

# Hippocrates

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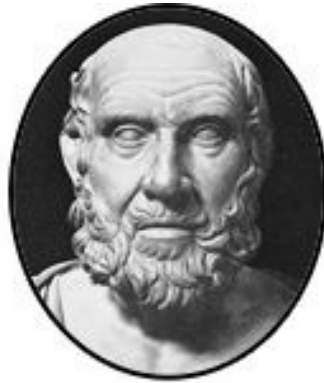
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**HIPPOCRATES**

(c. 460 – c. 370 BC)



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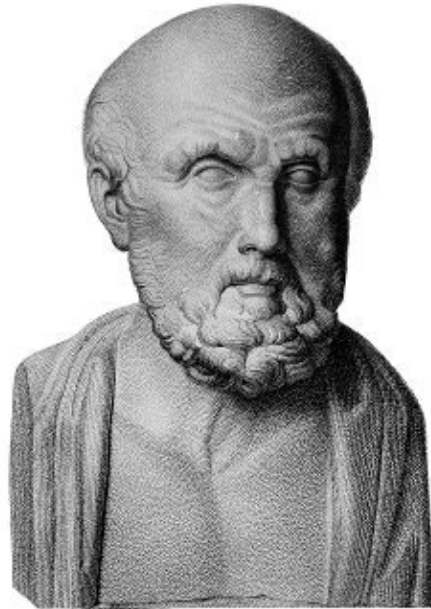


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## Works of Hippocrates



*Harbour of Cos (ancient Kos) — Hippocrates' birthplace*

## ON ANCIENT MEDICINE



OR, TRADITION IN MEDICINE

*Translated by Charles Darwin Adams*

This treatise is regarded as one of the most significant works of the Hippocratic Corpus, the collection of approximately sixty writings covering all areas of medical thought and practice, which are traditionally associated with Hippocrates (c. 460 BC – c. 370 BC), the father of Western medicine. In more recent times, thirteen of the works have been identified as being possibly by the hand of Hippocrates, with *On Ancient Medicine* being a key text of this number. The origins of the Hippocratic Corpus can be traced to the sixth and fifth centuries BC in Italy.

There were two seminal schools of Western medical thought; Agrigentum on the southern coast of Sicily and Croton on the west coast of the Gulf of Taranto. Agrigentum was the home of Empedocles, while Croton belonged to the Pythagorean sect of medical philosophy. The school of Agrigentum and Empedocles placed great emphasis on cure by contraries, while the school of Croton rejected this notion, championing the medical philosophy that perceived the human organism consists of an infinite number of humours. The first medical philosopher of the school of Croton was Alcmaeon, who argued that the maintenance of good health required a balance of the powers of moist and dry, cold and hot, bitter and sweet. He argued that sickness arises when there is an imbalance within the human organism, caused by the predominance of one power over another. In the Agrigentum school of thought Empedocles hypothesised that the universe consisted of four elements: earth, water, air and fire. On the basis of these four elements he sought to account for the origin of matter. Matter or the universe was generated out of these four elements and their mutual attraction and repulsion.

The conflict between these two schools of thought became manifest in their medical philosophies. Whereas, Alcmaeon argued that there were indefinite number of diverse qualities that made up the human organism, Empedocles

believed that there were four concrete or substantial elements. Although it is Empedocles' medical philosophy that ultimately inspires the humoral doctrine of human nature, it is Alcmaeon's theory that provides the backdrop to the medical therapeutic doctrine proposed in *On Ancient Medicine*. Alcmaeon's argument that there are an infinite number of causes for disease that cannot be simply organised into categories is the basic operating assumption of empirical medicine. Therefore medical knowledge continuously expanded through a firsthand experience and observation of the human organism within nature. It is in this light that *On Ancient Medicine* should be seen as an attempt by Alcmaeon's followers and the empirical school of thought to respond to and critique the Empedoclean or humoral theory of medicine.

*On Ancient Medicine* is formed of three parts. In chapters 1–19 the author responds to the supporters of the hypothesis theory of medicine, arguing that the exploration of medicine itself reveals the human organism as a blend of diverse substances or humours. Having set forth this humoral theory, he then critiques the hypothesis theory proposed by his opponents as being an oversimplified conception of the cause of disease. He then discusses his own theory and method employed in its discovery (chapters 20-24), before responding to the charge that ancient medicine is not a genuine medical art because it has limited accuracy. These arguments must be seen in the light of the author's theory of human physiology (chapters 9-12).

It is generally believed that *On Ancient Medicine* was written between 440 and 350 BC, with several hints suggesting a date in the late fifth century. In particular, the author refers to Empedocles (490–430 B.C.) as the motivation of the method he attacks, which would suggest a date not long after Empedocles' peak of activity.

Since the work of Émile Littré in the nineteenth century, the treatise has been scrutinised in thorough detail, in an attempt to determine which of the works in the Hippocratic Corpus were composed by Hippocrates. Littré was the scholar most associated with advocating that *On Ancient Medicine* was written by Hippocrates, as he believed that it was the work to which Plato was referring to in *The Phaedrus*. However, it is difficult to establish any certainty as to whether the historical Hippocrates actually wrote the treatise *On Ancient Medicine*, due to the scanty surviving evidence from references in Plato and Aristotle.



*Vaticanus graecus 277, 10v-11r — a fourteenth century Hippocratic Corpus manuscript.*



## ON ANCIENT MEDICINE

1. Whoever having undertaken to speak or write on Medicine, have first laid down for themselves some hypothesis to their argument, such as hot, or cold, or moist, or dry, or whatever else they choose (thus reducing their subject within a narrow compass, and supposing only one or two original causes of diseases or of death among mankind), are all clearly mistaken in much that they say; and this is the more reprehensible as relating to an art which all men avail themselves of on the most important occasions, and the good operators and practitioners in which they hold in especial honor. For there are practitioners, some bad and some far otherwise, which, if there had been no such thing as Medicine, and if nothing had been investigated or found out in it, would not have been the case, but all would have been equally unskilled and ignorant of it, and everything concerning the sick would have been directed by chance. But now it is not so; for, as in all the other arts, those who practise them differ much from one another in dexterity and knowledge, so is it in like manner with Medicine. Wherefore I have not thought that it stood in need of an empty hypothesis, like those subjects which are occult and dubious, in attempting to handle which it is necessary to use some hypothesis; as, for example, with regard to things above us and things below the earth; if any one should treat of these and undertake to declare how they are constituted, the reader or hearer could not find out, whether what is delivered be true or false; for there is nothing which can be referred to in order to discover the truth.

2. But all these requisites belong of old to Medicine, and an origin and way have been found out, by which many and elegant discoveries have been made, during a length of time, and others will yet be found out, if a person possessed of the proper ability, and knowing those discoveries which have been made, should proceed from them to prosecute his investigations. But whoever, rejecting and despising all these, attempts to pursue another course and form of inquiry, and says he has discovered anything, is deceived himself and deceives others, for the thing is impossible. And for what reason it is impossible, I will now endeavor to explain, by stating and showing what the art really is. From this it will be manifest that discoveries cannot possibly be made in any other way. And most especially, it appears to me, that whoever treats of this art should treat of things which are familiar to the common people. For of nothing else will such a one have to inquire or treat, but of the diseases under which the common people have labored, which diseases and the causes of their origin and departure, their

increase and decline, illiterate persons cannot easily find out themselves, but still it is easy for them to understand these things when discovered and expounded by others. For it is nothing more than that every one is put in mind of what had occurred to himself. But whoever does not reach the capacity of the illiterate vulgar and fails to make them listen to him, misses his mark. Wherefore, then, there is no necessity for any hypothesis.

3. For the art of Medicine would not have been invented at first, nor would it have been made a subject of investigation (for there would have been no need of it), if when men are indisposed, the same food and other articles of regimen which they eat and drink when in good health were proper for them, and if no others were preferable to these. But now necessity itself made medicine to be sought out and discovered by men, since the same things when administered to the sick, which agreed with them when in good health, neither did nor do agree with them. But to go still further back, I hold that the diet and food which people in health now use would not have been discovered, provided it had suited with man to eat and drink in like manner as the ox, the horse, and all other animals, except man, do of the productions of the earth, such as fruits, weeds, and grass; for from such things these animals grow, live free of disease, and require no other kind of food. And, at first, I am of opinion that man used the same sort of food, and that the present articles of diet had been discovered and invented only after a long lapse of time, for when they suffered much and severely from strong and brutish diet, swallowing things which were raw, unmixed, and possessing great strength, they became exposed to strong pains and diseases, and to early deaths. It is likely, indeed, that from habit they would suffer less from these things than we would now, but still they would suffer severely even then; and it is likely that the greater number, and those who had weaker constitutions, would all perish; whereas the stronger would hold out for a longer time, as even nowadays some, in consequence of using strong articles of food, get off with little trouble, but others with much pain and suffering. From this necessity it appears to me that they would search out the food befitting their nature, and thus discover that which we now use: and that from wheat, by macerating it, stripping it of its hull, grinding it all down, sifting, toasting, and baking it, they formed bread; and from barley they formed cake (maza), performing many operations in regard to it; they boiled, they roasted, they mixed, they diluted those things which are strong and of intense qualities with weaker things, fashioning them to the nature and powers of man, and considering that the stronger things Nature would not be able to manage if administered, and that from such things pains, diseases, and death would arise, but such as Nature could manage, that from

them food, growth, and health, would arise. To such a discovery and investigation what more suitable name could one give than that of Medicine? since it was discovered for the health of man, for his nourishment and safety, as a substitute for that kind of diet by which pains, diseases, and deaths were occasioned.

4. And if this is not held to be an art, I do not object. For it is not suitable to call any one an artist of that which no one is ignorant of, but which all know from usage and necessity. But still the discovery is a great one, and requiring much art and investigation. Wherefore those who devote themselves to gymnastics and training, are always making some new discovery, by pursuing the same line of inquiry, where, by eating and drinking certain things, they are improved and grow stronger than they were.

5. Let us inquire then regarding what is admitted to be Medicine; namely, that which was invented for the sake of the sick, which possesses a name and practitioners, whether it also seeks to accomplish the same objects, and whence it derived its origin. To me, then, it appears, as I said at the commencement, that nobody would have sought for medicine at all, provided the same kinds of diet had suited with men in sickness as in good health. Wherefore, even yet, such races of men as make no use of medicine, namely, barbarians, and even certain of the Greeks, live in the same way when sick as when in health; that is to say, they take what suits their appetite, and neither abstain from, nor restrict themselves in anything for which they have a desire. But those who have cultivated and invented medicine, having the same object in view as those of whom I formerly spoke, in the first place, I suppose, diminished the quantity of the articles of food which they used, and this alone would be sufficient for certain of the sick, and be manifestly beneficial to them, although not to all, for there would be some so affected as not to be able to manage even small quantities of their usual food, and as such persons would seem to require something weaker, they invented soups, by mixing a few strong things with much water, and thus abstracting that which was strong in them by dilution and boiling. But such as could not manage even soups, laid them aside, and had recourse to drinks, and so regulated them as to mixture and quantity, that they were administered neither stronger nor weaker than what was required.

6. But this ought to be well known, that soups do not agree with certain persons in their diseases, but, on the contrary, when administered both the fevers and the pains are exacerbated, and it becomes obvious that what was given has proved

food and increase to the disease, but a wasting and weakness to the body. But whatever persons so affected partook of solid food, or cake, or bread, even in small quantity, would be ten times and more decidedly injured than those who had taken soups, for no other reason than from the strength of the food in reference to the affection; and to whomsoever it is proper to take soups and not eat solid food, such a one will be much more injured if he eat much than if he eat little, but even little food will be injurious to him. But all the causes of the sufferance refer themselves to this rule, that the strongest things most especially and decidedly hurt man, whether in health or in disease.

7. What other object, then, had he in view who is called a physician, and is admitted to be a practitioner of the art, who found out the regimen and diet befitting the sick, than he who originally found out and prepared for all mankind that kind of food which we all now use, in place of the former savage and brutish mode of living? To me it appears that the mode is the same, and the discovery of a similar nature. The one sought to abstract those things which the constitution of man cannot digest, because of their wildness and intemperature, and the other those things which are beyond the powers of the affection in which any one may happen to be laid up. Now, how does the one differ from the other, except that the latter admits of greater variety, and requires more application, whereas the former was the commencement of the process?

8. And if one would compare the diet of sick persons with that of persons in health, he will find it not more injurious than that of healthy persons in comparison with that of wild beasts and of other animals. For, suppose a man laboring under one of those diseases which are neither serious and unsupportable, nor yet altogether mild, but such as that, upon making any mistake in diet, it will become apparent, as if he should eat bread and flesh, or any other of those articles which prove beneficial to healthy persons, and that, too, not in great quantity, but much less than he could have taken when in good health; and that another man in good health, having a constitution neither very feeble, nor yet strong, eats of those things which are wholesome and strengthening to an ox or a horse, such as vetches, barley, and the like, and that, too, not in great quantity, but much less than he could take; the healthy person who did so would be subjected to no less disturbance and danger than the sick person who took bread or cake unseasonably. All these things are proofs that Medicine is to be prosecuted and discovered by the same method as the other.

9. And if it were simply, as is laid down, that such things as are stronger prove



injurious, but such as are weaker prove beneficial and nourishing, both to sick and healthy persons, it were an easy matter, for then the safest rule would be to circumscribe the diet to the lowest point. But then it is no less mistake, nor one that injures a man less, provided a deficient diet, or one consisting of weaker things than what are proper, be administered. For, in the constitution of man, abstinence may enervate, weaken, and kill. And there are many other ills, different from those of repletion, but no less dreadful, arising from deficiency of food; wherefore the practice in those cases is more varied, and requires greater accuracy. For one must aim at attaining a certain measure, and yet this measure admits neither weight nor calculation of any kind, by which it may be accurately determined, unless it be the sensation of the body; wherefore it is a task to learn this accurately, so as not to commit small blunders either on the one side or the other, and in fact I would give great praise to the physician whose mistakes are small, for perfect accuracy is seldom to be seen, since many physicians seem to me to be in the same plight as bad pilots, who, if they commit mistakes while conducting the ship in a calm do not expose themselves, but when a storm and violent hurricane overtake them, they then, from their ignorance and mistakes, are discovered to be what they are, by all men, namely, in losing their ship. And thus bad and commonplace physicians, when they treat men who have no serious illness, in which case one may commit great mistakes without producing any formidable mischief (and such complaints occur much more frequently to men than dangerous ones): under these circumstances, when they commit mistakes, they do not expose themselves to ordinary men; but when they fall in with a great, a strong, and a dangerous disease, then their mistakes and want of skill are made apparent to all. Their punishment is not far off, but is swift in overtaking both the one and the other.

10. And that no less mischief happens to a man from unseasonable depletion than from repletion, may be clearly seen upon reverting to the consideration of persons in health. For, to some, with whom it agrees to take only one meal in the day, and they have arranged it so accordingly; whilst others, for the same reason, also take dinner, and this they do because they find it good for them, and not like those persons who, for pleasure or from any casual circumstance, adopt the one or the other custom and to the bulk of mankind it is of little consequence which of these rules they observe, that is to say, whether they make it a practice to take one or two meals. But there are certain persons who cannot readily change their diet with impunity; and if they make any alteration in it for one day, or even for a part of a day, are greatly injured thereby. Such persons, provided they take dinner when it is not their wont, immediately become heavy and inactive, both in

body and mind, and are weighed down with yawning, slumbering, and thirst; and if they take supper in addition, they are seized with flatulence, tormina, and diarrhea, and to many this has been the commencement of a serious disease, when they have merely taken twice in a day the same food which they have been in the custom of taking once. And thus, also, if one who has been accustomed to dine, and this rule agrees with him, should not dine at the accustomed hour, he will straightway feel great loss of strength, trembling, and want of spirits, the eyes of such a person will become more pallid, his urine thick and hot, his mouth bitter; his bowels will seem, as it were, to hang loose; he will suffer from vertigo, lowness of spirit, and inactivity,- such are the effects; and if he should attempt to take at supper the same food which he was wont to partake of at dinner, it will appear insipid, and he will not be able to take it off; and these things, passing downwards with tormina and rumbling, burn up his bowels; he experiences insomnolency or troubled and disturbed dreams; and to many of them these symptoms are the commencement of some disease.

11. But let us inquire what are the causes of these things which happened to them. To him, then, who was accustomed to take only one meal in the day, they happened because he did not wait the proper time, until his bowels had completely derived benefit from and had digested the articles taken at the preceding meal, and until his belly had become soft, and got into a state of rest, but he gave it a new supply while in a state of heat and fermentation, for such bellies digest much more slowly, and require more rest and ease. And as to him who had been accustomed to dinner, since, as soon as the body required food, and when the former meal was consumed, and he wanted refreshment, no new supply was furnished to it, he wastes and is consumed from want of food. For all the symptoms which I describe as befalling to this man I refer to want of food. And I also say that all men who, when in a state of health, remain for two or three days without food, experience the same unpleasant symptoms as those which I described in the case of him who had omitted to take dinner.

12. Wherefore, I say, that such constitutions as suffer quickly and strongly from errors in diet, are weaker than others that do not; and that a weak person is in a state very nearly approaching to one in disease; but a person in disease is the weaker, and it is, therefore, more likely that he should suffer if he encounters anything that is unseasonable. It is difficult, seeing that there is no such accuracy in the Art, to hit always upon what is most expedient, and yet many cases occur in medicine which would require this accuracy, as we shall explain. But on that account, I say, we ought not to reject the ancient Art, as if it were not, and had

not been properly founded, because it did not attain accuracy in all things, but rather, since it is capable of reaching to the greatest exactitude by reasoning, to receive it and admire its discoveries, made from a state of great ignorance, and as having been well and properly made, and not from chance.

13. But I wish the discourse to revert to the new method of those who prosecute their inquiries in the Art by hypothesis. For if hot, or cold, or moist, or dry, be that which proves injurious to man, and if the person who would treat him properly must apply cold to the hot, hot to the cold, moist to the dry, and dry to the moist- let me be presented with a man, not indeed one of a strong constitution, but one of the weaker, and let him eat wheat, such as it is supplied from the thrashing-floor, raw and unprepared, with raw meat, and let him drink water. By using such a diet I know that he will suffer much and severely, for he will experience pains, his body will become weak, and his bowels deranged, and he will not subsist long. What remedy, then, is to be provided for one so situated? Hot? or cold? or moist? or dry? For it is clear that it must be one or other of these. For, according to this principle, if it is one of the which is injuring the patient, it is to be removed by its contrary. But the surest and most obvious remedy is to change the diet which the person used, and instead of wheat to give bread, and instead of raw flesh, boiled, and to drink wine in addition to these; for by making these changes it is impossible but that he must get better, unless completely disorganized by time and diet. What, then, shall we say? whether that, as he suffered from cold, these hot things being applied were of use to him, or the contrary? I should think this question must prove a puzzler to whomsoever it is put. For whether did he who prepared bread out of wheat remove the hot, the cold, the moist, or the dry principle in it?- for the bread is consigned both to fire and to water, and is wrought with many things, each of which has its peculiar property and nature, some of which it loses, and with others it is diluted and mixed.

14. And this I know, moreover, that to the human body it makes a great difference whether the bread be fine or coarse; of wheat with or without the hull, whether mixed with much or little water, strongly wrought or scarcely at all, baked or raw- and a multitude of similar differences; and so, in like manner, with the cake (maza); the powers of each, too, are great, and the one nowise like the other. Whoever pays no attention to these things, or, paying attention, does not comprehend them, how can he understand the diseases which befall a man? For, by every one of these things, a man is affected and changed this way or that, and the whole of his life is subjected to them, whether in health, convalescence, or

disease. Nothing else, then, can be more important or more necessary to know than these things. So that the first inventors, pursuing their investigations properly, and by a suitable train of reasoning, according to the nature of man, made their discoveries, and thought the Art worthy of being ascribed to a god, as is the established belief. For they did not suppose that the dry or the moist, the hot or the cold, or any of these are either injurious to man, or that man stands in need of them, but whatever in each was strong, and more than a match for a man's constitution, whatever he could not manage, that they held to be hurtful, and sought to remove. Now, of the sweet, the strongest is that which is intensely sweet; of the bitter, that which is intensely bitter; of the acid, that which is intensely acid; and of all things that which is extreme, for these things they saw both existing in man, and proving injurious to him. For there is in man the bitter and the salt, the sweet and the acid, the sour and the insipid, and a multitude of other things having all sorts of powers both as regards quantity and strength. These, when all mixed and mingled up with one another, are not apparent, neither do they hurt a man; but when any of them is separate, and stands by itself, then it becomes perceptible, and hurts a man. And thus, of articles of food, those which are unsuitable and hurtful to man when administered, every one is either bitter, or intensely so, or saltish or acid, or something else intense and strong, and therefore we are disordered by them in like manner as we are by the secretions in the body. But all those things which a man eats and drinks are devoid of any such intense and well-marked quality, such as bread, cake, and many other things of a similar nature which man is accustomed to use for food, with the exception of condiments and confectioneries, which are made to gratify the palate and for luxury. And from those things, when received into the body abundantly, there is no disorder nor dissolution of the powers belonging to the body; but strength, growth, and nourishment result from them, and this for no other reason than because they are well mixed, have nothing in them of an immoderate character, nor anything strong, but the whole forms one simple and not strong substance.

15. I cannot think in what manner they who advance this doctrine, and transfer Art from the cause I have described to hypothesis, will cure men according to the principle which they have laid down. For, as far as I know, neither the hot nor the cold, nor the dry, nor the moist, has ever been found unmixed with any other quality; but I suppose they use the same articles of meat and drink as all we other men do. But to this substance they give the attribute of being hot, to that cold, to that dry, and to that moist. Since it would be absurd to advise the patient to take something hot, for he would straightway ask what it is? so that he must



either play the fool, or have recourse to some one of the well known substances; and if this hot thing happen to be sour, and that hot thing insipid, and this hot thing has the power of raising a disturbance in the body (and there are many other kinds of heat, possessing many opposite powers), he will be obliged to administer some one of them, either the hot and the sour, or the hot and the insipid, or that which, at the same time, is cold and sour (for there is such a substance), or the cold and the insipid. For, as I think, the very opposite effects will result from either of these, not only in man, but also in a bladder, a vessel of wood, and in many other things possessed of far less sensibility than man; for it is not the heat which is possessed of great efficacy, but the sour and the insipid, and other qualities as described by me, both in man and out of man, and that whether eaten or drunk, rubbed in externally, and otherwise applied.

16. But I think that of all the qualities heat and cold exercise the least operation in the body, for these reasons: as long time as hot and cold are mixed up with one another they do not give trouble, for the cold is attempered and rendered more moderate by the hot, and the hot by the cold; but when the one is wholly separate from the other, then it gives pain; and at that season when cold is applied it creates some pain to a man, but quickly, for that very reason, heat spontaneously arises in him without requiring any aid or preparation. And these things operate thus both upon men in health and in disease. For example, if a person in health wishes to cool his body during winter, and bathes either in cold water or in any other way, the more he does this, unless his body be fairly congealed, when he resumes his clothes and comes into a place of shelter, his body becomes more heated than before. And thus, too, if a person wish to be warmed thoroughly either by means of a hot bath or strong fire, and straight-way having the same clothing on, takes up his abode again in the place he was in when he became congealed, he will appear much colder, and more disposed to chills than before. And if a person fan himself on account of a suffocating heat, and having procured refrigeration for himself in this manner, cease doing so, the heat and suffocation will be ten times greater in his case than in that of a person who does nothing of the kind. And, to give a more striking example, persons travelling in the snow, or otherwise in rigorous weather, and contracting great cold in their feet, their hands, or their head, what do they not suffer from inflammation and tingling when they put on warm clothing and get into a hot place? In some instances, blisters arise as if from burning with fire, and they do not suffer from any of those unpleasant symptoms until they become heated. So readily does either of these pass into the other; and I could mention many other examples. And with regard to the sick, is it not in those who experience a rigor that the

most acute fever is apt to break out? And yet not so strongly neither, but that it ceases in a short time, and, for the most part, without having occasioned much mischief; and while it remains, it is hot, and passing over the whole body, ends for the most part in the feet, where the chills and cold were most intense and lasted longest; and, when sweat supervenes, and the fever passes off, the patient is much colder than if he had not taken the fever at all. Why then should that which so quickly passes into the opposite extreme, and loses its own powers spontaneously, be reckoned a mighty and serious affair? And what necessity is there for any great remedy for it?

17. One might here say- but persons in ardent fevers, pneumonia, and other formidable diseases, do not quickly get rid of the heat, nor experience these rapid alterations of heat and cold. And I reckon this very circumstance the strongest proof that it is not from heat simply that men get into the febrile state, neither is it the sole cause of the mischief, but that this species of heat is bitter, and that acid, and the other saltish, and many other varieties; and again there is cold combined with other qualities. These are what proves injurious; heat, it is true, is present also, possessed of strength as being that which conducts, is exacerbated and increased along with the other, but has no power greater than what is peculiar to itself.

18. With regard to these symptoms, in the first place those are most obvious of which we have all often had experience. Thus, then, in such of us as have a coryza and defluxion from the nostrils, this discharge is much more acrid than that which formerly was formed in and ran from them daily; and it occasions swelling of the nose, and it inflames, being of a hot and extremely ardent nature, as you may know, if you apply your hand to the place; and, if the disease remains long, the part becomes ulcerated although destitute of flesh and hard; and the heat in the nose ceases, not when the defluxion takes place and the inflammation is present, but when the running becomes thicker and less acrid, and more mixed with the former secretion, then it is that the heat ceases. But in all those cases in which this decidedly proceeds from cold alone, without the concurrence of any other quality, there is a change from cold to hot, and from hot to cold, and these quickly supervene, and require no coction. But all the others being connected, as I have said, with acrimony and intemperance of humors, pass off in this way by being mixed and concocted.

19. But such defluxions as are determined to the eyes being possessed of strong and varied acrimonies, ulcerate the eyelids, and in some cases corrode the and

parts below the eyes upon which they flow, and even occasion rupture and erosion of the tunic which surrounds the eyeball. But pain, heat, and extreme burning prevail until the defluxions are concocted and become thicker, and concretions form about the eyes, and the coction takes place from the fluids being mixed up, diluted, and digested together. And in defluxions upon the throat, from which are formed hoarseness, cynanche, crysipelas, and pneumonia, all these have at first saltish, watery, and acrid discharges, and with these the diseases gain strength. But when the discharges become thicker, more concocted, and are freed from all acrimony, then, indeed, the fevers pass away, and the other symptoms which annoyed the patient; for we must account those things the cause of each complaint, which, being present in a certain fashion, the complaint exists, but it ceases when they change to another combination. But those which originate from pure heat or cold, and do not participate in any other quality, will then cease when they undergo a change from cold to hot, and from hot to cold; and they change in the manner I have described before. Wherefore, all the other complaints to which man is subject arise from powers (qualities?). Thus, when there is an overflow of the bitter principle, which we call yellow bile, what anxiety, burning heat, and loss of strength prevail! but if relieved from it, either by being purged spontaneously, or by means of a medicine seasonably administered, the patient is decidedly relieved of the pains and heat; but while these things float on the stomach, unconcocted and undigested, no contrivance could make the pains and fever cease; and when there are acidities of an acrid and aeruginous character, what varieties of frenzy, gnawing pains in the bowels and chest, and inquietude, prevail! and these do not cease until the acidities be purged away, or are calmed down and mixed with other fluids. The coction, change, attenuation, and thickening into the form of humors, take place through many and various forms; therefore the crises and calculations of time are of great importance in such matters; but to all such changes hot and cold are but little exposed, for these are neither liable to putrefaction nor thickening. What then shall we say of the change? that it is a combination (crasis) of these humors having different powers toward one another. But the hot does not loose its heat when mixed with any other thing except the cold; nor again, the cold, except when mixed with the hot. But all other things connected with man become the more mild and better in proportion as they are mixed with the more things besides. But a man is in the best possible state when they are concocted and at rest, exhibiting no one peculiar quality; but I think I have said enough in explanation of them.

20. Certain sophists and physicians say that it is not possible for any one to know

medicine who does not know what man is [and how he was made and how constructed], and that whoever would cure men properly, must learn this in the first place. But this saying rather appertains to philosophy, as Empedocles and certain others have described what man in his origin is, and how he first was made and constructed. But I think whatever such has been said or written by sophist or physician concerning nature has less connection with the art of medicine than with the art of painting. And I think that one cannot know anything certain respecting nature from any other quarter than from medicine; and that this knowledge is to be attained when one comprehends the whole subject of medicine properly, but not until then; and I say that this history shows what man is, by what causes he was made, and other things accurately. Wherefore it appears to me necessary to every physician to be skilled in nature, and strive to know, if he would wish to perform his duties, what man is in relation to the articles of food and drink, and to his other occupations, and what are the effects of each of them to every one. And it is not enough to know simply that cheese is a bad article of food, as disagreeing with whoever eats of it to satiety, but what sort of disturbance it creates, and wherefore, and with what principle in man it disagrees; for there are many other articles of food and drink naturally bad which affect man in a different manner. Thus, to illustrate my meaning by an example, undiluted wine drunk in large quantity renders a man feeble; and everybody seeing this knows that such is the power of wine, and the cause thereof; and we know, moreover, on what parts of a man's body it principally exerts its action; and I wish the same certainty to appear in other cases. For cheese (since we used it as an example) does not prove equally injurious to all men, for there are some who can take it to satiety without being hurt by it in the least, but, on the contrary, it is wonderful what strength it imparts to those it agrees with; but there are some who do not bear it well, their constitutions are different, and they differ in this respect, that what in their body is incompatible with cheese, is roused and put in commotion by such a thing; and those in whose bodies such a humor happens to prevail in greater quantity and intensity, are likely to suffer the more from it. But if the thing had been pernicious to of man, it would have hurt all. Whoever knows these things will not suffer from it.

21. During convalescence from diseases, and also in protracted diseases, many disorders occur, some spontaneously, and some from certain things accidentally administered. I know that the common herd of physicians, like the vulgar, if there happen to have been any innovation made about that day, such as the bath being used, a walk taken, or any unusual food eaten, all which were better done

than otherwise, attribute notwithstanding the cause of these disorders, to some of these things, being ignorant of the true cause but proscribing what may have been very proper. Now this ought not to be so; but one should know the effects of a bath or a walk unseasonably applied; for thus there will never be any mischief from these things, nor from any other thing, nor from repletion, nor from such and such an article of food. Whoever does not know what effect these things produce upon a man, cannot know the consequences which result from them, nor how to apply them.

22. And it appears to me that one ought also to know what diseases arise in man from the powers, and what from the structures. What do I mean by this? By powers, I mean intense and strong juices; and by structures, whatever conformations there are in man. For some are hollow, and from broad contracted into narrow; some expanded, some hard and round, some broad and suspended, some stretched, some long, some dense, some rare and succulent, some spongy and of loose texture. Now, then, which of these figures is the best calculated to suck to itself and attract humidity from another body? Whether what is hollow and expanded, or what is solid and round, or what is hollow, and from broad, gradually turning narrow? I think such as from hollow and broad are contracted into narrow: this may be ascertained otherwise from obvious facts: thus, if you gape wide with the mouth you cannot draw in any liquid; but by protruding, contracting, and compressing the lips, and still more by using a tube, you can readily draw in whatever you wish. And thus, too, the instruments which are used for cupping are broad below and gradually become narrow, and are so constructed in order to suck and draw in from the fleshy parts. The nature and construction of the parts within a man are of a like nature; the bladder, the head, the uterus in woman; these parts clearly attract, and are always filled with a juice which is foreign to them. Those parts which are hollow and expanded are most likely to receive any humidity flowing into them, but cannot attract it in like manner. Those parts which are solid and round could not attract a humidity, nor receive it when it flows to them, for it would glide past, and find no place of rest on them. But spongy and rare parts, such as the spleen, the lungs, and the breasts, drink up especially the juices around them, and become hardened and enlarged by the accession of juices. Such things happen to these organs especially. For it is not with the spleen as with the stomach, in which there is a liquid, which it contains and evacuates every day; but when it (the spleen) drinks up and receives a fluid into itself, the hollow and lax parts of it are filled, even the small interstices; and, instead of being rare and soft, it becomes hard and dense, and it can neither digest nor discharge its contents: these things it suffers,

owing to the nature of its structure. Those things which engender flatulence or tormina in the body, naturally do so in the hollow and broad parts of the body, such as the stomach and chest, where they produce rumbling noises; for when they do not fill the parts so as to be stationary, but have changes of place and movements, there must necessarily be noise and apparent movements from them. But such parts as are fleshy and soft, in these there occur torpor and obstructions, such as happen in apoplexy. But when it (the flatus?) encounters a broad and resisting structure, and rushes against such a part, and this happens when it is by nature not strong so as to be able to withstand it without suffering injury; nor soft and rare, so as to receive or yield to it, but tender, juicy, full of blood, and dense, like the liver, owing to its density and broadness, it resists and does not yield. But flatus, when it obtains admission, increases and becomes stronger, and rushes toward any resisting object; but owing to its tenderness, and the quantity of blood which it (the liver) contains, it cannot be without uneasiness; and for these reasons the most acute and frequent pains occur in the region of it, along with suppurations and chronic tumors (phymata). These symptoms also occur in the site of the diaphragm, but much less frequently; for the diaphragm is a broad, expanded, and resisting substance, of a nervous (tendinous?) and strong nature, and therefore less susceptible of pain; and yet pains and chronic abscesses do occur about it.

23. There are both within and without the body many other kinds of structure, which differ much from one another as to sufferings both in health and disease; such as whether the head be small or large; the neck slender or thick, long or short; the belly long or round; the chest and ribs broad or narrow; and many others besides, all which you ought to be acquainted with, and their differences; so that knowing the causes of each, you may make the more accurate observations.

24. And, as has been formerly stated, one ought to be acquainted with the powers of juices, and what action each of them has upon man, and their alliances towards one another. What I say is this: if a sweet juice change to another kind, not from any admixture, but because it has undergone a mutation within itself; what does it first become?- bitter? salt? austere? or acid? I think acid. And hence, an acid juice is the most improper of all things that can be administered in cases in which a sweet juice is the most proper. Thus, if one should succeed in his investigations of external things, he would be the better able always to select the best; for that is best which is farthest removed from that which is unwholesome.



## PROGNOSTICS



*Translated by Charles Darwin Adams*

1. It appears to me a most excellent thing for the physician to cultivate Prognosis; for by foreseeing and foretelling, in the presence of the sick, the present, the past, and the future, and explaining the omissions which patients have been guilty of, he will be the more readily believed to be acquainted with the circumstances of the sick; so that men will have confidence to intrust themselves to such a physician. And he will manage the cure best who has foreseen what is to happen from the present state of matters. For it is impossible to make all the sick well; this, indeed, would have been better than to be able to foretell what is going to happen; but since men die, some even before calling the physician, from the violence of the disease, and some die immediately after calling him, having lived, perhaps, only one day or a little longer, and before the physician could bring his art to counteract the disease; it therefore becomes necessary to know the nature of such affections, how far they are above the powers of the constitution; and, moreover, if there be anything divine in the diseases, and to learn a foreknowledge of this also. Thus a man will be the more esteemed to be a good physician, for he will be the better able to treat those aright who can be saved, having long anticipated everything; and by seeing and announcing beforehand those who will live and those who will die, he will thus escape censure.

2. He should observe thus in acute diseases: first, the countenance of the patient, if it be like those of persons in health, and more so, if like itself, for this is the best of all; whereas the most opposite to it is the worst, such as the following; a sharp nose, hollow eyes, collapsed temples; the ears cold, contracted, and their lobes turned out: the skin about the forehead being rough, distended, and parched; the color of the whole face being green, black, livid, or lead-colored. If the countenance be such at the commencement of the disease, and if this cannot be accounted for from the other symptoms, inquiry must be made whether the patient has long wanted sleep; whether his bowels have been very loose; and whether he has suffered from want of food; and if any of these causes be confessed to, the danger is to be reckoned so far less; and it becomes obvious, in

the course of a day and a night, whether or not the appearance of the countenance proceeded from these causes. But if none of these be said to exist, if the symptoms do not subside in the aforesaid time, it is to be known for certain that death is at hand. And, also, if the disease be in a more advanced stage either on the third or fourth day, and the countenance be such, the same inquiries as formerly directed are to be made, and the other symptoms are to be noted, those in the whole countenance, those on the body, and those in the eyes; for if they shun the light, or weep involuntarily, or squint, or if the one be less than the other, or if the white of them be red, livid, or has black veins in it; if there be a gum upon the eyes, if they are restless, protruding, or are become very hollow; and if the countenance be squalid and dark, or the color of the whole face be changed- all these are to be reckoned bad and fatal symptoms. The physician should also observe the appearance of the eyes from below the eyelids in sleep; for when a portion of the white appears, owing to the eyelids not being closed together, and when this is not connected with diarrhea or purgation from medicine, or when the patient does not sleep thus from habit, it is to be reckoned an unfavorable and very deadly symptom; but if the eyelid be contracted, livid, or pale, or also the lip, or nose, along with some of the other symptoms, one may know for certain that death is close at hand. It is a mortal symptom, also, when the lips are relaxed, pendent, cold, and blanched.

3. It is well when the patient is found by his physician reclining upon either his right or his left side, having his hands, neck, and legs slightly bent, and the whole body lying in a relaxed state, for thus the most of persons in health recline, and these are the best of postures which most resemble those of healthy persons. But to lie upon one's back, with the hands, neck, and the legs extended, is far less favorable. And if the patient incline forward, and sink down to the foot of the bed, it is a still more dangerous symptom; but if he be found with his feet naked and not sufficiently warm, and the hands, neck, and legs tossed about in a disorderly manner and naked, it is bad, for it indicates aberration of intellect. It is a deadly symptom, also, when the patient sleeps constantly with his mouth open, having his legs strongly bent and plaited together, while he lies upon his back; and to lie upon one's belly, when not habitual to the patient to sleep thus while in good health, indicates delirium, or pain in the abdominal regions. And for the patient to wish to sit erect at the acme of a disease is a bad symptom in all acute diseases, but particularly so in pneumonia. To grind the teeth in fevers, when such has not been the custom of the patient from childhood, indicates madness and death, both which dangers are to be announced beforehand as likely to happen; and if a person in delirium do this it is a very deadly symptom. And if

the patient had an ulcer previously, or if one has occurred in the course of the disease, it is to be observed; for if the man be about to die the sore will become livid and dry, or yellow and dry before death.

4. Respecting the movement of the hands I have these observations to make: When in acute fevers, pneumonia, phrenitis, or headache, the hands are waved before the face, hunting through empty space, as if gathering bits of straw, picking the nap from the coverlet, or tearing chaff from the wall- all such symptoms are bad and deadly.

5. Respiration, when frequent, indicates pain or inflammation in the parts above the diaphragm: a large respiration performed at a great interval announces delirium; but a cold respiration at nose or mouth is a very fatal symptom. Free respiration is to be looked upon as contributing much to the safety of the patient in all acute diseases, such as fevers, and those complaints which come to a crisis in forty days.

6. Those sweats are the best in all acute diseases which occur on the critical days, and completely carry off the fever. Those are favorable, too, which taking place over the whole body, show that the man is bearing the disease better. But those that do not produce this effect are not beneficial. The worst are cold sweats, confined to the head, face, and neck; these in an acute fever prognosticate death, or in a milder one, a prolongation of the disease; and sweats which occur over the whole body, with the characters of those confined to the neck, are in like manner bad. Sweats attended with a miliary eruption, and taking place about the neck, are bad; sweats in the form of drops and of vapour are good. One ought to know the entire character of sweats, for some are connected with prostration of strength in the body, and some with intensity of the inflammation.

7. That state of the hypochondrium is best when it is free from pain, soft, and of equal size on the right side and the left. But if inflamed, or painful, or distended; or when the right and left sides are of disproportionate sizes;- all these appearances are to be dreaded. And if there be also pulsation in the hypochondrium, it indicates perturbation or delirium; and the physician should examine the eyes of such persons; for if their pupils be in rapid motion, such persons may be expected to go mad. A swelling in the hypochondrium, that is hard and painful, is very bad, provided it occupy the whole hypochondrium; but if it be on either side, it is less dangerous when on the left. Such swellings at the commencement of the disease prognosticate speedy death; but if the fever has

passed twenty days, and the swelling has not subsided, it turns to a suppuration. A discharge of blood from the nose occurs to such in the first period, and proves very useful; but inquiry should be made if they have headache or indistinct vision; for if there be such, the disease will be determined thither. The discharge of blood is rather to be expected in those who are younger than thirty-five years. Such swellings as are soft, free from pain, and yield to the finger, occasion more protracted crises, and are less dangerous than the others. But if the fever continue beyond sixty days, without any subsidence of the swelling, it indicates that empyema is about to take place; and a swelling in any other part of the cavity will terminate in like manner. Such, then, as are painful, hard, and large, indicate danger of speedy death; but such as are soft, free of pain, and yield when pressed with the finger, are more chronic than these. Swellings in the belly less frequently form abscesses than those in the hypochondrium; and seldome of all, those below the navel are converted into suppuration; but you may rather expect a hemorrhage from the upper parts. But the suppuration of all protracted swellings about these parts is to be anticipated. The collections of matter there are to be thus judged of: such as are determined outwards are the best when they are small, when they protrude very much, and swell to a point; such as are large and broad, and which do not swell out to a sharp point, are the worst. Of such as break internally, the best are those which have no external communication, but are covered and indolent; and when the whole place is free from discoloration. That pus is best which is white, homogeneous, smooth, and not at all fetid; the contrary to this is the worst.

8. All dropsies arising from acute diseases are bad; for they do not remove the fever, and are very painful and fatal. The most of them commence from the flanks and loins, but some from the liver; in those which derive their origin from the flanks and loins the feet swell, protracted diarrhoeas supervene, which neither remove the pains in the flanks and loins, nor soften the belly, but in dropsies which are connected with the liver there is a tickling cough, with scarcely any perceptible expectoration, and the feet swell; there are no evacuations from the bowels, unless such as are hard and forced; and there are swellings about the belly, sometimes on the one side and sometimes on the other, and these increase and diminish by turns.

9. It is a bad symptom when the head, hands, and feet are cold, while the belly and sides are hot; but it is a very good symptom when the whole body is equally hot. The patient ought to be able to turn round easily, and to be agile when raised up; but if he appear heavy in the rest of his body as well as in his hands and feet,

it is more dangerous; and if, in addition to the weight, his nails and fingers become livid, immediate death may be anticipated; and if the hands and feet be black it is less dangerous than if they be livid, but the other symptoms must be attended, to; for if he appear to bear the illness well, and if certain of the salutary symptoms appear along with these there may be hope that the disease will turn to a deposition, so that the man may recover; but the blackened parts of the body will drop off. When the testicles and members are retracted upwards, they indicate strong pains and danger of death.

10. With regard to sleep- as is usual with us in health, the patient should wake during the day and sleep during the night. If this rule be anywise altered it is so far worse: but there will be little harm provided he sleep in the morning for the third part of the day; such sleep as takes place after this time is more unfavorable; but the worst of all is to get no sleep either night or day; for it follows from this symptom that the insomnolency is connected with sorrow and pains, or that he is about to become delirious.

11. The excrement is best which is soft and consistent, is passed at the hour which was customary to the patient when in health, in quantity proportionate to the ingests; for when the passages are such, the lower belly is in a healthy state. But if the discharges be fluid, it is favorable that they are not accompanied with a noise, nor are frequent, nor in great quantity; for the man being oppressed by frequently getting up, must be deprived of sleep; and if the evacuations be both frequent and large, there is danger of his falling into deliquium animi. But in proportion to the ingesta he should have evacuations twice or thrice in the day, once at night and more copiously in the morning, as is customary with a person in health. The faeces should become thicker when the disease is tending to a crisis; they ought to be yellowish and not very fetid. It is favorable that round worms be passed with the discharges when the disease is tending to a crisis. The belly, too, through the whole disease, should be soft and moderately distended; but excrements that are very watery, or white, or green, or very red, or frothy, are all bad. It is also bad when the discharge is small, and viscid, and white, and greenish, and smooth; but still more deadly appearances are the black, or fatty, or livid, or verdigris-green, or fetid. Such as are of varied characters indicate greater duration of the complaint, but are no less dangerous; such as those which resemble scrapings, those which are bilious, those resembling leeks, and the black; these being sometimes passed together, and sometimes singly. It is best when wind passes without noise, but it is better that flatulence should pass even thus than that it should be retained; and when it does pass thus, it indicates either

that the man is in pain or in delirium, unless he gives vent to the wind spontaneously. Pains in the hypochondria, and swellings, if recent, and not accompanied with inflammation, are relieved by borborygmi supervening in the hypochondrium, more especially if it pass off with faeces, urine, and wind; but even although not, it will do good by passing along, and it also does good by descending to the lower part of the belly.

12. The urine is best when the sediment is white, smooth, and consistent during the whole time, until the disease come to a crisis, for it indicates freedom from danger, and an illness of short duration; but if deficient, and if it be sometimes passed clear, and sometimes with a white and smooth sediment, the disease will be more protracted, and not so void of danger. But if the urine be reddish, and the sediment consistent and smooth, the affection, in this case, will be more protracted than the former, but still not fatal. But farinaceous sediments in the urine are bad, and still worse are the leafy; the white and thin are very bad, but the furfuraceous are still worse than these. Clouds carried about in the urine are good when white, but bad if black. When the urine is yellow and thin, it indicates that the disease is unconcocted; and if it (the disease) should be protracted, there maybe danger lest the patient should not hold out until the urine be concocted. But the most deadly of all kinds of urine are the fetid, watery, black, and thick; in adult men and women the black is of all kinds of urine the worst, but in children, the watery. In those who pass thin and crude urine for a length of time, if they have otherwise symptoms of convalescence, an abscess may be expected to form in the parts below the diaphragm. And fatty substances floating on the surface are to be dreaded, for they are indications of melting. And one should consider respecting the kinds of urine, which have clouds, whether they tend upwards or downwards, and upwards or downwards, and the colors which they have and such as fall downwards, with the colors as described, are to be reckoned good and commended; but such as are carried upwards, with the colors as described, are to be held as bad, and are to be distrusted. But you must not allow yourself to be deceived if such urine be passed while the bladder is diseased; for then it is a symptom of the state, not of the general system, but of a particular viscus.

13. That vomiting is of most service which consists of phlegm and bile mixed together, and neither very thick nor in great quantity; but those vomitings which are more unmixed are worse. But if that which is vomited be of the color of leeks or livid, or black, whatever of these colors it be, it is to be reckoned bad; but if the same man vomit all these colors, it is to be reckoned a very fatal

symptom. But of all the vomitings, the livid indicates the danger of death, provided it be of a fetid smell. But all the smells which are somewhat putrid and fetid, are bad in all vomitings.

14. The expectoration in all pains about the lungs and sides, should be quickly and easily brought up, and a certain degree of yellowness should appear strongly mixed up with the sputum. But if brought up long after the commencement of the pain, and of a yellow or ruddy color, or if it occasions much cough, or be not strongly mixed, it is worse; for that which is intensely yellow is dangerous, but the white, and viscid, and round, do no good. But that which is very green and frothy is bad; but if so intense as to appear black, it is still more dangerous than these; it is bad, if nothing is expectorated, and the lungs discharge nothing, but are gorged with matters which boil (as it were) in the air-passages. It is bad when coryza and sneezing either precede or follow affections of the lungs, but in all other affections, even the most deadly, sneezing is a salutary symptom. A yellow spittle mixed up with not much blood in cases of pneumonia, is salutary and very beneficial if spit up at the commencement of the disease, but if on the seventh day, or still later, it is less favorable. And all sputa are bad which do not remove the pain. But the worst is the black, as has been described. Of all others the sputa which remove the pain are the best.

15. When the pains in these regions do not cease, either with the discharge of the sputa, nor with alvine evacuations, nor from venesection, purging with medicine, nor a suitable regimen, it is to be held that they will terminate in suppurations. Of empyemata such as are spit up while the sputum is still bilious, are very fatal, whether the bilious portion be expectorated separate, or along with the other; but more especially if the empyema begin to advance after this sputum on the seventh day of the disease. It is to be expected that a person with such an expectoration shall die on the fourteenth day, unless something favorable supervene. The following are favorable symptoms: to support the disease easily, to have free respiration, to be free from pain, to have the sputa readily brought up, the whole body to appear equally warm and soft, to have no thirst, the urine, and faeces, sleep, and sweats to be all favorable, as described before; when all these symptoms concur, the patient certainly will not die; but if some of these be present and some not, he will not survive longer than the fourteenth day. The bad symptoms are the opposite of these, namely, to bear the disease with difficulty, respiration large and dense, the pain not ceasing, the sputum scarcely coughed up, strong thirst, to have the body unequally affected by the febrile heat, the belly and sides intensely hot, the forehead, hands, and feet cold; the urine, and

excrements, the sleep, and sweats, all bad, agreeably to the characters described above; if such a combination of symptoms accompany the expectoration, the man will certainly die before the fourteenth day, and either on the ninth or eleventh. Thus then one may conclude regarding this expectoration, that it is very deadly, and that the patient will not survive until the fourteenth day. It is by balancing the concomitant symptoms whether good or bad, that one is to form a prognosis; for thus it will most probably prove to be a true one. Most other suppurations burst, some on the twentieth, some on the thirtieth, some on the fortieth, and some as late as the sixtieth day.

16. One should estimate when the commencement of the suppuration will take place, by calculating from the day on which the patient was first seized with fever, or if he had a rigor, and if he says, that there is a weight in the place where he had pain formerly, for these symptoms occur in the commencement of suppurations. One then may expect the rupture of the abscesses to take place from these times according to the periods formerly stated. But if the empyema be only on either side, one should turn him and inquire if he has pain on the other side; and if the one side be hotter than the other, and when laid upon the sound side, one should inquire if he has the feeling of a weight hanging from above, for if so, the empyema will be upon the opposite side to that on which the weight was felt.

17. Empyema may be recognized in all cases by the following symptoms: In the first place, the fever does not go off, but is slight during the day, and increases at night, and copious sweats supervene, there is a desire to cough, and the patients expectorate nothing worth mentioning, the eyes become hollow, the cheeks have red spots on them, the nails of the hands are bent, the fingers are hot especially their extremities, there are swellings in the feet, they have no desire of food, and small blisters (phlyctaenae) occur over the body. These symptoms attend chronic empyemata, and may be much trusted to; and such as are of short standing are indicated by the same, provided they be accompanied by those signs which occur at the commencement, and if at the same time the patient has some difficulty of breathing. Whether they will break earlier or later may be determined by these symptoms; if there be pain at the commencement, and if the dyspnoea, cough, and ptyalism be severe, the rupture may be expected in the course of twenty days or still earlier; but if the pain be more mild, and all the other symptoms in proportion, you may expect from these the rupture to be later; but pain, dyspnoea, and ptyalism, must take place before the rupture of the abscess. Those patients recover most readily whom the fever leaves the same



day that the abscess bursts,- when they recover their appetite speedily, and are freed from the thirst,- when the alvine discharges are small and consistent, the matter white, smooth, uniform in color, and free of phlegm, and if brought up without pain or strong coughing. Those die whom the fever does not leave, or when appearing to leave them it returns with an exacerbation; when they have thirst, but no desire of food, and there are watery discharges from the bowels; when the expectoration is green or livid, or pituitous and frothy; if all these occur they die, but if certain of these symptoms supervene, and others not, some patients die and some recover, after a long interval. But from all the symptoms taken together one should form a judgment, and so in all other cases.

18. When abscesses form about the ears, after peripneumonic affections, or depositions of matter take place in the inferior extremities and end in fistula, such persons recover. The following observations are to be made upon them: if the fever persist, and the pain do not cease, if the expectoration be not normal, and if the alvine discharges be neither bilious, nor free and unmixed; and if the urine be neither copious nor have its proper sediment, but if, on the other hand, all the other salutary symptoms be present, in such cases abscesses may be expected to take place. They form in the inferior parts when there is a collection of phlegm about the hypochondria; and in the upper when the hypochondria continue soft and free of pain, and when dyspnoea having been present for a certain time, ceases without any obvious cause. All deposits which take place in the legs after severe and dangerous attacks of pneumonia, are salutary, but the best are those which occur at the time when the sputa undergo a change; for if the swelling and pain take place while the sputa are changing from yellow and becoming of a purulent character, and are expectorated freely, under these circumstances the man will recover most favorably and the abscess becoming free of pain, will soon cease; but if the expectoration is not free, and the urine does not appear to have the proper sediment, there is danger lest the limb should be maimed, or that the case otherwise should give trouble. But if the abscesses disappear and go back, while expectoration does not take place, and fever prevails, it is a bad symptom; for there is danger that the man may get into a state of delirium and die. Of persons having empyema after peripneumonic affections, those that are advanced in life run the greatest risk of dying; but in the other kinds of empyema younger persons rather die. In cases of empyema treated by the cautery or incision, when the matter is pure, white, and not fetid, the patient recovers; but if of a bloody and dirty character, he dies.

19. Pains accompanied with fever which occur about the loins and lower parts, if

they attack the diaphragm, and leave the parts below, are very fatal. Wherefore one ought to pay attention to the other symptoms, since if any unfavorable one supervene, the case is hopeless; but if while the disease is determined to the diaphragm, the other symptoms are not bad, there is great reason to expect that it will end in empyema. When the bladder is hard and painful, it is an extremely bad and mortal symptom, more especially in cases attended with continued fever; for the pains proceeding from the bladder alone are to kill the patient; and at such a time the bowels are not moved, or the discharges are hard and forced. But urine of a purulent character, and having a white and smooth sediment, relieves the patient. But if no amendment takes place in the characters of the urine, nor the bladder become soft, and the fever is of the continual type, it may be expected that the patient will die in the first stages of the complaint. This form attacks children more especially, from their seventh to their fifteenth year.

20. Fevers come to a crisis on the same days as to number on which men recover and die. For the mildest class of fevers, and those originating with the most favorable symptoms, cease on the fourth day or earlier; and the most malignant, and those setting in with the most dangerous symptoms, prove fatal on the fourth day or earlier. The first class of them as to violence ends thus: the second is protracted to the seventh day, the third to the eleventh, the fourth to the fourteenth, the fifth to the seventeenth, and the sixth to the twentieth. Thus these periods from the most acute disease ascend by fours up to twenty. But none of these can be truly calculated by whole days, for neither the year nor the months can be numbered by entire days. After these in the same manner, according to the same progression, the first period is of thirty-four days, the second of forty days, and the third of sixty days. In the commencement of these it is very difficult to determine those which will come to a crisis after a long interval; for these beginnings are very similar, but one should pay attention from the first day, and observe further at every additional tetrad, and then one cannot miss seeing how the disease will terminate. The constitution of quartans is agreeable to the same order. Those which will come to a crisis in the shortest space of time, are the easiest to be judged of; for the differences of them are greatest from the commencement, thus those who are going to recover breathe freely, and do not suffer pain, they sleep during the night, and have the other salutary symptoms, whereas those that are to die have difficult respiration, are delirious, troubled with insomnolency, and have other bad symptoms. Matters being thus, one may conjecture, according to the time, and each additional period of the diseases, as they proceed to a crisis. And in women, after parturition, the crises proceed agreeably to the same ratio.

21. Strong and continued headaches with fever, if any of the deadly symptoms be joined to them, are very fatal. But if without such symptoms the pain be prolonged beyond twenty days, a discharge of blood from the nose or some abscess in the inferior parts may be anticipated; but while the pain is recent, we may expect in like manner a discharge of blood from the nose, or a suppuration, especially if the pain be seated above the temples and forehead; but the hemorrhage is rather to be looked for in persons younger than thirty years, and the suppuration in more elderly persons.

22. Acute pain of the ear, with continual and strong fever, is to be dreaded; for there is danger that the man may become delirious and die. Since, then, this is a hazardous spot, one ought to pay particular attention to all these symptoms from the commencement. Younger persons die of this disease on the seventh day, or still earlier, but old persons much later; for the fevers and delirium less frequently supervene upon them, and on that account the ears previously come to a suppuration, but at these periods of life, relapses of the disease coming on generally prove fatal. Younger persons die before the ear suppurates; only if white matter run from the ear, there may be hope that a younger person will recover, provided any other favorable symptom be combined.

23. Ulceration of the throat with fever, is a serious affection, and if any other of the symptoms formerly described as being bad, be present, the physician ought to announce that his patient is in danger. Those quinsies are most dangerous, and most quickly prove fatal, which make no appearance in the fauces, nor in the neck, but occasion very great pain and difficulty of breathing; these induce suffocation on the first day, or on the second, the third, or the fourth. Such as, in like manner, are attended with pain, are swelled up, and have redness (erythema) in the throat, are indeed very fatal, but more protracted than the former, provided the redness be great. Those cases in which both the throat and the neck are red, are more protracted, and certain persons recover from them, especially if the neck and breast be affected with erythema, and the erysipelas be not determined inwardly. If neither the erysipelas disappear on the critical day, nor any abscess form outwardly, nor any pus be spit up, and if the patient fancy himself well, and be free from pain, death, or a relapse of the erythema is to be apprehended. It is much less hazardous when the swelling and redness are determined outwardly; but if determined to the lungs, they superinduce delirium, and frequently some of these cases terminate in empyema. It is very dangerous to cut off or scarify enlarged uvulae while they are red and large, for inflammations and hemorrhages supervene; but one should try to reduce such swellings by some

other means at this season. When the whole of it is converted into an abscess, which is called Uva, or when the extremity of the variety called Columella is larger and round, but the upper part thinner, at this time it will be safe to operate. But it will be better to open the bowels gently before proceeding to the operation, if time will permit, and the patient be not in danger of being suffocated.

24. When the fevers cease without any symptoms of resolution occurring, and not on the critical days, in such cases a relapse may be anticipated. When any of the fevers is protracted, although the man exhibits symptoms of recovery, and there is no longer pain from any inflammation, nor from any other visible cause, in such a case a deposit, with swelling and pain, may be expected in some one of the joints, and not improbably in those below. Such deposits occur more readily and in less time to persons under thirty years of age; and one should immediately suspect the formation of such a deposit, if the fever be protracted beyond twenty days; but to aged persons these less seldom happen, and not until the fever be much longer protracted. Such a deposit may be expected, when the fever is of a continual type, and that it will pass into a quartan, if it become intermittent, and its paroxysms come on in an irregular manner, and if in this form it approach autumn. As deposits form most readily in persons below thirty years of age, so quartans most commonly occur to persons beyond that age. It is proper to know that deposits occur most readily in winter, that then they are most protracted, but are less given to return. Whoever, in a fever that is not of a fatal character, says that he has pain in his head, and that something dark appears to be before his eyes, and that he has pain at the stomach, will be seized with vomiting of bile; but if rigor also attack him, and the inferior parts of the hypochondrium are cold, vomiting is still nearer at hand; and if he eat or drink anything at such a season, it will be quickly vomited. In these cases, when the pain commences on the first day, they are particularly oppressed on the fourth and the fifth; and they are relieved on the seventh, but the greater part of them begin to have pain on the third day, and are most especially tossed on the fifth, but are relieved on the ninth or eleventh; but in those who begin to have pains on the fifth day, and other matters proceed properly with them, the disease comes to a crisis on the fourteenth day. But when in such a fever persons affected with headache, instead of having a dark appearance before their eyes, have dimness of vision, or flashes of light appear before their eyes, and instead of pain at the pit of the stomach, they have in their hypochondrium a fullness stretching either to the right or left side, without either pain or inflammation, a hemorrhage from the nose is to be expected in such a case, rather than a vomiting. But it is in young persons

particularly that the hemorrhage is to be expected, for in persons beyond the age of thirty-five, vomitings are rather to be anticipated. Convulsions occur to children if acute fever be present, and the belly be they cannot sleep, are agitated, and moan, and change color, and become green, livid, or ruddy. These complaints occur most readily to children which are very young up to their seventh year; older children and adults are not equally liable to be seized with convulsions in fevers, unless some of the strongest and worst symptoms precede, such as those which occur in frenzy. One must judge of children as of others, which will die and which recover, from the whole of the symptoms, as they have been specially described. These things I say respecting acute diseases, and the affections which spring from them.

25. He who would correctly beforehand those that will recover, and those that will die, and in what cases the disease will be protracted for many days, and in what cases for a shorter time, must be able to form a judgment from having made himself acquainted with all the symptoms, and estimating their powers in comparison with one another, as has been described, with regard to the others, and the urine and sputa, as when the patient coughs up pus and bile together. One ought also to consider promptly the influx of epidemical diseases and the constitution of the season. One should likewise be well acquainted with the particular signs and the other symptoms, and not be ignorant how that, in every year, and at every season, bad symptoms prognosticate ill, and favorable symptoms good, since the aforesaid symptoms appear to have held true in Libya, in Delos, and in Scythia, from which it may be known that, in the same regions, there is no difficulty in attaining a knowledge of many more things than these; if having learned them, one knows also how to judge and reason correctly of them. But you should not complain because the name of any disease may happen not to be described here, for you may know all such as come to a crisis in the aforementioned times, by the same symptoms.

# APHORISMS



*Translated by Charles Darwin Adams*

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## SECTION I.

1. Life is short, and Art long; the crisis fleeting; experience perilous, and decision difficult. The physician must not only be prepared to do what is right himself, but also to make the patient, the attendants, and externals cooperate.
2. In disorders of the bowels and vomitings, occurring spontaneously, if the matters purged be such as ought to be purged, they do good, and are well borne; but if not, the contrary. And so artificial evacuations, if they consist of such matters as should be evacuated, do good, and are well borne; but if not, the contrary. One, then, ought to look to the country, the season, the age, and the diseases in which they are proper or not.
3. In the athletae, embonpoint, if carried to its utmost limit, is dangerous, for they cannot remain in the same state nor be stationary; and since, then, they can neither remain stationary nor improve, it only remains for them to get worse; for these reasons the embonpoint should be reduced without delay, that the body may again have a commencement of reparation. Neither should the evacuations, in their case, be carried to an extreme, for this also is dangerous, but only to such a point as the person's constitution can endure. In like manner, medicinal evacuations, if carried to an extreme, are dangerous; and again, a restorative course, if in the extreme, is dangerous.
4. A slender restricted diet is always dangerous in chronic diseases, and also in acute diseases, where it is not requisite. And again, a diet brought to the extreme point of attenuation is dangerous; and repletion, when in the extreme, is also dangerous.
5. In a restricted diet, patients who transgress are thereby more hurt (than in any other?); for every such transgression, whatever it may be, is followed by greater consequences than in a diet somewhat more generous. On this account, a very slender, regulated, and restricted diet is dangerous to persons in health, because they bear transgressions of it more difficultly. For this reason, a slender and restricted diet is generally more dangerous than one a little more liberal.
6. For extreme diseases, extreme methods of cure, as to restriction, are most suitable.
7. When the disease is very acute, it is attended with extremely severe symptoms

in its first stage; and therefore an extremely attenuating diet must be used. When this is not the case, but it is allowable to give a more generous diet, we may depart as far from the severity of regimen as the disease, by its mildness, is removed from the extreme.

8. When the disease is at its height, it will then be necessary to use the most slender diet.

9. We must form a particular judgment of the patient, whether he will support the diet until the acme of the disease, and whether he will sink previously and not support the diet, or the disease will give way previously, and become less acute.

10. In those cases, then, which attain their acme speedily, a restricted diet should be enjoined at first; but in those cases which reach their acme later, we must retrench at that period or a little before it; but previously we must allow a more generous diet to support the patient.

11. We must retrench during paroxysms, for to exhibit food would be injurious. And in all diseases having periodical paroxysms, we must restrict during the paroxysms.

12. The exacerbations and remissions will be indicated by the diseases, the seasons of the year, the reciprocation of the periods, whether they occur every day, every alternate day, or after a longer period, and by the supervening symptoms; as, for example, in pleuritic cases, expectoration, if it occur at the commencement, shortens the attack, but if it appear later, it prolongs the same; and in the same manner the urine, and alvine discharges, and sweats, according as they appear along with favorable or unfavorable symptoms, indicate diseases of a short or long duration.

13. Old persons endure fasting most easily; next, adults; young persons not nearly so well; and most especially infants, and of them such as are of a particularly lively spirit.

14. Growing bodies have the most innate heat; they therefore require the most food, for otherwise their bodies are wasted. In old persons the heat is feeble, and therefore they require little fuel, as it were, to the flame, for it would be extinguished by much. On this account, also, fevers in old persons are not equally acute, because their bodies are cold.



15. In winter and spring the bowels are naturally the hottest, and the sleep most prolonged; at these seasons, then, the most sustenance is to be administered; for as the belly has then most innate heat, it stands in need of most food. The well-known facts with regard to young persons and the athleteae prove this.

16. A humid regimen is befitting in all febrile diseases, and particularly in children, and others accustomed to live on such a diet.

17. We must consider, also, in which cases food is to be given once or twice a day, and in greater or smaller quantities, and at intervals. Something must be conceded to habit, to season, to country, and to age.

18. Invalids bear food worst during summer and autumn, most easily in winter, and next in spring.

19. Neither give nor enjoin anything to persons during periodical paroxysms, but abstract from the accustomed allowance before the crisis.

20. When things are at the crisis, or when they have just passed it, neither move the bowels, nor make any innovation in the treatment, either as regards purgatives or any other such stimulants, but let things alone.

21. Those things which require to be evacuated should be evacuated, wherever they most tend, by the proper outlets.

22. We must purge and move such humors as are concocted, not such as are unconcocted, unless they are struggling to get out, which is mostly not the case.

23. The evacuations are to be judged of not by their quantity, but whether they be such as they should be, and how they are borne. And when proper to carry the evacuation to *deliquium animi* , this also should be done, provided the patient can support it.

24. Use purgative medicines sparingly in acute diseases, and at the commencement, and not without proper circumspection.

25. If the matters which are purged be such as should be purged, the evacuation is beneficial, and easily borne; but, not withstanding, if otherwise, with difficulty.

## SECTION II

1. In whatever disease sleep is laborious, it is a deadly symptom; but if sleep does good, it is not deadly.
2. When sleep puts an end to delirium, it is a good symptom.
3. Both sleep and insomnolency, when immoderate, are bad.
4. Neither repletion, nor fasting, nor anything else, is good when more than natural.
5. Spontaneous lassitude indicates disease.
6. Persons who have a painful affection in any part of the body, and are in a great measure sensible of the pain, are disordered in intellect.
7. Those bodies which have been slowly emaciated should be slowly recruited; and those which have been quickly emaciated should be quickly recruited.
8. When a person after a disease takes food, but does not improve in strength, it indicates that the body uses more food than is proper; but if this happen when he does not take food, it is to be understood evacuation is required.
9. When one wishes to purge, he should put the body into a fluent state.
10. Bodies not properly cleansed, the more you nourish the more you injure.
11. It is easier to fill up with drink than with food.
12. What remains in diseases after the crisis is apt to produce relapses.
13. Persons in whom a crisis takes place pass the night preceding the paroxysm uncomfortably, but the succeeding night generally more comfortably.
14. In fluxes of the bowels, a change of the dejections does good, unless the change be of a bad character.
15. When the throat is diseased, or tubercles ( *phymata* ) form on the body, attention must be paid to the secretions; for if they be bilious, the disease affects the

general system; but if they resemble those of a healthy person, it is safe to give nourishing food.

16. When in a state of hunger, one ought not to undertake labor.

17. When more food than is proper has been taken, it occasions disease; this is shown by the treatment.

18. From food which proves nourishing to the body either immediately or shortly, the dejections also are immediate.

19. In acute diseases it is not quite safe to prognosticate either death or recovery.

20. Those who have watery discharges from their bowels when young have dry when they are old; and those who have dry discharges when they are young will have watery when they are old.

21. Drinking strong wine cures hunger.

22. Diseases which arise from repletion are cured by depletion; and those that arise from depletion are cured by repletion; and in general, diseases are cured by their contraries.

23. Acute disease come to a crisis in fourteen days.

24. The fourth day is indicative of the seventh; the eighth is the commencement of the second week; and hence, the eleventh being the fourth of the second week, is also indicative; and again, the seventeenth is indicative, as being the fourth from the fourteenth, and the seventh from the eleventh.

25. The summer quartans are, for the most part, of short duration; but the autumnal are protracted, especially those occurring near the approach of winter.

26. It is better that a fever succeed to a convulsion, than a convulsion to a fever.

27. We should not trust ameliorations in diseases when they are not regular, nor be much afraid of bad symptoms which occur in an irregular form; for such are commonly inconstant, and do not usually continue, nor have any duration.

28. In fevers which are not altogether slight, it is a bad symptom for the body to

remain without any diminution of bulk, or to be wasted beyond measure; for the one state indicates a protracted disease, and the other weakness of body.

29. If it appear that evacuations are required, they should be made at the commencement of diseases; at the acme it is better to be quiet.

30. Toward the commencement and end of diseases all the symptoms are weaker, and toward the acme they are stronger.

31. When a person who is recovering from a disease has a good appetite, but his body does not improve in condition, it is a bad symptom.

32. For the most part, all persons in ill health, who have a good appetite at the commencement, but do not improve, have a bad appetite again toward the end; whereas, those who have a very bad appetite at the commencement, and afterward acquire a good appetite, get better off.

33. In every disease it is a good sign when the patient's intellect is sound, and he is disposed to take whatever food is offered to him; but the contrary is bad.

34. In diseases, there is less danger when the disease is one to which the patient's constitution, habit, age, and the season are allied, than when it is one to which they are not allied.

35. In all diseases it is better that the umbilical and hypogastric regions preserve their fullness; and it is a bad sign when they are very slender and emaciated; in the latter case it is dangerous to administer purgatives.

36. Persons in good health quickly lose their strength by taking purgative medicines, or using bad food.

37. Purgative medicines agree ill with persons in good health.

38. An article of food or drink which is slightly worse, but more palatable, is to be preferred to such as are better but less palatable.

39. Old have fewer complaints than young; but those chronic diseases which do befall them generally never leave them.

40. Catarrhs and coryza in very old people are not concocted.

41. Persons who have had frequent and severe attacks of swooning, without any manifest cause, die suddenly.

42. It is impossible to remove a strong attack of apoplexy, and not easy to remove a weak attack.

43. Of persons who have been suspended by the neck, and are in a state of insensibility, but not quite dead, those do not recover who have foam at the mouth.

44. Persons who are naturally very fat are apt to die earlier than those who are slender.

45. Epilepsy in young persons is most frequently removed by changes of air, of country, and of modes of life.

46. Of two pains occurring together, not in the same part of the body, the stronger weakens the other.

47. Pains and fevers occur rather at the formation of pus than when it is already formed.

48. In every movement of the body, whenever one begins to endure pain, it will be relieved by rest.

49. Those who are accustomed to endure habitual labors, although they be weak or old, bear them better than strong and young persons who have not been so accustomed.

50. Those things which one has been accustomed to for a long time, although worse than things which one is not accustomed to, usually give less disturbance; but a change must sometimes be made to things one is not accustomed to.

51. To evacuate, fill up, heat, cool, or otherwise, move the body in any way much and suddenly, is dangerous; and whatever is excessive is inimical to nature; but whatever is done by little and little is safe, more especially when a transition is made from one thing to another.

52. When doing everything according to indications, although things may not turn out agreeably to indication, we should not change to another while the

original appearances remain.

53. Those persons who have watery discharges from the bowels when they are young, come off better than those who have dry; but in old age they come off worse, for the bowels in aged persons are usually dried up.

54. Largeness of person in youth is noble and not unbecoming; but in old age it is inconvenient, and worse than a smaller structure.

### SECTION III

1. The changes of the season mostly engender diseases, and in the seasons great changes either of heat or of cold, and the rest agreeably to the same rule.
2. Of natures ( *temperaments?* ), some are well- or ill-adapted for summer, and some for winter.
3. Of diseases and ages, certain of them are well- or ill-adapted to different seasons, places, and kinds of diet.
4. In the seasons, when during the same day there is at one time heat and at another time cold, the diseases of autumn may be expected.
5. South winds induce dullness of hearing, dimness of visions, heaviness of the head, torpor, and languor; when these prevail, such symptoms occur in diseases. But if the north wind prevail, coughs, affections of the throat, hardness of the bowels, dysuria attended with rigors, and pains of the sides and breast occur. When this wind prevails, all such symptoms may be expected in diseases.
6. When summer is like spring, much sweating may be expected in fevers.
7. Acute diseases occur in droughts; and if the summer be particularly such, according to the constitution which it has given to the year, for the most part such diseases maybe expected.
8. In seasons which are regular, and furnish the productions of the season at the seasonable time, the diseases are regular, and come readily to a crisis; but in inconstant seasons, the diseases are irregular, and come to a crisis with difficulty.
9. In autumn, diseases are most acute, and most mortal, on the whole. The spring is most healthy, and least mortal.
10. Autumn is a bad season for persons in consumption.
11. With regard to the seasons, if the winter be of a dry and northerly character, and the spring rainy and southerly, in summer there will necessarily be acute fevers, ophthalmies, and dysenteries, especially in women, and in men of a humid temperament.



12. If the but the spring dry and northerly, women whose term of delivery should be in spring, have abortions from any slight cause; and those who reach their full time, bring forth children who are feeble, and diseased, so that they either die presently, or, if they live, are puny and unhealthy. Other people are subject to dysenteries and ophthalmies, and old men to catarrhs, which quickly cut them off.

13. If the summer be dry and northerly and the autumn rainy and southerly, headaches occur in winter, with coughs, hoarsenesses, coryzae, and in some cases consumptions.

14. But if the autumn be northerly and dry, it agrees well with persons of a humid temperament, and with women; but others will be subject to dry ophthalmies, acute fevers, coryzae, and in some cases melancholy.

15. Of the constitutions of the year, the dry, upon the whole, are more healthy than the rainy, and attended with less mortality.

16. The diseases which occur most frequently in rainy seasons are, protracted fevers, fluxes of the bowels, mortifications, epilepsies, apoplexies, and quinsies; and in dry, consumptive diseases, ophthalmies, arthritic diseases, stranguries, and dysenteries.

17. With regard to the states of the weather which continue but for a day, that which is northerly, braces the body, giving it tone, agility, and color, improves the sense of hearing, dries up the bowels, pinches the eyes, and aggravates any previous pain which may have been seated in the chest. But the southerly relaxes the body, and renders it humid, brings on dullness of hearing, heaviness of the head, and vertigo, impairs the movements of the eyes and the whole body, and renders the alvine discharges watery.

18. With regard to the seasons, in spring and in the commencement of summer, children and those next to them in age are most comfortable, and enjoy best health; in summer and during a certain portion of autumn, old people; during the remainder of the autumn and in winter, those of the intermediate ages.

19. All diseases occur at all seasons of the year, but certain of them are more apt to occur and be exacerbated at certain seasons.

20. The diseases of spring are, maniacal, melancholic, and epileptic disorders,

bloody flux, quinsy, coryza, hoarseness, cough, leprosy, lichen alphas, exanthemata mostly ending in ulcerations, tubercles, and arthritic diseases.

21. Of summer, certain of these, and continued, ardent, and tertian fevers, most especially vomiting, diarrhoea, ophthalmy, pains of the ears, ulcerations of the mouth, mortifications of the privy parts, and the sudamina.

22. Of autumn, most of the summer, quartan, and irregular fevers, enlarged spleen, dropsy, phthisis, strangury, lientery, dysentery, sciatica, quinsy, asthma, ileus, epilepsy, maniacal and melancholic disorders.

23. Of winter, pleurisy, pneumonia, coryza, hoarseness, cough, pains of the chest, pains of the ribs and loins, headache, vertigo, and apoplexy.

24. In the different ages the following complaints occur: to little and new-born children, aphthae, vomiting, coughs, sleeplessness, frights inflammation of the navel, watery discharges from the ears.

25. At the approach of dentition, pruritus of the gums, fevers, convulsions, diarrhoea, especially when cutting the canine teeth, and in those who are particularly fat, and have constipated bowels.

26. To persons somewhat older, affections of the tonsils, incurvation of the spine at the vertebra next the occiput, asthma, calculus, round worms, ascarides, acrochordon, satyriasmus, struma, and other tubercles (phymata), but especially the aforesaid.

27. To persons of a more advanced age, and now on the verge of manhood, the most of these diseases, and, moreover, more chronic fevers, and epistaxis.

28. Young people for the most part have a crisis in their complaints, some in forty days, some in seven months, some in seven years, some at the approach to puberty; and such complaints of children as remain, and do not pass away about puberty, or in females about the commencement of menstruation, usually become chronic.

29. To persons past boyhood, haemoptysis, phthisis, acute fevers, epilepsy, and other diseases, but especially the aforementioned.

30. To persons beyond that age, asthma, pleurisy, pneumonia, lethargy, phrenitis,

ardent fevers, chronic diarrhoea, cholera, dysentery, lientery, hemorrhoids.

31. To old people dyspnoea, catarrhs accompanied with coughs, dysuria, pains of the joints, nephritis, vertigo, apoplexy, cachexia, pruritus of the whole body, insomnolency, defluxions of the bowels, of the eyes, and of the nose, dimness of sight, cataract (glaucoma), and dullness of hearing.

## SECTION IV

1. We must purge pregnant women, if matters be turgid (in a state of orgasm?), from the fourth to the seventh month, but less freely in the latter; in the first and last stages of pregnancy it should be avoided.
2. In purging we should bring away such matters from the body as it would be advantageous had they come away spontaneously; but those of an opposite character should be stopped.
3. If the matters which are purged be such as should be purged, it is beneficial and well borne; but if the contrary, with difficulty.
4. We should rather purge upward in summer, and downward in winter.
5. About the time of the dog-days, and before it, the administration of purgatives is unsuitable.
6. Lean persons who are easily made to vomit should be purged upward, avoiding the winter season.
7. Persons who are difficult to vomit, and are moderately fat, should be purged downward, avoiding the summer season.
8. We must be guarded in purging phthisical persons upward.
9. And from the same mode of reasoning, applying the opposite rule to melancholic persons, we must purge them freely downward.
10. In very acute diseases, if matters be in a state of orgasm, we may purge on the first day, for it is a bad thing to procrastinate in such cases.
11. Those cases in which there are tormina, pains about the umbilicus, and pains about the loins, not removed either by purgative medicines or otherwise, usually terminate in dry dropsy.
12. It is a bad thing to purge upward in winter persons whose bowels are in a state of lientery.

13. Persons who are not easily purged upward by the hellebores, should have their bodies moistened by plenty of food and rest before taking the draught.
14. When one takes a draught of hellebore, one should be made to move more about, and indulge less in sleep and repose. Sailing on the sea shows that motion disorders the body.
15. When you wish the hellebore to act more, move the body, and when to stop, let the patient get sleep and rest.
16. Hellebore is dangerous to persons whose flesh is sound, for it induces convulsion.
17. Anorexia, heartburn, vertigo, and a bitter taste of the mouth, in a person free from fever, indicate the want of purging upward.
18. Pains seated above the diaphragm indicate purging upward, and those below it, downward.
19. Persons who have no thirst while under the action of a purgative medicine, do not cease from being purged until they become thirsty.
20. If persons free from fever be seized with tormina, heaviness of the knees, and pains of the loins, this indicates that purging downward is required.
21. Alvine dejections which are black, like blood, taking place spontaneously, either with or without fever, are very bad; and the more numerous and unfavorable the colors, so much the worse; when with medicine it is better, and a variety of colors in this case is not bad.
22. When black bile is evacuated in the beginning of any disease whatever, either upward or downward, it is a mortal symptom.
23. In persons attenuated from any disease, whether acute or chronic, or from wounds, or any other cause, if there be a discharge either of black bile, or resembling black blood, they die on the following day.
24. Dysentery, if it commence with black bile, is mortal.
25. Blood discharged upward, whatever be its character, is a bad symptom, but

downward it is (more?) favorable, and so also black dejections.

26. If in a person ill of dysentery, substances resembling flesh be discharged from the bowels, it is a mortal symptom.

27. In whatever cases of fever there is a copious hemorrhage from whatever channel, the bowels are in a loose state during convalescence.

28. In all cases whatever, bilious discharges cease if deafness supervenes, and in all cases deafness ceases when bilious discharges supervene.

29. Rigors which occur on the sixth day have a difficult crisis.

30. Diseases attended with paroxysms, if at the same hour that the fever leaves it return again next day, are of difficult crisis.

31. In febrile diseases attended with a sense of lassitude, deposits form about the joints, and especially those of the jaws.

32. In convalescents from diseases, if any part be pained, there deposits are formed.

33. But if any part be in a painful state previous to the illness, there the disease fixes.

34. If a person laboring under a fever, without any swelling in the fauces, be seized with a sense of suffocation suddenly, it is a mortal symptom.

35. If in a person with fever, the become suddenly distorted, and he cannot swallow unless with difficulty, although no swelling be present, it is a mortal symptom.

36. Sweats, in febrile diseases, are favorable, if they set in on the third, fifth, seventh, ninth, eleventh, fourteenth, seventeenth, twenty-first, twenty-seventh, and thirty-fourth day, for these sweats prove a crisis to the disease; but sweats not occurring thus, indicate pain, a protracted disease, and relapses.

37. Cold sweats occurring with an acute fever, indicate death; and along with a milder one, a protracted disease.

38. And in whatever part of the body there is a sweat, it shows that the disease is seated there.

39. And in whatever part of the body heat or cold is seated, there is disease.

40. And wherever there are changes in the whole body, and if the body be alternately cold and hot, or if one color succeed another, this indicates a protracted disease.

41. A copious sweat after sleep occurring without any manifest cause, indicates that the body is using too much food. But if it occur when one is not taking food, it indicates that evacuation is required.

42. A copious sweat, whether hot or cold, flowing continuously, indicates, the cold a greater, and the hot a lesser disease.

43. Fevers, not of the intermittent type, which are exacerbated on the third day, are dangerous; but if they intermit in any form, this indicates that they are not dangerous.

44. In cases attended with protracted fevers, tubercles (*phymata*) or pains occur about the joints.

45. When tubercles (*phymata*) or pains attack the joints after fevers, such persons are using too much food.

46. If in a fever not of the intermittent type a rigor seize a person already much debilitated, it is mortal.

47. In fevers not of the intermittent type, expectorations which are livid bloody, fetid and bilious, are all bad; but if evacuated properly, they are favorable. So it is with the alvine evacuations and the urine. But if none of the proper excretions take place by these channels, it is bad.

48. In fevers not of the intermittent type, if the external parts be cold, but the internal be burnt up, and if there be thirst, it is a mortal symptom.

49. In a fever not of the intermittent type, if a lip, an eye-brow, an eye, or the nose, be distorted; or if there be loss of sight or of hearing, and the patient be in a weak state-whatever of these symptoms occur, death is at hand.

50. Apostemes in fevers which are not resolved at the first crisis, indicate a protracted disease.
51. When in a fever not of the intermittent type dyspnoea and delirium come on, the case is mortal.
52. When persons in fevers, or in other illnesses, shed tears voluntarily, it is nothing out of place; but when they shed tears involuntarily, it is more so.
53. In whatever cases of fever very viscid concretions form about the teeth, the fevers turn out to be particularly strong.
54. In whatever case of ardent fever dry coughs of a tickling nature with slight expectoration are long protracted, there is usually not much thirst.
55. All fevers complicated with buboes are bad, except ephemerals.
56. Sweat supervening in a case of the fever ceasing, is bad, for the disease is protracted, and it indicates more copious humors.
57. Fever supervening in a case of confirmed spasm, or of tetanus, removes the disease.
58. A rigor supervening in a case of ardent fever, produces resolution of it.
59. A true tertian comes to a crisis in seven periods at furthest.
60. When in fevers there is deafness, if blood run from the nostrils, or the bowels become disordered, it carries off the disease.
61. In a febrile complaint, if the fever do not leave on the odd days, it relapses.
62. When jaundice supervenes in fevers before the seventh day, it a bad symptom, unless there be watery discharges from the bowels.
63. In whatever cases of fever rigors occur during the day, the fevers come to a resolution during the day.
64. When in cases of fever jaundice occurs on the seventh, the ninth, the eleventh, or the fourteenth day, it is a good symptom, provided the



hypochondriac region be not hard. Otherwise it is not a good symptom.

65. A strong heat about the stomach and cardialgia are bad symptoms in fevers.

66. In acute fevers, spasms, and strong pains about the bowels are bad symptoms.

67. In fevers, frights after sleep, or convulsions, are a bad symptom.

68. In fevers, a stoppage of the respiration is a bad symptom, for it indicates convulsions.

69. When the urine is thick, grumoss, and scanty in cases not free from fever a copious discharge of thinner urine proves beneficial. Such a discharge more commonly takes place when the urine has had a sediment from the first, or soon after the commencement.

70. When in fevers the urine is turbid, like that of a beast of burden, in such a case there either is or will be headache.

71. In cases which come to a crisis on the seventh day, the urine has a red nubecula on the fourth day, and the other symptoms accordingly.

72. When the urine is transparent and white, it is bad; it appears principally in cases of phrenitis.

73. When the hypochondriac region is affected with meteorism and borborygmi, should pain of the loins supervene, the bowels get into a loose and watery state, unless there be an eruption of flatus or a copious evacuation of urine. These things occur in fevers.

74. When there is reason to expect that an abscess will form in joints, the abscess is carried off by a copious discharge of urine, which is thick, and becomes white, like what begins to form in certain cases of quartan fever, attended with a sense of lassitude. It is also speedily carried off by a hemorrhage from the nose.

75. Blood or pus in the urine indicates ulceration either of the kidneys or of the bladder.

76. When small fleshy substances like hairs are discharged along with thick urine, these substances come from the kidneys.

77. In those cases where there are furfuraceous particles discharged along with thick urine, there is scabies of the bladder.

78. In those cases where there is a spontaneous discharge of bloody urine, it indicates rupture of a small vein in the kidneys.

79. In those cases where there is a sandy sediment in the urine, there is calculus in the bladder (or kidneys).

80. If a patient pass blood and clots in his urine, and have strangury, and if a pain seize the hypogastric region and perineum, the parts about the bladder are affected.

81. If a patient pass blood, pus, and scales, in the urine, and if it have a heavy smell, ulceration of the bladder is indicated.

82. When tubercles form in the urethra, if these suppurate and burst, there is relief.

83. When much urine is passed during the night, it indicates that the alvine evacuations are scanty.

## SECTION V

1. A spasm from taking hellebore is of a fatal nature.
2. Spasm supervening on a wound is fatal.
3. A convulsion, or hiccup, supervening on a copious discharge of blood is bad.
4. A convulsion, or hiccup, supervening upon hypercatharsis is bad.
5. If a drunken person suddenly lose his speech, he will die convulsed, unless fever come on, or he recover his speech at the time when the consequences of a debauch pass off.
6. Such persons as are seized with tetanus die within four days, or if they pass these they recover.
7. Those cases of epilepsy which come on before puberty may undergo a change; but those which come on after twenty-five years of age, for the most part terminate in death.
8. In pleuritic affections, when the disease is not purged off in fourteen days, it usually terminates in empyema.
9. Phthisis most commonly occurs between the ages of eighteen and thirty-five years.
10. Persons who escape an attack of quinsy, and when the disease is turned upon the lungs, die in seven days; or if they pass these they become affected with empyema.
11. In persons affected with phthisis, if the sputa which they cough up have a heavy smell when poured upon coals, and if the hairs of the head fall off, the case will prove fatal.
12. Phthisical persons, the hairs of whose head fall off, die if diarrhoea set in.
13. In persons who cough up frothy blood, the discharge of it comes from the lungs.

14. Diarrhoea attacking a person affected with phthisis is a mortal symptom.
15. Persons who become affected with empyema after pleurisy, if they get clear of it in forty days from the breaking of it, escape the disease; but if not, it passes into phthisis.
16. Heat produces the following bad effects on those who use it frequently: enervation of the fleshy parts, impotence of the nerves, torpor of the understanding, hemorrhages, deliquia, and, along with these, death.
17. Cold induces convulsions, tetanus, mortification, and febrile rigors.
18. Cold is inimical to the bones, the teeth, the nerves, the brain, and the spinal marrow, but heat is beneficial.
19. Such parts as have been congealed should be heated, except where there either is a hemorrhage, or one is expected.
20. Cold pinches ulcers, hardens the skin, occasions pain which does not end in suppuration, blackens, produces febrile rigors, convulsions, and tetanus.
21. In the case of a muscular youth having tetanus without a wound, during the midst of summer, it sometimes happens that the allusion of a large quantity of cold water recalls the heat. Heat relieves these diseases.
22. Heat is suppurative, but not in all kinds of sores, but when it is, it furnishes the greatest test of their being free from danger. It softens the skin, makes it thin, removes pain, soothes rigor, convulsions, and tetanus. It removes affections of the head, and heaviness of it. It is particularly efficacious in fractures of the bones, especially of those which have been exposed, and most especially in wounds of the head, and in mortifications and ulcers from cold; in herpes exedens, of the anus, the privy parts, the womb, the bladder, in all these cases heat is agreeable, and brings matters to a crisis; but cold is prejudicial, and does mischief.
23. Cold water is to be applied in the following cases; when there is a hemorrhage, or when it is expected, but not applied *to* the spot, but *around* the spot whence the blood flows; and in inflammations and inflammatory affections, inclining to a red and subsanguineous color, and consisting of fresh blood, in these cases it is to be applied but it occasions mortification in old cases; and in

erysipelas not attended with ulceration, as it proves injurious to erysipelas when ulcerated.

24. Cold things, such as snow and ice, are inimical to the chest, being provocative of coughs, of discharges of blood, and of catarrhs.

25. Swellings and pains in the joints, ulceration, those of a gouty nature, and sprains, are generally improved by a copious affusion of cold water, which reduces the swelling, and removes the pain; for a moderate degree of numbness removes pain.

26. The lightest water is that which is quickly heated and quickly cooled.

27. When persons have intense thirst, it is a good thing if they can sleep off the desire of drinking.

28. Fumigation with aromatics promotes menstruation, and would be useful in many other cases, if it did not occasion heaviness of the head.

29. Women in a state of pregnancy may be purged, if there be any urgent necessity ( *or* , if the humors be in a state of orgasm?), from the fourth to the seventh month, but less so in the latter case. In the first and last periods it must be avoided.

30. It proves fatal to a woman in a state of pregnancy, if she be seized with any of the acute diseases.

31. If a woman with child be bled, she will have an abortion, and this will be the more likely to happen, the larger the foetus.

32. Haemoptysis in a woman is removed by an eruption of the menses.

33. In a woman when there is a stoppage the menses, a discharge of blood from the nose is good.

34. When a pregnant woman has a violent diarrhoea, there is danger of her miscarrying.

35. Sneezing occurring to a woman affected with hysterics, and in difficult labor, is a good symptom.

36. When the menstrual discharge is of a bad color and irregular, it indicates that the woman stands in need of purging.
37. In a pregnant woman, if the breasts suddenly lose their fullness, she has a miscarriage.
38. If, in a woman pregnant with twins, either of her breasts lose its fullness, she will part with one of her children; and if it be the right breast which becomes slender, it will be the male child, or if the left, the female.
39. If a woman who is not with child, nor has brought forth, have milk, her menses are obstructed.
40. In women, blood collected in the breasts indicates madness.
41. If you wish to ascertain if a woman be with child, give her hydromel to drink when she is going to sleep, and has not taken supper, and if she be seized with tormina in the belly, she is with child, but otherwise she is not pregnant.
42. A woman with child, if it be a male, has a good color, but if a female, she has a bad color.
43. If erysipelas of the womb seize a woman with child, it will probably prove fatal.
44. Women who are very lean, have miscarriages when they prove with child, until they get into better condition.
45. When women, in a moderate condition of body, miscarry in the second or third month, without any obvious cause, their cotyledones are filled with mucosity, and cannot support the weight of the foetus, but are broken asunder.
46. Such women as are immoderately fat, and do not prove with child, in them it is because the epiploon (*fat?*) blocks up the mouth of the womb, and until it be reduced, they do not conceive.
47. If the portion of the uterus seated near the hip-joint suppurate, it gets into a state requiring to be treated with tents.
48. The male foetus is usually seated in the right, and the female in the left side.

49. To procure the expulsion of the secundines, apply a sternutatory, and shut the nostrils and mouth.

50. If you wish to stop the menses in a woman, apply as large a cupping instrument as possible to the breasts.

51. When women are with child, the mouth of their womb is closed.

52. If in a woman with child, much milk flow from the breasts, it indicates that the foetus is weak; but if the breasts be firm, it indicates that the foetus is in a more healthy state.

53. In women that are about to miscarry, the breasts become slender; but if again they become hard, there will be pain, either in the breasts, or in the hip-joints, or in the eyes, or in the knees, and they will not miscarry.

54. When the mouth of the uterus is hard, it is also necessarily shut.

55. Women with child who are seized with fevers, and who are greatly emaciated, without any (other?) obvious cause, have difficult and dangerous labors, and if they miscarry, they are in danger.

56. In the female flux ( *immoderate menstruation?* ), if convulsion and deliquium come on, it is bad.

57. When the menses are excessive, diseases take place, and when the menses are stopped, diseases from the uterus take place.

58. Strangury supervenes upon inflammation of the rectum, and of the womb, and strangury supervenes upon suppuration of the kidney, and hiccup upon inflammation of the liver.

59. If a woman do not conceive, and wish to ascertain whether she can conceive, having wrapped her up in blankets, fumigate below, and if it appear that the scent passes through the body to the nostrils and mouth, know that of herself she is not unfruitful.

60. If woman with a child have her courses, it is impossible that the child can be healthy.

61. If a woman's courses be suppressed, and neither rigor nor fever has followed, but she has been affected with nausea, you may reckon her to be with child.

62. Women who have the uterus cold and dense ( *compact?* ) do not conceive; and those also who have the uterus humid, do not conceive, for the semen is extinguished, and in women whose uterus is very dry, and very hot, the semen is lost from the want of food; but women whose uterus is in an intermediate state between these temperaments prove fertile.

63. And in like manner with respect to males; for either, owing to the laxity of the body, the pneuma is dissipated outwardly, so as not to propel the semen, or, owing to its density, the fluid ( *semen?* ) does not pass outwardly; or, owing to coldness, it is not heated so as to collect in its proper place ( *seminal vessels?* ), or, owing to its heat, the very same thing happens.

64. It is a bad thing to give milk to persons having headache, and it is also bad to give it in fevers, and to persons whose hypochondria are swelled up, and troubled with borborygmi, and to thirsty persons; it is bad also, when given to those who have bilious discharges in acute fevers, and to those who have copious discharges of blood; but it is suitable in phthisical cases, when not attended with very much fever; it is also to be given in fevers of a chronic and weak nature, when none of the aforementioned symptoms are present, and the patients are excessively emaciated.

65. When swellings appear on wounds, such cases are not likely to be attacked either with convulsions, or delirium, but when these disappear suddenly, if situated behind, spasms and tetanus supervene, and if before, mania, acute pains of the sides, or suppurations, or dysentery, if the swellings be rather red.

66. When no swelling appears on severe and bad wounds, it is a great evil.

67. In such cases, the soft are favorable; and crude, unfavorable.

68. When a person is pained in the back part of the head, he is benefited by having the straight vein in the forehead opened.

69. Rigors commence in women, especially at the loins, and spread by the back to the head; and in men also, rather in the posterior than the anterior side of the body, as from the arms and thighs; the skin there is rare, as is obvious from the growth of hair on them.



70. Persons attacked with quartans are not readily attacked with convulsions, or if previously attacked with convulsions, they cease if a quartan supervene.

71. In those persons in whom the skin is stretched, and parched and hard, the disease terminates without sweats; but in those in whom the skin is loose and rare, it terminates with sweats.

72. Persons disposed to jaundice are not very subject to flatulence.

## SECTION VI

1. In cases of chronic lientery, acid eructations supervening when there were none previously, is a good symptom.
2. Persons whose noses are naturally watery, and their seed watery, have rather a deranged state of health; but those in the opposite state, a more favorable.
3. In protracted cases of dysentery, loathing of food is a bad symptom, and still worse, if along with fever.
4. Ulcers, attended with a falling off of the hair, are mali moris.
5. It deserves to be considered whether the pains in the sides, and in the breasts, and in the other parts, differ much from one another.
6. Diseases about the kidneys and bladder are cured with difficulty in old men.
7. Pains occurring about the stomach, the more superficial they are, the more slight are they; and the less superficial, the more severe.
8. In dropsical persons, ulcers forming on the body are not easily healed.
9. Broad exanthemata are not very itchy.
10. In a person having a painful spot in the head, with intense cephalalgia, pus or water running from the nose, or by the mouth, or at the ears, removes the disease.
11. Hemorrhoids appearing in melancholic and nephritic affections are favorable.
12. When a person has been cured of chronic hemorrhoids, unless one be left, there is danger of dropsy or phthisis supervening.
13. Sneezing coming on, in the case of a person afflicted with hiccup, removes the hiccup.
14. In a case of dropsy, when the water runs by the veins into the belly, it removes the disease.

15. In confirmed diarrhoea, vomiting, when it comes on spontaneously, removes the diarrhoea.
16. A diarrhoea supervening in a confirmed case of pleurisy or pneumonia is bad.
17. It is a good thing in ophthalmy for the patient to be seized with diarrhoea.
18. A severe wound of the bladder, of the brain, of the heart, of the diaphragm, of the small intestines, of the stomach, and of the liver, is deadly.
19. When a bone, cartilage, nerve, the slender part of the jaw, or prepuce, are cut out, the part is neither restored, nor does it unite.
20. If blood be poured out preternaturally into a cavity, it must necessarily become corrupted.
21. In maniacal affections, if varices or hemorrhoids come on, they remove the mania.
22. Those ruptures in the back which spread down to the elbows are removed by venesection.
23. If a fright or despondency lasts for a long time, it is a melancholic affection.
24. If any of the intestines be transfixed, it does not unite.
25. It is not a good sign for an erysipelas spreading outwardly to be determined inward; but for it to be determined outward from within is good.
26. In whatever cases of ardent fever tremors occur, they are carried off by a delirium.
27. Those cases of empyema or dropsy which are treated by incision or the cautery, if the water or pus flow rapidly all at once, certainly prove fatal.
28. Eunuchs do not take the gout, nor become bald.
29. A woman does not take the gout, unless her menses be stopped.
30. A young man does not take the gout until he indulges in coition.

31. Pains of the eyes are removed by drinking pure wine, or the bath, or a fomentation, or venesection, or purging.
32. Persons whose speech has become impaired are likely to be seized with chronic diarrhoea.
33. Persons having acid eructations are not very apt to be seized with pleurisy.
34. Persons who have become bald are not subject to large varices; but should varices supervene upon persons who are bald, their hair again grows thick.
35. Hiccup supervening in dropsical cases is bad.
36. Venesection cures dysuria; open the internal veins of the arm.
37. It is a good symptom when swelling on the outside of the neck seizes a person very ill of quinsy, for the disease is turned outwardly.
38. It is better not to apply any treatment in cases of occult cancer; for, if treated, the patients die quickly; but if not treated, they hold out for a long time.
39. Convulsions take place either from repletion or depletion; and so it is with hiccup.
40. When pains, without inflammation, occur about the hypochondria, in such cases, fever supervening removes the pain.
41. When pus formed anywhere in the body does not point, this is owing to the thickness of the part.
42. In cases of jaundice, it is a bad symptom when the liver becomes indurated.
43. When persons having large spleens are seized with dysentery, and if the dysentery pass into a chronic state, either dropsy or lientery supervenes, and they die.
44. When ileus comes on in a case of strangury, they prove fatal in seven days, unless, fever supervening, there be a copious discharge of urine.
45. When ulcers continue open for a year or upward, there must necessarily be

exfoliation of bone, and the cicatrices are hollow.

46. Such persons as become hump-backed from asthma or cough before puberty, die.

47. Persons who are benefited by venesection or purging, should be bled or purged in spring.

48. In enlargement of the spleen, it is a good symptom when dysentery comes on.

49. In gouty affections, the inflammation subsides in the course of forty days.

50. When the brain is severely wounded, fever and vomiting of bile necessarily supervene.

51. When persons in good health are suddenly seized with pains in the head, and straightway are laid down speechless, and breathe with stertor, they die in seven days, unless fever come on.

52. We must attend to the appearances of the eyes in sleep, as presented from below; for if a portion of the white be seen between the closed eyelids, and if this be not connected with diarrhoea or severe purging, it is a very bad and mortal symptom.

53. Delirium attended with laughter is less dangerous than delirium attended with a serious mood.

54. In acute diseases, complicated with fever, a moaning respiration is bad.

55. For the most part, gouty affections rankle in spring and in autumn.

56. In melancholic affections, determinations of the humor which occasions them produce the following diseases; either apoplexy of the whole body, or convulsion, or madness, or blindness.

57. Persons are most subject to apoplexy between the ages of forty and sixty.

58. If the omentum protrude, it necessarily mortifies and drops off.

59. In chronic diseases of the hip-joint, if the bone protrude and return again into

its socket, there is mucosity in the place.

60. In persons affected with chronic disease of the hip-joint, if the bone protrude from its socket, the limb becomes wasted and maimed, unless the part be cauterized.

## SECTION VII

1. In acute diseases, coldness of the extremities is bad.
2. Livid flesh on a diseased bone is bad.
3. Hiccup and redness of the eyes, when they supervene on vomiting, are bad.
4. A chill supervening on a sweat is not good.
5. Dysentery, or dropsy, or ecstasy coming on madness is good.
6. In a very protracted disease, loss of appetite and unmixed discharges from the bowels are bad symptoms.
7. A rigor and delirium from excessive drinking are bad.
8. From the rupture of an internal abscess, prostration of strength, vomiting, and deliquium animi result.
9. Delirium or convulsion from a flow of blood is bad.
10. Vomiting, or hiccup, or convulsion, or delirium, in ileus, is bad.
11. Pneumonia coming on pleurisy is bad.
12. Phrenitis along with pneumonia is bad.
13. Convulsion or tetanus, coming upon severe burning, is bad.
14. Stupor or delirium from a blow on the head is bad.
15. From a spitting of blood there is a spitting of pus.
16. From spitting of pus arise phthisis and a flux; and when the sputa are stopped, they die.
17. Hiccup in inflammation of the liver bad.
18. Convulsion or delirium supervening upon insomnolency is bad.

18. a

Trembling upon lethargus is bad.

19. Erysipelas upon exposure of a bone (is bad?).

20. Mortification or suppuration upon erysipelas is bad.

21. Hemorrhage upon a strong pulsation in wounds is bad.

22. Suppuration upon a protracted pain of the parts about the bowels is bad.

23. Dysentery upon unmixed alvine discharges is bad.

24. Delirium upon division of the cranium, if it penetrate into the cavity of the head, is bad.

25. Convulsion upon severe purging is mortal.

26. Upon severe pain of the parts about the bowels, coldness of the extremities coming on is bad.

27. Tenesmus coming on in a case of pregnancy causes abortion.

28. Whatever piece of bone, cartilage, or nerve ( *tendon?* ) is cut off, it neither grows nor unites.

29. When strong diarrhoea supervenes in a case of leucophlegmatia, it removes the disease.

30. In those cases in which frothy discharges occur in diarrhoea there are defluxions from the head.

31. When there is a farinaceous sediment in the urine during fever, it indicates a protracted illness.

32. In those cases in which the urine is thin at first, and the sediments become bilious, an acute disease is indicated.

33. In those cases in which the urine becomes divided there is great disorder in the body.



34. When bubbles settle on the surface of the urine, they indicate disease of the kidneys, and that the complaint will be protracted.
35. When the scum on the surface is fatty and copious, it indicates acute diseases of the kidneys.
36. Whenever the aforementioned symptoms occur in nephritic diseases, and along with them acute pains about the muscles of the back, provided these be seated about the external parts, you may expect that there will be an abscess; but if the pains be rather about the internal parts, you may also rather expect that the abscess will be seated internally.
37. Haematemesis, without fever, does not prove fatal, but with fever it is bad; it is to be treated with refrigerant and styptic things.
38. Defluxions into the cavity of the chest suppurate in twenty days.
39. When a patient passes blood and clots, and is seized with strangury and pain in the perineum and pubes, disease about the bladder is indicated.
40. If the tongue suddenly lose its powers, or a part of the body become apoplectic, the affection is of a melancholic nature.
41. In hypercatharsis, of old persons, hiccup supervening is not a good symptom.
42. In a fever, is not of a bilious nature, a copious allusion of hot water upon the head removes the fever.
43. A woman does not become ambidexterous.
44. When empyema is treated either by the cautery or incision, if pure and white pus flow from the wound, the patients recover; but if mixed with blood, slimy and fetid, they die.
45. When abscess of the liver is treated by the cautery or incision, if the pus which is discharged be pure and white, the patients recover, (for in this case it is situated in the coats of the liver;) but if it resemble the lees of oil as it flows, they die.
46. Pains of the eyes are removed by drinking undiluted wine, plenteous bathing

with hot water, and venesection.

47. If a dropsical patient be seized with hiccup the case is hopeless.

48. Strangury and dysuria are cured by drinking pure wine, and venesection; open the vein on the inside.

49. It is a good sign when swelling and redness on the breast seize a person very ill of quinsy, for in this case the disease is diverted outwardly.

50. When the brain is attacked with sphacelus, the patients die in three days; or if they escape these, they recover.

51. Sneezing arises from the head, owing to the brain being heated, or the cavity ( *ventricle* ) in the head being filled with humors; the air confined in it then is discharged, and makes a noise, because it comes through a narrow passage.

52. Fever supervening on painful affections of the liver removes the pain.

53. Those persons to whom it is beneficial to have blood taken from their veins, should have it done in spring.

54. In those cases where phlegm is collected between the diaphragm and the stomach, and occasions pain, as not finding a passage into either of the cavities, the disease will be carried off if the phlegm be diverted to the bladder by the veins.

55. When the liver is filled with water and bursts into the epiploon, in this case the belly is filled with water and the patient dies.

56. Anxiety, yawning, rigor, -wine drunk with an equal proportion of water, removes these complaints.

57. When tubercles ( *phymata* ) form in the urethra, if they suppurate and burst, the pain is carried off.

58. In cases of concussion of the brain produced by any cause, the patients necessarily lose their speech.

59. In a person affected with fever, when there is no swelling in the fauces,

should suffocation suddenly come on, and the patient not be able to swallow, except with difficulty, it is a mortal symptom.

59. a

In the case of a person oppressed by fever, if the neck be turned aside, and the patient cannot swallow, while there is no swelling in the neck, it is a mortal sign.

60. Fasting should be prescribed the those persons who have humid flesh; for fasting dries bodies.

61. When there are changes in the whole body, and the body becomes sometimes cold and sometimes hot, and the color changes, a protracted disease is indicated.

62. A copious sweat, hot or cold, constantly flowing, indicates a superabundance of humidity; we must evacuate then, in a strong person upward, and in a weak, downward.

63. Fevers, not of the intermittent type, if they become exacerbated every third day are dangerous; but if they intermit in any form whatever, this shows that they are not dangerous.

64. In cases of protracted fever, either chronic abscesses or pains in the joints come on.

65. When chronic abscesses ( *phymata* ) or pains in the joints take place after fevers, the patients are using too much food.

66. If one give to a person in fever the same food which is given to a person in good health, what is strength to the one is disease to the other.

67. We must look to the urinary evacuations, whether they resemble those of persons in health; if not at all so, they are particularly morbid, but if they are like those of healthy persons, they are not at all morbid.

68. When the dejections are allowed to stand and not shaken, and a sediment is formed like scrapings (of the bowels), in such a case it is proper to purge the bowels; and if you give ptisans before purging, the more you give the more harm you will do.

69. Crude dejections are the product of black bile; if abundant, of more copious, and if deficient, of less copious collections of it.

70. The sputa in fevers, not of an intermittent type, which are livid, streaked with blood, and fetid, are all bad, it is favorable when this evacuation, like the urinary and alvine, passes freely; and whenever any discharge is suppressed and not purged off it is bad.

71. When you wish to purge the body, you must bring it into a state favorable to evacuations; and if you wish to dispose it to evacuations upward, you must bind the belly; and if you wish to dispose it to evacuations downward, you must moisten the belly.

72. Sleep and watchfulness, both of them, when immoderate, constitute disease.

73. In fevers which do not intermit, if the external parts be cold, and the internal burning hot, and fever prevail, it is a mortal sign.

74. In a fever which does not intermit, if a lip, the nose, or an eye be distorted, if the patient lose his sense of sight or of hearing, while now in a weak state, - whatever of these symptoms occurs it is mortal.

75. Upon leucophlegmatia dropsy supervenes.

76. Upon diarrhoea dysentery.

77. Upon dysentery lientery.

78. Upon sphacelus exfoliation of the bone.

79. and 80

Upon vomiting of blood consumption, and a purging of pus upward; upon consumption a defluxion from the head; upon a defluxion diarrhoea; upon diarrhoea a stoppage of the purging upward; upon the stoppage of it death.

81. In the discharges by the bladder, the belly, and the flesh ( *the skin?* ) if the body has departed slightly from its natural condition, the disease is slight; if much, it is great; if very much, it is mortal.

82. Persons above forty years of age who are affected with frenzy, do not readily recover; the danger is less when the disease is cognate to the constitution and age.

83. In whatever diseases the eyes weep voluntarily, it is a good symptom, but when involuntarily, it is a bad.

84. When in quartan fevers blood flows from the nostrils it is a bad symptom.

85. Sweats are dangerous when they do not occur on critical days, when they are strong, and quickly forced out of the forehead, either in the form of drops or in streams, and if excessively cold and copious; for such a sweat must proceed from violence, excess of pain, and prolonged squeezing ( *affliction?* ).

86. In a chronic disease an excessive flux from the bowels is bad.

87. Those diseases which medicines do not cure, iron ( *the knife?* ) cures; those which iron cannot cure, fire cures; and those which fire cannot cure, are to be reckoned wholly incurable.

# EPIDEMICS I AND III



*Translated by W. H. S. Jones*

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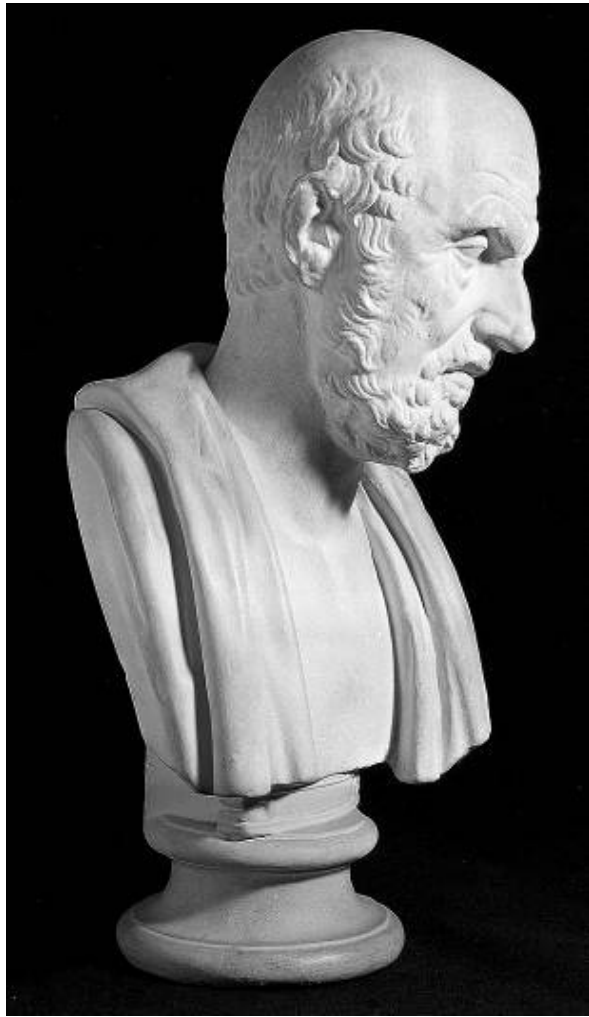
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*Bust of Hippocrates in the British Museum*

# EPIDEMICS I



## FIRST CONSTITUTION

I. IN Thasos during autumn, about the time of the equinox to near the setting of the Pleiades, there were many rains, gently continuous, with southerly winds. Winter southerly, north winds light, droughts ; on the whole, the winter was like a spring. Spring southerly and chilly ; slight showers. Summer in general cloudy. No rain. Etesian winds few, light and irregular.

The whole weather proved southerly, with droughts, but early in the spring, as the previous constitution had proved the opposite and northerly, a few patients suffered from ardent fevers, and these very mild, causing hemorrhage in few cases and no deaths. Many had swellings beside one ear, or both ears, in most cases unattended with fever, so that confinement to bed was unnecessary. In some cases there was slight heat, but in all the swellings subsided without causing harm ; in no case was there suppuration such as attends swellings of other origin. This was the character of them : — flabby, big, spreading, with neither inflammation nor pain ; in every case they disappeared without a sign. The sufferers were youths, young men, and men in their prime, usually those who frequented the wrestling school and gymnasia. Few women were attacked. Many had dry coughs which brought up nothing when they coughed, but their voices were hoarse. Soon after, though in some cases after some time, painful inflammations occurred either in one testicle or in both, sometimes accompanied with fever, in other cases not. Usually they caused much suffering. In other respects the people had no ailments requiring medical assistance.

II. Beginning early in the summer, throughout the summer and in winter many of those who had been ailing a long time took to their beds in a state of consumption, while many also who had hitherto been doubtful sufferers at this time showed undoubted symptoms. Some showed the symptoms now for the first time ; these were those whose constitution inclined to be consumptive. Many, in fact most of these, died ; of those who took to their beds I do not know one who survived even for a short time. Death came more promptly than is usual in consumption, and yet the other complaints, which will be described presently, though longer and attended with fever, were easily supported and did not prove fatal. For consumption was the worst of the diseases that occurred, and alone was responsible for the great mortality.

In the majority of cases the symptoms were these. Fever with shivering,

continuous, acute, not completely intermitting, but of the semitertian type ; remitting during one day they were exacerbated on the next, becoming on the whole more acute. Sweats were continual, but not all over the body. Severe chill in the extremities, which with difficulty recovered their warmth. Bowels disordered, with bilious, scanty, unmixed, thin, smarting stools, causing the patient to get up often. Urine either thin, colourless, unconcocted and scanty, or thick and with a slight deposit, not settling favourably, but with a crude and unfavourable deposit. The patients frequently coughed up small, concocted sputa, brought up little by little with difficulty. Those exhibiting the symptoms in their most violent form showed no concoction at all, but continued spitting crude sputa. In the majority of these cases the throat was throughout painful from the beginning, being red and inflamed. Fluxes slight, thin, pungent. Patients quickly wasted away and grew worse, being throughout averse to all food and experiencing no thirst. Delirium in many cases as death approached. Such were the symptoms of the consumption.

III. But when summer came, and during autumn occurred many continuous but not violent fevers, which attacked persons who were long ailing without suffering distress in any other particular manner ; for the bowels were in most cases quite easy, and hurt to no appreciable extent. Urine in most cases of good colour and clear, but thin, and after a time near the crisis it grew concocted. Coughing was slight, and caused no distress. No lack of appetite ; in fact it was quite possible even to give food. In general the patients did not sicken, as did the consumptives, with shivering fevers, but with slight sweats, the paroxysms being variable and irregular. The earliest crisis was about the twentieth day ; in most cases the crisis was about the fortieth day, though in many it was about the eightieth. In some cases the illness did not end in this way, but in an irregular manner without a crisis. In the majority of these cases the fevers relapsed after a brief interval, and after the relapse a crisis occurred at the end of the same periods as before. The disease in many of these instances was so protracted that it even lasted during the winter.

Out of all those described in this constitution only the consumptives showed a high mortality-rate ; for all the other patients bore up well, and the other fevers did not prove fatal.

## SECOND CONSTITUTION

IV. In Thasos early in autumn occurred unseasonable wintry storms, suddenly with many north and south winds bursting out into rains. These conditions continued until the setting of the Pleiades and during their season. Winter was northerly ; many violent and abundant rains ; snows ; generally there were fine intervals. With all this, however, the cold weather was not exceptionally unseasonable. But immediately after the winter solstice, when the west wind usually begins to blow, there was a return of severe wintry weather, much north wind, snow and copious rains continuously, sky stormy and clouded. These conditions lasted on, and did not remit before the equinox. Spring cold, northerly, wet, cloudy. Summer did not turn out excessively hot, the Etesian winds blowing continuously. But soon after, near the rising of Arcturus, there was much rain again, with northerly winds.

V. The whole year having been wet, cold and northerly, in the winter the public health in most respects was good, but in early spring many, in fact most, suffered illnesses. Now there began at first inflammations of the eyes, marked by rheum, pain, and unconcocted discharges. Small gummy sores, in many cases causing distress when they broke out ; the great majority relapsed, and ceased late on the approach of autumn. In summer and autumn dysenteric diseases, tenesmus and lientery ; bilious diarrhœa, with copious, thin, crude, smarting stools ; in some cases it was also watery. In many cases there were also painful, bilious defluxions, watery, full of thin particles, purulent and causing strangury. No kidney trouble, but their various symptoms succeeded in various orders. Vomitings of phlegm, bile, and undigested food. Sweats ; in all cases much moisture over all the body. These complaints in many cases were unattended with fever, and the sufferers were not confined to bed ; but in many others there was fever, as I am going to describe. Those who showed all the symptoms mentioned above were consumptives who suffered pain. When autumn came, and during winter, continuous fevers — in some few cases ardent — day fevers, night fevers, semitertians, exact tertians, quartans, irregular fevers. Each of the fevers mentioned found many victims.

VI. Now the ardent fevers attacked the fewest persons, and these were less distressed than any of the other sick. There was no bleeding from the nose, except very slight discharges in a few cases, and no delirium. All the other symptoms were slight. The crises of these diseases were quite regular, generally

in seventeen days, counting the days of intermission, and I know of no ardent fever proving fatal at this time, nor of any phrenitis. The tertians were more numerous than the ardent fevers and more painful. But all these had four regular periods from the first onset, had complete crises in seven, and in no case relapsed. But the quartans, while in many instances they began at first with quartan periodicity, yet in not a few they became quartan by an abscission from other fevers or illnesses. They were protracted, as quartans usually are, or even more protracted than usual. Many fell victims to quotidians, night fevers, or irregular fevers, and were ill for a long time, either in bed or walking about. In most of these cases the fevers continued during the season of the Pleiades or even until winter. In many patients, especially children, there were convulsions and slight feverishness from the beginning ; sometimes, too, convulsions supervened upon fevers. Mostly these illnesses were protracted, but not dangerous, except for those who from all other causes were predisposed to die.

VII. But those fevers which were altogether continuous and never intermitted at all, but in all cases grew worse after the manner of semitertians, with remission during one day followed by exacerbation during the next, were the most severe of all the fevers which occurred at this time, the longest and the most painful. Beginning mildly, and on the whole increasing always, with exacerbation, and growing worse, they had slight remissions followed quickly after an abatement by more violent exacerbations, generally becoming worse on the critical days. All patients had irregular rigors that followed no fixed law, most rarely and least in the semitertians, but more violent in the other fevers. Copious sweats, least copious in the semitertians ; they brought no relief, but on the contrary caused harm. These patients suffered great chill in the extremities, which grew warm again with difficulty. Generally there was sleeplessness, especially with the semitertians, followed afterwards by coma. In all the bowels were disordered and in a bad state, but in the semitertians they were far the worst. In most of them urine either ( *a* ) thin, crude, colourless, after a time becoming slightly concocted with signs of crisis, or ( *b* ) thick enough but turbid, in no way settling or forming sediment, or ( *c* ) with small, bad, crude sediments, these being the worst of all. Coughs attended the fevers, but I cannot say that either harm or good resulted from the coughing on this occasion.

VIII. Now the greatest number of these symptoms continued to be protracted, troublesome, very disordered, very irregular, and without any critical signs, both in the case of those who came very near death and in the case of those who did not. For even if some patients enjoyed slight intermissions, there followed a

quick relapse. A few of them experienced a crisis, the earliest being about the eightieth day, some of the latter having a relapse, so that most of them were still ill in the winter. The greatest number had no crisis before the disease terminated. These symptoms occurred in those who recovered just as much as in those who did not. The illnesses showed a marked absence of crisis and a great variety ; the most striking and the worst symptom, which throughout attended the great majority, was a complete loss of appetite, especially in those whose general condition exhibited fatal signs, but in these fevers they did not suffer much from unseasonable thirst. After long intervals, with many pains and with pernicious wasting, there supervened abscessions either too severe to be endured, or too slight to be beneficial, so that there was a speedy return of the original symptoms, and an aggravation of the mischief.

IX. The symptoms from which these patients suffered were dysenteries and tenesmus, lenteries also and fluxes. Some had dropsies also, either with or without these. Whenever any of these attacked violently they were quickly fatal, or, if mild, they did no good. Slight eruptions, which did not match the extent of the diseases and quickly disappeared again, or swellings by the ears that grew smaller and signified nothing, in some cases appearing at the joints, especially the hip-joint, in few instances leaving with signs of crisis, when they quickly re-established themselves in their original state.

X. From all the diseases some died, but the greatest number from these fevers, especially children — those just weaned, older children of eight or ten years, and those approaching puberty. These victims never suffered from the latter symptoms without the first I have described above, but often the first without the latter. The only good sign, the most striking that occurred, which saved very many of those who were in the greatest danger, was when there was a change to strangury, into which abscessions took place. The strangury, too, came mostly to patients of the ages mentioned, though it did happen to many of the others, either without their taking to bed or when they were ill. Rapid and great was the complete change that occurred in their case. For the bowels, even if they were perniciously loose, quickly recovered ; their appetite for everything returned, and hereafter the fever abated. But the strangury, even in these cases, was long and painful. Their urine was copious, thick, varied, red, mixed with pus, and passed with pain. But they all survived, and I know of none of these that died.

XI. In all dangerous cases you should be on the watch for all favourable coctions of the evacuations from all parts, or for fair and critical abscessions. Coctions

signify nearness of crisis and sure recovery of health, but crude and uncooked evacuations, which change into bad abscessions, denote absence of crisis, pain, prolonged illness, death, or a return of the same symptoms. But it is by a consideration of other signs that one must decide which of these results will be most likely. Declare the past, diagnose the present, foretell the future ; practise these acts. As to diseases, make a habit of two things — to help, or at least to do no harm. The art has three factors, the disease, the patient, the physician. The physician is the servant of the art. The patient must co-operate with the physician in combating the disease.

XII. Pains about the head and neck, and heaviness combined with pain, occur both without and with fever. Sufferers from phrenitis have convulsions, and eject verdigris-coloured vomit ; some die very quickly. But in ardent and the other fevers, those with pain in the neck, heaviness of the temples, dimness of sight, and painless tension of the hypochondrium, bleed from the nose ; those with a general heaviness of the head, cardialgia, and nausea, vomit afterwards bile and phlegm. Children for the most part in such cases suffer chiefly from the convulsions. Women have both these symptoms and pains in the womb. Older people, and those whose natural heat is failing, have paralysis or raving or blindness.

## THIRD CONSTITUTION

XIII. In Thasos a little before and at the season of Arcturus many violent rains with northerly winds. About the equinox until the setting of the Pleiades slight, southerly rains. Winter northerly, droughts, cold periods, violent winds, snow. About the equinox very severe storms. Spring northerly, droughts, slight rains, periods of cold. About the summer solstice slight showers, periods of great cold until near the Dog Star. After the Dog Star, until Arcturus, hot summer. Great heat, not intermittent but continuous and severe. No rain fell. The Etesian winds blew. About Arcturus southerly rains until the equinox.

XIV. In this constitution during winter began paralyses which attacked many, a few of whom quickly died. In fact, the disease was generally epidemic. In other respects the public health continued good. Early in spring began ardent fevers which continued until the equinox and on to summer. Now those who began to be ill at once, in spring or the beginning of summer, in most cases got well, though a few died ; but when autumn and the rains came the cases were dangerous, and more died.

As to the peculiarities of the ardent fevers, the most likely patients to survive were those who had a proper and copious bleeding from the nose, in fact I do not know of a single case in this constitution that proved fatal when a proper bleeding occurred, For Philiscus and Epaminon and Silenus, who died, had only a slight epistaxis on the fourth and fifth days. Now the majority of the patients had rigors near the crisis, especially such as had no epistaxis, but these had sweats also as well as rigors.

XV. Some had jaundice on the sixth day, but these were benefited by either a purging through the bladder or a disturbance of the bowels or a copious hemorrhage, as was the case with Heraclides, who lay sick at the house of Aristocydes. This patient, however, who had a crisis on the twentieth day, not only bled from the nose, but also experienced disturbance of the bowels and a purging through the bladder. Far otherwise was it with the servant of Phanagoras, who had none of these symptoms, and died. But the great majority had hemorrhage, especially youths and those in the prime of life, and of these the great majority who had no hemorrhage died. Older people had jaundice or disordered bowels, for example Bion, who lay sick at the house of Silenus. Dysenteries also were general in summer, and some too of those who had fallen

ill, and also suffered from hemorrhage, finally had dysentery ; for example, the slave of Erato and Myllus, after copious hemorrhage, lapsed into dysentery. They recovered.

This humour, then, especially was in great abundance, since even those who had no hemorrhage near the crisis, but swellings by the ears which disappeared — and after their disappearance there was a heaviness along the left flank up to the extremity of the hip — after the crisis had pain and passed thin urine, and then began to suffer slight hemorrhage about the twenty-fourth day, and abscessions into hemorrhage occurred. In the case of Antipho, son of Critobulus, the illness ceased and came to a complete crisis about the fortieth day.

XVI. Though many women fell ill, they were fewer than the men and less frequently died. But the great majority had difficult childbirth, and after giving birth they would fall ill, and these especially died, as did the daughter of Telebulus on the sixth day after delivery. Now menstruation appeared during the fevers in most cases, and with many maidens it occurred then for the first time. Some bled from the nose. Sometimes both epistaxis and menstruation appeared together ; for example, the maiden daughter of Daitharses had her first menstruation during fever and also a violent discharge from the nose. I know of no woman who died if any of these symptoms showed themselves properly, but all to my knowledge had abortions if they chanced to fall ill when with child.

XVII. Urine in most cases was of good colour, but thin and with slight sediments, and the bowels of most were disordered with thin, bilious excretions. Many after a crisis of the other symptoms ended with dysentery, as did Xenophanes and Critias. I will mention cases in which was passed copious, watery, clear and thin urine, even after a crisis in other respects favourable, and a favourable sediment : Bion, who lay sick at the house of Silenus, Cratis, who lodged with Xenophanes, the slave of Areto, and the wife of Mnesistratus. Afterwards all these suffered from dysentery.

About the season of Arcturus many had crisis on the eleventh day, and these did not suffer even the normal relapses. There were also comatose fevers about this time, usually in children, and of all patients these showed the lowest mortality.

XVIII. About the equinox up to the setting of the Pleiades, and during winter, although the ardent fevers continued, yet cases of phrenitis were most frequent at this time, and most of them were fatal. In summer, too, a few cases had occurred.



Now the sufferers from ardent fever, when fatal symptoms attended, showed signs at the beginning. For right from the beginning there was acute fever with slight rigors, sleeplessness, thirst, nausea, slight sweats about the forehead and collar-bones, but in no case general, much delirium, fears, depression, very cold extremities, toes and hands, especially the latter. The exacerbations on the even days ; but in most cases the pains were greatest on the fourth day, with sweat for the most part chilly, while the extremities could not now be warmed again, remaining livid and cold ; and in these cases the thirst ceased. Their urine was scanty, black, thin, with constipation of the bowels. Nor was there hemorrhage from the nose in any case when these symptoms occurred, but only slight epistaxis. None of these cases suffered relapse, but they died on the sixth day, with sweating. The cases of phrenitis had all the above symptoms, but the crises generally occurred on the eleventh day. Some had their crises on the twentieth day, namely those in whom the phrenitis did not begin at first, or began about the third or fourth day, but though these fared tolerably at the beginning, yet the disease assumed an acute form about the seventh day.

XIX. Now the number of illnesses was great. And of the patients there died chiefly striplings, young people, people in their prime, the smooth, the fair-skinned, the straight-haired, the black-haired, the black-eyed, those who had lived recklessly and care-lessly, the thin-voiced, the rough-voiced, the lispers, the passionate. Women too died in very great numbers who were of this kind. In this constitution there were four symptoms especially which denoted recovery : — a proper hemorrhage through the nostrils ; copious discharges by the bladder of urine with much sediment of a proper character ; disordered bowels with bilious evacuations at the right time ; the appearance of dysenteric characteristics. The crisis in many cases did not come with one only of the symptoms described above, but in most cases all symptoms were experienced, and the patients appeared to be more distressed ; but all with these symptoms got well. Women and maidens experienced all the above symptoms, but besides, whenever any took place properly, and whenever copious menstruation supervened, there was a crisis therefrom which resulted in recovery ; in fact I know of no woman who died when any of these symptoms took place properly. For the daughter of Philo, who died, though she had violent epistaxis, dined rather unseasonably on the seventh day.

In acute fevers, more especially in ardent fevers, when involuntary weeping occurs, epistaxis is to be expected if the patient have no fatal symptoms besides ; for when he is in a bad way such weeping portends not hemorrhage but death.

XX. The painful swellings by the ears in fevers in some cases neither subsided nor suppurated when the fever ceased with a crisis. They were cured by bilious diarrhœa, or dysentery, or a sediment of thick urine such as closed the illness of Hermippus of Clazomenæ. The circumstances of the crises, from which too I formed my judgments, were either similar or dissimilar ; for example, the two brothers, who fell sick together at the same time, and lay ill near the bungalow of Epigenes. The elder of these had a crisis on the sixth day, the younger on the seventh. Both suffered a relapse together at the same time with an intermission of five days. After the relapse both had a complete crisis together on the seventeenth day. But the great majority had a crisis on the sixth day, with an intermission of six days followed by a crisis on the fifth day after the relapse. Those who had a crisis on the seventh day had an intermission of seven days, with a crisis on the third day after the relapse. Others with a crisis on the seventh had an intermission of three days, with a crisis on the seventh day after the relapse. Some who had a crisis on the sixth day had an intermission of six and a relapse of three, an intermission of one and a relapse of one, followed by a crisis ; for example, Euagon the son of Daitharses. Others with a crisis on the sixth had an intermission of seven days, and after the relapse a crisis on the fourth ; for example, the daughter of Aglai+das. Now most of those who fell ill in this constitution went through their illness in this manner, and none of those who recovered, so far as I know, failed to suffer the relapses which were normal in these cases, but all, so far as I know, recovered if their relapses took place after this fashion. Further, I know of none who suffered a fresh relapse after going through the illness in the manner described above.

XXI. In these diseases most died on the sixth day, as did Epaminondas, Silenus and Philiscus the son of Antagoras. Those who had the swellings by the ears had a crisis on the twentieth day, but these subsided in all cases without suppuration, being diverted to the bladder. There were two cases of suppuration, both fatal, Cratistonax, who lived near the temple of Heracles, and the serving-maid of Scymnus the fuller. When there was a crisis on the seventh day, with an intermission of nine days followed by a relapse, there was a second crisis on the fourth day after the relapse — in the case of Pantacles, for example, who lived by the temple of Dionysus. When there was a crisis on the seventh day, with an intermission of six days followed by a relapse, there was a second crisis on the seventh day after the relapse — in the case of Phanocritus, for example, who lay sick at the house of Gnathon the fuller.

XXII. During winter, near the time of the winter solstice, and continuing until

the equinox, the ardent fevers and the phrenitis still caused many deaths, but their crises changed. Most cases had a crisis on the fifth day from the outset, then intermitted four days, relapsed, had a crisis on the fifth day after the relapse, that is, after thirteen days altogether. Mostly children experienced crises thus, but older people did so too. Some had a crisis on the eleventh day, a relapse on the fourteenth, and a complete crisis on the twentieth. But if rigor came on about the twentieth day the crisis came on the fortieth. Most had rigors near the first crisis, and those who had rigors at first near the crisis, had rigors again in the relapses at the time of the crisis. Fewest experienced rigors in the spring, more in summer, more still in autumn, but by far the most during winter. But the hemorrhages tended to cease.

XXIII. The following were the circumstances attending the diseases, from which I framed my judgments, learning from the common nature of all and the particular nature of the individual, from the disease, the patient, the regimen prescribed and the prescriber — for these make a diagnosis more favourable or less ; from the constitution, both as a whole and with respect to the parts, of the weather and of each region ; from the custom, mode of life, practices and ages of each patient ; from talk, manner, silence, thoughts, sleep or absence of sleep, the nature and time of dreams, pluckings, scratchings, tears ; from the exacerbations, stools, urine, sputa, vomit, the antecedents and consequents of each member in the successions of diseases, and the abscessions to a fatal issue or a crisis, sweat, rigor, chill, cough, sneezes, hiccoughs, breathing, belchings, flatulence, silent or noisy, hemorrhages, and hemorrhoids. From these things must we consider what their consequents also will be.

XXIV. Some fevers are continuous, some have an access during the day and an intermission during the night, or an access during the night and an intermission during the day ; there are semitertians, tertians, quartans, quintans, septans, nonans. The most acute diseases, the most severe, difficult and fatal, belong to the continuous fevers. The least fatal and least difficult of all, but the longest of all, is the quartan. Not only is it such in itself, but it also ends other, and serious, diseases. In the fever called semitertian, which is more fatal than any other, there occur also acute diseases, while it especially precedes the illness of consumptives, and of those who suffer from other and longer diseases. The nocturnal is not very fatal, but it is long. The diurnal is longer still, and to some it also brings a tendency to consumption. The septan is long but not fatal. The nonan is longer still but not fatal. The exact tertian has a speedy crisis and is not fatal. But the quintan is the worst of all. For if it comes on before consumption

or during consumption the patient dies.

XXV. Each of these fevers has its modes, its constitutions and its exacerbations. For example, a continuous fever in some cases from the beginning is high and at its worst, leading up to the most severe stage, but about and at the crisis it moderates. In other cases it begins gently and in a suppressed manner, but rises and is exacerbated each day, bursting out violently near the crisis. In some cases it begins mildly, but increases and is exacerbated, reaching its height after a time ; then it declines again until the crisis or near the crisis. These characteristics may show themselves in any fever and in any disease. It is necessary also to consider the patient's mode of life and to take it into account when prescribing. Many other important symptoms there are which are akin to these, some of which I have described, while others I shall describe later. These must be duly weighed when considering and deciding who is suffering from one of these diseases in an acute, fatal form, or whether the patient may recover ; who has a chronic, fatal illness, or one from which he may recover ; who is to be prescribed for or not, what the prescription is to be, the quantity to be given and the time to give it.

XXVI. When the exacerbations are on even days, the crises are on even days. But the diseases exacerbated on odd days have their crises on odd days. The first period of diseases with crises on the even days is the fourth day, then the sixth, eighth, tenth, fourteenth, twentieth, twenty-fourth, thirtieth, fortieth, sixtieth, eightieth, hundred and twentieth. Of those with a crisis on the odd days the first period is the third, then the fifth, seventh, ninth, eleventh, seventeenth, twenty-first, twenty-seventh, thirty-first. Further, one must know that, if the crises be on other days than the above, there will be relapses, and there may also be a fatal issue. So one must be attentive and know that at these times there will be the crises resulting in recovery, or death, or a tendency for better or worse. One must also consider in what periods the crises occur of irregular fevers, of quartans, of quintans, of septans and of nonans.

## FOURTEEN CASES

### CASE I

Philiscus lived by the wall. He took to his bed with acute fever on the first day and sweating ; night uncomfortable.

*Second day.* General exacerbation, later a small clyster moved the bowels well. A restful night.

*Third day.* Early and until mid-day he appeared to have lost the fever ; but towards evening acute fever with sweating ; thirst ; dry tongue ; black urine. An uncomfortable night, without sleep ; completely out of his mind.

*Fourth day.* All symptoms exacerbated ; black urine ; a more comfortable night, and urine of a better colour.

*Fifth day.* About mid-day slight epistaxis of unmixed blood. Urine varied, with scattered, round particles suspended in it, resembling semen ; they did not settle. On the application of a suppository the patient passed, with flatulence, scanty excreta. A distressing night, snatches of sleep, irrational talk ; extremities everywhere cold, and would not get warm again ; black urine ; snatches of sleep towards dawn ; speechless ; cold sweat ; extremities livid. About mid-day on the sixth day the patient died. The breathing throughout, as though he were recollecting to do it, was rare and large. Spleen raised in a round swelling ; cold sweats all the time. The exacerbations on even days.

### CASE II

Silenus lived on Broadway near the place of Eualcidas. After over-exertion, drinking, and exercises at the wrong time he was attacked by fever. He began by having pains in the loins, with heaviness in the head and tightness of the neck. From the bowels on the first day there passed copious discharges of bilious matter, unmixed, frothy, and highly coloured. Urine black, with a black sediment ; thirst ; tongue dry ; no sleep at night.

*Second day.* Acute fever, stools more copious, thinner, frothy ; urine black ; uncomfortable night ; slightly out of his mind.

*Third day.* General exacerbation ; oblong tightness of the hypochondrium, soft underneath, extending on both sides to the navel ; stools thin, blackish ; urine turbid, blackish ; no sleep at night ; much rambling, laughter, singing ; no power of restraining himself.

*Fourth day.* Same symptoms.

*Fifth day.* Stools unmixed, bilious, smooth, greasy ; urine thin, transparent ; lucid intervals.

*Sixth day.* Slight sweats about the head ; extremities cold and livid ; much tossing ; nothing passed from the bowels ; urine suppressed ; acute fever.

*Seventh day.* Speechless ; extremities would no longer get warm ; no urine.

*Eighth day.* Cold sweat all over ; red spots with sweat, round, small like acne, which persisted without subsiding. From the bowels with slight stimulus there came a copious discharge of solid stools, thin, as it were unconcocted, painful. Urine painful and irritating. Extremities grow a little warmer ; fitful sleep ; coma ; speechlessness ; thin, transparent urine.

*Ninth day.* Same symptoms.

*Tenth day.* Took no drink ; coma ; fitful sleep. Discharges from the bowels similar ; had a copious discharge of thickish urine, which on standing left a farinaceous, white deposit ; extremities again cold.

*Eleventh day.* Death.

From the beginning the breath in this case was throughout rare and large. Continuous throbbing of the hypochondrium ; age about twenty years.

### CASE III

Herophon had acute fever ; scanty stools with tenesmus at the beginning, afterwards becoming thin, bilious and fairly frequent. No sleep ; urine black and thin.

*Fifth day.* Deafness early in the day ; general exacerbation ; spleen swollen ; tension of the hypochondrium ; scanty black stools ; delirium.

*Sixth day.* Wandering talk ; at night sweat and chill ; the wandering persisted.

*Seventh Day.* Chill all over ; thirst ; out of his mind. During the night he was rational, and slept.

*Eighth day.* Fever ; spleen lessened ; quite rational ; pain at first in the groin, on the side of the spleen ; then the pains extended to both legs. Night comfortable ; urine of a better colour, with a slight deposit.

*Ninth day.* Sweat, crisis, intermission. On the fifth day after the crisis the patient relapsed. Immediately the spleen swelled ; acute fever ; return of deafness. On the third day after the relapse the spleen grew less and the deafness diminished, but there was pain in the legs. During the night he sweated. The crisis was about the seventeenth day. There was no delirium during the relapse.

#### CASE IV

In Thasos the wife of Philinus gave birth to a daughter. The lochial discharge was normal, and the mother was doing well when on the fourteenth day after delivery she was seized with fever attended with rigor. At first she suffered in the stomach and the right hypochondrium. Pains in the genital organs. The discharge ceased. By a pessary these troubles were eased, but pains persisted in the head, neck and loins. No sleep ; extremities cold ; thirst ; bowels burnt ; scanty stools ; urine thin, and at first colourless.

*Sixth day.* Much delirium at night, followed by recovery of reason.

*Seventh day.* Thirst ; stools scanty, bilious, highly coloured.

*Eighth day.* Rigor ; acute fever ; many painful convulsions ; much delirium. The application of a suppository made her keep going to stool, and there were copious motions with a bilious flux. No sleep.

*Ninth day.* Convulsions.

*Tenth day.* Lucid intervals.

*Eleventh day.* Slept ; complete recovery of her memory, followed quickly by renewed delirium. A copious passing of urine with convulsions — her attendants seldom reminding her — which was white and thick, like urine with a sediment

and then shaken ; it stood for a long time without forming a sediment ; colour and consistency like that of the urine of cattle. Such was the nature of the urine that I myself saw.

About the fourteenth day there were twitchings over all the body ; much wandering, with lucid intervals followed quickly by renewed delirium. About the seventeenth day she became speechless.

*Twentieth day.* Death.

## CASE V

The wife of Epicrates, who lay sick near the founder, when near her delivery was seized with severe rigor without, it was said, becoming warm, and the same symptoms occurred on the following day. On the third day she gave birth to a daughter, and the delivery was in every respect normal. On the second day after the delivery she was seized with acute fever, pain at the stomach and in the genitals. A pessary relieved these symptoms, but there was pain in the head, neck and loins. No sleep. From the bowels passed scanty stools, bilious, thin and unmixed. Urine thin and blackish. Delirium on the night of the sixth day from the day the fever began.

*Seventh day.* All symptoms exacerbated ; sleeplessness ; delirium ; thirst ; bilious, highly-coloured stools.

*Eighth day.* Rigor ; more sleep.

*Ninth day.* The same symptoms. *Tenth day.* Severe pains in the legs ; pain again at the stomach ; heaviness in the head ; no delirium ; more sleep ; constipation.

*Eleventh day.* Urine of better colour, with a thick deposit ; was easier.

*Fourteenth day.* Rigor ; acute fever.

*Fifteenth day.* Vomited fairly frequently bilious, yellow vomit ; sweated without fever ; at night, however, acute fever ; urine thick, with a white sediment.

*Sixteenth day.* Exacerbation ; an uncomfortable night ; no sleep ; delirium.

*Eighteenth day.* Thirst ; tongue parched ; no sleep ; much delirium ; pain in the



legs.

About the twentieth day. Slight rigors in the early morning ; coma ; quiet sleep ; scanty, bilious, black vomits ; deafness at night.

About the twenty-first day. Heaviness all over the left side, with pain ; slight coughing ; urine thick, turbid, reddish, no sediment on standing. In other respects easier ; no fever. From the beginning she had pain in the throat ; redness ; uvula drawn back ; throughout there persisted an acrid flux, smarting, and salt.

About the twenty-seventh day. No fever ; sediment in urine ; some pain in the side.

About the thirty-first day. Attacked by fever ; bowels disordered and bilious.

*Fortieth day.* Scanty, bilious vomits.

*Eightieth day.* Complete crisis with cessation of fever.

## CASE VI

Cleanactides, who lay sick above the temple of Heracles, was seized by an irregular fever. He had at the beginning pains in the head and the left side, and in the other parts pains like those caused by fatigue. The exacerbations of the fever were varied and irregular ; sometimes there were sweats, sometimes there were not. Generally the exacerbations manifested themselves most on the critical days.

About the twenty-fourth day. Pain in the hands ; bilious, yellow vomits, fairly frequent, becoming after a while like verdigris ; general relief.

About the thirtieth day. Epistaxis from both nostrils began, and continued, irregular and slight, until the crisis. All the time he suffered no thirst, nor lack of appetite or sleep. Urine thin, and not colourless.

About the fortieth day. Urine reddish, and with an abundant, red deposit. Was eased. Afterwards the urine varied, sometimes having, sometimes not having, a sediment.

*Sixtieth day.* Urine had an abundant sediment, white and smooth ; general

improvement ; fever intermitted ; urine again thin but of good colour.

*Seventieth day.* Fever, which intermitted for ten days.

*Eightieth day.* Rigor ; attacked by acute fever ; much sweat ; in the urine a red, smooth sediment. A complete crisis.

## CASE VII

Meton was seized with fever, and painful heaviness in the loins.

*Second day.* After a fairly copious draught of water had his bowels well moved.

*Third day.* Heaviness in the head ; stools thin, bilious, rather red. *Fourth day.* General exacerbation ; slight epistaxis twice from the right nostril. An uncomfortable night ; stools as on the third day ; urine rather black ; had a rather black cloud floating in it, spread out, which did not settle.

*Fifth day.* Violent epistaxis of unmixed blood from the left nostril ; sweat ; crisis. After the crisis sleeplessness ; wandering ; urine thin and rather black. His head was bathed ; sleep ; reason restored. The patient suffered no relapse, but after the crisis bled several times from the nose.

## CASE VIII

Erasinus lived by the gully of Boétes. Was seized with fever after supper ; a troubled night.

*First day.* Quiet, but the night was painful.

*Second day.* General exacerbation ; delirium at night.

*Third day.* Pain and much delirium.

*Fourth day.* Very uncomfortable ; no sleep at night ; dreams and wandering. Then worse symptoms, of a striking and significant character ; fear and discomfort.

*Fifth day.* Early in the morning was composed, and in complete possession of his senses. But long before mid-day was madly delirious ; could not restrain himself

; extremities cold and rather livid ; urine suppressed ; died about sunset.

In this patient the fever was throughout accompanied by sweat ; the hypochondria were swollen, distended and painful. Urine black, with round, suspended particles which did not settle. There were solid discharges from the bowels. Thirst throughout not very great. Many convulsions with sweating about the time of death.

#### CASE IX

Crito, in Thasos, while walking about, was seized with a violent pain in the great toe. He took to bed the same day with shivering and nausea ; regained a little warmth ; at night was delirious.

*Second day.* Swelling of the whole foot, which was rather red about the ankle, and distended ; black blisters ; acute fever ; mad delirium. Alvine discharges unmixed, bilious and rather frequent. He died on the second day from the commencement.

#### CASE X

The man of Clazomenae, who lay sick by the well of Phrynichides, was seized with fever. Pain at the beginning in head, neck and loins, followed immediately by deafness. No sleep ; seized with acute fever ; hypochondrium swollen, but not very much ; distension ; tongue dry.

*Fourth day.* Delirium at night.

*Fifth day.* Painful.

*Sixth day.* All symptoms exacerbated.

About the eleventh day slight improvement. From the beginning to the fourteenth day there were from the bowels thin discharges, copious, of a watery biliousness ; they were well supported by the patient. Then the bowels were constipated. Urine throughout thin, but of good colour. It had much cloud spread through it, which did not settle in a sediment. About the sixteenth day the urine was a little thicker, and had a slight sediment. The patient became a little easier, and was more rational.

*Seventeenth day.* Urine thin again ; painful swellings by both ears. No sleep ; wandering ; pain in the legs.

*Twentieth day.* A crisis left the patient free from fever ; no sweating ; quite rational. About the twenty-seventh day violent pain in the right hip, which quickly ceased. The swellings by the ears neither subsided nor suppurated, but continued painful. About the thirty-first day diarrhœa with copious, watery discharges and signs of dysentery. Urine thick ; the swellings by the ears subsided.

*Fortieth day.* Pain in the right eye ; sight rather impaired ; recovery.

## CASE XI

The wife of Dromeades, after giving birth to a daughter, when everything had gone normally, on the second day was seized with rigor ; acute fever. On the first day she began to feel pain in the region of the hypochondrium ; nausea ; shivering ; restless ; and on the following days did not sleep. Respiration rare, large, interrupted at once as by an inspiration.

*Second day from rigor.* Healthy action of the bowels. Urine thick, white, turbid, like urine which has settled, stood a long time, and then been stirred up. It did not settle. No sleep at night.

*Third day.* At about mid-day rigor ; acute fever ; urine similar ; pain in the hypochondrium ; nausea ; an uncomfortable night without sleep ; a cold sweat all over the body, but the patient quickly recovered heat. *Fourth day.* Slight relief of the pains about the hypochondrium ; painful heaviness of the head ; somewhat comatose ; slight epistaxis ; tongue dry ; thirst ; scanty urine, thin and oily ; snatches of sleep.

*Fifth day.* Thirst ; nausea ; urine similar ; no movement of the bowels ; about mid-day much delirium, followed quickly by lucid intervals ; rose, but grew somewhat comatose ; slight chilliness ; slept at night ; was delirious.

*Sixth day.* In the morning had a rigor ; quickly recovered heat ; sweated all over ; extremities cold ; was delirious ; respiration large and rare. After a while convulsions began from the head, quickly followed by death.

## CASE XII

A man dined when hot and drank too much. During the night he vomited everything ; acute fever ; pain in the right hypochondrium ; inflammation, soft underneath, from the inner part; an uncomfortable night ; urine at the first thick and red ; on standing it did not settle ; tongue dry ; no great thirst.

*Fourth day.* Acute fever ; pains all over.

*Fifth day.* Passed much smooth, oily urine ; acute fever.

*Sixth day.* In the afternoon much delirium. No sleep at night.

*Seventh day.* General exacerbation ; urine similar ; much rambling ; could not restrain himself ; on stimulation the bowels passed watery, disturbed discharges, with worms. An uncomfortable night, with rigor in the morning. Acute fever. Hot sweat, and the patient seemed to lose his fever ; little sleep, followed by chilliness ; expectoration. In the evening much delirium, and shortly afterwards he vomited black, scanty, bilious vomits.

*Ninth day.* Chill ; much wandering ; no sleep.

*Tenth day.* Legs painful ; general exacerbation ; wandering.

*Eleventh day.* Death.

### CASE XIII

A woman lying sick by the shore, who was three months gone with child, was seized with fever, and immediately began to feel pains in the loins.

*Third day.* Pain in the neck and in the head, and in the region of the right collar-bone. Quickly she lost her power of speech, the right arm was paralyzed, with a convulsion, after the manner of a stroke ; completely delirious. An uncomfortable night, without sleep ; bowels disordered with bilious, unmixed, scanty stools.

*Fourth day.* Her speech was recovered, but was indistinct ; convulsions ; pains of the same parts remained ; painful swelling in the hypochondrium ; no sleep ; utter delirium ; bowels disordered ; urine thin, and not of good colour.

*Fifth day.* Acute fever ; pain in the hypochondrium ; utter delirium ; bilious

stools. At night sweated ; was without fever.

*Sixth day.* Rational ; general relief, but pain remained about the left collar-bone ; thirst ; urine thin ; no sleep.

*Seventh day.* Trembling ; some coma ; slight delirium ; pains in the region of the collar-bone and left upper arm remained ; other symptoms relieved ; quite rational. For three days there was an intermission of fever.

*Eleventh day.* Relapse ; rigor ; attack of fever. But about the fourteenth day the patient vomited bilious, yellow matter fairly frequently ; sweated ; a crisis took off the fever.

#### CASE XIV

Melidia, who lay sick by the temple of Hera, began to suffer violent pain in the head, neck and chest. Immediately she was attacked by acute fever, and there followed a slight menstrual flow. There were continuous pains in all these parts.

*Sixth day.* Coma ; nausea ; shivering ; flushed cheeks ; slight delirium.

*Seventh day.* Sweat ; intermittence of fever ; the pains persisted ; relapse ; snatches of sleep ; urine throughout of good colour but thin ; stools thin, bilious, irritating, scanty, black and of bad odour ; sediment in the urine white and smooth ; sweating.

*Eleventh day.* Perfect crisis.

# EPIDEMICS III

## THE CHARACTERS

### CASE I

Pythion, who lived by the temple of Earth, was seized with trembling which began in the hands.

*First day.* Acute fever ; wandering.

*Second day.* General exacerbation.

*Third day.* Same symptoms.

*Fourth day.* Stools scanty, uncompounded and bilious.

*Fifth day.* General exacerbation ; fitful sleep ; constipation.

*Sixth day.* Varied, reddish sputa.

*Seventh day.* Mouth drawn awry.

*Eighth day.* General exacerbation ; tremblings persisted ; urine from the beginning to the eighth day thin, colourless, with a cloudy substance floating in it.

*Tenth day.* Sweat ; sputa somewhat concocted ; crisis ; urine somewhat thin about the time of the crisis. After the crisis, forty days subsequent to it, abscess in the seat, and an abscession through strangury.

### CASE II

Hermocrates, who lay sick by the new wall, was seized with fever. He began to feel pain in the head and loins ; tension of the hypochondrium without swelling; tongue at the beginning parched ; deafness at once ; no sleep ; no great thirst ; urine thick, red, with no sediment on standing ; stools not scanty, and burnt.

*Fifth day.* Urine thin, with particles floating in it, without sediment ; at night delirium.



*Sixth day.* Jaundice ; general exacerbation ; not rational.

*Seventh day.* Discomfort ; urine thin, and as before. The following days similar. About the eleventh day there seemed to be general relief ; coma began ; urine thicker, reddish, thin at the bottom, without sediment ; by degrees grew more rational.

*Fourteenth day.* No fever ; no sweat ; sleep ; reason quite recovered ; urine as before.

About the seventeenth day there was a relapse, and the patient grew hot. On the following days there was acute fever ; urine thin ; delirium.

*Twentieth day.* A fresh crisis ; no fever ; no sweat. All the time the patient had no appetite ; was perfectly collected but could not talk ; tongue dry ; no thirst ; snatches of sleep ; coma. About the twenty-fourth day he grew hot ; bowels loose with copious, thin discharges. On the following days acute fever ; tongue parched.

*Twenty-seventh day.* Death.

In this case deafness persisted throughout ; urine thick, red, without settling, or thin, colourless, with substances floating in it. The patient had no power to take food.

### CASE III

The man lying sick in the garden of Delearces had for a long time heaviness in the head and pain in the right temple. From some exciting cause he was seized with fever, and took to his bed.

*Second day.* Slight flow of unmixed blood from the left nostril. The bowels were well moved ; urine thin and varied, with particles in small groups, like barley-meal or semen, floating in it.

*Third day.* Acute fever ; stools black, thin, frothy, with a livid sediment in them ; slight stupor ; getting up caused distress ; in the urine a livid, rather viscous sediment.

*Fourth day.* Vomited scanty, bilious, yellow vomits, and after a short interval,

verdigris-coloured ones ; slight flow of unmixed blood from the left nostril ; stools unaltered and urine unaltered ; sweat about the head and collar-bones ; spleen enlarged ; pain in the direction of the thigh ; tension, soft under-neath, of the right hypochondrium ; no sleep at night ; slight delirium.

*Fifth day.* Stools more copious, black, frothy ; a black sediment in the stools ; no sleep at night ; delirium.

*Sixth day.* Stools black, oily, viscid, foul-smelling ; slept ; was more rational.

*Seventh day.* Tongue dry ; thirsty ; no sleep ; delirium ; urine thin, not of a good colour.

*Eighth day.* Stools black, scanty, compact ; sleep ; was collected ; not very thirsty.

*Ninth day.* Rigor, acute fever ; sweat ; chill ; delirium ; squinting of the right eye ; tongue dry ; thirsty ; sleepless. *Tenth day.* Symptoms about the same.

*Eleventh day.* Quite rational ; no fever ; slept, urine thin about the time of the crisis.

The patient remained free from fever for two days, relapsed on the fourteenth day, and immediately had no sleep at night and was completely delirious.

*Fifteenth day.* Urine muddy, like that which has been stirred up after settling ; acute fever ; completely delirious ; no sleep ; pain in knees and legs. On the application of a suppository, black, solid motions were passed.

*Sixteenth day.* Urine thin, with a cloudy substance floating in it ; delirium.

*Seventeenth day.* Extremities cold in the early morning ; would wrap himself up ; acute fever ; sweated all over ; was relieved ; more rational ; some fever ; thirst ; vomited bilious matters, yellow and scanty ; solid motions from the bowels ; after a while they became black, scanty and thin ; urine thin, and not of a good colour.

*Eighteenth day.* Was not rational ; comatose.

*Nineteenth day.* The same symptoms.

*Twentieth day.* Slept ; completely rational ; sweated ; no fever ; no thirst ; urine thin.

*Twenty-first day.* Slightly delirious ; rather thirsty ; pain in the hypochondrium and throbbing about the navel continuously.

*Twenty-fourth day.* Sediment in urine ; completely rational.

*Twenty-seventh day.* Pain in the right hip, but in other respects very comfortable ; sediment in the urine.

About the twenty-ninth day pain in the right eye ; urine thin. *Fortieth day.* Passed motions full of phlegm, white and rather frequent ; copious sweat all over ; a perfect crisis.

#### CASE IV

Philistes in Thasos had for a long time pain in the head, and at last fell into a state of stupor and took to his bed. Heavy drinking having caused continuous fevers the pain grew worse. At night he grew hot at the first.

*First day.* Vomited bilious matters, scanty, at first yellow, afterwards increasing and of the colour of verdigris ; solid motions from the bowels ; an uncomfortable night.

*Second day.* Deafness ; acute fever ; tension of the right hypochondrium, which fell inwards. Urine thin, transparent, with a small quantity of substance, like semen, floating in it. About mid-day became raving.

*Third day.* Uncomfortable.

*Fourth day.* Convulsions ; exacerbation.

*Fifth day.* Died early in the morning.

#### CASE V

Chaerion, who lay sick in the house of Demaenetus, was seized with fever after drinking. At once there was painful heaviness of the head ; no sleep ; bowels disturbed with thin, rather bilious stools.

*Third day.* Acute fever, trembling of the head, particularly of the lower lip ; after a while rigor, convulsions, complete delirium ; an uncomfortable night.

*Fourth day.* Quiet ; snatches of sleep ; wandering. *Fifth day.* Pain ; general exacerbation ; irrational talk ; uncomfortable night ; no sleep.

*Sixth day.* The same symptoms.

*Seventh day.* Rigor ; acute fever ; sweating all over ; crisis.

This patient's stools were throughout bilious, scanty and uncompounded. Urine thin, not of a good colour, with a cloudy substance floating in it. About the eighth day the urine had a better colour, with a slight, white sediment ; quite rational and no fever ; an intermission.

*Ninth day.* Relapse.

About the fourteenth day acute fever.

*Sixteenth day.* Vomited bilious, yellow matters rather frequently.

*Seventeenth day.* Rigor ; acute fever ; sweating ; crisis ended the fever.

Urine after relapse and crisis of a good colour, with a sediment ; no delirium during the relapse.

*Eighteenth day.* Slight heat ; rather thirsty ; urine thin, with cloudy substance floating in it ; slight delirium.

*Nineteenth day.* No fever ; pain in the neck ; sediment in urine.

*Twentieth day.* Complete crisis.

## CASE VI

The maiden daughter of Euryanax was seized with fever. Throughout the illness she suffered no thirst and had no inclination for food. Slight alvine discharges ; urine thin, scanty, and not of a good colour. At the beginning of the fever suffered pain in the seat. On the sixth day did not sweat, being without fever ; a crisis. The sore near the seat supplicated slightly, and burst at the crisis. After the

crisis, on the seventh day, she had a rigor ; grew slightly hot ; sweated. Afterwards the extremities always cold. About the tenth day, after the sweating that occurred, she grew delirious, but was soon rational again. They said that the trouble was due to eating grapes. After an intermission, on the twelfth day she again wandered a great deal ; the bowels were disturbed, with bilious, uncompounded, scanty, thin, irritating stools, which frequently made her get up. She died the seventh day from the second attack of delirium. This patient at the beginning of the illness had pain in the throat, which was red throughout. The uvula was drawn back. Many fluxes, scanty and acrid. She had a cough with signs of coction, but brought up nothing. No appetite for any food the whole time, nor did she desire anything. No thirst, and she drank nothing worth mentioning. She was silent, and did not converse at all. Depression, the patient despairing of herself. There was also some inherited tendency to consumption.

#### CASE VII

The woman suffering from angina who lay sick in the house of Aristion began her complaint with indistinctness of speech. Tongue red, and grew parched.

*First day.* Shivered, and grew hot. *Third day.* Rigor ; acute fever ; a reddish, hard swelling in the neck, extending to the breast on either side ; extremities cold and livid, breathing elevated ; drink returned through the nostrils — she could not swallow — stools and urine ceased.

*Fourth day.* General exacerbation.

*Fifth day.* Death.

#### CASE VIII

The youth who lay sick by the Liars' Market was seized with fever after unaccustomed fatigue, toil and running.

*First day.* Bowels disturbed with bilious, thin, copious stools ; urine thin and blackish ; no sleep ; thirst.

*Second day.* General exacerbation ; stools more copious and more unfavourable. No sleep ; mind disordered ; slight sweating.

*Third day.* Uncomfortable ; thirst ; nausea ; much tossing ; distress ; delirium ;

extremities livid and cold ; tension, soft underneath, of the hypochondrium on both sides.

*Fourth day.* No sleep ; grew worse.

*Seventh day.* Died, being about twenty years old.

#### CASE IX

The woman who lodged with Tisamenus was in bed with a troublesome attack of inflammation of the upper bowel. Copious vomits ; could not retain her drink. Pains in the region of the hypochondria. The pains were also lower, in the region of the bowels. Constant tormina. No thirst. She grew hot, though the extremities were cold all the time. Nausea ; sleeplessness. Urine scanty and thin. Excreta crude, thin and scanty. It was no longer possible to do her any good, and she died.

#### CASE X

A woman who was one of the house of Pantimides after a miscarriage was seized with fever on the first day. Tongue dry ; thirst ; nausea ; sleeplessness. Bowels disordered, with thin, copious and crude stools.

*Second day.* Rigor ; acute fever ; copious stools ; no sleep.

*Third day.* The pains greater.

*Fourth day.* Delirium.

*Seventh day.* Death.

The bowels were throughout loose, with copious, thin, crude stools. Urine scanty and thin.

#### CASE XI

Another woman, after a miscarriage about the fifth month, the wife of Hicetas, was seized with fever. At the beginning she had alternations of coma and sleeplessness ; pain in the loins ; heaviness in the head.

*Second day.* Bowels disordered with scanty, thin stools, which at first were uncompounded.

*Third day.* Stools more copious and worse ; no sleep at night.

*Fourth day.* Delirium ; fears ; depression. Squinting of the right eye ; slight cold sweat about the head ; extremities cold.

*Fifth day.* General exacerbation ; much wandering, with rapid recovery of reason ; no thirst ; no sleep ; stools copious and unfavourable throughout ; urine scanty, thin and blackish ; extremities cold and rather livid.

*Sixth day.* Same symptoms.

*Seventh day.* Death.

## CASE XII

A woman who lay sick by the Liars' Market, after giving birth in a first and painful delivery to a male child, was seized with fever. From the very first there was thirst, nausea, slight pain at the stomach, dry tongue, bowels disordered with thin and scanty discharges, no sleep.

*Second day.* Slight rigor ; acute fever ; slight, cold sweating around the head.

*Third day.* In pain ; crude, thin, copious discharges from the bowels.

*Fourth day.* Rigor ; general exacerbation ; sleepless.

*Fifth day.* In pain.

*Sixth day.* The same symptoms ; copious, fluid discharges from the bowels.

*Seventh day.* Rigor ; acute fever ; thirst ; much tossing ; towards evening cold sweat all over ; chill ; extremities cold, and would not be warmed. At night she again had a rigor ; the extremities would not be warmed ; no sleep ; slight delirium, but quickly was rational again.

*Eighth day.* About mid-day recovered her heat ; thirst ; coma ; nausea ; vomited bilious, scanty, yellowish matters. An uncomfortable night ; no sleep ;

unconsciously passed a copious discharge of urine. *Ninth day.* General abatement of the symptoms ; coma. Towards evening slight rigor ; vomited scanty, bilious matters.

*Tenth day.* Rigor ; exacerbation of the fever ; no sleep whatsoever. In the early morning a copious discharge of urine without sediment ; extremities were warmed.

*Eleventh day.* Vomited bilious matters, of the colour of verdigris. A rigor shortly afterwards, and the extremities became cold again ; in the evening sweat, rigor and copious vomiting ; a painful night.

*Twelfth day.* Vomited copious, black, fetid matters ; much hiccoughing ; painful thirst.

*Thirteenth day.* Vomited black, fetid, copious matters ; rigor. About mid-day lost her speech.

*Fourteenth day.* Epistaxis ; death.

The bowels of this patient were throughout loose, and there were shivering fits. Age about seventeen.



## CONSTITUTION

II. The year was southerly and rainy, with no winds throughout. About the rising of Arcturus, while during the immediately preceding period droughts had prevailed, there were now heavy rains, with southerly winds. Autumn dark and cloudy, with abundance of rain. The winter southerly, humid, and mild after the solstice. Long after the solstice, near the equinox, wintry weather returned, and at the actual equinoctial period there were northerly winds with snow, but not for long. The spring southerly again, with no winds ; many rains throughout until the Dog Star. The summer was clear and warm, with waves of stifling heat. The Etesian winds were faint and intermittent. But, on the other hand, near the rising of Arcturus there were heavy rains with northerly winds.

The year having proved southerly, wet and mild, in the winter the general health was good except for the consumptives, who will be described in due course.

III. Early in the spring, at the same time as the cold snaps which occurred, were many malignant cases of erysipelas, some from a known exciting cause and some not. Many died, and many suffered pain in the throat. Voices impaired ; ardent fevers ; phrenitis ; aphthae in the mouth ; tumours in the private parts ; inflammations of the eyes ; carbuncles ; disordered bowels ; loss of appetite ; thirst in some cases, though not in all ; urine disordered, copious, bad ; long coma alternating with sleeplessness ; absence of crisis in many cases, and obscure crises ; dropsies ; many consumptives. Such were the diseases epidemic. There were patients suffering from each of the above types, and fatal cases were many. The symptoms in each type were as follow.

IV. Many were attacked by the erysipelas all over the body when the exciting cause was a trivial accident or a very small wound ; especially when the patients were about sixty years old and the wound was in the head, however little the neglect might have been. Many even while undergoing treatment suffered from severe inflammations, and the erysipelas would quickly spread widely in all directions. Most of the patients experienced abscessions ending in suppurations. Flesh, sinews and bones fell away in large quantities. The flux which formed was not like pus, but was a different sort of putre-faction with a copious and varied flux. If any of these symptoms occurred in the head, there was loss of hair from all the head and from the chin ; the bones were bared and fell away, and there were copious fluxes. Fever was sometimes present and sometimes absent.

These symptoms were terrifying rather than dangerous. For whenever they resulted in suppuration or some similar coction the cases usually recovered. But whenever the inflammation and the erysipelas disappeared without producing any such abscession, there were many deaths. The course of the disease was the same to whatever part of the body it spread. Many lost the arm and the entire forearm. If the malady settled in the sides there was rotting either before or behind. In some cases the entire thigh was bared, or the shin and the entire foot. But the most dangerous of all such cases were when the pubes and genital organs were attacked. Such were the sores which sprang from an exciting cause. In many cases, however, sores occurred in fevers, before a fever, or supervening on fevers. In some of these also, when an abscession took place through suppuration, or when a seasonable disturbance of the bowels occurred or a passing of favourable urine, this gave rise to a solution ; but when none of these events happened, and the symptoms disappeared without a sign, death resulted. It was in the spring that by far the greater number of cases of erysipelas occurred, but they continued throughout the summer and during autumn.

V. Much trouble was caused to some patients by the tumours in the throat, inflammations of the tongue and the abscesses about the teeth. Many had the symptom of impaired and muffled voice, at first at the beginning of the cases of consumption, but also in the ardent fevers and in phrenitis.

VI. Now the ardent fevers and phrenitis began early in the spring after the cold snaps which occurred, and very many fell sick at that time. These suffered acute and fatal symptoms. The constitution of the ardent fevers that occurred was as follows. At the beginning coma, nausea, shivering, acute fever, no great thirst, no delirium, slight epistaxis. The exacerbations in most cases on even days, and about the time of the exacerbations there was loss of memory with prostration and speechlessness. The feet and hands of these patients were always colder than usual, most especially about the times of exacerbation. Slowly and in no healthy manner they recovered their heat, becoming rational again and conversing. Either the coma held them continuously without sleep, or they were wakeful and in pain. Bowels disordered in the majority of these cases, with crude, thin, copious stools. Urine copious, thin, with no critical or favourable sign, nor did any other critical sign appear in these patients. For there occurred neither favourable hemorrhage nor any other of the usual critical abscessions. The manner of their dying varied with the individual ; it was usually irregular, at the crises, but in some cases after long loss of speech and in many with sweating. These were the symptoms attending the fatal cases of ardent fever, and the cases

of phrenitis were similar. These suffered from no thirst at all, and no case showed the mad delirium that attacked others, but they passed away overpowered by a dull oppression of stupor.

VII. There were other fevers also, which I shall describe in due course. Many had aphthae and sores in the mouth. Fluxes about the genitals were copious; sores, tumours external and internal ; the swellings which appear in the groin. Watery inflammations of the eyes, chronic and painful. Growths on the eyelids, external and internal, in many cases destroying the sight, which are called “figs.” There were also often growths on other sores, particularly in the genitals. Many carbuncles in the summer, and other affections called “rot.” Large pustules. Many had large tetters.

VIII. The bowel troubles in many cases turned out many and harmful. In the first place many were attacked by painful tenesmus, mostly children — all in fact who were approaching puberty — and most of these died. Many lenteries. Cases of dysentery, but they too were not very painful. Stools bilious, greasy, thin and watery. In many cases this condition of the bowels constituted the disease itself, fever being sometimes absent and sometimes present. Painful tormina and malignant colic. There were evacuations, though the bulk of the contents remained behind. The evacuations did not take away the pains, and yielded with difficulty to the remedies administered. Purgings, in fact, did harm in most cases. Of those in this condition many died rapidly, though a few held out longer. In brief, all patients, whether the disease was prolonged or acute, died chiefly from the bowel complaints. For the bowels carried all off together.

IX. Loss of appetite, to a degree that I never met before, attended all the cases described above, but most especially the last, and of them, and of the others also, especially such as were fatally stricken. Thirst afflicted some, but not others ; of the fever patients, as well as of the other cases, none were unseasonably affected, but as far as drink was concerned you could diet them as you pleased.

X. The urine that was passed was copious, not in proportion to, but far exceeding, the drink administered. Yet the urine too that was passed showed a great malignancy. For it had neither the proper consistency, nor coction, nor cleansing powers ; it signified for most patients wasting, trouble, pains, and absence of crisis.

XI. Coma attended mostly the phrenitis and ardent fevers, without excluding,

however, all the other diseases of the most severe sort that were accompanied by fever. Most patients throughout either were sunk in heavy coma or slept only in fitful snatches.

XII. Many other forms also of fever were epidemic : — tertians, quartans, night fevers, fevers continuous, protracted, irregular, fevers attended with nausea, fevers of no definite character. All these cases suffered severely from trouble. For the bowels in most cases were disordered, with shivering fits. Sweats portended no crisis, and the character of the urine was as I have described. Most of these cases were protracted, for the abscessions too which took place did not prove critical as in other cases ; nay rather, in all cases all symptoms marked obscurity of crisis, or absence of crisis, or protraction of the disease, but most especially in the patients last described. A few of these had a crisis about the eightieth day ; with most recovery followed no rule. A few of them died of dropsy, without taking to their bed ; many sufferers from the other diseases too were troubled with swellings, most particularly the consumptives.

XIII. The severest and most troublesome disease, as well as the most fatal, was the consumption. Many cases began in the winter, and of these several took to their bed, though some went about ailing without doing so. Early in the spring most of those who had gone to bed died, while none of the others lost their cough, though it became easier in the summer. During autumn all took to bed and many died. Most of these were ill for a long time. Now most of these began suddenly to grow worse, showing the following symptoms : — frequent shivering ; often continuous and acute fever ; unseasonable, copious, cold sweats throughout ; great chill with difficult recovery of heat ; bowels variously constipated, then quickly relaxing, and violently relaxing in all cases near the end ; the humours about the lungs spread downwards ; abundance of unfavourable urine ; malignant wasting. The coughs throughout were frequent, bringing up copious, concocted and liquid sputa, but without much pain ; but even if there was pain, in all cases the purging from the lungs took place very mildly. The throat did not smart very much, nor did salt humours cause any distress at all. The fluxes, however, viscid, white, moist, frothy, which came from the head, were abundant. But by far the worst symptom that attended both these cases and the others was the distaste for food, as has been mentioned. They had no relish either for drink with nourishment, but they remained entirely without thirst. Heaviness in the body. Coma. In most of them there was swelling, which developed into dropsy. Shivering fits and delirium near death.

XIV. The physical characteristics of the consumptives were : — skin smooth, whitish, lentil-coloured, reddish ; bright eyes ; a leucophlegmatic condition ; shoulder-blades projecting like wings. Women too so. As to those with a melancholic or a rather sanguine complexion, they were attacked by ardent fevers, phrenitis and dysenteric troubles. Tenesmus affected young, phlegmatic people ; the chronic diarrhoea and acrid, greasy stools affected persons of a bilious temperament.

XV. In all the cases described spring was the worst enemy, and caused the most deaths ; summer was the most favourable season, in which fewest died. In autumn and during the season of the Pleiades, on the other hand, there were again deaths, usually on the fourth day. And it seems to me natural that the coming on of summer should have been helpful. For the coming on of winter resolves the diseases of summer, and the coming on of summer removes those of winter. And yet in itself the summer in question was not healthful ; in fact it was suddenly hot, southerly, and calm. But nevertheless the change from the other constitution proved beneficial.

XVI. The power, too, to study correctly what has been written I consider to be an important part of the art of medicine. The man who has learnt these things and uses them will not, I think, make great mistakes in the art. And it is necessary to learn accurately each constitution of the seasons as well as the disease ; what common element in the constitution or in the disease is good, and what common element in the constitution or in the disease is bad ; what malady is protracted and fatal, what is protracted and likely to end in recovery ; what acute illness is fatal, what acute illness is likely to end in recovery. With this knowledge it is easy to examine the order of the critical days, and to prognosticate therefrom. One who has knowledge of these matters can know whom he ought to treat, as well as the time and method of treatment.

## SIXTEEN CASES

### CASE I

XVII. In Thasos the Parian who lay sick beyond the temple of Artemis was seized with acute fever, which at the beginning was continuous and ardent. Thirst. At the beginning coma followed by sleeplessness. Bowels disordered at the beginning ; urine thin.

*Sixth day.* Oily urine ; delirium.

*Seventh day.* General exacerbation ; no sleep ; urine similar and mind disordered ; stools bilious and fatty.

*Eighth day.* Slight epistaxis ; vomited scanty matters of the colour of verdigris ; snatches of sleep.

*Ninth day.* Same symptoms.

*Tenth day.* General improvement.

*Eleventh day.* Sweated all over ; grew chilly, but quickly recovered heat.

*Fourteenth day.* Acute fever ; stools bilious, thin, copious ; substance floating in urine ; delirium.

*Seventeenth day.* In pain ; no sleep, while the fever grew worse.

*Twentieth day.* Sweated all over ; no fever ; stools bilious ; aversion to food ; coma.

*Twenty-fourth day.* Relapse.

*Thirty-fourth day.* No fever ; no constipation ; recovered heat.

*Fortieth day.* No fever ; bowels constipated for a short time ; aversion to food ; became slightly feverish again, throughout irregularly, the fever being sometimes absent, sometimes present ; for if the fever intermitted and was alleviated there was a relapse soon afterwards. He took little bits of food, and that of an

unsuitable sort. Sleep bad ; delirium at the relapses. Urine at these times had consistency, but was troubled and bad. Bowels constipated, but afterwards relaxed. Continuous slight fevers. Stools thin and copious.

*Hundred and twentieth day.* Death.

In this case the bowels continuously from the first day loose with bilious, loose, copious stools, or constipated with hot, undigested stools. Urine throughout bad ; mostly comatose ; painful sleeplessness ; continued aversion to food.

## CASE II

In Thasos the woman who lay sick by the Cold Water, on the third day after giving birth to a daughter without lochial discharge, was seized with acute fever accompanied by shivering. For a long time before her delivery she had suffered from fever, being confined to bed and averse to food. After the rigor that took place, the fevers were continuous, acute, and attended with shivering.

*Eighth and following days.* Much delirium, quickly followed by recovery of reason ; bowels disturbed with copious, thin, watery and bilious stools ; no thirst.

*Eleventh day.* Was rational, but comatose. Urine copious, thin and black ; no sleep.

*Twentieth day.* Slight chills, but heat quickly recovered ; slight wandering ; no sleep ; bowels the same ; urine watery and copious.

*Twenty-seventh day.* No fever ; bowels constipated ; not long afterwards severe pain in the right hip for a long time. Fevers again attended ; urine watery.

*Fortieth day.* Pain in the hip relieved ; continuous coughing, with watery, copious sputa ; bowels constipated ; aversion to food ; urine the same. The fevers, without entirely intermitting, were exacerbated irregularly, sometimes increasing and sometimes not doing so.

*Sixtieth day.* The coughing ceased without any critical sign ; there was no coction of the sputa, nor any of the usual abscessions ; jaw on the right side convulsed ; comatose ; wandering, but reason quickly recovered ; desperately averse to food ; jaw relaxed ; passed small, bilious stools ; fever grew more acute, with shivering. On the succeeding days she lost power of speech, but

would afterwards converse.

*Eightieth day.* Death.

The urine of this patient was throughout black, thin and watery. Coma was present, aversion to food, despondency, sleeplessness, irritability, restlessness, the mind being affected by melancholy.

### CASE III

In Thasos Pythion, who lay sick above the shrine of Heracles, after labour, fatigue and careless living, was seized by violent rigor and acute fever. Tongue dry ; thirst ; bilious ; no sleep ; urine rather black, with a substance suspended in it, which formed no sediment.

*Second day.* About mid-day chill in the extremities, especially in the hands and head ; could not speak or utter a sound ; respiration short for a long time ; recovered warmth ; thirst ; a quiet night ; slight sweats about the head.

*Third day.* A quiet day, but later, about sunset, grew rather chilly ; nausea ; distress ; painful night without sleep ; small, solid stools were passed.

*Fourth day.* Early morning peaceful, but about mid-day all symptoms were exacerbated ; chill ; speechless and voiceless ; grew worse ; recovered warmth after a time ; black urine with a substance floating in it ; night peaceful ; slept.

*Fifth day.* Seemed to be relieved, but there was heaviness in the bowels with pain ; thirst ; painful night.

*Sixth day.* Early morning peaceful ; towards evening the pains were greater ; exacerbation ; but later a little clyster caused a good movement of the bowels. Slept at night.

*Seventh day.* Nausea ; rather uneasy ; urine oily ; much distress at night ; wandering ; no sleep at all.

*Eighth day.* Early in the morning snatches of sleep ; but quickly there was chill ; loss of speech ; respiration thin and weak ; in the evening he recovered warmth again ; was delirious ; towards morning slightly better ; stools uncompounded, small, bilious.



*Ninth day.* Comatose ; nausea whenever he woke up. Not over-thirsty. About sunset was uncomfortable ; wandered ; a bad night.

*Tenth day.* In the early morning was speechless ; great chill ; acute fever ; much sweat ; death.

In this case the pains on even days.

#### CASE IV

The patient suffering from phrenitis on the first day that he took to bed vomited copiously thin vomits of the colour of verdigris ; much fever with shivering ; continuous sweating all over ; painful heaviness of head and neck ; urine thin, with small, scattered substances floating in it, which did not settle. Copious excreta at a single evacuation ; delirium ; no sleep. *Second day.* In the early morning speechless ; acute fever ; sweating ; no intermission ; throbbing all over the body ; convulsions at night.

*Third day.* General exacerbation.

*Fourth day.* Death.

#### CASE V

In Larisa a bald man suddenly experienced pain in the right thigh. No remedy did any good.

*First day.* Acute fever of the ardent type ; the patient was quiet, but the pains persisted.

*Second day.* The pains in the thigh subsided, but the fever grew worse ; the patient was rather uncomfortable and did not sleep ; extremities cold ; copious and unfavourable urine was passed.

*Third day.* The pain in the thigh ceased, but there was derangement of the intellect, with distress and much tossing.

*Fourth day.* Death about mid-day.

#### CASE VI

In Abdera Pericles was seized with acute fever, continuous and painful ; much thirst ; nausea ; could not retain what he drank. There was slight enlargement of the spleen and heaviness in the head.

*First day.* Epistaxis from the left nostril ; the fever, however, increased greatly. Copious urine, turbid and white. On standing it did not settle.

*Second day.* General exacerbation ; the urine, however, had consistency, but there was some sediment ; the nausea was relieved and the patient slept.

*Third day.* The fever went down ; abundance of urine, with concocted and copious sediment ; a quiet night. *Fourth day.* About mid-day a hot, violent sweating all over ; no fever ; crisis ; no relapse.

## CASE VII

In Abdera the maiden who lay sick by the Sacred Way was seized with a fever of the ardent type. She was thirsty and sleepless. Menstruation occurred for the first time.

*Sixth day.* Much nausea ; redness ; shivering ; restlessness.

*Seventh day.* Same symptoms. Urine thin but of good colour ; no trouble in the bowels.

*Eighth day.* Deafness ; acute fever ; sleeplessness ; nausea ; shivering ; was rational ; urine similar.

*Ninth day* Same symptoms, and also on the following days. The deafness persisted.

*Fourteenth day.* Reason disturbed ; the fever subsided.

*Seventeenth day.* Copious epistaxis ; the deafness improved a little. On the following days nausea and deafness, while there was also delirium.

*Twentieth day.* Pain in the feet ; deafness ; the delirium ceased ; slight epistaxis ; sweating ; no fever.

*Twenty-fourth day.* The fever returned, with the deafness ; pain in the feet

persisted ; delirium.

*Twenty-seventh day.* Copious sweating ; no fever ; the deafness ceased ; the pain in the feet remained, but in other respects there was a perfect crisis.

### CASE VIII

In Abdera Anaxion, who lay sick by the Thracian gate, was seized with acute fever. Continuous pain in the right side ; a dry cough, with no sputa on the first days. Thirst ; sleeplessness ; urine of good colour, copious and thin.

*Sixth day.* Delirium ; warm applications gave no relief.

*Seventh day.* In pain, for the fever grew worse and the pains were not relieved, while the coughing was troublesome and there was difficulty in breathing.

*Eighth day.* I bled him in the arm. There was an abundant, proper flow of blood ; the pains were relieved, although the dry coughing persisted.

*Eleventh day.* The fever went down ; slight sweating about the head ; the coughing and the sputa more moist.

*Seventeenth day.* Began to expectorate small, concocted sputa ; was relieved.

*Twentieth day.* Sweated and was free from fever ; after a crisis was thirsty, and the cleansings from the lungs were not favourable.

*Twenty-seventh day.* The fever returned ; coughing, with copious, concocted sputa ; copious, white sediment in urine ; thirst and difficulty in breathing disappeared.

*Thirty-fourth day.* Sweated all over ; no fever ; general crisis.

### CASE IX

In Abdera Heropythus had pain in the head without taking to bed, but shortly afterwards was compelled to do so. He lived close to the Upper Road. An acute, ardent fever seized him. Vomited at the beginning copious, bilious matters ; thirst ; great discomfort ; urine thin and black, sometimes with, sometimes without, substances suspended in it. Painful night, with fever rising now in this

way, now in that, but for the most part irregularly. About the fourteenth day, deafness ; the fever grew worse ; urine the same.

*Twentieth day.* Much delirium, also on the following days.

*Fortieth day.* Copious epistaxis ; more rational ; some deafness, but less than before ; the fever went down. Frequent, but slight, epistaxis on the following days. About the sixtieth day the bleedings from the nose ceased, but there was violent pain in the right hip and the fever increased. Not long afterwards, pains in all the lower parts. It happened that either the fever was higher and the deafness great, or else, though these symptoms were relieved and less severe, yet the pains in the lower parts about the hips grew worse. But from about the eightieth day all the symptoms were relieved without any disappearing. The urine that was passed was of good colour and had greater deposits, while the delirious mutterings were less. About the hundredth day the bowels were disordered with copious, bilious stools, and copious evacuations of this nature were passed for a long time. Then followed painful symptoms of dysentery, with relief of the other symptoms. In brief, the fever disappeared and the deafness ceased.

*Hundred and twentieth day.* Complete crisis.

## CASE X

In Abdera Nicodemus after venery and drunkenness was seized with fever. At the beginning he had nausea and cardialgia ; thirst ; tongue parched ; urine thin and black.

*Second day.* The fever increased ; shivering ; nausea ; no sleep ; bilious, yellow vomits ; urine the same ; a quiet night ; sleep.

*Third day.* All symptoms less severe ; relief. But about sunset he was again somewhat uncomfortable ; painful night.

*Fourth day.* Rigor ; much fever ; pains every-where ; urine thin, with floating substance in it ; the night, on the other hand, was quiet.

*Fifth day.* All symptoms present, but relieved.

*Sixth day.* Same pains everywhere ; substance floating in urine ; much delirium.

*Seventh day.* Relief.

*Eighth day.* All the other symptoms less severe.

*Tenth day and following days.* The pains were present, but all less severe. The exacerbations and the pains in the case of this patient tended through-out to occur on the even days.

*Twentieth day.* Urine white, having consistency ; no sediment on standing. Copious sweating ; seemed to lose his fever, but towards evening grew hot again, with pains in the same parts ; shivering ; thirst ; slight delirium.

*Twenty-fourth day.* Much white urine, with much sediment. Hot sweating all over ; the fever passed away in a crisis.

#### CASE XI

In Thasos a woman of gloomy temperament, after a grief with a reason for it, without taking to bed lost sleep and appetite, and suffered thirst and nausea. She lived near the place of Pylades on the plain.

*First day.* As night began there were fears, much rambling, depression and slight feverishness. Early in the morning frequent convulsions ; whenever these frequent convulsions intermitted, she wandered and uttered obscenities ; many pains, severe and continuous.

*Second day.* Same symptoms ; no sleep ; fever more acute.

*Third day.* The convulsions ceased, but were succeeded by coma and oppression, followed in turn by wakefulness. She would jump up ; could not restrain herself ; wandered a great deal ; fever acute ; on this night a copious, hot sweating all over ; no fever ; slept, was perfectly rational, and had a crisis. About the third day urine black and thin, with particles mostly round floating in it, which did not settle. Near the crisis copious menstruation.

#### CASE XII

In Larisa a maiden was seized with an acute fever of the ardent type. Sleeplessness ; thirst ; tongue sooty and parched ; urine of good colour, but thin.

*Second day.* In pain ; no sleep.

*Third day.* Copious stools, watery and of a yellowish green ; similar stools on the following days, passed without distress.

*Fourth day.* Scanty, thin urine, with a substance suspended in it which did not settle ; delirium at night.

*Sixth day.* Violent and abundant epistaxis ; after a shivering fit followed a hot, copious sweating all over ; no fever ; a crisis. In the fever and after the crisis menstruation for the first time, for she was a young maiden. Throughout she suffered nausea and shivering ; redness of the face ; pain in the eyes ; heaviness in the head. In this case there was no relapse, but a definite crisis. The pains on the even days.

### CASE XIII

Apollonius in Abdera was ailing for a long time without being confined to bed. He had a swollen abdomen, and a continual pain in the region of the liver had been present for a long time ; moreover, he became during this period jaundiced and flatulent ; his complexion was whitish. After dining and drinking unseasonably cow's milk he at first grew rather hot ; he took to his bed. Having drunk copiously of milk, boiled and raw, both goat's and sheep's, and adopting a thoroughly bad regimen, he suffered much therefrom. For there were exacerbations of the fever ; the bowels passed practically nothing of the food taken ; the urine was thin and scanty. No sleep. Grievous distension ; much thirst ; coma ; painful swelling of the right hypochondrium ; extremities all round rather cold ; slight delirious mutterings ; forgetfulness of every-thing he said ; he was not himself. About the fourteenth day from his taking to bed, after a rigor, he grew hot ; wildly delirious ; shouting, distress, much rambling, followed by calm ; the coma came on at this time. Afterwards the bowels were disordered with copious stools, bilious, uncompounded and crude ; urine black, scanty and thin. Great discomfort. The evacuations showed varying symptoms ; they were either black, scanty and verdigris-coloured, or else greasy, crude and smarting ; at times they seemed actually to be like milk. About the twenty-fourth day comfortable ; in other respects the same, but he had lucid intervals. He remembered nothing since he took to bed. But he quickly was again delirious, and all symptoms took a sharp turn for the worse. About the thirtieth day acute fever ; copious, thin stools ; wandering ; cold extremities ; speechlessness.

*Thirty-fourth day.* Death.

This patient throughout, from the time I had knowledge of the case, suffered from disordered bowels ; urine thin and black ; coma ; sleeplessness ; extremities cold ; delirious throughout.

#### CASE XIV

In Cyzicus a woman gave birth with difficult labour to twin daughters, and the lochial discharge was far from good.

*First day.* Acute fever with shivering ; painful heaviness of head and neck. Sleepless from the first, but silent, sulky and refractory. Urine thin and of no colour ; thirsty ; nausea generally ; bowels irregularly disturbed with constipation following.

*Sixth day.* Much wandering at night ; no sleep. About the eleventh day she went out of her mind and then was rational again ; urine black, thin, and then, after an interval, oily ; copious, thin, disordered stools.

*Fourteenth day.* Many convulsions ; extremities cold ; no further recovery of reason ; urine suppressed.

*Sixteenth day.* Speechless.

*Seventeenth day.* Death.

#### CASE XV

In Thasos the wife of Delearces, who lay sick on the plain, was seized after a grief with an acute fever with shivering. From the beginning she would wrap herself up, and throughout, without speaking a word, she would fumble, pluck, scratch, pick hairs, weep and then laugh, but she did not sleep ; though stimulated, the bowels passed nothing. She drank a little when the attendants suggested it. Urine thin and scanty ; fever slight to the touch ; coldness of the extremities.

*Ninth day.* Much wandering followed by return of reason ; silent.

*Fourteenth day.* Respiration rare and large with long intervals, becoming

afterwards short.

*Seventeenth day.* Bowels under a stimulus passed disordered matters, then her very drink passed unchanged ; nothing coagulated. The patient noticed nothing ; the skin tense and dry.

*Twentieth day.* Much rambling followed by recovery of reason ; speechless ; respiration short.

*Twenty-first day.* Death.

The respiration of this patient throughout was rare and large ; took no notice of anything ; she constantly wrapped herself up ; either much rambling or silence throughout.

## CASE XVI

In Meliboea a youth took to his bed after being for a long time heated by drunkenness and sexual indulgence. He had shivering fits, nausea, sleeplessness, but no thirst.

*First day.* Copious, solid stools passed in abundance of fluid, and on the following days the excreta were copious, watery and of a greenish yellow. Urine thin, scanty and of no colour ; respiration rare and large with long intervals ; tension, soft underneath, of the hypochondrium, extending out to either side ; continual throbbing throughout of the epigastrium ; urine oily.

*Tenth day.* Delirious but quiet, for he was orderly and silent ; skin dry and tense ; stools either copious and thin or bilious and greasy. *Fourteenth day.* General exacerbation ; delirious with much wandering talk.

*Twentieth day.* Wildly out of his mind ; much tossing ; urine suppressed ; slight quantities of drink were retained.

*Twenty-fourth day.* Death.



## ON REGIMEN IN ACUTE DISEASES



*Translated by Charles Darwin Adams*

1. Those who composed what are called “The Cnidian Sentences” have described accurately what symptoms the sick experience in every disease, and how certain of them terminate; and in so far a man, even who is not a physician, might describe them correctly, provided he put the proper inquiries to the sick themselves what their complaints are. But those symptoms which the physician ought to know beforehand without being informed of them by the patient, are, for the most part, omitted, some in one case and some in others, and certain symptoms of vital importance for a conjectural judgment. But when, in addition to the diagnosis, they describe how each complaint should be treated, in these cases I entertain a still greater difference of opinion with them respecting the rules they have laid down; and not only do I not agree with them on this account, but also because the remedies they use are few in number; for, with the exception of acute diseases, the only medicines which they give are drastic purgatives, with whey, and milk at certain times. If, indeed, these remedies had been good and suitable to the complaints in which they are recommended, they would have been still more deserving of recommendation, if, while few in number, they were sufficient; but this is by no means the case. Those, indeed, who have remodeled these “Sentences” have treated of the remedies applicable in each complaint more in a medical fashion. But neither have the ancients written anything worth regimen, although this be a great omission. Some of them, indeed, were not ignorant of the many varieties of each complaint, and their manifold divisions, but when they wish to tell clearly the numbers (species?) of each disease they do not write for their species would be almost innumerable if every symptom experienced by the patients were held to constitute a disease, and receive a different name.

2. For my part, I approve of paying attention to everything relating to the art, and that those things which can be done well or properly should all be done properly; such as can be quickly done should be done quickly; such as can be neatly done should be done neatly; such operations as can be performed without pain should be done with the least possible pain; and that all other things of the like kind

should be done better than they could be managed by the attendants. But I would more especially commend the physician who, in acute diseases, by which the bulk of mankind are cut off, conducts the treatment better than others. Acute diseases are those which the ancients named pleurisy, pneumonia, phrenitis, lethargy, causus, and the other diseases allied to these, including the continual fevers. For, unless when some general form of pestilential disease is epidemic, and diseases are sporadic and [not] of a similar character, there are more deaths from these diseases than from all the others taken together. The vulgar, indeed, do not recognize the difference between such physicians and their common attendants, and are rather disposed to commend and censure extraordinary remedies. This, then, is a great proof that the common people are most incompetent, of themselves, to form a judgment how such diseases should be treated: since persons who are not physicians pass for physicians owing most especially to these diseases, for it is an easy matter to learn the names of those things which are applicable to persons laboring under such complaints. For, if one names the juice of ptisan, and such and such a wine, and hydromel, the vulgar fancy that he prescribes exactly the same things as the physicians do, both the good and the bad, but in these matters there is a great difference between them.

3. But it appears to me that those things are more especially deserving of being consigned to writing which are undetermined by physicians, notwithstanding that they are of vital importance, and either do much good or much harm. By undetermined I mean such as these, wherefore certain physicians, during their whole lives, are constantly administering unstrained ptisans, and fancy they thus accomplish the cure properly, whereas others take great pains that the patient should not swallow a particle of the barley (thinking it would do much harm), but strain the juice through a cloth before giving it; others, again, will neither give thick ptisan nor the juice, some until the seventh day of the disease, and some until after the crisis. Physicians are not in the practice of mooted such questions; nor, perhaps, if mooted, would a solution of them be found; although the whole art is thereby exposed to much censure from the vulgar, who fancy that there really is no such science as medicine, since, in acute diseases, practitioners differ so much among themselves, that those things which one administers as thinking it the best that can be given, another holds to be bad; and, in this respect, they might say that the art of medicine resembles augury, since augurs hold that the same bird (omen) if seen on the left hand is good, but if on the right bad: and in divination by the inspection of entrails you will find similar differences; but certain diviners hold the very opposite of these opinions.

I say, then, that this question is a most excellent one, and allied to very many others, some of the most vital importance in the Art, for that it can contribute much to the recovery of the sick, and to the preservation of health in the case of those who are well; and that it promotes the strength of those who use gymnastic exercises, and is useful to whatever one may wish to apply it.

4. Ptisan, then, appears to me to be justly preferred before all the other preparations from grain in these diseases, and I commend those who made this choice, for the mucilage of it is smooth, consistent, pleasant, lubricant, moderately diluent, quenches thirst if this be required, and has no astringency; gives no trouble nor swells up in the bowels, for in the boiling it swells up as much as it naturally can. Those, then, who make use of ptisan in such diseases, should never for a day allow their vessels to be empty of it, if I may say so, but should use it and not intermit, unless it be necessary to stop for a time, in order to administer medicine or a clyster. And to those who are accustomed to take two meals in the day it is to be given twice, and to those accustomed to live upon a single meal it is to be given once at first, and then, if the case permit, it is to be increased and given twice to them, if they appear to stand in need of it. At first it will be proper not to give a large quantity nor very thick, but in proportion to the quantity of food which one has been accustomed to take, and so as that the veins may not be much emptied. And, with regard to the augmentation of the dose, if the disease be of a drier nature than one had supposed, one must not give more of it, but should give before the draught of ptisan, either hydromel or wine, in as great quantity as may be proper; and what is proper in each case will be afterward stated by us. But if the mouth and the passages from the lungs be in a proper state as to moisture, the quantity of the draught is to be increased, as a general rule, for an early and abundant state of moisture indicates an early crisis, but a late and deficient moisture indicates a slower crisis. And these things are as I have stated for the most part; but many other things are omitted which are important to the prognosis, as will be explained afterwards. And the more that the patient is troubled with purging, in so much greater quantity is it to be given until the crisis, and moreover until two days beyond the crisis, in such cases as it appears to take place on the fifth, seventh, or ninth day, so as to have respect both for the odd and even day: after this the draught is to be given early in the day, and the other food in place is to be given in the evening. These things are proper, for the most part, to be given to those who, from the first, have used ptisan containing its whole substance; for the pains in pleuritic affections immediately cease of their own accord whenever the patients begin to expectorate anything worth mentioning, and the purgings become much better,

and empyema much more seldom takes place, than if the patients used a different regimen, and the crises are more simple, occur earlier, and the cases are less subject to relapses.

5. Ptisans are to be made of the very best barley, and are to be well boiled, more especially if you do not intend to use them strained. For, besides the other virtues of ptisan, its lubricant quality prevents the barley that is swallowed from proving injurious, for it does not stick nor remain in the region of the breast; for that which is well boiled is very lubricant, excellent for quenching thirst, of very easy digestion, and very weak, all which qualities are wanted. If, then, one do not pay proper attention to the mode of administering the ptisan, much harm may be done; for when the food is shut up in the bowels, unless one procure some evacuation speedily, before administering the draught, the pain, if present, will be exasperated; and, if not present, it will be immediately created, and the respiration will become more frequent, which does mischief, for it dries the lungs, fatigues the hypochondria, the hypogastrium, and diaphragm. And moreover if, while the pain of the side persists, and does not yield to warm fomentations, and the sputa are not brought up, but are viscid and unconcocted, unless one get the pain resolved, either by loosening the bowels, or opening a vein, whichever of these may be proper;- if to persons so circumstanced ptisan be administered, their speedy death will be the result. For these reasons, and for others of a similar kind still more, those who use unstrained ptisan die on the seventh day, or still earlier, some being seized with delirium, and others dying suffocated with orthopnoe and riles. Such persons the ancients thought *struck*, for this reason more especially, that when dead the affected side was livid, like that of a person who had been struck. The cause of this is that they die before the pain is resolved, being seized with difficulty of respiration, and by large and rapid breathing, as has been already explained, the spittle becoming thick, acid, and unconcocted, cannot be brought up, but, being retained in the bronchi of the lungs, produces riles; and, when it has come to this, death, for the most part, is inevitable; for the sputa being retained prevent the breath from being drawn in, and force it speedily out, and thus the two conspire together to aggravate the sputa being retained renders the respiration frequent, while the respiration being frequent thickens the sputa, and prevents them from being evacuated. These symptoms supervene, not only if ptisan be administered unseasonably, but still more if any other food or drink worse than ptisan be given.

6. For the most part, then, the results are the same, whether the patient have used the unstrained ptisan or have used the juice alone; or even only drink; and

sometimes it is necessary to proceed quite differently. In general, one should do thus: if fever commences shortly after taking food, and before the bowels have been evacuated, whether with or without pain, the physician ought to withhold the draught until he thinks that the food has descended to the lower part of the belly; and if any pain be present, the patient should use oxymel, hot if it is winter, and cold if it is summer; and, if there be much thirst, he should take hydromel and water. Then, if any pain be present, or any dangerous symptoms make their appearance, it will be proper to give the draught neither in large quantity nor thick, but after the seventh day, if the patient be strong. But if the earlier-taken food has not descended, in the case of a person who has recently swallowed food, and if he be strong and in the vigor of life, a clyster should be given, or if he be weaker, a suppository is to be administered, unless the bowels open properly of themselves. The time for administering the draught is to be particularly observed at the commencement and during the whole illness; when, then, the feet are cold, one should refrain from giving the ptisan, and more especially abstain from drink; but when the heat has descended to the feet, one may then give it; and one should look upon this season as of great consequence in all diseases, and not least in acute diseases, especially those of a febrile character, and those of a very dangerous nature. One may first use the juice, and then the ptisan, attending accurately to the rules formerly laid down.

7. When pain seizes the side, either at the commencement or at a later stage, it will not be improper to try to dissolve the pain by hot applications. Of hot applications the most powerful is hot water in a bottle, or bladder, or in a brazen vessel, or in an earthen one; but one must first apply something soft to the side, to prevent pain. A soft large sponge, squeezed out of hot water and applied, forms a good application; but it should be covered up above, for thus the heat will remain the longer, and at the same time the vapor will be prevented from being carried up to the patient's breath, unless when this is thought of use, for sometimes it is the case. And further, barley or tares may be infused and boiled in diluted vinegar, stronger than that it could be drunk, and may then be sewed into bladders and applied; and one may bran in like manner. Salts or toasted millet in woolen bags are excellent for forming a dry fomentation, for the millet is light and soothing. A soft fomentation like this soothes pains, even such as shoot to the clavicle. Venesection, however, does not alleviate the pain unless when it extends to the clavicle. But if the pain be not dissolved by the fomentations, one ought not to foment for a length of time, for this dries the lungs and promotes suppuration; but if the pain point to the clavicle, or if there be a heaviness in the arm, or about the breast, or above the diaphragm, one

should open the inner vein at the elbow, and not hesitate to abstract a large quantity, until it become much redder, or instead of being pure red, it turns livid, for both these states occur. But if the pain be below the diaphragm, and do not point to the clavicle, we must open the belly either with black hellebore or peplium, mixing the black hellebore with carrot or seseli, or cumin, or anise, or any other of the fragrant herbs; and with the peplium the juice of sulphium (asafoetida), for these substances, when mixed up together, are of a similar nature. The black hellebore acts more pleasantly and effectually than the peplium, while, on the other hand, the peplium expels wind much more effectually than the black hellebore, and both these stop the pain, and many other of the laxatives also stop it, but these two are the most efficacious that I am acquainted with. And the laxatives given in draughts are beneficial, when not very unpalatable owing to bitterness, or any other disagreeable taste, or from quantity, color, or any apprehension. When the patient has drunk the medicine, one ought to give him to swallow but little less of the ptisan than what he had been accustomed to; but it is according to rule not to give any draughts while the medicine is under operation; but when the purging is stopped then he should take a smaller draught than what he had been accustomed to, and afterwards go on increasing it progressively, until the pain cease, provided nothing else contraindicate. This is my rule, also, if one would use the juice of ptisan (for I hold that it is better, on the whole, to begin with taking the decoction at once, rather than by first emptying the veins before doing so, or on the third, fourth, fifth, sixth, or seventh day, provided the disease has not previously come to a crisis in the course of this time), and similar preparations to those formerly described are to be made in those cases.

8. Such are the opinions which I entertain respecting the administering of the ptisan; and, as regards drinks, whichsoever of those about to be described may be administered, the same directions are generally applicable. And here I know that physicians are in the practice of doing the very reverse of what is proper, for they all wish, at the commencement of diseases, to starve their patients for two, three, or more days, and then to administer the ptisans and drinks; and perhaps it appears to them reasonable that, as a great change has taken place in the body, it should be counteracted by another great change. Now, indeed, to produce a change is no small matter, but the change must be effected well and cautiously, and after the change the administration of food must be conducted still more so. Those persons, then, would be most injured if the change is not properly managed, who used unstrained ptisans; they also would suffer who made use of the juice alone; and so also they would suffer who took merely drink, but these

least of all.

9. One may derive information from the regimen of persons in good health what things are proper; for if it appear that there is a great difference whether the diet be so and so, in other respects, but more especially in the changes, how can it be otherwise in diseases, and more especially in the most acute? But it is well ascertained that even a faulty diet of food and drink steadily persevered in, is safer in the main as regards health than if one suddenly change it to another. Wherefore, in the case of persons who take two meals in the day, or of those who take a single meal, sudden changes induce suffering and weakness; and thus persons who have not been accustomed to dine, if they shall take dinner, immediately become weak, have heaviness over their whole body, and become feeble and languid, and if, in addition, they take supper, they will have acid eructations, and some will have diarrhoea whose bowels were previously dry, and not having been accustomed to be twice swelled out with food and to digest it twice a day, have been loaded beyond their wont. It is beneficial, in such cases, to counterbalance this change, for one should sleep after dinner, as if passing the night, and guard against cold in winter and heat in summer; or, if the person cannot sleep, he may stroll about slowly, but without making stops, for a good while, take no supper, or, at all events, eat little, and only things that are not unwholesome, and still more avoid drink, and especially water. Such a person will suffer still more if he take three full meals in the day, and more still if he take more meals; and yet there are many persons who readily bear to take three full meals in the day, provided they are so accustomed. And, moreover, those who have been in the habit of eating twice a day, if they omit dinner, become feeble and powerless, averse to all work, and have heartburn; their bowels seem, as it were, to hang loose, their urine is hot and green, and the excrement is parched; in some the mouth is bitter, the eyes are hollow, the temples throb, and the extremities are cold, and the most of those who have thus missed their dinner cannot eat supper; or, if they do sup, they load their stomach, and pass a much worse night than if they had previously taken dinner. Since, then, an unwonted change of diet for half a day produces such effects upon persons in health, it appears not to be a good thing either to add or take from. If, then, he who was restricted to a single meal, contrary to usage, having his veins thus left empty during a whole day, when he supped according to custom felt heavy, it is probable that if, because he was uneasy and weak from the want of dinner, he took a larger supper than wont, he would be still more oppressed; or if, wanting food for a still greater interval, he suddenly took a meal after supper, he will feel still greater oppression. He, then, who, contrary to usage, has had his veins kept

empty by want of food, will find it beneficial to counteract the bad effects during that day as follows: let him avoid cold, heat, and exertion, for he could bear all these ill; let him make his supper considerably less than usual, and not of dry food, but rather liquid; and let him take some drink, not of a watery character, nor in smaller quantity than is proportionate to the food, and on the next day he should take a small dinner, so that, by degrees, he may return to his former practice. Persons who are bilious in the stomach bear these changes worst, while those who are pituitous, upon the whole, bear the want of food best, so that they suffer the least from being restricted to one meal in the day, contrary to usage. This, then, is a sufficient proof that the greatest changes as to those things which regard our constitutions and habits are most especially concerned in the production of diseases, for it is impossible to produce unseasonably a great emptying of the vessels by abstinence, or to administer food while diseases are at their acme, or when inflammation prevails; nor, on the whole, to make a great change either one way or another with impunity.

10. One might mention many things akin to these respecting the stomach and bowels, to show how people readily bear such food as they are accustomed to, even if it is not naturally good, and drink in like manner, and how they bear unpleasantly such food as they are not accustomed to, even although not bad, and so in like manner with drink; and as to the effects of eating much flesh, contrary to usage, or garlic, or asafoetida, or the stem of the plant which produces it, or things of a similar kind possessed of strong properties, one would be less surprised if such things produce pains in the bowels, but rather when one learned what trouble, swelling, flatulence, and tormina the cake (maza) will raise in the belly when eaten by a person not accustomed to it; and how much weight and distention of the bowels bread will create to a person accustomed to live upon the maza; and what thirst and sudden fullness will be occasioned by eating hot bread, owing to its desiccant and indigestible properties; and what different effects are produced by fine and coarse bread when eaten contrary to usage, or by the cake when usually dry, moist, or viscid; and what different effects polenta produces upon those who are accustomed and those who are unaccustomed to the use of it; or drinking of wine or drinking of water, when either custom is suddenly exchanged for the other; or when, contrary to usage, diluted wine or undiluted has been suddenly drunk, for the one will create water-brash in the upper part of the intestinal canal and flatulence in the lower, while the other will give rise to throbbing of the arteries, heaviness of the head, and thirst; and white and dark-colored wine, although both strong wines, if exchanged contrary to usage, will produce very different effects upon the body, so that one need the less



wonder that a sweet and strong wine, if suddenly exchanged, should have by no means the same effect.

11. Let us here briefly advert to what may be said on the opposite side; namely, that a change of diet has occurred in these cases, without any change in their body, either as to strength, so as to require an increase of food, or as to weakness, so as to require a diminution. But the strength of the patient is to be taken into consideration, and the manner of the disease, and of the constitution of the man, and the habitual regimen of the patient, not only as regards food but also drink. Yet one must much less resort to augmentation, since it is often beneficial to have recourse to abstraction, when the patient can bear it, until the disease having reached its acme and has become concocted. But in what cases this must be done will be afterwards described. One might write many other things akin to those which have been now said, but there is a better proof, for it is not akin to the matter on which my discourse has principally turned, but the subject-matter itself is a most seasonable proof. For some at the commencement of acute diseases have taken food on the same day, some on the next day; some have swallowed whatever has come in their way, and some have taken *cyceon*. Now all these things are worse than if one had observed a different regimen; and yet these mistakes, committed at that time, do much less injury than if one were to abstain entirely from food for the first two or three days, and on the fourth or fifth day were to take such food; and it would be still worse, if one were to observe total abstinence for all these days, and on the following days were to take such a diet, before the disease is concocted; for in this way death would be the consequence to most people, unless the disease were of a very mild nature. But the mistakes committed at first were not so irremediable as these, but could be much more easily repaired. This, therefore, I think a strong proof that such or such a draught need not be prescribed on the first days to those who will use the same draughts afterwards. At the bottom, therefore, they do not know, neither those using unstrained ptisans, that they are hurt by them, when they begin to swallow them, if they abstain entirely from food for two, three, or more days; nor do those using the juice know that they are injured in swallowing them, when they do not commence with the draught seasonably. But this they guard against, and know that it does much mischief, if, before the disease be concocted, the patient swallow unstrained ptisan, when accustomed to use strained. All these things are strong proofs that physicians do not conduct the regimen of patients properly, but that in those diseases in which total abstinence from food should not be enforced on patients that will be put on the use of ptisans, they do enforce total abstinence; that in those cases in which there

should be no change made from total abstinence to ptisans, they do make the change; and that, for the most part, they change from abstinence to ptisans, exactly at the time when it is often beneficial to proceed from ptisans almost to total abstinence, if the disease happen to be in the state of exacerbation. And sometimes crude matters are attracted from the head, and bilious from the region near the chest, and the patients are attacked with insomnolency, so that the disease is not concocted; they become sorrowful, peevish, and delirious; there are flashes of light in their eyes, and noises in their ears; their extremities are cold, their urine unconcocted; the sputa thin, saltish, tinged with an intense color and smell; sweats about the neck, and anxiety; respiration, interrupted in the expulsion of the air, frequent and very large; expression of the eyelids dreadful; dangerous *deliquia* ; tossing of the bed-clothes from the breast; the hands trembling, and sometimes the lower lip agitated. These symptoms, appearing at the commencement, are indicative of strong delirium, and patients so affected generally die, or if they escape, it is with a deposit, hemorrhage from the nose, or the expectoration of thick matter, and not otherwise. Neither do I perceive that physicians are skilled in such things as these; how they ought to know such diseases as are connected with debility, and which are further weakened by abstinence from food, and those aggravated by some other irritation; those by pain, and from the acute nature of the disease, and what affections and various forms thereof our constitution and habit engender, although the knowledge or ignorance of such things brings safety or death to the patient. For it is a great mischief if to a patient debilitated by pain, and the acute nature of the disease, one administer drink, or more ptisan, or food, supposing that the debility proceeds from inanition. It is also disgraceful not to recognize a patient whose debility is connected with inanition, and to pinch him in his diet; this mistake, indeed, is attended with some danger, but much less than the other, and yet it is likely to expose one to much greater derision, for if another physician, or a private person, coming in and knowing what has happened, should give to eat or drink those things which the other had forbidden, the benefit thus done to the patient would be manifest. Such mistakes of practitioners are particularly ridiculed by mankind, for the physician or nonprofessional man thus coming in, seems as it were to resuscitate the dead. On this subject I will describe elsewhere the symptoms by which each of them may be recognized.

12. And the following observations are similar to those now made respecting the bowels. If the whole body rest long, contrary to usage, it does not immediately recover its strength; but if, after a protracted repose, it proceed to labor, it will clearly expose its weakness. So it is with every one part of the body, for the feet

will make a similar display, and any other of the joints, if, being unaccustomed to labor, they be suddenly brought into action, after a time. The teeth and the eyes will suffer in like manner, and also every other part whatever. A couch, also, that is either softer or harder than one has been accustomed to will create uneasiness, and sleeping in the open air, contrary to usage, hardens the body. But it is sufficient merely to state examples of all these cases. If a person having received a wound in the leg, neither very serious nor very trifling, and he being neither in a condition very favorable to its healing nor the contrary, at first betakes himself to bed, in order to promote the cure, and never raises his leg, it will thus be much less disposed to inflammation, and be much sooner well, than it would have been if he had strolled about during the process of healing; but if upon the fifth or sixth day, or even earlier, he should get up and attempt to walk, he will suffer much more than if he had walked about from the commencement of the cure, and if he should suddenly make many laborious exertions, he will suffer much more than if, when the treatment was conducted otherwise, he had made the same exertions on the same days. In fine, all these things concur in proving that all great changes, either one way or another, are hurtful. Wherefore much mischief takes place in the bowels, if from a state of great inanition more food than is moderate be administered (and also in the rest of the body, if from a state of great rest it be hastily brought to greater exertion, it will be much more injured), or if from the use of much food it be changed to complete abstinence, and therefore the body in such cases requires protracted repose, and if, from a state of laborious exertion, the body suddenly falls into a state of ease and indolence, in these cases also the bowels would require continued repose from abundance of food, for otherwise it will induce pain and heaviness in the whole body.

13. The greater part of my discourse has related to changes, this way or that. For all purposes it is profitable to know these things, and more especially respecting the subject under consideration,- that in acute diseases, in which a change is made to ptisans from a state of inanition, it should be made as I direct; and then that ptisans should not be used until the disease be concocted, or some other symptom, whether of evacuation or of irritation, appear in the intestines, or in the hypochondria, such as will be described. Obstinate insomnolency impairs the digestion of the food and drink, and in other respects changes and relaxes the body, and occasions a heated state, and heaviness of the head.

14. One must determine by such marks as these, when sweet, strong, and dark wine, hydromel, water and oxymel, should be given in acute diseases. Wherefore

the sweet affects the head less than the strong, attacks the brain less, evacuates the bowels more than the other, but induces swelling of the spleen and liver; it does not agree with bilious persons, for it causes them to thirst; it creates flatulence in the upper part of the intestinal canal, but does not disagree with the lower part, as far as regards flatulence; and yet flatulence engendered by sweet wine is not of a transient nature, but rests for a long time in the hypochondria. And therefore it in general is less diuretic than wine which is strong and thin; but sweet wine is more expectorant than the other. But when it creates thirst, it is less expectorant in such cases than the other wine, but if it do not create thirst, it promotes expecto-ration better than the other. The good and bad effects of a white, strong wine, have been already frequently and fully stated in the disquisition on sweet wine; it is determined to the bladder more than the other, is diuretic and laxative, and should be very useful in such complaints; for if in other respects it be less suitable than the other, the clearing out of the bladder effected by it is beneficial to the patient, if properly administered. There are excellent examples of the beneficial and injurious effects of wine, all which were left undetermined by my predecessors. In these diseases you may use a yellow wine, and a dark austere wine for the following purposes: if there be no heaviness of the head, nor delirium, nor stoppage of the expectoration, nor retention of the urine, and if the alvine discharges be more loose and like scrapings than usual, in such cases a change from a white wine to such as I have mentioned, might be very proper. It deserves further to be known, that it will prove less injurious to all the parts above, and to the bladder, if it be of a more watery nature, but that the stronger it is, it will be the more beneficial to the bowels.

15. Hydromel, when drunk in any stage of acute disease, is less suitable to persons of a bilious temperament, and to those who have enlarged viscera, than to those of a different character; it increases thirst less than sweet wine; it softens the lungs, is moderately expectorant, and alleviates a cough; for it has some detergent quality in it, whence it lubricates the sputum. Hydromel is also moderately diuretic, unless prevented by the state of any of the viscera. And it also occasions bilious discharges downwards, sometimes of a proper character, and sometimes more intense and frothy than is suitable; but such rather occurs in persons who are bilious, and have enlarged viscera. Hydromel rather produces expectoration, and softening of the lungs, when given diluted with water. But unmixed hydromel, rather than the diluted, produces frothy evacuations, such as are unseasonably and intensely bilious, and too hot; but such an evacuation occasions other great mischiefs, for it neither extinguishes the heat in the

hypochondria, but rouses it, induces inquietude, and jactitation of the limbs, and ulcerates the intestines and anus. The remedies for all these will be described afterwards. By using hydromel without ptisans, instead of any other drink, you will generally succeed in the treatment of such diseases, and fail in few cases; but in what instances it is to be given, and in what it is not to be given, and wherefore it is not to be given,- all this has been explained already, for the most part. Hydromel is generally condemned, as if it weakened the powers of those who drink it, and on that account it is supposed to accelerate death; and this opinion arose from persons who starve themselves to death, some of whom use hydromel alone for drink, as fancying that it really has this effect. But this is by no means always the case. For hydromel, if drunk alone, is much stronger than water, if it do not disorder the bowels; but in some respects it is stronger, and in some weaker, than wine that is thin, weak, and devoid of *bouquet*. There is a great difference between unmixed wine and unmixed honey, as to their nutritive powers, for if a man will drink double the quantity of pure wine, to a certain quantity of honey which is swallowed, he will find himself much stronger from the honey, provided it do not disagree with his bowels, and that his alvine evacuations from it will be much more copious. But if he shall use ptisan for a draught, and drink afterward hydromel, he will feel full, flatulent, and uncomfortable in the viscera of the hypochondrium; but if the hydromel be taken before the draught, it will not have the same injurious effects as if taken after it, but will be rather beneficial. And boiled hydromel has a much more elegant appearance than the unboiled, being clear, thin, white, and transparent, but I am unable to mention any good quality which it possesses that the other wants. For it is not sweeter than the unboiled, provided the honey be fine, and it is weaker, and occasions less copious evacuations of the bowels, neither of which effects is required from the hydromel. But one should by all means use it boiled, provided the honey be bad, impure, black, and not fragrant, for the boiling will remove the most of its bad qualities and appearances.

16. You will find the drink, called oxymel, often very useful in these complaints, for it promotes expectoration and freedom of breathing. the following are the proper occasions for administering it. When strongly acid it has no mean operation in rendering the expectoration more easy, for by bringing up the sputa, which occasion troublesome hawking, and rendering them more slippery, and, as it were, clearing the windpipe with a feather, it relieves the lungs and proves emollient to them; and when it succeeds in producing these effects it must do much good. But there are cases in which hydromel, strongly acid, does not promote expectoration, but renders it more viscid and thus does harm, and it is

most apt to produce these bad effects in cases which are otherwise of a fatal character, when the patient is unable to cough or bring up the sputa. On this account, then, one ought to consider beforehand the strength of the patient, and if there be any hope, then one may give it, but if given at all in such cases it should be quite tepid, and in by no means large doses. But if slightly acid it moistens the mouth and throat, promotes expectoration, and quenches thirst; agrees with the viscera seated in the hypochondrium, and obviates the bad effects of the honey; for the bilious quality of the honey is thereby corrected. It also promotes flatulent discharges from the bowels, and is diuretic, but it occasions watery discharges and those resembling scrapings, from the lower part of the intestine, which is sometimes a bad thing in acute diseases, more especially when the flatulence cannot be passed, but rolls backwards; and otherwise it diminishes the strength and makes the extremities cold, this is the only bad effect worth mentioning which I have known to arise from the oxymel. It may suit well to drink a little of this at night before the draught of ptisan, and when a considerable interval of time has passed after the draught there will be nothing to prevent its being taken. But to those who are restricted entirely to drinks without draughts of ptisan, it will therefore not be proper at all times to give it, more especially from the fretting and irritation of the intestine which it occasions, (and these bad effects it will be the more apt to produce provided there be no faeces in the intestines and the patient is laboring under inanition,) and then it will weaken the powers of the hydromel. But if it appears advantageous to use a great deal of this drink during the whole course of the disease, one should add to it merely as much vinegar as can just be perceived by the taste, for thus what is prejudicial in it will do the least possible harm, and what is beneficial will do the more good. In a word, the acidity of vinegar agrees rather with those who are troubled with bitter bile, than with those patients whose bile is black; for the bitter principle is dissolved in it and turned to phlegm, by being suspended in it; whereas black bile is fermented, swells up, and is multiplied thereby: for vinegar is a melanagogue. Vinegar is more prejudicial to women than to men, for it creates pains in the uterus.

17. I have nothing further to add as to the effects of water when used as a drink in acute diseases; for it neither soothes the cough in pneumonia, nor promotes expectoration, but does less than the others in this respect, if used alone through the whole complaint. But if taken intermediate between oxymel and hydromel, in small quantity, it promotes expectoration from the change which it occasions in the qualities of these drinks, for it produces, as it were, a certain overflow. Otherwise it does not quench the thirst, for it creates bile in a bilious

temperament, and is injurious to the hypochondrium; and it does the most harm, engenders most bile, and does the least good when the bowels are empty; and it increases the swelling of the spleen and liver when they are in an inflamed state; it produces a gurgling noise in the intestines and swims on the stomach; for it passes slowly downwards, as being of a coldish and indigestible nature, and neither proves laxative nor diuretic; and in this respect, too, it proves prejudicial, that it does not naturally form does in the intestines: and, if it be drunk while the feet are cold, its injurious effects will be greatly aggravated, in all those parts to which it may be determined. When you suspect in these diseases either strong heaviness of the head, or mental alienation, you must abstain entirely from wine, and in this case use water, or give weak, straw-colored wine, entirely devoid of *bouquet*, after which a little water is to be given in addition; for thus the strength of the will less affect the head and the understanding: but in which cases water is mostly to be given for drink, when in large quantity, when in moderate, when cold, and when hot; all these things have either been discussed already or will be treated of at the proper time. In like manner, with respect to all the others, such as barley-water, the drinks made from green shoots, those from raisins, and the skins of grapes and wheat, and bastard saffron, and myrtles, pomegranates, and the others, when the proper time for using them is come, they will be treated of along with the disease in question, in like manner as the other compound medicines.

18. The bath is useful in many diseases, in some of them when used steadily, and in others when not so. Sometimes it must be less used than it would be otherwise, from the want of accommodation; for in few families are all the conveniences prepared, and persons who can manage them as they ought to be. And if the patient be not bathed properly, he maybe thereby hurt in no inconsiderable degree, for there is required a place to cover him that is free of smoke, abundance of water, materials for frequent baths, but not very large, unless this should be required. It is better that no friction should be applied, but if so, a hot soap ( *smegma* ) must be used in greater abundance than is common, and an affusion of a considerable quantity of water is to be made at the same time and afterwards repeated. There must also be a short passage to the basin, and it should be of easy ingress and egress. But the person who takes the bath should be orderly and reserved in his manner, should do nothing for himself, but others should pour the water upon him and rub him, and plenty of waters, of various temperatures, should be in readiness for the *douche*, and the affusions quickly made; and sponges should be used instead of the comb ( *strigil* ), and the body should be anointed when not quite dry. But the head should be rubbed by

the sponge until it is quite dry; the extremities should be protected from cold, as also the head and the rest of the body; and a man should not be washed immediately after he has taken a draught of ptisan or a drink; neither should he take ptisan as a drink immediately after the bath. Much will depend upon whether the patient, when in good health, was very fond of the bath, and in the custom of taking it: for such persons, especially, feel the want of it, and are benefited if they are bathed, and injured if they are not. In general it suits better with cases of pneumonia than in ardent fevers; for the bath soothes the pain in the side, chest, and back; concocts the sputa, promotes expectoration, improves the respiration, and allays lassitude; for it soothes the joints and outer skin, and is diuretic, removes heaviness of the head, and moistens the nose. Such are the benefits to be derived from the bath, if all the proper requisites be present; but if one or more of these be wanting, the bath, instead of doing good, may rather prove injurious; for every one of them may do harm if not prepared by the attendants in the proper manner. It is by no means a suitable thing in these diseases to persons whose bowels are too loose, or when they are unusually confined, and there has been no previous evacuation; neither must we bathe those who are debilitated, nor such as have nausea or vomiting, or bilious eructations; nor such as have hemorrhage from the nose, unless it be less than required at that stage of the disease (with those stages you are acquainted), but if the discharge be less than proper, one should use the bath, whether in order to benefit the whole body or the head alone. If then the proper requisites be at hand, and the patient be well disposed to the bath, it may be administered once every day, or if the patient be fond of the bath there will be no harm, though he should take it twice in the day. The use of the bath is much more appropriate to those who take unstrained ptisan, than to those who take only the juice of it, although even in their case it may be proper; but least of all does it suit with those who use only plain drink, although, in their case too it may be suitable; but one must form a judgment from the rules laid down before, in which of these modes of regimen the bath will be beneficial, and in which not. Such as want some of the requisites for a proper bath, but have those symptoms which would be benefited by it, should be bathed; whereas those who want none of the proper requisites, but have certain symptoms which contraindicate the bath, are not to be bathed.

## **APPENDIX**

1. Ardent fever (causus) takes place when the veins, being dried up in the summer season, attract acrid and bilious humors to themselves; and strong fever seizes the whole body, which experiences aches of the bones, and is in a state of



lassitude and pain. It takes place most commonly from a long walk and protracted thirst, when the veins being dried up attract acrid and hot defluxions to themselves. The tongue becomes rough, dry, and very black; there are gnawing pains about the bowels; the alvine discharges are watery and yellow; there is intense thirst, insomnolency, and sometimes wandering of the mind. To a person in such a state give to drink water and as much boiled hydromel of a watery consistence as he will take; and if the mouth be bitter, it may be advantageous to administer an emetic and clyster; and if these things do not loosen the bowels, purge with the boiled milk of asses. Give nothing saltish nor acrid, for they will not be borne; and give no draughts of ptisan until the crisis be past. And the affection is resolved if there be an epistaxis, or if true critical sweats supervene with urine having white, thick, and smooth sediments, or if a deposit take place anywhere; but if it be resolved without these, there will be a relapse of the complaint, or pain in the hips and legs will ensue, with thick sputa, provided the patient be convalescent. Another species of ardent fever: belly loose, much thirst, tongue rough, dry, and saltish, retention of urine, insomnolency, extremities cold. In such a case, unless there be a flow of blood from the nose, or an abscess form about the neck, or pain in the limbs, or the patient expectorate thick sputa (these occur when the belly is constipated), or pain of the hips, or lividity of the genital organs, there is no crisis; tension of the testicle is also a critical symptom. Give attractive draughts.

2. Bleed in the acute affections, if the disease appear strong, and the patients be in the vigor of life, and if they have strength. If it be quinsy or any other of the pleuritic affections, purge with electuaries; but if the patient be weaker, or if you abstract more blood, you may administer a clyster every third day, until he be out of danger, and enjoin total abstinence if necessary.

3. Hypochondria inflamed not from retention of flatus, tension of the diaphragm, checked respiration, with dry orthopnoea, when no pus is formed, but when these complaints are connected with obstructed respiration; but more especially strong pains of the liver, heaviness of the spleen, and other phlegmasiae and intense pains above the diaphragm, diseases connected with collections of humors,- all these diseases do not admit of resolution, if treated at first by medicine, but venesection holds the first place in conducting the treatment; then we may have recourse to a clyster, unless the disease be great and strong; but if so, purging also may be necessary; but bleeding and purging together require caution and moderation. Those who attempt to resolve inflammatory diseases at the commencement by the administration of purgative medicines, remove none

of the morbid humors which produce the inflammation and tension; for the diseases while unconcocted could not yield, but they melt down those parts which are healthy and resist the disease; so when the body is debilitated the malady obtains the mastery; and when the disease has the upper hand of the body, it does not admit of a cure.

4. When a person suddenly loses his speech, in connection with obstruction of the veins,- if this happen without warning or any other strong cause, one ought to open the internal vein of the right arm, and abstract blood more or less according to the habit and age of the patient. Such cases are mostly attended with the following symptoms: redness of the face, eyes fixed, hands distended, grinding of the teeth, palpitations, jaws fixed, coldness of the extremities, retention of airs in the veins.

5. When pains precede, and there are influxes of black bile and of acrid humors, and when by their pungency the internal parts are pained, and the veins being pinched and dried become distended, and getting inflamed attract the humors running into the parts, whence the blood being vitiated, and the airs collected there not being able to find their natural passages, coldness comes on in consequence of this stasis, with vertigo, loss of speech, heaviness of the head, and convulsion, if the disease fix on the liver, the heart, or the great vein (vena cava?); whence they are seized with epilepsy or apoplexy, if the defluxions fall upon the containing parts, and if they are dried up by airs which cannot make their escape; such persons having been first tormented are to be immediately bled at the commencement, while all the peccant vapors and humors are buoyant, for then the cases more easily admit of a cure; and then supporting the strength and attending to the crisis, we may give emetics, unless the disease be alleviated; or if the bowels be not moved, we may administer a clyster and give the boiled milk of asses, to the amount of not less than twelve heminae, or if the strength permit, to more than sixteen.

6. Quinsy takes place when a copious and viscid defluxion from the head, in the season of winter or spring, flows into the jugular veins, and when from their large size they attract a greater defluxion; and when owing to the defluxion being of a cold and viscid nature it becomes enfarcted, obstructing the passages of the respiration and of the blood, coagulates the surrounding blood, and renders it motionless and stationary, it being naturally cold and disposed to obstructions. Hence they are seized with convulsive suffocation, the tongue turning livid, assuming a rounded shape, and being vent owing to the veins which are seated

below the tongue (for when an enlarged uvula, which is called *uva*, is cut, a large vein may be observed on each side). These veins, then, becoming filled, and their roots extending into the tongue, which is of a loose and spongy texture, it, owing to its dryness receiving forcibly the juice from the veins, changes from broad and becomes round, its natural color turns to livid, from a soft consistence it grows hard, instead of being flexible it becomes inflexible, so that the patient would soon be suffocated unless speedily relieved. Bleeding, then, in the arm, and opening the sublingual veins, and purging with the electuaries, and giving warm gargles, and shaving the head, we must apply to it and the neck a cerate, and wrap them round with wool, and foment with soft sponges squeezed out of hot water; give to drink water and hydromel, not cold; and administer the juice of ptisan when, having passed the crisis, the patient is out of danger. When, in the season of summer or autumn, there is a hot and nitrous defluxion from the head (it is rendered hot and acrid by the season), being of such a nature it corrodes and ulcerates, and fills with air, and orthopnoea attended with great dryness supervenes; the fauces, when examined, do not seem swollen; the tendons on the back part of the neck are contracted, and have the appearance as if it were tetanus; the voice is lost, the breathing is small, and inspiration becomes frequent and laborious. In such persons the trachea becomes ulcerated, and the lungs engorged, from the patient's not being able to draw in the external air. In such cases, unless there be a spontaneous determination to the external parts of the neck, the symptoms become still more dreadful, and the danger more imminent, partly owing to the season, and the hot and acrid humors which cause the disease.

7. When fever seizes a person who has lately taken food, and whose bowels are loaded with faeces which have been long retained, whether it be attended with pain of the side or not, he ought to lie quiet until the food descend to the lower region of the bowels, and use oxymel for drink; but when the load descends to the loins, a clyster should be administered, or he should be purged by medicine; and when purged, he should take ptisan for food and hydromel for drink; then he may take the cerealia, and boiled fishes, and a watery wine in small quantity, at night, but during the day, a watery hydromel. When the flatus is offensive, either a suppository or clyster is to be administered; but otherwise the oxymel is to be discontinued, until the matters descend to the lower part of the bowels, and then they are to be evacuated by a clyster. But if the ardent fever (*causus*) supervene when the bowels are empty, should you still judge it proper to administer purgative medicine, it ought not be done during the first three days, nor earlier than the fourth. When you give the medicine, use the ptisan, observing the

paroxysms of the fevers, so as not to give it when the fever is setting in, but when it is ceasing, or on the decline, and as far as possible from the commencement. When the feet are cold, give neither drink nor ptisan, nor anything else of the kind, but reckon it an important rule to refrain until they become warm, and then you may administer them with advantage. For the most part, coldness of the feet is a symptom of a paroxysm of the fever coming on; and if at such a season you apply those things, you will commit the greatest possible mistake, for you will augment the disease in no small degree. But when the fever ceases, the feet, on the contrary, become hotter than the rest of the body; for when the heat leaves the feet, it is kindled up in the breast, and sends its flame up to the head. And when all the heat rushes upwards, and is exhaled at the head, it is not to be wondered at that the feet become cold, being devoid of flesh, and tendinous; and besides, they contract cold, owing to their distance from the hotter parts of the body, an accumulation of heat having taken place in the chest: and again, in like manner, when the fever is resolved and dissipated, the heat descends to the feet, and, at the same time, the head and chest become cold. Wherefore one should attend to this; that when the feet are cold, the bowels are necessarily hot, and filled with nauseous matters; the hypochondrium distended: there is jactitation of the body, owing to the internal disturbance; and aberration of the intellect, and pains; the patient is agitated, and wishes to vomit, and if he vomits bad matters he is pained; but when the heat descends to the feet, and the urine passes freely, he is every way lightened, even although he does not sweat; at this season, then, the ptisan ought to be given; it would be death to give it before.

8. When the bowels are loose during the whole course of fevers, in this case we are most especially to warm the feet, and see that they are properly treated with cerates, and wrapped in shawls, so that they may not become colder than the rest of the body; but when they are hot, no fomentation must be made to them, but care is to be taken that they do not become cold; and very little drink is to be used, either cold water or hydromel. In those cases of fever where the bowels are loose, and the mind is disordered, the greater number of patients pick the wool from their blankets, scratch their noses, answer briefly when questions are put to them, but, when left to themselves, utter nothing that is rational. Such attacks appear to me to be connected with black bile. When in these cases there is a colliquative diarrhoea, I am of opinion that we ought to give the colder and thicker ptisans, and that the drinks ought to be binding, of a vinous nature, and rather astringent. In cases of fever attended from the first with vertigo, throbbing of the head, and thin urine, you may expect the fever to be exacerbated at the

crisis; neither need it excite wonder, although there be delirium. When, at the commencement, the urine is cloudy or thick, it is proper to purge gently, provided this be otherwise proper; but when the urine at first is thin, do not purge such patients, but, if thought necessary, give a clyster; such patients should be thus treated; they should be kept in a quiet state, have unguents applied to them, and be covered up properly with clothes, and they should use for drink a watery hydromel, and the juice of ptisan as a draught in the evening; clear out the bowels at first with a clyster, but give no purgative medicines to them, for, if you move the bowels strongly, the urine is not concocted, but the fever remains long, without sweats and without a crisis. Do not give draughts when the time of the crisis is at hand, if there be agitation, but only when the fever abates and is alleviated. It is proper to be guarded at the crises of other fevers, and to withhold the draughts at that season. Fevers of this description are apt to be protracted, and to have determinations, if the inferior extremities be cold, about the ears and neck, or, if these parts are not cold, to have other changes; they have epistaxis, and disorder of the bowels. But in cases of fever attended with nausea, or distention of the hypochondria, when the patients cannot lie reclined in the same position, and the extremities are cold, the greatest care and precaution are necessary; nothing should be given to them, except oxymel diluted with water; no draught should be administered, until the fever abate and the urine be concocted; the patient should be laid in a dark apartment, and recline upon the softest couch, and he should be kept as long as possible in the same position, so as not to toss about, for this is particularly beneficial to him. Apply to the hypochondrium linseed by inunctions, taking care that he do not catch cold when the application is made; let it be in a tepid state, and boiled in water and oil. One may judge from the urine what is to take place, for if the urine be thicker, and more yellowish, so much the better; but if it be thinner, and blacker, so much the worse; but if it undergo changes, it indicates a prolongation of the disease, and the patient, in like manner, must experience a change to the worse and the better. Irregular fevers should be let alone until they become settled, and, when they do settle, they are to be treated by a suitable diet and medicine, attending to the constitution of the patient.

9. The aspects of the sick are various; wherefore the physician should pay attention, that he may not miss observing the exciting causes, as far as they can be ascertained by reasoning, nor such symptoms as should appear on an even or odd day, but he ought to be particularly guarded in observing the odd days, as it is in them, more especially, that changes take place in patients. He should mark, particularly, the first day on which the patient became ill, considering when and

whence the disease commenced, for this is of primary importance to know. When you examine the patient, inquire into all particulars; first how the head is, and if there be no headache, nor heaviness in it; then examine if the hypochondria and sides be free of pain; for if the hypochondrium be painful, swelled, and unequal, with a sense of satiety, or if there be pain in the side, and, along with the pain, either cough, tormina, or belly-ache, if any of these symptoms be present in the hypochondrium, the bowels should be opened with clysters, and the patient should drink boiled hydromel in a hot state. The physician should ascertain whether the patient be apt to faint when he is raised up, and whether his breathing be free; and examine the discharges from the bowels, whether they be very black, or of a proper color, like those of persons in good health, and ascertain whether the fever has a paroxysm every third day, and look well to such persons on those days. And should the fourth day prove like the third, the patient is in a dangerous state. With regard to the symptoms, black stools prognosticate death; but if they resemble the discharges of a healthy person, and if such is their appearance every day, it is a favorable symptom; but when the bowels do not yield to a suppository, and when, though the respiration be natural, the patient when raised to the night table, or even in bed, be seized with deliquium, you may expect that the patient, man or woman, who experiences these symptoms, is about to fall into a state of delirium. Attention also should be paid to the hands, for if they tremble, you may expect epistaxis; and observe the nostrils, whether the breath be drawn in equally by both; and if expiration by the nostrils be large, a convulsion is apt to take place; and should a convulsion occur to such a person, death may be anticipated, and it is well to announce it beforehand.

10. If, in a winter fever, the tongue be rough, and if there be swoonings, it is likely to be the remission of the fever. Nevertheless such a person is to be kept upon a restricted diet, with water for drink, and hydromel, and the strained juices, not trusting to the remission of the fevers, as persons having these symptoms are in danger of dying; when, therefore, you perceive these symptoms, announce this prognostic, if you shall judge proper, after making the suitable observations. When, in fevers, any dangerous symptom appears on the fifth day, when watery discharges suddenly take place from the bowels, when deliquium animi occurs, or the patient is attacked with loss of speech, convulsions, or hiccup, under such circumstances he is likely to be affected with nausea, and sweats break out under the nose and forehead, or on the back part of the neck and head, and patients with such symptoms shortly die, from stoppage of the respiration. When, in fevers, abscesses form about the legs, and, getting

into a chronic state, are not concocted while the fever persists, and if one is seized with a sense of suffocation in the throat, while the fauces are not swelled, and if it do not come to maturation, but is repressed, in such a case there is apt to be a flow of blood from the nose; if this, then, be copious, it indicates a resolution of the disease, but if not, a prolongation of the complaint; and the less the discharge, so much worse the symptoms, and the more protracted the disease; but if the other symptoms are very favorable, expect in such a case that pains will fall upon the feet; if then they attack the feet, and if these continue long in a very painful, and inflamed state, and if there be no resolution, the pains will extend by degrees to the neck, to the clavicle, shoulder, breast, or to some articulation, in which an inflammatory tumor will necessarily form. When these are reduced, if the hands are contracted, and become trembling, convulsion and delirium seize such a person; but blisters break out on the eyebrow, erythema takes place, the one eyelid being tumefied overtops the other, a hard inflammation sets in, the eye become strongly swelled, and the delirium increases much, but makes its attacks rather at night than by day. These symptoms more frequently occur on odd than on even days, but, whether on the one or the other, they are of a fatal character. Should you determine to give purgative medicines in such cases, at the commencement, you should do so before the fifth day, if there be borborygmi in the bowels, or, if not, you should omit the medicines altogether. If there be borborygmi, with bilious stools, purge moderately with scammony; but with regard to the treatment otherwise, administer as few drinks and draughts as until there be some amendment, and the disease is past the fourteenth day. When loss of speech seizes a person, on the fourteenth day of a fever, there is not usually a speedy resolution, nor any removal of the disease, for this symptom indicates a protracted disease; and when it appears on that day, it will be still more prolonged. When, on the fourth day of a fever, the tongue articulates confusedly, and when there are watery and bilious discharges from the bowels, such a patient is apt to fall into a state of delirium; the physician ought, therefore, to watch him, and attend to whatever symptoms may turn up. In the season of summer and autumn an epistaxis, suddenly occurring in acute diseases, indicates vehemence of the attack, and inflammation in the course of the veins, and on the day following, the discharge of thin urine; and if the patient be in the prime of life, and if his body be strong from exercise, and brawny, or of a melancholic temperament, or if from drinking has trembling hands, it may be well to announce beforehand either delirium or convulsion; and if these symptoms occur on even days, so much the better; but on critical days, they are of a deadly character. If, then, a copious discharge of blood procure an issue to the fullness thereof about the nose, or what is collected

about the anus, there will be an abscess, or pains in the hypochondrium, or testicles, or in the limbs; and when these are resolved, there will be a discharge of thick sputa, and of smooth, thin urine. In fever attended with singultus, give asafoetida, oxymel, and carrot, triturated together, in a draught; or galbanum in honey, and cumin in a linctus, or the juice of ptisan. Such a person cannot escape, unless critical sweats and gentle sleep supervene, and thick and acrid urine be passed, or the disease terminate in an abscess: give pine-fruit and myrrh in a linctus, and further give a very little oxymel to drink; but if they are very thirsty, some barley-water.

11. Peripneumonia, and pleuritic affections, are to be thus observed: If the fever be acute, and if there be pains on either side, or in both, and if expiration be if cough be present, and the sputa expectorated be of a blond or livid color, or likewise thin, frothy, and florid, or having any other character different from the common, in such a case, the physician should proceed thus: if the pain pass upward to the clavicle, or the breast, or the arm, the inner vein in the arm should be opened on the side affected, and blood abstracted according to the habit, age, and color of the patient, and the season of the year, and that largely and boldly, if the pain be acute, so as to bring on deliquium animi, and afterwards a clyster is to be given. But if the pain be below the chest, and if very intense, purge the bowels gently in such an attack of pleurisy, and during the act of purging give nothing; but after the purging give oxymel. The medicine is to be administered on the fourth day; on the first three days after the commencement, a clyster should be given, and if it does not relieve the patient, he should then be gently purged, but he is to be watched until the fever goes off, and till the seventh day; then if he appear to be free from danger, give him some unstrained ptisan, in small quantity, and thin at first, mixing it with honey. If the expectoration be easy, and the breathing free, if his sides be free of pain, and if the fever be gone, he may take the ptisan thicker, and in larger quantity, twice a day. But if he do not progress favorably, he must get less of the drink, and of the draught, which should be thin, and only given once a day, at whatever is judged to be the most favorable hour; this you will ascertain from the urine. The draught is not to be given to persons after fever, until you see that the urine and sputa are concocted (if, indeed, after the administration of the medicine he be purged frequently, it may be necessary to give it, but it should be given in smaller quantities and thinner than usual, for from inanition he will be unable to sleep, or digest properly, or wait the crisis); but when the melting down of crude matters has taken place, and his system has cast off what is offensive, there will then be no objection. The sputa are concocted when they resemble pus, and the urine when



it has reddish sediments like tares. But there is nothing to prevent fomentations and cerates being applied for the other pains of the sides; and the legs and loins may be rubbed with hot oil, or anointed with fat; linseed, too, in the form of a cataplasm, may be applied to the hypochondrium and as far up as the breasts. When pneumonia is at its height, the case is beyond remedy if he is not purged, and it is bad if he has dyspnoea, and urine that is thin and acrid, and if sweats come out about the neck and head, for such sweats are bad, as proceeding from the suffocation, rales, and the violence of the disease which is obtaining the upper hand, unless there be a copious evacuation of thick urine, and the sputa be concocted; when either of these come on spontaneously, that will carry off the disease. A linctus for pneumonia: Galbanum and pine-fruit in Attic honey; and southernwood in oxymel; make a decoction of pepper and black hellebore, and give it in cases of pleurisy attended with violent pain at the commencement. It is also a good thing to boil opoponax in oxymel, and, having strained it, to give it to drink; it answers well, also, in diseases of the liver, and in severe pains proceeding from the diaphragm, and in all cases in which it is beneficial to determine to the bowels or urinary organs, when given in wine and honey; when given to act upon the bowels, it should be drunk in larger quantity, along with a watery hydromel.

12. A dysentery, when stopped, will give rise to an aposteme, or tumor, if it do not terminate in fevers with sweats, or with thick and white urine, or in a tertian fever, or the pain fix upon a varix, or the testicles, or on the hip-joints.

## ON AIRS, WATERS, AND PLACES



*Translated by Charles Darwin Adams*

1. Whoever wishes to investigate medicine properly, should proceed thus: in the first place to consider the seasons of the year, and what effects each of them produces (for they are not at all alike, but differ much from themselves in regard to their changes). Then the winds, the hot and the cold, especially such as are common to all countries, and then such as are peculiar to each locality. We must also consider the qualities of the waters, for as they differ from one another in taste and weight, so also do they differ much in their qualities. In the same manner, when one comes into a city to which he is a stranger, he ought to consider its situation, how it lies as to the winds and the rising of the sun; for its influence is not the same whether it lies to the north or the south, to the rising or to the setting sun. These things one ought to consider most attentively, and concerning the waters which the inhabitants use, whether they be marshy and soft, or hard, and running from elevated and rocky situations, and then if saltish and unfit for cooking; and the ground, whether it be naked and deficient in water, or wooded and well watered, and whether it lies in a hollow, confined situation, or is elevated and cold; and the mode in which the inhabitants live, and what are their pursuits, whether they are fond of drinking and eating to excess, and given to indolence, or are fond of exercise and labor, and not given to excess in eating and drinking.

2. From these things he must proceed to investigate everything else. For if one knows all these things well, or at least the greater part of them, he cannot miss knowing, when he comes into a strange city, either the diseases peculiar to the place, or the particular nature of common diseases, so that he will not be in doubt as to the treatment of the diseases, or commit mistakes, as is likely to be the case provided one had not previously considered these matters. And in particular, as the season and the year advances, he can tell what epidemic diseases will attack the city, either in summer or in winter, and what each individual will be in danger of experiencing from the change of regimen. For knowing the changes of the seasons, the risings and settings of the stars, how each of them takes place, he will be able to know beforehand what sort of a year

is going to ensue. Having made these investigations, and knowing beforehand the seasons, such a one must be acquainted with each particular, and must succeed in the preservation of health, and be by no means unsuccessful in the practice of his art. And if it shall be thought that these things belong rather to meteorology, it will be admitted, on second thoughts, that astronomy contributes not a little, but a very great deal, indeed, to medicine. For with the seasons the digestive organs of men undergo a change.

3. But how of the aforementioned things should be investigated and explained, I will now declare in a clear manner. A city that is exposed to hot winds (these are between the wintry rising, and the wintry setting of the sun), and to which these are peculiar, but which is sheltered from the north winds; in such a city the waters will be plenteous and saltish, and as they run from an elevated source, they are necessarily hot in summer, and cold in winter; the heads of the inhabitants are of a humid and pituitous constitution, and their bellies subject to frequent disorders, owing to the phlegm running down from the head; the forms of their bodies, for the most part, are rather flabby; they do not eat nor drink much; drinking wine in particular, and more especially if carried to intoxication, is oppressive to them; and the following diseases are peculiar to the district: in the first place, the women are sickly and subject to excessive menstruation; then many are unfruitful from disease, and not from nature, and they have frequent miscarriages; infants are subject to attacks of convulsions and asthma, which they consider to be connected with infancy, and hold to be a sacred disease (epilepsy). The men are subject to attacks of dysentery, diarrhea, hepialus, chronic fevers in winter, of epinyctis, frequently, and of hemorrhoids about the anus. Pleurisies, peripneumonies, ardent fevers, and whatever diseases are reckoned acute, do not often occur, for such diseases are not apt to prevail where the bowels are loose. Ophthalmies occur of a humid character, but not of a serious nature, and of short duration, unless they attack epidemically from the change of the seasons. And when they pass their fiftieth year, defluxions supervening from the brain, render them paralytic when exposed suddenly to strokes of the sun, or to cold. These diseases are endemic to them, and, moreover, if any epidemic disease connected with the change of the seasons, prevail, they are also liable to it.

4. But the following is the condition of cities which have the opposite exposure, namely, to cold winds, between the summer settings and the summer risings of the sun, and to which these winds are peculiar, and which are sheltered from the south and the hot breezes. In the first place the waters are, for the most part, hard

cold. The men must necessarily be well braced and slender, and they must have the discharges downwards of the alimentary canal hard, and of difficult evacuation, while those upwards are more fluid, and rather bilious than pituitous. Their heads are sound and hard, and they are liable to burstings (of vessels?) for the most part. The diseases which prevail epidemically with them, are pleurisies, and those which are called acute diseases. This must be the case when the bowels are bound; and from any causes, many become affected with suppurations in the lungs, the cause of which is the tension of the body, and hardness of the bowels; for their dryness and the coldness of the water dispose them to ruptures (of vessels?). Such constitutions must be given to excess of eating, but not of drinking; for it is not possible to be gourmands and drunkards at the same time. Ophthalmies, too, at length supervene; these being of a hard and violent nature, and soon ending in rupture of the eyes; persons under thirty years of age are liable to severe bleedings at the nose in summer; attacks of epilepsy are rare but severe. Such people are likely to be rather long-lived; their ulcers are not attended with serious discharges, nor of a malignant character; in disposition they are rather ferocious than gentle. The diseases I have mentioned are peculiar to the men, and besides they are liable to any common complaint which may be prevailing from the changes of the seasons. But the women, in the first place, are of a hard constitution, from the waters being hard, indigestible, and cold; and their menstrual discharges are not regular, but in small quantity, and painful. Then they have difficult parturition, but are not very subject to abortions. And when they do bring forth children, they are unable to nurse them; for the hardness and indigestible nature of the water puts away their milk. Phthisis frequently supervenes after childbirth, for the efforts of it frequently bring on ruptures and strains. Children while still little are subject to dropsies in the testicle, which disappear as they grow older; in such a town they are late in attaining manhood. It is, as I have now stated, with regard to hot and cold winds and cities thus exposed.

5. Cities that are exposed to winds between the summer and the winter risings of the sun, and those the opposite to them, have the following characters:- Those which lie to the rising of the sun are all likely to be more healthy than such as are turned to the North, or those exposed to the hot winds, even if there should not be a furlong between them. In the first place, both the heat and cold are more moderate. Then such waters as flow to the rising sun, must necessarily be clear, fragrant, soft, and delightful to drink, in such a city. For the sun in rising and shining upon them purifies them, by dispelling the vapors which generally prevail in the morning. The persons of the inhabitants are, for the most part, well

colored and blooming, unless some disease counteract. The inhabitants have clear voices, and in temper and intellect are superior to those which are exposed to the north, and all the productions of the country in like manner are better. A city so situated resembles the spring as to moderation between heat and cold, and the diseases are few in number, and of a feeble kind, and bear a resemblance to the diseases which prevail in regions exposed to hot winds. The women there are very prolific, and have easy deliveries. Thus it is with regard to them.

6. But such cities as lie to the west, and which are sheltered from winds blowing from the east, and which the hot winds and the cold winds of the north scarcely touch, must necessarily be in a very unhealthy situation: in the first place the waters are not clear, the cause of which is, because the mist prevails commonly in the morning, and it is mixed up with the water and destroys its clearness, for the sun does not shine upon the water until he be considerably raised above the horizon. And in summer, cold breezes from the east blow and dews fall; and in the latter part of the day the setting sun particularly scorches the inhabitants, and therefore they are pale and enfeebled, and are partly subject to all the aforesaid diseases, but no one is peculiar to them. Their voices are rough and hoarse owing to the state of the air, which in such a situation is generally impure and unwholesome, for they have not the northern winds to purify it; and these winds they have are of a very humid character, such being the nature of the evening breezes. Such a situation of a city bears a great resemblance to autumn as regards the changes of the day, inasmuch as the difference between morning and evening is great. So it is with regard to the winds that are conducive to health, or the contrary.

7. And I wish to give an account of the other kinds of waters, namely, of such as are wholesome and such as are unwholesome, and what bad and what good effects may be derived from water; for water contributes much towards health. Such waters then as are marshy, stagnant, and belong to lakes, are necessarily hot in summer, thick, and have a strong smell, since they have no current; but being constantly supplied by rain-water, and the sun heating them, they necessarily want their proper color, are unwholesome and form bile; in winter, they become congealed, cold, and muddy with the snow and ice, so that they are most apt to engender phlegm, and bring on hoarseness; those who drink them have large and obstructed spleens, their bellies are hard, emaciated, and hot; and their shoulders, collar-bones, and faces are emaciated; for their flesh is melted down and taken up by the spleen, and hence they are slender; such persons then are voracious and thirsty; their bellies are very dry both above and below, so that

they require the strongest medicines. This disease is habitual to them both in summer and in winter, and in addition they are very subject to dropsies of a most fatal character; and in summer dysenteries, diarrheas, and protracted quartan fevers frequently seize them, and these diseases when prolonged dispose such constitutions to dropsies, and thus prove fatal. These are the diseases which attack them in summer; but in winter younger persons are liable to pneumonia, and maniacal affections; and older persons to ardent fevers, from hardness of the belly. Women are subject to oedema and leucophlegmasiae; when pregnant they have difficult deliveries; their infants are large and swelled, and then during nursing they become wasted and sickly, and the lochial discharge after parturition does not proceed properly with the women. The children are particularly subject to hernia, and adults to varices and ulcers on their legs, so that persons with such constitutions cannot be long-lived, but before the usual period they fall into a state of premature old age. And further, the women appear to be with child, and when the time of parturition arrives, the fulness of the belly disappears, and this happens from dropsy of the uterus. Such waters then I reckon bad for every purpose. The next to them in badness are those which have their fountains in rocks, so that they must necessarily be hard, or come from a soil which produces thermal waters, such as those having iron, copper, silver, gold, sulphur, alum, bitumen, or nitre (soda) in them; for all these are formed by the force of heat. Good waters cannot proceed from such a soil, but those that are hard and of a heating nature, difficult to pass by urine, and of difficult evacuation by the bowels. The best are those which flow from elevated grounds, and hills of earth; these are sweet, clear, and can bear a little wine; they are hot in summer and cold in winter, for such necessarily must be the waters from deep wells. But those are most to be commended which run to the rising of the sun, and especially to the summer sun; for such are necessarily more clear, fragrant, and light. But all such as are salty, crude, and harsh, are not good for drink. But there are certain constitutions and diseases with which such waters agree when drunk, as I will explain presently. Their characters are as follows: the best are such as have their fountains to the east; the next, those between the summer risings and settings of the sun, and especially those to the risings; and third, those between the summer and winter settings; but the worst are those to the south, and the parts between the winter rising and setting, and those to the south are very bad, but those to the north are better. They are to be used as follows: whoever is in good health and strength need not mind, but may always drink whatever is at hand. But whoever wishes to drink the most suitable for any disease, may accomplish his purpose by attending to the following directions: To persons whose bellies are hard and easily burnt up, the sweetest, the lightest, and the

most limpid waters will be proper; but those persons whose bellies are soft, loose, and pituitous, should choose the hardest, those kinds that are most crude, and the saltiest, for thus will they be most readily dried up; for such waters as are adapted for boiling, and are of a very solvent nature, naturally loosen readily and melt down the bowels; but such as are intractable, hard, and by no means proper for boiling, these rather bind and dry up the bowels. People have deceived themselves with regard to salt waters, from inexperience, for they think these waters purgative, whereas they are the very reverse; for such waters are crude, and ill adapted for boiling, so that the belly is more likely to be bound up than loosened by them. And thus it is with regard to the waters of springs.

8. I will now tell how it is with respect to rain-water, and water from snow. Rain waters, then, are the lightest, the sweetest, the thinnest, and the clearest; for originally the sun raises and attracts the thinnest and lightest part of the water, as is obvious from the nature of salts; for the saltish part is left behind owing to its thickness and weight, and forms salts; but the sun attracts the thinnest part, owing to its lightness, and he abstracts this not only from the lakes, but also from the sea, and from all things which contain humidity, and there is humidity in everything; and from man himself the sun draws off the thinnest and lightest part of the juices. As a strong proof of this, when a man walks in the sun, or sits down having a garment on, whatever parts of the body the sun shines upon do not sweat, for the sun carries off whatever sweat makes its appearance; but those parts which are covered by the garment, or anything else, sweat, for the particles of sweat are drawn and forced out by the sun, and are preserved by the cover so as not to be dissipated by the sun; but when the person comes into the shade the whole body equally perspires, because the sun no longer shines upon it. Wherefore, of all kinds of water, these spoil the soonest; and rain water has a bad spot smell, because its particles are collected and mixed together from most objects, so as to spoil the soonest. And in addition to this, when attracted and raised up, being carried about and mixed with the air, whatever part of it is turbid and darkish is separated and removed from the other, and becomes cloud and mist, but the most attenuated and lightest part is left, and becomes sweet, being heated and concocted by the sun, for all other things when concocted become sweet. While dissipated then and not in a state of consistence it is carried aloft. But when collected and condensed by contrary winds, it falls down wherever it happens to be most condensed. For this is likely to happen when the clouds being carried along and moving with a wind which does not allow them to rest, suddenly encounters another wind and other clouds from the opposite direction: there it is first condensed, and what is behind is carried up to the spot, and thus it

thickens, blackens, and is conglomerated, and by its weight it falls down and becomes rain. Such, to all appearance, are the best of waters, but they require to be boiled and strained; for otherwise they have a bad smell, and occasion hoarseness and thickness of the voice to those who drink them. Those from snow and ice are all bad, for when once congealed, they never again recover their former nature; for whatever is clear, light, and sweet in them, is separated and disappears; but the most turbid and weightiest part is left behind. You may ascertain this in the following manner: If in winter you will pour water by measure into a vessel and expose it to the open air until it is all frozen, and then on the following day bring it into a warm situation where the ice will thaw, if you will measure the water again when dissolved you will find it much less in quantity. This is a proof that the lightest and thinnest part is dissipated and dried up by the congelation, and not the heaviest and thickest, for that is impossible: wherefore I hold that waters from snow and ice, and those allied to them, are the worst of any for all purposes whatever. Such are the characters of rain-water, and those from ice and snow.

9. Men become affected with the stone, and are seized with diseases of the kidneys, strangury, sciatica, and become ruptured, when they drink all sorts of waters, and those from great rivers into which other rivulets run, or from a lake into which many streams of all sorts flow, and such as are brought from a considerable distance. For it is impossible that such waters can resemble one another, but one kind is sweet, another saltish and aluminous, and some flow from thermal springs; and these being all mixed up together disagree, and the strongest part always prevails; but the same kind is not always the strongest, but sometimes one and sometimes another, according to the winds, for the north wind imparts strength to this water, and the south to that, and so also with regard to the others. There must be deposits of mud and sand in the vessels from such waters, and the aforesaid diseases must be engendered by them when drunk, but why not to all I will now explain. When the bowels are loose and in a healthy state, and when the bladder is not hot, nor the neck of the bladder very contracted, all such persons pass water freely, and no concretion forms in the bladder; but those in whom the belly is hot, the bladder must be in the same condition; and when preternaturally heated, its neck becomes inflamed; and when these things happen, the bladder does not expel the urine, but raises its heat excessively. And the thinnest part of it is secreted, and the purest part is passed off in the form of urine, but the thickest and most turbid part is condensed and concreted, at first in small quantity, but afterwards in greater; for being rolled about in the urine, whatever is of a thick consistence it assimilates to itself, and



thus it increases and becomes indurated. And when such persons make water, the stone forced down by the urine falls into the neck of the bladder and stops the urine, and occasions intense pain; so that calculous children rub their privy parts and tear at them, as supposing that the obstruction to the urine is situated there. As a proof that it is as I say, persons affected with calculus have very limpid urine, because the thickest and foulest part remains and is concreted. Thus it generally is in cases of calculus. It forms also in children from milk, when it is not wholesome, but very hot and bilious, for it heats the bowels and bladder, so that the urine being also heated undergoes the same change. And I hold that it is better to give children only the most diluted wine, for such will least burn up and dry the veins. Calculi do not form so readily in women, for in them the urethra is short and wide, so that in them the urine is easily expelled; neither do they rub the pudendum with their hands, nor handle the passage like males; for the urethra in women opens direct into the pudendum, which is not the case with men, neither in them is the urethra so wide, and they drink more than children do. Thus, or nearly so, is it with regard to them.

10. And respecting the seasons, one may judge whether the year will prove sickly or healthy from the following observations:- If the appearances connected with the rising and setting stars be as they should be; if there be rains in autumn; if the winter be mild, neither very tepid nor unseasonably cold, and if in spring the rains be seasonable, and so also in summer, the year is likely to prove healthy. But if the winter be dry and northerly, and the spring showery and southerly, the summer will necessarily be of a febrile character, and give rise to ophthalmies and dysenteries. For when suffocating heat sets in all of a sudden, while the earth is moistened by the vernal showers, and by the south wind, the heat is necessarily doubled from the earth, which is thus soaked by rain and heated by a burning sun, while, at the same time, men's bellies are not in an orderly state, nor the brain properly dried; for it is impossible, after such a spring, but that the body and its flesh must be loaded with humors, so that very acute fevers will attack all, but especially those of a phlegmatic constitution. Dysenteries are also likely to occur to women and those of a very humid temperament. And if at the rising of the Dogstar rain and wintry storms supervene, and if the etesian winds blow, there is reason to hope that these diseases will cease, and that the autumn will be healthy; but if not, it is likely to be a fatal season to children and women, but least of all to old men; and that convalescents will pass into quartans, and from quartans into dropsies; but if the winter be southerly, showery and mild, but the spring northerly, dry, and of a wintry character, in the first place women who happen to be with child, and whose accouchement should take place in spring,

are apt to miscarry; and such as bring forth, have feeble and sickly children, so that they either die presently or are tender, feeble, and sickly, if they live. Such is the case with the women. The others are subject to dysenteries and dry ophthalmies, and some have catarrhs beginning in the head and descending to the lungs. Men of a phlegmatic temperament are likely to have dysenteries; and women, also, from the humidity of their nature, the phlegm descending downwards from the brain; those who are bilious, too, have dry ophthalmies from the heat and dryness of their flesh; the aged, too, have catarrhs from their flabbiness and melting of the veins, so that some of them die suddenly and some become paralytic on the right side or the left. For when, the winter being southerly and the body hot, the blood and veins are not properly constricted; a spring that is northerly, dry, and cold, having come on, the brain when it should have been expanded and purged, by the coryza and hoarseness is then constricted and contracted, so that the summer and the heat occurring suddenly, and a change supervening, these diseases fall out. And such cities as lie well to the sun and winds, and use good waters, feel these changes less, but such as use marshy and pooly waters, and lie well both as regards the winds and the sun, these all feel it more. And if the summer be dry, those diseases soon cease, but if rainy, they are protracted; and there is danger of any sore that there is becoming phagedenic from any cause; and lenteries and dropsies supervene at the conclusion of diseases; for the bowels are not readily dried up. And if the summer be rainy and southerly, and next the autumn, the winter must, of necessity, be sickly, and ardent fevers are likely to attack those that are phlegmatic, and more elderly than forty years, and pleurisies and peripneumonies those that are bilious. But if the summer is parched and northerly, but the autumn rainy and southerly, headache and sphaelus of the brain are likely to occur; and in addition hoarseness, coryza, coughs, and in some cases, consumption. But if the season is northerly and without water, there being no rain, neither after the Dogstar nor Arcturus; this state agrees best with those who are naturally phlegmatic, with those who are of a humid temperament, and with women; but it is most inimical to the bilious; for they become much parched up, and ophthalmies of a dry nature supervene, fevers both acute and chronic, and in some cases melancholy; for the most humid and watery part of the bile being consumed, the thickest and most acrid portion is left, and of the blood likewise, when these diseases came upon them. But all these are beneficial to the phlegmatic, for they are thereby dried up, and reach winter not oppressed with humors, but with them dried up.

11. Whoever studies and observes these things may be able to foresee most of the

effects which will result from the changes of the seasons; and one ought to be particularly guarded during the greatest changes of the seasons, and neither willingly give medicines, nor apply the cautery to the belly, nor make incisions there until ten or more days be past. Now, the greatest and most dangerous are the two solstices, and especially the summer, and also the two equinoxes, but especially the autumnal. One ought also to be guarded about the rising of the stars, especially of the Dogstar, then of Arcturus, and then the setting of the Pleiades; for diseases are especially apt to prove critical in those days, and some prove fatal, some pass off, and all others change to another form and another constitution. So it is with regard to them.

12. I wish to show, respecting Asia and Europe, how, in all respects, they differ from one another, and concerning the figure of the inhabitants, for they are different, and do not at all resemble one another. To treat of all would be a long story, but I will tell you how I think it is with regard to the greatest and most marked differences. I say, then, that Asia differs very much from Europe as to the nature of all things, both with regard to the productions of the earth and the inhabitants, for everything is produced much more beautiful and large in Asia; the country is milder, and the dispositions of the inhabitants also are more gentle and affectionate. The cause of this is the temperature of the seasons, because it lies in the middle of the risings of the sun towards the east, and removed from the cold (and heat), for nothing tends to growth and mildness so much as when the climate has no predominant quality, but a general equality of temperature prevails. It is not everywhere the same with regard to Asia, but such parts of the country as lie intermediate between the heat and the cold, are the best supplied with fruits and trees, and have the most genial climate, and enjoy the purest waters, both celestial and terrestrial. For neither are they much burnt up by the heat, nor dried up by the drought and want of rain, nor do they suffer from the cold; since they are well watered from abundant showers and snow, and the fruits of the season, as might be supposed, grow in abundance, both such as are raised from seed that has been sown, and such plants as the earth produces of its own accord, the fruits of which the inhabitants make use of, training them from their wild state and transplanting them to a suitable soil; the cattle also which are reared there are vigorous, particularly prolific, and bring up young of the fairest description; the inhabitants too, are well fed, most beautiful in shape, of large stature, and differ little from one another either as to figure or size; and the country itself, both as regards its constitution and mildness of the seasons, may be said to bear a close resemblance to the spring. Manly courage, endurance of suffering, laborious enterprise, and high spirit, could not be produced in such a

state of things either among the native inhabitants or those of a different country, for there pleasure necessarily reigns. For this reason, also, the forms of wild beasts there are much varied. Thus it is, as I think, with the Egyptians and Libyans.

13. But concerning those on the right hand of the summer risings of the sun as far as the Palus Maeotis (for this is the boundary of Europe and Asia), it is with them as follows: the inhabitants there differ far more from one another than those I have treated of above, owing to the differences of the seasons and the nature of the soil. But with regard to the country itself, matters are the same there as among all other men; for where the seasons undergo the greatest and most rapid changes, there the country is the wildest and most unequal; and you will find the greatest variety of mountains, forests, plains, and meadows; but where the seasons do not change much there the country is the most even; and, if one will consider it, so is it also with regard to the inhabitants; for the nature of some is like to a country covered with trees and well watered; of some, to a thin soil deficient in water; of others, to fenny and marshy places; and of some again, to a plain of bare and parched land. For the seasons which modify their natural frame of body are varied, and the greater the varieties of them the greater also will be the differences of their shapes.

14. I will pass over the smaller differences among the nations, but will now treat of such as are great either from nature, or custom; and, first, concerning the Macrocephali. There is no other race of men which have heads in the least resembling theirs. At first, usage was the principal cause of the length of their head, but now nature cooperates with usage. They think those the most noble who have the longest heads. It is thus with regard to the usage: immediately after the child is born, and while its head is still tender, they fashion it with their hands, and constrain it to assume a lengthened shape by applying bandages and other suitable contrivances whereby the spherical form of the head is destroyed, and it is made to increase in length. Thus, at first, usage operated, so that this constitution was the result of force: but, in the course of time, it was formed naturally; so that usage had nothing to do with it; for the semen comes from all parts of the body, sound from the sound parts, and unhealthy from the unhealthy parts. If, then, children with bald heads are born to parents with bald heads; and children with blue eyes to parents who have blue eyes; and if the children of parents having distorted eyes squint also for the most part; and if the same may be said of other forms of the body, what is to prevent it from happening that a child with a long head should be produced by a parent having a long head? But

now these things do not happen as they did formerly, for the custom no longer prevails owing to their intercourse with other men. Thus it appears to me to be with regard to them.

15. As to the inhabitants of Phasis, their country is fenny, warm, humid, and wooded; copious and severe rains occur there at all seasons; and the life of the inhabitants is spent among the fens; for their dwellings are constructed of wood and reeds, and are erected amidst the waters; they seldom practice walking either to the city or the market, but sail about, up and down, in canoes constructed out of single trees, for there are many canals there. They drink the hot and stagnant waters, both when rendered putrid by the sun, and when swollen with rains. The Phasis itself is the most stagnant of all rivers, and runs the smoothest; all the fruits which spring there are unwholesome, feeble and imperfect growth, owing to the redundance of water, and on this account they do not ripen, for much vapor from the waters overspreads the country. For these reasons the Phasians have shapes different from those of all other men; for they are large in stature, and of a very gross habit of body, so that not a joint nor vein is visible; in color they are sallow, as if affected with jaundice. Of all men they have the roughest voices, from their breathing an atmosphere which is not clear, but misty and humid; they are naturally rather languid in supporting bodily fatigue. The seasons undergo but little change either as to heat or cold; their winds for the most part are southerly, with the exception of one peculiar to the country, which sometimes blows strong, is violent and hot, and is called by them the wind cenchron. The north wind scarcely reaches them, and when it does blow it is weak and gentle. Thus it is with regard to the different nature and shape of the inhabitants of Asia and Europe.

16. And with regard to the pusillanimity and cowardice of the inhabitants, the principal reason the Asiatics are more unwarlike and of gentler disposition than the Europeans is, the nature of the seasons, which do not undergo any great changes either to heat or cold, or the like; for there is neither excitement of the understanding nor any strong change of the body whereby the temper might be ruffled and they be roused to inconsiderate emotion and passion, rather than living as they do always in the state. It is changes of all kinds which arouse understanding of mankind, and do not allow them to get into a torpid condition. For these reasons, it appears to me, the Asiatic race is feeble, and further, owing to their laws; for monarchy prevails in the greater part of Asia, and where men are not their own masters nor independent, but are the slaves of others, it is not a matter of consideration with them how they may acquire military discipline, but

how they may seem not to be warlike, for the dangers are not equally shared, since they must serve as soldiers, perhaps endure fatigue, and die for their masters, far from their children, their wives, and other friends; and whatever noble and manly actions they may perform lead only to the aggrandizement of their masters, whilst the fruits which they reap are dangers and death; and, in addition to all this, the lands of such persons must be laid waste by the enemy and want of culture. Thus, then, if any one be naturally warlike and courageous, his disposition will be changed by the institutions. As a strong proof of all this, such Greeks or barbarians in Asia as are not under a despotic form of government, but are independent, and enjoy the fruits of their own labors, are of all others the most warlike; for these encounter dangers on their own account, bear the prizes of their own valor, and in like manner endure the punishment of their own cowardice. And you will find the Asiatics differing from one another, for some are better and others more dastardly; of these differences, as I stated before, the changes of the seasons are the cause. Thus it is with Asia.

17. In Europe there is a Scythian race, called Sauromatae, which inhabits the confines of the Palus Maeotis, and is different from all other races. Their women mount on horseback, use the bow, and throw the javelin from their horses, and fight with their enemies as long as they are virgins; and they do not lay aside their virginity until they kill three of their enemies, nor have any connection with men until they perform the sacrifices according to law. Whoever takes to herself a husband, gives up riding on horseback unless the necessity of a general expedition obliges her. They have no right breast; for while still of a tender age their mothers heat strongly a copper instrument constructed for this very purpose, and apply it to the right breast, which is burnt up, and its development being arrested, all the strength and fullness are determined to the right shoulder and arm.

18. As the other Scythians have a peculiarity of shape, and do not resemble any other, the same observation applies to the Egyptians, only that the latter are oppressed by heat and the former by cold. What is called the Scythian desert is a prairie, rich in meadows, high-lying, and well watered; for the rivers which carry off the water from the plains are large. There live those Scythians which are called Nomades, because they have no houses, but live in wagons. The smallest of these wagons have four wheels, but some have six; they are covered in with felt, and they are constructed in the manner of houses, some having but a single apartment, and some three; they are proof against rain, snow, and winds. The wagons are drawn by yokes of oxen, some of two and others of three, and all

without horns, for they have no horns, owing to the cold. In these wagons the women live, but the men are carried about on horses, and the sheep, oxen, and horses accompany them; and they remain on any spot as long as there is provender for their cattle, and when that fails they migrate to some other place. They eat boiled meat, and drink the milk of mares, and also eat hippace, which is cheese prepared from the milk of the mare. Such is their mode of life and their customs.

19. In respect of the seasons and figure of body, the Scythian race, like the Egyptian, have a uniformity of resemblance, different from all other nations; they are by no means prolific, and the wild beasts which are indigenous there are small in size and few in number, for the country lies under the Northern Bears, and the Rhiphaean mountains, whence the north wind blows; the sun comes very near to them only when in the summer solstice, and warms them but for a short period, and not strongly; and the winds blowing from the hot regions of the earth do not reach them, or but seldom, and with little force; but the winds from the north always blow, congealed, as they are, by the snow, ice, and much water, for these never leave the mountains, which are thereby rendered uninhabitable. A thick fog covers the plains during the day, and amidst it they live, so that winter may be said to be always present with them; or, if they have summer, it is only for a few days, and the heat is not very strong. Their plains are high-lying and naked, not crowned with mountains, but extending upwards under the Northern Bears. The wild beasts there are not large, but such as can be sheltered underground; for the cold of winter and the barrenness of the country prevent their growth, and because they have no covert nor shelter. The changes of the seasons, too, are not great nor violent, for, in fact, they change gradually; and therefore their figures resemble one another, as they all equally use the same food, and the same clothing summer and winter, respiring a humid and dense atmosphere, and drinking water from snow and ice; neither do they make any laborious exertions, for neither body nor mind is capable of enduring fatigue when the changes of the seasons are not great. For these reasons their shapes are gross and fleshy, with ill-marked joints, of a humid temperament, and deficient in tone: the internal cavities, and especially those of the intestines, are full of humors; for the belly cannot possibly be dry in such a country, with such a constitution and in such a climate; but owing to their fat, and the absence of hairs from their bodies, their shapes resemble one another, the males being all alike, and so also with the women; for the seasons being of a uniform temperature, no corruption or deterioration takes place in the concretion of the semen, unless from some violent cause, or from disease.

20. I Will give you a strong proof of the humidity (laxity?) of their constitutions. You will find the greater part of the Scythians, and all the Nomades, with marks of the cautery on their shoulders, arms, wrists, breasts, hip-joints, and loins, and that for no other reason but the humidity and flabbiness of their constitution, for they can neither strain with their bows, nor launch the javelin from their shoulder owing to their humidity and atony: but when they are burnt, much of the humidity in their joints is dried up, and they become better braced, better fed, and their joints get into a more suitable condition. They are flabby and squat at first, because, as in Egypt, they are not swathed (?); and then they pay no attention to horsemanship, so that they may be adepts at it; and because of their sedentary mode of life; for the males, when they cannot be carried about on horseback, sit the most of their time in the wagon, and rarely practise walking, because of their frequent migrations and shiftings of situation; and as to the women, it is amazing how flabby and sluggish they are. The Scythian race are tawny from the cold, and not from the intense heat of the sun, for the whiteness of the skin is parched by the cold, and becomes tawny.

21. It is impossible that persons of such a constitution could be prolific, for, with the man, the sexual desires are not strong, owing to the laxity of his constitution, the softness and coldness of his belly, from all which causes it is little likely that a man should be given to venery; and besides, from being jaded by exercise on horseback, the men become weak in their desires. On the part of the men these are the causes; but on that of the women, they are embonpoint and humidity; for the womb cannot take in the semen, nor is the menstrual discharge such as it should be, but scanty and at too long intervals; and the mouth of the womb is shut up by fat and does not admit the semen; and, moreover, they themselves are indolent and fat, and their bellies cold and soft. From these causes the Scythian race is not prolific. Their female servants furnish a strong proof of this; for they no sooner have connection with a man than they prove with child, owing to their active course of life and the slenderness of body.

22. And, in addition to these, there are many eunuchs among the Scythians, who perform female work, and speak like women. Such persons are called effeminate. The inhabitants of the country attribute the cause of their impotence to a god, and venerate and worship such persons, every one dreading that the like might befall himself; but to me it appears that such affections are just as much divine as all others are, and that no one disease is either more divine or more human than another, but that all are alike divine, for that each has its own nature, and that no one arises without a natural cause. But I will explain how I think that



the affection takes its rise. From continued exercise on horseback they are seized with chronic defluxions in their joints owing to their legs always hanging down below their horses; they afterwards become lame and stiff at the hip-joint, such of them, at least, as are severely attacked with it. They treat themselves in this way: when the disease is commencing, they open the vein behind either ear, and when the blood flows, sleep, from feebleness, seizes them, and afterwards they awaken, some in good health and others not. To me it appears that the semen is altered by this treatment, for there are veins behind the ears which, if cut, induce impotence; now, these veins would appear to me to be cut. Such persons afterwards, when they go in to women and cannot have connection with them, at first do not think much about it, but remain quiet; but when, after making the attempt two, three, or more times, they succeed no better, fancying they have committed some offence against the god whom they blame for the affection, they put on female attire, reproach themselves for effeminacy, play the part of women, and perform the same work as women do. This the rich among the Scythians endure, not the basest, but the most noble and powerful, owing to their riding on horseback; for the poor are less affected, as they do not ride on horses. And yet, if this disease had been more divine than the others, it ought not to have befallen the most noble and the richest of the Scythians alone, but all alike, or rather those who have little, as not being able to pay honors to the gods, if, indeed, they delight in being thus rewarded by men, and grant favors in return; for it is likely that the rich sacrifice more to the gods, and dedicate more votive offerings, inasmuch as they have wealth, and worship the gods; whereas the poor, from want, do less in this way, and, moreover, upbraid the gods for not giving them wealth, so that those who have few possessions were more likely to bear the punishments of these offences than the rich. But, as I formerly said, these affections are divine just as much as others, for each springs from a natural cause, and this disease arises among the Scythians from such a cause as I have stated. But it attacks other men in like manner, for whenever men ride much and very frequently on horseback, then many are affected with rheums in the joints, sciatica, and gout, and they are inept at venery. But these complaints befall the Scythians, and they are the most impotent of men for the aforesaid causes, and because they always wear breeches, and spend the most of their time on horseback, so as not to touch their privy parts with the hands, and from the cold and fatigue they forget the sexual desire, and do not make the attempt until after they have lost their virility. Thus it is with the race of the Scythians.

23. The other races in Europe differ from one another, both as to stature and shape, owing to the changes of the seasons, which are very great and frequent,

and because the heat is strong, the winters severe, and there are frequent rains, and again protracted droughts, and winds, from which many and diversified changes are induced. These changes are likely to have an effect upon generation in the coagulation of the semen, as this process cannot be the same in summer as in winter, nor in rainy as in dry weather; wherefore, I think, that the figures of Europeans differ more than those of Asiatics; and they differ very much from one another as to stature in the same city; for vitiations of the semen occur in its coagulation more frequently during frequent changes of the seasons, than where they are alike and equable. And the same may be said of their dispositions, for the wild, and unsociable, and the passionate occur in such a constitution; for frequent excitement of the mind induces wildness, and extinguishes sociableness and mildness of disposition, and therefore I think the inhabitants of Europe more courageous than those of Asia; for a climate which is always the same induces indolence, but a changeable climate, laborious exertions both of body and mind; and from rest and indolence cowardice is engendered, and from laborious exertions and pains, courage. On this account the inhabitants of Europe are than the Asiatics, and also owing to their institutions, because they are not governed by kings like the latter, for where men are governed by kings there they must be very cowardly, as I have stated before; for their souls are enslaved, and they will not willingly, or readily undergo dangers in order to promote the power of another; but those that are free undertake dangers on their own account, and not for the sake of others; they court hazard and go out to meet it, for they themselves bear off the rewards of victory, and thus their institutions contribute not a little to their courage. Such is the general character of Europe and Asia.

24. And there are in Europe other tribes, differing from one another in stature, shape, and courage: the differences are those I formerly mentioned, and will now explain more clearly. Such as inhabit a country which is mountainous, rugged, elevated, and well watered, and where the changes of the seasons are very great, are likely to have great variety of shapes among them, and to be naturally of an enterprising and warlike disposition; and such persons are apt to have no little of the savage and ferocious in their nature; but such as dwell in places which are low-lying, abounding in meadows and ill ventilated, and who have a larger proportion of hot than of cold winds, and who make use of warm waters- these are not likely to be of large stature nor well proportioned, but are of a broad make, fleshy, and have black hair; and they are rather of a dark than of a light complexion, and are less likely to be phlegmatic than bilious; courage and laborious enterprise are not naturally in them, but may be engendered in them by means of their institutions. And if there be rivers in the country which carry off

the stagnant and rain water from it, these may be wholesome and clear; but if there be no rivers, but the inhabitants drink the waters of fountains, and such as are stagnant and marshy, they must necessarily have prominent bellies and enlarged spleens. But such as inhabit a high country, and one that is level, windy, and well-watered, will be large of stature, and like to one another; but their minds will be rather unmanly and gentle. Those who live on thin, ill-watered, and bare soils, and not well attempered in the changes of the seasons, in such a country they are likely to be in their persons rather hard and well braced, rather of a blond than a dark complexion, and in disposition and passions haughty and self-willed. For, where the changes of the seasons are most frequent, and where they differ most from one another, there you will find their forms, dispositions, and nature the most varied. These are the strongest of the natural causes of difference, and next the country in which one lives, and the waters; for, in general, you will find the forms and dispositions of mankind to correspond with the nature of the country; for where the land is fertile, soft, and well-watered, and supplied with waters from very elevated situations, so as to be hot in summer and cold in winter, and where the seasons are fine, there the men are fleshy, have ill-formed joints, and are of a humid temperament; they are not disposed to endure labor, and, for the most part, are base in spirit; indolence and sluggishness are visible in them, and to the arts they are dull, and not clever nor acute. When the country is bare, not fenced, and rugged, blasted by the winter and scorched by the sun, there you may see the men hardy, slender, with well-shaped joints, well-braced, and shaggy; sharp industry and vigilance accompany such a constitution; in morals and passions they are haughty and opinionative, inclining rather to the fierce than to the mild; and you will find them acute and ingenious as regards the arts, and excelling in military affairs; and likewise all the other productions of the earth corresponding to the earth itself. Thus it is with regard to the most opposite natures and shapes; drawing conclusions from them, you may judge of the rest without any risk of error.

# ON THE ARTICULATIONS



OR, ON JOINTS

*Translated by Charles Darwin Adams*

1. I am acquainted with one form in which the shoulder-joint is dislocated, namely, that into the armpit; I have never seen it take place upward nor outward; and yet I do not positively affirm whether it might be dislocated in these directions or not, although I have something which I might say on this subject. But neither have I ever seen what I considered to be a dislocation forward. Physicians, indeed, fancy that dislocation is very apt to occur forward, and they are more particularly deceived in those persons who have the fleshy parts about the joint and arm much emaciated; for, in all such cases, the head of the arm appears to protrude forward. And I in one case of this kind having said that there was no dislocation, exposed myself to censure from certain physicians and common people on that account, for they fancied that I alone was ignorant of what everybody else was acquainted with, and I could not convince them but with difficulty, that the matter was so. But if one will strip the point of the shoulder of the fleshy parts, and where the muscle (*deltoid?*) extends, and also lay bare the tendon that goes from the armpit and clavicle to the breast (*pectoral muscle?*), the head of the humerus will appear to protrude strongly forward, although not dislocated, for the head of the humerus naturally inclines forward, but the rest of the bone is turned outward. The humerus is connected obliquely with the cavity of the scapula, when the arm is stretched along the sides; but when the whole arm is stretched forward, then the head of the humerus is in a line with the cavity of the humerus, and no longer appears to protrude forward. And with regard to the variety we are now treating of, I have never seen a case of dislocation forward; and yet I do not speak decidedly respecting it, whether such a dislocation may take place or not. When, then, a dislocation into the armpit takes place, seeing it is of frequent occurrence, many persons know how to reduce it, for it is an easy thing to teach all the methods by which physicians effect the reductions, and the best manner of applying them. The strongest of those methods should be used when the difficulty of reduction is particularly great. The strongest is the method to be last described.

2. Those who are subject to frequent dislocations at the shoulder-joint, are for the most part competent to effect the reduction themselves; for, having introduced the knuckles of the other hand into the armpit, they force the joint upward, and bring the elbow toward the breast. The physician might reduce it in the same manner, if having introduced his fingers into the armpit on the inside of the dislocated joint, he would force it from the ribs, pushing his own head against the acromion, in order to make counter-pressure, and with his knees applied to the patient's elbow pushing the arm to the sides. It will be of advantage if the operator has strong hands, or the physician may do as directed with his head and hands, while another person brings the elbow toward the breast. Reduction of the shoulder may also be effected by carrying the fore-arm backward to the spine, and then with the one hand grasping it at the elbow, to bend the arm upward, and with the other to support it behind at the articulation. This mode of reduction, and the one formerly described, are not natural, and yet by rotating the bone of the joint, they force it to return.

3. Those who attempt to perform reduction with the heel, operate in a manner which is an approach to the natural. The patient must lie on the ground upon his back, while the person who is to effect the reduction is seated on the ground upon the side of the dislocation; then the operator, seizing with his hand the affected arm, is to pull it, while with his heel in the armpit he pushes in the contrary direction, the right heel being placed in the right armpit, and the left heel in the left armpit. But a round ball of a suitable size must be placed in the hollow of the armpit; the most convenient are very small and hard balls, formed from several pieces of leather sewed together. For without something of the kind the heel cannot reach to the head of the humerus, since, when the arm is stretched, the armpit becomes hollow, the tendons on both sides of the armpit making counter-contraction so as to oppose the reduction. But another person should be seated on the other side of the patient to hold the sound shoulder, so that the body may not be dragged along when the arm of the affected side is pulled; and then, when the ball is placed in the armpit, a supple piece of thong sufficiently broad is to be placed round it, and some person taking hold of its two ends is to seat himself above the patient's head to make counter-extension, while at the same time he pushes with his foot against the bone at the top of the shoulder. The ball should be placed as much on the inside as possible, upon the ribs, and not upon the head of the humerus.

4. There is another method of reduction performed by the shoulder of a person standing. The person operating in this way, who should be taller than the patient,

is to take hold of his arm and place the sharp point of his own shoulder in the patient's armpit, and push it in so that it may lodge there, and having for his object that the patient may be suspended at his back by the armpit, he must raise himself higher on this shoulder than the other; and he must bring the arm of the suspended patient as quickly as possible to his own breast. In this position he should shake the patient when he raises him up, in order that the rest of the body may be a counterpoise to the arm which is thus held. But if the patient be very light, a light child should be suspended behind along with him. These methods of reduction are all of easy application in the palestra, as they can all be performed without instruments, but they may also be used elsewhere.

5. Those who accomplish the reduction by forcibly bending it round a pestle, operate in a manner which is nearly natural. But the pestle should be wrapped in a soft shawl (for thus it will be less slippery), and it should be forced between the ribs and the head of the humerus. And if the pestle be short, the patient should be seated upon something, that his arm can with difficulty pass above the pestle. But for the most part the pestle should be longer, so that the patient when standing may be almost suspended upon the piece of wood. And then the arm and forearm should be stretched along the pestle, whilst some person secures the opposite side of the body by throwing his arms round the neck, near the clavicle.

6. But the method with a ladder is another of the same kind, and still better, since by it the body can be more safely counterpoised on this side; and that, while in the method which the piece of wood resembling a pestle, there is danger of the body tumbling to either side. But some round thing should be tied upon the step of the ladder which may be fitted to the armpit, whereby the head of the bone may be forced into its natural place.

7. The following, however, is the strongest of all the methods of reduction. We must get a piece of wood, five, or at least four inches broad, two inches in thickness, or still thinner, and two cubits in length, or a little less; and its extremity at one end should be rounded, and made very narrow and very slender there, and it should have a slightly projecting edge ( *ambe* ) on its round extremity, not on the part that is to be applied to the side, but to the head of the humerus, so that it may be adjusted in the armpit at the sides under the head of the humerus; and a piece of soft shawl or cloth should be glued to the end of the piece of wood, so as to give the less pain upon pressure. Then having pushed the head of this piece of wood as far inward as possible between the ribs and the head of the humerus, the whole arm is to be stretched along this piece of wood,

and is to be bound round at the arm, the fore-arm, and the wrist, so that it may be particularly well secured; but great pains should be taken that the extremity of this piece of wood should be introduced as far as possible into the armpit, and that it is carried past the head of the humerus. Then a cross-beam is to be securely fastened between two pillars, and afterward the arm with the piece of wood attached to it is to be brought over this cross-beam, so that the arm may be on the one side of it and the body on the other, and the cross-beam in the armpit; and then the arm with the piece of wood is to be forced down on the one side of the cross-beam, and the rest of the body on the other. The cross-beam is to be bound so high that the rest of the body may be raised upon tip-toes. This is by far the most powerful method of effecting reduction of the shoulder; for one thus operates with the lever upon the most correct principles, provided only the piece of wood be placed as much as possible within the head of the humerus, and thus also the counter-balancing weights will be most properly adjusted, and safely applied to the bone of the arm. Wherefore recent cases in this way may be reduced more quickly than could be believed, before even extension would appear to be applied; and this is the only mode of reduction capable of replacing old dislocations, and this it will effect, unless flesh has already filled up the (glenoid) cavity, and the head of the humerus has formed a socket for itself in the place to which it has been displaced; and even in such an old case of dislocation, it appears to me that we could effect reduction (for what object would a lever power properly applied not it move?), but it would not remain in its place, but would be again displaced as formerly. The same thing may be effected by means of the ladder, by preparing it in the same manner. If the dislocation be recent, a large Thessalian chair may be sufficient to accomplish this purpose; the wood, however, should be dressed up as described before; but the patient should be seated sideways on the chair, and then the arm, with the piece of wood attached to it, is to be brought over the back of the chair, and force is to be applied to the arm, with the wood on the one side, and the body on the other side. The same means may be applied with a double door. One should always use what happens to be at hand.

8. Wherefore it should be known that one constitution differs much from another as to the facility with which dislocations in them may be reduced, and one articular cavity differs much from another, the one being so constructed that the bone readily leaps out and another less so; but the greatest difference regards the binding together of the parts by the nerves ( *ligaments?* ) which are slack in some and tight in others. For the humidity in the joints of men is connected with the state of the ligaments, when they are slack and yielding; for you may see

many people who are so humid ( *flabby?* ) that when they choose they can disarticulate their joints without pain, and reduce them in like manner. The habit of the body also occasions a certain difference, for in those who are in a state of embonpoint and fleshy the joint is rarely dislocated, but is more difficult to reduce; but when they are more attenuated and leaner than usual, then they are subject to dislocations which are more easily reduced. And the following observation is a proof that matters are so; for in cattle the thighs are most apt to be dislocated at the hip-joint, when they are most particularly lean, which they are at the end of winter, at which time then they are particularly subject to dislocations (if I may be allowed to make such an observation while treating of a medical subject); and therefore Homer has well remarked, that of all beasts oxen suffer the most at that season, and especially those employed at the plow as being worked in the winter season. In them, therefore, dislocations happen most frequently, as being at that time most particularly reduced in flesh. And other cattle can crop the grass when it is short, but the ox cannot do so until it becomes long; for, in the others, the projection of the lip is slender, and so is the upper lip, but in the ox the projection of the lip is thick, and the upper jaw is thick and obtuse, and therefore they are incapable of seizing short herbs. But the *solidungula* as having prominent teeth in both their front jaws, can crop the grass and grasp it with their teeth while short, and delight more in short grass than in rank; for, in general, short grass is better and more substantial than rank, as having not yet given out its fructification. Wherefore the poet has the following line: "As when to horned cattle dear the vernal season comes," because rank grass appears to be most sought after by them. But otherwise in the ox, this joint is slacker than in other animals, and, therefore, this animal drags his foot in walking more than any other, and especially when lank and old. For all these reasons the ox is most particularly subject to dislocations; and I have made the more observations respecting him, as they confirm all that was said before on this subject. With regard, then, to the matter on hand, I say that dislocations occur more readily, and are more speedily reduced in those who are lean than in those who are fleshy; and in those who are humid and lank there is less inflammation than in such as are dry and fleshy, and they are less compactly knit hereafter, and there is more mucosity than usual in cases not attended with inflammation, and hence the joints are more liable to luxations; for, in the main, the articulations are more subject to mucosities in those who are lean than in those who are fleshy; and the flesh of lean persons who have not been reduced by a proper course of discipline abounds more with mucosity than that of fat persons. But in those cases in which the mucosity is accompanied with inflammation, the inflammation binds ( *braces?* ) the joint, and hence those who



have small collections of mucosities are not very subject to dislocations, which they would be if the mucosity had not been accompanied with more or less inflammation.

9. In cases of dislocation those persons who are not attacked with inflammation of the surrounding parts, can use the shoulder immediately without pain, and do not think it necessary to take any precautions with themselves; it is therefore the business of the physician to warn them beforehand that dislocation is more likely to return in such cases than when the tendons have been inflamed. This remark applies to all the articulations, but particularly to those of the shoulder and knee, for these are the joints most subject to luxations. But those who have inflammation of the ligaments cannot use the shoulder, for the pain and the tension induced by the inflammation prevent them. Such cases are to be treated with cerate, compresses, and plenty of bandages; but a ball of soft clean wool is to be introduced into the armpit, to fill up the hollow of it, that it may be a support to the bandaging, and maintain the joint *in situ*. The arm, in general, should be inclined upward as much as possible, for thus it will be kept at the greatest possible distance from the place at which the head of the humerus escaped. And when you bandage the shoulder you must fasten the arms to the sides with a band, which is to be carried round the body. The shoulder should be rubbed gently and softly. The physician ought to be acquainted with many things, and among others with friction; for from the same name the same results are not always obtained; for friction could brace a joint when unseasonably relaxed, and relax it when unseasonably hard; but we will define what we know respecting friction in another place. The shoulder, then, in such a state, should be rubbed with soft hands; and, moreover, in a gentle manner, and the joint should be moved about, but not roughly, so as to excite pain. Things get restored sometimes in a greater space of time, and sometimes in a smaller.

10. A dislocation may be recognized by the following symptoms:-Since the parts of a man's body are proportionate to one another, as the arms and the legs, the sound should always be compared with the unsound, and the unsound with the sound, not paying regard to the joints of other individuals (for one person's joints are more prominent than another's), but looking to those of the patient, to ascertain whether the sound joint be unlike the unsound. This is a proper rule, and yet it may lead to much error; and on this account it is not sufficient to know this art in theory, but also by actual practice; for many persons from pain, or from any other cause, when their joints are not dislocated, cannot put the parts into the same positions as the sound body can be put into; one ought therefore to

know and be acquainted beforehand with such an attitude. But in a dislocated joint the head of the humerus appears lying much more in the armpit than it is in the sound joint; and also, above, at the top of the shoulder, the part appears hollow, and the acromion is prominent, owing to the bone of the joint having sunk into the part below; there is a source of error in this case also, as will be described afterward, for it deserves to be described; and also, the elbow of the dislocated arm is farther removed from the ribs than that of the other; but by using force it may be approximated, though with considerable pain; and also they cannot, with the elbow extended, raise the arm to the ear, as they can the sound arm, nor move it about as formerly in this direction and that. These, then, are the symptoms of dislocation at the shoulder. The methods of reduction and the treatment are as described.

11. It deserves to be known how a shoulder which is subject to frequent dislocations should be treated. For many persons owing to this accident have been obliged to abandon gymnastic exercises, though otherwise well qualified for them; and from the same misfortune have become inept in warlike practices, and have thus perished. And this subject deserves to be noticed, because I have never known any physician treat the case properly; some abandon the attempt altogether, and others hold opinions and practice the very what is proper. For physicians have burned the shoulders subject to dislocation, at the top of the shoulder, at the anterior part where the head of the humerus protrudes, and a little behind the top of the shoulder; these burnings, if the dislocation of the arm were upward, or forward, or backward, would have been properly performed; but now, when the dislocation is downward, they rather promote than prevent dislocations, for they shut out the head of the humerus from the free space above. The cautery should be applied thus: taking hold with the hands of the skin at the armpit, it is to be drawn into the line, in which the head of the humerus is dislocated; and then the skin thus drawn aside is to be burnt to the opposite side. The burnings should be performed with irons, which are not thick nor much rounded, but of an oblong form (for thus they pass the more readily through), and they are to be pushed forward with the hand; the cauteries should be red-hot, that they may pass through as quickly as possible; for such as are thick pass through slowly, and occasion eschars of a greater breadth than convenient, and there is danger that the cicatrices may break into one another; which, although nothing very bad, is most unseemly, or awkward. When you have burnt through, it will be sufficient, in most cases, to make eschars only in the lower part; but if there is no danger of the ulcers passing into one another, and there is a considerable piece of skin between them, a thin spatula is to be pushed through

these holes which have been burned, while, at the same time, the skin is stretched, for otherwise the instrument could not pass through; but when you have passed it through you must let go the skin, and then between the two eschars you should form another eschar with a slender iron, and burn through until you come in contact with the spatula. The following directions enable you to determine how much of the skin of the armpit should be grasped; all men have glands in the armpit greater or smaller, and also in many other parts of the body. But I will treat in another work of the whole constitution of the glands, and explain what they are, what they signify, and what are their offices. The glands, then, are not to be taken hold of, nor the parts internal to the glands; for this would be attended with great danger, as they are adjacent to the most important nerves. But the greater part of the substances external to the glands are to be grasped, for there is no danger from them. And this, also, it is proper to know, that if you raise the arm much, you will not be able to grasp any quantity of skin worth mentioning, for it is all taken up with the stretching; and also the nerves, which by all means you must avoid wounding, become exposed and stretched in this position; but if you only raise the arm a little, you can grasp a large quantity of skin, and the nerves which you ought to guard against are left within, and at a distance from the operation. Should not, then, the utmost pains be taken in the whole practice of the art to find out the proper attitude in every case? So much regarding the armpit, and these contractions will be sufficient, provided the eschars be properly placed. Without the armpit there are only two places where one might place the eschars to obviate this affection; the one before and between the head of the humerus and the tendon at the armpit; and then the skin may be fairly burned through, but not to any great depth, for there is a large vein adjacent, and also nerves, neither of which must be touched with the heat. But externally, one may form another eschar considerably above the tendon at the armpit, but a little below the head of the humerus; and the skin must be burned fairly through, but it must not be made very deep, for fire is inimical to the nerves. Through the whole treatment the sores are to be so treated, as to avoid all strong extension of the arm, and this is to be done moderately, and only as far as the dressing requires; for thus they will be less cooled (for it is of importance to cover up all sorts of burns if one would treat them mildly), and then the lips of them will be less turned aside; there will be less hemorrhage and fear of convulsions. But when the sores have become clean, and are going on to cicatrization, then by all means the arm is to be bound to the side night and day; and even when the ulcers are completely healed, the arm must still be bound to the side for a long time; for thus more especially will cicatrization take place, and the wide space into which the humerus used to escape will become

contracted.

12. When attempts to reduce a dislocated shoulder have failed, if the patient be still growing, the bone of the affected arm will not increase like the sound one, for although it does increase in so far it becomes shorter than the other; and those persons called *weasel-armed*, become so from two accidents, either from having met with this dislocation *in utero*, or from another accident, which will be described afterward. But those who while they were children have had deep-seated suppurations about the head of the bone, all become weasel-armed; and this, it should be well known, will be the issue, whether the abscess be opened by an incision or cautery, or whether it break spontaneously. Those who are thus affected from birth are quite able to use the arm yet neither can they raise the arm to the ear, by extending the elbow, but they do this much less efficiently than with the sound arm. But in those who have had the shoulder dislocated after they were grown up, and when it has not been reduced, the top of the shoulder becomes much less fleshy, and the habit of body at that part is attenuated; but when they cease to have pain, whatever they attempt to perform by raising the elbow from the sides obliquely, they can no longer accomplish as formerly; but whatever acts are performed by carrying the arm around by the sides, either backward or forward, all those they can perform; for they can work with an auger or a saw, or with a hatchet, and can dig, by not raising the elbow too much, and do all other kinds of work which are done in similar attitudes.

13. In those cases where the acromion has been torn off, the bone which is thus separated appears prominent. The bone is the bond of connection between the clavicle and scapula, for in this respect the constitution of man is different from that of other animals; physicians are particularly liable to be deceived in this accident (for as the separated bone protrudes, the top of the shoulder appears low and hollow), so that they make preparations as if for dislocation of the shoulder; for I have known many physicians, otherwise not inexpert at the art, who have done much mischief by attempting to reduce such shoulders, thus supposing it a case of dislocation; and they did not desist until they gave over mistake of supposing that they had reduced the shoulder. The treatment, in these cases, is similar to that which is applicable in others of a like kind, namely, cerate, compresses, and suitable bandaging with linen cloths. The projecting part must be pushed down, and the greater number of compresses are to be placed on it, and most compression is to be applied at that part, and the arm being fastened to the side is to be kept elevated; for thus the parts which had been torn asunder are brought into closest proximity with one another. All this should be well known,

and if you choose you may prognosticate safely that no impediment, small or great, will result from such an injury at the shoulder, only there will be a deformity in the place, for the bone cannot be properly restored to its natural situation, but there must necessarily be more or less tumefaction in the upper part. For neither can any other bone be made exactly as it was, which having become incorporated with another bone, and having grown to it as an apophysis, has been torn from its natural situation. If properly bandaged, the acromion becomes free of pain in a few days.

14. When a fractured clavicle is fairly broken across it is more easily treated, but when broken obliquely it is more difficult to manage. Matters are different in these cases from what one would have supposed; for a bone fairly broken across can be more easily restored to its natural state, and with proper care the upper part may be brought down by means of suitable position and proper bandaging, and even if not properly set, the projecting part of the bone is not very sharp. But in oblique fractures the case is similar to that of bones which have been torn away, as formerly described; for they do not admit of being restored to their place, and the prominence of the bone is very sharp. For the most part, then, it should be known, no harm results to the shoulder or to the rest of the body from fracture of the clavicle, unless it sphacelate, and this rarely happens. A deformity, however, may arise from fracture of the clavicle, and in these cases it is very great at first, but by and by it becomes less. A fractured clavicle, like all other spongy bones, gets speedily united; for all such bones form callus in a short time. When, then, a fracture has recently taken place, the patients attach much importance to it, as supposing the mischief greater than it really is, and the physicians bestow great pains in order that it may be properly bandaged; but in a little time the patients, having no pain, nor finding any impediment to their walking or eating, become negligent; and the physicians finding they cannot make the parts look well, take themselves off, and are not sorry at the neglect of the patients, and in the meantime the callus is quickly formed. The method of dressing which is most appropriate, is similar to that used in ordinary cases, consisting of cerate, compresses, and bandages; and it should be most especially known in this operation, that most compresses should be placed on the projecting bone, and that the greatest pressure should be made there. There are certain physicians who make a show of superior skill by binding a heavy piece of lead on the part in order to depress the projecting bone; but this mode of treatment does not apply to the clavicle, for it is impossible to depress the projecting part to any extent worth mentioning. There are others who, knowing the fact that the bandages are apt to slip off, and that they do not keep the

projecting parts in their place, apply compresses and bandages like the others, and then having girt the patient with a girdle, where it is usually applied with most effect, they make a heap of the compresses upon the projecting bone when they apply them, and having fastened the head of the bandage to the girdle in front, they apply it so as to bring the turns of it into the line of the clavicle, carrying them to the back, and then bringing them around the girdle they carry them to the fore part and again backward. There are others who do not apply the bandage round the girdle, but carry the rounds of it by the perineum and anus, and along the spine, so as to compress the fracture. To an inexperienced person these methods will appear not far from natural, but when tried, they will be found of no service; for they do not remain firm any length of time, even if the patient keep his bed, although in this position they answer best; and yet even when lying in bed, should he bend his leg, or should his trunk be bent, all the will be displaced; and, moreover, the bandaging is inconvenient, in as much as the anus is comprehended by it, and many turns of the bandage are crowded there in a narrow space. And in the method with the girdle, the girdle cannot be so firmly girt around, but that the turns of the bandage force the girdle to ascend, and hence of necessity all the other bandages must be slackened. He would seem to me to come nearest his purpose, although after all he effects but little, who would take a few turns round the girdle, but would use the bandage principally to secure the former bandaging; for in this manner the bandages would be most secure, and would mutually assist one another. Every thing now almost has been said which applies to fracture of the clavicle. But this also should be known, that in fractures of the clavicle, it is the part attached to the breast which is uppermost, and that the piece attached to the acromion is the lowermost. The cause of this is, that for the most part the breast can neither be depressed nor raised, there being but a slight movement of the joint at the breast, for the sternum is connected together on both sides with the spine. The clavicle admits of most motion at the joint of the shoulder, and this arises from its connection with the acromion. And, moreover, when broken, the part which is connected with the sternum flies upward, and is not easily forced downward; for it is naturally light, and there is more room for it above than below. But the shoulder, the arm, and the parts connected with them, are easily moved from the sides and breast, and, on that account, they admit of being considerably elevated and depressed. When, therefore, the clavicle is broken, the fragment attached to the shoulder inclines downward, for it inclines much more readily with the shoulder and arm downward than upward. Matters being as I have stated, they act imprudently who think to depress the projecting end of the bone. But it is clear that the under part ought to be brought to the upper, for the former is the

movable part, and that which has been displaced from its natural position. It is obvious, therefore, that there is no other way of applying force to it (for the bandages no more force it to than they force it from); but if one will push the arm when at the sides as much as possible upward, so that the shoulder may appear as sharp as possible, it is clear that in this way it will be adjusted to the fragment of the bone connected with the breast from which it was torn. If one then will apply a bandage, *secundum artem*, for the purpose of promoting a speedy cure, and will reckon everything else of no value, except the position as described, he will form a correct opinion of the case, and will effect a cure in the speediest and most appropriate manner. It is of great importance, however, that the patient should lie in a recumbent posture. Fourteen days will be sufficient if he keep quiet, and twenty at most.

15. But if the clavicle be fractured in the opposite manner (which does not readily happen), so that the fragment of bone connected with the breast is depressed, while the piece connected with the acromion is raised up and rides over other, this case does not require much management, for if the shoulder and arm be let go, the fragments of the bone will be adjusted to one another, and an ordinary bandage will suffice, and the callus will be formed in the course of a few days.

16. If the fracture be not thus, but if it incline either forward or backward, it may be restored to its natural position, by raising the shoulder with the arm as formerly described, and brought back to its natural place, when the cure will be speedily accomplished. Most of the varieties of displacement may be rectified by raising the arm upward. When the upper bone is displaced laterally or downward, it would favor the adaptation of the parts if the patient would lie on his back, and if some elevated substance were placed between the shoulder-blades, so that the breast may be depressed as much as possible upon the two sides; and if, while another person raised the arm extended along the sides, the physician, applying the palm of the one hand to the head of the bone, would push it away, and with the other would adjust the broken bones, he would thus reduce the parts most readily to their natural position. But, as formerly stated, the upper bone ( *sternal fragment?* ) is rarely depressed downward. In most cases, after the bandages have been applied, that position is beneficial in which the elbow is fixed to the same side, and the shoulder is kept elevated; but in certain cases, the shoulder is to be raised, as has been directed, and the elbow is to be brought forward to the breast, and the hand laid on the acromion of the sound side. If the patient has the resolution to lie in bed, something should be placed so as to support the shoulder, and keep it as much elevated as possible. But if he

walk about, the arm should be slung in a shawl, which embraces the point of the elbow, and is passed round the neck.

17. When the elbow-joint is displaced or dislocated to the side or outward, while its sharp point ( *olecranon?* ) remains in the cavity of the humerus, extension is to be made in a straight line, and the projecting part is to be pushed backward and to the side.

18. In complete dislocations toward either side, extension is to be made as in bandaging fracture of the arm; for thus the rounded part of the elbow will not form an obstacle to it. Dislocation, for the most part, takes place toward the sides ( *inwardly?* ). Reduction is to be effected by separating (the bones) as much as possible, so that the end (of the humerus) may not come in contact with the olecranon, and it is to be carried up, and turned round, and not forced in a straight line, and, at the same time, the opposite sides are to be pushed together, and propelled into their proper place. It will further assist if rotation of the fore-arm be made at the elbow, sometimes turning it into a supine position, and sometimes into a prone. The position for the treatment consists in keeping the hand a little higher than the elbow, and the arm at the sides; then it may either be suspended or laid at rest, for either position will answer; and nature and the usage of common means will accomplish the cure, if the callus does not form improperly: it is formed quickly. The treatment is to be conducted with bandages according to the rule for bandaging articulations, and the point of the elbow is to be included in the bandage.

19. Dislocations at the elbow give rise to the most serious consequences, such as fevers, pain, nausea, vomitings of pure bile, and more especially when the humerus is displaced backward from pressure on the nerve, which occasions numbness; next to it is the dislocation forward; the treatment is the same; reduction in dislocation backward is by extension and adaptation; the symptom of this variety-loss of the power of extension; of dislocation forward-loss of the power of flexion, and in this case reduction is to be accomplished by placing a hard ball (in the bend of the elbow), and bending the fore-arm about it, along with sudden extension.

20. Diastasis of the bones may be recognized by examining the part where the vein that runs along the arm divides.

The Genuine Works of Hippocrates. Hippocrates. Charles Darwin Adams. New



York. Dover. 1868.

21. In those cases callus is quickly formed. In congenital dislocations the bones below the seat of the injury are shorter than natural, and, mostly, those nearest to the place; namely, the bones of the fore-arm, next those of the hand; and, third, those of the fingers. The arm and shoulder are stronger, owing to the nourishment which they receive, and the other arm, from the additional work which it has to perform, is still more strong. Wasting of the flesh takes place on the inside if the dislocation be on the outside; or otherwise, on the side opposite the dislocation.

22. When the elbow is dislocated either inward or outward, extension is to be made with the fore-arm at a right angle to the arm; the arm, suspended by means of a shawl passed through the armpit, and a weight attached to the extremity of the elbow; or force may be applied with the hands; when the articular extremity has been cleared, the displaced parts are to be rectified with the palms of the hand, as in dislocations of the hands. It is to be bandaged, suspended in a sling, and placed while in this attitude.

23. Dislocations backward are to be rectified by the palms of the hands, along with sudden extension; the two acts are to be performed together, as in other cases of the kind. But in dislocation forward the arm is to be bent around a ball of cloth of proper size, and at the same time replaced.

24. But if the displacement be on the other side, both these operations are to be performed in effecting the adjustment. For conducting the treatment, the position and bandaging are the same as in the other cases. But all these cases may be reduced by ordinary distention.

25. Of the methods of reduction, some operate by raising up the part, some by extension, and some by rotation: the last consists in rapidly turning the fore-arm to this side and that.

26. The joint of the hand is dislocated either inward or outward, most frequently inward. The symptoms are easily recognized: if inward, the patient cannot at all bend his fingers; and if outward, he cannot extend them. With regard to the reduction, -by placing the fingers above a table, extension and counter-extension are to be made by other persons, while with the palm or heel of the hand on the projecting bone one pushes forward, and another from behind on the other bone;

some soft substance is to be applied to it, and the arm is to be turned to the prone position if the dislocation was forward, but to the supine, if backward. The treatment is to be conducted with bandages.

27. The whole hand is dislocated either inward or outward, or to this side or that, but more especially inward; and sometimes the epiphysis is displaced, and sometimes the other of these bones is separated. In these cases strong extension is to be applied, and pressure is to be made on the projecting bone, and counter-pressure on the opposite side, both at the same time, behind and at the side, with the hands upon a table, or with the heel. These accidents give rise to serious consequences and deformities; but in the course of time the part gets strong, and admits of being used. The cure is with bandages, which ought to embrace both the hand and fore-arm; and splints are to be applied as far as the fingers; and when they are used they should be more frequently unloosed than infractions, and more copious affusions of water should be used.

28. In congenital dislocations (at the wrist) the hand becomes shortened, and the atrophy of the flesh occurs, for the most part, on the side opposite to the dislocation. In an adult the bones remain of their natural size.

29. Dislocation at the joint of a finger is easily recognized. Reduction is to be effected by making extension in a straight line, and applying pressure on the projecting bone, and counter-pressure on the opposite side of the other. The treatment is with bandages. When not reduced, callus is formed outside of the joint. When the dislocation takes place at birth, during adolescence the bones below the dislocation are shortened, and the flesh is wasted rather on the opposite than on the same side with the dislocation. When it occurs in an adult the bones remain of their proper size.

30. The jaw-bone, in few cases, is completely dislocated, for the zygomatic process formed from the upper jaw-bone (*malar?*) and the bone behind the ear (*temporal?*) shuts up the heads of the under jaw, being above the one (*condyloid process?*), and below the other (*coronoid process?*). Of these extremities of the lower jaw, the one, from its length, is not much exposed to accidents, while the other, the coronoid, is more prominent than the zygoma, and from both these heads nervous tendons arise, with which the muscles called temporal and masseter are connected; they have got these names from their actions and connections; for in eating, speaking, and the other functional uses of the mouth, the upper jaw is at rest, as being connected with the head by synarthrosis, and

not by diarthrosis ( *enarthrosis?* ): but the lower jaw has motion, for it is connected with the upper jaw and the head by enarthrosis. Wherefore, in convulsions and tetanus, the first symptom manifested is rigidity of the lower jaw; and the reason why wounds in the temporal region are fatal and induce coma, will be stated in another place. These are the reasons why complete dislocation does not readily take place, and this is another reason, because there is seldom a necessity for swallowing so large pieces of food as would make a man gape more than he easily can, and dislocation could not take place in any other position than in great gaping, by which the jaw is displaced to either side. This circumstance, however, contributes to dislocation there; of nerves ( *ligaments?* ) and muscles around joints, or connected with joints, such as are frequently moved in using the member are the most yielding to extension, in the same manner as well-dressed hides yield the most. With regard, then, to the matter on hand, the jaw-bone is rarely dislocated, but is frequently slackened ( *partially displaced?* ) in gaping, in the same manner as many other derangements of muscles and tendons arise. Dislocation is particularly recognized by these symptoms: the lower jaw protrudes forward, there is displacement to the opposite side, the coronoid process appears more prominent than natural on the upper jaw, and the patient cannot shut his lower jaw but with difficulty. The mode of reduction which will apply in such cases is obvious: one person must secure the patient's head, and another, taking hold of the lower jaw with his fingers within and without at the chin, while the patient gapes as much as he can, first moves the lower jaw about for a time, pushing it to this side and that with the hand, and directing the patient himself to relax the jaw, to move it about, and yield as much as possible; then all of a sudden the operator must open the mouth, while he attends at the same time to three positions: for the lower jaw is to be moved from the place to which it is dislocated to its natural position; it is to be pushed backward, and along with these the jaws are to be brought together and kept shut. This is the method of reduction, and it cannot be performed in any other way. A short treatment suffices, a waxed compress is to be laid on, and bound with a loose bandage. It is safer to operate with the patient laid on his back, and his head supported on a leather cushion well filled, so that it may yield as little as possible, but some person must hold the patient's head.

31. When the jaw is dislocated on both sides, the treatment is the same. The patients are less able to shut the mouth than in the former variety; and the jaw protrudes farther in this case, but is not distorted; the absence of distortion may be recognized by comparing the corresponding rows of the teeth in the upper and lower jaws. In such cases reduction should be performed as quickly as possible;

the method of reduction has been described above. If not reduced, the patient's life will be in danger from continual fevers, coma attended with stupor (for these muscles, when disordered and stretched preternaturally, induce coma); and there is usually diarrhea attended with billous, unmixed, and scanty dejections; and the vomitings, if any, consist of pure bile, and the patients commonly die on the tenth day.

32. In fracture of the lower jaw, when the bone is not fairly broken across, and is still partially retained, but displaced, it should be adjusted by introducing the fingers at the side of the tongue, and making suitable counter-pressure on the outside; and if the teeth at the wound be distorted and loosened, when the bone is adjusted, they should be connected together, not only two, but more of them, with a gold thread, if possible, but otherwise, with a linen thread, until the bone be consolidated, and then the part is to be dressed with cerate, a few compresses, and a few bandages, which should not be very tight, but rather loose. For it should be well known that in fracture of the jaw, dressing with bandages, if properly performed, is of little advantage, but occasions great mischief if improperly done. Frequent examinations should be made about the tongue, and prolonged pressure should be applied with the fingers, in order to rectify the displaced bone. It would be best if one could do so constantly, but that is impossible.

33. But if the bone be fairly broken across (this, however, rarely happens), it is to be set in the manner now described. When adjusted, the teeth are to be fastened together as formerly described, for this will contribute much toward keeping the parts at rest, especially if properly fastened, and the ends of the thread secured with knots. But it is not easy to describe exactly in writing the whole manipulation of the case; but the reader must figure the thing to himself from the description given. Then one must take a piece of Carthaginian leather; if the patient be a younger person, it will be sufficient to use the outer skin, but if an adult the whole thickness of the hide will be required; it is to be cut to the breadth of about three inches, or as much as will be required, and having smeared the jaw with a little gum (for thus it sticks more pleasantly), the end of the skin is to be fastened with the glue near the fractured part of the jaw, at the distance of an inch or a little more, from the wound. This piece is to be applied below the jaw; but the thong should have a cut in it, in the direction of the chin, so that it may go over the sharp point of the chin. Another piece of thong like this, or somewhat broader, is to be glued to the upper part of the jaw, at about the same distance from the wound as the other thong; this thong should be so cut as

to encircle the ear. The thongs should be sharp-pointed at the part where they unite, and in gluing them, the flesh of the thong should be turned to the patient's skin, for in this way it will be more tenacious; then we must stretch this thong, but still more so the one at the chin, in order to prevent the fragments of the jaw from riding over each other, and the thongs are to be fastened at the vertex, and then a bandage is to be bound round the forehead, and a proper apparatus is to be put over all, to prevent the bandages from being displaced. The patient should lie upon the sound side of the jaw, not resting upon the jaw, but upon the head. He is to be kept on a spare diet for ten days, and then nourished without delay. If there be no inflammation during the first days, the jaw is consolidated in twenty days; for callus quickly forms in this, as in all the other porous bones, provided there be no sphacelus ( *exfoliation?* ). But much remains to be said on the sphacelus of bones in another place. This method of distention with glued substances is mild, of easy application, and is useful for many dislocations in many parts of the body. Those physicians who have not judgment combined with their dexterity, expose themselves in fractures of the jaws, as in other cases, for they apply a variety of bandages to a fractured jaw-bone, sometimes properly, and sometimes improperly. For all such bandaging of a fractured jawbone has a tendency rather to derange the bones connected with the fracture, than to bring them into their natural position.

34. But if the lower jaw be disjoined at its symphysis in the chin (there is but one symphysis in the lower jaw, but there are several in the upper; but I am unwilling to digress from the subject, as these matters will have to be touched upon in other kinds of disease)-if, then, the symphysis be separated at the chin, it is the work which anybody can perform, to rectify it; for the part which protrudes is to be pushed inward by pressure with the fingers, and the part that inclines inward is to be forced outward by pushing with the fingers from within. It is after having applied extension to separate the fragments that this is to be done, for they will thus be more easily restored to their natural position, than if one should bring them together by using force. This is proper to be known as applying to all such cases. When you have set the parts, you must fasten the teeth on both sides to one another, as formerly directed. The treatment is to be accomplished with cerate, a few compresses, and bandages. This part, in particular, requires a short but complex (?) bandaging, for it is nearly cylindrical, though not exactly so; but the turn of the bandage is to be made, if the right jaw was dislocated, to the right hand (that is said to be to the right hand when the right hand conducts the bandaging); but if the other jaw be the seat of the dislocation, the bandaging is to be made in the other direction. And if matters be properly adjusted, and the

patient keep quiet, there will be a speedy recovery, and the teeth will be uninjured; but if not, the recovery will be more protracted, the teeth will be distorted, will give trouble, and become useless.

35. Of fractures of the nose there are more than one variety, but those who, without judgment, delight in fine bandagings, do much mischief, most especially in injuries about the nose. For this is the most complex of all the forms of bandaging, having most of the turns of the bandage called "ascia," and rhomboidal intervals and uncovered spaces of the skin. As has been said, those who practice manipulation without judgment are fond of meeting with a case of fractured nose, that they may apply the bandage. For a day or two, then, the physician glories in his performance, and the patient who has been bandaged is well pleased, but speedily the patient complains of the incumbrance of the bandage, and the physician is satisfied, because he has had an opportunity of showing his skill in applying a complex bandage to the nose. Such a bandaging does everything the very reverse of what is proper; for, in the first place, those who have their nose flattened by the fracture, will clearly have the part rendered still more flat, if pressure above be applied to it; and further, those cases in which the nose is distorted to either side, whether at the cartilage or higher up, will evidently derive no benefit from bandaging above it, but will rather be injured; for it will not admit of having compresses properly arranged on either side of the nose, and indeed, persons applying this bandage do not seek to do this.

36. This bandaging would appear to me to answer best when the skin surrounding the bone is contused on its ridge near the middle, or if the bone itself have sustained some injury, but not a great one, in such cases, redundant callus forms in the nose, and the part becomes a little too prominent; and yet, even in these cases, the bandaging need not require much trouble, if, indeed, any bandage be applied at all; for it is enough if one lay a waxed compress on the contusion, and then apply the double-headed bandage, thus taking one turn with it. The best application to such accidents is a small cataplasm of wheaten flour, washed, and mixed up into a viscid mass. If the flour be made from good wheat, and if it be glutinous, it should be used alone for all such cases, but if it be not very glutinous, a little of the manna of frankincense, well pulverized, is to be moistened with water, and the flour is to be mixed up with it, or a very little gum may be mixed in like manner.

37. In those cases in which the fractured portions are depressed and flattened, if it

is depressed in front at the cartilage, something may be introduced into the nostrils to rectify the parts. If not, all such deformities may be restored by introducing the fingers into the nostrils, if this can be managed, but if not, a thick spatula is to be introduced with the fingers, not to the fore part of the nose, but to the depressed portion, and the physician is to take hold of the nose externally on both sides, and at the same time raise it up. And if the fracture be much in the fore part one may introduce into the nostrils as already stated, either caddis scraped from a linen towel, or something such wrapped up in a piece of cloth, or rather stitched in Carthaginian leather, and moulded into a shape suitable to the place into which it is to be introduced. But if the fracture be at a greater distance, it is not possible to introduce anything within, for if it was irksome to bear anything of the kind in the fore part, how is it not to be so when introduced farther in? At first, then, by rectifying the parts from within, and sparing no pains upon them from without, they are to be brought to their natural position, and set. A fractured nose may be readily restored to shape, especially on the day of the accident, or even a little later, but the physicians act irresolutely, and touch it more delicately at first than they should; for the fingers should be applied on both sides along the natural line of the nose, and it is to be pushed downward, and thus, with pressure from within, the displacement is to be rectified. But for these purposes no physician is equal to the index-fingers of the patient himself, if he will pay attention and has resolution, for they are the most natural means. Either of the fingers is to be placed firmly along the whole nose, and thus it is to be gently held, and steadily, if possible until it become firm, but if not, he himself is to hold it for as long a time as possible, or if he cannot, a child or woman should do it, for the hands ought to be soft. Thus may a fracture of the nose, attended with depression, and not with displacement to the side, but in a straight line, be most properly treated. I have never seen a case of fractured nose which could not be rectified when attempted, before callus is formed, provided the treatment be properly applied. But although men would give a great price to escape being deformed, yet at the same time they do not know how to take care, nor have resolution, if they do not experience pain, nor fear death, although the formation of callus in the nose speedily place, for the most part is consolidated in ten days, provided sphacelus do not take place.

38. When the fractured bone is displaced laterally, the treatment is the same, but it is obvious that the reduction is to be made, not by applying equal force on both sides, but by pushing the displaced portion into its natural position, and pressing on it from without, and introducing something into the nostrils, and boldly rectifying the fragments which incline inward, until the whole be properly

adjusted, well knowing that if you do not restore the parts at once, it is impossible but that the nose must be distorted. But when you restore the parts to their natural position, either the patient himself, or some other person, is to apply one finger or more to the part which protrudes, and keep it in position until the fracture be consolidated; but the little finger is, from time to time, to be pushed into the nostril, to rectify the parts which incline inward. When any inflammation supervenes, dough must be used, but attention must still be equally paid to the application of the fingers, although the dough be on the part. But if the fracture be in the cartilage, with lateral displacement, the end of the nose must necessarily be distorted. In such cases some of the aforementioned means of reduction, or whatever suits, is to be introduced into the nostril; but there are many convenient things to be found which have no smell, and are appropriate in other respects; thus, on one occasion, I introduced a slice of sheep's lung, as it happened to be at hand; for sponges, if introduced, imbibe humidities. Then the outer skin of Carthaginian leather is to be taken, and a piece of the size of the thumb, or what will answer, is to be cut off and glued to the outside of the nostril which is turned aside, and then this piece of thong is to be stretched to the proper degree, or rather a little more than what will be sufficient to make the nose straight and regular. Then (for the thong must be long) it is to be brought below the ear and round the head, and the end of the thong may either be glued to the forehead, or a still longer one may be carried all round the head, and secured. This is a natural mode of setting the nose, is of easy application, and is calculated to enable the counter-extension on the nose to be made greater or less, as you may incline. In a case where the fractured nose is turned to the side, the treatment is to be conducted otherwise, as already described; and in most of them the thong ought to be glued to the end of the nose, in order to make extension in the opposite direction.

39. When the fracture is complicated with a wound, one need not be troubled on that account, but pitch-cerate or any of the applications for fresh wounds is to be applied to the sores; for, in general, they admit of easy cure, even when there is reason to apprehend that pieces of bone will come out. The parts, at first, are to be adjusted fearlessly, taking care that nothing is omitted, and, subsequently, they are also to be adjusted with the fingers; more softly, indeed, but still it must be done; and of all parts of the body the nose is modeled with the greatest ease. And there is nothing to prevent us from having recourse to the practice of gluing on the thongs, and drawing the nose to the opposite side, even if there be a wound or the parts be inflamed, for these thongs give no pain.



40. In fractures of the ear all sorts of bandages do harm. For one would not think of applying it quite loose, and if applied more tightly, it only does the more harm, for even the sound ear, when confined with a bandage, becomes painful, throbs, and gets into a febrile state. With regard to cataplasms, the heaviest, on the whole, are the worst; but almost all kinds are bad, form abscesses, occasion an increase of humors, and afterward troublesome suppurations; and a fractured ear stands in less need of such applications than any other part; the most ready, if required, is the paste of meal, but neither should it have weight. It should touch as little as possible; for it is a good sometimes to apply nothing at all, both to the ear and to many other cases. Attention must be paid to the patient's position during sleep. And the body must be reduced, more especially if there be danger lest the ear suppurate; it will also be better to open the bowels, and if the patient can be readily made to vomit, this may be accomplished by means of the *syрмаism*. If the part come to suppuration, it should not be hastily opened; for often when matter appears to be formed it is absorbed again, even when no cataplasm is applied. But if forced to open it, the part will get soonest well if transfixed with a cautery, and yet it should be well understood that the ear gets maimed, and is less than the other if burned through. If not burned through, an incision, and not a very small one, should be made on the upper side; for the pus is found to be surrounded with a thicker covering than one would have supposed; and it may be said, in general, that all parts of a mucous nature and which form mucus, as being all viscid, when touched, slip from below the fingers to either side; and on that account the physician, in such cases, finds that he has to pass his instrument through a thicker substance than he supposed; and in certain ganglionic cases, when the skin is flabby and mucous, many physicians open them, expecting to find a collection in them; here the physician forms a wrong judgment, but by such a procedure no great harm results to the patient from having had the part opened. But with regard to watery parts, and such as are filled with mucus, and which are situated in regions where every one of the parts, if opened, will occasion death or some other injury, these will be treated of in another work. When, therefore, incision is made in the ear, all sorts of cataplasms and pledges should be avoided, and it is to be treated either with applications for recent wounds, or anything else which is neither heavy nor will occasion pain, for if the cartilage be laid bare and abscesses form, the case will be troublesome; this happens from such modes of treatment. In all aggravated cases, the most effectual remedy is the transfixing of the part with a hot iron.

41. The vertebrae of the spine when contracted into a hump behind from disease, for the most part cannot be remedied, more especially when the gibbosity is

above the attachment of the diaphragm to the spine. Certain of those below the diaphragm are carried off by varices in the legs, more especially by such as occur in the vein at the ham; and in those cases where the gibbosities are removed, the varices take place also in the groin; and some have been carried off by a dysentery when it becomes chronic. And when the gibbosity occurs in youth before the body has attained its full growth, in these cases the body does not usually grow along the spine, but the legs and the arms are fully developed, whilst the parts (about the back) are arrested in their development. And in those cases where the gibbosity is above the diaphragm, the ribs do not usually expand properly in width, but forward, and the chest becomes sharp-pointed and not broad, and they become affected with difficulty of breathing and hoarseness; for the cavities which inspire and expire the breath do not attain their proper capacity. And they are under the necessity of keeping the neck bent forward at the great vertebra, in order that their head may not hang downward; this, therefore, occasions great contraction of the pharynx by its inclination inward; for, even in those who are erect in stature, dyspnoea is induced by this bone inclining inward, until it be restored to its place. From this frame of body, such persons appear to have more prominent necks than persons in good health, and they generally have hard and unconcocted tubercles in the lungs, for the gibbosity and the distension are produced mostly by such tubercles, with which the neighboring nerves communicate. When the gibbosity is below the diaphragm, in some of these cases nephritic diseases and affections of the bladder supervene, but abscesses of a chronic nature, and difficult to cure, occur in the loins and groins, and neither of these carries off the gibbosity; and in these cases the hips are more emaciated than when the gibbosity is seated higher up; but the whole spine is more elongated in them than in those who have the gibbosity seated higher up, the hair of the pubes and chin is of slower growth and less developed, and they are less capable of generation than those who have the gibbosity higher up. When the gibbosity seizes persons who have already attained their full growth, it usually occasions a crisis of the then existing disease, but in the course of time some of them attack, as in the case of younger persons, to a greater or less degree; but, notwithstanding, for the most part, all these diseases are less malignant. And yet many have borne the affection well, and have enjoyed good health until old age, more especially those persons whose body is inclined to be plump and fat; and a few of them have lived to beyond sixty years of age, but the most of them are more short-lived. In some cases the curvature of the spine is lateral, that is to say, either to the one side or the other; the most of such cases are connected with tubercles ( *abscesses?* ) within the spine; and in some, the positions in which they have been accustomed to lie

cooperate with the disease. But these will be treated of among the chronic affections of the lungs; for these the most suitable prognostics of what will happen in these cases are given.

42. When the spine protrudes backward, in consequence of a fall, it seldom happens that one succeeds in straightening it. Wherefore succussion on a ladder has never straightened anybody, as far as I know, but it is principally practiced by those physicians who seek to astonish the mob-for to such persons these things appear wonderful, for example, if they see a man suspended or thrown down, or the like; and they always extol such practices, and never give themselves any concern whatever may result from the experiment, whether bad or good. But the physicians who follow such practices, as far as I have known them, are all stupid. The device, however, is an old one, and I give great praise to him who first invented this, and any other mechanical contrivance which is according to nature. For neither would I despair, but that if succussion were properly gone about, the spine, in certain cases, might be thereby rectified. But, indeed, for my own part, I have been ashamed to treat all such cases in this way, because such modes of procedure are generally practiced by charlatans.

43. Those cases in which the gibbosity is near the neck, are less likely to be benefited by these succussions with the head downward, for the weight of the head, and tops of the shoulders, when allowed to hang down, is but small; and such cases are more likely to be made straight by succussion applied with the feet hanging down, since the inclination downward is greater in this way. When the hump is lower down, it is more likely in this case that succussion with the head downward should do good. If one, then, should think of trying succussion, it may be applied in the following manner:-The ladder is to be padded with leather lined cushions, laid across, and well secured to one another, to a somewhat greater extent, both in length and breadth, than the space which the man's body will occupy; he is then to be laid on the ladder upon his back, and the feet, at the ankles, are to be fastened, at no great distance from one another, to the ladder, with some firm but soft band; and he is further to be secured, in like manner, both above and below the knee, and also at the nates; and at the groins and chest loose shawls are to be put round in such a fashion as not to interfere with the effect of the succussion; and his arms are to be fastened along his sides to his own body, and not to the ladder. When you have arranged these matters thus, you must hoist up the ladder, either to a high tower or to the gable-end of a house; but the place where you make the succussion should be firm, and those who perform the extension should be well instructed, so that they may let

go their hold equally to the same extent, and suddenly, and that the ladder may neither tumble to the ground on either side, nor they themselves fall forward. But, if the ladder be let go from a tower, or the mast of a ship, fastened into the ground with its cordage, it will be better, so that the ropes run upon a pulley or axle-tree. But it is disagreeable even to enlarge upon these matters; and yet, by the contrivances now described, the proper succussion may be made.

44. But if the hump be situated very high up, and if succussion be by all means to be used, it will be better to do it with the feet downward, as has been said, for the force downward will be the greater in this case. The patient is to be well fastened to the ladder by cords at the breast, at the neck by means of a very loose shawl so as merely to keep the part properly on the ladder, and the head is to be fastened to the ladder at the forehead, the arms are to be stretched along and attached to the patient's body, and not to the ladder, and the rest of the body is not to be bound, except so as to keep it in place by means of a loose shawl wrapped round it and the ladder; attention, moreover, should be paid that these ligatures do not interfere with the force of the succussion, and the legs are not to be fastened to the ladder, but should be placed near one another, so as to be in line with the spine. These matters should be thus arranged, if recourse is to be had at all to succussion on a ladder; for it is disgraceful in every art, and more especially in medicine, after much trouble, much display, and much talk, to do no good after all.

45. In the first place, the structure of the spine should be known, for this knowledge is requisite in many diseases. Wherefore, on the side turned to the belly ( *the anterior?* ) the vertebrae are in a regular line, and are united together by a pulpy and nervous band of connection, originating from the cartilages, and extending to the spinal marrow. There are certain other nervous cords which decussate, are attached ( *to the vertebrae?* ), and are extended from both sides of them. But we will describe in another work the connections of the veins and arteries, their numbers, their qualities, their origin, their functional offices in particular parts, in what sort of sheaths the spinal marrow is inclosed, where they arise, where they terminate, how they communicate, and what their uses. On the opposite side ( *behind?* ) the vertebrae are connected together by a ginglymoid articulation. Common cords ( *nerves?* ) are extended to all parts, both those within and without. There is an osseous process from the posterior part of all and each of the vertebra, whether greater or smaller; and upon these processes there are cartilaginous epiphyses, and from them arise nervous productions ( *ligaments?* ), akin to the external nerves ( *tonoi* ). The ribs are united to them,

having their heads inclined rather to the inside than the out, and every one of them is articulated with the vertebrae; and the ribs in man are very curved, and, as it were, arched. The space between the ribs and the processes of the vertebrae is filled on both sides by muscles, which arise from the neck and extend to the loins ( ? ). The spine, longitudinally, is a straight line slightly curved; from the os sacrum to the great vertebra which is connected with the articulation of the femur, the spine inclines backward, for the bladder, the organs of generation, and the loose portion of the rectum, are situated there. From this, to the attachment of the diaphragm, the spine inclines inward, and this portion alone, from the internal parts, gives origin to muscles, which are called *psoae* . From this to the great vertebra ( *seventh cervical?* ) which is above the tops of the shoulders, it is convex behind lengthways; but it is more in appearance than it really is, for the spinous processes are highest in the middle, and less so above and below. The region of the neck is convex before.

46. In cases of displacement backward along the vertebrae, it does not often happen, in fact, it is very rare, that one or more vertebrae are torn from one another and displaced. For such injuries do not readily occur, as the spine could not easily be displaced backward but by a severe injury on the fore part through the belly (which would prove fatal), or if a person falling from a height should pitch on the nates, or shoulders (and even in this case he would die, but not immediately); and it also would not readily happen that such a displacement could take place forward, unless some very heavy weight should fall upon it behind; for each of the posterior spinal processes is so constructed, that it would sooner be broken than undergo any great inclination forward from a force which would have to overcome the ligaments and the articulations mutually connecting them. And the spinal marrow would suffer, if from the displacement of a vertebra it were to be bent even to a small extent; for the displaced vertebra would compress the spinal marrow, if it did not break it; and if compressed and strangled, it would induce insensibility of many great and important parts, so that the physician need not give himself any concern about rectifying the displacement of the vertebra, accompanied, as it is, by many other ill consequences of a serious nature. It is evident, then, that such a case could not be reduced either by succussion or by any other method, unless one were to cut open the patient, and then, having introduced the hand into one of the great cavities, were to push outward from within, which one might do on the dead body, but not at all on the living. Wherefore, then, do I write all this? Because certain persons fancy that they have cured patients in whom the vertebra had undergone complete dislocation forward. Some, indeed, suppose that this is the

easiest of all these dislocations to be recovered from, and that such cases do not stand in need of reduction, but get well spontaneously. Many are ignorant, and profit by their ignorance, for they obtain credit from those about them. These are deceived in this way, for they suppose the spinous processes to be the vertebrae themselves, because every one of them appears round to the touch, not knowing that these bones are processes from the vertebrae, as formerly stated; but the vertebrae are at a considerable distance before them; for of all animals, man, in proportion to his bulk, has the belly ( *internal cavity?* ) the narrowest from behind to before, especially at the breast. When, therefore, any of these processes are severely fractured, whether one or more, the part there appears lower than on either side, and for that reason they are deceived, supposing that the vertebrae are displaced inward. And the attitudes of the patient contribute also to deceive them; for if they attempt to put themselves into a bent position, they are pained, from the skin being stretched at the seat of the injury, and at the same time the fragments of the bones wound the skin still more; but if they bend forward, they feel easier, for the skin at the wound is thus relaxed, and the bones are less disposed to hurt them; and if touched, they shrink and bend forward, and the part which is touched appears empty and soft. All the circumstances now mentioned contribute to deceive the physician. Such patients speedily get well without any bad effects, for callus readily forms in all such bones as are porous.

47. There are many varieties of curvature of the spine even in persons who are in good health; for it takes place from natural conformation and from habit, and the spine is liable to be bent from old age, and from pains. Gibbosities ( *or* projections backward) from falls generally take place when one pitches on the nates, or falls on the shoulders. In this case some one of the vertebrae must necessarily appear higher than natural, and those on either side to a less degree; but yet no one generally has started out of the line of the others, but every one has yielded a little, so that a considerable extent of them is curved. On this account the spinal marrow easily bears such distortions, because they are of a circular shape, and not angular. The apparatus for the reduction in this case must be managed in the following manner: a strong and broad board, having an oblong furrow in it, is to be fastened in the ground, or, in place of the board, we may scoop out an oblong furrow in the wall, about a cubit above the floor, or at any suitable height, and then something like an oaken bench, of a quadrangular shape, is to be laid along (the wall?) at a distance from the wall, which will admit of persons to pass round if necessary, and the bench is to be covered with robes, or anything else which is soft, but does not yield much; and the patient is to be stoved with vapor, if necessary, or bathed with much hot water, and then he

is to be stretched along the board on his face, with his arms laid along and bound to his body; the middle, then, of a thong which is soft, sufficiently broad and long, and composed of two cross straps of leather, is to be twice carried along the middle of the patient's breast, as near the armpits as possible, then what is over of the thongs at the armpits is to be carried round the shoulders, and afterward the ends of the thong are to be fastened to a piece of wood resembling a pestle; they are to be adapted to the length of the bench laid below the patient, and so that the pestle-like piece of wood resting against this bench may make extension. Another such band is to be applied above the knees and the ankles, and the ends of the thongs fastened to a similar piece of wood; and another thong, broad, soft, and strong, in the form of a swathe, having breadth and length sufficient, is to be bound tightly round the loins, as near the hips as possible; and then what remains of this swathelike thong, with the ends of the thongs, must be fastened to the piece of wood placed at the patient's feet, and extension in this fashion is to be made upward and downward, equally and at the same time, in a straight line. For extension thus made could do no harm, if properly performed, unless one sought to do mischief purposely. But the physicians, or some person who is strong, and not uninstructed, should apply the palm of one hand to the hump, and then, having laid the other hand upon the former, he should make pressure, attending whether this force should be applied directly downward, or toward the head, or toward the hips. This method of applying force is particularly safe; and it is also safe for a person to sit upon the hump while extension is made, and raising himself up, to let himself fall again upon the patient. And there is nothing to prevent a person from placing a foot on the hump, and supporting his weight on it, and making gentle pressure; one of the men who is practiced in the palestra would be a proper person for doing this in a suitable manner. But the most powerful of the mechanical means is this: if the hole in the wall, or in the piece of wood fastened into the ground, be made as much below the man's back as may be judged proper, and if a board, made of limetree, or any other wood, and not too narrow, be put into the hole, then a rag, folded several times or a small leather cushion, should be laid on the hump; nothing large, however, should be laid on the back, but just as much as may prevent the board from giving unnecessary pain by its hardness; but the hump should be as much as possible on a line with the hole made in the wall, so that the board introduced into it may make pressure more especially at that spot. When matters are thus adjusted, one person, or two if necessary, must press down the end of the board, whilst others at the same time make extension and counter-extension as along the body, as formerly described. Extension may also be made with axles, which may either be fastened in the ground beside the

bench, or the post of the axles may be attached to the bench itself, if you will make them perpendicular and overtopping ( *the bench?* ) a little at both ends, or at either end of the bench. These powers are easily regulated, so as to be made stronger or weaker, and they are of such force, that if one were to have recourse to them for a mischievous purpose, and not as a remedy, they would operate strongly in this way also; for by making merely extension and counter-extension longitudinally, without any additional force, one might make sufficient extension; and if, without making extension at all, one were only to press down properly with the board, sufficient force might be applied in this way. Such powers, then, are excellent which admit of being so regulated, that they can be made weaker and stronger as required. And the forces are applied in the natural way; for the pressure above forces the displaced parts into their place. Natural extension restores parts which have come too near one another to their natural position. I, then, am acquainted with no powers which are better or more appropriate than these; for extension along the spine downward has no proper hold at the bone called the os sacrum; and extension upward, along the neck and head, has indeed a hold; but extension thus made is unseemly to behold, and, besides, if increased, may occasion much mischief otherwise. I once made trial of the following plan. Having placed the patient on his back, I put below the hump a bladder, not inflated, and afterward introduced air into the bladder by means of a brass pipe connected with it. But the experiment did not succeed; for, when the man was fairly extended, the bladder yielded, and the air could not be forced into it; and, besides, the hump of the patient was apt to slip off the distended bladder when they were pressed together. But when I did not extend the man strongly, the bladder was swelled up by the air, and the man became more bent forward than proper. I have written this expressly; for it is a valuable piece of knowledge to learn what things have been tried and have proved ineffectual, and wherefore they did not succeed.

48. In curvatures forward of the vertebrae from a fall, or from some heavy body falling upon them, in general no one of them is displaced far beyond the others, but if one or more be so displaced, the case proves fatal; but, notwithstanding, as formerly stated, the displacement is circular, and not angular. In such cases, then, the urine and faeces are more apt to be retained than in displacement outward, the feet and the whole inferior extremities are colder, and the symptoms are more fatal than in the former case; and if they do survive, they are more subject to retention of the urine, and to loss of strength, and to torpor in their legs. But if the displacement be in the upper part, they experience loss of strength and torpor of the whole body. I know no mechanical contrivance by



which such a displacement could be reduced, unless that one might be benefited by succussion on a bladder, or any other similar plan of treatment, such as extension, as formerly described. I am not aware of any mode of pressure which might be applied along with the extension, like that of the board in displacement backward; for how could one apply pressure from before through the belly? (*internal cavity?*) The thing is impossible. But neither coughing nor sneezing has any power so as to cooperate with the extension, nor would the injection of air into the bowels have any effect. And to apply large cupping instruments with the view of drawing back the vertebrae which have protruded forward, shows a great error of judgment; for they rather propel than attract, and those who apply them are not aware even of this fact, for the greater will be the inclination forward the greater the instrument applied, the skin being forcibly drawn into the cupping-instrument. I could tell of other modes of succussion than those formerly described, which one might fancy would be more applicable in such an affection; but I have no great confidence in them, and therefore I do not describe them. On the main, it should be known, respecting the accidents which I have briefly described, that displacements forward are of a fatal and injurious nature; but that displacements backward, for the most part, do not prove fatal, nor occasion retention of urine nor torpor of the limbs, for they do not stretch the ducts leading toward the intestines, nor occasion obstruction of the same; but displacements forward produce both these bad effects, and many others in addition. And truly they are more apt to lose the power of their legs and arms, to have torpor of the body, and retention of urine, who experience no displacement either forward or backward, but merely a violent concussion along the spine, while those who have displacement backward are least subject to these symptoms.

49. And one might observe many other instances in medicine, of considerable injuries not proving serious, but producing a crisis in some affection, while less considerable injuries prove more serious, give rise to chronic diseases, and extend their effects to the whole system. Now something similar may happen in fracture of the ribs; for in fracture of one or more ribs, in general, if the fractured bones are not driven inward, nor are laid bare, fever rarely supervenes, neither does it often happen that there is haemoptysis, empyema, and suppurating sores, which require treatment with pledgets, nor necrosis of the bones; and in these cases the ordinary regimen is sufficient. For, unless they be seized with continual fever, a strict diet does more harm than good, by inducing inanition, and increasing the pain, fever, and cough; for moderate fullness of the intestines has a tendency to replace the ribs, while evacuation leads to suspension of the ribs,

and suspension induces pain. Ordinary bandaging, externally, is sufficient in such cases; the bandages should be applied moderately tight, along with cerate and compresses, or a pad of wool may be applied. The rib is consolidated in twenty days, for callus soon forms in such bones.

50. But when there is contusion of the flesh about the ribs, either from a blow, or a fall, or a bruise, or any like cause, there is often copious vomiting of blood, for there are canals stretched along the vacuity of each rib ( *intercostal space?* ), and nerves proceeding from the most important parts of the body have their origin there. Many of these, therefore, are troubled with coughs, tubercles, empyema, external suppurations, and sphacelus of the ribs. And even when no such symptoms supervene from contusion of the skin about the ribs, still in such cases there is, generally, more combined pain than in fractures of the ribs, and relapses of pain in the seat of the injury are more apt to occur. Wherefore some physicians pay much less attention to such injuries, than where the rib is fractured, whereas, if they were wise, they would treat such cases with far greater care than the other; for it is proper that the diet should be restricted, that the patients should remain at rest as much as possible, and abstain from venery, from fat articles of food, from such as excite cough, and from everything strong; they should be bled in the arm, speak as little as possible, should have the contused part bound round with folded compresses, plenty of bandages, broader than the contusion, and which should be smeared with cerate; in applying the bandages, broad and soft shawls should be used, and they should be put on moderately firm, so that the patient will say that they are neither too tight nor loose, and the bandaging should commence at the seat of the injury, and be made more particularly tight there, and the bandaging should be conducted as is done with a double-headed roller, so that the skin about the ribs may not be ruffled, but may lie smooth, and the bandaging should be renewed every day, or every alternate day. It is better also to open the bowels with some gentle medicine, so as just to produce an evacuation of the food, and the diet is to be restricted for ten days, and then the body is to be recruited and filled up; while you are upon the reducing system, the bandaging should be tighter, but when you are making him up again, it must be looser; and, if he spit blood from the commencement, the treatment and bandaging should be continued for forty days; but if there be no haemoptysis, treatment for twenty days will generally be sufficient; but the length of time must be regulated by the magnitude of the injury. When such contusions are neglected, if no greater mischief result there from, at all events the bruised part has its flesh more pulpy than it had formerly. When, therefore, any such thing is left behind, and is not properly dissipated by the treatment, it

will be worse if the mucosity be lodged near the bone, for the flesh no longer adheres to the bone as formerly, the bone becomes diseased, and chronic sloughings of the bone in many cases arise from such causes. But if the mischief be not upon the bone, but it is the flesh itself which is pulpy, relapses and pains will return from time to time, if there happen to be any disorder in the body; wherefore proper bandaging, and for a considerable time, must be had recourse to, until the extravasated blood forming in the bruise be dried up and absorbed, and the part be made up with sound flesh, and the flesh adhere to the bone. The best cure is the cautery in those cases which, from neglect, have become chronic, and the place turns painful, and the flesh is pulpy. And when the flesh itself is pulpy, the burning should be carried as far as the bone, but the bone itself should not be heated; but if it be in the intercostal space, you need not make the burning so superficial, only you must take care not to burn quite through. But if the contusion appear to be at the bone, if it be still recent, and the bone has not yet become necrosed, if it be very small, it is to be burned as has been described; but if the rising along the bone be oblong, several eschars are to be burned over it. Necrosis of the rib will be described along with the treatment of suppurating sores.

51. There are four modes of dislocation at the hip-joint: of which modes, dislocation inward takes place most frequently, outward, the most frequently of all the other modes; and it sometimes takes place backward and forward, but seldom. When, therefore, dislocation takes place inward, the leg appears longer than natural, when compared with the other leg, for two reasons truly; for the bone which articulates with the hip-joint is carried from above down to the ischium where it rises up to the pubes, upon it, then, the head of the femur rests, and the neck of the femur is lodged in the cotyloid foramen ( *foramen thyroideum?* ). The buttock appears hollow externally, from the head of the thighbone having shifted inward, and the extremity of the femur at the knee is turned outward, and the leg and foot in like manner. The foot then being turned outward, physicians, from ignorance, bring the sound leg to it and not it to the sound leg; on this account, the injured limb appears to be much longer than the sound one, and in many other cases similar circumstances lead to error in judgment. Neither does the limb at the groin admit of flexion as in the sound limb, and the head of the bone is felt at the perineum too prominent. These, then, are the symptoms attending dislocation of the thigh inward.

52. When, then, a dislocation has not been reduced, but has been misunderstood or neglected, the leg, in walking, is rolled about as is the case with oxen, and the

weight of the body is mostly supported on the sound leg, and the limb at the flank, and the joint where the dislocation has occurred is necessarily hollow and bent, while on the sound side the buttock is necessarily rounded. For if one should walk with the foot of the sound leg turned outward, the weight of the body would be thrown upon the injured limb, but the injured limb could not carry it, for how could it? One, then, is forced in walking to turn the leg inward, and not outward, for thus the sound leg best supports its own half of the body, and also that of the injured side. But being hollow at the flank and the hip-joint, they appear small in stature, and are forced to rest on a staff at the side of the sound leg. For they require the support of a staff there, since the nates inclines to this side, and the weight of the body is carried to it. They are forced also to stoop, for they are obliged to rest the hand on the side of the thigh against the affected limb; for the limb which is injured cannot support the body in changing the legs, unless it be held when it is applied to the ground. They who have got an unreduced dislocation inward are forced to put themselves into these attitudes, and this from no premeditation on their part how they should assume the easiest position, but the impediment itself teaches them to choose that which is most conformable to their present circumstances. For persons who have a sore on the foot, or leg, and cannot rest upon the limb, all, even children, walk in this way; for they turn the injured limb outward in walking, and they derive two advantages therefrom, to supply two wants; the weight of the body is not equally thrown upon the limb turned outward, as upon the one turned inward, for neither is the weight in a line with it, but is much more thrown upon the one under the body; for the weight is in a straight line with it, both in walking and in the shifting of the legs. In this position one can most quickly turn the sound limb under the body, by walking with the unsound limb outward, and the sound inward. In the case we are now treating of, it is well that the body finds out the attitudes which are the easiest for itself. Those persons, then, who have not attained their growth at the time when they met with a dislocation which is not reduced, become maimed in the thigh, the leg, and the foot, for neither do the bones grow properly, but become shortened, and especially the bone of the thigh; and the whole limb is emaciated, loses its muscularity, and becomes enervated and thinner, both from the impediment at the joint, and because the patient cannot use the limb, as it does not lie in its natural position, for a certain amount of exercise will relieve excessive enervation, and it will remedy in so far the deficiency of growth in length. Those persons, then, are most maimed who have experienced the dislocation *in utero*, next those who have met with it in infancy, and least of all, those who are full grown. The mode of walking adopted by adults has been already described; but those who are children when this accident

befalls them, generally lose the erect position of the body, and crawl about miserably on the sound leg, supporting themselves with the hand of the sound side resting on the ground. Some, also, who had attained manhood before they met with this accident, have also lost the faculty of walking erect. Those who were children when they met with the accident, and have been properly instructed, stand erect upon the sound leg, but carry about a staff, which they apply under the armpit of the sound side, and some use a staff in both arms; the unsound limb they bear up, and the smaller the unsound limb, the greater facility have they in walking, and their sound leg is no less strong than when both are sound. The fleshy parts of the limb are enervated in all such cases, but those who have dislocation inward are more subject to this loss of strength than, for the most part, those who have it outward.

53. Some tell a story how the Amazonian women dislocate the joints of their male children while mere infants, some at the knee, and others at the hip-joint, that they may be maimed, and that the male sex may not conspire against the female, and that they use them as artisans to perform any sedentary work, such as that of a shoemaker or brazier. Whether these things be true or not I do not know, but this I know, that matters would be such as is represented, provided their children, while infants, were to have their joints dislocated. The consequences of dislocation inward at the hip-joint are much greater than of dislocation outward at the hip-joint, but at the knee, although there be some difference, it is less; but the mode of either impediment is peculiar, their legs are more bandied when the dislocation is outward, but those who have dislocation inward stand erect on their feet with less freedom. In like manner, when the dislocation is at the anklejoint, if outward they become *vari* ( *their toes are turned inward?* ), but they can stand; but if the dislocation be inward they become *valgi* ( *their toes are turned outward?* ), but they have less freedom of standing. The proportional growth of their bones is as follows: in those cases in which the bone of the leg is dislocated, the bones of the feet grow very little, as being very near the injury, but the bones of the leg increase in size, and with very little defect, but the fleshy parts ( *muscles?* ) are wasted. But when the ankle-joint is in its natural state, but the knee is dislocated, in these cases the bones of the leg do not grow in like manner, but become shortened, as being nearest the seat of the injury, and the bones of the feet also are atrophied, but not in the same proportion; because, as was said a little while ago, the ankle-joint is safe, and if they could use it, as in the case of club-foot, the bones of the foot would be still less atrophied. When the dislocation takes place at the hip-joint, the bone of the thigh, in this case, does not generally grow in like manner, as being the one

nearest the seat of the injury, but becomes shorter than the sound one; but the growth of the bones of the leg is not arrested in like manner; nor of those of the feet, for this reason, that there is no displacement between the bones of the thigh and leg, nor between those of the leg and foot; in those cases, however, the fleshy parts of the whole limb are atrophied; but if they could make use of the limb, the growth of the bones would be still more developed, as formerly stated, only the thigh, although its flesh would be much less wasted, would still be by no means so fleshy as the sound limb. The following observations are a proof of this: those persons who are weasel-armed ( *galiancones* ) from birth, owing to dislocation of the humerus, or when the accident has happened to them before they have attained their full growth, such persons have the bone of the arm shortened, but those of the fore-arm and hand are little inferior in size to the sound, for the reasons which have been stated, because the humerus is the bone nearest to the joint affected, and, on that account, it is shorter than natural; but the fore-arm is not equally affected by the accident, because the joint at which the bones of the arm and forearm are articulated remains in its natural condition, and the hand is still further distant than the fore-arm from the seat of the injury. Such are the reasons why certain of the bones in this case increase in growth, and certain do not. The laborious office of the hand contributes much to the development of the flesh in the fore-arm and hand, for whatever work is done by the hand, these weasel-armed persons strive to do no less effectually with the other hand than with the sound; for the arms do not support the weight of the body like the legs, and the work performed by them is light. From exercise, then, the fleshy parts on the hand and fore-arm are not atrophied in weasel-armed persons, and by these means the arm, too, gains flesh. But in dislocation inward at the hip-joint, whether from birth or from childhood, the fleshy parts, on that account, are much more atrophied than those of the hand, because the patients cannot exercise the leg. Another proof will be given in the observations which will be presently stated, that these things are such as I things are such as I have represented.

54. When the head of the femur is dislocated outward, the limb in these cases, when compared with the other, appears shortened, and this is natural, for the head of the femur no longer rests on a bone as in dislocation inward, but along the side of a bone which naturally inclines to the side, and it is lodged in flesh of a pulpy and yielding nature, and on that account it appears more shortened. Inwardly, the thigh about the perineum appears more hollow and flabby, but externally the buttock is more rounded, from the head of the thigh having slipped outward, but the nates appear to be raised up, owing to the flesh there having

yielded to the head of the thigh-bone; but the extremity of the thigh-bone, at the knee, appears to be turned inward, and the leg and foot in like manner, neither does it admit of flexion like the sound limb. These, then, are the symptoms of dislocation outward.

55. When such a dislocation is not reduced in adults, the whole limb appears to be shortened, and in walking they cannot reach the ground with the heel, but they walk with the ball of the foot on the ground, and the points of their toes incline a little inward. But the injured limb, in this case, can support the body much better than in dislocation inward, both because the head of the femur and the neck of its articular extremity, being naturally oblique, have formed a bed under a considerable portion of the hip, and because the extremity of the foot is not forcibly turned outward, but is nearly in a line with the body, and is even inclined more inwardly. When, then, the articular extremity of the femur has worn out a socket for itself in the flesh where it was lodged, and the flesh is lubricated, it ceases to be painful in the course of time, and when it becomes free from pain, they can walk without a staff, if so inclined, and they can support the body on the injured limb. From usage then, in such cases, the fleshy parts are less enervated than in those which have been mentioned a little before, still, however, they lose their strength more or less; but in general there is more enervation when the dislocation is inward than when it is outward. Some of them, then, cannot wear their shoes, owing to the unbending state of their leg, and some of them can. But when this dislocation takes place *in utero*, and when the dislocation having occurred at any time before manhood, from violence, has not been replaced, or when from disease the articular extremity has started from its socket, and is displaced (for many such cases occur, and from some of them, if the femur become necrosed, obstinate suppurations requiring the use of tents are formed, and in certain of them the bone is laid bare), whether the bone become necrosed or not, the bone of the thigh is much shortened, and does not usually grow like the sound one, the bones, too, of the leg, become shorter than those of the other, but in a small degree, for the same reasons that were formerly stated; such persons can walk, some of them in the same fashion as adults having an unreduced dislocation, and some of them walk with the whole foot on the ground, but limp in walking, being obliged to do so by the shortness of the limb. Such is the result, even though they be carefully and properly trained in the attitudes before they have strength for walking, and in like manner also, after they have acquired the necessary strength; but those persons require the most care who were very young when they met with the accident, for, if neglected while children, the limb becomes entirely useless and atrophied. The fleshy parts

of the entire limb are more wasted than those of the sound limb, but this is much less apt to happen in their case than in dislocation inward, owing to usage and exercise, as they are speedily able to make use of the limb, as was stated a little before with regard to the weasel-armed ( *galiancones* ).

56. There are persons who, from birth or from disease, have dislocations outward of both the thighs; in them, then, the bones are affected in like manner, but the fleshy parts in their case lose their strength less; the legs, too, are plump and fleshy, except that there is some little deficiency at the inside, and they are plump because they have the equal use of both their legs, for in walking they totter equally to this side that. Their nates appear very prominent, from the displacement of the bones of the joint. But if in their case the bones do not sphacelate ( *become carious?* ) and if they do not become bent above the hip-joint, if nothing of this kind happen to them, they become otherwise sufficiently healthy, but the growth of all the rest of the body, with the exception of the head, is arrested.

57. In dislocations of the head of the femur backward, which rarely occur, the patient cannot extend the leg, either at the dislocated joint, or at the ham, to any extent, and of all the dislocations, this is the variety in which the patients have the least power of making extension at the groin and the ham. But, moreover, this also should be known (for it is a valuable piece of knowledge, and of much importance, and yet most yet most people are ignorant of it), that persons in health cannot extend the joint at the ham, if they do not extend the joint at the groin at the same time, unless they raise the foot very high, for in this way they could do it; neither also could they bend the joint at the ham, but with much greater difficulty, if they do not bend the joint at the groin at the same time. There are many other things in the body which have similar connections, both with regard to the contractions of nerves ( *ligaments?* ), and the positions of muscles, and many of them more worthy of being known than is generally supposed, and with regard to the nature of the intestine and that of the whole internal cavity, and with regard to the displacements and contractions of the uterus; but all these things will be treated of elsewhere, in a work akin to the present one. But with regard to the matter on hand, they cannot make extension, as has been already stated; and the limb appears shortened, for two reasons-first, because it cannot be extended, and also because the bone has slipped into the flesh of the nates; for the head and neck of the femur, in this dislocation, are carried downward from their natural situation, to the outside of the nates. But yet they can bend the limb, unless prevented by pain, and the leg and foot appear



pretty straight, and not much inclined toward either side, but at the groin the flesh, when felt, appears looser, from the bone of the joint having slipped to the other side, but at the nates the head of the femur may be felt to be more prominent than natural. Such are the symptoms accompanying dislocation of the thigh backward.

58. When this dislocation occurs in an adult, and is not reduced, he can walk, indeed, after a time, and when the pain has abated, and when he has been accustomed to rotate the articular bone in the flesh; he finds it necessary, however, to make strong flexion at the groin in walking, for two reasons, both because the limb, for the causes already stated, becomes much shorter, and he is far from touching the ground with his heel, and he can barely reach it with the ball of his foot, and not even thus, unless he bend himself at the groins, and also bend with the other leg at the ham. And in this case, he is under the necessity of supporting the upper part of the thigh with his hand at each step: this also contributes, in a certain degree, to make him bend the body at the groins; for, during the shifting of the feet in walking, the body cannot be supported on the unsound limb, unless it be pressed to the ground by the hand, the end of the femur not being placed properly under the body, but having slipped backward to the nates; and if he should try to rest the weight of his body for a little, upon the foot, without any other support, he would fall backward, for there would be a great inclination in this direction, from the hips having protruded backward far beyond the line of the foot, and the spine inclining toward the hips. Such persons can walk, indeed, without a staff, if so accustomed, for because the sole of the foot is in its old line, and is not inclined outward, they do not require anything to balance them. Such, however, as, instead of grasping the thigh, prefer resting their weight upon a staff introduced into the armpit of the affected side, these, if they use a longer staff, will walk, indeed, more erect, but will not be able to reach the ground with the foot, or if they wish to rest upon the foot, they must take a shorter staff, and will require to bend the body at the groins. The wasting of the fleshy parts is analogous to what happens in the cases formerly described, for the wasting is greatest in those cases in which the patients keep the limb up, and do not exercise it, whilst those who practice walking, have the least atrophy. The sound leg, however, is not benefited, but is rather rendered more deformed, if the injured limb be applied to the ground, for it is forced to cooperate with the other, being protruded at the hip, and bent at the ham. But if the patient does not use the injured limb by applying it to the ground, but carries it up, and rests upon a staff, the sound leg thereby gains strength, for it is employed in its natural position, and further, the exercise

gives it strength. But it may be said, these things are foreign to medicine; for what is the use of enlarging upon cases which are already past remedy? This is far from being the case, for it belongs to the knowledge of medicine to be acquainted also with these, and they cannot possibly be separated from one another; for to such as are curable, means are to be used to prevent them from becoming incurable, studying how they may best be prevented from getting into an incurable state. And incurable cases should be known, that they may not be aggravated by useless applications, and splendid and creditable prognostics are made by knowing where, how, and when every case will terminate, and whether it will be converted into a curable or an incurable disease. When then, from birth, or during one's youth, this dislocation backward occurs, and is not reduced, whether it be connected with violence or disease (for many such dislocations occur in diseases, but the nature of the diseases in which dislocations take place, will be described afterward); if, then, the dislocated limb be not reduced, the bone of the thigh becomes shortened, the whole limb is impaired, is arrested in its growth, and loses its flesh from want of use; the articulation at the ham is also impaired, for the nerves ( *ligaments?* ) become stretched, from cases formerly stated, wherefore those who have this dislocation, cannot make extension at the knee-joint. In a word, all parts of the body which were made for active use, if moderately used and exercised at the labor to which they are habituated, become healthy, increase in bulk, and bear their age well, but when not used, and when left without exercise, they become diseased, their growth is arrested, and they soon become old. Among these parts the joints and nerves ( *ligaments?* ), if not used, are not the least liable to be so affected; they are impaired, then, for the reasons we have stated, more in this variety of dislocation than in the others, for the whole limb is wasted, both in its bones and in its fleshy parts. Such persons, then, when they attain their full growth, keep the limb raised and flexed, rest the weight of the body on the other leg, and support themselves with a staff, some with one, and others with two.

59. In dislocations of the head of the thigh-bone forward (they are of rare occurrence), the patients cannot extend the leg completely, but least of all can they bend it at the groin; they are pained, also, if forced to bend the limb at the ham. The length of the leg, if compared at the heel, is the same as that of the other; but the extremity of the foot inclines less to project forward. But the whole limb has its natural direction, and inclines neither to this side nor to that. These cases are particularly attended with severe pain, and they are more apt to be accompanied with retention of urine at first than any of the other dislocations; for the head of the thigh-bone is lodged very near to important nerves. And the

region of the groin appears swelled out and stretched, while that of the nates is more wrinkled and flabby. The symptoms now stated are those which attend this dislocation of the thigh-bone.

60. When persons have attained their full growth before meeting with this dislocation, and when it has not been reduced, upon the subsidence of the pain, and when the bone of the joint has been accustomed to be rotated in the place where it is lodged, these persons can walk almost erect without a staff, and with the injured leg almost quite straight, as it does not admit of easy flexion at the groin and the ham; owing, then, to this want of flexion at the groin, they keep the limb more straight in walking than they do the sound one. And sometimes they drag the foot along the ground, as not being able to bend the upper part of the limb, and they walk with the whole foot on the ground; for in walking they rest no less on the heel than on the fore part of the foot; and if they could take great steps, they would rest entirely on the heel in walking; for persons whose limbs are sound, the greater the steps they take in walking, rest so much the more on the heel, while they are putting down the one foot and raising the opposite. In this form of dislocation, persons rest their weight more on the heel than on the anterior part of the foot, for the fore part of the foot cannot be bent forward equally well when the rest of the limb is extended as when it is in a state of flexion; neither, again, can the foot be arched to the same degree the limb is bent as when it is extended. The natural state of matters is such as has been now described; and in an unreduced dislocation, persons walk in the manner described, for the reasons which have been stated. The limb, moreover, is less fleshy than the other, at the nates, the calf of the leg, and the whole of its posterior part. When this dislocation occurs in infancy, and is not reduced, or when it is congenital, in these cases the bone of the thigh is more atrophied than those of the leg and foot; but the atrophy of the thigh-bone is least of all in this form of dislocation. The fleshy parts, however, are everywhere attenuated, more especially behind, as has been stated above. If properly trained, such persons, when they grow up, can use the limb, which is only a little shorter than the other, and yet they support themselves on a staff at the affected side. For, not being able to use properly the ball of the foot without the heel, nor to put it down as some can in the other varieties of dislocation (the cause of which has been just now stated), on this account they require a staff. But those who are neglected, and are not in the practice of putting their foot to the ground, but keep the limb up, have the bones more atrophied than those who use the limb; and, at the articulations, the limb is more maimed in the direct line than in the other forms of dislocation.

61. In a word, luxations and subluxations take place in different degrees, being sometimes greater and sometimes less; and those cases in which the bone has slipped or been displaced to a much greater extent, are in general more difficult to rectify than otherwise; and if not reduced, such cases have greater and more striking impairment and lesion of the bones, fleshy parts, and attitudes; but when the bone has slipped, or been displaced to a less extent, it is easier to reduce such cases than the other; and if the attempts at reduction have failed, or have been neglected, the impairment in such cases is less, and proves less injurious than in the cases just mentioned. The other joints present great differences as to the extent of the displacements which they are subject to. But the heads of the femur and humerus are very similar to one another as to their dislocations. For the heads of the bones are rounded and smooth, and the sockets which receive the heads are also circular, and adapted to the heads; they do not admit then of being dislocated in any intermediate degree, but, notwithstanding, from their rounded shape, the bones slip either outward or inward. In the case we are now treating of, then, there is either a complete dislocation or none at all, and yet these bones admit of being displaced to a greater or less extent; and the thigh is more subject to these differences than the arm.

62. Wherefore, then, some of these congenital displacements, if to a small extent, may be reduced to their natural condition, and especially those at the ankle-joint. Most cases of congenital club-foot are remediable, unless the declination be very great, or when the affection occurs at an advanced period of youth. The best plan, then, is to treat such cases at as early a period as possible, before the deficiency of the bones of the foot is very great, and before there is any great wasting of the flesh of the leg. There is more than one variety of club-foot, the most of them being not complete dislocations, but impairments connected with the habitual maintenance of the limb in a certain position. In conducting the treatment, attention must be paid to the following points: to push back and rectify the bone of the leg at the ankle from without inward, and to make counter-pressure on the bone of the heel in an outward direction, so as to bring it into line, in order that the displaced bones may meet at the middle and side of the foot; and the mass of the toes, with the great toe, are to be inclined inward, and retained so; and the parts are to be secured, with cerate containing a full proportion of resin, with compresses, and soft bandages insufficient quantity, but not applied too tight; and the turns of the bandages should be in the same direction as the rectifying of the foot with the hand, so that the foot may appear to incline a little outward. And a sole made of leather not very hard, or of lead, is to be bound on, and it is not to be applied to the skin but when you are about to

make the last turns of the bandages. And when it is all bandaged, you must attach the end of one of the bandages that are used to the bandages applied to the inferior part of the foot on the line of the little toe; and then this bandage is to be rolled upward in what is considered to be a sufficient degree, to above the calf of the leg, so that it may remain firm when thus arranged. In a word, as if moulding a wax model, you must bring to their natural position the parts which were abnormally displaced and contracted together, so rectifying them with your hands, and with the bandaging in like manner, as to bring them into their position, not by force, but gently; and the bandages are to be stitched so as to suit the position in which the limb is to be placed, for different modes of the deformity require different positions. And a small shoe made of lead is to be bound on externally to the bandaging, having the same shape as the Chian slippers had. But there is no necessity for it if the parts be properly adjusted with the hands, properly secured with the bandages, and properly disposed of afterward. This, then, is the mode of cure, and it neither requires cutting, burning, nor any other complex means, for such cases yield sooner to treatment than one would believe. However, they are to be fairly mastered only by time, and not until the body has grown up in the natural shape; when recourse is had to a shoe, the most suitable are the buskins, which derive their name from being used in traveling through mud; for this sort of shoe does not yield to the foot, but the foot yields to it. A shoe shaped like the Cretan is also suitable.

63. In cases of complete dislocation at the ankle-joint, complicated with an external wound, whether the displacement be inward or outward, you are not to reduce the parts, but let any other physician reduce them if he choose. For this you should know for certain, that the patient will die if the parts are allowed to remain reduced, and that he will not survive more than a few days, for few of them pass the seventh day, being cut off by convulsions, and sometimes the leg and foot are seized with gangrene. It should be well known that such will be the results; and it does not appear to me that hellebore will do any good, though administered the same day, and the draught repeated, and yet it is the most likely means, if any such there be; but I am of opinion that not even it will be of service. But if not reduced, nor any attempts at first made to reduce them, most of such cases recover. The leg and foot are to be arranged as the patient wishes, only they must not be put in a dependent position, nor moved about; and they are to be treated with pitched cerate, a few compresses dipped in wine, and not very cold, for cold in such cases induces convulsions; the leaves also of beet, or of colt's foot, of any such, when boiled in dark-colored austere wine, form a suitable application to the wound and the surrounding parts; and the wound may

further be anointed with cerate in a tepid state. But if it be the winter season, the part is to be covered with unscoured wool, which is to be sprinkled from above with tepid wine and oil, but on no account is either bandage or compress to be applied; for this should be known most especially, that whatever compresses, or is heavy, does mischief in such cases. And certain of the dressings used to recent wounds are suitable in such cases; and wool may be laid upon the sore, and sprinkled with wine, and allowed to remain for a considerable time; but those dressings for recent wounds which only last for a few days, and into which resin enters as an ingredient, do not agree with them; for the cleansing of the sores is a slow process, and the sore has a copious discharge for a long time. Certain of these cases it may be advantageous to bandage. It ought also to be well understood, that the patient must necessarily be much maimed and deformed, for the foot is retracted outward, and the bones which have been displaced outward protrude: these bones, in fact, not being generally laid bare, unless to a small extent; neither do they exfoliate, but they heal by thin and feeble cicatrices, provided the patient keeps quiet for a length of time; but otherwise there is danger that a small ulcer may remain incurable. And yet in the case we are treating of, those who are thus treated are saved; whereas, when the parts are reduced and allowed to remain in place, the patients die.

64. The same rule applies to dislocations at the wrist, attended with a wound and projection of the bone, whether the bones of the arm be displaced inward or outward. For this should be well understood, that the patient will die in the course of a few days, by the same mode of death as formerly described, if the bone be reduced, and allowed to remain so. But in those cases in which they are not reduced, nor any attempt made to reduce them, the patients, for the most part, recover; and the same mode of treatment as has been described will be applicable; but the deformity and impediment of the limb must necessarily be great, and the fingers of the hand will be weak and useless; for if the bones have slipped inward, they cannot bend the fingers, or if outward, they cannot extend them.

65. When the os tibiae, having made a wound at the knee, has protruded through the skin, whether the dislocation be outward or inward, in such a case, if the bone be reduced, death will be even more speedy than in the other cases, although speedy also in them. But the only hope of recovery is if you treat them without reduction. These cases are more dangerous than the others, as being so much higher up, as being so much stronger joints, and displaced from bones which are so much stronger. But if the os femoris form a wound at the knee, and

slip through it, provided it be reduced and left so, it will occasion a still more violent and speedy death than in the cases formerly described; but if not reduced, it will be much more dangerous than those cases mentioned before, and yet this is the only hope of recovery.

66. The same rule applies to the elbow-joint, and with regard to the bones of the fore-arm and arm. For when these bones protrude through a wound which they have made in the skin, all cases in which they are reduced prove fatal; but if not reduced, there is a chance of recovery; but to those that survive there is certain impediment. And if in any instance the bones of the upper articulations ( *shoulder-joint?* ), should be dislocated, and project through a wound which they have made in the skin, these, if reduced, are followed by more speedy death; and if not reduced, they are more dangerous than the others. But the mode of treatment which appears to me most suitable has been already described.

67. When the joints of the toes or hands are dislocated, and the bones protrude through a wound which they have made, and when there is no fracture of the bone, but merely displacement of the joint, in these cases, if the reduction be made and allowed to remain, there is some danger of spasms ( *tetanus?* ) if not properly treated, and yet it may be worth while to reduce them, having warned the patient beforehand that much caution and care will be required. The easiest, the most efficient method, and the one most conformable to art, is that by the lever, as formerly described when treating of bones which have been fractured and protruded; then the patient must be as quiet as possible, lie in a recumbent position, and observe a restricted regimen. And it will be better also that he should get some gentle emetics. The sore is to be treated with dressings for fresh wounds, which permit of allusions, or with the leaves of camomile, or with the applications for fractured bones of the head, but nothing very cold must be applied. The first ( *most distant?* ) joints are least dangerous, but those still higher, are more so. Reduction should be made the same day, or the next, but by no means on the third or fourth, for it is on the fourth day that exacerbations especially attack. In those cases, then, where immediate reduction cannot be accomplished, we must wait until after the aforesaid days; for whatever you reduce within ten days, may be expected to induce spasm. But if the spasm supervene on its being reduced, the joint should be quickly displaced, and bathed frequently with warm water, and the whole body should be kept in a warm, soft, and easy condition, and more especially about the joints, for the whole body should rather be in a bent than in an extended state. Moreover, it is to be expected, that the articular extremities of the bones of the fingers will for this

generally happens, if even the least degree of inflammation take place, so that if it were not that the physician would be exposed to censure, owing to the ignorance of the common people, no reduction should be made at all. The reduction of the bones of joints which have protruded through the skin, is attended with the dangers which have been described.

68. When the articular bones of the fingers are fairly chopped off, these cases are mostly unattended with danger, unless deliquium come on in consequence of the injury, and ordinary treatment will be sufficient to such sores. But when resection is made, not at the articulations, but at some other point in the bones, these cases also are free from danger, and are still more easily cured than the others; and the fractured bones of the fingers which protrude otherwise than at the joint admit of reduction without danger. Complete resections of bones at the joints, whether the foot, the hand, the leg, the ankle, the forearm, the wrist, for the most part, are not unattended with danger, unless one be cut off at once by deliquium animi, or if continual fever supervene on the fourth day.

69. With regard to the sphacelus of fleshy parts, it takes place in wounds where there are large blood-vessels, which have been strongly compressed, and in fractures of bones which have been bound too tight, and in other cases of immoderate constriction, when the parts which have been strangulated generally drop off; and the most of such patients recover, even when a portion of the thigh comes away, or of the arm, both bones and flesh, but less so in this case; and when the fore-arm and leg drop off, the patients readily recover. In cases then, of fracture of the bones, when strangulation and blackening of the parts take place at first, the separation of the dead and living parts quickly occurs, and the parts speedily drop off, as the bones have already given way; but when the blackening (*mortification*) takes place while the bones are entire, the fleshy parts, in this case, also quickly die, but the bones are slow in separating at the boundary of the blackening, and where the bones are laid bare. Those parts of the body which are below the boundaries of the blackening are to be removed at the joint, as soon as they are fairly dead and have lost their sensibility; care being taken not to wound any living part; for if the part which is cut off give pain, and if it prove not to be quite dead, there is great danger lest the patient may swoon away from the pain, and such swoonings often are immediately fatal. I have known the thigh-bones, when denuded in this manner, drop off on the eightieth day; but in the case of this patient, the parts below were separated at the knee on the twentieth day, and, as I thought, too early, for it appeared to me that this should be done more guardedly. In a case which I had of such blackening in the leg, the bones of the



leg, as far as they were denuded, separated at its middle on the sixtieth day. But the separation of denuded bones is quicker or slower, according to the mode of treatment; something, too, depends upon whether the compression be stronger or weaker, and whether the nerves, flesh, arteries, and veins are quicker or slower in becoming blackened and in dying; since, when the parts are not strongly compressed, the separation is more superficial, and does not go the length of laying the bones bare, and in some cases it is still more superficial, so as not even to expose the nerves. For the reasons now stated, it is impossible to define accurately the time at which each of these cases will terminate. The treatment of such cases, however, is to be readily undertaken, for they are more formidable to look at than to treat; and a mild treatment is sufficient in all such cases, for they come to a crisis of themselves; only the diet must be attended to, so that it may be as little calculated to create fever as possible, and the body is to be placed in the proper positions: these are, neither raised very high up, nor inclined much downward, but rather upward, until the separation be completed; for at that time there is most danger of hemorrhage; on this account, wounds should not be laid in a declining position, but the contrary. But after a while, and when the sores have become clean, the same positions will no longer be appropriate; but a straight position, and one inclining downward, may be proper; and in the course of time, in some of these cases, abscesses form, and require bandages. One may also expect that such patients will be attacked with dysentery; for dysentery usually supervenes in cases of mortification and of hemorrhage from wounds; it comes on generally when the blackening and hemorrhage have arrived at a crisis, and is profuse and intense, but does not last many days; neither is it of a fatal nature, for such patients do not usually lose their appetite, nor is it proper to put them on a restricted diet.

70. Dislocation inward at the hip-joint is to be reduced in the following manner: (it is a good, proper, and natural mode of reduction, and has something of display in it, if any one takes delight in such ostentatious modes of procedure). The patient is to be suspended by the feet from a cross-beam with a strong, soft, and broad cord; the feet are to be about four inches or less from one another; and a broad and soft leather collar connected with the cross-beam is to be put on above the knees; and the affected leg should be so extended as to moved be two inches longer than the other; the head should be about two cubits from the ground, or a little more or less; and the arms should be stretched along the sides, and bound with something soft; all these preparations should be made while he is lying on his back, so that he may be suspended for as short a time as possible. But when the patient is suspended, a person properly instructed and not weak,

having introduced his arm between his thighs, is to place his fore-arm between the perineum and the dislocated head of the os femoris; and then, having joined the other hand to the one thus passed through the thighs, he is to stand by the side of the suspended patient, and suddenly suspend and swing himself in the air as perpendicularly as possible. This method comprises all the conditions which are natural; for the body being suspended by its weight, produces extension, and the person suspended from him, along with the extension, forces the head of the thigh-bone to rise up above the acetabulum; and at the same time he uses the bone of the fore-arm as a lever, and forces the os femoris to slip into its old seat. The cords should be properly prepared, and care should be taken that the person suspended along with the patient have a sufficiently strong hold.

71. Wherefore, as formerly stated, men's constitutions differ much from one another as to the facility or difficulty with which dislocations are reduced; and the cause of this was also stated formerly in treating of the shoulder. In some the thigh is reduced with no preparation, with slight extension, directed by the hands, and with slight movement; and in some the reduction is effected by bending the limb at the joint, and making rotation. But much more frequently it does not yield to any ordinary apparatus, and therefore one should be acquainted with the most powerful means which can be applied in each case, and use whatever maybe judged most proper under all circumstances. The modes of extension have been described in the former parts of the work, so that one may make use of whatever may happen to be at hand. For, extension and counter-extension are to be made in the direction of the limb and the body; and if this be properly effected, the head of the thigh-bone will be raised above its ancient seat; and if thus raised, it will not be easy to prevent it from settling in its place, so that any ordinary impulse with the lever and adjustment will be quite sufficient; but some apply insufficient extension, and hence the reduction gives much trouble. The bands then should be fastened, not only at the foot, but also above the knee, so that the force of the extension may not be expended on the knee-joint more than upon the hip-joint. The extension in the direction of the foot is to be thus contrived. But the counter-extension is not only to be managed by means of something carried round the chest and armpits, but also by a long, double, strong, and supple thong applied to the perineum, and carried behind along the spine, and in front along the collar-bone and fixed to the point from which counter-extension is made; and then force is to be so applied, by means of this extension and counter-extension, that the thong at the perineum may not pass over the head of the thigh-bone, but between it and the perineum; and during the extension one should strike the head of the femur with the fist, so as

to drive it outward. And when the patient is raised up by the stretching, you should pass a hand through ( *between the legs?* ) and grasp it with the other hand, so as at the same time to make extension, and force the dislocated limb outward; while some other person sitting by the knee quietly directs it inward.

72. It has been formerly stated by us that it will be of importance for any person who practices medicine in a populous city to get prepared a quadrangular board, about six cubits or a little more in length, and about two cubits in breadth; a fathom will be sufficient thickness for it; and then along it from the one end to the other, an excavation must be made, so that the working of the levers may not be higher than is proper; then at both sides we are to raise short, strong, and strongly-fixed posts, having axles; and in the middle of the bench five or six long grooves are to be scooped out about four inches distant from one another, three inches will be a sufficient breadth for them, and the depth in like manner; and although the number of grooves I have mentioned will be sufficient, there is nothing to prevent their being made all over the bench. And the bench should have in its middle a pretty deep hole, of a square shape, and of about three inches in size; and into this hole, when judged necessary, is to be adjusted a corresponding piece of wood, rounded above, which, at the proper time, is to be adjusted between the perineum and the head of the thigh-bone. This upright piece of wood prevents the body from yielding to the force dragging downward by the feet; for sometimes this piece of wood serves the purpose of counter-extension upward; and sometimes, too, when extension and counter-extension are made, this piece of wood, if susceptible of some motion to this side or that, will serve the purpose of a lever for pushing the head of the thigh-bone outward. It is on this account that several grooves are scooped out on the bench, so that this piece of wood, being erected at the one which answers, may act as a lever, either on the sides of the articular heads of bones, or may make pressure direct on the heads along with the extension, according as it may suit to push inward or outward with the lever; and the lever may be either of a round or broad form, as may be judged proper; for sometimes the one form and sometimes the other suits with the articulation. This mode of applying the lever along with extension is applicable in the reduction of all dislocations of the thigh. In the case now on hand, a round lever is proper; but in dislocations outward a flat lever will be the suitable one. By means of such machines and of such powers, it appears to me that we need never fail in reducing any dislocation at a joint.

73. And one might find out other modes of reduction for this joint. If the large bench were to have raised on it two posts about a foot ( *in diameter?* ), and of a

suitable height, on each side near its middle, and if a transverse piece of wood like the step of a ladder, were inserted in the posts, then if the sound leg were carried through between the posts, and the injured limb were brought over the transverse piece of wood, which should be exactly adapted in height to the joint which is dislocated (and it is an easy matter so to adjust it, for the step of the ladder should be made a little higher than required, and a convenient robe, folded several times, is to be laid below the patient's body), then a piece of wood, of suitable breadth and length, is to be laid below the limb, and it should reach from the ankle to beyond the head of the thigh-bone, and should be bound moderately tight to the limb. Then the limb being extended, either by means of the pestle-like piece of wood (formerly described), or by any of the other methods of extension, the limb which is carried over the step with the piece of wood attached to it, is to be forced downward, while somebody grasps the patient above the hip-joint. In this manner the extension will carry the head of the thighbone above the acetabulum, while the lever power that is exercised will push the head of the thigh-bone into its natural seat. All the above-mentioned powers are strong, and more than sufficient to rectify the accident, if properly and skill-fully applied. For, as formerly stated, in most cases reduction may be effected by much weaker extension, and an inferior apparatus.

74. If the head of the bone slip outward, extension and counter-extension must be made as described, or in a similar manner. But along with the extension a broad lever is to be used to force the bone from without inward, the lever being placed at the nates or a little farther up, and some person is to steady the patient's body, so that it may not yield, either by grasping him at the buttocks with his hands, or this may be effected by means of another similar lever, adjusted to one of the grooves, while the patient has something laid below him, and he is secured, and the dislocated thigh is to be turned gently from within outward at the knee. Suspension will not answer in this form of dislocation, for, in this instance, the arm of the person suspended from him, would push the head of the thigh-bone from the acetabulum. But one might use the piece of wood placed below him as a lever, in such a manner as might suit with this mode of dislocation; it must work from without. But what use is there for more words? For if the extension be well and properly done, and if the lever be properly used, what dislocation of the joint could occur, that might not be thus reduced?

75. In dislocation of the thigh, backward, extension and counter-extension should be made as has been described; and having laid on the bench a cloth which has been folded several times, so that the patient may lie soft, he is to be laid on his

face, and extension thus made, and, along with the extension, pressure is to be made with a board, as in the case of humpback, the board being placed on the region of the nates, and rather below than above the hip-joint; and the hole made in the wall for the board should not be direct over, but should be inclined a little downward, toward the feet. This mode of reduction is particularly appropriate to this variety of dislocation, and at the same time is very strong. But perhaps, instead of the board, it might be sufficient to have a person sitting ( *on the seat of luxation?* ), or pressing with his hands, or with his foot, and suddenly raising himself up, along with the extension. None of the other afore-mentioned modes of reduction are natural in this form of dislocation.

76. In dislocation forward, the same mode of extension should be made; but a person who has very strong hands, and is well trained, should place the palm of the one hand on the groin, and taking hold of this hand with the other, is at the same time to push the dislocated part downward, and at the same time to the fore part of the knee. This method of reduction is most especially conformable to this mode of dislocation. And the mode of suspension is also not far removed from being natural, but the person suspended should be well trained, so that his arm may not act as a lever upon the joint, but that the force of the suspension may act about the middle of the perineum, and at the os sacrum.

77. Reduction by the bladder is also celebrated in dislocations at this joint, and I have seen certain persons who, from ignorance, attempted to reduce both dislocations outward and backward therewith, not knowing that they were rather displacing than replacing the parts; it is clear, however, that he who first invented this method intended it for dislocation inward. It is proper, then, to know how the bladder should be used, if it is to be used, and it should be understood that many other methods are more powerful than it. The bladder should be placed between the thighs uninflated, so that it may be carried as far up the perineum as possible, and the thighs beginning at the patella are to be bound together with a swathe, as far up as the middle of the thigh, and then a brass pipe is to be introduced into one of the loose feet of the bladder, and air forced into it, the patient is to lie on his side with the injured limb uppermost. This, then, is the preparation; some, however, do the thing worse than as I have described, for they do not bind the thighs together to any extent, but only at the knees, neither do they make extension, whereas extension should be made, and yet some people by having the good fortune to meet with a favorable case, have succeeded in making reduction. But it is not a convenient method of applying force, for the bladder, when inflated, does not present its most prominent part to the articular

extremity of the femur, which is the place that ought to be more especially pressed outward, but its middle, which probably corresponds with the middle of the thigh, or still lower down, for the thighs are naturally curved, being fleshy, and in contact above, and becoming smaller downward, so that the natural configuration of the parts forces the bladder from the most proper place. And if a small bladder be introduced, its power will be small, and unable to overcome the resistance of the articular bone. But if the bladder must be used, the thighs are to be bound together to a considerable extent, and the bladder is to be inflated along with the extension of the body, and in this method of reduction both legs are to be bound together at their extremity.

78. The prime object of the physician in the whole art of medicine should be to cure that which is diseased; and if this can be accomplished in various ways, the least troublesome should be selected; for this is more becoming a good man, and one well skilled in the art, who does not covet popular coin of base alloy. With regard to the subject now on hand, the following are domestic means of making extension of the body, so that it is easy to choose from among the things at hand:-In the first place, when soft and supple thongs are not at hand for ligatures, either iron chains, or cords, or cables of ships, are to be wrapped round with scarfs or pieces of woolen rags, especially at the parts of them which are to be applied, and in this state they are to be used as bands. In the second place, the patient is to be comfortably laid on the strongest and largest couch that is at hand, and the feet of the couch, either those at the (*patient's?*) head, or those at the feet, are to be fastened to the threshold, either within or without, as is most suitable; and a square piece of wood is to be laid across, and extending from the one foot to the other; and if this piece of wood be slender, it should be bound to the feet of the couch, but, not withstanding, if it be thick, there will be no necessity for this; then the heads of the ligatures, both of those at the head and those at the feet, are to be fastened to a pestle, or some such piece of wood, difficult to reduce at either end; the ligatures should run along the line of the body, or be a little elevated above it, and it should be stretched proportionally to the pestles, so that, standing erect, the one may be fastened to the threshold, and the other to the transverse piece of wood. Extension is then to be made by bending back the ends of the pestles. A ladder, having strong steps, if laid below the bed, will serve the purpose of the threshold and the piece of wood laid along (*the foot of the couch?*), as the pestles can be fastened to the steps at either end, and when drawn back they thus make extension of the ligatures. Dislocation, inward or forward, may be reduced in the following manner: a ladder is to be fastened in the ground, and the man is to be seated upon it, and then the sound

leg is to be gently stretched along and bound to it, wherever it is found convenient; and water is to be poured into an earthen vessel, or stones put into a hamper and slung from the injured leg, so as to effect the reduction. Another mode of reduction: a cross-beam is to be fastened between two pillars of moderate height; and at one part of the cross-beam there should be a protuberance proportionate to the size of the nates; and having bound a coverlet round the patient's breast, he is to be seated on the protuberant part of the cross-beam, and afterward the breast is to be fastened to the pillar by some broad ligature; then some one is to hold the sound leg so that he may not fall off, and from the injured limb is to be suspended some convenient weight, as formerly described.

79. It should be particularly known that the union of all bones is, for the most part, by a head and socket ( *cotyle* ); in some of these the place ( *socket?* ) is cotyloid and oblong, and in some the socket is glenoid ( *shallow?* ). In all dislocations reduction is to be effected, if possible, immediately, while still warm, but otherwise, as quickly as it can be done; for reduction will be a much easier and quicker process to the operator, and a much less painful one to the patient, if effected before swelling comes on. But all the joints when about to be reduced should be first softened, and gently moved about; for, thus they are more easily reduced. And, in all cases of reduction at joints, the patient must be put on a spare diet, but more especially in the case of the greatest joints, and those most difficult to reduce, and less so in those which are very small and easily reduced.

80. If any joint of the fingers is dislocated, whether the first, second, or the third, the same method of reduction is to be applied, but the largest joints are the most difficult to reduce. There are four modes of displacement-either upward, downward, or to either side; most commonly upward, and most rarely laterally, and in consequence of violent motion. On both sides of its articular cavity there is a sort of raised border. When the dislocation is upward or downward, owing to the articular cavity having smoother edges there than at the sides, if the joint of it be dislocated, it is more easily reduced. This is the mode of reduction:-The end of the finger is to be wrapped round with a fillet, or something such, that, when you lay hold of it and make extension, it will not slip; and when this is done, some person is to grasp the arm at the wrist, and another is to take hold of the finger which is wrapped in the fillet, and then each is to make considerable extension toward himself, and at the same time the projecting bone is to be pushed into its place. But, if the dislocation be lateral, the same mode of reduction is to be used; but when you think that the extremity of the bone has

cleared the rim, at the same time that extension is made, the bone is to be pushed direct into its place, while another person on the other side of the finger is to take care and make counter-pressure, so that it may not again slip out there. The twisted nooses formed from palm-shoots are convenient for effecting reduction, if you will make extension and counter-extension by holding the twisted string in the one hand and the wrist in the other. When reduced, you must bind the part as quickly as possible with bandages; these are to be very slender and waxed with cerate, neither very soft nor very hard, but of middle consistence; for that which is hard drops off from the finger, while that which is soft and liquid is melted and lost by the increased heat of the finger. The bandage is to be loosed on the third or fourth day; but on the whole, if inflamed, it is to be the more frequently loosed, and if otherwise, more rarely; this I say respecting all the joints. The articulation of a finger is restored in fourteen days. The treatment of the fingers and of the toes is the same.

81. After all reductions of joints the patient should be confined to a restricted diet and abstinence until the seventh day; and if there be inflammation, the bandages are to be the more frequently loosed, but otherwise, less frequently, and the pained joint is to be kept constantly in a state of rest, and is to be laid in the most convenient position possible.

82. Accidents at the knee are more mild than at the elbow, from its being compact, regular, and elegant in its construction; and, therefore, it is more readily dislocated and reduced. It is most frequently dislocated inward, but also outward and backward. The modes of reduction are these: by flexion at the knee, or by sudden calcitration, or having rolled a swathe into a ball, and fixed it in the ham, the patient's body is to be suddenly dropped on its bended knees. Dislocation backward, also, as in the case of the elbow, may be reduced by moderate extension, and to either side, either by flexion or calcitration, but also by moderate extension. The adjustment is the same in all cases. In dislocations backward which are not reduced, the patient cannot bend the joint, but neither can he, to any great extent, in the other varieties; the thigh and leg are wasted in front; but if inward the patients become bow-legged, and the external parts are wasted; but if outward they become more bandy-legged, but the impediment is less, for the body is supported on the larger of the bones, and the inner parts are wasted. When these accidents happen at birth or during adolescence, they follow the rule formerly stated.

83. Dislocations at the ankle-joints require strong extension, either with the hands



or some such means; and adjustment, which at the same time effects both purposes, as is common in all cases.

84. Injuries of the foot are to be remedied like those of the hand.

85. The bones connected with the leg, and which are dislocated, either at birth or during adolescence, follow the same course as those in the hand.

86. When persons jumping from a height pitch on the heel, so as to occasion separation ( *diastasis* ) of the bones, ecchymosis of the veins, and contusion of the nerves; when these symptoms are very violent there is danger of sphacelus, and that the case may give trouble during life, for the bones are so constructed as to slip from one another, and the nerves communicate together. And, indeed, in cases of fracture, either from an injury in the leg or thigh, or in paralysis of the nerves ( *tendons?* ) connected with these parts, or from neglect during confinement to bed, when the heel gets blackened the most serious consequences result therefrom. Sometimes, in addition to the sphacelus, there come on acute fevers accompanied with hiccup, aberration of intellect, and speedy death, with lividities of the large blood-vessels. With regard to the symptoms attending exacerbations, if the ecchymosed and blackened parts and those around be somewhat hard and red, and if along with the hardness there be lividity, mortification is to be apprehended; but if the parts be slightly livid, or even very livid, and the swelling diffused, or if greenish and soft, these appearances, in such cases, are all favorable. The treatment, if no fever be present, consists in the administration of hellebore, but otherwise (it is not to be given, but *oxyglyky* ( *decoction of honeycombs and vinegar* ) is to be given for drink, if required. Bandaging as in the other articulations: above all, more especially in contusions, the bandages should be numerous and softer than usual, but the compression should be less; most turns should be made around the heel. Position, like the bandaging, should be so regulated as not to determine to the heel. Splints are not to be used.

87. When the foot is dislocated, either alone or along with its epiphysis, the displacement is, for the most part, to the inside. If not reduced, in the course of time, the hip, the thigh, and the side of the leg opposite the dislocation, become atrophied. Reduction is the same as in the wrist, but the extension requires to be very powerful. Treatment, agreeably to the general rule for joints. Exacerbations do occur, but less frequently than in dislocations at the wrist, provided the parts get rest. While they remain at rest the diet should be restricted. Those which

occur at birth, or during adolescence, follow the rule formerly stated.

## ON FRACTURES



*Translated by Charles Darwin Adams*

1. In treating fractures and dislocations, the physician must make the extension as straight as possible, for this is the most natural direction. But if it incline to either side, it should rather turn to that of pronation, for there is thus less harm than if it be toward supination. Those, then, who act in such cases without deliberation, for the most part do not fall into any great mistake, for the person who is to have his arm bound, presents it in the proper position from necessity, but physicians who fancy themselves learned in these matters, are they who commit blunders. There is no necessity for much study, then, in order to set a broken arm, and in a word, any ordinary physician can perform it; but I am under the necessity of giving the longer directions on this subject, because I know physicians who have the reputation of being skilled in giving the proper positions to the arm in binding it up, while in reality they are only showing their own ignorance. But many other things in our art are judged of in this manner, for people rather admire what is new, although they do not know whether it be proper or not, than what they are accustomed to, and know already to be proper; and what is strange, they prefer to what is obvious. I must now state what the mistakes of medical men are, which I wish to unteach, and what instructions I have to give as to the management of the arm; for what I have to say regarding it, will apply to the other bones in the body.

2. The arm, then, for that is the subject we were treating of, was presented in the prone position to be bound, but the physician forced his patient to hold it as the archers do when they project the shoulder, and in this position he bound it up, thinking within himself that he was acting according to Nature, and in proof of this he pointed out that all the bones in the fore-arm were thus in a straight line, and that the integuments both inside and outside, were also in a straight line, and that the flesh and nerves (*tendons?*) were thus put in their natural position, and he appealed to what happens in archery, as a proof of this. And so saying, and so doing, he is looked up to as a sage; and yet he forgets that in all the other arts and performances, whether executed by strength or dexterity, what is reckoned the natural position is not the same, and that in the same piece of work it may

happen that the natural position of the right arm is not the same as that of the left. For there is one attitude in throwing the javelin, and another in slinging, another in casting stones, another in boxing, and another in a state of repose. And whatever arts one examines, it will be found that the natural position of the arms is not the same in each, but that in every case the arms are put into the attitude which suits best with the instrument that is used, and the work to be performed. In practicing archery, no doubt this is the best attitude of the left arm, for gingly-moid extremity of the humerus being fixed in the cavity of the ulna, in this position, throws the bones of the forearm and arm into a line, as if they constituted a single bone, and all flexion at the joint is prevented in this position. It is no doubt certain that the member is thus put into the most unbending and extended position possible, so as not to be overcome or yield when the string is drawn by the right arm, and thus will the archer be enabled to draw the string farthest, and discharge his arrow with the greatest force and rapidity, for arrows thus discharged have the greatest swiftness and force, and are carried to the greatest distances. But there is nothing in common between the binding up of an arm and archery. Moreover, if having thus bound up the arm, the physician direct the patient to keep it thus, he will occasion him greater pain than he had from the wound itself; and thus also, if the physician order him to bend the arm, neither the bones, the nerves, nor the flesh will any longer be in the same condition, but will be arranged differently, having overcome the bandaging. What use, then, is there of the archer's attitude? And these mistakes, the physician, conceited in his knowledge, would probably not have committed if he had allowed the patient himself to present his arm.

3. But another physician putting the arm into the state of supination, gives orders to extend the arm thus, and bandages it in this position, reckoning it the one according to nature, judging thus from the skin, and also fancying the bones to be thus in their natural position, because the bone which protrudes at the wrist, where the little finger is, appears to be in a line with the bone from which people measure the bone of the fore-arm. These things he brings forward as proofs that the parts are in their natural state, and he is supposed to speak correctly. But, indeed, if the arm be kept stretched in a supine position, it will become very painful, and this fact any one may ascertain by extending his own arm in this attitude. And also a weaker man grasping with his hands a stronger man whose arm is turned in a supine position, could lead him wherever he chose, and neither, if a man held a sword thus in his hand, could he make any proper use of it, so constrained is this position. And, moreover, if, when a physician has thus bound up the arm, he allow it to remain in the same position, the patient will

endure greater pain if he walk about, but considerable, even if he remain at rest. And thus, too, if he shall bend the arm, the muscles and the bones must necessarily assume a different position. But, in addition to other mischief, he is ignorant of these facts regarding the position, that the bone which protrudes at the wrist, close to the little finger, belongs to the fore-arm, whereas the one at the joint, from which people measure the fore-arm, is the head of the humerus. He fancies that both these belong to the same bone, and many others are of this opinion. The latter, in fact, is the same part as that which is called the elbow, upon which we sometimes rest, and when he holds the arm thus in a supine position, in the first place the bone appears distorted, and in the next place the tendons which extend from the carpus along the inner side and from the fingers become distorted while the arm has a supine position; for these tendons proceed to the bone of the humerus, from which the fore-arm is measured. Such, and so many mistakes and marks of ignorance are committed, regarding the natural construction of the arm. But if one will extend a broken arm as I direct, he will turn the bone, situated at the extremity of the little finger, into the straight line, and also the one at the elbow, and the tendons which stretch from the carpus to the extremity of the humerus will be placed in the straight line; and when the arm is suspended in a sling, it will be in the same attitude as that in which it was bound up, and will give no pain to the patient when he walks about, nor when he lies reclined, and will not become fatigued. The man should be so seated that the prominent part of the bone may be turned to the brightest light which is at hand, so that the operator in making the extension, may be at no loss to discover if it be sufficiently straight. The prominence of a broken bone could not escape being detected by the hand of an experienced person, when applied for this purpose, and, moreover, the projecting part is particularly painful to the touch.

4. In cases of fracture in either of the bones of the forearm, it is easier to effect a cure if the upper bone be broken, although it be the thicker one, both because the sound bone is situated below, and forms a support to it, and because the deformity is more easily concealed, there being a thick mass of flesh on the upper side, except near to the wrist. But the lower bone is without a covering of flesh, is not easily concealed, and requires stronger extension. If it is not this bone, but the other which is broken, a more feeble extension proves sufficient, but if both be broken, a more powerful extension is required. In the case of a young person I have known the extension made more strong than was necessary, but in general the extension made is less than what is required. And when they are extended, the physician should apply the palms of the hands, and adjust the fractured parts and then having rubbed the parts with cerate, but not in large

quantity so that the bandages may not come off, it is to be bound up in this state, care being taken that the hand be not lower than the elbow, but a little higher, so that the blood do not flow toward the extremity, but may be determined to the upper part; and then it is to be secured with the bandage, the head of which is to be placed at the fracture, and the bandage should impart firmness to the parts without occasioning strong compression. When you have carried the bandage twice or thrice round at the seat of the fracture, it is to be carried upward, so that the afflux of blood into it may be stopped, and the bandage should terminate there, and the first bandages ought not to be long. The head of the second bandage is also to be placed upon the seat of the fracture, and a single round of it being made there, it is then to be carried downward, and is not to be applied so tight as the other, and there should be greater distances between the turns, so that the bandage may prove sufficient to revert to the spot where the other terminated. The bandages may be rolled to the left hand or to the right, or to whatever side suits best with the position of the fractured arm, or according to the inclination which it may have. Afterward we must place along the arm, compresses, smeared with a little cerate, for thus they occasion less uneasiness, and are more easily arranged. And then we must apply the bandages crossways, sometimes to the right hand, and sometimes to the left, for the most part beginning below and terminating above, but sometimes commencing above and ending below. The parts which are thinly covered with flesh should be wrapped round with compresses, and inequalities should be made up, not by a number of folds at once, but by degrees. Some slack turns are also to be made around the wrist, to this side and to that. These two bandages are sufficient at first.

5. And these are the signs that the patient has been well treated and properly bandaged: if you ask him if the arm feels tight, and he says it does, but moderately so, and especially about the fracture; and this reply he should make all along, if the bandage be properly applied. And these are symptoms of the bandaging being moderately tight; if for the first day and night he fancies that the tightness does not diminish, but rather increases; and if on the next day there be a soft swelling in the hand, for this is a sign of moderate compression, but at the end of the second day the compression should feel less, and on the third day the bandaging should appear loose. And if any of these symptoms be wanting, you may conclude that the bandaging is slacker than it should be; or if any of these symptoms be in excess, you may infer that the compression is more than moderate; and judging from these, you will apply the next bandages either slacker or tighter. Having removed the bandages on the third day, you must make extension and adjust the fracture, and bind it up again; and if the first bandaging

was moderately applied, the second bandaging should be made somewhat tighter. The heads the bandages should be placed on the fractures as in the former case; for, so doing, the humors will be driven to the extremities, whereas if you bandage any other part beforehand, the humors will be forced from it to the seat of the fracture: it is of much importance that this should be properly understood. Thus the bandaging and compression should always commence at the seat of the fracture, and everything else should be conducted on the same principle, so that the farther you proceed from the fracture, the compression should always be the less. The bandages should never be actually loose, but should be smoothly put on. At each dressing the number of bandages should be increased; and the patient, if asked, should answer, that he feels the bandages somewhat tighter than on the former occasion, especially about the fracture, and everything else in proportion; and with respect to the swelling, the pain, and recovery, everything should proceed as after the former dressing. But on the third day the outer bandaging should appear looser. Then having removed the bandages, you should bind it up again, somewhat tighter than before, and with all the bandages which will be required on the occasion, and afterwards one ought to experience the same train of symptoms as at the former periods of bandaging.

6. When the third day arrives, that is to say, the seventh from the first dressing, if properly done, the swelling in the hand should be not very great; and the part which has been bandaged should be found more slender and less swelled at each time, and on the seventh day the swelling should be quite gone, and the broken bones should be more readily moved, and admit of being easily adjusted. And if these things be so, you should, after setting the fracture, apply the bandages so as to suit the splints, and a little more tight than formerly, unless there be more pain from the swelling in the hand. When you have applied the bandages, you must adjust the splints all around the limb, and secure them with strings so loose as just to keep them in their place, without the application of the splints contributing at all to the compression of the arm. After this the pain and recovery should proceed as in the preceding periods of the bandaging. But if, on the third day, the patient say that the bandaging is loose, you must then fasten the splints, especially at the fracture, but also elsewhere, wherever the bandaging is rather loose than tight. The splint should be thickest where the fracture protrudes, but it should not be much more so than elsewhere. Particular attention should be paid to the line of the arm corresponding to the thumb, so that no splint be laid on it, but upon each side of it, nor in the line of the little finger where the bone is prominent at the wrist, but on each side of it. And if it be found necessary that

splints should be applied in these directions at the seat of the fracture, they should be made shorter than the others, so as that they may not reach the bones which are prominent at the wrist, for otherwise there is danger of ulceration, and of the tendons being laid bare. The splints should be adjusted anew every third day, in a very gentle manner, always keeping in mind that the object of the splints is to maintain the lower bandages in their place, and that they are not needed in order to contribute to the compression.

7. If, then, you see that the bones are properly adjusted by the first dressings, and that there is no troublesome pruritus in the part, nor any reason to suspect ulceration, you may allow the arm to remain bandaged in the splints until after the lapse of more than twenty days. The bones of the fore-arm generally get consolidated in thirty days altogether; but there is nothing precise in this matter, for one constitution differs from another, and one period of life from another. When you remove the bandages, you must pour hot water on the arm and bind it up again, but somewhat slacker, and with fewer bandages than formerly: and again on the third day you undo the bandages, and bind it still more loosely, and with still fewer bandages. And if, while the arm is bound up in the splints, you should at any time suspect that the bones do not lie properly, or if anything about the bandages annoys the patient, you should loose them at the middle of the time, or a little earlier, and apply them again. A diet slightly restricted will be sufficient in those cases in which there was no external wound at first, or when the bone does not protrude; but one should live rather sparingly until the tenth day, as being now deprived of exercise; and tender articles of food should be used, such as moderately loosen the bowels; but one should abstain altogether from flesh and wine, and then by degrees resume a more nourishing diet. This diet. may be laid down as a just rule in the treatment of fractures, both as to how they should be treated, and what will be the results of a proper plan of treatment; so that one may know, that if things do not turn out thus, there has been some defect or excess in the treatment. And in this simple plan of treatment it is necessary to attend also to the following directions, which some physicians pay little attention to, although, when improperly executed, they are capable of marring the whole process of bandaging: for if both the bones be broken, or the lower one only, and the patient who has got his arm bandaged keep it slung in a shawl, and that the shawl is particularly loose at the fracture, so that the arm is not properly suspended at this end or that, in this case the bone must necessarily be found distorted upwards; whereas, when both bones are thus broken, if the arm recline in the shawl at the wrist and elbow, but the rest of it be not kept up, the bone in this case will be distorted to the lower side. The greater part of the



arm and the wrist of the hand should therefore be equally suspended in a broad soft shawl.

8. When the arm is broken, if one stretch the fore-arm and adjust it while in this position, the muscle of the arm will be bound while extended; but when the dressing is over, and the patient bends his arm at the elbow, the muscle of the arm will assume a different shape. The following, then, is the most natural plan of setting the arm: having got a piece of wood a cubit or somewhat less in length, like the handles of spades, suspend it by means of a chain fastened to its extremities at both ends; and having seated the man on some high object, the arm is to be brought over, so that the armpit may rest on the piece of wood, and the man can scarcely touch the seat, being almost suspended; then having brought another seat, and placed one or more leather pillows under the arm, so as to keep it a moderate height while it is bent at a right angle, the best plan is to put round the arm a broad and soft skin, or broad shawl, and to hang some great weight to it, so as to produce moderate extension; or otherwise, while the arm is in the position I have described, a strong man is to take hold of it at the elbow and pull it downward. But the physician standing erect, must perform the proper manipulation, having the one foot on some pretty high object, and adjusting the bone with the palms of his hands; and it will readily be adjusted, for the extension is good if properly applied. Then let him bind the arm, commencing at the fracture, and do otherwise as directed above; let him put the same questions and avail himself of the same signs to ascertain whether the arm be moderately tight or not; and every third day let him bind it anew and make it tighter; and on the seventh or ninth day let him bind it up with splints, and leave it so until after the lapse of more than thirty days. And if he suspect that the bone is not lying properly, let him remove the bandages in the interval, and having adjusted the arm, let him bind it up again. The bone of the arm is generally consolidated in forty days. When these are past, the dressing is to be removed, and fewer and slacker bandages applied instead of it. The patient is to be kept on a stricter diet, and for a longer space of time than in the former case; and we must form our judgment of it from the swelling in the hand, looking also to the strength of the patient. This also should be known, that the arm is naturally inclined outward; to this side, therefore, the distortion usually takes place, if not properly treated; but indeed, all the other bones are usually distorted during treatment for fracture to that side to which they naturally incline. When, therefore, anything of this kind is suspected, the arm is to be encircled in a broad shawl, which is to be carried round the breast, and when the patient goes to rest, a compress of many folds, or some such thing, is to be folded and placed between the elbow and the side, for

thus the bending of the bone will be rectified, but care must be taken lest it be inclined too much inwards.

9. The human foot is composed of several small bones like the hand. These bones therefore are scarcely ever broken, unless the skin at the same time be wounded by some sharp and heavy body. The treatment of such injuries, therefore, will be delivered under the head of wounds. But if any bone be moved from its place, or a joint of the toes be luxated, or any of the bones of the part called the tarsus be displaced, it must be forced back again to its place as described with regard to the hand; and is to be treated with cerate, compresses, and bandages, like the fractures, with the exception of the splints; and is to be secured tightly in the same way, and the bandages renewed on the third day; and the patient thus bandaged should return the same answers as in fractures, as to the bandages feeling tight or slack. All these bones recover perfectly in twenty days, except those that are connected with the bones of the leg, and are in a line with them. It is advantageous to lie in bed during the whole of this time; but the patients, thinking light of the complaint, have not perseverance to do this, and they walk about before they get well; wherefore many of these do not make a perfect recovery. And often the pain puts them in mind of the injury; and deservedly, for the feet sustain the weight of the whole body. When, therefore, they walk about before they are whole, the joints which have been luxated are cured incompletely; and, on that account, while walking about, they have pains in the leg from time to time.

10. But those bones which are connected with the bones of the leg are larger than the others, and the cure of them when luxated is more protracted. The mode of treatment then is the same; but we must use more bandages and more splints, and the bandage is to be carried round to this side and to that, and pressure is to be made as in the other cases, particularly at the seat of the luxation, and the first circles of the bandages are to be made there. And at each time the bandages are taken off, much hot water is to be used, for in all injuries at joints the affusion of hot water in large quantity is to be had recourse to. And the same symptoms of compression and relaxation should manifest themselves in the same times, as in the cases formerly treated of, and the subsequent bandagings should be conducted in like manner. These cases get completely well for the most part in forty days, if the patients have resolution to keep their bed; but if not, they are subjected to the complaints formerly described, or still worse.

11. In persons who jumping from any high object pitch upon their heel with great

force, the bones are separated, and the veins pour forth their contents, owing to the contusion of the flesh surrounding the bone, and hence a swelling and much pain supervene. For this bone (os calcis) is not a small one, protrudes beyond the line of the leg, and is connected with important veins and tendons; for the back tendon of the leg is inserted into this bone. Such cases are to be treated with cerate, and with compresses and bandages; and hot water is to be used in large quantity; and they require many bandages, which ought to be particularly good and appropriate. And if the patient happen to have a tender skin about the heel, nothing is to be done to it; but if, as some have it, the skin be thick and hardened, it is to be pared down smoothly and thinned, but without wounding it. It is not everybody who can apply the bandage properly in such cases; for if one shall bind the parts, as in other accidents about the ankle, sometimes bringing a fold round the foot and sometimes round the tendon, these turns leave out the heel, which is the seat of the contusion, and thus there is danger that the os calcis may sphacelate; and if this should take place, the impediment may endure for life and also in all the other cases of sphacelus, not proceeding from such a cause as this; as when, from being carelessly allowed to lie in a certain position during confinement to bed, the heel becomes black, or when a serious wound has occurred in the leg and it is long of healing, and is connected with the heel, or when the same thing happens in the thigh, or when in any disease a protracted decubitus takes place on the back, in all such cases the sores are inveterate, troublesome, and frequently break out again, unless particular attention be paid to the cure, along with much rest, as in all the cases attended with sphacelus. And cases of sphacelus connected with this cause, in addition to other inconveniences, are attended with great danger to the whole body. For they are apt to be attended with very acute fevers, of the continual type, accompanied with tremblings, hiccup, aberration of intellect, and which prove fatal within a few days: and there may be lividities of bloody veins, with nausea, and gangrene from pressure; these diseases may occur, besides the sphacelus. Those which have been described are the most violent contusion; but in general the contusions are mild, and no great care is required with regard to the treatment, and yet it must be conducted properly. But when the contusion appears to be severe, we must do as described above, making many turns of the bandage around the heel, sometimes carrying it to the extremity of the foot, sometimes to the middle, and sometimes around the leg; and, in addition, all the surrounding parts are to be bandaged in this direction and that, as formerly described; and the compression should not be made strong, but we should make use of many bandages, and it is better also to administer hellebore the same day or on the morrow; and the bandages should be removed on the third day and reapplied. And these are the

symptoms by which we discover whether the case will get worse or not: when the extravasated blood, the lividities, and the surrounding parts become red and hard, there is danger of an exacerbation. But if there be no fever, we must give emetics, as has been said, and administer the other remedies which are applicable when the fever is not of a continual type; but if continual fever be present, we must not give strong medicines, but enjoin abstinence from solid food and soups, and give water for drink, and not allow wine but *oxyglyky* (a composition from vinegar and honey?). But if the case be not going to get worse, the ecchymosed and livid parts, and those surrounding them become greenish and not hard; for this is a satisfactory proof in all cases of ecchymosis, that they are not to get worse; but when lividity is complicated with hardness, there is danger that the part may become blackened. And we must so manage the foot as that it may be generally raised a little higher than the rest of the body. Such a patient will get well in sixty days if he keep quiet.

12. The leg consists of two bones, of which the one is much more slender than the other at one part, but not much more slender at another. These are connected together at the foot, and form a common epiphysis, but they are not united together along the line of the leg; and at the thigh they are united together and form an epiphysis, and this epiphysis has a diaphysis; but the other bone in a line with the little toe is a little longer. Such is the nature of the bones of the leg.

13. Sometimes the bones connected with the foot are displaced, sometimes both bones with their epiphysis; sometimes the whole epiphysis is slightly moved, and sometimes the other bone. These cases are less troublesome than the same accidents at the wrist, if the patients will have resolution to give them rest. The mode of treatment is the same as that of the other, for the reduction is to be made, as of the other, by means of extension, but greater force is required, as the parts of the body concerned are stronger in this case. But, for the most part, two men will be sufficient, by making extension in opposite directions, but, notwithstanding, if they are not sufficiently strong, it is easy to make more powerful extension in the following way: having fixed in the ground either the nave of a wheel, or any such object, something soft is to be bound round the foot, and then some broad thongs of ox-skin being brought round it, the heads of the thongs are to be fastened to a pestle or any other piece of wood, the end of which is to be inserted into the nave, and it, the pestle, is to be pulled away, while other persons make counter-extension by grasping the shoulders and the ham. It is also sometimes necessary to secure the upper extremity otherwise; this if you desire to effect, fasten deeply in the ground a round, smooth piece of wood, and place

the upper extremity of the piece of wood at the perineum, so that it may prevent the body from yielding to the pulling at the foot, and, moreover, to prevent the leg while stretched, from inclining downward; some person seated at his side should push back the hip, so that the body may not turn round with the pulling, and for this purpose, if you think fit, pieces of wood may be fastened about the armpits on each side, and they are to be stretched by the hands, and thus secured, while another person takes hold of the limb at the knee, and aids in thus making counter-extension. Or thus, if you prefer it: having bound other thongs of leather about the limb, either at the knee, or around the thigh, and having fastened another nave of a wheel in the ground above the head, and adjusted the thongs piece of wood adapted to the nave, extension may thus be made in the opposite direction to the feet. Or if you choose, it may be done thus: instead of the naves, lay a moderate-sized beam under the couch, and then having fastened pieces of wood in this beam, both before and behind the head, make counter-extension by means of thongs, or place windlasses at this extremity and that, and make extension by means of them. There are many other methods of making extension. But the best thing is, for any physician who practices in a large city, to have prepared a proper wooden machine, with all the mechanical powers applicable in cases of fractures and dislocation, either for making extension, or acting as a lever. For this purpose it will be sufficient to possess a board in length, breadth, and thickness, resembling the quadrangular threshing-boards made of oak.

14. When you have made proper extension, it is easy reduce the joint, for the displaced bone is thus raised into a line with the other. And the bones are to be adjusted with the palms of the hands, pressing upon the projecting bone with the one, and making counter-pressure below the ankle with the other. When you have replaced the bones, you must apply the bandages while the parts are upon the stretch, if you possibly can; but if prevented by the thongs, you must loose them, and make counter-extension until you get the bandages applied. The bandage is to be applied in the manner formerly described, the heads of the bandages being placed on the projecting part, and the first turns made in like manner, and so also with regard to the number of compresses and the compression; and turns of the bandages are to be brought frequently round on this and on that side of the ankle. But this joint must be bound more tight at the first dressing than in the case of the hand. But when you have applied the bandage, you must place the bandaged part somewhat higher than the rest of the body, and in such a position that the foot may hang as little as possible. The attenuation of the body is to be made proportionate to the magnitude of the

luxation, for one luxation is to be a small, and another to a great extent. But in general we must reduce more, and for a longer time, in injuries about the legs, than in those about the hands; for the former parts are larger and thicker than the latter, and it is necessary that the body should be kept in a state of rest, and in a recumbent position. There is nothing to prevent or require the limb to be bandaged anew on the third day. And all the treatment otherwise is to be conducted in like manner, as in the preceding cases. And if the patient have resolution to lie quiet, forty days will be sufficient for this purpose, if only the bones be properly reduced, but if he will not lie quiet, he will not be able to use the limb with ease, and he will find it necessary to wear a bandage for a long time. When the bones are not properly replaced, but there has been some defect in this respect, the hip, the thigh, and the leg become wasted, and if the dislocation be inward, the external part of the thigh is wasted, and *vice versa* . But for the most part the dislocation is inward.

15. And when both bones of the leg are broken without a wound of the skin, stronger extension is required. We may make extension by some of the methods formerly described, provided the bones ride over one another to a considerable degree. But extension by men is also sufficient, and for the most part two strong men will suffice, by making extension and counterextension. Extension must naturally be made straight in a line with the leg and thigh, whether on account of a fracture of the bones of the leg or of the thigh. And in both cases they are to be bandaged while in a state of extension, for the same position does not suit with the leg and the arm. For when the fractured bones of the arm or fore-arm are bandaged, the fore-arm is suspended in a sling, and if you bind them up while extended, the figures of the fleshy parts will be changed in bending the arm at the elbow, for the elbow cannot be kept long extended, since persons are not in the custom of keeping the joint long in this form, but in a bent position, and persons who have been wounded in the arm, and are still able to walk about, require to have the arm bent at the elbow-joint. But the leg, both in walking and standing, is habitually extended, either completely or nearly so, and is usually in a depending position from its construction, and in order that it may bear the weight of the rest of the body. Wherefore it readily bears to be extended when necessary, and even when in bed the limb is often in this position. And when wounded, necessity subdues the understanding, since the patients become incapable of raising themselves up, so that they neither think of bending the limb nor of getting up erect, but remain lying in the same position. For these reasons, neither the same position nor the same mode of bandaging applies to the arm and to the leg. If, then, extension by means of men be sufficient, we should not have

recourse to any useless contrivances, for it is absurd to employ mechanical means when not required; but if extension by men be not sufficient, you may use any of the mechanical powers which is suitable. When sufficiently extended, it will be easy to adjust the bones and bring them into their natural position, by straightening and arranging them with the palms of the hand.

16. When the parts are adjusted, you should apply the bandages while the limb is in a stretched position, making the first turns to the right or to the left, as may be most suitable; and the end of the bandage should be placed over the fracture, and the first turns made at that place; and then the bandage should be carried up the leg, as described with regard to the other fractures. But the bandages should be broader and longer, and more numerous, in the case of the leg than in that of the arm. And when it is bandaged it should be laid upon some smooth and soft object, so that it may not be distorted to the one side or the other, and that there may be no protrusion of the bones either forward or backward; for this purpose nothing is more convenient than a cushion, or something similar, either of linen or wool, and not hard; it is to be made hollow along its middle, and placed below the limb. With regard to the canals ( *gutters?* ) usually placed below fractured legs, I am at a loss whether to advise that they should be used or not. For they certainly are beneficial, but not to the extent which those who use them suppose. For the canals do not preserve the leg at rest as they suppose; nor, when the rest of the body is turned to the one side or the other, does the canal prevent the leg from following, unless the patient himself pay attention; neither does the canal prevent the limb from being moved without the body to the one side or the other. And a board is an uncomfortable thing to have the limb laid upon, unless something soft be placed above it. But it is a very useful thing in making any subsequent arrangements of the bed and in going to stool. A limb then may be well or ill arranged with or without the canal. But the common people have more confidence, and the surgeon is more likely to escape blame, when the canal is placed under the limb, although it is not *secundum artem* . For the limb should by all means lie straight upon some level and soft object, since the bandaging must necessarily be overcome by any distortion in the placing of the leg, whenever or to whatever extent it may be inclined. The patient, when bandaged, should return the same answers as formerly stated, for the bandaging should be the same, and the same swellings should arise in the extremities, and the slackening of the bandages in like manner, and the new bandaging on the third day; and the bandaged part should be found reduced in swelling; and the new bandagings should be more tightly put on, and more pieces of cloth should be used; and the bandages should be carried loosely about the foot, unless the

would be near the knee. Extension should be made and the bones adjusted at every new bandaging; for, if properly treated, and if the swelling progress in a suitable manner, the bandaged limb will have become more slender and attenuated, and the bones will be more mobile, and yield more readily to extension. On the seventh, the ninth, or the eleventh day, the splints should be applied as described in treating of the other fractures. Attention should be paid to the position of the splints about the ankles and along the tendon of the foot which runs up the leg. The bones of the leg get consolidated in forty days, if properly treated. But if you suspect that anything is wanting to the proper arrangement of the limb, or dread any ulceration, you should loose the bandages in the interval, and having put everything right, apply them again.

17. But if the other bone (*fibula?*) of the leg be broken, less powerful extension is required, and yet it must not be neglected, nor be performed slovenly, more especially at the first bandaging. For in all cases of fracture this object should be attained then as quickly as possible. For when the bandage is applied tight while the bones are not properly arranged, the properly arranged, the part becomes more painful. The treatment otherwise is the same.

18. Of the bones of the leg, the inner one, called the tibia, is the more troublesome to manage, and requires the greater extension; and if the broken bones are not properly arranged, it is impossible to conceal the distortion, for the bone is exposed and wholly uncovered with flesh; and it is much longer before patients can walk on the leg when this bone is broken. But if the outer bone be broken, it causes much less trouble, and the deformity, when the bones are not properly set, is much more easily concealed, the bone being well covered with flesh; and the patients speedily get on foot, for it is the inner bone of the leg which supports the most of the weight of the body. For along with the thigh, as being in a line with weight thrown upon the thigh, the inner bone has more work to sustain; inasmuch as it is the head of the thigh-bone which sustains the upper part of the body, and it is on the inner and not on the outer side of the thigh, being in a line with the tibia; and the other half of the body approximates more to this line than to the external one; and at the same time the inner bone is larger than the outer, as in the fore-arm the bone in the line of the little finger is the slenderer and longer. But in the joint of the inferior extremity, the disposition of the longer bone is not alike, for the elbow and the ham are bent differently. For these reasons when the external bone is broken, the patients can soon walk about; but in fractures of the inner, it is a long time before they can walk.



18. When the thigh-bone is broken, particular pains should be taken with regard to the extension that it may not be insufficient, for when excessive, no great harm results from it. For, if one should bandage a limb while the extremities of the bone are separated to a distance from one another by the force of the extension, the bandaging will not keep them separate, and so the bones will come together again as soon as the persons stretching it let go their hold; for the fleshy parts ( *muscles?* ) being thick and strong, are more powerful than the bandaging, instead of being less so. In the case then which we are now treating of, nothing should be omitted in order that the parts may be properly distended and put in a straight line; for it is a great disgrace and an injury to exhibit a shortened thigh. For the arm, when shortened, might be concealed, and the mistake would not be great; but a shortened thigh-bone would exhibit the man maimed. For when the sound limb is placed beside it, being longer than the other, it exposes the mistake, and therefore it would be to the advantage of a person who would be improperly treated that both his legs should be broken, rather than either of them; for in this case the one would be of the same length as the other. When, then, proper extension has been made, you must adjust the parts with the palms of the hands, and bandage the limb in the manner formerly described, placing the hands of the bandages as was directed, and making the turns upward. And the patient should return the same answers to the same questions as formerly, should be pained and recover in like manner, and should have the bandaging renewed in the same way; and the application of the splints should be the same. The thigh-bone is consolidated in forty days.

20. But this also should be known, that the thigh-bone is curved rather to the outside than to the inside, and rather forward than backward; when not properly treated, then, the distortions are in these directions; and the bone is least covered with flesh at the same parts, so that the distortion cannot be concealed. If, therefore, you suspect anything of this kind, you should have recourse to the mechanical contrivances recommended in distortion of the arm. And a few turns of the bandage should be brought round by the hip and the loins, so that the groin and the articulation near the perineum may be included in the bandage; and moreover, it is expedient that the extremities of the splints should not do mischief by being placed on parts not covered with the bandages. The splints, in fact, should be carefully kept off the naked parts at both ends; and the arrangement of them should be so managed, as that they may not be placed on the natural protuberances of the bone at the knee-joint, nor on the tendon which is situated there.

21. The swellings which arise in the ham, at the foot, or in any other part from the pressure, should be well wrapped in unscoured and carded wool, washed with wine and oil, and anointed with cerate, before bandaging; and if the splints give pain they should be slackened. You may sooner reduce the swellings, by laying aside the splints, and applying plenty of bandages to them, beginning from below and rolling upward; for thus the swellings will be most speedily reduced, and the humors be propelled to the parts above the former bandages. But this form of bandaging must not be used unless there be danger of vesications or blackening in the swelling, and nothing of the kind occurs unless the fracture be bound too tight, or unless the limb be allowed to hang, or it be rubbed with the hand, or some other thing of an irritant nature be applied to the skin.

22. More injury than good results from placing below the thigh a canal which does not pass farther down than the ham, for it neither prevents the body nor the leg from being moved without the thigh. And it creates uneasiness by being brought down to the ham, and has a tendency to produce what of all things should be avoided, namely, flexion at the knee, for this completely disturbs the bandages; and when the thigh and leg are bandaged, if one bend the limb at the knee, the muscles necessarily assume another shape, and the broken bones are also necessarily moved. Every endeavor then should be made to keep the ham extended. But it appears to me, that a canal which embraces the limb from the nates to the foot is of use. And moreover, a shawl should be put loosely round at the ham, along with the canal, as children are swathed in bed; and then, if the thigh-bone gets displaced either upward or to the side, it can be more easily kept in position by this means along with the canal. The canal then should be made so as to extend all along the limb or not used at all.

23. The extremity of the heel should be particularly attended to, so that it may be properly laid, both in fractures of the leg and of the thigh. For if the foot be placed in a dependent position, while the rest of the body is supported, the limb must present a curved appearance at the forepart of the leg; and if the heel be placed higher than is proper, and if the rest of the leg be rather too low, the bone at the forepart of the leg must present a hollow, more especially if the heel of the patient be naturally large. But all the bones get consolidated more slowly, if not laid properly, and if not kept steady in the same position, and in this case the callus is more feeble.

24. These things relate to cases in which there is fracture of the bones without protrusion of the same or wound of any other kind. In those cases in which the

bones are simply broken across, and are not comminuted, but protrude, if reduced the same day or next, and secured in their place, and if there be no reason to anticipate that any splintered bones will come away; and in those in which the broken bones do not protrude, nor is the mode of fracture such that there is reason to expect the splinters will come out, some physicians heal the sores in a way which neither does much good nor harm, by means of a cleansing application, applying pitch ointment, or some of the dressings for fresh wounds, or anything else which they are accustomed to do, and binding above them compresses wetted with wine, or greasy wool, or something else of the like nature. And when the wounds become clean and are new healed, they endeavor to bind up the limb with plenty of bandages, and keep it straight with treatment does some good, and never much harm. The bones, however, can never be equally well restored to their place, but the part is a little more swelled than it should be; and the limb will be somewhat shortened, provided both bones either of the leg or fore-arm have been fractured.

25. There are others who treat such cases at first with bandages, applying them on both sides of the seat of the injury, but omit them there, and leave the wound uncovered, and afterward they apply to the wound some cleansing medicine, and complete the dressing with compresses dipped in wine and greasy wool. This plan of treatment is bad, and it is clear that those who adopt this mode of practice are guilty of great mistakes in other cases of fracture as well as these. For it is a most important consideration to know in what manner the head of the bandage should be placed and at what part the greatest pressure should be, and what benefits would result from applying the end of the bandage and the pressure at the proper place, and what mischiefs would result from applying the head of the bandage and the pressure otherwise than at the proper place. Wherefore it has been stated in the preceding part of the work what are the results of either; and the practice of medicine bears witness to the truth of it, for in a person thus bandaged, a swelling must necessarily arise on the wound. For, if even a sound piece of skin were bandaged on either side, and a part were left in the middle, the part thus left unbandaged would become most swelled, and would assume a bad color; how then could it be that a wound would not suffer in like manner? The wound then must necessarily become discolored and its lips everted, the discharge will be ichorous and without pus, and the bones, which should not have got into a state of necrosis, exfoliate; and the wound gets into a throbbing and inflamed condition. And they are obliged to apply a cataplasm on account of the swelling, but this is an unsuitable application to parts which are bandaged on both sides, for a useless load is added to the throbbing which

formerly existed in it. At last they loose the bandages when matters get very serious, and conduct the rest of the treatment without bandaging; and notwithstanding, if they meet with another case of the same description, they treat it in the same manner, for they do not think that the application of the bandages on both sides, and the exposure of the wound are the cause of what happened, but some other untoward circumstance. Wherefore I would not have written so much on this subject, if I had not well known that this mode of bandaging is unsuitable, and yet that many conduct the treatment in this way, whose mistake it is of vital importance to correct, while what is here said is a proof, that what was formerly written as to the circumstances under which bandages should be tightly applied to fractures or otherwise has been correctly written.

26. As a general rule it may be said, that in those cases in which a separation of bone is not expected, the same treatment should be applied as when the fractures are not complicated with an external wound; for the extension, adjustment of the bones, and the bandaging, are to be conducted in the same manner. To the wound itself a cerate mixed with pitch is to be applied, a thin folded compress is to be bound upon it, and the parts around are to be anointed with white cerate. The cloths for bandages and the other things should be torn broader than in cases in which there is no wound, and the first turn of the bandage should be a good deal broader than the wound. For a narrower bandage than the wound binds the wound like a girdle, which is not proper, or the first turn should comprehend the whole wound, and the bandaging should extend beyond it on both sides. The bandage then should be put on in the direction of the wound, and should be not quite so tight as when there is no wound, but the bandage should be otherwise applied in the manner described above. The bandages should be of a soft consistence, and more especially so in such cases than in those not complicated with a wound. The number of bandages should not be smaller, but rather greater than those formerly described. When applied, the patient should have the feeling of the parts being properly secured, but not too tight, and in particular he should be able to say that they are firm about the wound. And the intervals of time during which the parts seem to be properly adjusted, and those in which they get loose, should be the same as those formerly described. The bandages should be renewed on the third day, and the after treatment conducted in the same manner as formerly described, except that in the latter case the compression should be somewhat less than in the former. And if matters go on properly, the parts about the wound should be found at every dressing always more and more free of swelling, and the swelling should have subsided on the whole part

comprehended by the bandages. And the suppurations will take place more speedily than in the case of wounds treated otherwise; and the pieces of flesh in the wound which have become black and dead, will sooner separate and fall off under this plan of treatment than any other, and the sore will come more quickly to cicatrization when thus treated than otherwise. The reason of all this is, that the parts in which the wound is situated, and the surrounding parts, are kept free of swelling. In all other respects the treatment is to be conducted as in cases of fracture without a wound of the integuments. Splints should not be applied. On this account the bandages should be more numerous than in the former case, both because they must be put on less tight, and because the splints are later of being applied. But if you do apply the splints, they should not be applied along the wound, and they are to be put on in a loose manner, especial care being taken that there may be no great compression from the splints. This direction has been formerly given. And the diet should be more restricted, and for a longer period, in those cases in which there is a wound at the commencement, and when the bones protrude through the skin; and, in a word, the greater the wound, the more severe and protracted should the regimen be.

27. The treatment of the sores is the same in those cases of fracture in which there was no wound of the skin at first, but one has formed in the course of treatment, owing to the pressure of the splints occasioned by the bandages, or from any other cause. In such cases it is ascertained that there is an ulcer, by the pain and the throbbing; and the swelling in the extremities becomes harder than usual, and if you apply your finger the redness disappears, but speedily returns. If you suspect anything of the kind you must loose the dressing, if there be any itching below the under-bandages, or in any other part that is bandaged, and used a pitched cerate instead of the other. If there be nothing of that, but if the ulcer be found in an irritable state, being very black and foul, and the fleshy parts about to suppurate, and the tendons to slough away, in these cases no part is to be exposed to the air, nor is anything to be apprehended from these suppurations, but the treatment is to be conducted in the same manner as in those cases in which there was an external wound at first. You must begin to apply the bandages loosely at the swelling in the extremities, and then gradually proceed upward with the bandaging, so that it may be tight at no place, but particularly firm at the sore, and less so elsewhere. The first bandages should be clean and not narrow, and the number of bandages should be as great as in those cases in which the splints were used, or somewhat fewer. To the sore itself a compress, anointed with white cerate, will be sufficient, for if a piece of flesh or nerve ( *tendon?* ) become black, it will fall off; for such sores are not to be treated with

acid, but with emollient applications, like burns. The bandages are to be renewed every third day, and no splints are to be applied, but rest is to be more rigidly maintained than in the former cases, along with a restricted diet. It should be known, that if any piece of flesh or tendon be to come away, the mischief will spread much less, and the parts will much more speedily drop off, and the swelling in the surrounding parts will much more completely subside, under this treatment, than if any of the cleansing applications be put upon the sore. And if any part that is to come away shall fall off, the part will incarnate sooner when thus treated than otherwise, and will more speedily cicatrize. Such are the good effects of knowing how a bandage can be well and moderately applied. But a proper position, the other parts of the regimen, and suitable bandages cooperate.

28. If you are deceived with regard to a recent wound, supposing there will be no exfoliation of the bones, while they are on the eve of coming out of the sore, you must not hesitate to adopt this mode of treatment; for no great mischief will result, provided you have the necessary dexterity to apply the bandages well and without doing any harm. And this is a symptom of an exfoliation of bone being about to take place under this mode of treatment; pus runs copiously from the sore, and appears striving to make its escape. The bandage must be renewed more frequently on account of the discharge, since otherwise fevers come on; if the sore and surrounding parts be compressed by the bandages they become wasted. Cases complicated with the exfoliation of very small bones, do not require any change of treatment, only the bandages should be put on more loosely, so that the discharge of pus may not be intercepted, but left free, and the dressings are to be frequently renewed until the bone exfoliate, and the splints should not be applied until then.

29. Those cases in which the exfoliation of a larger piece of bone is expected, whether you discover this at the commencement, or perceive subsequently that it is to happen, no longer require the same mode of treatment, only that the extension and arrangement of the parts are to be performed in a manner that has been described; but having formed double compresses, not less than half a fathom in breadth (being guided in this by the nature of the wound), and considerably shorter than what would be required to go twice round the part that is wounded, but considerably longer than to go once round, and in number what will be sufficient, these are to be dipped in a black austere wine; and beginning at the middle, as is done in applying the double-headed bandage, you are to wrap the part around and proceed crossing the heads in the form of the bandage called "ascia." These things are to be done at the wound, and on both sides of it; and

there must be no compression, but they are to be laid on so as to give support to the wound. And on the wound itself is to be applied the pitched cerate, or one of the applications to recent wounds, or any other medicine which will suit with the embrocation. And if it be the summer season, the compresses are to be frequently damped with wine; but if the winter season, plenty of greasy wool, moistened with wine and oil, should be applied. And a goat's skin should be spread below, so as to carry off the fluids which run from the wound; these must be guarded against, and it should be kept in mind, that parts which remain long in the same position are subject to excoriations which are difficult to cure.

30. In such cases as do not admit of bandaging according to any of the methods which have been described, or which will be described, great pains should be taken that the fractured part of the body be laid in a right position, and attention should be paid that it may incline upward rather than downward. But if one would wish to do the thing well and dexterously, it is proper to have recourse to some mechanical contrivance, in order that the fractured part of the body may undergo proper and not violent extension; and this means is particularly applicable in fractures of the leg. There are certain physicians who, in all fractures of the leg, whether bandages be applied or not, fasten the sole of the foot to the couch, or to some other piece of wood which they have fixed in the ground near the couch. These persons thus do all sorts of mischief but no good; for it contributes nothing to the extension that the foot is thus bound, as the rest of the body will no less sink down to the foot, and thus the limb will no longer be stretched, neither will it do any good toward keeping the limb in a proper position, but will do harm, for when the rest of the body is turned to this side or that, the bandaging will not prevent the foot and the bones belonging to it from following the rest of the body. For if it had not been bound it would have been less distorted, as it would have been the less prevented from following the motion of the rest of the body. But one should sew two balls of Egyptian leather, such as are worn by persons confined for a length of time in large shackles, and the balls should have coats on each side, deeper toward the wound, but shorter toward the joints; and the balls should be well stuffed and soft, and fit well, the one above the ankles, and the other below the knee. Sideways it should have below two appendages, either of a single or double thong, and short, like loops, the one set being placed on either side of the ankle, and the other on the knee. And the other upper ball should have others of the same kind in the same line. Then taking four rods, made of the cornel tree, of equal length, and of the thickness of a finger, and of such length that when bent they will admit of being adjusted to the appendages, care should be taken that the extremities of the rods

bear not upon the skin, but on the extremities of the balls. There should be three sets of rods, or more, one set a little longer than another, and another a little shorter and smaller, so that they may produce greater or less distention, if required. Either of these sets of rods should be placed on this side and that of the ankles. If these things be properly contrived, they should occasion a proper and equable extension in a straight line, without giving any pain to the wound; for the pressure, if there is any, should be thrown at the foot and the thigh. And the rods are commodiously arranged on either side of the ankles, so as not to interfere with the position of the limb; and the wound is easily examined and easily arranged. And, if thought proper, there is nothing to prevent the two upper rods from being fastened to one another; and if any light covering be thrown over the limb, it will thus be kept off from the wound. If, then, the balls be well made, handsome, soft, and newly stitched, and if the extension by the rods be properly managed, as has been already described, this is an excellent contrivance; but if any of them do not fit properly, it does more harm than good. And all other mechanical contrivances should either be properly done, or not be had recourse to at all, for it is a disgraceful and awkward thing to use mechanical means in an unmechanical way.

31. Moreover, the greater part of physicians treat fractures, both with and without an external wound, during the first days, by means of unwashed wool, and there does not appear to be anything improper in this. It is very excusable for those who are called upon to treat newly-received accidents of this kind, and who have no cloth for bandages at hand, to do them up with wool; for, except cloth for bandages, one could not have anything better than wool in such cases; but a good deal should be used for this purpose, and it should be well carded and not rough, for in small quantity and of a bad quality it has little power. But those who approve of binding up the limb with wool for a day or two, and on the third and fourth apply bandages, and make the greatest compression and extension at that period, such persons show themselves to be ignorant of the most important principles of medicine; for, in a word, at no time is it so little proper to disturb all kinds of wounds as on the third and fourth day; and all sort of probing should be avoided on these days in whatever other injuries are attended with irritation. For, generally, the third and fourth day in most cases of wounds, are those which give rise to exacerbations, whether the tendency be to inflammation, to a foul condition of the sore, or to fevers. And if any piece of information be particularly valuable this is; to which of the most important cases in medicine does it not apply? and that not only in wounds but in many other diseases, unless one should call all other diseases wounds. And this doctrine is not devoid of a



certain degree of plausibility, for they are allied to one another in many respects. But those who maintain that wool should be used until after the first seven days, and then that the parts should be extended and adjusted, and secured with bandages, would appear not to be equally devoid of proper judgment, for the proper judgment, for the most dangerous season for inflammation is then past, and the bones being loose can be easily set after the lapse of these days. But still this mode of treatment is far inferior to that with bandages from the commencement; for, the latter method exhibits the patient on the seventh day free from inflammation, and ready for complete bandaging with splints; while the former method is far behind in this respect, and is attended with many other bad effects which it would be tedious to describe.

31. a

In those cases of fracture in which the bones protrude and cannot be restored to their place, the following mode of reduction may be practiced:- Some small pieces of iron are to be prepared like the levers which the cutters of stone make use of, one being rather broader and another narrower; and there should be three of them at least, and still more, so that you may use those that suit best; and then, along with extension, we must use these as levers, applying the under surface of the piece of iron to the under fragment of the bone, and the upper surface to the upper bone; and, in a word, we must operate powerfully with the lever as we would do upon a stone or a piece of wood. The pieces of iron should be as strong as possible, so that they may not bend. This is a powerful assistance, provided the pieces of iron be suitable, and one use them properly as levers. Of all the mechanical instruments used by men, the most powerful are these three, the axis in peritrochio, the lever, and the wedge. Without these, one or all, men could not perform any of their works which require great force. Wherefore, reduction with the lever is not to be despised, for the bones will be reduced in this way, or not at all. But if the upper fragment which rides over the other does not furnish a suitable point of support a suitable point of support for the lever, but the protruding part is sharp, you must scoop out of the bone what will furnish a proper place for the lever to rest on. The lever, along with extension, may be had recourse to on the day of the accident, or next day, but by no means on the third, the fourth, and the fifth. For if the limb is disturbed on these days, and yet the fractured bones not reduced, inflammation will be excited, and this no less if they are reduced; for convulsions are more apt to occur if reduction take place, than if the attempt should fail. These facts should be well known, for if convulsions should come on when reduction is effected, there is little hope of

recovery; but it is of use to displace the bones again if this can be done with out trouble. For it is not at the time when the parts are in a particularly relaxed condition that convulsions and tetanus are apt to supervene, but when they are more than usually tense. In the case we are now treating of, we should not disturb the limb on the aforesaid days, but strive to keep the wound as free from inflammation as possible, and especially encourage suppuration in it. But when seven days have elapsed, or rather more, if there be no fever, and if the wound be not inflamed, then there will be less to prevent an attempt at reduction, if you hope to succeed; but otherwise you need not take and give trouble in vain.

32. When you have reduced the bones to their place, the modes of treatment, whether you expect the bones to exfoliate or not, have been already described. All those cases in which an exfoliation of bone is expected, should be treated by the method of bandaging with cloths, beginning for the most part at the middle of the bandage, as is done with the double-headed bandage; but particular attention should be paid to the shape of the wound, so that its lips may gape or be distorted as little as possible under the bandage. Sometimes the turns of the bandage have to be made to the right, and sometimes to the left, and sometimes a double-headed bandage is to be used.

33. It should be known that bones, which it has been found impossible to reduce, as well as those which are wholly denuded of flesh, will become detached. In some cases the upper part of the bone is laid bare, and in others the flesh dies all around; and, from a sore of long standing, certain of the bones become carious, and some not, some more, and some less; and in some the small, and in others the large bones. From what has been said it will be seen, that it is impossible to tell in one word when the bones will separate. Some come away more quickly, owing to their smallness, and some from being merely fixed at the point; and some, from pieces not separating, but merely exfoliating, become dried up and putrid; and besides, different modes of treatment have different effects. For the most part, the bones separate most quickly in those cases in which suppuration takes place most quickly, and when new flesh is most quickly formed, and is particularly sound, for the flesh which grows up below in the wound generally elevates the pieces of bone. It will be well if the whole circle of the bone separate in forty days; for in some cases it is protracted to sixty days, and in some to more; for the more porous pieces of bone separate more quickly, but the more solid come away more slowly; but the other smaller splinters in much less time, and others otherwise. A portion of bone which protrudes should be sawn off for the following reasons: if it cannot be reduced, and if it appears that only a

small piece is required in order that it may get back into its place; and if it be such that it can be taken out, and if it occasions inconvenience and irritates any part of the flesh, and prevents the limb from being properly laid, and if, moreover, it be denuded of flesh, such a piece of bone should be taken off. With regard to the others, it is not of much consequence whether they be sawed off or not. For it should be known for certain, that such bones as are completely deprived of flesh, and have become dried, all separate completely. Those which are about to exfoliate should not be sawn off. Those that will separate completely must be judged of from the symptoms that have been laid down.

34. Such cases are to be treated with compresses and vinous applications, as formerly laid down regarding bones which will separate. We must avoid wetting it at the beginning with anything cold; for there is danger of febrile rigors, and also of convulsions; for convulsions are induced by cold things, and also sometimes by wounds. It is proper to know that the members are necessarily shortened in those cases in which the bones have been broken, and have healed the one across the other, and in those cases in which the whole circle of the bone has become detached.

35. Those cases in which the bone of the thigh, or of the arm, protrudes, do not easily recover. For the bones are large, and contain much marrow; and many important nerves, muscles, and veins are wounded at the same time. And if you reduce them, convulsions usually supervene; and, if not reduced, acute bilious fevers come on, with singultus and mortification. The chances of recovery are not fewer in those cases in which the parts have not been reduced, nor any attempts made at reduction. Still more recover in those cases in which the lower, than those in which the upper part of the bone protrudes; and some will recover when reduction has been made, but very rarely indeed. For modes of treatment and peculiarity of constitution make a great difference as to the capability of enduring such an injury. And it makes a great difference if the bones of the arm and of the thigh protrude to the inside; for there are many and important vessels situated there, some of which, if wounded, will prove fatal; there are such also on the outside, but of less importance. In wounds of this sort, then, one ought not to be ignorant of the dangers, and should prognosticate them in due time. But if you are compelled to have recourse to reduction, and hope to succeed, and if the bones do not cross one another much, and if the muscles are not contracted (for they usually are contracted), the lever in such cases may be advantageously employed.

36. Having effected the reduction, you must give an emollient draught of hellebore the same day, provided it has been reduced on the day of the accident, but otherwise it should not be attempted. The wound should be treated with the same things as are used in fractures of the bones of the head, and nothing cold should be applied; the patient should be restricted from food altogether, and if naturally of a bilious constitution, he should have for a diet a little fragrant *oxyglyky* sprinkled on water; but if he is not bilious, he should have water for drink; and if fever of the continual type come on, he is to be confined to this regimen for fourteen days at least, but if he be free of fever, for only seven days, and then you must bring him back by degrees to a common diet. To those cases in which the bones have not been reduced, a similar course of medicine should be administered, along with the same treatment of the sores and regimen; and in like manner the suspended part of the body should not be stretched, but should rather be contracted, so as to relax the parts about the wound. The separation of the bones is protracted, as also was formerly stated. But one should try to escape from such cases, provided one can do so honourably, for the hopes of recovery are small, and the dangers many; and if the physician do not reduce the fractured bones he will be looked upon as unskillful, while by reducing them he will bring the patient nearer to death than to recovery.

37. Luxations and subluxations at the knee are much milder accidents than subluxations and luxations at the elbow. For the knee-joint, in proportion to its size, is more compact than that of the arm, and has a more even conformation, and is rounded, while the joint of the arm is large, and has many cavities. And in addition, the bones of the leg are nearly of the same length, for the external one overtops the other to so small an extent as hardly to deserve being mentioned, and therefore affords no great resistance, although the external nerve ( *ligament?* ) at the ham arises from it; but the bones of the fore-arm are unequal, and the shorter is considerably thicker than the other, and the more slender ( *ulna?* ) protrudes, and passes up above the joint, and to it (the *olecranon?* ) are attached the nerves ( *ligaments?* ) which go downward to the junction of the bones; and the slender bone ( *ulna?* ) has more to do with the insertion of the ligaments in the arm than the thick bone ( *radius?* ). The configuration then of the articulations, and of the bones of the elbow, is such as I have described. Owing to their configuration, the bones at the knee are indeed frequently dislocated, but they are easily reduced, for no great inflammation follows, nor any constriction of the joint. They are displaced for the most part to the inside, sometimes to the outside, and occasionally into the ham. The reduction in all these cases is not difficult, but in the dislocations inward and outward, the patient should be placed

on a low seat, and the thigh should be elevated, but not much. Moderate extension for the most part sufficeth, extension being made at the leg, and counter-extension at the thigh.

38. Dislocations at the elbow are more troublesome than those at the knee, and, owing to the inflammation which comes on, and the configuration of the joint, are more difficult to reduce if the bones are not immediately replaced. For the bones at the elbow are less subject to dislocation than those of the knee, but are more difficult to reduce and keep in their position, and are more apt to become inflamed and ankylosed.

39. For the most part the displacements of these bones are small, sometimes toward the ribs, and sometimes to the outside; and the whole articulation is not displaced, but that part of the humerus remains in place which is articulated with the cavity of the bone of the forearm that has a protuberance ( *ulna?* ). Such dislocations, to whatever side, are easily reduced, and the extension is to be made in the line of the arm, one person making extension at the wrist, and another grasping the armpit, while a third, applying the palm of his hand to the part of the joint which is displaced, pushes it inward, and at the same time makes counterpressure on the opposite side near the joint with the other hand.

40. The end of the humerus at the elbow gets displaced ( *subluxated?* ) by leaving the cavity of the ulna. Such luxations readily yield to reduction, if applied before the parts get inflamed. The displacement for the most part is to the inside, but sometimes to the outside, and they are readily recognized by the shape of the limb. And often such luxations are reduced without any powerful extension. In dislocations inward, the joint is to be pushed into its place, while the fore-arm is brought round to a state of pronation. Such are most of the dislocations at the elbow.

41. But if the articular extremity of the humerus be carried to either side above the bone of the fore-arm, which is prominent, into the hollow of the arm (?), this rarely happens; but if it does happen, extension in the straight line is not so proper under such circumstances; for in such a mode of extension, the process of the ulna ( *olecranon?* ) prevents the bone of the arm ( *humerus?* ) from passing over it. In dislocations of this kind, extension should be made in the manner described when treating of the bandaging of fractured bones of the arm, extension being made upward at the armpit, while the parts at the elbow are pushed downward, for in this manner can the humerus be most readily raised

above its cavity; and when so raised, the reduction is easy with the palms of the hand, the one being applied so as to make pressure on the protuberant part of the arm, and the other making counter-pressure, so as to push the bone of the forearm into the joint. This method answers with both cases. And perhaps this is the most suitable mode of reduction in such a case of dislocation. The parts may be reduced by extension in a straight line, but less readily than thus.

42. If the arm be dislocated forward- this rarely happens, indeed, but what would a sudden shock not displace? for many other things are removed from their proper place, notwithstanding a great obstacle,- in such a violent displacement the part ( *olecranon?* ) which passes above the prominent part of the bones is large, and the stretching of the nerves ( *ligaments?* ) is intense; and yet the parts have been so dislocated in certain cases. The following is the symptom of such a displacement: the arm cannot be bent in the least degree at the elbow, and upon feeling the joint the nature of the accident becomes obvious. If, then, it is not speedily reduced, strong and violent inflammation, attended with fever, will come on, but if one happen to be on the spot at the time it is easily reduced. A piece of hard linen cloth (or a piece of hard linen, not very large, rolled up in a ball, will be sufficient) is to be placed across the bend of the elbow, and the arm is then to be suddenly bent at the elbow, and the hand brought up to the shoulder. This mode of reduction is sufficient in such displacements; and extension in the straight line can rectify this manner of dislocation, but we must use at the same time the palms of the hands, applying the one to the projecting part of the humerus at the bend of the arm for the purpose of pushing it back, and applying the other below to the sharp extremity of the elbow, to make counter-pressure, and incline the parts into the straight line. And one may use with advantage in this form of dislocation the method of extension formerly described, for the application of the bandages in the case of fracture of the arm; but when extension is made, the parts are to be adjusted, as has been also described above.

43. But if the arm be dislocated backward (but this very rarely happens, and it is the most painful of all, and the most subject to bilious fevers of the continual type, which prove fatal in the course of a few days), in such a case the patient cannot extend the arm. If you are quickly present, by forcible extension the parts may return to their place of their own accord; but if fever have previously come on, you must no longer attempt reduction, for the pain will be rendered more intense by any such violent attempt. In a word, no joint whatever should be reduced during the prevalence of fever, and least of all the elbow-joint.

44. There are also other troublesome injuries connected with the elbow-joint; for example, the thicker bone ( *radius?* ) is sometime partially displaced from the other, and the patient can neither perform extension nor flexion properly. This accident becomes obvious upon examination with the hand at the bend of the arm near the division of the vein that runs up the muscle. In such a case it is not easy to reduce the parts to their natural state, nor is it easy, in the separation of any two bones united by symphysis, to restore them to their natural state, for there will necessarily be a swelling at the seat of the diastasis. The method of bandaging a joint has been already described in treating of the application of bandages to the ankle.

45. In certain cases the process of the ulna ( *olecranon?* ) behind the humerus is broken; sometimes its cartilaginous part, which gives origin to the posterior tendon of the arm, and sometimes its fore part, at the base of the anterior coronoid process; and when this displacement takes place, it is apt to be attended with malignant fever. The joint, however, remains in place, for its whole base protrudes at that point. But when the displacement takes place where its head overtops the arm, the joint becomes looser if the bone be fairly broken across. To speak in general terms, all cases of fractured bones are less dangerous than those in which the bones are not broken, but the veins and important nerves ( *tendons?* ) situated in these places are contused; for the risk of death is more immediate in the latter class of cases than in the former, if continual fever come on. But fractures of this nature seldom occur.

46. It sometimes happens that the head of the humerus is fractured at its epiphysis; and this, although it may appear to be a much more troublesome accident, is in fact a much milder one than the other injuries at the joint.

47. The treatment especially befitting each particular dislocation has been described; and it has been laid down as a rule, that immediate reduction is of the utmost advantage, owing to the rapid manner in which inflammation of the tendons supervenes. For even when the luxated parts are immediately reduced, the tendons usually become stiffened, and for a considerable time prevent extension and flexion from being performed to the ordinary extent. All these cases are to be treated in a similar way, whether the extremity of the articulating bone be snapped off, whether the bones be separated, or whether they be dislocated; for they are all to be treated with plenty of bandages, compresses, and cerate, like other fractures. The position of the joint in all these cases should be the same, as when a fractured arm or fore-arm has been bound up. For this is

the most common position in all dislocations, displacements, and fractures; and it is the most convenient for the subsequent movements, whether of extension or flexion, as being the intermediate stage between both. And this is the position in which the patient can most conveniently carry or suspend his arm in a sling. And besides, if the joint is to be stiffened by callus, it were better that this should not take place when the arm is extended, for this position will be a great impediment and little advantage; if the arm be wholly bent, it will be more useful; but it will be much more convenient to have the joint in the intermediate position when it becomes ankylosed. So much with regard to position.

48. In bandaging, the head of the first bandage should be placed at the seat of the injury, whether it be a case of fracture, of dislocation, or of diastasis ( *separation?* ), and the first turns should be made there, and the bandages should be applied most firmly at that place, and less so on either side. The bandaging should comprehend both the arm and the fore-arm, and on both should be to a much greater extent than most physicians apply it, so that the swelling may be expelled from the seat of the injury to either side. And point of the fore-arm should be comprehended in the bandaging, whether the injury be in that place or not, in order that the swelling may not collect there. In applying bandages, we must avoid as much as possible accumulating many turns of the bandage at the bend of the arm. For the principal compression should be at the seat of the injury, and the same rules are to be observed, and at the same periods, with regard to compression and relaxation, as formerly described respecting the treatment of broken bones; and the bandages should be renewed every third day; and they should appear loose on the third day, as in the other case. And splints should be applied at the proper time (for there is nothing unsuitable in them, whether the bones be fractured or not, provided there is no fever); they should be particularly loose, whether applied to the arm or the forearm, but they must not be thick. It is necessary that they should be of unequal size, and that the one should ride over the other, whenever from the flexion it is judged proper. And the application of the compresses should be regulated in the same manner as has been stated with regard to the splints; and they should be put on in a somewhat more bulky form at the seat of the injury. The periods are to be estimated from the inflammation, and from what has been written on them above.



# ON THE INSTRUMENTS OF REDUCTION



OR, MOCHLICON

*Translated by Charles Darwin Adams*

1. With regard to the construction of bones, the bones and joints of the fingers are simple, the bones of the hand and foot are numerous, and articulated in various ways; the uppermost are the largest; the heel consists of one bone which is seen to project outward, and the back tendons are attached to it. The leg consists of two bones, united together above and below, but slightly separated in the middle; the external bone (*fibula*), where it comes into proximity with the little toe, is but slightly smaller than the other, more so where they are separated, and at the knee, the outer hamstring arises from it; these bones have a common epiphysis below, with which the foot is moved, and another epiphysis is above in which is moved the articular extremity of the femur, which is simple and light in proportion to its length, in the form of a condyle, and having the patella (connected with it?), the femur itself bends outward and forward; its head is a round epiphysis which gives origin to ligament inserted in the acetabulum of the hip-joint. This bone is articulated somewhat obliquely, but less so than the humerus. The ischium is united to the great vertebra contiguous to the os sacrum by a cartilaginous ligament. The spine, from the os sacrum to the great vertebra, is curved backward; in this quarter are situated the bladder, the organs of generation, and the inclined portion of the rectum; from this to the diaphragm it proceeds in a straight line inclining forward, and the psoae are situated there; from this point, to the great vertebra above the tops of the shoulders, it rises in a line that is curved backward, and the curvature appears greater than it is in reality, for the posterior processes of the spine are there highest; the articulation of the neck inclines forward. The vertebrae on the inside are regularly placed upon one another, but behind they are connected by a cartilaginous ligament; they are articulated in the form of synarthrosis at the back part of the spinal marrow; behind they have a sharp process having a cartilaginous epiphysis, whence proceeds the roots of nerves running downward, as also muscles extending from the neck to the loins, and filling the space between the ribs and the spine. The ribs are connected to all the intervertebral spaces on the inside,

from the neck to the lumbar region, by a small ligament, and before to the sternum, their extremities being spongy and soft; their form is the most arched in man of all animals; for in this part, man is, of all animals, the narrowest in proportion to his bulk. The ribs are united to each vertebra by a small ligament at the place from which the short and broad lateral processes ( *transverse processes?* ) arise. The sternum is one continuous bone, having lateral pits for the insertion of the ribs; it is of a spongy and cartilaginous structure. The clavicles are rounded in front, having some slight movements at the sternum, but more free at the acromion. The acromion, in man, arises from the scapula differently from most other animals. The scapula is cartilaginous toward the spine, and spongy elsewhere, having an irregular figure externally; its neck and articular cavity cartilaginous; it does not interfere with the movements of the ribs, and is free of all connection with the other bones, except the humerus. The head of the humerus is articulated with its ( *glenoid?* ) cavity, by means of a small ligament, and it consists of a rounded epiphysis composed of spongy cartilage, the humerus itself is bent outward and forward, and it is articulated with its ( *glenoid?* ) cavity by its side, and not in a straight line. At the elbow it is broad, and has condyles and cavities, and is of a solid consistence; behind it is a cavity in which the coronoid process ( *olecranon?* ) of the ulna is lodged, when the arm is extended; here, too, is inserted the benumbing nerve, which arises from between the two bones of the forearm at their junction, and terminates there.

2. When the nose is fractured, the parts should be modeled instantly, if possible. If the fracture be in its cartilaginous part, introduce into the nostrils a tent formed of caddis, inclosed in the outer skin of a Carthaginian hide, or anything else which does not irritate; the skin is to be glued to the parts displaced, which are to be thus rectified. Bandaging in this case does mischief. The treatment is to consist of flour with manna, or of sulphur with cerate. You will immediately adjust the fragments, and afterward retain them in place with your fingers introduced into the nostrils, and turning the parts into place; then the Carthaginian skin is to be used. Callus forms even when there is a wound; and the same things are to be done, even when there is to be exfoliation of the bones, for this is not of a serious nature.

3. In fractures of the ears, neither bandages nor cataplasms should be used; or, if any bandage be used, it should be put on very tight; the cerate and sulphur should be applied to agglutinate the bandages. When matter forms in the ears, it is found to be more deeply seated than might be supposed, for all parts that are

pulpy, and consist of juicy flesh, prove deceptive in such a case. But no harm will result from making an opening, for the parts are lean, watery, and full of mucus. No mention is here made of the places and circumstances which render it fatal to make an opening. The cure is soonest effected by transfixing the ear with a cautery; but the ear is maimed and diminished in size, if burned across. If opened, one of the gentle medicines for flesh wounds should be used as a dressing.

4. The jaw-bone is often slightly displaced ( *subluxated?* ), and is restored again; it is dislocated but rarely, especially in gaping; in fact, the bone is never dislocated unless it slips while the mouth is opened wide. It slips, however, the more readily from its ligaments being oblique, supple, and of a yielding nature. The symptoms are: the lower jaw protrudes, it is distorted to the side opposite the dislocation, and the patient cannot shut his mouth; when both sides are dislocated, the jaw projects more, the mouth can be less shut, but there is no distortion; this is shown by the rows of the teeth in the upper and lower jaw corresponding with one another. If, then, both sides be dislocated, and not immediately reduced, the patient for the most part dies on the tenth day, with symptoms of continued fever, stupor, and coma, for the muscles there induce such effects; there is disorder of the bowels attended with scanty and unmixed dejection; and the vomitings, if any, are of the same character. The other variety is less troublesome. The method of reduction is the same in both:-The patient being laid down or seated, the physician is to take hold of his head, and grasping both sides of the jaw-bone with both hands, within and without, he must perform three manoeuvres at once,-rectify the position of the jaw, push it backward, and shut the mouth. The treatment should consist of soothing applications, position, and applying a suitable bandage to support the jaw-bone, so as to cooperate with the reduction.

5. The bone of the shoulder is dislocated downward. I have never heard of any other mode. The parts put on the appearance of dislocation forward, when the flesh about the joint is wasted during consumption, as also seems to be the case with cattle when in a state of leanness after winter. Those persons are most liable to dislocations who are thin, slender, and have humidities about their joints without inflammation, for it knits the joints. Those who attempt to reduce and rectify dislocations in oxen, commit a blunder, as forgetting that the symptoms arise from the manner in which the ox uses the limb, and that the appearance is the same in a man who is in a similar condition, and forgetting also that Homer has said, that oxen are most lean at that season. In this dislocation, then, when

not reduced, the patient cannot perform any of those acts which others do, by raising the arm from the side. I have thus stated who are the persons most subject to this dislocation, and how they are affected. In congenital dislocations the nearest bones are most shortened, as is the case with persons who are *weasel-armed* ; the fore-arm less so, and the hand still less; the bones above are not affected. And the parts (near the seat of the injury) are most wasted in flesh; and this happens more especially on the side of the arm opposite the dislocation, and that during adolescence, yet in a somewhat less degree than in congenital cases. The deep-seated suppurations occur most frequently to new-born infants about the joint of the shoulder, and these produce the same consequences as dislocations. In adults, the bones are not so diminished in size, and justly, seeing that the others will not increase as in the former case; but wasting of the flesh takes place, for it is increased, and is diminished every day, and at all ages. And attention should be paid to the force of habit, and to the symptom produced by the tearing away of the acromion, whereby a void is left, which makes people suppose that the humerus is dislocated. The head of the humerus is felt in the armpit, and the patient cannot raise his arm, nor swing it to this side and that, as formerly. The other shoulder shows the difference. Modes of reduction:-The patient himself having placed his fist in the arm pit, pushes up the head of the humerus with it, and brings the hand forward to the breast. Another:-Force it backward, so that you may turn it round. Another:-Apply your head to the acromion, and your hands to the armpit, separate the head of the humerus (*from the side?* ), and push the elbow in the opposite direction; or, instead of your knees, another person may turn aside the elbow, as formerly directed. Or, place the patient on your shoulder, with the shoulder in his armpit. Or, with the heel, something being introduced to fill up the hollow of the armpit, and using the right foot to the right shoulder. Or, with a pestle. Or, with the step of a ladder. Or, by rotation made with piece of wood stretched below the arm. Treatment:-As to attitude, the arm placed by the side, the hand and shoulder raised; the bandaging and adjustment of the parts while in this attitude. If not reduced, the top of the shoulder becomes attenuated.

6. When the acromion is torn away, the appearance is the same as in dislocation of the shoulder; but there is no impediment, except that the bone does not return to its position. The figure should be the same as in dislocation, both as regards bandaging and suspending the limb. The bandaging according to rule.

7. When partial displacement (*sub-luxation?* ) takes place at the elbow, either inside or outside, but the sharp point (*olecranon?* ) remains in the cavity of the

humerus, make extension in a straight line, and push the projecting parts backward and to the sides.

8. In complete dislocations to either side, make extension while the arm is in the position it is put in to be bandaged for a fracture, for thus the rounded part of the elbow will not form an obstacle to it. Dislocation most commonly takes place inward. The parts are to be adjusted by separating the bones as much as possible, so that the end of the humerus may not come in contact with the olecranon, but it is to be carried up and turned round, and not forced in a straight line; at the same time the opposite sides are to be pushed together, and the bones reduced to their place. In these cases rotation of the elbow cooperates; that is to say, turning the arm into a state of supination and pronation; so much for the reduction. With regard to the attitude in which it is to be put, -the hand is to be placed somewhat higher than the elbow, and the arm by the side; this position suits with it when slung from the neck, is easily borne, is its natural position, and one adapted for ordinary purposes, unless callus form improperly: the callus soon forms. Treatment: -By bandages according to the common rule for articulations, and the point of the elbow is to be included in the bandage.

9. The elbow, when luxated, induces the most serious consequences, fevers, pain, nausea, vomiting of pure bile; and this especially in dislocations backward, from pressure on the nerve which occasions numbness; next to it is dislocation forward. The treatment is the same. The reduction of dislocation backward is by extension and adaptation: the symptom of this variety, loss of the power of extension; of dislocation forward, loss of the power of flexion. In it a hard ball is to be placed in the bend of the elbow, and the fore-arm is to be bent over this while sudden extension is made.

10. Diastasis of the bones may be recognized by examining the part where the vein which runs along the arm divides.

11. In these cases callus is speedily formed. In congenital dislocations, the bones below the seat of the injury are shorter than natural; in this case, the greatest shortening is in the nearest, namely, those of the fore-arm; second, those of the hand; third, those of the fingers. The arm and shoulders are stronger, owing to the nourishment which they receive, and the other arm, from the additional work it has to perform, is still more strong. The wasting of the flesh, if the dislocation was outward, is on the inside; or if otherwise, on the side opposite the dislocation.

12. In dislocation at the elbow, whether outward or inward, extension is to be made with the fore-arm at right angles to the arm; the arm is to be suspended by a shawl passed through the armpit, and a weight is to be attached to the extremity of the elbow; or force is to be applied with the hands. The articular extremity being properly raised, the parts are to be adjusted with the palms of the hands, as in dislocations of the hands. It is to be bandaged, suspended in a sling, and placed, while in this attitude.

13. Dislocations backward are to be rectified with the palms of the hands along with sudden extension. These two acts are to be performed together, as in other cases of the kind. In dislocation forward, the arm is to bend around a ball of cloth, of proper size, and at the same time replaced.

14. If the displacement be on the other side both these operations are to be performed in effecting the adjustment of the arm. With regard to the treatment, the position and the bandaging are the same as in the other cases. For all these cases may be reduced by ordinary distention.

15. With regard to the modes of reduction, some act upon the principle of carrying the one piece of bone over the other, some by extension, and some by rotation: these last consist in rapidly turning the arm to this side and that.

16. The joint of the hand is dislocated inward or outward, but most frequently inward. The symptoms are easily recognized; if inward, the patient cannot at all bend his fingers, but if outward, he cannot extend them. Reduction:-By placing the fingers above a table, extension and counter-extension are to be made by assistance, while, with the palm of the hand or the heel on the projecting bone, one presses forward, and from behind, upon the other bone, and lays some soft substance on it; and, if the dislocation be above, the hand is to be turned into a state of pronation; or, if backward, into a state of supination. The treatment is to be conducted with bandages.

17. The whole hand is dislocated either inward, or outward, but especially inward, or to this side or that. Sometimes the epiphysis is displaced, and sometimes there is displacement ( *diastasis* ) of the one bone from the other. Powerful extension is to be made in this case; and the projecting part is to be pressed upon, and counter-pressure made on the opposite side: both modes being performed at the same time, both backward and laterally, either with the hands on a table, or with the heel. These accidents give rise to serious consequences

and deformities; but in time the parts get so strong as to admit of being used. The treatment consists of bandages comprehending the hand and forearm, and splints are to be applied as far as the fingers; when put in splints, they are to be more frequently loosed than in fractures, and more copious allusions of water are to be used.

18. In congenital dislocations the hand becomes shortened, and the atrophy of the flesh is generally on the side opposite the dislocation. In the adult the bones remain of their proper size.

19. The symptoms of dislocation of the finger are obvious, and need not be described. This is the mode of reduction:-By stretching in a straight line, and making pressure on the projecting part, and counter-pressure, at the opposite side, on the other. The proper treatment consists in the application of bandages. When not reduced, the parts unite by callus outside of the joints. In congenital dislocations, and in those which occur during bones below the dislocation are shortened, and the flesh is wasted principally on the side opposite to the dislocation; in the adult the bones remain of their proper size.

20. Dislocation at the hip-joint occurs in four modes, inward most frequently, outward next, the others of equal frequency. The symptoms:-The common, a comparison with the sound leg. The peculiar symptoms of dislocations inward; the head of the bone is felt at the perineum; the patient cannot bend his leg as formerly; the limb appears elongated, and to a great extent, unless you bring both limbs into the middle space between them in making a comparison of them; and the foot and the knee are inclined outward. If the dislocation has taken place from birth, or during one's growth, the thigh is shortened, the leg less so, and the others according to the same rule; the fleshy parts are atrophied, especially on the outside. Such persons are afraid to stand erect, and crawl along on the sound limb; or, if compelled, they walk with one or two staves, and bear up the affected limb; and the smaller the limb so much the more do they walk. If the accident happens to adults the bones remain of their proper size, but the flesh is wasted, as formerly described; the patients walk in a wriggling manner, like oxen; they are bent toward the flank, and the buttock on the uninjured side is prominent; for the uninjured limb must necessarily come below that it may support the body, whilst the other must be carried out of the way, as it cannot support the body, like those who have an ulcer in the foot. They poise the body by means of a staff on the sound side, and grasp the affected limb with the hand above the knee so as to carry the body in shifting from one place to another. If the parts below the hip-

joint be used, the bones below are less atrophied, but the flesh more.

21. The symptoms and attitudes in dislocation outward are the opposite, and the knee and foot incline a little inward. When it is congenital, or occurs during adolescence, the bones do not grow properly; according to the same rule, the bone of the hip-joint is somewhat higher than natural, and does not grow proportionally. In those who have frequent dislocations outward, without inflammation, the limb is of a more humid (flabby?) temperament than natural, like the thumb, for it is the part most frequently dislocated, owing to its configuration; in what persons the dislocation is to a greater or less extent; and in what persons it is more difficultly or easily produced; in what there is reason to hope that it can be speedily reduced, and in what not; and the remedy for this; and in what cases the dislocation frequently happens, and treatment of this. In dislocation outward from birth, or during adolescence, or from disease, (and it happens most frequently from disease, in which case there is sometimes exfoliation of the bone, but even where there is no exfoliation), the patients experience the same symptoms, but to an inferior degree to those in dislocations inward, if properly managed so that in walking they can put the whole foot to the ground and lean to either side. The younger the patient is, the greater care should be bestowed on him; when neglected, the case gets worse; when attended to, it improves; and, although there be atrophy in all parts of the limb, it is to a less extent.

22. When there is a dislocation on both sides, the affections of the bones are the same; the flesh is well developed, except within, the nates protrude, the thighs are arched, unless there be sphacelus. If there be curvature of the spine above the hip-joint, the patients enjoy good health, but the body does not grow, with the exception of the head.

23. The symptoms of dislocation backward are:-The parts before more empty, behind they protrude, the foot straight, flexion impossible, except with pain, extension least of all: in these the limb is shortened. They can neither extend the limb at the ham, nor at the groin, unless it be much raised, nor can they bend it. The uppermost joint, in most cases, takes the lead: this is common in joints, nerves, muscles, intestines, uteri, and other parts. There the bone of the hip-joint is carried backward to the nates, and on that account it is shortened, and because the patient cannot extend it. The flesh of the whole leg is wasted in all cases, in which most, and to what extent, has been already stated. Every part of the body which performs its functional work is strong, but, notwithstanding, if inactive, it



gets into a bad condition, unless its inactivity arise from fatigue, fever, or inflammation. And in dislocations outward, the limb is shortened, because the bone is lodged in flesh which yields; but, notwithstanding, in dislocations inward, it is longer, because the bone is lodged on a projecting bone. Adults, then, who have this dislocation unreduced, are bent at the groins in walking, and the other ham is flexed; they scarcely reach the ground with the ball of the foot; they grasp the limb with the hand, and walk without a staff if they choose; if the staff be too long, their foot cannot reach the grounds-if they wish to reach the ground, they must use a short staff. There is wasting of the flesh in cases attended with pain; and the inclination of the leg is forward, and the sound leg in proportion. In congenital cases, or when in adolescence, or from disease, the bone is dislocated (under what circumstances will be explained afterward), the limb is particularly impaired, owing to the nerves and joints not being exercised, and the knee is impaired for the reasons stated. These persons, keeping the limb bent, walk with one staff or two. But the sound limb is in good flesh from usage.

24. In dislocations forward the symptoms are the opposite: a vacuity behind, a protuberance before; of all motions they can least perform flexion, and extension best; the foot is straight, the limb is of the proper length at the heel; at its extremity the foot a little turned up; they are especially pained at first: of all these dislocations retention of urine occurs most frequently in this variety, because the bone is lodged among important nerves. The fore parts are stretched, do not grow, are diseased, and are obnoxious to premature decay; the back parts are wrinkled. In the case of adults, they walk erect, resting merely on the heel, and this they do decidedly if they can take great steps; but they drag it along; the wasting is least of all in this variety of dislocation, owing to their being able to use the limb, but the wasting is most behind. The whole limb being straighter than natural they stand in need of a staff on the affected side. When the dislocation is congenital, or has occurred during adolescence, if properly managed, the patient has the use of the limb as well as adults (otherwise?) have of it. But, if neglected, it is shortened and extended, for in such cases the joint is generally in a straight position. The diminution of the bones, and wasting of the fleshy parts, are analogous.

25. In reduction-the extension of the thigh is to be powerful, and the adjustment what is common in all such cases, with the hands, or a board, or a lever, which, in dislocations inward, should be round, and in dislocations outward, flat; but it is mostly applicable in dislocations outward. Dislocations inward are to be remedied by means of bladders, extending to the bare part of the thigh, along

with extension and binding together of the limbs. The patient may be suspended, with his feet a little separated from one another, and then a person inserting his arm within the affected limb, is to suspend himself from it, and perform extension and readjustment at the same time; and this method is sufficient in dislocations forward and the others, but least of all in dislocations backward. A board fastened under the limb, like the board fastened below the arm in dislocations at the shoulder, answers in dislocations inward, but less so in the other varieties. Along with extension you will use pressure either with the foot, the hand, or a board, especially in dislocations forward and backward.

26. Dislocations at the knee are of a milder character than those of the elbow, owing to the compactness and regularity of the joint; and hence it is more readily dislocated and reduced. Dislocation generally takes place inward, but also outward and backward. The methods of reduction are-by circumflexion, or by rapid excalcitration, or by rolling a fillet into a ball, placing it in the ham, and then letting the patient's body suddenly drop down on his knees: this mode applies best in dislocations backward. Dislocations backward, like those of the elbows, may also be reduced by moderate extension. Lateral dislocations may be reduced by circumflexion or excalcitration, or by extension (but this is most applicable in dislocation backward), but also by moderate extension. The adjustment is what is common in all. If not reduced, in dislocations backward, they cannot bend the leg and thigh upon one another, but neither can they do this in the others except to a small extent; and the fore parts of the thigh and leg are wasted. In dislocations inward they are bandy-legged, and the external parts are atrophied. But, in dislocations outward, they incline more outward, but are less lame, for the body is supported on the thicker bone, and the inner parts are wasted. The consequences of a congenital dislocation, or one occurring during adolescence, are analogous to the rule formerly laid down.

27. Dislocations at the ankle-joint require strong extension, either with the hands or some such means, and adjustment, which at the same time effects both acts; this is common in all cases.

28. Dislocations of the bones of the foot are to be treated like those of the hand.

29. Dislocations of the bones connected with the leg, if not reduced, whether occurring at birth or during adolescence, are of the same character as those in the hand.

30. Persons who, in jumping from a height, have pitched on the heel, so as to occasion diastasis (separation) of the bones, ecchymosis of the veins, and contusion of the nerves,-when these symptoms are very violent, there is danger that the parts may sphacelate, and give trouble to the patient during the remainder of his life; for these bones are so constructed as to slip past one another, and the nerves communicate together. And, likewise in cases of fracture, either from an injury in the leg or thigh, or in paralysis of the nerves connected with these parts, or, when in any other case of confinement to bed the heel, from neglect, becomes blackened, in all these cases serious effects result therefrom. Sometimes, in addition to the sphacelus, very acute fevers supervene, attended with hiccup, tumors, aberration of intellect, and speedy death, along with lividity of the large bloodvessels, and gangrene. The symptoms of the exacerbations are these: if the ecchymosis, the blackened parts, and those around them, be somewhat hard and red, and if lividity be combined with the hardness, there is danger of mortification; but, notwithstanding, if the parts are sublivid, or even very livid and diffused, or greenish and soft, these symptoms, in all such cases, are favorable. The treatment consists in the administration of hellebore, if they be free from fever, but otherwise, they are to have *oxyglyky* for drink, if required. Bandaging,-agreeably to the rule in other joints; but this is to be attended to also,-the bandages should be numerous, and softer than usual; compression less; more water than usual to be used in the allusions; to be applied especially to the heel. The same object should be sought after in the position as in the bandaging, namely, that the humors may not be determined to the heel; the limb to be well laid should have the heel higher than the knee. Splints not to be used.

31. When the foot is dislocated, either alone, or with the epiphysis, the displacement is more apt to be inward. If not reduced, in the course of time the parts of the hips, thigh, and leg, opposite the dislocation, become attenuated. Reduction:-As in dislocation at the wrist; but the extension requires to be very powerful. Treatment:-Agreeably to the rule laid down for the other joints. Less apt to be followed by serious consequences than the wrist, if kept quiet. Diet restricted, as being in an inactive state. Those occurring at birth, or during adolescence, observe the rule formerly stated.

32. With regard to slight congenital dislocations, some of them can be rectified, especially club-foot. There is more than one variety of club-foot. The treatment consists in modeling the foot like a piece of wax; applying resinous cerate, and numerous bandages; or a sole, or a piece of lead is to be bound on, but not upon the bare skin; the adjustment and attitudes to correspond.

33. If the dislocated bones cause a wound in the skin, and protrude, it is better to let them alone, provided only they are not allowed to hang, nor are compressed. The treatment consists in applying pitched cerate, or compresses dipped in hot wine (for cold is bad in all such cases), and certain leaves; but in winter unwashed wool may be applied as a cover to the part; neither cataplasms nor bandaging; restricted diet. Cold, great weight, compression, violence, restricted position, all such are to be accounted as fatal measures. When treated moderately (they escape), maimed and deformed; for, if the dislocation be at the ankle, the foot is drawn upward, and, if elsewhere, according to the same rule. The bones do not readily exfoliate; for only small portions of them are denuded, and they heal by narrow cicatrices. The danger is greatest in the greatest joints, and those highest up. The only chance of recovery is, if they are not reduced, except at the fingers and hand, and in these cases the danger should be announced beforehand. Attempts at reduction to be made on the first or second day; or, if not accomplished then, on the tenth, by no means on the fourth. Reduction by levers. Treatment:-As in injuries of the bones of the head, and the part is to be kept hot; and it is better to give hellebore immediately after the parts have been reduced. With regard to the other bones, it should be well known, that, if replaced, death will be the consequence; the more surely and expeditiously, the greater the articulation, and the more high its situation. Dislocation of the foot is attended with spasm (tetanus) and gangrene; and if, upon its being replaced, any of these symptoms come on, the chance of recovery, if there be any chance, is in displacing it anew; for spasms do not arise from relaxation, but from tension of the parts.

34. Excision, either of articular bones or of pieces of bones, when not high up in the body, but about the foot or the hand, is generally followed by recovery, unless the patient die at once from deliquium animi. Treatment:-As in injuries of the head; warmth.

35. Sphacelus of the fleshy parts is produced by the tight compression of bleeding wounds, and by pressure in the fractures of bones, and by blackening, arising from bandages. And in those cases in which a portion of the thigh or arm, both the bones and the flesh drop off, many recover, the case being less dangerous than many others. In cases, then, connected with fracture of the bones, the separation of the flesh quickly takes place, but the separation of the bone, at the boundary of its denuded part, is slower in taking place. But the parts below the seat of the injury, and the sound portion of the body, are to be previously taken away (for they die previously), taking care to avoid producing pain, for

*deliquium animi* may occasion death. The bone of the thigh in such a case came away on the eightieth day, but the leg was removed on the twentieth day. The bones of the leg, in a certain case, came away at the middle of the sixtieth day. In these cases the separation is quick or slow, according to the compression applied by the physician. When the compression is gently applied the bones do not drop off at all, neither are they denuded of flesh, but the gangrene is confined in the more superficial parts. The treatment of such cases must be undertaken; for most of them are more formidable in appearance than in reality. The treatment should be mild, but, notwithstanding, with a restricted diet; hemorrhages and cold are to be dreaded; the position, so as that the limb may be inclined upward, and afterward, on account of the purulent abscess, horizontally, or such as may suit with it. In such cases, and in mortifications, there are usually, about the crisis, hemorrhages and crisis, hemorrhages and violent diarrhoeas, which, however, only last for a few days; the patients do not lose their appetite, neither are they feverish, nor should they be put upon a reduced diet.

36. Displacement of the spine, if inward, threatens immediate death, attended with retention of urine and loss of sensibility. Outward, the accident is free from most of these bad effects, much more so than where there is merely concussion without displacement; the effects in the former case being confined to the spot affected, whereas in the latter they are further communicated to the whole body, and are of a mortal character. In like manner, when the ribs are fractured, whether one or more, provided there be no splinters, there is rarely fever, spitting of blood, and sphacelus, and ordinary treatment without evacuation will suffice, provided there be no fever;-bandaging, according to rule; and the callus forms in twenty days, the bone being of a porous nature. But in cases of contusion, tubercles form, along with cough, suppurating sores, and sphacelus of the ribs, for nerves from all the parts run along each rib. In many of these cases haemoptysis and empyema also take place. The management of this case consists in careful treatment, bandaging according to rule, diet at first restricted, but afterward more liberal, quiet, silence, position, bowels, and venereal matters regulated. Even when there is no spitting of blood, these contusions are more painful than fractures, and are more subject in time to relapses; and when any mucous collection is left in the part, it makes itself be felt in disorders of the body. Treatment:-burning, when the bone is affected, down to the bone, but not touching the bone itself; if in the intercostal space, the burning must not extend through it, nor be too superficial. In sphacelus of the ribs, tents are to be tried, all other particulars will be stated afterward: but they should be learned by sight rather than by words, namely, food, drink, heat, cold, attitude; medicines, dry,

liquid, red, dark, white, sour, for the ulcers, and so with regard to the diet.

37. Displacements ( *of the vertebrae* ) from a fall rarely admit of being rectified, and those above the diaphragm are most difficult to rectify. When the accident happens to children, the body does not grow, with the exception of the legs, the arms, and head. Excurvation, in adults, speedily relieves the individual from the disease he is laboring under, but in time it renews its attack, with the same symptoms as in children, but of a less serious nature. Some individuals have borne this affection well, and have turned out to be brawny and fat. But few of them have lived to the age of sixty. Lateral curvatures also occur, the proximate cause of which is the attitudes in which these persons lie. These cases have their prognostics accordingly.

38. The rule for the reduction and adjustment:-The axle, the lever, the wedge, pressure above; the axle to separate, the lever to push aside. Reduction and adjustment are to be accomplished by forcible extension, the parts being placed in such a position as will facilitate the conveying of the displaced bone over the extremity of the bone from which it was displaced: this is to be accomplished either with the hands, or by suspension, or axles, or turned round something. With the hands this is to be effected properly, according to the structure of the parts. In the case of the wrist and elbow, the parts are to be forced asunder, at the wrist in the line of the elbow, and the elbow with the fore-arm at a right angle with the arm, as when it is suspended in a sling. When we want to separate the protruding bones, and force them into place, in the case of the fingers, the toes, or the wrist, the proper separation may be made by hands, while the projecting part is forced into its place by pressing down with the heel or the palm of the hand upon some resisting object, while something moderately soft is laid under the projecting part, but nothing such under the other, and then pressure is to be made backward and downward, whether the dislocation be inward or outward. In lateral displacement, pressure and counter-pressure must be made on the opposite sides. Displacements forward can be reduced neither by sneezing, nor coughing, nor by the injection of air, nor by the cupping-instrument; and if anything can do good in such a case, it is extension. People are deceived in fractures of the spinal processes, the pain of which causing the patient to stoop forward, the case is taken for dislocation inward; these fractures heal speedily and easily. Dislocation outward is to be remedied by succussion, when high up, toward the feet; and when situated low down, in the contrary direction; the part is to be pressed back into its place, either with the foot or a board. Dislocations to either side, if they admit of any remedy, are to be treated by extension, and

suitable attitudes, with regimen. The whole apparatus should be broad, soft, and strong; or otherwise, they should be wrapped in rags; before being used, they should all be prepared proportionately to the length, height, and breadth. In applying extension to the thigh, for example, the bands should be fastened at the ankle and above the knee, these stretching in the same direction, another band to be passed by the loins, and around the armpits, and by the perineum and thigh, one end passing up the breast and the other along the back, these all stretching in the same direction and being fastened either to a piece of wood resembling a pestle or to an axle. When this is done on a couch, either of its feet is to be fastened to the threshold, and a strong block of wood is to be laid across the other, and the pieces of wood resembling a pestle are to be raised on these, to make extension and counter-extension; the naves of a wheel are to be fastened in the floor, or a ladder is to be adjusted, so that extension may be made in both directions. The thing commonly used is a bench six cubits long, two cubits broad, one fathom in thickness, having two low axles at this end and that, and having at its middle two moderate sized pillars, to which is to be adjusted a transverse piece of wood like the step of a ladder, which is to receive the piece of wood tied below the limb, as is done in dislocation at the shoulder; and the bench is to have excavations like trays, smooth, four inches in breadth and depth, and at such an interval as to leave room for the lever used to reduce the limb. In the middle of the bench a square hole is to be scooped out to receive a small pillar, which, being adjusted to the perineum, will obviate the tendency of the body to slip downward, and being rather loose may act somewhat as a lever. In certain occasions a piece of wood is required, which is inserted into a hole scooped out of the wall; the other end of it is then to be pressed down, something moderately soft being placed under it.

39. In those cases where the bone of the palate has exfoliated, the nose sinks in its middle. In contusions of the head without a wound, either from a fall, a fracture, or pressure, in certain of these cases acrid humors descend from the head to the throat, and from the wound in the head to the liver and thigh.

40. The symptoms of subluxations and luxations, and where, and how, and how much these differ from one another. And the cases in which the articular cavity has been broke off, and in which the ligament has been torn, and in which the epiphysis has broken in which, and how, when the limb consists of two bones, one or both are broken: in consequence of these the dangers, chances in which bad, and when the injuries will result in death, and when in recovery. What cases are to be reduced or attempted, and when, and which, and when not; the hopes

and dangers in these cases. Which and when congenital dislocations are to be undertaken: the parts in a state of growth, the parts fully grown, and why sooner, or slower: and why a part becomes maimed, and how, and how not: and why a certain part is atrophied, and where, and how, and in what cases to a less extent. And why fractured parts unite sooner or slower, how distortions and callosities form, and the remedy for them. In what cases there are external wounds, either at first or afterwards: in what fractures the bones are shortened, and in what not: in what cases the fractured bones protrude, and when they protrude most: in what cases dislocated bones protrude. That physicians are deceived, and by what means, in what they see, and in what they devise, regarding affections, and regarding cures. Established rules with regard to bandaging: preparation, presentation of the part, extension, adjustment, friction, bandaging, suspension and placing of the limb, attitude, seasons, diet. The more porous parts heal fastest, and vice versa. Distortions, where the bones are crooked. Flesh and tendons wasted on the side of the dislocation. The force used in reduction to be applied at as great a distance as possible from the seat of the displacement. Of nerves ( *ligaments?* ), those which are in motion and in humidity ( *flabby?* ) are of a yielding nature; those that are not, less so. In every dislocation the most speedy reduction is best. Reduction not to be made while the patient is in a febrile state, nor on the fourth or fifth day; and least of all, in those of the elbow, and all cases which induce torpor; the soonest the best, provided the inflammatory stage be avoided. Parts torn asunder, whether nerves, or cartilages, or epiphyses, or parts separated at symphyses, cannot possibly be restored to their former state; but callus is quickly formed in most cases, yet the use of the limb is preserved. Of luxations, those nearest the extremities are least dangerous. Those joints which are most easily dislocated are the least subject to inflammation. Those which have been least inflamed, and have not been subjected to after-treatment, are most liable to be dislocated anew. Extension should be made in the position most calculated to enable the one bone to clear the extremity of the other, attention being paid to configuration and place. Adjustment to be made in the direction of the displacement; to push the displaced limb straight backward and sideways. Parts suddenly drawn aside are to be suddenly drawn back by a rotatory motion. Articulations which have been oftenest dislocated are the most easily reduced; the cause is the conformation of the nerves ( *ligaments?* ) or of the bones; of the ligaments that they are long and yielding; and of the bones, the shallowness of the articular cavity, and roundness of the head [of the bone that enters it]. Usage, by its friction, forms a new socket. The cause-the disposition, and habit, and age. A part somewhat mucous is not subject to inflammation.



41. In those cases where there are wounds, either at first, or from protrusion of the bones; or afterwards, from pruritus, or irritation; in the latter case you are immediately to unloose the bandages, and having applied pitched cerate to the wound, bandage the limb, placing the head of the roller upon the wound, and proceeding otherwise as if there were no wound in the case; for thus will the swelling be reduced as much as possible, and the wound will suppurate most quickly, and the diseased parts will separate, and when it becomes clean the wound will most quickly heal. Splints are not to be applied to the place, nor is it to be bound tight. Proceed thus when no large bones exfoliate, but not in the latter case, for then there is great suppuration, and the same treatment is not applicable, but the parts require to be exposed to the air on account of the abscesses. In such cases where the bones protrude, and whether reduced or not, bandaging is not befitting, but distention is to be practiced by means of rolls of cloth, made like those used upon shackles; one of these is to be placed at the ankle, and the other at the knee; they are to be flattened toward the leg, soft, strong, and having rings; and rods made of cornel, and of a proper length and thickness are to be adjusted to them, so as to keep the parts distended; and straps, attached to both extremities, are to be inserted into the rings, so that the extremities being fixed into the rolls, may effect distention. Treatment:-Pitched cerate, in a hot state; the attitudes, position of the foot and hip; regulated diet. The bones which have protruded through the skin are to be replaced the same day, or next; not on the fourth or fifth, but when the swelling has subsided. Reduction is to be performed with levers; when the bone does not present any place upon which the lever can rest, a portion of the part which prevents this is to be sawed off. But the denuded parts will drop off, and the limb become shortened.

42. Dislocations at the joints are to a greater and less extent. Those that are to a less extent are the most easily reduced; those that are to a greater extent occasion lesions of the bones, of the ligaments, of the joints, of the fleshy parts, and of the attitudes. The thigh and arm resemble one another very much in their dislocations.

## ON INJURIES OF THE HEAD



*Translated by Charles Darwin Adams*

1. MEN'S heads are by no means all like to one another, nor are the sutures of the head of all men constructed in the same form. Thus, whoever has a prominence in the anterior part of the head (by prominence is meant the round protuberant part of the bone which projects beyond the rest of it), in him the sutures of the head take the form of the Greek letter *tau*, T; for the head has the shorter line running transverse before the prominence, while the other line runs through the middle of the head, all the way to the neck. But whoever has the prominence in the back part of the head, in him the sutures are constructed in quite the opposite form to the former; for in this case the shorter line runs in front of the prominence, while the longer runs through the middle all along to the forehead. But whoever has a prominence of the head both before and behind, in him the sutures resemble the Greek letter *eta* E; for the long lines of the letter run transverse before each prominence while the short one runs through the middle and terminates in the long lines. But whoever has no prominence on either part he has the sutures of the head resembling the Greek letter *chi*; for the one line comes transverse to the temple while the other passes along the middle of the head. The bone at the middle of the head is double, the hardest and most compact part being the upper portion, where it is connected with the skin, and the lowest, where it is connected with the meninx (*dura mater*); and from the uppermost and lowermost parts the bone gradually becomes softer and less compact, till you come to the *diploe*. The *diploe* is the most porous, the softest, and most cavernous part. But the whole bone of the head, with the, exception of a small portion of the uppermost and lowermost portions of it, is like a sponge; and the bone has in it many juicy substances, like caruncles; and if one will rub them with the fingers, some blood will issue from them. There are also in the bone certain very slender and hollow vessels full of blood. So it is with regard to hardness, softness, and porosity.

2. In respect to thickness and thinness; the thinnest and weakest part of the whole head is the part about the *bregma*; and the bone there has the smallest and thinnest covering of flesh upon it, and the largest proportion of brain is situated

in that region of the head. And hence it happens that from similar or even smaller wounds and instruments, when a person is wounded to the same or a less degree, the bone of the head there is more contused, fractured, and depressed; and that injuries there are more deadly and more difficult to cure; and it is more difficult to save one's life in injuries there than in any other part of the head; that from having sustained a similar or even a less wound a man will die, and that, too, in a shorter space of time than from a wound in any other part of the head. For the brain about the bregma feels more quickly and strongly any mischief that may occur to the flesh or the bone; for the brain about the bregma is in largest quantity, and is covered by the thinnest bone and the least flesh. Of the other portions, the weakest is that about the temples; for it is the conjunction of the lower jaw with the cranium, and there is motion there up and down as at a joint; and the organ of hearing is near it; and further, a hollow and important vein runs along the temple. But the whole bone of the head behind the vertex and the ear is stronger than the whole anterior part, and the bone itself has a larger and deeper covering of flesh upon it. And hence it follows, that when exposed to the same or even greater injuries from instruments of the same or greater size, the bone is less liable to be fractured and depressed than elsewhere; and that in a fatal accident the patient will live longer when the wound is in the posterior part of the head than when elsewhere; and that pus takes longer time to form and penetrate through the bone to the brain, owing to the thickness of the bone; and moreover, as there is less brain in that part of the head, more persons who are wounded in the back part of the head escape than of those who wounded in the anterior part. And in fatal cases, a man will survive longer in winter than in summer, whatever be the part of the head in which the wound is situated.

3. As to the *haedrae* (dints *or* marks?) of sharp and light weapons, when they take place in the bone without fissure, contusion, or depression inwards (and these take place equally in the anterior and posterior part of the head), death, when it does occur, does not properly result from them. A suture appearing in a wound, when the bone is laid bare, on whatever part of the head the wound may have been inflicted, is the weakest point of the head to resist a blow or a weapon, when the weapon happens to be impinged into the suture itself; but more especially when this occurs in the bregma at the weakest part of the head, and the sutures happen to be situated near the wound, and the weapon has hit the sutures themselves.

4. The bone in the head is liable to be wounded in the following modes, and there are many varieties in each of these modes of fracture: When a wounded bone

breaks, in the bone comprehending the fissure, contusion necessarily takes place where the bone is broken; for an instrument that breaks the bone occasions a contusion thereof more or less, both at the fracture and in the parts of the bone surrounding the fracture. This is the first mode. But there are all possible varieties of fissures; for some of them are fine, and so very fine that they cannot be discovered, either immediately after the injury, or during the period in which it would be of use to the patient if this could be ascertained. And some of these fissures are thicker and wider, certain of them being very wide. And some of them extend to a greater, and some to a smaller, distance. And some are more straight, nay, completely straight; and some are more curved, and that in a remarkable degree. And some are deep, so as to extend downwards and through the whole bone; and some are less so, and do not penetrate through the whole bone.

5. But a bone may be contused, and yet remain in its natural condition without any fracture in it; this is the second mode. And there are many varieties of contusion; for they occur to a greater or less degree, and to a greater depth, so as sometimes to extend through the whole bone; or to a less depth, so as not to extend through the whole bone; and to a greater and smaller length and breadth. But it is not possible to recognize any of these varieties by the sight, so as to determine their form and extent; neither, indeed, is it visible to the eyes when any mischief of this kind takes place, and immediately after the injury, whether or not the bone has been actually bruised, as is likewise the case with certain fractures at a distance from the seat of injury.

6. And the bone being fractured, is sometimes depressed inwards from its natural level along with the fractures, otherwise there would be no depression; for the depressed portion being fractured and broken off, is pushed inwards, while the rest of the bone remains in its natural position; and in this manner a fracture is combined with the depression. This is the third mode. There are many varieties of depression, for it may comprehend a greater and a small extent of bone, and may either be to a greater depth, or less so, and more superficial.

7. When a *hedra*, or dint of a weapon, takes place in a bone, there may be a fracture combined with it; and provided there be a fracture, contusion must necessarily be joined, to a greater or less extent, in the seat of the dint and fracture, and in the bone which comprehends them. This is the fourth mode. And there may be a *hedra*, or indentation of the bone, along with contusion of the surrounding bone, but without any fracture either in the *hedra* or in the contusion

inflicted by the weapon. But the indentation of a weapon takes place in a bone, and is called *hedra* , when the bone remaining in its natural state, the weapon which struck against the bone leaves its impression on the part which it struck. In each of these modes there are many varieties, with regard to the contusion and fracture, if both these be combined with the *hedra* , or if contusion alone, as it has been already stated that there are many varieties of contusion and fracture. And the *hedra* , or dint, of itself may be longer and shorter, crooked, straight, and circular; and there are many varieties of this mode, according to the shape of the weapon; and they may be more or less deep, and narrower or broader, and extremely broad. When a part is cleft, the cleft or notch which occurs in the bone, to whatever length or breadth, is a *hedra* , if the other bones comprehending the cleft remain in their natural position, and be not driven inwards; for in this case it would be a depression, and no longer a *hedra* .

8. A bone may be injured in a different part of the head from that on which the person has received the wound, and the bone has been laid bare. This is the fifth mode. And for this misfortune, when it occurs, there is no remedy; for when this mischief takes place, there is no means of ascertaining by any examination whether or not it has occurred, or on what part of the head.

9. Of these modes of fracture, the following require trepanning: the contusion, whether the bone be laid bare or not; and the fissure, whether apparent or not. And if, when an indentation ( *hedra* ) by a weapon takes place in a bone it be attended with fracture and contusion, and even if contusion alone, without fracture, be combined with the indentation, it requires trepanning. A bone depressed from position rarely requires trepanning; and those which are most pressed and broken require trepanning the least; neither does an indentation ( *hedra* ) without fracture and contusion require trepanning; nor does a notch, provided it is large and wide; for a notch and a *hedra* are the same.

10. In the first place, one must examine the wounded person, in what part of the head the wound is situated, whether in the stronger or weaker parts; and ascertain respecting the hairs about the wound, whether they have been cut off by the instrument, and have gone into the wound; and if so, one should declare that the bone runs the risk of being denuded of flesh, and of having sustained some injury from the weapon. These things one should say from a distant inspection, and before laying a hand on the man; but on a close examination one should endeavor to ascertain clearly whether the bone be denuded of flesh or not; and if the denuded bone be visible to the eyes, this will be enough; but

otherwise an examination must be made with the sound. And if you find the bone denuded of the flesh, and not safe from the wound, you must first ascertain the state of the bone, and the extent of the mischief, and of what assistance it stands in need. One should also inquire of the wounded person how and in what way he sustained the injury; and if it be not apparent whether the bone has sustained an injury or not, it will be still more necessary, provided the bone be denuded, to make inquiry how the wound occurred, and in what manner; for when contusions and fractures exist in the bone, but are not apparent, we must ascertain, in the first place from the patient's answers, whether or not the bone has sustained any such injuries, and then find out the nature of the case by word and deed, with the exception of sounding. For sounding does not discover to us whether the bone has sustained any of these injuries or not; but sounding discovers to us an indentation inflicted by a weapon, and whether a bone be depressed from its natural position, and whether the bone be strongly fractured; all which may also be ascertained visibly with the eyes.

11. And a bone sustains fractures, either so fine as to escape the sight, or such as are apparent, and contusions which are not apparent, and depression from its natural position, especially when one person is intentionally wounded by another, or when, whether intentionally or not, a blow or stroke is received from an elevated place, and if the instrument in the hand, whether used in throwing or striking, be of a powerful nature, and if a stronger person wound a weaker. Of those who are wounded in the parts about the bone, or in the bone itself, by a fall, he who falls from a very high place upon a very hard and blunt object is in most danger of sustaining a fracture and contusion of the bone, and of having it depressed from its natural position; whereas he that falls upon more level ground, and upon a softer object, is likely to suffer less injury in the bone, or it may not be injured at all. Of those instruments which, falling upon the head, wound the parts about the bone, or the bone itself, that which falls from a very high place, and the least on a level with the person struck, and which is at the same time very hard, very blunt, and very heavy, and which is the least light, sharp, and soft, such an instrument would occasion a fracture and contusion of the bone. And there is most danger that the bone may sustain these injuries, under such circumstances, when the wound is direct and perpendicular to the bone, whether struck from the hand or from a throw, or when any object falls upon the person, or when he is wounded by falling, or in whatever way the bone sustains a direct wound from this instrument. Those weapons which graze the bone obliquely are less apt to fracture, contuse, or depress the bone, even when the bone is denuded of flesh; for in some of those wounds thus inflicted the bone

is not laid bare of the flesh. Those instruments more especially produce fractures in the bone, whether apparent or not, and contusions, and inward depression of the bone, which are rounded, globular, smooth on all sides, blunt, heavy, and hard; and such weapons bruise, compress, and pound the flesh; and the wounds inflicted by such instruments, whether obliquely or circularly, are round, and are more disposed to suppurate, and to have a discharge, and take longer time to become clean; for the flesh which has been bruised and pounded must necessarily suppurate and slough away. But weapons of an oblong form, being, for the most part, slender, sharp, and light, penetrate the flesh rather than bruise it, and the bone in like manner; and such an instrument may occasion a *hedra* and a cut (for a *hedra* and a cut are same thing); but weapons of this description do not produce contusions, nor fractures, nor depressions inwardly. And in addition the appearances in the bone, which you call detect by the sight, you should make inquiry as to all these particulars (for they are symptoms of a greater or less injury), whether the wounded person was stunned, and whether darkness was diffused over his eyes, and whether he had vertigo, and fell to the ground.

12. When the bone happens to be denuded of flesh by the weapon, and when the wound occurs upon the sutures, it is difficult to distinguish the indentation ( *hedra* ) of a weapon which is clearly recognized in other parts of the bone, whether it exist or not, and especially if the *hedra* be seated in the sutures themselves. For the suture being rougher than the rest of the bone occasions confusion, and it is not clear which is the suture, and which the mark inflicted by the instrument, unless the latter ( *hedra* ) be large. Fracture also for the most part is combined with the indentation when it occurs in the sutures; and this fracture is more difficult to discern when the bone is broken, on this account, that if there be a fracture, it is situated for the most part in the suture. For the bone is liable to be broken and slackened there, owing to the natural weakness of the bone there, and to its porosity, and from the suture being readily ruptured and slackened: but the other bones which surround the suture remain unbroken, because they are stronger than the suture. For the fracture which occurs at the suture is also a slackening of the suture, and it is not easy to detect whether the bone be broken and slackened by the indentation of a weapon occurring in the suture, or from a contusion of the bone at the sutures; but it is still more difficult to detect a fracture connected with contusion. For the sutures, having the appearance of fissures, elude the discernment and sight of the physician, as being rougher than the rest of the bone, unless the bone be strongly cut and slackened (for a cut and a *hedra* are the same thing). But it is necessary, if the wound has occurred at the

sutures, and the weapon has impinged on the bone or the parts about it, to pay attention and find out what injury the bone has sustained. For a person wounded to the same, or a much smaller, extent, and by weapons of the same size and quality, and even much less, will sustain a much greater injury, provided he has received the blow at the sutures, than if it was elsewhere. And many of these require trepanning, but you must not apply the trepan to the sutures themselves, but on the adjoining bone.

13. And with regard to the cure of wounds in the head, and the mode of detecting injuries in the bone which are not apparent, the following is my opinion:- In a wound of the head, you must not apply anything liquid, not even wine, but as little as possible, nor a cataplasm, nor conduct the treatment with tents, nor apply a bandage to an ulcer on the head, unless it be situated on the forehead, in the part which is bare of hairs, or about the eyebrow and eye, for wounds occurring there require cataplasms and bandages more than upon any other part of the head. For the rest of the head surrounds the whole forehead, and the wounds wherever situated become inflamed and swelled, owing to an influx of blood from surrounding parts. And neither must you apply cataplasms and bandages to the forehead at all times; but when the inflammation is stopped and the swelling has subsided, you must give up the cataplasms and bandages. A wound in any other part of the head must not be treated with tents, bandages, or cataplasms, unless it also requires incision. You must perform incision on wounds situated on the head and forehead, whenever the bone is denuded of flesh, and appears to have sustained some injury from the blow, but the wound has not sufficient length and breadth for the inspection of the bone, so that it may be seen whether it has received any mischief from the blow, and of what nature the injury is, and to what extent the flesh has been contused, and whether the bone has sustained any injury, or whether it be uninjured by the blow, and has suffered no mischief; and with regard to the treatment, what the wound, and the flesh, and the injury of the bone stand in need of. Ulcers of this description stand in need of incision; and, if the bone be denuded of the flesh, and if it be hollow, and extend far obliquely, we cut up the cavity wherever the medicine cannot penetrate readily, whatever medicine it may be; and wounds which are more inclined to be circular and hollow, and for the most part others of the like shape, are cut up by making double incision in the circle lengthways, according to the figure of the man, so as to make the wound of a long form. Incisions may be practiced with impunity on other parts of the head, with the exception of the temple and the parts above it, where there is a vein that runs across the temple, in which region an incision is not to be made. For convulsions seize on a person who has been thus treated; and



if the incision be on the left temple, the convulsions seize on the right side; and if the incision be on the right side, the convulsions take place on the left side.

14. When, then, you lay open a wound in the head on account of the bones having been denuded of the flesh, as wishing to ascertain whether or not the bone has received an injury from the blow, you must make an incision proportionate to the size of the wound, and as much as shall be judged necessary. And in making the incision you must separate the flesh from the bone where it is united to the membrane (*pericranium?*) and to the bone, and then fill the whole wound with a tent, which will expand the wound very wide next day with as little pain as possible; and along with the tents apply a cataplasm, consisting of a mass (*maza*) of fine flour pounded in vinegar, or boiled so as to render it as glutinous as possible. On the next day, when you remove the tent, having examined the bone to see what injury it has sustained, if the wound in the bone be not right seen by you, nor can you discover what mischief the bone itself has sustained, but the instrument seems to have penetrated to the bone so as to have injured it, you must scrape the bone with a raspatory to a depth and length proportionate to the suture of the patient, and again in a transverse direction, for the sake of the fractures which are not seen, and of the contusions which are not discovered, as not being accompanied with depression of the bone from its natural position. For the scraping discovers the mischief, if the injuries in the bone be not otherwise manifest. And if you perceive an indentation (*hedra*) left in the bone by the blow, you must scrape the dint itself and the surrounding bones, lest, as often happens, there should be a fracture and contusion, or a contusion alone, combined with the dint, and escape observation. And when you scrape the bone with the raspatory, and it appears that the wound in the bone requires the operation, you must not postpone it for three days, but do it during this period, more especially if the weather be hot, and you have had the management of the treatment from commencement. If you suspect that the bone is broken or contused, or has sustained both these injuries, having formed your judgement from the severity of the wound, and from the information of the patient, as that the person who inflicted the wound, provided it was done by another person, was remarkably strong, and that the weapon by which he was wounded was of a dangerous description, and then that the man had been seized with vertigo, dimness of vision, and stupor, and fell to the ground,- under these circumstances, if you cannot discover whether the bone be broken, contused, or both the one and the other, nor can see the truth of the matter, you must dissolve the jet-black ointment, and fill the wound with it when this dissolved, and apply a linen rag smeared with oil, and then a cataplasm of the *maza* with a bandage; and on the

next day, having cleaned out the wound, scrape the bone with the raspatory. And if the bone is not sound, but fractured and contused, the rest of it which is scraped will be white; but the fracture and contusion, having imbibed the preparation, will appear black, while the rest of the bone is white. And you must again scrape more deeply the fracture where it appears black; and, if you thus remove the fissure, and cause it to disappear, you may conclude that there has been a contusion of the bone to a greater or less extent, which has occasioned the fracture that has disappeared under the raspatory; but it is less dangerous, and a matter of less consequence, when the fissure has been effaced. But if the fracture extend deep, and do not seem likely to disappear when scraped, such an accident requires trepanning. But having performed this operation, you must apply the other treatment to the wound.

15. You must be upon your guard lest the bone sustain any injury from the fleshy parts if not properly treated. When the bone has been sawed and otherwise denuded, whether it be actually sound, or only appears to be so, but has sustained some injury from the blow, there may be danger of its suppurating (although it would not otherwise have done so), if the flesh which surrounds the bone be ill cured, and become inflamed and strangled; for it gets into a febrile state, and becomes much inflamed. For the bone acquires heat and inflammation from the surrounding flesh, along with irritation and throbbing, and the other mischiefs which are in the flesh itself, and from these it gets into a state of suppuration. It is a bad thing for the flesh ( *granulations?* ) in an ulcer to be moist and mouldy, and to require a long time to become clean. But the wound should be made to suppurate as quickly as possible; for, thus the parts surrounding the wound would be the least disposed to inflammation, and would become the soonest clean; for the flesh which has been chopped and bruised by the blow, must necessarily suppurate and slough away. But when cleaned the wound must be dried, for thus the wound will most speedily become whole, when flesh devoid of humors grows up, and thus there will be no fungous flesh in the sore. The same thing applies to the membrane which surrounds the brain: for when, by sawing the bone, and removing it from the meninx, you lay the latter bare, you must make it clean and dry as quickly as possible, lest being in a moist state for a considerable time, it become soaked therewith and swelled; for when these things occur, there is danger of its mortifying.

16. A piece of bone that must separate from the rest of the bone, in consequence of a wound in the head, either from the indentation ( *hedra* ) of a blow in the bone, or from the bone being otherwise denuded for a long time, separates

mostly by becoming exsanguous. For the bone becomes dried up and loses its blood by time and a multiplicity of medicines which are used; and the separation will take place most quickly, if one having cleaned the wound as quickly as possible will next dry it, and the piece of bone, whether larger or smaller. For a piece of bone which is quickly dried and converted, as it were, into a shell, is most readily separated from the rest of the bone which retains its blood and vitality; for, the part having become exsanguous and dry, more readily drops off from that which retains its blood and is alive.

17. Such pieces of bone as are depressed from their natural position, either being broken off or chopped off to a considerable extent, are attended with less danger, provided the membrane be safe; and bones which are broken by numerous and broader fractures are still less dangerous and more easily extracted. And you must not trepan any of them, nor run any risks in attempting to extract the pieces of bone, until they rise up of their own accord, upon the subsidence of the swelling. They rise up when the flesh (*granulations*) grows below, and it grows from the diploe of the bone, and from the sound portion, provided the upper table alone be in a state of necrosis. And the flesh will shoot up and grow below the more quickly, and the pieces of bone ascend, if one will get the wound to suppurate and make it clean as quickly as possible. And when both the tables of the bone are driven in upon the membrane, I mean the upper and lower, the wound, if treated in the same way, will very soon get well, and the depressed bones will quickly rise up.

18. The bones of children are thinner and softer, for this reason, that they contain more blood [than those of adults]; and they are porous and spongy, and neither dense nor hard. And when wounded to a similar or inferior degree by weapons of the same or even of an inferior power, the bone of a young person more readily and quickly suppurates, and that in less time than the bone of an older person; and in accidents, which are to prove fatal, the younger person will die sooner than the elder. But if the bone is laid bare of flesh, one must attend and try to find out, what even is not obvious to the sight, and discover whether the bone be broken and contused, or only contused; and if, when there is an indentation in the bone, whether contusion, or fracture, or both be joined to it; and if the bone has sustained any of these injuries, we must give issue to the blood by perforating the bone with a small trepan, observing the greatest precautions, for the bone of young persons is thinner and more superficial than that of elder persons.

19. When a person has sustained a mortal wound on the head, which cannot be cured, nor his life preserved, you may form an opinion of his approaching dissolution, and foretell what is to happen from the following symptoms which such a person experiences. When a bone is broken, or cleft, or contused, or otherwise injured, and when by mistake it has not been discovered, and neither the raspatory nor trepan has been applied as required, but the case has been neglected as if the bone were sound, fever will generally come on if in winter, and in summer the fever usually seizes after seven days. And when this happens, the wound loses its color, and the inflammation dies in it; and it becomes glutinous, and appears like a pickle, being of a tawny and somewhat livid color; and the bone then begins to sphacelate, and turns black where it was white before, and at last becomes pale and blanched. But when suppuration is fairly established in it, small blisters form on the tongue and he dies delirious. And, for the most part, convulsions seize the other side of the body; for, if the wound be situated on the left side, the convulsions will seize the right side of the body; or if the wound be on the right side of the head, the convulsion attacks the left side of the body. And some become apoplectic. And thus they die before the end of seven days, if in summer; and before fourteen, if in winter. And these symptoms indicate, in the same manner, whether the wound be older or more recent. But if you perceive that fever is coming on, and that any of these symptoms accompany it, you must not put off, but having sawed the bone to the membrane (*meninx*), or scraped it with a raspatory (and it is then easily sawed or scraped), you must apply the other treatment as may seem proper, attention being paid to circumstances.

20. When in any wound of the head, whether the man has been trepanned or not, but the bone has been laid bare, a red and erysipelatous swelling supervenes in the face, and in both eyes, or in either of them, and if the swelling be painful to the touch, and if fever and rigor come on, and if the wound look well, whether as regards the flesh or the bone, and if the parts surrounding the wound be well, except the swelling in the face, and if the swelling be not connected with any error in the regimen, you must purge the bowels in such a case with a medicine which will evacuate bile; and when thus purged the fever goes off, the swelling subsides, and the patient gets well. In giving the medicine you must pay attention to the strength of the patient.

21. With regard to trepanning, when there is a necessity for it, the following particulars should be known. If you have had the management of the case from the first, you must not at once saw the bone down to the *meninx*; for it is not

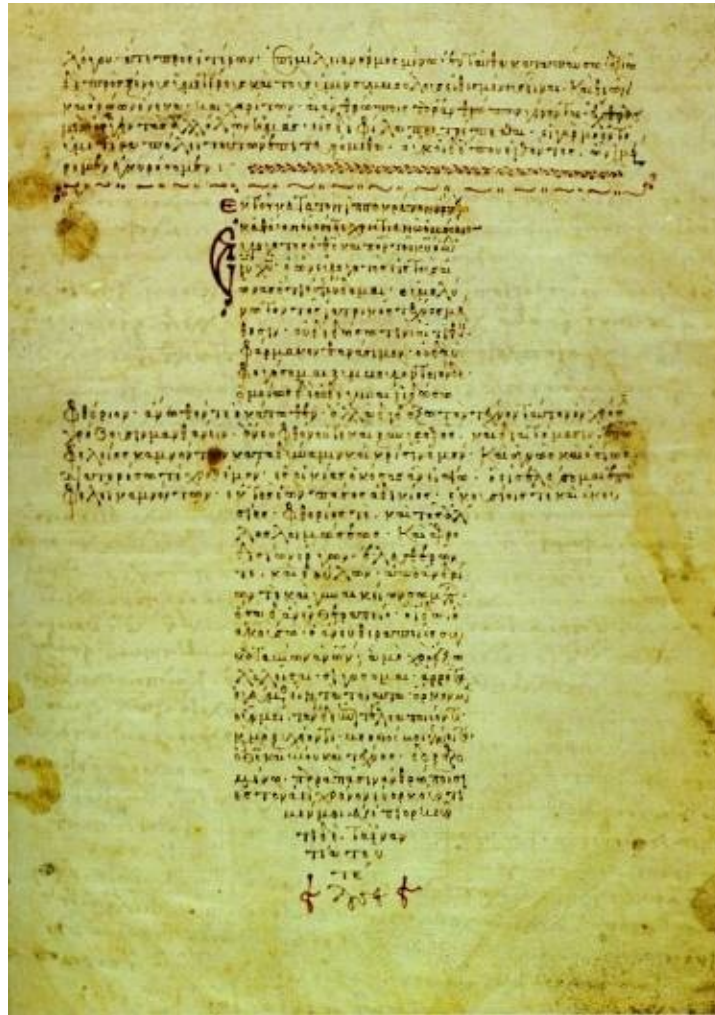
proper that the membrane should be laid bare and exposed to injuries for a length of time, as in the end it may become fungous. And there is another danger if you saw the bone down to the meninx and remove it at once, lest in the act of sawing you should wound the meninx. But in trepanning, when only a very little of the bone remains to be sawed through, and the bone can be moved, you must desist from sawing, and leave the bone to fall out of itself. For to a bone not sawed through, and where a portion is left of the sawing, no mischief can happen; for the portion now left is sufficiently thin. In other respects you must conduct the treatment as may appear suitable to the wound. And in trepanning you must frequently remove the trepan, on account of the heat in the bone, and plunge it in cold water. For the trepan being heated by running round, and heating and drying the bone, burns it and makes a larger piece of bone around the sawing to drop off, than would otherwise do. And if you wish to saw at once down to the membrane, and then remove the bone, you must also, in like manner, frequently take out the trepan and dip it in cold water. But if you have not charge of the treatment from the first, but undertake it from another after a time, you must saw the bone at once down to the meninx with a serrated trepan, and in doing so must frequently take out the trepan and examine with a sound (specillum), and otherwise along the tract of the instrument. For the bone is much sooner sawn through, provided there be matter below it and in it, and it often happens that the bone is more superficial, especially if the wound is situated in that part of the head where the bone is rather thinner than in other parts. But you must take care where you apply the trepan, and see that you do so only where it appears to be particularly thick, and having fixed the instrument there, that you frequently make examinations and endeavor by moving the bone to bring it up. Having removed it, you must apply the other suitable remedies to the wound. And if, when you have the management of the treatment from the first, you wish to saw through the bone at once, and remove it from the membrane, you must, in like manner, examine the tract of the instrument frequently with the sound, and see that it is fixed on the thickest part of the bone, and endeavor to remove the bone by moving it about. But if you use a perforator ( *trepan?* ), you must not penetrate to the membrane, if you operate on a case which you have had the charge of from the first, but must leave a thin scale of bone, as described in the process of sawing.

## THE HIPPOCRATIC OATH



*Translated by Charles Darwin Adams*

Scholars widely believe that Hippocrates, or one of his students wrote the ὅρκος, the traditional oath, taken by new physicians, swearing to a number of healing gods to uphold specific ethical standards. Of historic and traditional value, the oath is considered a rite of passage for practitioners of medicine in many countries, although nowadays the modernised version of the text varies. The oath was originally written in Ionic Greek from the late 5th century BC and remains a key text of the Hippocratic Corpus.



*A twelfth century Byzantine manuscript of the Hippocratic Oath*

## THE HIPPOCRATIC OATH

I SWEAR by Apollo the physician, and Aesculapius, and Health, and All-heal, and all the gods and goddesses, that, according to my ability and judgment, I will keep this Oath and this stipulation- to reckon him who taught me this Art equally dear to me as my parents, to share my substance with him, and relieve his necessities if required; to look upon his offspring in the same footing as my own brothers, and to teach them this art, if they shall wish to learn it, without fee or stipulation; and that by precept, lecture, and every other mode of instruction, I will impart a knowledge of the Art to my own sons, and those of my teachers, and to disciples bound by a stipulation and oath according to the law of medicine, but to none others. I will follow that system of regimen which, according to my ability and judgment, I consider for the benefit of my patients, and abstain from whatever is deleterious and mischievous. I will give no deadly medicine to any one if asked, nor suggest any such counsel; and in like manner I will not give to a woman a pessary to produce abortion. With purity and with holiness I will pass my life and practice my Art. I will not cut persons laboring under the stone, but will leave this to be done by men who are practitioners of this work. Into whatever houses I enter, I will go into them for the benefit of the sick, and will abstain from every voluntary act of mischief and corruption; and, further from the seduction of females or males, of freemen and slaves. Whatever, in connection with my professional practice or not, in connection with it, I see or hear, in the life of men, which ought not to be spoken of abroad, I will not divulge, as reckoning that all such should be kept secret. While I continue to keep this Oath unviolated, may it be granted to me to enjoy life and the practice of the art, respected by all men, in all times! But should I trespass and violate this Oath, may the reverse be my lot!



# THE LAW



## OR, THE CANON

*Translated by Charles Darwin Adams*

1. Medicine is of all the Arts the most noble; but, notwithstanding, owing to the ignorance of those who practice it, and of those who, inconsiderately, form a judgment of them, it is at present far behind all the other arts. Their mistake appears to me to arise principally from this, that in the cities there is no punishment connected with the practice of medicine (and with it alone) except disgrace, and that does not hurt those who are familiar with it. Such persons are like the figures which are introduced in tragedies, for as they have the shape, and dress, and personal appearance of an actor, but are not actors, so also physicians are many in title but very few in reality.

2. Whoever is to acquire a competent knowledge of medicine, ought to be possessed of the following advantages: a natural disposition; instruction; a favorable position for the study; early tuition; love of labor; leisure. First of all, a natural talent is required; for, when Nature opposes, everything else is in vain; but when Nature leads the way to what is most excellent, instruction in the art takes place, which the student must try to appropriate to himself by reflection, becoming an early pupil in a place well adapted for instruction. He must also bring to the task a love of labor and perseverance, so that the instruction taking root may bring forth proper and abundant fruits.

3. Instruction in medicine is like the culture of the productions of the earth. For our natural disposition is, as it were, the soil; the tenets of our teacher are, as it were, the seed; instruction in youth is like the planting of the seed in the ground at the proper season; the place where the instruction is communicated is like the food imparted to vegetables by the atmosphere; diligent study is like the cultivation of the fields; and it is time which imparts strength to all things and brings them to maturity.

4. Having brought all these requisites to the study of medicine, and having

acquired a true knowledge of it, we shall thus, in traveling through the cities, be esteemed physicians not only in name but in reality. But inexperience is a bad treasure, and a bad fund to those who possess it, whether in opinion or reality, being devoid of self-reliance and contentedness, and the nurse both of timidity and audacity. For timidity betrays a want of powers, and audacity a want of skill. There are, indeed, two things, knowledge and opinion, of which the one makes its possessor really to know, the other to be ignorant.

5. Those things which are sacred, are to be imparted only to sacred persons; and it is not lawful to import them to the profane until they have been initiated in the mysteries of the science.

# THE PHYSICIAN'S ESTABLISHMENT



OR, ON THE SURGERY

*Translated by Charles Darwin Adams*

1. It's the business of the physician to know, in the first place, things similar and things dissimilar; those connected with things most important, most easily known, and in anywise known; which are to be seen, touched, and heard; which are to be perceived in the sight, and the touch, and the hearing, and the nose, and the tongue, and the understanding; which are to be known by all the means we know other things.
2. The things relating to surgery, are- the patient; the operator; the assistants; the instruments; the light, where and how; how many things, and how; where the body, and the instruments; the time; the manner; the place.
3. The operator is either sitting or standing, conveniently for himself, for the person operated upon, for the light. There are two kinds of light, the common and the artificial; the common is not at our disposal, the artificial is at our disposal. There are two modes of using each, either to the light, or from the light (to the side?). There is little use of that which is from ( *or* oblique to the light), and the degree of it is obvious. As to opposite the light, we must turn the part to be operated upon to that which is most brilliant of present and convenient lights, unless those parts which should be concealed, and which it is a shame to look upon; thus the part that is operated upon should be opposite the light, and the operator opposite the part operated upon, except in so far as he does not stand in his own light; for in this case the operator will indeed see, but the thing operated upon will not be seen. With regard to himself when sitting, his feet should be raised to a direct line with his knees, and nearly in contact with one another; the knees a little higher than the groins, and at some distance from one another, for the elbows to rest upon them. The robe, in a neat and orderly manner, is to be thrown over the elbows and shoulders equally and proportionally. With regard to the part operated upon; we have to consider how far distant, and how near, above, below, on this side on that side, or in the middle. The measure as to

distance and proximity is, that the elbows do not press the knees before, nor the sides behind; that the hands be not raised higher than the breasts, nor lower than so as that when the breast reposes on the knees he may have the hands at right angles with the arm: thus it is as regards the medium; but as concerns this side or that, the operator must not be beyond his seat, but in proportion as he may require turning he must shift the body, or part of the body, that is operated upon. When standing, he must make his inspection, resting firmly and equally on both feet; but he must operate while supporting himself upon either leg, and not the one on the same side with the hand which he makes use of; the knee being raised to the height of the groins as while sitting; and the other measures in like manner. The person operated upon should accommodate the operator with regard to the other parts of his body, either standing, sitting, or lying; so as that he may continue to preserve his figure, avoid sinking down, shrinking from, turning away; and may maintain the figure and position of the part operated upon, during the act of presentation, during the operation, and in the subsequent position.

4. The nails should be neither longer nor shorter than the points of the fingers; and the surgeon should practice with the extremities of the fingers, the index-finger being usually turned to the thumb; when using the entire hand, it should be prone; when both hands, they should be opposed to one another. It greatly promotes a dexterous use of the fingers when the space between them is large, and when the thumb is opposed to the index. But it is clearly a disease when the thumb is impaired from birth, or when, from a habit contracted during the time of nursing, it is impeded in its motions by the fingers. One should practice all sorts of work with either of them, and with both together (for they are both alike), endeavouring to do them well, elegantly, quickly, without trouble, neatly, and promptly.

5. The instruments, and when and how they should be prepared, will be treated of afterwards; so that they may not impede the work, and that there may be no difficulty in taking hold of them, with the part of the body which operates. But if another gives them, he must be ready a little beforehand, and do as you direct.

6. Those about the patient must present the part to be operated upon as may seem proper, and they must hold the rest of the body steady, in silence, and listening to the commands of the operator.

7. There are two views of bandaging: that which regards it while doing, and that which regards it when done. It should be done quickly, without pain, with ease,

and with elegance; quickly, by despatching the work; without pain, by being readily done; with ease, by being prepared for everything; and with elegance, so that it may be agreeable to the sight. By what mode of training these accomplishments are to be acquired has been stated. When done, it should fit well and neatly; it is neatly done when with judgment, and when it is equal and unequal, according as the parts are equal or unequal. The forms of it (the bandage?) are the simple, the slightly winding (called *ascia*), the sloping (*sima*), the monocus, the rhombus, and the semi-rhombus. The form of bandage should be suitable to the form and the affection of the part to which it is applied.

8. There are two useful purposes to be fulfilled by bandaging: (*first* ,) strength, which is imparted by the compression and the number of folds. In one case the bandage effects the cure, and in another it contributes to the cure. For these purposes this is the rule- that the force of the constriction be such as to prevent the adjoining parts from separating, without compressing them much, and so that the parts may be adjusted but not forced together; and that the constriction be small at the extremities, and least of all in the middle. The knot and the thread that is passed through should not be in a downward but in an upward direction, regard being had to the circumstances under which the case is presented; to position, to the bandaging, and to the compression. The commencement of the ligatures is not to be placed at the wound, but where the knot is situated. The knot should not be placed where it will be exposed to friction, nor where it will be in the way, nor where it will be useless. The knot and the thread should be soft, and not large.

9. (*Second* .) One ought to be well aware that every bandage has a tendency to fall off towards the part that declines or becomes smaller; as, for example, upwards, in the case of the head, and downwards, in the case of the leg. The turns of the bandage should be made from right to left, and from left to right, except on the head, where it should be in a straight direction. When opposite parts are to be bandaged together, we must use a bandage with two heads; or if we make use of a bandage with one head, we must attach it in like manner at some fixed point: such, for example, as the middle of the head; and so in other cases. Those parts which are much exposed to motion, such as the joints, where there is a flexion, should have few and slight bandages applied to them, as at the ham; but where there is much extension, the bandage should be single and broad, as at the kneecap; and for the maintenance of the bandage in its proper place, some turns should be carried to those parts which are not much moved, and are lank, such as the parts above and below the knee. In the case of the shoulder; a

fold should be carried round by the other armpit; in that of the groin, by the flanks of the opposite side; and of the leg, to above the calf of the leg. When the bandage has a tendency to escape above, it should be secured below, and *vice versa* ; and where there is no means of doing this, as in the case of the head, the turns are to be made mostly on the most level part of the head, and the folds are to be done with as little obliquity as possible, so that the firmest part being last applied may secure the portions which are more movable. When we cannot secure the bandaging by means of folds of the cloth, nor by suspending them from the opposite side, we must have recourse to stitching it with ligatures, either passed circularly or in the form of a seam.

10. The bandages should be clean, light, soft, and thin. One should practice rolling with both hands together, and with either separately. One should also choose a suitable one, according to the breadth and thickness of the parts. The heads of the bandages should be hard, smooth, and neatly put on. That sort of bandaging is the worst which quickly falls off; but those are bad bandages which neither compress nor yet come off.

11. The following are the object which the upper bandage, the under bandage, or both aim at: The object of the under bandage is either to bring together parts that are separated, or to compress such as are expanded, or to separate what are contracted, or to restore to shape what are distorted, or the contrary. It is necessary to prepare pieces of linen cloth, which are light, thin, soft, clean, having no seams nor protuberances on them, but sound, and able to bear some stretching, or even a little more than required; not dry, but wetted with a juice suitable to the purpose required. We must deal with parts separated ( *in a sinus?* ) in such wise, that the parts which are raised may touch the bottom without producing pressure; we must begin on the sound part, and terminate at the wound; so that whatever humor is in it may be expelled, and that it may be prevented from collecting more. And straight parts are to be bandaged in a straight direction, and oblique obliquely, in such a position as to create no pain; and so that there may be no constriction nor falling off on a change of position, either for the purpose of taking hold of anything, or laying the limb; and that muscles, veins, nerves, and bones may be properly placed and adjusted to one another. It should be raised or laid in a natural position, so as not to occasion pain. In those cases in which an abscess is formed, we must act in a contrary way. When our object is to bring together parts which have become expanded, in other respects we must proceed on the same plain; and we must commence the bringing together from some considerable distance; and after their approach, we

must apply compression, at first slight, and afterwards stronger, the limit of it being the actual contact of the parts. In order to separate parts which are drawn together, when attended with inflammation, we must proceed on the opposite plan; but when without inflammation, we must use the same preparations, but bandage in the opposite direction. In order to rectify distorted parts, we must proceed otherwise on the same principles; but the parts which are separated must be brought together by an underbandage, by agglutinants, and by suspending it (*the limb?*) in its natural position. And when the deformities are the contrary, this is to be done on the contrary plan.

12. In fractures we must attend to the length, breadth, thickness, and number of the compresses. The length should be that of the bandaging; the breadth, three or four fingers; thickness, three or fourfold; number so as to encircle the limb, neither more nor less; those applied for the purpose of rectifying a deformity, should be of such a length as to encircle it; the breadth and thickness being determined by the vacuity, which is not to be filled up at once. The upper bandages are two, the first of which is to be carried from the seat of the injury upwards, and the second from the seat of the injury downwards, and from below upwards; the parts about the seat of the injury being most compressed, the extremities least, and the rest in proportion. The upper bandages should take in a considerable portion of the sound parts. We must attend to the number, length, and breadth of the bandages; the number must be such as not to be inferior to what the injury requires, nor occasion compression with the splints, nor prove cumbersome, nor occasion any slipping of them, nor render them inefficient. As to length and breadth, they should be three, four, five, or six cubits in length, and as many fingers broad. The folds of the strings (*selvages?*) should be such as not to occasion pressure; they are to be soft and not thick; and all these things are to be proportionate to the length, breadth, and thickness of the part affected. The splints are to be smooth, even, and rounded at the extremities; somewhat less all along than the upper bandaging, and thickest at the part to which fracture inclines. Those parts where there are tuber-osities, and which are devoid of flesh, such as the ankles or fingers, we must guard from the splints which are placed over them, either by position, or by their shortness. They are to be secured by the strings in such a manner as not to occasion pressure at first. A soft, consistent, and clean cerate should be rubbed into the folds of the bandage.

13. As to the temperature and quantity of the water used, its heat should be just such as the hand can bear, and it ought to be known that a large quantity is best for producing relaxation and attenuation, whereas a moderate quantity is best for

incarnating and softening. The limit to the affusion is, to stop when the parts become swelled up, and before the swelling subsides; for the parts swell up at first, and fall afterward.

14. The object on which to ( *the limb?* ) is laid should be soft, smooth, and sloping upwards toward the protuberant parts of the body, such as the heel or hips, so that there may be no projection, nor bending inwards, nor turning aside. The canal ( *spout or gutter?* ) should rather comprehend the whole limb than the half of it, attention being paid to the injury and to whatever else appears to create inconvenience.

15. The presentation of the injured part to the physician, the extension, the arrangement, and so forth, are to be regulated according to nature. What is nature in these operations is to be determined by the accomplishment of the object which we have in view, and for this purpose we must look to the part in the state of rest, in its middle state, and to habit; in regard to the state of rest and relaxation, as in the arm, that it be in a line with the hand; and with regard to the medium between flexion and extension, that the forearm be at right angles to the arm; and with regard to habit, it should be considered that some limbs bear certain positions preferably, as, for example, the thighs extension; for in such attitudes the parts can best bear to be placed for a considerable time without a change of posture. And in the change from the state of distention, the muscles, veins, nerves, and bones, when properly arranged and secured, will preserve their relations to one another while the limb is raised or placed.

16. The extension should be most powerful when the largest and thickest bones, or when both are broken; next when the under-bone, and least of all, when the upper. When immoderate, it is injurious, except in the case of children. The limb should be a little elevated. The model by which we judge if the part be properly set is the sound part of the same name, or the part which is its pair.

17. Friction can relax, brace, incarnate, attenuate: hard braces, soft relaxes, much attenuates, and moderate thickens.

18. The following should be the state of matters on the first application of the bandage. The person to whom it has been applied should say that he feels the compression particularly at the seat of the injury, but very little at the extremities; the parts should be adjusted but not pressed together, and that rather by the number of the bandages than by the force of the constriction; and the



tightness should rather be on the increase during the first day and night; but on the next it should be less, and on the third the bandages should be loose. On the next day a soft swelling should be observed in the extremities; and on the third day, when the bandaging is loosed, the swelling should be found diminished in size, and this should be the case every time the bandages are removed. At the second application of the bandage, it should be ascertained whether the dressing has been properly done, and then greater compression should be made, and with more bandages; and on the third, still greater, and still more. On the seventh day from the first dressing, when the bandages are loosed, the limb should be found slender and the bones mobile. We must then have recourse to the splints, provided the limb be free of swelling, pruritus, and ulceration, and allow them to remain until twenty days after the accident; but if any suspicions arise, the bandages must be loosed in the interval. The splints should be tightened every third day.

19. The suspending of a fractured limb in a sling, the disposition of it, and the bandaging, all have for their object to preserve it in position. The principal considerations with regard to the position are the habits and the peculiar nature of each of the limbs: the varieties are shown in running, walking, standing, lying, action, repose.

20. It should be kept in mind that exercise strengthens, and inactivity wastes.

21. Compression should be produced by the number of bandages, rather than by the force of the constriction.

22. In cases of ecchymosis, contusions, sprains, or swellings not attended with inflammations, blood is to be expelled from the wound, in greatest quantity to the upper part, and in smallest to the inferior; neither the arm nor the leg should be placed in a declining position: the head of the bandage should be placed on the wound, and there the greatest pressure should be made; the least at the extremities, and intermediately in the middle; the last fold of the bandage should be at the upper part of the body. As to binding and compression, these objects are to be attained rather by the number of the bandages than the force of the constriction; and moreover, in these cases the bandages should be thin, light, soft, clean, broad, sound, so that they may effect their purpose, even without splints. And we must use affusions.

23. Dislocations, sprains, diastases of bones, violent separation, abruption of the

extremities of bones, and distrainings, so as to induce *varus* or *valgus* , in these cases we must apply the bandages so as not to compress the part whence the displacement took place, and that we may render them tight at the side to which the displacement was, and give the limb an inclination in the opposite direction, and that in an excessive degree. We employ bandages, compresses, suspension of the limb in a sling, attitude, extension, friction, rectification; and along with these the affusion of much water.

24. In treating parts which are atrophied, we must comprehend a considerable part of the sound limb with the bandage, so that by the influx thereby produced, the wasted part may acquire a supply greater than its loss, and may be thus disposed to growth and restoration of its fleshy parts. It is better also to bandage the parts above, as the thigh in the case of the leg, and also the thigh and leg of the opposite side, so that they may be placed in similar circumstances, and may both equally be deprived of motion; and that the supply of nourishment may be alike curtailed and open to both. The compression should be the effect rather of the number of the bandages than of their tightness. We relax first the part most requiring it, and have recourse to that kind of friction which will promote the growth of flesh, and to affusion. No splints.

25. Those things which are for the purpose of giving support and strength to the part, as to the breast, side, head, and so forth, are used in such cases as the following: for pulsations, that there may be no motion in the part; and in separation at the sutures of the skull, in order to give support; and in order to strengthen the chest and head, in coughs, sneezings, and other movements. In all these cases the same measure of bandaging is to be observed, for where the injury is, there the bandage should compress most, and something soft is to be placed below that suits with the complaint; and we must not apply the bandages tighter than just to stop the pulsations from creating disturbance, and that the separated parts at the sutures may be brought into contact, they must not be such as absolutely to stop the coughs and sneezings, but so as to give support, and, without occasioning uneasiness, prevent the parts from being shaken.

## Works of the Hippocratic Corpus



*Ruins of an Asklepieion (a healing temple) on Kos. Hippocrates was probably trained at the asklepieion, taking lessons from the Thracian physician Herodicus of Selymbria.*



*Another view of the Asklepieion*

## ON THE NATURE OF MAN



*Translated by W. H. S. Jones*

It is now generally believed that *On the Nature of Man* and the following treatise, *Regimen in Health*, are both by the hand of Polybus, the son in law and disciple of Hippocrates, as shown by a testimony from Aristotle's *History of Animals*. *On the Nature of Man* attempts to explain the human body in its anatomy and composition. The content is based on detailed observation and defended by logical explanations of the causes of each disease in order to readily meet outside criticism. The treatise places emphasis on disease not being of divine origin, but rather an imbalance of the four humours (collection of blood, phlegm, black bile, and yellow bile) in the body.

The work demonstrates the common Hippocratic interest in humourism and in such treatments as bloodletting — a procedure performed in order to regulate the patient's four humours. Polybus gives first hand accounts and explanations of individual medical cases. For example, dysentery and nosebleeds occur in the spring and summer, as this is when the blood is at its hottest. The author concludes that the degree of damage a given disease can do to a person depends on its nature. The most serious of illnesses are those that affect the strongest part of the body. If the strongest part of the body is affected, then the weak parts are easily affected and may cause death. However, if a disease starts in a weak area of the body, often it is curable.

## NATURE OF MAN

I. He who is accustomed to hear speakers discuss the nature of man beyond its relations to medicine will not find the present account of any interest. For I do not say at all that a man is air, or fire, or water, or earth, or anything else that is not an obvious constituent of a man; such accounts I leave to those that care to give them. Those, however, who give them have not in my opinion correct knowledge. For while adopting the same idea they do not give the same account. Though they add the same appendix to their idea — saying that “what is” is a unity, and that this is both unity and the all — yet they are not agreed as to its name. One of them asserts that this one and the all is air, another calls it fire, another, water, and another, earth; while each appends to his own account evidence and proofs that amount to nothing. The fact that, while adopting the same idea, they do not give the same account, shows that their knowledge too is at fault. The best way to realise this is to be present at their debates. Given the same debaters and the same audience, the same man never wins in the discussion three times in succession, but now one is victor, now another, now he who happens to have the most glib tongue in the face of the crowd. Yet it is right that a man who claims correct knowledge about the facts should maintain his own argument victorious always, if his knowledge be knowledge of reality and if he set it forth correctly. But in my opinion such men by their lack of understanding overthrow themselves in the words of their very discussions, and establish the theory of Melissus.

II. Now about these men I have said enough, and I will turn to physicians. Some of them say that a man is blood, others that he is bile, a few that he is phlegm. Physicians, like the metaphysicians, all add the same appendix. For they say that a man is a unity, giving it the name that severally they

wish to give it; this changes its form and its power, being constrained by the hot and the cold, and becomes sweet, bitter, white, black and so on. But in my opinion these views also are incorrect. Most physicians then maintain views like these, if not identical with them; but I hold that if man were a unity he would never feel pain, as there would be nothing from which a unity could suffer pain. And even if he were to suffer, the cure too would have to be one. But as a matter of fact cures are many. For in the body are many constituents, which, by heating, by cooling, by drying or by wetting one another contrary to nature, engender diseases; so that both the forms of diseases are many and the healing of them is

manifold. But I require of him who asserts that man is blood and nothing else, to point out a man when he does not change his form or assume every quality, and to point out a time, a season of the year or a season of human life, in which obviously blood is the only constituent of man. For it is only natural that there should be

one season in which blood-in-itself appears as the sole constituent. My remarks apply also to him who says that man is only phlegm, and to him who says that man is bile. I for my part will prove that what I declare to be the constituents of a man are, according to both convention and nature, always alike the same; it makes no difference whether the man be young or old, or whether the season be cold or hot. I will also bring evidence, and set forth the necessary causes why each constituent grows or decreases in the body.

III. Now in the first place generation cannot take place from a unity. How could a unity generate, without copulating? Again, there is no generation unless the copulating partners be of the same kind, and possess the same qualities; nor would there be any offspring. Moreover, generation will not take place if the combination of hot with cold and of dry

with moist be not tempered and equal — should the one constituent be much in excess of the other, and the stronger be much stronger than the weaker. Wherefore how is it likely for a thing to be generated from one, when generation does not take place from more than one unless they chance to be mutually well-tempered? Therefore, since such is the nature both of all other things and of man, man of necessity is not one, but each of the components contributing to generation has in the body the power it contributed. Again, each component must return to its own nature when the body of a man dies, moist to moist, dry to dry, hot to hot and cold to cold. Such too is the nature of animals, and of all other things. All things are born in a like way, and all things die in a like way. For the nature of them is composed of all those things I have mentioned above, and each thing, according to what has been said, ends in that from which it was composed. So that too is whither it departs.

IV. The body of man has in itself blood, phlegm, yellow bile and black bile; these make up the nature of his body, and through these he feels pain or enjoys health. Now he enjoys the most perfect health when these elements are duly proportioned to one another in respect of compounding, power and bulk, and when they are perfectly mingled. Pain is

felt when one of these elements is in defect or excess, or is isolated in the body without being compounded with all the others. For when an element is isolated and stands by itself, not only must the place which it left become diseased, but the place where it stands in a flood must, because of the excess, cause pain and distress. In fact when more of an element flows out of the body than is necessary to get rid of superfluity, the emptying causes pain. If, on the other hand, it be to an inward part that there takes place the emptying, the shifting and the separation from other elements, the man certainly must, according to what has been said, suffer from a double pain, one in the place left, and another in the place flooded.

V. Now I promised to show that what are according to me the constituents of man remain always the same, according to both convention and nature. These constituents are, I hold, blood, phlegm, yellow bile and black bile. First I assert that the names of these according to convention are separated, and that none of them has the same name as the others; furthermore, that according to nature their essential forms are separated, phlegm being quite unlike blood, blood being quite unlike bile, bile being quite unlike phlegm. How could they be like one another, when their colours appear not alike to the sight nor does their touch seem alike to the hand? For they are not equally warm, nor cold, nor dry, nor moist. Since then they are so different from one another in essential form and in power, they cannot be one, if fire and water are not one. From the following evidence you may know that these elements are not all one, but that each of them has its own power and its own nature. If you were to give a man a medicine which withdraws phlegm, he will vomit you phlegm; if you give him one which withdraws bile, he will vomit you bile. Similarly too black bile is purged away if you give a medicine which withdraws black bile. And if you wound a man's body so as to cause a wound, blood will flow from him. And you will find all these things happen on any day and on any night, both in winter and in summer, so long as the man can draw breath in and then breathe it out again, or until he is deprived of one of the elements congenital with him. Congenital with him (how should they not be so?) are the elements already mentioned. First, so long as a man lives he manifestly has all these elements always in him; then he is born out of a human being having all these elements, and is nursed in a human being having them all, I mean those elements I have mentioned with proofs.

VI. Those who assert that man is composed of one element seem to me to have been influenced by the following line of thought. They see those who drink drugs and die through excessive purgings vomiting, in some cases bile, in others phlegm; then they think that the man is composed of that one thing from the



purging of which they saw him die. Those too who say that man is composed of blood use the same line of thought. They see men who are cut bleeding from the body, and so they think that blood composes the soul of a man. Such is the evidence they all use in their discussions. Yet first, nobody yet in excessive purgings has vomited bile alone when he died. But when a man has drunk a drug which withdraws bile, he first vomits bile, then phlegm also. Afterwards under stress men vomit after these black bile, and finally they vomit also pure blood. The same experiences happen to those who drink drugs which withdraw phlegm. First they vomit phlegm, then yellow bile, then black, and finally pure blood, whereon they die. For when the drug enters the body, it first withdraws that constituent of the body which is most akin to itself, and then it draws and purges the other constituents. For just as things that are sown and grow in the earth, when they enter it, draw each that constituent of the earth which is nearest akin to it — these are the acid, the bitter, the sweet, the salt and so on — first the plant draws to itself mostly that element which is most akin to it, and then it draws the other constituents also. Such too is the action of drugs in the body. Those that withdraw bile first evacuate absolutely pure bile, then bile that is mixed.

Those that withdraw phlegm first withdraw absolutely pure phlegm, and then phlegm that is mixed. And when men are cut, the blood that flows is at first very hot and very red, and then it flows with more phlegm and bile mixed with it.

VII. Phlegm increases in a man in winter; for phlegm, being the coldest constituent of the body, is closest akin to winter. A proof that phlegm is very cold is that if you touch phlegm, bile and bloody you will find phlegm the coldest. And yet it is the most viscid, and after black bile requires most force for its evacuation. But things that are moved by force become hotter under the stress of the force. Yet in spite of all this, phlegm shows itself the coldest element by reason of its own nature. That winter fills the body with phlegm you can learn from the following evidence. It is in winter that the sputum and nasal discharge of men is fullest of phlegm; at this season mostly swellings become white, and diseases generally phlegmatic. And in spring too phlegm still remains strong in the body, while the blood increases. For the cold relaxes, and the rains come on, while the blood accordingly increases through the, showers and the hot days. For these conditions of the year are most akin to the nature of blood, spring being moist and warm. You can learn the truth from the following facts. It is chiefly in spring and summer that men are attacked by dysenteries, and by hemorrhage from the nose, and they are then hottest and red. And in summer blood is still

strong, and bile rises in the body and extends until autumn. In autumn blood becomes small in quantity, as autumn is opposed to its nature, while bile prevails in the body during the summer season and during autumn. You may learn this truth from the following facts. During this season men vomit bile without an emetic, and when they take purges the discharges are most bilious. It is plain too from fevers and from the complexions of men. But in summer phlegm is at its weakest. For the season is opposed to its nature, being dry and warm. But in autumn blood becomes least in man, for autumn is dry and begins from this point to chill him. It is black bile which in autumn is greatest and strongest. When winter comes on, bile being chilled becomes small in quantity, and phlegm increases again because of the abundance of rain and the length of the nights. All these elements then are always comprised in the body of a man, but as the year goes round they become now greater and now less, each in turn and according to its nature. For just as every year participates in every element, the hot, the cold, the dry and the moist — none in fact of these elements would last for a moment without all the things that exist in this universe, but if one were to fail all would disappear, for by reason of the same necessity all things are constructed and nourished by one another — even so, if any of these congenital elements were to fail, the man could not live. In the year sometimes the winter is most powerful, sometimes the spring, sometimes the summer and sometimes the autumn. So too in man sometimes phlegm is powerful, sometimes blood, sometimes bile, first yellow, and then what is called black bile. The clearest proof is that if you will give the same man to drink the same drug four times in the year, he will vomit, you will find, the most phlegmatic matter in the winter, the moistest in the spring, the most bilious in the summer, and the blackest in the autumn.

VIII. Now, as these things are so, such diseases as increase in the winter ought to cease in the summer, and such as increase in the summer ought to cease in the winter, with the exception of those which do not change in a period of days — the period of days I shall speak of afterwards. When diseases arise in spring, expect their departure in autumn. Such diseases as arise in autumn must have their departure in spring. Whenever a disease passes these limits, you may know that it will last a year. The physician too must treat diseases with the conviction that each of them is powerful in the body according to the season which is most conformable to it.

VI. Furthermore, one must know that diseases due to repletion are cured by evacuation, and those due to evacuation are cured by repletion; those due to

exercise are cured by rest, and those due to idleness are cured by exercise. To know the whole matter, the physician must set himself against the established character of diseases, of constitutions, of seasons and of ages; he must relax what is tense and make tense what is relaxed. For in this way the diseased part would rest most, and this, in my opinion, constitutes treatment. Diseases arise, in some cases from regimen, in other cases from the air by the inspiration of which we live. The distinction between the two should be made in the following way. Whenever many men are attacked by one disease at the same time, the cause should be assigned to that which is most common, and which we all use most. This it is which we breathe in. For it is clear that the regimen of each of us is not the cause, since the disease attacks all in turn, both younger and older, men as much as women, those who drink wine as much as teetotallers, those who eat barley cake as much as those who live on bread, those who take much exercise as well as those who take little. For regimen could not be the cause, when no matter what regimen they have followed all men are attacked by the same disease. But when diseases of all sorts occur at one and the same time, it is clear that in each case the particular regimen is the cause, and that the treatment carried out should be that opposed to the cause of the disease, as has been set forth by me elsewhere also, and should be by change of regimen. For it is clear that, of the regimen the patient is wont to use, either all, or the greater part, or some one part, is not suited to him. This one should learn and change, and carry out treatment only after examination of the patient's constitution, age, physique, the season of the year and the fashion of the disease, sometimes taking away and sometimes adding, as I have already said, and so making changes in drugging or in regimen to suit the several conditions of age, season, physique and disease. But when an epidemic of one disease is prevalent, it is plain that the cause is not regimen but what we breathe, and that this is charged with some unhealthy exhalation. During this period these are the recommendations that should be made to patients. They should not change their regimen, as it is not the cause of their disease, but rather take care that, their body be as thin and as weak as possible, by diminishing their usual food and drink gradually. For if the change of regimen be sudden, there is a risk that from the change too some disturbance will take place in the body, but regimen should be used in this way when it manifestly does no harm to a patient. Then care should be taken that inspiration be of the lightest, and also from a source as far removed as possible; the place should be moved as far as possible from that in which the disease is epidemic, and the body should be reduced, for such reduction will minimise the need of deep and frequent breathing.

VII. Those diseases are most dangerous which arise in the strongest part of the body. For should the disease remain where it began, the whole body, as the strongest limb in it feels pain, must be in pain; while should the disease move from a stronger part to one of the weaker parts, the riddance of it proves difficult. But when diseases move from weaker parts to stronger parts, it is easier to get rid of them, as the strength of the stronger part will easily consume the humours that flow into them.

XI. The thickest of the veins have the following nature. There are four pairs in the body. One pair extends from behind the head through the neck, and on either side of the spine externally reaches to the loins and legs, and then stretches through the shanks to the outside of the ankles and to the feet. So bleeding for pains in the back and loins should be made on the outside, behind the knee or at the ankle. The other pair of veins extend from the head by the ears through the neck, and are called jugular veins. They stretch right and left by the side of the spine internally along the loins to the testicles and thighs, then on the inside through the hollow of the knee, and finally through the shanks to the ankles on the inside and to the feet. Accordingly, to counteract pains in the loins and testicles, bleeding should be performed in the hollow of the knee and in the ankles on the inner side. The third pair of veins passes from the temples through the neck under the shoulder-blades, then they meet in the lungs and reach, the one on the right the left side, and the one on the left the right. The right one reaches from the lungs under the breast both to the spleen and to the kidneys, and the left one to the right from the lungs under the breast both to the liver and to the kidneys, both of them ending at the anus. The fourth pair begin at the front of the head and eyes, under the neck and collar-bones, passing on the upper part of the arms to the elbows, then through the forearms to the wrists and fingers, then back from the fingers they go through the ball of the hand and the forearm upwards to the elbow, and through the upper arm on the under side to the armpit, and from the ribs above one reaches to the spleen and the other to the liver, and finally both pass over the belly to the privy parts. Such is the arrangement of the thick veins. From the belly too extend over the body very many veins of all sorts, by which nourishment comes to the body. Veins too lead from the thick veins to the belly and to the rest of the body both from the outside and from the inside; they communicate with one another, the inside ones outside and the outside ones inside. Bleeding then should be practised according to these principles. The habit should be cultivated of cutting as far as possible from the places where the pains are wont to occur and the blood to collect. In this way the change will be least sudden and violent, and you will change the habit so that the

blood no longer collects in the same place.

XII. Such as expectorate much pus without fever, or have a thick sediment of pus in the urine without pain, or whose stools remain stained with blood, as in dysentery, during a long period, being thirty-five years or older, all these are ill from the same cause. For these patients must have been in their youth hardworking, diligent and industrious; afterwards when delivered from their labours they must have put on soft flesh very different from their former flesh, and there must be a wide difference between the previous condition and the hypertrophied condition of their body, so that there is no longer harmony. Accordingly when a disease seizes men in such a condition, at first they escape, but after the disease the body in time wastes and serous matter flows through the veins wherever it finds the broadest passage. Now if the flux be to the lower bowel, the stools become very like the matter shut up in the body, because as the passage slopes downwards the matter cannot remain long in the intestine. When the flux is to the chest the patients suffer suppuration, because since the purging is along an upward passage and abides a long time in the chest it rots and turns to pus. When the matter empties itself into the bladder, owing to the warmth of the place the matter becomes hot and white, and separates itself out. The finest part becomes scum on the top, while the thickest sinks to the bottom and is called pus. Stones too form in children because of the heat of this place and of the whole body, but in men stones do not form because of the coldness of the body. For you must know that a man is warmest on the first day of his existence and coldest on the last. For it must be that the body is hot which grows and progresses with force; but when the body begins to decay with an easy decline it grows cooler. It is on account of this that a man, growing most on his first day, is proportionally hotter then; on his last day, decaying most, he is proportionally cooler. Most patients in the condition described above recover their health spontaneously forty-five days from the day on which they began to waste. Such of them as exceed this period, should no other illness occur, recover spontaneously in a year.

XIII. Diseases which arise soon after their origin, and whose cause is clearly known, are those the history of which can be foretold with the greatest certainty. The patient himself must bring about a cure by combating the cause of the disease, for in this way will be removed that which caused the disease in the body.

VIII. Patients whose urine contains a deposit of sand or chalk suffer at first from

tumours near the thick vein, with suppuration; then, since the tumours do not break quickly, from the pus there grow out pieces of chalk, which are pressed outside through the vein into the bladder with the urine. Those whose urine is merely blood-stained have suffered in the veins. When the urine is thick, and there are passed with it small pieces of flesh like hair, you must know that these symptoms result from the kidneys and arthritic complaints. When the urine is clear, but from time to time as it were bran appears in it, the patients suffer from psoriasis of the bladder.

IX. Most fevers come from bile. There are four sorts of them, apart from those that arise in distinctly separate pains. Their names are the continued, the quotidian, the tertian and the quartan. Now what is called the continued fever comes from the most abundant and the purest bile, and its crises occur after the shortest interval. For since the body has no time to cool it wastes away rapidly, being warmed by the great heat. The quotidian next to the continued comes from the most abundant bile, and ceases quicker than any other, though it is longer than the continued, proportionately to the lesser quantity of bile from which it comes; moreover the body has a breathing space, whereas in the continued there is no breathing space at all. The tertian is longer than the quotidian and is the result of less bile. The longer the breathing space enjoyed by the body in the case of the tertian than in the case of the quotidian, the longer this fever is than the quotidian. The quartans are in general similar, but they are more protracted than the tertians in so far as their portion is less of the bile that causes heat, while the intervals are greater in which the body cools. It is from black bile that this excessive obstinacy arises. For black bile is the most viscous of the humours in the body, and that which sticks fast the longest. Hereby you will know that quartan fevers participate in the atrabilious element, because it is mostly in autumn that men are attacked by quartans, and between the ages of twenty-five and forty-five. This age is that which of all ages is most under the mastery of black bile, just as autumn is the season of all seasons which is most under its mastery. Such as are attacked by a quartan fever outside this period and this age you may be sure will not suffer from a long fever, unless the patient be the victim of another malady as well.

## REGIMEN IN HEALTH



*Translated by W. H. S. Jones*

I. THE layman ought to order his regimen in the following way. In winter eat as much as possible and drink as little as possible; drink should be wine as undiluted as possible, and food should be bread, with all meats roasted; during this season take as few vegetables as possible, for so will the body be most dry and hot. When spring comes, increase drink and make it very diluted, taking a little at a time; use softer foods and less in quantity; substitute for bread barley-cake; on the same principle diminish meats, taking them all boiled instead of roasted, and eating when spring comes a few vegetables, in order that a man may be prepared for summer by taking all foods soft, meats boiled, and vegetables raw or boiled. Drinks should be as diluted and as copious as possible, the change to be slight, gradual and not sudden. In summer the barley-cake to be soft, the drink diluted and copious, and the meats in all cases boiled. For one must use these, when it is summer, that the body may become cold and soft. For the season is hot and dry, and makes bodies burning and parched. Accordingly these conditions must be counteracted by way of living. On the same principle the change from spring to summer will be prepared for in like manner to that from winter to spring, by lessening food and increasing drink. Similarly, by opposing opposites prepare for the change from summer to winter. In autumn make food more abundant and drier, and meats too similar, while drinks should be smaller and less diluted, so that the winter may be healthy and a man may take his drink neat and scanty and his food as abundant and as dry as possible. For in this way he will be most healthy and least chilly, as the season is cold and wet.

II. Those with physiques that are fleshy, soft and red, find it beneficial to adopt a rather dry regimen for the greater part of the year. For the nature of these physiques is moist. Those that are lean and sinewy, whether ruddy or dark, should adopt a moister regimen for the greater part of the time, for the bodies of such are constitutionally dry. Young people also do well to adopt a softer and moister regimen, for this age is dry, and young bodies are firm. Older people should have a drier kind of diet for the greater part of the time, for bodies at this age are moist and soft and cold.

So — in fixing regimen pay attention to age, season, habit, land, and physique, and counteract the prevailing heat or cold. For in this way will the best health be enjoyed.

III. Walking should be rapid in winter and slow in summer, unless it be under a burning heat. Fleshy people should work faster, thin people slower. Bathe frequently in summer, less in winter, and the lean should bathe more than the fleshy. In winter wear unoled cloaks, but soak them in oil in summer.

IV. Fat people who wish to become thin should always fast when they undertake exertion, and take their food while they are panting and before they have cooled, drinking beforehand diluted wine that is not very cold. Their meats should be seasoned with sesame, sweet spices, and things of that sort. Let them also be rich. For so the appetite will be satisfied with a minimum. They should take only one full meal a day, refrain from bathing, lie on a hard bed, and walk lightly clad as much as is possible. Thin people who wish to become fat should do the opposite of these things, and in particular they should never undertake exertion when fasting.

V. Emetics and clysters for the bowels should be used thus. Use emetics during the six winter months, for this period engenders more phlegm than does the summer, and in it occur the diseases that attack the head and the region above the diaphragm. But when the weather is hot use clysters, for the season is burning, the body bilious, heaviness is felt in the loins and knees, feverishness comes on and colic in the belly. So the body must be cooled, and the humours that rise must be drawn downwards from these regions. For people inclined to fatness and moistness let the clysters be rather salt and thin; for those inclined to dryness, leanness and weakness let them be rather greasy and thick. Greasy, thick clysters are prepared from milk, or water boiled with chick-peas or similar things. Thin, salt clysters are made of things like brine and sea-water. Emetics should be employed thus. Men who are fat and not thin should take an emetic fasting after running or walking quickly in the middle of the day. Let the emetic consist of half a *cotyle* of hyssop compounded with a *chous* of water, and let the patient drink this, pouring in vinegar and adding salt, in such a way as to make the mixture as agreeable as possible. Let him drink it quietly at first, and then more quickly. Thinner and weaker people should partake of food before the emetic in the following way. After bathing in hot water let the patient first drink a cotyle of neat wine; then let him take food of all sorts without drinking either during or after the meal, but after waiting time enough to walk ten stades, give him to



drink a mixture of three wines, dry, sweet and acid, first rather neat, and taken in small sips at long intervals, then more diluted, more quickly and in larger quantities.

He who is in the habit of taking an emetic twice a month will find it better to do so on two successive days than once every fortnight, though the usual custom is just the contrary. Those who benefit from vomiting up their food, or whose bowels do not easily excrete, all these profit by eating several times a day, partaking of all sorts of food and of meats prepared in every way, and by drinking two or three sorts of wine. Those who do not vomit up their food, or have loose bowels, all these profit by acting in exactly the opposite way to this.

I. Infants should be washed in warm water for a long time, and be given to drink their wine well diluted and not altogether cold, and such that will least swell the belly and cause flatulence. This must be done that they may be less subject to convulsions, and that they may become bigger and of a better colour. Women should use a regimen of a rather dry character, for food that is dry is more adapted to the softness of their flesh, and less diluted drinks are better for the womb and for pregnancy.

VII. Athletes in training should in winter both run and wrestle; in summer they should wrestle but little and not run at all, walking instead a good deal in the cool. Such as are fatigued after their running ought to wrestle; such as are fatigued by wrestling ought to run. For by taking exercise in this way they will warm, brace and refresh best the part of the body suffering from fatigue. Such as are attacked by diarrhoea when training, whose stools consist of undigested food, should reduce their training by at least one-third and their food by one-half. For it is plain that their bowels cannot generate the heat necessary to digest the quantity of their food. The food of such should be well-baked bread crumbled into wine, and their drink should be as undiluted and as little as possible, and they ought not to walk after food. At this time they should take only one meal each day, a practice which will give the bowels the greatest heat, and enable them to deal with whatever enters them. This kind of diarrhoea attacks mostly persons of close flesh, when a man of such a constitution is compelled to eat meat, for the veins when closely contracted cannot take in the food that enters. This kind of constitution is apt sharply to turn in either direction, to the good or to the bad, and in bodies of such a sort a good condition is at its best only for a while. Physiques of a less firm flesh and inclined to be hairy are more capable of forcible feeding and of fatigue, and their good

condition is of longer duration. Such as throw up their food the day after, whose hypochondria are swollen because of the undigested food, are benefited by prolonging their sleep, but apart from this their bodies should be subjected to fatigue, and they should drink more wine and less diluted, and at such times partake of less food. For it is plain that their bellies are too weak and cold to digest the quantity of food. When people are attacked by thirst, diminish food and fatigue, and let them drink their wine well diluted and as cold as possible. Those who feel pains in the abdomen after exercise or after other fatigue are benefited by resting without food; they ought also to drink that of which the smallest quantity will cause the maximum of urine to be passed, in order that the veins across the abdomen may not be strained by repletion. For it is in this way that tumours and fevers arise.

VIII. When a disease arises from the brain, at first a numbness seizes the head and there is frequent passing of urine with the other symptoms of strangury; this lasts nine days. Then, if water or mucus break out at the nostrils or ears, the illness ceases and there is no more strangury. The patient passes without pain copious white urine for the next twenty days. His headache disappears, but his vision is impaired.

VIII. A wise man should consider that health is the greatest of human blessings, and learn how by his own thought to derive benefit in his illnesses.

## ON ULCERS



*Translated by Charles Darwin Adams*

1. We must avoid wetting all sorts of ulcers except with wine, unless the ulcer be situated in a joint. For, the dry is nearer to the sound, and the wet to the unsound, since an ulcer is wet, but a sound part is dry. And it is better to leave the part without a bandage unless a unless a cataplasm be applied. Neither do certain ulcers admit of cataplasms, and this is the case with the recent rather than the old, and with those situated in joints. A spare diet and water agree with all ulcers, and with the more recent rather than the older; and with an ulcer which either is inflamed or is about to be so; and where there is danger of gangrene; and with the ulcers an inflammation in joints; and where there is danger of convulsion; and in wounds of the belly; but most especially in fractures of the head and thigh, or any other member in which a fracture may have occurred. In the case of an ulcer, it is not expedient to stand; more especially if the ulcer be situated in the leg; but neither, also, is it proper to sit or walk. But quiet and rest are particularly expedient. Recent ulcers, both the ulcers themselves and the surrounding parts, will be least exposed to inflammation, if one shall bring them to a suppuration as expeditiously as possible, and if the matter is not prevented from escaping by the mouth of the sore; or, if one should restrain the suppuration, so that only a small and necessary quantity of pus may be formed, and the sore may be kept dry by a medicine which does not create irritation. For the part becomes inflamed when rigor and throbbing supervene; for ulcers then get inflamed when suppuration is about to form. A sore suppurates when the blood is changed and be-comes heated; so that becoming putrid, it constitutes the pus of such ulcers. When you seem to require a cataplasm, it is not the ulcer itself to which you must apply the cataplasm, but to the surrounding parts, so that the pus may escape and the hardened parts may become soft. Ulcers formed either from the parts having been cut through by a sharp instrument, or excised, admit of medicaments for bloody wounds ( *'enaima* ), and which will prevent suppuration by being desiccant to a certain degree. But, when the flesh has been contused and roughly cut by the weapon, it is to be so treated that it may suppurate as quickly as possible; for thus the inflammation is less, and it is necessary that the pieces of flesh which are bruised and cut should melt away by

becoming putrid, being converted into pus, and that new flesh should then grow up. In every recent ulcer, except in the belly, it is expedient to cause blood to flow from it abundantly, and as may seem seasonable; for thus will the wound and the adjacent parts be less attacked with inflammation. And, in like manner, from old ulcers, especially if situated in the leg, in a toe or finger, more than in any other part of the body. For when the blood flows they become drier and less in size, as being thus dried up. It is this (*blood?*) especially which prevents such ulcers from healing, by getting into a state of putrefaction and corruption. But, it is expedient, after the flow of the blood, to bind over the ulcer a thick and soft piece of sponge, rather dry than wet, and to place above the sponge some slender leaves. Oil, and all things of an emollient and oily nature, disagree with such ulcers, unless they are getting nearly well. Neither does oil agree with wounds which have been recently inflicted, nor yet do medicines formed with oil or suet, more especially if the ulcer stands in need of more cleansing. And, in a word, it is in summer and in winter that we are to smear with oil these sores that require such medicines.

2. Gentle purging of the bowels agrees with most ulcers, and in wounds of the head, belly, or joints, where there is danger of gangrene, in such as require sutures, in phagedaenic, spreading and in otherwise inveterate ulcers. And when you want to apply a bandage, no plasters are to be used until you have rendered the sore dry, and then indeed you may apply them. The ulcer is to be frequently cleaned with a sponge, and then a dry and clean piece of cloth is to be frequently applied to it, and in this way the medicine which it is supposed will agree with it is to be applied, either with or without a bandage. The hot season agrees better than winter with most ulcers, except those situated in the head and belly; but the equinoctial season agrees still better with them. Ulcers which have been properly cleansed and dried as they should be, do not usually get into a the state. When a bone has exfoliated, or has been burned, or sawed, or removed in any other way, the cicatrices of such ulcers become deeper than usual. Ulcers which are not cleansed, are not disposed to unite if brought together, nor do the lips thereof approximate of their own accord. When the points adjoining to an ulcer are inflamed, the ulcer is not disposed to heal until the inflammation subside, nor when the surrounding parts are blackened by mortification, nor when a varix occasions an overflow of blood in the part, is the ulcer disposed to heal, unless you bring the surrounding parts into a healthy condition.

3. Circular ulcers, if somewhat hollow, you must scarify all along their edges, or to the extent of half the circle, according to the natural stature of the man. When

erysipelas supervenes upon any sore, you must purge the body, in the way most suitable to the ulcer, either upward or downward. When swelling arises around an ulcer, and if the ulcer remain free from inflammation, there will be a deposit of matter in process of time. And whatever ulcer gets swelled along with inflammation and does not subside as the other parts subside which became inflamed and swelled at the same time, there is a danger that such an ulcer may not unite. When from a fall, or in any other way, a part has been torn or bruised, and the parts surrounding the ulcer have become swelled, and, having suppured, matter flows from the swelling by the ulcer, if in such cases a cataplasm be required, it should not be applied to the sore itself, but to the surrounding parts, so that the pus may have free exit, and the indurated parts may be softened. But when the parts are softened as the inflammation ceases, then the parts which are separated are to be brought toward one another, binding on sponges and applying them, beginning from the sound parts and advancing to the ulcer by degrees. But plenty of leaves are to be bound above the sponge. When the parts are prevented from coming together by a piece of flesh full of humors, it is to be removed. When the ulcer is deep seated in the flesh, it is swelled up, both from the bandaging and the compression. Such an ulcer should be cut up upon a director (specillum) if possible, at the proper time, so as to admit a free discharge of the matter, and then the proper treatment is to be applied as may be needed. For the most part, in every hollow ulcer which can be seen into which can be seen into direct without being any swelling present, if there be putrefaction in it, or if the flesh be flabby and putrid, such an ulcer, and the parts which surround it, will be seen to be black and somewhat livid. And of corroding ulcers, those which are phagedaenic, spread and corrode most powerfully, and, in this case, the parts surrounding the sore will have a black and sub-livid appearance.

4. Cataplasms for swellings and inflammation in the surrounding parts. Boiled mullein, the raw leaves of the trefoil, and the boiled leaves of the epipetrum, and the poley, and if the ulcer stand in need of cleansing, all these things also cleanse; and likewise the leaves of the fig-tree, and of the olive, and the horehound, all these are to be boiled; and more especially the chaste-tree, and the fig, and the olive, and the leaves of the pomegranate are to be boiled in like manner. These are to be used raw: and the leaves of the mallow pounded with wine, and the leaves of rue, and those of the green origany. With all these, linseed is to be boiled up and mixed by pounding it as a very fine powder. When there is danger of erysipelas seizing the ulcers, the leaves of woad are to be pounded and applied raw in a cataplasm along with linseed, or the linseed is to

be moistened with the juice of strychnos or of woad, and applied as a cataplasm. When the ulcer is clean, but both it and the surrounding parts are inflamed, lentil is to be boiled in wine and finely triturated, and, being mixed with a little oil, it is to be applied as a cataplasm; and the leaves of the hip-tree are to be boiled in water and pounded in a fine powder and made into a cataplasm; and apply below a thin, clean piece of cloth wetted in wine and oil; and when you wish to produce contraction, prepare the leaves of the hip-tree like the lentil, and the cress; wine and finely-powdered linseed are to be mixed together. And this is proper: linseed, and raw chaste-tree, and Melian alum, all these things being macerated in vinegar.

5. Having pounded the white unripe grape in a mortar of red bronze, and passed it through the strainer, expose it to the sun during the day, but remove it during the night, that it may not suffer from the dew; rub it constantly during the day, so that it may dry equally, and may contract as much virtue as possible from the bronze: let it be exposed to the sun for as great a length of time as till it acquire the thickness of honey; then put it into a bronze pot with the fresh honey and sweet wine, in which turpentine resin has been previously boiled, boil the resin in the wine until it become hard like boiled honey; then take out the resin and pour off the wine: there should be the greatest proportion of the juice of unripe grape, next of the wine, and third of the honey and myrrh, either the liquid (*stacte*) or otherwise. The finest kind is to be levigated and moistened by having a small quantity of the same wine poured on it; and then the myrrh is to be boiled by itself, stirring it in the wine; and when it appears to have attained the proper degree of thickness, it is to be poured into the juice of the unripe grape; and the finest natron is to be toasted, and gently added to the medicine, along with a smaller quantity of the flowers of copper (*flos aeris*) than of the natron. When you have mixed these things, boil for not less than three days, on a gentle fire made with fuel of the fig-tree or with coals, lest it catch fire. The applications should all be free from moisture, and the sores should not be wetted when this medicine is applied in the form of liniment. This medicine is to be used for old ulcers, and also for recent wounds of the glans penis, and ulcers on the head and ears. Another medicine for the same ulcers:-The dried gall of an ox, the finest honey, white wine, in which the shavings of the lotus have been boiled, frankincense, of myrrh an equal part, of saffron an equal part, the flowers of copper, in like manner of liquids, the greatest proportion of wine, next of honey, and least of the gall. Another:-Wine, a little cedar honey, of dried things, the flowers of copper, myrrh, dried pomegranate rind. Another:-Of the roasted flower of copper half a drachm, of myrrh two half-drachms, of saffron three

drachms, of honey a small quantity, to be boiled with wine. Another:-Of frankincense a drachm, of gall a drachm, of saffron three drachms; let each of these be dried and finely levigated, then, having mixed, triturate in a very strong sun, pouring in the juice of an unripe grape, until it become of a gelatinous consistence, for three days; then let them be allowed to macerate in an austere, dark-colored, fragrant wine, which is gradually poured upon them. Another:-Boil the roots of the holmoak in sweet white wine; and when it appears to be properly done, having poured off two parts of the wine, and of the lees of wine as free of water as possible one part; then boil, stirring it, so that it may not be burnt, at a gentle fire, until it appear to have attained the proper consistence. Another:-The other things are to be the same; but, notwithstanding, instead of the wine, use the strongest white vinegar, and dip into it wool as greasy as can be procured, and then, moistening it with the lees of oil, boil, and pour in the juice of the wild fig-tree, and add Melian alum, and natron, and the flowers of copper, both toasted. This cleanses the ulcers better than the former, but the other is no less desiccant. Another:-Dip the wool in a very little water; and then, having added a third part of wine, boil until it attain the proper consistence. By these, recent ulcers are most speedily prevented from getting into a state of suppuration.

6. Another:-Sprinkle on it dried wakerobin, and add the green bark of the fig-tree, pounding it in the juice: do this with or without wine, and along with honey. Another:-Boiling the shavings of lotus with vinegar (the vinegar should be white); then mix the lees of oil and raw tar-water, and use it as a liniment or wash, and bandage above. These things in powder prevent recent wounds from suppurating, or they may be used for cleansing the sore along with vinegar, or for sponging with wine.

7. Another:-Sprinkle ( *on the sore?* ) lead finely triturated with the recement of copper; and sprinkle on it, also, the shavings of lotus, and the scales of copper, and alum, and chalcitis, with copper, both alone, and with the shavings of lotus. And other-wise, when it is wanted to use these in a dry state, do it with the Illyrian spodos triturated with the shavings, and with the shavings alone. And the flowers of silver alone, in the finest powder; and birthwort, when scraped and finely pounded, may be sprinkled on the part. Another, for bloody sores myrrh, frankincense, galls, verdigris the roasted flower of copper, Egyptian alum roasted, vine flowers, grease of wool, plumbago, each of these things is to be diluted, in equal proportions, with wine like the former. And there is another preparation of the same:-The strongest vinegar of a white color, honey, Egyptian alum, the finest natron; having toasted these things gently, pour in a little gall;

this cleanses fungous ulcers, renders them hollow, and is not pungent. Another:- The herb with the small leaves, which gets the name of *Parthenium parviflorum*, and is used for removing thymia ( *warts?* ) from the glans penis, alum, chalcitis, a little crude Melian alum (?); sprinkle a little dried elaterium, and a little dried pomegranate rind in like manner.

8. The herb which has got the name of *lagopyrus*, fills up hollow and clean ulcers; (when dried it resembles wheat; it has a small leaf like that of the olive, and more long;) and the leaf of horehound, with oil. Another:-The internal fatty part, resembling honey, of a fig much dried, of water two parts, of linseed not much toasted and finely levigated, one part. Another:-Of the dried fig, of the flower of copper levigated a little, and the juice of the fig. The preparation from dried fig:-The black chamaeleon, the dried gall of an ox, the other things the same. Of the powders:-Of the slender cress in a raw state, of horehound, of each equal parts; of the dried fig, two parts; of linseed, two parts; the juice of the fig. When you use any of these medicines, apply above it compresses wetted in vinegar, apply a sponge about the compresses and make a If the surrounding parts be in an inflamed state, apply to them any medicine which may appear suitable.

9. If you wish to use a liquid application, the medicine called *caricum* may be rubbed in, and the bandages may be applied as formerly described upon the same principle. The medicine is prepared of the following ingredients:-Of black hellebore, of sandarach, of the flakes of copper, of lead washed, with much sulphur, arsenic, and cantharides. This may be compounded so as may be judged most proper, and it is to be diluted with oil of juniper. When enough has been rubbed in, lay aside the medicine, and apply boiled wakerobin in a soft state, either rubbing it in dry, or moistening it with honey. But if you use the *caricum* in a dry state, you must abstain from these things, and sprinkle the medicine on the sore. The powder from hellebore and sandarach alone answers. Another liquid medicine:-The herb, the leaf of which resembles the arum (wakerobin) in nature, but is white, downy, of the size of the ivy-leaf: this herb is applied with wine, or the substance which forms upon the branches of the ilex, when pounded with wine, is to be applied. Another:-The juice of the grape, the strongest vinegar, the flower of copper, natron, the juice of the wild fig-tree. Alum, the most finely levigated, is to be put into the juice of the wild grape, and it is to be put into a red bronze mortar and stirred in the sun, and removed when it appears to have attained proper consistence.



10. These are other powders:-Black hellebore, as finely levigated as possible, is to be sprinkled on the sore while any humidity remains about it, and while it continues to spread. The bandaging is the same as when plasters are used. Another, in like manner:-The driest lumps of salt are to be put into a copper, or earthen pot, of equal size, as much as possible, and not large, and the finest honey, of double the size of the salt, as far as can be guessed, is to be poured upon the lumps of salt, then the vessel is to be put upon coals and allowed to sit there until the whole is consumed. Then, having sponged the ulcer and cleansed it, bandage it as before, and compress it a little more. Next day, wherever the medicine has not been taken in, sprinkle it on, press it down, and bandage. But when you wish to remove the medicine, pour in hot vinegar until it separate, and again do the same things, sponging it away, if necessary. Another corrosive powder:-Of the most finely-levigated misy, sprinkle upon the moist and gangrenous parts, and a little of the flower of copper, not altogether levigated. Another powder equally corrosive:-Having sponged the ulcer, burn the most greasy wool upon a shell placed on the fire until the whole be consumed; having reduced this to a fine powder, and sprinkled it on the sore, apply the bandage in the same manner. Another powder for the same ulcers:-The black chamaeleon, when prepared with the juice of the fig. It is to be prepared roasted, and alkanet mixed with it. Or, pimpernel, and Egyptian alum roasted, and sprinkle on them the Orchomenian powder. For spreading ulcers:-Alum, both the Egyptian roasted, and the Melian; but the part is to be first cleansed with roasted natron and sponged; and the species of alum called chalcitis roasted. It is to be roasted until it catch fire.

11. For old ulcers which occur on the fore part of the legs; they become bloody and black:-Having pounded the flower of the melilot and mixed it with honey, use as a plaster. For nerves ( *tendons?* ) which have been cut asunder:-Having pounded, sifted, and mixed with oil the roots of the wild myrtle, bind on the part; and the herb cinquefoil (it is white and downy, and more raised above the ground than the black cinquefoil), having pounded this herb in oil bind it on the part, and then remove it on the third day.

12. *Emollients* (?):-These medicines are to be used in winter rather than in summer. Emollient medicines which make the cicatrices fair:-Pound the inner mucous part of the squill and pitch, with fresh swine's seam, and a little oil, and a little resin, and ceruse. And the grease of a goose, fresh swine's seam, and squill, and a little oil. The whitest wax, fresh clean grease, or squill and white oil, and a little resin. Wax, swine's seam (old and fresh), and oil, and verdigris,

and squill and resin. Let there be two parts of the old grease to the fresh, and of the other things, q. s. Having melted the grease that is fresh, pour it into another pot; having levigated plumbago finely and sifted it, and mixed them together, boil and stir at first; boil until when poured upon the ground it concretes; then taking it off the fire, pour it all into another vessel, with the exception of the stony sediment, and add resin and stir, and mix a little oil of juniper, and what has been taken off. In all the emollient medicines to which you add the resin, when you remove the medicine from the fire, pour in and mix the resin while it is still warm. Another:-Old swine's seam, wax, and oil, the dried shavings of the lotus, frankincense, plumbago,-namely, of the frankincense one part, and of the other one part, and of the shavings of the lotus one part; but let there be two parts of the old grease, one of wax, and of fresh swine's seam one part. Another:-Or old swine's seam along with the fresh grease of a goat; when cleaned, let it retain as little as possible of its membrane: having triturated or pounded it smooth, pour in oil, and sprinkle the lead with the spodium and half the shavings of the lotus. Another:-Swine's seam, spodium, blue chalcitis, oil.

13. *For Burns:* -You must boil the tender roots of the ilex, and if their bark be very thick and green, it must be cut into small parts, and having poured in white wine, boil upon a gentle fire, until it appear to you to be of the proper consistence, so as to be used for a liniment. And it may be prepared in water after the same manner. Another, not corrosive:-Old swine's seam is to be rubbed in by itself, and it is to be melted along with squill, the root of which is to be divided and applied with a bandage. Next day it is to be fomented; and having melted old swine's seam and wax, and mixed with them oil, frankincense, and the shavings of lotus and vermilion, this is to be used as a liniment. Having boiled the leaves of the wakerobin in wine and oil, apply a bandage. Another:-When you have smeared the parts with old swine's seam let the roots of asphodel be pounded in wine and triturated, and rubbed in. Another:-Having melted old swine's seam, and mixed with resin and bitumen, and having spread it on a piece of cloth and warmed it at the fire, apply a bandage. When an ulcer has formed on the back from stripes or otherwise, let squill, twice boiled, be pounded and spread upon a linen cloth and bound on the place. Afterward the grease of a goat, and fresh swine's seam, spodium, oil, and frankincense are to be rubbed in.

14. Swellings which arise on the feet, either spontaneously or otherwise, when neither the swellings nor the inflammation subside under the use of cataplasms, and although sponges or wool, or anything else be bound upon the sound part; but the swelling and inflammation return of themselves again, an influx of blood

into the veins is the cause, when not occasioned by a bruise. And the same story applies if this happen in any other part of the body. But blood is to be abstracted, especially the from the veins, which are the seat of the influx, if they be conspicuous; but if not, deeper and more numerous scarifications are to be made in the swellings; and whatever part you scarify, this is to be done with the sharpest and most slender instruments of iron. When you have removed the blood, you must not press hard upon the part with the specillum, lest you produce contusion. Bathe with vinegar, and do not allow a clot of blood to remain between the lips of the wounds, and having spread greasy wool with a medicine for bloody wounds, and having carded the woof and made it soft, bind it on, having wetted it with wine and oil. And let the scarified part be so placed that the determination of the blood may be upward and not downward; and do not wet the part at all, and let the patient be put upon a restricted diet and drink water. If upon loosing the bandages you find the scarifications inflamed, apply a cataplasm of the fruit of the chaste-tree and linseed. But if the scarifications become ulcerated and break into one another, we must be regulated by circumstances, and otherwise apply whatever else appears to be proper.

15. When a varix is on the fore part of the leg, and is very superficial, or below the flesh, and the leg is black, and seems to stand in need of having the blood evacuated from it, such swellings are not, by any means, to be cut open; for, generally, large ulcers are the consequence of the incisions, owing to the influx from the varix. But the varix itself is to be punctured in many places, as circumstances may indicate.

16. When you have opened a vein and abstracted blood, and although the fillet be loosed the bleeding does not stop, the member, whether the arm or leg, is to be put into the reverse position to that from which the blood flows; so that the blood may flow backward, and it is to be allowed to remain in this position for a greater or less space of time. Then bind up the part while matters are so, no clots of blood being allowed to remain in the opening. Then having applied a double compress, and wetted it with wine, apply above it clean wool which has been smeared with oil. For, although the flow of blood be violent, it will be stopped in this way. If a thrombus be formed in the opening, it will inflame and suppurate. Venesection is to be practiced when the person has dined more or less freely and drunk, and when somewhat heated, and rather in hot weather than in cold.

17. When in cupping, the blood continues to flow after the cupping-instrument has been removed, and if the flow of blood, or serum be copious, the instrument

is to be applied again before the part is healed up, so as to abstract what is left behind. Otherwise coagula of blood will be retained in the incisions and inflammatory ulcers will arise from them. In all such cases the parts are to be bathed with vinegar, after which they are not to be wetted; neither must the person lie upon the scarifications, but they are to be anointed with some of the medicines for bloody wounds. When the cupping instrument is to be applied below the knee, or at the knee, it should be done, if possible, while the man stands erect.

## ON FISTULAE



*Translated by Charles Darwin Adams*

1. Fistulae are produced by contusions and tubercles, and they are also occasioned by rowing, on horseback, when blood accumulates in the nates near the anus. For, having become putrid, it spreads to the soft parts (the breech being of a humid nature, and the flesh in which it spreads being soft), until the tubercle break and corrupt below at the anus. When this happens, a fistula is formed, having an ichorous discharge, and faeces pass by it, with flatus and much and abomination. It is produced, then, by contusions when any of the parts about the anus are bruised by a blow, or a fall, or a wound, or by riding, or rowing, or any such cause. For blood is collected, and it, becoming corrupted, suppurates; and the from the the same accidents happen, as have been described in the case of tubercles.

2. In the first place, then, when you see any such tubercle formed, you must cut it open while still unripe, before it suppurate and burst into the rectum. But if a fistula be already formed when you undertake the case, take a stalk of fresh garlic, and having laid the man on his back, and separated his thighs on both sides, push down the stalk as far as it will go, and thereby measure the depth of the fistula. Then, having bruised the root of seseli to a very fine powder, and poured in some water, let it macerate for four days, and, mixing the water with honey, let the patient drink it, fasting, to the amount of three cyathi, and at the same time purge away the ascarides. Those who are left without treatment die.

3. In the next place, having moistened the strip of cotton cloth, with the juice of the great tithymallus, and sprinkling on it the flos aeris, roasted and triturated, and having made it into a tent equal in length to the fistula, and having passed a thread through the ends of the tent again through the stalk, and having placed the patient in a reclining position, and having examined the ulcerated parts of the rectum with a speculum, pass the stalk by it, and when it reaches the rectum, take hold of it and draw it out until the tent be pushed through, and be brought on a level above and below. When it ( *the tent?* ) has been pushed inward, introduce a ball of horn into the rectum (the rectum having been previously

smear with Cimolian chalk), and leave it there, and when the patient wants to go to stool, let it be taken out and again replaced, and let this practice be continued for five days. On the sixth day let it be removed, and drawing the tent out of the flesh, and afterwards pounding alum and filling the ball (*pessary*) and introducing it into the rectum, leave it until the alum melts. Anoint the rectum with myrrh until the parts appear to be united.

4. Another method of cure:-Taking a very slender thread of raw lint, and uniting it into five folds of the length of a span, and wrapping them round with a horse hair; then having made a director (*specillum*) of tin, with an eye at its extremity, and having passed through it the end of raw lint wrapped round as above described, introduce the director into the fistula, and, at the same time, introduce the index finger of the left hand *per anum*; and when the director touches the finger, bring it out with the finger, bending the extremity of the director and the end of the threads in it, and the director is to be withdrawn, but the ends of the threads are to be knotted twice or thrice, and the rest of the raw threads is to be twisted around and fastened into a knot. Then the patient is to be told that he may go and attend to his matters. The rest of the treatment:-Whenever any part of the thread gets loose owing to the fistula becoming putrid, it is to be tightened and twisted every day; and should the raw thread rot before the fistula is eaten through, you must attach another piece of raw thread to the hair, pass it through, and tie it, for it was for this purpose that the hair was rolled round the raw lint, as it is not liable to rot. When the fistula has sloughed through, a soft sponge is to be cut into very slender pieces and applied, and then the flowers of copper, roasted, are to be frequently applied with a director; and the sponge smeared with honey is to be introduced with the index finger of the left hand, and pushed forward; and another bit of added, it is to be bound on in the same manner as in the operation for hemorrhoids. Next day, having loosed the bandages, the fistula is to be washed with hot water, and cleansed, as far as possible, with the finger of the left hand by means of the sponge, and again the flos aeris is to be applied. This is to be done for seven days, for generally the coat of the fistula takes that time to fistula takes that time to slouch through. The same mode of bandaging is to be persevered in afterwards, until the cure be completed. For in this way, the fistula being forcibly expanded by the sponge will not fill up and heal unequally, but it will all become whole together. During the treatment, the part should be bathed with plenty of warm water, and the patient kept on a spare diet.

5. When the fistula does not get eaten through, having first examined it with a sound, cut down as far as it passes, and sprinkle with the flos aeris, and let it

remain for five days. Then pour warm water upon it, and above lay flour mixed with water, and bind on it the leaves of beet. When the flos aeris comes away, and the fistulous sore becomes clean, cure it as before described. But if the fistula be in a part which does not admit of this treatment, and if it be deep, syringe it with the flowers of copper, and myrrh, and natron, diluted with urine, and introduce a piece of lead into the orifice of the fistula so that it may not close. Syringe the fistula by means of a quill attached to a bladder, so that the injection may distend the fistula. But it does not heal unless it be cut open.

6. If the anus gets inflamed, and there is pain, fever, a frequent desire of going to stool without passing anything, and the anus appears to protrude, owing to the inflammation, and if at times strangury come on, this disease is formed, when phlegm, collected from the whole body, is determined to the rectum. Warm things are beneficial in this case; for these, when applied, can attenuate and dissolve the phlegm, and dilute the acrid and salt particles, so that the heat subsides, and the irritation in the rectum is removed. Wherefore it is to be treated thus: The patient is to be put into a hip-bath of hot water, and sixty grains of the grana gnidia are to be pounded and infused in a hemina of wine, with half a hemina of oil, and injected. This brings away phlegm and faeces. When the patient does not take the hip-bath, boil eggs in dark-colored fragrant wine, and apply to the anus, and spread to the anus, and spread something warm below, either a bladder filled with warm water, or linseed toasted and ground, and its meal stirred up and mixed equally with dark, fragrant wine, and oil, and this applied very warm as a cataplasm; or, having mixed barley and Egyptian alum pulverized, form into an oblong ball ( *suppository?* ) and warming it gently at the fire, make it into a cataplasm, foment, form it into shape with the fingers, and then making it quite tepid, introduce it into the anus. The external parts are to be anointed with cerate, and a cataplasm of boiled garlic, with dark wine diluted, is to be applied. But if you remove these things, let him take the hip-bath of hot water, and having mixed together the juice of srychnos, the grease of a goose, swine's seam, chrysocolla, resin, and white wax, and then having melted in the same and mixed together, anoint with these things, and while the inflammation lasts, use the cataplasm of boiled garlic. And if by these means he be freed from the pain, it is enough; but if not, give him the white meconium ( *Euphorbia peplus?* ), or, if not it, any other phlegmagogue medicine. While the inflammation lasts, the diet should be light.

7. The strangury comes on in this way:-The bladder being heated from the rectum, phlegm is attracted by the heat, and by the phlegm ( *inflammation?* ) the

strangury is occasioned. If, then, as is frequently the case, it cease with the disease, well; but, not withstanding, if not, give any of the medicines for strangury.

8. If procidentia ani take place, having fomented the part with a soft sponge, and anointed it with a snail, bind the man's hands together, and suspend him for a short time, and the gut will return. But if it still prolapse, and will not remain up, fasten a girdle round his loins and attach a shawl behind, and having pushed up the anus, apply to it a soft sponge, moistened with hot water in which the shavings of lotus have been boiled; pour of this decoction upon the anus by squeezing the sponge, then, bringing the shawl below between the legs, fasten it at the navel. But if he wish to evacuate the bowels, let him do so upon a very narrow night-stool. Or, if the patient be a child, let him be placed on the feet of a woman, with his back reclined to her knees, and when the bowels are evacuated, let the legs be extended. In this way the anus will be the least disposed to fall out. When a watery and ichorous discharge flows from the rectum, wash it out with burnt lees of wine, and water from myrtle, and having dried maiden-hair, pound and sift it, and apply as a cataplasm. But if there be a discharge of blood, having washed with the same, and pounded chalcitis, and the shavings of cypress, or of juniper, or of stone-pine, or of turpentine, the in equal proportions the apply as a cataplasm. Anoint the external parts with thick cerate.

9. When the gut protrudes and will not remain in its place, scrape the finest and most compact silphium ( *assafoetida?* ) into small pieces and apply as a cataplasm, and apply a sternutatory medicine to the nose and provoke sneezing, and having moistened pomegranate rind with hot water, and having powdered alum in white wine, pour it on the gut, then apply rags, bind the thighs together for three days, and let the patient fast, only he may drink sweet wine. If even thus matters do not proceed properly, having mixed vermilion with honey, anoint.

10. If procidentia ani be attended with a discharge of blood, pare off the rind of the root of wakerobin, then pound and mix flour with it, and apply it warm as a cataplasm. Another: Having scraped off the rind of the most tender roots of the wild vine, which some call *psilothrion* , boil in a dark austere wine undiluted; then having pounded, apply as a tepid cataplasm; but mix also flour and stir it up with white wine and oil in a tepid state. Another:-Having pounded the seed of hemlock, pour on it a fragrant white wine, and then apply in a tepid state as a cataplasm.



11. But if it be inflamed, having boiled in water the root of the ivy, finely powdered, and mixing the finest flour, and stirring it up with white wine, apply as a cataplasm, and mix up some fat with these things. Another:-Take the root of the mandrake, especially the green (fresh) root, but otherwise the dried, and having cleaned the green root and cut it down, boil in diluted wine, and apply as a cataplasm; but the dry may be pounded and applied as a cataplasm in the manner. Another:-Having bruised the inner part of a ripe cucumber to a soft state, apply as a cataplasm.

12. If there be pain without inflammation, having roasted red natron, and pounded it to a fine powder, and added alum and roasted salts, finely triturated, mix together in equal proportions; then having mixed it up with the best pitch and spread upon a rag, apply, and bind. Another:-Having pounded the green leaves of capers, put into a bag and bind on the part; and when it appears to burn, take it away and apply it afterward; or, if you have not the leaves of capers, pound the rind of its roots, and having mixed it up with dark-colored wine, bind on the part in the same manner. This is a good application also for pains of the spleen. Of these poultices, those which are cooling, stop the discharge; those which are emollient and heating, discuss; and those which are attractive, dry up and attenuate. This disease is formed when bile and phlegm become seated in the parts. When the anus is inflamed, it should be anointed with the ointment, the ingredients of which are resin, oil, wax, plumbago, and suet, these being all melted and applied quite hot as a cataplasm.

## ON HEMORRHOIDS



*Translated by Charles Darwin Adams*

1. The disease of the hemorrhoids is formed in this way: if bile or phlegm be determined to the veins in the rectum, it heats the blood in the veins; and these veins becoming heated attract blood from the nearest veins, and being gorged the inside of the gut swells outwardly, and the heads of the veins are raised up, and being at the same time bruised by the faeces passing out, and injured by the blood collected in them, they squirt out blood, most frequently along with the faeces, but sometimes without faeces. It is to be cured thus:

2. In the first place it should be known in what sort of a place they are formed. For cutting, excising, sewing, binding, applying putrefacient means to the anus, - all these appear to be very formidable things, and yet, after all, they are not attended with mischief. I recommend seven or eight small pieces of iron to be prepared, a fathom in size, in thickness like a thick specillum, and bent at the extremity, and a broad piece should be on the extremity, like a small obolus. Having on the preceding day first purged the man with medicine, on the day of the operation apply the cautery. Having laid him on his back, and placed a pillow below the breech, force out the anus as much as possible with the fingers, and make the irons red-hot, and burn the pile until it be dried up, and so as that no part may be left behind. And burn so as to leave none of the hemorrhoids unburnt, for you should burn them all up. You will recognize the hemorrhoids without difficulty, for they project on the inside of the gut like dark-colored grapes, and when the anus is forced out they spurt blood. When the cautery is applied the patient's head and hands should be held so that he may not stir, but he himself should cry out, for this will make the rectum project the more. When you have performed the burning, boil lentils and tares, finely triturated in water, and apply as a cataplasm for five or six days. But on the seventh, cut a soft sponge into a very slender slice, its width should be about six inches square. Then a thin smooth piece of cloth, of the same size as the sponge, is to be smeared with honey and applied; and with the index finger of the left hand the middle of the sponge is to be pushed as far up as possible; and afterward wool is to be placed upon the sponge so that it may remain in the anus. And having

girded the patient about the loins and fastened a shawl to the girdle, bring up this band from behind between the legs and attach it to the girdle at the navel. Then let the medicine which I formerly said is calculated to render the skin thick and strong, be bound on. These things should be kept on for not less than twenty days. The patient should once a day take a draught from flour or millet, or bran, and drink water. When the patient goes to stool the part should be washed with hot water. Every third day he should take the bath.

3. Another method of cure:-Having got the anus to protrude as much as possible, foment with hot water, and then cut off the extremities of the hemorrhoids. But this medicine should be prepared beforehand, as an application to the wound:- Having put urine into a bronze vessel, sprinkle upon the urine the flower of bronze calcined and finely triturated; then, when it is moistened, shake the vessel and dry in the sun. When it becomes dry, let it be scraped down and levigated, and apply with the finger to the part, and having oiled compresses, apply them, and bind a sponge above.

4. Another method:-There grows upon the bleeding condyloma, a protuberance like the fruit of the mulberry, and if the condyloma be far without, an envelope of flesh is adherent to it. Having placed the man over two round stones upon his knees, examine, for you will find the parts near the anus between the buttocks inflated, and blood proceeding from within. If, then, the condyloma below the cover be of a soft nature, bring it away with the finger, for there is no more difficulty in this than in skinning a sheep, to pass the finger between the hide and the flesh. And this should be accomplished without the patient's knowledge, while he is kept in conversation. When the condyloma is taken off, streaks of blood necessarily flow from the whole of the torn part. It must be speedily washed with a decoction of galls, in a dry wine, and the bleeding vein will disappear along with the condyloma, and its cover will be replaced. The older it is, the more easy the cure.

5. But if the condyloma be higher up, you must examine it with the speculum, and you should take care not to be deceived by the speculum; for when expanded, it renders the condyloma level with the surrounding parts, but when contracted, it shows the tumor right again. It is to be removed by smearing it with black hellebore on the finger. Then, on the third day, wash it out with a dry wine. You need not be surprised that there is no discharge of blood when you remove the condyloma, for neither, if you cut off the hands or legs at the articulations will there be any flow of blood; but if you cut them off above or

below the joints, you will find there hollow veins which pour out blood, and you will have difficulty in stopping the bleeding. In the same manner, the bleeding vein in the anus, if you cut it above or below the point of separation of the condyloma, will pour forth blood; but if you take away the condyloma at its junction ( *with the natural parts?* ) there will be no flow of blood. If matters then be thus put to rights, it will be well; but otherwise burn it, taking care not to touch the place with the iron, but bringing it close so as to dry it up, and apply the flos aeris in the urine.

6. Another method of curing hemorrhoids:-You must prepare a cautery like the *arundo phragmites* , and an iron that exactly fits is to be adapted to it; then the tube being introduced into the anus, the iron, red hot, is to be passed down it, and frequently drawn out, so that the part may bear the more heat, and no sore may result from the heating, and the dried veins may heal up. But if you are neither disposed to burn nor excise, having first fomented with plenty hot water and turned out the anus, levigate myrrh, and having burnt galls and Egyptian alum, in the proportion of one and a half to the other things, and as much of melanteria; these things are all to be used in a dry state. The hemorrhoid will separate under the use of these medicines, like a piece of burnt hide. You are to proceed thus until the whole are removed, and a half part of burnt chalcitis does the same thing. But if you wish to effect the cure by suppositories, take the shell of the part fish a third part of plumbago, bitumen, alum, a little of the flos aeris, galls, a little verdigris; having poured a small quantity of boiled honey on these, and formed an oblong suppository, apply until you remove them.

7. An hemorrhoid in a woman may be thus cured. Having fomented with plenty of hot water, boil in the water certain of the fragrant medicines, add pounded tamarisk, roasted litharge and galls, and pour on them white wine, and oil, and the grease of a goose, pounding all together. Give to use after fomenting. In fomenting the anus is to be made to protrude as much as possible.

## ON THE SACRED DISEASE



*Translated by Charles Darwin Adams*

It is thus with regard to the disease called Sacred: it appears to me to be nowise more divine nor more sacred than other diseases, but has a natural cause from the originates like other affections. Men regard its nature and cause as divine from ignorance and wonder, because it is not at all like to other diseases. And this notion of its divinity is kept up by their inability to comprehend it, and the simplicity of the mode by which it is cured, for men are freed from it by purifications and incantations. But if it is reckoned divine because it is wonderful, instead of one there are many diseases which would be sacred; for, as I will show, there are others no less wonderful and prodigious, which nobody imagines to be sacred. The quotidian, tertian, and quartan fevers, seem to me no less sacred and divine in their origin than this disease, although they are not reckoned so wonderful. And I see men become mad and demented from no manifest cause, and at the same time doing many things out of place; and I have known many persons in sleep groaning and crying out, some in a state of suffocation, some jumping up and fleeing out of doors, and deprived of their reason until they awaken, and afterward becoming well and rational as before, although they be pale and weak; and this will happen not once but frequently. And there are many and various things of the like kind, which it would be tedious to state particularly.

They who first referred this malady to the gods appear to me to have been just such persons as the conjurors, purificators, mountebanks, and charlatans now are, who give themselves out for being excessively religious, and as knowing more than other people. Such persons, then, using the divinity as a pretext and screen of their own inability to of their own inability to afford any assistance, have given out that the disease is sacred, adding suitable reasons for this opinion, they have instituted a mode of treatment which is safe for themselves, namely, by applying purifications and incantations, and enforcing abstinence from baths and many articles of food which are unwholesome to men in diseases. Of sea substances, the surmullet, the blacktail, the mullet, and the eel; for these are the fishes most to be guarded against. And of fleshes, those of the goat, the stag, the

sow, and the dog: for these are the kinds of flesh which are aptest to disorder the bowels. Of fowls, the cock, the turtle, and the bustard, and such others as are reckoned to be particularly strong. And of potherbs, mint, garlic, and onions; for what is acrid does not agree with a weak person. And they forbid to have a black robe, because black is expressive of death; and to sleep on a goat's skin, or to wear it, and to put one foot upon another, or one hand upon another; for all these things are held to be hindrances to the cure. All these they enjoin with reference to its divinity, as if possessed of more knowledge, and announcing beforehand other causes so that if the person should recover, theirs would be the honor and credit; and if he should die, they would have a certain defense, as if the gods, and not they, were to blame, seeing they had administered nothing either to eat or drink as medicines, nor had overheated him with baths, so as to prove the cause of what had happened. But I am of opinion that (if this were true) none of the Libyans, who live in the interior, would be free from this disease, since they all sleep on goats' skins, and live upon goats' flesh; neither have they couch, robe, nor shoe that is not made of goat's skin, for they have no other herds but goats and oxen. But if these things, when administered in food, aggravate the disease, and if it be cured by abstinence from them, godhead is not the cause at all; nor will purifications be of any avail, but it is the food which is beneficial and prejudicial, and the influence of the divinity vanishes.

Thus, they who try to cure these maladies in this way, appear to me neither to reckon them sacred nor divine. For when they are removed by such purifications, and this method of cure, what is to prevent them from being brought upon men and induced by other devices similar to these? So that the cause is no longer divine, but human. For whoever is able, by purifications conjurations, to drive away such an affection, will be able, by other practices, to excite it; and, according to this view, its divine nature is entirely done away with. By such sayings and doings, they profess to be possessed of superior knowledge, and deceive mankind by enjoining lustrations and purifications upon them, while their discourse turns upon the divinity and the godhead. And yet it would appear to me that their discourse savors not of piety, as they suppose, but rather of impiety, and as if there were no gods, and that what they hold to be holy and divine, were impious and unholy. This I will now explain.

For, if they profess to know how to bring down the moon, darken the sun, induce storms and fine weather, and rains and droughts, and make the sea and land unproductive, and so forth, whether they arrogate this power as being derived from mysteries or any other knowledge or consideration, they appear to me to

practice impiety, and either to fancy that there are no gods, or, if there are, that they have no ability to ward off any of the greatest evils. How, then, are they not enemies to the gods? For if a man by magical arts and sacrifices will bring down the moon, and darken the sun, and induce storms, or fine weather, I should not believe that there was anything divine, but human, in these things, provided the power of the divine were overpowered by human knowledge and subjected to it. But perhaps it will be said, these things are not so, but, notwithstanding, men being in want of the means of life, invent many and various things, and devise many contrivances for all other things, and for this disease, in every phase of the disease, assigning the cause to a god. Nor do they remember the same things once, but frequently. For, if they imitate a goat, or grind their teeth, or if their right side be convulsed, they say that the mother of the gods is the cause. But if they speak in a sharper and more intense tone, they resemble this state to a horse, and say that Poseidon (*Neptune*) is the cause. Or if any excrement be passed, which is often the case, owing to the violence of the disease, the appellation of Enodia (*Hecate?*) is adhibited; or, if it be passed in smaller and denser masses, like bird's, it is said to be from Apollo Nomius. But if foam be emitted by the mouth, and the patient kick with his feet, Ares (*Mars*) then gets the blame. But terrors which happen during the night, and fevers, and delirium, and jumpings out of bed, and frightful apparitions, and fleeing away,-all these they hold to be the plots of Hecate, and the invasions the and use purifications and incantations, and, as appears to me, make the divinity to be most wicked and most impious. For they purify those laboring under this disease, with the same sorts of blood and the other means that are used in the case of those who are stained with crimes, and of malefactors, or who have been enchanted by men, or who have done any wicked act; who ought to do the very reverse, namely, sacrifice and pray, and, bringing gifts to the temples, supplicate the gods. But now they do none of these things, but purify; and some of the purifications they conceal in the earth, and some they throw into the sea, and some they carry to the mountains where no one can touch or tread upon them. But these they ought to take to the temples and present to the god, if a god be the cause of the disease. Neither truly do I count it a worthy opinion to hold that the body of man is polluted by god, the most impure by the most holy; for were it defiled, or did it suffer from any other thing, it would be like to be purified and sanctified rather than polluted by god. For it is the divinity which purifies and sanctifies the greatest of offenses and the most wicked, and which proves our protection from them. And we mark out the boundaries of the temples and the groves of the gods, so that no one may pass them unless he be pure, and when we enter them we are sprinkled with holy water, not as being polluted, but as laying aside any other pollution which we

formerly had. And thus it appears to me to hold, with regard to purifications.

But this disease seems to me to be no more divine than others; but it has its nature such as other diseases have, and a cause whence it originates, and its nature and cause are divine only just as much as all others are, and it is curable no less than the others, unless when, the from of time, it is confirmed, and has become stronger than the remedies applied. Its origin is hereditary, like that of other diseases. For if a phlegmatic person be born of a phlegmatic, and a bilious of a bilious, and a phthysical of a phthysical, and one having spleen disease, of another having disease of the spleen, what is to hinder it from happening that where the father and mother were subject to this disease, certain of their offspring should be so affected also? As the semen comes from all parts of the body, healthy particles will come from healthy parts, and unhealthy from unhealthy parts. And another great proof that it is in nothing more divine than other diseases is, that it occurs in those who are of a phlegmatic constitution, but does not attack the bilious. Yet, if it were more divine than the others, this disease ought to befall all alike, and make no distinction between the bilious and phlegmatic.

But in them, the brain is the cause of this affection, as it is of other very great diseases, and in what manner and from what cause it is formed, I will now plainly declare. The brain of man, as in all other animals, is double, and a thin membrane (*meninx*) divides it through the middle, and therefore the pain is not always in the same part of the head; for sometimes it is situated on either side, and sometimes the whole is affected; and veins run toward it from all parts of the body, many of which are small, but two are thick, the one from the liver, and the other from the spleen. And it is thus with regard to the one from the liver: a portion of it runs downward through the parts on the side, near the kidneys and the psoas muscles, to the inner part of the thigh, and extends to the foot. It is called vena cava. The other runs upward by the right veins and the lungs, and divides into branches for the heart and the right arm. The remaining part of it rises upward across the clavicle to the right side of the neck, and is superficial so as to be seen; near the ear it is concealed, and there it divides; its thickest, largest, and most hollow part ends in the brain; another small vein goes to the right ear, another to the right eye, and another to the nostril. Such are the distributions of the hepatic vein. And a vein from the spleen is distributed on the left side, upward and downward, like that from the liver, but more slender and feeble.



By these veins we draw in much spirit (*gas?*) , since they are the spiracles of our bodies inhaling air to themselves and distributing it to the rest of the body, and to the smaller veins, and they and afterwards exhale it. For the breath (*pneuma*) cannot be stationary, but it passes upward and downward, for if stopped and intercepted, the part where it is stopped becomes powerless. In proof of this, when, in sitting or lying, the small veins are compressed, so that the breath (*pneuma*) from the larger vein does not pass into them, the part is immediately seized with numbness; and it is so likewise with regard to the other veins.

This malady, then, affects phlegmatic people, but not bilious. It begins to be formed while the foetus is still *in utero* . For the brain, like the other organs, is depurated and grows before birth. If, then, in this purgation it be properly and moderately depurated, and neither more nor less than what is proper be secreted from it, the head is thus in the most healthy condition. If the secretion (melting) the from the brain be greater than natural, the person, when he grows up, will have his head diseased, and full of noises, and will neither be able to endure the sun nor cold. Or, if the melting take place from any one part, either from the eye or ear, or if a vein has become slender, that part will be deranged in proportion to the melting. Or, should depuration not take place, but it ( *the secretion?* ) accumulate in the brain, it necessarily becomes phlegmatic. And such children as have an eruption of ulcers on the head, on the ears, and along the rest of the body, with copious discharges of saliva and mucus,-these, in after life, enjoy best health; for in this way the phlegm which ought to have been purged off in the womb, is discharged and cleared away, and persons so purged, for the most part, are not subject to attacks of this disease. But such as have had their skin free from eruptions, and have had no discharge of saliva or mucus, nor have undergone the proper purgation in the womb, these persons run the risk of being seized with this disease.

But should the defluxion make its way to the heart, the person is seized with palpitation and asthma, the chest becomes diseased, and some also have curvature of the spine. For when a defluxion of cold phlegm takes place on the lungs and heart, the blood is chilled, and the veins, being violently chilled, palpitate in the lungs and heart, and the heart palpitates, so that from this necessity asthma and orthopnoea supervene. For it does not receive the spirits ( *pneuma* ) as much breath as he needs until the defluxion of phlegm be mastered, and being heated is distributed to the veins, then it ceases from its palpitation and difficulty of breathing, and this takes place as soon as it obtains an abundant supply; and this will be more slowly, provided the defluxion be more abundant,

or if it be less, more quickly. And if the defluxions be more condensed, the epileptic attacks will be more frequent, but otherwise if it be rarer. Such are the symptoms when the defluxion is upon the lungs and heart; but if it be upon the bowels, the person is attacked with diarrhoea.

And if, being shut out from all these outlets, its defluxion be determined to the veins I have formerly mentioned, the patient loses his speech, and chokes, and foam issues by the mouth, the teeth are fixed, the hands are contracted, the eyes distorted, he becomes insensible, and in some cases the bowels are evacuated. And these symptoms occur sometimes on the left side, sometimes on the right, and sometimes in both. The cause of everyone of these symptoms I will now explain. The man becomes speechless when the phlegm, suddenly descending into the veins, shuts out the air, and does not admit it either to the brain or to the vena cava, or to the ventricles, but interrupts the inspiration. For when a person draws in air by the mouth and nostrils, the breath ( *pneuma* ) goes first to the brain, then the greater part of it to the internal cavity, and part to the lungs, and part to the veins, and from them it is distributed to the other parts of the body along the veins; and whatever passes to the stomach cools, and does nothing more; and so also with regard to the lungs. But the air which enters the veins is of use (to the body) by entering the brain and its ventricles, and thus it imparts sensibility and motion to all the members, so that when the veins are excluded from the air by the phlegm and do not receive it, the man loses his speech and intellect, and the hands become powerless, and are contracted, the blood stopping and not being diffused, as it was wont; and the eyes are distorted owing to the veins being excluded from the air; and they palpitate; and froth from the lungs issues by the mouth. For when the breath ( *pneuma* ) does not find entrance to him, he foams and sputters like a dying person. And the bowels are evacuated in consequence of the violent suffocation; and the suffocation is produced when the liver and stomach ascend to the diaphragm, and the mouth of the stomach is shut up; this takes place when the breath ( *pneuma* ) does not enter by the mouth, as it is wont. The patient kicks with his feet when the air is shut up in the lungs and cannot find an outlet, owing to the phlegm; and rushing by the blood upward and downward, it occasions convulsions and pain, and therefore he kicks with his feet. All these symptoms he endures when the cold phlegm passes into the warm blood, for it congeals and stops the blood. And if the deflexion be copious and thick, it immediately proves fatal to him, for by its cold it prevails over the blood and congeals it; or, if it be less, it in the first place obtains the mastery, and stops the respiration; and then in the course of time, when it is diffused along the veins and mixed with much warm blood, it is thus

overpowered, the veins receive the air, and the patient recovers his senses.

Of little children who are seized with this disease, the greater part die, provided the defluxion be copious and humid, for the veins being slender cannot admit the phlegm, owing to its thickness and abundance; but the blood is cooled and congealed, and the child immediately dies. But if the phlegm be in small quantity, and make a defluxion into both the veins, or to those on either side, the children survive, but exhibit notable marks of the disorder; for either the mouth is drawn aside, or an eye, the neck, or a hand, wherever a vein being filled with phlegm loses its tone, and is attenuated, and the part of the body connected with this vein is necessarily rendered weaker and defective. But for the most it affords relief for a longer interval; for the child is no longer seized with these attacks, if once it has contracted this impress of the disease, in consequence of which the other veins are necessarily affected, and to a certain degree attenuated, so as just to admit the air, but no longer to permit the influx of phlegm. However, the parts are proportionally enfeebled whenever the veins are in an unhealthy state. When in striplings the defluxion is small and to the right side, they recover without leaving any marks of the disease, but there is danger of its becoming habitual, and even increasing if not treated by suitable remedies. Thus, or very nearly so, is the case when it attacks children.

To persons of a more advanced age, it neither proves fatal, nor produces distortions. For their veins are (*large?*) and filled with hot blood; and therefore the phlegm can neither prevail nor cool the blood, so as to coagulate it, but it is quickly overpowered and mixed with the blood, and thus the veins receive the air, and sensibility remains; and, owing to their strength, the aforesaid symptoms are less likely to seize them. But when this disease attacks very old people, it therefore proves fatal, or induces paraplegia, because the veins are empty, and the blood scanty, thin, and watery. When, therefore, the defluxion is copious, and the season winter, it proves fatal; for it chokes up the exhalents, and coagulates the blood if the defluxion be to both sides; but if to either, it merely induces paraplegia. For the blood being thin, cold, and scanty, cannot prevail over the but being itself overpowered, it is coagulated, so that those parts in which the blood is corrupted, lose their strength.

The flux is to the right rather than to the left because the veins there are more capacious and numerous than on the left side, for on the one side they spring from the liver, and on the other from the spleen. The defluxion and melting down take place most especially in the case of children in whom the head is heated

either by the sun or by fire, or if the brain suddenly contract a rigor, and then the phlegm is excreted. For it is melted down by the heat and diffusion of the but it is excreted by the congealing and contracting of it, and thus a defluxion takes place. And in some this is the cause of the disease, and in others, when the south wind quickly succeeds to northern breezes, it suddenly unbinds and relaxes the brain, which is contracted and weak, so that there is an inundation of phlegm, and thus the defluxion takes place. The defluxion also takes place in consequence of fear, from any hidden cause, if we are the at any person's calling aloud, or while crying, when one cannot quickly recover one's breath, such as often happens to children. When any of these things occur, the body immediately shivers, the person becoming speechless cannot draw his breath, but the breath ( *pneuma* ) stops, the brain is contracted, the blood stands still, and thus the excretion and defluxion of the phlegm take place. In children, these are the causes of the attack at first. But to old persons winter is most inimical. For when the head and brain have been heated at a great fire, and then the person is brought into cold and has a rigor, or when from cold he comes into warmth, and sits at the fire, he is apt to suffer in the same way, and thus he is seized in the manner described above. And there is much danger of the same thing occurring, if his head be exposed to the sun, but less so in summer, as the changes are not sudden. When a person has passed the twentieth year of his life, this disease is not apt to seize him, unless it has become habitual from childhood, or at least this is rarely or never the case. For the veins are filled with blood, and the brain consistent and firm, so that it does not run down into the veins, or if it do, it does not master the blood, which is copious and hot.

But when it has gained strength from one's childhood, and become habitual, such a person usually suffers attacks, and is seized with them in changes of the winds, especially in south winds, and it is difficult of removal. For the brain becomes more humid than natural, and is inundated with phlegm, so that the defluxions become more frequent, and the phlegm can no longer be the nor the brain be dried up, but it becomes wet and humid. This you may ascertain in particular, from beasts of the flock which are seized with this disease, and more especially goats, for they are most frequently attacked with it. If you will cut open the head, you will find the brain humid, full of sweat, and having a bad smell. And in this way truly you may see that it is not a god that injures the body, but disease. And so it is with man. For when the disease has prevailed for a length of time, it is no longer curable, as the brain is corroded by the phlegm, and melted, and what is melted down becomes water, and surrounds the brain externally, and overflows it; wherefore they are more frequently and readily

seized with the disease. And therefore the disease is protracted, because the influx is thin, owing to its quantity, and is immediately overpowered by the blood and heated all through.

But such persons as are habituated to the disease know beforehand when they are about to be seized and flee from men; if their own house be at hand, they run home, but if not, to a deserted place, where as few persons as possible will see them falling, and they immediately cover themselves up. This they do from shame of the affection, and not from fear of the divinity, as many suppose. And little children at first fall down wherever they may happen to be, from inexperience. But when they have been often seized, and feel its approach beforehand, they flee to their mothers, or to any other person they are acquainted with, from terror and dread of the affection, for being still infants they do not know yet what it is to be ashamed.

Therefore, they are attacked during changes of the winds, and especially south winds, then also with north winds, and afterwards also with the others. These are the strongest winds, and the most opposed to one another, both as to direction and power. For, the north wind condenses the air, and separates from it whatever is muddy and nebulous, and renders it clearer and brighter, and so in like manner also, all the winds which arise from the sea and other waters; for they extract the humidity and nebulosity from all objects, and from men themselves, and therefore it (the north wind) is the most wholesome of the winds. But the effects of the south are the very reverse. For in the first place it begins by melting and diffusing the condensed air, and therefore it does not blow strong at first, but is gentle at the commencement, because it is not able at once to overcome the and compacted air, which yet in a while it dissolves. It produces the same effects upon the land, the sea, the fountains, the wells, and on every production which contains humidity, and this, there is in all things, some more, some less. For all these feel the effects of this wind, and from clear they become cloudy, from cold, hot; from dry, moist; and whatever earthen vessels are placed upon the ground, filled with wine or any other fluid, are affected with the south wind, and undergo a change. And the sun, and the moon, it renders blunter appearance than they naturally are. When, then, it possesses such powers over things so great and strong, and the body is made to feel and undergo changes in the changes of the winds, it necessarily follows that the brain should be dissolved and overpowered with moisture, and that the veins should become more relaxed by the south winds, and that by the north the healthiest portion of the brain should become contracted, while the most morbid and humid is secreted, and

overflows externally, and that catarrhs should thus take place in the changes of these winds. Thus is this disease formed and prevails from those things which enter into and go out of the body, and it is not more difficult to understand or to cure than the others, neither is it more divine than other diseases.

And men ought to know that from nothing else but (*from the brain*) come joys, delights, laughter and sports, and sorrows, griefs, despondency, and lamentations. And by this, in an especial manner, we acquire wisdom and knowledge, and see and hear, and know what are foul and what are fair, what are bad and what are good, what are sweet, and what unsavory; some we discriminate by habit, and some we perceive by their utility. By this we distinguish objects of relish and disrelish, according to the seasons; and the same things do not always please us. And by the same organ we become mad and delirious, and fears and terrors assail us, some by night, and some by day, and dreams and untimely wanderings, and cares that are not suitable, and ignorance of present circumstances, desuetude, and unskilfulness. All these things we endure from the brain, when it is not healthy, but is more hot, more cold, more moist, or more dry than natural, or when it suffers any other preternatural and unusual affection. And we become mad from humidity (*of the brain*). For when it is more moist than natural, it is necessarily put into motion, and the affection being moved, neither the sight nor hearing can be at rest, and the tongue speaks in accordance with the sight and hearing.

As long as the brain is at rest, the man enjoys his reason, but the depravement of the brain arises from phlegm and bile, either of which you may recognize in this manner: Those who are mad from phlegm are quiet, and do not cry out nor make a noise; but those from bile are vociferous, malignant, and will not be quiet, but are always doing something improper. If the madness be constant, these are the causes thereof. But if terrors and fears assail, they are connected with derangement of the brain, and derangement is owing to its being heated. And it is heated by bile when it is determined to the brain along the bloodvessels running from the trunk; and fear is present until it returns again to the veins and trunk, when it ceases. He is grieved and troubled when the brain is unseasonably cooled and contracted beyond its wont. This it suffers from phlegm, and from the same affection the patient becomes oblivious. He calls out and screams at night when the brain is suddenly heated. The bilious endure this. But the phlegmatic are not heated, except when much blood goes to the brain, and creates an ebullition. Much blood passes along the aforesaid veins. But when the man happens to see a frightful dream and is in fear as if awake, then his face is in a

greater glow, and the eyes are red when the patient is in fear. And the understanding meditates doing some mischief, and thus it is affected in sleep. But if, when awakened, he returns to himself, and the blood is again distributed along the veins, it ceases.

In these ways I am of the opinion that the brain exercises the greatest power in the man. This is the interpreter to us of those things which emanate from the air, when it ( *the brain* ) happens to be in a sound state. But the air supplies sense to it. And the eyes, the ears, the tongue and the feet, administer such things as the brain cogitates. For in as much as it is supplied with air, does it impart sense to the body. It is the brain which is the messenger to the understanding. For when the man draws the breath ( *pneuma* ) into himself, it passes first to the brain, and thus the air is distributed to the rest of the body, leaving in the brain its acme, and whatever has sense and understanding. For if it passed first to the body and last to the brain, then having left in the flesh and veins the judgment, when it reached the brain it would be hot, and not at all pure, but mixed with the humidity from flesh and blood, so as to be no longer pure.

Wherefore, I say, that it is the brain which interprets the understanding. But the diaphragm has obtained its name ( *frenes* ) from accident and usage, and not from reality or nature, for I know no power which it possesses, either as to sense or understanding, except that when the man is affected with unexpected joy or sorrow, it throbs and produces palpitations, owing to its thinness, and as having no belly to receive anything good or bad that may present themselves to it, but it is thrown into commotion by both these, from its natural weakness. It then perceives beforehand none of those things which occur in the body, but has received its name vaguely and without any proper reason, like the parts about the heart, which are called auricles, but which contribute nothing towards hearing. Some say that we think with the heart, and that this is the part which is grieved, and experiences care. But it is not so; only it contracts like the diaphragm, and still more so for the same causes. For veins from all parts of the body run to it, and it has valves, so as to as to perceive if any pain or pleasurable emotion befall the man. For when grieved the body necessarily shudders, and is contracted, and from excessive joy it is affected in like manner. Wherefore the heart and the diaphragm are particularly sensitive, they have nothing to do, however, with the operations of the understanding, but of all but of all these the brain is the cause. Since, then, the brain, as being the primary seat of sense and of the spirits, perceives whatever occurs in the body, if any change more powerful than usual take place in the air, owing to the seasons, the brain becomes changed by the

state of the air. For, on this account, the brain first perceives, because, I say, all the most acute, most powerful, and most deadly diseases, and those which are most difficult to be understood by the inexperienced, fall upon the brain.

And the disease called the Sacred arises from causes as the others, namely, those things which enter and quit the body, such as cold, the sun, and the winds, which are ever changing and are never at rest. And these things are divine, so that there is no necessity for making a distinction, and holding this disease to be more divine than the others, but all are divine, and all human. And each has its own peculiar nature and power, and none is of an ambiguous nature, or irremediable. And the most of them are curable by the same means as those by which any other thing is food to one, and injurious to another. Thus, then, the physician should understand and distinguish the season of each, so that at one time he may attend to the nourishment and increase, and at another to abstraction and diminution. And in this disease as in all others, he must strive not to feed the disease, but endeavor to wear it out by administering whatever is most opposed to each disease, and not that which favors and is allied to it. For by that which is allied to it, it gains vigor and increase, but it wears out and disappears under the use of that which is opposed to it. But whoever is acquainted with such a change in men, and can render a man humid and dry, hot and cold by regimen, could also cure this disease, if he recognizes the proper season for administering his remedies, without minding purifications, spells, and all other illiberal practices of a like kind.



## ON ALIMENT



### OR, NUTRIMENT

*Translated by W. H. S. Jones*

I. NUTRIMENT and form of nutriment, one and many. One, inasmuch as its kind is one ; form varies with moistness or dryness. These foods too have their forms and quantities ; they are for certain things, and for a certain number of things.

II. It increases, strengthens, clothes with flesh, makes like, makes unlike, what is in the several parts, according to the nature of each part and its original power.

III. It makes into the likeness of a power, when the nutriment that comes in has the mastery, and when that is mastered which was there to begin with.

IV. It also loses its qualities ; sometimes the earlier nutriment, when in time it has been liberated or added, sometimes the later, when in time it has been liberated or added.

V. Both are weakened in time and after a time by the nutriment from without which has continuously entered in, and for a long time firmly has interwoven itself with all the limbs.

VI. And it sends forth shoots of its own proper form. It changes the old form and descends ; it nourishes as it is digested. Sometimes it alters the earlier form, and completely obscures the former ones.

VII. Power of nutriment reaches to bone and to all the parts of bone, to sinew, to vein, to artery, to muscle, to membrane, to flesh, fat, blood, phlegm, marrow, brain, spinal marrow, the intestines and all their parts ; it reaches also to heat, breath, and moisture.

VIII. Nutriment is that which is nourishing ; nutriment is that which is fit to nourish ; nutriment is that which is about to nourish.

IX. The beginning of all things is one and the end of all things is one, and the end and beginning are the same.

X. And all the particular details in nourishment are managed well or ill ; well if as aforesaid, ill if ordered in the opposite way to these.

XI. Juices varied in colours and in powers, to harm or to help, or neither to harm nor to help, varied in amount, excess or defect, in combination of some but not of others.

XII. And to the warming of all it harms or helps, to the cooling it harms or helps, to the power it harms or helps.

XIII. Of power varied natures.

XIV. Humours corrupting whole, part, from without, from within, spontaneous, not spontaneous ; spontaneous for us, not spontaneous for the cause. Of the cause, part is clear, part is obscure, part is within our power and part is not.

XV. Nature is sufficient in all for all.

XVI. To deal with nature from without : plaster, anointing, salve, uncovering of whole or part, covering of whole or part, warming or cooling similarly, astriction, ulceration, biting, grease ; from within : some of the aforesaid, and in addition an obscure cause in part or whole, in some cases but not in all.

XVII. Secretions in accordance with nature, by the bowels, urine, sweat, sputum, mucus, womb, through hemorrhoid, wart, leprosy, tumour, carcinoma, from nostrils, lungs, bowels, seat, penis, in accordance with nature or contrary to nature. The peculiar differences in these things depend on differences in the individual, on times and on methods. All these things are one nature and not one. All these things are many natures and one nature.

XVIII. Purging upward or downward, neither upward nor downward.

XIX. In nutriment purging excellent, in nutriment purging bad ; bad or excellent

according to circumstances.

XX. Ulceration, burn-scab, blood, pus, lymph, leprosy, scurf, dandruff, scurvy, white leprosy, freckles, sometimes harm and sometimes help, and sometimes neither harm nor help.

XXI. Nutriment not nutriment if it have not its power. Not nutriment nutriment if it can nourish. Nutriment in name, not in deed ; nutriment in deed, not in name.

XXII. It travels from within to hair, nails, and to the extreme surface ; from without nutriment travels from the extreme surface to the innermost parts.

XXIII. Conflux one, conspiracy one, all things in sympathy ; all the parts as forming a whole, and severally the parts in each part, with reference to the work.

XXIV. The great beginning travels to the extreme part ; from the extreme part there is travelling to the great beginning. One nature to be and not to be.

XXV. Differences of diseases depend on nutriment, on breath, on heat, on blood, on phlegm, on bile, on humours, on flesh, on fat, on vein, on artery, on sinew, muscle, membrane, bone, brain, spinal marrow, mouth, tongue, oesophagus, stomach, bowels, midriff, peritoneum, liver, spleen, kidneys, bladder, womb, skin. All these things both as a whole and severally. Their greatness great and not great.

XXVI. Signs : tickling, ache, rupture, mind, sweat, sediment in urine, rest, tossing, condition of the eyes, imaginations, jaundice, hiccoughs, epilepsy, blood entire, sleep, from both these and all other things in accordance with nature, and everything else of a similar nature that tends to harm or help. Pains of the whole or of a part, indications of severity : of the one, greater severity, of the other, less, and from both come signs of greater severity, and from both come signs of less.

XXVII. Sweet, not sweet ; sweet in power, like water, sweet to the taste, like honey. Signs of either are sores, eyes and tastings, which can also distinguish degrees. Sweet to sight, in colours and in combinations generally, sweet to a

greater or less degree.

XXVIII. Porousness of a body for transpiration healthy for those from whom more is taken ; denseness of body for transpiration unhealthy for those from whom less is taken. Those who transpire freely are weaker, healthier, and recover easily ; those who transpire hardly are stronger before they are sick, but on falling sick they make difficult recovery. These for both whole and part.

XXIX. The lungs draw a nourishment which is the opposite of that of the body, all other parts draw the same.

XXX. Beginning of nutriment of breath, nostrils, mouth, throat, lungs, and the transpiratory system generally. Beginning of nutriment, both wet and dry, mouth, oesophagus, stomach. The more ancient nutriment, through the epigastrium, where the navel is.

XXXI. Root of veins, liver ; root of arteries, heart. Out of these travel to all parts blood and breath, and heat passes through them.

XXXII. Power one, and not one, by which all these things and those of a different sort are managed ; one for the life of whole and part, not one for the sensation of whole and part.

XXXIII. Milk nutriment, for those to whom milk is a natural nutriment, but for others it is not. For some wine is nutriment, for others not. So with meats and the other many forms of nutriment, the differences being due to place and habit.

XXXIV. Nourishment is sometimes into growth and being, sometimes into being only, as is the case with old men ; sometimes in addition it is into strength. The condition of the athlete is not natural. A healthy state is superior in all.

XXXV. It is a great thing successfully to adapt quantity to power.

XXXVI. Milk and blood are what is left over from nutriment.

XXXVII. Periods generally harmonise for the embryo and its nutriment ; and again nutriment tends upwards to milk and the nourishment of the baby.

XXXVIII. Inanimates get life, animates get life, the parts of animates get life.

XXXIX. The natures of all are untaught.

XL. Blood of another is useful, one's own blood is useful ; blood of another is harmful, one's own blood is harmful ; one's own humours are harmful, humours of another are harmful ; humours of another are beneficial, one's own humours are beneficial ; the harmonious is unharmonious, the unharmonious is harmonious ; another's milk is good, one's own milk is bad ; another's milk is harmful, one's own milk is useful.

XLI. Food for the young partly digested, for the old completely changed, for adults unchanged.

XLII. For formation, thirty-five days ; for movement, seventy days ; for completion, two hundred and ten days. Others, for form, forty-five days ; for motion, ninety days ; for delivery, two hundred and seventy days. Others, fifty for form ; for the first leap, one hundred ; for completion, three hundred days. For distinction of limbs, forty ; for shifting, eighty ; for detachment, two hundred and forty days. It is not and is. There are found therein both more and less, in respect of both the whole and the parts, but the more is not much more, and the less not much less.

XLIII. Nutriment of bones after breaking ; for the nostril, twice five ; for jaw, collar-bone and ribs, twice this ; for the fore-arm, thrice ; for the leg and upper-arm, four times ; for the thigh, five times ; there may be, however, in these a little more or less.

XLIV. Blood is liquid and blood is solid. Liquid blood is good, liquid blood is bad. Solid blood is good, solid blood is bad. All things are good or bad relatively.

XLV. The way up, down.

XLVI. Power of nutriment superior to mass ; mass of nutriment superior to power ; both in moist things and in dry.

XLVII. It takes away and adds not the same thing ; it takes away from one, and adds to another, the same thing.

XLVIII. Pulsations of veins and breathing of the lungs according to age, harmonious and unharmonious, signs of disease and of health, and of health more than of disease, and of disease more than of health. For breath too is nutriment.

XLIX. Liquid nutriment more easily changed than solid ; solid nutriment more easily changed than liquid. That which is hardly altered is hard of digestion, and that which is easily added is easy of digestion.

L. And for such as need a quick reinforcement, a liquid remedy is best for recovery of power ; for such as need a quicker, a remedy through smell ; for those who need a slower reinforcement, solid nutriment.

LI. Muscles being more solid waste less easily than other parts, save bone and sinew. Parts that have been exercised resist change, being according to their kind stronger than they otherwise would have been, and therefore less liable to waste.

LII. Pus comes from flesh ; pus-like lymph comes from blood and moisture generally. Pus is nutriment for a sore ; lymph is nutriment for vein and artery.

LIII. Marrow nutriment of bone, and through this a callus forms.

LIV. Power gives to all things increase, nourishment and birth.

LV. Moisture the vehicle of nutriment.

## THE PRECEPTS



*Translated by W. H. S. Jones*

I. TIME is that wherein there is opportunity, and opportunity is that wherein there is no great time. Healing is a matter of time, but it is sometimes also a matter of opportunity. However, knowing this, one must attend in medical practice not primarily to plausible theories, but to experience combined with reason. For a theory is a composite memory of things apprehended with sense-perception. For the sense-perception, coming first in experience and conveying to the intellect the things subjected to it, is clearly imaged, and the intellect, receiving these things many times, noting the occasion, the time and the manner, stores them up in itself and remembers. Now I approve of theorising also if it lays its foundation in incident, and deduces its conclusions in accordance with phenomena. For if theorising lays its foundation in clear fact, it is found to exist in the domain of intellect, which itself receives from other sources each of its impressions. So we must conceive of our nature as being stirred and instructed under compulsion by the great variety of things ; and the intellect, as I have said, taking over from nature the impressions, leads us afterwards into truth. But if it begins, not from a clear impression, but from a plausible fiction, it often induces a grievous and troublesome condition. All who so act are lost in a blind alley. Now no harm would be done if bad practitioners received their due wages. But as it is their innocent patients suffer, for whom the violence of their disorder did not appear sufficient without the addition of their physician's inexperience. I must now pass on to another subject.

II. But conclusions which are merely verbal cannot bear fruit, only those do which are based on demonstrated fact. For affirmation and talk are deceptive and treacherous. Wherefore one must hold fast to facts in generalisations also, and occupy oneself with facts persistently, if one is to acquire that ready and infallible habit which we call " the art of medicine." For so to do will bestow a very great advantage upon sick folk and medical practitioners. Do not hesitate to inquire of laymen, if thereby there seems likely to result any improvement in treatment. For so I think the whole art has been set forth, by observing some part of the final end in each of many particulars, and then combining all into a single

whole. So one must pay attention to generalities in incidents, with help and quietness rather than with professions and the excuses that accompany ill-success.

III. Early determination of the patient's treatment — since only what has actually been administered will benefit ; emphatic assertion is of no use — is beneficial but complicated. For it is through many turns and changes that all diseases settle into some sort of permanence.

IV. This piece of advice also will need our consideration, as it contributes somewhat to the whole. For should you begin by discussing fees, you will suggest to the patient either that you will go away and leave him if no agreement be reached, or that you will neglect him and not prescribe any immediate treatment. So one must not be anxious about fixing a fee. For I consider such a worry to be harmful to a troubled patient, particularly if the disease be acute. For the quickness of the disease, offering no opportunity for turning back, spurs on the good physician not to seek his profit but rather to lay hold on reputation. Therefore it is better to reproach a patient you have saved than to extort money from those who are at death's door.

V. And yet some patients ask for what is out of the way and doubtful, through prejudice, deserving indeed to be disregarded, but not to be punished. Wherefore you must reasonably oppose them, as they are embarked upon a stormy sea of change.

For, in heaven's name, who that is a brotherly physician practises with such hardness of heart as not at the beginning to conduct a preliminary examination of every illness and prescribe what will help towards a cure, to heal the patient and not to overlook the reward, to say nothing of the desire that makes a man ready to learn?

VI. I urge you not to be too unkind, but to consider carefully your patient's superabundance or means. Sometimes give your services for nothing, calling to mind a previous benefaction or present satisfaction. And if there be an opportunity of serving one who is a stranger in financial straits, give full assistance to all such. For where there is love of man, there is also love of the art. For some patients, though conscious that their condition is perilous, recover their health simply through their contentment with the goodness of the physician. And it is well to superintend the sick to make them well, to care for the healthy to



keep them well, but also to care for one's own self, so as to observe what is seemly.

VII. Now those who are buried in deep ignorance of the art cannot appreciate what has been said. In fact such men will be shown up as ignorant of medicine, suddenly exalted yet needing good luck. For should wealthy men gain some remission of their trouble, these quacks win reputation through a double good fortune, and if a relapse occurs they stand upon their dignity, having neglected the irreproachable methods of the art, wherewith a good physician, a "brother of the art" as he is called, would be at his best. But he who accomplishes his cures easily without making a mistake would transgress none of these methods through want of power ; for he is not distrusted on the ground of wickedness. For quacks do not attempt treatment when they see an alarming condition, and avoid calling in other physicians, because they wickedly hate help. And the patients in their pain drift on a sea of twofold wretchedness for not having intrusted themselves to the end to the fuller treatment that is given by the art. For a remission of a disease affords a sick man much relief. Wherefore wanting a healthy condition they do not wish always to submit to the same treatment, therein being in accord with a physician's versatility. For the patients are in need through heavy expenditure, worshipping incompetence and showing no gratitude when they meet it ; when they have the power to be well off, they exhaust themselves about fees, really wishing to be well for the sake of managing their investments or farms, yet without a thought in these matters to receive anything.

VIII. So much for such recommendations. For remission and aggravation of a disease require respectively less or more medical assistance. A physician does not violate etiquette even if, being in difficulties on occasion over a patient and in the dark through inexperience, he should urge the calling in of others, in order to learn by consultation the truth about the case, and in order that there may be fellow-workers to afford abundant help. For when a diseased condition is stubborn and the evil grows, in the perplexity of the moment most things go wrong. So on such occasions one must be bold. For never will I lay it down that the art has been condemned in this matter. Physicians who meet in consultation must never quarrel, or jeer at one another. For I will assert upon oath, a physician's reasoning should never be jealous of another. To be so will be a sign of weakness. Those who act thus lightly are rather those connected with the business of the market-place. Yet it is no mistaken idea to call in a consultant. For in all abundance there is lack.

IX. With all these things it will appear strong evidence for the reality of the art if a physician, while skilfully treating the patient, does not refrain from exhortations not to worry in mind in the eagerness to reach the hour of recovery. For we physicians take the lead in what is necessary for health. And if he be under orders the patient will not go far astray. For left to themselves patients sink through their painful condition, give up the struggle and depart this life. But he who has taken the sick man in hand, if he display the discoveries of the art, preserving nature, not trying to alter it, will sweep away the present depression or the distrust of the moment. For the healthy condition of a human being is a nature that has naturally attained a movement, not alien but perfectly adapted, having produced it by means of breath, warmth and coction of humours, in every way, by complete regimen and by everything combined, unless there be some congenital or early deficiency. Should there be such a thing in a patient who is wasting, try to assimilate to the fundamental nature. For the wasting, even of long standing, is unnatural.

X. You must also avoid adopting, in order to gain a patient, luxurious headgear and elaborate perfume. For excess of strangeness will win you ill-repute, but a little will be considered in good taste, just as pain in one part is a trifle, while in every part it is serious. Yet I do not forbid your trying to please, for it is not unworthy of a physician's dignity.

XI. Bear in mind the employment of instruments and the pointing out of significant symptoms, and so forth.

XII. And if for the sake of a crowded audience you do wish to hold a lecture, your ambition is no laudable one, and at least avoid all citations from the poets, for to quote them argues feeble industry. For I forbid in medical practice an industry not pertinent to the art, and laboriously far-fetched, and which therefore has in itself alone an attractive grace. For you will achieve the empty toil of a drone and a drone's spoils.

XIII. A condition too is desirable free from the late-learner's faults. For his state accomplishes nothing that is immediate, and its remembrance of what is not before the eyes is but tolerable. So there arises a quarrelsome inefficiency, with headstrong outrage, that has no thought for what is seemly, while definitions, professions, oaths, great as far as the gods invoked are concerned, come from the physician in charge of the disease, bewildered laymen being lost in admiration of flowery language spoken in continuous reading and instruction, crowding

together even before they are troubled by a disease. Wherever I may be in charge of a case, with no confidence should I call in such men to help as consultants. For in them comprehension of seemingly learning is far to seek. Seeing then that they cannot but be unintelligent, I urge that experience is useful, the learning of opinions coming far after. For who is desirous and ambitious of learning truly subtle diversities of opinion, to the neglect of calm and practised skill? Wherefore I advise you to listen to their words but to oppose their acts.

XIV. When regimen has been restricted you must not suppress for long a long-standing desire of the patient. In a chronic disease indulgence too helps to set a man on his feet again, if one pay the necessary attention to one who is blind. As great fear is to be guarded against, so is excessive joy. A sudden disturbance of the air is also to be guarded against. The prime of life has everything lovely, the decline has the opposite. Incoherence of speech comes from an affection, or from the ears, or from the speaker's talking of something fresh before he has uttered what was in his mind before, or from his thinking of fresh things before he has expressed what was in his thoughts before. Now this is a thing that happens without any "visible affection" so-called, mostly to those who are in love with their art. The power of youth, when the matter is trifling, is sometimes supremely great. Irregularity in a disease signifies that it will be a long one. A crisis is the riddance of a disease. A slight cause turns into a cure unless the affection be in a vital part. Because fellow-feeling at grief causes distress, some are distressed through the fellow-feeling of another. Loud talking is painful. Overwork calls for gentle dissuasion. A wooded district benefits.

# HUMOURS



*Translated by W. H. S. Jones*

I. THE colour of the humours, where there is no ebb of them, is like that of flowers. They must be drawn along the suitable parts whither they tend, except those whose coction comes in due time. Coction tends outwards or inwards, or in any other necessary direction. Caution. Lack of experience. Difficulty of learning by experience. Falling out of hair. Emptiness of bowels, for the lower, repletion, for the upper, nourishment. Tendency upwards; tendency downwards. Spontaneous movements upwards, downwards; beneficial, harmful. Congenital constitution, country, habit, age, season, constitution of the disease, excess, defect, the deficient and the amount of the deficiency, or the contrary. Remedies. Deflection. Deviation, to head, to the sides, along the route to which the chief tendencies are. Or revulsion, downwards when there is an upwards tendency, upwards when there is a downwards tendency. Drying up. Cases in which the upper parts, or the lower, are washed out; cases for soothing remedies. Do not shut up extravasated humours inside, but dry up the evacuations. Disturbance; flooding out, washing through, for those who will have an abscession to the seat, whereby is withdrawn poison, or sore, or solidified humour, or growth, or flatulence, or food, or creature, or inflammation, or any other affection.

I. Observe these things: symptoms which cease of themselves, or for example the blisters that rise upon burns, what are harmful or beneficial and in what cases, positions, movement, rising, subsidence, sleep, waking, to be quick when something must be done or prevented. Instruction about vomit, evacuation below, sputum, mucus, coughing, belching, hiccoughing, flatulence, urine, sneezing, tears, itching, pluckings, touchings, thirst, hunger, repletion, sleep, pain, absence of pain, body, mind, learning, memory, voice, silence.

III. In affections of the womb, purgations; evacuations from above, with colic, that are greasy, uncompounded, foamy, hot, biting, verdigris-coloured, varied, with shreds, lees or blood, without air, unconcocted, concocted, desiccated, the nature of the liquid part, looking at the comfort or discomfort of the patient before danger comes, and also what ought not to be stopped. Coction, descent of

the humours below, rising of the humours above, fluxes from the womb, the wax in the ears. Orgasm, opening, emptying, warming, chilling, within or without, in some cases but not in others. When that which causes the colic is below the navel the colic is slow and mild, and *vice versa*.

IV. The evacuations, whither they tend; without foam, with coction, without coction, cold, fetid, dry, moist. In fevers not ardent, thirst that was not present before, brought about neither by heat nor by any other cause, urine, wetness of the nostrils. Prostration, dryness or fulness of the body; rapid respiration; hypochondrium; extremities; eyes sickly; change of complexion; pulsations; chills; palpitations: hardness of the skin, muscles, joints, voice, mind; voluntary posture; hair; nails; power, or the want of power, to bear easily what is necessary. These are signs: — smell of the skin, mouth, ear, stools, flatulence, urine, sores, sweat, sputum, nose; saltness of skin, sputum, nose, tears, or of the humours generally. In every way similar the things that benefit, the things that harm. The dreams the patient sees, what he does in sleep; if his hearing be sharp, if he be interested in information. In estimating signs take the majority that are more important and more prominent — those that denote recovery are more seasonable than the others. If the patients perceive everything with every sense and bear easily, for example, smells, conversation, clothes, postures and so on. Symptoms which benefit even when they manifest themselves spontaneously (and sometimes these too bring about a crisis), such as flatulence and urine, of the right kind, of the right amount, and at the right time. What is contrary avert; combat it. Parts near and common to affected places suffer lesions first and most.

V. In examining the constitution of a disease look to the excretions in the initial stages, the nature of the urine, the state of collapse, change of colour, diminution of respiration and the other symptoms besides. The abnormal conditions that must be known: passage of urine, menstruation, sputum, nasal discharge, eyes, sweat, discharge from tumours, from wounds, from eruptions, what is spontaneous and what artificial; for all critical symptoms follow a norm, as do those that help, those that harm and those that kill. They must be known, that the bad may be shunned and averted, and that the good may be invited, encouraged and welcomed. Similarly with other symptoms, of the skin, extremities, hypochondria, joints, mouth, eye, postures, sleep, such as denote a crisis, and when symptoms of this kind must be provoked. Moreover, abscessions of a helpful character must be encouraged by foods, drinks, smells, sights, sounds, ideas, evacuations, warmth, cooling, moist things, dry things, moistening, drying, anointings, ointments, plasters, salves, powders, dressings, applications

[postures, massage, leaving alone, exertion, rest, sleep, keeping awake], breaths from above, from below, common, particular, artificial — not, however, when paroxysms are present or imminent, nor when the feet are chilled, but when the disease is declining.

VI. At the periodic paroxysms do not give nourishment; do not force it on the patient, but diminish the quantity before the crisis. Do not disturb a patient either during a crisis or just after one, either by purgings or by other irritants; do not try experiments either, but leave the patient alone. [Critical signs of an improvement ought not to be expected to appear at once.] Purge or otherwise disturb concocted, not crude, humours, and avoid the onset of a disease, unless there be orgasm, a thing which rarely occurs then. Evacuate the humours that have to be evacuated in the direction in which they mostly tend, and by the convenient passages. Judge of evacuations, not by bulk, but by conformity to what is proper, and by the way in which the patient supports them. When occasion calls for it, reduce the patient, if need be, to a fainting condition, until the object in view be attained. If then there be need of anything further, shift your ground; dry up the humours, moisten them, treat by revulsion, if, that is, the strength of the patient permits. Take as your tests the following symptoms: the dry will be hot, and the moist cold; purgatives will produce the opposite effect. This is what usually happens. On odd days evacuations should be upwards if the periods and the constitution of the paroxysms be odd. On even days they are generally downwards, for so they are beneficial even when spontaneous, if the periods cause the paroxysms on the even days. But when the circumstances are not such, evacuations should be upwards on even days, downwards on odd days.

(a) — A purge is necessary on an odd day. If paroxysms occur on odd days, purge upwards. If paroxysms occur on even days, purge downwards.

(b) — A purge is necessary on an even day. If paroxysms occur on even days, purge downwards. If paroxysms occur on odd days, purge upwards.

Such constitutions are rare, and the crises are rather uncertain. Prolonged illnesses must be similarly treated — for example, those which last thirteen or fourteen days; purge on the thirteenth day downwards, on the fourteenth

upwards (to do so is beneficial for the crisis), and similarly with diseases of twenty days, except when purging should be downwards. Purging must be copious, and not near the crisis but some time before it. Rarely in acute diseases must evacuation be copious.

II. Generally, in cases of fever with prostration, abscessions are most likely to occur at the joints and by the jaw, in each case near to the part where the pains are, more often, in fact generally, to an upper part. If the disease be sluggish and incline to the lower parts, the abscessions too collect in a lower part. Hot feet especially signify a lower abscession, cold feet an upper abscession. When patients, on rising after an illness, suffer immediately pains in arms or feet, abscessions form in these parts. Moreover, if a part suffer pain before the illness, it is in it that the humours settle, as was the case with those who in Perinthus suffered from cough and angina. For coughs, like fevers, cause abscessions. These results are the same, whether they come from humours or from wasting of body and soul.

VI. Know in what seasons the humours break out, what diseases they cause in each, and what symptoms they cause in each disease. As to the body generally, know to what disease the physical constitution most inclines. For example, a swollen spleen produces a certain effect, to which the constitution contributes something. It is much the same with an evil complexion, or the body is parched, and so on. Be practised in these things.

IX. Among psychical symptoms are intemperance in drink and food, in sleep, and in wakefulness, the endurance of toil either for the sake of certain passions (for example, love of dice) or for the sake of one's craft or through necessity, and the regularity or irregularity of such endurance. States of mind before and after changes. Of moral characteristics: diligence of mind, whether in inquiry or practice or sight or speech; similarly, for example, griefs, passionate outbursts, strong desires. Accidents grieving the mind, either through vision or through hearing. How the body behaves: when a mill grinds the teeth are set on edge; the legs shake when one walks beside a precipice; the hands shake when one lifts a load that one should not lift; the sudden sight of a snake causes pallor. Fears, shame, pain, pleasure, passion and so forth: to each of these the appropriate member of the body responds by its action. Instances are sweats, palpitation of the heart and so forth.

X. Of remedies that may help or harm those applied externally include anointing,

affusions, inunction, cataplasms, bandages of wool and the like; the internal parts of the body react to these remedies just as the external parts react to remedies applied internally. Moreover, a bed made out of unwashed fleeces, and the sight or smell of the cumin called “royal.” Things that purge the head are disturbing, conversation, voice and so forth. Breasts, seed, womb are symptomatic at the various ages; in chokings and in coughs, fluxes to the testicles.

XI. As the soil is to trees, so is the stomach to animals. It nourishes, it warms, it cools; as it empties it cools, as it fills it warms. As a soil that is manured warms in winter, so the stomach grows warm. Trees have a slight, dry bark, but inside they are of dry texture, healthy, free from rot, durable; so among animals are tortoises and the like. In their ages animals are like the seasons and the year. They do not wear out, but improve with moderate use. As a water-pot, when new, lets the liquid pass through it, but holds it as time goes on, so the stomach lets nourishment pass, and like a vessel retains a sediment.

XII. The fashions of diseases. Some are congenital and may be learned by inquiry, as also may those that are due to the district, for most people are permanent residents there, so that those who know are numerous. Some are the result of the physical constitution, others of regimen, of the constitution of the disease, of the seasons. Countries badly situated with respect to the seasons engender diseases analogous to the season. *E.g.* when it produces irregular heat or cold on the same day, diseases in the country are autumnal, and similarly in the case of the other seasons. Some spring from the smells of mud or marshes, others from waters, stone, for example, and diseases of the spleen: of this kind are waters because of winds good or bad.

XIII. What the character of a season's diseases and constitutions will be you must foretell from the following signs. If the seasons proceed normally and regularly, they produce diseases that come easily to a crisis. The diseases that are peculiar to the seasons are clear as to their fashions. According to the alterations in a season, the diseases such as arise in this season will be either like or unlike their usual nature. If the season proceeds normally, similar or somewhat similar to the normal will be the diseases, as, for example, autumnal jaundice; for cold spells succeed to hot spells and heat to cold. If the summer prove bilious, and if the increased bile be left behind, there will also be diseases of the spleen. So when spring too has had a bilious constitution, there occur cases of jaundice in spring also. For this motion is very closely akin to the season when it has this



nature. When summer turns out like to spring, sweats occur in fevers; these are mild, not acute, and do not parch the tongue. When the spring turns out wintry, with after-winter storms, the diseases too are wintry, with coughs, pneumonia or angina. So in autumn, should there be sudden and unseasonable wintry weather, symptoms are not continuously autumnal, because they began in their wrong season, but irregularities occur. So seasons, like diseases, can fail to show crisis or to remain true to type, should they break out suddenly, or be determined too soon, or be left behind. For seasons, too, suffer from relapses, and so cause diseases. Accordingly, account must also be taken of the condition of a body when the seasons come upon it.

XIV. South winds cause deafness, dimness of vision, headaches, heaviness, and are relaxing. When such winds prevail, their characteristics extend to sufferers from diseases. Sores are soft, especially in the mouth, the privy parts, and similar places. A north wind causes coughs, sore throats, constipation, difficult micturition accompanied by shivering, pains in the side and chest; such are the diseases that one must be prone to expect when this wind prevails. Should its predominance be greater still, the fevers which follow drought and rain are determined by the conditions that preceded this predominance, by the physical condition produced by the previous season, and by the particular humour that prevails in the body. Droughts accompany both south winds and north winds. Winds cause differences — and this too is important — in all other respects also. For humours vary in strength according to season and district; summer, for instance, produces bile; spring, blood, and so on in each case.

VII. It is changes that are chiefly responsible for diseases, especially the greatest changes, the violent alterations both in the seasons and in other things. But seasons which come on gradually are the safest, as are gradual changes of regimen and temperature, and gradual changes from one period of life to another.

VIII. The constitutions of men are well or ill adapted to the seasons, some to summer, some to winter; others again to districts, to periods of life, to modes of living, to the various constitutions of diseases. Periods of life too are well or ill adapted to districts, seasons, modes of living and constitutions of diseases. So with the seasons vary modes of living, foods and drinks. In winter no work is done and foods are ripe and simple — an important point; in autumn work is done, exposure to the sun is beneficial, drinks are frequent and foods varied, with wine and fruits.

XIV. As it is possible to infer diseases from the seasons, so occasionally it is possible from diseases to forecast rains, winds and droughts; for example, north winds and south winds. For he who has noticed symptoms carefully and accurately has evidence on which to work; certain skin diseases, for instance, and pains at the joints are irritating when rain threatens, to quote one example out of many.

XV. Rains occur every other day, or every day, or at other intervals; some are continuous. Winds sometimes last for many days, and are opposed to one another; others are shorter; some, like rains, are periodic. These have resemblances to the seasonal constitutions, though less marked. If the year, having had a certain character to a marked degree, has given this character to the constitution, the diseases too have this character to a marked degree and are more severe; in this way have arisen very serious diseases, very widespread and lasting a very long period of time. After the first rains, when rain is coming after a long drought, it is possible to predict dropsies; and when the other slight signs appear at a period of calm, or at a change, one must infer what diseases are typical of the various rains or winds, and must listen to anyone who knows the nature of the spring or summer that will follow a winter of such and such a character.

XIX. Complexions vary with the seasons; they are not the same in north winds as in south winds; individuals differ, and the same individual varies in complexion as he grows older. Judge of complexions by their permanent characteristics, realising that ages resemble seasons in colour as in character.

XX. Sufferers from hemorrhoids are attacked neither by pleurisy, nor by pneumonia, nor by spreading ulcer, nor by boils, nor by swellings, nor perhaps by skin-eruptions and skin-diseases. However, unseasonably cured, many have been quickly caught by such diseases, and, moreover, in a fatal manner. All other abscessions, too, such as fistula, are cures of other diseases. So symptoms that relieve complaints if they come after their development, prevent the development if they come before. Suspected places cause relief, by acting as receptacles owing to pain, weight, or any other cause. In other cases there is the sympathetic action. The issue, through the flow, ceases to be one of blood, but the patients spit up matter connected with the humour. In some such cases seasonable blood-letting is possible, but in other cases blood-letting, as sometimes in the former cases, is not suitable but only a hindrance. Blood-spitting may be caused by the season, by pleurisy, or by bile. When swellings by

the ear do not suppurate at a crisis, a relapse occurs when the swelling softens; when the relapse follows the normal course of relapses, the swelling rises again and remains, following the same periods as occur when fevers relapse. In such cases expect an abscession to the joints. Thick, white urine, as in the case of the slave of Antigenes, sometimes is passed on the fourth day in prostrating fevers, and saves the patient from the abscession, and this is especially so if in addition there is a copious flow of blood from the nostrils. The patient whose right bowel was painful became easier when arthritis supervened, but when this symptom was cured the pains became worse.

## DREAMS



*Translated by W. H. S. Jones*

LXXXVI. He who has learnt aright about the signs that come in sleep will find that they have an important influence upon all things. For when the body is awake the soul is its servant, and is never her own mistress, but divides her attention among many things, assigning a part of it to each faculty of the body — to hearing, to sight, to touch, to walking, and to acts of the whole body; but the mind never enjoys independence. But when the body is at rest, the soul, being set in motion and awake, administers her own household, and of herself performs all the acts of the body. For the body when asleep has no perception; but the soul when awake has cognizance of all things — sees what is visible, hears what is audible, walks, touches, feels pain, ponders. In a word, all the functions of body and of soul are performed by the soul during sleep. Whoever, therefore, knows how to interpret these acts aright knows a great part of wisdom.

LXXXVII. Now such dreams as are divine, and foretell to cities or to private persons things evil or things good, have interpreters in those who possess the art of dealing with such things. But all the physical symptoms foretold by the soul, excess, of surfeit or of depletion, of things natural, or change to unaccustomed things, these also the diviners interpret, sometimes with, sometimes without success. But in neither case do they know the cause, either of their success or of their failure. They recommend precautions to be taken to prevent harm, yet they give no instruction how to take precautions, but only recommend prayers to the gods. Prayer indeed is good, but while calling on the gods a man should himself lend a hand.

LXXXVIII. This is the truth of the matter. Such dreams as repeat in the night a man's actions or thoughts in the day-time, representing them as REGIMEN, IV. LXXXVIII. occurring naturally, just as they were done or planned during the day in a normal act — these are good for a man. They signify health, because the soul abides by the purposes of the day, and is overpowered neither by surfeit nor by depletion nor by any attack from without. But when dreams are contrary to the acts of the day, and there occurs about them some struggle or triumph, a

disturbance in the body is indicated, a violent struggle meaning a violent mischief, a feeble struggle a less serious mischief. As to whether the act should be averted or not I do not decide, but I do advise treatment of the body. For a disturbance of the soul has been caused by a secretion arising from some surfeit that has occurred. Now if the contrast be violent, it is beneficial to take an emetic, to increase gradually a light diet for five days, to take in the early morning long, sharp walks, increasing them gradually, and to adapt exercises, when in training, so as to match the gradual increase of food. If the contrast be milder, omit the emetic, reduce food by a third, resuming this by a gentle, gradual increase spread over five days. Insist on vigorous walks, use voice-exercises, and the disturbance will cease.

LXXXIX. To see the sun, moon, heavens and stars clear and bright, each in the proper order, is good, as it indicates physical health in all its signs, but this condition must be maintained by adhering to the regimen followed at the time. But if there be a contrast between the dream and reality, it indicates a physical illness, a violent contrast a violent illness, a slighter contrast a lighter illness. The stars are in the outer sphere, the sun in the middle sphere, the moon in the sphere next the hollow. When any one of the heavenly bodies appears to be disfigured, to disappear, or to be arrested in its revolution, if it be through mist or cloud, the malign influence is comparatively weak; if through rain also or hail, the influence is more powerful. In any case it is indicated that a moist and phlegm-like secretion, arising in the body, has fallen to the outer circuit. It is beneficial for this man to make his runs long, wearing his cloak the while, to increase them gradually, that he may perspire as freely as possible, and after exercise to take long walks; luncheon should be left out. Reduce food by one-third, and take five days in gradually resuming the normal quantity. Should the trouble appear to be of the more potent kind, use also the vapour-bath; for, as the mischief lies in the outer circuit, it is expedient to make the purgation through the skin. The foods employed are to be dry, acrid, astringent and unmixed; the exercises such as are the most drying. But if it be the moon that shows these signs at all, it is beneficial to effect the revulsion inwards, and to administer an emetic after foods that are acrid, salt and soft. There should be sharp circular runs, walks, voice-exercises, omission of luncheon, the same reduction and gradual increase of food. The revulsion must be directed inwards because the harm showed itself at the hollow parts of the body. But if it be the sun that manifests the phenomena, the malady is more potent, and harder to eliminate. It is necessary to effect the revulsions in both directions, to employ running on the double track and on the round track, walks and all other exercises, the same reduction and gradual

increase of food. After an emetic should come another gradual increase spread over five days. But if in a clear sky the heavenly bodies are crushed, seeming to be weak and overpowered by the dryness of the revolution, it indicates a danger of falling into a disease. What is necessary is to reduce food, to employ the moistest regimen, baths and increased rest, and sleep, until there is a recovery. If the hostile influence appear to be fiery and hot, a secretion of bile is indicated. Now if the force win, a disease is indicated. If the vanquished be also annihilated, there is a danger that the disease will have a fatal issue. But if the force seem to be put to flight, and to flee quickly, pursued by the stars, there is a danger that the patient will become delirious, unless he be treated. In all these cases it is most beneficial to be purged with hellebore before submitting to regimen. The next best course is to adopt a watery regimen, and to abstain from wine unless it be white, thin, soft and diluted. There should be abstinence from things that are hot, acrid, drying and salt. Let there be plenty of natural exercises and long runs with the cloak worn. Let there be no massage, no ordinary wrestling, and no wrestling on dust. Long sleeps on a soft bed; rest except after the natural exercises; let there be a walk after dinner. It is a good thing too to take a vapour-bath. After the vapour-bath an emetic is to be drunk. Until thirty days are gone the appetite should not be fully satisfied, and when the time has come for this full satisfaction, let an emetic be taken three times a month after a meal of sweet, watery and light foods. Whenever the heavenly bodies wander about, some in one way and others in another, it indicates a disturbance of the soul arising from anxiety. Rest is beneficial in such a case. The soul should be turned to the contemplation of comic things, if possible, if not, to such other things as will bring most pleasure when looked at, for two or three days, and recovery will take place. Otherwise there is a risk of falling ill. Whenever a heavenly body appears to fall away from its orbit, should it be pure and bright, and the motion towards the east, it is a sign of health. For whenever a pure substance in the body is secreted from the circuit in the natural motion from west to east, it is right and proper. In fact secretions into the belly and substances disgorged into the flesh all fall away from the circuit. But whenever a heavenly body seems to be dark and dull, and to move towards the west, or into the sea, or into the earth, or upwards, disease is indicated. When the motion is upwards, it means fluxes of the head; when into the sea, diseases of the bowels; when into the earth, most usually tumours growing in the flesh. In such cases it is beneficial to reduce food by one-third and to take an emetic, to be followed by a gradual increase of food for five days, the normal diet being resumed in another five. Another emetic should be followed by the same gradual increase. Whenever a heavenly body seems to settle on you, if it be pure and moist, it

indicates health, because what descends from the ether on to the person is pure, and the soul too sees it in its true character as it entered the body. But should the heavenly body be dark, impure and not transparent, it indicates disease caused neither by surfeit nor by depletion, but by the entrance of something from without. It is beneficial in this case to take sharp runs on the round track, that there may be as little melting of the body as possible, and that by breathing as rapidly as possible the patient may secrete the foreign body. After these runs let there be sharp walks. Diet to be soft and light for four days. Whatsoever a man seems to receive pure from a pure god is good for health; for it indicates that the matter is pure that enters the body. But whatever he seems to see that is the opposite thereof is not good; for it indicates that something diseased has entered the body. Accordingly the treatment in this case should be the same as the former. Should it seem to rain with a gentle shower from a clear sky, with neither a violent downpour nor a terrible storm, it is a good sign; for it indicates that the breath has come from the air in just measure and pure. If the reverse occur, violent rain, storm and tempest, and the water be foul, it indicates disease from the breath that comes from without. In this case also the same regimen must be employed, and diet must be very strictly limited. So with this knowledge about the heavenly bodies, precautions must be taken, with change of regimen and prayers to the gods; in the case of good signs, to the Sun, to Heavenly Zeus, to Zeus, Protector of Home, to Athena, Protectress of Home, to Hermes and to Apollo; in the case of adverse signs, to the Averters of evil, to Earth and to the Heroes, that all dangers may be averted.

XC. The following too are signs that foretell health. To see and hear clearly the things on the earth, to walk surely, to run surely, quickly and without fear, to see the earth level and well tilled, trees that are luxuriant, covered with fruit and cultivated, rivers flowing naturally, with water that is pure, and neither higher nor lower than it should be, and springs and wells that are similar. All these indicate health for the dreamer, and that the body with all its circuits, diet and secretions are proper and normal. But if anything be seen that is the reverse of these things, it indicates some harm in the body. If sight or hearing be impaired, it indicates disease in the region of the head. In addition to the preceding regimen the dreamer should take longer walks in the early morning and after dinner. If it be the legs that are injured, the revulsion should be made with emetics, and in addition to the preceding regimen there should be more wrestling. For the earth to be rough indicates that the flesh is impure. So the walks after exercises must be made longer. Fruitless trees signify corruption of the human seed. Now if the trees are shedding their leaves, the harm is caused by

moist, cold influences; if leaves abound without any fruit, by hot, dry influences. In the former case regimen must be directed towards warming and drying; in the latter towards cooling and moistening. When rivers are abnormal they indicate a circulation of the blood; high water excess of blood, low water defect of blood. Regimen should be made to increase the latter and lessen the former. Impure streams indicate disturbance of the bowels. The impurities are removed by running on the round track and by walks, which stir them up by accelerated respiration. Springs and cisterns indicate some trouble of the bladder; it should be thoroughly purged by diuretics. A troubled sea indicates disease of the belly; it should be thoroughly purged by light, soft aperients. Trembling of the earth or of a house indicates illness when the dreamer is in health, and a change from disease to health when he is sick. So it is beneficial to change the regimen of a healthy dreamer. Let him first take an emetic, that he may resume nourishment again little by little, for it is the present nourishment that is troubling all the body. A sick dreamer benefits by continuing the same regimen, for the body is already changing from its present condition. To see the earth flooded by water or sea signifies a disease, as there is much moisture in the body. What is necessary is to take emetics, to avoid luncheon, to exercise and to adopt a dry diet. Then there should be a gradual increase of food, little by little, and little to begin with. It is not good either to see the earth black or scorched, but there is a danger of catching a violent, or even a fatal disease, for it indicates excess of dryness in the flesh. What is necessary is to give up exercises and such food as is dry and acrid and diuretic. Regimen should consist of barley-water well boiled, light and scanty meals, copious white wine well diluted, and numerous baths. No bath should be taken on an empty stomach, the bed should be soft and rest abundant. Chill and the sun should be avoided. Pray to Earth, Hermes and the Heroes. If the dreamer thinks that he is diving in a lake, in the sea, or in a river, it is not a good sign, for it indicates excess of moisture. In this case also benefit comes from a drying regimen and increased exercises. But for a fever patient these dreams are a good sign, for the heat is being suppressed by the moisture.

XCI. The sight of something connected with the person that is normal, and for which the physique is neither too large nor too small, is a good sign for the health. To be wearing white clothes, and the most beautiful shoes, is also a good sign. But anything too large or too small for the limbs is not good. What is necessary is in the latter case to increase by regimen, in the former to diminish. Black objects indicate a worse and more dangerous disease; what is necessary is to soften and to moisten. New objects indicate a change.



XCII. To see the dead clean and in white cloaks is a good sign, and to receive something clean from them indicates both health of body and the healthiness of the things that enter it. For from the dead come nourishment, growth and seed, and for these to enter the body clean indicates health. But if, on the contrary, one should see them naked, or clothed in black, or not clean, or taking something, or bringing something out of the house, the sign is unfavourable, as it indicates disease, the things entering the body being harmful. What is necessary is to purge them away by runs on the round track and by walks, and after an emetic gradually to increase a soft and light diet.

XCIII. Monstrous bodies that are seen in sleep and frighten a man indicate a surfeit of unaccustomed food, a secretion, a bilious flux and a dangerous disease. What is necessary is an emetic, followed idiomatic, though the sense is not materially altered: “neither too large nor too small for the physique.” by a gradual increase, for five days, of the lightest food possible, neither abundant nor acrid, neither dry nor hot, with such exercises as are most natural, excepting walks after dinner. The dreamer should take hot baths and rest, and avoid the sun and cold. Whenever in his sleep a man thinks he is eating or drinking his usual food or drink, it indicates a want of nourishment and depression of the soul. Meats if they be very strong show a very great excess; if they be weaker, a less excess. For just as eating is good, so eating in a dream is a good sign. So it is beneficial to reduce the quantity of food, for an excess of nourishment is indicated. The meaning is the same when bread is eaten, prepared with cheese and honey. To drink clean water in dreams is no sign of harm, but it is to drink any other kind. Whenever a man thinks that he beholds familiar objects, it indicates a desire of the soul. Whenever he runs away in fear, it indicates that the blood is arrested by dryness. It is in this case beneficial to cool and moisten the body. Fighting, or to be pierced or bound by another, indicates that there has occurred in the body a secretion opposed to the circuit. It is beneficial to take an emetic, to reduce the flesh, to walk, to eat light foods, and after the emetic to increase food gradually for four days. Wanderings and difficult ascents have the same meaning. Crossing rivers, enemy men-at-arms and strange monsters indicate disease or raving. It is beneficial to take small meals of light, soft food, and emetics, and gently to increase food for five days, with plenty of natural exercise except after dinner; but hot baths, rest, cold and sun are to be avoided. Using these means in the way I have described a man will live a healthy life: in fact I have discovered regimen, with the gods’ help, as far as it is possible for mere man to discover it.

## THE ART



*Translated by W. H. S. Jones*

I. SOME there are who have made an art of vilifying the arts, though they consider, not that they are accomplishing the object I mention, but that they are making a display of their own knowledge. In my opinion, however, to discover that was unknown before, when the discovery of it is better than a state of ignorance, is the ambition and task of intelligence, and so is to bring to completion what was already accomplished in part. On the other hand, to be eager to bring shame through the art of abuse upon the discoveries of others, improving nothing, but disparaging before those who do not know the discoveries of those who do, seems to me to be not the ambition and work of intelligence, but the sign of a nasty nature, or of want of art. Indeed it becomes only those who are without art to act in this manner, with the ambition, though not the power, to indulge their malevolence by disparaging what is right in their neighbours' works and by eavilling at what is amiss. Now as for the attacks of this kind that are made on the other arts, let them be repelled by those who care to do so and can, and with regard to those points about which they care; the present discussion will oppose those who thus invade the art of medicine, and it is emboldened by the nature of those it blames, well equipped through the art it defends, and powerful through the wisdom in which it has been educated.

II. Now it seems to me that generally speaking there is no art which does not exist; in fact it is absurd to regard as non-existent one of the things that exist. Since what substance could there be of non-existents, and who could behold them and declare that they exist? For if really it be possible to see the non-existent, as it is to see the existent, I do not know how a man could regard as nonexistent what he can both see with his eyes and with his mind think that it exists. Nay, it cannot be so; but the existent is always seen and known, and the non-existent is neither seen nor known. Now reality is known when the arts have been already revealed, and there is no art which is not seen as the result of some real essence. I for my part think that the names also of the arts have been given them because of their real essences; for it is absurd — nay impossible — to hold that real essences spring from names. For names are conventions, but real

essences are not conventions but the offspring of nature.

III. As to this subject in general, if it is not sufficiently understood from what I have said, other treatises will give clearer instruction. I will now turn to medicine, the subject of the present treatise, and set forth the exposition of it. First I will define what I conceive medicine to be. In general terms, it is to do away with the sufferings of the sick, to lessen the violence of their diseases, and to refuse to treat those who are overmastered by their diseases, realizing that in such cases medicine is powerless. That medicine fulfils these conditions, and is able constantly to fulfil them, will be the subject of my treatise from this point. In the exposition of the art I shall at the same time refute the arguments of those who think to shame it, and I shall do so just in those points where severally they believe they achieve some success.

IV. The beginning of my discourse is a point which will be conceded by all. It is conceded that of those treated by medicine some are healed. But because not all are healed the art is blamed, and those who malign it, because there are some who succumb to diseases, assert that those who escape do so through luck and not through the art. Now I, too, do not rob luck of any of its prerogatives, but I am nevertheless of opinion that when diseases are badly treated ill-luck generally follows, and good luck when they are treated well. Again, how is it possible for patients to attribute their recoveries to anything else except the art, seeing that it was by using it and serving it that they recovered? For in that they committed themselves to the art they showed their unwillingness to behold nothing but the reality of luck, so that while freed from dependence upon luck they are not freed from dependence upon the art. For in that they committed themselves with confidence to the art, they thereby acknowledged also its reality, and when its work was accomplished they recognized its power.

V. Now my opponent will object that in the past many, even without calling in a physician, have been cured of their sickness, and I agree that he is right. But I hold that it is possible to profit by the art of medicine even without calling in a physician, not indeed so as to know what is correct medical treatment and what is incorrect, but so as by chance to employ in self-treatment the same means as would have been employed had a physician actually been called in. And it is surely strong proof of the existence of the art, that it both exists and is powerful, if it is obvious that even those who do not believe in it recover through it. For even those who, without calling in a physician, recovered from a sickness must perforce know that their recovery was due to doing something or to not doing

something; it was caused in fact by fasting or by abundant diet, by excess of drink or by abstinence therefrom, by bathing or by refraining therefrom, by violent exercise or by rest, by sleep or by keeping awake, or by using a combination of all these things. And they must perforce have learnt, by having been benefited, what it was that benefited them, just as when they were harmed they must have learnt, by having been harmed, what it was that harmed them.

For it is not everybody who is capable of discerning things distinguished by benefit and things distinguished by harm. If therefore the patient will know how to praise or to blame what composed the regimen under which he recovered, all these things belong to the art of medicine. Again, mistakes, no less than benefits, witness to the existence of the art; for what benefited did so because correctly administered, and what harmed did so because incorrectly administered. Now where correctness and incorrectness each have a defined limit, surely there must be an art. For absence of art I take to be absence of correctness and of incorrectness; but where both are present art cannot be absent.

VI. Moreover, if the medical art and medical men brought about a cure only by means of medicines, purgative or astringent, my argument would be weak. As it is, the physicians of greatest repute obviously cure by regimen and by other substances, which nobody — not only a physician but also an unlearned layman, if he heard of them — would say do not belong to the art. Seeing then that there is nothing that cannot be put to use by good physicians and by the art of medicine itself, but in most things that grow or are made are present the essential substances of cures and of drugs, no patient who recovers without a physician can logically attribute the recovery to spontaneity. Indeed, under a close examination spontaneity disappears; for everything that occurs will be found to do so through something, and this “through something” shows that spontaneity is a mere name, and has no reality. Medicine, however, because it acts “through something,” and because its results may be forecasted, has reality, as is manifest now and will be manifest for ever.

VI. Such then might be the answer to those who attribute recovery to chance and deny the existence of the art. As to those who would demolish the art by fatal cases of sickness, I wonder what adequate reason induces them to hold innocent the ill-luck of the victims, and to put all the blame upon the intelligence of those who practised the art of medicine. It amounts to this: while physicians may give wrong instructions, patients can never disobey orders. And yet it is much more likely that the sick cannot follow out the orders than that the physicians give

wrong instructions. The physician sets about his task with healthy mind and healthy body, having considered the case and past cases of like characteristics to the present, so as to say how they were treated and cured. The patient knows neither what he is suffering from, nor the cause thereof; neither what will be the outcome of his present state, nor the usual results of like conditions. In this state he receives orders, suffering in the present and fearful of the future; full of the disease, and empty of food; wishful of treatment rather to enjoy immediate alleviation of his sickness than to recover his health; not in love with death, but powerless to endure. Which is the more likely: that men in this condition obey, instead of varying, the physician's orders, or that the physician, in the condition that my account has explained above, gives improper orders? Surely it is much more likely that the physician gives proper orders, which the patient not unnaturally is unable to follow; and not following them he meets with death, the cause of which illogical reasoners attribute to the innocent, allowing the guilty to go free.

VIII. Some too there are who blame medicine because of those who refuse to undertake desperate cases, and say that while physicians undertake cases which would cure themselves, they do not touch those where great help is necessary; whereas, if the art existed, it ought to cure all alike. Now if those who make such statements charged physicians with neglecting them, the makers of the statements, on the ground that they are delirious, they would bring a more plausible charge than the one they do bring. For if a man demand from an art a power over what does not belong to the art, or from nature a power over what does not belong to nature, his ignorance is more allied to madness than to lack of knowledge. For in cases where we may have the mastery through the means afforded by a natural constitution or by an art, there we may be craftsmen, but nowhere else. Whenever therefore a man suffers from an ill which is too strong for the means at the disposal of medicine, he surely must not even expect that it can be overcome by medicine. For example, of the caustics employed in medicine fire is the most powerful, though there are many others less powerful than it. Now affections that are too strong for the less powerful caustics plainly are not for this reason incurable; but those which are too strong for the most powerful plainly are incurable. For when fire operates, surely affections not overcome thereby show that they need another art, and not that wherein fire is the means. I apply the same argument to the other agents employed in medicine; when any one of them plays the physician false, the blame should be laid on the power of the affection, and not on the art. Now those who blame physicians who do not undertake desperate cases, urge them to take in hand unsuitable patients

just as much as suitable ones. When they urge this, while they are admired by physicians in name, they are a laughing-stock of really scientific physicians. Those experienced in this craft have no need either of such foolish blame or of such foolish praise; they need praise only from those who have considered where the operations of craftsmen reach their end and are complete, and likewise where they fall short; and have considered moreover which of the failures should be attributed to the craftsmen, and which to the objects on which they practise their craft.

IX. The scope of the other arts shall be discussed at another time and in another discourse; the scope of medicine, the nature of things medical and how they are to be judged, my discourse has or will set forth. Men with an adequate knowledge of this art realize that some, but only a few, diseases have their seat where they can be seen; others, and they are many, have a seat where they cannot be perceived. Those that can be perceived produce eruptions on the skin, or manifest themselves by colour or swelling; for they allow us to perceive by sight or touch their hardness, moistness, heat or cold, and what are the conditions which, by their presence or absence in each case, cause the diseases to be of the nature they are. Of all such diseases in all cases the cures should be infallible, not because they are easy, but because they have been discovered. However, they have not been discovered for those who have desire only, but for those of them who have power; this power belongs to those whose education has been adequate, and whose natural ability is not wretched.

X. Now such being its nature the art must be a match for the open diseases; it ought however not to be helpless before diseases that are more hidden. These are those which are determined to the bones or to the cavities. The body has of these not one but several. There are two that take in food and discharge it, with several others besides these, known to men who are interested in these things; all limbs, in fact, have cavities that are surrounded by the flesh that is called muscle. Everything in fact not a continuous growth, whether it be skin or flesh that covers it, is hollow, and in health is filled with air, in disease with juice.

Such flesh then the arms have, and so have the thighs and the legs. Moreover, in the fleshless parts also there are cavities like those we have shown to be in the fleshy parts. For the trunk, as it is called, in which the liver is covered, the sphere of the head, in which is the brain, the back, by which are the lungs — all these are themselves hollow, being full of interstices, which do not at all fail to be vessels to contain many things, some of which do harm to the possessor and

some do good. Moreover, in addition to these there are many veins, and sinews that are not near the surface of the flesh but stretched along the bones, binding the joints to a certain point, and the joints themselves, at which the movable bones meet and turn round. Of these none is not porous; all have cells about them, which are made known by juice, which, when the cells are opened, comes out in great quantity, causing many pains.

XI. Without doubt no man who sees only with his eyes can know anything of what has been here described. It is for this reason that I have called them obscure, even as they have been judged to be by the art. Their obscurity, however, does not mean that they are our masters, but as far as is possible they have been mastered, a possibility limited only by the capacity of the sick to be examined and of researchers to conduct research. More pains, in fact, and quite as much time, are required to know them as if they were seen with the eyes; for what escapes the eyesight is mastered by the eye of the mind, and the sufferings of patients due to their not being quickly observed are the fault, not of the medical attendants, but of the nature of the patient and of the disease. The attendant in fact, as he could neither see the trouble with his eyes nor learn it with his ears, tried to track it by reasoning. Indeed, even the attempted reports of their illnesses made to their attendants by sufferers from obscure diseases are the result of opinion, rather than of knowledge. If indeed they understood their diseases they would never have fallen into them, for the same intelligence is required to know the causes of diseases as to understand how to treat them with all the treatment that prevents illnesses from growing worse. Now when not even the reports afford perfectly reliable information, the attendant must look out for fresh light. For the delay thus caused not the art is to blame, but the constitution of human bodies. For it is only when the art sees its way that it thinks it right to give treatment, considering how it may give it, not by daring but by judgment, not by violence but by gentleness. As to our human constitution, if it admits of being seen, it will also admit of being healed. But if, while the sight is being won, the body is mastered by slowness in calling in the attendant or by the rapidity of the disease, the patient will pass away. For if disease and treatment start together, the disease will not win the race, but it will if it start with an advantage, which advantage is due to the density of our bodies, in which diseases lurk unseen, and to the careless neglect of patients. This advantage is not to be wondered at, as it is only when diseases have established themselves, not while they are doing so, that patients are ready to submit to treatment.

XI. Now the power of the art, when it raises a patient suffering from an obscure

disease, is more surprising than its failure when it attempts to treat incurables.... So in the ease of no other craft that has been discovered are such extravagant demands made; those that depend on fire are inoperative when fire is not present, but operative when one has been lighted. And the arts that are worked in materials easy to shape aright, using in some eases wood, in others leather, in others — these form the great majority — paint, bronze, iron and similar substances — the articles wrought, I say, through these arts and with these substances are easily shaped aright, and yet are wrought not so much with a view to speed as to correctness. Nor are they wrought in a casual manner, but functioning ceases if any instrument be lacking. Yet in these arts too slowness is contrary to their interests; but in spite of this it is preferred.

XII. Now medicine, being prevented, in cases of empyema, and of diseased liver, kidneys, and the cavities generally, from seeing with the sight with which all men see everything most perfectly, has nevertheless discovered other means to help it. There is clearness or roughness of the voice, rapidity or slowness of respiration, and for the customary discharges the ways through which they severally pass, sometimes smell, sometimes colour, sometimes thinness or thickness furnishing medicine with the means of inferring, what condition these symptoms indicate, what symptoms mean that a part is already affected and what that a part may hereafter be affected. When this information is not afforded, and nature herself will yield nothing of her own accord, medicine has found means of compulsion, whereby nature is constrained, without being harmed, to give up her secrets; when these are given up she makes clear, to those who know about the art, what course ought to be pursued. The art, for example, forces nature to disperse phlegm by acrid foods and drinks, so that it may form a conclusion by vision concerning those things which before were invisible. Again, when respiration is symptomatic, by uphill roads and by running it compels nature to reveal symptoms. It brings on sweats by the means already stated, and forms the conclusions that are formed through fire when it makes hot water give out steam. There are also certain excretions through the bladder which indicate the disease better than those which come out through the flesh. So medicine has also discovered drinks and foods of such a kind that, becoming wanner than the natural heat, melt the matters I spoke of, and make them flow away, which they never would have done without this treatment. Now as the relation between excretions and the information they give is variable, and depends upon a variety of conditions, it is accordingly not surprising that disbelief in this information is prolonged, but treatment is curtailed, for extraneous factors must be used in interpreting the information before it can be utilized by medical intelligence.



XIII. Now that medicine has plentiful reasoning in itself to justify its treatment, and that it would rightly refuse to undertake obstinate cases, or undertaking them would do so without making a mistake, is shown both by the present essay and by the expositions of those versed in the art, expositions set forth in acts, not by attention to words, under the conviction that the multitude find it more natural to believe what they have seen than what they have heard.

## BREATHS



*Translated by W. H. S. Jones*

I. THERE are some arts which to those that possess them are painful, but to those that use them are helpful, a common good to laymen, but to those that practise them grievous. Of such arts there is one which the Greeks call medicine. For the medical man sees terrible sights, touches unpleasant things, and the misfortunes of others bring a harvest of sorrows that are peculiarly his; but the sick by means of the art rid themselves of the worst of evils, disease, suffering, pain and death. For medicine proves for all these evils a manifest cure. And of this art the weak points are difficult to apprehend, while the strong points are more easy; the weak points laymen cannot know, but only those skilled in medicine, as they are matters of the understanding and not of the body. For whenever surgical treatment is called for, training by habituation is necessary, for habit proves the best teacher of the hands; but to judge of the most obscure and difficult diseases is more a matter of opinion than of art, and therein there is the greatest possible difference between experience and inexperience. Now of these obscure matters one is the cause of diseases, what the beginning and source is whence come affections of the body. For knowledge of the cause of a disease will enable one to administer to the body what things are advantageous. Indeed this sort of medicine is quite natural. For example, hunger is a disease, as everything is called a disease which makes a man suffer. What then is the remedy for hunger? That which makes hunger to cease. This is eating; so that by eating must hunger be cured. Again, drink stays thirst; and again repletion is cured by depletion, depletion by repletion, fatigue by rest. To sum up in a single sentence, opposites are cures for opposites. Medicine in fact is subtraction and addition, subtraction of what is in excess, addition of what is wanting. He who performs these acts best is the best physician; he who is farthest removed therefrom is also farthest removed from the art. These remarks I have made incidentally in passing to the discourse that is to come.

II. Now of all diseases the fashion is the same, but the seat varies. So while diseases are thought to be entirely unlike one another, owing to the difference in their seat, in reality all have one essence and cause. What this cause is I shall try

to declare in the discourse that follows.

III. Now bodies, of men and of animals generally, are nourished by three kinds of nourishment, and the names thereof are solid food, drink, and wind. Wind in bodies is called breath, outside bodies it is called air. It is the most powerful of all and in all, and it is worth while examining its power. A breeze is a flowing and a current of air. When therefore much air flows violently, trees are torn up by the roots through the force of the wind, the sea swells into waves, and vessels of vast bulk are tossed about. Such then is the power that it has in these things, but it is invisible to sight, though visible to reason. For what can take place without it? In what is it not present? What does it not accompany? For everything between earth and heaven is full of wind. Wind is the cause of both winter and summer, becoming in winter thick and cold, and in summer gentle and calm. Nay, the progress of sun, moon, and stars is because of wind; for wind is food for fire, and without air fire could not live. Wherefore, too, air being thin causes the life of the sun to be eternal. Nay, it is clear that the sea, too, partakes of wind, for swimming creatures would not be able to live did they not partake of wind. Now how could they partake except by inhaling the air of the water? In fact the earth too is a base for air, and air is a vehicle of the earth, and there is nothing that is empty of air.

IV. How air, then, is strong in the case of wholes has been said; and for mortals too this is the cause of life, and the cause of disease in the sick. So great is the need of wind for all bodies that while a man can be deprived of everything else, both food and drink, for two, three, or more days, and live, yet if the wind passages into the body be cut off he will die in a brief part of a day, showing that the greatest need for a body is wind. Moreover, all other activities of a man are intermittent, for life is full of changes; but breathing is continuous for all mortal creatures, inspiration and expiration being alternate.

V. Now I have said that all animals participate largely in air. So after this I must say that it is likely that maladies occur from this source and from no other. On the subject as a whole I have said sufficient; after this I will by the same reasoning proceed to facts and show that diseases are all the offspring of air.

VI. I will begin in the first place with the most common disease, fever, for this disease is associated with all other diseases. To proceed on these lines, there are two kinds of fevers; one is epidemic, called pestilence, the other is sporadic, attacking those who follow a bad regimen. Both of these fevers, however, are

caused by air. Now epidemic fever has this characteristic because all men inhale the same wind; when a similar wind has mingled with all bodies in a similar way, the fevers too prove similar. But perhaps someone will say, "Why then do such diseases attack, not all animals, but only one species of them?" I would reply that it is because one body differs from another, one air from another, one nature from another and one nutriment from another. For all species of animals do not find the same things either well or ill-adapted to themselves, but some things are beneficial to some things and other things to others, and the same is true of things harmful. So whenever the air has been infected with such pollutions as are hostile to the human race, then men fall sick, but when the air has become ill-adapted to some other species of animals, then these fall sick.

VII. Of epidemic diseases I have already spoken, as well as of the victims and of the cause thereof; I must now go on to describe the fever caused by bad regimen. By bad regimen I mean, firstly, the giving of more food, moist or dry, to the body than the body can bear, without counteracting the bulky food by exercise; and, secondly, the taking of foods that are varied and dissimilar. For dissimilar foods disagree, and some are digested quickly and some more slowly. Now along with much food much wind too must enter, for everything that is eaten or drunk is accompanied into the body by wind, either in greater quantity or in less. This is shown by the following fact. After food and drink most people suffer from belching, because the enclosed air rushes upwards when it has broken the bubbles in which it is concealed. When therefore the body is filled full of food, it becomes full of wind too, if the foods remain a long time; and they do remain a long time because owing to their bulk they cannot pass on. The lower belly being thus obstructed, the breaths spread through all the body, and striking the parts of the body that are most full of blood they chill them. These parts being chilled, where are the roots and springs of the blood, a shiver passes through all the body, for when all the blood has been chilled all the body shivers.

VIII. Now this is the reason why shivering occurs before fevers. The character, however, of the rigor depends upon the volume and coldness of the breaths that burst out; from copious and colder breaths come more violent rigor, from less copious and less cold, less violent rigor. The tremors of the body in shivers are caused as follows. The blood, through fear of the shivers that are present, runs together and dashes throughout the body to the warmest parts of it. As the blood leaps from the extremities of the body to the viscera, the sick man shakes. The reason is that some parts of the body become over-full, but others depleted, of blood. Now the depleted parts cannot be still, but shake, because of their being

chilled; for the heat has left them. But the over-filled parts tremble because of the quantity of blood; having become great it cannot keep still. Gapes precede fevers because much air gathers together, and, passing upwards in a mass, unbolts the mouth and forces it open, as through it there is an easy passage. For just as copious steam rises from pots when the water boils, even so, as the body grows hot, the air rushes through the mouth compressed and violently carried along. The joints too relax before fevers, because the sinews stretch when they grow warm. But when the greater part of the blood has been massed together, the air that cooled the blood becomes warm again, being overcome by the heat; and when it has become fiery and waterless, it imparts its heat to the whole body. Herein it is aided by the blood, which melts as it grows warm, and wind arises out of it; as the wind strikes the channels of the body, sweat is formed. For the wind when it condenses flows as water, and going through the channels passes on to the surface, just as steam rising from boiling water, should it meet a solid object that it must strike, thickens and condenses, and drops fall away from the lids on which the steam strikes. Headache with fever arises in the following manner. The blood passages in the head become narrowed. The veins in fact are filled with air, and when full and inflated cause the headache; for the hot blood, forcibly forced through the narrow passages, cannot traverse them quickly because of the many hindrances and barriers in the way. This too is the reason why pulsations occur about the temples.

IX. This then is the way fevers are caused, and the pains and illnesses that accompany fever. As to other maladies, ileus and tormina for example, it is obvious, I think, to everybody that they are settlements of breaths, for the medical treatment for such disorders is to draw off some of the wind. For when it strikes against places that are not usually attacked by it, it pierces the flesh like an arrow forcing its way. Sometimes it strikes against the hypochondria, sometimes against the flanks, sometimes against both. It is for this reason that attendants try to soothe the pain by applying hot fomentations to the skin. For by the heat of the fomentation the wind is rarefied and passes through the body, thus affording some relief of the pains.

X. Perhaps it may be objected : “How then do breaths cause fluxes, and in what way is wind the cause of chest hemorrhages?” I think I can show that these too are caused by this agent. When the veins about the head are loaded with air, at first the head becomes heavy through the breaths that press against it. Then the blood is compressed, the passages being unable, on account of their narrowness, to pour it through. The thinnest part of the blood is pressed out through the

veins, and when a great accumulation of this liquid has been formed, it moves through other channels. Any part of the body it reaches in a mass becomes the seat of a disease. If it go to the eyes, the pain is there; if it be to the ears, the disease is there. If it go to the chest, it is called sore throat; for phlegm, mixed with acrid humours, produces sores wherever it strikes an unusual spot, and the throat, being soft, is roughened when a flux strikes it. For the wind that is breathed in through the throat passes into the chest, and comes out again through this passage. So when the ascending wind meets the descending flux, a cough comes on, and the phlegm is thrown upwards. This being so the throat becomes sore, rough and hot, and being hot draws the moisture from the head, which passes on to the throat the moisture it receives from the rest of the body.

When therefore the flux has grown used to flowing by this route, and the passages have become channelled, it now spreads even to the chest. Being acrid the phlegm ulcerates the flesh when it strikes it, and bursts open the veins. The extravasated blood rots in course of time and becomes pus, as it can neither ascend nor get away downwards. For a fluid thing cannot easily ascend upwards, and the diaphragm is a barrier to its descent. Why ever then is it that the flux bursts upwards, either spontaneously or through pains? Well, there is a spontaneous flux whenever the air spontaneously enters the veins and makes the channels narrow for the passage of the blood; for on such occasions the blood is compressed because of its volume, and bursts open the passages wherever the pressure is greatest. Whenever excessive pains cause hemorrhage, in these cases also it is wind with which the pains have filled the veins, seeing that any part in pain must retain the wind. Other cases are like those that I have already described.

XI. Lacerations in all cases occur for the following reason. Whenever flesh is violently severed from flesh, and wind slips into the gap, the pain is thereby produced.

XII. If the breaths by passing through the flesh dilate the passages of the body, and these breaths are followed by moisture, the way for which is prepared by the air, then, when the body has become sodden, the flesh melts away and swellings descend to the legs. A disease of this kind is called dropsy. The strongest evidence that breaths cause the disease is the following. Patients already at death's door in some cases are pumped dry of the water. Now the water appears to come copiously from the cavity at first, becoming less plentiful after a time. Now it is plain that at first the water is full of air, and the air makes it of great

bulk. But as the wind goes away the water is left by itself, and so it appears to be less, though the quantity is really equal. These patients furnish another proof, in that when the cavity has been completely emptied, not even three days elapse before they are full again. What then filled them except air? What else could fill them up so quickly? Not drink; for surely so much does not enter the body. Not flesh either; as there does not remain flesh to be dissolved. In fact only bones, sinews and skin are left, from none of which could come any increase of water.

XIII. The cause of dropsy then has been set forth; apoplexy, too, is caused by breaths. For when they pass through the flesh and puff it up, the parts of the body affected lose the power of feeling. So if copious breaths rush through the whole body, the whole patient is affected with apoplexy. If the breaths reach only a part, only that part is affected. If the breaths go away, the disease comes to an end; if they remain, the disease too remains.

VIII. To the same cause I attribute also the disease called sacred. I will try to persuade my hearers by the same arguments as persuaded myself. Now I hold that no constituent of the body in anyone contributes more to intelligence than does blood. So long as the blood remains in its normal condition, intelligence too remains normal; but when the blood alters, the intelligence also changes. There are many testimonies that this is the case. In the first place sleep, which is common to all the animals, witnesses to the truth of my words. When sleep comes upon the body the blood is chilled, as it is of the nature of sleep to cause chill. When the blood is chilled its passages become more sluggish. This is evident; the body grows heavy and sinks (all heavy things naturally fall downwards); the eyes close; the intelligence alters, and certain other fancies linger, which are called dreams. Again, in cases of drunkenness, when the blood has increased in quantity, the soul and the thoughts in the soul change; the ills of the present are forgotten, but there is confidence that the future will be happy.

I could mention many other examples of an alteration in the blood producing an alteration of the intelligence. So if all the blood experience a thorough disturbance, the intelligence is thoroughly destroyed. For learnings and recognitions are matters of habit. So whenever we depart from our wonted habit our intelligence perishes. I hold that the sacred disease is caused in the following way. When much wind has combined throughout the body with all the blood, many barriers arise in many places in the veins. Whenever therefore much air weighs, and continues to weigh, upon the thick, blood-filled veins, the blood is prevented from passing on. So in one place it stops, in another it passes

sluggishly, in another more quickly. The progress of the blood through the body proving irregular, all kinds of irregularities occur. The whole body is torn in all directions; the parts of the body are shaken in obedience to the troubling and disturbance of the blood; distortions of every kind occur in every manner. At this time the patients are unconscious of everything — deaf to what is spoken, blind to what is happening, and insensible to pain. So greatly does a disturbance of the air disturb and pollute the blood. Foam naturally rises through the mouth. For the air, passing through the veins, itself rises and brings up with it the thinnest part of the blood. The moisture, mixing with the air, becomes white, for the air being pure is seen through thin membranes. For this reason the foam appears completely white. When then will the victims of this disease rid themselves of their disorder and the storm that attends it? When the body exercised by its exertions has warmed the blood, and the blood thoroughly warmed has warmed the breaths, and these thoroughly warmed are dispersed, breaking up the congestion of the blood, some going out along with the respiration, others with the phlegm. The disease finally ends when the foam has frothed itself away, the blood has re-established itself, and calm has arisen in the body.

IX. So breaths are seen to be the most active agents during all diseases; all other things are but secondary and subordinate causes. This then as the cause of diseases I have now expounded. I promised to declare the cause of diseases, and I have set forth how wind is lord, not only in things as wholes, but also in the bodies of animals. I have led my discourse on to familiar maladies in which the hypothesis has shown itself correct. If indeed I were to speak of all maladies, my discourse, while being longer, would not be in the least more true or more convincing.



## DECORUM



*Translated by W. H. S. Jones*

I. NOT without reason are those who present as useful for many things wisdom, that is, wisdom applied to life. Most kinds of wisdom, indeed, have manifestly come into being as superfluities; I mean those which confer no advantage upon the objects that they discuss. Parts thereof may be tolerated up to tins point, that where idleness is not neither is there evil. Idleness and lack of occupation tend — nay are dragged — towards evil. Alertness, however, and exercise of the intellect, bring with them something that helps to make life beautiful. I leave out of account mere talk that leads to no useful purpose. More gracious is wisdom that even with some other object has been fashioned into an art, provided that it be an art directed towards decorum and good repute.

II. Any wisdom, in fact, wherein works some scientific method, is honourable if it be not tainted with base love of gain and unseemliness. If they be so tainted, such kinds of wisdom become popular only through impudence. Young men fall in with the devotees thereof; when they are grown up they sweat with shame at the sight of them; when they are old, in their spleen they pass laws to banish these devotees from their cities. These are the very men who go around cities, and gather a crowd about them, deceiving it with cheap vulgarity. You should mark them by their dress, and by the rest of their attire; for even if magnificently adorned, they should much more be shunned and hated by those who behold them.

III. The opposite kind of wisdom one should conceive of thus. No studied preparation, and no over-elaboration. Dress decorous and simple, not over-elaborated, but aiming rather at good repute, and adapted for contemplation, introspection and walking. The several characteristics are: to be serious, artless, sharp in encounters, ready to reply, stubborn in opposition, with those who are of like mind quick-witted and affable, good-tempered towards all, silent in face of disturbances, in the face of silence ready to reason and endure, prepared for an opportunity and quick to take it, knowing how to use food and temperate, patient in waiting for an opportunity, setting out in effectual language everything that

has been shown forth, graceful in speech, gracious in disposition, strong in the reputation that these qualities bring, turning to the truth when a thing has been shown to be true.

III. The dominant factor in all the qualities I have mentioned is nature. In fact, if they have natural ability, those engaged in the arts have already made progress in all the qualities mentioned. For in the art, as in wisdom, use is not a thing that can be taught. Before any teaching has taken place nature has rushed down in a flood to make the beginning; it is afterwards that wisdom comes to know the things that are done by nature herself. In fact many, worsted in both words, have in no way used for demonstration both the actual things together. Accordingly, whenever one of them examines in regard to truth something that is being set out in speech, nature will in no way come to their aid. These are found at any rate to have walked in a path similar to that followed by the others. Wherefore being stripped they clothe themselves with the whole of badness and disgrace. For reasoning that comes as the result of work that has been taught is a good thing; for everything that has been done artistically has been performed as the result of reasoning. But when a thing is not done, but only expressed artistically, it indicates method divorced from art. For to hold opinions, without putting them into action, is a sign of want of education and of want of art. For mere opining brings, in medicine most particularly, blame upon those who hold opinions and ruin upon those who make use of them. In fact, if they persuade themselves by word, and opine that they know the work that is the result of education, they SHOW themselves up like gold proved by fire to be dross. And yet such a forecast is something inexorable. Where understanding is on a par with action, knowledge at once makes plain the end. In some cases time has put the art on the right track, or has made clear the means of approach to those who have chanced upon the like route.

IV. Wherefore resume each of the points mentioned, and transplant wisdom into medicine and medicine into wisdom. For a physician who is a lover of wisdom is the equal of a god. Between wisdom and medicine there is no gulf fixed; in fact medicine possesses all the qualities that make for wisdom. It has disinterestedness, shamefastness, modesty, reserve, sound opinion, judgment, quiet, pugnacity, purity, sententious speech, knowledge of the things good and necessary for life, selling of that which cleanses, freedom from superstition, pre-excellence divine. What they have, they have in opposition to intemperance, vulgarity, greed, concupiscence, robbery, shamelessness. This is knowledge of one's income, use of what conduces to friendship, the way and manner to be

adopted towards one's children and money. Now with medicine a kind of wisdom is an associate, seeing that the physician has both these things and indeed most things.

VI. In fact it is especially knowledge of the gods that by medicine is woven into the stuff of the mind. For in affections generally, and especially in accidents, medicine is found mostly to be held in honour by the gods. Physicians have given place to the gods. For in medicine that which is powerful is not in excess. In fact, though physicians take many things in hand, many diseases are also overcome for them spontaneously. All that medicine has now mastered it will supply thence. The gods are the real physicians, though people do not think so. But the truth of this statement is shown by the phenomena of disease, which are co-extensive with the whole of medicine, changing in form or in quality, sometimes being cured by surgery, sometimes being relieved, either through treatment or through regimen. The information I have given on these matters must serve as a summary.

VII. As all I have said is true, the physician must have at his command a certain ready wit, as dourness is repulsive both to the healthy and to the sick. He must also keep a most careful watch over himself, and neither expose much of his person nor gossip to laymen, but say only what is absolutely necessary. For he realizes that gossip may cause criticism of his treatment. He will do none of all of these things in a way that savours of fuss or of show. Let all these things be thought out, so that they may be ready beforehand for use as required. Otherwise there must always be lack when need arises.

VIII. You must practise these things in medicine with all reserve, in the matter of palpation, anointing, washing, to ensure elegance in moving the hands, in the matter of lint, compresses, bandages, ventilation, purges, for wounds and eye-troubles, and with regard to the various kinds of these things, in order that you may have ready beforehand instruments, appliances, knives and so forth. For lack in these matters means helplessness and harm. See that you have a second physician's case, of simpler make, that you can carry in your hands when on a journey. The most convenient is one methodically arranged, for the physician cannot possibly go through everything.

IX. Keep well in your memory drugs and their properties, both simple and compound, seeing that after all it is in the mind that are also the cures of diseases; remember their modes, and their number and variety in the several

cases. This in medicine is beginning, middle and end.

X. You must have prepared in advance emollients classified according to their various uses, and get ready powerful draughts prepared according to formula after their various kinds. You must make ready beforehand purgative medicines also, taken from suitable localities, prepared in the proper manner, after their various kinds and sizes, some preserved so as to last a long time, others fresh to be used at the time, and similarly with the rest.

VII. When you enter a sick man's room, having made these arrangements, that you may not be at a loss, and having everything in order for what is to be done, know what you must do before going in.

For many cases need, not reasoning, but practical help. So you must from your experience forecast what the issue will be. To do so adds to one's reputation, and the learning thereof is easy.

VIII. On entering bear in mind your manner of sitting, reserve, arrangement of dress, decisive utterance, brevity of speech, composure, bedside manners, care, replies to objections, calm self-control to meet the troubles that occur, rebuke of disturbance, readiness to do what has to be done. In addition to these things be careful of your first preparation. Failing this, make no further mistake in the matters wherefrom instructions are given for readiness XIII. Make frequent visits; be especially careful in your examinations, counteracting the things wherein you have been deceived at the changes. Thus you will know the case more easily, and at the same time you will also be more at your ease. For instability is characteristic of the humours, and so they may also be easily altered by nature and by chance. For failure to observe the proper season for help gives the disease a start and kills the patient, as there was nothing to relieve him.

For when many things together produce a result there is difficulty. Sequences of single phenomena are more manageable, and are more easily learnt by experience.

XIV. Keep a watch also on the faults of the patients, which often make them lie about the taking of things prescribed. For through not taking disagreeable drinks, purgative or other, they sometimes die. What they have done never results in a confession, but the blame is thrown upon the physician.

XV. The bed also must be considered. The season and the kind of illness will

make a difference. Some patients are put into breezy spots, others into covered places or underground. Consider also noises and smells, especially the smell of wine. This is distinctly bad, and you must shun it or change it.

XVI. Perform all this calmly and adroitly, concealing most things from the patient while you are attending to him. Give necessary orders with cheerfulness and serenity, turning his attention away from what is being done to him; sometimes reprove sharply and emphatically, and sometimes comfort with solicitude and attention, revealing nothing of the patient's future or present condition. For many patients through this cause have taken a turn for the worse, I mean by the declaration I have mentioned of what is present, or by a forecast of what is to come.

XI. Let one of your pupils be left in charge, to carry out instructions without unpleasantness, and to administer the treatment. Choose out those who have been already admitted into the mysteries of the art, so as to add anything necessary, and to give treatment with safety. He is there also to prevent those things escaping notice that happen in the intervals between visits. Never put a layman in charge of anything, otherwise if a mischance occur the blame will fall on you. Let there never be any doubt about the points which will secure the success of your plan, and no blame will attach to you, but achievement will bring you pride. So say beforehand all this at the time the things are done, to those whose business it is to have fuller knowledge of the parts about which I have spoken, wrap himself round always with the other, watch it and keep it, perform it and pass it on. For things that are glorious are closely guarded among all men. And those who have made their way through them are held in honour by parents and children; and if any of them do not know many things, they are brought to understanding by the facts of actual experience.

## THE PHYSICIAN



*Translated by W. H. S. Jones*

THE dignity of a physician requires that he should look healthy, and as plump as nature intended him to be; for the common crowd consider those -who are not of this excellent bodily condition to be unable to take care of others. Then he must be clean in person, well dressed, and anointed with sweet-smelling unguents that are not in any way suspicious. This, in fact, is pleasing to patients. The prudent man must also be careful of certain moral considerations — not only to be silent, but also of a great regularity of life, since thereby his reputation will be greatly enhanced; he must be a gentleman in character, and being this he must be grave and kind to all. For an over-forward obtrusiveness is despised, even though it may be very useful. Let him look to the liberty of action that is his; for when the same things are rarely presented to the same persons there is content. In appearance, let him be of a serious but not harsh countenance; for harshness is taken to mean arrogance and unkindness, while a man of uncontrolled laughter and excessive gaiety is considered vulgar, and vulgarity especially must be avoided. In every social relation he will be fair, for fairness must be of great service. The intimacy also between physician and patient is close. Patients in fact put themselves into the hands of their physician, and at every moment he meets women, maidens and possessions very precious indeed. So towards all these self-control must be used. Such then should the physician be, both in body and in soul.

## DENTITION



*Translated by W. H. S. Jones*

- I. CHILDREN who are naturally well-nourished do not suck milk in proportion to their fleshiness.
- II. Children with voracious appetites, and who suck much milk do not put on flesh in proportion.
- III. Of sucking children those that pass much urine are the least subject to vomiting.
- IV. Children that pass copious stools and have good digestion are the more healthy; those that pass stools scantily, and with voracious appetites are not nourished in proportion, are unhealthy.
- V. Those that vomit copiously milky matters suffer from constipation.
- VI. Those who while teething have their bowels moved often are less subject to convulsions than those who have them moved seldom.
- VII. Those who while teething are attacked by acute fever seldom suffer from convulsions.
- VIII. Those who while teething are lethargic while remaining well-nourished run a risk of being seized with convulsions.
- IX. Those who teethe in winter, other things being equal, come off better.
- X. Not all children die that are seized with convulsions while teething; many recover.
- XI. Teething is protracted when complicated with a cough, and emaciation in such cases is excessive while the teeth are coming through.

XII. Children who have a troublesome time while teething, if they are suitably attended to, bear up more easily against teething.

XIII. Those that pass more urine than faeces are proportionately better nourished.

XIV. Those who do not pass urine in proportion, but from babyhood discharge undigested food frequently, are unhealthy.

XV. Children who sleep well, and are well- nourished, may take a great deal of food, even though it is placed before them insufficiently prepared for digestion.

XVI. Those that eat solid food while being suckled bear weaning more easily.

XVII. Those that often pass stools of undigested food mixed with blood, the great majority of them when feverish are drowsy.

XVIII. Ulcers on the tonsils that come without fever are less dangerous.

XIX. Babies that are attacked by a cough while being suckled usually have an enlarged uvula.

XX. When corroding sores form quickly on the tonsils, the fevers and coughs remaining, there is a danger of ulcerations occurring again.

XXI. Ulcerations that recur on the tonsils are dangerous.

XXII. When children have considerable ulceration of the tonsils, if they can drink, it is a sign that they may recover, the more so if they could not drink before.

XXIII. In cases of ulcerated tonsils, to vomit bilious matters, or to evacuate them by stools, is attended with danger.

XXIV. In cases of ulcerated tonsils, the formation of a membrane like a spider's web is not a good sign.

XXV. In cases of ulcerated tonsils, after the first periods it is useful for phlegm to flow from the mouth, which before did not do so; nevertheless it must be brought up. If the symptoms begin to disappear, is altogether a welcome sign. If



the phlegm does not flow in this way, you must be careful.

XVIII. When there is a discharge on the tonsils, in most cases dry coughs are resolved by evacuation through the bowels; with children most cases are resolved by the vomiting of concocted matters.

XIX. Ulcerations on the tonsils, that remain for a long time without increasing, are not attended with danger before five or six days.

XX. Children at the breast that take much milk are generally drowsy.

XXI. Children at the breast that are ill nourished also pick up strength with difficulty.

XXII. Ulcerated tonsils that occur in summer are worse than those that occur at other seasons, for they spread more rapidly.

XXIII. Ulcers on the tonsils that spread over the uvula alter the voice of those who recover.

XXXII Ulcers that spread about the throat are more serious and acute, as they generally bring on difficulty of breathing.

## The Greek Texts



*Thessaly, near Larissa — Hippocrates taught and practiced medicine throughout his life, travelling to Thessaly in his final years.*

## LIST OF GREEK TEXTS



*In this section of the eBook, readers can view the original Greek texts of Hippocrates' works. You may wish to Bookmark this page for future reference.*

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## ON ANCIENT MEDICINE - Περὶ ἀρχαίας ἰητρικῆς

1. Ὅποσοι μὲν ἐπεχείρησαν περὶ ἰητρικῆς λέγειν ἢ γράφειν, ὑπόθεσιν αὐτοὶ αὐτοῖς ὑποθέμενοι τῷ λόγῳ, θερμὸν ἢ ψυχρὸν ἢ ὑγρὸν ἢ ξηρὸν ἢ ἄλλο τι ὃ ἂν θέλωσιν, ἐς βραχὺ ἄγοντες τὴν ἀρχὴν τῆς αἰτίας τοῖσι ἀνθρώποισι νούσων τε καὶ θανάτου, καὶ πᾶσι τὴν αὐτήν, ἐν ἣ δὺο ὑποθέμενοι, ἐν πολλοῖσι μὲν καὶ οἷσι λέγουσι καταφανέες εἰσὶ ἀμαρτάνοντες, μάλιστα δὲ ἄξιον μέμψασθαι, ὅτι ἀμφὶ τέχνης ἐούσης, ἥ χρέονταί τε πάντες ἐπὶ τοῖσι μεγίστοισι καὶ τιμῶσι μάλιστα τοὺς ἀγαθοὺς χειροτέχνας καὶ δημιουργοὺς. εἰσὶν δὲ δημιουργοὶ οἱ μὲν φαῦλοι, οἱ δὲ πολλὸν διαφέροντες: ὅπερ, εἰ μὴ ἦν ἰητρικὴ ὅλως, μηδ' ἐν αὐτῇ ἔσκεπτο μηδ' εὖρητο μηδέν, οὐκ ἂν ἦν, ἀλλὰ πάντες ὁμοίως αὐτῆς ἄπειροί τε καὶ ἀνεπιστήμονες ἦσαν, τύχη δ' ἂν πάντα τὰ τῶν καμνόντων διοικεῖτο. νῦν δ' οὐχ οὕτως ἔχει, ἀλλ' ὥσπερ καὶ τῶν ἄλλων τεχνέων πασέων οἱ δημιουργοὶ πολλὸν ἀλλήλων διαφέρουσιν κατὰ χεῖρα καὶ κατὰ γνώμην, οὕτω δὲ καὶ ἐπὶ ἰητρικῆς. διὸ οὐκ ἠξίουσαν αὐτὴν ἔγωγε κενῆς ὑποθέσιος δεῖσθαι ὥσπερ τὰ ἀφανέα τε καὶ ἀπορεόμενα, περὶ ὧν ἀνάγκη, ἦν τις ἐπιχειρῆ τι λέγειν, ὑποθέσει χρῆσθαι, οἷον περὶ τῶν μετεώρων ἢ τῶν ὑπὸ γῆν: ἃ εἴ τις λέγοι καὶ γινώσκοι ὡς ἔχει, οὐτ' ἂν αὐτῷ τῷ λέγοντι οὔτε τοῖς ἀκούουσι δῆλα ἂν εἶη, εἴτε ἀληθέα ἐστὶν εἴτε μή. οὐ γὰρ ἔστι πρὸς ὃ τι χρὴ ἀνελέγκαντα εἰδέναι τὸ σαφές.

2. Ἰητρικῆ δὲ πάλαι πάντα ὑπάρχει, καὶ ἀρχὴ καὶ ὁδὸς εὖρημένη, καθ' ἣν τὰ εὖρημένα πολλά τε καὶ καλῶς ἔχοντα εὖρηται ἐν πολλῷ χρόνῳ, καὶ τὰ λοιπὰ εὐρεθήσεται, ἦν τις ἰκανός τε ἐὼν καὶ τὰ εὖρημένα εἰδὼς ἐκ τούτων ὀρμώμενος ζητῆ. ὅστις δὲ ταῦτα ἀποβαλὼν καὶ ἀποδοκιμάσας πάντα, ἐτέρη ὁδῷ καὶ ἐτέρῳ σχήματι ἐπιχειρεῖ ζητεῖν, καὶ φησὶ τι ἐξευρηκέναι, ἐξηπάτηται καὶ ἐξαπατᾶται: ἀδύνατον γάρ: δι' ἃς δὲ ἀνάγκας ἀδύνατον, ἐγὼ πειρήσομαι ἐπιδειξάμενος, λέγων καὶ ἐπιδεικνύων τὴν τέχνην ὃ τι ἐστίν. ἐκ δὲ τούτου καταφανές ἔσται ἀδύνατα ἐόντα ἄλλως πῶς τούτων εὐρίσκεσθαι. μάλιστα δὲ μοι δοκεῖ περὶ ταύτης δεῖν λέγοντα τῆς τέχνης γνωστὰ λέγειν τοῖσι δημότησι. οὐ γὰρ περὶ ἄλλων τινῶν οὔτε ζητεῖν οὔτε λέγειν προσήκει ἢ περὶ τῶν παθημάτων ὧν αὐτοὶ οὗτοι νοσεουσὶ τε καὶ πονέουσι. αὐτοὺς μὲν οὖν τὰ σφέων αὐτῶν παθήματα καταμαθεῖν, ὡς γίνεται καὶ παύεται καὶ δι' οἷας προφάσις αὐξεται τε καὶ φθίνει, δημότας ἐόντας οὐ ῥηίδιον: ὑπ' ἄλλου δὲ εὖρημένα καὶ λεγόμενα, εὐπετέες. οὐδὲν γὰρ ἕτερον ἢ ἀναμιμνήσκειται ἕκαστος ἀκούων τῶν αὐτῷ συμβαινόντων. εἰ δὲ τις τῆς τῶν ἰδιωτέων γνώμης ἀποτεύξεται καὶ μὴ διαθήσει τοὺς ἀκούοντας οὕτως, τοῦ ἐόντος ἀποτεύξεται. καὶ διὰ ταῦτα οὖν ταῦτα οὐδὲν δεῖ ὑποθέσιος.

3. Τὴν γὰρ ἀρχὴν οὐτ' ἂν εὐρέθη ἢ τέχνη ἢ ἰητρικὴ οὐτ' ἂν ἐξητήθη — οὐδὲν

γὰρ αὐτῆς ἔδει-εἶ τοῖσι κάμνουσι τῶν ἀνθρώπων τὰ αὐτὰ διαιτωμένοισί τε καὶ προσφερομένοισι, ἅπερ οἱ ὑγιαίνοντες ἐσθίουσί τε καὶ πίνουσι καὶ τᾶλλα διαιτέονται, συνέφερον, καὶ μὴ ἦν ἕτερα τούτων βελτίω. νῦν δὲ αὐτῆ ἡ ἀνάγκη ἰητρικὴν ἐποίησεν ζητηθῆναι τε καὶ εὐρεθῆναι ἀνθρώποισι, ὅτι τοῖσι κάμνουσι ταῦτὰ προσφερομένοισι, ἅπερ οἱ ὑγιαίνοντες, οὐ συνέφερον, ὡς οὐδὲ νῦν συμφέρει. ἔτι δὲ ἄνωθεν ἔγωγε ἀξιῶ οὐδ' ἂν τὴν τῶν ὑγιαίνοντων δίαιτάν τε καὶ τροφήν, ἣ νῦν χρέονται, εὐρεθῆναι, εἰ ἐξήρκει τῷ ἀνθρώπῳ ταῦτὰ ἐσθίοντι καὶ πίνοντι βοῖ τε καὶ ἵπῳ καὶ πᾶσιν ἐκτὸς ἀνθρώπου, οἷον τὰ ἐκ τῆς γῆς φυόμενα, καρπούς τε καὶ ὕλην καὶ χόρτον. ἀπὸ τούτων γὰρ καὶ τρέφονται καὶ αὔξονται καὶ ἄπονοι διάγουσιν οὐδὲν προσδεόμενοι ἄλλης διαίτης. καὶ τοι τὴν γε ἀρχὴν ἔγωγε δοκέω καὶ τὸν ἄνθρωπον τοιαύτη τροφῇ κεχρηῆσθαι. τὰ δὲ νῦν διαιτήματα εὐρημένα καὶ τετεχνημένα ἐν πολλῷ χρόνῳ γεγενῆσθαι μοι δοκεῖ. ὡς γὰρ ἔπασχον πολλά τε καὶ δεινὰ ὑπὸ ἰσχυρῆς τε καὶ θηριώδεος διαίτης ὡμά τε καὶ ἄκρητα καὶ μεγάλας δυνάμιας ἔχοντα ἐσφερόμενοι. οἷά περ ἂν καὶ νῦν ὑπ' αὐτῶν πάσχοιεν πόνοισί τε ἰσχυροῖσι καὶ νοῦσοις περιπίπτοντες καὶ διὰ τάχους θάνατοι. ἦσσαν μὲν οὖν ταῦτα τότε εἰκὸς ἦν πάσχειν διὰ τὴν συνήθειαν, ἰσχυρῶς δὲ καὶ τότε. καὶ τοὺς μὲν πλείστους τε καὶ ἀσθενεστέρην φύσιν ἔχοντας ἀπόλλυσθαι εἰκὸς, τοὺς δὲ τούτων ὑπερέχοντας πλείω χρόνον ἀντέχειν: ὥσπερ καὶ νῦν ἀπὸ τῶν ἰσχυρῶν βρωμάτων οἱ μὲν ῥηϊδίως ἀπαλλάσσονται, οἱ δὲ μετὰ πολλῶν πόνων τε καὶ κακῶν. διὰ δὲ ταύτην τὴν αἰτίην καὶ οὗτοί μοι δοκέουσι ζητῆσαι τροφήν ἀρμόζουσαν τῇ φύσει καὶ εὐρεῖν ταύτην, ἣ νῦν χρεώμεθα. ἐκ μὲν οὖν τῶν πυρῶν βρέξαντές σφας καὶ πτίσαντες καὶ καταλέσαντές τε καὶ διασήσαντες καὶ φορούξαντες καὶ ὀπτήσαντες ἀπετέλεσαν ἄρτον, ἐκ δὲ τῶν κριθέων μᾶζαν: ἄλλα τε πολλὰ περὶ ταῦτα πρηγματευσάμενοι ἤψησάν τε καὶ ὥπτησαν καὶ ἔμιξαν, καὶ ἐκέρασαν τὰ ἰσχυρά τε καὶ ἄκρητα τοῖς ἀσθενεστέροις, πλάσσοντες πάντα πρὸς τὴν τοῦ ἀνθρώπου φύσιν τε καὶ δύναμιν, ἠγεύμενοι, ὅσα μὲν ἂν ἰσχυρότερα ἢ ἡ δυνήσεται κρατεῖν ἢ φύσις, ἢν ἐμφέρηται, ἀπὸ τούτων δ' αὐτῶν πόνους τε καὶ νοῦσους καὶ θανάτους ἔσσεσθαι, ὀπόσων δ' ἂν δύνηται ἐπικρατεῖν, ἀπὸ τούτων τροφήν τε καὶ αὔξησιν καὶ ὑγίειν. τῷ δὲ εὐρήματι τούτῳ καὶ ζητήματι τί ἂν τις ὄνομα δικαιότερον ἢ προσῆκον μᾶλλον θεῖη ἢ ἰητρικὴν; ὅτι γε εὐρηται ἐπὶ τῇ τοῦ ἀνθρώπου ὑγείῃ τε καὶ σωτηρίῃ καὶ τροφῇ, ἄλλαγμα ἐκείνης τῆς διαίτης, ἐξ ἧς οἱ πόνοι καὶ νοῦσοι καὶ θάνατοι ἐγίνοντο.

4. Εἰ δὲ μὴ τέχνη αὕτη νομίζεται εἶναι, οὐκ ἀπεικός: ἦς γὰρ μηδεὶς ἐστὶν ἰδιώτης, ἀλλὰ πάντες ἐπιστήμονες διὰ τὴν χρῆσίν τε καὶ ἀνάγκην, οὐ προσήκει ταύτης οὐδένα τεχνίτην καλεῖσθαι: ἐπεὶ τό γε εὐρημα μέγα τε καὶ πολλῆς σκέψιος τε καὶ τέχνης. ἔτι γοῦν καὶ νῦν οἱ τῶν γυμνασίων τε καὶ ἀσκησίων ἐπιμελόμενοι αἰεὶ τι προσεξευρίσκουσιν κατὰ τὴν αὐτὴν ὁδὸν ζητέοντες ὅ τι ἐσθίων τε καὶ πίνων ἐπικρατήσῃ τε αὐτοῦ μάλιστα καὶ ἰσχυρότερος αὐτὸς

έωυτοῦ ἔσται.

5. Σκεψώμεθα δὲ καὶ τὴν ὁμολογεομένως ἰητρικὴν, τὴν ἀμφὶ τοὺς κάμνοντας εὐρημένην, ἣ καὶ ὄνομα καὶ τεχνίτας ἔχει, ἧρά τι καὶ αὐτὴ τῶν αὐτῶν ἐθέλει, καὶ πόθεν ποτὲ ἦρκεται. ἔμοι μὲν γάρ, ὅπερ ἐν ἀρχῇ εἶπον, οὐδ' ἂν ζητῆσαι ἰητρικὴν δοκεῖ οὐδεὶς, εἰ ταῦτὰ διαιτήματα τοῖσι τε κάμνουσι καὶ τοῖσι ὑγιαίνουσιν ἤρμοζεν. ἔτι γοῦν καὶ νῦν ὅσοι ἰητρικῇ μὴ χρέονται, οἱ τε βάρβαροι καὶ τῶν Ἑλλήνων ἔνιοι, τὸν αὐτὸν τρόπον, ὄνπερ οἱ ὑγιαίνοντες, διαιτέονται πρὸς ἡδονήν, καὶ οὔτ' ἂν ἀπόσχοντο οὐδενὸς ὧν ἐπιθυμέουσιν οὔθ' ὑποστείλαιντο ἂν. οἱ δὲ ζητήσαντες καὶ εὐρόντες ἰητρικὴν τὴν αὐτὴν ἐκείνοισι διάνοιαν ἔχοντες, περὶ ὧν μοι ὁ πρότερος λόγος εἴρηται, πρῶτον μὲν, οἶμαι, ὑφεῖλον τοῦ πλήθεος τῶν σιτίων αὐτῶν τούτων, καὶ ἀντὶ πλειόνων ὀλίγιστα ἐποίησαν. ἐπεὶ δὲ αὐτοῖσι τοῦτο ἔστι μὲν ὅτε πρὸς τινὰς τῶν καμνόντων ἦρκεσε καὶ φανερόν ἐγένετο ὠφελῆσαν, οὐ μέντοι πᾶσι γε, ἀλλ' ἦσαν τινες οὕτως ἔχοντες, ὡς μὴ ὀλίγων σιτίων δύνασθαι ἐπικρατεῖν, ἀσθενεστέρου δὲ δὴ τινος οἱ τοιοῖδε ἐδόκεον δεῖσθαι, εὖρον τὰ ῥυφήματα μίξαντες ὀλίγα τῶν ἰσχυρῶν πολλῶ τῷ ὕδατι καὶ ἀφαιρέομενοι τὸ ἰσχυρὸν τῇ κρήσει τε καὶ ἐψήσει. ὅσοι δὲ μηδὲ τῶν ῥυφημάτων ἐδύναντο ἐπικρατεῖν, ἀφεῖλον καὶ ταῦτα, καὶ ἀφίκοντο ἐς πόματα, καὶ ταῦτα τῆσι τε κρήσεσι καὶ τῷ πλήθει διαφυλάσσοντες ὡς μετρίως ἔχοι, μήτε πλείω τῶν δεόντων μήτε ἀκρῆ τέστερα προσφερόμενοι μηδὲ ἐνδεέστερα.

6. Εὖ δὲ χρὴ τοῦτο εἰδέναί, ὅτι τισὶ τὰ ῥυφήματα ἐν τῆσι νούσοισιν οὐ συμφέρει, ἀλλ' ἀντικρυς, ὅταν ταῦτα προσαίρωνται, παροξύνονται σφισι οἱ τε πυρετοὶ καὶ τὰ ἀλγήματα: καὶ δῆλον τὸ προσενεχθὲν τῇ μὲν νούσῳ τροφή τε καὶ αὐξήσις γενόμενον, τῷ δὲ σώματι φθίσις τε καὶ ἀρρωστίη. ὅσοι δὲ ἂν τῶν ἀνθρώπων ἐν ταύτῃ τῇ διαθέσει ἐόντες προσενέγκωνται ξηρὸν σιτίον ἢ μᾶζαν ἢ ἄρτον, καὶ ἦν πάνυ μικρόν, δεκαπλασίως ἂν μᾶλλον καὶ ἐπιφανέστερον κακωθεῖεν ἢ ῥυφέοντες, δι' οὐδὲν ἄλλο ἢ διὰ τὴν ἰσχὴν τοῦ βρώματος πρὸς τὴν διάθεσιν: καὶ ὅτῳ ῥυφεῖν μὲν συμφέρει, ἐσθίειν δ' οὐ, εἰ πλείω φάγοι, πολὺ ἂν μᾶλλον κακωθεῖη, ἢ εἰ ὀλίγα: καὶ εἰ ὀλίγα δέ, πονήσειεν ἂν. πάντα δὲ τὰ αἷτια τοῦ πόνου ἐς τὸ αὐτὸ ἀνάγεται, τὰ ἰσχυρότατα μάλιστα τε καὶ ἐπιφανέστατα λυμαίνεσθαι τὸν ἄνθρωπον καὶ τὸν ὑγιᾶ ἔοντα καὶ τὸν κάμνοντα.

7. Τί οὖν φαίνεται ἕτεροῖον διανοηθεὶς ὁ καλούμενος ἰητρὸς καὶ ὁμολογεομένως χειροτέχνης, ὃς ἐξεῦρε τὴν ἀμφὶ τοὺς κάμνοντας δίαιτάν τε καὶ τροφήν, ἣ ἐκεῖνος ὁ ἀπ' ἀρχῆς τοῖσι πᾶσιν ἀνθρώποισιν τροφήν, ἣ νῦν χρώμεθα, ἐξ ἐκείνης τῆς ἀγρίης τε καὶ θηριώδεος διαίτης εὐρών τε καὶ παρασκευασάμενος; ἔμοι μὲν γάρ φαίνεται ὁ αὐτὸς λόγος καὶ ἐν καὶ ὁμοιον τὸ εὖρημα. ὁ μὲν, ὅσων μὴ ἐδύνατο ἢ φύσις ἢ ἀνθρωπίνη ὑγιαίνουσα ἐπικρατεῖν ἐμπιπτόντων διὰ τὴν

θηριότητά τε καὶ τὴν ἀκρησίην, ὁ δέ, ὅσων ἢ διάθεσις, ἐν οἷῃ ἂν ἐκάστοτε ἕκαστος τύχη διακεείμενος, μὴ δύνηται ἐπικρατεῖν, ταῦτα ἐζήτησεν ἀφελεῖν. τί δὴ τοῦτο ἐκείνου διαφέρει ἄλλ' ἢ πλεον τό γε εἶδος, καὶ ὅτι ποικιλώτερον καὶ πλείονος πρηγματίης, ἀρχὴ δὲ ἐκείνη ἢ πρότερον γενομένη;

8. Εἰ δέ τις σκέπτοιο τὴν τῶν καμνόντων δίαιταν πρὸς τὴν τῶν ὑγιαίνοντων, εὖροι ἂν τὴν τῶν θηρίων τε καὶ τῶν ἄλλων ζῴων οὐ βλαβρωτέραν πρὸς τὴν τῶν ὑγιαίνοντων. ἀνὴρ γὰρ κάμνων νοσήματι μῆτε τῶν χαλεπῶν τε καὶ ἀπόρων μῆτε αὐτῶν παντάπασιν εὐηθέων, ἀλλ' ὅ τι αὐτῷ ἐξαμαρτάνοντι μέλλει ἐπίδηλον ἔσεσθαι, εἰ ἐθέλοι καταφαγεῖν ἄρτον καὶ κρέας ἢ ἄλλο τι ὧν οἱ ὑγιαίνοντες ἐσθίοντες ὠφελέονται, μὴ πολλόν, ἀλλὰ πολλῷ ἔλασσον ἢ ὑγιαίνων ἂν ἐδύνατο, ἄλλος τε τῶν ὑγιαίνοντων φύσιν ἔχων μῆτε παντάπασιν ἀσθενέα μῆτε αὐτῷ ἰσχυρὴν φάγοι τι ὧν βοῦς ἢ ἵππος φαγὼν ἂν ὠφελοῖτό τε καὶ ἰσχύοι, ὀρόβους ἢ κριθὰς ἢ ἄλλο τι τῶν τοιούτων, μὴ πολύ, ἀλλὰ πολλῷ μείον ἢ δύναιτο, οὐκ ἂν ἦσσαν ὁ ὑγιαίνων τοῦτο ποιήσας πονήσειέ τε καὶ κινδυνεύσειε κείνου τοῦ νοσέοντος, ὅς τὸν ἄρτον ἢ τὴν μᾶζαν ἀκαίρως προσηνέγκατο. ταῦτα δὴ πάντα τεκμήρια, ὅτι αὕτη ἢ τέχνη πᾶσα ἢ ἰητρικὴ τῇ αὐτῇ ὁδῷ ζητεομένη εὐρίσκοιο ἂν.

9. Καὶ εἰ μὲν ἦν ἀπλοῦν, ὥσπερ ὑφήγητο, ὅσα μὲν ἦν ἰσχυρότερα, ἔβλαπτεν, ὅσα δ' ἦν ἀσθενέστερα, ὠφέλει τε καὶ ἔτρεφεν καὶ τὸν κάμνοντα καὶ τὸν ὑγιαίνοντα, εὐπετές ἂν ἦν τὸ πρῆγμα: πολλόν γὰρ τοῦ ἀσφαλέος ἂν ἔδει περιλαμβάνοντας ἄγειν ἐπὶ τὸ ἀσθενέστερον. νῦν δὲ οὐκ ἔλασσον ἀμάρτημα, οὐδὲ ἦσσαν λυμαίνεται τὸν ἄνθρωπον, ἦν ἐλάσσονα καὶ ἐνδεέστερα τῶν ἱκανῶν προσφέρηται. τὸ γὰρ τοῦ λιμοῦ μένος δύναται ἰσχυρῶς ἐν τῇ φύσει τοῦ ἀνθρώπου καὶ γυῖωσαι καὶ ἀσθενέα ποιῆσαι καὶ ἀποκτεῖναι. πολλὰ δὲ καὶ ἄλλα κακὰ ἕτεροῖα τῶν ἀπὸ πληρώσιος, οὐχ ἦσσαν δὲ δεινά, καὶ ἀπὸ κενώσιος. διότι πολλόν ποικιλώτερά τε καὶ διὰ πλείονος ἀκριβείης ἐστί. δεῖ γὰρ μέτρον τινὸς στοχάσασθαι. μέτρον δὲ οὔτε ἀριθμὸν οὔτε σταθμὸν ἄλλον, πρὸς ὃ ἀναφέρων εἴση τὸ ἀκριβές, οὐκ ἂν εὖροις ἄλλ' ἢ τοῦ σώματος τὴν αἴσθησιν. διὸ ἔργον οὕτω καταμαθεῖν ἀκριβέως, ὥστε σμικρὰ ἀμαρτάνειν ἔνθα ἢ ἔνθα. κἂν ἐγὼ τοῦτον τὸν ἰητρὸν ἰσχυρῶς ἐπαινεῖμι τὸν σμικρὰ ἀμαρτάνοντα. τὸ δὲ ἀτρεκὲς ὀλιγάκις ἔστι κατιδεῖν. ἐπεὶ οἱ πολλοὶ γε τῶν ἰητρῶν τὰ αὐτὰ μοι δοκέουσιν τοῖσι κακοῖσι κυβερνήτησι πάσχειν. καὶ γὰρ ἐκεῖνοι ὅταν ἐν γαλήνῃ κυβερνῶντες ἀμαρτάνωσιν, οὐ καταφανέες εἰσίν: ὅταν δὲ αὐτοὺς κατάσχη χειμῶν τε μέγας καὶ ἄνεμος ἐξώστης, φανερῶς πᾶσιν ἤδη ἀνθρώποις δι' ἀγνωσίην καὶ ἀμαρτίην δῆλοί εἰσιν ἀπολέσαντες τὴν ναῦν. οὕτω δὴ καὶ οἱ κακοὶ τε καὶ οἱ πλεῖστοι ἰητροί, ὅταν μὲν θεραπεύωσιν ἀνθρώπους μηδὲν δεινὸν ἔχοντας, ἐς οὓς ἂν τις τὰ μέγιστα ἐξαμαρτάνων οὐδὲν δεινὸν ἐργάσαιτο-πολλὰ δὲ τοιαῦτα νοσήματα καὶ

πολλόν τι πλείω τῶν δεινῶν ἀνθρώποις συμβαίνει — ἐν μὲν τοῖσι τοιούτοις ἀμαρτάνοντες οὐ καταφανέες εἰσὶν τοῖσιν ἰδιότησιν: ὅταν δ' ἐντύχωσιν μεγάλῳ τε καὶ ἰσχυρῷ καὶ ἐπισφαλεῖ νοσήματι, τότε σφέων τά τε ἀμαρτήματα καὶ ἡ ἀτεχνίη πᾶσι καταφανής: οὐ γὰρ ἐς μακρὸν αὐτῶν ἑκατέρου αἰ τιμωρίαί, ἀλλὰ διὰ τάχους πάριαι.

10. Ὅτι δ' οὐδὲν ἐλάσσους ἀπὸ κενώσιος ἀκαίρου κακοπάθειαι γίνονται τῷ ἀνθρώπῳ ἢ ἀπὸ πληρώσιος, καταμανθάνειν καλῶς ἔχει ἐπαναφέροντας ἐπὶ τοὺς ὑγιαίνοντας. ἔστι γὰρ οἷσιν αὐτῶν συμφέρει μονοσιτεῖν, καὶ τοῦτο διὰ τὸ συμφέρον οὕτως αὐτοὶ ἐτάξαντο, ἄλλοισι δὲ ἀριστήν διὰ τὴν αὐτὴν ἀνάγκην: οὕτω γὰρ αὐτοῖσι συμφέρει. καὶ μὴν τοῦτ' εἰσὶ οἱ δι' ἡδονὴν ἢ δι' ἄλλην τινὰ συγκυρίην ἐπετήδευσαν ὁπότερον αὐτῶν. τοῖς μὲν γὰρ πλείστοισι τῶν ἀνθρώπων οὐδὲν διαφέρει, ὁπότερον ἂν ἐπιτηδεύσωσιν, εἴτε μονοσιτεῖν εἴτε ἀριστήν, τούτῳ τῷ ἔθει χρῆσθαι. εἰσὶ δὲ τινες οἱ οὐκ ἂν δύναιντο ἔξω τοῦ συμφέροντος ποιέοντες ῥηϊδίως ἀπαλλάσσειν, ἀλλὰ συμβαίνει αὐτῶν ἑκατέροις παρ' ἡμέρην μιαν καὶ ταύτην οὐχ ὅλην μεταβάλλουσιν ὑπερφυῆς κακοπάθεια. οἱ μὲν γὰρ ἦν ἀριστήσωσιν μὴ συμφέροντος αὐτοῖσι, εὐθέως βαρέες καὶ νωθροὶ καὶ τὸ σῶμα καὶ τὴν γνώμην χάσμησεν τε καὶ νυσταγμοῦ καὶ δίψης πλήρεις: ἦν δὲ καὶ ἐπιδειπνήσωσι, καὶ φῦσα καὶ στρόφος καὶ ἡ κοιλίη καταρρήγνυται. καὶ πολλοῖσιν ἀρχὴ νούσου αὕτη μεγάλης ἐγένετο, καὶ ἦν τὰ σιτία, ἃ μεμαθήκεσαν ἅπαξ ἀναλίσκειν, ταῦτα δις προσενέγκωνται καὶ μηδὲν πλείω. τοῦτο δέ, ἦν ἀριστήν μεμαθηκώς τις — καὶ οὕτως αὐτῷ συμφέρον ἦν — μὴ ἀριστήση, ὅταν τάχιστα παρέλθῃ ἡ ὥρη, εὐθύς ἀδυναμίη δεινή, τρόμος, ἀψυχίη: ἐπὶ τούτοις ὀφθαλμοὶ κοῖλοι, οὖρον χλωρότερον καὶ θερμότερον, στόμα πικρὸν, καὶ τὰ σπλάγχνα δοκεῖ οἱ κρέμασθαι, σκοτοδινίη, δυσθυμίη, δυσεργείη. ταῦτα δὲ πάντα, καὶ ὅταν δειπνεῖν ἐπιχειρήσῃ, ἀηδέστερος μὲν ὁ σῖτος, ἀναλίσκειν δὲ οὐ δύναται ὅσα ἀριστιζόμενος πρότερον ἐδείπνει. ταῦτα δὲ αὐτὰ μετὰ στρόφον καὶ ψόφου καταβαίνοντα συγκαίει τὴν κοιλίην, δυσκοιτέουσί τε καὶ ἐνυπνιάζουσι τεταραγμένα τε καὶ θορυβώδεα. πολλοῖσι δὲ καὶ τούτων αὕτη ἀρχὴ νούσου ἐγένετο.

11. Σκέπασθαι δὲ χρή, διὰ τίνα αἰτίην αὐτοῖσιν ταῦτα συνέβη. τῷ μὲν, οἶμαι, μεμαθηκότι μονοσιτεῖν, ὅτι οὐκ ἀνέμεινεν τὸν χρόνον τὸν ἰκανόν, μέχρι αὐτοῦ ἡ κοιλίη τῶν τῆ προτεραίῃ προσενηνεγμένων σιτίων ἀπολαύση τελέως καὶ ἐπικρατήση καὶ λαπαχθῆ τε καὶ ἡσυχάσῃ, ἀλλ' ἐπὶ ζέουσάν τε καὶ ἐζυμωμένην καινὰ ἐπεσηνέγκατο. αἰ δὲ τοιαῦται κοιλίαι πολλῶ τε βραδύτερον πέσσουσι καὶ πλείονος δέονται ἀναπαύσιός τε καὶ ἡσυχίης. ὁ δὲ μεμαθηκώς ἀριστίζεσθαι, διότι, ἐπειδὴ τάχιστα ἐδεήθη τὸ σῶμα τροφῆς καὶ τὰ πρότερα κατανάλωτο καὶ οὐκ εἶχεν οὐδεμίαν ἀπόλαυσιν, οὐκ εὐθέως αὐτῷ προσεγένετο καινὴ τροφή,



φθίνει δὴ καὶ συντήκεται ὑπὸ λιμοῦ. πάντα γάρ, ἃ λέγω πάσχειν τὸν τοιοῦτον ἄνθρωπον, λιμῶ ἀνατίθημι. φημι δὲ καὶ τοὺς ἄλλους ἀθρώπους ἅπαντας, οἵτινες ἂν ὑγιαίνοντες ἄσιτοι δύο ἡμέρας ἢ τρεῖς γένωνται, ταῦτα πείσεσθαι, οἷάπερ ἐπὶ τῶν ἀναρίστων γενομένων εἶρηκα.

12. Τὰς δὲ τοιαύτας φύσις ἔγωγέ φημι τὰς ταχέως τε καὶ ἰσχυρῶς τῶν ἀμαρτημάτων ἀπολανούσας ἀσθενεστέρας εἶναι τῶν ἐτέρων. ἐγγύτατα δὲ τοῦ ἀσθενέοντός ἐστιν ὁ ἀσθενής, ἔτι δὲ ἀσθενέστερος ὁ ἀσθενέων, καὶ μᾶλλον αὐτῷ προσήκει ὅ τι ἂν τοῦ καιροῦ ἀποτυγχάνη πονεῖν. χαλεπὸν δὲ τοιαύτης ἀκριβείης ἐούσης περὶ τὴν τέχνην τυγχάνειν αἰεὶ τοῦ ἀτρεκεστάτου. πολλὰ δὲ εἶδεα κατ' ἰητρικὴν ἐς τοσαύτην ἀκρίβειαν ἤκει, περὶ ὧν εἰρήσεται. οὐ φημι δὲ δεῖν διὰ τοῦτο τὴν τέχνην ὡς οὐκ ἐοῦσαν οὐδὲ καλῶς ζητεομένην τὴν ἀρχαίην ἀποβάλλεσθαι, εἰ μὴ ἔχει περὶ πάντα ἀκρίβειαν, ἀλλὰ πολὺ μᾶλλον διὰ τὸ ἐγγὺς οἶμαι τοῦ ἀτρεκεστάτου δύνασθαι ἤκειν λογισμῶ ἐκ πολλῆς ἀγνωσίης θαυμάζειν τὰ ἐξευρημένα, ὡς καλῶς καὶ ὀρθῶς ἐξεύρηται καὶ οὐκ ἀπὸ τύχης.

13. Ἐπὶ δὲ τῶν τὸν καινὸν τρόπον τὴν τέχνην ζητούντων ἐξ ὑποθέσιος τὸν λόγον ἐπανελθεῖν βούλομαι. εἰ γάρ τί ἐστιν θερμὸν ἢ ψυχρὸν ἢ ξηρὸν ἢ ὑγρὸν τὸ λυμαινόμενον τὸν ἄνθρωπον, καὶ δεῖ τὸν ὀρθῶς ἰητρεύοντα βοηθεῖν τῷ μὲν θερμῷ ἐπὶ τὸ ψυχρὸν, τῷ δὲ ψυχρῷ ἐπὶ τὸ θερμὸν, τῷ δὲ ξηρῷ ἐπὶ τὸ ὑγρὸν, τῷ δὲ ὑγρῷ ἐπὶ τὸ ξηρὸν. ἔστω μοι ἄνθρωπος μὴ τῶν ἰσχυρῶν φύσει, ἀλλὰ τῶν ἀσθενεστέρων: οὗτος δὲ πυρούς ἐσθιέτω, οὓς ἂν ἀπὸ τῆς ἄλλω ἀνέλη, ὠμούς καὶ ἀργούς, καὶ κρέα ὠμὰ καὶ πινέτω ὕδωρ. ταύτη χρεώμενος τῇ διαίτῃ εὖ οἶδ' ὅτι πείσεται πολλὰ καὶ δεινά: καὶ γὰρ πόνους πονήσει καὶ τὸ σῶμα ἀσθενές ἔσται καὶ ἡ κοιλίη φθαρήσεται καὶ ζῆν πολλὸν χρόνον οὐ δυνήσεται. τί δὴ χρή βοήθημα παρεσκευάσθαι ὧδ' ἔχοντι; θερμὸν ἢ ψυχρὸν ἢ ξηρὸν ἢ ὑγρὸν; δῆλον γὰρ ὅτι τούτων τι. εἰ γὰρ τὸ λυμαινόμενόν ἐστιν τούτων τὸ ἕτερον, τῷ ὑπεναντίῳ προσήκει λῦσαι, ὡς ὁ ἐκείνων λόγος ἔχει. τὸ μὲν γὰρ βεβαιοτάτον τε καὶ προφανέστατον φάρμακον ἀφελόντα τὰ διαιτήματα, οἷς ἐχρήτο, ἀντὶ μὲν τῶν πυρῶν ἄρτον δίδόναι, ἀντὶ δὲ τῶν ὠμῶν κρεῶν ἐφθά, πιεῖν τε ἐπὶ τούτοισιν οἴνου. ταῦτα μεταβαλόντα οὐχ οἷόν τε μὴ οὐχ ὑγιᾶ γενέσθαι, ἦν γε μὴ παντάπασιν ἢ διεφθαρμένος ὑπὸ χρόνου τε καὶ τῆς διαίτης. τί δὴ φήσομεν; πότερον αὐτῷ ἀπὸ ψυχροῦ κακοπαθέοντι θερμὰ ταῦτα προσενέγκαντες ὠφέλησαν ἢ τάναντία; οἶμαι γὰρ ἔγωγε πολλὴν ἀπορίην τῷ ἐρωτηθέντι παρασχεῖν. ὁ γὰρ τὸν ἄρτον παρασκευάζων τῶν πυρῶν τὸ θερμὸν ἢ τὸ ψυχρὸν ἢ τὸ ξηρὸν ἢ τὸ ὑγρὸν ἀφείλατο; ὁ γὰρ καὶ πυρὶ καὶ ὕδατι δέδοται καὶ ἄλλοις πολλοῖσι ἤργασται, ὧν ἕκαστον ἰδίην δύναμιν καὶ φύσιν ἔχει, τὰ μὲν τῶν ὑπαρχόντων ἀποβέβληκε, ἄλλοισι δὲ κέκρηται τε καὶ μέμικται.

14. Οἶδα μὲν γὰρ καὶ τάδε δήπου, ὅτι διαφέρει ἐς τὸ σῶμα τοῦ ἀνθρώπου καθαρὸς ἄρτος ἢ συγκομιστός, ἢ ἀπίστων πυρῶν ἢ ἐπισημένων, ἢ πολλῶ ὕδατι πεφυρημένος ἢ ὀλίγῳ, ἢ ἰσχυρῶς πεφυρημένος ἢ ἀφύρητος, ἢ ἔξοπτος ἢ ἔνωμος, ἄλλα τε πρὸς τούτοις μυρία. ὡς δ' αὐτῶς καὶ περὶ μάζης. καὶ αἱ δυνάμεις μεγάλαι τε ἐκάστου καὶ οὐδὲν ἢ ἐτέρη τῇ ἐτέρη εἰκυῖα. ὅστις δὲ ταῦτα οὐκ ἐπέσκεπται ἢ σκεπτόμενος οὐκ οἶδεν, πῶς ἂν τι οὗτος δύναιτο τῶν κατ' ἀνθρώπον παθημάτων εἰδέναι; ὑπὸ γὰρ ἐνὸς ἐκάστου τούτων πάσχει τε καὶ ἑτεροιοῦται ὁ ἀνθρώπος ἢ τοῖον ἢ τοῖον. καὶ διὰ τούτων πᾶς ὁ βίος καὶ ὑγιαίνουντι καὶ ἐκ νούσου ἀνατρεφομένῳ καὶ κάμνοντι. οὐκ ἂν οὖν ἕτερα τούτων χρησιμώτερα οὐδὲ ἀναγκαιότερα εἶη εἰδέναι δήπου, ὡς δὲ καλῶς καὶ λογισμῶ προσήκοντι ζητήσαντες πρὸς τὴν τοῦ ἀνθρώπου φύσιν εὔρον αὐτὰ οἱ πρῶτοι εὐρόντες καὶ ᾤθησαν ἀξίην τὴν τέχνην θεῶ προσθεῖναι, ὥσπερ καὶ νομίζεται. οὐ γὰρ τὸ ξηρὸν οὐδὲ τὸ ὑγρὸν οὐδὲ τὸ θερμὸν οὐδὲ τὸ ψυχρὸν οὐδὲ ἄλλο τούτων ἠγησάμενοι οὐδὲν οὔτε λυμαίνεσθαι οὔτε προσδεῖσθαι οὐδενὸς τούτων τὸν ἀνθρώπον, ἀλλὰ τὸ ἰσχυρὸν ἐκάστου καὶ τὸ κρέσσον τῆς φύσιος τῆς ἀνθρωπείης, οὗ μὴ ἠδύνατο κρατεῖν, τοῦτο βλάπτειν ἠγήσαντο καὶ τοῦτο ἐζήτησαν ἀφαιρεῖν. ἰσχυρότατον δ' ἐστὶ τοῦ μὲν γλυκέος τὸ γλυκύτατον, τοῦ δὲ πικροῦ τὸ πικρότατον, τοῦ δὲ ὀξεῖος τὸ ὀξύτατον, ἐκάστου δὲ πάντων τῶν ἐνεόντων ἢ ἀκμῆ. ταῦτα γὰρ ἐώρων καὶ ἐν τῷ ἀνθρώπῳ ἐνεόντα καὶ λυμαινόμενα τὸν ἀνθρώπον. ἐνὶ γὰρ ἐν ἀνθρώπῳ καὶ ἄλμυρον καὶ πικρὸν καὶ γλυκὺ καὶ ὄξυ καὶ στρυφνὸν καὶ πλαδαρὸν καὶ ἄλλα μυρία παντοίας δυνάμιας ἔχοντα πλῆθός τε καὶ ἰσχύν. ταῦτα μὲν μεμιγμένα καὶ κεκρημένα ἀλλήλοισιν οὔτε φανερά ἐστίν οὔτε λυπεῖ τὸν ἀνθρώπον. ὅταν δὲ τι τούτων ἀποκριθῆ καὶ αὐτὸ ἐφ' ἑωυτοῦ γένηται, τότε καὶ φανερόν ἐστὶ καὶ λυπεῖ τὸν ἀνθρώπον: τοῦτο δὲ, τῶν βρωμάτων ὅσα ἡμῖν ἀνεπιτήδεια ἐστίν καὶ λυμαίνεται τὸν ἀνθρώπον ἐμπεσόντα, τούτων ἐν ἑκάστῳ ἢ πικρὸν ἐστὶν ἢ ἄλμυρον ἢ ὄξυ ἢ ἄλλο τι ἄκρητόν τε καὶ ἰσχυρόν, καὶ διὰ τοῦτο ταρασσόμεθα ὑπ' αὐτῶν, ὥσπερ καὶ ὑπὸ τῶν ἐν τῷ σώματι ἀποκρινόμενων. πάντα δὲ ὅσα ἀνθρώπος ἐσθίει ἢ πίνει, τὰ τοιαῦτα βρώματα ἢκιστα τοιούτου χυμοῦ ἀκρήτου τε καὶ διαφέροντος δῆλὰ ἐστὶν μετέχοντα, οἶον ἄρτος τε καὶ μᾶζα καὶ τὰ ἐπόμενα τούτοις, οἷς εἴθισται ὁ ἀνθρώπος πλείστοις τε καὶ αἰεὶ χρῆσθαι, ἔξω τῶν πρὸς ἡδονὴν τε καὶ κόρον ἠρτυμένων τε καὶ ἐσκευασμένων. καὶ ἀπὸ τούτων πλείστων ἐσιόντων ἐς τὸν ἀνθρώπον τάραχος καὶ ἀπόκρισις τῶν ἀμφὶ τὸ σῶμα δυναμίῳ ἠκιστα γίνεται, ἰσχύς δὲ καὶ αὐξήσις καὶ τροφή μάλιστα δι' οὐδὲν ἕτερον γίνεται ἢ ὅτι εὖ τε κέκρηται καὶ οὐδὲν ἔχει οὔτε ἄκρητον οὔτε ἰσχυρόν, ἀλλ' ὅλον ἐν τε γέγονε καὶ ἀπλοῦν.

15. Ἀπορέω δ' ἔγωγε, οἱ τὸν λόγον ἐκεῖνον λέγοντες καὶ ἄγοντες ἐκ ταύτης τῆς ὁδοῦ ἐπὶ ὑπόθεσιν τὴν τέχνην τίνα ποτὲ τρόπον θεραπεύουσι τοὺς ἀνθρώπους,

ὥσπερ ὑποτίθενται. οὐ γάρ ἐστιν αὐτοῖς, οἷμαι, ἐξευρημένον αὐτό τι ἐφ' ἐωυτοῦ θερμὸν ἢ ψυχρὸν ἢ ξηρὸν ἢ ὑγρὸν μηδενὶ ἄλλῳ εἶδει κοινωνέον. ἀλλ' οἷομαι ἔγωγε ταῦτ' ἀβρώματα καὶ πόματα αὐτοῖσι ὑπάρχειν, οἷσι πάντες χρεώμεθα. προστιθέασι δὲ τῷ μὲν εἶναι θερμῷ, τῷ δὲ ψυχρῷ, τῷ δὲ ξηρῷ, τῷ δὲ ὑγρῷ, ἐπεὶ ἐκεῖνό γε ἄπορον προστάξαι τῷ κάμνοντι θερμὸν τι προσενέγκασθαι. εὐθὺ γὰρ ἐρωτήσῃ: τί; ὥστε ληρεῖν ἀνάγκη ἢ ἐς τούτων τι τῶν γινωσκομένων καταφεύγειν. εἰ δὲ δὴ τυγχάνει τι θερμὸν ἐὸν στρυφνόν, ἄλλο δὲ θερμὸν ἐὸν πλαδαρόν, ἄλλο δὲ θερμὸν ἄραδον ἔχον — ἔστι γὰρ καὶ ἄλλα πολλὰ θερμὰ καὶ ἄλλας δυνάμιας ἔχοντα ἐωυτοῖς ὑπεναντίας — ἢ διοίσει τι αὐτῶν προσενεγκεῖν τὸ θερμὸν καὶ στρυφνὸν ἢ τὸ θερμὸν καὶ πλαδαρὸν ἢ ἅμα τὸ ψυχρὸν καὶ στρυφνόν — ἔστι γὰρ καὶ τοιοῦτο — ἢ τὸ ψυχρὸν τε καὶ πλαδαρόν: ὥσπερ γὰρ ἐγὼ οἶδα, πᾶν τούναντίον ἀφ' ἐκατέρου αὐτῶν ἀποβαίνει, οὐ μόνον ἐν ἀνθρώπῳ, ἀλλὰ καὶ ἐν σκύτει καὶ ἐν ξύλῳ καὶ ἐν ἄλλοις πολλοῖς, ἃ ἐστὶν ἀνθρώπου ἀναισθητότερα. οὐ γὰρ τὸ θερμὸν ἐστὶν τὸ τὴν μεγάλην δύναμιν ἔχον, ἀλλὰ τὸ στρυφνὸν καὶ τὸ πλαδαρὸν καὶ τἄλλα ὅσα μοι εἴρηται καὶ ἐν τῷ ἀνθρώπῳ καὶ ἔξω τοῦ ἀνθρώπου, καὶ ἐσθιόμενα καὶ πινόμενα καὶ ἔξωθεν ἐπιχρῖό μενά τε καὶ προσπλασσόμενα.

16. Ψυχρότητα δ' ἐγὼ καὶ θερμότητα πασέων ἥκιστα τῶν δυναμίῳ νομίζω δυναστεύειν ἐν τῷ σώματι διὰ τάσδε τὰς αἰτίας: ὄν μὲν ἂν δῆπου χρόνον μεμιγμένα αὐτὰ ἐωυτοῖς ἅμα τὸ θερμὸν τε καὶ ψυχρὸν ἐνῆ, οὐ λυπεῖ. κρῆσις γὰρ καὶ μετριότης τῷ μὲν θερμῷ γίνεται ἀπὸ τοῦ ψυχροῦ, τῷ δὲ ψυχρῷ ἀπὸ τοῦ θερμοῦ. ὅταν δ' ἀποκριθῆ χωρὶς ἐκάτερον, τότε λυπεῖ. ἐν δὲ δὴ τούτῳ τῷ καιρῷ, ὅταν τὸ ψυχρὸν ἐπιγένηται καὶ τι λυπήσῃ τὸν ἀνθρώπον, διὰ τάχειος πρῶτον δι' αὐτὸ τοῦτο πάρεστιν τὸ θερμὸν αὐτόθεν ἐκ τοῦ ἀνθρώπου, οὐδεμιῆς βοηθείης οὐδὲ παρασκευῆς δεόμενον. καὶ ταῦτα καὶ ἐν ὑγιαίνουσι τοῖς ἀνθρώποις ἀπεργάζεται καὶ ἐν κάμνουσι. τοῦτο μὲν, εἴ τις θέλει ὑγιαίνων χειμῶνος διαψύξαι τὸ σῶμα ἢ λουσάμενος ψυχρῷ ἢ ἄλλῳ τῷ τρόπῳ, ὅσῳ ἂν ἐπὶ πλεῖον αὐτὸ ποιήσῃ, καὶ ἦν γε μὴ παντάπασιν παγῆ τὸ σῶμα, ὅταν εἴματα λάβῃ καὶ ἔλθῃ ἐς τὴν σκέπη, ἔτι μᾶλλον καὶ ἐπὶ πλεῖον θερμαίνεται τὸ σῶμα: τοῦτο δέ, εἰ ἐθέλοι ἐκθερμανθῆναι ἰσχυρῶς ἢ λουτρῷ θερμῷ ἢ πυρὶ πολλῷ, ἐκ δὲ τούτου τὸ αὐτὸ εἶμα ἔχον ἐν τῷ αὐτῷ χωρίῳ τὴν διατριβὴν ποιεῖσθαι ὥσπερ διεψυγμένος, πολὺ φαίνεται καὶ ψυχρότερος καὶ ἄλλως φρικαλεώτερος: ἢ εἰ ῥιπιζόμενός τις ὑπὸ πνίγειος καὶ παρασκευαζόμενος αὐτὸς ἐωυτῷ ψῦχος ἐκ τοιοῦτου ἂν τρόπου διαπαύσαιτο τοῦτο ποιέων, δεκαπλάσιον ἔσται τὸ καῦμα καὶ πνίγιος ἢ τῷ μηδὲν τοιοῦτο ποιέοντι. Τόδε δὲ καὶ πολὺ μέζον: ὅσοι ἂν διὰ χιόνος ἢ ἄλλου ψύχειος βαδίσαντες ῥιγώσωσι διαφερόντως πόδας ἢ χεῖρας ἢ κεφαλὴν, οἷα πάσχουσιν ἐς τὴν νύκτα, ὅταν περισταλεωσί τε καὶ ἐν ἀλέῃ γένωνται ὑπὸ καύματος καὶ κνησμοῦ. καὶ ἔστιν οἷσι φύλκταιναι ἀνίστανται ὥσπερ τοῖς ἀπὸ πυρὸς

κατακεκαυμένοις. καὶ οὐ πρότερον τοῦτο πάσχουσιν, πρὶν θερμανθέωσιν. οὕτως ἐτοίμως ἐκάτερον αὐτῶν ἐπὶ θάτερον παραγίνεται. μυρία δ' ἂν καὶ ἄλλα ἔχοιμι εἰπεῖν. τὰ δὲ κατὰ τοὺς νοσέοντας, οὐχὶ ὅσοις ἂν ῥίγος γένηται, τούτοις ὀξύτατος ὁ πυρετὸς ἐκλάμπει; καὶ οὐχὶ ὅπως ἰσχυρός, ἀλλὰ καὶ παυόμενος δι' ὀλίγου, καὶ ἄλλως τὰ πολλὰ ἀσινήσκει καὶ ὅσον ἂν χρόνον παρῆ διάθερμος; καὶ διεξιὼν διὰ παντὸς τελευτᾷ ἐς τοὺς πόδας μάλιστα, οὐπὲρ τὸ ῥίγος καὶ ἡ ψῦξις νηνικωτάτη καὶ ἐπὶ πλείον ἐνεχρόνισεν: πάλιν τε ὅταν ἰδρώσῃ τε καὶ ἀπαλλαγῇ ὁ πυρετός, πολὺ μᾶλλον διέψυξε ἢ εἰ μὴ ἔλαβε τὴν ἀρχήν. ὧ οὖν διὰ τάχους οὕτω παραγίνεται τὸ ἐναντιώτατόν τε καὶ ἀφαιρεόμενον τὴν δύναμιν ἀπὸ τούτομάτου, τί ἂν ἀπὸ τούτου μέγα ἢ δεινὸν γένοιτο; ἢ τί δεῖ πολλῆς ἐπὶ τούτῳ βοηθείης;

17. Εἴποι ἂν τις: ἀλλ' οἱ πυρεταίνοντες τοῖσι καύσοισί τε καὶ περιπνευμονίησι καὶ ἄλλοισι ἰσχυροῖσι νοσήμασι οὐ ταχέως ἐκ τῆς θερμῆς ἀπαλλάσσονται, οὐδὲ πάρεστιν ἐνταῦθα ἔτι τὸ θερμὸν ἢ τὸ ψυχρόν. ἐγὼ δὲ μοι τοῦτο μέγιστον τεκμήριον ἡγεῦμαι εἶναι, ὅτι οὐ διὰ τὸ θερμὸν ἀπλῶς πυρεταίνουσιν οἱ ἄνθρωποι, οὐδὲ τοῦτο εἶη τὸ αἴτιον τῆς κακώσιος μῦνον, ἀλλ' ἔστι καὶ πικρὸν καὶ θερμὸν τὸ αὐτό, καὶ ὄξυ καὶ θερμὸν, καὶ ἄλμυρόν τε καὶ θερμὸν, καὶ ἄλλα μυρία, καὶ πάλιν γε ψυχρόν μετὰ δυναμίῳν ἐτέρων. τὰ μὲν οὖν λυμαινόμενα ταῦτ' ἐστί: συμπάρεστι δὲ καὶ τὸ θερμὸν, ῥώμης μὲν ἔχον ὅσον τὸ ἡγεύμενον καὶ παροξυνόμενον καὶ αὐξόμενον ἅμα ἐκείνω, 55 δύναμιν δὲ οὐδεμίαν πλείω τῆς προσηκούσης.

18. Δῆλα δὲ ταῦτα ὅτι ὧδε ἔχει ἐπὶ τῶνδε τῶν σημείων: πρῶτον μὲν ἐπὶ τὰ φανερώτερα, ὧν πάντες ἔμπειροι πολλάκις ἐσμέν τε καὶ ἐσόμεθα. τοῦτο μὲν γάρ, ὅσοις ἂν ἡμέων κόρυζα ἐγγένηται καὶ ῥεῦμα κινηθῇ διὰ τῶν ῥινῶν, τοῦτο ὡς τὸ πολὺ δριμύτερον τοῦ πρότερον γινομένου τε καὶ ἰόντος ἐκ τῶν ῥινῶν καθ' ἐκάστην ἡμέρην καὶ οἰδεῖν μὲν ποιεῖ τὴν ῥίνα καὶ συγκαίει θερμὴν τε καὶ διάπυρον ἐσχάτως, ἣν δὴ τὴν χειρὰ πρὸς φέρης: κῆν πλείω χρόνον παρῆ, καὶ ἐξελκοῦται τὸ χωρίον ἄσαρκόν τε καὶ σκληρὸν ἕον. παύεται δὲ πῶς τὸ καῦμα ἐκ τῆς ῥινός, οὐχ ὅταν τὸ ῥεῦμα γένηται καὶ ἡ φλεγμονὴ ἦ, ἀλλ' ἐπειδὴν παχύτερόν τε καὶ ἥσσον δριμύ ῥέη, πέπον καὶ μεμιγμένον μᾶλλον τοῦ πρότερον γινομένου, τότε δὲ ἦδη καὶ τὸ καῦμα πέπαυται. ἀλλ' οἷσι δὲ ὑπὸ ψύχους φανερώς αὐτοῦ μόνου γίνεται μηδενὸς ἄλλου συμπαραγενομένου, πᾶσι δὲ ἡ αὐτὴ ἀπαλλαγὴ, ἐκ μὲν τῆς ψύξιος διαθερμανθῆναι, ἐκ δὲ τοῦ καύματος διαψυχθῆναι, καὶ ταῦτα ταχέως παραγίνεται καὶ πέψιος οὐδεμιῆς προσδεῖται. τὰ δ' ἄλλα πάντα, ὅσα διὰ χυμῶν δριμύτητος καὶ ἀκρησίας, φημὶ ἔγωγε γίνεσθαι τὸν αὐτὸν τρόπον καὶ ἀποκαθίστασθαι πεφθέντα καὶ κρηθέντα.

19. Ὅσα τε αὐτὴ ἐπὶ τοὺς ὀφθαλμοὺς τρέπεται τῶν ῥευμάτων, ἰσχυρὰς καὶ παντοίας

δριμύτητος ἔχοντα, ἔλκοϊ μὲν βλέφαρα, κατεσθίει δ' ἐνίων γνάθους τε καὶ τὰ ὑπὸ τοῖσι ὀφθαλμοῖσι, ἐφ' ὃ τι ἂν ἐπιρρυῖ, ρήγνυσι δὲ καὶ διεσθίει τὸν ἀμφὶ τὴν ὄψιν χιτῶνα. ὀδύναι δὲ καὶ καῦμα καὶ φλογμὸς ἔσχατος κατέχει μέχρι τινός, μέχρι ἂν τὰ ρεύματα πεφθῇ καὶ γένηται παχύτερα καὶ λήμη ἀπ' αὐτῶν ἦ. τὸ δὲ πεφθῆναι γίνεται ἐκ τοῦ μιχθῆναι καὶ κρηθῆναι ἀλλήλοισι καὶ συνεψηθῆναι. τοῦτο δέ, ὅσα ἐς τὴν φάρυγγα, ἀφ' ὧν βράγχοι γίνονται καὶ συνάγχει, ἐρυσσιπέλατά τε καὶ περιπνευμονίαι, πάντα ταῦτα τὸ μὲν πρῶτον ἀλμυρά τε καὶ ὑγρὰ καὶ δριμέα ἀφίει, καὶ ἐν τοῖσι τοιούτοις ἔρρωται τὰ νοσήματα. ὅταν δὲ παχύτερα καὶ πεπαίτερα γένηται καὶ πάσης δριμύτητος ἀπηλλαγμένα, τότε ἤδη καὶ οἱ πυρετοὶ παύονται καὶ τᾶλλα τὰ λυπέοντα τὸν ἄνθρωπον. δεῖ δὲ δήπου ταῦτα αἷτια ἐκάστου ἡγεῖσθαι εἶναι, ὧν παρεόντων μὲν τοιοῦτο τρόπον γίνεσθαι ἀνάγκη, μεταβαλλόντων δὲ ἐς ἄλλην κρῆσιν παύεσθαι. ὅποσα οὖν ἀπ' αὐτῆς τῆς θέρμης εἰλικρινέος ἢ ψύξιος γίνεται καὶ μὴ μετέχει ἄλλης δυνάμιος μηδεμιῆς, οὕτω παύοιτο ἂν, ὅταν μεταβάλλῃ ἐκ τοῦ θερμοῦ ἐς τὸ ψυχρὸν καὶ ἐκ τοῦ ψυχροῦ ἐς τὸ θερμόν. μεταβάλλει δὲ ὄνπερ προεῖρηταί μοι τρόπον. ἔτι τοίνυν τᾶλλα ὅσα κακοπαθεῖ ὁ ἄνθρωπος πάντα ἀπὸ δυνάμιων γίνεται. τοῦτο μὲν γάρ, ὅταν πικρότης τις ἀποχυθῇ, ἦν δὴ χολὴν ξανθὴν καλέομεν, οἷαι ἄσαι καὶ καύματα καὶ ἀδυναμίαι κατέχουσιν: ἀπαλλασσόμενοι δὲ τούτου, ἐνίοτε καὶ καθαιρόμενοι, ἢ αὐτόματοι ἢ ὑπὸ φαρμάκου, ἦν ἐν καιρῷ τι αὐτῶν γίνηται, φανερῶς καὶ τῶν πόνων καὶ τῆς θέρμης ἀπαλλάσσονται. ὅσον δ' ἂν χρόνον ταῦτα μετέωρα ἦ καὶ ἄπεπτα καὶ ἄκρητα, μηχανὴ οὐδεμία οὔτε τῶν πόνων παύεσθαι οὔτε τῶν πυρετῶν. καὶ ὅσοισι δὲ ὀξύτητες προσίστανται δριμεῖαί τε καὶ ἰώδεες, οἷαι λύσσαι καὶ δῆξιες σπλάγχμων καὶ θώρηκος καὶ ἀπορίη: οὐ παύεται τι τούτου πρότερον, πρὶν ἢ ἀποκαθαρθῆ τε καὶ καταστορεσθῆ καὶ μιχθῆ τοῖσιν ἄλλοισιν: πέσσεσθαι δὲ καὶ μεταβάλλειν καὶ λεπτύνεσθαι τε καὶ παχύνεσθαι ἐς χυμῶν εἶδος δι' ἄλλων εἰδέων καὶ παντοίων-διὸ καὶ κρίσεις καὶ ἀριθμοὶ τῶν χρόνων ἐν τοῖσι τοιούτοις μέγα δύνανται — πάντων δὴ τούτων ἥκιστα προσήκει θερμῷ ἢ ψυχρῷ πάσχειν: οὔτε γὰρ ἂν τοῦτό γε σαπεῖη οὔτε παχυνθεῖη. τί γὰρ αὐτὸ φήσωμεν εἶναι; κρήσιας αὐτῶν ἄλλην πρὸς ἄλληλα ἐχούσας δύνανται. ἐπεὶ ἄλλω γε οὐδενὶ τὸ θερμὸν μιχθὲν παύσεται τῆς θέρμης ἢ τῷ ψυχρῷ οὐδέ γε τὸ ψυχρὸν ἢ τῷ θερμῷ. τὰ δὲ ἄλλα πάντα τὰ περὶ τὸν ἄνθρωπον, ὅσω ἂν πλείοσι μίσηται, τοσοῦτω ἠπιώτερα καὶ βελτίω. πάντων δὲ ἄριστα διάκειται ὁ ἄνθρωπος, ὅταν πᾶνπέσσηται καὶ ἐν ἡσυχίῃ ἦ, μηδεμίαν δύνανται ἰδίην ἀποδεικνύμενον, περὶ οὗ ἡγεῦμαι ἐπιδεδεῖχθαι.

20. Λέγουσι δὲ τινες ἰητροὶ καὶ σοφισταί, ὡς οὐκ εἶη δυνατὸν ἰητρικὴν εἰδέναι ὅστις μὴ οἶδεν ὃ τί ἐστὶν ἄνθρωπος. ἀλλὰ τοῦτο δεῖ καταμαθεῖν τὸν μέλλοντα ὀρθῶς θεραπεύσειν τοὺς ἀνθρώπους. τείνει δὲ αὐτοῖς ὁ λόγος ἐς φιλοσοφίην, καθάπερ Ἐμπεδοκλῆς ἢ ἄλλοι οἱ περὶ φύσιος γεγράφασιν ἐξ ἀρχῆς ὃ τί ἐστὶν

ἄνθρωπος, καὶ ὅπως ἐγένετο πρῶτον καὶ ὀπόθεν συνεπάγη. ἐγὼ δὲ τοῦτο μὲν, ὅσα τινὶ εἴρηται ἢ σοφιστῆ ἢ ἰητρῷ ἢ γέγραπται περὶ φύσιος, ἧσσον νομίζω τῆ ἰητρικῆ τέχνῃ προσήκειν ἢ τῆ γραφικῆ. νομίζω δὲ περὶ φύσιος γνῶναί τι σαφὲς οὐδαμῶθεν ἄλλοθεν εἶναι ἢ ἐξ ἰητρικῆς: τοῦτο δὲ οἷόν τε καταμαθεῖν, ὅταν αὐτὴν τις τὴν ἰητρικὴν ὀρθῶς περιλάβῃ: μέχρι δὲ τούτου πολλοῦ μοι δοκεῖ δεῖν: λέγω δὲ ταύτην τὴν ἱστορίην εἰδέναί, ἄνθρωπος τί ἐστὶν καὶ δι' οἴας αἰτίας γίνεται καὶ τᾶλλα ἀκριβέως. ἐπεὶ τοῦτό γέ μοι δοκεῖ ἀναγκαῖον εἶναι ἰητρῷ περὶ φύσιος εἰδέναί καὶ πάνυ σπουδάσαι ὡς εἴσεται, εἴπερ τι μέλλει τῶν δεόντων ποιήσῃ, ὃ τί τέ ἐστὶν ἄνθρωπος πρὸς τὰ ἐσθιόμενά τε καὶ πινόμενα καὶ ὃ τι πρὸς τὰ ἄλλα ἐπιτηδεύματα, καὶ ὃ τι ἀφ' ἐκάστου ἐκάστῳ συμβήσεται, καὶ μὴ ἀπλῶς οὕτως: πονηρόν ἐστὶν βρῶμα τυρός. πόνον γὰρ παρέχει τῷ πληρωθέντι αὐτοῦ, ἀλλὰ τίνα τε πόνον καὶ διὰ τί καὶ τίνι τῶν ἐν τῷ ἀνθρώπῳ ἐνεόντων ἀνεπιτήδειον. ἔστι γὰρ καὶ ἄλλα πολλὰ βρώματα καὶ πόματα πονηρά, ἃ διατίθησι τὸν ἄνθρωπον οὐ τὸν αὐτὸν τρόπον. οὕτως οὖν μοι ἔστω οἶον: οἶνος ἄκρητος πολλὸς ποθεῖς διατίθησί πως τὸν ἄνθρωπον: καὶ πάντες ἂν οἱ εἰδότες τοῦτο γνοίησαν, ὅτι αὕτη δύναμις οἴνου καὶ αὐτὸς αἴτιος: καὶ οἷσί γε τῶν ἐν τῷ ἀνθρώπῳ τοῦτο δύναται μάλιστα, οἶδαμεν. τοιαύτην δὲ βούλομαι ἀληθεῖν καὶ περὶ τῶν ἄλλων φανῆναι. τυρός γάρ, ἐπειδὴ τούτῳ σημείῳ ἐχρησάμην, οὐ πάντας ἀνθρώπους ὁμοίως λυμαίνεται, ἀλλ' εἰσὶν οἵτινες αὐτοῦ πληρούμενοι οὐδ' ὅτιοῦν βλάπτονται, ἀλλὰ καὶ ἰσχύν, οἷσιν ἂν συμφέρη, θαυμασίως παρέχεται. εἰσὶ δ' οἱ χαλεπῶς ἀπαλλάσσουσι. διαφέρουσιν οὖν τούτων αἱ φύσιες. διαφέρουσιν δὲ κατὰ τοῦτο, ὅπερ ἐν τῷ σώματι ἔνεστι πολέμιον τυρῷ καὶ ὑπὸ τούτου ἐγείρεται τε καὶ κινεῖται: οἷς ὁ τοιοῦτος χυμὸς τυγχάνει πλείων ἐνεῶν καὶ μᾶλλον ἐνδυναστεύων ἐν τῷ σώματι, τούτους μᾶλλον καὶ κακοπαθεῖν εἰκός. εἰ δὲ πάσῃ τῆ ἀνθρωπίνῃ φύσει ἦν κακόν, πάντας ἂν ἐλυμήνατο. ταῦτα δὲ εἴ τις εἰδείη, οὐκ ἂν πάσχοι τάδε.

21. Ἐν τῆσιν ἀνακομιδῆσιν τῆσιν ἐκ τῶν νόσων, ἔτι δὲ καὶ ἐν τῆσιν νόσοισι τῆσιν μακρῆσιν γίνονται πολλαὶ συνταράξεις, αἱ μὲν ἀπὸ τωτομάτου, αἱ δὲ καὶ ἀπὸ τῶν προσενηχθέντων τῶν τυχόντων. οἶδα δὲ τοὺς πολλοὺς ἰητρούς, ὥσπερ τοὺς ιδιώτας, ἦν τύχῳσι περὶ τὴν ἡμέρην ταύτην τι κεκαιουργηκότες, ἢ λουσάμενοι ἢ περιπατήσαντες ἢ φαγόντες τι ἕτεροῖον, ταῦτα δὲ πάντα βελτίῳ προσενηνεγμένα ἢ μὴ, οὐδὲν ἧσσον τὴν αἰτίην τούτων τινὶ ἀνατιθέντας καὶ τὸ μὲν αἴτιον ἀγνοεῦντας, τὸ δὲ συμφορώτατον, ἦν οὕτω τύχη, ἀφαιρέοντας. δεῖ δὲ οὐ, ἀλλ' εἰδέναί, τί λουτρὸν ἀκαίρως προσγενόμενον ἐργάσεται ἢ τί κόπος. οὐδέποτε γὰρ ἢ αὐτὴ κακοπάθεια τούτων οὐδετέρου, οὐδέ γε ἀπὸ πληρώσιος οὐδ' ἀπὸ βρώματος τοίου ἢ τοίου. ὅστις οὖν ταῦτα μὴ εἴσεται ὡς ἕκαστα ἔχει πρὸς τὸν ἄνθρωπον, οὔτε γινώσκειν τὰ γινόμενα ἀπ' αὐτῶν δυνησεται οὔτε χρῆσθαι ὀρθῶς.

22. Δεῖν δέ μοι δοκεῖ καὶ ταῦτα εἰδέναι, ὅσα τῷ ἀνθρώπῳ παθήματα ἀπὸ δυναμίων γίνεται καὶ ὅσα ἀπὸ σχημάτων. λέγω δέ τι τοιοῦτον, δύναμιν μὲν εἶναι τῶν χυμῶν τὰς ἀκρότητάς τε καὶ ἰσχύον, σχήματα δὲ λέγω ὅσα ἔνεστιν ἐν τῷ ἀνθρώπῳ, τὰ μὲν κοιλὰ τε καὶ ἐξ εὐρέος ἐς στενὸν συνηγμένα, τὰ δὲ καὶ ἐκπεπταμένα, τὰ δὲ στερεὰ τε καὶ στρογγύλα, τὰ δὲ πλατέα τε καὶ ἐπικρεμάμενα, τὰ δὲ διατεταμένα, τὰ δὲ μακρὰ, τὰ δὲ πυκνὰ, τὰ δὲ μανὰ τε καὶ τεθηλότα, τὰ δὲ σπογοειδέα τε καὶ ἀραιά. τοῦτο μὲν οὖν, ἐλκύσαι ἐφ' ἐωυτὸ καὶ ἐπισπάσασθαι ὑγρότητα ἐκ τοῦ ἄλλου σώματος, πότερον τὰ κοιλὰ τε καὶ ἐκπεπταμένα ἢ τὰ στερεὰ τε καὶ στρογγύλα ἢ τὰ κοιλὰ τε καὶ ἐς στενὸν ἐξ εὐρέος συνηγμένα δύναται ἂν μάλιστα; οἶμαι μὲν τὰ τοιαῦτα, τὰ ἐς στενὸν συνηγμένα ἐκ κοίλου τε καὶ εὐρέος. καταμανθάνειν δὲ δεῖ ταῦτα ἔξωθεν ἐκ τῶν φανερῶν. τοῦτο μὲν γάρ, τῷ στόματι κεχηγῶς ὑγρὸν οὐδὲν ἀνασπάσεις: προμυλλήνας δὲ καὶ συστείλας, πιέσας τε τὰ χεῖλα καὶ ἔπειτεν αὐλὸν προσθέμενος ῥηϊδίως ἀνασπάσαις ἂν ὅ τι ἐθέλοις. τοῦτο δέ, αἱ σικύαι προσβαλλόμεναι ἐξ εὐρέος ἐς στενώτερον συνηγμένα πρὸς τοῦτο τετέχνηται, πρὸς τὸ ἔλκειν ἐκ τῆς σαρκὸς καὶ ἐπισπᾶσθαι, ἄλλα τε πολλὰ τοιουτότροπα. τῶν δὲ ἔσω φύσει τοῦ ἀνθρώπου σχῆμα τοιοῦτον κύστις τε καὶ κεφαλή, καὶ ὑστέρη γυναιξίν: καὶ φανερῶς ταῦτα μάλιστα ἔλκει καὶ πλήρεά ἐστιν ἐπάκτου ὑγρότητος αἰεὶ. τὰ δὲ κοῖλα καὶ ἐκπεπταμένα ἐπεσρυνεῖσαν μὲν ὑγρότητα μάλιστα δέξαιτο πάντων, ἐπισπᾶσαιτο δ' ἂν οὐχ ὁμοίως. τὰ δὲ γε στερεὰ καὶ στρογγύλα οὐτ' ἂν ἐπισπᾶσαιτο οὐτ' ἂν ἐπεσρυνεῖσαν δέξαιτο: περιολισθάνοι τε γὰρ καὶ οὐκ ἔχοι ἔδρην, ἐφ' ἧς μένοι. τὰ δὲ σπογοειδέα τε καὶ ἀραιά, οἶον σπλήν τε καὶ πνεύμων καὶ μαζοί, προσκαθεζόμενα μάλιστα ἀναπίνοι καὶ σκληρυνθείη ἂν καὶ αὐξηθείη ὑγρότητος προσγενομένης ταῦτα μάλιστα. οὐ γὰρ ἂν ὥσπερ ἐν κοιλίῃ, ἐν ἧ τὸ ὑγρὸν, ἔξω τε περιέχει αὐτὴ ἢ κοιλίῃ, ἐξαλίζοιτ' ἂν καθ' ἐκάστην ἡμέρην, ἀλλ' ὅταν πίῃ καὶ δέξηται αὐτὸ ἐς ἐωυτὸ τὸ ὑγρὸν, τὰ κενὰ καὶ ἀραιὰ ἐπληρώθη καὶ τὰ σμικρὰ πάντη καὶ ἀντὶ μαλθακοῦ τε καὶ ἀραιοῦ σκληρὸς τε καὶ πυκνὸς ἐγένετο καὶ οὐτ' ἐκπέσσει οὐτ' ἀφήσει. ταῦτα δὲ πάσχει διὰ τὴν φύσιν τοῦ σχήματος. ὅσα δὲ φῦσάν τε καὶ ἀνειλήματα ἀπεργάζεται ἐν τῷ σώματι, προσήκει ἐν μὲν τοῖσι κοίλοισι καὶ εὐρυχώροισι, οἶον κοιλίῃ τε καὶ θώρηκι, ψόφον τε καὶ πάταγον ἐμποιεῖν. ὅτε γὰρ ἂν μὴ ἀποπληρώση οὕτως ὥστε στῆναι, ἀλλ' ἔχη μεταβολὰς τε καὶ κινήσιας, ἀνάγκη ὑπ' αὐτῶν ψόφον καὶ καταφανέας κινήσιας γίνεσθαι. ὅσα δὲ σαρκώδεά τε καὶ μαλθακά, ἐν τοῖσι τοιούτοις νάρκη τε καὶ πληρώματα οἷα ἐν τοῖσι ἀποπληγεῖσι γίνεται. ὅταν δ' ἐγκυρήσῃ πλατεῖ τε καὶ ἀντικειμένῳ, καὶ πρὸς αὐτὸ ἀντιπέση, καὶ φύσει τοῦτο τύχη ἐὼν μῆτε ἰσχυρόν, ὥστε δύνασθαι ἀνέχεσθαι τὴν βίην καὶ μηδὲν κακὸν παθεῖν, μῆτε μαλθακὸν τε καὶ ἀραιόν, ὥστ' ἐκδέξασθαι τε καὶ ὑπεῖξαι, ἀπαλὸν δὲ καὶ τεθηλὸς καὶ ἔναιμον καὶ πυκνόν, οἶον ἦπαρ, διὰ μὲν τὴν πυκνότητα καὶ πλατύτητα ἀνθέστηκέ τε καὶ οὐχ ὑπεῖκει, φῦσα δ' ἐπισχομένη αὐξεται τε καὶ ἰσχυροτέρη γίνεται καὶ ὀρμᾷ μάλιστα πρὸς τὸ

ἀντιπαῖον. διὰ δὲ τὴν ἀπαλότητα καὶ τὴν ἐναιμότητα οὐ δύναται ἄνευ πόνων εἶναι, καὶ διὰ ταύτας τὰς προφάσις ὀδύνη τε ὀξύταται καὶ πυκνόταται πρὸς τοῦτο τὸ χωρίον γίνονται ἐμπυήματά τε καὶ φύματα πλεῖστα. γίνεται δὲ καὶ ὑπὸ φρένας ἰσχυρῶς, ἥσσον δὲ πολλόν. διάτασις μὲν γὰρ φρενῶν πλατεΐη καὶ ἀντικειμένη, φύσις δὲ νευρωδεστέρα τε καὶ ἰσχυροτέρα, διὸ ἥσσον ἐπώδυνά ἐστιν. γίνεται δὲ καὶ περὶ ταῦτα καὶ πόνοι καὶ φύματα.

23. Πολλὰ δὲ καὶ ἄλλα καὶ ἔσω καὶ ἔξω τοῦ σώματος εἶδεα σχημάτων, ἃ μεγάλα ἀλλήλων διαφέρει πρὸς τὰ παθήματα καὶ νοσέοντι καὶ ὑγιαίνοντι, οἷον κεφαλῆ σμικραὶ ἢ μεγάλαι, τράχηλοι λεπτοὶ ἢ παχέες, μακροὶ ἢ βραχέες, κοιλίαι μακραι ἢ στρογγύλαι, θώρηκος καὶ πλευρῶν πλατύτητες ἢ στενότητες, ἄλλα μυρία, ἃ δεῖ πάντα εἰδέναι ἢ διαφέρει, ὅπως τὰ αἷτια ἐκάστων εἰδὼς ὀρθῶς φυλάσσηται:

24. Περὶ δὲ δυναμίων χυμῶν αὐτῶν τε ἕκαστος ὃ τι δύναται ποιεῖν τὸν ἄνθρωπον ἐσκέφθαι, ὥσπερ καὶ πρότερον εἴρηται, καὶ τὴν συγγένειαν ὡς ἔχουσι πρὸς ἀλλήλους. λέγω δὲ τὸ τοιοῦτον: εἰ γλυκὺς χυμὸς ἐὼν μεταβάλλοι εἰς ἄλλο εἶδος, μὴ ἀπὸ συγκρήσιος, ἀλλὰ αὐτὸς ἐξιστάμενος, ποῖός τις ἂν πρῶτος γένοιτο, πικρὸς ἢ ἀλμυρὸς ἢ στρυφνὸς ἢ ὀξύς; οἶμαι μὲν, ὀξύς. ὁ ἄρα ὀξύς χυμὸς ἀνεπιτήδειος προσφέρειν ἂν τῶν λοιπῶν εἶη μάλιστα, εἴπερ ὁ γλυκὺς τῶν γεπάντων ἀνεπιτηδείοτατος. οὕτως εἴ τις δύναιτο ζητέων ἔξωθεν ἐπιτυγχάνειν, καὶ δύναιτο ἂν πάντων ἐκλέγεσθαι αἰεὶ τὸ βέλτιστον. βέλτιστον δὲ ἐστὶ αἰεὶ τὸ προσωτάτω τοῦ ἀνεπιτηδείου ἀπέχον.



## PROGNOSTICS - Προγνωστικόν

1. Τὸν ἰητρὸν δοκέει μοι ἄριστον εἶναι πρόνοιαν ἐπιτηδεύειν προγιγνώσκων γὰρ καὶ προλέγων παρὰ τοῖσι νοσέουσι τά τε παρεόντα καὶ τὰ προγεγονότα καὶ τὰ μέλλοντα ἔσεσθαι, ὁκόσα τε παραλείπουσιν οἱ ἀσθενέοντες ἐκδιηγούμενος, πιστεύοιτ' ἂν μᾶλλον γινώσκειν τὰ τῶν νοσεόντων πρήγματα, ὥστε τολμᾶν ἐπιτρέπειν τοὺς ἀνθρώπους σφέας ἐωυτοὺς τῷ ἰητρῷ. Τὴν δὲ θεραπείην ἄριστα ἂν ποιέοιτο, προειδῶς τὰ ἐσόμενα ἐκ τῶν παρεόντων παθημάτων. Ὑγιέας μὲν γὰρ ποιέειν ἅπαντας τοὺς ἀσθενέοντας ἀδύνατον τοῦτο γὰρ τοῦ προγιγνώσκειν τὰ μέλλοντα ἀποβήσεσθαι κρέσσον ἂν ἦν ἐπειδὴ δὲ οἱ ἄνθρωποι ἀποθνήσκουσιν, οἱ μὲν πρὶν ἢ καλέσαι τὸν ἰητρὸν, ὑπὸ τῆς ἰσχύος τῆς νούσου, οἱ δὲ

καὶ ἐσκαλεσάμενοι παραχρῆμα ἐτελεύτησαν, οἱ μὲν ἡμέρην μίην ζήσαντες, οἱ δὲ ὀλίγῳ πλέονα χρόνον πρὶν ἢ τὸν ἰητρὸν τῇ τέχνῃ πρὸς ἕκαστον νοσημα ἀνταγωνίσασθαι γινῶναι οὖν χρῆ τῶν παθέων τῶν τοιουτέων τὰς φύσεις, ὁκόσον ὑπὲρ τὴν δύναμιν εἰσι τῶν σωμάτων, ἅμα δὲ καὶ εἴ τι θεῖον ἔνεστιν ἐν τῆσι νούσοισι, καὶ τουτέου τὴν πρόνοιαν ἐκμανθάνειν. Οὕτω γὰρ ἂν θαυμάζοιτό τε δικαίως, καὶ ἰητρὸς ἀγαθὸς ἂν εἴη καὶ γὰρ οὐς οἶόν τε περιγίγνεσθαι, τούτους ἔτι μᾶλλον δύναιτ' ἂν ὀρθῶς διαφυλάσσειν, ἐκ πλείονος χρόνου προβουλευόμενος πρὸς ἕκαστα, καὶ τοὺς ἀποθανομένους τε καὶ σωθησομένους προγιγνώσκων καὶ προαγορεύων ἀναίτιος ἂν εἴη.

2. Σκέπτεσθαι δὲ χρῆ ὧδε ἐν τοῖσιν ὀξέσι νουσήμασι πρῶτον μὲν τὸ πρόσωπον τοῦ νοσέοντος, εἰ ὁμοίον ἐστι τοῖσι τῶν ὑγιαινόντων, μάλιστα δὲ, εἰ αὐτὸ ἐωυτέω. Οὕτω γὰρ ἂν εἴη

ἄριστον, τὸ δ' ἐναντιώτατον τοῦ ὁμοίου, δεινότατον. Εἴη δ' ἂν τὸ τοιόνδε ρίς ὀξεῖα, ὀφθαλμοὶ κοῖλοι, κρόταφοι ξυμπεπτωκότες, ὧτα ψυχρὰ καὶ ξυνεσταλμένα, καὶ οἱ λοβοὶ τῶν ὠτων ἀπεστραμμένοι, καὶ τὸ δέρμα τὸ περὶ τὸ μέτωπον σκληρόν τε καὶ περιτεταμένον καὶ καρφαλέον ἐόν. Καὶ τὸ χρῶμα τοῦ ξύμπαντος προσώπου χλωρόν τε ἢ καὶ μέλαν ἐόν, καὶ πελιόν, ἢ μολιβδῶδες. Ἦν μὲν οὖν ἐν ἀρχῇ τῆς νούσου τὸ πρόσωπον τοιοῦτον ἦ, καὶ μήπω οἶόν τε ἦ τοῖσιν ἄλλοισι σημείοισι ξυντεκμαίρεσθαι, ἐπανερέσθαι χρῆ, μὴ ἡγρύπνησεν ὁ νοσέων, ἢ τὰ τῆς κοιλῆς ἐξυγρασμένα ἢ ἰσχυρῶς, ἢ λιμῶδές τι ἔχη αὐτόν κῆν μὲν τι τουτέων ὁμολογῆ, ἦσσαν νομίζειν δεινὸν εἶναι κρίνεται δὲ τὰ τοιαῦτα ἐν ἡμέρῃ τε καὶ νυκτὶ, ἦν διὰ ταῦτας τὰς προφάσεις τὸ πρόσωπον τοιοῦτον ἦ. Ἦν δὲ μηδὲν τουτέων φῆ εἶναι, μηδὲ ἐν τῷ χρόνῳ τῷ προειρημένῳ καταστῆ, εἰδέναι

χρή ἐγγὺς ἐόντα τοῦ θανάτου. Ἦν δὲ καὶ παλαιότερου ἐόντος τοῦ νουσήματος, ἢ τριταίου

ἢ τεταρταίου, τὸ πρόσωπον τοιοῦτον ἦ, περὶ τουτέων ἐπανε ρέσθαι, περὶ ὧν καὶ πρότερον ἐκέλευσα, καὶ τᾶλλα σημεῖα σκέπτεσθαι, τὰ τε ἐν τῷ ζύμπαντι προσώπῳ, τὰ τε ἐν τῷ σώματι, καὶ τὰ ἐν τοῖσιν ὀφθαλμοῖσιν. Ἦν γὰρ τὴν αὐγὴν φεύγωσιν, ἢ δακρύωσιν ἀπροαιρέτως, ἢ διαστρέφονται, ἢ ὁ ἕτερος τοῦ ἑτέρου ἐλάσσων γίγνηται, ἢ τὰ λευκὰ ἐρυθρὰ ἴσχωσιν, ἢ πελιὰ, ἢ φλέβια μέλανα ἐν ἐωυτέοισιν ἔχωσιν, ἢ λῆμαι φαίνονται περὶ τὰς ὄψιας, ἢ καὶ ἐναιωρεύμενοι, ἢ ἐξίσχοντες, ἢ ἔγκοιλοι ἰσχυρῶς γιγνόμενοι, ἢ αἱ ὄψιες αὐχμῶσαι καὶ ἀλαμπέες, ἢ τὸ χρῶμα τοῦ ζύμπαντος προσώπου ἠλλοιωμένον ἦ, ταῦτα πάντα κακὰ νομίζειν καὶ ὀλέθρια εἶναι. Σκοπέειν δὲ χρή καὶ τὰς ὑποφάσιας τῶν ὀφθαλμῶν ἐν τοῖσιν ὕπνοισιν ἣν γὰρ τι ὑποφαίνεται τοῦ λευκοῦ, τῶν βλεφάρων

μὴ ξυμβαλλομένων, μὴ ἐκ διαρροίης ἢ φαρμακοποσίης ἐόντι, ἢ μὴ εἰθισμένῳ οὔτῳ καθεύδειν, φλαῦρον τὸ σημεῖον καὶ θανατῶδες λίην. Ἦν δὲ καμπύλον γένηται, ἢ πελιὸν, ἢ ὠχρὸν βλέφαρον, ἢ χειλος, ἢ ῥίς, μετὰ τινος τῶν ἄλλων σημείων, εἰδέναι χρή ἐγγὺς ἐόντα θανάτου θανατῶδες δὲ καὶ χεῖλα ἀπολυόμενα, καὶ κρεμάμενα, καὶ ψυχρὰ, καὶ ἔκλευκα γιγνόμενα.

3. Κεκλιμένον δὲ χρή καταλαμβάνεσθαι τὸν νοσέοντα ὑπὸ τοῦ ἰητροῦ ἐπὶ τὸ πλευρὸν τὸ δεξιὸν, ἢ τὸ ἀριστερὸν, καὶ τὰς χεῖρας καὶ τὸν τράχηλον καὶ τὰ σκέλεα ὀλίγον ἐπικεκαμμένα ἔχοντα, καὶ τὸ ζύμπαν σῶμα ὑγρὸν κείμενον οὔτῳ γὰρ καὶ οἱ πλεῖστοι τῶν ὀγκαινόντων κατακλίνονται ἄρισται δὲ εἰσι τῶν κατακλίσιων αἱ ὁμοιαὶ τῆσι τῶν ὑγαινόντων. Ὑπτιον δὲ κέεσθαι καὶ τὰς χεῖρας καὶ τὸν τράχηλον καὶ τὰ σκέλεα ἐκτεταμένα ἔχοντα, ἦσσον ἀγαθόν. Εἰ δὲ καὶ προπετὴς γένοιτο, καὶ καταρρέοι ἐπὶ τῆς κλίνης ἐπὶ τοὺς πόδας, δεινότερόν ἐστιν. Εἰ δὲ καὶ γυμνοὺς τοὺς πόδας εὐρίσκοιτο ἔχων, μὴ θερμοὺς κάρτα ἐόντας, καὶ τὰς χεῖρας, καὶ

τὸν τράχηλον, καὶ τὰ σκέλεα ἀνωμάλως διερριμμένα καὶ γυμνὰ, κακὸν ἄλυσμὸν γὰρ σημαίνει. Θανατῶδες δὲ καὶ τὸ κεχηνότα καθεύδειν αἰεὶ, καὶ τὰ σκέλεα ὑπτίου κειμένου ξυγκεκαμμένα εἶναι ἰσχυρῶς, καὶ διαπεπλεγμένα. Ἐπὶ γαστέρα δὲ κέεσθαι ᾧ μὴ ξύνηθές ἐστι καὶ ὑγαιίνοντι οὔτῳ κοιμᾶσθαι, παραφροσύνην τινὰ σημαίνει, ἢ ὀδύνην τῶν ἀμφὶ τὴν κοιλίην τόπων. Ἀνακαθίζειν δὲ βούλεσθαι τὸν νοσέοντα, τῆς νούσου ἀκμαζούσης, πονηρὸν μὲν ἐν πᾶσι τοῖσιν ὀξέσι νουσήμασι, κάκιστον δὲ ἐν τοῖσι περιπλευμονικοῖσιν. Ὀδόντας δὲ πρίειν ἐν πυρετοῖσιν, ὀκόσοισι μὴ ξύνηθές ἐστιν ἀπὸ παιδῶν, μανικὸν καὶ θανατῶδες, ἀλλὰ προλέγειν ἀπ' ἀμφοῖν κίνδυνον ἐσόμενον ἣν δὲ καὶ παραφρονέων

το πο, ὀλέθριον γίνεταί καρτα ἤδη. Ἐλκος δὲ ἦν τε καὶ προγεγονὸς τύχη ἔχων, ἦν τε καὶ ἐν τῇ νούσῳ γένηται, καταμανθάνειν δεῖ ἦν γὰρ μέλλη ἀπόλλυσθαι ὁ ἄνθρωπος, πρὸ τοῦ θανάτου πελιδνόν τε καὶ ξηρόν ἔσται, ἢ ὠχρόν τε καὶ ξηρόν.

4. Περὶ δὲ χειρῶν φορῆς τάδε γινώσκω ὀκόσοισιν ἐν πυρετοῖσιν ὀξέσιν, ἢ ἐν περιπλευμονίησιν, ἢ ἐν φρενίτισιν, ἢ ἐν κεφαλαλγίησι, πρὸ τοῦ προσώπου φερομένας καὶ θηρευούσας διὰ κενῆς, καὶ ἀποκαρφολογεούσας, καὶ κροκίδας ἀπὸ τῶν ἱματίων ἀποτιλλούσας, καὶ ἀπὸ τοῦ τοίχου ἄχυρα ἀποσπώσας, πάσα ναι κακὰς καὶ θανατώδεις.

5. Πνεῦμα δὲ πυκνὸν μὲν ἐὼν πόνον σημαίνει ἢ φλεγμονὴ ἐν τοῖσιν ὑπὲρ τῶν φρενῶν χωρίοισι μέγα δὲ ἀναπνεόμενον καὶ διὰ πολλοῦ χρόνου παραφροσύνην δηλοῖ ψυχρὸν δὲ ἐκπνεόμενον. τῶν ῥινῶν καὶ τοῦ στόματος ὀλέθριον κάρτα ἤδη γίνεταί. Εὐπνοίαν δὲ χρὴ νομίζειν κάρτα μεγάλην δύναμιν ἔχειν ἐς σωτηρίην ἅπασιν τοῖσιν ὀξέσιν νουσήμασιν, ὅσα ζῦν πυρετοῖσιν ἔστι καὶ τεσσαράκοντα ἡμέρησι κρίνεταί.

6. Οἱ δὲ ἰδρώτες ἀριστοὶ μὲν εἰσιν ἐν πᾶσιν τοῖσιν ὀξέσιν νουσήμασιν,

ὀκόσοι ἐν ἡμέρησί τε κρισίμοισι γίνονται καὶ τελείως τὸν πυρετὸν ἀπαλλάσσουσιν. Ἄγαθοι δὲ καὶ ὀκόσοι διὰ παντὸς τοῦ σώματος γινόμενοι ἀπέδειξαν τὸν ἄνθρωπον εὐπετέστερον φέροντα τὸ νόσημα. Οἱ δ' ἂν μὴ τοιοῦτόν τι ἐξεργάζωνται, οὐ λυσιτελέες. Κάκιστοι δὲ οἱ ψυχροὶ τε καὶ μῶνον περὶ τὴν κεφαλὴν τε καὶ τὸ πρόσωπον γινόμενοι καὶ τὸν αὐχένα οὗτοι γὰρ ζῦν μὲν ὀξεῖ πυρετῷ θάνατον προσημαίνουσι, ζῦν δὲ πρηϋτέρῳ, μῆκος νόσου. Καὶ οἱ κατὰ πᾶν τὸ σῶμα ὡσαύτως γινόμενοι τοῖσιν περὶ τὴν κεφαλὴν οἱ δὲ κεγχροειδέες καὶ μῶνον περὶ τὸν τράχηλον γινόμενοι πονηροί. Οἱ δὲ μετὰ σταλαγμῶν καὶ ἀτιμίζοντες, ἀγαθοί. Κατανοεῖν δὲ χρὴ τὸ ζύνολον τῶν ἰδρώτων. Γίνονται γὰρ οἱ μὲν δι' ἔκλυσιν σωμάτων, οἱ δὲ διὰ ζυντονίην φλεγμονῆς.

7. Ὑποχόνδριον δὲ ἄριστον μὲν ἀνώδυνόν τε ἐὼν καὶ μαλθακόν

καὶ ὀμαλόν, καὶ ἐπὶ δεξιὰ καὶ ἐπ' ἀριστερά. Φλεγμαῖνον δὲ, ἢ ὀδύνην παρέχον, ἢ ἐντεταμένον, ἢ ἀνωμάλως διακείμενα τὰ δεξιὰ πρὸς τὰ ἀριστερά, ταῦτα πάντα φυλάσσεσθαι χρὴ. Εἰ δὲ καὶ σφυγμὸς ἐνεῖη ἐν τῷ ὑποχονδρίῳ, θόρυβον σημαίνει, ἢ παραφροσύνην ἀλλὰ τοὺς ὀφθαλμοὺς ἐπικατιδεῖν τῶν τοιουτέων ἦν γὰρ αἱ ὄψεις πυκνὰ κινέωνται, μαῖναι τούτους ἐλπίς. Οἴδημα δὲ ἐν τῷ ὑποχονδρίῳ σκληρόν τε ἐὼν καὶ ἐπώδυνον, κάκιστον μὲν, εἰ παρ' ἅπαν εἴη τὸ ὑποχόνδριον εἰ δὲ καὶ εἴη ἐν τῷ ἐτέρῳ μέρει, ἀκινδυνότερόν ἐστιν ἐν τῷ ἐπ'

ἀριστερά. Σημαίνει δὲ τὰ τοιαῦτα οἰδήματα ἐν ἀρχῇ μὲν θάνατον ὀλιγοχρόνιον ἔσεσθαι ἢ δὲ ὑπερβάλλη εἴκοσιν ἡμέρας ὃ τε πυρετὸς ἔχων καὶ τὸ οἶδημα μὴ καθιστάμενον, ἔς διαπύησιν τρέπεται. Γίγνεται δὲ τουτέοισιν ἐν τῇ πρώτῃ περιόδῳ καὶ αἷματος ῥῆξις ἐκ τῶν ῥινῶν, καὶ

κάρτα ὠφελέει ἀλλ' ἐπανερωτᾶν χρῆ, εἰ τὴν κεφαλὴν ἀλγέουσιν, ἢ ἀμβλυωπέουσιν ἢ γὰρ τι τοιοῦτον εἴη, ἐνταῦθα ἂν ῥέποι. Μᾶλλον δὲ τοῖσι νεωτέροισι πέντε καὶ τριήκοντα ἔτεων, τὴν τοῦ αἵματος ῥῆξιν προσδέχεσθαι χρῆ. Τὰ δὲ μαλθακὰ τῶν οἰδημάτων καὶ ἀνώδυνα καὶ τῷ δακτύλῳ ὑπέκοντα χρονωτέρας τὰς κρίσις ποιέεται, καὶ ἥσσον ἐκείνων δεινότερά ἐστιν. Εἰ δὲ ὑπερβάλλοι ἐξήκοντα ἡμέρας ὃ τε πυρετὸς ἔχων καὶ τὸ οἶδημα μὴ καθιστάμενον, ἔμπυον ἔσεσθαι σημαίνει καὶ τοῦτο, καὶ τὸ ἐν τῇ ἄλλῃ κοιλίῃ κατὰ τούτο. Ὀκόσα μὲν οὖν ἐπώδυνά τε ἐστὶ καὶ σκληρὰ καὶ μεγάλα, σημαίνει κίνδυνον θανάτου ὀλιγοχρονίου Ὀκόσα δὲ μαλθακὰ τε καὶ ἀνώδυνα καὶ τῷ δακτύλῳ πιεζόμενα ὑπέκκει, χρονωτέρα ἐκείνων. Τὰς δὲ ἀποστάσις ἥσσον τὰ ἐν τῇ γαστρὶ οἰδήματα ποιέεται τῶν ἐν τοῖσιν ὑποχονδρίοισιν, ἥκιστα δὲ τὰ ὑποκάτω τοῦ ὀμφαλοῦ ἔς ἐπιπύησιν τρέπεται αἷματος δὲ

Ῥῆξιν ἐκ τῶν ἄνω τόπων μάλιστα προσδέχεσθαι. Ἀπάντων δὲ χρῆ τῶν οἰδημάτων χρονωζόντων περὶ ταῦτα τὰ χωρία ὑποσκέπτεσθαι τὰς ἐκπύησις. Τὰ δὲ διαπυήματα ὧδε δεῖ σκέπτεσθαι τὰ ἐντεῦθεν Ὀκόσα μὲν ἔξω τρέπεται, ἀριστα ἐστὶ, μικρὰ τε ἔόντα, καὶ ὡς μάλιστα ἐκκλίνοντα ἔξω, καὶ ἐς ὄξυ ἀποκυρτούμενα τὰ δὲ μεγάλα τε ἔόντα καὶ πλατέα, καὶ ἥκιστα ἐς ὄξυ ἀποκορυφούμενα, κάκιστα ὄσα δὲ ἔσω ῥήγνυται, ἀριστα ἐστὶν, ἃ μὴδὲν τῷ ἔξω χωρίῳ ἐπικοινωνέει, ἀλλ' ἔστι προσεσταλμένα τε καὶ ἀνώδυνα καὶ πᾶν τὸ ἔξω χωρίον ὁμόχροον φαίνεται. Τὸ δὲ πῦον ἀριστον λευκόν τε εἶναι καὶ ὀμαλὸν καὶ λεῖον καὶ ὡς ἥκιστα δυσῶδες τὸ δὲ ἐναντίον τουτέου κάκιστον.

8. Οἱ δὲ ὑδρωπεῖς οἱ ἐκ τῶν ὀξέων νοσημάτων πάντες κακοὶ οὔτε γὰρ τοῦ πυρὸς ἀπαλλάσσουσιν, ἐπώδυνοί τε εἰσι κάρτα καὶ θανατώδεις. Ἄρχονται δὲ οἱ πλεῖστοι μὲν ἀπὸ τῶν κενεῶνων καὶ τῆς ὀσφύος, οἱ δὲ ἀπὸ τοῦ ἥπατος οἷσι μὲν οὖν ἀπὸ τῶν κενεῶνων καὶ τῆς ὀσφύος αἱ ἀρχαὶ γίνονται, οἱ τε πόδες οἰδέουσι, καὶ διάρροια πολυχρόνιον ἔχουσιν, οὔτε τὰς ὀδύνας λύουσαι τὰς ἐκ τῶν κενεῶνων καὶ τῆς ὀσφύος, οὔτε τὴν γαστέρα λαπάσσουσαι

Ὀκόσοισι δὲ ἀπὸ τοῦ ἥπατος ὑδρωπεῖς γίνονται, βῆξαι τε θυμὸς τούτοις ἐγγίγνεται, καὶ οὐδέν τι ἀποπτύουσιν ἄξιον λόγου, καὶ οἱ πόδες οἰδέουσι, καὶ ἡ γαστήρ οὐ διαχωρέει, εἰ μὴ σκληρὰ τε καὶ πρὸς ἀνάγκην, καὶ περὶ τὴν κοιλίην γίγνεται οἰδήματα, τὰ μὲν ἐπὶ δεξιᾷ, τὰ δ' ἐπ' ἀριστερὰ, ἰστάμενά τε καὶ

καταπαυόμενα.

9. Κεφαλή δὲ καὶ χεῖρες καὶ πόδες ψυχρὰ ἔοντα κακόν, τῆς τε κοιλίης καὶ τῶν πλευρῶν θερμῶν ἔοντων. Ἄριστον δὲ καὶ ὅλον τὸ σῶμα θερμόν τε ἔόν καὶ μαλθακόν ὁμαλῶς. Στρέφεσθαι δὲ χρή ῥηϊδίως τὸν ἀλγεῦντα, καὶ ἐν τοῖσι μετεωρισμοῖσιν ἐλαφρὸν εἶναι εἰ δὲ βαρὺς ἔων φαίνοιτο καὶ τὸ ἄλλο σῶμα καὶ τὰς χεῖρας καὶ τοὺς πόδας, ἐπικινδυνότερον. Εἰ δὲ πρὸς τῷ βάρει καὶ οἱ ὄνυχες καὶ οἱ δάκτυλοι πελιδνοὶ γίνονται, προσδόκιμος ὁ θάνατος παραυτικά μελαινόμενοι δὲ παντελῶς οἱ δάκτυλοι καὶ οἱ πόδες ἦσσαν ὀλέθριοι τῶν πελιδνῶν εἰσὶν ἀλλὰ καὶ τᾶλλα σημεῖα σκέπτεσθαι χρή ἦν γὰρ εὐπετέως φέρων φαίνεται τὸ κακόν, καὶ ἄλλο τι τῶν περιεστικῶν πρὸς τουτέοισι τοῖσι σημείοισιν

ὑποδεικνύη, τὸ νόσημα ἐς ἀπόστασιν τραπήναι ἐλπὶς, ὥστε τὸν μὲν ἄνθρωπον περιγενέσθαι, τὰ δὲ μελανθέντα τοῦ σώματος ἀποπεσεῖν. Ὁρχιες δὲ καὶ αἰδοῖα ἀνεσπασμένα πόνους ἰσχυροὺς σημαίνει καὶ κίνδυνον θανατώδεα.

10. Περί δὲ ὕπνων, ὡσπερ κατὰ φύσιν ζύνηθες ἡμῖν ἐστὶ, τὴν μὲν ἡμέρην ἐγρηγορέναι χρή, τὴν δὲ νύκτα καθεύδειν. Ἦν δὲ εἴη τοῦτο μεταβεβλημένον, κάκιον ἤκιστα δ' ἂν λυπέοιτο, εἰ κοιμῶτο τὸ πρωῖ ἐς τὸ τρίτον μέρος τῆς ἡμέρης οἱ δὲ ἀπὸ τουτέου τοῦ χρόνου ὕπνοι πονηρότεροί εἰσι κάκιστον δὲ μὴ κοιμᾶσθαι, μήτε τῆς νυκτὸς, μήτε τῆς ἡμέρης ἢ γὰρ ὑπὸ ὀδύνης τε καὶ πόνων ἀγρυπνέειν ἢ παραφρονήσειν ἔπεται ἀπὸ τουτέου τοῦ σημείου.

11. Διαχώρημα δὲ ἐστὶν ἄριστον τὸ μαλθακόν τε καὶ ξυνεστηκός, καὶ τὴν ὥρην ἦνπερ καὶ ὑγιαίνουντι ὑπεχώρει, πλῆθος δὲ πρὸς λόγον τῶν ἐσιόντων τοιαύτης γὰρ ἐούσης τῆς διεξόδου, ἢ κάτω κοιλίη ὑγιαίνοι ἂν. Εἰ δὲ εἴη ὑγρὸν τὸ διαχώρημα, ξυμφέρει μήτε τρύζειν, μήτε πυκνόν τι εἶναι, καὶ κατ' ὀλίγον

ὑποχωρέειν κοπιῶν γὰρ ὁ ἄνθρωπος ὑπὸ τῆς ξυνεχέος ἐξαναστάσιος ἀγρυπνοίη ἂν εἰ δὲ ἀθρόον πολλάκις διαχωρέει, κίνδυνος λειποθυμῆσαι. Ἀλλὰ χρή κατὰ τὸ πλῆθος τῶν ἐσιόντων ἢ δις ἢ τρίς τῆς ἡμέρης ὑποχωρέειν, καὶ τῆς νυκτὸς ἅπαξ, πλείονα δ' ἐπὶ τὸ πρωῖ, ὡσπερ ζύνηθές ἐστὶ τῷ ἀνθρώπῳ. Παχύνεσθαι δὲ χρή τὸ διαχώρημα, ἰούσης πρὸς κρίσιν τῆς νόσου. Ὑπόπυρρον δὲ ἔστω καὶ μὴ λίην δυσῶδες. Ἐπιθήδειον δὲ καὶ ἔλμινθας στρογγύλας διεξιέναι μετὰ τοῦ διαχωρήματος, πρὸς κρίσιν ἰούσης τῆς νόσου. Δεῖ δὲ ἐν παντὶ τῷ νοσήματι λαπαρὴν τὴν κοιλίην εἶναι καὶ εὐογκόν. Ὑδαρές δὲ κάρτα, ἢ λευκόν, ἢ χλωρόν, ἢ ἐρυθρόν ἰσχυρῶς, ἢ ἀφρῶδες διαχωρέειν, πονηρὰ ταῦτα πάντα. Ἔτι δὲ πονηρόν, καὶ σμικρόν τε ἔόν, καὶ γλισχρόν, καὶ

λευκόν, καὶ ὑπόγλωρον, καὶ λεῖον. Τουτέων δὲ θανατωδέστερα ἂν εἶη τὰ μέλανα, ἢ λιπαρά, ἢ πελιὰ, ἢ ἰώδεα, ἢ κάκοδμα. Τὰ δὲ ποικίλα, χρονιώτερα μὲν τουτέων, ὀλέθρια δὲ οὐδὲν ἦσσαν ἔστι δὲ τὰ τοιαῦτα ξυσματώδεα, καὶ χολώδεα, καὶ πρασοειδέα, καὶ μέλανα, ποτὲ μὲν ὁμοῦ διεξερχόμενα ἀλλήλοισι, ποτὲ δὲ κατὰ μέρος. Φῦσαν δὲ ἄνευ ψόφου καὶ περδήσιος διεξιέναι ἄριστον κρέσσον δὲ καὶ ξὺν ψόφῳ διελθεῖν ἢ αὐτοῦ ἀνειλέεσθαι καὶ οὕτω διελθοῦσα σημαίνει ἢ πονέειν τι τὸν ἄνθρωπον, ἢ παραφρονέειν, ἢν μὴ ἐκὼν ὁ ἄνθρωπος οὕτω τὴν ἄφεισιν τῆς φύσης ποιήσεται. Τοὺς δὲ ἐκ τῶν ὑποχονδρίων πόνους τε καὶ κυρτώματα, ἢν ἢ νεαρά καὶ μὴ ξὺν φλεγμονῇ, λύει βορβορυγμὸς ἐγγενόμενος ἐν τῷ ὑποχονδρίῳ, καὶ μάλιστα μὲν διεξιὼν ξὺν κόπρῳ τε καὶ οὖρῳ καὶ φύσει, ἢν δὲ μὴ, καὶ αὐτὸς δὴ περαιωθεὶς ὠφέλεει ὠφέλεει δὲ καὶ ὑποκαταβάς ἐς τὰ κάτω χωρία.

12. Τὸ δὲ οὔρον ἄριστόν ἐστιν, ὅταν ἢ λευκὴ τε ἢ ὑπόστασις, καὶ λείη, καὶ ὁμαλὴ παρὰ πάντα τὸν χρόνον, ἔστ' ἂν κριθῇ ἢ

νοῦσος σημαίνει γὰρ ἀσφάλειάν τε καὶ νούσημα ὀλιγοχρόνιον ἔσεσθαι. Εἰ δὲ διαλείποι, καὶ ποτὲ μὲν καθαρὸν οὐρέοιτο, ποτὲ δὲ ὑφίσταται τὸ λευκὸν καὶ λεῖον, χρονιώτερη γίγνεται ἢ νοῦσος καὶ ἦσσαν ἀσφαλῆς. Εἰ δὲ εἶη τό τε οὔρον ὑπέρυθρον καὶ ἢ ὑπόστασις αὐτέου ὁμοίη καὶ λείη, πολυχρονιώτερον μὲν τοῦτο τοῦ πρώτου γίγνεται, σωτήριον δὲ κάρτα. Κριμνώδεες δὲ ἐν τοῖσιν οὔροισιν αἱ ὑποστάσιες, πονηραὶ τουτέων δὲ εἰσι κακίους αἱ πεταλώδεες αἱ λευκαὶ δὲ καὶ λεπταὶ, κάρτα φλαῦραι τουτέων δ' ἔτι κακίους εἰσὶν αἱ πιτυρώδεες. Νεφέλαι δὲ ἐμφερόμεναι τοῖσιν οὔροισι, λευκαὶ μὲν ἀγαθαί, μέλαιναι δὲ φλαῦραι. Ἔστ' ἂν δὲ πυρρὸν τε εἶη τὸ οὔρον καὶ λεπτὸν, σημαίνει τὸ νούσημα ἄπεπτον εἶναι ἢν δὲ καὶ πούλυχρόνιον εἶη τοιοῦτον ἔον, κίνδυνος μὴ οὐ δυνήσεται ὁ ἄνθρωπος διαρκέσαι, ἔστ' ἂν πεπανθῇ ἢ νοῦσος.

Θανατωδέστερα δὲ τῶν οὔρων τὰ τε δυσώδεα καὶ ὑδατώδεα καὶ μέλανα καὶ παχέα ἔστι δὲ τοῖσι μὲν ἀνδράσι καὶ τῆσι γυναιξὶ τὰ μέλανα τῶν οὔρων κάκιστα, τοῖσι δὲ παιδίοισι τὰ ὑδατώδεα. Ὀκόσοι δ' ἂν οὔρα λεπτὰ καὶ ὠμὰ οὐρέωσι πούλυν χρόνον, ἢν τᾶλλα ὡς περιεσομένοισι σημεῖα ἢ, τουτέοισιν ἀπόστασιν δεῖ προσδέχεσθαι ἐς τὰ κάτω τῶν φρενῶν χωρία. Καὶ τὰς λιπαρότητας δὲ τὰς ἄνω ἐφισταμένας ἀραχνοειδέας μέμφεσθαι ξυντήξιος γὰρ σημεῖα. Σκοπέειν δὲ χρὴ τῶν οὔρων, ἐν οἷσιν αἱ νεφέλαι, ἢν τε ἄνω, ἢν τε κάτω ἔωσι, καὶ τὰ χρώματα ὀκοῖα ἴσχουσι, καὶ τὰς μὲν κάτω φερομένας ξὺν τοῖσι χρώμασιν, οἷσιν εἴρηται, ἀγαθὰς εἶναι νομίζειν καὶ ἐπαινέειν, τὰς δὲ ἄνω ξὺν τοῖσι χρώμασιν, οἷσιν εἴρηται, κακὰς εἶναι, καὶ μέμφεσθαι. Μὴ ἐξαπατάτω δέ σε, ἢν γε ἢ κύστις τι νούσημα ἔχουσα τῶν οὔρων τὰ τοιαῦτα ἀποδιδῶ οὐ γὰρ τοῦ ὅλου σώματος

σημεῖόν ἐστιν, ἀλλ' αὐτῆς καθ' ἑωυτῆς.

13. Ἔμετος δὲ ὠφελιμώτατος ὁ φλέγματος καὶ χολῆς ζυμμεμιγμένων

ὅτι μάλιστα καὶ μὴ παχὺς κάρτα, μηδὲ πολὺς ἐμεέσθω οἱ γὰρ ἄκρητέστεροι κακίους εἰσίν. Εἰ δὲ εἶη τὸ ἐμεύμενον πρασοειδές, ἢ πελιόν, ἢ μέλαν, ὅ τι ἂν ἦ τουτέων τῶν χρωμάτων, νομίζειν χρή πονηρὸν εἶναι εἰ δὲ καὶ πάντα τὰ χρώματα ὁ αὐτὸς ἄνθρωπος ἐμέοι, κάρτα ὀλέθριον τοῦτο γίνεταί τάχιστον δὲ θάνατον σημαίνει τὸ πελιόν τῶν ἐμεσμάτων, εἰ ὅζει δυσώδες. Πᾶσαι δὲ αἱ ὑπόσαπροι καὶ δυσώδες ὄσμαί κακαὶ ἐπὶ πᾶσι τοῖσιν ἐμεομένοισιν.

14. Πτύελον χρή ἐπὶ πᾶσι τοῖσιν ἀλγήμασι τοῖσι περὶ τὸν πλεύμονα καὶ τὰς πλευρὰς ταχέως τε ἀναπτύεσθαι καὶ εὐπετέως, ζυμμεμιγμένον τε φαίνεσθαι τὸ ξανθὸν ἰσχυρῶς τῷ πτύελῳ. Εἰ γὰρ πολλῷ ὕστερον μετὰ τὴν ἀρχὴν τῆς ὀδύνης ἀναπτύοιτο, ξανθὸν ἐὸν, ἢ πυρρὸν, ἢ πολλὴν βῆχα παρέχον, ἢ μὴ ἰσχυρῶς ζυμμεμιγμένον, κάκιον γίνεταί τό τε γὰρ ξανθὸν

ἄκρητον ἐὸν κινδυνῶδες, τὸ δὲ λευκὸν καὶ γλίσχρον καὶ στρογγύλον ἀλυσιτελέες. Κακὸν δὲ καὶ τὸ χλωρὸν ἐὸν κάρτα καὶ τὸ ἀφρῶδες εἰ δὲ εἶη οὕτως ἄκρητον ὥστε καὶ μέλαν φαίνεσθαι, δεινότερόν ἐστι τοῦτο ἐκείνων κακὸν δὲ καὶ ἦν μηδὲν ἀνακαθαίρηται, μηδὲ προῖη ὁ πλεύμων, ἀλλὰ πλήρης ἐὼν ζέη ἐν τῇ φάρυγγι. Κορύζας δὲ καὶ παρμούς ἐπὶ πᾶσι τοῖσι περὶ τὸν πλεύμονα νουσήμασι προγεγονέναι, ἢ ἐπιγενέσθαι, κακὸν ἀλλ' ἐν τοῖσιν ἄλλοισι νουσήμασι τοῖσι θανατωδεστάτοισιν οἱ παρμοὶ λυσιτελέουσιν. Αἷματι δὲ ζυμμεμιγμένον μὴ πολλῷ πτύελον ξανθὸν ἐν τοῖσι περιπλευμονικοῖσιν, ἐν ἀρχῇ μὲν τῆς νόσου πτυόμενον, περιεστικὸν καὶ κάρτα ὠφελεεὶ ἐβδομαίῳ δὲ ἐόντι καὶ παλαιότερῳ ἦσσαν ἀσφαλές. Πάντα δὲ πτύελα πονηρά ἐστιν ὀκόσα ἂν τὴν ὀδύνην μὴ παύη. Κάκιστα δὲ τὰ μέλανα, ὡς διαγέγραπται. Τὰ δὲ παύοντα ὀδύνην, πάντων ἀμείνω ἀναπτύόμενα.

15. Ὀκόσα δὲ τῶν ἀλγημάτων ἐκ τουτέων τῶν χωρίων μὴ

παύηται, μήτε πρὸς τὰς τῶν πτυέλων καθάρσιας, μήτε πρὸς τὴν τῆς κοιλίης ἐκκόπρωσιν, μήτε πρὸς τὰς φλεβοτομίας τε καὶ φαρμακείας καὶ διαίτας, εἰδέναι δεῖ ἐκπυήσοντα. Τῶν δὲ ἐκπυημάτων ὀκόσα μὲν ἔτι χολῶδες ἐόντος τοῦ πτυέλου ἐκπύσκειται, ὀλέθρια κάρτα, ἦν τε ἐν μέρει τὸ χολῶδες τῷ πύῳ ἀναπτύοιτο, ἦν τε ὁμοῦ μάλιστα δὲ, ἦν ἄρξῃται χωρέειν τὸ ἐμπύημα ἀπὸ τουτέου τοῦ πτυέλου, ἐβδομαίου ἐόντος τοῦ νουσήματος. Ἐλπίς δὲ τὸν τὰ τοιαῦτα πτύοντα ἀποθανεῖσθαι τεσσαρεσκαίδεκαταῖον, ἦν μὴ τι αὐτέῳ

ἐπιγένηται ἀγαθόν. Ἔστι δὲ τὰ μὲν ἀγαθὰ τάδε εὐπετέως φέρειν τὸ νοῦσημα, εὐπνοον εἶναι, τῆς ὀδύνης ἀπηλλάχθαι, τὸ τε πτύελον ῥηϊδίως ἀναβήσσειν, τὸ τε σῶμα ὁμαλῶς φαίνεσθαι θερμόν τε εἶναι καὶ μαλθακόν, καὶ δίψαν μὴ ἔχειν, οὐρά τε καὶ διαχωρήματα καὶ ὕπνους καὶ ἰδρῶτας, ὡς διαγέγραπται ἕκαστα εἶναι ἀγαθὰ, ἐπιγίγνεσθαι οὕτω μὲν γὰρ ἀπάντων τουτέων ἐπιγιγνομένων, οὐκ ἂν ἀποθάνοι ὁ ἄνθρωπος ἢν δὲ τὰ μὲν τοι αὐτέων ἐπιγίγνοιτο, τὰ δὲ μὴ, οὐ πλείονα χρόνον

ζήσας ἢ τεσσαρεσκαίδεκα ἡμέρας, ἀπόλοιτ' ἂν ὁ ἄνθρωπος. Κακὰ δὲ τὰ ἐναντία τουτέων, ἦγουν δυσπετέως φέρειν τὴν νοῦσον, πνεῦμα μέγα καὶ πυκνὸν εἶναι, τὴν ὀδύνην μὴ παύεσθαι, τὸ πτύελον μόλις ἀναβήσσειν, διψῆν κάρτα, τὸ τε σῶμα ὑπὸ πυρὸς ἀνωμάλως ἔχεσθαι, καὶ τὴν μὲν κοιλίην καὶ τὰς πλευρὰς θερμὰς εἶναι ἰσχυρῶς, τὸ δὲ μέτωπον καὶ τὰς χεῖρας καὶ τοὺς πόδας ψυχροῦς, οὐρα δὲ καὶ διαχωρήματα καὶ ὕπνους καὶ ἰδρῶτας, ὡς διαγέγραπται ἕκαστα εἶναι κακὰ, ἐπιγίγνεσθαι οὕτω γὰρ εἰ ἐπιγένοιτό τι τῷ πτυέλῳ τουτέῳ, ἀπόλοιτο ἂν ὁ ἄνθρωπος πρὶν ἢ ἐς τὰς τεσσαρεσκαίδεκα ἡμέρας ἀφικέσθαι, ἢ ἐναταῖος, ἢ ἑνδεκαταῖος. Οὕτως οὖν ξυμβάλλεσθαι χρὴ, ὡς τοῦ πτυέλου τουτέου θανατώδεις ἐόντος μάλα, καὶ οὐ φθάνοντος ἐς τὰς τεσσαρεσκαίδεκα ἡμέρας. Τὰ δὲ ἐπιγεγόμενα κακὰ τε καὶ ἀγαθὰ ξυλλογιζόμενον ἐκ τουτέων χρὴ τὰς προρρήσιας προλέγειν οὕτω γὰρ ἂν τις ἀληθεύοι μάλιστα. Αἱ δὲ ἄλλαι ἐκπυήσεις ῥήγνυνται αἱ πλεῖστα, αἱ μὲν εἰκοσταῖαι, αἱ δὲ τριηκοσταῖαι, αἱ δὲ τεσσαρακονθήμεροι, αἱ δὲ πρὸς τὰς ἐξήκοντα ἡμέρας ἀφικνέονται.

16. Ἐπισκέπτεσθαι δὲ χρὴ τὴν ἀρχὴν τοῦ ἐμπυήματος ἔσεσθαι

λογιζόμενον ἀπὸ τῆς ἡμέρης ἧς τὸ πρῶτον ὁ ἄνθρωπος ἐπύρεξεν, ἢ εἴ ποτε αὐτὸν ῥῆγος ἔλαβε, καὶ εἰ φαίη ἀντὶ τῆς ὀδύνης αὐτέῳ βάρος γεγενῆσθαι ἐν τῷ τόπῳ ἐν ᾧ ἤλγεεν ταῦτα γὰρ ἐν ἀρχῆσι γίνεται τῶν ἐμπυημάτων. Ἐξ οὖν τουτέων τῶν χρόνων τὴν ῥῆξιν χρὴ προσδέχεσθαι τῶν ἐμπυημάτων ἔσεσθαι ἐς τοὺς χρόνους τοὺς προειρημένους. Εἰ δὲ εἴη τὸ ἐμπύημα ἐπὶ θάτερα μούνον, στρεφειν τε καὶ καταμανθάνειν χρὴ ἐπὶ τουτέοισι, μὴ τι ἔχη ἄλγημα ἐν τῷ ἐτέρῳ πλευρῷ καὶ ἦν θερμότερον ἢ τὸ ἕτερον τοῦ ἐτέρου, κατακλινομένου ἐπὶ τὸ ὑγιαῖνον πλευρὸν, ἐρωτᾶν εἴ τι αὐτέῳ δοκέει βαρὺ ἀποκρέμασθαι ἐκ τοῦ ἄνωθεν. Εἰ γὰρ εἴη τοῦτο, ἐπὶ θάτερόν ἐστι τὸ ἐμπύημα, ἐπὶ ὀκτοῖον ἂν πλευρὸν τὸ βάρος γίγνηται.

17. Τοὺς δὲ ξύμπαντας ἐμπύους γινώσκειν χρὴ τοισίδε τοῖσι σημείοισι. Πρῶτον μὲν, ὁ πυρετὸς οὐκ ἀφήσιν, ἀλλὰ τὴν μὲν ἡμέρην λεπτὸς ἴσχει, τὴν δὲ νύκτα πλείων, καὶ ἰδρῶτες



πολλοὶ ἐπιγίνονται, βῆξαι τε θυμὸς ἐγγίγνεται αὐτοῖσιν, καὶ ἀποπτύουσιν οὐδὲν ἄξιον λόγου, καὶ οἱ μὲν ὀφθαλμοὶ ἔκκοιλοι γίνονται, αἱ δὲ γνάθοι ἐρυθρήματα ἴσχουσι, καὶ οἱ μὲν ὄνυχες τῶν χειρῶν γρυποῦνται, οἱ δὲ δάκτυλοι θερμαίνονται, καὶ μάλιστα οἱ ἄκροι, καὶ ἐν τοῖσι ποσὶν οἰδήματα γίνονται, καὶ σιτίων οὐκ ἐπιθυμέουσι, καὶ φλύκταιναι γίνονται ἀνὰ τὸ σῶμα. Ὀκόσα μὲν οὖν ἐγγρονίζει τῶν ἐμπυημάτων, ἔχει τὰ σημεῖα ταῦτα, καὶ πιστεύειν αὐτέοισι χρὴ κάρτα ὀκόσα δὲ ὀλιγοχρόνιά ἐστι, τουτέοισιν ἐπισημαίνεται, ἣν τι ἐπιφαίνεται, οἷα καὶ τοῖσιν ἐν ἀρχῆσι γιγνομένοισιν, ἅμα δὲ καὶ ἣν τι δυσπνούστερος ἢ ὁ ἄνθρωπος. Τὰ δὲ ταχύτερον αὐτέων καὶ βραδύτερον ῥηγνύμενα τοισίδε γινώσκειν χρὴ ἣν μὲν ὁ πόνος ἐν ἀρχῆσι γίγνηται, καὶ ἡ δύσπνοια καὶ ἡ βῆξ καὶ ὁ πτυαλισμὸς διατείνῃ, ἐς τὰς εἴκοσιν ἡμέρας προσδέχεσθαι τὴν ῥῆξιν, ἢ καὶ ἔτι πρόσθεν ἣν δὲ ἡσυχαιότερος ὁ πόνος ἢ, καὶ τᾶλλα πάντα κατὰ λόγον, τουτέοισι προσδέχεσθαι τὴν

Ῥῆξιν ἐς ὕστερον γίνεσθαι δὲ ἀνάγκη καὶ πόνον καὶ δύσπνοιαν καὶ πτυαλισμὸν πρὸ τῆς τοῦ πύου ῥήξιος. Περιγίνονται δὲ τουτέων μάλιστα μὲν οὖς ἂν ἀφῆ ὁ πυρετὸς αὐθημερὸν μετὰ τὴν ῥῆξιν, καὶ σιτίων ταχέως ἐπιθυμέωσι, καὶ δίψης ἀπηλλαγμένοι ἔωσι, καὶ ἡ γαστήρ σμικρά τε καὶ ξυνεστηκότα ὑποχωρή, καὶ τὸ πῦον λευκὸν τε καὶ λεῖον καὶ ὁμόχροον ἢ καὶ φλέγματος ἀπηλλαγμένον, καὶ ἄτερ πόνου τε καὶ βηχὸς ἰσχυρῆς ἀνακαθαίρηται. Ἄριστα μὲν οὕτω καὶ τάχιστα ἀπαλλάσσουσιν ἣν δὲ μὴ, οἷσιν ἂν ἐγγυτάτω τουτέων γίγνηται. Απόλλυνται δὲ οὖς ἂν ὁ τε πυρετὸς μὴ ἀφῆ, ἢ δοκέων αὐτέους ἀφιέναι, αὐθις φαίνεται ἀναθερμαινόμενος, καὶ δίψαν μὲν ἔχωσι, σιτίων δὲ μὴ ἐπιθυμέωσι, καὶ ἡ κοιλίη ὑγρὴ ἢ, καὶ τὸ πῦον χλωρὸν ἢ πελιὸν πτύη, ἢ φλεγματοῦδες καὶ ἀφρῶδες ἣν ταῦτα πάντα γίγνηται, ἀπόλλυνται ὀκόσοισι δ' ἂν τουτέων τὰ μὲν ἐπιγένηται, τὰ δὲ μὴ, οἱ μὲν αὐτέων ἀπόλλυνται, οἱ δὲ ἐν πολλῷ χρόνῳ περιγίνονται.

Ἄλλ' ἐκ πάντων τῶν τεκμηρίων τῶν ἐόντων ἐν τουτέοισι σημαίνεσθαι, καὶ τοῖσιν ἄλλοισι πᾶσιν.

18. Ὀκόσοισι δὲ ἀποστάσεις γίνονται ἐκ τῶν περιπλευμονικῶν νοσημάτων παρὰ τὰ ὦτα, καὶ ἐκπτέουσιν, ἢ ἐς τὰ κάτω χωρία, καὶ συριγγοῦνται, οὗτοι περιγίνονται. Ἐπισκέπτεσθαι δὲ χρὴ τὰ τοιαῦτα ὧδε ἣν ὁ τε πυρετὸς ἔχη, καὶ ἡ ὀδύνη μὴ παύηται, καὶ τὸ πτύελον μὴ ἐκχωρή κατὰ λόγον, μηδὲ χολώδες αἱ τῆς κοιλίης διαχωρήσεις, μηδὲ εὐλυτοί τε καὶ ἄκρητοι γίνοιτο, καὶ μηδὲ τὸ οὖρον πουλύ τε κάρτα καὶ πολλήν

ὑπόστασιν ἔχον, ὑπηρετέηται δὲ πεοιστικῶς ὑπὸ τῶν λοιπῶν πάντων τῶν περιεστικῶν σημείων, τουτέοισι χρὴ τὰς τοιαύτας ἀποστάσεις ἐλπίζειν ἔσεσθαι.

Γίνονται δὲ αἱ μὲν ἐς τὰ κάτω χωρία, οἷσιν ἂν περὶ τὰ ὑποχόνδρια τοῦ φλέγματός τι ἐγγένηται αἱ δὲ ἄνω, οἷσι τὸ ὑποχόνδριον λαπαρόν τε καὶ ἀνώδυνον διατελέη, δύσπνοος δὲ τινα χρόνον γενόμενος παύσεται, ἄτερ φανερῆς προφάσιος ἄλλης. Αἱ δὲ ἀποστάσιες αἱ ἐς τὰ σκέλεα ἐν τῆσι περιπλευμονίησι τῆσιν ἰσχυρῆσί τε καὶ ἐπικινδύνοισι λυσιτελέες μὲν πᾶσαι, ἄριστα δὲ αἱ τοῦ πτυέλου ἐν μεταβολῇ ἐόντος γιγνόμεναι εἰ γὰρ τὸ οἶδημα καὶ ἡ ὀδύνη γίγνοιτο, τοῦ πτυέλου ἀντὶ ξανθοῦ πυώδους γενομένου καὶ ἐκχωρέοντος ἕξω, οὕτως ἂν ἀσφαλέστατα ὅ τε ἄνθρωπος περιγίγνοιτο, καὶ ἡ ἀπόστασις ἀνώδυνος τάχιστα παύσαιτο εἰ δὲ τὸ πτύελον μὴ ἐκχωρέοι καλῶς, μηδὲ τὸ οὔρον ὑπόστασιν ἀγαθὴν ἔχον φαίνοιτο, κίνδυνος χολὸν γενέσθαι τὸ

ἄρθρον ἢ πολλὰ πρήγματα παρασχεῖν. Ἦν δὲ ἀφανίζονται καὶ παλινδρομέωσιν αἱ ἀποστάσιες, τοῦ πτυλου μὴ ἐκχωρέοντος, καὶ τοῦ πυρετοῦ ἔχοντος, δεινὸν κίνδος γὰρ μὴ παραφρονήση καὶ ἀποθάνῃ ὁ ἄνθρωπος. Τῶν δὲ ἐμπύων τῶν ἐκ τῶν περιπλευμονικῶν οἱ γεραίτεροι μᾶλλον ἀπόλλυνται ἐκ δὲ τῶν ἄλλων ἐμπυημάτων οἱ νεώτεροι μᾶλλον ἀποθνήσκουσι. Ὀκόσοι δὲ τῶν

ἐμπύων καίονται ἢ τέμνονται, οἷσιν ἂν καθαρὸν μὲν το πῦον ἦ καὶ λευκὸν καὶ μὴ δυσῶδες, σώζονται οἷσι δὲ ὑφαιμόν τε καὶ βορβορῶδες, ἀπόλλυνται.

19. Αἱ δὲ ζῦν πυρετῶ γιγνόμεναι ὀδύνη περὶ τὴν ὀσφῦν τε καὶ τὰ κάτω χωρία, ἦν τῶν φρενῶν ἄπτωνται, τὰ κάτω ἐκλείπουσαι, ὀλέθρια κάρτα. Προσέχειν οὖν δεῖ τὸν νόον τοῖσιν ἄλλοισι σημείοισιν, ὡς ἦν τι καὶ τῶν ἄλλων σημείων ἐπιφαίνεται πονηρὸν, ἀνέλπιστος ὁ ἄνθρωπος ἦν δὲ, ἀναΐσσοντος τοῦ νουσήματος ὡς πρὸς τὰς φρένας, τᾶλλα σημεία μὴ πονηρὰ ἐπιγίγνηται, ἔμπυον ἔσεσθαι τοῦτον πολλαὶ ἐλπίδες.

Κύστιες δὲ σκληραὶ τε καὶ ἐπώδυνοι δειναὶ μὲν παντελῶς καὶ ὀλέθρια ὀλεθριώτεροι δὲ ὀκόσοι ζῦν πυρετῶ ζυνεχεῖ γίνονται καὶ γὰρ οἱ ἀπ' αὐτέων τῶν κύστιων πόνοι ἱκανοὶ ἀποκτεῖναι καὶ αἱ κοιλίαι οὐ διαχωρέουσιν ἐν τουτέῳ τῶ χρόνῳ, εἰ μὴ σκληρὰ τε καὶ πρὸς ἀνάγκην λύει δὲ οὔρον πυῶδις οὐρηθὲν, λευκὴν καὶ λείην ἔχον τὴν ὑπόστασιν. Ἦν δὲ μήτε

τὸ οὔρον μηδὲν ἐνδιδοίη, μήτε ἡ κύστις μαλάσσοιτο, ὅ τε πυρετος ζυνεχῆς ἦ, ἐν τῆσι πρώτῃσι περιόδοισι τοῦ νουσήματος ἐλπίς τὸν ἀλγέοντα ἀπολέσθαι. Ὁ δὲ τρόπος οὗτος ἄπτεται τῶν παιδίων μάλιστα τῶν ἑπταετέων, ἕως ἂν ἐς τὰ πεντεκαίδεκα ἔτεα γένωνται.

20. Οἱ δὲ πυρετοὶ κρίνονται ἐν τῆσιν αὐτέησιν ἡμέρησι τὸν ἀριθμὸν, ἐξ ὧν τε

περιγίγνονται οἱ ἄνθρωποι καὶ ἐξ ὧν ἀπόλλυνται. Οἷ τε γὰρ εὐηθέστατοι τῶν πυρετῶν καὶ ἐπὶ σημείων ἀσφαλεστάτων βεβῶτες τεταρταῖοι παύονται, ἢ πρόσθεν οἷ τε κακοηθέστατοι καὶ ἐπὶ σημείων δεινοτάτων γινόμενοι τεταρταῖοι κτείνουσιν, ἢ πρόσθεν. Ἡ μὲν οὖν πρώτη ἔφοδος αὐτέων οὕτω τελευτᾷ ἢ δὲ δευτέρῃ ἐς τὴν ἐβδόμην περιάγεται ἢ δὲ τρίτῃ ἐς τὴν ἑνδεκάτην ἢ δὲ τετάρτῃ ἐς τὴν τεσσαρεσκαίδεκάτην ἢ δὲ πέμπτῃ ἐς τὴν ἑπτακαίδεκάτην ἢ δὲ ἕκτῃ ἐς τὴν εἰκοστήν. Αὗται μὲν οὖν ἐκ τῶν ὀξυτάτων νοσημάτων διὰ τεσσάρων ἐς τὰς εἴκοσιν ἐκ προσθέσιος τελευτῶσιν. Οὐ δύναται δὲ ὄλησιν ἡμέρησιν οὐδὲν τουτέων

ἀριθμέσθαι ἀτρεκέως οὐδὲ γὰρ ὁ ἐνιαυτός τε καὶ οἱ μῆνες ὄλησιν ἡμέρησι πεφύκασιν ἀριθμέσθαι. Μετὰ δὲ ταῦτα ἐν τῷ αὐτέῳ τρόπῳ κατὰ τὴν αὐτέην πρόσθεσιν ἢ πρώτη περίοδος τεσσάρων καὶ τριήκονθ' ἡμερέων, ἢ δὲ δευτέρῃ τεσσαράκοντα ἡμερέων, ἢ δὲ τρίτῃ ἐξήκονθ' ἡμερέων. Τουτέων δ' ἐν ἀρχῆσιν ἐστιχαλεπώτατον διαγιγνώσκειν τὰ μέλλοντα ἐν πλείστῳ χρόνῳ κρίνεσθαι ὁμοιόταται γὰρ αἱ ἀρχαὶ εἰσιν αὐτέων ἀλλὰ χρὴ ἀπὸ τῆς πρώτης ἡμέρης ἐνθυμέσθαι, καὶ καθ' ἐκάστην τετράδα προστιθεμένην σκέπτεσθαι καὶ οὐ λήσεται ὅπῃ τρέψεται τὸ νόσημα. Γίνεται δὲ ἢ τῶν τεταρταίων κατάστασις ἐκ τοῦ τοιούτου κόσμου. Τὰ δὲ ἐν ἐλαχίστῳ χρόνῳ μέλλοντα κρίνεσθαι, εὐπετέστερα γινώσκεσθαι μέγιστα γὰρ τὰ διαφέροντα ἀπ' ἀρχῆς αὐτέων ἐστὶν οἱ μὲν γὰρ περιεσόμενοι εὐπνοοὶ τε καὶ ἀνώδυνοί εἰσι, καϊκοιμῶνται τὰς νύκτας, τὰ τε ἄλλασημεῖα ἔχουσιν ἀσφαλέστατα οἱ δὲ ἀπολούμενοι δύσπνοοι γίνονται, ἀλλοφάσσοντες, ἀγρυπνέοντες, τὰ τε ἄλλα σημεῖα κάκιστα ἔχοντες. Ὡς οὖν τουτέων οὕτω

γινομένων ξυμβάλλεσθαι χρὴ, κατὰ τε τὸν χρόνον, κατὰ τε τὴν πρόσθεσιν ἐκάστην ἐπὶ τὴν κρίσιν ἰόντων τῶν νοσημάτων. Κατὰ δὲ τὸν αὐτὸν λόγον καὶ τῆσι γυναιξίν αἱ κρίσεις ἐκ τῶν τόκων γίνονται.

21. Κεφαλῆς δὲ ὀδύνη ἰσχυραὶ τε καὶ ξυνεχές ξὺν πυρετῷ ἢν μὲν τι τῶν θανατωδέων σημείων προσγίνοιτο, ὀλέθριον κάρτα. Εἰ δὲ ἄτερ τῶν τοιούτων σημείων ἢ ὀδύνη ὑπερβάλλοι εἴκοσιν ἡμέρας, ὅ τε πυρετὸς ἔχοι, ὑποσκέπτεσθαι χρὴ αἵματος ῥῆξιν διὰ ῥινῶν, ἢ ἄλλην τινὰ ἀπόστασιν ἐς τὰ κάτω χωρία ἔστ' ἂν δὲ ἢ ὀδύνη ἢ νεαρὰ, προσδέχεσθαι χρὴ ὡσαύτως αἵματος ῥῆξιν διὰ ῥινῶν, ἢ ἐκπύησιν, ἄλλως τε ἢν ἢ ὀδύνη περὶ τοὺς κροτάφους καὶ τὸ μέτωπον ἢ μᾶλλον δὲ χρὴ προσδέχεσθαι τοῦ μὲν αἵματος τὴν ῥῆξιν τοῖσι νεωτέροισι πέντε καὶ τριήκοντα ἑτέων, τοῖσι δὲ γεραιτέροισι τὴν ἐκπύησιν.

22. Ὡτὸς δὲ ὀξείῃ ὀδύνη ξὺν πυρετῷ ξυνεχεῖ τε καὶ ἰσχυρῷ δεινὸν κίνδυνος γὰρ

παραφρονῆσαι τὸν ἄνθρωπον καὶ ἀπολέσθαι. Ὡς οὖν τουτέου τοῦ τόπου σφαλεροῦ ἐόντος, ταχέως δεῖ προσέχειν τὸν νόον τοῖσι σημείοισι πᾶσιν ἀπὸ τῆς πρώτης ἡμέρης. Ἀπόλλυνται δὲ οἱ μὲν νεώτεροι τῶν ἀνθρώπων ἑβδομαῖοι καὶ ἔτι θᾶσσον ὑπὸ τουτέου τοῦ νουσήματος οἱ δὲ γέροντες πολλῶ βραδύτερον οἱ τε γὰρ πυρετοὶ καὶ αἱ παραφροσύναι ἦσσαν αὐτέοισιν ἐπιγίνονται, καὶ τὰ ὄτα διὰ τοῦτο φθάνει ἐκπυῖσκεσθαι ἀλλὰ ταύτησι μὲν τῆσιν ἡλικίησιν ὑποστροφῶν τοῦ νουσήματος ἐπιγιγνώμεναι ἀποκτείνουσι τοὺς πλείστους. Οἱ δὲ νεώτεροι, πρὶν ἐκπυῖσαι τὸ οὔς, ἀπόλλυνται πλὴν ἀλλ' ἦν γε ῥυῆ πῦον λευκὸν ἐκ τοῦ ὠτός, ἐλπίς τῷ νεωτέρῳ περιγενέσθαι, ἦν γε καὶ ἄλλο τι αὐτέῳ ἐπιγένηται χρηστὸν σημεῖον.

23. Φάρυγξ δὲ ἐλκουμένη ζὺν πυρετῶ δεινὸν ἀλλ' ἦν τι

καὶ ἄλλο σημεῖον γένηται τῶν προκεκριμένων πονηρῶν εἶναι, προλέγειν δεῖ ὡς ἐν κινδύνῳ ἐόντος τοῦ ἀνθρώπου. Αἱ δὲ κυνάγλαι δεινόταται μὲν εἰσι, καὶ τάχιστα ἀναιρέουσιν, ὀκόσαι μῆτε ἐν τῇ φάρυγγι μηδὲν ἔκδηλον ποιέουσι, μῆτε ἐν τῷ αὐχένι, πλεῖστον δὲ πόνον παρέχουσι καὶ ὀρθόπνοιαν αὐταὶ γὰρ καὶ αὐθημερὸν ἀποπνίγουσι, καὶ δευτεραῖαι, καὶ τριταῖαι, καὶ τεταρταῖαι. Ὅσαι δὲ τὰ μὲν ἄλλα παραπλησίως πόνον παρέχουσι, ἐπαίρονται δὲ, καὶ ἐρυθήματα ἐν τῇ φάρυγγι ποιέουσι, ὀλέθρια μὲν κάρτα, χροσιώτεραι δὲ μᾶλλον τῶν πρόσθεν, ἦν τὸ ἐρυθήμα μέγα γίγνηται. Ὀκόσοισι δὲ ζυνεξερευθεῖη ἢ φάρυγξ καὶ ὁ αὐχὴν, αὐταὶ δὲ χροσιώτεραι, καὶ μάλιστα ἐξ αὐτέων τινὲς περιφεύγουσι, ἦν ὅ τε

αὐχὴν καὶ τὸ στῆθος ἐρυθήμα ἔχη, καὶ μὴ παλινδρομέη τὸ ἐρυσίπελας ἔσω. Ἦν δὲ μῆτε ἐν ἡμέρησιν κρισίμησιν ἀφανίζηται τὸ ἐρυσίπελας, μῆτε φύματος ζυστραφέντος ἐν τῷ ἔξω χωρίῳ, μῆτε πῦον ἀποβήσση, ῥηϊδίως τε καὶ ἀπόνως ἔχειν δοκέη, θάνατον σημαίνει, ἢ ὑποστροφὴν τοῦ ἐρυθήματος. Ἀσφαλέστερον δὲ τὸ οἶδημα καὶ τὸ ἐρυθήμα ὡς μάλιστα ἔξω τρέπεσθαι ἦν δὲ ἐς τὸν πλεύμονα τραπεῖη, παράνοιάν τε ποιέει, καὶ ἔμπυοι ἐξ αὐτέων τινὲς ὡς τὰ πολλὰ γίνονται. Οἱ δὲ γαργαρεῶνες ἐπικίνδυνοι καὶ ἀποτάμνεσθαι καὶ ἀποσχάζεσθαι, ἔστ' ἂν ἐρυθροὶ τε ἔωσι καὶ μεγάλοι καὶ γὰρ φλεγμοναὶ ἐπιγίνονται τουτέοισι καὶ αἱμορραγίαι ἀλλὰ χρῆ τὰ τοιαῦτα τοῖσιν ἄλλοισι μηχανήμασι πειρῆσθαι κατισχναίνειν ἐν τουτέῳ τῷ χρόνῳ. Ὀκόταν δὲ ἀποκριθῆ πᾶν, ὃ δὲ σταφυλὴν καλέουσι, καὶ γένηται τὸ

μὲν ἄκρον τοῦ γαργαρεῶνος μεῖζόν τε καὶ περιφερές, τὸ δὲ ἀνωτέρω λεπτότερον, ἐν τουτέῳ τῷ καιρῷ ἀσφαλές διαχειρίζειν. Ἄμεινον δὲ καὶ τὴν κοιλίην ὑποκενώσαντα τῇ χειρουργίῃ χρέεσθαι, ἦν ὅ τε χρόνος ζυγχωρή, καὶ μὴ ἀποπνίγηται ὁ ἄνθρωπος.

24. Ὀκόσοισι δ' ἂν οἱ πυρετοὶ παύωνται, μήτε σημείων γενομένων λυτηρίων, μήτε ἐν ἡμέρησι κρισίμησιν, ὑποστροφὴν προσδέχεσθαι χρὴ τουτέοισιν. Ὅστις δ' ἂν τῶν πυρετῶν μηκύνῃ περιεστικῶς διακειμένου τοῦ ἀνθρώπου, μηκέτι ὀδύνης ἐχούσης διὰ φλεγμονὴν τινα, μήτε διὰ πρόφασιν ἄλλην μηδεμίαν ἐμφανέα, τουτέῳ προσδέχεσθαι ἀπόστασιν μετ' οἰδήματός τε καὶ ὀδύνης ἕξ τι τῶν ἄρθρων, καὶ οὐχ ἦσσον ἐκ τῶν κάτω. Μᾶλλον δὲ γίνονται καὶ ἐν ἐλάσσονι χρόνῳ αἱ τοιαῦται ἀποστάσεις τοῖσι νεωτέροισι τριήκοντα ἑτέων ὑποσκέπτεσθαι δὲ χρὴ εὐθέως τὰ περὶ τῆς ἀποστάσιος, ἣν εἴκοσιν ἡμέρας ὁ πυρετὸς ἔχων ὑπερβάλλῃ τοῖσι δὲ γεραιτέροισιν

ἦσσον γίνεταί, πολυχρονιωτέρου ἐόντος τοῦ πυρετοῦ. Χρὴ δὲ τὴν μὲν τοιαύτην ἀπόστασιν προσδέχεσθαι, ξυνεχέος ἐόντος τοῦ πυρετοῦ, ἕς δὲ τεταρταῖον καταστήσεσθαι, ἣν διαλείπῃ τε καὶ καταλαμβάνῃ πεπλανημένον τρόπον, καὶ ταῦτα ποιέων τῷ φθινοπώρῳ προσπελάσῃ. Ὡσπερ δὲ τοῖσι νεωτέροισι τῶν τριήκοντα ἑτέων αἱ ἀποστάσεις γίνονται, οὕτως οἱ τεταρταῖοι μᾶλλον τοῖσι τριήκοντα ἑτέων καὶ γεραιτέροισιν. Τὰς δὲ ἀποστάσιος εἰδέναι χρὴ τοῦ χειμῶνος μᾶλλον γιγνομένης χρονιώτερόν τε παυομένης, ἦσσον δὲ παλινδρομεύσας. Ὅστις δ' ἂν ἐν πυρετῷ μὴ θανατώδει φῆ τὴν κεφαλὴν ἀλγέειν, ἢ καὶ ὀρφνῶδές τι πρὸ τῶν ὀφθαλμῶν φαίνεσθαι, ἢ καρδιωγμὸς τουτέῳ προσγένηται, χολώδης ἔμετος παρέσται ἣν δὲ καὶ ῥίγος ἐπιλάβῃ, καὶ τὰ κάτω μέρη τοῦ ὑποχονδρίου ψυχρὰ ἦ, καὶ θᾶσσον ἔτι ὁ ἔμετος παρέσται ἣν δὲ τι πῖη ἢ φάγη ὑπὸ τοῦτον τὸν χρόνον, κάρτα τοῦτο ταχέως ἐμέεται. Τουτέων δὲ οἷσιν ἂν ἄρξηται ὁ πόνος τῆ πρώτῃ ἡμέρῃ γίνεσθαι, τεταρταῖοι πιεζεῦνται μάλιστα καὶ πεμπταῖοι ἕς δὲ τὴν ἐβδόμην ἀπαλλάσσονται οἱ μέντοι πλείονες αὐτέων ἄρχονται μὲν πονέεσθαι τριταῖοι, χειμάζονται δὲ μάλιστα πεμπταῖοι, ἀπαλλάσσονται δὲ ἐναταῖοι ἢ ἐνδεκαταῖοι οἱ δ' ἂν ἄρξονται πεμπταῖοι πονέεσθαι, καὶ τᾶλλα κατὰ λόγον αὐτέοισι γίνεταί, ἕς τὴν τεσσαρεσκαδεκάτην κρίνεταί ἢ νοῦσος. Γίνεταί δὲ ταῦτα τοῖσι μὲν ἀνδράσι καὶ τῆσι γυναιξίν ἐν τοῖσι τριταίοισι μάλιστα τοῖσι δὲ νεωτέροισι γίνεταί μὲν καὶ ἐν τουτέοισι, μᾶλλον δὲ ἐν τοῖσι ξυνεχестέροισι πυρετοῖσι, καὶ ἐν τοῖσι γνησίοισι τριταίοισιν. Οἷσι δ' ἂν ἐν τοιουτοτρόπῳ πυρετῷ κεφαλὴν ἀλγέουσιν ἀντὶ μὲν τοῦ ὀρφνῶδές τι πρὸ τῶν ὀφθαλμῶν φαίνεσθαι, ἀμβλυωγμὸς γίνεταί, ἢ μαρμαρυγαὶ προφαίνονται, ἀντὶ δὲ τοῦ καρδιώσσειν, ἐν τῷ ὑποχονδρίῳ ἐπὶ δεξιὰ ἢ ἐπ' ἀριστερὰ ξυντείνεται τι μήτε ξὺν ὀδύνη μήτε ξὺν φλεγμονῇ, αἷμα διὰ τῶν ῥινῶν τουτέοισι ῥυῆναι προσδόκιμον ἀντὶ τοῦ ἐμέτου. Μᾶλλον δὲ καὶ ἐνταῦθα τοῖσι νέοισι τοῦ αἵματος τὴν ῥῆξιν προσδέχεσθαι τοῖσι δὲ πέντε καὶ τριήκοντα ἔτεσι καὶ γεραιτέροισιν ἦσσον, ἀλλὰ τοὺς ἐμέτους τουτέοισι προσδέχεσθαι. Τοῖσι δὲ παιδίοισι σπασμοὶ γίνονται, ἣν ὁ πυρετὸς ὀξὺς ἦ, καὶ γαστήρ μὴ διαχωρῆ, καὶ ἀγρυπνέωσί τε καὶ ἐκπλαγέωσι, καὶ κλαυθυρίζωσι, καὶ τὸ χρῶμα μεταβάλλωσι, καὶ χλωρὸν ἢ πελιδνὸν ἢ ἐρυθρὸν

ἴσχωσιν. Γίνεται δὲ ταῦτα ἐξ ἐτοιμοτάτου μὲν τοῖσι παιδίοισι τοῖσι νεωτάτοισιν ἐς τὰ ἑπτὰ ἔτεα τὰ δὲ πρεσβύτερα τῶν παιδίων καὶ οἱ ἄνδρες οὐκ ἔτι ἐν τοῖσι πυρετοῖσιν ὑπὸ τῶν σπασμῶν ἀλίσκονται, ἢν μὴ τι τῶν σημείων προσγένηται τῶν ἰσχυροτάτων τε καὶ κακίστων, οἷά περ ἐν τησι φρενίτισι γίνεται. Τοὺς δ' ἀπολουμένους τε καὶ περιεσομένους τῶν παιδίων τε καὶ τῶν ἄλλων τεκμαίρεσθαι τοῖσι ζύμπασι σημείοισιν, ὡς ἐφ' ἑκάστοισιν ἕκαστα διαγέγραπται. Ταῦτα δὲ λέγω περὶ τε τῶν ὀξέων νοσημάτων καὶ ὅσα ἐκ τουτέων γίνεται.

25. Χρὴ δὲ τὸν μέλλοντα ὀρθῶς προγιγνώσκειν τοὺς περιεσομένους καὶ τοὺς ἀποθανομένους, ὅσοισί τε ἂν μέλλη πλέονας ἡμέρας παραμένειν τὸ νόσημα καὶ ὅσοισιν ἂν ἐλάσσους, τὰ σημεῖα ἐκμανθάνοντα πάντα δύνασθαι κρίνειν, λογιζόμενον τὰς δυνάμιας αὐτέων πρὸς ἀλλήλας, ὥσπερ διαγέγραπται περὶ τε τῶν ἄλλων καὶ τῶν οὖρων καὶ τῶν πτυέλων, ὅταν ὁμοῦ πῦόν τε ἀναβήσῃ καὶ χολήν. Χρὴ δὲ καὶ τὰς φορὰς τῶν νοσημάτων αἰεὶ ἐπιδημούντων ταχέως ἐνθυμέεσθαι, τὴν τε τῆς ὥρης κατάστασιν. Εὖ μέντοι χρὴ εἰδέναι περὶ τῶν τεκμηρίων καὶ τῶν ἄλλων σημείων, καὶ μὴ λανθάνειν ὅτι ἐν παντὶ ἔτει καὶ πάσῃ ὥρῃ τὰ τε κακὰ κακὸν σημαίνει, καὶ τὰ χρηστὰ ἀγαθόν, ἐπεὶ καὶ ἐν Λιβύῃ καὶ ἐν Δήλῳ καὶ ἐν Σκυθίῃ φαίνεται τὰ προγεγραμμένα ἀληθεύοντα σημεῖα. Ἐξ ὧν χρὴ εἰδέναι ὅτι ἐν γε τοῖς αὐτέοισι χωρίοισιν οὐδὲν δεινὸν τὸ μὴ οὐ τὰ πολλαπλάσια αὐτέων ἐπιτυχάνειν, ἢν ἐκμαθὼν τις αὐτὰ κρίνειν τε καὶ λογίζεσθαι ὀρθῶς ἐπίστηται. Ποθέειν δὲ χρὴ οὐδενὸς νοσήματος οὐνομα, ὃ τι μὴ τυγχάνῃ ἐνθάδε γεγραμμένον πάντα γὰρ ὀκόσα ἐν τοῖσι χρόνοις τοῖσι προειρημένοις κρίνεται, γνώσῃ τοῖσιν αὐτέοισι σημείοισιν.

# APHORISMS - Άφορισμοί

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## SECTION 1

1. Ὁ βίος βραχὺς, ἢ δὲ τέχνη μακρὴ, ὁ δὲ καιρὸς ὀξὺς, ἢ δὲ πείρα σφαλερὴ, ἢ δὲ κρίσις χαλεπὴ. Δεῖ δὲ οὐ μόνον ἑωυτὸν παρέχειν τὰ δέοντα ποιεῦντα, ἀλλὰ καὶ τὸν νοσέοντα, καὶ τοὺς παρεόντας, καὶ τὰ ἔξωθεν.

2. Ἐν τῆσι τα ραχῆσι τῆς κοιλίης, καὶ ἐμέτοισι, τοῖσιν αὐτομάτως γιγνομένοισιν, ἦν μὲν, οἷα δεῖ καθαίρεσθαι, καθαίρωνται, ζυμφέρει τε καὶ εὐφόρως φέρουσιν ἦν δὲ μὴ, τούναντίον. Οὕτω δὲ καὶ κενεαγγεῖη, ἦν μὲν, οἷα δεῖ γίνεσθαι, γίγνηται, ζυμφέρει τε καὶ εὐφόρως φέρουσιν ἦν δὲ μὴ, τούναντίον. Ἐπιβλέπειν οὖν δεῖ καὶ χώραν, καὶ ὥρην, καὶ ἡλικίην, καὶ νούσους, ἐν ἧσι δεῖ, ἢ οὐ.

3. Ἐν τοῖσι γυμναστικοῖσιν αἱ ἐπ' ἄκρον εὐεξίαί σφαλεραί, ἦν ἐν τῷ ἐσχάτῳ ἔωσιν οὐ γὰρ δύνανται μένειν ἐν τῷ αὐτέῳ, οὐδὲ ἀτρεμέειν ἐπεὶ δὲ οὐκ ἀτρεμέουσιν, οὐδ' ἔτι δυνάνται ἐπὶ τὸ βέλτιον ἐπιδιδόναι, λείπεται ἐπὶ τὸ χεῖρον τουτέων οὖν εἵνεκεν τὴν εὐεξίην λύειν ζυμφέρει μὴ βραδέως, ἵνα πάλιν ἀρχὴν ἀναθρέψιος λαμβάνη τὸ σῶμα μηδὲ τὰς ζυμπτώσιας ἐς τὸ ἔσχατον ἄγειν, σφαλερὸν γὰρ, ἀλλ' ὀκοίη ἂν ἢ φύσις ἢ τοῦ μέλλοντος ὑπομένειν, ἐς τοῦτο ἄγειν. Ὡσαύτως δὲ καὶ αἱ κενώσεις αἱ ἐς τὸ ἔσχατον ἄγουσαι, σφαλεραί καὶ πάλιν αἱ ἀναθρέψεις, αἱ ἐν τῷ ἐσχάτῳ ἐοῦσαι, σφαλεραί.

4. Αἱ λεπταὶ καὶ ἀκριβέες δίαιται, καὶ ἐν τοῖσι μακροῖσιν αἰεὶ πάθεσι, καὶ ἐν τοῖσιν ὀξέσιν, οὐ μὴ ἐπιδέχεται, σφαλεραί. Καὶ πάλιν αἱ ἐς τὸ ἔσχατον λεπτότητος ἀφιγμέναί δίαιται, χαλεπαὶ καὶ γὰρ αἱ πληρώσιες αἱ ἐν τῷ ἐσχάτῳ ἐοῦσαι, χαλεπαί.

5. Ἐν τῆσι λεπτῆσι διαίτησιν ἀμαρτάνουσιν οἱ νοσέοντες, διὸ μᾶλλον βλάπτονται πᾶν γὰρ τὸ ἀμάρτημα ὃ ἂν γίνηται, μέγα γίνεται μᾶλλον, ἢ ἐν τῆσιν ὀλίγον ἀδροτέρησι διαίτησιν διὰ τοῦτο καὶ τοῖσιν ὀγιαίνουσι σφαλεραί αἱ πάνυ λεπταὶ καὶ καθεστηκυῖαι καὶ ἀκριβέες δίαιται, ὅτι τὰ ἀμαρτανόμενα χαλεπότερον φέρουσιν. Διὰ τοῦτο οὖν αἱ λεπταὶ καὶ ἀκριβέες δίαιται, σφαλεραί ἐς τὰ πλεῖστα τῶν σμικρῶ ἀδροτέρων.

6. Ἐς δὲ τὰ ἔσχατα νοσήματα αἱ ἔσχαται θεραπείαι ἐς ἀκριβεῖην, κράτισται.

7. Ὅκου μὲν κάτοξυ τὸ νοῦσημα, αὐτίκα καὶ τοὺς ἐσχάτους πόνους ἔχει, καὶ τῆ ἐσχάτως λεπτοτάτῃ διαίτη ἀναγκαῖον χρέεσθαι ὅκου δὲ μὴ, ἀλλ' ἐνδέχεται ἀδροτέρως διαιτᾶν, τοσοῦτον ὑποκαταβαίνειν, ὀκόσον ἂν ἢ νοῦσος μαλθακώτερη τῶν ἐσχάτων ἔη.



8. Ὅκοταν δὲ ἀκμάζῃ τὸ νοῦσημα, τότε λεπτοτάτῃ διαίτῃ ἀναγκαῖον χρέεσθαι.
9. Ξυντεκμαίρεσθαι δὲ χρή καὶ τὸν νοσέοντα, εἰ ἐξαρκέσει τῇ διαίτῃ πρὸς τὴν ἀκμὴν τῆς νοῦσου, καὶ πρότερον ἐκεῖνος ἀπαυδήσει πρότερον, καὶ οὐκ ἐξαρκέσει τῇ διαίτῃ, ἢ ἡ νοῦσος πρότερον ἀπαυδήσει καὶ ἀμβλυνεῖται.
10. Ὅκοσοισι μὲν οὖν αὐτίκα ἢ ἀκμῇ, αὐτίκα λεπτῶς διαιτῆν ὅκοσοισι δὲ ἐς ὕστερον ἢ ἀκμῇ, ἐς ἐκεῖνο, καὶ πρὸ ἐκείνου σμικρὸν, ἀφαιρετέον ἔμπροσθεν δὲ, πιωτέρως διαιτῆν, ὡς ἂν ἐξαρκέσῃ ὁ νοσέων.
11. Ἐν δὲ τοῖσι παροξυσμοῖσιν ὑποστέλλεσθαι χρή τὸ προστιθέναι γὰρ βλάβη καὶ ὅκοσα κατὰ περιόδους παροξύνεται, ἐν τοῖσι παροξυσμοῖσιν ὑποστέλλεσθαι χρή.
12. Τοὺς δὲ παροξυσμοὺς καὶ τὰς καταστάσιας δηλώσουσιν αἱ νοῦσοι, καὶ αἱ ὥραι τοῦ ἔτεος, καὶ αἱ τῶν περιόδων πρὸς ἀλλήλας ἀνταποδόσεις, ἦν τε καθ' ἡμέρην, ἦν τε παρ' ἡμέρην, ἦν τε καὶ διὰ πλείονος χρόνου γίνωνται ἀτὰρ καὶ τοῖσιν ἐπιφαινομένοισιν, οἷον ἐν πλευριτικοῖσι πτύελον ἦν μὲν αὐτίκα ἐπιφαίνεται, ἀρχομένου, βραχύνει, ἦν δ' ὕστερον ἐπιφαίνεται, μηκύνει καὶ οὔρα καὶ ὑποχωρήματα καὶ ἰδρώτες, καὶ δύσκριτα καὶ εὐκριτα, καὶ βραχέα καὶ μακρὰ τὰ νοσήματα, ἐπιφαινόμενα, δηλοῖ.
13. Γέροντες εὐφορώτατα νηστείην φέρουσι, δεύτερον, οἱ καθεστηκότες, ἡκιστα, μειράκια, πάντων δὲ μάλιστα, παιδιά, τουτέων δὲ αὐτέων ἃ ἂν τύχη αὐτὰ ἐουτέων προθυμότερα ἔοντα.
14. Τὰ αὐξανόμενα πλεῖστον ἔχει τὸ ἔμφυτον θερμὸν πλείστης οὖν δεῖται τροφῆς εἰ δὲ μὴ, τὸ σῶμα ἀναλίσκεται γέρουσι δὲ ὀλίγον τὸ θερμὸν, διὰ τοῦτο ἄρα ὀλίγων ὑπεκκαυμάτων δέονται ὑπὸ πολλῶν γὰρ ἀποσβέννυται διὰ τοῦτο καὶ οἱ πυρετοὶ τοῖσι γέρουσιν οὐχ ὁμοίως ὀξέεες ψυχρὸν γὰρ τὸ σῶμα.
15. Αἱ κοιλίαι χειμῶνος καὶ ἦρος θερμότεραι φύσει, καὶ ὕπνοι μακρότατοι ἐν ταύτησιν οὖν τῆσιν ὥρησι, καὶ τὰ προσάρματα πλείω δοτέον καὶ γὰρ τὸ ἔμφυτον θερμὸν πλεῖστον ἔχει τροφῆς οὖν πλείονος δεῖται σημείων, αἱ ἡλικίαι καὶ οἱ ἀθληταί.
16. Αἱ ὑγραὶ δίαται πᾶσι τοῖσι πυρεταίνουσι ξυμφέρουσι, μάλιστα δὲ παιδίοισι, καὶ τοῖσιν ἄλλοισι τοῖσιν οὕτως εἰθισμένοισι διαιτᾶσθαι.

17. Καὶ οἷσιν ἄπαξ, ἢ δις, καὶ πλείω ἢ ἐλάσσω, καὶ κατὰ μέρος δοτέον δέ τι καὶ τῷ ἔθει, καὶ τῇ ὥρῃ, καὶ τῇ χώρῃ, καὶ τῇ ἡλικίῃ.

18. Θέρεος καὶ φθινοπώρου σιτία δυσφορώτατα φέρουσι, χειμῶνος Ρήϊστα, ἦρος δεύτερον.

19. Τοῖσιν ἐν τῆσι περιόδοισι παροξυνομένοισι μηδὲν διδόναι, μηδ' ἀναγκάζειν, ἀλλ' ἀφαιρέειν τῶν προσθεσίων πρὸ τῶν κρισίων.

20. Τὰ κρινόμενα καὶ τὰ κεκριμένα ἀρτίως, μὴ κινέειν, μηδὲ νεωτεροποιέειν, μήτε φαρμακείησι, μήτ' ἄλλοισιν ἐρεθισμοῖσιν, ἀλλ' ἔαν.

21. Ἄ δεῖ ἄγειν, ὅκου ἂν μάλιστα Ρέπη, ταύτη ἄγειν, διὰ τῶν συμφερόντων χωρίων

22. Πέπονα φαρμακεύειν καὶ κινέειν, μὴ ὠμά, μηδὲ ἐν ἀρχῆσιν, ἢν μὴ ὀργᾶ τὰ δὲ πλεῖστα οὐκ ὀργᾶ.

23. Τὰ χωρέοντα μὴ τῷ πλήθει τεκμαίρεσθαι, ἀλλ' ὡς ἂν χωρήη οἷα δεῖ, καὶ φέρη εὐφόρως καὶ ὅκου δεῖ μέχρι λειποθυμίας ἄγειν, καὶ τοῦτο ποιέειν, ἢν ἐξαρκέη ὁ νοσέων.

24. Ἐν τοῖσιν ὀξέσι πάθεσιν ὀλιγάκις καὶ ἐν ἀρχῆσιν τῆσι φαρμακείησι χρέεσθαι, καὶ τοῦτο προεξευκρινήσαντα ποιέειν.

25. Ἦν, οἷα δεῖ καθαίρεσθαι, καθαίρωνται, συμφέρει τε, καὶ εὐφόρως φέρουσι τὰ δ' ἐναντία, δυσχερῶς.

## SECTION 2

1. Ἐν ᾧ νοσήματι ὕπνος πόνον ποιεῖ, θανάσιμον ἦν δὲ ὕπνος ὠφελῆ, οὐ θανάσιμον.
2. Ὅκου παραφροσύνην ὕπνος παύει, ἀγαθόν.
3. Ὑπνος, ἀγρυπνίη, ἀμφοτέρω τοῦ μετρίου μᾶλλον γενόμενα, κακόν.
4. Οὐ πλησμονή, οὐ λιμός, οὐδ' ἄλλο οὐδὲν ἀγαθόν, ὅ τι ἂν μᾶλλον τῆς φύσιος ἦ.
5. Κόποι αὐτόματοι φράζουσι νούσους.
6. Ὅκόσοι, πονέοντές τι τοῦ σώματος, τὰ πολλὰ τῶν πόνων οὐκ αἰσθάνονται, τουτέοισιν ἡ γνώμη νοσέει.
7. Τὰ ἐν πολλῷ χρόνῳ λεπτυνόμενα σώματα νωθρῶς ἐπανατρέφειν, τὰ δὲ ἐν ὀλίγῳ, ὀλίγως.
8. Ἦν ἐκ νούσου τροφήν λαμβάνων τις μὴ ἰσχύη, σημαίνει ὅτι πλείονι τροφῇ τὸ σῶμα χρέεται ἦν δὲ, τροφήν μὴ λαμβάνοντος, τοῦτο γίγνηται, χρή εἰδέναι, ὅτι κενώσιος δεῖται.
9. Τὰ σώματα χρή, ὅκου τις βούλεται καθαίρειν, εὔροα ποιεῖν.
10. Τὰ μὴ καθαρὰ τῶν σωμάτων, ὀκόσω ἂν θρέψης μᾶλλον, βλάβεις.
11. Ῥᾶον πληροῦσθαι ποτοῦ, ἢ σιτίου.
12. Τὰ ἐγκαταλιμπανόμενα ἐν τῆσι νούσοισι μετὰ κρίσιν, ὑποστροφὰς ποιεῖν εἴωθεν.
13. Ὅκόσοισι κρίσις γίνεται, τουτέοισιν ἡ νύξ δύσφορος, ἢ πρὸ τοῦ παροξυσμοῦ, ἢ δὲ ἐπιούσα εὐφορωτέρη ὡς ἐπὶ τὸ πούλυ.
14. Ἐν τῆσι τῆς κοιλίης Ῥύσεσιν αἱ μεταβολαὶ τῶν διαχωρημάτων ὠφελέουσιν, ἦν μὴ ἐς τὰ πονηρὰ μεταβάλλῃ.
15. Ὅκου φάρυγξ νοσέει, ἢ φύματα ἐν τῷ σώματι ἐκφύεται, τὰς ἐκκρίσιαις σκέπτεσθαι ἦν γὰρ χολώδεις ἔωσι, τὸ σῶμα ξυνοσέει ἦν δὲ ὁμοιαὶ τοῖσιν

ὕγιαίνουσι γίνωνται, ἀσφαλές τὸ σῶμα τρέφειν.

16. Ὅκου λιμὸς, οὐ δεῖ πονέειν.

17. Ὅκου ἂν τροφή πλείων παρὰ φύσιν ἐσέλθῃ, τοῦτο νοῦσον ποιέει, δηλοῖ δὲ ἡ ἴησις.

18. Τῶν τρεφόντων ἀθρόως καὶ ταχέως, ταχεῖται καὶ αἱ διαχωρήσεις γίνονται.

19. Τῶν ὀξέων νοσημάτων οὐ πάμπαν ἀσφαλέες αἱ προδιαγορεύσεις, οὔτε τοῦ θανάτου, οὔτε τῆς ὑγείης.

20. Ὁκόσοισι νέοισιν ἐοῦσιν αἱ κοιλίαι ὑγραί εἰσι, τουτέοισιν ἀπογηράσκουσι ξηραίνονται ὀκόσοισι δὲ νέοισιν ἐοῦσιν αἱ κοιλίαι ξηραί εἰσι, τουτέοισι πρεσβυτέροισι γινομένοισιν ὑγραίνονται.

21. Λιμὸν θώρηξις λύει.

22. Ἀπὸ πλησμονῆς ὀκόσα ἂν νοσήματα γένηται, κένωσις ἰῆται, καὶ ὀκόσα ἀπὸ κενώσιος, πλησμονή, καὶ τῶν ἄλλων ἢ ὑπεναντίωσις.

23. Τὰ ὀξέα τῶν νοσημάτων κρίνεται ἐν τεσσαρεσκαίδεκα ἡμέρησιν.

24. Τῶν ἐπτὰ ἢ τετάρτη ἐπίδηλος ἐτέρης ἐβδομάδος ἢ ὀγδὴ ἀρχή, θεωρητὴ δὲ ἡ ἐνδεκάτη, αὕτη γάρ ἐστι τετάρτη τῆς ἐτέρης ἐβδομάδος θεωρητὴ δὲ πάλιν ἡ ἐπτακαιδεκάτη, αὕτη γάρ ἐστι τετάρτη μὲν ἀπὸ τῆς τεσσαρεσκαιδεκάτης, ἐβδόμη δὲ ἀπὸ τῆς ἐνδεκάτης.

25. Οἱ θερινοὶ τεταρταῖοι τὰ πολλὰ γίνονται βραχέες, οἱ δὲ φθινοπωρινοὶ, μακροὶ, καὶ μάλιστα οἱ πρὸς τὸν χειμῶνα ξυνάπτοντες.

26. Πυρετὸν ἐπὶ σπασμῶ βέλτιον γενέσθαι, ἢ σπασμὸν ἐπὶ πυρετῶ.

27. Τοῖσι μὴ κατὰ λόγον κουφίζουσιν οὐ δεῖ πιστεύειν, οὐδὲ φοβέεσθαι λίην τὰ μοχθηρὰ γινόμενα παραλόγως τὰ γὰρ πολλὰ τῶν τοιουτέων ἐστὶν ἀβέβαια, καὶ οὐ πάνυ τι διαμένειν, οὐδὲ χρονίζειν εἴωθεν.

28. Τῶν πυρεσσόντων μὴ παντάπασιν ἐπιπολαίως, τὸ διαμένειν, καὶ μηδὲν ἐνδιδόναι τὸ σῶμα, ἢ καὶ συντήκεσθαι μᾶλλον τοῦ κατὰ λόγον, μοχθηρόν τὸ μὲν γὰρ μῆκος νοῦσου σημαίνει, τὸ δὲ, ἀσθένειαν.

29. Ἀρχομένων τῶν νούσων, ἣν τι δοκέη κινέειν, κίνει ἀκμαζουσῶν δὲ, ἡσυχίην ἔχειν βέλτιόν ἐστιν.

30. Περὶ τὰς ἀρχὰς καὶ τὰ τέλη, πάντα ἀσθενέστατα, περὶ δὲ τὰς ἀκμὰς, ἰσχυρότατα.

31. Τῷ ἐξ ἀρρωστίης εὐσιτεῦντι, μηδὲν ἐπιδιδόναι τὸ σῶμα, μοχθηρόν.

32. Ὡς τὰ πολλὰ πάντες οἱ φαύλως ἔχοντες, κατ' ἀρχὰς μὲν εὐσιτεῦντες, καὶ μηδὲν ἐπιδιδόντες, πρὸς τῷ τέλει πάλιν ἀσιτέουσιν οἱ δὲ κατ' ἀρχὰς μὲν ἀσιτεῦντες ἰσχυρῶς, ὕστερον δὲ εὐσιτεῦντες, βέλτιον ἀπαλλάσσουσιν.

33. Ἐν πάσῃ νούσῳ τὸ ἐρῶσθαι τὴν διάνοιαν, καὶ εὖ ἔχειν πρὸς τὰς προσφορὰς, ἀγαθόν τὸ δὲ ἐναντίον, κακόν.

34. Ἐν τῆσι νούσοισιν ἦσσον κινδυνεύουσιν, οἷσιν ἂν οἰκεῖη τῆς φύσιος, καὶ τῆς ἕξιος, καὶ τῆς ἡλικίης, καὶ τῆς ὥρης ἢ νοῦσος ἢ μᾶλλον, ἢ οἷσιν ἂν μὴ οἰκεῖη κατὰ τι τουτέων ἦ.

35. Ἐν πάσῃσι τῆσι νούσοισι, τὰ περὶ τὸν ὀμφαλὸν καὶ τὸ ἦτρον πάχος ἔχειν βέλτιόν ἐστι, τὸ δὲ σφόδρα λεπτόν καὶ ἐκτετηκός, μοχθηρόν ἐπισφαλές δὲ τὸ τοιοῦτον καὶ πρὸς τὰς κάτω καθάρσιας.

36. Οἱ ὑγιεινῶς ἔχοντες τὰ σώματα, ἐν τῆσι φαρμακείησι καθαιρόμενοι ἐκλύονται ταχέως, καὶ οἱ πονηρῆ τροφῆ χρεόμενοι.

37. Οἱ εὖ τὰ σώματα ἔχοντες, φαρμακεύεσθαι ἐργώδεες.

38. Τὸ μικρῷ χειρόν καὶ πόμα καὶ σιτίον, ἥδιον δὲ, τῶν βελτιόνων μὲν, ἀηδεστέρων δὲ, μᾶλλον αἰρετέον.

39. Οἱ πρεσβῦται τῶν νέων τὰ μὲν πολλὰ νοσέουσιν ἦσσον ὅσα δ' ἂν αὐτέοισι χρόνια νοσήματα γένηται, τὰ πολλὰ ξυναποθνήσκει.

40. Βράγχοι καὶ κόρυζαι τοῖσι σφόδρα πρεσβύτησιν οὐ πεπαίνονται.

41. Οἱ ἐκλύομενοι πολλάκις καὶ ἰσχυρῶς, ἄνευ φανερῆς προφάσιος, ἐξαπίνης τελευτῶσιν.

42. Λύειν ἀποπληξίην ἰσχυρὴν μὲν ἀδύνατον, ἀσθενέα δὲ, οὐ Ρηΐδιον.

43. Τῶν ἀπαγχομένων καὶ καταλυομένων, μηδέπω δὲ τεθνηκότων, οὐκ ἀναφέρουσιν, οἷσιν ἂν ἀφρὸς ἦ περὶ τὸ στόμα.
44. Οἱ παχέες σφόδρα κατὰ φύσιν, ταχυθάνατοι γίνονται μᾶλλον τῶν ἰσχνῶν.
45. Τῶν ἐπιληπτικῶν τοῖσι νέοισιν ἀπαλλαγὴν αἰ μεταβολαὶ μάλιστα τῆς ἡλικίης, καὶ τῶν χωρίων, καὶ τῶν βίων ποιέουσιν.
46. Δύο πόνων ἅμα γινομένων μὴ κατὰ τὸν αὐτὸν τόπον, ὁ σφοδρότερος ἀμαυροὶ τὸν ἕτερον.
47. Περὶ τὰς γενέσιαι τοῦ πύου οἱ πόνοι καὶ οἱ πυρετοὶ ζυμβαίνουσι μᾶλλον, ἢ γενομένου.
48. Ἐν πάσῃ κινήσει τοῦ σώματος, ὀκόταν ἄρχηται πονέειν, τὸ διαναπαύειν εὐθύς, ἄκοπον.
49. Οἱ εἰθισμένοι τοὺς ζυνήθεας πόνους φέρειν, κῆν ὧσιν ἀσθενέες ἢ γέροντες, τῶν ἀζυνηθέων ἰσχυρῶν τε καὶ νέων ἄον φέρουσιν.
50. Τὰ ἐκ πολλοῦ χρόνου ζυνήθεα, κᾶν ἦ χεῖρω τῶν ἀζυνηθέων, ἦσσον ἐνοχλεῖν εἴωθεν δεῖ δὲ καὶ ἐς τὰ ἀζυνήθεα μεταβάλλειν
51. Τὸ κατὰ πολὺ καὶ ἐξαπίνης κενοῦν, ἢ πληροῦν, ἢ θερμαίνειν, ἢ ψύχειν, ἢ ἄλλως ὀκωσοῦν τὸ σῶμα κινέειν, σφαλερὸν, καὶ πᾶν τὸ πολὺ τῇ φύσει πολέμιον τὸ δὲ κατ' ὀλίγον, ἀσφαλές, καὶ ἄλλως, ἢν τις ἐξ ἑτέρου ἐφ' ἕτερον μεταβαίνει.
52. Πάντα κατὰ λόγον ποιέοντι, μὴ γινομένων τῶν κατὰ λόγον, μὴ μεταβαίνειν ἐφ' ἕτερον, μένοντος τοῦ δόξαντος ἐξ ἀρχῆς.
53. Ὀκόσοι τὰς κοιλίας ὑγρὰς ἔχουσιν, νέοι μὲν ἐόντες, βέλτιον ἀπαλλάσσουσι τῶν ξηρὰς ἐχόντων, ἐς δὲ τὸ γῆρας χεῖρον ἀπαλλάσσουσιν ξηραίνονται γὰρ ὡς ἐπὶ τὸ πουλὺ ἀπογηράσκουσιν.
54. Μεγέθει δὲ σώματος, ἐννεάσαι μὲν, ἐλευθέριον καὶ οὐκ ἀηδές ἐγγηρᾶσαι δὲ, δύσχηστον καὶ χεῖρον τῶν ἐλασσόνων.

### SECTION 3

1. Αἱ μεταβολαὶ τῶν ὥρέων μάλιστα τίκτουσι νουσήματα, καὶ ἐν τῆσιν ὥρησιν αἱ μεγάλαι μεταλλαγαὶ ἢ ψύξιος ἢ θάλπιος, καὶ τᾶλλα κατὰ λόγον οὕτως.
2. Τῶν φυσίων αἱ μὲν πρὸς θέρος, αἱ δὲ πρὸς χειμῶνα εὖ ἢ κακῶς πεφύκασιν.
3. Τῶν νούσων ἄλλαι πρὸς ἄλλας εὖ ἢ κακῶς πεφύκασι, καὶ ἡλικίαι τινὲς πρὸς ὥρας, καὶ χώρας, καὶ διαίτας.
4. Ἐν τῆσιν ὥρησιν, ὅταν τῆς αὐτῆς ἡμέρης ὅτε μὲν θάλπος, ὅτε δὲ ψύχος γένηται, φθινοπωρινὰ τὰ νουσήματα προσδέχεσθαι χρή.
5. Νότοι βαρυήκοοι, ἀγλυώδεες, κερηβαρικοὶ, νωθοὶ, διαλυτικοὶ ὁκόταν οὗτος δυναστεύῃ, τοιαῦτα ἐν τῆσιν ἀρρωστίησι πάσχουσιν. Ἦν δὲ βόρειον ἦ, βῆγες, φάρυγγες, κοιλίαι σκληραὶ, δυσουρίαι φρικώδεες, ὀδύνη πλευρέων, στηθέων ὁκόταν οὗτος δυναστεύῃ, τοιαῦτα ἐν τῆσιν ἀρρωστίησι προσδέχεσθαι χρή.
6. Ὅκόταν θέρος γένηται ἤρι ὁμοιον, ἰδρῶτας ἐν τοῖσι πυρετοῖσι πολλοὺς προσδέχεσθαι χρή.
7. Ἐν τοῖσιν ἀύχομοῖσι πυρετοὶ ὀξέες γίνονται καὶ ἦν μὲν ἐπὶ πλέον ἦ τὸ ἔτος τοιουτέον ἐὸν, οἷην τὴν κατάστασιν ἐποίησεν, ὡς ἐπιτοπουλὸν καὶ τὰ νουσήματα τοιαῦτα δεῖ προσδέχεσθαι.
8. Ἐν τοῖσι καθεστεῶσι καιροῖσι, καὶ ὠραίως τὰ ὠραῖα ἀποδοῦσιν, εὐσταθέες καὶ εὐκρινέες αἱ νοῦσοι γίνονται, ἐν δὲ τοῖσιν τάτοισιν ἀκατάστατοι καὶ δύσκριτοι.
9. Ἐν φθινοπώρῳ ὀξύταται αἱ νοῦσοι, καὶ θανατωδέσταται τοῦπίπαν, ἦρ δὲ ὑγιεινότατον, καὶ ἥκιστα θανατῶδες.
10. Τὸ φθινόπωρον τοῖσι φθίνουσι κακόν.
11. Περὶ δὲ τῶν ὥρέων, ἦν μὲν ὁ χειμῶν ἀύχηρὸς καὶ βόρειος γένηται, τὸ δὲ ἔπομβρον καὶ νότιον, ἀνάγκη, τοῦ θέρεος, πυρετοῦς ὀξέας, καὶ ὀφθαλμίας, καὶ δυσεντερίας γίνεσθαι, μάλιστα τῆσι γυναιξὶ, καὶ ἀνδρῶν τοῖσιν ὑγροῖσι τὰς φύσιας.
12. Ἦν δὲ νότιος ὁ χειμῶν καὶ ἔπομβρος καὶ εὐδιεινὸς γένηται, τὸ δὲ ἔαρ

αύχμηρὸν καὶ βόρειον, αἱ μὲν γυναῖκες, ἥσιν οἱ τόκοι πρὸς τὸ ἦρ, ἐκ πάσης προφάσιος ἐκτιτρώσκουσιν αἱ δ' ἂν τέκωσιν, ἀκρατέα καὶ νοσώδεα τὰ παιδιά τίκτουςιν, ὥστε ἢ παραυτίκα ἀπόλλυσθαι, ἢ λεπτὰ καὶ νοσώδεα ζῆν ἔοντα τοῖσι δὲ ἄλλοισι βροτοῖσι δυσεντερίαι καὶ ὀφθαλμίαι ξηραὶ γίνονται, τοῖσι δὲ πρεσβυτέροισι κατὰ ῥοοὶ ξυντόμως ἀπολλύντες.

13. Ἦν δὲ τὸ θέρος αύχμηρὸν καὶ βόρειον γένηται, τὸ δὲ φθινόπωρον

πομβρον καὶ νότιον, κεφαλαλγίαι ἐς τὸν χειμῶνα γίνονται, καὶ βῆχες, καὶ βράγχοι, καὶ κόρυζαι, ἐνίοισι δὲ καὶ φθίσιες.

14. Ἦν δὲ βόρειον ἢ καὶ ἄνυδρον, τοῖσι μὲν ὑγροῖσι τὰς φύσιας καὶ τῆσι γυναῖξι ξύμφορον τοῖσι δὲ λοιποῖσιν ὀφθαλμίαι ἔσονται ξηραὶ, καὶ πυρετοὶ ὀξέες, καὶ κόρυζαι, ἐνίοισι δὲ καὶ μελαγχολίαι.

15. Τῶν δὲ καταστασίων τοῦ ἐνιαυτοῦ τὸ μὲν ὅλον οἱ αύχομοὶ τῶν ἐπομβριῶν εἰσιν ὑγιεινότεροι, καὶ ἦσσον θανατώδεες.

16. Νοσήματα δὲ ἐν μὲν τῆσιν ἐπομβρίησιν ὡς τὰ πολλὰ γίνεται, πυρετοὶ τε μακροὶ, καὶ κοιλίης Ρύσιες, καὶ σηπεδόνες, καὶ ἐπίληπτοι, καὶ ἀπόπληκτοι, καὶ κυνάγχαι ἐν δὲ τοῖσιν αύχομοῖσι, φθινάδες, ὀφθαλμίαι, ἀρθρίτιδες, στραγγουρία, καὶ δυσεντερίαι.

17. Αἱ δὲ καθ' ἡμέρην καταστάσεις, αἱ μὲν βόρειοι τά τε

σώματα ξυνιστᾶσι, καὶ εὔτονα καὶ εὐκίνητα καὶ εὔχροα καὶ εὐηκοώτερα ποιέουσι, καὶ τὰς κοιλίας ξηραίνουσι, καὶ τὰ ὄμματα δάκνουσι, καὶ περὶ τὸν θώρηκα ἄλγημα ἦν τι προϋπάρχη, μᾶλλον πονέουσιν αἱ δὲ νότιοι διαλύουσι τὰ σώματα καὶ ὑγραίνουσι, καὶ βαρνηκοῖας καὶ καρηβαρίας καὶ ἰλίγγους ποιέουσιν, ἐν δὲ τοῖσιν ὀφθαλμοῖσι καὶ τοῖσι σώμασι δυσκινησίην, καὶ τὰς κοιλίας ὑγραίνουσιν.

18. Κατὰ δὲ τὰς ὥρας, τοῦ μὲν ἦρος καὶ ἄκρου τοῦ θέρεος, οἱ παῖδες καὶ οἱ τουτέων ἐχόμενοι τῆσιν ἡλικίησιν, ἄριστά τε διαῖγουσι, καὶ ὑγιαίνουσι μάλιστα τοῦ δὲ θέρεος καὶ τοῦ φθινοπώρου, μέχρι μὲν τινος οἱ γέροντες τὸ δὲ λοιπὸν, καὶ τοῦ χειμῶνος, οἱ μέσοι τῆσιν ἡλικίησιν.

19. Νοσήματα δὲ πάντα μὲν ἐν πάσησι τῆσιν ὥρησι γίνεται, μᾶλλον δ' ἔνια κατ' ἐνίας αὐτέων καὶ γίνεται καὶ παροξύνεται.



20. Τοῦ μὲν γὰρ ἦρος, τὰ μανικὰ, καὶ τὰ μελαγχολικὰ, καὶ τὰ ἐπιληπτικὰ, καὶ αἵματος Ρύσιες, καὶ κυνάγχαι, καὶ κόρυζαι, καὶ βράγχοι, καὶ βῆχες, καὶ λέπραι, καὶ λειχήνες, καὶ ἄλφοι, καὶ ἐξανθήσιες ἐλκώδεις πλεῖσται, καὶ φύματα, καὶ ἀρθριτικά.

21. Τοῦ δὲ θέρεος, ἔνιά τε τουτέων, καὶ πυρετοὶ ξυνεχές, καὶ

καῦσοι, καὶ τριταῖοι πλεῖστοι, καὶ ἔμετοι, καὶ διάρροιαι, καὶ ὀφθαλμῖαι, καὶ ὠτων πόνοι, καὶ στομάτων ἐλκώσεις, καὶ σηπεδόνες αἰδοίων, καὶ ἰδρωα.

22. Τοῦ δὲ φθινοπώρου, καὶ τῶν θερινῶν τὰ πολλὰ, καὶ πυρετοὶ τεταρταῖοι, καὶ πλανῆτες, καὶ σπλῆνες, καὶ ὕδρωπες, καὶ φθίσιες, καὶ στραγγουρία, καὶ λειεντερία, καὶ δυσεντερία, καὶ ἰσχιάδες, καὶ κυνάγχαι, καὶ ἄσθματα, καὶ εἰλεοὶ, καὶ ἐπιληψία, καὶ τὰ μανικὰ, καὶ τὰ μελαγχολικὰ.

23. Τοῦ δὲ χειμῶνος, πλευρίτιδες, περιπλευμονία, κόρυζαι, βράγχοι, βῆχες, πόνοι στηθέων, πόνοι πλευρέων, ὄσφύος, κεφαλαλγία, ἴλιγγοι, ἀποπληξία.

24. Ἐν δὲ τῆσιν ἡλικίησιν τοιάδε ξυμβαίνει τοῖσι μὲν σμικροῖσι καὶ νεογνοῖσι παιδίοισιν, ἄφθαι, ἔμετοι, βῆχες, ἀγρυπνία, φόβοι, ὀμφαλοῦ φλεγμοναί, ὠτων ὑγρότητες.

25. Πρὸς δὲ τὸ ὀδοντοφυεῖν προσάγουσιν, οὖλων ὀδαξησμοί,

πυρετοὶ, σπασμοὶ, διάρροια, καὶ μάλιστα ὅταν ἀνάγῃ τοὺς κυνόδοντας, καὶ τοῖσι παχυτάτοισι τῶν παίδων, καὶ τοῖσι σκληρὰς τὰς κοιλίας ἔχουσιν.

26. Πρεσβυτέροισι δὲ γενομένοισι, παρίσθμια, σπονδύλου τοῦ κατὰ τὸ ἰνίον εἴσω ὤσιες, ἄσθματα, λιθίασιες, ἔλμινθες στρογγύλαι, ἀσκαρίδες, ἀκροχορδόνες, σατυριασμοὶ, χοιράδες, καὶ τᾶλλα φύματα, μάλιστα δὲ τὰ προειρημένα.

27. Τοῖσι δὲ ἔτι πρεσβυτέροισι καὶ πρὸς τὴν ἡβην προσάγουσι, τουτέων τε τὰ πολλὰ, καὶ πυρετοὶ χρόνιοι μᾶλλον, καὶ ἐκ Ρινῶν αἵματος Ρύσιες

28. Τὰ δὲ πλεῖστα τοῖσι παιδίοισι πάθεα κρίνεται, τὰ μὲν ἐν τεσσαράκοντα ἡμέρησιν, τὰ δὲ ἐν ἑπτὰ μηνσὶ, τὰ δὲ ἐν ἑπτὰ ἔτεσιν, τὰ δὲ πρὸς τὴν ἡβην προσάγουσιν ὅσα δ' ἂν διαμείνῃ τοῖσι παιδίοισιν, καὶ μὴ ἀπολυθῆ περὶ τὸ ἠβάσκειν, ἢ τῆσιν θηλείησιν περὶ τὰς τῶν καταμηνίων Ρήξιας, χρονίζειν εἴωθεν.

29. Τοῖσι δὲ νεηνίσκοισιν, αἵματος πτύσιες, φθίσιες, πυρετοὶ ὀξέες, ἐπιληψία, καὶ

τᾶλλα νοσήματα, μάλιστα δὲ τὰ προειρημένα.

30. Τοῖσι δὲ ὑπὲρ τὴν ἡλικίην ταύτην, ἄσθματα, πλευρίτιδες, περιπλευμονίαι, λήθαργοι, φρενίτιδες, καῦσοι, διάρροια χρόνια, χολέραι, δυσεντερίαι, λειεντερίαι, αἰμορροΐδες.

31. Τοῖσι δὲ πρεσβύτησι, δύσπνοια, κατάρροοι βηχώδεις, στραγγουρίαι, δυσουρίαι, ἄρθρων πόνοι, νεφρίτιδες, ἴλιγγοι, ἀποπληξίαι, καχεξίαι, ξυσμοὶ τοῦ σώματος ὅλου, ἀγρυπνίαι,

κοιλίης καὶ ὀφθαλμῶν καὶ Ρινῶν ὑγρότητες, ἀμβλυωπία, γλαυκώσεις, βαρυηκοΐαι.

## SECTION 4

1. Τὰς κούσας φαρμακεύειν, ἣν ὀργᾶ, τετράμηνα καὶ ἄχρι ἑπτὰ μηνῶν, ἦσσον δὲ ταύτας τὰ δὲ νήπια καὶ τὰ πρεσβύτερα εὐλαβέεσθαι χρή.
2. Ἐν τῆσι φαρμακείησι τοιαῦτα ἄγειν ἐκ τοῦ σώματος, ὀκοῖα καὶ αὐτόματα ἰόντα χρήσιμα, τὰ δὲ ἐναντίως ἰόντα παύειν,
3. Ἦν μὲν οἷα δεῖ καθαίρεσθαι, καθαίρωνται, ξυμφέρει τε καὶ εὐφόρως φέρουσι, τὰ δὲ ἐναντία, δυσχερῶς.
4. Φαρμακεύειν θέρεος μὲν μᾶλλον τὰς ἄνω, χειμῶνος δὲ τὰς κάτω.
5. Ὑπὸ κύνα καὶ πρὸ κυνὸς ἐργώδεες αἱ φαρμακεῖαι.
6. Τοὺς ἰσχνοὺς τοὺς εὐημέας ἄνω φαρμακεύειν, ὑποστελλομένους χειμῶνα.
7. Τοὺς δὲ δυσημέας καὶ μέσως εὐσάρκους, κάτω, ὑποστελλομένους θέρος.
8. Τοὺς δὲ φθινώδεας, ὑποστελλομένους τὰς ἄνω.
9. Τοὺς δὲ μελαγχολικοὺς, ἀδροτέρως τὰς κάτω, τῷ αὐτῷ λογισμῷ τάναντία προστιθείς.
10. Φαρμακεύειν ἐν τοῖσι λίην ὀξέσιν, ἣν ὀργᾶ, αὐθημερόν χρονίζειν γὰρ ἐν τοῖσι τοιουτέοισι κακόν.
11. Ὀκόσοισι στρόφοι, καὶ περὶ ὀμφαλὸν πόνοι, καὶ ὀσφύος ἄλγημα μὴ λύομενον μήτε ὑπὸ φαρμακείης, μήτ' ἄλλως, εἰς ὕδρωπα ξηρὸν ἰδρύεται.
12. Ὀκόσοισι κοιλίαι λειεντεριώδεες, χειμῶνος φαρμακεύειν ἄνω, κακόν
13. Πρὸς τοὺς ἐλλεβόρους τοῖσι μὴ Ρηϊδίως ἄνω καθαιρομένοισι,  
πρὸ τῆς πόσιος προὔγραίνειν τὰ σώματα πλείονι τροφῇ καὶ ἀναπαύσει.
14. Ἐπὴν πῆ τις ἐλλέβορον, πρὸς μὲν τὰς κινήσιας τῶν σωμάτων μᾶλλον ἄγειν, πρὸς δὲ τοὺς ὕπνους καὶ μὴ κινήσιας, ἦσσον δηλοῖ δὲ καὶ ναυτιλίη, ὅτι κίγσις τὰ σώματα ταρασσει.

15. Ἐπὴν βούλη μᾶλλον ἄγειν τὸν ἐλλέβορον, κίνει τὸ σῶμα ἐπὴν δὲ παῦσαι, ὕπνον ποίει, καὶ μὴ κίνει.
16. Ἐλλέβορος ἐπικίνδυνος τοῖσι τὰς σάρκας ὑγείας ἔχουσι, σπασμὸν γὰρ ἐμποιέει.
17. Ἀπυρέτω ἐόντι, ἀποσιτίη, καὶ καρδιωγμὸς, καὶ σκοτόδιμος, καὶ στόμα ἐκτικρούμενον, ἄνω φαρμακείης δέεσθαι σημαίνει.
18. Τὰ ὑπὲρ τῶν φρενῶν ὀδυνήματα ἄνω φαρμακείην σημαίνει ὀκόσα δὲ κάτω, κάτω.
19. Ὀκόσοι ἐν τῆσι φαρμακοποσίησι μὴ διψῶσι, καθαιρόμενοι οὐ παύονται πρὶν ἢ διψήσωσι.
20. Ἀπυρέτοισιν ἐοῦσιν, ἣν γίνηται στρόφος, καὶ γουνάτων βάρος, καὶ ὀσφύος ἄλγημα, κάτω φαρμακείης δεῖσθαι σημαίνει.
21. Ὑποχωρήματα μέλανα, οἷον αἷμα, ἀπὸ ταυτομάτου ἰόντα, καὶ ζῦν πυρετῶ, καὶ ἄνευ πυρετοῦ, κάκιστα καὶ ὀκόσω ἂν τὰ χρώματα πλείω καὶ πονηρότερα ἢ, μᾶλλον.  
κάκιον ζῦν φαρμάκω δὲ ἄμεινον, καὶ ὀκόσω ἂν πλείω χρώματα ἢ, οὐ πονηρόν.
22. Νοσημάτων ὀκόσων ἀρχομένων, ἣν χολὴ μέλαινα ἢ ἄνω ἢ κάτω ὑπέλθη, θανάσιμον.
23. Ὀκόσοισιν ἐκ νοσημάτων ὀξέων ἢ πολυχρονίων, ἢ ἐκ τραμάτων, ἢ ἄλλως πως λελεπτυσμένοισι χολὴ μέλαινα ἢ ὀκοῖον αἷμα μέλαν ὑπέλθη, τῇ ὑστεραίῃ ἀποθνήσκουσιν.
24. Δυσεντερὴ ἣν ἀπὸ χολῆς μελαίνης ἄρξεται, θανάσιμον.
25. Αἷμα ἄνω μὲν ὀκοῖον ἂν ἢ, κακὸν, κάτω δὲ, ἀγαθόν, καὶ τὰ μέλανα ὑποχωρέοντα.
26. Ἦν ὑπὸ δυσεντερίας ἐχομένω ὀκοῖαι σάρκες ὑποχωρήσωσι, θανάσιμον.
27. Ὀκόσοισιν ἐν τοῖσι πυρεοῖσιν αἰμορραγέει πλῆθος ὀκοθενούν, ἐν τῆσιν ἀναλήψεσι τουτέοισιν αἰ κοιλία καθυγραίνονται.

28. Ὀκόσοισι χολώδεα τὰ διαχωρήματα, κωφόσιος γενομένης παύεται, καὶ ὀκόσοισι κώφωσις, χολωδέων γενομένων παύεται.

29. Ὀκόσοισιν ἐν τοῖσι πυρετοῖσιν ἐκταίοισιν ἐοῦσι Ρίγεια γίνεται, δύσκριτα.

30. Ὀκόσοισι παροξυσμοὶ γίνονται, ἂν ὥρην ἀφῆ, ἐς τὴν αὔριον τὴν αὐτὴν ὥρην ἢν λάβη, δύσκριτα.

31. Τοῖσι κοπιώδεσιν ἐν τοῖσι πυρετοῖσιν, ἐς ἄρθρα καὶ παρὰ τὰς γνάθους μάλιστα ἀποστάσιες γίνονται.

32. Ὀκόσοισι δὲ ἀνισταμένοισιν ἐκ τῶν νούσων τι πονέσει, ἐνταῦθα ἀποστάσιες γίνονται.

33. Ἀτὰρ ἦν καὶ προπεπονηκός τι ἦ πρὸ τοῦ νοσέειν, ἐνταῦθα στηρίζει ἡ νοῦσος.

34. Ἦν ὑπὸ πυρετοῦ ἐχομένῳ, οἰδήματος μὴ ἐόντος ἐν τῇ φάρυγγι, πνιξ ἐξαίφνης ἐπιστῆ, θανάσιμον.

35. Ἦν ὑπὸ πυρετοῦ ἐχομένῳ ὁ τράχηλος ἐξαίφνης ἐπιστραφῆ, καὶ μόλις καταπίνειν δύνηται, οἰδήματος μὴ ἐόντος, θανάσιμον.

36. Ἰδρῶτες πυρεταίνουσιν ἢν ἄρξωνται, ἀγαθοὶ τριταῖοι, καὶ πεμπταῖοι, καὶ ἑβδομαῖοι, καὶ ἑναταῖοι, καὶ ἑνδεκαταῖοι, καὶ τεσσαρεσκαίδεκαταῖοι, καὶ ἑπτακαίδεκαταῖοι, καὶ μῆ καὶ εἰκοστῆ, καὶ ἑβδόμη καὶ εἰκοστῆ, καὶ τριηκοστῆ πρώτη, καὶ τριηκοστῆ

τετάρτη οὗτοι γὰρ οἱ ιδρῶτες νούσους κρίνουσιν οἱ δὲ μὴ οὕτω γινόμενοι πόνον σημαίνουσι καὶ μῆκος νοῦσου καὶ ὑποτροπιασμούς.

37. Οἱ ψυχροὶ ιδρῶτες, ζῦν μὲν ὄξει πυρετῶ γινόμενοι, θάνατον, ζῦν πρηυτέρῳ δὲ, μῆκος νοῦσου σημαίνουσιν.

38. Καὶ ὄκου ἐνι τοῦ σώματος ιδρώς, ἐνταῦθα φράζει τὴν νοῦσον.

39. Καὶ ὄκου ἐνι τοῦ σώματος θερμὸν ἢ ψυχρὸν, ἐνταῦθα ἡ νοῦσος.

40. Καὶ ὄκου ἐν ὄλῳ τῷ σώματι μεταβολαί, καὶ ἢν τὸ σῶμα καταψύχεται, ἢ αὔθις θερμαίνεται, ἢ χρῶμα ἕτερον ἐξ ἑτέρου γίνηται, μῆκος νοῦσου σημαίνει.

41. Ἰδρῶς πουλὺς ἐξ ὕπνου ἄνευ τινὸς αἰτίας φανερῆς γινόμενος, τὸ σῶμα σημαίνει ὅτι πλείονι τροφῇ χρέεται ἢν δὲ τροφήν μὴ λαμβάνοντι τοῦτο γίγνηται, σημαίνει ὅτι κενώσιος δέεται.

42. Ἰδρῶς πουλὺς ψυχρὸς ἢ θερμὸς αἰεὶ Ρέων, ὁ μὲν ψυχρὸς, μέζω, ὁ δὲ θερμὸς, ἐλάσσω, νοῦσον σημαίνει.

43. Οἱ πυρετοὶ ὀκόσοι, μὴ διαλείποντες, διὰ τρίτης ἰσχυρότεροι γίνονται, ἐπικίνδunami ὅτω δ' ἂν τρόπῳ διαλείπωσι, σημαίνει ὅτι ἀκίνδunami.

44. Ὀκόσοισι πυρετοὶ μακροὶ, τουτέοισι φύματα ἢ ἐς τὰ ἄρθρα πόνοι ἐγγίνονται.

45. Ὀκόσοισι φύματα, ἢ ἐς τὰ ἄρθρα πόνοι ἐκ πυρετῶν γίνονται, οὔτοι σιτίοισι πλείοισι χρέονται.

46. Ἦν Ρίγος ἐπιπίπτη πυρετῶ μὴ διαλείποντι, ἤδη ἀσθενεῖ ἐόντι, θανάσιμον.

47. Αἱ ἀποχρέμψεις αἱ ἐν τοῖσι πυρετοῖσι τοῖσι μὴ διαλείπουσιν, αἱ πελιδναὶ, καὶ αἱματώδεις, καὶ δυσώδεις, καὶ χολώδεις, πᾶσαι κακαὶ ἀποχωρέουσαι δὲ καλῶς, ἀγαθαὶ, καὶ κατὰ

τὰς διαχωρήσιας, καὶ κατὰ τὰ ὄρα ἢν δε μή τι τῶν ζυμφερόντων ἐκκρίνηται διὰ τῶν τόπων τούτων, κακόν.

48. Ἐν τοῖσι μὴ διαλείπουσι πυρετοῖσιν, ἢν τὰ μὲν ἔξω ψυχρὰ ἦ, τὰ δὲ ἔνδον καίηται, καὶ δίψαν ἔχη, θανάσιμον.

49. Ἐν μὴ διαλείποντι πυρετῶ, ἢν χεῖλος, ἢ ὄφρυς, ἢ ὄφθαλμὸς, ἢ Ρὶς διαστραφῆ, ἢν μὴ βλέπη, ἢν μὴ ἀκούη, ἀσθενέος ἐόντος τοῦ κάμνοντος, ὅ τι ἂν τουτέων γένηται, ἐγγὺς ὁ θάνατος.

50. Ὀκου ἐν πυρετῶ μὴ διαλείποντι δύσπνοια γίνεται καὶ παραφροσύνη, θανάσιμον.

51. Ἐν τοῖσι πυρετοῖσιν ἀποστήματα μὴ λυόμενα πρὸς τὰς πρώτας κρίσιας, μῆκος νοῦσου σημαίνει.

52. Ὀκόσοι ἐν τοῖσι πυρετοῖσιν, ἢ ἐν τῆσιν ἄλλησιν ἀρρωστίησι κατὰ προαίρεσιν δακρύουσιν, οὐδὲν ἄτοπον ὀκόσοι δὲ μὴ κατὰ προαίρεσιν, ἀτοπώτερον.

53. Ὀκόσοισι δὲ ἐπὶ τῶν ὀδόντων ἐν τοῖσι πυρετοῖσι περίγλισχρα γίνεται, ἰσχυρότεροι γίνονται οἱ πυρετοί.
54. Ὀκόσοισιν ἐπὶ πούλῳ βῆχες ξηραὶ, βραχέα ἐρεθίζουσαι, ἐν πυρετοῖσι καυσώδεσιν, οὐ πάνυ τι διψώδεές εἰσιν.
55. Οἱ ἐπὶ βουβῶσι πυρετοί, πάντες κακοί, πλὴν τῶν ἐφημέρων.
56. Πυρέσσοντι ἰδρῶς ἐπιγενόμενος, μὴ ἐκλείποντος τοῦ πυρετοῦ, κακόν μηκύνει γὰρ ἢ νοῦσος, καὶ ὑγρασίην πλείω σημαίνει.
57. Ὑπὸ σπασμοῦ ἢ τετάνου ἐχομένῳ πυρετὸς ἐπιγενόμενος λύει τὸ νόσημα.
58. Ὑπὸ καύσου ἐχομένῳ, ἐπιγενομένου Ρίγεος, λύσις.
59. Τριταῖος ἀκριβῆς κρίνεται ἐν ἑπτὰ περιόδοισι τὸ μακρότατον.
60. Ὀκόσοισιν ἂν ἐν τοῖσι πυρετοῖσι τὰ ὦτα κωφωθῆ, αἷμα ἐκ Ρινῶν Ρυέν, ἢ κοιλίη ἐκταραχθεῖσα, λύει τὸ νόσημα.
61. Πυρέσσοντι ἢν μὴ ἐν περισσῆσιν ἡμέρησιν ἀφῆ ὁ πυρετὸς, ὑποτροπιάζειν εἴωθεν.
62. Ὀκόσοισιν ἐν τοῖσι πυρετοῖσιν ἴκτεροι ἐπιγίνονται πρὸ τῶν ἑπτὰ ἡμερῶν, κακόν, ἢν μὴ ξυνδόσιες ὑγρῶν κατὰ τὴν κοιλίην γένωνται.
63. Ὀκόσοισιν ἂν ἐν τοῖσι πυρετοῖσι καθ' ἡμέρην Ρίγεα γίνηται, καθ' ἡμέρην οἱ πυρετοὶ λύονται.
64. Ὀκόσοισιν ἐν τοῖσι πυρετοῖσι τῇ ἐβδόμῃ ἢ τῇ ἐνάτῃ ἢ τῇ ἐνδεκάτῃ ἢ τῇ τεσσαρεσκαδεκάτῃ ἴκτεροι ἐπιγίνονται, ἀγαθόν, ἢν μὴ τὸ δεξιὸν ὑποχόνδριον σκληρὸν ἦ ἢν δὲ μὴ, οὐκ ἀγαθόν.
65. Ἐν τοῖσι πυρετοῖσι περὶ τὴν κοιλίην καῦμα ἰσχυρὸν καὶ καρδιωγμὸς, κακόν.
66. Ἐν τοῖσι πυρετοῖσι τοῖσιν ὀξέσιν οἱ σπασμοὶ καὶ οἱ περὶ τὰ σπλάγχνα πόνοι ἰσχυροί, κακόν.
67. Ἐν τοῖσι πυρετοῖσιν οἱ ἐκ τῶν ὑπνῶν φόβοι, ἢ σπασμοὶ, κακόν.
68. Ἐν τοῖσι πυρετοῖσι τὸ πνεῦμα προσκόπτον, κακόν σπασμὸν γὰρ σημαίνει.

69. Ὀκόσοισιν οὔρα παχέα, θρομβώδεα, ὀλίγα, οὐκ ἀπυρέτοισι, πλῆθος ἐπελθὸν ἐκ τουτέων λεπτὸν ὠφελεί μάλιστα δὲ τὰ τοιαῦτα ἔρχεται, οἷσιν ἐξ ἀρχῆς, ἢ διὰ ταχέων ὑπόστασιν ἴσχει.

70. Ὀκόσοισι δὲ ἐν πυρετοῖσι τὰ οὔρα ἀνατεταραγμένα οἶον ὑποζυγίου, τουτέοισι κεφαλαλγία ἢ πάρειςιν, ἢ παρέσονται.

71. Ὀκόσοισιν ἐβδομαῖα κρίνεται, τουτέοισιν ἐπινέφελον ἴσχει τὸ οὔρον τῆ τετάρτη ἐρυθρὸν, καὶ τᾶλλα κατὰ λόγον.

72. Ὀκόσοισιν οὔρα διαφανέα λευκὰ, πονηρά μάλιστα δὲ ἐν τοῖσι φρενιτικοῖσιν ἐπιφαίνεται.

73. Ὀκόσοισιν ὑποχόνδρια μετέωρα, διαβορβορῦζοντα, ὀσφύος ἀλγήματος ἐπιγενομένου, αἱ κοιλία τουτέοισι καθυγραίνονται, ἢν μὴ φύσαι καταρραγέωσιν, ἢ οὔρου πλῆθος ἐπέλθη ἐν πυρετοῖσι δὲ ταῦτα.

74. Ὀκόσοισιν ἐλπίς ἐς ἄρθρα ἀφίστασθαι, Ρύεται τῆς ἀποστάσιος οὔρον πουλὺ, κάρτα παχὺ, καὶ λευκὸν γινόμενον, οἶον

ἐν τοῖσι κοπιώδεσι πυρετοῖσι τεταρταίοισιν ἄρχεται ἐνίοισι γίνεσθαι ἢν δὲ καὶ ἐκ τῶν Ρινῶν αἰμορραγήση, καὶ πάνυ ταχὺ λύεται.

75. Ἦν αἷμα ἢ πῦον οὐρέη, τῶν νεφρῶν ἢ τῆς κύστιος ἔλκωσιν σημαίνει.

76. Ὀκόσοισιν ἐν τῷ οὔρῳ παχεῖ ἐόντι σαρκία σμικρὰ ὥσπερ τρίχες συνεξέρχονται, τουτέοισιν ἀπὸ τῶν νεφρῶν ἐκκρίνεται.

77. Ὀκόσοισιν ἐν τῷ οὔρῳ παχεῖ ἐόντι πιτυρώδεα συνεξουρέεται, τουτέοισιν ἢ κύστις ψωριᾶ.

78. Ὀκόσοι ἀπὸ ταῦτομάτου αἷμα οὔρουσι, τουτέοισιν ἀπὸ τῶν νεφρῶν φλεβίου Ρῆξιν σημαίνει.

79. Ὀκόσοισιν ἐν τῷ οὔρῳ ψαμμώδεα ὑφίσταται, τουτέοισιν ἢ κύστις λιθιᾶ.

80. Ἦν αἷμα οὐρέη καὶ θρόμβους, καὶ στραγγουρίην ἔχη,

καὶ ὀδύνη ἐμπίπτῃ ἐς τὸ ὑπογάστριον καὶ ἐς τὸν περίνεον, τὰ περὶ τὴν κύστιν πονέει.



81. Ἦν αἷμα καὶ πῦον οὐρέη καὶ λεπίδας, καὶ ὀσμὴ βαρὴ ἦ, τῆς κύστιος ἔλκωσιν σημαίνει.

82. Ὀκόσοισιν ἐν τῇ οὐρήθρη φύματα φύεται, τουτέοισι, διαπυήσαντος καὶ ἐκραγέντος, λύσις.

83. Οὕρησις νύκτωρ πολλὴ γινομένη, σμικρὴν τὴν ὑποχώρησιν σημαίνει.

## SECTION 5

1. Σπασμὸς ἐξ ἔλλεβόρου, θανάσιμον.
2. Ἐπὶ τρώματι σπασμὸς ἐπιγενόμενος, θανάσιμον.
3. Αἷματος πολλοῦ Ρυέντος, σπασμὸς ἢ λυγμὸς ἐπιγενόμενος, κακόν.
4. Ἐπὶ ὑπερκαθάρσει σπασμὸς ἢ λυγμὸς ἐπιγενόμενος, κακόν.
5. Ἦν μεθύων ἐξαίφνης ἄφωνός τις γένηται, σπασθεὶς ἀποθνήσκει, ἢν μὴ πυρετὸς ἐπιλάβῃ, ἢ ἐς τὴν ὥρην ἐλθὼν, καθ' ἣν αἱ κραιπάλαι λύονται, φθέγγεται.
6. Ὀκόσοι ὑπὸ τετάνου ἀλίσκονται, ἐν τέσσαρσιν ἡμέρησιν ἀπόλλυνται ἢν δὲ ταύτας διαφύγωσιν, ὑγιέες γίνονται.
7. Τὰ ἐπιληπτικὰ ὀκόσοισι πρὸ τῆς ἥβης γίνεται, μετάστασιν ἴσχει ὀκόσοισι δὲ πέντε καὶ εἴκοσιν ἐτέων γίνεται, τουτέοισι τὰ πολλὰ ξυναποθνήσκει.
8. Ὀκόσοι πλευριτικοὶ γενόμενοι οὐκ ἀνακαθαίρονται ἐν τεσσαρεσκαίδεκα ἡμέρησι, τουτέοισιν ἐς ἐμπύημα καθίσταται.
9. Φθίσις γίνεται μάλιστα ἡλικίῃσι τῆσιν ἀπὸ ὀκτωκαίδεκα ἐτέων μέχρι πέντε καὶ τριήκοντα ἐτέων.
10. Ὀκόσοι κυνάγχην διαφεύγουσι, καὶ ἐς τὸν πλεύμονα αὐτέοισι  
τρέπεται, ἐν ἑπτὰ ἡμέρησιν ἀποθνήσκουσιν ἢν δὲ ταύτας διαφύγωσιν, ἔμπυοι γίνονται.
11. Τοῖσιν ὑπὸ τῶν φθισίων ἐνοχλουμένοισιν, ἢν τὸ πτύσμα, ὅπερ ἂν ἀποβήσσωσι, βαρὺ ὄζῃ ἐπὶ τοὺς ἄνθρακας ἐπιχεόμενον, καὶ αἱ τρίχες ἀπὸ τῆς κεφαλῆς Ρέωσι, θανατῶδες.
12. Ὀκόσοισι φθισιῶσιν αἱ τρίχες ἀπὸ τῆς κεφαλῆς Ρέουσιν, οὗτοι, διαρροίης ἐπιγενομένης, ἀποθνήσκουσιν.
13. Ὀκόσοι αἷμα ἀφρῶδες ἀναπτύουσι, τουτέοισιν ἐκ τοῦ πλεύμονος ἡ τοιαύτη

ἀναγωγὴ γίνεται.

14. Ὑπὸ φθίσιος ἐχομένῳ διάρροια ἐπιγενομένη, θανατῶδες.

15. Ὀκόσοι ἐκ πλευρίτιδος ἔμπυοι γίνονται, ἢ ἀνακαθαρθῶσιν ἐν τεσσαράκοντα ἡμέρησιν, ἀφ' ἧς ἂν ἡ Ρῆξις γένηται, παύονται ἢν δὲ μὴ, ἐς φθίσιν μεθίσταντα.

16. Τὸ θερμὸν βλάπτει ταῦτα πλεονάκις χρεομένοισι, σαρκῶν ἐκθήλυνσιν, νεύρων ἀκράτειαν, γνώμης νάρκωσιν, αἰμμόΡαγίας, λειποθυμίας, ταῦτα οἷσι θάνατος.

17. Τὸ δὲ ψυχρὸν, σπασμοὺς, τετάνους, μελασμοὺς καὶ Ρίγεια πυρετώδεα.

18. Τὸ ψυχρὸν, πολέμιον ὀστέοισιν, ὀδοῦσι, νεύροισιν, ἐγκεφάλῳ, νωτιαίῳ μυελῷ τὸ δὲ θερμὸν ὠφέλιμον.

19. Ὀκόσα κατέψυκται, ἐκθερμαίνειν, πλὴν ὀκόσα αἰμοόΡαγεί, ἢ μέλλει.

20. Ἐλκεσι τὸ μὲν ψυχρὸν δακνῶδες, δέρμα περισκληρύνει, ὀδύνην ἀνεκπύητον ποιεῖ, μελαίνει, Ρίγεια πυρετώδεα ποιεῖ, σπασμοὺς καὶ τετάνους.

21. Ἔστι δὲ ὄκου ἐπὶ τετάνου ἄνευ ἔλκεος νέῳ εὐσάρκῳ, θέρεος μέσου, ψυχροῦ πολλοῦ κατάχυσις ἐπανάκλησιν θέρμης ποιεῖται θέρμη δὲ ταῦτα Ρύεται.

22. Τὸ θερμὸν ἐκπυητικὸν, οὐκ ἐπὶ παντὶ ἔλκει, μέγιστον σημεῖον ἐς ἀσφαλείην, δέρμα μαλάσσει, ἰσχυαίνει, ἀνώδυνον, Ριγέων, σπασμῶν, τετάνων παρηγορικόν τὰ δὲ ἐν τῇ κεφαλῇ, καὶ καρηβαρίην λύει πλεῖστον δὲ διαφέρει ὀστέων κατήγμασι, μάλιστα

δὲ τοῖσιν ἐψιλωμένοισι, τουτέων δὲ μάλιστα, τοῖσιν ἐν κεφαλῇ ἔλκεα ἔχουσι καὶ ὀκόσα ὑπὸ ψύξιος θνήσκει, ἢ ἐλκοῦται, καὶ ἔρπησιν ἐσθιομένοισιν, ἔδρη, αἰδοίῳ, ὑστέρη, κύστει, τουτέοισι τὸ μὲν θερμὸν φίλιον καὶ κρῖνον, τὸ δὲ ψυχρὸν πολέμιον καὶ κτεῖνον.

23. Ἐν τουτέοισι δεῖ τῷ ψυχρῷ χρέεσθαι, ὀκόθεν αἰμοόΡαγεί, ἢ μέλλει, μὴ ἐπ' αὐτὰ, ἀλλὰ περὶ αὐτὰ, ὀκόθεν ἐπιρρεῖ καὶ ὀκόσαι φλεγμοναί, ἢ ἐπιφλογίσματα ἐς τὸ ἐρυθρὸν καὶ ὑφαιμον Ρέποντα αἵματι νεαρῷ, ἐπὶ ταῦτα, ἐπεὶ τὰ γε παλαιὰ μελαίνει καὶ ἐρυσίπελας τὸ μὴ ἐλκούμενον, ἐπεὶ τό γε ἐλκούμενον βλάπτει.

24. Τὰ ψυχρὰ, οἶον χιῶν, κρύσταλλος, τῷ στήθεϊ πολέμια, βηγέων κινητικὰ,

αίμορροϊκά, καταρροϊκά.

25. Τὰ ἐν ἄρθροισιν οἰδήματα καὶ ἀλγήματα, ἄτερ ἔλκεος, καὶ ποδαγρικὰ, καὶ σπάσματα, τουτέων τὰ πλεῖστα ψυχρὸν πολλὸν καταχεόμενον Ρηΐζει τε καὶ ἰσχναίνει, καὶ ὀδύνην λύει νάρκη δὲ μετρίη ὀδύνης λυτική.

26. Ὑδωρ τὸ ταχέως θερμαινόμενον καὶ ταχέως ψυχόμενον, κουφότατον.

27. Ὀκόσοισι πιεῖν ὀρέξεις νύκτωρ τοῖσι πάνυ διψῶσιν, ἢν ἐπικοιμηθῶσιν, ἀγαθόν.

28. Γυναικείων ἀγωγὸν, ἢ ἐν ἀρώμασι πυρή, πολλαχῇ δὲ καὶ ἐς ἄλλα χρησίμη ἂν ᾗν, εἰ μὴ καρηβαρίας ἐνεποίεεν.

29. Τὰς κούσας φαρμακεύειν, ἢν ὀργᾶ, τετράμηνα, καὶ ἄχρι ἐπτὰ μηνῶν ἦσσαν τὰ δὲ νήπια καὶ πρεσβύτερα εὐλαβέεσθαι.

30. Γυναικὶ ἐν γαστρὶ ἐχούση ὑπὸ τινος τῶν ὀξέων νοσημάτων ληφθῆναι, θανατῶδες.

31. Γυνὴ ἐν γαστρὶ ἔχουσα, φλεβοτομηθεῖσα, ἐκτιτρώσκει καὶ μᾶλλον ᾗσι μείζον τὸ ἔμβρυον.

32. Γυναικὶ αἷμα ἐμεούση, τῶν καταμηνίων Ραγέντων, λύσις.

33. Γυναικὶ, τῶν καταμηνίων ἐκλειπόντων, αἷμα ἐκ τῶν Ρινῶν Ρυῆναι, ἀγαθόν.

34. Γυναικὶ ἐν γαστρὶ ἐχούση, ἢν ἢ κοιλίη πουλλὰ Ρυῆ, κίνδυνος ἐκτρῶσαι.

35. Γυναικὶ ὑπὸ ὑστερικῶν ἐνοχλουμένη, ἢ δυστοκούση, παρμὸς ἐπιγινόμενος, ἀγαθόν.

36. Γυναικὶ τὰ καταμήνια ἄχροα, καὶ μὴ κατὰ τὰ αὐτὰ αἰεὶ γινόμενα, καθάρσιος δεῖσθαι σημαίνει.

37. Γυναικὶ ἐν γαστρὶ ἐχούση, ἢν οἱ μασθοὶ ἐξαίφνης ἰσχροὶ γένωνται, ἐκτιτρώσκει.

38. Γυναικὶ ἐν γαστρὶ ἐχούση ἢν ὁ ἕτερος μασθὸς ἰσχνὸς γένηται, δίδυμα ἐχούση, θάτερον ἐκτιτρώσκει καὶ ἢν μὲν ὁ δεξιὸς ἰσχνὸς γένηται, τὸ ἄρσεν ἢν δὲ ὁ

ἀριστερός, τὸ θῆλυ.

39. Ἦν γυνὴ μὴ κύουσα, μηδὲ τετοκυῖα, γάλα ἔχη, ταύτη τὰ καταμήνια ἐκλέλοιπεν.

40. Γυναιξὶν ὀκόσησιν ἐς τοὺς τιθοὺς αἷμα συστρέφεται, μανίην σημαίνει.

41. Γυναῖκα ἦν θέλης εἰδέναι εἰ κύει, ἐπὴν καθεύδειν μέλλη, ἀδείπνω εὐούση, μελίκρητον διδόναι πιεῖν κῆν μὲν στρόφος αὐτὴν ἔχη περὶ τὴν γαστέρα, κύει ἦν δὲ μὴ, οὐ κύει.

42. Γυνὴ ἔγκυος, ἦν μὲν ῥσεν κύη, εὐχροός ἐστιν ἦν δὲ θῆλυ, δύσχροος.

43. Ἦν γυναικὶ κυούση ἐρυσίπελας ἐν τῇ ὑστέρη γένηται, θανατῶδες.

44. Ὀκόσαι παρὰ φύσιν λεπταὶ εὐούσαι ἐν γαστρὶ ἔχουσιν, ἐκτιτρώσκουσι, πρὶν ἢ παχυνθῆναι.

45. Ὀκόσαι δὲ μετρίως τὸ σῶμα ἔχουσαι ἐκτιτρώσκουσι δίμηνα καὶ τρίμηνα ἄτερ προφάσιος φανερῆς, ταύτησιν αἱ κοτυληδόνες μύξης μεσταὶ εἰσι, καὶ οὐ δύνανται κρατεεῖν ὑπὸ τοῦ βάρους τὸ ἔμβρυον, ἀλλ' ἀπορῶγγνυνται.

46. Ὀκόσαι παρὰ φύσιν παχεῖαι εὐούσαι μὴ ξυλλαμβάνουσιν ἐν γαστρὶ, ταύτησι τὸ ἐπίπλοον τὸ στόμα τῶν ὑστερέων ἀποπιέζει, καὶ, πρὶν ἢ λεπτυνθῆναι, οὐ κύουσιν.

47. Ἦν ὑστέρη ἐν τῷ ἰσχύῳ ἐγκειμένη διαπυήση, ἀνάγκη ἔμμοτον γενέσθαι.

48. Ἐμβρυα τὰ μὲν ἄρσενα ἐν τοῖσι δεξιόισι, τὰ δὲ θήλεα ἐν τοῖσιν ἀριστεροῖσι μᾶλλον.

49. Ὑστέρων ἐκπτώσιες, πταρμικὸν προσθεῖς, ἐπιλάμβανε τοὺς μυκτῆρας καὶ τὸ στόμα.

50. Γυναικὶ τὰ καταμήνια ἦν βούλη ἐπισχεῖν, σικύην ὡς μεγίστην πρὸς τοὺς τιθοὺς πρόσβαλλε.

51. Ὀκόσαι ἐν γαστρὶ ἔχουσι, τουτέων τὸ στόμα τῶν ὑστερέων ξυμμέμυκεν.

52. Ἦν γυναικὶ ἐν γαστρὶ ἐχούση γάλα πουλὸ ἐκ τῶν μαζῶν Ρυῆ, ἀσθενὲς τὸ

ἔμβρυον σημαίνει ἢν δὲ στερεοὶ οἱ μαστοὶ ἔωσιν, ὑγιεινότερον τὸ ἔμβρυον σημαίνει.

53. Ὁκόσαι διαφθείρειν μέλλουσι τὰ ἔμβρυα, ταύτησιν οἱ

τιτθοὶ ἰσχυροὶ γίνονται ἢν δὲ πάλιν σκληροὶ γένωνται, ὀδύνη ἔσται ἢ ἐν τοῖσι τιτθοῖσιν, ἢ ἐν τοῖσιν ἰσχύοισιν, ἢ ἐν τοῖσιν ὀφθαλμοῖσιν, ἢ ἐν τοῖσι γούνασι, καὶ οὐ διαφθεύουσιν.

54. Ὁκόσησι τὸ στόμα τῶν ὑστερέων σκληρόν ἐστί, ταύτησιν ἀνάγκη τὸ στόμα τῶν ὑστερέων ζυμύειν.

55. Ὁκόσαι ἐν γαστρὶ ἔχουσαι ὑπὸ πυρετῶν λαμβάνονται, καὶ ἰσχυρῶς ἰσχυαίνονται, ἄνευ προφάσιος φανερῆς τίκτουσι χαλεπῶς καὶ ἐπικινδύνως, ἢ ἐκτιτρώκουσαι κινδυνεύουσιν.

56. Ἐπὶ Ρόφῳ γυναικείῳ σπασμὸς καὶ λειποθυμὴ ἢν ἐπιγένηται, κακόν.

57. Καταμηνίων γενομένων πλειόνων, νοῦσοι ζυμβαίνουσι, καὶ, μὴ γινομένων, ἀπὸ τῆς ὑστέρης γίνονται νοῦσοι.

58. Ἐπὶ ἀρχῷ φλεγμαίνοντι, καὶ ὑστέρη φλεγμαινούσῃ,

στραγγουρίη ἐπιγίνεται, καὶ ἐπὶ νεφροῖσιν ἐμπύοισι στραγγουρίη ἐπιγίνεται, ἐπὶ δὲ ἥπατι φλεγμαίνοντι λὺγξ ἐπιγίνεται.

59. Γυνὴ ἢν μὴ λαμβάνῃ ἐν γαστρὶ, βούλη δὲ εἰδέναι εἰ λήψεται, περικαλύψας ἱματίοισι, θυμία κάτω κῆν μὲν πορεύεσθαι δοκέῃ ἢ ὀδμῇ διὰ τοῦ σώματος ἐς τὰς Ρῖνας καὶ ἐς τὸ στόμα, γίνωσκε ὅτι αὐτὴ οὐ δι' ἐωυτὴν ἄγονός ἐστίν.

60. Ἦν γυναικὶ ἐν γαστρὶ ἐχούσῃ αἱ καθάρσιες πορεύονται, ἀδύνατον τὸ ἔμβρυον ὑγιαίνειν.

61. Ἦν γυναικὶ αἱ καθάρσιες μὴ πορεύονται, μήτε φρίκης, μήτε πυρετοῦ ἐπιγινόμενου, ἄσαι δὲ αὐτῇ προσπίπτωσι, λογίζου ταύτην ἐν γαστρὶ ἔχειν.

62. Ὁκόσαι ψυχρὰς καὶ πυκνὰς τὰς μήτρας ἔχουσιν, οὐ κυῖσκουσιν καὶ ὀκόσαι καθύγρους ἔχουσι τὰς μήτρας, οὐ κυῖσκουσιν, ἀποσβέννυται γὰρ ὁ γόνος καὶ ὀκόσαι ξηρὰς μᾶλλον καὶ περικαέας, ἐνδείη γὰρ τῆς τροφῆς φθείρεται τὸ σπέρμα ὀκόσαι

δὲ ἐξ ἀμφοτέρων τὴν κρᾶσιν ἔχουσι ζύμμετρον, αἱ τοιαῦται ἐπίτεκνοι γίνονται.

63. Παραπλησίως δὲ καὶ ἐπὶ τῶν ἀρρένων ἢ γὰρ διὰ τὴν ἀραιότητα τοῦ σώματος τὸ πνεῦμα ἔξω φέρεται πρὸς τὸ μὴ παραπέμπειν τὸ σπέρμα ἢ διὰ τὴν πυκνότητα τὸ ὑγρὸν οὐ διαχωρέει ἔξω ἢ διὰ τὴν ψυχρότητα οὐκ ἐκπυροῦται, ὥστε ἀθροίζεσθαι πρὸς τὸν τόπον τοῦτον ἢ διὰ τὴν θερμασίην τὸ αὐτὸ τοῦτο γίνεται.

64. Γάλα διδόναι κεφαλαλγέουσι κακὸν κακὸν δὲ καὶ πυρεταίνουσι, καὶ οἷσιν ὑποχόνδρια μετέωρα καὶ διαβορβορύζοντα, καὶ τοῖσι

διψώδεσι κακὸν δὲ, καὶ οἷσι χολώδεις αἱ ὑπὸ χωρήσεις ἐν ὀξέσι πυρετοῖσιν ἐοῦσι, καὶ οἷσιν αἵματος πολλοῦ διαχώρησις γέγονεν ἀρμόζει δὲ φθινώδεσι μὴ λίην πολλῶ πυρέσσουσιν διδόναι δὲ καὶ ἐν πυρετοῖσι μακροῖσι βληχροῖσι, μηδενὸς τῶν προειρημένων σημείων παρεόντος, παρὰ λόγον δὲ ἐκτετηκότων.

65. Ὀκόσοισιν οἰδήματα ἐφ' ἔλκεσι φαίνεται, οὐ μάλα σπῶνται, οὐδὲ μαίνονται τουτέων δὲ ἀφανισθέντων ἐξαίφνης, τοῖσι μὲν ὀπισθεν σπασμοὶ, τέτανοι, τοῖσι δὲ ἔμπροσθεν μανία, ὀδύνη πλευροῦ ὀξεῖαι, ἢ ἐμπύησις, ἢ δυσεντερία, ἢ ἔρυθρὰ μᾶλλον ἢ τὰ οἰδήματα.

66. Ἦν, τραυμάτων ἰσχυρῶν ἐόντων καὶ πονηρῶν, οἴδημα μὴ φαίνεται, μέγα κακόν.

67. Τὰ χαῦνα, χρηστὰ, τὰ ἔνωμα, κακά.

68. Τῶ τὰ ὀπισθεν τῆς κεφαλῆς ὀδυνωμένῳ ἢ ἐν μετώπῳ ὀρθίῃ φλέψι τμηθεῖσα, ὠφελέει.

69. Ῥίγεα ἄρχεται, γυναιξὶ μὲν ἐξ ὀσφύος μᾶλλον καὶ διὰ νότου ἐς κεφαλὴν ἀτὰρ καὶ ἀνδράσι μᾶλλον ὀπισθεν, ἢ ἔμπροσθεν τοῦ σώματος, οἶον ἀπὸ πήχεων καὶ μηρῶν ἀτὰρ καὶ τὸ δέρμα ἀραιὸν ἔχουσι, δηλοῖ δὲ τοῦτο ἢ θρίξ.

70. Οἱ ὑπὸ τεταρταίων ἀλίσκόμενοι ὑπὸ σπασμοῦ οὐ πάνυ τι ἀλίσκονται ἢν δὲ ἀλίσκωνται πρότερον, εἶτα ἐπιγένηται τεταρταῖος, παύονται.

71. Ὀκόσοισι δέρματα περιτείνεται καρφαλέα καὶ σκληρὰ, ἄνευ ἰδρώτος τελευτῶσιν ὀκόσοισι δὲ χαλαρὰ καὶ ἀραιὰ, σὺν ἰδρῶτι τελευτῶσιν.

72. Οἱ ἰκτεριώδεις οὐ πάνυ τι πνευματώδεις εἰσιν.

## SECTION 6

1. Ἐν τῆσι χρονίησι λειεντερίησιν ὄξυρεγμῆ ἐπιγινομένη, μὴ γενομένη πρότερον, σημεῖον ἀγαθόν.
2. Οἷσι Ρῖνες ὑγρότεραι φύσει, καὶ ἡ γονὴ ὑγροτέρη, ὑγιαίνουσι νοσηρότερον οἷσι δὲ τάναντία, ὑγιεινότερον.
3. Ἐν τῆσι μακρῆσι δυσεντερίησιν αἱ ἀποσιτίαι, κακόν καὶ ξὺν πυρετῶ, κάκιον.
4. Τὰ περιμάδαρα ἔλκεα, κακοήθεια.
5. Τῶν ὀδυνέων ἐν πλευρῆσι, καὶ ἐν στήθεσι, καὶ ἐν τοῖσιν ἄλλοισι μέρεσιν, ἦν μέγα διαφέρωσι, καταμαθητέον.
6. Τὰ νεφριτικά, καὶ ὀκόσα κατὰ τὴν κύστιν, ἐργωδῶς ὑγιάζεται τοῖσι πρεσβύτησιν.
7. Τὰ ἀλγήματα τὰ κατὰ τὴν κοιλίην γινόμενα, τὰ μὲν μετέωρα κουφότερα, τὰ δὲ μὴ μετέωρα, ἰσχυρότερα.
8. Τοῖσιν ὑδρωπικοῖσι τὰ γινόμενα ἔλκεα ἐν τῷ σώματι, οὐ Ρηϊδίως ὑγιάζεται.
9. Τὰ πλατέα ἐξανθήματα, οὐ πάνυ τι κνησμώδεα.
10. Κεφαλὴν πονέοντι καὶ περιωδυνέοντι, πῦον, ἢ ὕδωρ, ἢ αἷμα Ρυέν κατὰ τὰς Ρῖνας, ἢ κατὰ τὸ στόμα, ἢ κατὰ τὰ ὦτα, λύει τὸ νόσημα.
11. Τοῖσι μελαγχολικοῖσι, καὶ τοῖσι νεφριτικοῖσιν αἰμορροΐδες ἐπιγινόμεναι, ἀγαθόν.
12. Τῷ ἰηθέντι χρονίας αἰμορροΐδας, ἦν μὴ μία φυλαχθῆ, κίνδυνος ὑδρωπα ἐπιγενέσθαι ἢ φθίσιν.
13. Ὑπὸ λυγμοῦ ἐχομένῳ παρμοὶ ἐπιγενόμενοι λύουσι τὸν λυγμόν.
14. Ὑπὸ ὑδρωπος ἐχομένῳ, κατὰ τὰς φλέβας ἐς τὴν κοιλίην ὕδατος Ρυέντος, λύσις.
15. Ὑπὸ διαρροΐης ἐχομένῳ μακρῆς ἀπὸ ταυτομάτου ἔμετος ἐπιγινόμενος λύει



τὴν διάρροϊαν.

16. Ὑπὸ πλευρίτιδος, ἢ ὑπὸ περιπλευμονίης ἐχομένῳ διάρροϊα ἐπιγενομένη, κακόν.

17. Ὀφθαλμιῶντι, ὑπὸ διάρροϊῆς ληφθῆναι, ἀγαθόν.

18. Κύστιν διακοπέντι, ἢ ἐγκέφαλον, ἢ καρδίην, ἢ φρένας, ἢ τῶν ἐντέρων τι τῶν λεπτῶν, ἢ κοιλίην, ἢ ἥπαρ, θανατῶδες.

19. Ἐπὴν διακοπῆ ὀστέον, ἢ χονδρὸς, ἢ νεῦρον, ἢ γνάθου τὸ λεπτόν, ἢ ἀκροποσθίη, οὔτε αὔξεται, οὔτε ζυμφύεται.

20. Ἦν ἐς τὴν κοιλίην αἷμα ἐκχυθῆ παρὰ φύσιν, ἀνάγκη ἐκπτυηθῆναι.

21. Τοῖσι μαινομένοισι, κισῶν ἢ αἱμορροΐδων ἐπιγενομένων, μανίης λύσις.

22. Ὀκόσα Ρήγματα ἐκ τοῦ νότου ἐς τοὺς ἀγκῶνας καταβαίνει, φλεβοτομὴ λύει.

23. Ἦν φόβος ἢ δυσθυμίη πουλὺν χρόνον διατελέη, μελαγχολικὸν τὸ τοιοῦτον.

24. Ἐντέρων ἢν διακοπῆ τῶν λεπτῶν τι, οὐ ζυμφύεται.

25. Ἐρυσίπελας, ἔξωθεν καταχεόμενον, ἔσω τρέπεσθαι οὐκ ἀγαθόν ἔσωθεν δὲ ἔξω, ἀγαθόν.

26. Ὀκόσοισιν ἂν ἐν τοῖσι καύσοισι τρόμοι γενωνται, παρακοπὴ λύει.

27. Ὀκόσοι ἔμπυοι ἢ ὑδρωπικοὶ τέμνονται ἢ καίονται, ἐκρυνέντος τοῦ πύου ἢ τοῦ ὕδατος ἀθρόου, πάντως ἀπόλλυνται.

28. Εὐνοῦχοι οὐ ποδαγριῶσιν, οὐδὲ φαλακροὶ γίνονται.

29. Γυνὴ οὐ ποδαγριᾶ, ἢν μὴ τὰ καταμήνια αὐτῆ ἐκλίπη.

30. Παῖς οὐ ποδαγριᾶ πρὸ τοῦ ἀφροδισιασμοῦ.

31. Ὀδύνας ὀφθαλμῶν ἀκρητοποσίη, ἢ λουτρὸν, ἢ πυρίη, ἢ φλεβοτομὴ, ἢ φαρμακοποσίη λύει.

32. Τραυλοὶ ὑπὸ διάρροϊῆς μάλιστα ἀλίσκονται μακρῆς.

33. Οἱ ὄξυρεγμιώδεες οὐ πάνυ τι πλευριτικοὶ γίνονται.
34. Ὀκόσοι φαλακροὶ, τουτέοισι κίρσοι μεγάλοι οὐ γίνονται ὀκόσοισι δὲ φαλακροῖσιν ἐοῦσιν κίρσοι γίνονται, πάλιν οὗτοι γίνονται δασέες.
35. Τοῖσιν ὑδρωπικοῖσι βῆξ ἐπιγενομένη, κακόν.
36. Δυσουρίην φλεβοτομή λύει, τάμνει δὲ τὰς ἔσω.
37. Ὑπὸ κυνάγχης ἐχομένω οἰδήματα γενέσθαι ἐν τῷ βρόγχῳ ἔξω, ἀγαθόν.
38. Ὀκόσοισι κρυπτοὶ καρκίνοι γίνονται, μὴ θεραπεύειν βέλτιον θεραπευόμενοι γὰρ ἀπόλλυνται ταχέως, μὴ θεραπευόμενοι δὲ, πούλυν χρόνον διατελέουσιν.
39. Σπασμοὶ γίνονται, ἢ ὑπὸ πληρώσιος, ἢ κενώσιος οὕτω δὲ καὶ λυγμός.
40. Ὀκόσοισι περὶ τὸ ὑποχόνδριον πόνοι γίνονται ἄτερ φλεγμοῆς, τουτέοισι πυρετὸς ἐπιγενομένος λύει τὸν πόνον.
41. Ὀκόσοισι διάπυόν τι ἐὼν ἐν τῷ σώματι μὴ διασημαίνει, τουτέοισι διὰ παχύτητα τοῦ τόπου οὐ διασημαίνει.
42. Ἐν τοῖσιν ἰκτερικοῖσι τὸ ἥπαρ σκληρὸν γενέσθαι, πονηρόν.
43. Ὀκόσοι σπληνώδεες ὑπὸ δυσεντερίης ἀλίσκονται, τουτέοισιν, ἐπιγενομένης μακρῆς τῆς δυσεντερίης, ὕδρωψ ἐπιγίνεται, ἢ λειεντερίη, καὶ ἀπόλλυνται.
44. Ὀκόσοισιν ἐκ στραγγουρίης εἰλεοὶ γίνονται, ἐν ἑπτὰ ἡμέρησιν ἀπόλλυνται, ἦγμῃ, πυρετοῦ ἐπιγενομένου, ἄλις τὸ οὔρον Ρυῆ.
45. Ἐλκεα ὀκόσα ἐνιαύσια γίνεται, ἢ μακρότερον χρόνον ἴσχει, ἀνάγκη ὀστέον ἀφίστασθαι, καὶ τὰς οὐλὰς κοίλας γίνεσθαι.
46. Ὀκόσοι ὑβοὶ ἐξ ἄσθματος ἢ βηχὸς γίνονται πρὸ τῆς ἥβης, ἀπόλλυνται.
47. Ὀκόσοισι φλεβοτομή ἢ φαρμακεῖη ζυμφέρει, τουτέους προσῆκον τοῦ ἥρος φλεβοτομεῖν, ἢ φαρμακεύειν.
48. Τοῖσι σπληνώδεσι δυσεντερίη ἐπιγενομένη, ἀγαθόν.
49. Ὀκόσα ποδαγρικὰ νουσήματα γίνεται, ταῦτα ἀποφλεγμῆναντα ἐν

τεσσαράκοντα ἡμέρησιν ἀποκαθίσταται.

50. Ὀκόσοισιν ἂν ὁ ἐγκέφαλος διακοπῆ, τουτέοισιν ἀνάγκη πυρετὸν καὶ χολῆς ἔμετον ἐπιγίνεσθαι.

51. Ὀκόσοισιν ὑγιαίνουσιν ὀδύνας γίνονται ἐξαίφνης ἐν τῇ κεφαλῇ, καὶ παραχρῆμα ἄφωνοι κεῖνται, καὶ Ρέγκουσιν, ἀπόλλυνται ἐν ἑπτὰ ἡμέρησιν, ἢν μὴ πυρετὸς ἐπιλάβῃ.

52. Σκοπεῖν δὲ χρῆ καὶ τὰς ὑποφάσιαι τῶν ὀφθαλμῶν ἐν τοῖσιν ὕπνοισιν ἢν γάρ τι ὑποφαίνεται, ξυμβαλλομένων τῶν βλεφάρων, τοῦ λευκοῦ μὴ ἐκ διαρροΐης ἐόντι ἢ φαρμακοποσίης, φλαῦρον τὸ σημεῖον καὶ θανατῶδες σφόδρα.

53. Αἱ παραφροσύναι αἱ μὲν μετὰ γέλωτος γινόμεναι, ἀσφαλέστεραι αἱ δὲ μετὰ σπουδῆς, ἐπισφαλέστεραι.

54. Ἐν τοῖσιν ὀξέσι πάθεσι τοῖσι μετὰ πυρετοῦ αἱ κλαυθμώδεις ἀναπνοαὶ, κακαί.

55. Τὰ ποδαγωγικά τοῦ ἥρος καὶ τοῦ φθινοπώρου κινέεται ὡς ἐπὶ τὸ πουλύ.

56. Τοῖσι μελαγχολικοῖσι νουσήμασιν ἐς τάδε ἐπικίνδυνοι αἱ ἀποσκήψεις ἢ ἀπόπληξιν τοῦ σώματος, ἢ σπασμὸν, ἢ μανίην, ἢ τύφλωσιν σημαίνουσιν.

57. Ἀπόπληκτοι δὲ μάλιστα γίνονται ἡλικίῃ τῇ ἀπὸ τεσσαράκοντα ἐτέων ἄχρις ἐξήκοντα.

58. Ἦν ἐπίπλοον ἐκπέση, ἀνάγκη ἀποσαπῆναι.

59. Ὀκόσοισιν ὑπὸ ἰσχιάδος ἐνοχλουμένοισιν ἐξίσταται τὸ ἰσχίον, καὶ πάλιν ἐμπίπτει, τουτέοισι μύξαι ἐπιγίνονται.

60. Ὀκόσοισιν ὑπὸ ἰσχιάδος ἐνοχλουμένοισι χρονίης τὸ ἰσχίον ἐξίσταται, τουτέοισι τήκεται τὸ σκέλος, καὶ χωλοῦνται, ἢν μὴ καυθέωσιν.

## SECTION 7

1. Ἐν τοῖσιν ὀξέσι νουσήμασι ψύξις ἀκρωτηρίων, κακόν.
2. Ἐπὶ ὀστέω νοσέοντι σὰρξ πελιδνὴ, κακόν.
3. Ἐπὶ ἐμέτῳ λύγξ καὶ ὀφθαλμοὶ ἐρυθροὶ, κακόν.
4. Ἐπὶ ἰδρῶτι φρίκη, οὐ χρηστόν.
5. Ἐπὶ μανίῃ δυσεντερίῃ, ἢ ὕδρωψ, ἢ ἔκστασις, ἀγαθόν.
6. Ἐν νούσῳ πολυχρονίῃ ἀσιτίῃ καὶ ἄκρητοι ὑποχωρήσεις, κακόν.
7. Ἐκ πολυποσίης ῥῖγος καὶ παραφροσύνη, κακόν.
8. Ἐπὶ φύματος ἔσω ῥήξει ἔκλυσις, ἔμετος, καὶ λειποψυχὴ γίνεται.
9. Ἐπὶ αἵματος ῥύσει παραφροσύνη ἢ σπασμὸς, κακόν.
10. Ἐπὶ εἰλεῶ ἔμετος, ἢ λύγξ, ἢ σπασμὸς, ἢ παραφροσύνη, κακόν.
11. Ἐπὶ πλευρίτιδι περιπλευμονίῃ, κακόν.
12. Ἐπὶ περιπλευμονίῃ φρενῖτις, κακόν.
13. Ἐπὶ καύμασιν ἰσχυροῖσι σπασμὸς ἢ τέτανος, κακόν.
14. Ἐπὶ πληγῇ ἐς τὴν κεφαλὴν ἔκπληξις ἢ παραφροσύνη, κακόν.
15. Ἐπὶ αἵματος πτύσει, πύου τύσις.
16. Ἐπὶ πύου πτύσει, φθίσις καὶ ῥύσις ἐπὴν δὲ τὸ σίελον ἴσχηται, ἀποθνήσκουσιν.
17. Ἐπὶ φλεγμονῇ τοῦ ἥπατος λύγξ, κακόν.
18. Ἐπὶ ἀγρυπνίῃ σπασμὸς ἢ παραφροσύνη, κακόν. 18 βις. Ἐπὶ ληθάργῳ τρόμος, κακόν.
19. Ἐπὶ ὀστέου ψιλῶσει, ἐρυσίπελας.

20. Ἐπὶ ἐρυσσιπέλατι σηπεδῶν ἢ ἐκπύησις.
21. Ἐπὶ ἰσχυρῷ σφυγμῷ ἐν τοῖσιν ἔλκεσιν, αἰμορραγίη.
22. Ἐπὶ ὀδύνη πολυχρονίῳ τῶν περὶ τὴν κοιλίην, ἐκπύησις.
23. Ἐπὶ ἀκρήτῳ ὑποχωρήσει, δυσεντερίη.
24. Ἐπὶ ὀστέου διακοπῇ, παραφροσύνη, ἣν κενεὸν λάβη
25. Ἐκ φαρμακοποσίης σπασμὸς, θανατῶδες.
26. Ἐπὶ ὀδύνη ἰσχυρῇ τῶν περὶ τὴν κοιλίην, ἀκρωτηρίων ψύξις, κακόν.
27. Ἐν γαστρὶ ἐχούση τεινεσμὸς ἐπιγενόμενος ἐκτρῶσαι ποιέει.
28. Ὅ τι ἂν ὀστέον, ἢ χόνδρος, ἢ νεῦρον ἀποκοπῇ ἐν τῷ σώματι, οὔτε αὖξεται, οὔτε συμφύεται.
29. Ἦν ὑπὸ λευκοῦ φλέγματος ἐχομένῳ διάρροια ἐπιγένηται ἰσχυρῇ, λύει τὴν νοῦσον.
30. Ὁκόσοισιν ἀφρώδεα τὰ διαχωρήματα ἐν τῆσι διαρροίησι, τουτέοισιν ἀπὸ τῆς κεφαλῆς ταῦτα ἀποκαταρρέει.
31. Ὁκόσοισι πυρέσσουσιν ἐν τοῖσιν οὔροισι κριμνώδεις αἱ ὑποστάσιες γίνονται, μακρὴν τὴν ἀρρωστίην σημαίνουσιν.
32. Ὁκόσοισι δὲ χολώδεις αἱ ὑποστάσιες, ἄνωθεν δὲ λεπταὶ, ὀξεῖν τὴν ἀρρωστίην σημαίνουσιν.
33. Ὁκόσοισι δὲ διεστηκότα τὰ οὔρα γίνεται, τουτέοισι ταραχὴ ἰσχυρὴ ἐν τῷ σώματι ἐστίν.
34. Ὁκόσοισι δὲ ἐπὶ τοῖσιν οὔροισιν ἐφίστανται πομφόλυγες, νεφριτικὰ σημαίνουσι, καὶ μακρὴν τὴν ἀρρωστίην ἔσεσθαι.
35. Ὁκόσοισι δὲ λιπαρὴ ἢ ἐπίστασις καὶ ἀθρόη, τουτέοισι νεφριτικὰ καὶ ὀξεία σημαίνει.
36. Ὁκόσοισι δὲ νεφριτικοῖσιν ἐοῦσι τὰ προειρημένα συμβαίνει σημήϊα, πόνοι τε

ὀξέες περὶ τοὺς μύας τοὺς ῥαχιαίους γίνονται, ἦν μὲν περὶ τοὺς ἔξω τόπους γίνονται, ἀπόστημα προσδέχου ἐσόμενον ἔξω ἦν δὲ μᾶλλον οἱ πόνοι πρὸς τοὺς ἔσω τόπους γίνονται, καὶ τὸ ἀπόστημα προσδέχου ἐσόμενον μᾶλλον ἔσω.

37. Ὁκόσοι αἷμα ἐμέουσιν, ἦν μὲν ἄνευ πυρετοῦ, σωτήριον

ἦν δὲ ζὺν πυρετῶ, κακὸν θεραπεύειν δὲ τοῖσι ψυκτικοῖσι καὶ τοῖσι στυπτικοῖσιν.

38. Κατάρροοι οἱ ἐς τὴν ἄνω κοιλίην ἐκτυέονται ἐν ἡμέρησιν εἴκοσιν.

39. Ἦν οὐρέη αἷμα καὶ θρόμβους, καὶ στραγγουρίη ἔχη, καὶ ὀδύνη ἐμπίπτη ἐς τὸν περινεον καὶ τὸν κτένα, τὰ περὶ τὴν κύστιν νοσέειν σημαίνει.

40. Ἦν ἡ γλῶσσα ἐξαίφνης ἀκρατῆς γένηται, ἢ ἀπόπληκτόν τι τοῦ σώματος, μελαγχολικὸν τὸ τοιοῦτο γίνεται.

41. Ἦν, ὑπερκαθαιρομένων τῶν πρεσβυτέρων, λὺγξ ἐπιγένηται, οὐκ ἀγαθόν

42. Ἦν πυρετὸς μὴ ἀπὸ χολῆς ἔχη, ὕδατος πολλοῦ καὶ θερμοῦ καταχεομένου κατὰ τῆς κεφαλῆς, λύσις τοῦ πυρετοῦ γίνεται.

43. Γυνὴ ἀμφιδέξιος οὐ γίνεται.

44. Ὁκόσοι ἔμπυοι καίονται ἢ τέμνονται, ἦν μὲν τὸ πῦον καθαρὸν ῥυῆ καὶ λευκὸν, περιγίνονται ἦν δὲ ὕφαιμον καὶ βορβορῶδες καὶ δυσῶδες, ἀπόλλυνται

45. Ὁκόσοι τὸ ἥπαρ διάπυον καίονται ἢ τέμνονται, ἦν μὲν τὸ πῦον καθαρὸν ῥυῆ καὶ λευκὸν, περιγίνονται ἐν χιτῶνι γὰρ τὸ πῦον τουτέοισιν ἐστὶν ἦν δὲ οἶον ἀμόργη ῥυῆ, ἀπόλλυνται.

46. Ὁδύνας ὀφθαλμῶν, ἄκρητον ποτίσας καὶ λούσας πολλῶ θερμῶ, φλεβοτόμει.

47. Ὑδρωπιῶντα ἦν βῆξ ἔχη, ἀνέλπιστός ἐστίν.

48. Στραγγουρίην καὶ δυσουρίην θώρηξις καὶ φλεβοτομή λυεὶ τάμνειν δὲ τὰς ἔσω.

49. Ὑπὸ κυνάγχης ἐχομένῳ οἴδημα καὶ ἐρύθημα ἐν τῷ στήθει ἐπιγενόμενον, ἀγαθόν ἔξω γὰρ τρέπεται τὸ νόσημα.

50. Ὁκόσοισιν ἂν σφακελισθῆ ὁ ἐγκέφαλος, ἐν τρισὶν ἡμέρησιν ἀπόλλυνται ἦν δὲ

ταύτας διαφύγωσιν, ὑγιέες γίνονται.

51. Πταρμὸς γίνεται ἐκ τῆς κεφαλῆς, διαθερμαινομένου τοῦ ἐγκεφάλου, ἢ διυγραιομένου τοῦ ἐν τῇ κεφαλῇ κενεοῦ ὑπερχέεται οὖν ὁ ἀήρ ὁ ἐνεῶν, ψοφείει δὲ, ὅτι διὰ στενοῦ ἢ διέξοδος αὐτοῦ ἐστίν

52. Ὁκόσοι ἦπαρ περιωδυνέουσι, τουτέοισι πυρετὸς ἐπιγενόμενος λύει τὴν ὀδύνην.

53. Ὁκόσοισι ξυμφέρει αἷμα ἀφαιρέεσθαι ἀπὸ τῶν φλεβῶν, τουτέοισι ξυμφέρει ἦρος φλεβοτομέεσθαι.

54. Ὁκόσοισι μεταξὺ τῶν φρενῶν καὶ τῆς γαστρὸς φλέγμα ἀποκλείεται, καὶ ὀδύνην παρέχει, οὐκ ἔχον διέξοδον ἐς οὐδετέρην τῶν κοιλιῶν, τουτέοισι, κατὰ τὰς φλέβας ἐς τὴν κύστιν τραπέντος τοῦ φλέγματος, λύσις γίνεται τῆς νόσου.

55. Ὁκόσοισι δ' ἂν τὸ ἦπαρ ὕδατος πλησθὲν ἐς τὸ ἐπίπλοον ῥαγῆ, τουτέοισιν ἡ κοιλίη ὕδατος ἐμπίπλται, καὶ ἀποθνήσκουσιν.

56. Ἀλύκη, χάσμη, φρίκη, οἶνος ἴσος ἴσῳ πινόμενος λύει.

57. Ὁκόσοισιν ἐν τῇ οὐρήθρη φύματα γίνεται, τουτέοισι, διαπυήσαντος καὶ ἐκραγέντος, λύεται ὁ πόνος

58. Ὁκόσοισιν ἂν ὁ ἐγκέφαλος σεισθῆ ὑπὸ τινος προφάσιος, ἀνάγκη ἀφώνους γίνεσθαι παραχρῆμα.

60. Τοῖσι σώμασι τοῖσιν ὑγρὰς τὰς σάρκας ἔχουσι δεῖ λιμὸν ἐμποιέειν λιμὸς γὰρ ξηραίνει τὰ σώματα.

59. Ἦν ὑπὸ πυρετοῦ ἐχομένῳ, οἰδήματος μὴ ἐόντος ἐν τῇ φάρυγγι, πνιξ ἐξαίφνης ἐπιγένηται, καὶ καταπίνειν μὴ δύνηται, ἀλλ' ἢ μόλις, θανάσιμον. 59 βις. Ἦν ὑπὸ πυρετοῦ ἐχομένῳ ὁ τράχηλος ἐπιστραφῆ, καὶ καταπίνειν μὴ δύνηται, οἰδήματος μὴ ἐόντος ἐν τῷ τραχήλῳ, θανάσιμον.

61. Ὁκου ἂν ἐν ὄλῳ τῷ σώματι μεταβολαί, καὶ τὸ σῶμα καταψύχηται, καὶ πάλιν θερμαίνεται, ἢ χρῶμα ἕτερον ἐξ ἑτέρου μεταβάλλη, μῆκος νόσου σημαίνει.

62. Ἰδρῶς πουλὺς, θερμὸς ἢ ψυχρὸς, ῥέων αἰεὶ, σημαίνει ἔχειν πλησμονὴν ὑγροῦ ἀπάγειν οὖν χρῆ τῷ μὲν ἰσχυρῷ ἄνωθεν, τῷ δὲ ἀσθενεῖ κάτωθεν.

63. Οἱ πυρετοὶ οἱ μὴ διαλείποντες, ἦν ἰσχυρότεροι διὰ τρίτης γίνονται, ἐπικίνδunami ὅτω δ' ἂν τρόπῳ διαλείπωσι, σημαίνει ὅτι ἀκίνδunami.

64. Ὀκόσοισι πυρετοὶ μακροὶ, τουτέοισιν ἢ φύματα, ἢ ἐς τὰ ἄρθρα πόνοι ἐγγίνονται.

65. Ὀκόσοισι φύματα ἢ ἐς τὰ ἄρθρα πόνοι ἐκ πυρετῶν γίνονται, οὗτοι σιτίοισι πλείοσι χρέονται.

66. Ἦν τις πυρέσσοντι τροφήν διδῶ, ἦν ὑγιεῖ, τῷ μὲν ὑγιαίνουντι ἰσχύς, τῷ δὲ κάμνοντι νοῦσος.

67. Τὰ διὰ τῆς κύστιος διαχωρέοντα ὀρῆν δεῖ, εἰ οἷα τοῖς

ὑγιαίνουσιν ὑποχωρέεται τὰ ἥκιστα οὖν ὅμοια τουτέοισι, ταῦτα νοσοδέστερα, τὰ δ' ὅμοια τοῖσιν ὑγιαίνουσιν, ἥκιστα νοσερά.

68. Καὶ οἷσι τὰ ὑποχωρήματα, ἦν ἐάσης στῆναι καὶ μὴ κινήσης, ὑφίσταται οἶονεὶ ζύσματα, τουτέοισι συμφέρει ὑποκαθῆραι τὴν κοιλίην ἦν δὲ μὴ καθαρὴν ποιήσας διδῶς τὰ ῥοφήματα, ὀκόσω ἂν κλείω διδῶς, μᾶλλον βλάβεις.

69. Ὀκόσοισιν ἂν κάτω ὠμὰ διαχωρέη, ἀπὸ χολῆς μελαίνης ἐστίν, ἦν πλείονα, πλείονος, ἦν ἐλάσσονα, ἐλάσσονος.

70. Αἱ ἀποχρέμψεις αἱ ἐν τοῖσι πυρετοῖσι τοῖσι μὴ διαλείπουσι, πελιδναὶ καὶ αἱματώδεις καὶ δυσώδεις, πᾶσαι κακαὶ ἀποχωρέουσαι δὲ καλῶς, ἀγαθαί, καὶ κατὰ κοιλίην καὶ κύστιν καὶ ὅκου ἂν τι ἀποχωρέον στῆ μὴ κεκαθαρμένῳ, κακόν.

71. Τὰ σώματα χρῆ, ὅκου τις βούλεται καθαίρεσθαι, εὔροα ποιέειν κῆν μὲν ἄνω βούλη εὔροα ποιέειν, στῆσαι τὴν κοιλίην ἦν δὲ κάτω εὔροα ποιέειν, ὑγρῆναι τὴν κοιλίην.

72. Ὑπνος, ἀγρυπνίη, ἀμφότερα μᾶλλον τοῦ μετρίου γινόμενα, νοῦσος.

73. Ἐν τοῖσι μὴ διαλείπουσι πυρετοῖσιν, ἦν τὰ μὲν ἔξω ψυχρὰ ἦ, τὰ δὲ ἔσω καίηται, καὶ πυρετὸς ἔχη, θανάσιμον.

74. Ἐν μὴ διαλείποντι πυρετῷ, ἦν χειλὸς, ἢ ρίς, ἢ ὀφθαλμὸς διαστραφῆ, ἦν μὴ βλέπη, ἦν μὴ ἀκούη, ἦδη ἀσθενῆς ἐὼν, ὅ τι ἂν ἦ τουτέων τῶν σημείων, θανάσιμον.



75. Ἐπὶ λευκῷ φλέγματι ὕδρωψ ἐπιγίνεται.

76. Ἐπὶ διαρροίῃ δυσεντερίῃ.

77. Ἐπὶ δυσεντερίῃ λειεντερίῃ.

78. Ἐπὶ σφακέλῳ ἀπόστασις ὀστέου.

79 et 80. Ἐπὶ αἵματος ἐμέτῳ φθορῇ, καὶ πύου κάθαρσις ἄνω ἐπὶ φθορῇ ῥεῦμα ἐκ τῆς κεφαλῆς ἐπὶ ῥεύματι διάρροια ἐπὶ διαρροίῃ σχέσις τῆς ἄνω καθάρσιος ἐπὶ τῇ σχέσει θάνατος.

81. Ὅκοῖα καὶ ἐν τοῖσι κατὰ τὴν κύστιν, καὶ τοῖσι κατὰ τὴν κοιλίην ὑποχωρήμασι, καὶ ἐν τοῖσι κατὰ τὰς σάρκας, καὶ ἦν που

ἄλλη τῆς φύσιος ἐκβαίνει τὸ σῶμα, ἦν ὀλίγον, ὀλίγη ἢ νοῦσοξ γίνεται, ἦν πουλὺ, πολλή, ἦν πάνυ πουλὺ, θανάσιμον τὸ τοιοῦτον.

82. Ὅκόσοι ὑπὲρ τὰ τεσσαράκοντα ἔτεα φρενιτικοὶ γίνονται, οὐ πάνυ τι ὑγιάζονται ἥσσον γὰρ κινδυνεύουσιν, οἷσιν ἂν οἰκείῃ τῆς φύσιος καὶ τῆς ἡλικίης ἢ νοῦσος ἦ.

83. Ὅκόσοισιν ἐν τῆσιν ἀρρωστήσιν οἱ ὀφθαλμοὶ κατὰ προαίρεσιν δακρύουσιν, ἀγαθόν ὀκόσοισι δὲ ἄνευ προαιρέσιος, κακόν.

84. Ὅκόσοισιν ἐν τοῖσι πυρετοῖσι τεταρταίοισιν ἐοῦσιν αἷμα ἐκ τῶν ῥινῶν ῥυῆ, πονηρόν.

85. Ἰδρῶτες ἐπικίνδυνοι ἐν τῆσι κρισίμοισιν ἡμέρησι μὴ γινόμενοι, σφοδροὶ τε καὶ ταχέως ὠθούμενοι ἐκ τοῦ μετώπου, ὥσπερ σταλαγμοὶ καὶ κρουνοὶ, καὶ ψυχροὶ σφόδρα καὶ πολλοὶ ἀνάγκη γὰρ τὸν τοιοῦτον ἰδρῶτα πορεύεσθαι μετὰ βίης, καὶ πόνου ὑπερβολῆς, καὶ ἐκθλίψις πολυχρονίου.

86. Ἐπὶ χρονίῳ νουσήματι κοιλίης καταφορῇ, κακόν.

87. Ὅκόσα φάρμακα οὐκ ἰῆται, σίδηρος ἰῆται ὅσα σίδηρος οὐκ ἰῆται, πῦρ ἰῆται ὅσα δὲ πῦρ οὐκ ἰῆται, ταῦτα χρῆ νομίζεῖν ἀνίατα.

# EPIDEMICS I AND III - Έπιδημιών

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# ΕΠΙΔΗΜΙΩΝ Α

## Κατάστασις πρώτη

Ι. Ἐν Θάσῳ φθινοπώρου περὶ ἰσημερινὴν καὶ ὑπὸ πληιάδα ὕδατα πολλά, συνεχέα μαλθακῶς, ἐν νοτίοις. χειμῶν νότιος, σμικρὰ βόρεια, αὐχμοί· τὸ σύνολον ἕς γε χειμῶνα οἷον ἔαρ γίνεται. ἔαρ δὲ νότιον ψυχρινόν, σμικρὰ ὕσματα. θέρος ὡς ἐπὶ τὸ πολὺ ἐπινέφελον. ἀνυδρίαί. ἐτησίαι ὀλίγα, σμικρὰ, διεσπασμένως ἔπνευσαν.

Γενομένης δὲ τῆς ἀγωγῆς ὅλης ἐπὶ τὰ νότια καὶ μετ' αὐχμῶν, πρωὶ μὲν τοῦ ἥρος ἐκ τῆς πρόσθεν καταστάσιος ὑπεναντίας καὶ βορείου γενομένης ὀλίγοις ἐγίνοντο καῦσοι καὶ τούτοισι πάνυ εὐσταθέες, καὶ ὀλίγοις ἡμορράγει οὐδ' ἀπέθνησκον ἐκ τούτων. ἐπάρματα δὲ παρὰ τὰ ὄτα πολλοῖσιν ἐτερόρροπα καὶ ἐξ ἀμφοτέρων, τοῖσι πλείστοισιν ἀπύροισιν ὀρθοστάδην· ἔστι δὲ οἱ καὶ σμικρὰ ἐπεθερμαίνοντο. κατέσβη πᾶσιν ἀσινέως οὐδ' ἐξεπύησεν οὐδενὶ ὥσπερ τὰ ἐξ ἄλλων προφασίων. ἦν δὲ ὁ τρόπος αὐτῶν χαῦνα, μεγάλα, κεχυμένα, οὐ μετὰ φλεγμονῆς, ἀνώδυνα· πᾶσιν ἀσήμως ἠφανίσθη. ἐγίνετο δὲ ταῦτα μεираκίοισι, νέοισιν, ἀκμάζουσι, καὶ τούτων τοῖσι περὶ παλαιστρην καὶ γυμνάσια πλείστοισι· γυναιξὶ δὲ ὀλίγησιν ἐγίνετο. πολλοῖσι δὲ βῆχες ξηραὶ βήσσουσι καὶ οὐδὲν ἀνάγουσιν· φωναὶ βραγχώδεις. οὐ μετὰ πολὺ, τοῖσι δὲ καὶ μετὰ χρόνον, φλεγμοναὶ μετ' ὀδύνης ἕς ὄρχιν ἐτερόρροποι, τοῖσι δὲ ἕς ἀμφοτέρους. πυρετοὶ τοῖσι μὲν, τοῖσι δ' οὐ. ἐπιπόνως ταῦτα τοῖσι πλείστοισι. τὰ δ' ἄλλα ὅσα κατ' ἰητρῆιον ἀνόσως διηγῶν.

ΙΙ. Πρωὶ δὲ τοῦ θέρεος ἀρξάμενοι διὰ θέρεος καὶ κατὰ χειμῶνα πολλοὶ τῶν ἤδη πολὺν χρόνον ὑποφερομένων φθινῶδες κατεκλίνησαν, ἐπεὶ καὶ τοῖς ἐνδοιαστῶς ἔχουσι πολλοῖσιν ἐβεβαίωσε τότε. ἔστι δ' οἷσιν ἤρξατο πρῶτον τότε, οἷσιν ἔρρεπεν ἢ φύσις ἐπὶ τὸ φθινῶδες. ἀπέθανον δὲ πολλοὶ καὶ πλεῖστοι τούτων, καὶ τῶν κατακλινέντων οὐκ οἶδα εἴ τις οὐδ' εἰ μέτριον χρόνον περιεγένετο. ἀπέθνησκον δὲ ὀξυτέρως ἢ ὡς εἴθισται διάγειν τὰ τοιαῦτα· ὡς τὰ γε ἄλλα καὶ μακρότερα καὶ ἐν πυρετοῖσιν ἐόντα εὐφόρως ἤνεγκαν καὶ οὐκ ἀπέθνησκον, περὶ ὧν γεγράφεται. μῶνον γὰρ καὶ μέγιστον τῶν γενομένων νοσημάτων τοὺς πολλοὺς τὸ φθινῶδες ἔκτεινεν.

Ἦν δὲ τοῖς πλείστοισιν αὐτῶν τὰ παθήματα τοιάδε· φρικώδεις πυρετοί, συνεχέες, ὀξέες, τὸ μὲν ὅλον οὐ διαλείποντες· ὁ δὲ τρόπος ἡμιτριταῖος· μίαν κουφότεροι, τῇ ἐτέρῃ παροξυνόμενοι, καὶ τὸ ὅλον ἐπὶ τὸ ὀξύτερον ἐπιδιδόντες. ἰδρῶτες αἰεὶ, οὐ δι' ὄλου· ψύξις ἀκρέων πολλή καὶ μόγις ἀναθερμαινόμενα. κοιλία ταραχώδεις χολώδεσιν, ὀλίγοις, ἀκρήτοισι, λεπτοῖσι, δακνώδεσι· πυκνὰ

άνίσταντο. οὔρα ἢ λεπτά καὶ ἄχρω καὶ ἄπεπτα καὶ ὀλίγα ἢ πάχος ἔχοντα καὶ σμικρὴν ὑπόστασιν, οὐ καλῶς καθιστάμενα, ἀλλ' ὠμῆ τι καὶ ἀκαίρῳ ὑποστάσει. ἔβησον δὲ σμικρά, πυκνά, πέπονα, κατ' ὀλίγα μόγις ἀνάγοντες. οἷσι δὲ τὰ βιαιότατα συμπίπτει, οὐδ' ἐς ὀλίγον πεπασμὸν ἦει, ἀλλὰ διετέλεον ὠμὰ πτύοντες. φάρυγγες δὲ τοῖσι πλείστοισι τούτων ἐξ ἀρχῆς καὶ διὰ τέλος ἐπώδυνοι· εἶχον ἔρευθος μετὰ φλεγμονῆς· ρεύματα σμικρά, λεπτά, δριμέα· ταχὺ τηκόμενοι καὶ κακούμενοι, ἀπόσιτοι πάντων γευμάτων διὰ τέλος, ἄδιψοι· καὶ παράληροι πολλοὶ περὶ θάνατον. περὶ μὲν τὰ φθινώδεα ταῦτα.

III. Κατὰ δὲ θέρος ἤδη καὶ φθινόπωρον πυρετοὶ πολλοὶ συνεχέες οὐ βιαίως, μακρὰ δὲ νοσέουσιν οὐδὲ περὶ τὰ ἄλλα δυσφόρως διάγουσιν ἐγένοντο· κοιλία τε γὰρ τοῖσι πλείστοισι πάνυ εὐφόρως καὶ οὐδὲν ἄξιον λόγου προσέβλαπτον. οὔρα τε τοῖσι πλείστοισιν εὐχρῶ μὲν καὶ καθαρὰ, λεπτά δὲ καὶ μετὰ χρόνον περὶ κρίσιν πεπαινόμενα. βηχώδεις οὐ λίην. οὐδὲ τὰ βησσόμενα δυσκόλως· οὐδ' ἀπόσιτοι, ἀλλὰ καὶ διδόναι πάνυ ἐνεδέχεται. τὸ μὲν ὅλον ὑπενόσεον, οὐ τὸν φθινώδεα τρόπον πυρετοῖσι φρικώδεις, σμικρὰ ὑφιδροῦντες, ἄλλοτε ἀλλοίως παροξυνόμενοι πεπλανημένως. ἔκρινε τούτων οἷσι τὰ βραχύτατα γίνοιτο περὶ εἰκοστήν, τοῖσι δὲ πλείστοισι περὶ τεσσαρακοστήν, πολλοῖσι δὲ περὶ τὰς ὀγδοήκοντα. ἔστι δ' οἷσιν οὐδ' οὕτως, ἀλλὰ πεπλανημένως καὶ ἀκρίτως ἐξέλιπον· τούτων δὲ τοῖσι πλείστοισιν οὐ πολὺν διαλιπόντες χρόνον ὑπέστρεψαν οἱ πυρετοὶ πάλιν, ἐκ δὲ τῶν ὑποστροφέων ἐν τῆσιν αὐτῆσι περιόδοισιν ἐκρίνοντο· πολλοῖσι δὲ αὐτῶν ἀνήγαγον, ὥστε καὶ ὑπὸ χειμῶνα νοσεῖν.

Ἐκ πάντων δὲ τῶν ὑπογεγραμμένων ἐν τῇ καταστάσει ταύτῃ μόνουσι τοῖσι φθινώδεσι θανατώδεα συνέπεσεν· ἐπεὶ τοῖσί γε ἄλλοισι πᾶσιν εὐφόρως, καὶ θανατώδεις ἐν τοῖσιν ἄλλοισι πυρετοῖσιν οὐκ ἐγένοντο.

## Κατάστασις δευτέρη

IV. Ἐν Θάσῳ πρῶι τοῦ φθινοπώρου χειμῶνες οὐ κατὰ καιρόν, ἀλλ' ἐξαίφνης ἐν βορείοισι καὶ νοτίοισι πολλοῖς ὑγροὶ καὶ προεκρηγνύμενοι. ταῦτα δὴ ἐγένετο τοιαῦτα μέχρι πληιάδος δύσιος καὶ ὑπὸ πληιάδα. χειμῶν δὲ βόρειος· ὕδατα πολλά, λάβρα, μεγάλα, χιόνες· μειξαίθρια τὰ πλεῖστα. ταῦτα δὲ ἐγένετο μὲν πάντα, οὐ λίην δὲ ἀκαίρως τὰ τῶν ψυχέων. ἤδη δὲ μεθ' ἡλίου τροπᾶς χειμερινὰς καὶ ἡνίκα ζέφυρος πνεῖν ἄρχεται, ὀπισθοχειμῶνες μεγάλοι, βόρεια πολλά, χιῶν καὶ ὕδατα πολλὰ συνεχέως, οὐρανὸς λαι λαπώδης καὶ ἐπινέφελος. ταῦτα δὲ συνέτεινε καὶ οὐκ ἀνίει μέχρι ἰσημερίας. ἔαρ δὲ ψυχρόν, βόρειον, ὕδατῶδες, ἐπινέφελον. θέρος οὐ λίην καυματῶδες ἐγένετο· ἐτησίαι συνεχέες ἔπνευσαν. ταχὺ δὲ περὶ ἀρκτοῦρον ἐν βορείοισι πολλὰ πάλιν ὕδατα.

V. Γενομένου δὲ τοῦ ἔτεος ὅλου ὑγροῦ καὶ ψυχροῦ καὶ βορείου κατὰ χειμῶνα μὲν ὑγιηρῶς εἶχον τὰ πλεῖστα, πρῶι δὲ τοῦ ἤρος πολλοὶ τινες καὶ οἱ πλεῖστοι διῆγον ἐπινόσως. ἤρξαντο μὲν οὖν τὸ πρῶτον ὀφθαλμῖαι ῥοώδεις, ὀδυνώδεις, ὑγραὶ ἀπέπτως· σμικρὰ λημῖα δυσκόλως πολλοῖσιν ἐκρηγνύμενα· τοῖσι πλείστοισιν ὑπέστρεφον· ἀπέλιπον ὅψε πρὸς τὸ φθινόπωρον. κατὰ δὲ θέρος καὶ φθινόπωρον δυσεντεριώδεις καὶ τεινεσμοὶ καὶ λειεντεριώδεις. καὶ διάρροιαὶ χολώδεις, πολλοῖσι λεπτοῖσιν, ὠμοῖσι καὶ δακνώδεις, ἔστι δ' οἷσι καὶ ὕδατῶδες. πολλοῖσι δὲ καὶ περίρροιαὶ μετὰ πόνου χολώδεις, ὕδατῶδες, ξυσματῶδες, πυώδεις, στραγγουριώδεις· οὐ νεφριτικά, ἀλλὰ τούτοισιν ἀντ' ἄλλων ἄλλα. ἔμετοι φλεγματῶδεις, χολώδεις καὶ σιτίων ἀπέπτων ἀναγωγαί. ἰδρῶτες· πᾶσι πάντοθεν πολὺς πλάδος. ἐγένετο δὲ ταῦτα πολλοῖσιν ὀρθοστάδην ἀπύροισι, πολλοῖσι δὲ πυρετοῖ, περὶ ὧν γεγράφεται. ἐν οἷσι δὲ ὑπεφαίνετο πάντα τὰ ὑπογεγραμμένα, μετὰ πόνου φθινώδεις. ἤδη δὲ φθινοπώρου καὶ ὑπὸ χειμῶνα πυρετοὶ συνεχέες· καὶ τισιν αὐτῶν ὀλίγοισι καυσώδεις — ἡμερινοί, νυκτερινοί, ἡμιτριταῖοι, τριταῖοι ἀκριβέες, τεταρταῖοι, πλάνητες. ἕκαστοι δὲ τῶν ὑπογεγραμμένων πυρετῶν πολλοῖσιν ἐγίνοντο.

VI. Οἱ μὲν οὖν καῦσοι ἐλαχίστοισί τε ἐγένοντο καὶ ἥκιστα τῶν καμνόντων οὔτοι ἐπόνησαν. οὔτε γὰρ ἡμορράγει, εἰ μὴ πάνυ σμικρὰ καὶ ὀλίγοισιν, οὔτε οἱ παράληροι. τά τε ἄλλα πάντ' εὐφόρως. ἔκρινε τούτοισι πάνυ εὐτάκτως, τοῖσι πλείστοισι σὺν τῆσι διαλειπούσησιν ἐν ἑπτακαίδεκα ἡμέρησιν οὐδὲ ἀποθανόντα οὐδένα οἶδα τότε καύσῳ οὐδὲ φρενιτικά τότε γενόμενα. οἱ δὲ τριταῖοι πλείους μὲν τῶν καύσων καὶ ἐπιπονώτεροι· εὐτάκτως δὲ τούτοισι πᾶσιν ἀπὸ τῆς πρώτης λήψιος τέσσαρας περιόδους· ἐν ἑπτὰ δὲ τελέως ἔκριναν οὐδ' ὑπέστρεψαν οὐδενὶ τούτων. οἱ δὲ τεταρταῖοι πολλοῖσι μὲν ἐξ ἀρχῆς ἐν τάξει τεταρταίου ἤρξαντο,

ἔστι δὲ οἷς οὐκ ὀλίγοισιν ἐξ ἄλλων πυρετῶν καὶ νοσημάτων ἀποστάσει τεταρταῖοι ἐγένοντο· μακρὰ δὲ καὶ ὡς εἴθισται τούτοις καὶ ἔτι μακρότερα συνέπιπτεν. ἀμνημερινοὶ δὲ καὶ νυκτερινοὶ καὶ πλάνητες πολλοῖσι πολλοὶ καὶ πολὺν χρόνον παρέμενον ὀρθοστάδην τε καὶ κατακειμένοις. τοῖσι πλείστοις τούτων ὑπὸ πληϊάδα καὶ μέχρι χειμῶνος οἱ πυρετοὶ παρείποντο. σπασμοὶ δὲ πολλοῖσι, μᾶλλον δὲ παιδίοις, ἐξ ἀρχῆς καὶ ὑπεπύρεσσαν, καὶ ἐπὶ πυρετοῖσιν ἐγένοντο σπασμοί· χρόνια μὲν τοῖσι πλείστοις τούτων, ἀβλαβέα δέ, εἰ μὴ τοῖσι καὶ ἐκ τῶν ἄλλων πάντων ὀλεθρίως ἔχουσιν.

VII. Οἱ δὲ δὴ συνεχέες μὲν τὸ ὅλον καὶ οὐδὲν ἐκλείποντες, παροξυνόμενοι δὲ πᾶσι τριταιοφυέα τρόπον, μίαν ὑποκουφίζοντες καὶ μίαν παροξυνόμενοι, πάντων βιαιότατοι τῶν τότε γενομένων καὶ μακρότατοι καὶ μετὰ πόνων μεγίστων γενόμενοι· πρηγῶς ἀρχόμενοι, τὸ δ' ὅλον ἐπιδιδόντες αἰεὶ καὶ παροξυνόμενοι καὶ ἀνάγοντες ἐπὶ τὸ κάκιον· σμικρὰ διακουφίζοντες καὶ ταχὺ πάλιν ἐξ ἐπισχέσιος βιαιοτέρως παροξυνόμενοι, ἐν κρισίμοις ὡς ἐπὶ τὸ πολὺ κακούμενοι. ρίγεια δὲ πᾶσι μὲν ἀτάκτως καὶ πεπλανημένως ἐγένετο, ἐλάχιστα δὲ καὶ ἥκιστα τούτοις, ἀλλ' ἐπὶ τῶν ἄλλων πυρετῶν μέζω. ἰδρῶτες πολλοί, τούτοις δὲ ἐλάχιστοι, κουφίζοντες οὐδὲν, ἀλλ' ὑπεναντίον βλάβας φερόντες. ψύξις δὲ πολλὴ τούτοις ἀκρέων καὶ μόγις ἀναθερμαινόμενα. ἄγρυπνοι τὸ σύνολον καὶ μάλιστα οὗτοι καὶ πάλιν κωματώδεις. κοιλίαι δὲ πᾶσι μὲν ταραχώδεις καὶ κακαί, πολὺ δὲ τούτοις κάκιστα. οὖρα δὲ τοῖσι πλείστοις τούτων ἢ λεπτὰ καὶ ὠμὰ καὶ ἄχρω καὶ μετὰ χρόνον σμικρὰ πεπαινόμενα κρισίμως ἢ πάχος μὲν ἔχοντα, θολερὰ δὲ καὶ οὐδὲν καθιστάμενα, οὐδ' ὑφιστάμενα, ἢ σμικρὰ καὶ κακὰ καὶ ὠμὰ τὰ ὑφιστάμενα· κάκιστα δὲ ταῦτα πάντων. βῆχες δὲ παρείποντο μὲν τοῖς πυρετοῖσι, γράψαι δὲ οὐκ ἔχω βλάβην οὐδ' ὠφελείην γενομένην διὰ βηχὸς τότε.

VIII. Χρόνια μὲν οὖν καὶ δυσχερέα καὶ πάνυ ἀτάκτως καὶ πεπλανημένως καὶ ἀκρίτως τὰ πλεῖστα τούτων διετέλει γινόμενα καὶ τοῖσι πάνυ ὀλεθρίως ἔχουσι καὶ τοῖσι μὴ. εἰ γάρ τινος αὐτῶν καὶ διαλίποι σμικρὰ, ταχὺ πάλιν ὑπέστρεφεν. ἔστι δ' οἷσιν ἔκρινεν αὐτῶν ὀλίγοισιν, οἷσι τὰ βραχύτατα γένοιτο, περὶ ὀγδοηκοστὴν ἐοῦσι, καὶ τούτων ἐνίοις ὑπέστρεφεν, ὥστε κατὰ χειμῶνα τοὺς πλείστους αὐτῶν ἔτι νοσεῖν. τοῖσι δὲ πλείστοις ἀκρίτως ἐξέλειπεν. ὁμοίως δὲ ταῦτα συνέπιπτεν τοῖς περιγινομένοις καὶ τοῖσιν οὐ. πολλῆς δὲ τινος γινομένης ἀκρισίας καὶ ποικιλίης ἐπὶ τῶν νοσημάτων καὶ μεγίστου μὲν σημείου καὶ κακίστου διὰ τέλος παρεπομένου τοῖσι πλείστοις ἀποσίτοις εἶναι πάντων γευμάτων, μάλιστα δὲ τούτων, οἷσι καὶ τᾶλλα ὀλεθρίως ἔχοι, διψώδεις οὐ λίην ἀκαίρως ἦσαν ἐπὶ τοῖσι πυρετοῖσι τούτοις. γενομένων δὲ χρόνων μακρῶν καὶ πόνων πολλῶν καὶ κακῆς συντήξιος, ἐπὶ τούτοις ἀποστάσεις ἐγένοντο ἢ μέζους, ὥστε ὑποφέρειν μὴ δύνασθαι, ἢ μείους, ὥστε μηδὲν ὠφελεῖν, ἀλλὰ ταχὺ

παλινδρομεῖν καὶ συνεπείγειν ἐπὶ τὸ κάκιον.

ΙΧ. Ἦν δὲ τούτοισι τὰ γινόμενα δυσεντεριώδεα καὶ τεινεσμοί, καὶ λειεντερικοί καὶ ροώδεες. ἔστι δ' οἷσι καὶ ὕδρωπες μετὰ τούτων καὶ ἄνευ τούτων. ὅτι δὲ παραγένετο τούτων βιαίως ταχὺ συνήρει, ἢ πάλιν ἐπὶ τὸ μηδὲν ὠφελεῖν. ἐξανθήματα σμικρὰ καὶ οὐκ ἀξίως τῆς περιβολῆς τῶν νοσημάτων καὶ ταχὺ πάλιν ἀφανιζόμενα ἢ παρὰ τὰ ὤτα οἰδήματα μωλυόμενα καὶ οὐδὲν ἀποσημαίνοντα, ἔστι δ' οἷς ἐς ἄρθρα, μάλιστα δὲ κατὰ ἰσχίον, ὀλίγοισι κρισίμως ἀπολείποντα καὶ ταχὺ πάλιν ἐπικρατεύμενα ἐπὶ τὴν ἐξ ἀρχῆς ἔξιν.

Χ. Ἐθνησκον δ' ἐκ πάντων μὲν, πλείστοι δ' ἐκ τούτων, καὶ τούτων παιδιά, ὅσα ἀπὸ γάλακτος ἤδη, καὶ πρεσβύτερα, ὀκταετέα καὶ δεκαετέα, καὶ ὅσα πρὸ ἥβης. ἐγένετο δὲ τούτοισι ταῦτα οὐκ ἄνευ τῶν πρώτων γεγραμμένων, τὰ δὲ πρῶτα πολλοῖσιν ἄνευ τούτων. μῦνον δὲ χρηστὸν καὶ μέγιστον τῶν γενομένων σημείων καὶ πλείστους ἐρρύσατο τῶν ἐόντων ἐπὶ τοῖσι μεγίστοισι κινδύνοιςιν, οἷσιν ἐπὶ τὸ στραγγουριώδες ἐτράπετο καὶ ἐς τοῦτο ἀποστάσιες ἐγίνοντο. συνέπιπτε δὲ καὶ τὸ στραγγουριώδες τῆσιν ἡλικίησιν ταύτησιν γίνεσθαι μάλιστα. ἐγένετο δὲ καὶ τῶν ἄλλων πολλοῖσιν ὀρθοστάδην καὶ ἐπὶ τῶν νοσημάτων. ταχὺ δὲ καὶ μεγάλη τις ἢ μεταβολὴ τούτοισι πάντων ἐγένετο. κοιλίαι τε γάρ, καὶ εἰ τύχοιεν ἐφυγραινόμενα κακοήθεα τρόπον, ταχὺ συνίσταντο, γεύμασιν τε πᾶσιν ἠδέως εἶχον, οἷ τε πυρετοὶ πρηέες μετὰ ταῦτα. χρόνια δὲ καὶ τούτοισι τὰ περὶ τὴν στραγγουρίην καὶ ἐπιπόνως. οὔρα δὲ τούτοισιν ἦει πολλὰ παχέα καὶ ποικίλα καὶ ἐρυθρά, μειξόπυα μετ' ὀδύνης. περιεγέροντο δὲ πάντες οὔτοι, καὶ οὐδένα τούτων οἶδα ἀποθάνοντα.

ΧΙ. Ὅσα διὰ κινδύνων, πεπασμοὺς τῶν ἀπιόντων πάντας πάντοθεν ἐπικαίρους ἢ καλὰς καὶ κρισίμους ἀποστάσιες σκοπεῖσθαι. πεπασμοὶ ταχυτῆτα κρίσιος καὶ ἀσφάλειαν ὑγιείης σημαί νουσιν, ὠμὰ δὲ καὶ ἄπεπτα καὶ ἐς κακὰς ἀποστάσιες τρεπόμενα ἀκρισίας ἢ πόνους ἢ χρόνους ἢ θανάτους ἢ τῶν αὐτῶν ὑποστροφάς. ὅτι δὲ τούτων ἔσται μάλιστα, σκεπτέον ἐξ ἄλλων. λέγειν τὰ προγενόμενα, γινώσκειν τὰ παρεόντα, προλέγειν τὰ ἐσόμενα· μελετᾶν ταῦτα. ἀσκεῖν περὶ τὰ νοσήματα δύο, ὠφελεῖν ἢ μὴ βλάπτειν. ἢ τέχνη διὰ τριῶν, τὸ νόσημα καὶ ὁ νοσέων καὶ ὁ ἰητρός· ὁ ἰητρός ὑπηρέτης τῆς τέχνης· ὑπεναντιοῦσθαι τῷ νοσήματι τὸν νοσέοντα μετὰ τοῦ ἰητροῦ.

ΧΙΙ. Τὰ περὶ κεφαλὴν καὶ τράχηλον ἀλγήματα καὶ βάρεια μετ' ὀδύνης ἄνευ πυρετῶν καὶ ἐν πυρετοῖσι· φρενιτικοῖσι μὲν σπασμοί, καὶ ἰώδεα ἐπανεμεῦσιν, ἔνιοι ταχυθάνατοι τούτων. ἐν καύσοιςιν δὲ καὶ τοῖς ἄλλοις πυρετοῖς, οἷσι μὲν τραχήλου πόνος καὶ κροτάφων βάρος καὶ σκοτώδεα περὶ τὰς ὄψιας καὶ

ὑποχονδρίου σύντασις οὐ μετ' ὀδύνης γίνεται, τούτοις αἰμορραγεῖ διὰ ρινῶν· οἷσι δὲ βάρεια μὲν ὅλης τῆς κεφαλῆς, καρδιωγμοὶ δὲ καὶ ἀσώδεές εἰσιν, ἐπανεμέουσιν χολώδεα καὶ φλεγματώδεα. τὸ πολὺ δὲ παιδίοισιν ἐν τοῖσι τοιούτοις οἱ σπασμοὶ μάλιστα, γυναιξὶ δὲ καὶ ταῦτα καὶ ἀπὸ ὑστερέων πόνοι, πρεσβυτέροισι δὲ καὶ ὅσοις ἤδη τὸ θερμὸν κρατεῖται, παραπληγικὰ ἢ μανικὰ ἢ στερήσεις ὀφθαλμῶν.



## Κατάστασις τρίτη

XIII. Ἐν Θάσῳ πρὸ ἀρκτούρου ὀλίγον καὶ ἐπ' ἀρκτούρου ὕδατα πολλὰ μεγάλα ἐν βορείοις. περὶ δὲ ἰσημερίην καὶ μέχρι πληϊάδος νότια ὕσματα ὀλίγα. χειμῶν βόρειος, αὐχμοί, ψύχεια, πνεύματα μεγάλα, χιόνες. περὶ δὲ ἰσημερίην χειμῶνες μέγιστοι. ἔαρ βόρειον, αὐχμοί, ὕσματα ὀλίγα, ψύχεια. περὶ δὲ ἡλίου τροπὰς θερινὰς ὕδατα ὀλίγα, μεγάλα ψύχεια μέχρι κυνὸς ἐπλησίασε. μετὰ δὲ κύνα μέχρι ἀρκτούρου θέρος θερμόν· καύματα μεγάλα καὶ οὐκ ἐκ προσαγωγῆς, ἀλλὰ συνεχέα καὶ βίαια· ὕδωρ οὐκ ἐγένετο· ἐτησίαι ἔπνευσαν. περὶ ἀρκτούρον ὕσματα νότια μέχρι ἰσημερίας.

XIV. Ἐν τῇ καταστάσει ταύτῃ κατὰ χειμῶνα μὲν ἤρξαντο παραπληγίαι καὶ πολλοῖσιν ἐγίνοντο, καὶ τινὲς αὐτῶν ἔθνησκον διὰ ταχέων· καὶ γὰρ ἄλλως τὸ νόσημα ἐπίδημον ἦν· τὰ δὲ ἄλλα διετέλεον ἄνοσοι. πρωτὶ δὲ τοῦ ἤρος ἤρξαντο καῦσοι καὶ διετέλεον μέχρι ἰσημερίας καὶ πρὸς τὸ θέρος. ὅσοι μὲν οὖν ἤρος καὶ θέρος ἀρξαμένου αὐτίκα νοσεῖν ἤρξαντο, οἱ πλεῖστοι διεσώζοντο, ὀλίγοι δὲ τινες ἔθνησκον. ἤδη δὲ τοῦ φθινοπώρου καὶ τῶν ὑσμάτων γενομένων θανατώδεις ἦσαν καὶ πλείους ἀπωλλυντο.

Ἦν δὲ τὰ παθήματα τῶν καύσων, οἷσι μὲν καλῶς καὶ δαψιλῶς ἐκ ῥινῶν αἱμορραγήσαι, διὰ τούτου μάλιστα σώζεσθαι, καὶ οὐδένα οἶδα, εἰ καλῶς αἱμορραγήσαι, ἐν τῇ καταστάσει ταύτῃ ἀποθανόντα. Φιλίσκῳ γὰρ καὶ Ἐπαμείνονι καὶ Σιληνῶ τεταρταίῳ καὶ πεμπταίῳ σμικρὸν ἀπὸ ῥινῶν ἔσταξεν· ἀπέθανον. οἱ μὲν οὖν πλεῖστοι τῶν νοσησάντων περὶ κρίσιν ἐπερρίγουν καὶ μάλιστα οἷσι μὴ αἱμορραγήσαι. ἐπερρίγουν δὲ καὶ οὗτοι καὶ ἐφίδρουν.

XV. Ἔστι δὲ οἷσιν ἵκτεροι ἐκταίοις, ἀλλὰ τούτοις ἢ κατὰ κύστιν κάθαρσις ἢ κοιλίη ἐκταραχθεῖσα ὠφέλει ἢ δαψιλῆς αἱμορραγίη, οἷον Ἡρακλείδῃ, ὃς κατέκειτο παρὰ Ἀριστοκύδει. καίτοι τούτῳ καὶ ἐκ ῥινῶν ἡμορράγησε καὶ ἡ κοιλίη ἐπεταράχθη, καὶ κατὰ κύστιν ἐκαθήρατο· ἐκρίθη εἰκοσταῖος· οὐχ οἷον ὁ Φαναγόρεω οἰκέτης, ᾧ οὐδὲν τούτων ἐγένετο· ἀπέθανεν. ἡμορράγει δὲ τοῖσι πλείστοισι, μάλιστα δὲ μειρακίοισι καὶ ἀκμάζουσι, καὶ ἔθνησκον πλεῖστοι τούτων, οἷσι μὴ αἱμορραγήσαι. πρεσβυτέροισι δὲ ἐς ἰκτέρους ἢ κοιλίαι ταραχώδεις, οἷον Βίῳνι τῷ παρὰ Σιληνὸν κατακειμένῳ. ἐπεδήμησαν δὲ καὶ δυσεντερίαι κατὰ θέρος, καὶ τισι καὶ τῶν διανοησάντων, οἷσι καὶ αἱμορραγίαι ἐγένοντο, ἐς δυσεντεριώδεα ἐτελεύτησεν, οἷον τῷ Ἐράτωνος παιδὶ καὶ Μύλλῳ πολλῆς αἱμορραγίης γενομένης ἐς δυσεντεριώδεα κατέστη· περιεγένοντο.

Πολὺς μὲν οὖν μάλιστα οὗτος ὁ χυμὸς ἔπε πόλασεν, ἐπεὶ καὶ οἷσι περὶ κρίσιν οὐχ ἡμορράγησεν, ἀλλὰ παρὰ τὰ ὦτα ἐπαναστάντα ἠφανίσθη — τούτων δὲ ἀφανισθέντων παρὰ τὸν κενεῶνα βάρους τὸν ἀριστερὸν καὶ ἐς ἄκρον ἰσχίον — ἀλγήματος μετὰ κρίσιν γενομένου καὶ οὖρων λεπτῶν διεξιόντων, αἱμορραγεῖν σμικρὰ ἤρξατο περὶ τετάρτην καὶ εἰκοστήν, καὶ ἐγένοντο ἐς αἱμορραγίην ἀποστάσιες· Ἀντιφῶντι Κριτοβούλου ἀπεπαύσατο καὶ ἐκρίθη τελέως περὶ τεσσαρακοστήν.

XVI. Γυναῖκες δὲ ἐνόσησαν μὲν πολλαί, ἐλάσσους δὲ ἢ ἄνδρες καὶ ἔθνησκον ἦσσαν. ἐδυστόκεον δὲ αἱ πλείσται καὶ μετὰ τοὺς τόκους ἐπενόσεον, καὶ ἔθνησκον αὗται μάλιστα, οἷον ἡ Τελεβούλου θυγάτηρ ἀπέθανεν ἐκταίη ἐκ τόκου. τῆσι μὲν οὖν πλείστησιν ἐν τοῖσι πυρετοῖσι γυναικεῖα ἐπεφαίνετο καὶ παρθένοισι πολλῆσι τότε πρῶτον ἐγένετο· ἔστι δ' ἦσιν ἡμορράγησεν ἐκ ῥινῶν· ἔστι δ' ὅτε καὶ ἐκ ῥινῶν καὶ τὰ γυναικεῖα τῆσιν αὐτῆσιν ἐπεφαίνετο, οἷον τῆ Δαιθάρσεος θυγατρὶ παρθένῳ ἐπεφάνη τότε πρῶτον καὶ ἐκ ῥινῶν λάβρον ἐρρῦη, καὶ οὐδεμίαν οἶδα ἀποθανοῦσαν, ἦσι τούτων τι καλῶς γένοιτο. ἦσι δὲ συνεκύρησεν ἐν γαστρὶ ἐχούσησι νοσησαι, πᾶσαι ἀπέφθειραν, ἃς καὶ ἐγὼ οἶδα.

XVII. Οὖρα δὲ τοῖσι πλείστοισιν εὐχρῶ μὲν, λεπτὰ δὲ καὶ ὑποστάσιος ὀλίγας ἔχοντα, κοιλίαι δὲ ταραχώδεις τοῖσι πλείστοισι διαχωρήμασι λεπτοῖσι καὶ χολώδεσι. πολλοῖσι δὲ τῶν ἄλλων κεκριμένων ἐς δυσεντερίας ἐτελεύτα, οἷον Ξενοφάνει καὶ Κριτίᾳ. οὖρα δὲ ὑδατώδεα πολλὰ καθαρὰ καὶ λεπτὰ καὶ μετὰ κρίσιν καὶ ὑποστάσιος καλῆς γενομένης καὶ τῶν ἄλλων καλῶς κεκριμένων ἀναμνήσομαι οἷσιν ἐγένετο· Βίωνι, ὃς κατέκειτο παρὰ Σιληγόν, Κράτιδι τῆ παρὰ Ξενοφάνεος, Ἀρέτωνος παιδί, Μνησιστράτου γυναικί. μετὰ δὲ δυσεντεριώδεις ἐγένοντο οὗτοι πάντες.

Περὶ δὲ ἀρκτοῦρον ἐνδεκαταίοισι πολλοῖσιν ἔκρινε καὶ τούτοισιν οὐδ' αἱ κατὰ λόγον γινόμεναι ὑποστροφαι ὑπέστρεφον· ἦσαν δὲ καὶ κωματώδεις περὶ τὸν χρόνον τοῦτον, πλείω δὲ παιδία, καὶ ἔθνησκον ἦκιστα οὗτοι πάντων.

XVIII. Περὶ δὲ ἰσημερίην καὶ μέχρι πληιάδος καὶ ὑπὸ χειμῶνα παρείποντο μὲν οἱ καῦσοι, ἀτὰρ καὶ οἱ φρενιτικοὶ τηνικαῦτα πλείστοι ἐγένοντο καὶ ἔθνησκον τούτων οἱ πλείστοι. ἐγένοντο δὲ καὶ κατὰ θέρος ὀλίγοι. τοῖσι μὲν οὖν καυσώδεσιν ἀρχομένοισιν ἐπεσήμαινεν, οἷσι τὰ ὀλέθρια συνέπιπτεν· αὐτίκα γὰρ ἀρχομένοισι πυρετὸς ὀξύς, σμικρὰ ἐπερρίγουν, ἄγρυπνοι, διψώδεις, ἀσώδεις, σμικρὰ ἐφίδρουν περὶ μέτωπον καὶ κληῖδας, οὐδεὶς δι' ὄλου, πολλὰ παρέλεγον, φόβοι, δυσθυμῖαι, ἄκρεα περίψυχρα, πόδες ἄκροι, μᾶλλον δὲ τὰ περὶ χεῖρας· οἱ παροξυσμοὶ ἐν ἀρτίησι· τοῖσι δὲ πλείστοισιν τεταρταίοισιν οἱ πόνοι μέγιστοι καὶ

ιδρώς ἐπὶ πλεῖστον ὑπόψυχρος καὶ ἄκρεα οὐκ ἔτι ἀνεθερμαίνοντο, ἀλλὰ πελιδνὰ καὶ ψυχρά, οὐδ' ἐδίψων ἔτι ἐπὶ τούτοιςιν· οὖρα τούτοις ὀλίγα, μέλανα, λεπτὰ καὶ κοιλίαι ἐφίσταντο· οὐδ' ἡμορράγησεν ἐκ ρίνων οὐδενί, οἷσι ταῦτα συμπίπτει, ἀλλ' ἢ σμικρὰ ἔσταξεν· οὐδ' ἐς ὑποστροφὴν οὐδενὶ τούτων ἦλθεν, ἀλλ' ἐκταῖοι ἀπέθνησκον σὺν ἰδρῶτι. τοῖσι δὲ φρενιτικοῖσι συνέπιπτε μὲν καὶ τὰ ὑπογεγραμμένα πάντα, ἔκρινε δὲ τούτοιςιν ὡς ἐπὶ τὸ πολὺ ἐνδεκαταίοισιν· ἔστι δ' οἷσι καὶ εἰκοσταίοισι, οἷσιν οὐκ εὐθύς ἐξ ἀρχῆς ἢ φρενίτις ἤρξατο ἢ περὶ τρίτην ἢ τετάρτην ἡμέρην, ἀλλὰ μετρίως ἔχουσιν ἐν τῷ πρώτῳ χρόνῳ περὶ τὴν ἑβδόμην ἐς ὀξύτητα τὸ νόσημα μετέπεσεν.

XIX. Πλήθος μὲν οὖν τῶν νοσημάτων ἐγένετο. ἐκ δὲ τῶν καμνόντων ἀπέθνησκον μάλιστα μειράκια, νέοι, ἀκμάζοντες, λεῖοι, ὑπολευκόχρωτες, ἰθύτριχες, μελανότριχες, μελανόφθαλμοι, οἱ εἰκῆ καὶ ἐπὶ τὸ ράθυμον βεβιωκότες, ἰσχνόφωνοι, τρηχύφωνοι, τραυλοί, ὀργίλοι. καὶ γυναῖκες πλεῖσται ἐκ τούτου τοῦ εἶδος ἀπέθνησκον. ἐν δὲ ταύτῃ τῇ καταστάσει ἐπὶ σημείων μάλιστα τεσσάρων διεσώζοντο· οἷσι γὰρ ἢ διὰ ρίνων καλῶς αἵμορ ραγήσαι ἢ κατὰ κύστιν οὖρα πολλὰ καὶ πολλὴν καὶ καλὴν ὑπόστασιν ἔχοντα ἔλθοι ἢ κατὰ κοιλίην ταραχώδεα χολώδεσιν ἐπικαίρως, ἢ δυσεντερικοὶ γενοῖατο. πολλοῖσι δὲ συνέπιπτε μὴ ἐφ' ἐνὸς κρίνεσθαι τῶν ὑπογεγραμμένων σημείων, ἀλλὰ διεξιέναι διὰ πάντων τοῖσι πλείστοισι καὶ δοκεῖν μὲν ἔχειν ὀχληροτέρως· διεσώζοντο δὲ πάντες, οἷσι ταῦτα συμπίπτει. γυναίξιν δὲ καὶ παρθένοισι συνέπιπτε μὲν καὶ τὰ ὑπογεγραμμένα σημεία πάντα, ἧσιν δὲ ἢ τούτων τι καλῶς γένοιτο ἢ τὰ γυναικεῖα δαυηλέως ἐπιφανείη, διὰ τούτων ἐσώζοντο καὶ ἔκρινε, καὶ οὐδεμίαν οἶδα ἀπολομένην, ἧσιν τούτων τι καλῶς γένοιτο. Φίλωνος γὰρ θυγάτηρ, ἐκ ρίνων λάβρον ἐρρῦη, ἑβδομαίῃ ἐοῦσα ἐδείπνησεν ἀκαιροτέρως· ἀπέθανεν.

Οἷσιν ἐν πυρετοῖσιν ὀξέσι, μᾶλλον δὲ καυσώδεσιν, ἀέκουσιν δάκρυα παραρρεῖ, τούτοιςιν ἀπὸ ρίνων αἱμορραγίην προσδέχεσθαι, ἦν καὶ τᾶλλα ὀλεθρίως μὴ ἔχουσιν, ἐπεὶ τοῖσι γε φλαύρως ἔχουσιν οὐχ αἱμορραγίην, ἀλλὰ θάνατον σημαίνει.

XX. Τὰ παρὰ τὰ ὄντα ἐν πυρετοῖσιν ἐπαιρόμενα μετ' ὀδύνης ἔστιν οἷσιν ἐκλείποντος τοῦ πυρετοῦ κρισίμως οὔτε καθίστατο οὔτε ἐξεπύει· τούτοιςιν διάρροιαὶ χολωδέων ἢ δυσεντερική ἢ παχέων οὔρων ὑπόστασις γενομένη ἔλυσεν, οἷον Ἐρμίπῳ τῷ Κλαζομενίῳ. τὰ δὲ περὶ τὰς κρίσιας, ἐξ ὧν καὶ διεγινώσκομεν, ἢ ὅμοια ἢ ἀνόμοια, οἷον οἱ δύο ἀδελφοί, οἱ ἤρξαντο ὁμοῦ τὴν αὐτὴν ὥρην· κατέκειντο παρὰ τὸ θέρετρον Ἐπιγένεος. τούτων τῷ πρεσβυτέρῳ ἔκρινεν ἐκταῖῳ, τῷ δὲ νεωτέρῳ ἑβδομαίῳ. ὑπέστρεψεν ἀμφοτέροισιν ὁμοῦ τὴν αὐτὴν ὥρην καὶ διέλιπεν ἡμέρας πέντε. ἐκ δὲ τῆς ὑποστροφῆς ἐκρίθη ἀμφοτέροισιν

ὁμοῦ τὸ σύμπαν ἑπτακαιδεκαταίοισιν. ἔκρινε δὲ τοῖσι πλείστοισιν ἑκταίοις. διέλειπεν ἕξ· ἐκ δὲ τῶν ὑποστροφῶν ἔκρινε πεμπταίοις. οἷσι δ' ἔκρινεν ἑβδομαίοισι, διέλειπεν ἑπτά· ἐκ δὲ τῆς ὑποστροφῆς ἔκρινε τριταίοις. οἷσι δ' ἔκρινεν ἑβδομαίοισι, διαλείποντα τρεῖς ἔκρινεν ἑβδομαίοις. οἷσι δ' ἔκρινεν ἑκταίοισι, διαλείποντα ἕξ ἐλάμβανε τρισίν, διέλειπε μίαν, μίαν ἐλάμβανεν· ἔκρινεν, οἷον Εὐάγοντι τῷ Δαιθάρσεος. οἷσι δ' ἔκρινεν ἑκταίοισι, διέλειπεν ἑπτά, ἐκ δὲ τῆς ὑποστροφῆς ἔκρινε τετάρτη, οἷον τῆ Ἀγλαΐδου θυγατρί. οἱ μὲν οὖν πλείστοι τῶν νοσησάντων ἐν τῇ καταστάσει ταύτῃ τούτῳ τῷ τρόπῳ διενόησαν, καὶ οὐδένα οἶδα τῶν περιγενομένων, ᾧ τινι οὐχ ὑπέστρεψαν αἱ κατὰ λόγον ὑποστροφῆς γινόμεναι, καὶ διεσώζοντο πάντες, οὐς κἀγὼ οἶδα, οἷσιν αἱ ὑποστροφῆς διὰ τοῦ εἶδους τούτου γενοίετο. οὐδὲ τῶν διανοησάντων διὰ τούτου τοῦ τρόπου οὐδενὶ οἶδα ὑποστροφὴν γενομένην πάλιν.

XXI. Ἐθνησκον δὲ τοῖσι νοσήμασι τούτοις οἱ πλείστοι ἑκταῖοι, οἷον Ἐπαμεινώνδας καὶ Σιληνὸς καὶ Φιλίσκος ὁ Ἀνταγόρεω. οἷσι δὲ τὰ παρὰ τὰ ὧτα γενοίετο, ἔκρινε μὲν εἰκοσταίοισι, κατέσβη δὲ πᾶσι καὶ οὐκ ἐξεπύησεν, ἀλλ' ἐπὶ κύστιν ἐτράπετο. Κρατιστώνακτι, ὃς παρ' Ἡρακλεῖ ᾧκει, καὶ Σκύμνου τοῦ γναφέως θεραπαίνῃ ἐξεπύησεν· ἀπέθανον· οἷσι δ' ἔκρινεν ἑβδομαίοισι, διέλειπεν ἑννέα, ὑπέστρεφεν, ἔκρινεν ἐκ τῆς ὑποστροφῆς τεταρταίοισι — Παντακλεῖ, ὃς ᾧκει παρὰ Διονύσιον — . οἷσι δ' ἔκρινεν ἑβδομαίοισιν, διέλειπεν ἕξ· ὑποστροφή· ἐκ δὲ τῆς ὑποστροφῆς ἔκρινεν ἑβδομαίοισι — Φανοκρίτῳ, ὃς κατέκειτο παρὰ Γνάθωνι τῷ γναφεῖ.

XXII. Ὑπὸ δὲ χειμῶνα περὶ ἡλίου τροπᾶς χειμερινᾶς καὶ μέχρι ἰσημερίας παρέμενον μὲν καὶ οἱ καυσοὶ καὶ τὰ φρενιτικά, καὶ ἔθνησκον πολλοί· αἱ μὲντοι κρίσεις μετέπεσον, καὶ ἔκρινε τοῖσι πλείστοισιν ἕξ ἀρχῆς πεμπταίοισι, διέλειπε τέσσαρας, ὑπέστρεφεν, ἐκ δὲ τῆς ὑποστροφῆς ἔκρινε πεμπταίοισι, τὸ σύμπαν τεσσαρεσκαίδεκαταίοις. ἔκρινε δὲ παιδίοισιν οὕτω τοῖσι πλείστοισιν, ἀτὰρ καὶ πρεσβυτέροισιν. ἔστι δὲ οἷσιν ἔκρινεν ἑνδεκαταίοις, ὑποστροφή τεσσαρεσκαίδεκαταίοις, ἔκρινε τελῶς εἰκοστῇ. εἰ δὲ τινες ἐπερρίγουν περὶ τὴν εἰκοστὴν, τούτοιςιν ἔκρινε τεσσαρακοσταίοις. ἐπερρίγουν δ' οἱ πλείστοι περὶ κρίσιν τὴν ἕξ ἀρχῆς· οἱ δ' ἐπιρριγώσαντες ἕξ ἀρχῆς περὶ κρίσιν, καὶ ἐν τῇσιν ὑποστροφῆσιν ἅμα κρίσει. ἐρρίγουν δ' ἐλάχιστοι μὲν τοῦ ἥρος, θέρεος πλείους, φθινοπώρου ἔτι πλείους, ὑπὸ δὲ χειμῶνα πολὺ πλείστοι. αἱ δὲ αἱμορραγίαι ὑπέληγον.

XXIII. Τὰ δὲ περὶ τὰ νοσήματα, ἕξ ὧν διεγινώσκομεν, μαθόντες ἐκ τῆς κοινῆς φύσιος ἀπάντων καὶ τῆς ἰδίης ἐκάστου, ἐκ τοῦ νοσήματος, ἐκ τοῦ νοσέοντος, ἐκ τῶν προσφερομένων, ἐκ τοῦ προσφέροντος — ἐπὶ τὸ ῥᾶονγὰρ καὶ χαλεπώτερον

ἐκ τούτων — , ἐκ τῆς καταστάσιος ὅλης καὶ κατὰ μέρεια τῶν οὐρανίων καὶ χώρης ἐκάστης, ἐκ τοῦ ἔθεος, ἐκ τῆς διαίτης, ἐκ τῶν ἐπιτηδευμάτων, ἐκ τῆς ἡλικίης ἐκάστου, λόγοισι, τρόποισι, σιγῇ, δια νοήμασιν, ὕπνοισιν, οὐχ ὕπνοισιν, ἐνυπνίοισι, οἴοισι καὶ ὅτε, τιλμοῖσι, κνησμοῖσι, δάκρυσιν, ἐκ τῶν παροξυσμῶν, διαχωρήμασιν, οὔροισιν, πτυάλοισιν, ἐμέτοισι, καὶ ὅσαι ἐξ οἴων ἐς οἶα διαδοχαὶ νοσημάτων καὶ ἀποστάσιες ἐπὶ τὸ ὀλέθριον καὶ κρίσιμον, ἰδρώς, ῥῆγος, ψύξις, βῆξ, πταρμοί, λυγμοί, πνεύματα, ἐρεύξιες, φῦσαι, σιγῶσαι, ψοφώδεες, αἱμορραγίαι, αἱμορροΐδες. ἐκ τούτων καὶ ὅσα διὰ τούτων σκεπτέον.

XXIV. Πυρετοὶ οἱ μὲν συνεχέες, οἱ δ' ἡμέρην ἔχουσι, νύκτα διαλείπουσι, νύκτα ἔχουσιν, ἡμέρην διαλείπουσιν· ἡμιτριταῖοι, τριταῖοι, τεταρταῖοι, πεμπταῖοι, ἐβδομαῖοι, ἐναταῖοι. εἰσὶ δὲ ὀξύταται μὲν καὶ μέγισται καὶ χαλεπώταται νοῦσοι καὶ θανατωδέσταται ἐν τῷ συνεχεῖ πυρετῷ. ἀσφαλέστατος δὲ πάντων καὶ ῥῆϊστος καὶ μακρότατος πάντων ὁ τεταρταῖος· οὐ γὰρ μόνον αὐτὸς ἐφ' ἑωυτοῦ τοιοῦτός ἐστιν, ἀλλὰ καὶ νοσημάτων ἐτέρων μεγάλων ῥύεται. ἐν δὲ τῷ ἡμιτριταῖῳ καλεομένῳ συμπίπτει μὲν καὶ ὀξέα νοσήματα γίνεσθαι, καὶ ἔστι τῶν λοιπῶν οὗτος θανατωδέστατος· ἀτὰρ καὶ φθινώδεες καὶ ὅσοι ἄλλα μακρότερα νοσήματα νοσέουσιν, ἐπὶ τούτῳ μάλιστα νοσέουσι. νυκτερινὸς οὐ λίην θανατώδης, μακρὸς δὲ ἡμερινὸς μακρότερος· ἔστι δ' οἷσι ῥέπει καὶ ἐπὶ τὸ φθινῶδες. ἐβδομαῖος μακρὸς, οὐ θανατώδης. ἐναταῖος ἔτι μακρότερος, οὐ θανατώδης. τριταῖος ἀκριβῆς ταχυκρίσιμος καὶ οὐ θανατώδης. ὁ δὲ πεμπταῖος πάντων μὲν κάκιστος· καὶ γὰρ πρὸ φθίσιος καὶ ἤδη φθίνουσιν ἐπιγινόμενος κτείνει.

XXV. Εἰσὶ δὲ τρόποι καὶ καταστάσιες καὶ παροξυσμοὶ τούτων ἐκάστου τῶν πυρετῶν. αὐτίκα γὰρ συνεχῆς ἔστιν οἷσιν ἀρχόμενος ἀνθεῖ καὶ ἀκμάζει μάλιστα καὶ ἀνάγει ἐπὶ τὸ χαλεπώτατον, περὶ δὲ κρίσιν καὶ ἅμα κρίσει λεπτύνεται· ἔστι δ' οἷσιν ἄρχεται μαλακῶς καὶ ὑποβρύχια, ἐπαναδιδοῖ δὲ καὶ παροξύνεται καθ' ἡμέρην ἐκάστην, περὶ δὲ κρίσιν ἄλις ἐξέλαμψεν· ἔστι δ' οἷσιν ἀρχόμενος πρηέως ἐπιδιδοῖ καὶ παροξύνεται καὶ μέχρι τινὸς ἀκμάσας πάλιν ὑφίησι μέχρι κρίσιος καὶ περὶ κρίσιν. συμπίπτει δὲ ταῦτα γίνεσθαι ἐπὶ παντὸς πυρετοῦ καὶ νοσήματος. δεῖ δὲ καὶ τὰ διαιτήματα σκοπεύμενον ἐκ τούτων προσφέρειν. πολλὰ δὲ καὶ ἄλλα ἐπίκαιρα σημεῖα τούτοις ἐστὶν ἠδελφισμένα, περὶ ὧν τὰ μὲν πού γέγραπται, τὰ δὲ καὶ γεγράφεται. πρὸς ἃ δεῖ διαλογιζόμενον δοκιμάζειν καὶ σκοπεῖσθαι, τίνι τούτων ὀξὺ καὶ θανατῶδες ἢ περιεστικὸν καὶ τίνι μακρὸν καὶ θανατῶδες ἢ περιεστικὸν καὶ τίνι προσαρτέον ἢ οὐ καὶ πότε καὶ πόσον καὶ τί τὸ προσφερόμενον ἔσται.

XXVI. Τὰ δὲ παροξυνόμενα ἐν ἀρτίησι κρίνεται ἐν ἀρτίησιν· ὧν δὲ οἱ

παροξυσμοὶ ἐν περισσῆσι, κρίνεται ἐν περισσῆσιν. ἔστι δὲ πρώτη περίοδος τῶν ἐν τῆσιν ἀρτίησι κρινόντων τετάρτη, ἕκτη, ὀγδόη, δεκάτη, τεσσαρεσκαίδεκάτη, εἰκοστή, τετάρτη καὶ εἰκοστή, τριακοστή, τεσσαρακοστή, ἑξηκοστή, ὀγδοηκοστή, εἰκοστή καὶ ἑκατοστή· τῶν δ' ἐν τῆσι περισσῆσι κρινόντων περίοδος πρώτη, τρίτη, πέμπτη, ἑβδόμη, ἑνάτη, ἑνδεκάτη, ἑπτακαίδεκάτη, εἰκοστή πρώτη, εἰκοστή ἑβδόμη, τριακοστή πρώτη. εἰδέναι δὲ χρή ἔτι, ἦν ἄλλως κριθῆ ἔξω τῶν ὑπογεγραμμένων, ἔσομένας ὑποστροφάς· γένοιτο δὲ ἂν καὶ ὀλέθρια. δεῖ δὴ προσέχειν τὸν νόον καὶ εἰδέναι ἐν τοῖσι χρόνοισι τούτοισι τὰς κρίσιαις ἔσομένας ἐπὶ σωτηρίην ἢ ὄλεθρον ἢ ῥοπὰς ἐπὶ τὸ ἄμεινον ἢ τὸ χεῖρον. πλάνητες δὲ πυρετοὶ καὶ τεταρταῖοι καὶ πεμπταῖοι καὶ ἑβδομαῖοι καὶ ἑναταῖοι, ἐν ἧσι περίοδοισι κρίνονται, σκεπτέον.

## Ἄρρωστοι τέσσαρες καίδεκα

[α'.] Φιλίσκος ᾧκει παρὰ τὸ τεῖχος· κατεκλίθη, τῇ πρώτῃ πυρετὸς ὄξυς, ἴδρωσεν, ἐς νύκτα ἐπιπόνως· δευτέρῃ πάντα παρωξύνθη, ὅψε δὲ ἀπὸ κλυσματίου καλῶς διῆλθε· νύκτα δι' ἠσυχίης. τρίτῃ πρωὶ καὶ μέχρι μέσου ἡμέρης ἔδοξε γενέσθαι ἄπυρος, πρὸς δειλὴν δὲ πυρετὸς ὄξυς μετὰ ἰδρῶτος, διψώδης, γλῶσσα ἐπεξηραίνετο, μέλανα οὔρησε· νύκτα δυσφόρως, οὐκ ἐκοιμήθη, πάντα παρέκρουσε. τετάρτῃ πάντα παρωξύνθη, οὔρα μέλανα· νύκτα εὐφορωτέρῃ, οὔρα εὐχρώτερα. πέμπτῃ περὶ μέσον ἡμέρης σμικρὸν ἀπὸ ῥινῶν ἔσταξεν ἄκρητον· οὔρα δὲ ποικίλα, ἔχοντα ἐναιωρήματα στρογγύλα, γονοειδέα, διεσπας μένα, οὐχ ἰδρύετο· προσθεμένῳ δὲ βάλανον φυσώδεα σμικρὰ διῆλθε. νύκτα ἐπιπόνως, ὕπνοι σμικροί, λόγοι, λῆρος, ἄκρεα πάντοθεν ψυχρὰ καὶ οὐκέτι ἀναθερμαινόμενα, οὔρησε μέλανα, ἐκοιμήθη σμικρὰ πρὸς ἡμέρην, ἄφωνος, ἴδρωσε ψυχρῶ, ἄκρεα πελιδνά. περὶ δὲ μέσον ἡμέρης ἑκταῖος ἀπέθανεν. τούτῳ πνεῦμα διὰ τέλεος, ὥσπερ ἀνακαλεομένῳ, ἀραιὸν μέγα· σπλὴν ἐπήρθη περιφερεῖ κυρτώματι, ἰδρῶτες ψυχροὶ διὰ τέλεος. οἱ παροξυσμοὶ ἐν ἀρτίησιν.

[β'.] Σιληνὸς ᾧκει ἐπὶ τοῦ πλαταμῶνος πλησίον τῶν Εὐαλκίδεω. ἐκ κόπων καὶ πότων καὶ γυμνασιῶν ἀκαίρων πῦρ ἔλαβεν. ἤρξατο δὲ πονεῖν κατ' ὄσφυν· καὶ κεφαλῆς βάρος καὶ τραχήλου σύντασις. ἀπὸ δὲ κοιλῆς τῇ πρώτῃ χολώδεα, ἄκρητα, ἔπαφρα, κατακορέα πολλὰ διῆλθεν· οὔρα μέλανα, μέλαιναν ὑπόστασιν ἔχοντα, διψώδης, γλῶσσα ἐπίξηρος, νυκτὸς οὐδὲν ἐκοιμήθη. δευτέρῃ πυρετὸς ὄξυς, διαχωρήματα πλείω, λεπτότερα, ἔπαφρα, οὔρα μέλανα, νύκτα δυσφόρως, σμικρὰ παρέκρουσε. τρίτῃ πάντα παρωξύνθη· ὑποχονδρίου σύντασις ἐξ ἀμφοτέρων παραμήκης πρὸς ὀμφαλόν, ὑπολάπαρος· διαχωρήματα λεπτά, ὑπομέλανα, οὔρα θολερά, ὑπομέλανα, νυκτὸς οὐδὲν ἐκοιμήθη, λόγοι πολλοί, γέλως, ᾠδή, κατέχειν οὐκ ἠδύνατο. τετάρτῃ διὰ τῶν αὐτῶν. πέμπτῃ διαχωρήματα ἄκρητα, χολώδεα, λεῖα, λιπαρά, οὔρα λεπτά, διαφανέα· σμικρὰ κατενόει. ἕκτη περὶ κεφαλὴν σμικρὰ ἐφίδρωσεν, ἄκρεα ψυχρὰ, πελιδνά, πολὺς βληστρισμὸς, ἀπὸ κοιλῆς οὐδὲν διῆλθεν, οὔρα ἐπέστη, πυρετὸς ὄξυς. ἐβδόμη ἄφωνος, ἄκρεα οὐκέτι ἀναθερμαίνετο, οὔρησεν οὐδέν. ὀγδόῃ ἴδρωσεν δι' ὅλου ψυχρῶ· ἐξανθήματα μετὰ ἰδρῶτος ἐρυθρά, στρογγύλα, σμικρὰ οἶον ἰονθοί, παρέμενεν, οὐ καθίστατο· ἀπὸ δὲ κοιλῆς ἐρεθισμῶ σμικρῶ κοπρανα λεπτά, οἷα ἄπεπτα, πολλὰ διήει μετὰ πόνου· οὔρει μετ' ὀδύνης δακνώδεα· ἄκρεα σμικρὰ ἀναθερμαίνετο, ὕπνοι λεπτοί, κωματώδης, ἄφωνος, οὔρα λεπτά διαφανέα. ἐνάτη διὰ τῶν αὐτῶν. δεκάτη ποτὰ οὐκ ἐδέχετο, κωματώδης, ὕπνοι λεπτοί· ἀπὸ δὲ κοιλῆς ὁμοία, οὔρησεν ἀθρόον ὑπόπαχυ· κειμένῳ ὑπόστασις κριμνώδης λευκή, ἄκρεα πάλιν ψυχρὰ. ἐνδεκάτῃ ἀπέθανεν. ἐξ ἀρχῆς τούτῳ καὶ διὰ τέλεος πνεῦμα

ἀραιόν, μέγα. ὑποχονδρίου παλμός συνεχής, ἡλικίῃ ὡς περὶ ἕτεα εἴκοσιν.

[γ'.] Ἡροφῶντι πυρετὸς ὀξύς, ἀπὸ κοιλίης ὀλίγα, τεινεσμώδεα κατ' ἀρχάς, μετὰ δὲ λεπτὰ διήει χολώδεα, ὑπόσυχνα· ὕπνοι οὐκ ἐνήσαν, οὔρα μέλανα λεπτά. πέμπτη πρῶτὴ κώφωσις, παρωξύνθη πάντα, σπλὴν ἐπήρθη, ὑποχονδρίου σύντασις, ἀπὸ κοιλίης ὀλίγα διήλθε μέλανα, παρεφρόνησεν. ἕκτη ἐλήρει, ἐς νύκτα ἰδρώς, ψύξις, παράληρος παρέμενεν. ἑβδόμη περιέψυκτο, διψώδης, παρέκρουσε. νύκτα κατενόει, κατεκοιμήθη. ὀγδὴ ἐπύρεσεν, σπλὴν ἐμειοῦτο, κατενόει πάντα, ἤλγησεν τὸ πρῶτον κατὰ βουβῶνα, σπληνὸς κατ' ἴξιν, ἔπειτα δὲ πόνοι ἐς ἀμφοτέρας κνήμας. νύκτα εὐφύως, οὔρα εὐχρόωτερα, ὑπόστασιν εἶχε σμικρὴν. ἐνάτη ἰδρωσεν, ἐκρίθη, διέλιπεν. πέμπτη ὑπέστρεψεν. αὐτίκα δὲ σπλὴν ἐπήρθη, πυρετὸς ὀξύς, κώφωσις πάλιν· μετὰ δὲ τὴν ὑποστροφὴν τρίτη σπλὴν ἐμειοῦτο, κώφωσις ἦσσαν, σκέλεα ἐπωδύνως· νύκτα ἰδρωσεν. ἐκρίθη περὶ ἑπτακαιδεκάτην· οὐδὲ παρέκρουσεν ἐν τῇ ὑποστροφῇ.

[δ'.] Ἐν Θάσῳ Φιλίνου γυναῖκα θυγατέρα τεκοῦσαν κατὰ φύσιν καθάρσιος γενομένης καὶ τὰ ἄλλα κούφως διάγουσαν, τεσσαρεσκαίδεκαταίην ἐοῦσαν μετὰ τὸν τόκον, πῦρ ἔλαβε μετὰ ῥίγεος· ἤλγει δὲ ἀρχομένη καρδίην καὶ ὑποχόνδριον δεξιόν· γυναικείων πόνοι· κάθαρσις ἐπαύσατο. προσθεμένη δὲ ταῦτα μὲν ἐκουφίσθη, κεφαλῆς δὲ καὶ τραχήλου καὶ ὀσφύος πόνοι παρέμενον, ὕπνοι οὐκ ἐνήσαν, ἄκρεα ψυχρά, διψώδης, κοιλίη συνεκαύθη, σμικρὰ διήει, οὔρα λεπτά, ἄχρω κατ' ἀρχάς. ἕκταίη ἐς νύκτα παρέκρουσε πολλὰ καὶ πάλιν κατενόει. ἑβδόμη διψώδης, διαχωρήματα ὀλίγα χολώδεα κατακορέα. ὀγδὴ ἐπερρίγωσεν, πυρετὸς ὀξύς, σπασμοὶ πολλοὶ μετὰ πόνου, πολλὰ παρέλεγεν· ἐξανίστατο βάλανον προσθεμένη· πολλὰ διήλθε μετὰ περιρροῦ χολώδεος· ὕπνοι οὐκ ἐνήσαν. ἐνάτη σπασμοί. δεκάτη σμικρὰ κατενόει. ἐνδεκάτη ἐκοιμήθη, πάντων ἀνεμνήσθη, ταχὺ δὲ πάλιν παρέκρουσεν· οὔρει δὲ μετὰ σπασμῶν ἀθρόον πολὺ ὀλιγάκις ἀναμιμνησκόντων παχὺ λευκόν, οἶον γίνεται ἐκ τῶν καθισταμένων, ὅταν ἀναταραχθῇ· κείμενον πολὺν χρόνον οὐ καθίστατο· χρῶμα καὶ πάχος ἴκελον οἶον γίνεται ὑποζυγίου. τοιαῦτα οὔρει, οἷα κάγω εἶδον. περὶ τεσσαρεσκαίδεκάτην ἐούση παλμός δι' ὅλου τοῦ σώματος, λόγοι πολλοί, σμικρὰ κατενόει· διὰ ταχέων δὲ πάλιν παρέκρουσεν. περὶ δὲ ἑπτακαιδεκάτην ἐοῦσα ἄφωνος. εἰκοστῇ ἀπέθανε.

[ε'.] Ἐπικράτεος γυναῖκα, ἣ κατέκειτο παρὰ ἀρχηγέτην, περὶ τόκον ἤδη ἐοῦσαν ῥίγος ἔλαβεν ἰσχυρῶς, οὐκ ἐθερμάνθη, ὡς ἔλεγον, καὶ τῇ ὑστεραίῃ τὰ αὐτά. τρίτη δ' ἔτεκεν θυγατέρα καὶ τᾶλλα πάντα κατὰ λόγον ἤλθε. δευτεραίην μετὰ τὸν τόκον ἔλαβε πυρετὸς ὀξύς, καρδίης πόνος καὶ γυναικείων. προσθεμένη δὲ ταῦτα μὲν ἐκουφίσθη, κεφαλῆς δὲ καὶ τραχήλου καὶ ὀσφύος πόνος· ὕπνοι οὐκ



ἐνήσαν· ἀπὸ δὲ κοιλίης ὀλίγα χολώδεα λεπτὰ διήει ἄκρητα· οὔρα λεπτὰ ὑπομέλανα. ἀφ' ἧς δὲ ἔλαβε τὸ πῦρ, ἐς νύκτα ἑκταίη παρέκρουσεν. ἐβδομαίη πάντα παρωξύνθη, ἄγρυπνος, παρέκρουσεν, διψώδης, διαχωρήματα χολώδεα κατακορέα. ὀγδόη ἐπερρίωσεν καὶ ἐκοιμήθη πλείω. ἐνάτη διὰ τῶν αὐτῶν. δεκάτη σκέλεα ἐπιπόνως ἦλγει, καρδίας πάλιν ὀδύνη, καρηβαρὴ, οὐ παρέκρουεν, ἐκοιμᾶτο μᾶλλον, κοιλίη ἐπέστη. ἐνδεκάτη οὔρησεν εὐχρώτερα συχὴν ὑπόστασιν ἔχοντα· διῆγε κουφότερον. τεσσαρεσκαιδεκάτη ἐπερρίωσεν, πυρετὸς ὀξύς. πεντεκαιδεκάτη ἡμεσε χολώδεα ξανθὰ ὑπόσυχνα, ἴδρωσεν ἄπυρος, ἐς νύκτα δὲ πυρετὸς ὀξύς, οὔρα πάχος ἔχοντα, ὑπόστασις λευκή. ἑκκαιδεκάτη παρωξύνθη· νύκτα δυσφόρος· οὐχ ὑπνωσεν· παρέκρουσεν. ὀκτωκαιδεκάτη διψώδης, γλῶσσα ἐπεκαύθη, οὐχ ὑπνωσεν, παρέκρουσε πολλά, σκέλεα ἐπώδυνως εἶχεν. περὶ δὲ εἰκοστὴν πρωὶ σμικρὰ ἐπερρίωσεν, κωματώδης, δι' ἠσυχίης ὑπνωσεν, ἡμεσε χολώδεα ὀλίγα μέλανα, ἐς νύκτα κώφωσις. περὶ δὲ πρώτην καὶ εἰκοστὴν πλευροῦ ἀριστεροῦ βάρος δι' ὅλου μετ' ὀδύνης, σμικρὰ ὑπέβησεν. οὔρα δὲ πάχος ἔχοντα, θολερά, ὑπέρυθρα· κείμενα οὐ καθίστατο· τὰ δ' ἄλλα κουφοτέρως· οὐκ ἄπυρος. αὕτη ἐξ ἀρχῆς φάρυγγα ἐπώδυνος· ἔρευθος· κίων ἀνεσπασμένος· ρεῦμα δριμύ, δακνῶδες, ἀλμυρῶδες διὰ τέλεος παρέμενεν. περὶ δὲ εἰκοστὴν ἐβδόμην ἄπυρος, οὔροισιν ὑπόστασις, πλευρὸν ὑπήλγει. περὶ δὲ πρώτην καὶ τριακοστὴν πῦρ ἔλαβεν, κοιλίη χολώδεσιν ἐπεταράχθη. τεσσαρακοστῇ ἡμεσεν ὀλίγα χολώδεα. ἐκρίθη τελῶς ἄπυρος ὀγδοη κοστῇ.

[ς'.] Κλεανακτίδην, ὃς κατέκειτο ἐπάνω τοῦ Ἡρακλείου, πῦρ ἔλαβε πεπλανημένως· ἦλγει δὲ κεφαλὴν ἐξ ἀρχῆς καὶ πλευρὸν ἀριστερόν, καὶ τῶν ἄλλων πόνοι κοπιώδεα τρόπον· οἱ πυρετοὶ παροξυνόμενοι ἄλλοτ' ἄλλοίως, ἀτάκτως· ἰδρῶτες ὅτε μὲν, ὅτε δ' οὔ· τὰ μὲν πλεῖστα ἐπεσήμαινον οἱ παροξυμοὶ ἐν κρισίμοις μάλιστα. περὶ δὲ εἰκοστὴν τετάρτην χειῖρας ἄκρας ἐπόνησεν, ἡμεσε χολώδεα ξανθὰ, ὑπόσυχνα, μετ' ὀλίγον δὲ ἰώδεα· πάντων ἐκουφίσθη. περὶ δὲ τριακοστὴν ἐόντι ἦρξατο ἀπὸ ρίνων αἰμορραγεῖν ἐξ ἀμφοτέρων καὶ ταῦτα πεπλανημένως κατ' ὀλίγον μέχρι κρίσιος· οὐκ ἀπόσιτος οὐδὲ διψώδης παρὰ πάντα τὸν χρόνον οὐδ' ἄγρυπνος· οὔρα δὲ λεπτά, οὐκ ἄχρω. περὶ δὲ τεσσαρακοστὴν ἐὼν οὔρησεν ὑπέρυθρα ὑπόστασιν πολλὴν ἐρυθρὴν ἔχοντα· ἐκουφίσθη. μετὰ δὲ ποικίλως τὰ τῶν οὔρων· ὅτε μὲν ὑπόστασιν εἶχεν, ὅτε δ' οὔ. ἐξηκοστῇ οὔροισιν ὑπόστασις πολλὴ καὶ λευκὴ καὶ λείη, συνέδωκε πάντα, πυρετοὶ διελιπον, οὔρα δὲ πάλιν λεπτὰ μὲν, εὐχρω δέ. ἐβδομηκοστῇ πυρετὸς, διέλειπεν ἡμέρας δέκα. ὀγδοηκοστῇ ἐρρίωσε, πυρετὸς ὀξύς ἔλαβεν· ἴδρωσεν πολλῶ· οὔροισιν ὑπόστασις ἐρυθρὴ, λείη. τελῶς ἐκρίθη.

[ς'.] Μέτωνα πῦρ ἔλαβεν, ὀσφύος βάρος ἐπώδυνον. δευτέρη ὑδωρ πίνοντι

ὑπόσυχνον ἀπὸ κοιλίας καλῶς διήλθε. τρίτη κεφαλῆς βάρος, διαχωρήματα λεπτά, χολώδεα, ὑπέρυθρα. τετάρτη πάντα παρωξύνθη, ἐρρῦη ἀπὸ δεξιοῦ δις κατ' ὀλίγον. νύκτα δυσφόρως, διαχωρήματα ὅμοια τῇ τρίτῃ, οὔρα ὑπομέλανα· εἶχεν ἐναιώρημα ὑπόμελαν ἐόν, διεσπασμένον· οὐχ ἰδρύετο. πέμπτη ἐρρῦη λάβρον ἐξ ἀριστεροῦ ἄκρητον, ἴδρωσεν, ἐκρίθη. μετὰ κρίσιν ἄγρυπνος, παρέλεγεν, οὔρα λεπτά ὑπομέλανα. λουτροῖσιν ἐχρήσατο κατὰ κεφαλῆς, ἐκοιμήθη, κατενόει. τούτῳ οὐχ ὑπέστρεψεν, ἀλλ' ἠμορράγει πολλακίς μετὰ κρίσιν.

[η'.] Ἐρασίνοσ ᾧκει παρὰ Βοώτεω χαράδρην. πῦρ ἔλαβεν μετὰ δεῖπνον, νύκτα ταραχώδης. ἡμέρην τὴν πρώτην δι' ἠσυχίης, νύκτα ἐπιπόνως. δευτέρη πάντα παρωξύνθη, ἐς νύκτα παρέκρουσε. τρίτη ἐπιπόνως, πολλὰ παρέκρουσε. τετάρτη δυσφορώτατα· ἐς δὲ τὴν νύκτα οὐδὲν ἐκοιμήθη· ἐνύπνια καὶ λογισμοί· ἔπειτα χεῖρω, μεγάλα καὶ ἐπίκαιρα, φόβος, δυσφορή. πέμπτη πρὸς κατήρητο· κατενόει πάντα· πολὺ δὲ πρὸ μέσου ἡμέρης ἐξεμάνη, κατέχειν οὐκ ἠδύνατο, ἄκρεα ψυχρὰ ὑποπέλια, οὔρα ἐπέστη· ἀπέθανε περὶ ἡλίου δυσμάς. τούτῳ πυρετοὶ διὰ τέλεος σὺν ἰδρῶτι, ὑποχόνδρια μετέωρα, σύντασις μετ' ὀδύνης· οὔρα μέλανα ἔχοντα ἐναιωρήματα στρογγύλα· οὐχ ἰδρύετο· ἀπὸ δὲ κοιλίας κόπρανα διήει· δίψα διὰ τέλεος οὐ λίην· σπασμοὶ πολλοὶ σὺν ἰδρῶτι περὶ θάνατον.

[θ'.] Κρίτωνι ἐν Θάσῳ ποδὸς ὀδύνη ἤρξατο ἰσχυρὴ ἀπὸ δακτύλου τοῦ μεγάλου ὀρθοστάδην περιόντι. κατεκλίνη αὐθημερόν, φρικώδης, ἀσώδης, σμικρὰ ὑποθερμαινόμενος, ἐς νύκτα παρεφρόνησεν. δευτέρη οἴδημα δι' ὅλου τοῦ ποδὸς καὶ περὶ σφυρὸν ὑπέρυθρον μετὰ συντάσιος, φλυκταινίδια μέλανα, πυρετὸς ὀξύς, ἐξεμάνη· ἀπὸ δὲ κοιλίας ἄκρητα, χολώδεα, ὑπόσυχνα. ἀπέθανεν ἀπὸ τῆς ἀρχῆς δευτεραῖος.

[ι'.] Τὸν Κλαζομένιον, ὃς κατέκειτο παρὰ τὸ Φρυνιχίδεω φρέαρ, πῦρ ἔλαβε. ἤλγει δὲ κεφαλὴν, τράχηλον, ὀσφῦν ἐξ ἀρχῆς, αὐτίκα δὲ κώφωσις· ὕπνοι οὐκ ἐνῆσαν, πυρετὸς ὀξύς ἔλαβεν, ὑποχόνδριον ἐπῆρτο μετ' ὄγκου οὐ λίην, σύντασις, γλῶσσα ξηρή. τετάρτη ἐς νύκτα παρεφρόνει. πέμπτη ἐπιπόνως. ἕκτη πάντα παρωξύνθη. περὶ δὲ ἐνδεκάτην σμικρὰ συνέδωκεν. ἀπὸ δὲ κοιλίας ἀπ' ἀρχῆς καὶ μέχρι τεσσαρεσκαίδεκάτης λεπτά, πολλὰ, ὑδατόχολα διήει· εὐφόρως τὰ περὶ διαχώρησιν διῆγεν. ἔπειτα κοιλὴ ἐπέστη. οὔρα διὰ τέλεος λεπτά μὲν, εὐχρῶ δέ· καὶ πολὺ εἶχεν ἐναιώρημα ὑποδιεσπασμένον· οὐχ ἰδρύετο. περὶ δὲ ἕκτην καὶ δεκάτην οὔρησεν ὀλίγῳ παχύτερα· εἶχε σμικρὴν ὑπόστασιν· ἐκούφισεν ὀλίγῳ· κατενόει μᾶλλον. ἑπτακαίδεκάτη πάλιν λεπτά, παρὰ δὲ τὰ ὦτα ἀμφότερα ἐπήρθη σὺν ὀδύνη· ὕπνοι οὐκ ἐνῆσαν, παρελήρει, σκέλεα ἐπωδύνως εἶχεν. εἰκοστῇ ἄπυρος ἐκρίθη, οὐχ ἴδρωσε, πάντα κατενόει. περὶ δὲ εἰκοστὴν ἐβδόμη

ισχίου ὀδύνη δεξιοῦ ἰσχυρῶς· διὰ ταχέων ἐπαύσατο. τὰ δὲ παρὰ τὰ ὦτα οὔτε καθίστατο οὔτε ἐξεπύει, ἤλγει δέ. περὶ πρώτην καὶ τριηκοστὴν διάρροια πολλοῖσιν ὑδατώδεσιν μετὰ δυσεντεριωδέων· οὔρα παχέα οὔρει· κατέστη τὰ παρὰ τὰ ὦτα. τεσσαρακοστῇ ὀφθαλμὸν δεξιὸν ἤλγει, ἀμβλύτερον ἑώρα· κατέστη.

[ια'.] Τὴν Δρομεάδεω γυναῖκα θυγατέρα τεκοῦσαν καὶ τῶν ἄλλων πάντων γενομένων κατὰ λόγον δευτεραίην ἐοῦσαν ῥίγος ἔλαβεν· πυρετὸς ὀξύς. ἤρξατο δὲ πονεῖν τῇ πρώτῃ περὶ ὑποχόνδριον· ἀσώδης, φρικώδης, ἀλύουσα καὶ τὰς ἐχομένας οὐχ ὑπνώσει. πνεῦμα ἀραιόν, μέγα, αὐτίκα ἀνεσπασμένον. δευτέρῃ ἀφ' ἧς ἐρρίγωσεν, ἀπὸ κοιλίης καλῶς κόπρανα διήλθεν· οὔρα παχέα, λευκά, θολερά, οἷα γίνεται ἐκ τῶν καθισταμένων, ὅταν ἀναταραχθῇ κείμενα χρόνον πολύν· οὐ καθίστατο. νύκτα οὐκ ἐκοιμήθη. τρίτῃ περὶ μέσον ἡμέρης ἐπερρίγωσε, πυρετὸς ὀξύς, οὔρα ὅμοια, ὑποχονδρίου πόνος, ἀσώδης, νύκτα δυσφόρος, οὐκ ἐκοιμήθη· ἴδρωσε δι' ὄλου ψυχρῶ, ταχὺ δὲ πάλιν ἀνεθερμάνθη. τετάρτῃ περὶ ὑποχόνδριον σμικρὰ ἐκουφίσθη, κεφαλῆς δὲ βάρος μετ' ὀδύνης· ὑπεκαρώθη· σμικρὰ ἀπὸ ῥινῶν ἔσταξε· γλῶσσα ἐπίξηρος· διψώδης· οὔρα σμικρὰ λεπτὰ ἐλαιώδεα· σμικρὰ ἐκοιμήθη. πέμπτῃ διψώδης, ἀσώδης, οὔρα ὅμοια, ἀπὸ κοιλίης οὐδέν, περὶ δὲ μέσον ἡμέρης πολλὰ παρέκρυσσε καὶ πάλιν ταχὺ σμικρὰ κατενόει· ἀνισταμένη ὑπεκαρώθη, ψύξις σμικρὰ, νυκτὸς ἐκοιμήθη, παρέκρυσσεν. ἕκτῃ πρῶτὴ ἐπερρίγωσεν, ταχὺ διεθερμάνθη, ἴδρωσε δι' ὄλου· ἄκρεα ψυχρά, παρέκρυσσεν, πνεῦμα μέγα, ἀραιόν· μετ' ὀλίγον σπασμοὶ ἀπὸ κεφαλῆς ἤρξαντο, ταχὺ ἀπέθανεν.

[ιβ'.] Ἄνθρωπος θερμαινόμενος ἐδείπνησεν καὶ ἔπιε πλέον. ἤμεσε πάντα νυκτός, πυρετὸς ὀξύς, ὑποχονδρίου δεξιοῦ πόνος, φλεγμονὴ ὑπολάπαρος ἐκ τοῦ ἔσω μέρους, νύκτα δυσφόρος· οὔρα δὲ κατ' ἀρχὰς πάχος ἔχοντα, ἐρυθρά· κείμενα οὐ καθίστατο· γλῶσσα ἐπίξηρος, οὐ λίην διψώδης. τετάρτῃ πυρετὸς ὀξύς, πόνοι πάντων. πέμπτῃ οὔρησε λεῖον ἐλαιῶδες πολὺ· πυρετὸς ὀξύς. ἕκτῃ δείλης πολλὰ παρέκρυσσεν. οὐδὲ νύκτα ἐκοιμήθη. ἑβδόμη πάντα παρωξύνθη· οὔρα ὅμοια, λόγοι πολλοί, κατέχειν οὐκ ἠδύνατο· ἀπὸ δὲ κοιλίης ἐρεθισμῶ ὑγρὰ ταραχώδεα διήλθεν μετὰ ἐλμύγων. νύκτα ἐπιπόνως, πρῶτὴ δ' ἐρρίγωσε. πυρετὸς ὀξύς. ἴδρωσε θερμῶ, ἄπυρος ἔδοξε γενέσθαι· οὐ πολὺ ἐκοιμήθη, ἐξ ὑπνου ψύξις· πτυαλισμός. δείλης πολλὰ παρέκρυσσε, μετ' ὀλίγον δὲ ἤμεσε μέλανα, ὀλίγα, χολώδεα. ἐνάτῃ ψύξις, παρελήρει πολλὰ, οὐχ ὑπνώσεν. δεκάτῃ σκέλεα ἐπωδύνως, πάντα παρωξύνθη, παρελήρει. ἐνδεκάτῃ ἀπέθανεν.

[ιγ'.] Γυναῖκα, ἣ κατέκειτο ἐν ἀκτῇ, τρίμηνον πρὸς ἑωυτῇ ἔχουσαν πῦρ ἔλαβεν· αὐτίκα δὲ ἤρξατο πονεῖν ὀσφῶν. τρίτῃ πόνος τραχήλου καὶ κεφαλῆς καὶ κατὰ

κληῖδα δεξιήν· διὰ ταχέων δὲ γλῶσσα ἠφώνει, δεξιὴ χεὶρ παρελύθη μετὰ σπασμοῦ παραπληγικὸν τρόπον, παρελήρει πάντα. νύκτα δυσφόρως, οὐκ ἐκοιμήθη, κοιλίη ἐπεταράχθη χολώδεσιν ἀκρήτοισιν ὀλίγοισιν. τετάρτη γλῶσσα ἀσαφὴς ἦν, ἐλύθη, σπασμοί· πόνοι τῶν αὐτῶν παρέμενον, κατὰ ὑποχόνδριον ἔπαρμα σὺν ὀδύνη, οὐκ ἐκοιμᾶτο, παρέκρουσε πάντα, κοιλίη ταραχώδης, οὔρα λεπτά, οὐκ εὐχρω. πέμπτη πυρετὸς ὀξύς, ὑποχονδρίου πόνος, παρέκρουσε πάντα, διαχωρήματα χολώδεα. ἐς νύκτα ἴδρωσεν, ἄπυρος. ἕκτη κατενόει, πάντα ἐκουφίσθη, περὶ δὲ κληῖδα ἀριστερὴν πόμος παρέμενε· διψώδης, οὔρα λεπτά, οὐκ ἐκοιμήθη. ἑβδόμη τρόμος, ὑπεκαρώθη, σμικρὰ παρέκρουσεν, ἀλγήματα κατὰ κληῖδα καὶ βραχίονα ἀριστερὸν παρέμενε, τὰ δ' ἄλλα διεκούφισεν, πάντα κατενόει. τρεῖς διέλιπεν ἄπυρος. ἑνδεκάτη ὑπέστρεψεν, ἔπερ ρίγωσεν, πῦρ ἔλαβεν. περὶ δὲ τεσσαρεσκαίδεκάτην ἤμεσε χολώδεα ξανθὰ ὑπόσυχνα, ἴδρωσεν· ἄπυρος ἐκρίθη.

[ιδ'.] Μελιδίη, ἣ κατέκειτο παρὰ Ἡρῆς ἰρόν, ἤρξατο κεφαλῆς καὶ τραχήλου καὶ στήθεος πόμος ἰσχυρός· αὐτίκα δὲ πυρετὸς ὀξὺς ἔλαβεν· γυναικεῖα δὲ σμικρὰ ἐπεφαίνετο· πόνοι τούτων πάντων συνεχέες. ἕκτη κωματώδης, ἀσώδης, φρικώδης, ἐρύθημα ἐπὶ γνάθων, σμικρὰ παρέκρουσεν. ἑβδόμη ἴδρωσε, πυρετὸς διέλιπεν, οἱ πόνοι παρέμενον, ὑπέστρεψεν, ὕπνοι σμικροί· οὔρα διὰ τέλος εὐχρω μὲν, λεπτά δέ· διαχωρήματα λεπτά, χολώδεα, δακνώδεα, ὀλίγα, μέλανα, δυσώδεα διῆλθεν, οὔροις ὑπόστασις λευκή, λείη· ἴδρωσεν. ἐκρίθη τελῶς ἑνδεκάτη.

## ΕΠΙΔΗΜΙΩΝ Γ

I. [α'.] Πυθίωνι, ὃς ᾤκει παρὰ Γῆς ἰρόν, ἤρξατο τρόμος ἀπὸ χειρῶν· τῆ πρώτη πυρετὸς ὀξύς· λῆρος. δευτέρη πάντα παρωξύνθη. τρίτη τὰ αὐτά. τετάρτη ἀπὸ κοιλίης ὀλίγα, ἄκρητα, χολώδεα διῆλθε. πέμπτη πάντα παρωξύνθη· ὕπνοι λεπτοί· κοιλίη ἔστη. ἕκτη πτύαλα ποικίλα, ὑπέρυθρα. ἑβδόμη στόμα παρειρύσθη. ὀγδὴ πάντα παρωξύνθη, τρόμοι παρέμενον· οὔρα δὲ κατ' ἀρχὰς μὲν καὶ μέχρι τῆς ὀγδῆς λεπτά, ἄχρω· ἐναιώρημα εἶχον ἐπινέφελον. δεκάτη ἴδρωσε, πτύαλα ὑποπέποννα, ἐκρίθη· οὔρα ὑπόλεπτα περὶ κρίσιν. μετὰ δὲ κρίσιν, τεσσαράκοντα ἡμέρησιν ὕστερον, ἐμπύημα περὶ ἔδρην, καὶ στραγγουριώδης ἐγένετο ἀπόστασις.

[β'.] Ἐρμοκράτην, ὃς κατέκειτο παρὰ τὸ καινὸν τεῖχος, πῦρ ἔλαβεν. ἤρξατο δὲ ἀλγεῖν κεφαλήν, ὀσφῦν· ὑποχονδρίου ἔντασις λαπαρῶς· γλῶσσα δὲ ἀρχομενω ἐπεκαύθη· κώφωσις αὐτίκα· ὕπνοι οὐκ ἐνήσαν· διψώδης οὐ λίην· οὔρα παχέα, ἐρυθρά, κείμενα οὐ καθίστατο· ἀπὸ δὲ κοιλίης οὐκ ὀλίγα συγκεκαυμένα διῆει. πέμπτη οὔρησε λεπτά, εἶχεν ἐναιώρημα, οὐχ ἴδρυτο, ἐς νύκτα παρέκρουσεν. ἕκτη ἰκτεριώδης, πάντα παρωξύνθη, οὐ κατενόει. ἑβδόμη δυσφόρως, οὔρα λεπτά, ὁμοια. τὰς ἐπομένας παραπλησίως. περὶ δὲ ἑνδεκάτην ἐόντι πάντα ἔδοξε κουφισθῆναι· κῶμα ἤρξατο, οὔρει παχύτερα, ὑπέρυθρα, κάτω λεπτά· οὐ καθίστατο· ἠσυχῆ κατενόει. τεσσαρεσκαιδεκάτη ἄπυρος, οὐχ ἴδρωσεν, ἐκοιμήθη, κατενόει πάντα, οὔρα παρα πλήσια. περὶ δὲ ἑπτακαιδεκάτην ἐόντι ὑπέστρεψεν, ἐθερμάνθη. τὰς ἐπομένας πυρετὸς ὀξύς, οὔρα λεπτά, παρέκρουσεν. πάλιν δὲ εἰκοστῇ ἐκρίθη, ἄπυρος, οὐχ ἴδρωσεν. ἀπόσιτος παρὰ πάντα τὸν χρόνον, κατενόει πάντα, διαλέγεσθαι οὐκ ἠδύνατο, γλῶσσα ἐπίζηρος, οὐκ ἐδίψη· κατεκοιμᾶτο σμικρά, κωματώδης. περὶ δὲ εἰκοστὴν καὶ τετάρτην ἐπεθερμάνθη, κοιλίη ὑγρὴ πολλοῖσι λεπτοῖσι. καὶ τὰς ἐπομένας πυρετὸς ὀξύς, γλῶσσα συνεκαύθη. ἑβδόμη καὶ εἰκοστῇ ἀπέθανε. τούτῳ κώφωσις διὰ τέλεος παρέμενεν, οὔρα παχέα καὶ ἐρυθρά, οὐ καθιστάμενα, ἢ λεπτά καὶ ἄχρω καὶ ἐναιώρημα ἔχοντα· γεύεσθαι δὲ οὐκ ἠδύνατο.

[γ'.] Ὁ κατακείμενος ἐν τῷ Δελεάρκεος κήπῳ κεφαλῆς βάρους καὶ κρόταφον δεξιὸν ἐπώδυνον εἶχε χρόνον πολύν. μετὰ δὲ προφάσιος πῦρ ἔλαβε, κατεκλίθη. δευτέρη ἐξ ἀριστεροῦ ὀλίγον ἄκρητον ἐρρῦη· ἀπὸ δὲ κοιλίης κόπρανα καλῶς διῆλθεν, οὔρα λεπτά ποικίλα, ἐναιωρήματα ἔχοντα κατὰ σμικρὰ οἶον κρίμνα, γονοειδέα. τρίτη πυρετὸς ὀξύς, διαχωρήματα μέλανα, λεπτά, ἔπαφρα, ὑπόστασις πελιδνὴ διαχωρήμασιν, ὑπεκαροῦτο, ἐδυσφόρει περὶ τὰς ἀναστάσις, οὔροις ὑπόστασις πελιδνὴ, ὑπόγλισχος. τετάρτη ἡμεσε χολώδεα ξανθὰ ὀλίγα, διαλιπῶν

ὀλίγον ἰώδεα, ἐξ ἀριστεροῦ ὀλίγον ἄκρητον ἐρρύη, διαχωρήματα ὅμοια, οὔρα ὅμοια, ἐφίδρωσε περὶ κεφαλὴν καὶ κληΐδας, σπλὴν ἐπήρθη, μηροῦ ὀδύνη κατ' ἴξιν, ὑποχονδρίου δεξιῦ σύντασις ὑπολάπαρος, νυκτὸς οὐκ ἐκοιμήθη, παρέκρυσσε σμικρά. πέμπτη διαχωρήματα πλείω, μέλανα, ἔπαφρα, ὑπόστασις μέλαινα διαχωρήμασι, νύκτα οὐχ ὑπνωσε, παρέκρυσσεν. ἕκτη διαχωρήματα μέλανα, λιπαρά, γλίσχροα, δυσώδεα, ὑπνωσε, κατενόει μᾶλλον. ἑβδόμη γλῶσσα ἐπίξηρος, διψώδης, οὐκ ἐκοιμήθη, παρέκρυσσεν, οὔρα λεπτά, οὐκ εὔχρω. ὀγδόη διαχωρήματα μέλανα ὀλίγα, συνεστηκότα, ὑπνωσε, κατενόει, διψώδης οὐ λίην. ἐνάτη ἐπερρίγωσε, πυρετὸς ὀξύς, ἰδρωσε, ψύξις, παρέκρυσσε, δεξιῶ ἴλλαινε, γλῶσσα ἐπίξηρος, διψώδης, ἄγρυπνος. δεκάτη περὶ τὰ αὐτά. ἑνδεκάτη κατενόει πάντα, ἄπυρος, ὑπνωσεν, οὔρα λεπτά περὶ κρίσιν. δύο διέλιπεν ἄπυρος, ὑπέστρεψεν τεσσαρες καιδεκάτη, αὐτίκα δὲ νύκτα οὐκ ἐκοιμήθη, πάντα παρέκρυσσεν. πεντεκαιδεκάτη οὔρον θολερὸν, οἶον ἐκ τῶν καθεστηκότων γίνεται, ὅταν ἀναταραχθῆ, πυρετὸς ὀξύς, πάντα παρέκρυσσεν, οὐκ ἐκοιμήθη, γούνατα καὶ κνήμας ἐπώδυνα εἶχεν· ἀπὸ δὲ κοιλίης βάλανον προσθεμένω μέλανα κόπρανα διῆλθεν. ἕξκαιδεκάτη οὔρα λεπτά, εἶχεν ἐναιώρημα ἐπινέφελον, παρέκρυσσεν. ἑπτακαιδεκάτη πρωὶ ἄκρεα ψυχρά, περιεστέλλετο, πυρετὸς ὀξύς, ἰδρωσε δι' ὄλου, ἐκουφίσθη, κατενόει μᾶλλον, οὐκ ἄπυρος, διψώδης, ἤμεσε χολώδεα, ξανθὰ, ὀλίγα, ἀπὸ δὲ κοιλίης κόπρανα διῆλθε, μετ' ὀλίγον δὲ μέλανα, ὀλίγα, λεπτά· οὔρα λεπτά, οὐκ εὔχρω. ὀκτωκαιδεκάτη οὐ κατενόει, κωματώδης. ἑννεακαιδεκάτη διὰ τῶν αὐτῶν. εἰκοστῆ ὑπνωσε, κατενόει πάντα, ἰδρωσεν, ἄπυρος, οὐκ ἐδίψη, οὔρα δὲ λεπτά. εἰκοστῆ πρώτη σμικρά παρέκρυσσεν, ὑπεδίψη, ὑπο χονδρίου πόνος καὶ περὶ ὀμφαλὸν παλμὸς διὰ τέλος. εἰκοστῆ τετάρτη οὔροισιν ὑπόστασις, κατενόει πάντα. εἰκοστῆ ἑβδόμη ἰσχίου δεξιῦ ὀδύνη, τὰ δ' ἄλλα ἔσχεν ἐπιεικέστατα, οὔροισιν ὑπόστασις. περὶ δὲ εἰκοστὴν ἐνάτην ὀφθαλμοῦ δεξιῦ ὀδύνη, οὔρα λεπτά. τεσσαρακοστῆ διεχώρησε φλεγματώδεα, λευκά, ὑπόσυχνα, ἰδρωσε πολλῶ δι' ὄλου, τελέως ἐκρίθη.

[δ'.] Ἐν Θάσῳ Φιλιστῆς κεφαλὴν ἐπόνει χρόνον πολλὸν καὶ ποτε καὶ ὑποκαρωθεὶς κατεκλίθη· ἐκ δὲ πότων πυρετῶν συνεχέων γενομένων ὁ πόνος παρωξύνθη. νυκτὸς ἐπεθερμάνθη τὸ πρῶτον. τῆ πρώτῃ ἡμεσε χολώδεα, ὀλίγα, ξανθὰ τὸ πρῶτον, μετὰ δὲ ταῦτα ἰώδεα πλείω, ἀπὸ δὲ κοιλίης κόπρανα διῆλθε· νύκτα δυσφόρος. δευτέρῃ κώφωσις, πυρετὸς ὀξύς, ὑποχόνδριον δεξιὸν συνετάθη, ἔρρεπεν ἐς τὰ ἔσω· οὔρα λεπτά, διαφανέα, εἶχεν ἐναιώρημα γονοειδές, σμικρόν· ἐξεμάνη περὶ μέσον ἡμέρης. τρίτῃ δυσφόρος. τετάρτη σπασμοί, παρωξύνθη. πέμπτη πρωὶ ἀπέθανεν.

[ε'.] Χαιρίωνα, ὃς κατέκειτο παρὰ Δημαινέτῳ, ἐκ πότου πῦρ ἔλαβεν. αὐτίκα δὲ

κεφαλῆς βάρος ἐπώδυνον, οὐκ ἐκοιμᾶτο, κοιλίη ταραχώδης λεπτοῖσιν, ὑποχολώδεσι. τρίτη πυρετὸς ὀξύς, κεφαλῆς τρόμος, μάλιστα δὲ χεῖλος τοῦ κάτω· μετ' ὀλίγον δὲ ῥίγος, σπασμοί, πάντα παρέκρουσε, νύκτα δυσφόρως. τετάρτη δι' ἡσυχίης, σμικρὰ ἐκοιμήθη, παρέλεγε. πέμπτη ἐπιπόνως, πάντα παρωξύνθη, λῆρος, νύκτα δυσφόρως, οὐκ ἐκοιμήθη. ἕκτη διὰ τῶν αὐτῶν. ἑβδόμη ἐπερρίγωσε, πυρετὸς ὀξύς, ἴδρωσε δι' ὅλου, ἐκρίθη. τούτῳ διὰ τέλεος ἀπὸ κοιλίης διαχωρήματα χολώδεα, ὀλίγα, ἄκρητα· οὔρα λεπτά, οὐκ εὐχρω, ἐναιώρημα ἐπινέφελον ἔχοντα. περὶ ὀγδόην οὔρησεν εὐχροότερα, ἔχοντα ὑπόστασιν λευκὴν ὀλίγην, κατενόει, ἄπυρος· διέλιπεν. ἐνάτη ὑπέστρεψε. περὶ δὲ τεσσαρεσκαίδεκάτην πυρετὸς ὀξύς. ἐκκαίδεκάτη ἡμεσε χολώδεα, ξανθὰ, ὑπόσυχνα. ἑπτακαίδεκάτη ἐπερρίγωσε, πυρετὸς ὀξύς, ἴδρωσεν, ἄπυρος ἐκρίθη. οὔρα μετὰ ὑποστροφὴν καὶ κρίσιν εὐχρω, ὑπόστασιν ἔχοντα, οὐδὲ παρέκρουσεν ἐν τῇ ὑποστροφῇ. ὀκτωκαίδεκάτη ἐθερμαίνετο σμικρὰ, ὑπεδίψη, οὔρα λεπτά, ἐναιώρημα ἐπινέφελον, σμικρὰ παρέκρουσεν. ἐνεακαίδεκάτη ἄπυρος, τράχηλον ἐπωδύνως εἶχεν, οὔροισιν ὑπόστασις. τελῶς ἐκρίθη εἰκοστῇ.

[ς'.] Τὴν Εὐρύανακτος θυγατέρα, παρθένον, πῦρ ἔλαβεν. ἦν δὲ ἄδιψος διὰ τέλεος· γεύματα οὐ προσεδέχετο. ἀπὸ δὲ κοιλίης σμικρὰ διήει, οὔρα λεπτά, ὀλίγα, οὐκ εὐχρω. ἀρχομένου δὲ τοῦ πυρετοῦ περὶ ἔδρην ἐπόνει. ἐκταίη δὲ εἰσα ἄπυρος οὐχ ἴδρωσεν· ἐκρίθη. τὸ δὲ περὶ τὴν ἔδρην σμικρὰ ἐξεπύησεν, ἐρράγη ἅμα κρίσει. μετὰ δὲ κρίσιν ἐβδομαίη εἰσα ἐρρίγωσε, σμικρὰ ἐπεθερμάνθη, ἴδρωσεν. ὕστερον δὲ ἄκρεα ψυχρὰ αἰεῖ. περὶ δὲ δεκάτην μετὰ τὸν ἰδρῶτα τὸν γενόμενον παρέκρουσε καὶ πάλιν ταχὺ κατενόει· ἔλεγον δὲ γευσάμενην βότρυος. διαλιποῦσα δὲ δωδεκάτη πάλιν πολλὰ παρελήρει, κοιλίη ἐπεταράχθη χολώδεσιν, ἀκρήτοισιν, ὀλίγοισι, λεπτοῖσι, δακνώδεσι, πυκνὰ ἀνίστατο. ἀφ' ἧς δὲ παρέκρουσε τὸ ὕστερον, ἀπέθανε ἑβδόμη. αὕτη ἀρχομένου τοῦ νοσήματος ἤλγει φάρυγγα, καὶ διὰ τέλεος ἔρευθος εἶχε, γαργαρεῶν ἀνεσπασμένος. ῥεύματα πολλά, σμικρὰ, δριμέα. ἔβησσε πέπονα, οὐδὲν ἀνήγεν· ἀπόσιτος πάντων παρὰ πάντα τὸν χρόνον οὐδ' ἐπεθύμησεν οὐδενός. ἄδιψος, οὐδ' ἔπινεν οὐδὲν ἄξιον λόγου. σιγῶσα, οὐδὲν διελέγετο. δυσθυμῆ, ἀνελπίστως ἐωυτῆς εἶχεν. ἦν δὲ τι καὶ συγγενικὸν φθινῶδες.

[ζ'.] Ἡ κυναγκική ἢ παρὰ Ἀριστίωνος, ἧ πρῶτον ἤρξατο ἀσαφῆς φωνή. γλῶσσα ἐρυθρή, ἐπεξηράνθη. τῇ πρώτῃ φρικώδης, ἐπεθερμάνθη. τρίτη ῥίγος, πυρετὸς ὀξύς, οἴδημα ὑπέρυθρον, σκληρὸν τραχήλου καὶ ἐπὶ στῆθος ἐξ ἀμφοτέρων, ἄκρεα ψυχρὰ, πελιδνά, πνεῦμα μετέωρον, ποτὸν διὰ ῥινῶν, καταπίνειν οὐκ ἠδύνατο, διαχωρήματα καὶ οὔρα ἐπέστη. τετάρτη πάντα παρωξύνθη. πέμπτη ἀπέθανε.

[η'.] Τὸ μειράκιον, ὃ κατέκειτο ἐπὶ ψευδέων ἀγορῆ, πῦρ ἔλαβεν ἐκ κόπων καὶ πόνων καὶ δρόμων παρὰ τὸ ἔθος. τῆ πρώτη κοιλίη ταραχώδης χολώδεσι, λεπτοῖσι, πολλοῖσιν, οὔρα λεπτά, ὑπομέλινα, οὐχ ὑπνωσε, διψώδης. δευτέρη πάντα παρωξύνθη, διαχωρήματα πλείω, ἀκαιρότερα. οὐχ ὑπνωσε, τὰ τῆς γνώμης ταραχώδεα, σμικρὰ ὑφίδρωσε. τρίτη δυσφόρος, διψώδης, ἀσώδης, πολὺς βληστρισμός, ἀπορία, παρέκρουσεν, ἄκρεα πελιδνὰ καὶ ψυχρά, ὑποχονδρίου ἔντασις ὑπολάπαρος ἐξ ἀμφοτέρων. τετάρτη οὐχ ὑπνωσεν· ἐπὶ τὸ χεῖρον. ἐβδόμη ἀπέθανεν, ἡλικίην περὶ ἔτεα εἴκοσι.

[θ'.] Ἡ παρὰ Τεισαμενοῦ γυνὴ κατέκειτο, ἧ τὰ εἰλεώδεα δυσφόρος ὥρμησεν. ἔμετοι πολλοί, ποτὸν κατέχειν οὐκ ἠδύνατο. πόνοι περὶ ὑποχόνδρια. καὶ ἐν τοῖσι κάτω κατὰ κοιλίην οἱ πόνοι. στρόφοι συνεχέες. οὐ διψώδης. ἐπεθερμαίνετο, ἄκρεα ψυχρὰ διὰ τέλεος. ἀσώδης, ἄγρυπνος. οὔρα ὀλίγα, λεπτά. διαχωρήματα ὠμά, λεπτά, ὀλίγα. ὠφελεῖν οὐκέτι ἠδύνατο, ἀπέθανεν.

[ι'.] Γυναῖκα ἐξ ἀποφθορῆς νηπίου τῶν περὶ Παντιμίδην τῆ πρώτη πῦρ ἔλαβε. γλῶσσα ἐπίξηρος, διψώδης, ἀσώδης, ἄγρυπνος. κοιλίη ταραχώδης λεπτοῖσι, πολλοῖσιν, ὠμοῖσι. δευτέρη ἐπερρίγωσε, πυρετὸς ὀξύς, ἀπὸ κοιλίης πολλά, οὐχ ὑπνωσε. τρίτη μείζους οἱ πόνοι. τετάρτη παρέκρουσεν· ἐβδόμη ἀπέθανε. κοιλίη διὰ παντὸς ὑγρὴ διαχωρήμασι πολλοῖσι, λεπτοῖσιν, ὠμοῖσιν· οὔρα ὀλίγα λεπτά.

[ια'.] Ἐτέρην ἐξ ἀποφθορῆς περὶ πεντάμηνον, Ἰκέτεω γυναῖκα, πῦρ ἔλαβεν. ἀρχομένη κωματώδης ἦν, καὶ πάλιν ἄγρυπνος, ὀσφύος ὀδύνη, κεφαλῆς βάρους. δευτέρη κοιλίη ἐπεταράχθη ὀλίγοισι, λεπτοῖσιν, ἀκρήτοισι τὸ πρῶτον. τρίτη πλείω, χεῖρω· νυκτὸς οὐδὲν ἐκοιμήθη. τετάρτη παρέκρουσε, φόβοι, δυσθυμία. δεξιῶ ἴλλαινε, ἴδρωσε περὶ κεφαλὴν ὀλίγω ψυχρῶ, ἄκρεα ψυχρὰ· πέμπτη πάντα παρωξύνθη, πολλὰ παρέλεγε καὶ πάλιν ταχὺ κατενόει· ἄδιψος, ἄγρυπνος, κοιλίη πολλοῖσιν ἀκαίροισι διὰ τέλεος· οὔρα ὀλίγα, λεπτά, ὑπομέλινα· ἄκρεα ψυχρὰ, ὑποπέλιδνα. ἕκτη διὰ τῶν αὐτῶν. ἐβδόμη ἀπέθανε.

[ιβ'.] Γυναῖκα, ἧτις κατέκειτο ἐπὶ ψευδέων ἀγορῆ, τεκοῦσαν τότε πρῶτον ἐπιπόνως ἄρσεν πῦρ ἔλαβεν. αὐτίκα ἀρχομένη διψώδης, ἀσώδης, καρδίην ὑπήλγει, γλῶσσα ἐπίξηρος, κοιλίη ἐπεταράχθη λεπτοῖσιν ὀλίγοισιν, οὐχ ὑπνωσε. δευτέρη σμικρὰ ἐπερρίγωσε, πυρετὸς ὀξύς, σμικρὰ περὶ κεφαλὴν ἴδρωσε ψυχρῶ. τρίτη ἐπιπόνως· ἀπὸ κοιλίης ὠμά, λεπτά πολλά διῆει. τετάρτη ἐπερρίγωσε, πάντα παρωξύνθη· ἄγρυπνος· πέμπτη ἐπιπόνως. ἕκτη διὰ τῶν αὐτῶν· ἀπὸ κοιλίης ἦλθε ὑγρά πολλά. ἐβδόμη ἐπερρίγωσε, πυρετὸς ὀξύς, δίψα, πολὺς βληστρισμός, περὶ δείλην ἴδρωσε δι' ὄλου ψυχρῶ, ψύξις, ἄκρεα ψυχρὰ, οὐκέτι ἀνεθερμαίνετο· καὶ πάλιν ἐς νύκτα ἐπερρίγωσεν, ἄκρεα οὐκ ἀνεθερμαίνετο, οὐχ ὑπνωσε, σμικρὰ



παρέκρουσε, καὶ πάλιν ταχὺ κατενόει. ὀγδὴ περὶ μέσον ἡμέρης ἀνεθερμάνθη, διψώδης, κωματώδης, ἀσώδης, ἤμεσε χολώδεα σμικρὰ ὑπόξανθα. νύκτα δυσφόρως, οὐκ ἐκοιμήθη, οὔρησε πολὺ ἀθρόον οὐκ εἰδυῖα. ἐνάτη συνέδωκε πάντα, κωματώδης. πρὸς δείλην σμικρὰ ἐπερρίγωσεν, ἤμεσε σμικρὰ χολώδεα. δεκάτη ῥίγος, πυρετὸς παρωξύνθη, οὐχ ὕπνωσεν οὐδέν· πρωὶ οὔρησε πολὺ ὑπόστασιν οὐκ ἔχον, ἄκρεα ἀνεθερμάνθη. ἐνδεκάτη ἤμεσε χολώδεα, ἰώδεα. ἐπερρίγωσεν οὐ μετὰ πολὺ, καὶ πάλιν ἄκρεα ψυχρά, ἐς δείλην ἰδρώς, ῥίγος, ἤμεσε πολλὰ, νύκτα ἐπιπόνως. δωδεκάτη ἤμεσε πολλὰ μέλανα δυσώδεα, λυγμὸς πολὺς, δίψος ἐπιπόνως. τρισκαιδεκάτη μέλανα, δυσώδεα πολλὰ ἤμεσε, ῥίγος· περὶ δὲ μέσον ἡμέρης ἄφωνος. τεσσαρεσκαιδεκάτη αἷμα διὰ ῥινῶν· ἀπέθανε. ταύτη διὰ τέλος κοιλίη ὑγρὴ· φρικώδης· ἡλικίη περὶ ἔτεα ἑπτακαίδεκα.

## Κατάστασις

II. Ἔτος νότιον ἔπομβρον· ἄπνοια διὰ τέλος· αὐχμῶν δὲ γενομένων τοὺς ὑπόπροσθεν χρόνους ἐν νοτίοισι περὶ ἀρκτοῦρον ὕδατα πολλά. φθινόπωρον σκιῶδες, ἐπινέφελον, ὑδάτων πλήθρα. χειμῶν νότιος, ὑγρός, μαλθακὸς μετὰ ἡλίου τροπᾶς· ὕστερον πολλῶ, πλησίον ἰσημερίας, ὀπισθοχειμῶνες, καὶ ἤδη περὶ ἰσημερίην βόρεια, χιονώδεα, οὐ πολὺν χρόνον. ἦρ πάλιν νότιον, ἄπνοον· ὕδατα πολλά διὰ τέλος μέχρι κυνός. θέρος αἴθριον, θερμόν, πνίγεα μεγάλα· ἔτησίαι σμικρὰ διεσπασμένως ἔπνευσαν· πάλιν δὲ περὶ ἀρκτοῦρον ἐν βορείοισιν ὕδατα πολλά.

Γενομένου δὲ τοῦ ἔτεος νοτίου καὶ ὑγροῦ καὶ μαλθακοῦ κατὰ μὲν χειμῶνα διήγον ὑγιηρῶς πλὴν τῶν φθινωδέων, περὶ ὧν γεγράφεται.

III. Πρῶτὸν δὲ τοῦ ἦρος ἅμα τοῖσι γενομένοισι ψύχεσιν ἐρυσιπέλατα πολλά, τοῖσι μὲν μετὰ προφάσιος, τοῖσι δ' οὐ, κακοήθεια· πολλοὺς ἔκτεινε, πολλοὶ φάρυγγας ἐπόνησαν· φωναὶ κακούμεναι, καῦσοι, φρενιτικοί, στόματα ἀφθώδεα, αἰδοίοισι φύματα, ὀφθαλμῖαι, ἄνθρακες, κοιλίαι ταραχώδεις, ἀπόσιτοι, διψώδεις οἱ μὲν, οἱ δ' οὐ, οὔρα ταραχώδεα, πολλά, κακά, κωματώδεις ἐπὶ πολὺ καὶ πάλιν ἄγρυπνοι, ἀκρισίαι πολλαί, δύσκριτα, ὕδρωπες, φθινώδεις πολλοί. τὰ μὲν ἐπιδημήσαντα νοσήματα ταῦτα. ἐκάστου δὲ τῶν ὑπογεγραμμένων εἰδέων ἦσαν οἱ κάμνοντες καὶ ἔθνησκον πολλοί. συνέπιπτε δ' ἐφ' ἐκάστοισι τούτων ὧδε.

IV. Πολλοῖσι μὲν τὸ ἐρυσίπελας μετὰ προφάσιος ἐπὶ τοῖσι τυχοῦσι καὶ πάνυ ἐπὶ σμικροῖσι τρωματίοις ἐφ' ὄλω τῷ σώματι, μάλιστα δὲ τοῖσι περὶ ἐξήκοντα ἔτια καὶ περὶ κεφαλὴν, εἰ καὶ σμικρὸν ἀμεληθείη. πολλοῖσι δὲ καὶ ἐν θεραπείῃ ἐοῦσι μεγάλαι φλεγμοναὶ ἐγίνοντο, καὶ τὸ ἐρυσίπελας πολὺ ταχὺ πάντοθεν ἐπενέμετο. τοῖσι μὲν οὖν πλείστοισιν αὐτῶν ἀποστάσις ἐς ἐμπυήματα συνέπιπτον· σαρκῶν καὶ νεύρων καὶ ὀστέων ἐκπτώσεις μεγάλαι. ἦν δὲ καὶ τὸ ρεῦμα τὸ συνιστάμενον οὐ πύφ' ἴκελον, ἀλλὰ σηπεδῶν τις ἄλλη καὶ ρεῦμα πολὺ καὶ ποικίλον. οἷσι μὲν οὖν περὶ κεφαλὴν τούτων τι συμπίπτει γίνεσθαι, μάδησίς τε ὅλης τῆς κεφαλῆς ἐγένετο καὶ τοῦ γενείου καὶ ὀστέων ψιλώματα καὶ ἐκπτώσεις καὶ πολλὰ ρεύματα. ἐν πυρετοῖσι τε ταῦτα καὶ ἄνευ πυρετῶν. ἦν δὲ ταῦτα φοβερώτερα ἢ κακίω. οἷσι γὰρ ἐς ἐμπύημα ἢ τινα τοιοῦτον ἀφίκοιτο πεπασμόν, οἱ πλείστοι τούτων ἐσώζοντο. οἷσι δ' ἢ μὲν φλεγμονὴ καὶ τὸ ἐρυσίπελας ἀπέλθοι, τοιαύτην δὲ ἀπόστασιν μηδεμίαν ποιήσαιο, τούτων ἀπώλλυντο πολλοί. ὁμοίως δὲ καὶ εἴ πη ἄλλη τοῦ σώματος πλανηθείη, συνέπιπτε ταῦτα. πολλοῖσι μὲν γὰρ βραχίων καὶ πῆχυς ὅλος περιερρῦη. οἷσι δ' ἐπὶ τὰ πλευρά, ταῦτα ἐκακοῦτο ἢ τῶν ἔμπροσθεν

τι ἢ τῶν ὀπισθεν. οἷσι δ' ὄλος ὁ μηρὸς ἢ τὰ περι κνήμην ἀπεπιλοῦτο καὶ ποὺς ὄλος. ἦν δὲ πάντων χαλεπώτατα τῶν τοιούτων, ὅτε περι ἦβην καὶ αἰδοῖα γενοῖατο. τὰ μὲν περι ἔλκεα καὶ μετὰ προφάσιος τοιαῦτα. πολλοῖσι δὲ ἐν πυρετοῖσι καὶ πρὸ πυρετοῦ καὶ ἐπὶ πυρετοῖσι συνέπιπτεν. ἦν δὲ καὶ τούτων, ὅσα μὲν ἀπόστασιν ποιήσαιτο διὰ τοῦ ἐκπυῆσαι ἢ κατὰ κοιλίην ταραχὴ τις ἐπίκαιρος ἢ χρηστῶν οὐρῶν διάδοσις γένοιτο, διὰ τούτων λελύσθαι, οἷσι δὲ μηδὲν τούτων συμπίπτει, ἀσήμως δὲ ἀφανιζομένων, θανατώδεια γίνεσθαι. πολὺ μὲν οὖν πλείστοισι συνέπιπτε τὰ περι τὸ ἐρυσίπελας τοῦ ἦρος. παρείπετο δὲ καὶ διὰ τοῦ θέρους καὶ ὑπὸ φθινόπωρον.

V. Πολλὴ δὲ ταραχὴ τισι καὶ τὰ περι φάρυγγα φύματα, καὶ φλεγμοναὶ γλώσσης, καὶ τὰ παρ' ὀδόντας ἀποστήματα. φωναί τε πολλοῖσιν ἐπεσήμαινον κακούμεναι καὶ κατίλλουσαι, πρῶτον μὲν τοῖσι φθινώδεσιν ἀρχομένοισιν, ἀτὰρ καὶ τοῖσι καυσώδεσι καὶ τοῖσι φρενιτικοῖσιν.

VI. Ἦρξαντο μὲν οὖν οἱ καῦσοι καὶ τὰ φρενιτικὰ πρῶτὸ τοῦ ἦρος μετὰ τὰ γενόμενα ψύχρα, καὶ πλείστοι τηνικαῦτα διενόσησαν· ὀξέα δὲ τούτοισι καὶ θανατώδεια συνέπιπτεν. ἦν δὲ ἡ κατάστασις τῶν γενομένων καύσων ὧδε· ἀρχόμενοι κωματώδεις, ἀσώδεις, φρικώδεις, πυρετὸς ὀξύς, οὐ διψώδεις λίην, οὐ παράληροι, ἀπὸ ρινῶν ἔσταξε σμικρόν. οἱ παροξυσμοὶ τοῖσι πλείστοισιν ἐν ἀρτίησι, περι δὲ τοὺς παροξυσμοὺς λήθη καὶ ἄφεςις καὶ ἀφωνία. ἄκρεά τε τούτοισιν αἰεὶ μὲν ψυχρότερα ποδῶν καὶ χειρῶν, πολὺ δὲ περι τοὺς παροξυσμοὺς μάλιστα· πάλιν τε βραδέως καὶ οὐ καλῶς ἀνεθερμαίνοντο καὶ πάλιν κατενόεον καὶ διελέγοντο. κατεῖχε δὲ ἢ τὸ κῶμα συνεχές, οὐχ ὑπνώδεις, ἢ μετὰ πόνων ἄγρυπνοι. κοιλία ταραχώδεις τοῖσι πλείστοισι τούτων, διαχωρήμασιν ὠμοῖσι, λεπτοῖσι, πολλοῖσιν· οὐρά τε πολλὰ λεπτὰ κρίσιμον οὐδὲ χρηστὸν οὐδὲν ἔχοντα· οὐδὲ ἄλλο κρίσιμον οὐδὲν τοῖσιν οὕτως ἔχουσιν ἐφαίνετο· οὐτε γὰρ ἡμορράγει καλῶς οὐτε τις ἄλλη τῶν εἰθισμένων ἀπόστασις ἐγένετο κρίσιμος. ἔθνησκόν τε ἕκαστος ὡς τύχοι, πεπλανημένως τὰ πολλὰ, περι τὰς κρίσιας, ἐκ πολλοῦ δὲ τινες ἀφωνοί, ἰδρῶντες πολλοί. τοῖσι μὲν ὀλεθρίως ἔχουσι συνέπιπτε ταῦτα· παραπλήσια δὲ καὶ τοῖσι φρενιτικοῖσιν. ἄδιψοι δὲ πάνυ οὗτοι ἦσαν, οὐδ' ἐξεμάνη τῶν φρενιτικῶν οὐδεὶς, ὥσπερ ἐπ' ἄλλοισιν, ἀλλ' ἄλλη τινὶ καταφορῇ νωθρῇ καρηβαρές ἀπώλλυντο.

VII. Ἦσαν δὲ καὶ ἄλλοι πυρετοί, περι ὧν γεγράφεται. στόματα πολλοῖσιν ἀφθώδεια, ἐλκώδεια. ῥεύματα περι αἰδοῖα πολλά, ἐλκώματα, φύματα ἔξωθεν, ἔσωθεν· τὰ περι βουβῶνας. ὀφθαλμῖαι ὑγραί, μακροχρόνιοι μετὰ πόνων. ἐπιφύσεις βλεφάρων ἔξωθεν, ἔσωθεν, πολλῶν φθείροντα τὰς ὄψιας, ἃ σῦκα ἐπονομάζουσιν. ἐφύετο δὲ καὶ ἐπὶ τῶν ἄλλων ἐλκῶν πολλὰ καὶ ἐν αἰδοίοισιν.

ἄνθρακες πολλοὶ κατὰ θέρος καὶ ἄλλα, ἃ σήψ καλεῖται. ἐκθύματα μεγάλα. ἔρπητες πολλοῖσι μεγάλοι.

VIII. Τὰ δὲ κατὰ κοιλὴν πολλοῖσι πολλὰ καὶ βλαβερὰ συνέβαινε. πρῶτον μὲν τεινεσμοὶ πολλοῖσιν ἐπιπόνως, πλείστοισι δὲ παιδίοισι, καὶ πᾶσιν ὅσα πρὸ ἥβης, καὶ ἀπώλλυντο τὰ πλείστα τούτων. λειεντερικοὶ πολλοί. δυσεντεριώδεις, οὐδ' οὔτοι λήν ἐπιπόνως. τὰ δὲ χολώδεα καὶ λιπαρὰ καὶ λεπτὰ καὶ ὑδατώδεα· πολλοῖσι μὲν αὐτὸ τὸ νόσημα ἐς τοῦτο κατέσκηψεν ἄνευ τε πυρετῶν καὶ ἐν πυρετοῖσι. μετὰ πόνων στρόφοι καὶ ἀνειλήσιες κακοήθειες. διέξοδοί τε τῶν πολλῶν ἐνότων τε καὶ ἐπισχόντων. τὰ δὲ διεξιόντα πόνους οὐ λύοντα τοῖσι τε προσφερομένοισι δυσκόλως ὑπακούοντα· καὶ γὰρ αἱ καθάρσιες τοὺς πλείστους προσέβλαπτον. τῶν δὲ οὕτως ἐχόντων πολλοὶ μὲν ὀξέως ἀπώλλυντο, ἔστι δ' οἷσι καὶ μακρότερα διήγεν. ὡς δ' ἐν κεφαλαίῳ εἰρηῆσθαι, πάντες, καὶ οἱ τὰ μακρὰ νοσέοντες καὶ οἱ τὰ ὀξέα, ἐκ τῶν κατὰ κοιλὴν ἀπέθνησκον μάλιστα. πάντας γὰρ κοιλὴ συναπήνεγκεν.

IX. Ἀπόσιτοι δ' ἐγένοντο πάντες μὲν καὶ ἐπὶ πᾶσι τοῖσι προγεγραμμένοισιν, ὡς ἐγὼ οὐδὲ πώποτε ἐνέτυχον, πολὺ δὲ μάλιστα οὔτοι καὶ ἐκ τούτων καὶ ἐκ τῶν ἄλλων δὲ οἱ καὶ ὀλεθρίως ἔχοιεν. διψώδεις οἱ μὲν, οἱ δ' οὐ· τῶν ἐν πυρετοῖσι καὶ τοῖσιν ἄλλοισιν οὐδεὶς ἀκαίρως, ἀλλ' ἦν κατὰ ποτὸν διαιτᾶν ὡς ἤθελες.

X. Οὔρα δὲ πολλὰ μὲν τὰ διεξιόντα ἦν, οὐκ ἐκ τῶν προσφερομένων ποτῶν, ἀλλὰ πολλὸν ὑπερβάλλοντα. πολλὴ δὲ τις καὶ τῶν οὔρων κακότης ἦν τῶν ἀπιόντων. οὔτε γὰρ πάχος οὔτε πεπασμοὺς οὔτε καθάρσιος χρηστὰς εἶχεν. ἐσήμαινεν δὲ τοῖσι πλείστοισι σύντηξιν καὶ ταραχὴν καὶ πόνους καὶ ἀκρισίας.

XI. Κωματώδεις δὲ μάλιστα οἱ φρενιτικοὶ καὶ οἱ καυσώδεις ἦσαν, ἀτὰρ καὶ ἐπὶ τοῖς ἄλλοισι νοσήμασι πᾶσι τοῖσι μεγίστοισιν, ὅ τι μετὰ πυρετοῦ γίνοιτο. διὰ παντὸς δὲ τοῖσι πλείστοισιν ἢ βαρὺ κῶμα παρείπετο ἢ μικροὺς καὶ λεπτοὺς ὕπνους κοιμᾶσθαι.

XII. Πολλὰ δὲ καὶ ἄλλα πυρετῶν ἐπεδήμησεν εἶδεα, τριταίων, τεταρταίων, νυκτερινῶν, συνεχέων, μακρῶν, πεπλανημένων, ἀσωδέων, ἀκαταστάτων. ἅπαντες δὲ οὔτοι μετὰ πολλῆς ἐγίνοντο ταραχῆς· κοιλίαι τε γὰρ τοῖσι πλείστοισιν ταραχώδεις, φρικώδεις· ἰδρῶτες οὐ κρίσιμοι, καὶ τὰ τῶν οὔρων ὡς ὑπογέγραπται. μακρὰ δὲ τοῖσι πλείστοισι τούτων· οὐδὲ γὰρ αἱ γινόμεναι τούτοισιν ἀποστάσιες ἔκρινον ὥσπερ ἐπὶ τοῖσιν ἄλλοισι. δύσκριτα μὲν οὖν πᾶσι πάντα ἐγίνετο καὶ ἀκρισῖαι καὶ χρόνια, πολὺ δὲ μάλιστα τούτοις. ἔκρινε δὲ τούτων ὀλίγοισι περὶ ὀγδοηκοστήν. τοῖσι δὲ πλείστοισιν ἐξέλειπεν ὡς ἔτυχεν.

ἔθνησκον δὲ τούτων ὀλίγοι ὑπὸ ὕδρωπος ὀρθοστάδην. πολλοῖσι δὲ καὶ ἐπὶ τοῖσιν ἄλλοισι νοσήμασιν οἰδήματα παρῶχλει, πολὺ δὲ μάλιστα τοῖσι φθινώδεσι.

XIII. Μέγιστον δὲ καὶ χαλεπώτατον καὶ πλείστους ἔκτεινε τὸ φθινῶδες. πολλοὶ γὰρ τινες ἀρξάμενοι κατὰ χειμῶνα πολλοὶ μὲν κατεκλίθησαν, οἱ δὲ αὐτῶν ὀρθοστάδην ὑπεφέροντο· πρῶτὸν δὲ τοῦ ἥρος ἔθνησκον οἱ πλείστοι τῶν κατακλιθέντων· τῶν δὲ ἄλλων ἐξέλιπον μὲν αἱ βῆχες οὐδενί, ὑφίεσαν δὲ κατὰ θέρος. ὑπὸ δὲ τὸ φθινόπωρον κατεκλίθησαν πάντες καὶ πολλοὶ ἔθνησκον. μακρὰ δὲ τούτων οἱ πλείστοι διενόσεον. ἤρξατο μὲν οὖν τοῖσι πλείστοισι τούτων ἐξαίφνης ἐκ τούτων κακοῦσθαι· φρικώδεις πυκνά. πολλάκις πυρετοὶ συνεχέες, ὀξέες· ἰδρῶτες ἄκαιροι πολλοί, ψυχροὶ διὰ τέλεος· πολλὴ ψύξις, καὶ μόγις πάλιν ἀναθερμαινόμενοι· κοιλία ποικίλως ἐφιστάμεναι καὶ πάλιν ταχὺ καθυγραινόμεναι, περὶ δὲ τελευτήν πᾶσι βιαίως καθυγραινόμεναι· καὶ τῶν περὶ πνεύμονα πάντων διάδοσις κάτω· πλῆθος οὖρων οὐ χρηστῶν· συντήξεις κακαί. αἱ δὲ βῆχες ἐνήσαν μὲν διὰ τέλεος πολλαὶ καὶ πολλὰ ἀνάγουσαι πέπονα καὶ ὑγρά, μετὰ πόνων δὲ οὐ λίην· ἀλλ' εἰ καὶ ἐπόνεον, πάνυ πρηέως πᾶσιν ἢ κάθαρσις τῶν ἀπὸ πνεύμονος ἐγένετο. φάρυγγες οὐ λίην δακνώδεις, οὐδὲ ἀλμυρίδες οὐδὲν ἠνώχλεον· τὰ μέντοι γλίσχρα καὶ λευκὰ καὶ ὑγρά καὶ ἀφρώδεα πολλὰ ἀπὸ κεφαλῆς ἦει. πολὺ δὲ μέγιστον κακὸν παρείπετο καὶ τούτοις καὶ τοῖσιν ἄλλοις τὰ περὶ τὴν ἀποσιτίην, καθάπερ ὑπογέγραπται· οὐδὲ γὰρ πότων μετὰ τροφῆς ἠδέως εἶχον, ἀλλὰ πάνυ διῆγον ἀδίψως· βάρος σώματος· κωματώδεις· τοῖσι πλείστοισιν αὐτῶν οἴδημα, καὶ ἐς ὕδρωπα περιέστησαν· φρικώδεις, παράληροι περὶ θάνατον.

XIV. Εἶδος δὲ τῶν φθινωδέων ἦν τὸ λεῖον, τὸ ὑπόλευκον, τὸ φακῶδες, τὸ ὑπέρυθρον, τὸ χαροπὸν, λευκοφλεγματῖαι, περυγώδεις· καὶ γυναικῆς οὕτω. τὸ μελαγχολικὸν καὶ ὑφαιμον· οἱ καῦσοι καὶ τὰ φρενιτικὰ καὶ τὰ δυσεντεριώδεα τούτων ἤπτετο. τεινεσμοὶ νέοισι φλεγματώδεσιν· αἱ μακρὰι διάρροιαι καὶ τὰ δριμέα διαχωρήματα καὶ λιπαρὰ πικροχόλοισιν.

XV. Ἦν δὲ πᾶσι τοῖς ὑπογεγραμμένοις χαλεπώτατον μὲν τὸ ἔαρ καὶ πλείστους ἀπέκτεινε, τὸ δὲ θέρος ῥήϊστον, καὶ ἐλάχιστοι ἀπώλλυντο. τοῦ δὲ φθινοπώρου καὶ ὑπὸ πληϊάδα πάλιν ἔθνησκον, οἱ πολλοὶ τεταρταῖοι. δοκεῖ δὲ μοι προσωφελῆσαι κατὰ λόγον τὸ γενόμενον θέρος. τὰς γὰρ θερινὰς νούσους χειμῶν ἐπιγενόμενος λύει, καὶ τὰς χειμερινὰς θέρος ἐπιγενόμενον μεθίστησι. καίτοι αὐτὸ γε ἐπὶ ἐωυτοῦ τὸ γενόμενον θέρος οὐκ εὐσταθὲς ἐγένετο· καὶ γὰρ ἐξαίφνης θερμὸν καὶ νότιον καὶ ἄπνοον· ἀλλ' ὅμως πρὸς τὴν ἄλλην κατάστασιν μεταλλάξαν ὠφέλησε.

XVI. Μέγα δὲ μέρος ἡγεῦμαι τῆς τέχνης εἶναι τὸ δύνασθαι σκοπεῖν καὶ περὶ τῶν γεγραμμένων ὀρθῶς. ὁ γὰρ γνούς καὶ χρεώμενος τούτοις οὐκ ἂν μοι δοκεῖ μέγα σφάλλασθαι ἐν τῇ τέχνῃ. δεῖ δὲ καταμανθάνειν τὴν κατάστασιν τῶν ὠρέων ἀκριβῶς ἐκάστην καὶ τὸ νόσημα, ἀγαθὸν ὅ τι κοινὸν ἐν τῇ καταστάσει ἢ ἐν τῇ νόσῳ, κακὸν ὅ τι κοινὸν ἐν τῇ καταστάσει ἢ ἐν τῇ νόσῳ, μακρὸν ὅ τι νόσημα καὶ θανάσιμον, μακρὸν ὅ τι καὶ περιεστικόν, ὅξυ ὅ τι θανάσιμον, ὅξυ ὅ τι περιεστικόν· τάξιν τῶν κρισίμων ἐκ τούτων σκοπεῖσθαι καὶ προλέγειν ἐκ τούτων εὐπορεῖται. εἰδότε περὶ τούτων ἔστιν εἰδέναί οὐς καὶ ὅτε καὶ ὡς δεῖ διαιτᾶν.

## Ἑκκαίδεκα ἄρρωστοι

XVII. [α'.] Ἐν Θάσῳ τὸν Πάριον, ὃς κατέκειτο ὑπὲρ Ἀρτεμισίου, πυρετὸς ἔλαβεν ὀξύς, κατ' ἀρχὰς συνεχῆς, καυσώδης· δίψος· ἀρχόμενος κωματώδης καὶ πάλιν ἄγρυπνος· κοιλίη ταραχώδης ἐν ἀρχῆσιν, οὔρα λεπτά. ἕκτη οὔρησεν ἐλαιῶδες, παρέκρουσεν. ἑβδόμη παρωξύνθη πάντα, οὐδὲν ἐκοιμήθη, ἀλλὰ οὔρα τε ὅμοια καὶ τὰ τῆς γνώμης ταραχώδεα· ἀπὸ δὲ κοιλίης χολώδεα, λιπαρὰ διήλθεν. ὀγδὴ σμικρὸν ἀπὸ ρινῶν ἔσταξεν, ἤμεσεν ἰώδεα ὀλίγα, σμικρὰ ἐκοιμήθη. ἐνάτη διὰ τῶν αὐτῶν. δεκάτη πάντα συνέδωκεν. ἐνδεκάτη ἴδρωσε δι' ὄλου· περιέψυξε, ταχὺ δὲ πάλιν ἀνεθερμάνθη. τεσσαρεσκαίδεκάτη πυρετὸς ὀξύς, διαχωρήματα χολώδεα, λεπτά, πολλά, οὔροισιν ἐναιώρημα, παρέκρουσεν. ἑπτακαίδεκάτη ἐπιπόνως· οὔτε γὰρ ὕπνοι, ὃ τε πυρετὸς ἐπέτεινεν. εἰκοστῇ ἴδρωσε δι' ὄλου· ἄπυρος, διαχωρήματα χολώδεα, ἀπόσιτος, κωματώδης· εἰκοστῇ τετάρτη ὑπέστρεψε. τριηκοστῇ τετάρτη ἄπυρος, κοιλίη οὐ συνίστατο, καὶ πάλιν ἀνεθερμάνθη. τεσσαρακοστῇ ἄπυρος, κοιλίη συνέστη χρόνον οὐ πολὺν, ἀπόσιτος, σμικρὰ πάλιν ἐπύρεξε καὶ διὰ παντὸς πεπλανημένως· ἄπυρος τὰ μὲν, τὰ δ' οὔ· εἰ γάρ τι διαλίποι καὶ διακουφίσει, ταχὺ πάλιν ὑπέστρεψε. σιταρίοισι τε ὀλίγοισι καὶ φαύλοισι προσεχρῆτο. ὕπνοι κακοί, περὶ τὰς ὑποστροφὰς παρέκρουσεν. οὔρα πάχος μὲν ἔχοντα οὔρει τηνικαῦτα, ταραχώδεα δὲ καὶ πονηρά. καὶ τὰ κατὰ κοιλίην συνιστάμενα καὶ πάλιν διαλυόμενα. πυρέτια συνεχέα. διαχωρήματα λεπτά, πολλά. ἐν εἴκοσι καὶ ἑκατὸν ἔθανε. τούτῳ κοιλίη συνεχέως ἀπὸ τῆς πρώτης ὑγρῆ χολώδεσιν, ὑγροῖσι πολλοῖσιν ἦν ἢ συν ἰσταμένη ζέουσι καὶ ἀπέπτοισιν· οὔρα διὰ τέλος κακά· κωματώδης τὰ πλεῖστα, μετὰ πόνων ἄγρυπνος, ἀπόσιτος συνεχέως.

[β'.] Ἐν Θάσῳ τὴν κατακειμένην παρὰ τὸ ψυχρὸν ὕδωρ ἐκ τόκου θυγατέρα τεκοῦσαν καθάρσιος οὐ γενομένης πυρετὸς ὀξύς φρικώδης τρι ταῖην ἔλαβεν. ἐκ χρόνου δὲ πολλοῦ πρὸ τοῦ τόκου πυρετώδης ἦν, κατακλινῆς, ἀπόσιτος. μετὰ δὲ τὸ γενόμενον ῥῖγος συνεχέες, ὀξέες, φρικώδεις οἱ πυρετοί. ὀγδὴ πολλά παρέκρουσε καὶ τὰς ἐχομένας καὶ ταχὺ πάλιν κατενόει· κοιλίη ταραχώδης πολλοῖσι λεπτοῖσιν, ὕδατοχόλοις· ἄδιψος. ἐνδεκάτη κατενόει, κωματώδης δ' ἦν· οὔρα πολλὰ λεπτά καὶ μέλανα, ἄγρυπνος. εἰκοστῇ σμικρὰ περιέψυξε καὶ ταχὺ πάλιν ἀνεθερμάνθη, σμικρὰ παρέλεγεν, ἄγρυπνος· τὰ κατὰ κοιλίην ἐπὶ τῶν αὐτῶν· οὔρα ὕδατώδεα πολλά. εἰκοστῇ ἑβδόμη ἄπυρος, κοιλίη συνέστη, οὐ πολλῶ δὲ χρόνῳ ὕστερον ἰσχύου δεξιοῦ ὀδύνη ἰσχυρὴ χρόνον πολὺν· πυρετοὶ πάλιν παρείποντο· οὔρα ὕδατώδεα. τεσσαρακοστῇ τὰ μὲν περὶ τὸ ἰσχύον ἐπεκούφισε, βῆχες δὲ συνεχέες ὑγραὶ πολλαί, κοιλίη συνέστη, ἀπόσιτος· οὔρα ἐπὶ τῶν αὐτῶν. οἱ δὲ πυρετοὶ τὸ μὲν ὅλον οὐκ ἐκλείποντες, πεπλανημένως δὲ

παροξυνόμενοι, τὰ μὲν, τὰ δ' οὐ. ἐξηκοστῇ αἰ μὲν βῆχες ἀσήμως ἐξέλιπον· οὔτε γάρ τις πτυάλων πεπασμὸς ἐγένετο οὔτε ἄλλη τῶν εἰθισμένων ἀπόστασις· σιγῶν δὲ ἢ ἐκ τῶν ἐπὶ δεξιὰ κατεσπᾶσθη· κωματώδης· παρέλεγε καὶ ταχὺ πάλιν κατενόει· πρὸς δὲ τὰ γεύματα ἀπονενοημένως εἶχεν· σιγῶν μὲν ἐπανῆκε, κοιλίη δὲ χολώδεα σμικρὰ διέδωκεν, ἐπύρεξεν ὄξυτέρως, φρικώδης· καὶ τὰς ἐχομένας ἄφωνος καὶ πάλιν διελέγετο. ὀγδοηκοστῇ ἀπέθανε. ταύτη τὰ τῶν οὖρων διὰ τέλεος ἦν μέλανα καὶ λεπτὰ καὶ ὑδατώδεα. κῶμα παρείπετο, ἀπόσιτος, ἄθυμος, ἄγρυπνος, ὀργαί, δυσφορίαί, τὰ περὶ τὴν γνώμην μελαγχολικά.

[γ'.] Ἐν Θάσῳ Πυθίωνα, ὃς κατέκειτο ὑπεράνω τοῦ Ἡρακλείου, ἐκ πόνων καὶ κόπων καὶ διαίτης γενομένης ἀμελέος ῥίγος μέγα καὶ πυρετὸς ὄξυς ἔλαβε. γλῶσσα ἐπίξηρος, διψώδης, χολώδης, οὐχ ὑπνωσεν, οὔρα ὑπομέλανα, ἐναιώρημα μετέωρον, οὐχ ἴδρυτο. δευτέρη περὶ μέσον ἡμέρης ψύξις ἀκρέων, τὰ περὶ χεῖρας καὶ κεφαλὴν μᾶλλον, ἀναυδος, ἄφωνος, βραχύπνοος ἐπὶ πολὺν χρόνον, ἀνεθερμάνθη, δίψα, νύκτα δι' ἡσυχίης, ἴδρωσε περὶ κεφαλὴν σμικρὰ. τρίτη ἡμέρην δι' ἡσυχίης, ὅψε δὲ περὶ ἡλίου δυσμᾶς ὑπεψύχθη σμικρὰ, ἄση, ταραχή, νυκτὸς ἐπιπόνως, οὐδὲν ὑπνωσεν, ἀπὸ δὲ κοιλίης σμικρὰ συνεστηκότα κόπρανα διῆλθε. τετάρτη πρωὶ δι' ἡσυχίης, περὶ δὲ μέσον ἡμέρης πάντα παρωξύνθη, ψύξις, ἀναυδος, ἄφωνος, ἐπὶ τὸ χεῖρον, ἀνεθερμάνθη μετὰ χρόνον, οὔρησε μέλανα ἐναιώρημα ἔχοντα, νύκτα δι' ἡσυχίης, ἐκοιμήθη· πέμπτη ἔδοξε κουφίσαι, κατὰ δὲ κοιλίην βάρος μετὰ πόνου, διψώδης, νύκτα ἐπιπόνως. ἕκτη πρωὶ μὲν δι' ἡσυχίης, δειλῆς δὲ οἱ πόνοι μέζους, παρωξύνθη, ἀπὸ δὲ κοιλίης ὀψὲ κλυσματίῳ καλῶς διῆλθε, νυκτὸς ἐκοιμήθη. ἑβδόμη ἡμέρη ἀσώδης, ὑπεδυσφόρει, οὔρησεν ἐλαιῶδες, νυκτὸς ταραχὴ πολλή, παρέλεγεν, οὐδὲν ἐκοιμήθη. ὀγδὴ πρωὶ μὲν ἐκοιμήθη σμικρὰ, ταχὺ δὲ ψύξις, ἀφωνίη, λεπτὸν πνεῦμα καὶ μινυθῶδες, ὀψὲ δὲ πάλιν ἀνεθερμάνθη, παρέκρυσεν, ἤδη δὲ πρὸς ἡμέρην σμικρὰ ἐκουφίσθη, διαχωρήματα ἄκρητα, σμικρὰ, χολώδεα. ἐνάτη κωματώδης, ἀσώδης, ὅτε διεγείροιτο· οὐ λήην διψώδης· περὶ δὲ ἡλίου δυσμᾶς ἐδυσφόρει, παρέλεγε, νύκτα κακὴν. δεκάτη πρωὶ ἄφωνος, πολλὴ ψύξις, πυρετὸς ὄξυς, πολὺς ἰδρῶς, ἔθανεν. ἐν ἀρτίησιν οἱ πόνοι τούτῳ.

[δ'.] Ὁ φρενιτικὸς τῇ πρώτῃ κατακλιθεὶς ἤμεσεν ἰώδεα πολλὰ, λεπτά, πυρετὸς φρικώδης πολὺς, ἰδρῶς συνεχῆς δι' ὅλου, κεφαλῆς καὶ τραχήλου βάρος μετ' ὀδύνης, οὔρα λεπτά, ἐναιωρήματα σμικρὰ, διεσπασμένα, οὐχ ἴδρυτο. ἀπὸ δὲ κοιλίης ἐξεκόπρισεν ἀθρόα πολλὰ, παρέκρυσεν, οὐδὲν ὑπνωσε. δευτέρη πρωὶ ἄφωνος, πυρετὸς ὄξυς, ἴδρωσεν, οὐ διέλιπε, παλμοὶ δι' ὅλου τοῦ σώματος, νυκτὸς σπασμοί. τρίτη πάντα παρωξύνθη. τετάρτη ἔθανεν.

[ε'.] Ἐν Λαρίσῃ φαλακρὸς μηρὸν δεξιὸν ἐπόνησεν ἐξαίφνης· τῶν δὲ



προσφερομένων οὐδὲν ὠφέλει. τῇ πρώτη πυρετὸς ὀξύς, καυσώδης, ἀτρεμέως εἶχεν, οἱ δὲ πόνοι παρείποντο. δευτέρη τοῦ μηροῦ μὲν ὑφίεσαν οἱ πόνοι, ὁ δὲ πυρετὸς ἐπέτεινεν, ὑπεδυσφόρει, οὐκ ἐκοιμᾶτο, ἄκρεα ψυχρά, οὔρων πλῆθος διήει οὐ χρηστῶν. τρίτη τοῦ μηροῦ μὲν ὁ πόνος ἐπαύσατο, παρακοπή δὲ τῆς γνώμης καὶ ταραχὴ καὶ πολὺς βληστρισμός. τετάρτη περὶ μέσον ἡμέρης ἔθανεν.

[ς'.] Ἐν Ἀβδήροισι Περικλέα πυρετὸς ἔλαβεν ὀξύς, συνεχῆς μετὰ πονου, πολλὴ δίψα, ἄση, ποτὸν κατέχειν οὐκ ἠδύνατο· ἦν δὲ ὑπόσπληνός τε καὶ καρηβαρικός. τῇ πρώτη ἡμορράγησεν ἐξ ἀριστεροῦ· πολὺς μέντοι ὁ πυρετὸς ἐπέτεινεν· οὔρησε πολὺ θολερὸν, λευκόν· κείμενον οὐ καθίστατο. δευτέρη πάντα παρωξύνθη· τὰ μέντοι οὔρα παχέα μὲν ἦν, ἰδρυμένα δὲ μᾶλλον· καὶ τὰ περὶ τὴν ἄσσην ἐκούφισεν, ἐκοιμήθη. τρίτη πυρετὸς ἐμαλάχθη, οὔρων πλῆθος, πέπονα, πολλὴν ὑπόστασιν ἔχοντα, νύκτα δι' ἡσυχίης. τετάρτη περὶ μέσον ἡμέρης ἵδρωσε πολλῶ θερμῶ δι' ὄλου, ἄπυρος, ἐκρίθη, οὐχ ὑπέστρεψεν.

[ζ'.] Ἐν Ἀβδήροισι τὴν παρθένον, ἣ κατέκειτο ἐπὶ τῆς ἰρῆς ὁδοῦ, πυρετὸς καυσώδης ἔλαβεν· ἦν δὲ διψώδης καὶ ἄγρυπνος. κατέβη δὲ τὰ γυναικεῖα πρῶτον αὐτῇ. ἕκτη ἄση πολλή, ἔρευθος, φρικώδης, ἀλύουσα. ἐβδόμη διὰ τῶν αὐτῶν, οὔρα λεπτά μὲν, εὐχρω δέ, τὰ περὶ τὴν κοιλίην οὐκ ἠνώχλει. ὀγδόη κώφωσις, πυρετὸς ὀξύς, ἄγρυπνος, ἀσώδης, φρικώδης, κατενόει, οὔρα ὅμοια. ἐνάτη διὰ τῶν αὐτῶν· καὶ τὰς ἐπομένας οὕτως· ἡ κώφωσις παρέμενε. τεσσαρεσκαιδεκάτη τὰ τῆς γνώμης ταραχώδεια, ὁ πυρετὸς συνέδωκεν. ἐπτακαιδεκάτη διὰ ῥινῶν ἐρρῦη πολὺ, ἡ κώφωσις σμικρὰ συνέδωκε. καὶ τὰς ἐπομένας ἄση, κωφότης· ἐνῆν καὶ παράληρος. εἰκοστῇ ποδῶν ὀδύνη· κωφότης, παράληρος ἀπέλιπεν, ἡμορράγησε σμικρὰ διὰ ῥινῶν, ἵδρωσεν, ἄπυρος. εἰκοστῇ τετάρτη ὁ πυρετὸς ὑπέστρεψε, κώφωσις πάλιν, ποδῶν ὀδύνη παρέμεινεν, παρακοπή. εἰκοστῇ ἐβδόμη ἵδρωσε πολλῶ, ἄπυρος, ἡ κώφωσις ἐξέλιπεν, ἡ τῶν ποδῶν ὑπέμενεν ὀδύνη, τὰ δ' ἄλλα τελέως ἐκρίθη.

[η'.] Ἐν Ἀβδήροισιν Ἀναξίωνα, ὃς κατέκειτο παρὰ τὰς Θρηϊκίας πύλας, πυρετὸς ὀξύς ἔλαβε· πλευροῦ δεξιοῦ ὀδύνη συνεχῆς, ἔβησσε ξηρά, οὐδ' ἔπτυε τὰς πρώτας· διψώδης, ἄγρυπνος, οὔρα δὲ εὐχρω πολλὰ λεπτά. ἕκτη παράληρος· πρὸς δὲ τὰ θερμάσματα οὐδὲν ἐνεδίδου. ἐβδόμη ἐπιπόνως· ὁ γὰρ πυρετὸς ἐπέτεινεν, οἱ τε πόνοι οὐ συνεδίδουσαν, αἱ τε βῆχες ἠνώχλεον, δύσπνοός τε ἦν. ὀγδόη ἀγκῶνα ἔταμον· ἐρρῦη πολλὸν οἶον δεῖ· συνέδωκαν μὲν οἱ πόνοι, αἱ μέντοι βῆχες αἱ ξηραὶ παρείποντο. ἐνδεκάτη συνέδωκαν οἱ πυρετοί, σμικρὰ περὶ κεφαλὴν ἵδρωσεν, αἱ τε βῆχες καὶ τὰ ἀπὸ πνεύμονος ὑγρότερα. ἐπτακαιδεκάτη ἤρξατο σμικρὰ πέπονα πτύειν· ἐκούφισθη. εἰκοστῇ ἵδρωσεν, ἄπυρος, μετὰ δὲ κρίσιν διψώδης τε ἦν καὶ τῶν ἀπὸ πνεύμονος οὐ χρησταὶ αἱ καθάρσιες. εἰκοστῇ ἐβδόμη

ὁ πυρετὸς ὑπέστρεψεν, ἔβησεν, ἀνήγε πέπονα πολλά, οὔροισιν ὑπόστασις πολλή λευκή, ἄδιψος ἐγένετο, εὐπνοος. τριηκοστῆ τετάρτη ἴδρωσε δι' ὄλου, ἄπυρος, ἐκρίθη πάντα.

[θ'.] Ἐν Ἀβδήροισιν Ἡρόπυθος κεφαλὴν ὀρθοστάδην ἐπιπόνως εἶχεν, οὐ πολλῶ δὲ χρόνῳ ὕστερον κατεκλίθη. ὤκει πλησίον τῆς ἄνω ἀγωγῆς. πυρετὸς ἔλαβε καυσώδης, ὀξύς· ἔμετοι τὸ κατ' ἀρχὰς πολλῶν χολωδέων, διψώδης, πολλή δυσφορία, οὔρα λεπτὰ μέλανα, ἐναιώρημα μετέωρον ὅτε μὲν, ὅτε δ' οὐ· νύκτα ἐπιπόνως, πυρετὸς ἄλλοτε ἀλλοίως παροξυνόμενος, τὰ πλεῖστα ἀτάκτως. περὶ δὲ τεσσαρεσκαίδεκάτην κώφωσις, οἱ πυρετοὶ ἐπέτεινον, οὔρα διὰ τῶν αὐτῶν. εἰκοστῆ πολλά παρέκρυσσε καὶ τὰς ἐπομένας. τεσσαρακοστῆ διὰ ῥινῶν ἡμορράγησε πολὺ καὶ κατενόει μᾶλλον· ἡ κώφωσις ἐνῆν μὲν, ἦσσαν δέ· οἱ πυρετοὶ συνέδωκαν. ἡμορράγει τὰς ἐπομένας πυκνὰ κατ' ὀλίγον. περὶ δὲ ἐξηκοστὴν αἱ μὲν αἱμορραγίαι ἀπεπαύσαντο, ἰσχύου δὲ δεξιοῦ ὀδύνη ἰσχυρὴ καὶ οἱ πυρετοὶ ἐπέτεινον. οὐ πολλῶ δὲ χρόνῳ ὕστερον πόνοι τῶν κάτω πάντων· συνέπιπτε δὲ ἢ τοὺς πυρετοὺς εἶναι μέζους καὶ τὴν κώφωσιν πολλὴν ἢ ταῦτα μὲν ὑφιέναι καὶ κουφίζειν, τῶν δὲ κάτω περὶ ἰσχία μέζους εἶναι τοὺς πόνους. ἤδη δὲ περὶ ὀγδοηκοστὴν συνέδωκε μὲν πάντα, ἐξέλιπε δὲ οὐδέν· οὔρα τε γὰρ εὐχρω καὶ πλείους ὑποστάσις ἔχοντα κατέβαιναν, οἱ παράληροί τε μείους ἦσαν. περὶ δὲ ἑκατοστὴν κοιλίη πολλοῖσι χολώδεσιν ἐπεταράχθη, καὶ ἦει χρόνον οὐκ ὀλίγον πολλὰ τοιαῦτα, καὶ πάλιν δυσεντεριώδεα μετὰ πόνου, τῶν δὲ ἄλλων ῥαστώνη. τὸ δὲ σύνολον οἱ τε πυρετοὶ ἐξέλιπον καὶ ἡ κώφωσις ἐπαύσατο. ἐν ἑκατοστῆ εἰκοστῆ τελέως ἐκρίθη.

[ι'.] Ἐν Ἀβδήροισι Νικόδημον ἐξ ἀφροδισίων καὶ πότων πῦρ ἔλαβεν. ἀρχόμενος δὲ ἦν ἀσώδης καὶ καρδιαλγικός, διψώδης, γλῶσσα ἐπεκαύθη, οὔρα λεπτὰ μέλανα. δευτέρῃ ὁ πυρετὸς παρωξύνθη, φρικώδης, ἀσώδης, οὐδὲν ἐκοιμήθη, ἤμεσε χολώδεα ξανθὰ, οὔρα ὁμοια, νύκτα δι' ἡσυχίης, ὕπνωσε. τρίτη ὑφῆκε πάντα, ῥαστώνη· περὶ δὲ ἡλίου δυσμὰς πάλιν ὑπεδυσφόρει, νύκτα ἐπιπόνως. τετάρτη ῥίγος, πυρετὸς πολὺς, πόνοι πάντων, οὔρα λεπτά, ἐναιώρημα· νύκτα πάλιν δι' ἡσυχίης. πέμπτη ἐνῆν μὲν πάντα, ῥαστώνη δὲ ἦν. ἕκτη τῶν αὐτῶν πόνοι πάντων, οὔροισιν ἐναιώρημα, παρέκρυσσε πολλά. ἑβδόμη ῥαστώνη. ὀγδὴ τὰ ἄλλα συνέδωκε πάντα. δεκάτη καὶ τὰς ἐπομένας ἐνῆσαν μὲν οἱ πόνοι, ἦσσαν δὲ πάντες· οἱ δὲ παροξυσμοὶ καὶ οἱ πόνοι τούτῳ διὰ τέλεος ἐν ἀρτίησιν ἦσαν μᾶλλον. εἰκοστῆ οὔρησε λευκόν, πάχος εἶχε, κείμενον οὐ καθίστατο· ἴδρωσε πολλῶ, ἔδοξεν ἄπυρος γενέσθαι, δειλῆς δὲ πάλιν ἐθερμάνθη, καὶ τῶν αὐτῶν πόνοι, φρίκη, δίψα, σμικρὰ παρέκρυσσε. εἰκοστῆ τετάρτη οὔρησε πολὺ λευκόν, πολλὴν ὑπόστασιν ἔχον. ἴδρωσε πολλῶ θερμῶ δι' ὄλου, ἄπυρος ἐκρίθη.

[ια'.] Ἐν Θάσῳ γυνὴ δυσάνιος ἐκ λύπης μετὰ προφάσιος ὀρθοστάδην ἐγένετο ἄγρυπνός τε καὶ ἀπόσιτος καὶ διψώδης ἦν καὶ ἀσώδης. ὤκει δὲ πλησίον τῶν Πυλάδου ἐπὶ τοῦ λείου. τῇ πρώτῃ ἀρχομένης νυκτὸς φόβοι, λόγοι πολλοί, δυσθυμίη, πυρέτιον λεπτόν. πρῶτὶ σπασμοὶ πολλοί· ὅτε δὲ διαλίποιεν οἱ σπασμοὶ οἱ πολλοί, παρέλεγεν, ἠσχρομύθει· πολλοὶ πόνοι, μεγάλοι, συνεχέες. δευτέρῃ διὰ τῶν αὐτῶν, οὐδὲν ἐκοιμᾶτο, πυρετὸς ὀξύτερος. τρίτῃ οἱ μὲν σπασμοὶ ἀπέλιπον, κῶμα δὲ καὶ καταφορὴ καὶ πάλιν ἔγερσις· ἀνήϊσσε, κατέχειν οὐκ ἠδύνατο, παρέλεγε πολλά, πυρετὸς ὀξύς, ἐς νύκτα δὲ ταύτην ἰδρωσε πολλῶ θερμῶ δι' ὄλου· ἄπυρος, ὑπνωσε, πάντα κατενόει, ἐκρίθη. περὶ δὲ τρίτην ἡμέρην οὔρα μέλανα λεπτὰ, ἐναιώρημα δὲ ἐπὶ πολὺ στρογγύλον, οὐχ ἰδρύετο, περὶ δὲ κρίσιν γυναικεῖα πολλὰ κατέβη.

[ιβ'.] Ἐν Λαρίσῃ παρθένον πυρετὸς ἔλαβε καυσώδης, ὀξύς· ἄγρυπνος, διψώδης, γλῶσσα λιγνυώδης, ξηρή· οὔρα εὐχρῶ μὲν, λεπτὰ δέ. δευτέρῃ ἐπιπόνως, οὐχ ὑπνωσε. τρίτῃ πολλὰ διῆλθεν ἀπὸ κοιλῆς ὑδατόχλοα, καὶ τὰς ἐπομένας ἦι τοιαῦτα εὐφόρως. τετάρτῃ οὔρησε λεπτὸν ὀλίγον, εἶχεν ἐναιώρημα μετέωρον, οὐχ ἰδρύετο, παρέκρουσεν ἐς νύκτα. ἕκτη διὰ ρινῶν λάβρον ἐρρῦη πολὺ· φρίξασα ἰδρωσε πολλῶ θερμῶ δι' ὄλου· ἄπυρος· ἐκρίθη. ἐν δὲ τοῖσι πυρετοῖσι καὶ ἤδη κεκριμένων γυναικεῖα κατέβη πρῶτον τότε· παρθένος γὰρ ἦν. ἦν δὲ διὰ παντὸς ἀσώδης, φρικώδης, ἔρευθος προσώπου, ὀμμάτων ὀδύνη· καρηβαρική. ταύτῃ οὐχ ὑπέστρεψεν, ἀλλ' ἐκρίθη. οἱ πόνοι ἐν ἀρτίησιν.

[ιγ'.] Ἀπολλώνιος ἐν Ἀβδήροισιν ὀρθοστάδην ὑπεφέρετο χρόνον πολὺν. ἦν δὲ μεγαλόσπλαγχνος, καὶ περὶ ἧπαρ συνήθης ὀδύνη χρόνον πολὺν παρείπετο, καὶ δὴ τότε καὶ ἰκτερώδης ἐγένετο, φουσώδης, χροίης τῆς ὑπολεύκου. φαγῶν δὲ καὶ πιῶν ἀκαιρότερον βόειον ἐθερμάνθη σμικρὰ τὸ πρῶτον, κατεκλίθη. γάλαξι δὲ χρησάμενος ἐφθοῖσι καὶ ὠμοῖσι πολλοῖσιν, αἰγείοισι καὶ μηλίοισι, καὶ διαίτη κακῇ πάντων, βλάβαι μεγάλαι· οἱ τε γὰρ πυρετοὶ παρωξύνθησαν, κοιλίη τε τῶν προσενεχθέντων οὐδὲν διέδωκεν ἄξιον λόγου, οὔρα τε λεπτὰ καὶ ὀλίγα διῆει· ὑπνοὶ οὐκ ἐνήσαν· ἐμφύσημα κακόν, πολὺ δίψος, κωματώδης, ὑποχονδρίου δεξιοῦ ἔπαρμα σὺν ὀδύνη, ἄκρεα πάντοθεν ὑπόψυχρα, σμικρὰ παρέλεγε, λήθη πάντων ὅ τι λέγοι, παρεφέρετο. περὶ δὲ τεσσαρεσκαδεκάτην, ἀφ' ἧς κατεκλίθη, ῥιγώσας ἐπεθερμάνθη· ἐξεμάνη· βοή, ταραχή, λόγοι πολλοί, καὶ πάλιν ἰδρῦσις, καὶ τὸ κῶμα τηνικαῦτα προσῆλθε. μετὰ δὲ ταῦτα κοιλίη ταραχώδης πολλοῖσι χολώδεσιν, ἀκρήτοισιν, ὠμοῖσιν· οὔρα μέλανα, σμικρὰ, λεπτὰ· πολλὴ δυσφορίη· τὰ τῶν διαχωρημάτων ποικίλως· ἢ γὰρ μέλανα καὶ σμικρὰ καὶ ἰώδεα ἢ λιπαρὰ καὶ ὠμὰ καὶ δακνώδεα· κατὰ δὲ χρόνους ἐδόκει καὶ γαλακτώδεα διδόναι. περὶ δὲ εἰκοστὴν τετάρτην διὰ παρηγορίας· τὰ μὲν ἄλλα ἐπὶ τῶν αὐτῶν, σμικρὰ δὲ κατενόησεν· ἐξ οὗ δὲ κατεκλίθη, οὐδενὸς ἐμνήσθη· πάλιν δὲ ταχὺ παρενόει,

ὄρμητο πάντα ἐπὶ τὸ χεῖρον. περὶ δὲ τριηκοστὴν πυρετὸς ὄξυς, διαχωρήματα πολλὰ λεπτά, παράληρος, ἄκρεα ψυχρά, ἄφωνος. τριηκοστῇ τετάρτῃ ἔθανε. τούτῳ διὰ τέλος, ἔξ οὗ καὶ ἐγὼ οἶδα, κοιλίη ταραχώδης, οὔρα λεπτὰ μέλανα, κωματώδης, ἄγρυπνος, ἄκρεα ψυχρά, παράληρος διὰ τέλος.

[ιδ'.] Ἐν Κυζίκῳ γυναικὶ θυγατέρας τεκούση διδύμας καὶ δυστοκησάση καὶ οὐ πάνυ καθαρθείση τῇ πρώτῃ πυρετὸς φρικώδης ὄξυς, κεφαλῆς καὶ τραχήλου βάρος μετ' ὀδύνης· ἄγρυπνος ἔξ ἀρχῆς, σιγῶσα δὲ καὶ σκυθρωπὴ καὶ οὐ πειθομένη· οὔρα λεπτὰ καὶ ἄχρω· διψώδης, ἀσώδης τὸ πολὺ, κοιλίη πεπλανημένως ταραχώδης καὶ πάλιν συνισταμένη. ἕκτη ἔς νύκτα πολλὰ παρέλεγε, οὐδὲν ἐκοιμήθη. περὶ δὲ ἑνδεκάτῃ ἐοῦσα ἔξεμάνη καὶ πάλιν κατενόει· οὔρα μέλανα, λεπτὰ καὶ πάλιν διαλείποντα ἐλαιώδεα· κοιλίη πολλοῖσι, λεπτοῖσι, ταραχώδεσι. τεσσαρεσκαιδεκάτῃ σπασμοὶ πολλοί, ἄκρεα ψυχρά, οὐδὲν ἔτι κατενόει, οὔρα ἐπέστη. ἔξκαιδεκάτῃ ἄφωνος· ἑπτακαιδεκάτῃ ἀπέθανε.

[ιε'.] Ἐν Θάσῳ Δελεάρκεος γυναῖκα, ἣ κατέκειτο ἐπὶ τοῦ λείου, πυρετὸς φρικώδης, ὄξυς ἐκ λύπης ἔλαβεν. ἔξ ἀρχῆς δὲ περιστέλλετο καὶ διὰ τέλος αἰεὶ σιγῶσα ἐψηλάφα, ἔτιλλεν, ἔγλυφεν, ἐτριχολόγει, δάκρυα καὶ πάλιν γέλως, οὐκ ἐκοιμᾶτο· ἀπὸ κοιλίης ἐρεθισμῶ οὐδὲν διήει· σμικρὰ ὑπομιμνησκόντων ἔπινεν· οὔρα λεπτὰ σμικρά· πυρετοὶ πρὸς χεῖρα λεπτοί· ἀκρέων ψύξις. ἐνάτῃ πολλὰ παρέλεγε καὶ πάλιν ἰδρύνθη· σιγῶσα. τεσσαρεσκαιδεκάτῃ πνεῦμα ἀραιόν, μέγα διὰ χρόνου καὶ πάλιν βραχύπνοος. ἑπτακαιδεκάτῃ ἀπὸ κοιλίης ἐρεθισμῶ ταραχώδεα, ἔπειτα δὲ αὐτὰ τὰ ποτὰ διήει, οὐδὲν συνίστατο· ἀναισθήτως εἶχε πάντων· δέρματος περίτασις καρφαλέου. εἰκοστῇ λόγοι πολλοὶ καὶ πάλιν ἰδρύνθη· ἄφωνος, βραχύπνοος. εἰκοστῇ πρώτῃ ἀπέθανε. ταύτῃ διὰ τέλος πνεῦμα ἀραιόν, μέγα· ἀναισθήτως πάντων εἶχεν· αἰεὶ περιστέλλετο· ἢ λόγοι πολλοὶ ἢ σιγῶσα διὰ τέλος.

[ις'.] Ἐν Μελιβοίῃ νεηνίσκος ἐκ πότων καὶ ἀφροδισίων πολλῶν πολὺν χρόνον θερμανθεὶς κατεκλίθη· φρικώδης δὲ καὶ ἀσώδης ἦν καὶ ἄγρυπνος καὶ ἄδιψος. ἀπὸ δὲ κοιλίης τῇ πρώτῃ πολλὰ κόπρανα διήλθε σὺν περιρρόῳ πολλῶ, καὶ τὰς ἐπομένας ὑδατόχλοα πολλὰ διήει· οὔρα λεπτά, ὀλίγα, ἄχρω· πνεῦμα ἀραιόν, μέγα διὰ χρόνου· ὑποχονδρίου ἔντασις ὑπολάπαρος, παραμήκης ἔξ ἀμφοτέρων· καρδίας παλμὸς διὰ τέλος συνεχῆς· οὔρησεν ἐλαιῶδες. δεκάτῃ παρέκρουσεν ἀτρεμέως, ἦν δὲ κόσμιός τε καὶ σιγῶν· δέρμα καρφαλέον καὶ περιτεταμένον· διαχωρήματα ἢ πολλὰ καὶ λεπτὰ ἢ χολώδεα, λιπαρά. τεσσαρες καιδεκάτῃ πάντα παρωξύνθη, παρέκρουσεν, πολλὰ παρέλεγεν. εἰκοστῇ ἔξεμάνη, πολὺς βληστρισμὸς, οὐδὲν οὔρει, σμικρὰ ποτὰ κατείχετο. εἰκοστῇ τετάρτῃ ἀπέθανε.

## ON REGIMEN IN ACUTE DISEASES - Περί διαίτης όξεων

1. Οί ξυγγράψαντες τὰς Κνιδίας καλεομένας γνώμας, όκοΐα μὲν πάσχουσιν οί κάμνοντες ἐν ἐκάστοισι τῶν νοσημάτων όρθῶς ἔγραψαν, καὶ όκοΐως ἔνια ἀπέβαιναν αὐτέων καὶ ἄχρι μὲν τουτέου καὶ μὴ ἱητρὸς δύναιτο τις ἂν όρθῶς ξυγγράψαι, εἰ εὖ παρὰ τῶν καμνόντων ἕκαστον πύθοιτο όκοΐα πάσχουσιν. Όκόσα δὲ προκαταμαθεῖν χρὴ τὸν ἱητρὸν, μὴ λέγοντος τοῦ κάμνοντος, τουτέων τὰ πολλὰ παρεῖται, ἄλλα ἐν ἄλλοισι, καὶ ἐπικαιρα ἔνια ἐόντα ἐς τέκμαρσιν. Όκόταν δὲ ἐς τέκμαρσιν λέγεται ὡς χρὴ ἕκαστα ἱητρεύειν, ἐν τουτέοισι πολλὰ ἕτεροΐως

γιγνώσκω ἢ ὡς ἐκεῖνοι ἐπεξήρσαν καὶ οὐ μούνον διὰ τοῦτο οὐκ ἐπαινέω, ἀλλ' ὅτι καὶ ὀλίγοισι τὸν ἀριθμὸν τοῖσιν ἀκέεσιν ἐχρέοντο τὰ γὰρ πλεῖστα αὐτέοισιν εἰρέεται πλὴν τῶν ὀξειῶν νοῦσων, φάρμακα ἐλατήρια διδόναι καὶ όρρον καὶ γάλα ἐς τὴν ὥρην πιπίσκειν. Εἰ μὲν οὖν ταῦτα ἀγαθὰ ἦν καὶ ἀρμόζοντα τοῖσι νοσήμασιν, ἐφ' οἷσι παρήνεον διδόναι, ἔτι ἂν ἀξιώτερα ἐπαίνου ἦν, ὅτι, ὀλίγα ἐόντα, αὐτάρκεά ἐστιν νῦν δὲ οὐχ οὕτως ἔχει. Οἱ μὲν τοι ὕστερον ἐπιδιασκευάσαντες, ἱητρικώτερον δὴ τι ἐπῆλθον περὶ τῶν προσοιστέων ἐκάστοισιν ἀτὰρ οὐδὲ περὶ διαίτης οἱ ἀρχαῖοι ξυνέγραψαν οὐδὲν ἄξιον λόγου, καίτοι μέγα τοῦτο παρήκαν. Τὰς μέντοι πολυτροπίας τὰς ἐν ἐκάστη τῶν νοῦσων καὶ τὴν πολυσχιδίην αὐτέων οὐκ ἠγνόεον

ἔνιοι τοὺς δὲ ἀριθμοὺς ἐκάστου τῶν νοσημάτων σάφα φράζουσιν ἐθέλοντες, οὐκ όρθῶς ἔγραψαν μὴ γὰρ οὐκ εὐαρίθμητον εἶη, εἰ τουτέω τις σημανεῖται τὴν τῶν καμνόντων νοῦσον, τῷ ἕτερον ἐτέρου διαφέρειν τι, καὶ, ἦν μὴ τωὐτὸ νοῦσημα δοκέη εἶναι, μὴ τωὐτὸ οὕνομα ἔχειν.

2. Ἐμοὶ δ' ἀνδάνει μὲν ἐν πάσῃ τῇ τέχνῃ προσέχειν τὸν νόον καὶ γὰρ όκόσα ἔργα καλῶς ἔχει ἢ όρθῶς, καλῶς ἕκαστα χρὴ ποιέειν καὶ όρθῶς, καὶ όκόσα ταχέως ἔργα, ταχέως, καὶ όκόσα καθαρῶς, καθαρῶς, καὶ όκόσα ἀνωδύνως διαχειρίζεσθαι,

ὡς ἀνωδυνώτατα ποιέειν, καὶ τᾶλλα πάντα τὰ τοιουτότροπα διαφερόντως τῶν πέλας ἐπὶ τὸ βέλτιον ποιέειν χρὴ. Μάλιστα δ' ἂν ἐπαινέσαιμι ἱητρὸν, ὅστις ἐν τοῖσιν ὀξέσι νοσήμασιν, ἃ τοὺς πλείστους τῶν ἀνθρώπων κτείνει, ἐν τουτέοισι διαφέρων τι τῶν ἄλλων εἶη ἐπὶ τὸ βέλτιον. Ἔστι δὲ ταῦτα ὀξέα, όκοΐα ὠνόμασαν οἱ ἀρχαῖοι πλευριτίν, καὶ περιπλευμονίην, καὶ φρενίτιν, καὶ λήθαργον, καὶ καῦσον, καὶ τᾶλλα νοσήματα όκόσα τουτέων ἐχόμενά ἐστιν, ὧν οἱ πυρετοὶ τὸ

ἐπίπαν ξυνεχές. Ὅταν γὰρ μὴ λοιμώδεος νούσου τρόπος τις κοινὸς ἐπιδημήσῃ, ἀλλὰ σποράδες ἔωσιν αἱ νοῦσοι καὶ παραπλήσιοι,

ὑπὸ τουτέων τῶν νοσημάτων ἀποθνήσκουσι μᾶλλον ἢ ὑπὸ τῶν ἄλλων τῶν ξυμπάντων. Οἱ μὲν οὖν ἰδιῶται οὐ κάρτα γινώσκουσι τοὺς ἐς ταῦτα διαφέροντας τῶν πέλας, ἕτεροίων τε

μᾶλλον ἰημάτων ἐπαινέται καὶ ψέκται εἰσίν. Ἐπειτα μέγα σημεῖον τόδε, ὅτι οἱ δημόται ἀξυνετώτατοι αὐτοὶ ἐωυτῶν περὶ τουτέων τῶν νοσημάτων εἰσίν ὡς μελετητέα εἶναι οἱ γὰρ μὴ ἰητροὶ ἰητροὶ δοκέουσιν εἶναι μάλιστα διὰ

ταύτας τὰς νούσους ῥηΐδιον γὰρ τὰ ὀνόματα ἐκμανθάνειν, ὁκοῖα νενόμισται προσφέρεσθαι πρὸς τοὺς τὰ τοιαῦτα κάμνοντας. Ἦν γὰρ ὀνομάσῃ τις πτισάνης τε χυλὸν καὶ οἶνον τοῖον ἢ τοῖον καὶ μελίκρητον, ἅπαντα τοῖσι δημότησι δοκέουσιν οἱ ἰητροὶ ταῦτα λέγειν, οἱ τε βελτίους καὶ οἱ χεῖρους τὰ δὲ οὐχ οὕτως ἔχει, ἀλλ' ἐν τουτέοισι δὴ καὶ πάνυ μέγα διαφέρουσιν ἕτεροι ἑτέρων.

3. Δοκέει δέ μοι ἄξια γραφῆς εἶναι ταῦτα μάλιστα, ὁκόσα τε ἀκαταμάθητά ἐστι τοῖσιν ἰητροῖσιν, ἐπίκαιρα ἐόντα εἰδέναί, καὶ ὁκόσα μεγάλας ὠφελείας φέρει ἢ μεγάλας βλάβας. Ἀκαταμάθητα μὲν οὖν τάδε ἐστὶ διὰ τί ἄρα ἐν τῆσιν ὀξειῆσι νοῦσοισιν οἱ μὲν τῶν ἰητρῶν ἅπαντα τὸν αἰῶνα διατελεῦσι πτισάνας διδόντες ἀδιηθήτους, καὶ νομίζουσιν

ὀρθῶς ἰητρεύειν, οἱ δὲ τινες περὶ παντὸς ποιέονται ὅκως κριθὴν μηδεμίην καταπίῃ ὁ κάμνων μεγάλην γὰρ βλάβην ἠγεῦνται εἶναι, ἀλλὰ δι' ὀθονίου διηθεῦντες τὸν χυλὸν διδόασιν οἱ δ' αὖ τινες αὐτέων οὐτ' ἂν πτισάνην παχείην δοῖεν, οὔτε χυλὸν οἱ μὲν μέχρις ἂν ἐβδομαῖος γένηται ὁ κάμνων, οἱ δὲ καὶ διὰ τέλεος ἄχρις ἂν κριθῇ ἢ νοῦσος. Μάλα μὲν οὖν οὐδὲ προβάλλεσθαι τὰ τοιαῦτα ζητήματα εἰθισμένοι εἰσίν οἱ ἰητροὶ ἴσως δὲ οὐδὲ προβαλλόμενα εὐρίσκειται καίτοι διαβολὴν γε ἔχει ὅλη ἡ τέχνη πρὸς τῶν δημοτέων μεγάλην, ὡς μηδὲ δοκέειν ὅλως ἰητρικὴν εἶναι ἐν γε τοῖσιν

ὀξέσι τῶν νοσημάτων τοσόνδε διοίσουσιν ἀλλήλων οἱ χειρωνάκται, ὥστε ἂ ὁ ἕτερος προσφέρει ἠγεύμενος ἄριστα εἶναι, ταῦτα νομίζειν ἤδη τὸν ἕτερον κακὰ εἶναι καὶ σχεδὸν ἂν κατὰ γε τὸ τοιόνδε τὴν τέχνην φαῖεν ὠμοιωῖσθαι τῇ μαντικῇ, ὅτι οἱ μάντιες τὸν αὐτὸν ὄρνιθα, εἰ μὲν ἀριστερὸς εἴη, ἀγαθὸν νομίζουσιν εἶναι, εἰ δὲ δεξιὸς, κακὸν καὶ ἐν ἱεροσκοπίῃ τὰ τοιάδε εὔροι τις ἂν ἄλλα ἐπ' ἄλλοισιν ἀλλ' ἔνιοι τῶν μάντιων

τάναντία τουτέων. Φημὶ δὴ πάγκαλον εἶναι τοῦτο τὸ σκέμμα καὶ ἠδελφισμένον

τοῖσι πλείστοισι τῶν ἐν τῇ τέχνῃ καὶ ἐπικαιροτάτοισιν καὶ γὰρ τοῖσι νοσέουσι πᾶσιν ἐς ὑγίην μέγα τι δύνασθαι, καὶ τοῖσιν ὑγιαίνουσιν ἐς ἀσφαλείην, καὶ τοῖσιν ἀσκέουσιν ἐς εὐεξίην, καὶ ἐς ὃ τι ἂν ἕκαστος ἐθέλῃ.

4. Πτισάνη μὲν οὖν μοι δοκέει ὀρθῶς προκεκρίσθαι τῶν σιτηρῶν γευμάτων ἐν τουτέοισι τοῖσι νουσήμασι, καὶ ἐπαινέω γε τοὺς προκρίναντας. Τὸ γὰρ γλίσχρασμα αὐτέης λεῖον καὶ ξυνεχὲς καὶ προσηνές ἐστί καὶ ὀλισθηρὸν καὶ πλαδαρὸν μετρίως καὶ

ἄδιψον καὶ εὐέκπλυτον, εἴ τι καὶ τουτέου προσδέοι, καὶ οὔτε στύψιν ἔχον, οὔτε ἄραδον κακὸν, οὔτε ἀνοιδίσκεται ἐν τῇ κοιλίῃ ἀνώδηκε γὰρ ἐν τῇ ἐψήσει ὀκόσον πλεῖστον ἐπεφύκει διογκοῦσθαι. Ὀκόσοι μὲν οὖν πτισάνησι χρέονται, ἐν τουτέοισι τοῖσι νουσήμασιν οὐδεμιῇ ἡμέρῃ κενεαγγητέον, ὡς ἔπος εἰρήσθαι, ἀλλὰ χρηστέον, καὶ οὐ διαλειπτέον, ἦν μὴ τι δέη ἢ διὰ φαρμακίην ἢ κλύσιν διαλιπεῖν. Καὶ τοῖσι μὲν γε εἰθισμένοισι δις σιτέεσθαι τῆς ἡμέρης, δις δοτέον τοῖσι δὲ μονοσιτέειν εἰθισμένοισιν, ἅπαξ δοτέον τὴν πρώτην, ἐκ προσαγωγῆς δὲ, ἦν ἐνδέχεται, καὶ τουτέοισι δις δοτέον, ἦν τι

δοκέη προσδεῖν. Πλήθος δὲ ἀρκέει κατ' ἀρχὰς διδόναι μὴ πουλὺ, μηδὲ ὑπέρπαχυ, ἀλλ' ὀκόσον ἔνεκεν τοῦ ἔθεος ἐσιέναι τι, καὶ κενεαγγίην μὴ γίνεσθαι πολλήν. Περὶ δὲ τῆς ἐπιδόσιος ἐς πλῆθος τοῦ ροφήματος, ἦν μὲν ξηρότερον ἢ τὸ νούσημα ἢ ὡς ἂν τις οἶοιτο, οὐ χρὴ ἐπὶ πλεόν διδόναι,

ἀλλὰ προπίνειν πρὸ τοῦ ροφήματος ἢ μελίκρητον, ἢ οἶνον, ὀκότερον ἂν ἀρμόζῃ τὸ δ' ἀρμόζον ἐφ' ἐκάστοισι τῶν τρόπων εἰρήσεται. Ἦν δὲ ὑγραίνεται τὸ στόμα καὶ τὰ ἀπὸ τοῦ πλεύμονος εἴη ὀκοῖα δεῖ, ἐπιδιδόναι χρὴ ἐς πλῆθος τοῦ ροφήματος, ὡς ἐν κεφαλαίῳ εἰρήσθαι τὰ μὲν γὰρ θᾶσσον καὶ μᾶλλον πλαδῶντα ταχυτῆτα κρίσιος σημαίνει, τὰ δὲ βραδύτερον καὶ ἥσσον βραδυτέραν σημαίνει τὴν κρίσιν. Καὶ ταῦτα αὐτὰ μὲν καθ' ἑωυτὰ τοιάδε τὸ ἐπίπαν ἐστὶν πολλὰ δὲ καὶ ἄλλα ἐπίκαιρα παρεῖται οἷσι προσημαίνεσθαι δεῖ, ἃ εἰρήσεται ὕστερον. Καὶ ὀκόσω ἂν πλείων ἢ κάθαρσις γίγνηται, τοσῶδε χρὴ πλεόν ἐπιδιδόναι ἄχρι κρίσιος μάλιστα δὲ κρίσιος ὑπερβολῆς δύο ἡμερέων, οἷσί γε ἢ πεμπταίοισιν ἢ ἑβδομαίοισιν ἢ ἐναταίοισι δοκέει κρίνεσθαι, ὡς καὶ τὸ ἄρτιον

καὶ τὸ περισσὸν προμηθήσῃ μετὰ δὲ τοῦτο, τῶ μὲν ροφήματι τὸ πρωῖ χρηστέον, ὄψε δὲ ἐς σιτία μεταβάλλειν. Ξυμφέρει δὲ τὰ τοιάδε ὡς ἐπιτοπουλὺ τοῖσιν ὄλησι πτισάνησιν αὐτίκα

χρεομένοισιν. Αἶ τε γὰρ ὀδύναι ἐν τοῖσι πλευριτικοῖσιν αὐτίκα αὐτόματοι

παύονται, ὅταν ἄρξωνται πτύειν τι ἄξιον λόγου καὶ ἐκκαθαίρεσθαι, αἶ τε καθάρσιες πολλῶ τελεώτεραί εἰσι, καὶ ἔμπυοι ἦσσαν γίνονται ἢ εἰ ἀλλοίως τις δαιτώη, καὶ αἶ κρίσιες ἀπλούστεραι καὶ εὐκριτώτεραι καὶ ἦσσαν ὑποστροφώδεες.

5. Τὰς δὲ πτισάνας χρή ἐκ κριθέων τε ὡς βελτίστων εἶναι καὶ κάλλιστα ἠψηῆσθαι, καὶ ἄλλως ἦν μὴ τῷ χυλῷ μούνῳ μέλλης χρέεσθαι. Μετὰ γὰρ τῆς ἄλλης ἀρετῆς τῆς πτισάνης τὸ ὀλισθηρὸν

τὴν κριθὴν καταπινομένην ποιεῖ μὴ βλάπτειν οὐδαμοῦ γὰρ προσίσχει, οὐδὲ μένει κατὰ τὴν τοῦ θώρηκος ἴξιν. Ὀλισθηροτάτη τε καὶ ἀδιψοτάτη καὶ εὐπεπτοτάτη καὶ ἀσθενεστάτη ἐστὶν ἢ κάλλιστα ἐφθῆ, ὧν πάντων δεῖ. Ἦν οὖν μὴ προστιμωρήσῃ τις ὀκόσων δέεται αὐτάρκης εἶναι ὁ τρόπος τῆς τοιαύτης πτισανορροφίης, πολλαχῆ βεβλάψεται. Ὀκόσοισι γὰρ σίτος αὐτίκα ἐγκατακέκλεισται, ἦν μὴ τις ὑποκενώσας τὸ ρόφημα δώη, τὴν ὀδύνην ἐνεοῦσαν προσπαροξύνειεν ἄν,

καὶ μὴ ἐνεοῦσαν εὐθὺς ἐμποιήσειεν ἄν, καὶ πνεῦμα πυκνότερον γένοιτ' ἄν κακὸν δὲ τοῦτό ἐστὶν ξηραντικὸν γὰρ πλεύμονος, καὶ κοπῶδες ὑποχονδρίων καὶ ἦτρου καὶ φρενῶν. Τοῦτο δὲ, ἦν ἔτι τῆς ὀδύνης τοῦ πλευροῦ ξυνεχέος ἐούσης, καὶ πρὸς τὰ θερμάσματα μὴ χαλώσης, καὶ τοῦ πτυέλου μὴ ἀνιόντος, ἀλλὰ καταγλισχραινόμενου ἀσαπέως, ἦν μὴ λύση τις

τὴν ὀδύνην, ἢ κοιλίην μαλθάξας, ἢ φλέβα ταμῶν, ὀκότερον ἄν τουτέων ξυμφέρῃ, τὰς δὲ πτισάνας ἦν οὕτως ἔχουσι διδῶ, ταχέες οἱ θάνατοὶ τῶν τοιουτέων γίνονται. Διὰ ταύτας οὖν τὰς προφάσις καὶ ἐτέρας τοιαύτας ἔτι μᾶλλον, οἱ ὄλησι τῆσι πτισάνησι χρεόμενοι, ἑβδομαῖοι καὶ ὀλιγημερώτεροι θνήσκουσιν οἱ μὲν τοι καὶ τὴν γνώμην βλαβέντες, οἱ δὲ ὑπὸ τῆς ὀρθοπνοίης τε καὶ τοῦ ρέγγεος ἀποπνιγέντες. Μάλα δὲ τοὺς τοιουτέους οἱ ἀρχαῖοι βλητοὺς ἐνόμιζον εἶναι διὰ τόδε

μάλιστα οὐχ ἠκίστα δὲ, ὅτι καὶ ἀποθανόντων αὐτέων ἢ πλευρὴν πελιὴ εὐρίσκεται ἴκελόν τι πληγῆ. Αἴτιον δὲ τουτέου τόδε ἐστὶν, ὅτι, πρὶν λυθῆναι τὴν ὀδύνην, θνήσκουσιν ταχέως γὰρ πνευματῖαι γίνονται ὑπὸ δὲ τοῦ πολλοῦ καὶ πυκνοῦ πνεύματος, ὡς ἤδη εἴρηται, καταγλισχραινόμενον τὸ πτύελον ἀπέπτως κωλύει τὴν ἐπάνοδον γίνεσθαι, ἀλλὰ τὴν ρέγγιν ποιεῖ ἐνισχόμενον ἐν τοῖσι βρογχίοισι τοῦ πλεύμονος. Καὶ ὀκόταν ἐς ταῦτό ἔλθῃ, θανατῶδες ἤδη ὡς ἐπιτοπουλὸν ἐστὶν καὶ γὰρ αὐτὸ τὸ πτύελον ἐνισχόμενον κωλύει μὲν τὸ πνεῦμα ἔσω φέρεσθαι, ἀναγκάζει δὲ ταχέως ἔξω φέρεσθαι καὶ οὕτως ἐς τὸ κακὸν ἀλλήλοισι τιμωρέουσι



τό τε γὰρ πτύελον ἐνισχόμενον πυκνὸν τὸ πνεῦμα ποιέει, τό τε πνεῦμα πυκνὸν ἔὸν ἐπιγλισχραίνει τὸ πτύελον, καὶ κωλύει ἀπολισθαίνειν. Καταλαμβάνει

δὲ ταῦτα, οὐ μούνον ἦν πτισάνη ἀκαίρως χρέωνται, ἀλλὰ πούλῳ μᾶλλον ἦν τι ἄλλο φάγωσιν ἢ πίωσι πτισάνης ἀνεπιτηδειότερον.

6. Μάλα μὲν οὖν τὰ πλεῖστα παραπλήσιαί εἰσιν αἱ τιμωρίαι τοῖσί τε ὄλησι τῆσι πτισάνησι χρεομένοισι, τοῖσί τε τῷ χυλῷ αὐτέῳ τοῖσι δὲ μηδετέρῳ τουτέων, ἀλλὰ ποτῷ μούνον, ἔστιν ὅπη καὶ διαφερόντως τιμωρητέον. Χρῆ δὲ τό γε πάμπαν οὕτω ποιέειν ἦν νεοβρῶτι ἔόντι αὐτέῳ καὶ κοιλίης μήπω ὑποκεχωρηκυῖης ἄρξηται ὁ πυρετός, ἦν τε ξὺν ὀδύνη, ἦν τε ἄνευ ὀδύνης, ἐπισχεῖν τὴν δόσιν τοῦ ῥοφήματος, ἔστ' ἂν οἴηται κεχωρηκέναι ἐς τὸ κάτω μέρος τοῦ ἐντέρου τὸ σιτίον. Χρέεσθαι δὲ ποτῷ, ἦν μὲν ἄλγημά τι ἔχη, ὄξυμέλιτι χειμῶνος

μὲν θερμῷ, θέρεος δὲ, ψυχρῷ ἦν δὲ πολλὴ δίψα ἦ, μελικρήτῳ καὶ ὕδατι. Ἐπειτα, ἦν μὲν ἄλγημά τι ἐνῆ, ἢ τῶν ἐπικινδύνων τι ἐμφαίνηται, διδόναι τὸ ῥόφημα μήτε πούλῳ μήτε παχὺ, μετὰ δὲ τὴν ἐβδόμην, ἦν ἰσχύη. Ἦν δὲ μὴ ὑπεληλύθη ὁ παλαιότερος σῖτος νεοβρῶτι ἔόντι, ἦν μὲν ἰσχύη τε καὶ ἀκμάζη τῇ ἡλικίῃ, κλύσαι ἦν δὲ ἀσθενέστερος ἦ, βαλάνῳ προσχρήσασθαι, ἦν μὴ αὐτόματα διεξίη καλῶς. Καιρὸν δὲ τῆς δόσιος τοῦ ῥοφήματος τόνδε μάλιστα φυλάσσεσθαι, κατ' ἀρχὰς καὶ διὰ παντός τοῦ νοσήματος ὅταν μὲν οἱ πόδες ψυχροὶ ἔωσιν, ἐπισχεῖν χρῆ τοῦ ῥοφήματος τὴν δόσιν, μάλιστα δὲ καὶ τοῦ ποτοῦ ἀπέχεσθαι ὀκόταν δὲ ἢ θέρμη καταβῆ ἔς τοὺς πόδας, τότε διδόναι, καὶ

νομίζειν μέγα δύνασθαι τὸν καιρὸν τοῦτον ἐν πάσῃσι τῆσι νόσοισιν οὐχ ἥκιστα δὲ ἐν τῆσιν ὀξείῃσι, μάλιστα δὲ ἐν τῆσι μᾶλλον πυρετώδεσι καὶ ἐπικινδυνωτάτησιν. Χρέεσθαι δὲ πρῶτον μάλιστα μὲν χυλῷ, ἔπειτα δὲ πτισάνῃ, κατὰ τὰ τεκμήρια τὰ προγεγραμμένα ἀκριβέως θεωρέων.

7. Ὀδύνη δὲ πλευροῦ ἦν τε κατ' ἀρχὰς γένηται, ἦν τε ἐς ὕστερον, θερμάσμασι μὲν πρῶτον οὐκ ἀπὸ τρόπου ἐστὶ χρῆσάμενον πειρηθῆναι διαλύσαι τὴν ὀδύνην. Θερμασμάτων δὲ κράτιστον μὲν ὕδωρ θερμὸν ἐν ἀσκῷ, ἢ ἐν κύστει, ἢ ἐν χαλκῷ ἀγγεῖῳ, ἢ ἐν ὀστρακίνῳ προὔποτιθέναι δὲ

χρῆ μαλθακόν τι πρὸς τὴν πλευρὴν, προσηνεῖς εἶνεκεν. Αγαθὸν δὲ καὶ σπόγγος μαλθακός, μέγας, ἐξ ὕδατος θερμοῦ ἐκπεπισμένος προστίθεσθαι περιστέγειν τε ἄνω τὴν θάλψιν χρῆ πλείῳ τε γὰρ χρόνον διαρκέσει καὶ παραμενεῖ, καὶ ἅμα ὡς μὴ ἢ ἀτμὶς πρὸς τὸ πνεῦμα τοῦ κάμνοντος προσφέρηται, ἦν ἄρα μὴ δοκέη καὶ

τοῦτο χρήσιμον πρὸς τι εἶναι ἔστι γὰρ ὅτε δεῖ πρὸς τι. Ἔτι δὲ καὶ κριθαὶ ἢ ὄροβοι ἐν ὄξει κεκρημένῳ σμικρῷ ὀξύτερον, ἢ ὡς ἂν τις πίσι, διέντα καὶ ἀναζέσαντα, ἐς μαρσίπια καταρράψαντα προστιθέναι καὶ πίτυρα τὸν αὐτὸν τρόπον. Πυρίη δὲ ξηρὴ, ἄλες, κέγχροι πεφρυγμένοι ἐν εἰρινέοισι μαρσιπίοισιν ἐπιτηδειότατοι καὶ γὰρ κοῦφον καὶ

προσηνὲς ὁ κέγχρος λύει δὲ μάλλαξις ἢ τοιήδε καὶ τὰς πρὸς κληῖδα περαιούσας ἀλγηδόνας. Τομὴ μέντοι γε οὐχ δμοίως λύει ὀδύνην, ἢν μὴ πρὸς τὴν κληῖδα περαίνη ἢ ὀδύνη. Ἦν δὲ μὴ λύηται πρὸς τὰ θερμάσματα ὁ πόνος, οὐ χρὴ πολὺν χρόνον θερμαίνειν καὶ γὰρ ξηραντικὸν τοῦ πλεύμονος τοῦτό ἐστι, καὶ ἐμπυητικὸν ἀλλ' ἢν μὲν σημαίνη ἢ ὀδύνη ἐς τὴν κληῖδα ἢ ἐς τὸν βραχίονα βάρος ἢ περὶ μαζὸν ἢ ὑπὲρ τῶν φρενῶν, τάμενιν χρὴ τὴν ἐν τῷ ἀγκῶνι φλέβα τὴν ἔσω, καὶ μὴ ὀκνέειν συχρὸν ἀφαιρέειν τὸ αἷμα ἕως ἂν ἐρυθρότερον πολλῷ ῥύῃ, ἀντὶ καθαροῦ τε καὶ ἐρυθροῦ

πελιὸν ἀμφοτέρω γὰρ γίγνεται. Ἦν δὲ ὑπὸ τὰς φρένας ἢ τὸ ἄλγημα, ἐς δὲ τὴν κληῖδα μὴ σημαίνη, μαλθάσσειν δεῖ τὴν κοιλίην, ἢ μέλανι ἐλλεβόρῳ ἢ πεπλίῳ, μέλανι μὲν δαῦκον ἢ σέσελι ἢ κύμινον ἢ ἄνησον ἢ ἄλλο τι τῶν εὐωδέων μίσγοντα, πεπλίῳ δὲ ὀπὸν σιλφίου ἀτὰρ καὶ μισγόμενα ἀλλήλοισιν ὁμοιότροπα ταῦτά ἐστιν. Ἄγει δὲ μέλας μὲν καλλίῳ καὶ κρισιμώτερα πεπλίῳ, πέπλιον δὲ μέλανος μᾶλλον φυσέων καταρρηκτικὸν ἐστὶν ἄμφω δὲ ταῦτα ὀδύνην παύει παύει δὲ καὶ ἄλλα πολλὰ τῶν ὑψηλάτων κράτιστα δὲ ταῦτα ὧν ἐγὼ οἶδα ἐστίν. Ἐπεὶ καὶ τὰ ἐν τοῖσι ῥοφήμασι

διδόμενα ὑπήλατα ἀρήγει, ὀκόσα μὴ ἄγαν ἐστὶν ἀηδέα ἢ διὰ πικρότητα ἢ δι' ἄλλην τινὰ ἀηδίην, ἢ διὰ πλῆθος ἢ χροίην ἢ ὑποψίην τινά. Τῆς μὲν πτισάνης, ὀκόταν πῆν τὸ φάρμακον, ἐπιρροφῆν αὐτίκα χρὴ διδόναι μηδὲν ἔλασσον ἀξίως λόγου ἢ ὀκόσον εἶθιστο ἐπεὶ καὶ κατὰ λόγον ἐστὶ μεσηγὺ τῆς καθάρσιος μὴ διδόναι ῥοφῆν ὀκόταν δὲ λήξη ἢ κάθαρσις, τότε ἔλασσον ῥοφεέτω ἢ ὀκόσον εἶθιστο μετὰ δὲ τοῦτο, ἀναγέτω αἰεὶ ἐπὶ τὸ πλεῖον, ἢν ἢ τε ὀδύνη πεπαυμένη ἢ, καὶ μηδὲν ἄλλο ἐναντιῶται. Ωὗτος δὲ μοι λόγος ἐστὶ, καὶ ἢν χυλῷ πνης δέη χρέεσθαι φημὶ γὰρ ἄμεινον εἶναι αὐτίκα ἄρξασθαι ῥοφῆν τὸ ἐπίπαν μᾶλλον, ἢ προκενεαγγήσαντα ἄρξασθαι τοῦ ῥοφήματος, ἢ τριταῖον,

ἢ τεταρταῖον, ἢ πεμπταῖον, ἢ ἐκταῖον, ἢ ἐβδομαῖον, ἢν γε μὴ προκριθῆ ἢ νοῦσος ἐν τουτέῳ τῷ χρόνῳ αἰ δὲ προπαρασκευαί καὶ ἐπὶ τουτέοισι παραπλήσιοι ποιητέαι, ὀκοῖαι εἴρηνται.

8. Περὶ μὲν οὖν ῥοφήματος προσάρσιος οὕτω γινώσκω ἀτὰρ καὶ περὶ ποτοῦ,

όκοιον ἄν τις μέλλη πίνειν τῶν γραφησομένων, οὗτός μοι λόγος ὡς ἐπίπαν ἐστίν. Οἶδα δὲ τοὺς ἰητροὺς τὰ ἐναντιώτατα ἢ ὡς δεῖ ποιέοντας βούλονται γὰρ πάντες, ὑπὸ τὰς ἀρχὰς τῶν νούσων προταριχεύσαντες τοὺς ἀνθρώπους ἢ δύο ἢ τρεῖς ἢ καὶ πλείονας ἡμέρας, οὕτω προσφέρειν τὰ ῥοφήματα καὶ τὰ ποτά καὶ ἴσως τι καὶ εἰκὸς δοκέει αὐτέοισιν εἶναι, μεγάλης μεταβολῆς γενομένης τῷ σώματι, μέγα τι κάρτα καὶ ἀντιμεταβάλλειν.

Τὸ δὲ μεταβάλλειν μὲν εὖ ἔχει μὴ ὀλίγον ὀρθῶς μέντοι ποιητέα καὶ βεβαίως ἢ μεταβολή, καὶ ἔκ γε τῆς μεταβολῆς ἢ πρόσαρσις τῶν γευμάτων ἔτι μᾶλλον. Μάλιστα μὲν οὖν βλάπτοντο ἄν, εἰ μὴ ὀρθῶς μεταβάλλοιεν, οἱ ὅλησι τῆσι πτισάνησι χρεόμενοι βλάπτοντο δ' ἄν καὶ οἱ μούνῳ τῷ χυλῷ χρεόμενοι βλάπτοντο δ' ἄν καὶ οἱ μούνῳ τῷ ποτῷ χρεόμενοι, ἥκιστα δ' ἄν οὗτοι.

9. Χρῆ δὲ καὶ τὰ μαθήματα ποιέεσθαι ἐν τῇ διαίτῃ τῶν ἀνθρώπων ἔτι ὑγιαινόντων, οἷα ζυμφέρει εἰ γὰρ δὴ τοῖσι γε

ὕγιαίνουσι φαίνεται διαφέροντα μεγάλα τὰ τοῖα ἢ τοῖα διαιτήματα καὶ ἐν ἄλλῳ τινί που καὶ ἐν τῆσι μεταβολῆσι, πῶς οὐχὶ καὶ ἐν γε τῆσι νούσοισι διαφέρει μέγала, καὶ τουτέων ἐν τῆσιν ὀξυτάτησι μέγιστα; Ἄλλὰ μὴν εὐκαταμάθητόν γε ἐστίν, ὅτι φαύλη δίαίτα βρώσιος καὶ πόσιος αὐτῇ ἐωυτῇ ἐμφορῆς αἰεὶ, ἀσφαλεστέρη ἐστὶ τὸ ἐπίπαν ἐς ὑγείην, ἢ εἴ τις ἐξαπίνης μέγα μεταβάλλοι ἐς ἄλλο. Ἐπεὶ καὶ τοῖσι δις σιτεόμενοις τῆς ἡμέρης καὶ τοῖσι μονοσιτέουσιν αἱ ἐξαπιναῖοι μεταβολαὶ βλαβὰς καὶ ἀρρωστίνην παρέχουσιν. Καὶ τοὺς μὲν γε μὴ

μεμαθηκότας ἀριστᾶν, εἰ ἀριστήσουσιν, εὐθέως ἀρρώστους ποιέει, καὶ βαρέας ὄλον τὸ σῶμα, καὶ ἀσθενέας καὶ ὀκνηροὺς ἦν δὲ καὶ ἐπιδειπνήσωσιν, ὀξυρεγμιώδεας ἐνίοισι δὲ καὶ σπατίλη γένοιτο ἄν, ὅτι παρὰ τὸ ἐωθὸς ἠχθοφόρηκεν ἢ κοιλίη εἰθισμένη ἐπιξηραίνεσθαι, καὶ μὴ δις διογκοῦσθαι, μήτε δις ἔσφειν τὰ σιτία. Ἀρήγει οὖν τουτέοισιν ἀνασηκῶσαι

τὴν μεταβολὴν ἐγκοιμηθῆναι γὰρ χρῆ, ὥσπερ νυκτα ἀγαγόντα μετὰ τὸ δεῖπνον, τοῦ μὲν χειμῶνος ἀρριγέως, τοῦ δὲ θέρεος ἀθαλπέως ἦν δὲ μὴ δύνηται καθεύδειν, βραδειν, συχνὴν περίοδον, πλανηθέντα, μὴ στασίμως, δειπνήσαι μηδὲν, ἢ ὀλίγα καὶ μὴ βλαβερά ἔτι δὲ ἔλασσον πιεῖν καὶ μὴ ὑδαρές. Ἔτι δ' ἄν μᾶλλον πονήσειεν ὁ τοιοῦτος, εἰ τρεῖς σιτέοιτο τῆς ἡμέρης ἐς κόρον ἔτι δὲ μᾶλλον, εἰ

πλεονάκις καίτοι γε πολλοὶ εἰσιν, οἱ εὐφόρως φέρουσι τρεῖς σιτεόμενοι τῆς ἡμέρης ἐς πλῆθος, οἱ ἄν οὕτως ἐθισθῶσιν. Ἄλλὰ μὴν καὶ οἱ μεμαθηκότες δις

σιτέεσθαι τῆς ἡμέρης, ἢν μὴ ἀριστήσωσιν, ἀσθενέες καὶ ἄρρωστοί εἰσι, καὶ δειλοὶ ἐς πᾶν ἔργον, καὶ καρδιαλγέες κρεμᾶσθαι γὰρ δοκέει τὰ σπλάγχνα αὐτέοισι, καὶ οὐρέουσι θερμὸν καὶ χλωρὸν, καὶ ἡ ἄφοδος ξυγκαίεται ἔστι δ' οἷσι καὶ τὸ στόμα πικραίνεται, καὶ οἱ ὀφθαλμοὶ κοιλαίνονται, καὶ οἱ κρόταφοι πάλλονται, καὶ τὰ

ἄκρα διαψύχονται καὶ οἱ μὲν πλεῖστοι τῶν ἀνηριστηκοτῶν οὐ δύνανται κατεσθίειν τὸ δεῖπνον δειπνήσαντες δὲ βαρύνουσι τὴν κοιλίην, καὶ δυσκοιτέουσι πούλῳ μᾶλλον ἢ εἰ προηριστήκεσαν. Ὅκότε οὖν ταῦτα τοιαῦτα γίνεταί τοῖσιν ὑγιαίνουσιν εἵνεκεν ἡμίσεος ἡμέρης διαίτης μεταβολῆς παρὰ τὸ ἔθος, οὔτε προσθεῖναι λυσιτελέειν φαίνεται, οὔτε ἀφελέειν. Εἰ τοίνυν οὗτος ὁ παρὰ τὸ ἔθος μονοσιτήσας, ὅλην ἡμέρην κενεαγγήσας, δειπνήσειεν ὀκόσον εἴθιστο, δειπνήσας δὲ, τότε βαρὺς ἦν, εἰκὸς αὐτὸν, εἰ, ὅτι ἀνάριστος ἐὼν ἐπόνεε καὶ ἡρρώστει, δειπνήσειε πλείῳ ἢ ὀκόσον εἴθιστο, πούλῳ

μᾶλλον βαρύνεσθαι εἰ δέ γε ἐπὶ πλείῳ χρόνον κενεαγγήσας

ἐξαπίνης μεταδειπνήσειν, ἔτι μᾶλλον ἂν βαρύνοιτο. Τὸν οὖν παρὰ τὸ ἔθος κενεαγγήσαντα ξυμφέρει ταύτην τὴν ἡμέρην ἀντισηκῶσαι ὧδε ἀρριγέως καὶ ἀθαλπέως καὶ ἀταλαιπώρως, ταῦτα γὰρ πάντα βαρέως ἂν ἐνέγκοι τὸ δὲ δεῖπνον συχῶ ἔλασσον ποιήσασθαι ἢ ὅσον εἴθιστο, καὶ μὴ ξηρὸν, ἀλλὰ τοῦ πλαδαρωτέρου τρόπου καὶ πιεῖν μὴ ὑδαρὲς, μηδ' ἔλασσον ἢ κατὰ λόγον βρώματος καὶ τῆ ὑστεραίῃ

ὀλίγα ἀριστήσαι, ὡς ἐκ προσαγωγῆς ἀφίκεται ἐς τὸ ἔθος. Αὐτοὶ μέντοι σφῶν αὐτῶν δυσφορώτερον δὴ τὰ τοιαῦτα φέρουσι οἱ πικρόχολοι τὰ ἄνω τὴν δέ γε ἀσιτίην τὴν παρὰ τὸ ἔθος οἱ φλεγματῖαι τὰ ἄνω εὐφορώτερον φέρουσι τὸ ἐπίπαν, ὥστε καὶ τὴν μονοσιτίην τὴν παρὰ τὸ ἔθος εὐφορώτερον ἂν οὔτοι ἐνέγκοιεν. Ἴκανὸν μὲν οὖν καὶ τοῦτο σημήϊον, ὅτι αἱ μέγιστα μεταβολαὶ τῶν περὶ τὰς φύσεως ἡμῶν καὶ τὰς ἕξιας ξυμβαινόντων μάλιστα νοσοποιέουσιν οὐ δὴ οἷόν τε παρὰ καιρὸν οὔτε σφοδρὰς τὰς κενεαγγείας ποιέειν, οὔτε ἀκμαζόντων τῶν νοσημάτων καὶ ἐν φλεγμασίῃ ἐόντων προσφέρειν, οὔτε ἐξαπίνης οἷόν τε ὅλω τῷ πρήγματι μεταβάλλειν οὔτε ἐπὶ τὰ οὔτε ἐπὶ τὰ.

10. Πολλὰ δ' ἂν τις ἠδελφισμένα τουτέοισι τῶν ἐς κοιλίην καὶ ἄλλα εἴποι, ὡς εὐφόρως μὲν φέρουσι τὰ βρώματα, ἃ εἰθισμένοι εἰσὶν, ἢν καὶ μὴ ἀγαθὰ ἦ φύσει, ὡσαύτως δὲ καὶ τὰ ποτὰ δυσφόρως δὲ φέρουσι τὰ βρώματα, ἃ μὴ εἰθισμένοι εἰσὶν, κῆν μὴ κακὰ ἦ, ὡσαύτως δὲ καὶ τὰ ποτὰ. Καὶ ὀκόσα μὲν κρηφαγίῃ πολλή παρὰ τὸ ἔθος βρωθεῖσα ποιέει, ἢ σκόροδα, ἢ σίλφιον ἢ ὀπὸς ἢ καυλὸς, ἢ ἄλλα

ὀκόσα τοιουτότροπα μεγάλας δυνάμιας ἔχοντα ἰδίας, ἦσσαν ἂν τις θαυμάσειεν, εἰ τὰ τοιαῦτα πόνους ἐμποίει τῆσι κοιλίησι μᾶλλον τῶν ἄλλων ἄλλ' εἰ καταμάθοις ὀκόσον μᾶζα ὄχλον καὶ ὄγκον καὶ φῦσαν καὶ στρόφον τῆ

κοιλίη παρέχει παρὰ τὸ ἔθος βρωθεῖσα τῷ μὴ μαζοφαγέειν εἰθισμένῳ, ἢ ὀκοῖον ἄρτος βάρος καὶ τάσιν κοιλίης τῷ μαζοφαγέειν εἰθισμένῳ ἢ αὐτός τε ὁ ἄρτος θερμὸς βρωθεὶς οἶην δίψαν παρέχει, καὶ ἔξαπιναίην πληθώρην διὰ τὸ ξηραντικόν τε καὶ βραδύπορον καὶ οἱ ἄγαν καθαροὶ τε καὶ ξυγκομιστοὶ παρὰ τὸ ἔθος βρωθέντες οἷα διαφέροντα ἀλλήλων ποιεῦσι καὶ μᾶζά τε ξηρὴ παρὰ τὸ ἔθος, ἢ ὑγρὴ, ἢ γλίσχρη καὶ τὰ ἄλφιστα οἷόν τι ποίει τὰ ποταίνια τοῖσι μὴ εἰωθόσι, καὶ τὰ ἕτεροῖα τοῖσι τὰ ποταίνια εἰωθόσι καὶ οἰνοποσίη καὶ ὑδροποσίη παρὰ τὸ ἔθος ἐς θάτερα μεταβληθέντα ἔξαπίνης, καὶ ὑδαρῆς τε οἶνος καὶ ἄκρητος παρὰ τὸ ἐνος ἔξαπίνης ποθεῖς ὁ μὲν γὰρ πλάδον τε ἐν τῇ ἄνω κοιλίη ἐμποίησει καὶ φῦσαν ἐν τῇ κάτω ὁ δὲ παλμόν

τε φλεβῶν καὶ καρηβαρίην καὶ δίψαν καὶ λευκος τε καιμέλας οἶνος παρὰ τὸ ἔθος μεταβάλλοντι, εἰ καὶ ἄμφω οἰνώδεες εἶεν, ὅμως πολλὰ ἂν ἕτεροιώσειαν κατὰ τὸ σῶμα, ὡς δὴ γλυκύν τε καὶ οἰνώδεα οἶνον ἦσσαν ἂν τις φαίη θαυμαστὸν εἶναι μὴ τούτῳ δύνασθαι ἔξαπίνης μεταβληθέντα.

11. Τιμωρητέον δὲ τοιόνδε τι μέρος τῷ ἐναντίῳ λόγῳ μεταβολὴ τῆς διαίτης τουτέοισιν ἐγένετο, οὐ μεταβάλλοντος τοῦ σώματος οὔτε ἐπὶ τὴν ῥώμην, ὥστε προσθέσθαι δεῖν σιτία, οὔτε ἐπὶ τὴν ἀρρωστήην, ὥστε ἀφαιρεθῆναι προστεκμαρτέα δὴ καὶ ἡ ἰσχὺς καὶ ὁ τρόπος τοῦ νουσήματος

ἐκάστου, καὶ τῆς φύσιος τοῦ ἀνθρώπου, καὶ τοῦ ἔθεος τῆς διαίτης τοῦ κάμνοντος, οὐ μόνον σιτίων, ἀλλὰ καὶ ποτῶν. Πολλῶ δὲ ἦσσαν ἐπὶ τὴν πρόσθεσιν ἰτέον ἐπεὶ τὴν γε ἀφαίρεσιν ὅλως ἀφελεῖν πολλαχοῦ λυσιτελέει, ὅκου διαρκέειν μέλλει ὁ κάμων, μέχρις ἂν τῆς νούσου ἢ ἀκμῆ πεπανθῆ ἐν ὀκοίοισι δὲ τὸ τοιόνδε ποιητέον γεγράφεται. Πολλὰ δ' ἂν τις καὶ ἄλλα ἠδελφισμένα τοῖσιν εἰρημένοισι γράφοι τὸ δὲ γε μὴν κρέσσον μαρτύριον οὐ γὰρ ἠδελφισμένον ἐστὶ τῷ πρήγματι, περὶ οὗ μοι ὁ πλεῖστος λόγος εἴρηται, ἀλλ' αὐτὸ τὸ πρήγμα ἐπικαιρότατόν ἐστι διδακτήριον οἱ γὰρ ἀρχόμενοι τῶν ὀξέων νουσημάτων ἔστιν ὅτε οἱ μὲν σιτία ἔφαγον

αὐθημερὸν ἠργμένοι ἤδη, οἱ δὲ καὶ τῆ ὑστεραίῃ, οἱ δὲ καὶ ἐρρόφειν τὸ προστυχόν, οἱ δὲ καὶ κυκεῶνα ἐρρόφειν ἅπαντα δὲ ταῦτα κακίῳ μὲν ἐστὶν ἢ εἰ ἕτεροίως τις διαιτηθεῖ πολλῶ μέντοι ἐλάσσῳ βλάβην φέρει ἐν τούτῳ τῷ χρόνῳ ἀμαρτηθέντα, ἢ εἴ τις τὰς μὲν πρώτας ἡμέρας δύο ἢ τρεῖς κενεαγγήσειε τελείως,

τεταρταῖος δὲ ἐὼν τοιάδε διαιτηθεῖη, ἢ καὶ πεμπταῖος ἔτι μέντοι κάκιον, εἰ ταύτας πάσας τὰς ἡμέρας προκενεαγγήσας, ἐν τῆσιν ὕστερον ἡμέρησιν οὕτω διαιτηθεῖη, πρὶν ἢ πέπειρον γενέσθαι τὴν νοῦσον οὕτω μὲν γὰρ θάνατον φέρει φανερώς τοῖσι πλείστοισιν, εἰ μὴ παντάπασιν εὐήθης ἢ νοῦσος εἴη. Αἱ δὲ κατ' ἀρχὰς ἅμα ἄδες οὐχ ὁμοίως ταύτησιν ἀνήκεστοί εἰσιν, ἀλλὰ πολλῶν εὐακεστότ εραι. Τοῦτο οὖν ἠγεῦμαι μέγιστον διδακτῆριον, ὅτι οὐ στερητέαι αἱ πρῶται ἡμέραι τοῦ ῥοφήματος ἢ τοίου ἢ τοίου

τοῖσι μέλλουσιν ὀλίγον ὕστερον ῥοφήμασιν ἢ τοίοισιν ἢ τοίοισι χρέεσθαι. Πυθμενόθεν μὲν οὖν οὐκ ἴσασιν οὐθ' οἱ τῆσι κριθώδεσι πτισάνησι χρεόμενοι, ὅτι αὐτέησι κακοῦνται, ὁκόταν ῥοφέειν ἄρξωνται, ἣν προκενεαγγήσωσι δύο ἢ τρεῖς ἡμέρας ἢ πλείους, οὗτ' αὖ οἱ τῶν χυλῶν χρεόμενοι γινώσκουσιν ὅτι αὐτέησι βλάπτονται ῥοφέοντες, ὅταν μὴ ὀρθῶς ἄρξωνται τοῦ ῥοφήματος. Τόδε γε μὴν καὶ φυλάσσουσι καὶ γινώσκουσιν, ὅτι μεγάλην τὴν βλάβην φέρει, ἣν, πρὶν πέπειρον τὴν νοῦσον γενέσθαι, κριθώδεα πτισάνην ῥοφήσῃ ὁ κάμων, εἰθισμένος χυλῶν χρέεσθαι. Πάντα οὖν ταῦτα μεγάλα μαρτύρια, ὅτι οὐκ ὀρθῶς ἄγουσιν ἐς τὰ διαιτήματα

οἱ ἰητροὶ τοὺς κάμνοντας ἀλλ' ἐν ἧσὶ τε νοῦσοισιν οὐ χρὴ κενεαγγέειν τοὺς μέλλοντας ῥοφήμασι διαιτᾶσθαι, κενεαγγέουσιν ἐν ἧσὶ τε οὐ χρὴ μεταβάλλειν ἐκ κενεαγγείης ἐς ῥοφήματα, ἐν ταύτησι μεταβάλλουσι καὶ ὡς ἐπιτοπολὺ ἀπαρτὶ ἐν τοῖσι τοιοῦτοισι καιροῖσι μεταβάλλουσιν ἐς

τὰ ῥοφήματα ἐκ τῆς κενεαγγείης, ἐν οἷσι πολλάκις ἀρήγει ἐκ τῶν ῥοφημάτων πλησιάζειν τῇ κενεαγγείῃ, ἣν οὕτω τύχη παροξυνομένη ἢ νοῦσος. Ἐνίοτε δὲ καὶ ὠμὰ ἐπισπῶνται ἀπὸ τῆς κεφαλῆς καὶ τοῦ περὶ τὸν θώρηκα τόπου χολώδεα ἀγρυπνία τε ξυνεπίπτουσιν αὐτέοισι, δι' ἃς οὐ πέσσειται ἢ νοῦσος, περίλυποί τε καὶ πικροὶ γίνονται, καὶ παραφρονέουσι, καὶ μαρμαρυγώδεα σφέων τὰ ὄμματα, καὶ αἱ ἀκοαὶ

ἤχου μεσταὶ, καὶ τὰ ἀκρωτήρια κατεψυγμένα, καὶ οὖρα ἄπεπτα, καὶ πτύσματα λεπτὰ καὶ ἀλυκὰ καὶ κεχρωσμένα ἀκρήτῳ χρώματι σμικρὰ, καὶ ἰδρῶτες περὶ τὸν τράχηλον, καὶ διαπορήματα, καὶ πνεῦμα προσπταῖον ἐν τῇ ἄνω φορῇ πυκνὸν ἢ μέγα λίην, ὀφρύες δεινώσιος μετέχουσαι, λειποψυχώδεα πονηρὰ, καὶ τῶν ἱματίων ἀπορρίψεις ἀπὸ τοῦ στήθεος, καὶ χεῖρες τρομώδεες, ἐνίοτε δὲ καὶ χεῖλος τὸ κάτω σείεται. Ταῦτα δὲ ἐν ἀρχῆσιν ἐπιφαινόμενα παραφροσύνης δηλωτικὰ ἐστὶ σφοδρῆς, καὶ ὡς ἐπιτοπολὺ ἀποθνήσκουσιν οἱ δὲ διαφεύγοντες, ἢ μετὰ ἀποστήματος, ἢ αἵματος ῥύσιος ἐκ τῆς ῥινός, ἢ πῦον παχὺ πτύσαντες διαφεύγουσιν, ἄλλως δὲ οὐ. Οὐδὲ γὰρ τῶν τοιουτέων ὀρέω ἐμπείρους

τοὺς ἰητροὺς, ὡς χρὴ διαγιγνώσκειν τὰς ἀσθενείας ἐν τῆσι νούσοισιν, αἱ τε διὰ κενεαγγεῖν ἀσθενεῦνται, αἱ τε δι' ἄλλον τινὰ ἐρεθισμὸν, αἱ τε διὰ πόνον καὶ ὑπὸ ὀξύτητος τῆς νόσου, ὁκόσα τε ἡμέων ἢ φύσις καὶ ἡ ἕξις ἐκάστοισιν ἐκτεκνοῖ πάθεα καὶ εἶδεα παντοῖα καίτοι σωτηρίην ἢ θάνατον φέρει γινωσκόμενα ἢ ἀγνοούμενα τὰ τοιαῦτα. Μέζον μὲν γὰρ κακὸν ἐστίν, ἦν διὰ τὸν πόνον καὶ τὴν ὀξύτητα τῆς νόσου ἀσθενέοντι προσφέρῃ τις ποτὸν ἢ ρόφημα πλεῖον ἢ σιτίον, οἰόμενος διὰ κενεαγγεῖν ἀσθενεῖν. Ἄεικὲς δὲ καὶ διὰ κενεαγγεῖν ἀσθενέοντα μὴ γνῶναι καὶ πιέζειν τῇ διαίτῃ φέρει μὲν γὰρ τινα κίνδυνον καὶ αὕτη ἢ ἀμαρτὰς, πολλῶ δὲ ἥσσονα τῆς ἐτέρης καταγελαστοτέρη δὲ πολλῶ αὕτη μᾶλλον ἢ ἀμαρτὰς τῆς ἐτέρης εἰ γὰρ ἄλλος ἰητρὸς ἢ καὶ ἰδιώτης

ἐσελθὼν, καὶ γνοὺς τὰ ξυμβεβηκότα, δώῃ καὶ φαγεῖν καὶ πιεῖν, ἃ ὁ ἕτερος ἐκώλυεν, ἐπιδήλως ἂν δοκοίη ὠφελικένοι. Τὰ δὲ τοιαῦτα μάλιστα καθυβρίζεται τῶν χειρωνακτέων ὑπὸ τῶν ἀνθρώπων δοκέει γὰρ αὐτέοισιν ὁ ἐσελθὼν ἰητρὸς ἢ ἰδιώτης ὡσπερὶ τεθνεῶτα ἀναστῆσαι. Γεγράφεται οὖν καὶ περὶ τουτέου σημήϊα οἷσι δεῖ ἕκαστα τουτέων διαγιγνώσκειν.

12. Παραπλήσια μέντοι τοῖσι κατὰ κοιλίην ἐστὶ καὶ ταῦτα καὶ γὰρ ἦν ὅλον τὸ σῶμα ἀναπαύσεται πούλῳ παρὰ τὸ ἔθος, οὐκ αὐτίκα ἔρρωται μᾶλλον ἦν δὲ δὴ καὶ πλείω χρόνον διελινύσαν ἐξαπίνης ἐς τοὺς πόνους ἔλθη, φλαυρόν τι πρήξειεν ἐπιδήλως. Οὕτω δὲ καὶ ἐν ἕκαστον τοῦ σώματος καὶ γὰρ οἱ πόδες τοιόνδε τι πρήξειαν, καὶ τὰ ἄλλα ἄρθρα

μὴ εἰθισμένα πονεῖν, ἦν διὰ χρόνου ἐξαπίνης πρὸς τὸ πονεῖν ἔλθη. Ταῦτα δ' ἂν καὶ οἱ ὀδόντες καὶ οἱ ὀφθαλμοὶ πάθοιεν, καὶ πᾶν ὅτιοῦν. Ἐπεὶ καὶ κοίτη παρὰ τὸ ἔθος μαλθακὴ πόνον ἐμποιέει, καὶ σκληρὴ παρὰ τὸ ἔθος, καὶ ὑπαιθρος εὐνή παρὰ τὸ ἔθος σκληρύνει τὸ σῶμα. Ἄτάρ καὶ τὰ τῶν τοιῶνδε πάντων ἀρκέει παραδείγματα γράψαι. Εἰ γὰρ τις ἔλκος λαβὼν ἐν κνήμῃ μήτε λίην ἐπίκαιρον μήτε λίην εὐηθες, μήτε ἄγαν εὐελκῆς ἐὼν, μήτε ἄγαν δυσελκῆς, αὐτίκα ἀρξάμενος ἐκ πρώτης κατακείμενος ἰητρεύοιτο, καὶ

μηδαμῆ μετεωρίζοι τὸ σκέλος, ἀφλέγμαντος μὲν ἂν οὕτως εἴη μᾶλλον, καὶ ὑγιῆς πολλῶ θᾶσσον ἂν γένοιτο, ἢ εἰ πλανώμενος ἰητρεύοιτο εἰ μέντοι πεμπταῖος ἢ ἐκταῖος ἐὼν ἢ καὶ ἔτι ἀνωτέρω, ἀναστὰς ἐθέλοι προβαίνειν, μᾶλλον ἂν πονέοι τότε ἢ αὐτίκα ἐξ ἀρχῆς πλανώμενος ἰητρεύοιτο εἰ δὲ καὶ πολλὰ ταλαιπωρήσειεν ἐξαπίνης, πολλῶ ἂν μᾶλλον πονήσειεν ἢ εἰ ἐκείνως ἰητρεύομενος

τὰ αὐτὰ ταῦτα ταλαιπωρήσειεν ἐν ταύτησι τῆσιν ἡμέρησιν. Διὰ τέλος οὖν μαρτυρεῖ ταῦτα πάντα ἀλλήλοισιν, ὅτι πάντα ἐξαπίνης μέζω πολλῶ τοῦ μετρίου

μεταβαλλόμενα ἐπὶ τὰ, καὶ ἐπὶ τὰ, βλάπτει. Πολλαπλασίη μὲν οὖν κατὰ κοιλίην ἢ βλάβη ἐστίν, ἣν ἐκ πολλῆς κενεαγγείης ἐξαπίνης πλέον τοῦ μετρίου προσαίρηται ἀτὰρ καὶ κατὰ τὸ

ἄλλο σῶμα, ἣν ἐκ πολλῆς ἡσυχίης ἐξαίφνης ἐς πλείω πόνον ἔλθοι, πούλῳ πλείω βλαβεῖή, ἢ εἰ ἐκ πολλῆς ἐδωδῆς ἐς κενεαγγεῖην μεταβάλλοι δεῖ μέντοι καὶ τὸ σῶμα τούτοιςιν

ἐλινύειν καὶ ἣν ἐκ πολλῆς ταλαιπωρίας ἐξαπίνης ἐς σχολήν τε καὶ ῥαθυμίην ἐμπέση, δεῖ δὲ καὶ τούτοιςιν τὴν κοιλίην ἐλινύειν ἐκ πλήθους βρώμης ἣν δὲ μὴ, πόνον ἐν τῷ σώματι ἐμποιήσει καὶ βάρος ὄλου τοῦ σώματος.

13. Ὁ δὴ οὖν πλεῖστός μοι λόγος γέγονε περὶ τῆς μεταβολῆς τῆς ἐπὶ τὰ καὶ ἐπὶ τὰ ἐς πάντα μὲν οὖν εὐχρηστον

ταῦτα εἰδέναι ἀτὰρ καὶ περὶ οὗ ὁ λόγος ἦν, ὅτι ἐν τῆσιν ὀξεῖησι νούσοισιν ἐς τὰ ῥοφήματα μεταβάλλουσιν ἐκ τῆς κενεαγγείης μεταβλητέον γὰρ ὡς ἐγὼ κελεύω ἔπειτα οὐ χρηστότερον ῥοφήμασι πρὶν ἢ νοῦσος πεπανθῆ, ἢ ἄλλο τι σημεῖον φανῆ, ἢ κατ' ἔντερον κενεαγγικόν, ἢ ἐρεθιστικόν, ἢ κατὰ τὰ ὑποχόνδρια, ὁκοῖα γεγράφεται. Ἀγρυπνίη ἰσχυρὴ πόμα καὶ σιτίον ἀπεπτότερα ποιεῖ, καὶ ἢ ἐπὶ τὰ

ἕτερα αὖ μεταβολὴ διαλύει σῶμα, καὶ ἐφθόγητα καὶ κα ῥηβαρίην ἐμποιεῖ.

14. Γλυκὺν δὲ οἶνον καὶ οἰνώδεα καὶ λευκὸν καὶ μέλανα, καὶ μελίκρητον, καὶ ὕδωρ, καὶ ὀξύμελι, τοισίδε σημαινόμενον χρὴ διορίζειν ἐν τῆσιν ὀξεῖησι νούσοισιν. Ὁ μὲν γλυκὺς ἦσσον ἐστὶ καρηβαρικὸς τοῦ οἰνώδεος, καὶ ἦσσον φρενῶν ἀπτόμενος, καὶ διαχωρητικώτερος δὴ τι τοῦ ἐτέρου κατ' ἔντερον, μεγαλόσπλαγχνος δὲ σπληνὸς καὶ ἥπατος οὐκ ἐπιτήδειος δὲ οὐδὲ τοῖσι πικροχόλοισι καὶ γὰρ οὖν διψώδης τοῖσι γε τοιουτέοισιν ἐστὶν ἀτὰρ καὶ φυσώδης τοῦ ἐντέρου τοῦ ἄνω οὐ μὴν πολέμιός γε τῷ ἐντέρῳ τῷ κάτω, ὡς κατὰ λόγον τῆς φύσης καίτοι γε οὐ πάνυ πορίμη ἐστὶν ἢ ἀπὸ τοῦ γλυκέος οἴνου φῦσα, ἀλλ' ἐγγρονίζει περὶ ὑποχόνδρια. Καὶ γὰρ οὖν

οὗτος ἦσσον διουρητικὸς γίνεταί τὸ ἐπίπαν τοῦ οἰνώδεος λευκοῦ πτυάλου δὲ μᾶλλον ἀναγωγός ἐστὶ τοῦ ἐτέρου ὁ γλυκὺς. Καὶ οἷσι μὲν διψώδης ἐστὶ πινόμενος, ἦσσον ἂν τούτοιςιν ἀνάγοι ἢ ὁ ἕτερος οἶνος, οἷσι δὲ μὴ διψώσης, μᾶλλον ἀνάγοι ἂν τοῦ ἐτέρου. Ὁ δὲ λευκὸς οἰνώδης οἶνος ἐπήνηται μὲν καὶ ἔψεκται τὰ πλεῖστα καὶ τὰ μέγιστα ἤδη ἐν τῇ τοῦ γλυκέος οἴνου διηγήσει ἐς δὲ κύστιν μᾶλλον πόριμος ἐὼν τοῦ ἐτέρου καὶ διουρητικὸς καὶ καταρρηκτικὸς, αἰεὶ πολλὰ προσωφελεῖ ἂν ἐν ταύτησι τῆσι νούσοισι καὶ γὰρ εἰ πρὸς ἄλλα



ἀνεπιτηδειότερος τοῦ ἑτέρου πέφυκεν, ἀλλ' ὅμως ἢ κατὰ κύστιν κάθαρσις ὑπ' αὐτέου γιγνομένη ρύεται, ἢν προτρέπηται ὀκοῖον δεῖ. Καλὰ δὲ ταῦτα τεκμήρια ἔστι τὰ περὶ οἴνου ὠφελίης καὶ βλάβης, ὀκόσα ἀκαταμάθητα ἦν τοῖσιν ἐμεῦ γεραιτέροισιν. Κιρρῶ δὲ οἴνω καὶ μέλανι αὐστηρῶ ἐν ταύτησι τῆσι νούσοισιν ἐς τὰδε ἂν χρήσαιο εἰ καρηβαρῖη

μὲν μὴ ἐνεΐη, μηδὲ φρενῶν ἄψις, μηδὲ τὸ πτύελον κωλύοιτο τῆς ἀνόδου, μηδὲ τὸ οὔρον ἴσχοιτο, τὰ διαχωρήματα δὲ πλαδαρότερα καὶ ξυσματωδέστερα εἶη, ἐν δὴ τοῖσι τοιούτοις πρέποι ἂν μάλιστα μεταβάλλειν ἐκ τοῦ λευκοῦ, καὶ ὀκόσα τουτέοισιν ἐμπερέα. Προσξυνιέναι δὲ δεῖ, ὅτι τὰ μὲν ἄνω πάντα καὶ τὰ κατὰ κύστιν ἦσσαν βλάβει, ἢν ὑδαρέστερος ἦ, τὰ δὲ κατ' ἔντερον μᾶλλον ὀνήσει, ἢν ἀκρητέστερος ἦ.

15. Μελίκρητον δὲ πινόμενον διὰ πάσης τῆς νούσου ἐν τῆσιν ὀξειήσιν νούσοισι τὸ ἐπίπαν μὲν τοῖσι πικροχόλοισι καὶ μεγαλοσπλάγγχοισιν ἦσσαν ἐπιτήδειον ἢ τοῖσι μὴ τοιούτοις ἔστιν διψῶδὲς γε μὴ ἦσσαν τοῦ γλυκέος οἴνου πλεύμονός τε γὰρ μαλθακτικόν ἔστι, καὶ πτυέλου ἀναγωγὸν μετρίως, καὶ βηχὸς παρηγορικόν ἔχει γὰρ σμηγματῶδὲς

τι, ὃ μᾶλλον τοῦ μετρίου καταγλισχραίνει τὸ πτύελον.

Ἔστι δὲ καὶ οὔρητικόν μελίκρητον ἱκανῶς, ἢν μὴ τι τῶν ἀπὸ σπλάγγχων κωλύη. Καὶ διαχωρητικώτερον δὲ κάτω χολωδέων, ἔστι μὲν ὅτε καλῶν, ἔστι δ' ὅτε κατακορεστέρων

μᾶλλον τοῦ καιροῦ, καὶ ἀφρωδεστέρων μᾶλλον δὲ τὸ τοιοῦτο τοῖσι χολώδεσί τε καὶ μεγαλοσπλάγγχοισι γίγνεται. Πτυάλου μὲν οὖν ἀναγωγὴν καὶ μονος μάλθαξιν τὸ ὑδαρέστερον μελίκρητον ποιέει μᾶλλον μέντοι ἀφρώδεα διαχωρήματα καὶ μᾶλλον τοῦ καιροῦ κατακορέως χολώδεα, καὶ μᾶλλον θερμὰ, τὸ ἀκρητον μᾶλλον τοῦ ὑδαρέος ἄγει τὸ δὲ τοιόνδε διαχώρημα ἔχει μὲν καὶ ἄλλα σίνεα μεγάλα οὔτε γὰρ ἐξ ὑποχονδρίων καῦμα σβεννύει, ἀλλὰ ὀρμᾶ, δυσφορίην τε καὶ ῥιπτασμὸν τῶν μελέων ποιέει, ἐλκῶδὲς τέ ἐστι καὶ ἐντέρου καὶ ἔδρης ἀλεξητήρια δὲ τουτέων γεγράφεται. Ἄνευ μὲν οὖν ῥοφημάτων μελικρήτω χρεόμενος ἀντ' ἄλλου ποτοῦ ἐν ταύτησι τῆσι νούσοισι πολλὰ ἂν εὐτυχοίης, καὶ οὐκ ἂν πολλὰ ἀτυχοίης οἷσι δὲ δοτέον, καὶ οἷσιν οὐ δοτέον, τὰ μέγιστα εἶρηται, καὶ δι' ἃ οὐ δοτέον Κατέγνωσται

δὲ μελίκρητον ὑπὸ τῶν ἀνθρώπων, ὡς καταγυιοῖ τοὺς πίνοντας, καὶ διὰ τοῦτο ταχυθάνατον εἶναι νενόμισται ἐκλήθη δὲ τοῦτο διὰ τοὺς ἀποκαρτερέοντας ἔνιοι

γὰρ μελικρήτω μούνω χρέονται ποτῶ, ὡς τοιούτω δῆθεν ἔοντι τὸ δὲ οὐ παντάπασιν ὧδε ἔχει ἀλλ' ὕδατος μὲν πολλῶ ἰσχυρότερόν ἐστι πινόμενον μούνον, εἰ μὴ ταράσσοι τὴν κοιλίην ἀτὰρ καὶ οἴνου λεπτοῦ καὶ ὀλιγοφόρου καὶ ἀνόσμου ἢ μὲν ἰσχυρότερον, ἢ δὲ ἀσθενέστερον.

Μέγα μὴν διαφέρει καὶ οἴνου καὶ μέλιτος ἀκρητότης ἐς ἰσχὺν ἀμφοτέρων δ' ὅμως τούτων, εἰ διπλάσιον μέτρον οἴνου ἀκρήτου πίνει τις ἢ ὀκόσον μέλι ἐκλείχῃ, πολλῶ ἂν δήπου ἰσχυρότερος εἴη ὑπὸ τοῦ μέλιτος, εἰ μούνον μὴ ταράσσοι τὴν κοιλίην πολλαπλάσιον γὰρ καὶ τὸ κόπριον διεξίῃ ἂν αὐτέῳ. Εἰ μέντοι ῥοφήματι χρέοιτο πτισάνη, ἐπιπίνει δὲ μελικρήτον, ἄγαν πλησμονῶδες ἂν εἴη καὶ φουσῶδες, καὶ τοῖσι κατὰ τὰ ὑποχόνδρια σπλάγχνοισιν ἀξύμφορον προπινόμενον μέντοι πρὸ ῥοφήματος μελικρήτον οὐ βλάπτει ὡς μεταπινόμενον, ἀλλὰ τι καὶ ὠφελέει. Ἐφθὸν δὲ μελικρήτον ἐσιδεῖν μὲν πολλῶ κάλλιον τοῦ ὠμοῦ λαμπρὸν γὰρ καὶ λεπτὸν καὶ λευκὸν καὶ διαφανὲς γίγνεται ἀρετὴν δὲ ἦντινα αὐτέῳ προσθέω διαφέρουσάν τι τοῦ ὠμοῦ οὐκ ἔχω οὐδὲ γὰρ ἥδιόν ἐστι τοῦ ὠμοῦ, ἦν τυγχάνη

γε τὸ μέλι καλὸν ἔόν ἀσθενέστερον μέντοι γε τοῦ ὠμοῦ καὶ ἀκοπρωδέστερόν ἐστιν ὧν οὐδετέρης τιμωρίας προσδέεται μελικρήτον. Ἄγχιστα δὲ χρηστέον αὐτέῳ τοιῶδε ἔοντι, εἰ τὸ μέλι τυγχάνῃ πονηρὸν ἔόν καὶ ἀκάθαρον καὶ μέλαν καὶ μὴ εὐῶδες ἀφέλοιτο γὰρ ἂν ἢ ἔψησις τῶν κακοτήτων αὐτέου τὰ πλείονα τοῦ αἵσχεος.

16. Τὸ δὲ ὀξύμελι καλούμενον ποτὸν πολλαχοῦ μὲν εὐχρηστον ἐν ταύτησι τῆσι νούσοισιν εὐρήσεις ἔόν καὶ γὰρ πτυάλου ἀναγωγὸν ἐστι, καὶ εὐπνοον. Καιροῦς μέντοι τοιούσδε ἔχει τὸ μὲν γὰρ κάρτα ὀξὺ οὐδὲν ἂν μέσον

ποιήσῃ πρὸς τὰ πτύελα τὰ μὴ ῥηϊδίως ἀνιόντα εἰ γὰρ ἀνάγοι μὲν τὰ ἐγκέρχοντα, καὶ ὄλισθον ἐμποιήσῃ, καὶ ὥσπερ διαπτερώσῃ τὸν βρόγχον, παρηγορήσῃ ἂν τὸν πλεύμονα μαλθακτικὸν γὰρ αὐτέου καὶ εἰ μὲν ταῦτα ξυγκυρήσῃ, μεγάλην ἂν ὠφελείην ποιήσῃ. Ἔστι δ' ὅτε τὸ κάρτα ὀξὺ οὐκ ἐκράτησε τῆς ἀναγωγῆς τοῦ πτυέλου, ἀλλὰ προσεγλίσχησεν τε καὶ ἔβλαψεν μάλιστα δὲ τοῦτο πάσχουσιν οἵπερ καὶ ἄλλως ὀλέθριοι εἰσι, καὶ

ἀδύνατοι βῆσσειν τε καὶ ἀποχρέμπεσθαι τὰ ἐνεχόμενα. Ἐς μὲν οὖν τόδε προστεκμαίρεσθαι χρὴ τὴν ῥώμην τοῦ κάμνοντος, κῆν ἐλπίδα ἔχη, διδόναι διδόναι δὲ, ἦν διδῶς, ἀκροχλίαιρον καὶ κατ' ὀλίγον τὸ τοιόνδε, καὶ μὴ λάβρως. Τὸ μέντοι ὀλίγον ἔποξυ ὑγραίνει μὲν τὸ στόμα καὶ φάρυγγα ἀναγωγὸν δὲ πτυέλου ἐστὶ καὶ ἄδιψον ὑποχονδρίῳ δὲ καὶ σπλάγχνοισι καὶ ταύτῃ εὐμένεσ καὶ

τάς ἀπὸ μέλιτος βλάβας κωλύει τὸ γὰρ χολῶδες ἐν μέλιτι κολάζεται. Ἔστι δὲ καὶ φυσῶν καταρρηκτικὸν, καὶ ἐς οὔρησιν προτρεπτικὸν ἐντέρου μέντοι τῷ κάτω μέρει πλαδαρώτερον,

καὶ ζύσματα ἐμποιέει ἔστι δ' ὅτε καὶ φλαῦρον τοῦτο ἐν τῆσιν ὀξειῆσι νούσοισι γίγνεται, μάλιστα μὲν ὅτι φῦσαν κωλύει περαιούσθαι, ἀλλὰ παλινδρομέειν ποιέει ἔτι δὲ καὶ ἄλλως γυιοῖ καὶ τὰ ἀκρωτήρια ψύχει ταύτην καὶ οἶδα μούνην δι' ὀξυμέλιτος γιγνομένην βλάβην, ἣτις καὶ ἀξίη γραφῆς. Ὀλίγον δὲ τὸ τοιόνδε ποτὸν νυκτὸς μὲν καὶ νήσται πρὸ ρόφηματος ἐπιτήδειον προπίνεσθαι ἀτὰρ καὶ ὀκόταν πούλῳ μετὰ ρόφημα ἢ, οὐδὲν κωλύει πίνειν. Τοῖσι δὲ ποτῷ μούνον διαιτωμένοισιν ἄνευ ροφημάτων διὰ τόδε οὐκ ἐπιτήδειόν ἐστιν αἰεὶ καὶ διὰ παντὸς χρέεσθαι

τούτῳ, μάλιστα μὲν διὰ ζύσιν ἢ τρηχυσμὸν τοῦ ἐντέρου ἀκόπρῳ γὰρ ἐόντι μᾶλλον ἐμποιέει ἄν, καὶ ταῦτα κενεαγγείης παρεούσης ἔπειτα δὲ καὶ τὸ μελίκρητον τῆς ἰσχύος ἀφαιρέοιτο ἄν. Ἦν μέντοι ἀρήγειν φαίνεται πρὸς τὴν ζύμπασαν νοῦσον, πολλῷ ποτῷ τούτῳ χρέεσθαι, ὀλίγον χρὴ τὸ ὄξος παραχέειν, ὅσον μούνον γινώσκεσθαι οὕτω γὰρ καὶ ἄ φιλέει βλάπτειν, ἥκιστα ἄν βλάπτοι, καὶ ἄ δεῖται προσωφελέειν, προσωφελοῖη ἄν. Ἐν κεφαλαίῳ δ'

εἶρησθαι, αἱ ἀπὸ ὀξέος ὀξύτητες πικροχόλοισι μᾶλλον ἢ μελαγχολικοῖσι ξυμφέρουσι τὰ μὲν γὰρ πικρὰ διαλύεται καὶ ἐκφλεγματοῦται, μετεωριζόμενα ὑπ' αὐτέου τὰ δὲ μέλανα ζυμοῦται καὶ μετεωρίζεται καὶ πολλαπλασιοῦται ἀναγωγὸν γὰρ μελάνων, ὄξος. Γυναιξὶ δὲ τὸ ἐπίπαν πολεμιώτερον ἢ ἀνδράσιν ὄξος ὑστεραλγὲς γὰρ ἐστιν.

17. Ὑδατι δὲ ποτῷ ἐν τῆσιν ὀξειῆσι νούσοισιν ἄλλο μὲν οὐδὲν ἔχω ἔργον ὃ τι προσθέω οὔτε γὰρ βηχὸς παρηγορικὸν ἐστιν ἐν τοῖσι περιπλευμονικοῖσιν, οὔτε πτυέλου ἀναγωγὸν, ἀλλ' ἦσσαν τῶν ἄλλων, εἴ τις διὰ παντὸς ὕδατι ποτῷ χρέοιτο. Μεσηγὺ μέντοι ὀξυμέλιτος καὶ μελικρήτου ὕδωρ ἐπιρροφεόμενον ὀλίγον πτυέλου ἀναγωγὸν ἐστὶ διὰ τὴν μεταβολὴν τῆς ποιότητος τῶν ποτῶν πλημμυρίδα γὰρ τινα ἐμποιέει. Ἄλλως δὲ οὔτε δίψαν παύει, ἀλλ' ἐπιπικραίνει χολῶδες γὰρ φύσει χολῶδει, καὶ ὑποχονδρίῳ κακὸν καὶ κάκιστον

έωυτοῦ καὶ χολωδέστατον καὶ φιλαδυναμώτατον, ὅταν ἐς κενεότητα ἐσέλθῃ καὶ σπληνὸς δὲ αὐξητικὸν καὶ ἥπατός ἐστιν, ὀκόταν πεπυρωμένον ἢ καὶ ἐγκλυδαστικὸν τε καὶ ἐπιπολαστικὸν βραδύπορόν τε γὰρ ἐστὶ διὰ τὸ ὑπόψυχρον καὶ ἄπεπτον εἶναι καὶ οὔτε διαχωρητικὸν, οὔτε διουρητικὸν προσβλάπτει δέ τι καὶ διὰ τόδε, ὅτι ἄκοπρόν ἐστι φύσει ἢν δὲ δὴ καὶ ποδῶν ψυχρῶν ποτε ἐόντων

ποθῆ, πάντα ταῦτα πολλαπλασίως βλάπτει, ἐς ὃ τι ἂν αὐτέων ὀρμήση. Ὑποπτέουσιν μέντοι ἐν ταύτησι τῆσι νούσοισιν ἢ καρηβαρίην ἰσχυρὴν ἢ φρενῶν ἄψιν, παντάπασιν οἴνου ἀποσχετέον ὕδατι δὲ ἐν τῷ τοιῷδε χρηστέον, ἢ ὕδαρέα καὶ κίρρον παντελῶς δοτέον οἶνον καὶ ἄοσμον

παντάπασιν, καὶ μετὰ τὴν πόσιν αὐτοῦ ὕδωρ μεταποτέον ὀλίγον οὕτω γὰρ ἂν ἦσσαν τὸ ἀπὸ τοῦ οἴνου μένος ἄπτοιτο τῆς κεφαλῆς καὶ γνώμης ἐν οἷσι δὲ μάλιστα αὐτέων ὕδατι ποτῶ χρηστέον, καὶ ὁκότε πολλῶ κάρτα, καὶ ὅκου μετρίῳ, καὶ ὅκου ψυχρῶ, καὶ ὅκου θερμῶ, τὰ μὲν που πρόσθεν εἰρέεται, τὰ δὲ ἐν αὐτέοισι τοῖσι καιροῖσι ῥηθήσεται. Κατὰ ταῦτα δὲ καὶ περὶ τῶν ἄλλων ποτῶν, οἶον τὸ κρίθινον, καὶ τὰ ἀπὸ χλοῖης ποιούμενα, καὶ τὰ ἀπὸ σταφίδος καὶ στεμφύλων καὶ πυρῶν

καὶ κνήκου καὶ μύρτων καὶ ροιῆς καὶ τῶν ἄλλων, ὅταν τινὸς αὐτέων καιρὸς ἦ χρέεσθαι, γεγράφεται παρ' αὐτέῳ τῷ νουσήματι, ὅκως περ καὶ τᾶλλα τῶν ξυνθέτων φαρμάκων.

18. Λουτρὸν δὲ συχοῖσι τῶν νουσημάτων ἀρήγοι ἂν χρεομένοισιν, ἐς τὰ μὲν ξυνεχέως, ἐς τὰ δ' οὐ. Ἔστι δὲ ὅτε ἦσσαν χρηστέον διὰ τὴν ἀπαρασκευασίην τῶν ἀνθρώπων ἐν ὀλίγησι γὰρ οἰκίησι παρεσκευάσται τὰ ἄρμενα καὶ οἱ θεραπεύοντες ὡς δεῖ εἰ δὲ μὴ παγκάλως λούοιτο, βλάπτοιτ' ἂν οὐ σμικρά καὶ γὰρ σκέπης ἀκάπνου δεῖ, καὶ ὕδατος δαψιλέος, καὶ τοῦ λουτροῦ συχοῦ καὶ μὴ λίην λάβρου, ἦν γε μὴ οὕτω δέη. Καὶ μᾶλλον μὲν μὴ σμήχεσθαι ἦν δὲ σμήχηται, θερμῶ χρέεσθαι αὐτέῳ καὶ πολλαπλασίῳ ἢ ὡς

νομίζεται σμήγματι, καὶ προσκαταχέεσθαι μὴ ὀλίγῳ, καὶ ταχέως μετακαταχέεσθαι. Δεῖ δὲ καὶ τῆς ὁδοῦ βραχείης ἐς τὴν πύελον, καὶ ἐς εὐέμβατον καὶ ἐς εὐέκβατον εἶναι δὲ καὶ τὸν λουόμενον κόσμιον καὶ σιγηλὸν, καὶ μηδὲν αὐτὸν προσεξεργάζεσθαι, ἀλλ' ἄλλους καὶ καταχέειν καὶ σμήχειν καὶ μετακέρασμα πολλὸν ἠτοιμᾶσθαι, καὶ τὰς ἐπαντλήσιας ταχείας ποιέεσθαι καὶ σπόγγοισι χρέεσθαι ἀντὶ στλεγγίδος, καὶ μὴ ἄγαν ξηρὸν χρίεσθαι τὸ σῶμα. Κεφαλὴν μέντοι ἀνεξηράνθαι χρὴ ὡς οἶόν τε μάλιστα ὑπὸ σπόγγου ἐκμασσομένην, καὶ μὴ διαψύχεσθαι τὰ ἄκρεα, μήτε τὴν

κεφαλὴν, μήτε τὸ ἄλλο σῶμα καὶ μήτε νεορρόφητον μήτε νεόποτον λούεσθαι, μηδὲ ῥοφέειν, μηδὲ πίνειν ταχὺ μετὰ τὸ λουτρὸν. Μέγα μὲν δὴ μέρος χρὴ νέμειν τῷ κάμνοντι, ἦν ὑγιαίνων ἢ φιλόλουτρος ἄγαν καὶ εἰθισμένος λούεσθαι καὶ γὰρ ποθέουσι μᾶλλον οἱ τοιοῖδε, καὶ ὠφελέονται λουσάμενοι, καὶ βλάπτονται μὴ λουσάμενοι. Ἀρμόζει δὲ ἐν περιπλευμονίησι μᾶλλον ἢ ἐν καύσοισι τὸ ἐπίπαν καὶ

γὰρ ὀδύνης τῆς κατὰ πλευρὴν καὶ στήθεα καὶ μετάφρενον παρηγορικόν ἐστὶ τὸ λουτρὸν, καὶ πτυέλου πεπαντικὸν καὶ ἀναγωγὸν, καὶ εὖπνοον καὶ ἄκοπον μαλθακτικὸν γὰρ καὶ ἄρθρων καὶ τοῦ ἐπιπολαίου δέρματος καὶ οὐρητικὸν δὲ, καὶ καρηβαρίην λύει, καὶ ῥίνας ὑγραίνει. Ἀγαθὰ μὲν οὖν λουτρῶ τοσαῦτα πάρεστιν, ὧν πάντων δεῖ ἢν μέντοι τῆς παρασκευῆς ἔνδειά τις ἢ ἐνὸς ἢ πλειόνων, κίνδυνος μὴ λυσιτελέειν

τὸ λουτρὸν, ἀλλὰ μᾶλλον βλάπτειν ἐν γὰρ ἕκαστον αὐτέων μεγάλην φέρει τὴν βλάβην, μὴ παρασκευασθὲν ὑπὸ τῶν ὑπουργῶν ὡς δεῖ. Ἦκιστα δὲ λούειν καιρὸς τούτους οἷσιν ἢ κοιλὴ ὑγροτέρη τοῦ καιροῦ ἐν τῆσι νούσοισιν ἀτὰρ οὐδὲ οἷσιν ἔστηκε μᾶλλον τοῦ καιροῦ καὶ μὴ προδιελήλυθεν οὐδὲ δὴ τοὺς γεγυιωμένους χρὴ λούειν, οὐδὲ τοὺς ἀσώδεας ἢ ἐμετικούς, οὐδὲ τοὺς ἐπανερευγομένους χολῶδες, οὐδὲ τοὺς ἐκ ῥινῶν αἰμορραγέοντας, εἰ μὴ ἔλασσον τοῦ καιροῦ ῥέοι τοὺς δὲ καιροὺς οἶδας ἢν δὲ ἔλασσον τοῦ καιροῦ ῥέοι, λούειν, ἢν τε ὅλον τὸ σῶμα πρὸς τὰ ἄλλα ἀρήγη, ἢν τε τὴν κεφαλὴν μῶνον. Ἦν οὖν αἶ τε παρασκευαὶ ἔωσιν ἐπιτήδειοι καὶ ὁ κάμων μέλλῃ εὖ δέξασθαι τὸ λουτρὸν, λούειν χρὴ ἐκάστης ἡμέρης τοὺς δὲ φιλολουτρέοντας

οὐδ' εἰ δις τῆς ἡμέρης λούοις, οὐδὲν ἂν βλάπτεις. Χρέεσθαι δὲ λουτροῖσι τοῖσιν ὄλησι πτισάνησι χρεομένοισι παραποῦλὸν μᾶλλον ἐνδέχεται, ἢ τοῖσι χυλῶ μῶνον χρεομένοισιν ἐνδέχεται δὲ καὶ τουτέοισιν ἐνίστε ἢκιστα δὲ καὶ τοῖσι ποτῶ μῶνον χρεομένοισιν ἔστι δὲ καὶ οἷσι τουτέων ἐνδέχεται τεκμαίρεσθαι δὲ χρὴ τοῖσι προγεγραμμένοισιν οὓς τε μέλλει λουτρὸν ὠφελῆειν ἐν ἐκάστοισι τῶν τρόπων τῆς διαίτης, οὓς τε μή. Οἷσι μὲν γὰρ προσδέεται

τινος κάρτα τουτέων, ὀκόσα λουτρὸν ἀγαθὰ ποιέει, καὶ πρόσεστιν αὐτέοισιν ὅσα ἂν λουτρῶ ὠφελῆται, δεῖ λούειν οἷσι δὲ τουτέων

μηδενὸς προσδεῖ, καὶ πρόσεστιν αὐτέοισι τῶν σημείων ἐφ' οἷσι λούεσθαι οὐ συμφέρει, οὐ δεῖ λούειν.

## ON AIRS, WATERS, AND PLACES - Περὶ ἀέρων, ὑδάτων, τόπων

1. Ἴητρικὴν ὅστις βούλεται ὀρθῶς ζητεῖν, τάδε χρὴ ποιεῖν· πρῶτον μὲν ἐνθυμεῖσθαι τὰς ὥρας τοῦ ἔτεος, ὅτι δύναται ἀπεργάζεσθαι ἐκάστη· οὐ γὰρ εἰκόσιν ἀλλήλοισιν οὐδέν, ἀλλὰ πολὺ διαφέρουσιν αὐταί τε ἐφ' ἐωτέων καὶ ἐν τῆσι μεταβολῆσιν· ἔπειτα δὲ τὰ πνεύματα τὰ θερμά τε καὶ τὰ ψυχρά, μάλιστα μὲν τὰ κοινὰ πᾶσιν ἀνθρώποισιν, ἔπειτα δὲ καὶ τὰ ἐν ἐκάστη χώρῃ ἐπιχώρια ἔοντα. δεῖ δὲ καὶ τῶν ὑδάτων ἐνθυμεῖσθαι τὰς δυνάμιας· ὡσπερ γὰρ ἐν τῷ στόματι διαφέρουσι καὶ ἐν τῷ σταθμῷ, οὕτω καὶ ἡ δύναμις διαφέρει πολὺ ἐκάστου. ὥστε ἐς πόλιν ἐπειδὴν ἀφίκηται τις, ἥς ἄπειρός ἐστι, διαφροντίσαι χρὴ τὴν θέσιν αὐτῆς, ὅπως κεῖται καὶ πρὸς τὰ πνεύματα καὶ πρὸς τὰς ἀνατολάς τοῦ ἡλίου. οὐ γὰρ τούτῳ δύναται ἦτις πρὸς βορέην κεῖται καὶ ἦτις πρὸς νότον οὐδ' ἦτις πρὸς ἥλιον ἀνίσχοντα οὐδ' ἦτις πρὸς δύνοντα. ταῦτα δὲ χρὴ ἐνθυμεῖσθαι ὡς κάλλιστα καὶ τῶν ὑδάτων περὶ ὡς ἔχουσι, καὶ πότερον ἐλώδεσι χρέονται καὶ μαλθακοῖσιν ἢ σκληροῖσί τε καὶ ἐκ μετεώρων καὶ πετρωδέων εἴτε ἀλυκοῖσι καὶ ἀτεράμνοισιν· καὶ τὴν γῆν, πότερον ψιλὴ τε καὶ ἄνυδρος ἢ δασεῖα καὶ ἔφυδρος καὶ εἴτε ἔγκοιλος ἐστὶ καὶ πνιγερὴ εἴτε μετέωρος καὶ ψυχρὴ· καὶ τὴν δίαιταν τῶν ἀνθρώπων, ὅκοι ἢ ἡδονταί, πότερον φιλοπόται καὶ ἀριστηταί καὶ ἀταλαίπωροι ἢ φιλογυμνασταί τε καὶ φιλόπονοι καὶ ἐδωδοὶ καὶ ἄποτοι.

2. Καὶ ἀπὸ τούτων χρὴ ἐνθυμεῖσθαι ἕκαστα. εἰ γὰρ ταῦτα εἰδείη τις καλῶς, μάλιστα μὲν πάντα, εἰ δὲ μὴ, τά γε πλεῖστα, οὐκ ἂν αὐτὸν λανθάνοι ἐς πόλιν ἀφικνεόμενον, ἥς ἂν ἄπειρος ἦ, οὔτε νοσήματα ἐπιχώρια οὔτε τῶν κοινῶν ἢ φύσις, ὅκοι τις ἐστίν· ὥστε μὴ ἀπορεῖσθαι ἐν τῇ θεραπείῃ τῶν νούσων μηδὲ διαμαρτάνειν· ἃ εἰκός ἐστι γίνεσθαι, ἢν μὴ τις ταῦτα πρότερον εἰδῶς προφροντίσῃ περὶ ἐκάστου· τοῦ δὲ χρόνου προϊόντος καὶ τοῦ ἐνιαυτοῦ λέγοι ἂν, ὅκοσα τε νοσήματα μέλλει πάγκοινα τὴν πόλιν κατασχέσειν ἢ θέρεος ἢ χειμῶνος, ὅκοσα τε ἴδια ἐκάστῳ κίνδυνος γίνεσθαι ἐκ μεταβολῆς τῆς διαίτης. εἰδῶς γὰρ τῶν ὥρέων τὰς μεταβολὰς καὶ τῶν ἄστρων τὰς ἐπιτολάς τε καὶ δύσιας, καθότι ἕκαστον τούτων γίνεται, προειδείη ἂν τὸ ἔτος ὅκοιόν τι μέλλει γίνεσθαι. οὕτως ἂν τις ἐννοεῦμενος καὶ προγινώσκων τοὺς καιροὺς μάλιστ' ἂν εἰδείη περὶ ἐκάστου καὶ τὰ πλεῖστα τυγχάνοι τῆς ὑγιείης καὶ κατορθοῖα οὐκ ἐλάχιστα ἐν τῇ τέχνῃ. εἰ δὲ δοκέοι τις ταῦτα μετεωρολόγια εἶναι, εἰ μετασταίη τῆς γνώμης, μάθοι ἂν, ὅτι οὐκ ἐλάχιστον μέρος συμβάλλεται ἀστρονομίῃ ἐς ἰητρικὴν, ἀλλὰ πάνυ πλεῖστον. ἅμα γὰρ τῆσιν ὥρησι καὶ αἰ νοῦσοι καὶ αἰ κοιλίαι μεταβάλλουσιν τοῖσιν ἀνθρώποισιν.

3. Ὅκως δὲ χρὴ ἕκαστα τῶν προειρημένων σκοπεῖν καὶ βασανίζειν, ἐγὼ φράσω σαφέως. ἦτις μὲν πόλις πρὸς τὰ πνεύματα κεῖται τὰ θερμά — ταῦτα δ' ἐστὶ μεταξὺ τῆς τε χειμερινῆς ἀνατολῆς τοῦ ἡλίου καὶ τῶν δυσμέων τῶν χειμερινῶν — καὶ αὐτῇ ταῦτα τὰ πνεύματά ἐστι σύννομα, τῶν δὲ ἀπὸ τῶν ἄρκτων πνευμάτων σκέπη, ἐν ταύτῃ τῇ πόλει ἐστὶ τὰ τε ὕδατα πολλὰ καὶ ὕφαλα, καὶ ἀνάγκη εἶναι μετέωρα, τοῦ μὲν θέρεος θερμά, τοῦ δὲ χειμῶνος ψυχρά· τούς τε ἀνθρώπους τὰς κεφαλὰς ὑγρὰς ἔχειν καὶ φλεγματούδεας, τὰς τε κοιλίας αὐτῶν πυκνὰ ἐκταράσσεσθαι ἀπὸ τῆς κεφαλῆς τοῦ φλέγματος ἐπικαταρρέοντος· τὰ τε εἶδεα ἐπὶ τὸ πλῆθος αὐτῶν ἀτονώτερα εἶναι· ἐσθίειν δ' οὐκ ἀγαθοὺς εἶναι οὐδὲ πίνειν. ὀκόσοι μὲν γὰρ κεφαλὰς ἀσθενέας ἔχουσιν, οὐκ ἂν εἴησαν ἀγαθοὶ πίνειν· ἢ γὰρ κραιπάλη μᾶλλον πέζει. νοσήματά τε τάδε ἐπιχώρια εἶναι· πρῶτον μὲν τὰς γυναῖκας νοσερὰς καὶ ροώδεας εἶναι· ἔπειτα πολλὰς ἀτόκους ὑπὸ νοῦσου καὶ οὐ φύσει ἐκτιτρώσκεσθαι τε πυκνὰ· τοῖσί τε παιδίοισιν ἐπιπίπτειν σπασμούς τε καὶ ἄσθματα καὶ ἂ νομίζουσι τὸ παιδίον ποιεῖν καὶ ἱερὴν νοῦσον εἶναι· τοῖσι δὲ ἀνδράσι δυσεντερίας καὶ διαρροίας καὶ ἠπιάλους καὶ πυρετοὺς πολυχρονίους χειμερινούς καὶ ἐπινυκτίδας πολλὰς καὶ αἰμορροΐδας ἐν τῇ ἔδρῃ. πλευρίτιδες δὲ καὶ περιπνευμονίαι καὶ καῦσοι καὶ ὀκόσα ὀξέα νοσήματα νομίζονται εἶναι οὐκ ἐγγίνονται πολλὰ. οὐ γὰρ οἶόν τε, ὅκου ἂν κοιλίαι ὑγραὶ ἔωσι, τὰς νοῦσους ταύτας ἰσχύειν. ὀφθαλμίαι τε ἐγγίνονται ὑγραὶ καὶ οὐ χαλεπαί, ὀλιγοχρόνιοι, ἦν μὴ τι κατάσχη νόσημα πάγκοινον ἐκ μεταβολῆς μεγάλης. καὶ ὀκόταν τὰ πεντήκοντα ἔτεα ὑπερβάλωσι, κατάρροοι ἐπιγενόμενοι ἐκ τοῦ ἐγκεφάλου παραπληκτικούς ποιέουσι τοὺς ἀνθρώπους, ὀκόταν ἐξαίφνης ἠλιωθέωσι τὴν κεφαλὴν ἢ ῥιγώσωσι. ταῦτα μὲν τὰ νοσήματα αὐτοῖσιν ἐπιχώριά ἐστι. χωρὶς δέ, ἦν τι πάγκοινον κατάσχη νόσημα ἐκ μεταβολῆς τῶν ὠρέων, καὶ τούτου μετέχουσιν.

4. Ὅκόσαι δ' ἀντικέονται τούτων πρὸς τὰ πνεύματα τὰ ψυχρὰ τὰ μεταξὺ τῶν δυσμέων τῶν θερινῶν τοῦ ἡλίου καὶ τῆς ἀνατολῆς τῆς θερινῆς, καὶ αὐτῆσι ταῦτα τὰ πνεύματα ἐπιχώριά ἐστι, τοῦ δὲ νότου καὶ τῶν θερμῶν πνευμάτων σκέπη, ὧδε ἔχει περὶ τῶν πολίων τούτων· πρῶτον μὲν τὰ ὕδατα σκληρὰ τε καὶ ψυχρὰ ὡς ἐπὶ τὸ πλῆθος ἐγγίνεται. τοὺς δὲ ἀνθρώπους εὐτόνους τε καὶ σκελιφροὺς ἀνάγκη εἶναι, τοὺς τε πλείους τὰς κοιλίας ἀτεράμους ἔχειν καὶ σκληρὰς τὰς κάτω, τὰς δὲ ἄνω εὐρωτέρας· χολώδεάς τε μᾶλλον ἢ φλεγματίας εἶναι. τὰς δὲ κεφαλὰς ὑγιερὰς ἔχουσι καὶ σκληρὰς· ῥηγματίαι τέ εἰσιν ἐπὶ τὸ πλῆθος. νοσεύματα δὲ αὐτοῖσιν ἐπιδημεῖ τάδε· πλευρίτιδές τε πολλὰ αἶ τε ὀξεῖαι νομιζόμεναι νοῦσοι. ἀνάγκη δὲ ὧδε ἔχειν, ὀκόταν αἱ κοιλίαι σκληραὶ ἔωσιν· ἔμπυοί τε πολλοὶ γίνονται ἀπὸ πάσης προφάσιος. τούτου δὲ αἰτίον ἐστὶ τοῦ σώματος ἢ ἔντασις καὶ ἢ σκληρότης τῆς κοιλίης. ἢ γὰρ ξηρότης ῥηγματίας ποιεῖ εἶναι καὶ τοῦ ὕδατος ἢ ψυχρότης. ἐδωδούς δὲ ἀνάγκη τὰς τοιαύτας φύσιαι εἶναι καὶ οὐ πολυπότας· οὐ

γὰρ οἷόν τε ἅμα πολυβόρους τε εἶναι καὶ πολυπότας· ὀφθαλμίας τε γίνεσθαι μὲν διὰ χρόνου, γίνεσθαι δὲ σκληρὰς καὶ ἰσχυράς, καὶ εὐθέως ῥήγνυσθαι τὰ ὄμματα· αἱμορροίας δὲ ἐκ τῶν ῥινῶν τοῖσι νεωτέροισι τριήκοντα ἔτεων γίνεσθαι ἰσχυρὰς τοῦ θέρους· τὰ τε ἱερὰ νοσεύματα καλούμενα, ὀλίγα μὲν ταῦτα, ἰσχυρὰ δέ· μακροβίους δὲ τοὺς ἀνθρώπους τούτους μᾶλλον εἰκὸς εἶναι τῶν ἐτέρων· τὰ τε ἔλκεα οὐ φλεγματώδεα ἐγγίνεσθαι οὐδὲ ἀγριοῦσθαι· τὰ τε ἥθεα ἀγριώτερα ἢ ἡμερώτερα· τοῖσι μὲν ἀνδράσι ταῦτα τὰ νοσήματα ἐπιχώρια ἐστὶ· καὶ χωρὶς, ἦν τι πάγκοινον κατάσχη ἐκ μεταβολῆς τῶν ὠρέων· τῆσι δὲ γυναιξί· πρῶτον μὲν στερίφαι πολλαὶ γίνονται διὰ τὰ ὕδατα ἐόντα σκληρὰ τε καὶ ἀτέραμνα καὶ ψυχρά· αἱ γὰρ καθάρσιες οὐκ ἐπιγίνονται τῶν ἐπιμηνίων ἐπιτήδεια, ἀλλὰ ὀλίγαι καὶ πονηραί· ἔπειτα τίκτουσι χαλεπῶς· ἐκτιτρώσκουσι δὲ οὐ σφόδρα· ὀκόταν δὲ τέκωσι, τὰ παιδιά ἀδύνατοι τρέφειν εἰσὶ· τὸ γὰρ γάλα ἀποσβέννυται ἀπὸ τῶν ὑδάτων τῆς σκληρότητος καὶ ἀτεραμνίης· φθισιές τε γίνονται συχναὶ ἀπὸ τῶν τοκετῶν· ὑπὸ γὰρ βίης ῥήγματα ἴσχουσι καὶ σπάσματα· τοῖς δὲ παιδίοισιν ὕδρωπες ἐγγίνονται ἐν τοῖσιν ὄρχεσιν, ἕως μικρὰ ἢ· ἔπειτα προϊούσης τῆς ἡλικίης ἀφανί ζονται· ἠβῶσί τε ὀψὲ ἐν ταύτῃ τῇ πόλει.

5. Περὶ μὲν οὖν τῶν θερμῶν πνευμάτων καὶ τῶν ψυχρῶν καὶ τῶν πολίων τούτων ὧδε ἔχει ὡς προείρηται· ὀκόσαι δὲ κέονται πρὸς τὰ πνεύματα τὰ μεταξὺ τῶν θερινῶν ἀνατολέων τοῦ ἡλίου καὶ τῶν χειμερινῶν καὶ ὀκόσαι τὸ ἐναντίον τούτων, ὧδε ἔχει περὶ αὐτέων· ὀκόσαι μὲν πρὸς τὰς ἀνατολάς τοῦ ἡλίου κέονται, ταύτας εἰκὸς εἶναι ὑγιεινοτέρας τῶν πρὸς τὰς ἄρκτους ἐστραμμένων καὶ τῶν πρὸς τὰ θερμά, ἦν καὶ στάδιον τὸ μεταξὺ ἢ· πρῶτον μὲν γὰρ μετριώτερον ἔχει τὸ θερμὸν καὶ τὸ ψυχρόν· ἔπειτα τὰ ὕδατα, ὀκόσα πρὸς τὰς τοῦ ἡλίου ἀνατολάς ἐστὶ, ταῦτα λαμπρά τε εἶναι ἀνάγκη καὶ εὐώδεα καὶ μαλθακὰ καὶ ἐρατεινὰ ἐγγίνεσθαι ἐν ταύτῃ τῇ πόλει· ὁ γὰρ ἥλιος κωλύει ἀνίσχων καὶ καταλάμπων· τὸ γὰρ ἐωθινὸν ἐκάστοτε αὐτὸς ὁ ἡῆρ ἐπέχει ὡς ἐπὶ τὸ πολὺ· τὰ τε εἶδεα τῶν ἀνθρώπων εὐχροά τε καὶ ἀνθηρά ἐστὶ μᾶλλον ἢ ἄλλη ἦν μὴ τις νοῦσος κωλύη· λαμπρόφωνοί τε οἱ ἄνθρωποι ὀργήν τε καὶ σύνεσιν βελτίους εἰσὶ τῶν προσβορείων, ἥπερ καὶ τὰ ἄλλα τὰ ἐμφυόμενα ἀμείνω ἐστίν· ἔοικέ τε μάλιστα ἢ οὕτω κειμένη πόλις ἦρι κατὰ τὴν μετριότητα τοῦ θερμοῦ καὶ τοῦ ψυχροῦ· τὰ τε νοσεύματα ἐλάσσω μὲν γίνεται καὶ ἀσθενέστερα, ἔοικε δὲ τοῖς ἐν τῆσι πόλεσι γενομένοις νοσεύμασι τῆσι πρὸς τὰ θερμὰ πνεύματα ἐστραμμένῃσιν· αἱ τε γυναικες αὐτόθι ἀρικούμονές εἰσι σφόδρα καὶ τίκτουσι ῥηϊδίως.

6. Περὶ μὲν τούτων ὧδε ἔχει· ὀκόσαι δὲ πρὸς τὰς δύσιας κεῖνται καὶ αὐτῆσιν ἐστὶ σκέπη τῶν πνευμάτων τῶν ἀπὸ τῆς ἠοῦς πνεόντων τὰ τε θερμὰ πνεύματα παραρρεῖ καὶ τὰ ψυχρὰ ἀπὸ τῶν ἄρκτων, ἀνάγκη ταύτας τὰς πόλιας θέσιν κεῖσθαι νοσερωτάτην· πρῶτον μὲν γὰρ τὰ ὕδατα οὐ λαμπρά· αἴτιον δέ, ὅτι ὁ ἡῆρ



τὸ ἐωθινὸν κατέχει ὡς ἐπὶ τὸ πολὺ, ὅστις τῷ ὕδατι ἐγκαταμιγνύμενος τὸ λαμπρὸν ἀφανίζει· ὁ γὰρ ἥλιος πρὶν ἄνω ἀρθῆναι οὐκ ἐπιλάμπει. τοῦ δὲ θέρεος ἔωθεν μὲν αὔραι ψυχραὶ πνέουσι καὶ δρόσοι πίπτουσι· τὸ δὲ λοιπὸν ἥλιος ἐγκαταδύνων ὥστε μάλιστα διέψει τοὺς ἀνθρώπους, διὸ καὶ ἀχρόους τε εἰκὸς εἶναι καὶ ἀρρώστους, τῶν τε νοσευμάτων πάντων μετέχειν μέρος τῶν προειρημένων· οὐδὲν γὰρ αὐτοῖς ἀποκέκριται. βαρυφώνους τε εἰκὸς εἶναι καὶ βραγχώδεας διὰ τὸν ἥερα, ὅτι ἀκάθαρτος ὡς ἐπὶ τὸ πολὺ αὐτόθι γίνεται καὶ νοσώδης· οὔτε γὰρ ὑπὸ τῶν βορείων ἐκκρίνεται σφόδρα· οὐ γὰρ προς ἔχουσι τὰ πνεύματα· ἃ τε προσέχουσιν αὐτοῖσι καὶ πρόσκεινται ὑδατεινότητά ἐστιν· ἐπεὶ τοιαῦτα τὰ ἀπὸ τῆς ἐσπέρης πνεύματα· ἔοικέν τε μετοπώρῳ μάλιστα ἢ θέσις ἢ τοιαύτη τῆς πόλιος κατὰ τὰς τῆς ἡμέρης μεταβολάς, ὅτι πολὺ τὸ μέσον γίνεται τοῦ τε ἐωθινοῦ καὶ τοῦ πρὸς τὴν δείλην.

7. Περὶ μὲν πνευμάτων, ἃ τέ ἐστιν ἐπιτήδεια καὶ ἀνεπιτήδεια, ὧδε ἔχει. περὶ δὲ τῶν λοιπῶν ὑδάτων βούλομαι διηγήσασθαι, ἃ τέ ἐστὶ νοσώδεα καὶ ἃ ὑγιεινότεα καὶ ὀκόσα ἀφ' ὕδατος κακὰ εἰκὸς γίνεσθαι καὶ ὅσα ἀγαθὰ. πλεῖστον γὰρ μέρος συμβάλλεται ἐς τὴν ὑγιείην. ὀκόσα μὲν οὖν ἐστὶν ἐλώδεα καὶ στάσιμα καὶ λιμναῖα, ταῦτα ἀνάγκη τοῦ μὲν θέρεος εἶναι θερμὰ καὶ παχέα καὶ ὀδμὴν ἔχοντα, ἅτε οὐκ ἀπόρρυτα ἐόντα· ἀλλὰ τοῦ τε ὀμβρίου ὕδατος ἐπιφερομένου αἰεὶ νέου τοῦ τε ἡλίου καίοντος ἀνάγκη ἄχροά τε εἶναι καὶ πονηρὰ καὶ χολώδεα, τοῦ δὲ χειμῶνος παγετώδεά τε καὶ ψυχρὰ καὶ τεθολωμένα ὑπὸ τε χιόνος καὶ παγετῶν, ὥστε φλεγματοδέστατα εἶναι καὶ βραγχωδέστατα. τοῖσι δὲ πίνουσι σπλῆνας μὲν αἰεὶ μεγάλους εἶναι καὶ μεμωμένους καὶ τὰς γαστέρας σκληράς τε καὶ λεπτάς καὶ θερμάς, τοὺς δὲ ὠμούς καὶ τὰς κληῖδας καὶ τὸ πρόσωπον καταλελεπτύσθαι· ἐς γὰρ τὸν σπλῆνα αἱ σάρκες συντήκονται, διότι ἰσχυροὶ εἰσιν· ἐδωδούς τε εἶναι τοὺς τοιούτους καὶ διηηρούς· τὰς τε κοιλίας ξηροτάτας τε καὶ θερμοτάτας καὶ τὰς ἄνω καὶ τὰς κάτω ἔχειν, ὥστε τῶν φαρμάκων ἰσχυροτέρων δεῖσθαι. τοῦτο μὲν τὸ νόσημα αὐτοῖσι σύντροφόν ἐστι καὶ θέρεος καὶ χειμῶνος. πρὸς δὲ τούτοις οἱ ὕδρωπες πλεῖστοί τε γίνονται καὶ θανατωδέστατοι. τοῦ γὰρ θέρεος δυσεντερίαί τε πολλαὶ ἐμπίπτουσι καὶ διάρροιαί καὶ πυρετοὶ τεταρταῖοι πολυχρόνιοι. ταῦτα δὲ τὰ νοσεύματα μηκυνθέντα τὰς τοιαύτας φύσις ἐς ὕδρωπας καθίστησι καὶ ἀποκτείνει. ταῦτα μὲν αὐτοῖσι τοῦ θέρεος γίνεται. τοῦ δὲ χειμῶνος τοῖσι νεωτέροις μὲν περιπνευμονία τε καὶ μανιώδεα νοσεύματα, τοῖσι δὲ πρεσβυτέροις καῦσοι διὰ τὴν τῆς κοιλίας σκληρότητα. τῆσι δὲ γυναιξὶν οἰδήματα ἐγγίνεται καὶ φλέγμα λευκόν, καὶ ἐν γαστρὶ ἴσχουσι μόλις καὶ τίκτουσι χαλεπῶς· μεγάλα τε τὰ ἔμβρυα καὶ οἰδέοντα. ἔπειτα ἐν τῆσι τροφῆσι φθινώδεά τε καὶ πονηρὰ γίνεται· ἢ τε κάθαρσις τῆσι γυναιξὶν οὐκ ἐπιγίνεται χρηστὴ μετὰ τὸν τόκον. τοῖσι δὲ παιδίοις κῆλαι ἐπιγίνονται μάλιστα καὶ τοῖσιν ἀνδράσι κίρσοι καὶ ἔλκεα ἐν τῆσι κνήμησιν, ὥστε τὰς τοιαύτας φύσις οὐχ οἷόν τε

μακροβίους εἶναι, ἀλλὰ προγηράσκειν τοῦ χρόνου τοῦ ἰκνευμένου. ἔτι δὲ αἱ γυναῖκες δοκέουσιν ἔχειν ἐν γαστρὶ, καὶ ὀκόταν ὁ τόκος ἦ, ἀφανίζεται τὸ πλήρωμα τῆς γαστρὸς. τοῦτο δὲ γίνεται, ὀκόταν ὑδρωπιήσωσιν αἱ ὑστέραι. τὰ μὲν τοιαῦτα ὕδατα νομίζω μοχθηρὰ εἶναι πρὸς ἅπαν χρῆμα· δεύτερα δὲ ὄσων εἶεν αἱ πηγαὶ ἐκ πετρῶων — σκληρὰ γὰρ ἀνάγκη εἶναι — ἢ ἐκ γῆς, ὄκου θερμὰ ὕδατά ἐστιν, ἢ σίδηρος γίνεται ἢ χαλκὸς ἢ ἄργυρος ἢ χρυσὸς ἢ θεῖον ἢ στυπτηρὴν ἢ ἄσφαλτον ἢ νίτρον. ταῦτα γὰρ πάντα ὑπὸ βίης γίνονται τοῦ θερμοῦ. οὐ τοίνυν οἶόν τε ἐκ τοιαύτης γῆς ὕδατα ἀγαθὰ γίνεσθαι, ἀλλὰ σκληρὰ καὶ καυσώδεα διουρεῖσθαι τε χαλεπὰ καὶ πρὸς τὴν διαχώρησιν ἐναντία εἶναι. ἄριστα δὲ ὀκόσα ἐκ μετεώρων χωρίων ρεῖ καὶ λόφων γεηρῶν. αὐτὰ τε γὰρ ἐστὶ γλυκέα καὶ λευκὰ καὶ τὸν οἶνον φέρειν ὀλίγον οἶά τε ἐστὶν. τοῦ δὲ χειμῶνος θερμὰ γίνεται, τοῦ δὲ θέρεος ψυχρά. οὕτω γὰρ ἂν εἶη ἐκ βαθυτάτων πηγέων. μάλιστα δὲ ἐπαινέω ὧν τὰ ρεύματα πρὸς τὰς ἀνατολάς τοῦ ἡλίου ἐρρώγασι καὶ μᾶλλον πρὸς τὰς θερινάς. ἀνάγκη γὰρ λαμπρότερα εἶναι καὶ εὐώδεα καὶ κοῦφα. ὀκόσα δὲ ἐστὶν ἀλυκὰ καὶ ἀτέραμνα καὶ σκληρὰ, ταῦτα μὲν πάντα πίνειν οὐκ ἀγαθὰ· εἰσὶ δ' ἔναι φύσιες καὶ νοσεύματα, ἐς ἃ ἐπιτήδειά ἐστι τὰ τοιαῦτα ὕδατα πινόμενα, περὶ ὧν φράσω αὐτίκα. ἔχει δὲ περὶ τούτων ὧδε· ὀκόσων μὲν αἱ πηγαὶ πρὸς τὰς ἀνατολάς ἔχουσι, ταῦτα μὲν ἄριστα αὐτὰ ἐσωτῶν ἐστὶ· δεύτερα δὲ τὰ μεταξὺ τῶν θερινῶν ἀνατολέων ἐστὶ τοῦ ἡλίου καὶ δυσίων, καὶ μᾶλλον τὰ πρὸς τὰς ἀνατολάς· τρίτα δὲ τὰ μεταξὺ τῶν δυσμέων τῶν θερινῶν καὶ τῶν χειμερινῶν· φαυλότατα δὲ τὰ πρὸς τὸν νότον καὶ τὰ μεταξὺ τῆς χειμερινῆς ἀνατολῆς καὶ δύσιος. καὶ ταῦτα τοῖσι μὲν νοτίοισι πάνυ πονηρά, τοῖσι δὲ βορείοισιν ἀμείνω. τούτοις δὲ πρέπει ὧδε χρῆσθαι· ὅστις μὲν ὑγιαίνει τε καὶ ἐρρωται, μηδὲν διακρίνειν, ἀλλὰ πίνειν αἰεὶ τὸ παρεόν. ὅστις δὲ νόσου εἵνεκα βούλεται τὸ ἐπιτηδειότατον πίνειν, ὧδε ἂν ποιέων μάλιστα τυγχάνοι τῆς ὑγιείης· ὀκόσων μὲν αἱ κοιλίαι σκληραὶ εἰσι καὶ συγκαίειν ἀγαθαί, τούτοις μὲν τὰ γλυκύτατα συμφέρει καὶ κουφότατα καὶ λαμπρότατα· ὀκόσων δὲ μαλθακαὶ αἱ νηδύες καὶ ὑγραὶ εἰσι καὶ φλεγματώδεις, τούτοις δὲ τὰ σκληρότατα καὶ ἀτεραμνότατα καὶ τὰ ὑφαλυκὰ· οὕτω γὰρ ἂν ξηραίνοντο μάλιστα. ὀκόσα γὰρ ὕδατά ἐστιν ἔψειν ἄριστα καὶ τακερώτατα, ταῦτα καὶ τὴν κοιλίην διαλύειν εἰκὸς μάλιστα καὶ διατήκειν· ὀκόσα δὲ ἐστὶν ἀτέραμνα καὶ σκληρὰ καὶ ἥκιστα ἐψανά, ταῦτα δὲ συνίστησι μάλιστα τὰς κοιλίας καὶ ξηραίνει. ἀλλὰ γὰρ ψευδάμενοι εἰσὶν οἱ ἄνθρωποι τῶν ἀλμυρῶν ὑδάτων πέρι δι' ἀπειρίην, καὶ ὅτι νομίζεται διαχωρητικά· τὰ δὲ ἐναντιώτατά ἐστὶ πρὸς τὴν διαχώρησιν· ἀτέραμνα γὰρ καὶ ἀνέψανα, ὥστε καὶ τὴν κοιλίην ὑπ' αὐτῶν στύφεσθαι μᾶλλον ἢ τήκεσθαι.

8. Καὶ περὶ μὲν τῶν πηγαίων ὑδάτων ὧδε ἔχει. περὶ δὲ τῶν ὀμβρίων καὶ ὀκόσα ἀπὸ χιόνος φράσω ὅκως ἔχει. τὰ μὲν οὖν ὀμβρια κουφότατα καὶ γλυκύτατά ἐστι καὶ λεπτότατα καὶ λαμπρότατα. τὴν τε γὰρ ἀρχὴν ὁ ἥλιος ἀνάγει καὶ ἀναρπάζει

τοῦ ὕδατος τό τε λεπτότατον καὶ κουφότατον. δῆλον δὲ οἱ ἄλλες ποιέουσι. τὸ μὲν γὰρ ἀλμυρὸν λείπεται αὐτοῦ ὑπὸ πάχους καὶ βάρους καὶ γίνεται ἄλλες, τὸ δὲ λεπτότατον ὁ ἥλιος ἀναρπάζει ὑπὸ κουφότητος· ἀνάγει δὲ τὸ τοιοῦτο οὐκ ἀπὸ τῶν ὑδάτων μόνον τῶν λιμναίων, ἀλλὰ καὶ ἀπὸ τῆς θαλάσσης καὶ ἐξ ἀπάντων ἐν ὁκόσοισι ὑγρὸν τι ἔνεστιν. ἔνεστι δὲ ἐν παντὶ χρήματι. καὶ ἐξ αὐτῶν τῶν ἀνθρώπων ἄγει τὸ λεπτότατον τῆς ἰκμάδος καὶ κουφότατον. τεκμήριον δὲ μέγιστον· ὅταν ἄνθρωπος ἐν ἡλίῳ βαδίῃ ἢ καθίῃ ἱμάτιον ἔχων, ὁκόσα μὲν τοῦ χρωτὸς ὁ ἥλιος ἐφορᾷ, οὐχ ἰδρῶν ἄν· ὁ γὰρ ἥλιος ἀναρπάζει τὸ προφαινόμενον τοῦ ἰδρῶτος· ὁκόσα δὲ ὑπὸ τοῦ ἱματίου ἐσκέπασται ἢ ὑπ' ἄλλου του, ἰδροῖ. ἐξάγεται μὲν γὰρ ὑπὸ τοῦ ἡλίου καὶ βιάζεται, σῶζεται δὲ ὑπὸ τῆς σκέπης, ὥστε μὴ ἀφανίζεσθαι ὑπὸ τοῦ ἡλίου. ὁκόταν δὲ ἐς σκιὴν ἀφίκηται, ἅπαν τὸ σῶμα ὁμοίως ἰδίει· οὐ γὰρ ἔτι ὁ ἥλιος ἐπιλάμπει. διὰ ταῦτα δὲ καὶ σήπεται τῶν ὑδάτων τάχιστα ταῦτα καὶ ὀδμὴν ἴσχει πονηρὴν τὸ ὄμβριον, ὅτι ἀπὸ πλείστων συνῆκται καὶ συμμέμικται, ὥστε σήπεσθαι τάχιστα. ἔτι δὲ πρὸς τούτοις ἐπειδὴν ἀρπασθῆ καὶ μετεωρισθῆ περιφερόμενον καὶ καταμειγμένον ἐς τὸν ἡέρα, τὸ μὲν θολερὸν αὐτοῦ καὶ νυκτοειδὲς ἐκκρίνεται καὶ ἐξίσταται καὶ γίνεται ἡῆρ καὶ ὀμίχλη, τὸ δὲ λαμπρότατον καὶ κουφότατον αὐτοῦ λείπεται καὶ γλυκαίνεται ὑπὸ τοῦ ἡλίου καιόμενόν τε καὶ ἐψόμενον. γίνεται δὲ καὶ τᾶλλα πάντα τὰ ἐψόμενα αἰεὶ γλυκύτερα. ἕως μὲν οὖν διες κεδας μένον ἦ καὶ μήπω συνεστήκη, φέρεται μετέωρον. ὁκόταν δὲ κου ἀθροισθῆ καὶ συστραφῆ ἐς τὸ αὐτὸ ὑπὸ ἀνέμων ἀλλήλοισιν ἐναντιωθέντων ἐξαίφνης, τότε καταρρήγνυται, ἦ ἂν τύχη πλείστον συστραφέν. τότε γὰρ εἰκόδες τοῦτο μᾶλλον γίνεσθαι, ὁκόταν τὰ νέφια ὑπὸ ἀνέμου στάσιν μὴ ἔχοντος ὠρμημένα ἐόντα καὶ χωρέοντα ἐξαίφνης ἀντικόψη πνεῦμα ἐναντίον καὶ ἕτερα νέφια· ἐνταῦθα τὸ μὲν πρῶτον αὐτοῦ συστρέφεται, τὰ δὲ ὀπισθεν ἐπιφέρεται τε καὶ οὕτω παχύνεται καὶ μελαίνεται καὶ συστρέφεται ἐς τὸ αὐτὸ καὶ ὑπὸ βάρους καταρρήγνυται καὶ ὄμβροι γίνονται. ταῦτα μὲν ἐστὶν ἄριστα κατὰ τὸ εἶκος. δεῖται δὲ ἀφέψεσθαι καὶ ἀποσήπεσθαι· εἰ δὲ μή, ὀδμὴν ἴσχει πονηρὴν καὶ βράγχος καὶ βῆχες καὶ βαρυφωνίη τοῖς πίνουσι προσίσταται.

Τὰ δὲ ἀπὸ χιόνος καὶ κρυστάλλων πονηρὰ πάντα. ὁκόταν γὰρ ἄπαξ παγῆ, οὐκ ἔτι ἐς τὴν ἀρχαίην φύσιν καθίσταται, ἀλλὰ τὸ μὲν αὐτοῦ λαμπρὸν καὶ κοῦφον καὶ γλυκὺ ἐκκρίνεται καὶ ἀφανίζεται, τὸ δὲ θολωδέστατον καὶ σταθμωδέστατον λείπεται. γνοίης δ' ἂν ὧδε· εἰ γὰρ βούλει, ὅταν ἦ χειμῶν, ἐς ἀγγεῖον μέτρῳ ἐγγέας ὕδωρ θεῖναι ἐς τὴν αἰθρίην, ἵνα πήξεται μάλιστα, ἔπειτα τῇ ὑστεραίῃ ἐσενεγκῶν ἐς ἀλέην, ὅκου χαλάσει μάλιστα ὁ παγετός, ὁκόταν δὲ λυθῆ, ἀναμετρεῖν τὸ ὕδωρ, εὐρήσεις ἔλασσον συχνῶ. τοῦτο τεκμήριον, ὅτι ὑπὸ τῆς πήξιος ἀφανίζεται καὶ ἀναξηραίνεται τὸ κουφότατον καὶ λεπτότατον, οὐ τὸ βαρύτερον καὶ παχύτερον· οὐ γὰρ ἂν δύναίτο. ταύτη οὖν νομίζω πονηρότατα ταῦτα τὰ ὕδατα εἶναι τὰ ἀπὸ χιόνος καὶ κρυστάλλου καὶ τὰ τούτοις ἐπόμενα

πρὸς ἅπαντα χρήματα.

9. Περὶ μὲν οὖν ὀμβρίων ὑδάτων καὶ τῶν ἀπὸ χιόνος καὶ κρυστάλλων οὕτως ἔχει. λιθιῶσι δὲ μάλιστα ἄνθρωποι καὶ ὑπὸ νεφριτίδων καὶ στραγγουρίας ἀλίσκονται καὶ ἰσχιάδων, καὶ κῆλαι γίνονται, ὅκου ὕδατα πίνουσι παντοδαπώτατα καὶ ἀπὸ ποταμῶν μεγάλων, ἐς οὓς ποταμοὶ ἕτεροι ἐμβάλλουσι, καὶ ἀπὸ λίμνης, ἐς ἣν ῥεύματα πολλὰ καὶ παντοδαπὰ ἀφικνεῦνται, καὶ ὁκόσοι ὕδασιν ἐπακτοῖσι χρέονται διὰ μακροῦ ἀγομένοισι καὶ μὴ ἐκ βραχείος. οὐ γὰρ οἷόν τε ἕτερον ἐτέρῳ εἰσκέειν ὕδωρ, ἀλλὰ τὰ μὲν γλυκέα εἶναι, τὰ δὲ ἀλυκά τε καὶ στυπτηριώδεα, τὰ δὲ ἀπὸ θερμῶν ῥεῖν. συμμεισγόμενα δὲ ταῦτα ἐς τὸ ἀλλήλοισι στασιάζει καὶ κρατεῖ αἰεὶ τὸ ἰσχυρότατον. ἰσχύει δὲ οὐκ αἰεὶ τὸ αὐτό, ἀλλὰ ἄλλοτε ἄλλο κατὰ τὰ πνεύματα· τῷ μὲν γὰρ βορέης τὴν ἰσχὴν παρέχεται, τῷ δὲ ὁ νότος, καὶ τῶν λοιπῶν πέρι οὕτως λόγος. ὑφίστασθαι οὖν τοῖσι τοιούτοισιν ἀνάγκη ἐν τοῖς ἀγγείοις ἰλὸν καὶ ψάμμον· καὶ ἀπὸ τούτων πινομένων τὰ νοσήματα γίνεται τὰ προειρημένα· ὅτι δὲ οὐχ ἅπασιν, ἐξῆς φράσω.

Ὅκόσων μὲν ἢ τε κοιλίη εὐροός τε καὶ ὑγιερὴ ἐστὶ καὶ ἡ κύστις μὴ πυρετώδης μηδὲ ὁ στόμαχος τῆς κύστιος συμπέφρακται λίην, οὗτοι μὲν διου ρεῦσι ῥηϊδίως, καὶ ἐν τῇ κύστει οὐδὲν συστρέφεται. ὁκόσων δὲ ἂν ἡ κοιλίη πυρετώδης ἦ, ἀνάγκη καὶ τὴν κύστιν τὸ αὐτὸ πάσχειν. ὁκόταν γὰρ θερμανθῆ ἄλλοι τῆς φύσιος, ἐφλέγηται αὐτῆς ὁ στόμαχος. ὁκόταν δὲ ταῦτα πάθῃ, τὸ οὖρον οὐκ ἀφίησιν, ἀλλ' ἐν ἐωυτῇ συνέπει καὶ συγκαίει. καὶ τὸ μὲν λεπτότατον αὐτοῦ ἀποκρίνεται καὶ τὸ καθαρώτατον διεῖ καὶ ἐξουρεῖται, τὸ δὲ παχύτατον καὶ θολωδέστατον συστρέφεται καὶ συμπήγνυται. καὶ τὸ μὲν πρῶτον μικρόν, ἔπειτα δὲ μέζον γίνεται. κυλινδρῶδες γὰρ ὑπὸ τοῦ οὐρου, ὃ τι ἂν συνίστηται παχύ, συναρμόζει πρὸς ἐωυτό, καὶ οὕτως αὐξεται τε καὶ πωροῦται· καὶ ὁκόταν οὖρη, πρὸς τὸν στόμαχον τῆς κύστιος προσπίπτει ὑπὸ τοῦ οὐρου βιαζόμενον καὶ κωλύει οὐρεῖν καὶ ὀδύνην παρέχει ἰσχυρὴν· ὥστε τὰ αἰδοῖα τρίβουσι καὶ ἔλκουσι τὰ παιδιά τὰ λιθιῶντα· δοκεῖ γὰρ αὐτοῖς τὸ αἴτιον ἐνταῦθα εἶναι τῆς οὐρήσιος. τεκμήριον δέ, ὅτι οὕτως ἔχει· τὸ γὰρ οὖρον λαμπρότατον οὐρέουσιν οἱ λιθιῶντες, ὅτι τὸ παχύτατον καὶ θολωδέστατον αὐτοῦ μένει καὶ συστρέφεται. τὰ μὲν πλεῖστα οὕτω λιθιά· γίνεται δὲ παισὶν καὶ ἀπὸ τοῦ γάλακτος, ἣν μὴ ὑγιερὸν ἦ, ἀλλὰ θερμόν τε λίην καὶ χολῶδες. τὴν γὰρ κοιλίην διαθερμαίνει καὶ τὴν κύστιν, ὥστε τὸ οὖρον συγκαίόμενον ταῦτα πάσχειν. καὶ φημι ἄμεινον εἶναι τοῖς παιδίοισι τὸν οἶνον ὡς ὑδαρέστατον διδόναι· ἦσσαν γὰρ τὰς φλέβας συγκαίει καὶ συναναίνει. τοῖσι δὲ θήλεσι λίθοι οὐ γίνονται ὁμοίως· ὁ γὰρ οὐρητῆρ βραχὺς ἐστὶν ὁ τῆς κύστιος καὶ εὐρύς, ὥστε βιάζεσθαι τὸ οὖρον ῥηϊδίως. οὔτε γὰρ τῇ χειρὶ τρίβει τὸ αἰδοῖον ὡσπερ τὸ ἄρσεν, οὔτε ἄπτεται τοῦ οὐρητῆρος· ἐς γὰρ τὰ αἰδοῖα ξυντέτρηται, οἱ δὲ ἄνδρες οὐκ εὐθὺ τέτρηται, καὶ διότι οἱ οὐρητῆρες οὐκ

εὐρεῖς· καὶ πίνουσι πλεῖον ἢ οἱ παῖδες.

10. Περὶ μὲν οὖν τούτων ὧδε ἔχει ἢ ὅτι τούτων ἐγγύτατα. περὶ δὲ τῶν ὠρέων ὧδε ἂν τις ἐνθυμεύμενος διαγινώσκῃ, ὁκοῖόν τι μέλλει ἔσεσθαι τὸ ἔτος, εἴτε νοσερὸν εἴτε ὑγιερὸν· ἦν μὲν γὰρ κατὰ λόγον γένηται τὰ σημεῖα ἐπὶ τοῖς ἀστροῖσι δύνουσί τε καὶ ἐπιτέλλουσιν, ἔν τε τῷ μετοπώρῳ ὕδατα γένηται, καὶ ὁ χειμῶν μέτριος καὶ μήτε λίην εὐδιος μήτε ὑπερβάλλον τὸν καιρὸν τῷ ψύχει, ἔν τε τῷ ἥρι ὕδατα γένηται ὠραῖα καὶ ἐν τῷ θέρει, οὕτω τὸ ἔτος ὑγιεινότατον εἰκὸς εἶναι. ἦν δὲ ὁ μὲν χειμῶν αὐχμηρὸς καὶ βόρειος γένηται, τὸ δὲ ἥρ ἐπομβρον καὶ νότιον, ἀνάγκη τὸ θέρος πυρετῶδες γίνεσθαι καὶ ὀφθαλμίας καὶ δυσεντερίας ἐμποιεῖν. ὁκόταν γὰρ τὸ πνίγος ἐπιγένηται ἐξαίφνης τῆς τε γῆς ὑγρῆς εὐούσης ὑπὸ τῶν ὄμβρων τῶν ἐαρινῶν καὶ ὑπὸ τοῦ νότου, ἀνάγκη διπλόον τὸ καῦμα εἶναι, ἀπὸ τε τῆς γῆς διαβρόχου εὐούσης καὶ θερμῆς καὶ ὑπὸ τοῦ ἡλίου καίοντος, τῶν τε κοιλιῶν μὴ συνεστηκυῶν τοῖς ἀνθρώποις μήτε τοῦ ἐγκεφάλου ἀνεξηρασμένου — οὐ γὰρ οἷόν τε τοῦ ἥρος τοιούτου ἐόντος μὴ οὐ πλαδᾶν τὸ σῶμα καὶ τὴν σάρκα — ὥστε τοὺς πυρετοὺς ἐπιπίπτειν ὄξυτάτους ἅπασιν, μάλιστα δὲ τοῖσι φλεγματίησι. καὶ δυσεντερίας εἰκὸς ἐσθαι γίνεσθαι καὶ τῆσι γυναιξὶ καὶ τοῖς εἴδεσι τοῖς ὑγροτάτοισι. καὶ ἦν μὲν ἐπὶ κύνος ἐπιτολῆ ὕδωρ ἐπιγένηται καὶ χειμῶν καὶ οἱ ἐτησῖαι πνεύσωσιν, ἐλπὶς παύσασθαι καὶ τὸ μετόπωρον ὑγιερὸν γενέσθαι· ἦν δὲ μή, κίν δυνος θανάτους τε γενέσθαι τοῖσι παιδίοισι καὶ τῆσι γυναιξίν, τοῖσι δὲ πρεσβύτησιν ἤκιστα, τοὺς τε περιγενομένους ἐς τεταρταίους ἀποτελευτᾶν καὶ ἐκ τῶν τεταρταίων ἐς ὕδρωπας. ἦν δ' ὁ μὲν χειμῶν νότιος γένηται καὶ ἔπομβρος καὶ εὐδιος, τὸ δὲ ἥρ βόρειόν τε καὶ αὐχμηρὸν καὶ χειμέριον, πρῶτον μὲν τὰς γυναικας, ὁκόσαι ἂν τύχωσιν ἐν γαστρὶ ἔχουσαι καὶ ὁ τόκος αὐτῆσιν ἢ πρὸς τὸ ἥρ, ἐκτιτρώσκεσθαι· ὁκόσαι δ' ἂν καὶ τέκωσιν, ἀκρατέα τὰ παιδιά τίκτειν καὶ νοσῶδεα, ὥστε ἢ αὐτίκα ἀπόλλυσθαι, ἢ ζῶσι λεπτά τε ἐόντα καὶ ἀσθενέα καὶ νοσῶδεα. ταῦτα μὲν τῆσι γυναιξὶ· τοῖσι δὲ λοιποῖσι δυσεντερίας καὶ ὀφθαλμίας ξηρὰς καὶ ἐνίοισι καταρρόους ἀπὸ τῆς κεφαλῆς ἐπὶ τὸν πνεύμονα. τοῖσι μὲν οὖν φλεγματίησι τὰς δυσεντερίας εἰκὸς γίνεσθαι καὶ τῆσι γυναιξὶ φλέγματος ἐπικαταρρυνέντος ἀπὸ τοῦ ἐγκεφάλου διὰ τὴν ὑγρότητα τῆς φύσιος· τοῖσι δὲ χολῶδεσιν ὀφθαλμίας ξηρὰς διὰ τὴν θερμότητα καὶ ξηρότητα τῆς σαρκός· τοῖσι δὲ πρεσβύτησι καταρρόους διὰ τὴν ἀραιότητα καὶ τὴν ἔκτηξιν τῶν φλεβῶν, ὥστε ἐξαίφνης τοὺς μὲν ἀπόλλυσθαι, τοὺς δὲ παραπλήκτους γίνεσθαι τὰ δεξιὰ ἢ τὰ ἀριστερά. ὁκόταν γὰρ τοῦ χειμῶνος ἐόντος νοτίου καὶ θερμοῦ τοῦ σώματος μὴ συνιστῆται ὁ ἐγκέφαλος μηδὲ αἱ φλέβες, τοῦ ἥρος ἐπιγενομένου βορείου καὶ αὐχμηροῦ καὶ ψυχροῦ ὁ ἐγκέφαλος, ὀπηνίκα αὐτὸν ἔδει ἅμα καὶ τῷ ἥρι διαλύεσθαι καὶ καθαίρεσθαι ὑπὸ τε κορυζῆς καὶ βράγχων, τηνικαῦτα πῆγνυταί τε καὶ συνίσταται, ὥστε ἐξαίφνης τοῦ θέρεος ἐπιγενομένου καὶ τοῦ καύματος καὶ τῆς μεταβολῆς ἐπιγενομένης ταῦτα τὰ νοσεύματα ἐπιπίπτειν. καὶ ὁκόσαι μὲν τῶν

πολίων κέονται τε καλῶς τοῦ ἡλίου καὶ τῶν πνευμάτων ὕδασι τε χρέονται ἀγαθοῖσιν, αὗται μὲν ἤσσον αἰσθάνονται τῶν τοιούτων μεταβολέων· ὀκόσαι δὲ ὕδασι τε ἐλείοισι χρέονται καὶ λιμνώδεσι κέονται τε μὴ καλῶς τῶν πνευμάτων καὶ τοῦ ἡλίου, αὗται δὲ μᾶλλον. κῆν μὲν τὸ θέρος αὐχμηρὸν γένηται, θᾶσσον παύονται αἱ νοῦσοι· ἦν δὲ ἔπομβρον, πολυχρόνιοι γίνονται· καὶ φαγεδαίνας κίνδυνος ἐγγίνεσθαι ἀπὸ πάσης προφάσιος, ἦν ἔλκος ἐγγένηται. καὶ λειεντερία καὶ ὕδρωπες τελευτῶσι τοῖσι νοσεύμασιν ἐπιγίνονται· οὐ γὰρ ἀποξηραίνονται αἱ κοιλίαὶ ῥηϊδίως. ἦν δὲ τὸ θέρος ἔπομβρον γένηται καὶ νότιον καὶ τὸ μετόπωρον, τὸν χειμῶνα ἀνάγκη νοσερὸν εἶναι καὶ τοῖς φλεγματίησι καὶ τοῖς γεραιτέροισι τεσσαράκοντα ἐτέων καύσους γίνεσθαι εἰκός, τοῖσι δὲ χολώδεσι πλευρίτιδας καὶ περιπνευμονίας. ἦν δὲ τὸ θέρος αὐχμηρὸν γένηται καὶ βόρειον, τὸ δὲ μετόπωρον ἔπομβρον καὶ νότιον, κεφαλαλγίας ἐς τὸν χειμῶνα καὶ σφακέλους τοῦ ἐγκεφάλου εἰκός γίνεσθαι, καὶ προσέτι βράγχους καὶ κορύζας καὶ βῆχας, ἐνίοισι δὲ καὶ φθίσιος. ἦν δὲ βόρειόν τε ἦ καὶ ἄνυδρον καὶ μήτε ὑπὸ κύνα ἔπομβρον μήτε ἐπὶ τῷ ἀρκτούρω, τοῖσι μὲν φλεγματίησι φύσει συμφέρει μάλιστα καὶ τοῖς ὑγροῖς τὰς φύσιος καὶ τῆσι γυναιξί· τοῖσι δὲ χολώδεσι τοῦτο πολεμιώτατον γίνεται. λίην γὰρ ἀναξηραίνονται καὶ ὀφθαλμιαὶ αὐτοῖσιν ἐπιγίνονται ξηραί, καὶ πυρετοὶ ὀξέες καὶ πολυχρόνιοι, ἐνίοισι δὲ καὶ μελαγχολία. τῆς γὰρ χολῆς τὸ μὲν ὑγρότατον καὶ ὑδαρέστατον ἀναξηραίνεται καὶ ἀναλίσκεται, τὸ δὲ παχύτατον καὶ δριμύτατον λείπεται καὶ τοῦ αἵματος κατὰ τὸν αὐτὸν λόγον· ἀφ' ὧν ταῦτα τὰ νοσεύματα αὐτοῖσι γίνεται. τοῖσι δὲ φλεγματίησι πάντα ταῦτα ἀρωγά ἐστίν. ἀποξηραίνονται γὰρ καὶ ἐς τὸν χειμῶνα ἀφικνέονται οὐ πλαδῶντες, ἀλλὰ ἀναξηραίνόμενοι.

11. Κατὰ ταῦτά τις ἐννοεῦμενος καὶ σκοπεύμενος προειδείη ἂν τὰ πλεῖστα τῶν μελλόντων ἔσεσθαι ἀπὸ τῶν μεταβολέων. φυλάσσεσθαι δὲ χρῆ μάλιστα τὰς μεταβολὰς τῶν ὥρέων τὰς μεγίστας καὶ μήτε φάρμακον διδόναι ἐκόντα μήτε καίειν ὅ τι ἐς κοιλίην μήτε τάμνειν, πρὶν παρέλθωσιν ἡμέραι δέκα ἢ καὶ πλείονες· μέγιστα δὲ εἰσὶν αἶδε αἱ τέσσαρες καὶ ἐπικινδυνόταται· ἡλίου τροπαὶ ἀμφοτέραι καὶ μᾶλλον αἱ θεριναὶ καὶ αἱ ἰσημεριαὶ νομιζόμεναι εἶναι ἀμφοτέραι, μᾶλλον δὲ αἱ μετοπωριναί· δεῖδὲ καὶ τῶν ἄστρον τὰς ἐπιτολὰς φυλάσσεσθαι καὶ μάλιστα τοῦ κυνός, ἔπειτα ἀρκτούρου, καὶ ἔτι πληϊάδων δύσιν. τὰ τε γὰρ νοσεύματα μάλιστα ἐν ταύτησι τῆσιν ἡμέρησιν κρίνεται. καὶ τὰ μὲν ἀποφθίνει, τὰ δὲ λήγει, τὰ δὲ ἄλλα πάντα μεθίσταται ἐς ἕτερον εἶδος καὶ ἐτέρην κατάστασιν.

12. Περὶ μὲν τούτων οὕτως ἔχει. βούλομαι δὲ περὶ τῆς Ἀσίας καὶ τῆς Εὐρώπης δεῖξαι ὀκόσον διαφέρουσιν ἀλλήλων ἐς τὰ πάντα καὶ περὶ τῶν ἐθνέων τῆς μορφῆς, ὅτι διαλλάσσει καὶ μηδὲν ἔοικεν ἀλλήλοισιν. περὶ μὲν οὖν ἀπάντων

πολὺς ἂν εἴη λόγος, περὶ δὲ τῶν μεγίστων καὶ πλεῖστον διαφερόντων ἐρέω ὡς μοι δοκεῖ ἔχειν. τὴν Ἀσίην πλεῖστον διαφέρειν φημὶ τῆς Εὐρώπης ἐς τὰς φύσεις τῶν συμπάντων τῶν τε ἐκ τῆς γῆς φυομένων καὶ τῶν ἀνθρώπων. πολὺ γὰρ καλλίονα καὶ μέζονα πάντα γίνεται ἐν τῇ Ἀσίῃ, ἢ τε χώρα τῆς χώρας ἡμερωτέρη καὶ τὰ ἥθεα τῶν ἀνθρώπων ἡπιώτερα καὶ εὐοργητότερα. τὸ δὲ αἴτιον τούτων ἢ κρησὶς τῶν ὠρέων, ὅτι τοῦ ἡλίου ἐν μέσῳ τῶν ἀνατολέων κεῖται πρὸς τὴν ἠῶ τοῦ τε ψυχροῦ πορρωτέρω. τὴν δὲ αὐξησιν καὶ ἡμερότητα παρέχει πλεῖστον ἀπάντων, ὁκόταν μηδὲν ἢ ἐπικρατέον βιαίως, ἀλλὰ παντὸς ἰσομοιρῆ δυναστεύῃ. ἔχει δὲ κατὰ τὴν Ἀσίην πανταχῆ ὁμοίως, ἀλλ' ὅση μὲν τῆς χώρας ἐν μέσῳ κεῖται τοῦ θερμοῦ καὶ τοῦ ψυχροῦ, αὕτη μὲν εὐκαρποτάτη ἐστὶ καὶ εὐδενδροτάτη καὶ εὐδιεστάτη καὶ ὕδασι καλλίστοισι κέχρηται τοῖσι τε οὐρανίοισι καὶ τοῖς ἐκ τῆς γῆς. οὔτε γὰρ ὑπὸ τοῦ θερμοῦ ἐκκέκασται λίην οὔτε ὑπὸ αὐχμῶν καὶ ἀνυδρίας ἀναξηραίνεται, οὔτε ὑπὸ ψύχους βεβιασμένη οὔτε νοτία τε καὶ διάβροχός ἐστιν ὑπὸ τε ὄμβρων πολλῶν καὶ χιόνος· τὰ τε ὠραῖα αὐτόθι πολλὰ εἰκὸς γίνεσθαι, ὁκόσα τε ἀπὸ σπερμάτων καὶ ὁκόσα αὐτῇ ἢ γῆ ἀναδιδοῖ φυτά, ὧν τοῖς καρποῖσι χρέονται ἄνθρωποι, ἡμεροῦντες ἐξ ἀγρίων καὶ ἐς ἐπιτήδειον μεταφυτεύοντες· τὰ τε ἐντρεφόμενα κτήνεα εὐθηνεῖν εἰκὸς, καὶ μάλιστα τίκτειν τε πυκνότατα καὶ ἐκτρέφειν κάλλιστα· τοὺς τε ἀνθρώπους εὐτραφέας εἶναι καὶ τὰ εἶδεα καλλίστους καὶ μεγέθει μεγίστους καὶ ἡκιστα διαφόρους ἐς τὰ τε εἶδεα αὐτῶν καὶ τὰ μεγέθεα· εἰκὸς τε τὴν χώραν ταύτην τοῦ ἥρος ἐγγύτατα εἶναι κατὰ τὴν φύσιν καὶ τὴν μετριότητα τῶν ὠρέων. τὸ δὲ ἀνδρεῖον καὶ τὸ ταλαίπωρον καὶ τὸ ἔμπονον καὶ τὸ θυμοειδὲς οὐκ ἂν δύναίτο ἐν τοιαύτῃ φύσει ἐγγίνεσθαι οὔτε ὁμοφύλου οὔτε ἀλλοφύλου, ἀλλὰ τὴν ἡδονὴν ἀνάγκη κρατεῖν ..... διότι πολὺμορφα γίνεται τὰ ἐν τοῖς θηρίοις.

13. Περὶ μὲν οὖν Αἰγυπτίων καὶ Λιβύων οὕτως ἔχειν μοι δοκεῖ. περὶ δὲ τῶν ἐν δεξιῇ τοῦ ἡλίου τῶν ἀνατολέων τῶν θερινῶν μέχρι Μαιώτιδος λίμνης — οὗτος γὰρ ὄρος τῆς Εὐρώπης καὶ τῆς Ἀσίας — ὧδε ἔχει περὶ αὐτῶν· τὰ δὲ ἔθνεα ταῦτα ταύτῃ διάφορα αὐτὰ ἐωυτῶν μᾶλλον ἐστὶ τῶν προδιηγημένων διὰ τὰς μεταβολὰς τῶν ὠρέων καὶ τῆς χώρας τὴν φύσιν. ἔχει δὲ καὶ κατὰ τὴν γῆν ὁμοίως ἄπερ καὶ κατὰ τοὺς ἄλλους ἀνθρώπους. ὅκου γὰρ αἱ ὄραι μεγίστας μεταβολὰς ποιεῖνται καὶ πυκνοτάτας, ἐκεῖ καὶ ἡ χώρα ἀγριωτάτη καὶ ἀνωμαλωτάτη ἐστὶ, καὶ εὐρήσεις ὄρεα τε πλεῖστα καὶ δάσεια καὶ πεδία καὶ λειμῶνας ἐόντας. ὅκου δὲ αἱ ὄραι μὴ μέγα ἀλλάσσουσιν, ἐκείνοις ἢ χώρα ὁμαλωτάτη ἐστίν. οὕτω δὲ ἔχει καὶ περὶ τῶν ἀνθρώπων, εἴ τις βούλεται ἐνθυμεῖσθαι. εἰσὶ γὰρ φύσεις αἱ μὲν ὄρεσιν ἐοικυῖαι δενδρώδεσί τε καὶ ἐφύδροισιν, αἱ δὲ λεπτοῖσί τε καὶ ἀνύδροις, αἱ δὲ λειμακεστέροις τε καὶ ἐλώδεσι, αἱ δὲ πεδίῳ τε καὶ ψιλῇ καὶ ξηρῇ γῆ. αἱ γὰρ ὄραι αἱ μεταλλάσσουσαι τῆς μορφῆς τὴν φύσιν εἰσὶ διάφοροι. ἦν δὲ διάφοροι ἕωσι μέγα σφέων αὐτέων, διαφοραὶ καὶ πλείονες γίνονται τοῖς εἶδεσι.

14. Καὶ ὀκόσα μὲν ὀλίγον διαφέρει τῶν ἔθνεων παραλείψω, ὀκόσα δὲ μεγάλα ἢ φύσει ἢ νόμῳ, ἔρέω περὶ αὐτῶν ὡς ἔχει. καὶ πρῶτον περὶ τῶν Μακροκεφάλων. τούτων γὰρ οὐκ ἔστιν ἄλλο ἔθνος ὀμοίας τὰς κεφαλὰς ἔχον οὐδέν· τὴν μὲν γὰρ ἀρχὴν ὁ νόμος αἰτιώτατος ἐγένετο τοῦ μήκεος τῆς κεφαλῆς, νῦν δὲ καὶ ἡ φύσις συμβάλλεται τῷ νόμῳ. τοὺς γὰρ μακροτάτην ἔχοντας τὴν κεφαλὴν γενναιοτάτους ἠγγέονται. ἔχει δὲ περὶ νόμου ὧδε· τὸ παιδίον ὀκόταν γένηται τάχιστα, τὴν κεφαλὴν αὐτοῦ ἔτι ἀπαλὴν ἐοῦσαν μαλθακοῦ ἐόντος ἀναπλάσσουσι τῆσι χερσὶ καὶ ἀναγκάζουσιν ἐς τὸ μήκος αὔξεσθαι δεσμά τε προσφέροντες καὶ τεχνήματα ἐπιτήδεια, ὑφ' ὧν τὸ μὲν σφαιροειδὲς τῆς κεφαλῆς κακοῦται, τὸ δὲ μήκος αὔξεται. οὕτως τὴν ἀρχὴν ὁ νόμος κατειργάσατο, ὥστε ὑπὸ βίης τοιαύτην τὴν φύσιν γενέσθαι· τοῦ δὲ χρόνου προϊόντος ἐν φύσει ἐγένετο, ὥστε τὸν νόμον μηκέτι ἀναγκάζειν. ὁ γὰρ γόνος πανταχόθεν ἔρχεται τοῦ σώματος, ἀπὸ τε τῶν ὑγιερῶν ὑγιερὸς ἀπὸ τε τῶν νοσερῶν νοσερός. εἰ οὖν γίνονται ἔκ τε φαλακρῶν φαλακροὶ καὶ ἐκ γλαυκῶν γλαυκοὶ καὶ ἐκ διεστραμμένων στρεβλοὶ ὡς ἐπὶ τὸ πλῆθος, καὶ περὶ τῆς ἄλλης μορφῆς ὁ αὐτὸς λόγος, τί κωλύει καὶ ἐκ μακροκεφάλου μακροκέφαλον γίνεσθαι; νῦν δὲ ὀμοίως οὐκέτι γίνονται ὡς πρότερον· ὁ γὰρ νόμος οὐκέτι ἰσχύει διὰ τὴν ὀμιλίην τῶν ἀνθρώπων.

15. Περὶ μὲν οὖν τούτων οὕτως ἔχειν μοι δοκεῖ. περὶ δὲ τῶν ἐν Φάσει· ἡ χώρα ἐκείνη ἐλώδης ἐστὶ καὶ θερμὴ καὶ ὑδατεινὴ καὶ δασεῖα, ὄμβροι τε αὐτόθι γίνονται πᾶσαν ὥρην πολλοὶ τε καὶ ἰσχυροὶ· ἢ τε δίαιτα τοῖς ἀνθρώποις ἐν τοῖς ἔλεσιν ἐστὶν, τὰ τε οἰκήματα ξύλινα καὶ καλάμινα ἐν τοῖς ὑδασι μεμηχανημένα· ὀλίγη τε χρέονται βαδίσει κατὰ τὴν πόλιν καὶ τὸ ἐμπόριον, ἀλλὰ μονοξύλοις διαπλέουσιν ἄνω καὶ κάτω· διώρυγες γὰρ πολλαὶ εἰσι. τὰ δὲ ὑδατα θερμὰ καὶ στάσιμα πίνουσιν ὑπὸ τε τοῦ ἡλίου σηπόμενα καὶ ὑπὸ τῶν ὄμβρων ἐπαυξόμενα. αὐτὸς τε ὁ Φᾶσις στασιμώτατος πάντων τῶν ποταμῶν καὶ ῥέων ἠπιώτατα. οἱ τε καρποὶ οἱ γινόμενοι αὐτόθι πάντες ἀναλδέες εἰσὶ καὶ τεθηλυσμένοι καὶ ἀτελέες ὑπὸ πολυπληθείης τοῦ ὑδατος· διὸ καὶ οὐ πεπαίνονται. ἡὴρ τε πολὺς κατέχει τὴν χώραν ἀπὸ τῶν ὑδάτων. διὰ ταύτας δὴ τὰς προφάσιας τὰ εἶδεα ἀπηλλαγμένα τῶν λοιπῶν ἀνθρώπων ἔχουσιν οἱ Φασηνοὶ· τὰ τε γὰρ μεγέθεα μεγάλοι, τὰ πάχεα δ' ὑπερπάχητες, ἄρθρον τε κατάδηλον οὐδέν οὐδὲ φλέψ· τὴν τε χροίην ὠχρὴν ἔχουσιν ὥσπερ ὑπὸ ἰκτέρου ἐχόμενοι· φθέγγονται τε βαρύτερον ἀνθρώπων, τῷ ἡέρι χρεώμενοι οὐ λαμπρῷ, ἀλλὰ νοτώδει καὶ θολερῷ· πρὸς τε τὸ ταλαιπωρεῖν τὸ σῶμα ἀργότεροι πεφύκασιν. αἱ τε ὥραι οὐ πολὺ μεταλλάσσουσιν οὔτε πρὸς τὸ πνῖγος οὔτε πρὸς τὸ ψῦχος. τὰ τε πνεύματα τὰ πολλὰ νότια πλὴν αὔρης μιῆς ἐπιχωρίας. αὕτη δὲ πνεῖ ἐνίοτε βίαιος καὶ χαλεπὴ καὶ θερμὴ· καὶ κέγχρονα ὀνομάζουσι τοῦτο τὸ πνεῦμα. ὁ δὲ βορέης οὐ σφόδρα ἀφ' ἰκνεῖται· ὀκόταν δὲ πνέη, ἀσθενὴς καὶ βληχρός.



16. Καὶ περὶ μὲν τῆς φύσιος τῆς διαφορῆς καὶ τῆς μορφῆς τῶν ἐν τῇ Ἀσίῃ καὶ τῇ Εὐρώπῃ οὕτως ἔχει. περὶ δὲ τῆς ἀθυμίας τῶν ἀνθρώπων καὶ τῆς ἀνανδρείης, ὅτι ἀπολεμώτεροί εἰσι τῶν Εὐρωπαϊῶν οἱ Ἀσιηνοὶ καὶ ἡμερώτεροι τὰ ἥθεα αἱ ὄραι αἴτιαι μάλιστα, οὐ μεγάλας τὰς μεταβολὰς ποιούμεναι οὔτε ἐπὶ τὸ θερμὸν οὔτε ἐπὶ τὸ ψυχρὸν, ἀλλὰ παραπλησίως. οὐ γὰρ γίνονται ἐκπλήξεις τῆς γνώμης οὔτε μετάστασις ἰσχυρὴ τοῦ σώματος, ἀφ' ὅτων εἰκὸς τὴν ὀργὴν ἀγριοῦσθαι τε καὶ τοῦ ἀγνώμονος καὶ θυμοειδέος μετέχειν μᾶλλον ἢ ἐν τῷ αὐτῷ αἰεὶ ἐόντα. αἱ γὰρ μεταβολαὶ εἰσι τῶν πάντων αἱ ἐπεγεύρουσαι τὴν γνώμην τῶν ἀνθρώπων καὶ οὐκ ἐῶσαι ἀτρεμίζειν. διὰ ταύτας ἐμοὶ δοκεῖ τὰς προφάσιαις ἀναλκῆς εἶναι τὸ γένος τὸ Ἀσιηνὸν καὶ προσέτι διὰ τοὺς νόμους. τῆς γὰρ Ἀσίας τὰ πολλὰ βασιλεύεται. ὅκου δὲ μὴ αὐτοὶ ἐσωτῶν εἰσι καρτεροὶ οἱ ἄνθρωποι μηδὲ αὐτόνομοι, ἀλλὰ δεσπόζονται, οὐ περὶ τούτου αὐτοῖσιν ὁ λόγος ἐστίν, ὅπως τὰ πολέμια ἀσκήσωσιν, ἀλλ' ὅπως μὴ δόξωσι μάχιμοι εἶναι. οἱ γὰρ κίνδυνοι οὐχ ὁμοιοὶ εἰσι. τοὺς μὲν γὰρ στρατεύεσθαι εἰκὸς καὶ ταλαιπωρεῖν καὶ ἀποθνήσκειν ἐξ ἀνάγκης ὑπὲρ τῶν δεσποτέων ἀπὸ τε παιδίων καὶ γυναικὸς ἐόντας καὶ τῶν λοιπῶν φίλων. καὶ ὁκόσα μὲν ἂν χρηστὰ καὶ ἀνδρεῖα ἐργάσωνται, οἱ δεσπότηαι ἀπ' αὐτῶν αὐξοῦνται τε καὶ ἐκφύονται, τοὺς δὲ κινδύνους καὶ θανάτους αὐτοὶ καρποῦνται. ἔτι δὲ πρὸς τούτοις τῶν τοιούτων ἀνθρώπων ἀνάγκη ἐρημοῦσθαι τὴν γῆν ὑπὸ τε πολεμίων καὶ ἀργίης, ὥστε καὶ εἴ τις φύσει πέφυκεν ἀνδρεῖος καὶ εὐψυχος, ἀποτρέπεσθαι τὴν γνώμην ὑπὸ τῶν νόμων. μέγα δὲ τεκμήριον τούτων· ὁκόσοι γὰρ ἐν τῇ Ἀσίῃ Ἕλληνες ἢ βάρβαροι μὴ δεσπόζονται, ἀλλ' αὐτόνομοί εἰσι καὶ ἐσωτοῖσι ταλαιπωρεῦσιν, οὗτοι μαχιμώτατοί εἰσι πάντων· τοὺς γὰρ κινδύνους ἐσωτῶν περὶ κινδυνεύουσι, καὶ τῆς ἀνδρείης αὐτοὶ τὰ ἄθλα φέρονται καὶ τῆς δειλίας τὴν ζημίην ὡσαύτως. εὐρήσεις δὲ καὶ τοὺς Ἀσιηνοὺς διαφέροντας αὐτοὺς ἐσωτῶν, τοὺς μὲν βελτίονας, τοὺς δὲ φαυλοτέρους ἐόντας. τούτων δὲ αἱ μεταβολαὶ αἴτιαι τῶν ὥρέων, ὥσπερ μοι εἴρηται ἐν τοῖς προτέροις.

17. Καὶ περὶ μὲν τῶν ἐν τῇ Ἀσίῃ οὕτως ἔχει. ἐν δὲ τῇ Εὐρώπῃ ἔστιν ἔθνος Σκυθικόν, ὃ περὶ τὴν λίμνην οἰκεῖ τὴν Μαιῶτιν διαφέρον τῶν ἐθνέων τῶν ἄλλων. Σαυρομάται καλεῦνται. τούτων αἱ γυναῖκες ἰπάζονται τε καὶ τοξεύουσι καὶ ἀκοντίζουσιν ἀπὸ τῶν ἵπων καὶ μάχονται τοῖς πολεμίοις, ἕως ἂν παρθένοι ἔωσιν. οὐκ ἀποπαρθενεύονται δέ, μέχρι ἂν τῶν πολεμίων τρεῖς ἀποκτείνωσι, καὶ οὐ πρότερον συνοικέουσιν ἢπερ τὰ ἱερά θύσωσιν τὰ ἔννομα. ἢ δ' ἂν ἄνδρα ἐσωτῆ ἄρηται, παύεται ἰπαζομένη, ἕως ἂν μὴ ἀνάγκη καταλάβῃ παγκοίνου στρατείας. τὸν δεξιὸν δὲ μαζὸν οὐκ ἔχουσι. παιδίοις γὰρ ἐοῦσιν ἔτι νηπίοις αἱ μητέρες χαλκίον τετεχνημένον ἐπ' αὐτῷ τούτῳ διάπυρον ποιέουσαι πρὸς τὸν μαζὸν τιθέασιν τὸν δεξιὸν καὶ ἐπικαίεται, ὥστε τὴν αὐξήσιν φθείρεσθαι, ἐς δὲ τὸν δεξιὸν ὤμον καὶ βραχίονα πᾶσαν τὴν ἰσχὴν καὶ τὸ πλῆθος ἐκδιδόναι.

18. Περὶ δὲ τῶν λοιπῶν Σκυθέων τῆς μορφῆς, ὅτι αὐτοὶ αὐτοῖσιν εἰκόσασι καὶ οὐδαμῶς ἄλλοις, οὗτος λόγος καὶ περὶ τῶν Αἰγυπτίων, πλὴν ὅτι οἱ μὲν ὑπὸ τοῦ θερμοῦ εἰσι βεβιασμένοι, οἱ δὲ ὑπὸ τοῦ ψυχροῦ. ἡ δὲ Σκυθέων ἐρημὴ καλυμμένη πεδιάς ἐστὶ καὶ λειμακώδης καὶ ψιλὴ καὶ ἔνυδρος μετρίως. ποταμοὶ γὰρ εἰσι μεγάλοι, οἱ ἐξοχετεύουσι τὸ ὕδωρ ἐκ τῶν πεδίων. ἐνταῦθα καὶ οἱ Σκύθαι διατεῦνται, Νομάδες δὲ καλεῦνται, ὅτι οὐκ ἔστιν οἰκῆματα, ἀλλ' ἐν ἀμάξεισιν οἰκεῦσιν. αἱ δὲ ἄμαξαι εἰσιν αἱ μὲν ἐλάχισται τετράκυκλοι, αἱ δὲ ἐξάκυκλοι· αὗται δὲ πῖλοις περιπεφραγμένοι· εἰσὶ δὲ καὶ τετεχνασμένοι ὡσπερ οἰκῆματα τὰ μὲν διπλᾶ, τὰ δὲ τριπλᾶ. ταῦτα δὲ καὶ στεγνὰ πρὸς ὕδωρ καὶ πρὸς χιόνα καὶ πρὸς τὰ πνεύματα. τὰς δὲ ἀμάξας ἔλκουσι ζεύγεα τὰς μὲν δύο, τὰς δὲ τρία βοῶν κέρως ἄτερ. οὐ γὰρ ἔχουσι κέρατα ὑπὸ τοῦ ψύχεος. ἐν ταύτησι μὲν οὖν τῆσιν ἀμάξεισιν αἱ γυναῖκες διατεῦνται. αὐτοὶ δ' ἐφ' ἵπων ὀχεῦνται οἱ ἄνδρες. ἔπονται δὲ αὐτοῖς καὶ τὰ πρόβατα τὰ ἐόντα καὶ αἱ βόες καὶ οἱ ἵπποι. μένουσι δ' ἐν τῷ αὐτῷ τοσοῦτον χρόνον, ὅσον ἂν ἀποχρῆ αὐτοῖσι τοῖς κτήνεσιν ὁ χόρτος· ὁκόταν δὲ μηκέτι, ἐς ἐτέρην χώραν ἔρχονται. αὐτοὶ δ' ἐσθίουσι κρέα ἐφθὰ καὶ πίνουσι γάλα ἵπων. καὶ ἱπάκην τρώγουσι· τοῦτο δ' ἐστὶ τυρὸς ἵπων.

19. Τὰ μὲν ἐς τὴν δίαιταν αὐτῶν οὕτως ἔχει καὶ τοὺς νόμους· περὶ δὲ τῶν ὠρέων καὶ τῆς μορφῆς, ὅτι πολὺ ἀπήλλακται τῶν λοιπῶν ἀνθρώπων τὸ Σκυθικὸν γένος καὶ ἔοικεν αὐτὸ ἐωυτῷ ὡσπερ τὸ Αἰγύπτιον καὶ ἥκιστα πολύγονόν ἐστὶ, καὶ ἡ χώρα ἐλάχιστα θηρία τρέφει κατὰ μέγεθος καὶ πλῆθος. κεῖται γὰρ ὑπ' αὐτῆσι τῆσιν ἄρκτοις καὶ τοῖς ὄρεσι τοῖς Ῥιπαίοισιν, ὅθεν ὁ βορέης πνεῖ. ὁ τε ἥλιος τελευτῶν ἐγγύτατα γίνεται, ὁκόταν ἐπὶ τὰς θερινὰς ἔλθῃ περιόδους, καὶ τότε ὀλίγον χρόνον θερμαίνει καὶ οὐ σφόδρα· τὰ δὲ πνεύματα τὰ ἀπὸ τῶν θερμῶν πνέοντα οὐκ ἀφικνεῖται, ἢν μὴ ὀλιγάκις καὶ ἀσθενέα, ἀλλ' ἀπὸ τῶν ἄρκτων αἰεὶ πνέουσι πνεύματα ψυχρὰ ἀπὸ τε χιόνος καὶ κρυστάλλου καὶ ὑδάτων πολλῶν. οὐδέποτε δὲ τὰ ὄρεα ἐκλείπει· ἀπὸ τούτων δὲ δυσοίκητά ἐστὶν. ἡ ἡρ τε κατέχει πολὺς τῆς ἡμέρης τὰ πεδία, καὶ ἐν τούτοις διατεῦνται· ὥστε τὸν μὲν χειμῶνα αἰεὶ εἶναι, τὸ δὲ θέρος ὀλίγας ἡμέρας καὶ ταύτας μὴ λίην. μετέωρα γὰρ τὰ πεδία καὶ ψιλὰ καὶ οὐκ ἐστεφάνωνται ὄρεσιν, ἀλλ' ἢ ἀνάντεα ἀπὸ τῶν ἄρκτων· αὐτόθι καὶ τὰ θηρία οὐ γίνεται μεγάλα, ἀλλ' οἷά τε ἐστὶν ὑπὸ γῆν σκεπάζεσθαι. ὁ γὰρ χειμῶν κωλύει καὶ τῆς γῆς ἢ ψιλότης, ὅτι οὐκ ἔστιν ἀλέη οὐδὲ σκέπη. αἱ δὲ μεταβολαὶ τῶν ὠρέων οὐκ εἰσι μεγάλαι οὐδὲ ἰσχυραὶ, ἀλλ' ὁμοῖαι καὶ ὀλίγον μεταλλάσσουσαι· διότι καὶ τὰ εἶδεα ὁμοῖοι αὐτοῖς ἐωυτοῖς εἰσι σίτω τε χρεώμενοι αἰεὶ ὁμοίῳ ἐσθῆτί τε τῇ αὐτῇ καὶ θέρεος καὶ χειμῶνος, τὸν τε ἡέρα ὑδατεινὸν ἔλκοντες καὶ παχύν, τὰ τε ὕδατα πίνοντες ἀπὸ χιόνος καὶ παγετῶν, τοῦ τε ταλαιπώρου ἀπεόντες. οὐ γὰρ οἷόν τε τὸ σῶμα ταλαιπωρεῖσθαι οὐδὲ τὴν ψυχὴν, ὅκου μεταβολαὶ μὴ γίνονται ἰσχυραὶ. διὰ ταύτας τὰς ἀνάγκας τὰ εἶδεα αὐτῶν παχέα ἐστὶ καὶ σαρκώδεα καὶ ἄναρθρα καὶ ὑγρὰ καὶ ἄτονα, αἷ τε κοιλία

ὕγρόταται πασέων κοιλιῶν αἱ κάτω. οὐ γὰρ οἶόν τε νηδὺν ἀναξηραίνεσθαι ἐν τοιαύτῃ χώρῃ καὶ φύσει καὶ ὥρης καταστάσει, ἀλλὰ διὰ πιμελὴν τε καὶ ψιλήν τὴν σάρκα τὰ τε εἶδεα ἔοικεν ἀλλήλοισι τὰ τε ἄρσενα τοῖς ἄρσεσι καὶ τὰ θήλεα τοῖς θήλεσι. τῶν γὰρ ὠρέων παραπλησίων ἐουσέων φθοραὶ οὐκ ἐγγίνονται οὐδὲ κακώσεις ἐν τῇ τοῦ γόνου συμπήξει, ἢν μὴ τινος ἀνάγκης βιαίου τύχη ἢ νούσου.

20. Μέγα δὲ τεκμήριον ἐς τὴν ὑγρότητα παρέξομαι. Σκυθέων γὰρ τοὺς πολλούς, ἅπαντας ὅσοι Νομάδες, εὐρήσεις κεκαυμένους τοὺς τε ὠμούς καὶ τοὺς βραχίονας καὶ τοὺς καρπούς τῶν χειρῶν καὶ τὰ στήθεα καὶ τὰ ἰσχία καὶ τὴν ὀσφῦν δι' ἄλλ' οὐδὲν ἢ διὰ τὴν ὑγρότητα τῆς φύσιος καὶ τὴν μαλακίην. οὐ γὰρ δύνανται οὔτε τοῖς τόξοις συντείνειν οὔτε τῷ ἀκοντίῳ ἐμπίπτειν τῷ ὠμῷ ὑπὸ ὑγρότητος καὶ ἀτονίης. ὀκόταν δὲ καυθέωσιν, ἀναξηραίνεται ἐκ τῶν ἄρθρων τὸ πολὺ τοῦ ὑγροῦ, καὶ ἐντονώτερα μάλλον γίνεται καὶ τροφιμώτερα καὶ ἠρθρωμένα τὰ σώματα μᾶλλον. ῥοϊκὰ δὲ γίνεται καὶ πλατέα, πρῶτον μὲν ὅτι οὐ σπαργανοῦνται ὡσπερ ἐν Αἰγύπτῳ οὐδὲ νομίζουσι διὰ τὴν ἵππασιν, ὅκως ἂν εὐέδροι ἔωσιν· ἔπειτα δὲ διὰ τὴν ἔδρην· τὰ τε γὰρ ἄρσενα, ἕως ἂν οὐχ οἶά τε ἐφ' ἵππου ὀχεῖσθαι, τὸ πολὺ τοῦ χρόνου κάθηται ἐν τῇ ἀμάξῃ καὶ βραχὺ τῇ βαδίσει χρέονται διὰ τὰς μεταναστάσιας καὶ περιελάσιας· τὰ δὲ θήλεα θαυμαστὸν οἶον ῥοϊκὰ ἐστὶ τε καὶ βραδέα τὰ εἶδεα. πυρρὸν δὲ τὸ γένος ἐστὶ τὸ Σκυθικὸν διὰ τὸ ψύχος, οὐκ ἐπιγυνομένου ὀξέος τοῦ ἡλίου. ὑπὸ δὲ τοῦ ψύχους ἢ λευκότης ἐπι καίεται καὶ γίνεται πυρρή.

21. Πολύγονον δὲ οὐχ οἶόν τε εἶναι φύσιν τοιαύτην. οὔτε γὰρ τῷ ἀνδρὶ ἢ ἐπιθυμίῃ τῆς μεΐξιος γίνεται πολλὴ διὰ τὴν ὑγρότητα τῆς φύσιος καὶ τῆς κοιλίης τὴν μαλθακότητά τε καὶ τὴν ψυχρότητα, ἀφ' ὅτων ἤκιστα εἰκὸς ἄνδρα οἶόν τε λαγνεύειν· καὶ ἔτι ὑπὸ τῶν ἵππων αἰεὶ κοπτόμενοι ἀσθενέες γίνονται ἐς τὴν μεΐξιν. τοῖσι μὲν ἀνδράσιν αὐταὶ αἱ προφάσιες γίνονται, τῆσι δὲ γυναιξίν ἢ τε πίπτει τῆς σαρκὸς καὶ ὑγρότης· οὐ γὰρ δύνανται ἔτι συναρπάζειν αἱ μῆτραι τὸν γόνον· οὔτε γὰρ ἐπιμήνιος κάθαρσις αὐτῆσι γίνεται ὡς χρεῶν ἐστίν, ἀλλ' ὀλίγον καὶ διὰ χρόνου, τό τε στόμα τῶν μητρέων ὑπὸ πιμελῆς συγκλείεται καὶ οὐχ ὑποδέχεται τὸν γόνον· αὐταὶ τε ἀταλαίπωροι καὶ πύεροι καὶ αἱ κοιλίαι ψυχραὶ καὶ μαλθακαί. ὑπὸ τούτων τῶν ἀναγκέων οὐ πολύγονόν ἐστὶ τὸ γένος τὸ Σκυθικόν. μέγα δὲ τεκμήριον αἱ οἰκέτιδες ποιέουσιν· οὐ γὰρ φθάνουσι παρὰ ἄνδρα ἀφικνεύμενοι καὶ ἐν γαστρὶ ἴσχουσιν διὰ τὴν ταλαιπωρίην καὶ ἰσχύνητα τῆς σαρκός.

22. Ἐτι τε πρὸς τούτοις εὐνουχίαι γίνονται οἱ πλεῖστοι ἐν Σκύθησι καὶ γυναικεῖα ἐργάζονται καὶ ὡς αἱ γυναῖκες διατεῦνται διαλέγονταί τε ὁμοίως· καλεῦνται τε οἱ τοιοῦτοι Ἀναριεῖς. οἱ μὲν οὖν ἐπιχώριοι τὴν αἰτίην προστιθέασιν

θεῶ καὶ σέβονται τούτους τοὺς ἀνθρώπους καὶ προσκυνέουσι, δεδαικότες περὶ ἑωυτῶν ἕκαστοι. ἐμοὶ δὲ καὶ αὐτῶ δοκεῖ ταῦτα τὰ πάθεα θεῖα εἶναι καὶ τᾶλλα πάντα καὶ οὐδὲν ἕτερον ἑτέρου θειότερον οὐδὲ ἀνθρωπινώτερον, ἀλλὰ πάντα ὁμοῖα καὶ πάντα θεῖα. ἕκαστον δὲ αὐτῶν ἔχει φύσιν τὴν ἑωυτοῦ καὶ οὐδὲν ἄνευ φύσιος γίνεται. καὶ τοῦτο τὸ πάθος ὡς μοι δοκεῖ γίνεσθαι φράσω· ὑπὸ τῆς ἵππασίης αὐτοὺς κέδματα λαμβάνει, ἅτε αἰεὶ κρεμαμένων ἀπὸ τῶν ἵππων τοῖς ποσίν· ἔπειτα ἀποχωλοῦνται καὶ ἐλκοῦνται τὰ ἰσχία, οἱ ἂν σφόδρα νοσήσωσιν. ἰῶνται δὲ σφᾶς αὐτοὺς τρόπῳ τοιῶδε. ὁκόταν γὰρ ἄρχηται ἡ νοῦσος, ὀπισθεν τοῦ ὠτὸς ἑκατέρου φλέβα τάμνουσιν. ὁκόταν δὲ ἀπορρυῆ τὸ αἷμα, ὕπνος ὑπολαμβάνει ὑπὸ ἀσθενείης καὶ καθεύδουσιν. ἔπειτα ἀνεγείρονται, οἱ μὲν τινες ὑγιέες ἐόντες, οἱ δ' οὐ. ἐμοὶ μὲν οὖν δοκεῖ ἐν ταύτῃ τῇ ἰήσει διαφθεῖρεσθαι ὁ γόνος. εἰσὶ γὰρ παρὰ τὰ ὦτα φλέβες, ἃς ἐάν τις ἐπιτάμη, ἄγονοι γίνονται οἱ ἐπιτμηθέντες. ταύτας τοίνυν μοι δοκέουσι τὰς φλέβας ἐπιτάμνειν. οἱ δὲ μετὰ ταῦτα ἐπειδὴν ἀφίκονται παρὰ γυναῖκας καὶ μὴ οἷοί τ' ἔωσι χρῆσθαι σφισιν, τὸ πρῶτον οὐκ ἐνθυμεῦνται, ἀλλ' ἡσυχίην ἔχουσι. ὁκόταν δὲ δις καὶ τρις καὶ πλεονάκις αὐτοῖσι πειρωμένοισι μηδὲν ἄλλοιότερον ἀποβαίῃη, νομίσαντές τι ἡμαρτηκέναι τῶ θεῶ, ὃν ἐπαιτιῶνται, ἐνδύονται στολὴν γυναικεῖην καταγνόντες ἑωυτῶν ἀνανδρεῖην. γυναικίζουσί τε καὶ ἐργάζονται μετὰ τῶν γυναικῶν ἃ καὶ ἐκεῖναι.

Τοῦτο δὲ πάσχουσι Σκυθέων οἱ πλούσιοι, οὐχ οἱ κάκιστοι ἀλλ' οἱ εὐγενέστατοι καὶ ἰσχὴν πλείστην κεκτημένοι, διὰ τὴν ἵππασίην, οἱ δὲ πένητες ἦσσαν· οὐ γὰρ ἱπάζονται. καίτοι ἐχρῆν, ἐπεὶ θειότερον τοῦτο τὸ νόσευμα τῶν λοιπῶν ἐστίν, οὐ τοῖς γενναιοτάτοις τῶν Σκυθέων καὶ τοῖς πλουσιωτάτοις προσπίπτειν μούνοισ, ἀλλὰ τοῖς ἅπασιν ὁμοίως, καὶ μᾶλλον τοῖσιν ὀλίγα κεκτημένοισιν, εἰ δὴ τιμώμενοι χαίρουσιν οἱ θεοὶ καὶ θαυμαζόμενοι ὑπ' ἀνθρώπων καὶ ἀντὶ τούτων χάριτας ἀποδιδόασιν. εἰκὸς γὰρ τοὺς μὲν πλουσίους θύειν πολλὰ τοῖς θεοῖς καὶ ἀνατιθέναι ἀναθήματα ἐόντων χρημάτων πολλῶν καὶ τιμᾶν, τοὺς δὲ πένητας ἦσσαν διὰ τὸ μὴ ἔχειν, ἔπειτα καὶ ἐπιμεμφομένους ὅτι οὐ διδόασιν χρήματα αὐτοῖσιν, ὥστε τῶν τοιούτων ἀμαρτιῶν τὰς ζημίας τοὺς ὀλίγα κεκτημένους φέρειν μᾶλλον ἢ τοὺς πλουσίους. ἀλλὰ γάρ, ὥσπερ καὶ πρότερον ἔλεξα, θεῖα μὲν καὶ ταῦτά ἐστιν ὁμοίως τοῖς ἄλλοις· γίνεται δὲ κατὰ φύσιν ἕκαστα. καὶ ἡ τοιαύτη νοῦσος ἀπὸ τοιαύτης προφάσιος τοῖς Σκύθησι γίνεται οἷον εἴρηκα. ἔχει δὲ καὶ κατὰ τοὺς λοιποὺς ἀνθρώπους ὁμοίως. ὅκου γὰρ ἱπάζονται μάλιστα καὶ πυκνότατα, ἐκεῖ πλείστοι ὑπὸ κεδμάτων καὶ ἰσχιάδων καὶ ποδαγριῶν ἀλίσκονται καὶ λαγνεύειν κάκιστοὶ εἰσι. ταῦτα δὲ τοῖσι Σκύθησι πρόσεστι, καὶ εὐνουχοειδέστατοὶ εἰσιν ἀνθρώπων διὰ ταύτας τε τὰς προφάσιος καὶ ὅτι ἀναξυρίδας ἔχουσιν αἰεὶ καὶ εἰσιν ἐπὶ τῶν ἵππων τὸ πλεῖστον τοῦ χρόνου, ὥστε μήτε χειρὶ ἄπτεσθαι τοῦ αἰδοίου, ὑπὸ τε τοῦ ψύχεος καὶ τοῦ κόπου ἐπιλήθεσθαι

τοῦ ἡμέρου καὶ τῆς μείζιος, καὶ μηδὲν παρακινεῖν πρότερον ἢ ἀνανδρωθῆναι.

23. Περὶ μὲν οὖν τῶν Σκυθέων οὕτως ἔχει τοῦ γένους. τὸ δὲ λοιπὸν γένος τὸ ἐν τῇ Εὐρώπῃ διάφορον αὐτὸ ἐωυτῶ ἐστὶ καὶ κατὰ τὸ μέγεθος καὶ κατὰ τὰς μορφὰς διὰ τὰς μεταλλαγὰς τῶν ὥρέων, ὅτι μεγάλαί γίνονται καὶ πυκναί, καὶ θάλπεά τε ἰσχυρὰ καὶ χειμῶνες καρτεροὶ καὶ ὄμβροι πολλοὶ καὶ αὐτὶς αὐχμοὶ πολυχρόνιοι καὶ πνεύματα, ἐξ ὧν μεταβολαὶ πολλαὶ καὶ παντοδαπαί. ἀπὸ τούτων εἰκὸς αἰσθάνεσθαι καὶ τὴν γένεσιν ἐν τῇ συμπήξει τοῦ γόνου ἄλλοτε ἄλλην καὶ μὴ τῶ αὐτῶ τὴν αὐτὴν γίνεσθαι ἔν τε τῶ θέρει καὶ τῶ χειμῶνι μηδὲ ἐν ἐπομβρίῃ καὶ αὐχμῶ. διότι τὰ εἶδεα διηλλάχθαι νομίζω τῶν Εὐρωπαϊῶν μᾶλλον ἢ τῶν Ἀσινηῶν καὶ τὰ μεγέθεα διαφορώτατα αὐτὰ ἐωυτοῖς εἶναι κατὰ πόλιν ἐκάστην. αἱ γὰρ φθοραὶ πλείονες ἐγγίνονται τοῦ γόνου ἐν τῇ συμπήξει ἐν τῆσι μεταλλαγῆσι τῶν ὥρέων πυκνῆ σιν ἐούσησιν ἢ ἐν τῆσι παραπλησίησι καὶ ὁμοίησι. περὶ τε τῶν ἠθέων ὁ αὐτὸς λόγος· τό τε ἄγριον καὶ τὸ ἄμεικτον καὶ τὸ θυμοειδὲς ἐν τῇ τοιαύτῃ φύσει ἐγγίνεται. αἱ γὰρ ἐκπλήξεις πυκναὶ γινόμεναι τῆς γνώμης τὴν ἀγριότητα ἐντιθέασιν, τὸ δὲ ἡμερόν τε καὶ ἡπιον ἀμαυροῦσι. διὸ καὶ εὐψυχοτέρους νομίζω τοὺς τὴν Εὐρώπην οἰκέοντας εἶναι ἢ τοὺς τὴν Ἀσίην. ἐν μὲν γὰρ τῶ αἰεὶ παραπλησίῳ αἱ ῥαθυμίαι ἔνεισιν, ἐν δὲ τῶ μεταβαλλομένῳ αἱ ταλαιπωρίαὶ τῶ σώματι καὶ τῇ ψυχῇ. καὶ ἀπὸ μὲν ἡσυχίης καὶ ῥαθυμίας ἡ δειλίη αὐξεται, ἀπὸ δὲ τῆς ταλαιπωρίας καὶ τῶν πόνων αἱ ἀνδρεῖαι. διὰ τοῦτο εἰσι μαχιμώτεροι οἱ τὴν Εὐρώπην οἰκέοντες καὶ διὰ τοὺς νόμους, ὅτι οὐ βασιλεύονται ὥσπερ οἱ Ἀσινηοί. ὅκου γὰρ βασιλεύονται, ἐκεῖ ἀνάγκη δειλοτάτους εἶναι. εἴρηται δέ μοι καὶ πρότερον. αἱ γὰρ ψυχαὶ δεδούλωνται καὶ οὐ βούλονται παρακινδυνεύειν ἐκόντες εἰκῆ ὑπὲρ ἀλλοτρίας δυνάμιος. ὅσοι δὲ αὐτόνομοι — ὑπὲρ ἐωυτῶν γὰρ τοὺς κινδύνους αἰρεῦνται καὶ οὐκ ἄλλων — προθυμεῦνται ἐκόντες καὶ ἐς τὸ δεινὸν ἔρχονται. τὰ γὰρ ἀριστεῖα τῆς νίκης αὐτοὶ φέρονται. οὕτως οἱ νόμοι οὐχ ἥκιστα τὴν εὐψυχίην ἐργάζονται.

24. Τὸ μὲν οὖν ὅλον καὶ τὸ ἅπαν οὕτως ἔχει περὶ τε τῆς Εὐρώπης καὶ τῆς Ἀσίας. ἔνεισι δὲ καὶ ἐν τῇ Εὐρώπῃ φύλα διάφορα ἕτερα ἑτέροις καὶ τὰ μεγέθεα καὶ τὰς μορφὰς καὶ τὰς ἀνδρείας. τὰ δὲ διαλλάσσοντα ταῦτά ἐστιν, ἃ καὶ ἐπὶ τῶν πρότερον εἴρηται. ἔτι δὲ σαφέστερον φράσω. ὁκόσοι μὲν χώραν ὀρεινὴν τε οἰκέουσι καὶ τρηχεῖαν καὶ ὑψηλὴν καὶ ἔνυδρον, καὶ αἱ μεταβολαὶ αὐτοῖσι γίνονται τῶν ὥρέων μέγα διάφοροι, ἐνταῦθα εἰκὸς εἶδεα μεγάλα εἶναι καὶ πρὸς τὸ ταλαίπωρον καὶ τὸ ἀνδρεῖον εὖ πεφυκότα, καὶ τό τε ἄγριον καὶ τὸ θηριῶδες αἱ τοιαῦται φύσεις οὐχ ἥκιστα ἔχουσιν. ὁκόσοι δὲ κοῖλα χωρία καὶ λειμακώδεα καὶ πνιγηρὰ καὶ τῶν θερμῶν πνευμάτων πλεον μέρος μετέχουσιν ἢ τῶν ψυχρῶν ὑδασί τε χρέονται θερμοῖσιν, οὗτοι δὲ μεγάλοι μὲν οὐκ ἂν εἴησαν οὐδὲ κανονία, ἐς εὖρος δὲ πεφυκότες καὶ σαρκώδεις καὶ μελανότριχες, καὶ αὐτοὶ μέλανες

μᾶλλον ἢ λευκότεροι, φλεγματῖαι δὲ ἦσσαν ἢ χολώδεις· τὸ δὲ ἀνδρεῖον καὶ τὸ ταλαίπωρον ἐν τῇ ψυχῇ φύσει μὲν οὐκ ἂν ὁμοίως ἐνεῖη, νόμος δὲ προσγενόμενος ἀπεργάζοιτ' ἄν. καὶ εἰ μὲν ποταμοὶ ἐνεΐσαν ἐν τῇ χώρῃ, οἵτινες ἐκ τῆς χώρας ἐξοχετεύουσι τό τε στάσιμον καὶ τὸ ὄμβριον, οὗτοι ἂν ὑγιεῖς τε εἴησαν καὶ λαμπροί. εἰ μὲντοι ποταμοὶ μὲν μὴ εἴησαι, τὰ δὲ ὕδατα λιμναῖά τε καὶ στάσιμα πίνοιεν καὶ ἐλώδεα, ἀνάγκη τὰ τοιαῦτα εἶδεα προγαστρώτερα καὶ σπληνώδεα εἶναι. ὀκόσοι δὲ ὑψηλὴν τε οἰκέουσι χώραν καὶ λεινὴν καὶ ἀνεμώδεα καὶ ἔνυδρον, εἶεν ἂν εἶδεα μεγάλοι καὶ ἐωυτοῖσι παραπλήσιοι· ἀνανδρότεροι δὲ καὶ ἡμερώτεροι αἱ γινώμηναι. ὀκόσοι δὲ λεπτά τε καὶ ἄνυδρα καὶ ψιλὰ, τῆσι μεταβολῆσι τῶν ὠρέων οὐκ εὐκρητα, ἐν ταύτῃ τῇ χώρῃ τὰ εἶδεα εἰκὸς σκληρά τε εἶναι καὶ ἔντονα καὶ ξανθότερα ἢ μελάντερα καὶ τὰ ἥθεα καὶ τὰς ὀργὰς αὐθάδεάς τε καὶ ἰδιογνώμονας. ὅκου γὰρ αἱ μεταβολαὶ εἰσι πυκνότεραι τῶν ὠρέων καὶ πλεῖστον διάφοροι αὐταὶ ἐωυτῆσιν, ἐκεῖ καὶ τὰ εἶδεα καὶ τὰ ἥθεα καὶ τὰς φύσεως εὐρήσεις πλεῖστον διαφερούσας. Μέγισται μὲν οὖν εἰσιν αὐταὶ τῆς φύσεως αἱ διαλλαγαί, ἔπειτα δὲ καὶ ἡ χώρα, ἐν ἣ ἂν τις τρέφεται καὶ τὰ ὕδατα. εὐρήσεις γὰρ ἐπὶ τὸ πλῆθος τῆς χώρας τῇ φύσει ἀκολουθέοντα καὶ τὰ εἶδεα τῶν ἀνθρώπων καὶ τοὺς τρόπους. ὅκου μὲν γὰρ ἡ γῆ πίειρα καὶ μαλθακὴ καὶ ἔνυδρος, καὶ τὰ ὕδατα κάρτα μετέωρα, ὥστε θερμὰ εἶναι τοῦ θέρους καὶ τοῦ χειμῶνος ψυχρά, καὶ τῶν ὠρέων καλῶς κεῖται, ἐνταῦθα καὶ οἱ ἀνθρωποὶ σαρκώδεές εἰσι καὶ ἄναρθροι καὶ ὑγροὶ καὶ ἀταλαίπωροι καὶ τὴν ψυχὴν κακοὶ ὡς ἐπὶ τὸ πολὺ. τό τε ῥάθυμον καὶ τὸ ὑπνηρὸν ἐνεστὶν ἐν αὐτοῖς ἰδεῖν· ἕς τε τὰς τέχνας παχέες καὶ οὐ λεπτοὶ οὐδ' ὀξέες. ὅκου δ' ἐστὶν ἡ χώρα ψιλὴ τε καὶ ἄνυδρος καὶ τρηγεῖα καὶ ὑπὸ τοῦ χειμῶνος πιεζομένη καὶ ὑπὸ τοῦ ἡλίου κεκαυμένη, ἐνταῦθα δὲ σκληροὺς τε καὶ ἰσχνοὺς καὶ διηρθρωμένους καὶ ἐντόνους καὶ δασέας ἴδοις. τό τε ἐργατικὸν ἐνεὸν ἐν τῇ φύσει τῇ τοιαύτῃ καὶ τὸ ἄγρυπνον, τὰ τε ἥθεα καὶ τὰς ὀργὰς αὐθάδεας καὶ ἰδιογνώμονας, τοῦ τε ἀγρίου μᾶλλον μετέχοντας ἢ τοῦ ἡμέρου, ἕς τε τὰς τέχνας ὀξυτέρους τε καὶ συνετωτέρους καὶ τὰ πολέμια ἀμείνους εὐρήσεις· καὶ τᾶλλα τὰ ἐν τῇ γῇ φυόμενα πάντα ἀκόλουθα ἐόντα τῇ γῆ. αἱ μὲν ἐναντιώταται φύσιές τε καὶ ἰδέαι ἔχουσιν οὕτως. ἀπὸ δὲ τούτων τεκμαιρόμενος τὰ λοιπὰ ἐνθυμεῖσθαι, καὶ οὐχ ἀμαρτήση.

## ON THE ARTICULATIONS - Περί ἄρθρων

1. Ωμου δὲ ἄρθρον ἓνα τρόπον οἶδα ὀλισθάνον, τὸν ἐς τὴν μασχάλην ἄνω δὲ οὐδέποτε εἶδον, οὐδὲ ἐς τὸ ἔξω οὐ μέντοι δισχυριεῖω ἔγωγε, εἰ ὀλισθάνοι ἂν, ἢ οὐ, καίπερ ἔχων περὶ αὐτοῦ ὅ τι λέγω. Ἀτὰρ οὐδὲ ἐς τὸ ἔμπροσθεν οὐδὲ ὄπωπα, ὅ τι ἔδοξέ μοι ὀλισθηκέναι. Τοῖσι μέντοι ἰητροῖσι δοκέει κάρτα ἐς τοῦμπροσθεν ὀλισθάνειν, καὶ μάλιστα ἐξαπατέονται ἐν τουτέοισιν, ὧν ἂν φθίσις καταλάβῃ τὰς σάρκας τὰς περὶ τὸ ἄρθρον τε καὶ τὸν βραχίονα φαίνεται γὰρ ἐν τοῖσι τοιούτοις παντάπασιν ἢ κεφαλὴ τοῦ βραχίονος ἐξέχουσα ἐς τοῦμπροσθεν. Καὶ ἔγωγέ ποτε τὸ τοιοῦτον οὐ φᾶς ἐκπεπτωκέναι, ἤκουσα φλαύρως ὑπὸ τε τῶν ἰητρῶν, ὑπὸ τε τῶν δημοτέων, διὰ τοῦτο τὸ πρῆγμα ἐδόκεον γὰρ αὐτοῖσιν ἠγνοηκέναι μούνος, οἱ δὲ ἄλλοι ἐγνωκέναι, καὶ οὐκ ἠδυνάμην αὐτοὺς ἀναγνῶσαι,

εἰ μὴ μόλις, ὅτι τόδ' ἐστὶ τοιόνδε εἴ τις τοῦ βραχίονος ψιλώσῃ μὲν τῶν σαρκέων τὴν ἐπωμίδα, ψιλώσῃ δὲ ἢ ὁ μῦς ἀνατείνει, ψιλώσῃ δὲ τὸν τένοντα τὸν κατὰ τὴν μασχάλην καὶ τὴν κληῖδα πρὸς τὸ στήθος ἔχοντα, φαίνοιτο ἂν ἢ κεφαλὴ τοῦ βραχίονος ἐς τοῦμπροσθεν ἐξέχουσα ἰσχυρῶς, καίπερ οὐκ ἐκπεπτωκυῖα πέφυκε γὰρ ἐς τοῦμπροσθεν προπετῆς ἢ κεφαλὴ τοῦ βραχίονος τὸ δ' ἄλλο ὀστέον τοῦ βραχίονος ἐς τὸ ἔξω καμπύλον. Ὅμιλέει δὲ ὁ βραχίων τῷ κοίλῳ τῆς ὠμοπλάτης πλάγιος, ὅταν παρὰ τὰς πλευρὰς παρατεταμένος ἔῃ ὅταν μέντοι ἐς τοῦμπροσθεν ἐκτανυσθῇ ἢ ζύμπασα χεῖρ, τότε ἢ κεφαλὴ τοῦ βραχίονος κατ' ἴξιν τῆς ὠμοπλάτης τῷ κοίλῳ γίνεται, καὶ οὐκ ἔτι ἐξέχειν ἐς τοῦμπροσθεν φαίνεται. Περὶ οὗ οὖν ὁ λόγος, οὐδέποτε εἶδον οὐδὲ ἐς τοῦμπροσθεν ἐκπεσόν οὐ μὴν ἰσχυριεῖω γε οὐδὲ περὶ τούτου, εἰ μὴ ἐκπέσοι ἂν οὕτως, ἢ οὐ. Ὅταν οὖν ἐκπέσῃ ὁ βραχίων ἐς τὴν μασχάλην, ἅτε πολλοῖσιν ἐκπίπτοντος, πολλοὶ ἐπίστανται ἐμβάλλειν εὐπαίδευτον δὲ ἐστὶ τὸ εἰδέναι πάντας τοὺς τρόπους, οἷσιν οἱ ἰητροὶ ἐμβάλλουσι, καὶ ὡς ἂν τις αὐτοῖσι τοῖσι τρόποισι τούτοις κάλλιστα χρῶτο. Χρέεσθαι δὲ χρὴ τῷ κρατίστῳ τῶν τρόπων, ἢν τὴν ἰσχυρονάτην ἀνάγκην ὀρθῶς κράτιστος δὲ ὁ ὕστατος γεγραψόμενος.

2. Ὅσοισι μὲν οὖν πυκινὰ ἐκπίπτει ὁ ὦμος, ἱκανοὶ ὡς ἐπὶ τὸ

πλεῖστον αὐτοὶ σφίσις αὐτοῖσιν ἐμβάλλειν εἰσὶν ἐνθέντες γὰρ τῆς ἐτέρης χειρὸς τοὺς κονδύλους ἐς τὴν μασχάλην, ἀναγκάζουσιν ἄνω τὸ ἄρθρον, τὸν δὲ ἀγκῶνα παράγουσιν ἐπὶ τὸ στήθος. Τὸν αὐτὸν δὲ τρόπον τοῦτον καὶ ὁ ἰητρὸς ἂν ἐμβάλλοι, εἰ αὐτὸς μὲν ὑπὸ τὴν μασχάλην ἐσωτέρω τοῦ ἄρθρου τοῦ ἐκπεπτωκότος ὑποτείνας τοὺς δακτύλους, ἀπαναγκάζοι ἀπὸ τῶν πλευρέων,

ἐμβάλλον τὴν ἐωυτοῦ κεφαλὴν ἐς τὸ ἀκρόμιον, ἀντερείσιος ἔνεκα, τοῖσι δὲ γούνασι παρὰ τὸν ἀγκῶνα ἐς τὸν βραχίονα ἐμβάλλον, ἀντωθέοι πρὸς τὰς πλευράς ξυμφέρει δὲ κρατερὰς τὰς χεῖρας ἔχειν τὸν ἐμβάλλοντα. Ἡ αὐτὸς μὲν τῆσι χερσὶ καὶ τῇ κεφαλῇ οὕτω ποιοίη, ἄλλος δὲ τις τὸν ἀγκῶνα παράγοι παρὰ τὸ στῆθος. Ἔστι δὲ ἐμβολὴ ὤμου, καὶ ἐς τοῦπίσω ὑπερβάλλοντα τὸν πῆχυν ἐπὶ τὴν ράχιν, ἔπειτα τῇ μὲν ἐτέρῃ χειρὶ ἀνακλᾶν ἐς τὸ ἄνω τοῦ ἀγκῶνος ἐχόμενον, τῇ δὲ ἐτέρῃ παρὰ τὸ ἄρθρον ὀπισθεν ἐρείδειν. Αὕτη ἡ ἐμβολὴ, καὶ ἡ πρόσθεν εἰρημένη, οὐ κατὰ φύσιν ἐοῦσαι, ὅμως ἀμφισφάλουσαι τὸ ἄρθρον, ἀναγκάζουσιν ἐμπίπτειν.

3. Οἱ δὲ τῇ πτέρνῃ πειρώμενοι ἐμβάλλειν, ἐγγύς τι τοῦ κατὰ φύσιν ἀναγκάζουσιν χρῆ δὲ τὸν μὲν ἄνθρωπον χαμαὶ κατακλῖναι ὑπτιον, τὸν δὲ ἐμβάλλοντα χαμαὶ ἴζεσθαι ἐφ' ὀκότερα ἂν τὸ ἄρθρον ἐκπεπτώκῃ ἔπειτα λαβόμενον τῆσι χερσὶ τῆσιν ἐωυτέου τῆς χειρὸς τῆς σιναρῆς, κατατείνειν αὐτήν, τὴν δὲ πτέρνην ἐς τὴν μασχάλην

ἐμβάλλοντα ἀντωθέειν, τῇ μὲν δεξιῇ ἐς τὴν δεξιήν, τῇ δὲ ἀριστερῇ ἐς τὴν ἀριστερήν. Δεῖ δὲ ἐς τὸ κοῖλον τῆς μασχάλης ἐνθεῖναι στρογγύλον τι ἐναρμόσσον ἐπιτηδειόταται δὲ αἱ πάνυ σμικραὶ σφαῖραι καὶ σκληραὶ, οἷαι ἐκ τῶν πολλῶν σκυτέων ράπτονται ἦν γὰρ μή τι τοιοῦτον ἐγκέηται, οὐ δύναται ἡ πτέρνη ἐξικνέεσθαι πρὸς τὴν κεφαλὴν τοῦ βραχίονος κατατεινομένης γὰρ τῆς χειρὸς, κοιλαίνεται ἡ μασχάλη οἱ γὰρ τένοντες οἱ ἔνθεν καὶ ἔνθεν τῆς μασχάλης, ἀντισφίγγοντες, ἐναντίοι εἰσίν. Χρῆ δὲ τινα ἐπὶ θάτερα τοῦ κατατεινομένου καθήμενον κατέχειν κατὰ τὸν ὑγίεια ὄμον, ὡς μὴ περιέλκηται τὸ σῶμα, τῆς χειρὸς τῆς σιναρῆς ἐπὶ θάτερα τεινομένης ἔπειτα ἱμάντος μαλθακοῦ πλάτος ἔχοντος ἰκανόν, ὅταν ἡ σφαῖρη ἐντεθῇ ἐς τὴν μασχάλην, περὶ τὴν σφαῖρην περιβεβλημένου τοῦ ἱμάντος, καὶ κατέχοντος, λαβόμενον ἀμφοτέρων τῶν ἀρχέων τοῦ ἱμάντος, ἀντικατατείνειν τινὰ, ὑπὲρ κεφαλῆς τοῦ κατατεινομένου καθήμενον, τῷ ποδὶ προσβάντα πρὸς τοῦ ἀκρωμίου τὸ ὀστέον. Ἡ δὲ σφαῖρη ὡς ἐσωτάτω καὶ ὡς μάλιστα πρὸς τῶν πλευρέων κείσθω, καὶ μὴ ἐπὶ τῇ κεφαλῇ τοῦ βραχίονος.

4. Ἔστι δὲ καὶ ἄλλη ἐμβολὴ, ἣ κατωμίζουσιν ἐς ὀρθόν μείζω μέντοι εἶναι χρῆ τὸν κατωμίζοντα, διαλαβόντα δὲ τὴν χεῖρα, ὑποθεῖναι τὸν ὄμον τὸν ἐωυτοῦ ὑπὸ τὴν μασχάλην ὅζυν κᾶπειτα

ὑποστρέψαι, ὡς ἂν ἐνίζηται ἔδρη, οὕτω στοχασάμενον ὅκως ἀμφὶ τὸν ὄμον τὸν ἐωυτοῦ κρεμάσαι τὸν ἄνθρωπον κατὰ τὴν μασχάλην αὐτὸς δὲ ἐωυτὸν ὑψηλότερον ἐπὶ τοῦτον τὸν ὄμον ποιεέτω, ἢ ἐπὶ τὸν ἕτερον τοῦ δὲ κρεμαμένου



τὸν βραχίονα πρὸς τὸ ἐσωτοῦ στῆθος προσαναγκαζέτω ὡς τάχιστα ἐν τούτῳ δὲ τῷ σχήματι προσανασειέτω, ὁκόταν μετεωρίση τὸν ἄνθρωπον, ὡς ἀντιρρέποι τὸ ἄλλο σῶμα αὐτῷ, ἀντίον τοῦ βραχίονος τοῦ κατεχομένου ἦν δὲ ἄγαν κοῦφος ἔη ὁ ἄνθρωπος, προσεπικρεμασθήτω τούτου ὀπισθὲν τις κοῦφος παῖς. Αὗται δὲ αἱ ἐμβολαὶ πᾶσαι κατὰ παλαιστρην εὐχρηστοὶ εἰσιν, ὅτι οὐδὲν ἄλλοίων ἀρμένων δέονται ἐπεισενεχθῆναι χρήσαιτο δ' ἂν τις καὶ ἄλλοθι.

5. Ἄτὰρ καὶ οἱ περὶ τὸ ὑπερον ἀναγκάζοντες, ἐγγύς τι τοῦ κατὰ φύσιν ἐμβάλλουσιν χρή δὲ τὸ μὲν ὑπερον κατειλίχθαι ταινίη τινὶ μαλθακῇ ἥσσον γὰρ ἂν ὑπολισθάνοι, ὑπηναγκάσθαι δὲ μεσηγὺ τῶν πλευρέων καὶ τῆς κεφαλῆς τοῦ βραχίονος καὶ ἦν μὲν βραχὺ ἔη τὸ ὑπερον, καθῆσθαι χρή τὸν ἄνθρωπον ἐπί τινος, ὡς μόλις

τὸν βραχίονα περιβάλλειν δύνηται περὶ τὸ ὑπερον μάλιστα δὲ ἔστω μακρότερον τὸ ὑπερον, ὡς ἂν ἐστεῶς ὁ ἄνθρωπος κρέμασθαι μικροῦ δέη ἀμφὶ τῷ ξύλῳ. Κᾶπειτα ὁ μὲν βραχίων καὶ ὁ πῆχυς παρατεταμένος παρὰ τὸ ὑπερον ἔστω, τὸ δὲ ἐπὶ θάτερα τοῦ σώματος καταταγκαζέτω τις, περιβάλλων κατὰ τὸν αὐχένα παρὰ τὴν κληΐδα τὰς χεῖρας. Αὕτη ἡ ἐμβολὴ κατὰ φύσιν ἐπεικέως ἐστὶ, καὶ ἐμβάλλειν δύναται, ἦν χρηστῶς σκευάσωνται αὐτήν.

6. Ἄτὰρ καὶ ἡ διὰ τοῦ κλιμακίου ἐτέρη τις τοιαύτη, καὶ ἔτι βελτίων, ὅτι ἀσφαλεστέως ἂν τὸ σῶμα, τὸ μὲν τῆ, τὸ δὲ τῆ, ἀντισηκωθεῖ μετεωρισθὲν περὶ γὰρ τὸ ὑπεροειδὲς ὁ ὤμος ἦν καὶ καταπεπήγη, περισφάλλεσθαι τὸ σῶμα κίνδυνος ἢ τῆ, ἢ τῆ χρή μέντοι, καὶ ἐπὶ τῷ κλιμακτῆρι ἐπιδεδέσθαι τι ἄνωθεν στρογγύλον ἐναρμόσσον ἐς τὸ κοῖλον τῆς μασχάλης, ὃ προσδιαναγκάσει τὴν κεφαλὴν τοῦ βραχίονος ἐς τὴν φύσιν ἀπιέναι.

7. Κρατίστη μέντοι πασέων τῶν ἐμβολέων ἡ τοιήδε ξύλον χρή εἶναι, πλάτος μὲν ὡς πενταδάκτυλον, ἢ τετραδάκτυλον τὸ ἐπίπαν, πάχος δὲ ὡς διδάκτυλον, ἢ καὶ λεπτότερον, μῆκος δὲ δίπηχυ, ἢ ὀλίγω ἔλασσον ἔστω δὲ ἐπὶ θάτερα τὸ ἄκρον περιφερὲς καὶ στενότατον ταύτη καὶ λεπτότατον ἄμβην δὲ ἐχέτω, σμικρὸν

ὑπερέχουσαν, ἐπὶ τῷ ὑστάτῳ τοῦ περιφερέος, ἐν τῷ μέρει, μὴ τῷ πρὸς τὰς πλευράς, ἀλλὰ τῷ πρὸς τὴν κεφαλὴν τοῦ βραχίονος ἔχοντι, ὡς ὑφαρμόσειε τῆ μασχάλη παρὰ τὰς πλευράς ὑπὸ τὴν κεφαλὴν τοῦ βραχίονος ὑποτιθέμενον ὀθονίῳ δὲ ἢ ταινίη μαλθακῇ κατακεκολλήσθω ἄκρον τὸ ξύλον, ὅκως προσηνέστερον ἔη. Ἐπειτα χρή ὑπόσαντα τὴν κεφαλὴν τοῦ ξύλου ὑπὸ τὴν μασχάλην ὡς ἐσωτάτω μεσηγὺ τῶν πλευρέων καὶ τῆς κεφαλῆς τοῦ βραχίονος, τὴν δὲ ὄλην χεῖρα πρὸς τὸ ξύλον κατατείναντα, προσκαταδῆσαι κατὰ τε τὸν

βραχίονα, κατά τε τὸν πῆχυν, κατά τε τὸν καρπὸν τῆς χειρὸς, ὡς ἂν ἀτρεμέη ὅτι μάλιστα περὶ παντὸς δὲ χρῆ ποιέεσθαι, ὅκως τὸ ἄκρον τοῦ ζύλου ὡς ἐσωτάτω τῆς μασχάλης ἔσται, ὑπερβεβηκὸς τὴν κεφαλὴν τοῦ βραχίονος. Ἐπειτα χρῆ μεσηγὺ δύο στύλων στρωτῆρα πλάγιον εὖ προσδῆσαι, ἔπειτα ὑπερενεγκεῖν τὴν χεῖρα ξὺν τῷ ζύλῳ ὑπὲρ τοῦ στρωτῆρος, ὅκως ἢ μὲν χεὶρ ἐπὶ θάτερα ἔη, ἐπὶ θάτερα δὲ τὸ σῶμα, κατὰ δὲ τὴν μασχάλην ὁ στρωτῆρ κᾶπειτα ἐπὶ μὲν θάτερα τὴν χεῖρα καταναγκάζειν ξὺν τῷ ζύλῳ περὶ τὸν στρωτῆρα, ἐπὶ θάτερα δὲ τὸ ἄλλο σῶμα. Ὑψος δὲ ἔχων ὁ στρωτῆρ προσδεδέσθω, ὥστε μετέωρον τὸ ἄλλο σῶμα εἶναι ἐπ' ἄκρων τῶν ποδῶν. Οὗτος ὁ τρόπος παραπολὺ κράτιστος ἐμβολῆς ὤμου δικαιοτάτα μὲν γὰρ μοχλεύει, ἦν μούνον ἐσωτέρω ἔη τὸ ζύλον τῆς κεφαλῆς τοῦ βραχίονος δικαιοτάτα δὲ αἰ ἀντιρροπαί,

ἀσφαλέες δὲ τῷ ὀστέῳ τοῦ βραχίονος. Τὰ μὲν οὖν νεαρὰ ἐμπίπτει θᾶσσον, ἢ ὡς ἂν τις οἴοιτο, πρὶν ἢ καὶ κατατετάσθαι δοκέειν ἀτὰρ καὶ τὰ παλαιὰ μούνη αὕτη τῶν ἐμβολέων οἷη τε ἐμβιβάσαι, ἦν μὴ ἤδη ὑπὸ χρόνου σὰρξ μὲν ἐπεληλύθη ἐπὶ τὴν κοτύλην, ἢ δὲ κεφαλὴ τοῦ βραχίονος ἤδη τρίβον ἐσωτῆ πεποιημένη ἔη ἐν τῷ χωρίῳ, ἵνα ἐξεκλίθη οὐ μὴν ἀλλ' ἐμβάλλειν γὰρ μοι δοκέει καὶ οὕτω πεπαλαιωμένον ἔκπτωμα τοῦ βραχίονος τί γὰρ ἂν δικαίη μόχλευσις οὐχὶ κινήσειε; μένειν μέντοι οὐκ ἂν μοι δοκέοι κατὰ χώραν, ἀλλ' ὀλισθάνοι ἂν ὡς τὸ ἔθος. Τὸ αὐτὸ δὲ ποιέει καὶ περὶ κλιμακτῆρα καταναγκάζειν, τοῦτον τὸν τρόπον σκευάσαντα. Πάνυ μὴν ἱκανῶς ἔχει, καὶ περὶ μέγα ἔδος θεσσαλικὸν ἀναγκάζειν, ἦν νεαρὸν ἔη τὸ ὀλίσθημα ἐσκευάσθαι μέντοι χρῆ τὸ ζύλον οὕτως, ὥσπερ εἴρηται ἀτὰρ τὸν ἄνθρωπον καθίσει πλάγιον ἐπὶ τῷ δίφρῳ κᾶπειτα τὸν βραχίονα ξὺν τῷ ζύλῳ ὑπερβάλλειν ὑπὲρ τοῦ ἀνακλισμοῦ, καὶ ἐπὶ μὲν θάτερα τὸ σῶμα καταναγκάζειν, ἐπὶ δὲ θάτερα τὸν βραχίονα σὺν τῷ ζύλῳ. Τὸ αὐτὸ δὲ ποιέει καὶ ὑπὲρ δίκλειδος θύρης

ἀναγκάζειν. Χρέεσθαι δὲ χρῆ αἰεὶ τούτοισιν, ἃ ἂν τύχη παρεόντα.

8. Εἰδέναι μὲν οὖν χρῆ, ὅτι φύσιες φυσίων μέγα διαφέρουσιν ἐς τὸ ρηϊδίως ἐμπίπτειν τὰ ἐκπίπτοντα διενέγκοι μὲν γὰρ ἂν τι κα κοτύλη κοτύλης, ἢ μὲν εὐυπέρβατος ἐοῦσα, ἢ δὲ ἦσσον πλεῖστον δὲ διαφέρει καὶ τῶν νεύρων ὁ σύνδεσμος, τοῖσι μὲν ἐπιδόσιας ἔχων, τοῖσι δὲ ξυντεταμένος ἐών. Καὶ γὰρ ἢ ὑγρότης τοῖσιν ἀνθρώποισι γίνεται ἢ ἐκ τῶν ἄρθρων, διὰ τῶν νεύρων τὴν ἀπάρτισιν, ἦν χαλαρά τε ἔη φύσει, καὶ τὰς ἐπιτάσιας εὐφόρως φέρη συχνούς γὰρ ἂν τις ἴδοι, οἱ οὕτως ὑγροὶ εἰσιν, ὥστε, ὅποταν ἐθέλωσι, τότε αὐτοῖσι τὰ ἄρθρα ἐξίσταται ἀνωδύνως, καὶ καθίσταται ἀνωδύνως. Διαφέρει μέντοι τι καὶ σχέσις τοῦ σώματος τοῖσι μὲν γὰρ εὖ ἔχουσι τὸ γυῖον καὶ σεσαρκωμένοισιν ἐκπίπτει τε ἦσσον, ἐμπίπτει τε χαλεπώτερον ὅταν δὲ αὐτοὶ σφέων αὐτῶν λεπτότεροι καὶ

ἀσαρκότεροι ἔωσι, τότε ἐκπίπτει τε μᾶλλον, ἐμπίπτει τε ῥᾶον. Σημήϊον δὲ, ὅτι ταῦτα οὕτως ἔχει, καὶ τόδε τοῖσι γὰρ βουσι τότε ἐκπίπτουσι μᾶλλον οἱ μηροὶ ἐκ τῆς κοτύλης, ἠνίκα ἂν αὐτοὶ σφέων

αὐτῶν λεπτότατοι ἔωσιν γίνονται δὲ βόες λεπτότατοι, τοῦ χειμῶνος τελευτῶντος τότε οὖν καὶ ἐξαρθρέουσι μάλιστα, εἰ δὴ τι καὶ τοιοῦτο δεῖ ἐν ἰητρικῇ γράψαι δεῖ δὲ καλῶς γὰρ Ὅμηρος καταμεμαθήκει, ὅτι πάντων τῶν προβάτων βόες μάλιστα πονέουσι ταύτην τὴν ὥρην, καὶ βοῶν οἱ ἀρόται, ὅτι κατὰ τὸν χειμῶνα ἐργάζονται. Τούτοισι τοίνυν ἐκπίπτει μάλιστα οὗτοι γὰρ μάλιστα λεπτύνονται. Τὰ μὲν γὰρ ἄλλα βοσκήματα δύναται βραχεῖν τὴν ποίην βόσκεσθαι βοῦς δὲ οὐ μάλα, πρὶν βαθεῖα γένηται τοῖσι μὲν γὰρ ἄλλοισιν ἐστὶ λεπτή ἢ προβολή τοῦ χεῖλεος, λεπτή δὲ ἢ ἄνω γνάθος βοῖ δὲ παχεῖ μὲν ἢ προβολή τοῦ χεῖλεος, παχεῖ δὲ καὶ ἀμβλεῖα ἢ ἄνω γνάθος διὰ ταῦτα ὑποβάλλειν ὑπὸ τὰς βραχείας ποίας οὐ δύναται. Τὰ τε αὖ μόνυχα τῶν ζώων, ἅτε ἀμόδοστα ἔοντα, δύναται μὲν σαρκάζειν, δύναται δὲ ὑπὸ τὴν βραχεῖν ποίην ὑποβάλλειν τοὺς ὀδόντας, καὶ ἥδεται τῇ οὕτως ἐχούσῃ ποίῃ μᾶλλον, ἢ τῇ βαθείῃ καὶ γὰρ τὸ ἐπίπαν ἀμείνων καὶ στερεωτέρη ἢ βραχεῖ ποίη τῆς βαθείης, ποτὶ καὶ πρὶν ἐκκαρπεῖν τὴν βαθεῖν.

Διὰ τοῦτο οὖν ἐποίησεν ὧδε τάδε τὰ ἔπη [Ὡς δ' ὀπὸτ' ἀσπάσιον ἔαρ ἦλυθε βουσὶν ἔλιξιν], ὅτι ἀσμενωτάτη αὐτοῖσιν ἢ βαθεῖη ποίη φαίνεται. Ἄτὰρ καὶ ἄλλως ὁ βοῦς χαλαρὸν φύσει τὸ ἄρθρον τοῦτο ἔχει μᾶλλον τῶν ἄλλων ζώων διὰ τοῦτο καὶ εἰλίπουν ἐστὶ μᾶλλον τῶν ἄλλων ζώων, καὶ μάλιστα ὅταν λεπτὸν καὶ γηραλέον ἔη. Διὰ ταῦτα πάντα καὶ ἐκπίπτει βοῖ μάλιστα πλείω δὲ γέγραπται περὶ αὐτέου, ὅτι πάντων τῶν προειρημένων ταῦτα μαρτύριά ἐστιν. Περὶ οὗ οὖν ὁ λόγος, τοῖσιν ἀσάρκοισι μᾶλλον ἐκπίπτει, καὶ θᾶσσον ἐμπίπτει, ἢ τοῖσι σεσαρκωμένοισιν καὶ ἦσσον ἐπιφλεγμαίνει τοῖσιν ὑγροῖσιν καὶ τοῖσιν ἀσάρκοισιν, ἢ τοῖσι σκελιφροῖσι καὶ σεσαρκωμένοισιν, καὶ ἦσσόν γε δέδεται ἐς τὸν ἔπειτα χρόνον ἀτὰρ καὶ ἡ μύξα πλείων ὑπεῖη τοῦ μετρίου μὴ ζῦν φλεγμονῆ, καὶ οὕτως ἂν ὀλισθηρὸν εἶη μυξωδέστερα γὰρ τούπιπαν τὰ ἄρθρα τοῖσιν ἀσάρκοισιν, ἢ τοῖσι σεσαρκωμένοισιν ἐστὶν καὶ γὰρ αὗται αἱ σάρκες τῶν μὴ ἀπὸ τέχνης ὀρθῶς λελιμαγχημένων, αἱ τῶν λεπτῶν, μυξωδέστεραί εἰσιν, ἢ αἱ τῶν παχέων. Ὅσοισι μέντοι ζῦν φλεγμονῆ μύξα ὑπογίνεται, ἢ φλεγμονὴ δήσασα ἔχει τὸ ἄρθρον διὰ τοῦτο οὐ μάλα ἐκπίπτει τὰ ὑπόμυξα, ἐκπίπτοντα ἂν, εἰ μὴ τι ἢ πλέον, ἢ ἔλασσον φλεγμονῆς ὑπεγένετο.

9. Οἷσι μὲν οὖν, ὅταν ἐμπέση τὸ ἄρθρον, μὴ ἐπιφλεγμαίνει τὰ περιέχοντα, χρῆσθαί τε ἀνωδύνως αὐτίκα τῷ ὤμῳ δύναται, οὗτοι μὲν οὐδὲν νομίζουσι δεῖν ἐουτῶν ἐπιμελέεσθαι ἰητροῦ μήν ἐστὶ καταμαντεύσασθαι τῶν τοιούτων τοῖσι τοιούτοις γὰρ ἐκπίπτει καὶ αὐθις μᾶλλον, ἢ οἷσιν ἂν ἐπιφλεγμῆνη τὰ νεῦρα.

Τοῦτο κατὰ πάντα τὰ ἄρθρα οὕτως ἔχει, καὶ μάλιστα κατ' ὦμον καὶ κατὰ γόνυ μάλιστα γὰρ οὖν ὀλισθάνει ταῦτα. Οἷσι δ' ἂν ἐπιφλεγμῆνη τὰ νεῦρα, οὐ δύνανται χρέεσθαι τῷ ὤμῳ κωλύει γὰρ ἡ ὀδύνη καὶ ἡ ζύντασις τῆς φλεγμονῆς. Τοὺς οὖν τοιούτους ἰῆσθαι χρὴ κηρωτῆ καὶ σπλήνεσι καὶ ὀθονίοισι πολλοῖσιν ἐπιδέοντα ὑποτιθέναι δὲ ἐς τὴν μασχάλην εἴριον μαλθακὸν, καθαρὸν ξυνειλίσσοντα, ἐκπλήρωμα τοῦ κοίλου ποιέοντα, ἵνα ἀντιστήριγμα μὲν τῆ ἐπιδέσει ἔη, ἀνακωχῆ δὲ τὸ ἄρθρον τὸν δὲ βραχίονα ἐς τὸ ἄνω ρέποντα ἴσχειν χρὴ τὰ πλεῖστα οὕτω γὰρ ἂν ἐκαστάτω εἶη τοῦ χωρίου, ἐς ὃ ὠλισθεν ἡ κεφαλὴ τοῦ ὤμου. Χρὴ δὲ, ὅταν ἐπιδησησὶ τὸν ὦμον, ἔπειτα προσκαταδεῖν τὸν βραχίονα πρὸς τὰς πλευρὰς ταινίη τινί, κύκλῳ περὶ τὸ σῶμα περιβάλλοντα. Χρὴ δὲ καὶ ἀνατρίβειν τὸν ὦμον ἡσυχαίως καὶ λιπαρῶς. Πολλῶν δὲ ἔμπειρον δεῖ εἶναι τὸν ἰητρὸν, ἀτὰρ δὴ καὶ ἀνατρίψιος ἀπὸ γὰρ τοῦ αὐτέου ὀνόματος οὐ τούτῳ

ἀποβαίνει καὶ γὰρ ἂν δήσειεν ἄρθρον ἀνάτριψις, χαλαρώτερον τοῦ καιροῦ ἔδον, καὶ λύσειεν ἄρθρον, σκληρότερον τοῦ καιροῦ ἔδον ἀλλὰ διοριεῖται ἡμῖν περὶ ἀνατρίψιος ἐν ἄλλῳ λόγῳ. Τὸν γοῦν τοιοῦτον ὦμον μαλθακῆσι ξυμφέρει τῆσι χερσὶν ἀνατρίβειν, καὶ ἄλλως πρηέως τὸ δὲ ἄρθρον διακινέειν μὴ βίη, ἀλλὰ τοσοῦτον, ὅσον ἀνωδύνως κινῆσαι. Καθίσταται δὲ πάντα, τὰ μὲν ἐν πλείονι χρόνῳ, τὰ δ' ἐν ἐλάσσονι.

10. Γινώσκειν δὲ, εἰ ἐκπέπτωκεν ὁ βραχίων, τοισίδε χρὴ τοῖσι σημείοισιν τοῦτο μὲν, ἐπειδὴ δίκαιον ἔχουσι τὸ σῶμα οἱ ἄνθρωποι, καὶ τὰς χεῖρας, καὶ τὰ σκέλεα, παραδείγματι χρέεσθαι δεῖ τῷ ὑγιεῖ πρὸς τὸ μὴ ὑγιές, καὶ τῷ μὴ ὑγιεῖ πρὸς τὸ ὑγιές, μὴ τὰ ἀλλότρια ἄρθρα καθορῶντα ἄλλοι γὰρ ἄλλων μᾶλλον ἔξαρθοι πεφύκασιν, ἀλλὰ τὰ αὐτοῦ τοῦ κάμνοντος, ἦν ἀνόμοιον ἔη τὸ ὑγιές τῷ κάμνοντι. Καὶ τοῦτο εἴρηται μὲν ὀρθῶς, παραζύνεσιν δὲ ἔχει πάνυ πολλήν διὰ τὰ τοιαῦτα, καὶ οὐκ ἀρκέει μόνον λόγῳ εἰδέναι τὴν τέχνην ταύτην, ἀλλὰ καὶ ὁμιλίη ὁμιλέειν πολλοὶ γὰρ ὑπὸ ὀδύνης, ἢ καὶ ὑπ' ἀλλοίης προφάσιος, οὐκ ἐξεστεώτων αὐτέοισι τῶν ἄρθρων, ὅμως οὐ δύνανται

ἐς τὰ ὅμοια σχήματα καθίστασθαι ἐς οἷά περ τὸ ὑγιαῖνον σῶμα σχηματίζεται προσξυνιέναι μὲν οὖν, καὶ ἐννοεῖν καὶ τὸ τοιόνδε σχῆμα χρὴ. Ἀτὰρ καὶ ἐν τῇ μασχάλῃ ἢ κεφαλῇ τοῦ βραχίονος φαίνεται ἐγκειμένη πολλῷ μᾶλλον τοῦ ἐκπεπτωκότος ἢ τοῦ ὑγιέος τοῦτο δὲ, ἄνωθεν κατὰ τὴν ἐπωμίδα κοῖλον φαίνεται τὸ χωρίον, καὶ τὸ τοῦ ἀκρωμίου ὀστέον ἐξέχον φαίνεται, ἅτε ὑποδεδουκότος τοῦ ἄρθρου ἐς τὸ κάτω χωρίον παραζύνεσιν μὴν καὶ ἐν τούτῳ ἔχει τινὰ, ἀλλ' ὕστερον περὶ αὐτοῦ γεγράφεται, ἄξιον γὰρ γραφῆς ἐστὶν τοῦτο δὲ, τοῦ ἐκπεπτωκότος ὁ ἀγκῶν φαίνεται ἀφεστεῶς μᾶλλον ἀπὸ τῶν πλευρέων, ἢ τοῦ ἐτέρου εἰ μέντοι τις προσαναγκάζῃ, προσάγεται μὲν, ἐπιπόνως δὲ τοῦτο δὲ, ἄνω

τὴν χεῖρα ἄραι εὐθεῖαν παρὰ τὸ οὖς, ἐκτεταμένου τοῦ ἀγκῶνος, οὐ μάλα δύνανται, ὥσπερ τὴν ὑγίεια, οὐδὲ παράγειν ἔνθα καὶ ἔνθα ὁμοίως. Τὰ τε οὖν σημήια ταῦτά ἐστιν ὤμου ἐκπεπωκότος αἷ τε ἐμβολαὶ αἱ γεγραμμένα, αἷ τε ἰητρεῖαι αὐται.

11. Ἐπάξιον δὲ τὸ μάθημα, ὡς χρὴ ἰητρεύειν τοὺς πυκνὰ ἐκπίπτοντας ὤμους πολλοὶ μὲν γὰρ ἤδη ἀγωνίης ἐκωλύθησαν διὰ ταύτην τὴν ξυμφορὴν, τᾶλλα πάντα ἀξιόχρεοι ἐόντες πολλοὶ δὲ ἐν πολεμικοῖσιν ἀχρήϊοι ἐγένοντο, καὶ διεφθάρησαν διὰ ταύτην τὴν ξυμφορὴν ἅμα δὲ ἐπάξιον καὶ διὰ τοῦτο, ὅτι οὐδένα οἶδα ὀρθῶς ἰητρεύοντα, ἀλλὰ τοὺς μὲν μηδὲ ἐγχειρόντας, τοὺς δὲ τάναντία τοῦ ξυμφέροντος φρονέοντάς τε καὶ ποιέοντας. Συχοὶ γὰρ ἤδη ἰητροὶ

ἔκαυσαν ὤμους ἐκπίπτοντας, κατὰ τε τὴν ἐπωμίδα, κατὰ τε τὸ ἔμπροσθεν, ἢ ἢ κεφαλὴ τοῦ βραχίονος ἐξογκέει, κατὰ τε τοῦπισθεν ὀλίγον τῆς ἐπωμίδος αὐταὶ οὖν αἱ καύσεις, εἰ μὲν ἐς τὸ ἄνω ἐξέπιπτεν ὁ βραχίων, ἢ ἐς τοῦμπροσθεν, ἢ ἐς τοῦπισθεν, ὀρθῶς ἂν ἔκαιον νῦν δὲ δὴ, ὅτε ἐς τὸ κάτω ἐκπίπτει, ἐκβάλλουσιν αὐταὶ αἱ καύσεις μᾶλλον, ἢ κωλύουσιν ἀποκλείουσι γὰρ τῆς ἄνω εὐρυχωρίας τὴν κεφαλὴν τοῦ βραχίονος. Χρὴ δὲ ὧδε καίειν ταῦτα ἀπολαβόντα τοῖσι δακτύλοισι κατὰ τὴν μασχάλην τὸ δέρμα ἀφελκύσαι κατ' αὐτὴν τὴν ἴξιν μάλιστα, καθ' ἣν ἢ κεφαλὴ τοῦ βραχίονος ἐκπίπτει ἔπειτα οὕτως ἀφελκυσάμενον τὸ δέρμα διακαῦσαι ἐς τὸ πέρην. Σιδηρίοισι δὲ χρὴ ταῦτα καίειν, μὴ παχέσι, μηδὲ λίην φαλακροῖσιν, ἀλλὰ προμήκεσι ταχυπορώτερα γὰρ, καὶ τῇ χειρὶ ἐπερείδειν χρὴ δὲ καὶ διαφανέσι καίειν, ὡς ὅτι τάχιστα περαιωθῆ κατὰ δύναμιν τὰ γὰρ παχέα, βραδέως περαιούμενα, πλατυτέρας τὰς ἐκπτώσιας τῶν ἐσχαρῶν ποιέεται, καὶ κίνδυνος ἂν εἴη ξυρραγῆναι τὰς ὠτειλας καὶ κάκιον μὲν οὐδὲν ἂν εἴη, αἴσχιον δὲ καὶ ἀτεχνότερον. Ὅταν δὲ διακαύσης ἐς τὸ πέρην, τῶν μὲν πλείστων ἱκανῶς ἂν ἔχοι ἐν τῷ κάτω μέρει τὰς ἐσχάρας ταύτας μόνας θεῖναι ἦν δὲ μὴ κίνδυνος φαίνεται εἶναι ξυρραγῆναι τὰς ὠτειλάς, ἀλλὰ πολὺ τὸ διὰ μέσου ἔη, ὑπάλειπτρον χρὴ λεπτὸν διέρσαι διὰ τῶν καυμάτων,

ἔτι ἀναλελαμμένου τοῦ δέρματος, οὐ γὰρ ἂν ἄλλως δύναιο διέρσαι ἐπὴν δὲ διέρσης, ἀφεῖναι τὸ δέρμα, ἔπειτα μεσηγὺ τῶν ἐσχαρῶν ἄλλην ἐσχάρην ἐμβάλλειν λεπτῷ σιδηρίῳ, καὶ διακαῦσαι, ἄχρις ἂν τῷ ὑπαλείπτρῳ ἐγκύρση. Ὅκόσον δὲ τι χρὴ τὸ δέρμα τὸ ἀπὸ τῆς μασχάλης ἀπολαμβάνειν, τοισίδε χρὴ τεκμαίρεσθαι ἀδένες ὑπείσιν ἢ ἐλάσσους ἢ μείζους πᾶσιν ὑπὸ τῇ μασχάλῃ, πολλαχῆ δὲ καὶ ἄλλῃ τοῦ σώματος. Ἀλλὰ ἐν ἄλλῳ λόγῳ περὶ ἀδένων οὐλομελῆς γεγράφεται, ὅ τι τέ εἰσι, καὶ οἷα ἐν οἷοισι σημαίνουσί τε καὶ δύνανται. Τοὺς μὲν οὖν ἀδένας οὐ χρὴ προσαπολαμβάνειν, οὐδ' ὅσα ἐσωτέρω τῶν ἀδένων μέγας γὰρ ὁ κίνδυνος τοῖσι γὰρ ἐπικαιροτάτοισι τόνοις γειτονεύονται ὅσον δὲ

ἐξωτέρω τῶν ἀδένων, ἐπιπλεῖστον ἀπολαμβάνειν ἀσινέα γάρ. Γινώσκειν δὲ χρή. καὶ τάδε, ὅτι, ἦν μὲν ἰσχυρῶς τὸν βραχίονα ἀνατείνης, οὐ δυνήση τοῦ δέρματος ἀπολαβεῖν οὐδὲν τοῦ ὑπὸ τῆ μασχάλη, ὃ τι καὶ ἄξιον λόγου καταναισιμοῦται γὰρ ἐν τῆ ἀνατάσει οἱ δ' αὖ τόνοι, οὐς

οὐδεμιῇ μηχανῇ δεῖ τιτρώσκειν, οὗτοι πρόχειροι γίνονται καὶ κατατεταμένοι ἐν τούτῳ τῷ σχήματι ἦν δὲ μικρὸν ἐπάρης τὸν βραχίονα, πολὺ μὲν τοῦ δέρματος ἀπολήψη, οἱ δὲ τόνοι, ὧν δεῖ προμηθέεσθαι, εἴσω καὶ πρόσω τοῦ χειρίσματος γίνονται. Ἄρ' οὖν οὐκ ἐν πάσῃ τῇ τέχνῃ περὶ παντὸς χρή ποιέεσθαι, τὰ δίκαια σχήματα ἐξευρίσκειν ἐφ' ἐκάστοισιν; ταῦτα μὲν τὰ κατὰ τὴν μασχάλην, καὶ ἱκαναὶ αὐταὶ αἱ καταλήψεις, ἦν ὀρθῶς τεθῶσιν αἱ ἐσχάραι. Ἐκτοσθεν δὲ τῆς μασχάλης, δισσὰ μόνον ἐστὶ χωρία, ἵνα ἂν τις ἐσχάρας θείῃ, τιμωρεύσας τῷ παθήματι μίαν μὲν ἐν τῷ ἔμπροσθεν μεσηγὺ τῆς τε κεφαλῆς τοῦ βραχίονος καὶ τοῦ τένοντος τοῦ κατὰ τὴν μασχάλην καὶ ταύτῃ τὸ μὲν δῆμα τελέως διακαίειν χρή, βαθύτερον δὲ οὐ χρή φλέψ τε γὰρ παχείη πλησίη, καὶ νεῖρα,

ὧν οὐδέτερα θερμαντέα. Ἐξωθεν δ' αὖ ἄλλην ἐσχάρην ἐνδέχεται ἐνθεῖναι ἀνωτέρω μὲν συχνῶ τοῦ τένοντος τοῦ κατὰ τὴν μασχάλην, κατωτέρω δὲ ὀλίγῳ τῆς κεφαλῆς τοῦ βραχίονος καὶ τὸ μὲν δῆμα τελέως χρή διακαίειν, βαθεῖν δὲ μηδὲ κάρτα ταύτην ποιέειν πολέμιον γὰρ τὸ πῦρ νεύροισιν. Ἱητρεύειν μὲν οὖν χρή διὰ πάσης τῆς ἱητρείης τὰ ἔλκεα, μηδέποτε ἰσχυρῶς ἀνατείνοντα τὸν βραχίονα, ἀλλὰ μετρίως, ὅσον τῶν ἐλκέων ἐπιμελείης εἵνεκα ἦσσον μὲν γὰρ ἂν διαψύχοιτο ξυμφέροι γὰρ πάντα τὰ καύματα σκέπειν, ὡς ἐπιεικέως ἱητρεύεσθαι ἦσσον δ' ἂν ἐκπλίσοιτο ἦσσον δ' ἂν αἰμορραγοίη ἦσσον δ' ἂν σπασμὸς ἐπιγένοιτο. Ὅταν δὲ δὴ καθαρὰ γένηται τὰ ἔλκεα, ἐς ὠτειλὰς τε ἴη, τότε δὴ καὶ παντάπασι χρή αἰεὶ τὸν βραχίονα πρὸς τῆσι πλευρῆσι προσδεδέσθαι, καὶ νύκτα καὶ ἡμέρην ἀτὰρ καὶ ὅταν ὑγία γένηται τὰ ἔλκεα, ὁμοίως ἐπὶ πολὺν χρόνον χρή προσδεῖν τὸν βραχίονα πρὸς τὰς πλευράς οὕτω γὰρ ἂν μάλιστα ἐπουλωθεῖ, καὶ ἀποληφθεῖ ἢ εὐρυχωρή, καθ' ἣν μάλιστα ὀλισθάνει ὁ βραχίον.

12. Ὅσοισι δ' ἂν ὤμος καταπορηθῆ ἐμβληθῆναι, ἦν μὲν ἔτι ἐν αὐξήσει ἔωσιν, οὐκ ἐθέλει συναύξεσθαι τὸ ὀστέον τοῦ βραχίονος ὁμοίως τῷ ὑγιεί, ἀλλὰ αὐξεται μὲν ἐπὶ τι, βραχύτερον δὲ τοῦ ἑτέρου

γίνεται καὶ οἱ καλεομενοὶ δὲ ἐκ γενεῆς γαλιάγκωνες διὰ δισσὰς ξυμφορὰς ταύτας γίνονται, ἦν τέ τι τοιοῦτον αὐτοὺς ἐξάρθημα καταλάβῃ ἐν τῇ γαστρὶ ἐόντας, διὰ τε ἄλλην ξυμφορὴν, περὶ ἧς ὕστερόν ποτε γεγράφεται ἀτὰρ καὶ οἷσιν ἔτι νηπίοισιν ἐοῦσι κατὰ τὴν κεφαλὴν τοῦ βραχίονος βαθεῖαι καὶ ὑποβρύχιοι ἐκπυήσεις γίνονται, καὶ οὗτοι πάντες γαλιάγκωνες γίνονται καὶ ἦν τε τμηθῶσιν,

ἦν τε καυθῶσιν, ἦν τε αὐτόματόν σφιν ἐκραγῆ, εὖ εἰδέναι χρῆ, ὅτι ταῦτα οὕτως ἔχει. Χρέεσθαι μέντοι τῇ χειρὶ δυνατώτατοί εἰσιν οἱ ἐκ γενεῆς γαλιάγκωνες, οὐ μὴν οὐδὲ ἐκεῖνοί γε ἀνατεῖναι παρὰ τὸ οὖς τὸν βραχίονα, ἐκτανύσαντες τὸν ἀγκῶνα, δύνανται, ἀλλὰ πολὺ ἐνδεεστέρως, ἢ τὴν ὑγίεια χεῖρα. Οἷσι δ' ἂν ἤδη ἀνδράσιν ἐοῦσιν ἐκπέση ὁ ὤμος, καὶ μὴ ἐμβληθῆ, ἢ ἐπωμὶς ἀσαρκοτέρη γίνεται, καὶ ἢ ἕξις λεπτή ἢ κατὰ τοῦτο τὸ μέρος ὅταν μέντοι ὀδυνώμενοι παύσωνται, ὀκόσα μὲν δεῖ ἐργάζεσθαι ἐπάραντας τὸν ἀγκῶνα ἀπὸ τῶν πλευρέων ἐς τὸ πλάγιον, ταῦτα μὲν οὐ δύνανται ἅπαντα ὁμοίως ἐργάζεσθαι ὀκόσα δὲ δεῖ ἐργάζεσθαι, παραφέροντας τὸν βραχίονα παρὰ τὰς πλευράς, ἢ ἐς τοῦπίσω, ἢ ἐς τοῦμπροσθεν, ταῦτα δὲ δύνανται ἐργάζεσθαι καὶ γὰρ ἂν ἀρίδα ἐλκύσαιεν, καὶ

πρίονα, καὶ πελεκήσαιεν ἂν, καὶ σκάψαιεν ἂν, μὴ κάρτα ἄνω αἶροντες τὸν ἀγκῶνα, καὶ τᾶλλα ὅσα ἐκ τῶν τοιούτων σχημάτων ἐργάζονται.

13. Ὅσοισι δ' ἂν τὸ ἀκρόμιον ἀποσπασθῆ, τουτέοισι φαίνεται ἐξέχον τὸ ὀστέον τὸ ἀπεσπασμένον ἔστι δὲ τοῦτο ὁ ζύνδεσμος τῆς κληΐδος καὶ τῆς ὠμοπλάτης ἑτεροίη γὰρ ἢ φύσις ἀνθρώπου ταύτη, ἢ τῶν ἄλλων ζώων. Οἱ οὖν ἰητροὶ μάλιστα ἐξαπατέονται ἐν τούτῳ τῷ τρώματι ἅτε γὰρ ἀνασχόντος τοῦ ὀστέου τοῦ ἀποσπασθέντος, ἢ ἐπωμὶς φαίνεται χαμαιζήλη καὶ κοίλη, ὥστε καὶ προμηθέεσθαι τῶν ὤμων τῶν ἐκπεπτωκότων πολλοὺς οὖν οἶδα ἰητροὺς, τᾶλλα οὐ φλαύρους ἐόντας, οἱ πολλὰ ἤδη ἐλυμήναντο, ἐμβάλλειν πειρώμενοι τοὺς τοιούτους ὤμους, οὕτως οἰόμενοι ἐκπεπτωκένας, καὶ οὐ πρόσθεν παύονται, πρὶν ἢ ἀπογνῶναι, ἢ ἀπορῆσαι, δοκέοντες αὐτοὶ σφέας αὐτοὺς ἐμβάλλειν τὸν ὤμον. Τούτοισιν ἰητρείη μὲν, ἢπερ καὶ τοῖσιν ἄλλοισιν τοῖσι τοιούτοις, κηρωτὴ καὶ σπλῆνες καὶ ὀθόνια, καὶ ἐπίδες τοιαύτη. Καταναγκάζειν μέντοι τὸ ὑπερέχον χρῆ, καὶ τοὺς σπλῆνας κατὰ τοῦτο τιθέναι πλείστους, καὶ πιέζειν ταύτη μάλιστα, καὶ τὸν βραχίονα πρὸς τῆσι πλευρῆσι ποοσηρημένον ἐς τὸ ἄνω μέρος ἔχειν οὕτω γὰρ ἂν μάλιστα πλησιάζοι τὸ ἀπεσπασμένον. Τάδε μὴν εὖ εἰδέναι χρῆ, καὶ προλέγειν ὡς ἀσφαλέα, εἰ ἄλλως ἐθέλοις, ὅτι βλάβη μὲν οὐδεμίη, οὔτε σμικρὴ, οὔτε μεγάλη, τῷ ὤμῳ γίνεται ἀπὸ τούτου τοῦ τρώματος, αἴσχιον δὲ τὸ χωρίον οὐδὲ γὰρ τοῦτο τὸ ὀστέον ἐς τὴν ἀρχαίην ἔδρην ὁμοίως ἂν

ἰδρυνθείη, ὥσπερ ἐπεφύκεεν, ἀλλ' ἀνάγκη πλέον ἢ ἔλασσον ὀγκηρότερον εἶναι ἐς τὸ ἄνω. Οὐδὲ γὰρ ἄλλο ὀστέον οὐδὲν ἐς τούτῳ καθίσταται, ὅ τι ἂν κοινωνέον ἔῃ ἐτέρῳ ὀστέῳ, καὶ προσπεφυκὸς ἀποσπασθῆ ἀπὸ τῆς ἀρχαίης φύσιος. Ἀνώδυνον δὲ τὸ ἀκρόμιον ἐν ὀλίγησιν ἡμέρησι γίνεται, ἦν χρηστῶς ἐπιδέηται.

14. Κληῖς δὲ κατεαγεῖσα, ἦν μὲν ἀτρεκέως ἀποκαυλισθῆ, εὐιητοτέρη ἐστὶν ἦν δὲ παραμηκέως, δυσιητοτέρη. Τάναντία δὲ τούτοισιν ἐστὶν, ἢ ὡς ἂν τις οἶοιτο τὴν

μὲν γὰρ ἀτρεκέως ἀποκαυλισθεῖσαν προσαναγκάσειεν ἂν τις μᾶλλον ἐς τὴν φύσιν ἐλθεῖν καὶ γὰρ εἰ πάνυ προμηθηθεῖη, τὸ ἀνωτέρω κατωτέρω ἂν ποιήσειε, σχήμασί τε ἐπιτηδείοισι καὶ ἐπιδέσει ἀρμοζούσῃ εἰ δὲ μὴ τελέως ἰδρυνθεῖη, ἀλλ' οὖν τὸ ὑπερέχον γε τοῦ ὀστέου οὐ κάρτα ὅξυ γίνεται. Ὡν δὲ ἂν παράμηκες τὸ ὀστέον κατεαγῆ, ἰκέλη ἢ ξυμφορὴ γίνεται τοῖσιν ὀστέοισι τοῖσιν ἀπεσπασμένοισι, περὶ ὧν πρόσθεν γέγραπται οὔτε γὰρ ἰδρυνθῆναι αὐτὸ πρὸς ἔωυτὸ κάρτα ἐθέλει, ἢ τε ὑπερέχουσα ὄκρις τοῦ ὀστέου ὄξειη γίνεται κάρτα. Τὸ μὲν οὖν ξύμπαν, εἰδέναι χρὴ, ὅτι βλάβη οὐδεμίῃ τῷ ὤμῳ, οὐδὲ τῷ ἄλλῳ σώματι γίνεται διὰ τὴν κάτηξιν τῆς κληῖδος, ἣν μὴ ἐπισφακελίση ὀλιγάκις δὲ τοῦτο γίνεται. Αἰσχὸς γε μὴν προσγίνεται περὶ τὴν κάτηξιν τῆς κληῖδος, καὶ τούτοισι τὸ πρῶτον αἰσχιστον, ἔπειτα μὴν

ἐπὶ ἦσσον γίνεται. Ξυμφύεται δὲ ταχέως κληῖς, καὶ τᾶλλα πάντα ὅσα χαῦνα ὀστέα ταχείην γὰρ τὴν ἐπιπώρωσιν ποιέεται τὰ τοιαῦτα. Ὅταν μὲν οὖν νεωστὶ κατεαγῆ, οἱ τετρωμένοι σπουδάζουσιν, οἴομενοι μέζον τὸ κακὸν εἶναι, ἢ ὅσον ἐστὶν οἱ τε ἰητροὶ προθυμούνται δῆθ' ἐν ὀρθῶς ἰῆσθαι προϊόντος δὲ τοῦ χρόνου, οἱ τετρωμένοι, ἅτε οὐκ ὀδυνώμενοι, οὐδὲ κωλυόμενοι οὔτε ὀδοιπορίας, οὔτε ἐδωδῆς, καταμελέουσιν οἱ τε αὖ ἰητροὶ, ἅτε οὐ δυνάμενοι καλὰ τὰ χωρία ἀποδεικνύναι, ἀποδιδράσκουσι, καὶ οὐκ ἄχθονται τῇ ἀμελείῃ τῶν τετρωμένων ἐν τούτῳ δὲ ἡ ἐπιπώρωσις ξυνταχύνεται. Ἐπιδέσιος μὲν οὖν τρόπος καθέστηκε παραπλήσιος τοῖσι πλείστοισι, κηρωτῇ καὶ σπλήνεσι καὶ ὀθονίοισι μαλθακοῖσιν ἰητρεύειν καὶ τάδε δεῖ προσξυνιέναι καὶ μάλιστα ἐν τούτῳ τῷ χειρίσματι, ὅτι τοὺς τε σπλήνας πλείστους κατὰ τὸ ἐξέχον χρὴ τιθέναι, καὶ τοῖσιν ἐπιδέσμοισι πλείστοισι καὶ μάλιστα κατὰ τοῦτο πιέζειν. Ἐἰσὶ δὲ δὴ τινες, οἱ ἐπεσοφίσαντο ἤδη μολύβδιον βαρὺ προσεπικαταδεῖν, ὡς καταναγκάζειν τὸ ὑπερέχον ξυνιᾶσι μὲν οὖν ἴσως οὐδὲ οἱ ἀπλῶς ἐπιδέοντες ἀτὰρ δὴ οὐδ' οὗτος ὁ τρόπος κληῖδος κατήξιός ἐστιν οὐ γὰρ δυνατὸν τὸ ὑπερέχον καταναγκάζεσθαι οὐδὲν, ὃ τι καὶ ἄξιον λόγου. Ἄλλοι δ' αὖ τινές εἰσιν, οἵτινες, καταμαθόντες τοῦτο, ὅτι αὐταὶ αἱ ἐπιδέσιες παράφοροί εἰσι καὶ οὐ

κατὰ φύσιν καταναγκάζουσι τὰ ὑπερέχοντα, ἐπιδέουσι μὲν αὐτούς, σπλήνεσι καὶ ὀθονίοισι χρώμενοι, ὥσπερ καὶ οἱ ἄλλοι ζώσαντες δὲ τὸν ἄνθρωπον ταινίη τινὶ, ἢ εὐζωστότατος αὐτὸς ἔωυτοῦ ἐστίν, ὅταν ἐπιθῶσι τοὺς σπλήνας ἐπὶ τὰ ὑπερέχοντα τοῦ κατήγματος, ἐξογκώσαντες ἐπὶ τὰ ἐξέχοντα, τὴν ἀρχὴν τοῦ ὀθονίου προσέδησαν πρὸς τὸ ζῶσμα ἐκ τοῦ ἔμπροσθεν, καὶ οὕτως ἐπιδέουσιν, ἐπὶ τὴν ἴξιν τῆς κληῖδος ἐπιτανύοντες, ἐς τοῦπισθεν ἄγοντες κᾶπειτα περιβάλλοντες περὶ τὸ ζῶσμα, ἐς τοῦμπροσθεν ἄγουσι, καὶ αὖθις ἐς τοῦπισθεν. Οἱ δὲ τινες οὐχὶ περὶ τὸ ζῶσμα περιβάλλουσι τὸ ὀθόνιον, ἀλλὰ περὶ τὸ περίνεόν τε καὶ παρ' αὐτὴν τὴν ἔδρην, καὶ παρὰ τὴν ἄκανθαν κυκλεύοντες τὸ ὀθόνιον,



οὕτω πιέζουσι τὸ κάτηγμα. Ταῦτα γοῦν ἀπείρω μὲν ἀκοῦσαι φαίνεται ἐγγὺς τοῦ κατὰ φύσιν εἶναι, χρεομένω δὲ ἄχρηστα οὔτε γὰρ μόνιμα οὐδένα χρόνον, οὐδ' εἰ κατακέοιτό τις, καίτοι ἐγγυτάτω ἂν οὕτως ἄλλ' ὅμως εἰ καὶ κατακείμενος ἢ τὸ σκέλος συγκάμψειεν, ἢ αὐτὸς καμφθεῖη, πάντα ἂν τὰ ἐπιδέσματα κινέοιτο ἄλλως τε ἀσηρῆ ἢ ἐπίδεσις ἢ τε γὰρ ἔδρη ἀπολαμβάνεται, ἀθρόα τε τὰ ὀθόνια ἐν ταύτῃ τῇ στενοχωρίῃ γίνεται τά τε αὖ περὶ τὴν ζώνην περιβαλλόμενα, οὐχ οὕτως

ἰσχυρῶς ἔζωσται, ὡς οὐκ ἀναγκάσαι ἐς τὸ ἄνω τὴν ζώνην ἐπανιέναι, καὶ οὕτως ἀνάγκη ἂν εἴη πάντα χαλᾶν τὰ ἐπιδέσματα. Ἄγχιστα δ' ἂν τις δοκέει ποιέειν, καίπερ οὐ μεγάλα ποιέων, εἰ τοῖσι μὲν τισι τῶν ὀθονίων περὶ τὴν ζώνην περιβάλλοι, τοῖσι δὲ πλείστοισι τῶν ὀθονίων τὴν ἀρχαίην ἐπίδεσιν ἐπιδέει οὕτω γὰρ ἂν μάλιστα τὰ ἐπιδέσματα μόνιμά τε εἴη, καὶ ἀλλήλοισι τιμωρέοι. Τὰ μὲν οὖν πλεῖσταεῖρηται, ἄσσα καταλαμβάνει τοὺς τὴν κληῖδα καταγνυμένους. Προσξυνιέναι δὲ καὶ τόδε χρή, ὅτι κληῖς ὡς ἐπὶ τὸ πολὺ κατάγνυται, ὥστε τὸ μὲν ἀπὸ τοῦ στήθεος πεφυκὸς ὀστέον ἐς τὸ ἄνω μέρος ὑπερέχειν, τὸ δὲ ἀπὸ τῆς ἀκρωμῆς πεφυκὸς ὀστέον ἐν τῷ κάτω μέρει εἶναι. Αἴτια δὲ τούτων τάδε, ὅτι τὸ μὲν στήθος οὔτε κατωτέρω ἂν πολὺ, οὔτε ἀνωτέρω χωρήσειεν σμικρὸς γὰρ ὁ κιγκλισμὸς τοῦ ἄρθρου τοῦ ἐν τῷ στήθει αὐτό τε γὰρ ἐωυτῷ ξυνεχές ἐστὶ τὸ στήθος, καὶ τῇ ῥάχει ἄγχιστα μὴν ἢ κληῖς πρὸς τὸ τοῦ ὤμου ἄρθρον πλωώδης ἐστὶν ἠνάγκασται γὰρ πυκνοκίνητος εἶναι

διὰ τὴν τῆς ἀκρωμῆς σύζευξιν. Ἄλλως τε, ὅταν τρωθῆ, φεύγει ἐς τὸ ἄνω μέρος τὸ πρὸς τῷ στήθει προσεχόμενον, καὶ οὐ μάλα ἐς τὸ κάτω μέρος ἀναγκάζεσθαι ἐθέλει καὶ γὰρ πέφυκε κοῦφον, καὶ ἡ εὐρυχωρίῃ αὐτῷ ἄνω πλείων ἢ κάτω. Ὁ δὲ ὦμος, καὶ ὁ βραχίον, καὶ τὰ προσηρημένα τούτοιςιν εὐαπόλυτά ἐστὶν ἀπὸ τῶν πλευρέων καὶ τοῦ στήθεος, καὶ διὰ τοῦτο δύναται καὶ ἀνωτέρω πολὺ ἀνάγεσθαι καὶ κατωτέρω ὅταν οὖν καταγῆ ἢ κληῖς, τὸ πρὸς τῷ ὤμῳ ὀστέον ἐς τὸ κατωτέρω ἐπιρρέπει ἐς τοῦτο γὰρ ἐπιφορώτερον αὐτὸ ἅμα τῷ ὤμῳ καὶ τῷ βραχίονι κάτω ῥέψαι μᾶλλον, ἢ ἐς τὸ ἄνω. Ὅποτε οὖν ταῦτα τοιαῦτά ἐστὶν, ἀξυνετέουσιν ὅσοι τὸ ὑπερέχον τοῦ ὀστέου ἐς τὸ κάτω καταναγκάσαι οἴονται. Ἄλλα δῆλον, ὅτι τὸ κάτω πρὸς τὸ ἄνω προσακτέον ἐστὶν τοῦτο γὰρ ἔχει κίνησιν, τοῦτο γὰρ ἐστὶ καὶ τὸ ἀποστὰν ἀπὸ τῆς φύσιος. Δῆλον οὖν, ὅτι ἄλλως μὲν οὐδαμῶς ἐστὶν ἀναγκάσαι τοῦτο αἰ γὰρ ἐπίδεσιες οὐδέν τι μᾶλλον προσαναγκάζουσιν ἢ ἀπαναγκάζουσιν εἰ δέ τις τὸν βραχίονα πρὸς τῆσι πλευρῆσιν ἐόντα ἀναγκάζοι ὡς μάλιστα ἄνω, ὡς ὅτι ὀξύτατος ὁ ὦμος φαίνεται εἶναι, δῆλον ὅτι οὕτως ἂν ἀρμοσθεῖη πρὸς τὸ ὀστέον τὸ ἀπὸ τοῦ στήθεος πεφυκὸς, ὅθεν ἀπεσπάσθη. Εἰ οὖν τις τῇ μὲν ἐπιδέσει χρῶτο τῇ νομίμῃ τοῦ ταχέως ξυναλθεσθῆναι εἵνεκα, ἠγήσαιτο δὲ τᾶλλα πάντα μάτην εἶναι παρὰ τὸ σχῆμα τὸ εἰρημένον, ὀρθῶς τε ἂν ξυνίοι, ἰητρεύοι τε ἂν τάχιστα καὶ κάλλιστα. Κατακέεσθαι μέντοι τὸν ἄνθρωπον

μέγα τὸ διάφορόν

ἐστὶν καὶ ἡμέραι ἱκαναὶ τεσσαρεσκαίδεκα, εἰ ἀτρεμεῖοι, εἴκοσι δὲ πάμπολλαι.

15. Εἰ μέντοι τινὶ ἐπὶ τάναντία ἢ κληῖς κατεαγείη, ὃ οὐ μάλα γίνεται, ὥστε τὸ μὲν ἀπὸ τοῦ στήθεος ὀστέον ὑποδεδυκέναι, τὸ δὲ ἀπὸ τῆς ἀκρωμίας ὀστέον ὑπερέχειν καὶ ἐποχέεσθαι ἐπὶ τοῦ ἐτέρου, οὐδεμιῆς μεγάλης ἰητρείης ταῦτά γ' ἂν δέοιτο αὐτὸς γὰρ ὁ ὦμος ἀφιέμενος καὶ ὁ βραχίων ἰδρύοι ἂν τὰ ὀστέα πρὸς ἄλληλα, καὶ φαύλη ἂν τις ἐπίδεσις ἀρκέοι, καὶ ὀλίγαι ἡμέραι τῆς πωρώσιος γένοιντ' ἂν.

16. Εἰ δὲ μὴ κατεαγείη μὲν οὕτως, παρολισθάνοι δὲ ἐς τὸ πλάγιον ἢ τῆ ἢ τῆ, ἐς τὴν φύσιν μὲν ἀπαγαγεῖν ἂν δέοι, ἀναγαγόντα τὸν ὦμον σὺν τῷ βραχίονι, ὥσπερ καὶ πρόσθεν εἴρηται ὅταν δὲ ἴζηται ἐς τὴν ἀρχαίην φύσιν, ταχεῖη ἂν ἢ ἄλλη ἰητρείη εἴη. Τὰ μὲν οὖν πλεῖστα τῶν παραλλαγμάτων κατορθοῖ αὐτὸς ὁ βραχίων ἀναγκαζόμενος πρὸς τὰ ἄνω. Ὅσα δὲ τῶν ἄνωθεν παρολισθάνοντα ἐς τὸ πλάγιον ἦλθεν, ἢ ἐς τὸ κατωτέρω, συμπορσύνοι ἂν τὴν κατόρθωσιν, εἰ ὁ μὲν ἄνθρωπος ὑπτιος κέοιτο, κατὰ δὲ τὸ μεσηγὺ τῶν ὠμοπλατέων ὑψηλότερόν τι ὀλίγω ὑποκέοιτο, ὡς περιρρηδὲς ἔη τὸ στήθος ὡς μάλιστα καὶ τὸν βραχίονα εἰ ἀνάγοι τις παρὰ τὰς πλευρὰς παρατεταμένον, ὁ δὲ ἰητρὸς τῆ μὲν ἐτέρῃ χειρὶ ἐς τὴν

κεφαλὴν τοῦ βραχίονος ἐμβαλὼν τὸ θέναρ τῆς χειρὸς ἀπωθέοι, τῆ δὲ ἐτέρῃ τὰ ὀστέα τὰ κατηγότα εὐτεθίζοι, οὕτως ἂν μάλιστα ἐς τὴν φύσιν ἄγοι ἀτάρ, ὥσπερ ἤδη εἴρηται, οὐ μάλα τὸ ἄνωθεν ὀστέον ἐς τὸ κάτω φιλέει ὑποδύνειν. Τοῖσι μὲν οὖν πλείστοισιν, ὅταν ἐπιδεθῶσι, τὸ σχῆμα ἀρήγει, παρ' αὐτὰς τὰς πλευρὰς τὸν ἀγκῶνα ἔχοντα, οὕτως ἐς τὸ ἄνω τὸν ὦμον ἀναγκάζεσθαι ἔστι δ' οἷσι μὲν τὸν ὦμον ἀναγκάζειν δεῖ ἐς τὸ ἄνω, ὡς εἴρηται, τὸν δὲ ἀγκῶνα πρὸς τὸ στήθος παράγειν, ἄκρην δὲ τὴν χειρὰ παρὰ τὸ ἀκρόμιον τοῦ ὑγιέος ὤμου ἴσχειν. Ἦν μὲν οὖν κατακέεσθαι τολμᾶ, ἀντιστήριγμά τι προστιθέναι χρὴ, ὡς ἂν ὁ ὦμος ἀνωτάτω ἔη ἢν δὲ περιίη, σφενδόνην χρὴ, ἐκ ταινίης περὶ τὸ ὄξυ τοῦ ἀγκῶνος ποιήσαντα, ἀναλαμβάνειν περὶ τὸν αὐχένα.

17. Ἀγκῶνος δὲ ἄρθρον παραλλάξαν μὲν ἢ παραρθρῆσαν πρὸς πλευρὴν ἢ ἔξω, μένοντος τοῦ ὀξέος τοῦ ἐν τῷ κοίλῳ τοῦ βραχίονος, ἐς εὐθὺ κατατείναντα, τὸ ἐξέχον ἀπωθεῖν ὀπίσω καὶ ἐς τὸ πλάγιον.

18. Τὰ δὲ τελείως ἐκβάντα ἢ ἔνθα, ἢ ἔνθα, κατάτασις μὲν, ἐν

ἢ ὁ βραχίων κατεαγείη ἐπιδέεται οὕτω γὰρ ἂν τὸ καμπύλον τοῦ ἀγκῶνος οὐ κωλύσει. Ἐκπίπτει δὲ μάλιστα ἐς τὸ πρὸς πλευρὰς μέρος. Τὰς δὲ κατορθώσιαις,

ἀπάγοντα ὅτι πλεῖστον, ὡς μὴ ψαυή τῆς κορώνης ἢ κεφαλῆ, μετέωρον περιάγειν, καὶ περικάμπτειν, καὶ μὴ ἐς εὐθὺ βιάζεσθαι, ἅμα δὲ ὠθέειν τάναντία ἐφ' ἑκάτερα, καὶ παρωθέειν ἐς χώρην ξυνωφελοίη δ' ἂν καὶ ἐπίστρεψις ἀγκῶνος ἐν τουτέοισιν, ἐν τῷ μὲν ἐς τὸ ὑπτίον, ἐν τῷ δὲ ἐς τὸ πρηνές. Ἴησις δὲ, σχήματος μὲν, ὀλίγῳ ἀνωτέρω ἄκρην τὴν χεῖρα τοῦ ἀγκῶνος ἔχειν, βραχίονα δὲ κατὰ πλευράς οὕτω δὲ καὶ ἀνάληψις, καὶ θέσις, καὶ εὐφορον καὶ φύσις, καὶ χρῆσις ἐν κοινῷ, ἦν ἄρα μὴ κακῶς παρωθῆ ἢ παροῦται δὲ ταχέως. Ἴησις δὲ, ὀθονίοισι κατὰ τὸν νόμον τὸν ἀρθριτικὸν, καὶ τὸ ὄξυ προσεπιδέειν.

19. Παλιγοτώτατον δὲ ὁ ἀγκῶν πυρετοῖσιν, ὀδύνη ἀσώδει, ἀκρητοχόλω, ἀγκῶνος δὲ μάλιστα τοῦπίσω διὰ τὸ ναρκῶδες, δεύτερον δὲ τοῦμπροσθεν ἴησις δὲ ἢ αὐτὴ ἐμβολαὶ δὲ, τοῦ μὲν ὀπίσω, ἐκτείναντα κατατεῖναι σημεῖον δὲ οὐ γὰρ δύναται ἐκτείνειν τοῦ δὲ ἔμπροσθεν, οὐ δύναται ξυγκάμπτειν τουτέῳ δὲ ἐνθέντα

τι ξυνειλιγμένον σκληρὸν, περὶ τοῦτο ξυγκάμψαι ἐξ ἐκτάσιος ἐξαίφνης.

20. Διαστάσιος δὲ ὀστέων σημήϊον, κατὰ τὴν φλέβα τὴν κατὰ τὸν βραχίονα σχιζομένην διαψαύοντι.

21. Ταῦτα δὲ ταχέως διαπαροῦται ἐκ γενεῆς δὲ, βραχύτερα τὰ κάτω τοῦ σίνεος ὀστέα, πλεῖστον τὰ ἐγγύτατα τοῦ πήχεος, δεύτερον, χεῖρὸς, τρίτον, δακτύλων βραχίων δὲ καὶ ὤμος, ἐγκρατέστερα διὰ τὴν τροφήν ἢ δὲ ἐτέρη χεῖρ διὰ τὰ ἔργα ἔτι πλείω ἐγκρατεστέρη. Μινύθησις δὲ σαρκῶν, εἰ μὲν ἔξω ἐξέπεσεν, ἔσωθεν εἰ δὲ μὴ, ἐς τούναντίον, ἢ ἐξέπεσεν.

22. Ἀγκῶν δὲ ἦν ἔσω ἢ ἔξω ἐκβῆ, κατάτασις μὲν ἐν σχήματι ἐγγωνίῳ τῷ πήχεϊ πρὸς βραχίονα τὴν μὲν μασχάλην ἀναλαμβάνοντα ταινίη ἀνακρεμάσαι, ἀγκῶνι δὲ ἄκρῳ ὑποτιθέντα τι παρὰ τὸ ἄρθρον βάρος, ἐκκρεμάσαι, ἢ χερσὶ καταναγκάζειν ὑπεραιωρηθέντος δὲ τοῦ ἄρθρου, αἱ παραγωγαὶ τοῖσι θέναρσιν, ὡς τὰ ἐν χερσίν ἐπίδεσις ἐν τουτέῳ τῷ σχήματι, καὶ ἀνάληψις, καὶ θέσις.

23. Τὰ δὲ ὀπισθεν, ἐξαίφνης ἐκτείνοντα, διορθοῦν τοῖσι θέναρσιν ἅμα δὲ δεῖ ἐν τῇ διορθώσει καὶ ἐν τοῖσιν ἐτέροισιν. Ἦν δὲ

ἔμπροσθεν, ἀμφὶ ὀθόνιον ξυνειλιγμένον, εὐογκον, ξυγκάμπτοντα ἅμα διορθοῦν.

24. Ἦν δὲ ἐτεροκλινές ἔη, ἐν τῇ διορθώσει ἀμφοτέρα ἅμα χρῆ ποιέειν. Τῆς δὲ μελέτης τῆς θεραπείης, κοινὸν τὸ σχῆμα καὶ ἡ ἐπίδεσις. Δύναται δὲ καὶ ἐκ τῆς διατάσιος κοινῇ ξυμπίπτειν ἅπαντα.

25. Τῶν δὲ ἐμβολέων, αἱ μὲν ἐξ ὑπεραιωρήσιος ἐμβάλλονται, αἱ δὲ ἐκ κατατάσιος, αἱ δὲ ἐκ περισφάλσιος αὐταὶ δὲ ἐκ τῶν ὑπερβολέων τῶν σχημάτων, ἢ τῆ, ἢ τῆ, ξὺν τῷ τάχει.

26. Χειρὸς δὲ ἄρθρον ὀλισθάνει ἢ ἔσω, ἢ ἔξω, ἔσω δὲ τὰ πλειῖστα. Σημήϊα δὲ εὐσημα ἦν μὲν εἴσω, ξυγκάμπτειν τοὺς δακτύλους οὐ δύνανται ἦν δὲ ἔξω, ἐκτείνειν. Ἐμβολὴ δὲ, ὑπὲρ τραπέζης τοὺς δακτύλους ἔχων, τοὺς μὲν τείνειν, τοὺς δὲ ἀντείνειν, τὸ δὲ ἐξέχον ἢ θέναρι, ἢ πτέρνη ἅμα ἀπωθέειν, πρόσω καὶ κάτωθεν

κατὰ τὸ ἕτερον ὀστέον, ὄγκον μαλθακὸν ὑποθεῖς, ἦν μὲν ἄνω, καταστρέψας τὴν χεῖρα, ἦν δὲ κάτω, ὑπτίην. Ἴησις δὲ, ὀθονίοισιν.

27. Ὅλη δὲ ἡ χεὶρ ὀλισθάνει, ἢ ἔσω, ἢ ἔξω, ἢ ἔνθα, ἢ ἔνθα, μάλιστα δὲ εἴσω ἔστι δ' ὅτε καὶ ἡ ἐπίφυσις ἐκινήθη ἔστι δ' ὅτε τὸ ἕτερον τῶν ὀστέων διέστη. Τουτέοισι κατάτασις ἰσχυρὴ ποιητὴ καὶ τὸ μὲν ἐξέχον ἀπωθέειν, τὸ δὲ ἕτερον ἀντωθέειν, δύο εἶδεα ἅμα, ἐς τοῦπίσω καὶ ἐς τὸ πλάγιον, ἢ χερσὶν ἐπὶ τραπέζης, ἢ πτέρνη. Παλίγκοτα δὲ καὶ ἀσχήμονα τῷ δὲ χρόνῳ κρατύνεται ἐς χρῆσιν. Ἴησις, ὀθονίοισι ξὺν τῇ χειρὶ καὶ τῷ πήχεϊ καὶ νάρθηκας μέχρι δακτύλων τιθέναι ἐν νάρθηξι δὲ τεθέντα ταῦτα πυκνότερον λύειν, ἢ τὰ κατήγματα, καὶ καταχύσει πλείονι χρέεσθαι.

28. Ἐκ γενεῆς δὲ, βραχυτέρη ἡ χεὶρ γίνεται, καὶ μινύθησις σαρκῶν μάλιστα τάναντία, ἢ ἢ τὸ ἔκπτωμα ηὐξημένῳ δὲ τὰ ὀστέα μένει.

29. Δακτύλου δὲ ἄρθρον, ὀλισθὸν μὲν, εὐσημον. Ἐμβολὴ δὲ, κατατείναντα ἐς ἰθὺ, τὸ μὲν ἐξέχον ἀπωθέειν, τὸ δὲ ἐναντίον ἀντωθέειν

ἴησις δὲ, ὀθονίοισιν. Μὴ ἐμπεσὸν δὲ, ἐπιπωροῦται ἔξωθεν Ἐκ γενεῆς δὲ ἢ ἐν αὐξήσει ἐξαρθρήσαντα, τὰ ὀστέα βραχύνεται τὰ κάτω τοῦ ὀλισθήματος, καὶ σάρκες μινύθουσι τάναντία μάλιστα, ἢ ὡς τὸ ἔκπτωμα ηὐξημένῳ δὲ τὰ ὀστέα μένει.

30. Γνάθος δὲ ὀλίγοισι τελέως ἐξήρθησεν ὀστέον τε γὰρ τὸ ἀπὸ τῆς ἄνω γνάθου πεφυκὸς ὑπεζύγεται πρὸς τῷ ὑπὸ τὸ οὖς ὀστέῳ προσπεφυκότη, ὅπερ ἀποκλείει τὰς κεφαλὰς τῆς κάτω γνάθου, τῆς μὲν ἀνωτέρω ἐὼν, τῆς δὲ κατωτέρω τῶν κεφαλέων. Τὰ δὲ ἄκρεα τῆς κάτω γνάθου, τὸ μὲν διὰ τὸ μῆκος οὐκ εὐπαρεῖσδυτον, τὸ δ' αὖ κορωνόν τε καὶ ὑπερέχον ὑπὲρ τοῦ ζυγώματος ἅμα τε ἀπ' ἀμφοτέρων τῶν ἀκρέων τούτων νευρώδεις τένοντες πεφύκασιν, ἐξ ὧν ἐξήρτηνται οἱ μύες οἱ κροταφῖται καὶ μασσητῆρες καλεόμενοι διὰ τοῦτο δὲ

καλέονται, καὶ διὰ τοῦτο κινέονται, ὅτι ἐντεῦθεν

ἐξήρτηνται ἐν γὰρ τῇ ἐδῶδ, καὶ ἐν τῇ διαλέκτῳ, καὶ ἐν τῇ ἄλλῃ χρήσει τοῦ στόματος, ἢ μὲν ἄνω γνάθος ἀτρεμέει ξυνήρτηται γὰρ τῇ κεφαλῇ. καὶ οὐ διήρθρωται ἢ δὲ κάτω γνάθος κινέεται ἀπήρθρωται γὰρ ἀπὸ τῆς ἄνω γνάθου, καὶ ἀπὸ τῆς κεφαλῆς. Διότι μὲν οὖν ἐν σπασμοῖσι καὶ τετάνοισι πρῶτον τοῦτο τὸ ἄρθρον ἐπισημαίνει συντεταμένον, καὶ διότι πληγαὶ καίριοι καὶ καροῦσαι αἱ κροταφίτιδες γίνονται, ἐν ἄλλῳ λόγῳ εἰρήσεται. Περὶ δὲ τοῦ μὴ κάρτα ἐξαρθρέειν τάδε τὰ αἷτια αἷτιον δὲ καὶ τόδε, ὅτι οὐ μάλα καταλαμβάνουσι τοιαῦται ἀνάγκαι βρωμάτων, ὥστε τὸν ἄνθρωπον χανέειν μέζον ἢ ὅσον δύναται ἐκπέσει δ' ἂν ἀπ' οὐδενὸς ἄλλου σχήματος, ἢ ἀπὸ τοῦ μέγα χανόντα παραγαγεῖν τὴν γένυν ἐπὶ θάτερα. Προσξυμβάλλεται μέντοι καὶ τόδε πρὸς τὸ ἐκπίπτειν ὀκόσα γὰρ νεῦρα καὶ ὀκόσοι μύες παρὰ τὰ ἄρθρα εἰσὶν, ἢ ἀπὸ ἄρθρων ἀφ' ὧν ξυνδέδενται, τούτων ὅσα ἐν τῇ χρήσει πλειστάκις διακινέεται, ταῦτα καὶ ἐς τὰς κατατάσιας δυνατώτατα ἐπιδιδόναι, ὥσπερ καὶ τὰ δέρματα τὰ εὐδευητότατα πλείστην ἐπίδοσιν ἔχει. Περὶ οὗ οὖν ὁ λόγος, ἐκπίπτει μὲν γνάθος ὀλιγάκις σχᾶται μέντοι πολλάκις ἐν

χάσμησιν, ὥσπερ καὶ ἄλλαι πολλαὶ μυῶν παραλλαγαὶ καὶ νεύρων τούτο ποιέουσιν. Δῆλον μὲν οὖν ἐκ τῶνδε μάλιστά ἐστιν, ὅταν ἐκπεπτώκη προΐσχει γὰρ ἢ κάτω γνάθος ἐς τοῦμπροσθεν, καὶ παρῆκται τάναντία τοῦ ὀλισθήματος, καὶ τοῦ ὀστέου τὸ κορωνὸν ὀγκηρότερον φαίνεται παρὰ τὴν ἄνω γνάθον, καὶ χαλεπῶς ξυμβάλλουσι τὰς κάτω γνάθους. Τούτοις δὲ ἐμβολὴ πρόδηλος, ἥτις γίνοιτ' ἂν ἀρμόζουσα χρῆ γὰρ τὸν μὲν τινα κατέχειν τὴν κεφαλὴν τοῦ τετρωμένου, τὸν δὲ περιλαβόντα τὴν κάτω γνάθον καὶ ἔσωθεν καὶ ἔξωθεν τοῖσι δακτύλοις κατὰ τὸ γένειον, χάσκοντος τοῦ ἀνθρώπου ὅσον μετρίως δύναται, πρῶτον μὲν διακινέειν τὴν κάτω γνάθον χρόνον τινὰ, τῇ καὶ τῇ παράγοντα τῇ χειρὶ, καὶ αὐτὸν τὸν ἄνθρωπον κελεύειν χαλαρὴν τὴν γνάθον ἔχειν, καὶ ξυμπαράγειν, καὶ ξυνδιδόναι ὡς μάλιστα ἔπειτα ἐξαπίνης σχάσαι, τρισὶ σχήμασιν ὁμοῦ προσέχοντα τὸν νόον δεῖ μὲν γὰρ παράγεσθαι ἐκ τῆς διαστροφῆς ἐς τὴν φύσιν, δεῖ δὲ ἐς τοῦπίσω ἀπωσθῆναι τὴν γνάθον τὴν κάτω, δεῖ δὲ ἐπόμενον τούτοις ξυμβάλλειν τὰς γνάθους, καὶ μὴ χάσκειν. Ἐμβολὴ μὲν οὖν αὕτη, καὶ οὐκ ἂν γένοιτο ἀπ' ἄλλων σχημάτων. Ἰητρείη δὲ βραχεῖη ἀρκέει σπλῆνα προστιθέντα κεκηρωμένον χαλαρῶ ἐπιδέσμῳ ἐπιδεῖν. Ἀσφαλέστερον δὲ χειρίζειν ἐστὶν ὑπτίον κατακλίναντα τὸν ἄνθρωπον, ἐρείσαντα τὴν κεφαλὴν αὐτοῦ ἐπὶ σκυτίνου ὑποκεφαλαίου ὡς πληρεστάτου, ἵνα ὡς ἤκιστα ὑπέικη προσκατέχειν δὲ τινα χρῆ τὴν κεφαλὴν τοῦ τετρωμένου.

31. Ἦν δ' ἀμφοτέραι αἱ γνάθοι ἐξαρθρήσωσιν, ἢ μὲν ἴησις ἢ αὐτή. Ξυμβάλλειν δέ

τι ἦσσαν οὗτοι τὸ στόμα δύνανται καὶ γὰρ προπετέστεραι αἱ γένυες τούτοισιν, ἀστραβέες δὲ τὸ δὲ ἀστραβέες μάλιστ' ἂν γνοίης τοῖσιν ὀρίοισι τῶν ὀδόντων, τῶν τε ἄνω καὶ τῶν κάτω κατ' ἴξιν. Τούτοισι συμφέρει ἐμβάλλειν ὡς τάχιστα ἐμβολῆς δὲ τρόπος πρόσθεν εἴρηται. Ἦν δὲ μὴ ἐμπέση, κίνδυνος περὶ τῆς ψυχῆς ὑπὸ πυρετῶν ξυνεχέων καὶ νωθρῆς καρώσιος καρώδεες γὰρ οἱ μύες οὗτοι, καὶ ἀλλοιούμενοι, καὶ ἐντεινόμενοι παρὰ φύσιν φιλέει δὲ καὶ ἡ γαστήρ ὑποχωρέειν τούτοισι χολώδεα, ἄκρητα, ὀλίγα καὶ ἦν ἐμέωσιν, ἄκρητα ἐμέουσιν οὗτοι οὖν καὶ θνήσκουσι δεκαταῖοι μάλιστα.

32. Ἦν δὲ κατεαγῆ ἡ κάτω γνάθος, ἦν μὲν μὴ ἀποκαυλισθῆ παντάπασι, ἀλλὰ ξυνέχεται τὸ ὀστέον, ἐκκεκλιμένον δὲ ἔη, κατορθῶσαι μὲν χρὴ τὸ ὀστέον, παρὰ γε τὴν γλῶσσαν πλαγίην ὑπείραντα τοὺς δακτύλους, τὸ δὲ ἔξωθεν ἀντερειδόντα, ὡς ἂν συμφέρη καὶ ἦν διεστραμμένοι ἕωσιν οἱ ὀδόντες οἱ κατὰ τὸ τρῶμα καὶ κεκινημένοι, ὀκόταν τὸ ὀστέον κατορθωθῆ, ζευῆσαι τοὺς ὀδόντας χρὴ πρὸς ἀλλήλους, μὴ μόνον τοὺς δύο, ἀλλὰ καὶ πλέονας, μάλιστα μὲν χρυσίῳ, ἔστ' ἂν κρατυνθῆ τὸ ὀστέον, εἰ δὲ μὴ, λίνῳ ἔπειτα

ἐπιδεῖν κηρωτῆ καὶ σπλήνεσιν ὀλίγοισι καὶ ὀθονίοισιν ὀλίγοισι, μὴ ἄγαν ἐρειδόντα, ἀλλὰ χαλαροῖσιν. Εὖ γὰρ εἶδέναι χρὴ, ὅτι ἐπίδεσις ὀθονίων, γνάθου καταγείσης, μικρὰ μὲν ἂν ὠφελέοι, εἰ χρηστῶς ἐπιδέοιτο, μέγала δ' ἂν βλάβῃ, εἰ κακῶς ἐπιδέοιτο. Πυκνὰ δὲ παρὰ τὴν γλῶσσαν ἐσματέεσθαι χρὴ, καὶ πουλὺν χρόνον ἀντέχειν τοῖσι δακτύλοισι κατορθοῦντα τοῦ ὀστέου τὸ ἐκκλιθὲν ἄριστον δὲ, εἰ αἰεὶ δύναιτο, ἀλλ' οὐχ οἷόν τε.

33. Ἦν δὲ ἀποκαυλισθῆ παντάπασι τὸ ὀστέον ὀλιγάκις δὲ τοῦτο γίνεται, κατορθοῦν μὲν χρὴ τὸ ὀστέον οὕτω, καθάπερ εἴρηται. Ὅταν δὲ κατορθώσης, τοὺς ὀδόντας χρὴ ζευγνῦναι, ὡς πρόσθεν εἴρηται μέγα γὰρ ἂν ξυλλαμβάνοι ἐς τὴν ἀτρεμίην, προσέτι καὶ ἦν τις ὀρθῶς ζεύξη, ὥσπερ χρὴ, τὰς ἀρχὰς ῥάψας. Ἀλλὰ γὰρ οὐ ρηΐδιον ἐν γραφῇ χειρουργίην πᾶσαν ἀτρεκέως διηγέεσθαι, ἀλλὰ καὶ αὐτὸν ὑποτοπέεσθαι χρὴ ἐκ

τῶν γεγραμμένων. Ἐπειτα χρὴ δέρματος καρχηδονίου, ἦν μὲν νηπιώτερος ἔη ὁ τρωθεὶς, ἀρκέει τῷ λοπῶ χρέεσθαι, ἦν δὲ τελειότερος ἔη, αὐτῷ τῷ δέρματι ταμόντα δὲ χρὴ εὖρος ὡς τριδάκτυλον, ἢ ὅκως ἂν ἀρμόζῃ, ὑπαλείψαντα κόμμι τὴν γνάθον εὐμενέστερον γὰρ, κόλλη προσκολλῆσαι τὸ δέρμα ἄκρον πρὸς τὸ ἀποκεκαυλισμένον τῆς γνάθου, ἀπολείποντα ὡς δάκτυλον ἀπὸ τοῦ τρώματος ἢ ὀλίγῳ πλέον τοῦτο μὲν ἐς τὸ κάτω μέρος ἐχέτω δὲ ἐντομὴν κατὰ τὴν ἴξιν τοῦ γενείου ὁ ἱμάς, ὡς ἀμφιβεβήκη ἀμφὶ τὸ ὅζυ τοῦ γενείου. Ἐτερον δὲ ἱμάντα τοιοῦτον, ἢ ὀλίγῳ πλατύτερον προσκολλῆσαι χρὴ πρὸς τὸ ἄνω μέρος τῆς

γνάθου, ἀπολείποντα καὶ τοῦτον ἀπὸ τοῦ τρώματος, ὅσονπερ ὁ ἕτερος ἀπέλιπεν ἐσχίσθω δὲ καὶ οὗτος ὁ ἱμᾶς τὴν ἀμφὶ τὸ οὖς περιβάσιν. Ἀποξέες δὲ ἔστωσαν οἱ ἱμάντες ἀμφὶ τὴν ξυναφήν ἐν δὲ τῇ κολλήσει ἢ σὰρξ τοῦ σκύτεος πρὸς τοῦ χρωτὸς ἔστω, ἐχεκολλότερον γὰρ οὕτως. Ἐπειτα κακατείναντα χρή καὶ τοῦτον τὸν ἱμάντα μᾶλλον δέ

τι τὸν περὶ τὸ γένειον, ὡς ὅτι μάλιστα μὴ ἀπομυλλήνη ἢ γνάθος, ξυνάψαι τοὺς ἱμάντας κατὰ τὴν κορυφήν, κᾶπειτα περὶ τὸ μέτωπον ὀθονίω καταδῆσαι, καὶ κατάβλημα χρή εἶναι, ὥσπερ νομίζεται, ὡς ἀτρεμέη τὰ δεσμά. Τὴν δὲ κατάκλισην ποιέεσθω ἐπὶ τὴν ὑγίεια γνάθου, μὴ τῇ γνάθῳ ἐρηρισμένος, ἀλλὰ τῇ κεφαλῇ. Ἰσχυαίνειν δὲ χρή τὸ σῶμα ἄχρι ἡμερέων δέκα, ἔπειτα ἀνατρέφειν

μὴ βραδέως ἦν γὰρ ἐν τῆσι πρώτησιν ἡμέρησι μὴ φλεγμῆνη, ἐν εἴκοσιν ἡμέρησιν ἢ γνάθος κρατύνεται ταχέως γὰρ ἐπιπωροῦται, ὥσπερ καὶ τὰ ἄλλα τὰ ἀραιὰ ὀστέα, ἦν μὴ ἐπισφακελίση. Ἄλλα γὰρ περὶ σφακελισμῶν τῶν ξυμπάντων ὀστέων ἄλλος μακρὸς λόγος λείπεται. Αὕτη ἢ διατάσις ἢ ἀπὸ τῶν κολλημάτων εὐμενῆς, καὶ εὐταμίευτος, καὶ ἐς πολλὰ καὶ πολλαχοῦ διορθώματα εὐχρηστος. Τῶν δὲ ἰητρῶν οἱ μὴ ξὺν νόῳ εὐχειρες, καὶ ἐν ἄλλοισι τρώμασι τοιοῦτοί εἰσι καὶ ἐν γνάθου κατῆξεσιν ἐπιδέουσι γὰρ γνάθου κατεαγεῖσαν ποικίλως καὶ καλῶς καὶ κακῶς. Πᾶσα γὰρ ἐπίδεςις γνάθου οὕτω καταγεῖσης ἐκκλίνει τὰ ὀστέα τὰ ἐς τὸ κάτωμα ῥέποντα μᾶλλον, ἢ ἐς τὴν φύσιν ἄγει.

34. Ἦν δὲ ἢ κάτω γνάθος κατὰ τὴν ξύμφυσην τὴν κατὰ τὸ γένειον διασπασθῆ μούνη δὲ αὕτη ξύμφυσις ἐν τῇ κάτω γνάθῳ ἐστίν, ἐν δὲ τῇ ἄνω πολλαὶ ἄλλ' οὐ βούλομαι ἀποπλανᾶν τὸν λόγον, ἐν ἄλλοισι γὰρ εἶδεσι νοσημάτων περὶ τούτων λεκτέον, ἦν οὖν διαστῆ ἢ κατὰ τὸ γένειον ξύμφυσις, κατορθῶσαι μὲν παντὸς ἀνδρὸς ἐστίν τὸ μὲν γὰρ ἐξεστεὸς ἐσωθέειν χρή ἐς τὸ ἔσω μέρος, προσβάλλοντα τοὺς δακτύλους τὸ δὲ εἶσω ῥέπον ἀνάγειν ἐς τὸ ἔξω μέρος, ἐνερεῖσαντα τοὺς δακτύλους. Ἐς διάστασιν μέντοι διατεινάμενον, ταῦτα χρή ποιέειν ῥᾶον γὰρ οὕτως ἐς τὴν φύσιν ἤξει, ἢ εἰ ἐγχρίπτων τις ἐς ἄλληλα

τὰ ὀστέα, καταναγκάζειν πειρᾶται τοῦτο παρὰ πάντα τὰ τοιαῦτα ὑπομνήματα χάριεν εἰδέναί. Ὀκόταν δὲ κατορθώσης, ζευξαι μὲν χρή τοὺς ὀδόντας τοὺς ἔνθεν καὶ ἔνθεν πρὸς ἀλλήλους, ὥσπερ καὶ πρόσθεν εἴρηται. Ἰῆσθαι δὲ χρή κηρωτῆ καὶ σπλήνεσιν ὀλίγοισι καὶ ὀθονίοισιν. Ἐπίδεςιν δὲ βραχείην ποικίλην μάλιστα τοῦτο τὸ χωρίον ἐπιδέχεται, ἐγγὺς γὰρ τι τοῦ ἰσορρόπου ἐστίν, ὡς δὴ μὴ ἰσορροπον ἐόν τοῦ δὲ ὀθονίου τὴν περιβολὴν ποιέεσθαι χρή, ἦν μὲν ἢ δεξιῇ γνάθος ἐξεστήκη, ἐπὶ δεξιὰ ἐπὶ δεξιὰ γὰρ νομίζεται εἶναι, ἦν ἢ δεξιῇ χεὶρ προηγῆται τῆς ἐπιδέσιος ἦν δὲ ἢ ἐτέρη γνάθος ἐξεστήκη, ὡς ἐτέρως χρή τὴν

ἐπίδεδειξεν. Κῆν μὲν ὀρθῶς τις κατορθώσεται καὶ ἐπατρεμῆση ὡς χρῆ, ταχεῖη μὲν ἢ ἄλθεξις, οἱ δὲ ὀδόντες ἀσινέες γίνονται ἢν δὲ μὴ, χρονιωτέρη μὲν ἢ ἄλθεξις, διαστροφὴν δὲ ἴσχουσιν οἱ ὀδόντες, καὶ σιναροὶ καὶ ἀχρήϊοι γίνονται.

35. Ἦν δὲ ἡ ρῖς καταγῆ, τρόπος μὲν οὐχ εἷς ἐστὶ κατήξιος ἀτὰρ πολλὰ μὲν δὴ καὶ ἄλλα λωβέονται οἱ χαίροντες τῆσι καλῆσιν ἐπιδέσεσιν ἄνευ νόου, ἐν δὲ τοῖσι περὶ τὴν ῥῖνα μάλιστα ἐπιδεσίων γὰρ ἐστὶν αὕτη ποικιλωτάτη, καὶ πλείστους μὲν σκεπάρνους ἔχουσα, διαρρωγὰς δὲ καὶ διαλείψιας ποικιλωτάτας τοῦ χρωτὸς ῥομβοειδέας. Ὡς οὖν εἴρηται, οἱ τὴν ἀνόητον εὐχειρίην ἐπιτηδεύοντες ἄσμενοι ῥινὸς κατεαγυῖης ἐπιτυγχάνουσιν, ὡς ἐπιδήσωσιν. Μίαν μὲν οὖν ἡμέρην, ἢ δύο, ἀγάλλεται μὲν ὁ ἰητρὸς, χαίρει δὲ ὁ ἐπιδεδεμένος ἔπειτα ταχέως μὲν ὁ ἐπιδεδεμένος κορίσκειται, ἀσηρὸν γὰρ τὸ φόρημα ἀρκέει δὲ τῷ ἰητρῷ, ἐπειδὴ ἐπέδειξεν,

ὅτι ἐπίσταται ποικίλως ῥῖνα ἐπιδέειν. Ποιέει δὲ ἡ ἐπίδεδειξεν ἢ τοιαύτη πάντα τάναντία τοῦ δέοντος τοῦτο μὲν γὰρ, ὀκόσοι σιμοῦνται διὰ τὴν κάτηξιν, δηλονότι, εἰ ἄνωθεν τις μᾶλλον πιέζοι, σιμώτεροι ἂν ἔτι εἶεν τοῦτο δὲ, ὅσοισι παραστρέφεται ἢ ἔνθα ἢ ἔνθα ἢ ρῖς, ἢ κατὰ τὸν χόνδρον, ἢ ἀνωτέρω, δηλονότι οὐδὲν αὐτοὺς ἢ ἄνωθεν ἐπίδεδειξεν ὠφελήσει, ἀλλὰ καὶ βλάψει μᾶλλον οὐχ οὕτω γὰρ εὖ ξυναρμόσει σπλήνεσι τὸ ἐπὶ θάτερον τῆς ῥινὸς, καίτοι οὐδὲ τοῦτο ποιέουσιν οἱ ἐπιδέοντες.

36. Ἄγχιστα δὲ ἡ ἐπίδεδειξεν μοι δοκέη ἂν τι ποιέειν, εἰ κατὰ μέσην τὴν ῥῖνα, κατὰ τὸ ὄξυ, ἀμφιφλασθεῖη ἢ σὰρξ κατὰ τὸ ὀστέον, ἢ εἰ κατὰ τὸ ὀστέον μικρόν τι σίνος εἶη, καὶ μὴ μέγα τοῖσι γὰρ τοιούτοισιν ἐπιπώρωμα ἴσχει ἢ ρῖς, καὶ ὀκραιοειδестέρη τινὶ γίνεται ἀλλ' ὅμως οὐδὲ τούτοισι δὴ που πολλοῦ ὄχλου δέεται ἢ ἐπίδεδειξεν, εἰ δὴ τι καὶ δεῖ ἐπιδέειν ἀρκέει δὲ ἐπὶ μὲν τὸ φλάσμα σπληνίον ἐπιτείναντα κεκηρωμένον, ἔπειτα ὡς ἀπὸ δύο ἀρχέων ἐπιδέεται, οὕτως ὀθονίω ἐς ἅπαξ περιβάλλειν. Ἀρίστη μέντοι ἰητρείη, τῷ ἀλήτῳ, τῷ σιτανίῳ, τῷ πλυτῷ, γλίσχρῳ, πεφυρημένῳ, ὀλίγῳ,

καταπλάσσειν τὰ τοιαῦτα χρῆ δὲ, ἢν μὲν ἐξ ἀγαθῶν ἔη τῶν πυρῶν τὸ ἄλητον καὶ εὐόλκιμον, τούτῳ χρέεσθαι ἐς πάντα τὰ τοιαῦτα ἢν δὲ μὴ πάνυ ὀλκιμον ἔη, ὀλίγην μάννην ὕδατι ὡς λειοτάτην διέντα, τούτῳ φυρᾶν τὸ ἄλητον, ἢ κόμμι πάνυ ὀλίγον ὡσαύτως μίσγειν.

37. Ὀκόσοισι μὲν οὖν ρῖς ἐς τὸ κάτω καὶ ἐς τὸ σιμὸν ῥέπουσα καταγῆ, ἢν μὲν ἐκ τοῦ ἔμπροσθεν μέρους κατὰ τὸν χόνδρον ἴζηται, οἷόν τέ ἐστὶ καὶ ἐντιθέναί τι



διόρθωμα ἐς τοὺς μυκτῆρας ἦν δὲ μὴ, ἀνορθοῦν μὲν χρή πάντα τὰ τοιαῦτα, τοὺς δακτύλους ἐς τοὺς μυκτῆρας ἐντιθέντα, ἦν ἐνδέχεται ἦν δὲ μὴ, παχὺ ὑπάλειπτρον

μὴ ἐς τὸ ἔμπροσθεν τῆς ῥινὸς ἀνάγοντα τοῖσι δακτύλοισιν, ἀλλ' ἢ ἴδρυται ἔξωθεν δὲ τῆς ῥινὸς ἐνθεν καὶ ἐνθεν ἀμφιλαμβάνοντα τοῖσι δακτύλοισι, ξυναναγκάζειν τε ἅμα καὶ ἀναφέρειν ἐς τὸ ἄνω. Καὶ ἦν μὲν πάνυ ἐν τῷ ἔμπροσθεν τὸ κάτηγμα ἔη, οἷόν τε τι καὶ ἔσω τῶν μυκτῆρων ἐντιθέναι, ὡσπερ ἤδη εἴρηται, ἢ ἄχνην τὴν ἀφ' ἡμιτυβίου, ἢ ἄλλο τι τοιοῦτον ἐν ὀθονίῳ εἰλίσσοντα, μᾶλλον δὲ ἐν καρχηδονίῳ δέρματι ἐρράψαντα, σχηματίσαντα τὸ ἀρμόσσον σχῆμα τῷ χωρίῳ, ἵνα ἐγκείσεται. Ἦν μέντοι πρωσώτέρω ἔη τὸ κάτηγμα, οὐδὲν οἷόν τε ἔσω ἐντιθέναι καὶ γὰρ εἰ ἐν τῷ ἔμπροσθεν ἀσηρὸν τὸ φόρημα, πῶς γε δὴ οὐκ ἐν τῷ ἔσωτέρῳ; Τὸ μὲν οὖν πρῶτον, καὶ ἔσωθεν ἀναπλάσσεσθαι καὶ ἔξωθεν ἀφειδήσαντα, χρή ἀναγαγεῖν ἐς τὴν ἀρχαίην φύσιν, καὶ διορθώσασθαι. Κάρτα γὰρ οἷη τε ῥίς καταγεῖσα ἀναπλάσσεσθαι, μάλιστα μὲν αὐθήμερος, ἦν δὲ μὴ, ὀλίγῳ ὕστερον ἀλλὰ καταβλακεύουσιν οἱ ἰητροὶ, καὶ ἀπαλωτέρω τὸ πρῶτον ἄπτονται, ἢ ὡς χρή παραβάλλοντα γὰρ τοὺς δακτύλους χρή ἐνθεν καὶ ἐνθεν κατὰ τὴν φύσιν τῆς ῥινὸς ὡς κατωτάτω, κάτωθεν ξυναναγκάζειν, καὶ οὕτω μάλιστα ἀνορθοῦται

σὺν τῇ ἔσωθεν διορθώσει. Ἔπειτα δὲ ἐς ταῦτα ἰητρὸς οὐδεὶς ἄλλος ἐστὶ τοιοῦτος, εἰ ἐθέλοι καὶ μελετᾶν καὶ τολμᾶν, ὡς οἱ δάκτυλοι αὐτοῦ οἱ λιχανοὶ οὗτοι γὰρ κατὰ φύσιν μάλιστα εἰσιν. Παραβάλλοντα γὰρ χρή τῶν δακτύλων ἐκάτερον, παρὰ πᾶσαν τὴν ῥίνα ἐρείδοντα, ἡσύχως οὕτως ἔχειν, μάλιστα μὲν, εἰοῖόν τε εἶη, αἰεὶ, ἐστ' ἂν κρατυνηθῆ, εἰ δὲ μὴ, ὡς πλεῖστον χρόνον, αὐτὸν, ὡς εἴρηται εἰ δὲ μὴ, ἢ παῖδα ἢ γυναῖκά τινα μαλθακὰς γὰρ τὰς χεῖρας δεῖ εἶναι. Οὕτω γὰρ ἂν κάλλιστα ἰητρευθῆ, ὅτε ἢ ῥίς μὴ ἐς τὸ σκολιὸν, ἀλλ' ἐς τὸ κάτω ἰδρυμένη, ἰσόρροπος εἶη. Ἐγὼ μὲν οὖν οὐδεμίην που ῥίνα εἶδον, ἥτις οὕτω κατεαγεῖσα οὐχ οἷη τε διορθωθῆναι, αὐτίκα πρὶν πωρωθῆναι ξυναναγκαζομένη, ἐγένετο, εἴ τις ὀρθῶς ἐθέλοι ἰητρεύειν. Ἀλλὰ γὰρ οἱ ἄνθρωποι αἰσχροὶ μὲν εἶναι πολλοῦ ἀποτιμῶνται, μελετᾶν δὲ ἅμα μὲν οὐκ ἐπίστανται, ἅμα δὲ οὐ τολμέουσιν, ἦν μὴ ὀδυνέωνται, ἢ θάνατον δεδοίκωσιν καίτοι ὀλιγοχρόνιος ἢ πώρωσις τῆς ῥινὸς ἐν γὰρ δέκα ἡμέρησι κρατύνεται, ἦν μὴ ἐπισφακελίση.

38. Ὁκόσοισι δὲ τὸ ὀστέον ἐς τὸ πλάγιον κατάγνυται, ἢ μὲν ἴησις ἢ αὐτὴ τὴν δὲ διόρθωσιν δηλονότι χρή ποιέεσθαι, οὐκ ἰσόρροπον ἀμφοτέρωθεν, ἀλλὰ τό τε ἐκκεκλιμένον ὠθέειν ἐς τὴν φύσιν, ἔκτοσθεν ἀναγκάζοντα, καὶ ἐσματτεύομενον ἐς τοὺς μυκτῆρας, καὶ τὰ εἴσω ῥέψαντα διορθοῦν ἀόκνως, ἐστ' ἂν κατορθώσης,

εἶδόμενα, ὅτι, ἦν μὴ αὐτίκα κατορθώσης, οὐχ οἷόν τε μὴ οὐχὶ διεστράφθαι τὴν ῥίνα. Ὄταν δὲ ἀγάγῃς ἐς τὴν φύσιν, προσβάλλοντα χρὴ ἐς τὸ χωρίον, ἢ τοὺς δακτύλους, ἢ τὸν ἓνα δάκτυλον, ἢ ἐξέσχεν, ἀνακωχέειν, ἢ αὐτὸν, ἢ ἄλλον τινὰ, ἔστ' ἂν κρατυνθῇ τὸ τρῶμα ἀτὰρ καὶ ἐς τὸν μυκτῆρα τὸν μικρὸν δάκτυλον ἀπωθέοντα, ἄλλοτε καὶ ἄλλοτε διορθοῦν χρὴ τὰ ἐγκλιθέντα. Ὅτι δ' ἂν φλεγμονῆς ὑπογίνηται τουτέοισι, χρὴ τῷ σταιτὶ χρέεσθαι τοῖσι μέντοι δακτύλοισι προσέχειν χρὴ ὁμοίως, καὶ τοῦ σταιτὸς ἐπικειμένου. Ἦν δὲ πού κατα τὸν χόνδρον ἐς τὰ πλάγια καταγῆ, ἀνάγκη τὴν ῥίνα ἄκρην παρεστράφθαι. Χρὴ οὖν τοῖσι τοιούτοις ἐς τὸν μυκτῆρα ἄκρον διόρθωμά τι τῶν εἰρημένων, ἢ ὅτι τοῖσι οἷον, ἐντιθέσθαι πολλὰ δ' ἂν τις εὖροι τὰ ἐπιτήδεια, ὅσα μήτε ὁδμὴν ἴσχει, ἄλλως τε καὶ προσηγέα ἐστὶν ἐγὼ δὲ ποτε πλεύμονος προβάτου ἀπότμημα ἐνέθηκα, τοῦτο γὰρ πως παρέτυχεν οἱ γὰρ σπόγγοι ἐντιθεμένοι ὑγράσματα δέχονται. Ἐπειτα χρὴ καρχηδονίου δέρματος λοπὸν, πλάτος ὡς τοῦ μεγάλου δακτύλου τετμημένον, ἢ ὅπως ἂν ξυμφέρη, προσκολλῆσαι ἐς τὸ ἔκτοσθεν πρὸς τὸν μυκτῆρα τὸν ἐκκεκλιμένον κἄπειτα κατατεῖναι τὸν ἱμάντα, ὅπως ἂν ξυμφέρη

μᾶλλον δὲ ὀλίγῳ τείνειν χρὴ, [ἢ] ὥστε ὀρθὴν καὶ ἀπαρτῆ τὴν ῥίνα εἶναι. Ἐπειτα μακρὸς γὰρ ἔστω ὁ ἱμᾶς, κάτωθεν τοῦ ὠτὸς ἀγαγόντα αὐτὸν, ἀναγαγεῖν περὶ τὴν κεφαλὴν καὶ ἔξεστι μὲν κατὰ τὸ μέτωπον προσκολλῆσαι τὴν τελευτὴν τοῦ ἱμάντος, ἔξεστι δὲ καὶ μακρότερον ἐπιπεριελίσσοντα περὶ τὴν κεφαλὴν καταδέειν. Τοῦτο ἅμα μὲν δικαίην τὴν διόρθωσιν ἔχει, ἅμα δὲ εὐταμίευτον, καὶ μᾶλλον, ἦν ἐθέλη, καὶ ἦσσαν τὴν ἀντιρροπὴν ποιῆσαι τῆς ῥίνος. Ἀτὰρ καὶ ὀκόσοισιν ἐς τὸ πλάγιον ἢ ῥίς κατάγνυται, τὰ μὲν ἄλλα ἰητρεύειν χρὴ, ὡς προείρηται προσδέεται δὲ τοῖσι πλείστοις καὶ τοῦ ἱμάντος πρὸς ἄκρην τὴν ῥίνα προσκολληθῆναι τῆς ἀντιρροπῆς εἵνεκα.

39. Ὅσοισι δὲ σὺν τῇ κτῆξει καὶ ἔλκεα προσγίνεται, οὐδὲν δεῖ ταρασσεσθαι διὰ τοῦτο ἀλλ' ἐπὶ μὲν τὰ ἔλκεα ἐπιτιθέσθαι ἢ πισηρῆν, ἢ τῶν ἐναίμων τι εὐαλθέα γὰρ τῶν τοιούτων τὰ πλεῖστά ἐστιν ὁμοίως, κἢν ὅστέα μέλλη ἀπιέναι. Τὴν δὲ διόρθωσιν τὴν πρώτην ἀόκνως χρὴ ποιέεσθαι, μηδὲν ἐπιλείποντα, καὶ τὰς διορθώσας τοῖσι δακτύλοισιν ἐν τῷ ἔπειτα χρόνῳ, χαλαρωτέροις μὲν

χρεόμενον, χρεόμενον δὲ εὐπλαστότατον γὰρ τι παντὸς τοῦ σώματος ἢ ῥίς ἐστίν. Τῶν δὲ ἱμάντων τῇ κολλήσει καὶ τῇ ἀντιρροπῇ παντάπασιν οὐδὲν κωλύει χρέεσθαι, οὔτ' ἦν ἔλκος ἦ, οὔτ' ἦν ἐπιφλεγμῆνη ἀλυπόταται γὰρ εἰσιν.

40. Ἦν δὲ οὓς κατεαγῆ, ἐπιδέσιες μὲν πᾶσαι πολέμια οὐ γὰρ οὔτω τις καλαρὸν περιβάλλοι ἦν δὲ μᾶλλον πιέζει, πλέον κακὸν ἐργάζεται ἐπεὶ καὶ ὑγιᾶς οὓς, ἐπιδέσει πιεχθὲν, ὀδυνηρὸν καὶ σφυγματῶδες καὶ πυρετῶδες γίνεται. Ἀτὰρ καὶ

τὰ ἐπιπλάσματα, κάκιστα μὲν τὰ βαρύτατα τὸ ἐπίπαν ἀτὰρ καὶ τὰ πλεῖστα φλαῦρα καὶ ἀποστατικά, καὶ μύξαν τε ὑποποιεῖ πλείω, κάπειτα ἐκπυήσιας ἀσηράς τούτων δὲ ἥκιστα οὓς κατγὲν προσδέεται ἄγχιστα μὴν, εἴπερ χρή, τὸ γλίσχρον ἄλητον χρή δὲ μηδὲ τοῦτο βάρος ἔχειν. Ψάυειν δὲ ὡς ἥκιστα συμφέρει ἀγαθὸν γὰρ φάρμακόν ἐστιν ἐνίστε καὶ τὸ μηδὲν προσφέρειν καὶ πρὸς οὓς καὶ πρὸς ἄλλα πολλά. Χρή δὲ καὶ τὴν ἐπικοίμησιν φυλάσσεσθαι τὸ δὲ σῶμα ἰσχυαίνειν, καὶ μᾶλλον, ᾧ ἂν κίνδυνος ἔη ἔμπυον τὸ οὓς γενέσθαι ἄμεινον δὲ καὶ μαλθάξει τὴν κοιλίην ἣν δὲ καὶ εὐήμετος

ἔη, ἐμέειν ἀπὸ συρμαῖσμοῦ. Ἦν δὲ ἐς ἐμπύησιν ἔλθη, ταχέως μὲν οὐ χρή στομοῦν πολλά γὰρ καὶ τῶν δοκεόντων ἐκπυέεσθαι ἀναπίνεταί ποτε, κῆν μηδὲν τις καταπλάσῃ. Ἦν δὲ ἀναγκασθῆ στομῶσαι, τάχιστα μὲν ὑγιὲς γίνεται, ἣν τις πέρην διακαύση εἰδέναι μέντοι χρή σαφῶς, ὅτι κυλλὸν ἔσται τὸ οὓς καὶ μείον τοῦ ἐτέρου, ἣν πέρην διακαυθῆ. Ἦν δὲ μὴ πέρην καίηται, τάμνειν χρή τὸ μετέωρον, μὴ πάνυ σμικρὴν τομήν διὰ παχυτέρου μὴν καὶ τὸ πῦον εὐρίσκεται, ἣ ὡς ἂν τις δοκεῖ ὡς δ' ἐν κεφαλαίῳ εἰπεῖν, καὶ πάντα τᾶλλα τὰ μυξώδεα καὶ μυξοποιὰ, ἅτε γλίσχρα ἔοντα, ὑποθιγγανόμενα διολισθάνει ταχέως ὑπὸ τοὺς δακτύλους καὶ ἔνθα καὶ ἔνθα διὰ τοῦτο διὰ παχυτέρου εὐρίσκουσι τὰ τοιαῦτα οἱ ἰητροὶ, ἣ ὡς οἴονται ἐπεὶ καὶ τῶν γαγγλιωδέων ἔνια, ὅσα ἂν πλαδαρὰ ἔη, καὶ μυξώδεα σάρκα ἔχη, πολλοὶ στομοῦσιν, οἴομενοι ῥεῦμα ἀνευρήσειν ἐς τὰ τοιαῦτα ἢ μὲν οὖν γνώμη τοῦ ἰητροῦ ἐξαπατᾶται τῷ δὲ πρήγματι τῷ τοιούτῳ οὐδεμία βλάβη στομωθέντι. Ὅσα δὲ ὑδατώδεα χωρία ἐστίν, ἣ μύξης πεπληρωμένα, καὶ ἐν οἴοισι χωρίοισιν ἕκαστα θάνατον φέρει στομούμενα, ἣ καὶ ἀλλοίας βλάβας, περὶ τούτων ἐν ἄλλῳ λόγῳ γεγράφεται. Ὅταν οὖν τάμη τις τὸ οὓς, πάντων μὲν καταπλασμάτων, πάσης τε μοτώσιος ἀπέχεσθαι χρή ἰητρεύειν

δὲ ἢ ἐναίμω, ἣ ἄλλῳ τῷ, ὃ τι μήτε βάρος, μήτε πόνον παρασχῆσει ἣν γὰρ ὁ χόνδρος ἄρξεται ψιλοῦσθαι, καὶ ὑποστάσιας ἴσχη, ὀχλῶδες γίγνεται δὲ τοῦτο δι' ἐκείνας τὰς ἰήσιας. Πάντων δὲ τῶν παλιγκοτησάντων ἢ πέρην διάκαυσις αὐταρκέστατον.

41. Σπόνδυλοι δὲ οἱ κατὰ ῥάχιν, ὅσοισι μὲν ὑπὸ νοσημάτων ἔλκονται ἐς τὸ κυφόν, τὰ μὲν πλεῖστα ἀδύνατα λύεσθαι, ποτὶ καὶ ὅσα ἀνωτέρω τῶν φρενῶν τῆς προσφύσιος κυφοῦται. Τῶν δὲ κατωτέρω μετεξέτερα λύουσι κίρσοι γενόμενοι ἐν τοῖσι σκέλεσι, μᾶλλον δὲ τι ἐγγινόμενοι κίρσοι ἐν τῇ κατ' ἰγνύην φλεβί οἷσι δ' ἂν τὰ

κυφώματα λύηται, ἐγγίνονται δὲ καὶ ἐν τῇ κατὰ βουβῶνα ἤδη δὲ τισιν ἔλυσε καὶ δυσεντερὴ πολυχρόνιος γενομένη. Καὶ οἷσι μὲν κυφοῦται ῥάχιν παισὶν ἐοῦσι,

πρὶν ἢ τὸ σῶμα τελειωθῆναι ἐς αὐξήσιν, τουτέοισι μὲν οὐδὲ ξυναύξεσθαι ἐθέλει κατὰ τὴν ράχιν τὸ σῶμα, ἀλλὰ σκέλεα μὲν καὶ χεῖρες τελειοῦνται ταῦτα δὲ ἐνδεέστερα γίνεται. Καὶ ὅσοισιν ἂν ἢ ἀνωτέρω τῶν φρενῶν τὸ κῦφος, τούτοις μὲν αἶ τε πλευραὶ οὐκ ἐθέλουσιν ἐς τὸ εὐρὺ αὐξεσθαι, ἀλλ' ἐς τοῦμπροσθεν, τότε στῆθος ὄξυ γίνεται, ἀλλ' οὐ πλατὺ, αὐτοὶ τε δύσπνοοι γίνονται, καὶ κερχῶδες ἦσσον γὰρ εὐρυχωρίην ἔχουσιν αἱ κοιλίαι αἱ τὸ πνεῦμα δεχόμεναι καὶ προπέμπουσαι. Καὶ μέντοι καὶ ἀναγκάζονται κατὰ τὸν μέγαν σπόνδυλον λορδὸν τὸν αὐχένα ἔχειν, ὡς μὴ προπετῆς ἔῃ αὐτέοισιν ἢ κεφαλὴ στενοχωρίην μὲν οὖν πολλὴν τῇ φάρυγγι παρέχει καὶ τοῦτο, ἐς τὸ ἔσω ρέπον καὶ γὰρ τοῖσιν ὀρθοῖσι φύσει δύσπνοιαν παρέχει

τοῦτο τὸ ὀστέον, ἦν ἔσω ρέψη, ἔστ' ἂν ἀναπιεχθῆ. Δι' οὖν τὸ τοιοῦτον σχῆμα ἐξεχέβρογχοι οἱ τοιοῦτοι τῶν ἀνθρώπων μᾶλλον φαίνονται, ἢ οἱ ὑγιέες φυματίαι τε ὡς ἐπὶ τὸ πολὺ κατὰ τὸν πλευμόνα εἰσιν οἱ τοιοῦτοι σκληρῶν φυμάτων καὶ ἀπέπτων καὶ γὰρ ἢ πρόφασις τοῦ κυφώματος καὶ ἢ ζύντασις τοῖσι πλείστοις διὰ τοιαύτας ξυστροφὰς γίνεται, ἦσιν ἂν κοινωνήσωσιν οἱ τόνοι οἱ ζύνεγγυς. Ὅσοις δὲ κατωτέρω τῶν φρενῶν τὸ κύφωμά ἐστι, τούτοις νοσήματα μὲν ἐνίοσι προσγίνεται νεφριτικά, καὶ κατὰ κύστιν ἀτὰρ καὶ ἀποστάσιες ἐμπυήματι καὶ κατὰ κενεῶνας, καὶ κατὰ βουβῶνας, χρόνιαι καὶ δυσάλθεες, καὶ τουτέων οὐδετέρη λύει τὰ κυφώματα ἰσχία δὲ τοῖσι τοιοῦτέοισιν ἔτι ἀσαρκότερα γίνεται, ἢ τοῖσιν ἄνωθεν κυφοῖσιν ἢ μέντοι ζύμπασα ράχις μακροτέρη τουτέοισιν, ἢ τοῖσιν ἄνωθεν κυφοῖσιν ἢ βη δὲ καὶ γένειον βραδύτερα καὶ ἀτελέστερα, καὶ ἀγονώτεροι οὗτοι τῶν ἄνωθεν κυφῶν. Οἷσι δ' ἂν ἠϋξημένοισιν ἤδη τὸ σῶμα ἢ κύφωσις γένηται, τούτοις ἀπαντικρὺ μὲν τῆς νούσου τῆς τότε παρεούσης κρίσιν ποιέει ἢ κύφωσις ἀνὰ χρόνον μέντοι ἐπισημαίνει τι τῶν αὐτέων, ὥσπερ καὶ τοῖσι νεωτέροις, ἢ πλέον, ἢ ἔλασσον ἦσσον

δὲ κακοήθως ὡς τὸ ἐπίπαν μὴν τοιαῦτα πάντα ἐστίν. Πολλοὶ μέντοι ἤδη καὶ εὐφόρως ἤνεγκαν καὶ ὑγιεινῶς τὴν κύφωσιν ἄχρι γήρωσ, μάλιστα δὲ οὗτοι, οἷσιν ἂν ἐς τὸ εὐσαρκον καὶ πιμελῶδες προτράπηται τὸ σῶμα ὀλίγοι μὴν ἤδη καὶ τῶν τοιούτων ὑπὲρ ἐξήκοντα ἔτη ἐβίωσαν οἱ δὲ πλεῖστοι βραχυβιώτεροί εἰσιν. Ἔστι δ' οἷσι καὶ ἐς τὸ πλάγιον σκολιοῦνται σπόνδυλοι ἢ τῆ, ἢ τῆ πάντα μὴν ἢ τὰ πλεῖστα τὰ τοιαῦτα γίνεται διὰ ξυστροφὰς τὰς ἔσωθεν τῆς ράχιος προσξυμβάλλεται δὲ ἐνίοσι ζὺν τῆ νούσῳ καὶ τὰ σχήματα, ἐφ' ὁκοῖα ἂν ἐθισθέωσι κεκλίσθαι. Ἀλλὰ περὶ μὲν τούτων ἐν τοῖσι χρόνιοις κατὰ πλευμόνα νοσήμασις εἰρήσεται ἐκεῖ γὰρ εἰσιν αὐτῶν χαριέσταται προγνώσιες περὶ τῶν μελλόντων ἔσεσθαι.

42. Ὅσοις δὲ ἐκ καταπτώσιος ράχις κυφοῦται, ὀλίγα δὲ τούτων ἐκρατήθη, ὥστε

έξιθυνηται. Τοῦτο μὲν γάρ, αἱ ἐν τῇ κλίμακι κατασεΐσεις οὐδένα πω ἐξιθύναν, ὧν γε ἐγὼ οἶδα χρέονται δὲ οἱ ἰητροὶ μάλιστα αὐτῇ οὔτοι οἱ ἐπιθυμούντες ἐκχαυνοῦν τὸν πολὺν ὄχλον τοῖσι γὰρ τοιούτοισι ταῦτα θαυμάσιά ἐστιν, ἦν ἢ κρεμáμενον ἰδῶσιν, ἢ ρίπτεόμενον, ἢ ὅσα τοῖσι τοιούτοισιν ἔοικε, καὶ ταῦτα κληΐζουσιν αἰεὶ, καὶ οὐκέτι αὐτοῖσι μέλει, ὀκοῖόν τι ἀπέβη ἀπὸ τοῦ χειρίσματος, εἴτε κακόν, εἴτε ἀγαθόν. Οἱ μέντοι ἰητροὶ οἱ τὰ τοιαῦτα ἐπιτηδεύοντες, σκαιοὶ εἰσιν, οὐς ἔγωγε ἔγνω τὸ μὲν γὰρ ἐπινόημα ἀρχαῖον, καὶ ἐπαινέω ἔγωγε σφόδρα τὸν πρῶτον ἐπινοήσαντα καὶ τοῦτο καὶ ἄλλο πᾶν, ὃ τι μηχανήμα κατὰ φύσιν

ἐπενοήθη οὐδὲν γάρ μοι ἄελπτον, εἴ τις καλῶς σκευάσας καλῶς κατασεΐσειε, κᾶν ἐξιθυνηται ἔνια. Αὐτὸς μέντοι κατησχύνθην πάντα τὰ τοιουτότροπα ἰητρεύειν οὔτω, διὰ τοῦτο ὅτι πρὸς ἀπατεῶνων μᾶλλον οἱ τοιοῦτοι τρόποι.

43. Ὅσοισι μὲν οὖν ἐγγὺς τοῦ αὐχένος ἢ κύφωσις γίνεται, ἦσσον εἰκὸς ὠφελείην τὰς κατασεΐσιας ταύτας τὰς ἐπὶ κεφαλὴν σμικρὸν γὰρ τὸ βάρος ἢ κεφαλὴ καὶ τὰ ἀκρόμια καταρρέποντα ἀλλὰ τοὺς γε τοιούτους εἰκὸς ἐπὶ τοὺς πόδας κατασεισθέντας μᾶλλον ἐξιθυνηται μέζων γὰρ οὔτως ἢ καταρροπίη ἢ ἐπὶ ταῦτα. Ὅσοισι δὲ κατωτέρω τὸ ὕβωμα, τουτέοισιν εἰκὸς μᾶλλον ἐπὶ κεφαλὴν κατασεΐσθαι. Εἰ οὖν τις ἐθέλοι κατασεΐειν, ὀρθῶς ἂν ὧδε σκευάζοι τὴν μὲν κλίμακα χρή σκυτίνοισιν ὑποκεφαλαίοισι πλαγίοισιν, ἢ ἐρινέοισι, καταστρῶσαι εὖ πρὸς δεδεμένοισιν, ὀλίγω πλέον καὶ ἐπὶ μῆκος καὶ ἔνθεν καὶ ἔνθεν, ἢ ὅσον ἂν τὸ σῶμα τοῦ ἀνθρώπου κατάσχοι ἔπειτα τὸν ἀνθρωπον ὑπτιον κατακλῖναι ἐπὶ τὴν κλίμακα χρή κᾶπειτα προσδῆσαι μὲν τοὺς πόδας παρὰ τὰ σφυρὰ πρὸς τὴν κλίμακα μὴ διαβεβῶτας, δεσμῶ εὐόχῳ μὲν, μαλθακῶ δὲ προσδῆσαι δὲ κατωτέρω ἐκάτερον τῶν γουνάτων, καὶ ἀνωτέρω προσδῆσαι δὲ καὶ κατὰ τὰ ἰσχία κατὰ δὲ τοὺς κενεῶνας καὶ κατὰ τὸ στῆθος χαλαρῆσι ταινίησι περιβαλέειν οὔτως, ὅκως μὴ κωλύωσι

τὴν κατάσεισιν τὰς δὲ χεῖρας παρὰ τὰς πλευρὰς παρατείναντα προσκαταλαβεῖν πρὸς αὐτὸ τὸ σῶμα, καὶ μὴ πρὸς τὴν κλίμακα. Ὅταν δὲ ταῦτα κατασκευάσῃς οὔτως, ἀνέλκειν τὴν κλίμακα ἢ πρὸς τύρσιν τινὰ ὑψηλὴν, ἢ πρὸς ἀέτωμα οἴκου τὸ δὲ χωρίον, ἵνα κατασεΐεις, ἀντίτυπον ἔστω τοὺς δὲ ἀνατείνοντας εὐπαιδεύτους χρή εἶναι, ὅκως ὀμαλῶς καὶ ἰσορρόπως καὶ ἐξαπιναίως ἀφήσουσι, καὶ μήτε ἢ κλίμαξ ἑτερόρροπος ἐπὶ τὴν γῆν ἀφίξεται, μήτε αὐτοὶ προπετέες ἔσονται. Ἀπὸ μέντοι τύρσιος ἀφιεῖς ἢ ἀπὸ ἰστοῦ καταπεπηγότος καρχήσιον ἔχοντος, ἔτι κάλλιον ἂν τις σκευάσαιτο, ὥστε ἀπὸ τροχίλης τὰ χαλῶμενα εἶναι ὄπλα, ἢ ἀπὸ ὄνου. Ἀηδὲς μὴν καὶ μακρολογεῖν περὶ τούτων ὅμως δὲ ἐκ τουτέων ἂν τῶν κατασκευῶν κάλλιστ' ἂν τις κατασεισθεῖη.

44. Εἰ μέντοι κάρτα ἄνω εἶη τὸ ὕβωμα, δέοι δὲ κατασεῖειν πάντως, ἐπὶ πόδας κατασεῖειν λυσιτελέει, ὥσπερ ἤδη εἴρηται πλείων γὰρ οὕτω γίνεται ἢ καταρροπὴ ἐπὶ ταῦτα. Ἐρμάσαι δὲ χρῆ, κατὰ μὲν τὸ στῆθος πρὸς τὴν κλίμακα προσδήσαντα ἰσχυρῶς, κατὰ δὲ τὸν αὐχένα ὡς χαλαρωτάτη ταινίη, ὅσον τοῦ κατορθοῦσθαι εἵνεκα καὶ αὐτὴν τὴν κεφαλὴν κατὰ τὸ μέτωπον προσδήσαι πρὸς τὴν κλίμακα τὰς δὲ χεῖρας παρατανύσαντα πρὸς τὸ σῶμα προσδήσαι, καὶ μὴ πρὸς τὴν κλίμακα τὸ μέντοι ἄλλο σῶμα ἄδετον εἶναι χρῆ, πλὴν, ὅσον τοῦ κατορθοῦσθαι εἵνεκα, ἄλλη καὶ ἄλλη ταινίη χαλαρῆ περιβεβλησθαι ὅκως δὲ μὴ κωλύωσιν οὗτοι οἱ δεσμοὶ τὴν κατασεισιν, σκοπέειν τὰ δὲ σκέλεα πρὸς μὲν τὴν κλίμακα μὴ προσδεδέσθω, πρὸς ἄλληλα δὲ, ὡς κατὰ τὴν ράχιν ἰθύρροπα ἔη. Ταῦτα μέντοι τοιοῦτοτρόπως ποιητέα, εἰ πάντως δέοι ἐν κλίμακι κατασεισθῆναι αἰσχρὸν μέντοι καὶ ἐν πάσῃ τέχνῃ καὶ οὐχ ἥκιστα ἐν ἰητρικῇ πουλὺν ὄχλον, καὶ πολλὴν ὄψιν, καὶ πουλὺν λόγον παρασχόντα, ἔπειτα μηδὲν ὠφελῆσαι.

45. Χρῆ δὲ πρῶτον μὲν γινώσκειν τὴν φύσιν τῆς ράχιοι, οἷη τίς ἐστὶν ἐς πολλὰ γὰρ νοσήματα προσδέοι ἂν αὐτῆς. Τοῦτο μὲν γὰρ, τὸ πρὸς τὴν κοιλίην ῥέπον, οἱ σπόνδυλοι ἐντὸ ἄρτιοί εἰσιν ἀλλήλοισι, καὶ δέδενται πρὸς ἀλλήλους δεσμῶ μωξώδεϊ καὶ νευρώδεϊ, ἀπὸ χόνδρων ἀποπεφυκότι ἄχρι πρὸς τὸν νωτιαῖον. Ἄλλοι δὲ τινες τόνοι νευρώδες διανταῖοι, πρόσφυτοι, παρατέτανται ἐνθεν καὶ ἐνθεν αὐτῶν. Αἱ δὲ φλεβῶν καὶ ἀρτηριῶν κοινωνίαι ἐν ἐτέρῳ λόγῳ δεδηλώσονται, ὅσαι τε καὶ οἷαι, καὶ ὅθεν ὠρμημένα, καὶ ἐν οἷοισιν οἷα δύνανται, αὐτὸς δὲ ὁ νωτιαῖος οἷσιν ἐλύτρωται ἐλύτρουσι, καὶ ὅθεν ὠρμημένοι, καὶ ὅπη κραίνουσιν, καὶ οἷσι κοινωνέουσι, καὶ οἷα δυναμένοι. Ἐν δὲ τῷ ἐπέκεινα, ἐν ἄρθροισι γεγιγγλύμονται πρὸς ἀλλήλους οἱ σπόνδυλοι. Τόνοι δὲ κοινοὶ παρὰ πάντας, καὶ ἐν τοῖσιν ἔξω μέρεσι, καὶ ἐν τοῖσιν ἔσω παρατέτανται. Ἀπόφυσις δὲ ἐστὶν ὀστέου ἐς τὸ ἔξω μέρος ἀπὸ πάντων τῶν σπονδύλων, μία ἀπὸ ἐνὸς ἐκάστου, ἀπὸ τε τῶν μειζόνων, ἀπὸ τε τῶν ἐλασσόνων ἐπὶ δὲ τῆσιν ἀποφύσεις ταύτησι χονδρίων ἐπιφύσεις, καὶ

ἀπ' ἐκείνων νεύρων ἀποβλάστησις ἠδελφισμένη τοῖσιν ἐξωτάτω τόνοισιν. Πλευραὶ δὲ προσπεφύκασιν, ἐς τὸ εἶως μέρος τὰς κεφαλὰς ῥέπουσαι μᾶλλον, ἢ ἐς τὸ ἔξω καθ' ἓνα δὲ ἕκαστον τῶν σπονδύλων προσήρθρονται καμπυλώταται δὲ πλευραὶ ἀνθρώπου εἰσὶ ραιβοειδέα τρόπον. Τὸ δὲ μεσηγὺ τῶν πλευρῶν καὶ τῶν ὀστέων τῶν ἀποπεφυκότων ἀπὸ τῶν σπονδύλων, ἀποπληρέουσιν ἐκατέρωθεν

οἱ μύες ἀπὸ τοῦ αὐχένου ἀρξάμενοι, ἄχρι τῆς προσφύσιος. Αὐτὴ δὲ ἡ ράχις κατὰ μῆκος ἰθυσκόλιός ἐστὶν ἀπὸ μὲν τοῦ ἱεροῦ ὀστέου ἄχρι τοῦ μεγάλου σπονδύλου, παρ' ὃν προσήρτηται τῶν σκελέων ἢ πρόσφυσις, ἄχρι μὲν τούτου κυφὴ κύστις τε γὰρ, καὶ γοναὶ, καὶ ἀρχοῦ τὸ χαλαρὸν ἐν τουτέῳ ἔκτισται. Ἀπὸ δὲ τούτου ἄχρι

φρενῶν προσαρτήσιος, ἰθυλόρδη καὶ παραφύσιας ἔχει μυῶν τοῦτο μοῦνον τὸ χωρίον ἐκ τῶν εἴσωθεν μερῶν, ἃς δὴ καλέουσι ψόας. Ἀπὸ δὲ τούτου ἄχρι τοῦ μεγάλου σπονδύλου τοῦ ὑπὲρ τῶν ἐπωμίδων, ἰθυκύφη ἔτι δὲ μᾶλλον δοκέει ἢ ἐστὶν ἢ γὰρ ἄκανθα κατὰ μέσον ὑψηλοτάτας τὰς ἐκφύσιας τῶν ὀστέων ἔχει, ἔνθεν δὲ καὶ ἔνθεν ἐλάσσους. Αὐτὸ δὲ τὸ ἄρθρον τοῦ αὐχένος λορδόν ἐστίν.

46. Ὅκοσοισι μὲν οὖν κυφώματα γίνεται κατὰ τοὺς σπονδύλους, ἔξωσις μὲν μεγάλη ἀπορραγεῖσα ἀπὸ τῆς ξυμφύσιος ἢ ἐνὸς σπονδύλου, ἢ καὶ πλειόνων, οὐ μάλα πολλοῖσι γίνεται, ἀλλ' ὀλίγοισιν. Οὐδὲ γὰρ τὰ τρώματα τὰ τοιαῦτα ρήϊδιον γίνεσθαι οὔτε γὰρ ἐς τὸ ἔξω ἐξωσθῆναι ρήϊδιον ἐστίν, εἰ μὴ ἐκ τοῦ ἔμπροσθεν ἰσχυρῶ τινι τρωθείη διὰ τῆς κοιλῆς οὕτω δ' ἂν ἀπόλοιτο, ἢ εἴ τις ἀφ' ὑψηλοῦ τοῦ χωρίου πεσὼν ἐρείσειε τοῖσιν ἰσχύοισιν ἢ τοῖσιν ὤμοισιν ἀλλὰ καὶ οὕτως ἂν ἀποθάνοι, παραχρῆμα δὲ οὐκ ἂν ἀποθάνοι ἐκ δὲ τοῦ ὀπισθεν οὐ ρήϊδιον τοιαύτην ἔξαλσιν γενέσθαι ἐς τὸ ἔσω, εἰ μὴ ὑπέρβαρύ τι ἄχθος ἐμπέσοι τῶν τε γὰρ ὀστέων τῶν ἐκπεφυκότων ἔξω ἐν ἕκαστον τοιοῦτόν ἐστίν, ὥστε πρόσθεν ἂν αὐτὸ καταγῆναι, πρὶν ἢ μεγάλην ῥοπήν εἴσω ποιῆσαι, τοὺς τε ξυνδέσμους βησάμενον, καὶ τὰ ἄρθρα τὰ ἐνηλλαγμένα. Ὁ τε αὖ νωτιαῖος πονοίη ἂν, εἰ ἐξ ὀλίγου χωρίου τὴν περικαμπὴν ἔχοι, τοιαύτην ἔξαλσιν ἐξαλλομένου σπονδύλου ὃ τ' ἐκπηδήσας σπόνδυλος πιέζει ἂν τὸν νωτιαῖον, εἰ μὴ καὶ ἀπορρήξειεν πιεχθεὶς δ' ἂν καὶ ἀπολελαμμένος, πολλῶν ἂν καὶ μεγάλων καὶ ἐπικαίρων ἀπονάρκωσιν ποιήσειεν ὥστε οὐκ ἂν μέλοι τῷ ἰητρῶ, ὅπως χρή τὸν σπόνδυλον κατορθῶσαι, πολλῶν καὶ βιαίων ἄλλων κακῶν παρεόντων. Ὡστε

δὴ οὐδ' ἐμβαλεῖν οἶόν τε πρόδηλον τὸν τοιοῦτον οὔτε κατασεισει, οὔτε ἄλλω τρόπῳ οὐδενί, εἰ μὴ τις διαταμὼν τὸν ἄνθρωπον, ἔπειτα ἐσμασάμενος ἐς τὴν κοιλῆν, ἐκ τοῦ εἴσωθεν τῆ χειρὶ ἐς τὸ ἔξω ἀντωθέοι καὶ ταῦτα νεκρῶ μὲν οἶόν τε ποιέειν, ζῶντι δὲ οὐ πάνυ. Διὰ τί οὖν ταῦτα γράφω; Ὅτι οἶονταί τινες ἰητρευκένας ἄνθρώπους, οἷσιν ἔσωθεν ἔπεσον σπόνδυλοι, τελῶς ὑπερβάντες τὰ ἄρθρα καίτοι γε ρηϊστήν ἐς τὸ περιγενέσθαι τῶν διαστροφῶν ταύτην ἔνιοι νομίζουσι, καὶ οὐδὲν δέεσθαι ἐμβολῆς, ἀλλ' αὐτόματα ὑγία γίνεσθαι τὰ τοιαῦτα. Ἄγνοέουσι δὲ πολλοὶ, καὶ κερδαίνουσιν, ὅτι ἀγνοέουσιν πείθουσι γὰρ τοὺς πέλας. Ἐξαπατῶνται δὲ διὰ τὸδε οἶονται γὰρ τὴν ἄκανθαν τὴν ἐξέχουσαν κατὰ τὴν ῥάχιν ταύτην τοὺς σπονδύλους αὐτοὺς εἶναι, ὅτι στρογγύλον αὐτῶν ἕκαστον φαίνεται ψαυόμενον, ἀγνοεῦντες ὅτι τὰ ὀστέα ταῦτά ἐστι τὰ ἀπὸ τῶν σπονδύλων πεφυκότα, περὶ ὧν ὁ λόγος ὀλίγῳ πρόσθεν εἴρηται οἱ δὲ σπόνδυλοι πολὺ προσωτέρω ἄπεισιν στενοτάτην γὰρ πάντων τῶν ζώων ὄνθρωπος κοιλῆν ἔχει, ὡς ἐπὶ τῷ μεγέθει, ἀπὸ τοῦ ὀπισθεν ἐς τὸ ἔμπροσθεν, ποτὶ καὶ κατὰ τὸ στήθος. Ὅταν οὖν τι τούτων τῶν ὀστέων τῶν ὑπερεχόντων ἰσχυρῶς καταγῆ, ἢν τε ἐν, ἢν τε πλείω, ταύτη ταπεινότερον τὸ χωρίον γίνεται, ἢ τὸ ἐνθεν καὶ ἔνθεν,

καὶ διὰ τοῦτο ἐξαπατῶνται, οἰόμενοι τοὺς σπονδύλους ἔσω οἴχεσθαι. Προσεξαπατᾷ δὲ ἔτι αὐτοὺς καὶ

τὰ σχήματα τῶν τετρωμένων ἦν μὲν γὰρ πειρῶνται καμπύλλεσθαι, ὀδυνῶνται, περιτενέος γινομένου ταύτη τοῦ δέρματος, ἧ τέτρωνται καὶ ἅμα τὰ ὀστέα τὰ κατεηγότα ἐνθράσσει οὕτω μᾶλλον τὸν χρῶτα ἦν δὲ λорδαίνωσι, ῥάους εἰσὶν χαλαρότερον γὰρ τὸ δέρμα κατὰ τὸ τρῶμα ταύτη γίνεται, καὶ τὰ ὀστέα ἦσσαν ἐνθράσσει ἀτὰρ καὶ ἦν τις ψαυή αὐτῶν, κατὰ τοῦτο ὑπεῖκουσι λорδοῦντες, καὶ τὸ χωρίον κενεὸν καὶ μαλθακὸν ψαυόμενον ταύτη φαίνεται. Ταῦτα πάντα τὰ εἰρημένα προσεξαπατᾷ τοὺς ἰητρούς Ὑγιέες δὲ ταχέως καὶ ἀσινέες αὐτόματοι οἱ τοιοῦτοι γίνονται ταχέως γὰρ πάντα τὰ τοιαῦτα ὀστέα ἐπιπωροῦται, ὅσα χαυῖνά ἐστιν.

47. Σκολιαίνεται μὲν οὖν ῥάχις, καὶ ὑγιαίνουσι, κατὰ πολλοὺς τρόπους καὶ γὰρ ἐν τῇ φύσει καὶ ἐν τῇ χρήσει οὕτως ἔχει ἀτὰρ καὶ ὑπὸ γήραος καὶ ὑπὸ ὀδυνημάτων ζυνοδοτική ἐστίν. Αἱ δὲ δὴ κυφώσεις, αἱ ἐν τοῖσι πτώμασιν, ὡς ἐπὶ τὸ πολὺ γίνονται, ἦν ἢ τοῖσιν ἰσχίοισιν ἐρείση, ἢ ἐπὶ τοὺς ὠμούς πέση. Ἀνάγκη γὰρ ἔξω φαίνεσθαι ἐν τῷ κυφώματι ἓνα μὲν τινα ὑψηλότερον τῶν σπονδύλων,

τοὺς δὲ ἐνθεν καὶ ἐνθεν, ἐπὶ ἦσσαν οὐκ οὐκ εἰς ἐπὶ πούλῳ ἀποπεπηδηκῶς ἀπὸ τῶν ἄλλων ἐστίν, ἀλλὰ μικρὸν ἕκαστος ζυνοδοτῶν, ἀθρόον δὲ πολὺ γίνεται. Διὰ οὖν τοῦτο καὶ ὁ νοτιαῖος μυελὸς εὐφόρως φέρει τὰς τοιαύτας διαστροφάς, ὅτι κυκλώδης αὐτῷ ἢ διαστροφή γίνεται, ἀλλ' οὐ γωνιώδης. Χρῆ δὲ τὴν κατασκευὴν τοῦ διαναγκασμοῦ τοιήνδε κατασκευάσαι ἔξεστι μὲν ξύλον ἰσχυρὸν καὶ πλατὺ, ἐντομὴν παραμήκεα ἔχον, κατορύξαι ἔξεστι δὲ καὶ ἀντὶ τοῦ ξύλου ἐν τοίχῳ ἐντομὴν παραμήκεα ἐνταμεῖν, ἢ πήχεϊ ἀνωτέρω τοῦ ἐδάφους, ἢ ὅπως ἂν μετρίως ἔχη ἔπειτα οἶον στύλον δρυῖνον, τετράγωνον, πλάγιον παραβάλλειν, ἀπολείποντα ἀπὸ

τοῦ τοίχου, ὅσον παρελθεῖν τινα, ἦν δέη καὶ ἐπὶ μὲν τὸν στύλον ἐπιστορέσαι ἢ χλαίνας, ἢ ἄλλο τι, ὃ μαλθακὸν μὲν ἔσται, ὑπεῖξει δὲ μὴ μέγα τὸν δὲ ἄνθρωπον πυριῆσαι, ἦν ἐνδέχεται, ἢ πολλῷ θερμῷ λοῦσαι κᾶπειτα πρηνέα κατακλῖναι κατατεταμένον, καὶ τὰς μὲν χεῖρας αὐτοῦ παρατείναντα κατὰ φύσιν προσδῆσαι πρὸς τὸ σῶμα ἱμάντι δὲ μαλθακῷ, ἱκανῶς πλατέϊ τε καὶ μακρῷ, ἐκ δύο διανταίων ζυμβεβλημένῳ, μέσῳ, κατὰ μέσον τὸ στήθος δις περιβεβλήσθαι χρῆ ὡς ἐγγυτάτω τῶν μασχαλέων ἔπειτα τὸ περισσεῦον τῶν ἱμάντων κατὰ τὴν μασχάλην, ἐκάτερον περὶ τοὺς ὠμούς περιβεβλήσθω ἔπειτα αἱ ἀρχαὶ πρὸς ξύλον ὑπεροειδές τι προσδεδέσθωσαν, ἀρμόζουσαι τὸ μῆκος τῷ ξύλῳ τῷ ὑποτεταμένῳ, πρὸς ὃ τι προσβάλλον τὸ ὑπεροειδές ἀντιστηρίζοντα κατατείνειν. Τοιοῦτῳ δὲ



τινι ἐτέρῳ δεσμῷ χρῆ ἄνωθεν τῶν γουνάτων δῆσαντα καὶ ἄνωθεν τῶν πτερνέων, τὰς ἀρχὰς τῶν ἱμάντων πρὸς τοιοῦτό τι ξύλον προσδῆσαι ἄλλῳ δὲ ἱμάντι πλατεῖ, καὶ μαλθακῷ, καὶ δυνατῷ, ταινιοειδέϊ, πλάτος ἔχοντι καὶ μῆκος ἱκανόν, ἰσχυρῶς περὶ τὰς ἰζύας κύκλῳ περιδεδέσθαι ὡς ἐγγύτατα τῶν ἰσχύων ἔπειτα τὸ

περισεῦον τοῦ ταινιοειδέος, ἅμα ἀμφοτέρας τὰς ἀρχὰς τῶν ἱμάντων, πρὸς τὸ ξύλον προσδῆσαι τὸ πρὸς τῶν ποδῶν κάπειτα κατατείνειν ἐν τούτῳ τῷ σχήματι ἔνθα καὶ ἔνθα, ἅμα μὲν ἰσορρόπως, ἅμα δὲ ἐς ἰθὺ. Οὐδὲν γὰρ ἂν μέγα κακὸν ἢ τοιαύτη κατάτασις ποιήσειεν, εἰ χρηστῶς σκευασθείη, εἰ μὴ ἄρα ἐξεπίτηδὲς τις βούλοιο σίνεσθαι. Τὸν δὲ ἱητρὸν χρῆ ἢ ἄλλον, ὅστις ἰσχυρὸς καὶ μὴ ἀμαθής, ἐπιθέντα τὸ θέναρ τῆς χειρὸς ἐπὶ τὸ ὕβωμα, καὶ τὴν ἐτέρην χεῖρα προσεπιθέντα ἐπὶ τὴν ἐτέρην, καταναγκάζειν, προσξυνιέντα, ἦν τε ἐς ἰθὺ ἐς τὸ κάτω πεφύκη καταναγκάζεσθαι, ἦν τε πρὸς τῆς κεφαλῆς, ἦν τε πρὸς τῶν ἰσχύων. Καὶ ἀσινεστάτη μὲν αὕτη ἢ ἀνάγκη ἀσινὲς δὲ καὶ ἐπικαθίζεσθαι τινα ἐπὶ τὸ κύφωμα, αὐτοῦ ἅμα κατατεινομένου, καὶ ἐνσεῖσαι μετεωρισθέντα. Ἀτὰρ καὶ ἐπιβῆναι τῷ ποδί, καὶ ὀχηθῆναι ἐπὶ τὸ κύφωμα, ἡσύχως τε ἐπενσεῖσαι οὐδὲν κωλύει τὸ τοιοῦτο δὲ ποιῆσαι μετρίως ἐπιτήδειος ἂν τις εἴη τῶν ἀμφὶ παλαιστρη εἰθισμένων. Δυνατωτάτη μέντοι τῶν ἀναγκέων ἐστίν, εἰ ὁ μὲν τοῖχος, ἢ ἐντέτμηται, ἢ τὸ ξύλον τὸ κα. τορωρυγμένον, ἢ ἐντέτμηται, κατωτέρω εἴη τῆς ράχιος τοῦ ἀνθρώπου, ὀκόσῳ ἂν δοκέη μετρίως ἔχειν, σανὶς δὲ φιλυρίνη, μὴ λεπτή, ἐνείη, ἢ καὶ ἄλλου τινὸς ξύλου ἔπειτα ἐπὶ τὸ ὕβωμα ἐπιτεθείη ἢ τρύχιόν τι πολύπτυχον, ἢ σμικρὸν τι σκύτινον ὑποκεφάλαιον ὡς ἐλάχιστα μὴν ἐπικεῖσθαι ξυμφέρει, μόνον προμηθεόμενον, ὡς

μὴ ἢ σανὶς ὑπὸ σκληρότητος ὀδύνην παρὰ καιρὸν προσπαρέχη κατ' ἴξιν δὲ ἔστω ὡς μάλιστα τῇ ἐντομῇ τῇ ἐς τὸν τοῖχον, τὸ ὕβωμα, ὡς ἂν ἢ σανὶς, ἢ μάλιστα ἐξέστηκε, ταύτη μάλιστα πιέζει ἐπιτεθείσα. Ὅταν δὲ ἐπιτεθῆ, τὸν μὲν τινα καταναγκάζειν χρῆ τὸ ἄκρον τῆς σανίδος, ἦν τε ἓνα δέη, ἦν τε δύο, τοὺς δὲ κατατείνειν τὸ σῶμα κατὰ μῆκος, ὡς πρόσθεν εἴρηται, τοὺς μὲν τῇ, τοὺς δὲ τῇ. Ἐξεστι δὲ καὶ ὀνίσκοισι τὴν κατάτασιν ποιέεσθαι, ἢ παρακατορύξαντα παρὰ τὸ ξύλον, ἢ ἐν αὐτῷ τῷ ξύλῳ τὰς φλιάς τῶν ὀνίσκων ἐντεκτηνάμενον, ἦν τε ὀρθὰς ἐθέλης ἐκατέρωθεν σμικρὸν ὑπερεχούσας, ἦν τε κατὰ κορυφὴν τοῦ ξύλου ἔνθεν καὶ ἔνθεν. Αὗται αἱ ἀνάγκαι εὐταμίευτοί εἰσι καὶ ἐς τὸ ἰσχυρότερον καὶ ἐς τὸ ἥσσον, καὶ ἰσχὺν ἔχουσι τοιαύτην, ὥστε, καὶ εἴ τις ἐπὶ λύμῃ βούλοιο, ἀλλὰ μὴ ἐπὶ ἱητρείῃ, ἐς τοιαύτας ἀνάγκας ἀγαγεῖν, κἂν τούτῳ ἰσχυρῶς δύνασθαι καὶ γὰρ ἂν κατατείνων κατὰ μῆκος μῶνον ἔνθεν καὶ ἔνθεν οὕτω, καὶ ἄλλην ἀνάγκην οὐδεμίην προστιθείς, ὅμως κατατείνειεν ἂν τις ἱκανῶς καὶ εἰ μὴ κατατείνων, αὐτῇ δὲ μῶνον τῇ σανίδι οὕτως ἰποίη τις, καὶ οὕτως ἂν ἱκανῶς καταναγκάσειεν. Καλαὶ οὖν αἱ τοιαῦται ἰσχύες εἰσὶν, ἢσιν ἔξεστι καὶ ἀσθενεστέρησι καὶ

ἰσχυροτέρησι χρέεσθαι αὐτὸν ταμιεύοντα. Καὶ μὲν δὴ καὶ κατὰ φύσιν γε ἀναγκάζουσιν

τὰ μὲν γὰρ ἐξεστεῶτα ἐς τὴν χώραν ἀναγκάζει ἢ ἴπωσις ἰέναι, τὰ δὲ ξυνεληλυθότα κατὰ φύσιν κατατείνουσιν αἱ κατὰ φύσιν κατατάσεις. Οὐκ οὖν ἐγὼ ἔχω τουτέων ἀνάγκας καλλίους, οὐδὲ δικαιότερας ἢ γὰρ κατ' αὐτὴν τὴν ἄκανθαν ἰθυωρὴ τῆς κατατάσεως κάτωθεν τε καὶ κατὰ τὸ ἱερόν ὀστέον καλεόμενον οὐκ ἔχει ἐπιλαβὴν οὐδεμίαν ἄνωθεν δὲ κατὰ τὸν αὐχένα καὶ κατὰ τὴν κεφαλὴν, ἐπιλαβὴν μὲν ἔχει, ἀλλ' ἐσιδέειν γε ἀπρεπῆς ταύτη τοι γινομένη ἢ κατάτασις, καὶ ἄλλας βλάβας ἂν προσπαρέχοι πλεονασθεῖσα. Ἐπειρήθη δὲ δὴ ποτε, ὑπτίον τὸν ἄνθρωπον κατατείνας, ἄσκον ἀφύσητον ὑποθεῖναι ὑπὸ τὸ ὕβωμα, κᾶπειτα αὐλῶ ἐκ χαλκείου ἐς τὸν ἄσκον τὸν ὑποκείμενον ἐνιέναι φῦσαν. Ἀλλὰ μοι οὐκ εὐπορεῖτο ὅτε μὲν γὰρ εὖ κατατείνοιμι τὸν ἄνθρωπον, ἤσαστο ὁ ἄσκος, καὶ οὐκ ἠδύνατο ἢ φῦσα ἐσαναγκάζεσθαι καὶ ἄλλως ἔτοιμον περιολισθάνειν ἦν, ἄτε ἐς τὸ αὐτὸ ἀναγκαζόμενον, τό τε τοῦ ἀνθρώπου

ὑβωμα, καὶ τὸ τοῦ ἀσκοῦ πληρουμένου κύρτωμα. Ὅτε δ' αὖ μὴ κάρτα κατατείνοιμι τὸν ἄνθρωπον, ὁ μὲν ἄσκος ὑπὸ τῆς φύσης ἐκυρτοῦτο, ὁ δὲ ἄνθρωπος πάντη μᾶλλον ἐλорδαίνετο ἢ ἢ ξυνέφερεν. Ἐγραψα δὲ ἐπίτηδες τοῦτο καλὰ γὰρ καὶ ταῦτα τὰ μαθήματά ἐστιν, ἅ, πειρηθέντα, ἀπορηθέντα ἐφάνη, καὶ δι' ἅσσα ἠπορήθη.

48. Ὅσοισι δὲ ἐς τὸ εἶσω σκολιαίνονται οἱ σπόνδυλοι ὑπὸ πτώματος, ἢ καὶ ἐμπεσόντος τινὸς βαρέος, εἷς μὲν οὐδεὶς τῶν σπονδύλων μέγα ἐξίσταται κάρτα ὡς ἐπὶ τὸ πολὺ ἐκ τῶν ἄλλων, ἦν δὲ ἐκστῆ μέγα ἢ εἷς, ἢ πλείονες, θάνατον φέρουσιν ὥσπερ δὲ καὶ πρόσθεν εἴρηται, κυκλώδης καὶ αὕτη, καὶ οὐ γωνιώδης γίνεται ἢ παραλλαγή. Οὕρα μὲν οὖν τούτοισι καὶ ἀπόπατος μᾶλλον ἴσχηται, ἢ τοῖσιν ἔξω κυφοῖσι, καὶ πόδες καὶ ὄλα τὰ σκέλεα ψύχεται μᾶλλον, καὶ θανατηφόρα ταῦτα μᾶλλον ἐκείνων καὶ ἦν περιγέωνται δὲ, ρυώδεες τὰ οὕρα μᾶλλον οὗτοι, καὶ τῶν σκελέων ἀκρατέστεροι καὶ ναρκωδέστεροι ἦν δὲ καὶ ἐν τῷ ἄνω μέρει μᾶλλον τὸ λόρδωμα γένηται, παντὸς τοῦ σώματος ἀκρατέες καὶ κατανεναρκωμένοι γίνονται. Μηχανὴν δὲ οὐκ ἔχω οὐδεμίαν ἔγωγε, ὅκως χρῆ τὸν

τοιοῦτον ἐς τὸ αὐτὸ καταστῆσαι, εἰ μὴ τινα ἢ κατὰ τῆς κλίμακος κατάσεισις ὠφελείν οἷη τε εἶη, ἢ καὶ ἄλλη τις τοιαύτη ἴησις, ἢ κατάτασις, οἷηπερ ὀλίγω πρόσθεν εἴρηται. Κατανάγκασιν δὲ σὺν τῇ κατατάσει οὐδεμίαν ἔχω, ἦτις ἂν γίνοιτο, ὥσπερ τῷ κυφώματι τὴν κατανάγκασιν ἢ σανὺς ἐποιέετο. Πῶς γὰρ ἂν τις ἐκ τοῦ ἔμπροσθεν διὰ τῆς κοιλίης ἀναγκάσαι δύναται; οὐ γὰρ οἶόν τε. Ἀλλὰ μὴν οὔτε βῆχες, οὔτε παρμοὶ οὐδεμίαν δύναμιν ἔχουσιν, ὥστε τῇ κατατάσει

ξυντιμωρέειν οὐ μὴν οὐδ' ἔνεσις φύσης ἐνιεμένη ἐς τὴν κοιλίην οὐδὲν ἂν δυνασθεῖη. Καὶ μὴν αἱ μεγάλαι σικύαι προσβαλλόμεναι ἀνασπάσιος εἵνεκα δῆθεν τῶν ἔσω ῥεπόντων, σπονδύλων, μεγάλη ἀμαρτὰς γνώμης ἐστὶν ἀπωθέουσι γὰρ μᾶλλον, ἢ ἀνασπῶσιν καὶ οὐδ' αὐτὸ τοῦτο γινώσκουσιν οἱ προσβάλλοντες ὅσῳ γὰρ ἂν τις μέζῳ προσβάλλῃ, τοσοῦτῳ μᾶλλον λορδοῦνται οἱ προσβληθέντες, ξυαναγκαζόμενου ἄνω τοῦ δέρματος. Τρόπους δὲ ἄλλους κατασεισίων, ἢ οἷοι πρόσθεν εἴρηται, ἔχοιμι ἂν εἰπεῖν, ἀρμόσαι οὓς ἂν τις δοκέοι τῷ παθήματι μᾶλλον ἄλλ' οὐ κάρτα πιστεύω αὐτοῖσιν διὰ τοῦτο οὐ γράφω. Ἀθρόον δὲ ξυνιέναι χρὴ περὶ

τούτων, ὧν ἐν κεφαλαίῳ εἴρηται, ὅτι τὰ μὲν ἐς τὸ λορδὸν ῥέψαντα ὀλέθριά ἐστι καὶ σινάμωρα, τὰ δὲ ἐς τὸ κυφὸν ἀσινέα θανάτου, καὶ οὖρων σχεσίων, καὶ ἀποναρκωσίων τὸ ἐπίπαν οὐ γὰρ ἐντείνει τοὺς ὄχετους τοὺς κατὰ τὴν κοιλίην, οὐδὲ κωλύει εὐρόους εἶναι ἢ ἐς τὸ ἔξω κύφωσις ἢ δὲ λόρδωσις ταῦτά τε ἀμφοτέρωτα ποιεῖ, καὶ ἐς τὰ ἄλλα πολλὰ προσγίνεται. Ἐπεὶ τοι πολὺ πλείονες σκελέων τε καὶ χειρῶν ἀκρατέες γίνονται, καὶ καταναρκοῦνται τὸ σῶμα, καὶ οὖρα ἴσχεται αὐτέοισιν, οἷσιν ἂν μὴ ἐκστῆ μὲν τὸ ὕβωμα μήτε ἔξω, μήτε ἔσω, σεισθέωσι δὲ ἰσχυρῶς ἐς τὴν ἰθυωρίην τῆς ῥάχιος οἷσι δὲ ἂν ἐκστῆ τὸ ὕβωμα, ἦσσαν τοιαῦτα πάσχουσιν.

49. Πολλὰ δὲ καὶ ἄλλα ἐν ἰητρικῇ ἂν τις θεάσοιτο, ὧν τὰ μὲν ἰσχυρὰ ἀσινέα ἐστὶ, καὶ καθ' ἐωυτὰ τὴν κρίσιν ὅλην λαμβάνοντα τοῦ νοσήματος, τὰ δὲ ἀσθενέστερα σινάμωρα, καὶ ἀποτόκους νοσημάτων χρονίους ποιέοντα, καὶ κοινωνέοντα τῷ ἄλλῳ σώματι ἐπὶ πλέον. Ἐπεὶ καὶ πλευρέων κάτηξις τοιοῦτόν τι πέπονθεν οἷσι μὲν γὰρ ἂν καταγῆ πλευρῆ, μία ἢ πλείονες, ὡς τοῖσι πλείστοισι

κατάγνυται, μὴ διασχόντα τὰ ὀστέα ἐς τὸ ἔσω μέρος, μηδὲ ψιλωθέντα, ὀλίγοι μὲν ἤδη ἐπυρέτηναν ἀτὰρ οὐδὲ αἷμα πολλοὶ ἤδη ἔπτυσαν, οὐδὲ ἔμπτουι πολλοὶ γίνονται, οὐδὲ ἔμμοτοι, οὐδὲ ἐπισφακελίσιες τῶν ὀστέων δίαίτα τε φαύλη ἀρκέει ἢν γὰρ μὴ πυρετὸς ξυνεχῆς ἐπιλαμβάνῃ αὐτούς, κενεαγγεῖν κάκιον τοῖσι τοιούτοισιν, ἢ μὴ κενεαγγεῖν, καὶ ἐπωδυνέστερον, καὶ πυρετωδέστερον, καὶ βηχωδέστερον τὸ γὰρ πλήρωμα τὸ μέτριον τῆς κοιλίης, διόρθωμα τῶν πλευρέων γίνεται ἢ δὲ κένωσις κρεμασμὸν τῆσι πλευρῆσι ποιεῖ ὁ δὲ κρεμασμὸς, ὀδύνην. Ἐξωθέν τε αὖ φαύλη ἐπίδεσις τοῖσι τοιούτοισιν ἀρκέει κηρωτῆ καὶ σπλήνεσι καὶ ὀθονίοισιν ἠσυχῶς ἐρείδοντα, ὁμαλήν τὴν ἐπίδεσιν ποιεέσθαι, ἢ καὶ ἐριῶδές τι προσεπιθέντα. Κρατύνεται δὲ πλευρῆ ἐν εἴκοσιν ἡμέρησιν ταχεῖαι γὰρ αἱ ἐπιπωρώσιες τῶν τοιουτέων ὀστέων.

50. Ἀμφιφλασθείσης μέντοι τῆς σαρκὸς ἀμφὶ τῆσι πλευρῆσιν, ἢ ὑπὸ πληγῆς, ἢ

ὑπὸ πτώματος, ἢ ὑπὸ ἀντερείσιος, ἢ ἄλλου τινὸς τοιουτοτρόπου, πολλοὶ ἤδη πούλῳ αἷμα ἔπτυσαν οἱ γὰρ ὄχετοὶ οἱ κατὰ τὸ λαπαρὸν τῆς πλευρῆς ἐκάστης παρατεταμένοι, καὶ οἱ τόνοι ἀπὸ τῶν ἐπικαιροτάτων τῶν ἐν τῷ σώματι τὰς ἀφορμὰς ἔχουσιν πολλοὶ οὖν ἤδη βηχώδεις, καὶ φυματίαι, καὶ ἔμπυοι ἐγένοντο, καὶ ἔμμοτοι, καὶ ἡ πλευρὴ ἐπεσφακέλισεν αὐτοῖσιν. Ἀτὰρ καὶ οἷσι μηδὲν τοιοῦτον προσεγένετο, ἀμφιφλασθείσης τῆς σαρκὸς ἀμφὶ τῆσι πλευρῆσιν, ὅμως δὲ βραδύτερον ὀδυνώμενοι παύονται οὗτοι, ἢ οἷσιν ἂν πλευρὴ καταγῆ, καὶ ὑποστροφὰς μᾶλλον

ἴσχει ὀδυνημάτων τὸ χωρίον ἐν τοῖσι τοιούτοις τρώμασιν, ἢ τοῖσιν ἐτέροισιν. Μάλα μὲν οὖν μετεξέτεροι καταμελέουσι τῶν τοιούτων σινέων, μᾶλλον ἢ ἦν πλευρὴ καταγῆ αὐτέοισιν ἀτὰρ καὶ ἰήσιος σκεθροτέρης οἱ τοιοῦτοι δέονται, εἰ σωφρονοῖεν τῇ τε γὰρ διαίτῃ ζυμφέρει ζυνεστάλθαι, ἀτρεμέειν τε τῷ σώματι ὡς μάλιστα, ἀφροδισίων τε ἀπέχεσθαι, βρωμάτων τε λιπαρῶν, καὶ κερχνωδῶν, καὶ ἰσχυρῶν πάντων, φλέβα τε κατ' ἀγκῶνα τέμνεσθαι, σιγᾶν τε ὡς μάλιστα, ἐπιδέεσθαι τε τὸ χωρίον τὸ φλασθὲν σπλήνεσι μὴ πολυπτύχοισι, συχνοῖσι δὲ καὶ πολὺ πλατυτέροισι πάντα τοῦ φλάσματος, κηρωτῇ τε ὑποχρίειν, ὀθονίοισι τε πλατέσι σὺν ταινίησι πλατεῖησι καὶ μαλθακῆσιν ἐπιδέειν, ἐρείδειν τε μετρίως, ὥστε μὴ κάρτα πεπιέχθαι φάναι τὸν ἐπιδεδεμένον, μηδ' αὖ χαλαρὸν ἄρχεσθαι δὲ τὸν ἐπιδέοντα κατὰ τὸ φλάσμα, καὶ ἐρηρεῖσθαι ταύτη μάλιστα, τὴν δὲ ἐπίδεδειν ποιέεσθαι, ὡς ἀπὸ δύο ἀρχῶν ἐπιδέεται, ἵνα μὴ περιρρεπὲς τὸ δέρμα τὸ περὶ τὰς πλευρὰς ἔη, ἀλλ' ἰσόρροπον, ἐπιδέειν δὲ ἢ καθ' ἐκάστην ἡμέρην, ἢ παρ' ἐτέρην. Ἄμεινον δὲ καὶ τὴν κοιλίην μαλθάξαι κούφῳ τινὶ, ὅσον κενώσιος εἶνεκεν τοῦ σίτου, καὶ ἐπὶ μὲν δέκα ἡμέρας ἰσχναίνειν, ἔπειτα ἀναθρέψαι τὸ σῶμα, καὶ ἀπαλῦναι τῇ δὲ ἐπίδεδει, ἔστ' ἂν μὲν ἰσχναίνης, ἐρηρυσμένη μᾶλλον χρέεσθαι, ὀκόταν δὲ ἔς τὸν ἀπαλυσμὸν ἄγης, ἐπιχαλαρωτέρη καὶ ἦν μὲν αἷμα ἀποπτύση

καταρχὰς, τεσσαρακονθήμερον τὴν μελέτην καὶ τὴν ἐπίδεδειν ποιέεσθαι χρὴ ἦν δὲ μὴ πτύση τὸ αἷμα, ἀρκέει ἐν εἴκοσιν ἡμέρησιν ἢ μελέτῃ ὡς ἐπὶ τὸ πολὺ τῇ ἰσχύϊ δὲ τοῦ τρώματος τοὺς χρόνους προτεκμαίρεσθαι χρὴ. Ὅσοι δ' ἂν ἀμελήσωσι τῶν τοιουτέων ἀμφιφλασμάτων, ἦν καὶ ἄλλο μηδὲν αὐτοῖσι φλαῦρον μέζον γένηται, ὅμως τό γε χωρίον ἀμφιφλασθὲν μυξωδεστέραν τὴν σάρκα ἴσχει, ἢ πρόσθεν εἶχεν. Ὅκου δὲ τι τοιοῦτον ἐγκαταλείπεται, καὶ μὴ εὖ ἐξίποῦται τῇ γε ἀλθέξει, φαυλότερον μὲν, ἦν παρ' αὐτὸ τὸ ὀστέον ἐγκαταλειφθῆ τὸ μυξῶδες οὔτε γὰρ ἔτι ἢ σὰρξ ὁμοίως ἄπτεται τοῦ ὀστέου, τό τε ὀστέον νοσηρότερον γίνεται, σφακελισμοὶ τε χρόνιοι ὀστέου πολλοῖσιν ἤδη ἀπὸ τοιουτέων προφασίων ἐγένοντο. Ἀτὰρ καὶ ἦν μὴ παρὰ τὸ ὀστέον, ἀλλ' αὐτὴ ἡ σὰρξ μυξώδης ἔη, ὅμως ὑποστροφὰι γίνονται καὶ ὀδύναι ἄλλοτε καὶ ἄλλοτε, ἦν τι τῷ σώματι τύχη πονήσας καὶ διὰ τοῦτο τῇ ἐπίδεδει χρέεσθαι χρὴ, ἅμα μὲν ἀγαθῇ,

ἄμα δὲ ἐπὶ πούλῳ προηκούση, ἕως ἂν ξηρανθῆ μὲν καὶ ἀναποθῆ τὸ ἐκχύμωμα τὸ ἐν τῇ φλάσει γενόμενον, αὐξηθῆ δὲ σαρκὶ ὑγιεῖ τὸ χωρίον, ἄψηται δὲ τοῦ ὀστέου ἢ σάρξ. Οἷσι δ' ἃ ἀμεληθεῖσι χρονωθῆ, καὶ ὀδυνῶδες τὸ χωρίον γένηται, καὶ ἡ σὰρξ ὑπόμυξος ἔη, τούτοισι καῦσις ἴησις ἀρίστη. Καὶ ἦν μὲν αὐτὴ ἡ σὰρξ μυξώδης ἔη, ἄχρι τοῦ ὀστέου καίειν χρή, μὴ μὴν διαθερμανθῆναι τὸ ὀστέον ἦν δὲ μεσηγὺ τῶν πλευρέων ἔη, ἐπιπολῆς μὲν οὐδ' οὕτω χρή καίειν, φυλάσσεσθαι μέντοι, μὴ διακαύσης πέρην.

Ἦν δὲ πρὸς τῷ ὀστέῳ δοκέη εἶναι τὸ φλάσμα, καὶ ἔτι νεαρὸν ἔη, καὶ μήπω σφακελίση τὸ ὀστέον, ἦν μὲν κάρτα ὀλίγον ἔη, οὕτω καίειν χρή ὡσπερ εἴρηται ἦν μέντοι παραμήκης ἔη ὁ μετεωρισμὸς ὁ κατὰ τὸ ὀστέον, πλείονας ἐσχάρας ἐμβάλλειν χρή περὶ δὲ σφακελισμοῦ πλευρῆς ἄμα τῇ τῶν ἐμμότων ἰητρείῃ εἰρήσεται.

51. Ἦν δὲ μηροῦ ἄρθρον ἐξ ἰσχίου ἐκπέση, ἐκπίπτει δὲ κατὰ τέσσαρας τρόπους, ἐς μὲν τὸ ἔσω πλειστάκις, ἐς δὲ τὸ ἔξω τῶν ἄλλων πλειστάκις ἐς δὲ τὸ ὀπισθεν καὶ τὸ ἔμπροσθεν ἐκπίπτει μὲν, ὀλιγάκις δὲ οἷσι μὲν οὖν ἂν ἐκβῆ ἐς τὸ ἔσω, μακρότερον τὸ σκέλος φαίνεται, παραβαλλόμενον πρὸς τὸ ἕτερον, διὰ δισσὰς προφάσιας εἰκότως ἐπὶ τε γὰρ τὸ ἀπὸ τοῦ ἰσχίου πεφυκὸς ὀστέον, τὸ ἄνω φερόμενον πρὸς τὸν κτένα, ἐπὶ τοῦτο ἡ ἐπίβασις τῆς κεφαλῆς τοῦ μηροῦ γίνεται, καὶ ὁ αὐχὴν τοῦ ἄρθρου ἐπὶ τῆς κοτύλης ὀχέεται. Ἐξωθέν τε αὖ ὁ γλουτὸς κοῖλος φαίνεται, ἅτε ἔσω ῥεψάσης τῆς κεφαλῆς τοῦ μηροῦ, τό τε αὖ κατὰ τὸ γόνυ τοῦ μηροῦ ἄκρον ἀναγκάζεται ἔξω ῥέπειν, καὶ ἡ κνήμη καὶ δ πούς ὡσαύτως. Ἄτε οὖν ἔξω ῥέποντος τοῦ ποδός, οἱ ἰητροὶ δι' ἀπειρίην τὸν ὑγία πόδα πρὸς τοῦτον προσίσχουσιν, ἀλλ' οὐ τοῦτον πρὸς τὸν ὑγία διὰ τοῦτο πούλῳ μακρότερον φαίνεται τὸ σιναρὸν τοῦ ὑγίεος πολλαχῆ δὲ

καὶ ἄλλη τὰ τοιαῦτα παραξύνεσιν ἔχει. Οὐ μὴν οὐδὲ ξυγκάμπειν δύνανται κατὰ τὸν βουβῶνα ὁμοίως τῷ ὑγιεῖ ἀτὰρ καὶ ψαυομένη ἡ κεφαλὴ τοῦ μηροῦ κατὰ τὸν περίνεον ὑπερογκέουσα εὐδηλὸς ἐστίν. Τὰ μὲν οὖν σημήϊα ταῦτά ἐστιν, οἷσιν ἂν ἔσω ἐκπεπτώκη ὁ μηρός.

52. Οἷσι μὲν ἂν οὖν ἐκπεσὼν μὴ ἐμπέση, ἀλλὰ καταπορηθῆ καὶ ἀμεληθῆ, ἢ τε ὀδοιπορίῃ περιφοράδην τοῦ σκέλεος ὡσπερ τοῖσι βουσι γίνεται, καὶ ἡ ὄχησις πλείστη αὐτέοισιν ἐπὶ τοῦ ὑγίεος σκέλεός ἐστιν. Καὶ ἀναγκάζονται κατὰ τὸν κενεῶνα καὶ κατὰ τὸ ἄρθρον τὸ ἐκπεπτωκὸς κοῖλοι καὶ σκολιοὶ εἶναι κατὰ δὲ τὸ ὑγιές ἐς τὸ ἔξω ὁ γλουτὸς ἀναγκάζεται περιφερῆς εἶναι εἰ γὰρ τις ἔξω τῷ ποδὶ τοῦ ὑγίεος σκέλεος βαίνοι, ἀπωθοίη ἂν τὸ σῶμα τὸ ἄλλο ἐς τὸ σιναρὸν σκέλος τὴν ὄχησιν ποιέεσθαι τὸ δὲ σιναρὸν οὐκ ἂν δύναίτο ὀχέειν πῶς γάρ; ἀναγκάζεται

οὖν οὕτω κατὰ τοῦ ὑγιέος σκέλεος τῷ ποδὶ ἔσω βαίνειν, ἀλλὰ μὴ ἔξω οὕτω γὰρ ὀχέει μάλιστα τὸ σκέλος τὸ ὑγιές, καὶ τὸ ἐσωτοῦ μέρος τοῦ σώματος, καὶ τὸ τοῦ σιναροῦ σκέλεος μέρος. Κοιλαινόμενοι δὲ κατὰ τὸν κενεῶνα καὶ κατὰ τὰ ἄρθρα, μικροὶ φαίνονται, καὶ τῷ ξύλῳ ἀναγκάζονται ἀντερείδεσθαι πλάγιοι κατὰ τὸ ὑγιές σκέλος δέονται γὰρ ἀντικοντώσιος ταύτη

ἐπὶ τοῦτο γὰρ οἱ γλουτοὶ ρέπουσι, καὶ τὸ ἄχθος τοῦ σώματος ὀχεεται ἐπὶ τοῦτο. Ἀναγκάζονται δὲ καὶ ἐπικύπτειν τὴν γὰρ χεῖρα τὴν κατὰ τὸ σκέλος τὸ σιναρὸν ἀναγκάζονται κατὰ πλάγιον τὸν μηρὸν ἐρείδειν οὐ γὰρ δύναται τὸ σιναρὸν σκέλος ὀχέειν τὸ σῶμα ἐν τῇ μεταλλαγῇ τῶν σκελέων, ἢν μὴ κατέχηται πρὸς τὴν γῆν πιεζόμενον. Ἐν τούτοισιν οὖν τοῖσι σχήμασιν ἀναγκάζονται ἐσχηματίσθαι, οἷσιν ἂν ἔσω ἐκβάν τὸ ἄρθρον μὴ ἐμπέση, οὐ προβουλεύσαντος τοῦ ἀνθρώπου, ὅπως ἂν ῥήϊστα ἐσχηματισμένον ἔη, ἀλλ' αὐτὴ ἡ ζυμφορὴ διδάσκει ἐκ τῶν παρεόντων τὰ ῥήϊστα αἰρέεσθαι. Ἐπεὶ καὶ ὀκόσοι ἔλκος ἔχοντες ἐν ποδὶ ἢ κνήμη οὐ κάρτα δύναται ἐπιβαίνειν τῷ σκέλει, πάντες, καὶ οἱ νήπιοι, οὕτως ὀδοιπορέουσιν ἔξω γὰρ βαίνουσι τῷ σιναρῷ σκέλει καὶ δισσὰ κερδαίνουσι, δισσῶν γὰρ δέονται τό τε γὰρ σῶμα οὐκ ὀχέεται ὁμοίως ἐπὶ τοῦ ἔξω ἀποβαινομένου, ὥσπερ ἐπὶ τοῦ εἴσω οὐδὲ γὰρ κατ' ἰθυωρίην αὐτῷ γίνεται τὸ ἄχθος, ἀλλὰ πολλῷ μᾶλλον ἐπὶ τοῦ ὑποβαινομένου κατ' ἰθυωρίην γὰρ αὐτῷ γίνεται τὸ ἄχθος ἐν τε αὐτῇ τῇ ὀδοιπορίῃ καὶ τῇ μεταλλαγῇ τῶν σκελέων. Ἐν τούτῳ τῷ σχήματι τάχιστα ἂν δύναίτο ὑποτιθέναι τὸ ὑγιές σκέλος, εἰ τῷ μὲν σιναρῷ ἔξωτέρῳ βαίνοι, τῷ δὲ ὑγιεῖ ἐσωτέρῳ. Περὶ οὗ οὖν ὁ λόγος, ἀγαθὸν εὐρίσκεσθαι αὐτὸ ἐσωτῶ τὸ σῶμα [ἐς] τὰ ῥήϊστα τῶν

σχημάτων. Ὅσοισι μὲν οὖν μήπω τετελειωμένοισιν ἐς αὔξησιν ἐκπεσῶν μὴ ἐμπέσοι, γυιοῦται ὁ μηρὸς καὶ ἡ κνήμη καὶ ὁ πούς οὔτε γὰρ τὰ ὀστέα ἐς τὸ μῆκος ὁμοίως αὔξεται, ἀλλὰ βραχύτερα γίνεται, μάλιστα δὲ τὸ τοῦ μηροῦ, ἄσαρκόν τε ἅπαν τὸ σκέλος καὶ ἄμυον καὶ ἐκτεθηλυσμένον καὶ λεπτότερον γίνεται, ἅμα μὲν, διὰ τὴν στέρησιν τῆς χώρας τοῦ ἄρθρου, ἅμα δὲ, ὅτι ἀδύνατον χρέεσθαι ἐστίν, ὅτι οὐ κατὰ φύσιν κέεται χρήσις γὰρ μετεξετέρη ῥύεται τῆς ἄγαν ἐκθηλύνσιος ῥύεται δὲ τι καὶ τῆς ἐπὶ μῆκος ἀναυξήσιος. Κακοῦται μὲν οὖν μάλιστα, οἷσιν ἂν ἐν γαστρὶ ἐοῦσιν ἐξαρθρήση τοῦτο τὸ ἄρθρον, δεύτερον δὲ, οἷσιν ἂν ὡς νηπιωτάτοισιν ἐοῦσιν, ἥκιστα δὲ τοῖσι τετελειωμένοισιν. Τοῖσι μὲν οὖν τετελειωμένοισιν εἴρηται, οἷη τις ἡ ὀδοιπορίη γίνεται οἷσι δ' ἂν νηπίοισιν ἐοῦσιν ἡ ζυμφορὴ αὐτὴ γένηται, οἱ μὲν πλεῖστοι καταβλακεύουσι τὴν διόρθωσιν τοῦ σώματος, ἀλλὰ κακῶς εἰλέονται ἐπὶ τὸ ὑγιές σκέλος, τῇ χειρὶ πρὸς τὴν γῆν ἀπερειδόμενοι τῇ κατὰ τὸ ὑγιές σκέλος καταβλακεύουσι δὲ ἔνιοι τὴν ἐς τὸ ὀρθὸν ὀδοιπορίην, καὶ οἷσιν ἂν τετελειωμένοισιν αὐτὴ ἡ ζυμφορὴ γένηται. Ὀκόσοι δ' ἂν νήπιοι ἐόντες, ταύτη τῇ ζυμφορῇ χρησάμενοι, ὀρθῶς παιδαγωγηθῶσι, τῷ μὲν

ὕγιει σκέλει χρέονται ἐς ὀρθόν, ὑπὸ δὲ τὴν μασχάλην τὴν κατὰ τὸ ὑγιᾶς σκέλος σκίπωνα περιφέρουσι,

μετεξέτεροι δὲ, καὶ ὑπ' ἀμφοτέρας τὰς χεῖρας τὸ δὲ σιναρὸν σκέλος μετέωρον ἔχουσι, καὶ τοσοῦτω ῥήϊους εἰσὶν, ὅσῳ ἂν αὐτοῖσιν ἔλασσον τὸ σκέλος τὸ σιναρὸν ἔη τὸ δὲ ὑγιᾶς ἰσχύει αὐτέοισιν οὐδὲν ἦσσαν, ἢ εἰ καὶ ἀμφοτέρα ὑγιᾶ ἦν. Θηλύνονται δὲ πᾶσι τοῖσι τοιούτοισιν αἱ σάρκες τοῦ σκέλεος, μᾶλλον δὲ τι θηλύνονται αἱ ἐκ τοῦ ἔξω μέρους, ἢ αἱ ἐκ τοῦ ἔσω ὡς ἐπὶ πολὺ.

53. Μυθολογοῦσι δὲ τινες, ὅτι αἱ Ἀμαζονίδες τὸ ἄρσεν γένος τὸ ἐωυτῶν αὐτίκα νήπιον ἐὼν ἐξαρθρέουσιν, αἱ μὲν, κατὰ [τὰ] γούνατα, αἱ δὲ, κατὰ τὰ ἰσχία, ὡς δῆθεν χωλὰ γίνοιτο, καὶ μὴ ἐπιβουλεύοι τὸ ἄρσεν γένος τῷ θήλει χειρώναξιν ἄρα τουτέοισι χρέονται, ὀκόσα ἢ σκυτεῖης ἔργα, ἢ χαλκείης, ἢ ἄλλο ὃ τι ἐδραῖον ἔργον. Εἰ μὲν οὖν ἀληθεᾶ ταῦτά ἐστιν, ἐγὼ μὲν οὐκ οἶδα ὅτι δὲ γίνοιτο ἂν τοιαῦτα, οἶδα, εἴ τις ἐξαρθρεῖ αὐτίκα νήπια ἐόντα. Κατὰ μὲν οὖν τὰ ἰσχία μέζον τὸ διάφορον ἐστὶν ἐς τὸ ἔσω, ἢ ἐς τὸ ἔξω ἐξαρθρῆσαι κατὰ δὲ τὰ γούνατα διαφέρει μὲν τι, ἔλασσον δὲ τι διαφέρει τρόπος δὲ ἐκατέρου τοῦ χωλώματος ἰδίος ἐστὶν κυλλοῦται

γὰρ μᾶλλον, οἷσιν ἂν ἐς τὸ ἔξω ἐξαρθρήσῃ ὀρθοὶ δὲ ἦσσαν ἴστανται, οἷσιν ἂν ἐς τὸ ἔσω ἐξαρθρήσῃ. Ὡσαύτως δὲ καὶ ἦν παρὰ τὸ σφυρὸν ἐξαρθρήσῃ, ἦν μὲν ἐς τὸ ἔξω μέρος, κυλλοὶ μὲν γίνονται, ἐστάναι δὲ δύνανται ἦν δὲ ἐς τὸ ἔσω μέρος, βλαιοὶ μὲν γίνονται, ἦσσαν δὲ ἐστάναι δύνανται. Ἡ γε μὴν ξυναύξησις τῶν ὀστέων τοιήδε γίνεται οἷσι μὲν ἂν τὸ κατὰ τὸ σφυρὸν ὀστέον τὸ τῆς κνήμης ἐκστῆ, τούτοισι μὲν τὰ τοῦ ποδὸς ὀστέα ἠκιστα ξυναύξεται, ταῦτα γὰρ ἐγγυτάτω τοῦ τρώματός ἐστι, τὰ δὲ τῆς κνήμης ὀστέα αὔξεται μὲν, οὐ πολὺ δὲ ἐνδεεστερώς, αἱ μέντοι σάρκες μινύθουσιν. Οἷσι δ' ἂν κατὰ μὲν τὸ σφυρὸν μένη τὸ ἄρθρον κατὰ φύσιν, κατὰ δὲ τὸ γόνυ ἐξεστήκη, τούτοισι τὸ τῆς κνήμης ὀστέον οὐκ ἐθέλει ξυναύξεσθαι ὁμοίως, ἀλλὰ βραχύτατον γίνεται, τοῦτο γὰρ ἐγγυτάτω τοῦ τρώματός ἐστιν τοῦ μέντοι ποδὸς τὰ ὀστέα μινύθει μὲν, ἀτὰρ οὐχ ὁμοίως, ὥσπερ ὀλίγον τι πρόσθεν εἴρηται, ὅτι τὸ ἄρθρον τὸ παρὰ τὸν πόδα σῶν ἐστὶν εἰ δὲ οἱ χρέεσθαι ἠδύναντο, ὥσπερ καὶ τῷ κυλλῷ, ἔτι ἂν ἦσσαν ἐμινύθει τὰ τοῦ ποδὸς ὀστέα τούτοισιν. Οἷσι δ' ἂν κατὰ τὸ ἰσχίον ἢ ἐξάρθρησις γένηται, τούτοισι τοῦ μηροῦ τὸ ὀστέον οὐκ ἐθέλει ξυναύξεσθαι ὁμοίως, τοῦτο γὰρ ἐγγυτάτω τοῦ τρώματός ἐστιν, ἀλλὰ βραχύτερον τοῦ ὑγιᾶς γίνεται τὰ μέντοι τῆς κνήμης ὀστέα οὐχ ὁμοίως τούτοισιν ἀναυξέα γίνεται, οὐδὲ τὰ τοῦ ποδὸς, διὰ τοῦτο δὲ, ὅτι τὸ τοῦ μηροῦ ἄρθρον τὸ παρὰ τὴν κνήμην ἐν τῇ ἐωυτοῦ φύσει μένει, καὶ τὸ τῆς κνήμης τὸ παρὰ τὸν

πόδα σάρκες μέντοι μινύθουσι παντός τοῦ σκέλεος τούτοισιν εἰ μέντοι χρέεσθαι τῷ σκέλει ἠδύναντο, ἔτι ἂν μᾶλλον τὰ ὀστέα ζυνηυζάνετο, ὡς καὶ πρόσθεν εἴρηται, πλὴν τοῦ μηροῦ, κἂν ἦσσαν ἄσαρκα εἶη, ἀσαρκότερα δὲ πολλῶ ἢ εἰ υἰγία ἦν. Σημήϊον δὲ, ὅτι ταῦτα τοιαῦτά ἐστιν ὀκόσοι γὰρ, τοῦ βραχίονος ἐκπεσόντος, γαλιάγκωνες ἐγένοντο ἐκ γενεῆς, ἢ καὶ ἐν αὐξήσει πρὶν τελειωθῆναι, οὗτοι τὸ μὲν ὀστέον τοῦ βραχίονος βραχὺ ἴσχουσι, τὸν δὲ πῆχυν καὶ ἄκρην τὴν χειρὰ ὀλίγω ἐνδεεστέραν τοῦ υἰγιέος, διὰ ταύτας τὰς προφάσιας τὰς εἰρημένας, ὅτι ὁ μὲν βραχίων ἐγγυτάτω τοῦ ἄρθρου τοῦ τρώματός ἐστιν, ὥστε διὰ τοῦτο βραχύτερος γέγονεν ὁ δ' αὖ πῆχυς διὰ τοῦτο οὐχ ὁμοίως ἐνακούει τῆς ζυμφορῆς, ὅτι τὸ τοῦ βραχίονος ἄρθρον τὸ πρὸς τοῦ πήχεος ἐν τῇ ἀρχαίῃ φύσει μένει, ἢ τε αὖ χεὶρ ἄκρη ἔτι τηλοτέρω ἄπεστιν, ἢ ὁ πῆχυς, ἀπὸ τῆς ζυμφορῆς. Διὰ ταύτας οὖν τὰς εἰρημένας προφάσιας, τῶν ὀστέων τὰ τε μὴ ζυναυξανόμενα οὐ ζυναυζάνεται, τὰ τε ζυναυξανόμενα ζυναυζάνεται. Ἐς δὲ τὸ εὐσαρκον τῇ χειρὶ καὶ τῷ βραχίονι ἢ ταλαιπωρίῃ τῆς χειρὸς μέγα προσωφελείει ὅσα γὰρ χειρῶν ἔργα ἐστὶ, τὰ πλεῖστα προθυμέονται οἱ γαλιάγκωνες ἐργάζεσθαι τῇ χειρὶ ταύτῃ, ὅσα περ καὶ τῇ ἐτέρῃ δύνανται, οὐδὲν ἐνδεεστέρωσ τῆς ἀσινέος οὐ γὰρ δεῖ ὀχέεσθαι τὸ σῶμα ἐπὶ τῶν χειρῶν, ὡς ἐπὶ τῶν σκελέων, ἀλλὰ κοῦφα αὐτέησι τὰ ἔργα ἐστίν. Διὰ δὲ τὴν χρῆσιν οὐ μινύθουσιν αἱ σάρκες αἱ κατὰ τὴν χειρὰ καὶ τὸν πῆχυν τοῖσι γαλιάγκωσιν,

ἀλλὰ καὶ ὁ βραχίων τι προσωφελέεται ἐς εὐσαρκίην διὰ ταῦτα ὅταν δὲ ἰσχίον ἐκπαλὲς γένηται ἐς τὸ ἔσω μέρος ἐκ γενεῆς, ἢ καὶ ἔτι νηπίῳ ἐόντι, μινύθουσιν αἱ σάρκες διὰ τοῦτο μᾶλλον ἢ τῆς χειρὸς, ὅτι οὐ δύνανται χρέεσθαι τῷ σκέλει. Μαρτύριον δὲ τι ἐν ἔσται καὶ ἐν τοῖσιν ὀλίγον ὑστερον εἰρησομένοισιν, ὅτι ταῦτα τοιαῦτά ἐστιν.

54. Ὀκόσοισι δ' ἂν ἐς τὸ ἔξω ἢ τοῦ μηροῦ κεφαλὴ ἐκβῆ, τούτοισι βραχύτερον μὲν τὸ σκέλος φαίνεται παρατεινόμενον παρὰ τὸ ἕτερον εἰκότως οὐ γὰρ ἐπ' ὀστέον ἢ ἐπίβασις τῆς κεφαλῆς τοῦ μηροῦ ἐστιν, ὡς ὅτε ἔσω ἐκπέπτωκεν, ἀλλὰ παρ' ὀστέον παρεγκεκλιμένην τὴν φύσιν ἔχον, ἐν σαρκὶ δὲ στηρίζεται ὑγρῇ καὶ ὑπαικούσῃ διὰ τοῦτο μὲν βραχύτερον φαίνεται. Ἐσωθεν δὲ ὁ μηρὸς παρὰ τὴν πλιχάδα καλεομένην κοιλότερος καὶ ἀσαρκότερος φαίνεται ἔξωθεν δὲ ὁ γλουτὸς ὑποκυρτότερος, ἅτε ἐς τὸ ἔξω τῆς κεφαλῆς τοῦ μηροῦ ὠλισθηκυῖης ἀτὰρ καὶ ἀνωτέρω φαίνεται ὁ γλουτὸς, ἅτε ὑπειξάσης τῆς σαρκὸς τῆς ἐνταῦθα τῇ τοῦ μηροῦ κεφαλῇ τὸ δὲ παρὰ τὸ γόνυ τοῦ μηροῦ ἄκρον ἔσω ῥέπον φαίνεται, καὶ ἡ κνήμη, καὶ ὁ πούς ἀτὰρ οὐδὲ ζυγκάμπτειν ὥσπερ τὸ ὑγιὲς σκέλος δύνανται. Τὰ μὲν οὖν σημήϊα ταῦτα τοῦ ἔξω ἐκπεπτωκότος μηροῦ εἰσιν.

55. Οἷσι μὲν οὖν ἂν τετελειωμένοισιν ἤδη ἐκπεσὸν τὸ ἄρθρον



μη έμπέση, τούτοισι βραχύτερον μὲν φαίνεται τὸ ζύμπαν σκέλος, ἐν δὲ τῇ ὀδοιορίῃ τῇ μὲν πτέρνῃ οὐ δύναται καθικνέεσθαι ἐπὶ τῆς γῆς, τῷ δὲ στήθει τοῦ ποδὸς βαίνουσιν ἐπὶ τὴν γῆν ὀλίγον δὲ ἐς τὸ ἔσω μέρος ῥέπουσι τοῖσι δακτύλοισιν ἄκροισιν. Ὅχέειν δὲ δύναται τὸ σῶμα τὸ σιναρὸν σκέλος τούτοισι πολλῶ μᾶλλον, ἢ οἷσιν ἂν ἐς τὸ ἔσω μέρος ἐκπεπτώκη, ἅμα μὲν, ὅτι ἡ κεφαλὴ τοῦ μηροῦ, καὶ ὁ αὐχὴν τοῦ ἄρθρου πλάγιος φύσει πεφυκῶς, ὑπὸ συχνῶ μέρει τοῦ ἰσχίου τὴν ὑπόστασιν πεποιήται, ἅμα δὲ, ὅτι ἄκρος ὁ πούς οὐκ ἐς τὸ ἔξω μέρος ἀναγκάζεται ἐκκεκλίσθαι, ἀλλ' ἐγγύς ἐστι τῆς ἰθωρίας τῆς κατὰ τὸ σῶμα, καὶ τείνει καὶ ἐσωτέρω. Ὅταν οὖν τρίβον μὲν λάβῃ τὸ ἄρθρον ἐν τῇ σαρκί, εἰς ἣν ἐξεκλίθη, ἢ δὲ σὰρξ γλισχρανθῆ, ἀνώδυνον τῷ χρόνῳ γίνεται ὅταν δὲ ἀνώδυνον γένηται, δύναται μὲν ὀδοιοπέειν ἄνευ ζύλου, ἣν ἄλλως βούλωνται δύναται δὲ ὀχέειν τὸ σῶμα ἐπὶ τὸ σιναρὸν σκέλος. Δι' οὖν τὴν χρῆσιν ἦσσον τοῖσι τοιούτοισιν ἐκθηλύνονται αἱ σάρκες, ἢ οἷσιν ὀλίγον πρόσθεν εἴρηται ἐκθηλύνονται δὲ ἢ πλεῖον, ἢ ἔλασσον μᾶλλον δὲ τι ἐκθηλύνονται κατὰ τὸ ἔσω μέρος, ἢ κατὰ τὸ ἔξω, ὡς ἐπὶ τὸ πολὺ. Τὸ μέντοι ὑπόδημα μετεξέτεροι τούτων ὑποδέεσθαι οὐ δύναται διὰ τὴν ἀκαμπίην τοῦ σκέλεος, οἱ δὲ τινες καὶ δύναται. Οἷσι δὲ ἂν ἐν γαστρὶ ἐοῦσιν ἐξαρθρήση τοῦτο τὸ ἄρθρον, ἢ ἔτι ἐν αὐξήσει ἐοῦσι βίῃ ἐκπεσὸν ἤδη μὴ ἐμπέση, ἢ καὶ ὑπὸ νοῦσου ἐξαρθρήση τοῦτο τὸ ἄρθρον καὶ ἐκπαλήση πολλὰ γὰρ τοιαῦτα γίνεται, καὶ ἐνίων μὲν τῶν τοιούτων ἦν ἐπισφακελίση ὁ μηρὸς, ἐμπυήματα χρόνια καὶ ἔμμοτα γίνεται, καὶ ὀστέων ψιλῶσιες ἐνίοισιν, ὁμοίως δὲ καὶ οἷσιν ἐπισφακελίζει,

καὶ οἷσι μὴ ἐπισφακελίζει, τοῦ μηροῦ τὸ ὀστέον πολλῶ βραχύτερον γίνεται, καὶ οὐκ ἐθέλει ξυναύξεσθαι, ὥσπερ τοῦ ὑγιέος τὰ μέντοι τῆς κνήμης βραχύτερα μὲν γίνεται, ἢ τὰ τῆς ἐτέρης, ὀλίγω δὲ, διὰ τὰς αὐτὰς προφάσιας, αἱ καὶ πρόσθεν εἴρηται ὀδοιοπέειν τε δύναται οἱ τοιοῦτοι, οἱ μὲν τινες αὐτῶν τοῦτον τὸν τρόπον, ὥσπερ οἷσι τετελειωμένοισιν ἐξέπεσε καὶ μὴ ἐνέπεσεν, οἱ δὲ καὶ βαίνουσι μὲν παντὶ τῷ ποδί, διαρρέπουσι δὲ ἐν τῆσιν ὀδοιορίῃσιν, ἀναγκαζόμενοι διὰ τὴν βραχύτητα τοῦ σκέλεος. Ταῦτα δὲ τοιαῦτα γίνεται, ἦν ἐπιμελέως μὲν παιδαγωγηθῶσιν ἐν τοῖσι σχήμασι καὶ ὀρθῶς, ἐν οἷσι δεῖ, πρὶν κρατυνθῆναι ἐς τὴν ὀδοιορίην, ἐπιμελέως δὲ καὶ ὀρθῶς, ἐπὴν κρατυνθῶσιν πλείστης δὲ ἐπιμελείης δέονται, οἷσιν ἂν νηπιωτάτοισιν ἐοῦσιν αὕτη ἢ ξυμφορὴ γένηται ἦν γὰρ ἀμεληθῶσι νήπιοι ἐόντες, ἀχρήϊον παντάπασι καὶ ἀναυξῆς ὅλον τὸ σκέλος γίνεται. Αἱ δὲ σάρκες τοῦ ζύμπαντος σκέλεος μινύθουσι μᾶλλον, ἢ τοῦ ὑγιέος πάνυ μὴν πολλῶ ἦσσον τούτοισι μινύθουσιν, ἢ οἷσιν ἂν ἔσω ἐκπεπτώκη, διὰ τὴν χρῆσιν καὶ τὴν ταλαιπωρίην, οἷον εὐθέως δύνασθαι χρέεσθαι τῷ σκέλει, ὡς καὶ πρόσθεν ὀλίγω περὶ τῶν γαλιαγκῶνων εἴρηται.

56. Εἰσὶ δὲ τινες, ὧν τοῖσι μὲν ἐκ γενεῆς αὐτίκα, τοῖσι δὲ καὶ ὑπὸ νοῦσου

ἀμφοτέρων τῶν σκελέων ἐξέστη τὰ ἄρθρα ἐς τὸ ἔξω μέρος τούτοις οὖν τὰ μὲν ὀστέα ταῦτα παθήματα πάσχει αἱ μέντοι

σάρκες ἤκιστα ἐκθηλύνονται τοῖσι τοιούτοις εὐσαρκα δὲ καὶ τὰ σκέλεα γίνεται, πλὴν εἴ τι ἄρα κατὰ τὸ εἶσω μέρος ἐλλείποι ὀλίγον διὰ τοῦτο δὲ εὐσαρκά ἐστιν, ὅτι ἀμφοτέροισι τοῖσι σκέλεσιν ὁμοίως ἢ χρῆσις γίνεται ὁμοίως γὰρ σαλεύουσιν ἐν τῇ ὁδοιπορίῃ ἔνθα καὶ ἔνθα ἐξεχέγλουτοι δὲ οὔτοι ἰσχυρῶς φαίνονται διὰ τὴν ἔκστασιν τῶν ἄρθρων. Ἦν δὲ μὴ ἐπισφακελίση αὐτοῖσι τὰ ὀστέα, μηδὲ κυφοὶ ἀνωτέρω τῶν ἰσχίων γένωνται ἐνίους γὰρ καὶ τὰ τοιαῦτα καταλαμβάνει, ἦν οὖν μὴ τοιοῦτόν τι γένηται, ἱκανῶς ὑγιηροὶ τᾶλλα διαφέρονται ἀναυξέστεροι μέντοι τὸ πᾶν σῶμα οὔτοι γίνονται, πλὴν τῆς κεφαλῆς.

57. Ὅσοισι δ' ἂν ἐς τοῦπισθεν ἢ κεφαλὴ τοῦ μηροῦ ἐκπέση, ὀλίγοισι δὲ ἐκπίπτει, οὔτοι ἐκτανύειν οὐ δύνανται τὸ σκέλος, οὔτε κατὰ τὸ ἄρθρον τὸ ἐκπεσόν, οὔτε τι κάρτα κατὰ τὴν ἰγνύην ἀλλ' ἤκιστα τῶν ἐκπαλέων οὔτοι ἐκτανύουσι καὶ τὸ κατὰ τὸν βουβῶνα, καὶ τὸ κατὰ τὴν ἰγνύην ἄρθρον. Προσξυνιέναι μὲν οὖν καὶ τόδε χρὴ εὐχρηστον γὰρ καὶ πολλοῦ ἄξιόν ἐστι, καὶ τοὺς πλείστους λήθει, ὅτι οὐδ' ὑγιαίνοντες δύνανται κατὰ τὴν ἰγνύην ἐκτανύειν

τὸ ἄρθρον, ἦν μὴ ξυνεκτανύωσι καὶ τὸ κατὰ τὸν βουβῶνα ἄρθρον, πλὴν ἦν μὴ πάνυ ἄνω ἀείρωσι τὸν πόδα, οὔτω δ' ἂν δύναιντο οὐ τοίνυν οὐδὲ ξυγκάμπειν δύνανται τὸ κατὰ τὴν ἰγνύην ἄρθρον ὁμοίως, ἀλλὰ πολὺ χαλεπότερον, ἦν μὴ ξυγκάμπωσι καὶ τὸ κατὰ τὸν βουβῶνα ἄρθρον. Πολλὰ δὲ καὶ ἄλλα κατὰ τὸ σῶμα τοιαύτας ἀδελφίξιας ἔχει, καὶ κατὰ νεύρων ξυντάσιας, καὶ κατὰ μυῶν σχήματα, καὶ πλεῖστά τε καὶ πλείστου ἄξια γινώσκεσθαι, ἢ ὡς τις οἶεται, καὶ κατὰ τὴν τοῦ ἐντέρου φύσιν, καὶ τὴν τῆς ζυμπάσης κοιλίης, καὶ κατὰ τὰς τῶν ὑστερέων πλάνας καὶ ξυντάσιας ἀλλὰ περὶ μὲν τούτων ἐτέρωθι λόγος ἔσται, ἠδελφισμένος τοῖσι νῦν λεγομένοις. Περὶ οὗ δὲ ὁ λόγος ἐστίν, οὔτε ἐκτανύειν δύνανται, ὥσπερ ἤδη εἴρηται βραχύτερόν τε τὸ σκέλος φαίνεται διὰ δισσὰς προφάσιας, ὅτι τε οὐκ ἐκτανύεται, ὅτι τε πρὸς τὴν σάρκα ὠλίσθηκε τὴν τοῦ πυγαίου ἢ γὰρ φύσις τοῦ ἰσχίου τοῦ ὀστέου ταύτη, ἧ καὶ ἡ κεφαλὴ καὶ ὁ αὐχὴν τοῦ μηροῦ γίνεται, ὅταν δὲ ἐξαρθρήση, καταφερῆς πέφυκεν ἐπὶ τοῦ πυγαίου τὸ ἔξω μέρος. Ξυγκάμπειν μέντοι δύνανται, ὅταν μὴ ἡ ὀδύνη κωλύη καὶ ἡ κνήμη τε καὶ ὁ πούς ὀρθὰ ἐπεικέως φαίνεται, καὶ οὔτε τῆ, οὔτε τῆ πολὺ ἐκκεκλιμένα κατὰ δὲ τὸν βουβῶνα δοκέει τι ἢ σὰρξ λαπαρωτέρη εἶναι, ποτὶ καὶ ψαυομένη, ἄτε τοῦ ἄρθρου ἐς τὰ ἐπὶ θάτερα μέρη

ὠλισθηκότος κατὰ δὲ αὐτὸ τὸ πυγαῖον διαψαυομένη ἢ κεφαλὴ τοῦ μηροῦ δοκέει ἐξογκέειν μᾶλλον. Τὰ μὲν οὖν σημήια ταῦτα, ᾧ ἂν ἐς τὸ ὀπισθεν ἐκπεπτώκη ὁ

μηρός.

58. Ὅτεω μὲν οὖν ἂν τετελειωμένω ἤδη ἐκπεσῶν μὴ ἐμπέση, ὁδοιπορέειν μὲν δύναται, ὅταν ὁ χρόνος ἐγγένηται, καὶ ἡ ὀδύνη παύσηται, καὶ ἐθισθῆ τὸ ἄρθρον ἐν τῇ σαρκὶ ἐνστροφᾶσθαι ἀναγκάζεται μέντοι ἰσχυρῶς ξυγκάμπτειν κατὰ τοὺς βουβῶνας ὁδοιπορέων, διὰ δισσὰς προφάσις, ἅμα μὲν ὅτι πολλῶ βραχύτερον τὸ σκέλος γίνεται διὰ τὰ προειρημένα, καὶ τῇ μὲν πτέρνῃ καὶ πάνυ πολλοῦ δέεται ψαύειν τῆς γῆς μόλις δὲ τῷ στήθει τοῦ ποδὸς καθικνέεται, καὶ οὐδὲ οὕτως, ἦν μὴ κάμψη αὐτὸς ἐωυτὸν κατὰ τοὺς βουβῶνας, καὶ τῷ ἐτέρω σκέλει κατὰ τὴν ἰγνύην ἐπιξυγκάμψη. Ἐπὶ δὲ τούτοις ἀναγκάζεται, ὥστε τῇ χειρὶ τῇ κατὰ τὸ σιναρὸν σκέλος ἐρείδεσθαι ἐς τὸ ἄνω τοῦ μηροῦ ἐφ' ἐκάστη ξυμβάσει ἀναγκάζει οὖν τι καὶ τοῦτο αὐτὸ, ὥστε κάμπτεσθαι κατὰ τοὺς βουβῶνας ἐν γὰρ τῇ μεταλλαγῇ τῶν σκελέων ἐν τῇ ὁδοιπορίῃ οὐ δύναται τὸ σῶμα ὀχέεσθαι ἐπὶ τοῦ σιναροῦ σκέλεος, εἰ μὴ προσκατερίδεται

τὸ σιναρὸν πρὸς τὴν γῆν ὑπὸ τῆς χειρὸς, ἅτε οὐχ ὑφεστεῶτος τοῦ ἄρθρου ὑπὸ τῷ σῶματι, ἀλλ' ἐς τὸ ὀπισθεν ἐξεστεῶτος κατὰ τὸ ἰσχίον εἰ γὰρ πειρήσαιτο καὶ ἐπ' ὀλίγον τοῦ ποδὸς ὀχηθῆναι μηδενὶ ἄλλω ἀντιστηριζόμενος, ἐς τὸ ὀπίσω ἂν πέσοι ἢ γὰρ ῥοπή πολλὴ ἂν εἴη, τῶν ἰσχιῶν ἐπὶ πούλῳ ἐς τοῦπίσω ὑπερεχόντων ὑπὲρ τοῦ ποδὸς τῆς βάσιος, καὶ τῆς ράχιος ἐς τὰ ἰσχία ῥεπούσης. Ἄνευ μὲν οὖν ξύλου δύναται ὁδοιπορέειν οἱ τοιοῦτοι, ἦν ἄλλως ἐθισθέωσιν διὰ τοῦτο, ὅτι ἡ βάσις τοῦ ποδὸς κατὰ τὴν ἀρχαίην ἰθυωρίην ἐστίν, ἀλλ' οὐκ ἐς τὸ ἔξω ἐκκεκλιμένη, διὰ τοῦτο οὐδὲ δέονται τῆς ἀντικοντώσιος. Ὅσοι μὲντοι βούλονται ἀντὶ τῆς τοῦ μηροῦ ἐπιλαβῆς ὑπὸ τὴν μασχάλην τὴν κατὰ τὸ σιναρὸν σκέλος ὑποτιθέμενοι σκίπωνα ἀντερίδειν, κεῖνοι, ἦν μὲν μακρότερον τὸν σκίπωνα ὑποτιθέοιντο, ὀρθότεροι μὲν ὁδοιπορήσουσι, τῷ δὲ ποδὶ πρὸς τὴν γῆν οὐκ ἐρείδονται εἰ δ' αὖ βούλονται ἐρείδεσθαι τῷ ποδὶ, βραχύτερον μὲν τὸ ξύλον φορητέον, κατὰ δὲ τοὺς βουβῶνας ἐπιξυγκάμπτεσθαι ἂν δέοι αὐτούς. Τῶν δὲ σαρκῶν αἱ μινυθήσιες κατὰ λόγον. γίνονται καὶ τούτοις, ὥσπερ πρόσθεν εἴρηται τοῖσι μὲν γὰρ μετέωρον ἔχουσι τὸ σκέλος καὶ μηδὲν ταλαιπωρέουσιν, τούτοις καὶ μάλιστα μινύθουσιν οἱ δ' ἂν πλεῖστα χρέωνται τῇ ἐπιβάσει, τούτοις

ἥκιστα μινύθουσιν. Τὸ μὲντοι ὑγιὲς σκέλος οὐκ ὠφελέεται, ἀλλὰ μᾶλλον αἰ ἀσχημονέστερον γίνεται, ἦν χρέωνται τῷ σιναρῷ σκέλει ἐπὶ τὴν γῆν ξυνυπουργέον γὰρ ἐκείνῳ ἐξίσχιόν τε ἀπαναγκάζεται εἶναι, καὶ κατὰ τὴν ἰγνύην ξυγκάμπτειν ἦν δὲ μὴ προσχρέηται τῷ σιναρῷ ἐπὶ τὴν γῆν, ἀλλὰ, μετέωρον ἔχων, σκίπωνι ἀντερίδεται, οὕτω δὲ καρτερόν γίνεται τὸ ὑγιὲς σκέλος ἐν τε γὰρ τῇ φύσει διαιτᾶται, καὶ τὰ γυμνάσια προσκρατύνει αὐτό. Φαίη μὲν οὖν ἂν τις, ἔξω ἱητρικῆς τὰ τοιαῦτα εἶναι τί γὰρ δῆθεν δεῖ περὶ τῶν ἤδη ἀνηκέστων

γεγονότων ἔτι προσξυνιέναι; πολλοῦ δὲ δεῖ οὕτως ἔχειν τῆς γὰρ αὐτῆς γνώμης καὶ ταῦτα ξυνιέναι οὐ γὰρ οἷόν τε ἀπαλλοτριωθῆναι ἀπ' ἀλλήλων. Δεῖ μὲν γὰρ ἐς τὰ ἀκεστὰ μηχανάσθαι, ὅπως μὴ ἀνήκεστα ἔσται, ξυνιέντα ὅκη ἂν μάλιστα κωλυτέα ἐς τὸ ἀνήκεστον ἐλθεῖν δεῖ δὲ τὰ ἀνήκεστα ξυνιέναι, ὡς μὴ μάτην λυμαίνεται τὰ δὲ προρρήματα λαμπρὰ καὶ ἀγωνιστικά, ἀπὸ τοῦ διαγινώσκειν, ὅπη ἕκαστον, καὶ οἷως, καὶ ὁκότε τελευτήσει, ἦν τε ἐς τὸ ἀκεστὸν τράπηται, ἦν τε ἐς τὸ ἀνήκεστον. Ὅκόσοισι δ' ἂν ἐκ γενεῆς, ἢ καὶ ἄλλως πῶς ἐν αὐξήσει εὐοῦσιν, οὕτως ὀλίσθη τὸ ἄρθρον ὀπίσω, καὶ μὴ ἐμπέση, ἦν τε βίη ὀλίσθη, ἦν τε καὶ ὑπὸ νούσου πολλὰ γὰρ τοιαῦτα ἐξαρθρήματα γίνετα ἐν νοῦσοισιν οἷαι δέ τινές εἰσιν αἱ νοῦσοι, ἐν ἧσιν ἐξθρέεται τὰ τοιαῦτα, ὕστερον γεγράφεται, ἦν οὖν ἐκστὰν μὴ ἐμπέση, τοῦ μὲν μηροῦ τὸ ὀστέον βραχὺ γίνεται, κακοῦται δὲ καὶ

πᾶν τὸ σκέλος, καὶ ἀναυξέστερον γίνεται καὶ ἀσαρκότερον πολλῶ διατὸ μηδὲν προσχρέεσθαι αὐτῷ κακοῦται γὰρ τούτοισι καὶ τὸ κατὰ τὴν ἰγνύην ἄρθρον τὰ γὰρ νεῦρα ἐντεταμένα γίνεται διὰ τὰ πρόσθεν εἰρημένα διὸ οὐ δύνανται τὸ κατὰ τὴν ἰγνύην ἄρθρον ἐκτανύειν, οἷσιν ἂν οὕτως ἰσχίον ἐκπέση. Ὡς γὰρ ἐν κεφαλαίῳ εἶπεῖν, πάντα τὰ ἐν τῷ σώματι ὁκόσα ἐπὶ χρήσει γέγονε, χρεομένοισι μὲν μέτρια καὶ γυμναζομένοισιν ἐν τῆσι ταλαιπωρίησιν, ἐν ἧσιν ἕκαστα εἴθισται, οὕτω μὲν ὑγιεινὰ καὶ αὖξιμα καὶ εὐγῆρα γίνεται μὴ χρεομένοισι δὲ, ἀλλ' ἐλινύουσι νοσηρότερα γίνεται καὶ ἀναυξέα καὶ ταχύγηρα. Ἐν δὲ τούτοισιν οὐχ ἦκιστα τὰ ἄρθρα τοῦτο πέπονθε καὶ τὰ νεῦρα, ἦν μὴ τις αὐτοῖσι χρέηται κακοῦνται μὲν οὖν διὰ ταύτας τὰς προφάσιας μᾶλλον τι ἐν τούτῳ τῷ τρόπῳ τοῦ ὀλισθήματος, ἢ ἐν τοῖσιν ἄλλοισιν ὅλον γὰρ τὸ σκέλος ἀναυξές γίνεται, καὶ τῆ ἀπὸ τῶν ὀστέων φύσει, καὶ τῆ ἀπὸ τῶν σαρκῶν οἱ οὖν τοιοῦτοι ὁκόταν ἀνδρωθῶσι, μετέωρον καὶ ξυγκεκαμμένον τὸ σκέλος ἴσχουσιν, ἐπὶ δὲ τοῦ ἐτέρου ὀχέονται, καὶ τῷ ξύλῳ ἀντιστηριζόμενοι, οἱ μὲν, ἐνὶ, οἱ δὲ, δυσί.

59. Οἷσι δ' ἂν ἐς τοῦμπροσθεν ἢ κεφαλὴ τοῦ μηροῦ ἐκπέση, ὀλίγοισι δὲ τοῦτο γίνεται, οὗτοι ἐκτανύειν μὲν τὸ σκέλος δύνανται τελείως, ξυγκάμπειν δὲ ἦκιστα οὗτοι δύνανται τὰ κατὰ τὸν βουβῶνα πονέουσι δὲ, καὶ ἦν κατὰ τὴν ἰγνύην ἀναγκάζονται ξυγκάμπειν. Μῆκος δὲ τοῦ σκέλεος παραπλήσιον φαίνεται, κατὰ

μὲν τὴν πτέρνην καὶ πάνυ ἄκρος δὲ ὁ πούς ἦσσόν τι προκύπτειν ἐθέλει ἐς τοῦμπροσθεν ὅλον δὲ τὸ σκέλος ἔχει τὴν ἰθωρήνην τὴν κατὰ φύσιν, καὶ οὔτε τῆ, οὔτε τῆ ῥέπει. Ὀδυνῶνται δὲ αὐτίκα οὗτοι μάλιστα, καὶ οὔρον ἴσχετα τὸ πρῶτον τούτοισι μᾶλλον τι, ἢ τοῖσιν ἄλλοισιν ἐξαρθρήμασιν ἐγκέεται γὰρ ἢ κεφαλὴ τοῦ μηροῦ ἐγγυτάτω τούτοισι τῶν τόνων τῶν ἐπικαίρων. Καὶ κατὰ μὲν τὸν βουβῶνα ἐξογκέον τε καὶ κατατεταμένον τὸ χωρίον φαίνεται, κατὰ δὲ τὸ πυγαῖον, στολιδωδέστερον καὶ ἀσαρκότερον. Ταῦτα μὲν οὖν σημηῖά ἐστι τὰ εἰρημένα, ὧν

ἂν οὕτως ἐκπεπτώκη ὁ μηρός.

60. Ὀκόσοισι μὲν οὖν ἂν ἤδη ἠνδρωμένοισι τοῦτο τὸ ἄρθρον ἐκπεσὸν μὴ ἐμπέση, οὗτοι, ὀκόταν αὐτοῖσιν ἢ ὀδύνη παύσῃται καὶ τὸ ἄρθρον ἐθισθῆ ἔν τῷ χωρίῳ τούτῳ στροφᾶσθαι, ἵνα ἐξέπεσεν, οὗτοι δύνανται σχεδὸν εὐθύς ὀρθοὶ ὀδοιπορέειν ἄνευ ξύλου, καὶ πάνυ μέντοι εὐθέες, ἐπὶ δὲ τὸ σιναρὸν, ἅτε οὔτε κατὰ τὸν βουβῶνα εὐκαμπτοὶ ἐόντες, οὔτε κατὰ τὴν ἰγνύην διὰ οὖν τοῦ βουβῶνος τὴν ἀκαμπίην εὐθυτέρῳ ὄλῳ τῷ σκέλει ἐν τῇ ὀδοιπορίῃ χρέονται, ἢ ὅτε ὑγίαινον. Καὶ σύρουσι δὲ ἐνίστε πρὸς τὴν γῆν τὸν πόδα, ἅτε οὐ ρηϊδίως ξυγκάμπτοντες τὰ ἄνω ἄρθρα, καὶ ἅτε παντὶ βαίνοντες τῷ ποδί οὐδὲν γὰρ ἦσσαν τῇ πτέρνῃ οὗτοι βαίνουσιν, ἢ τῷ ἔμπροσθεν εἰ δέ γε ἠδύναντο μέγα προβαίνειν, κἂν πάνυ περνοβάται ἦσαν καὶ

γὰρ οἱ ὑγιάινοντες ὅσῳ ἂν μέζον προβαίνοντες ὀδοιπορέωσι, τοσούτῳ μᾶλλον περνοβάται εἰσὶ, τιθέντες τὸν πόδα, αἶροντες δὲ τὸν ἐναντίον. Ὀκόσοισι δὲ δὴ οὕτως ἐκπέπτωκε, καὶ ἔτι μᾶλλον τῇ πτέρνῃ προσεγχρίπτουσιν, ἢ τῷ ἔμπροσθεν τὸ γὰρ ἔμπροσθεν τοῦ ποδός, ὅταν ἐκτεταμένον ἔη τὸ ἄλλο σκέλος, οὐχ ὁμοίως δύνανται ἐς τὸ πρόσω καμπύλλεσθαι, ὥσπερ ὅταν ξυγκεκαμμένον ἔη τὸ σκέλος οὔτ' αὖ σιμοῦσθαι δύνανται ὁ πούς, ξυγκεκαμμένου τοῦ σκέλεος, ὡς ὅταν ἐκτεταμένον ἔη τὸ σκέλος. Ὑγιάινουσά τε οὖν ἢ φύσις οὕτω πέφυκεν, ὥσπερ εἴρηται ὅταν δὲ ἐκπεσὸν μὴ ἐμπέση τὸ ἄρθρον, οὕτως ὀδοιπορέουσιν, ὡς εἴρηται, διὰ τὰς προφάσις ταύτας τὰς εἰρημένας ἀσαρκότερον μέντοι τὸ σκέλος τοῦ ἐτέρου γίνεται, κατὰ τε τὸ πυγαῖον, κατὰ τε τὴν γαστροκνημίην, καὶ κατὰ τὴν ὀπισθεν ἴξιν. Οἷσι δ' ἂν νηπίοισιν ἔτι ἐοῦσι τὸ ἄρθρον οὕτως ὀλισθάνον μὴ ἐμπέση, ἢ καὶ ἐκ γενεῆς οὕτω γένηται, καὶ τούτοις τὸ τοῦ μηροῦ ὀστέον μᾶλλον τι μινύθει, ἢ τὰ τῆς κνήμης καὶ τὰ τοῦ ποδός ἠκιστα μὴν ἐν τούτῳ τῷ τρόπῳ τοῦ ὀλισθήματος ὁ μηρὸς μειοῦται. Μινύθουσι μέντοι αἱ σάρκες πάντη, μάλιστα δὲ κατὰ τὴν ὀπισθεν ἴξιν, ὥσπερ ἤδη καὶ πρόσθεν εἴρηται. Ὅσοι μὲν οὖν ἂν τιθνηθῶσιν ὀρθῶς, οὗτοι μὲν δύνανται προσχρέεσθαι τῷ σκέλει αὐξανόμενοι, βραχυτέρῳ μὲν τινι τοῦ ἐτέρου ἐόντι, ὅμως δὲ ἐρειδόμενοι ξύλῳ ἐπὶ ταῦτα, ἢ τὸ σιναρὸν σκέλος οὐ γὰρ κάρτα δύνανται ἄνευ τῆς πτέρνης τῷ στήθει τοῦ ποδός χρέεσθαι, ἐπικαθιέντες ὥσπερ

ἐν ἐτέροις χωλεύμασιν ἔνιοι δύνανται αἴτιον δὲ τοῦ μὴ δύνασθαι τὸ ὀλίγῳ πρόσθεν εἰρημένον διὰ οὖν τοῦτο προσδέονται ξύλου. Ὅσοι δ' ἂν καταμεληθῶσι καὶ μηδὲν χρέωνται ἐπὶ τὴν γῆν τῷ σκέλει, ἀλλὰ μετέωρον ἔχῳσι, τούτοις μινύθει μὲν τὰ ὀστέα ἐς αὔξισιν μᾶλλον, ἢ τοῖσι χρεομένοις μινύθουσι δὲ καὶ αἱ σάρκες πολὺ μᾶλλον, ἢ τοῖσι χρεομένοις κατὰ δὲ τὰ ἄρθρα ἐς τὸ εὐθὺ πηροῦται τούτοις τὸ σκέλος μᾶλλον τι, ἢ οἷσιν ἂν ἄλλως ἐκπεπτώκη.

61. Ως μὲν οὖν ἐν κεφαλαίῳ εἰρῆσθαι, τὰ ἄρθρα τὰ ἐκπίπτοντα καὶ τὰ ὀλισθάνοντα ἀνίσως αὐτὰ ἐωυτοῖσιν ἐκπίπτει καὶ ὀλισθάνει, ἄλλοτε μὲν πλεῖον, ἄλλοτε δὲ πολὺ ἔλασσον καὶ οἷσι μὲν ἂν πολὺ πλεῖον ὀλίσθη ἢ ἐκπέση, χαλεπώτερα ἐμβάλλειν τὸ ἐπίπαν ἐστὶ, καὶ ἦν μὴ ἐμβιβασθῆ, μέζους καὶ ἐπιδηλοτέρας τὰς πηρώσιας καὶ κακώσιας ἴσχει τὰ τοιαῦτα, καὶ ὀστέων, καὶ σαρκῶν, καὶ σχημάτων ὅταν δὲ μεῖον ἐκπέση καὶ ὀλίσθη, ῥηΐδιον μὲν ἐμβάλλειν τὰ τοιαῦτα τῶν ἐτέρων γίνεται, ἦν δὲ καταπορηθῆ ἢ ἀμεληθῆ ἐμπεσεῖν, μείους καὶ ἀσινέστεραι αἱ πηρώσιες γίνονται τούτοισιν, ἢ οἷσιν ὀλίγῳ πρόσθεν εἴρηται. Τὰ μὲν οὖν ἄλλα ἄρθρα καὶ πάνυ πολὺ διαφέρει ἐς τὸ ὅτε μὲν μεῖον, ὅτε δὲ μεῖζον τὸ ὀλίσθημα ποιέεσθαι μηροῦ δὲ καὶ βραχίονος κεφαλαί

παραπλησιώτατα ὀλισθάνουσιν αὐτῇ ἐωυτῇ ἑκατέρῃ ἅτε γὰρ στρογγύλαι μὲν αἱ κεφαλαὶ ἐοῦσαι, ἀπλῆν τὴν στρογγύλωσιν καὶ φαλακρὴν ἔχουσι, κυκλοτερέες δὲ αἱ κοιλίαι ἐοῦσαι, αἱ δεχόμεναι τὰς κεφαλὰς, ἀρμόζουσι δὲ τῆσι κεφαλῆσιν διὰ τοῦτο οὐκ ἔστιν αὐτῆσι τὸ ἥμισυ ἐκστῆναι τοῦ ἄρθρου ὀλισθάνοι γὰρ ἂν διὰ τὴν περιφερειήν, ἢ ἐς τὸ ἔξω, ἢ ἐς τὸ ἔσω. Περὶ οὗ οὖν ὁ λόγος, ἐκπίπτουσι τελέως ἤδη, ἐπεὶ ἄλλως γε οὐκ ἐκπίπτουσιν ὅμως δὲ καὶ ταῦτα ὅτε μὲν πλεῖον ἀποπηδᾷ ἀπὸ τῆς φύσιος, ὅτε δὲ ἔλασσον μᾶλλον δέ τι μηρὸς τοῦτο βραχίονος πέπονθεν.

62. Ἐπεὶ ἔνια καὶ τῶν ἐκ γενεῆς γενομένων ὀλισθημάτων, ἦν

μικρὸν ὀλίσθη, οἷά τε ἐς τὴν φύσιν ἄγεσθαι, καὶ μάλιστα τὰ παρὰ τοῦ ποδὸς ἄρθρα. Ὀκόσοι ἐκ γενεῆς κυλλοὶ γίνονται, τὰ πλεῖστα τούτων ἰήσιμά ἐστιν, ἦν μὴ πάνυ μεγάλη ἢ ἐκκλίσις ἔη, ἢ καὶ προαυξέων γεγονότων ἤδη τῶν παιδίων ξυμβῆ. Ἄριστον μὲν οὖν ὡς τάχιστα ἰητρεύειν τὰ τοιαῦτα, πρὶν πάνυ μεγάλην τὴν ἔνδειαν τῶν ὀστέων τῶν ἐν τῷ ποδὶ γενέσθαι, πρὶν τε πάνυ μεγάλην τὴν ἔνδειαν τῶν σαρκῶν τῶν κατὰ τὴν κνήμην εἶναι. Τρόπος μὲν οὖν κυλλώσιος οὐχ εἷς, ἀλλὰ πλείονες, τὰ πλεῖστα μὴν οὐκ ἐξηρθρηκότα παντάπασι, ἀλλὰ δι' ἔθος σχήματος ἐν τινὶ ἀπολήψει τοῦ ποδὸς κεκυλλωμένα. Προσέχειν δὲ καὶ ἐν τῇ ἰητρείῃ τοισίδε χρὴ ἀπωθέειν μὲν καὶ κατορθοῦν τῆς κνήμης τὸ κατὰ τὸ σφυρὸν ὀστέον, τὸ ἔξωθεν, ἐς τὸ ἔσω μέρος, ἀντωθέειν δὲ ἐς τὸ ἔξω μέρος τὸ τῆς πτέρνης τὸ κατὰ τὴν ἴξιν, ὅκως ἀλλήλοις ἀπαντήσῃ τὰ ὀστέα τὰ ἐξίσχοντα κατὰ μέσον τε καὶ πλάγιον τὸν πόδα τοῦς δ' αὖ δακτύλους ἀθρούς ξὺν τῷ μεγάλῳ δακτύλῳ ἐς

τὸ εἶσω μέρος ἐγκλίνειν καὶ περιαναγκάζειν οὕτως ἐπιδεῖν δὲ κηρωτῇ ἐρρητινωμένα εὖ, καὶ σπλήνεσι, καὶ ὀθονίοισι μαλθακοῖσι, μὴ ὀλίγοισι, μηδὲ ἄγαν πιέζοντα οὕτω δὲ τὰς περιαγωγὰς ποιέεσθαι τῆς ἐπιδέσιος, ὥσπερ καὶ τῆσι χερσὶν ἢ κατόρθωσις ἦν τοῦ ποδὸς, ὅκως ὁ πούς ὀλίγῳ μᾶλλον ἐς τὸ βλαισὸν

ρέπων φαίνηται. Ἴχνος δέ τι χρή ποιέεσθαι, ἢ δέρματος μὴ ἄγαν σκληροῦ, ἢ μολύβδινον, προσεπιδεῖν δὲ, μὴ πρὸς τὸν χρῶτα τιθέντα, ἀλλ' ὅταν ἤδη τοῖσιν ὑστάτοισιν ὀθονίοισι μέλλης ἐπιδέειν ὅταν δὲ ἤδη ἐπιδεδεμένος ἔη, ἐνός τινος τῶν ὀθονίων χρή, οἷσιν ἐπιδέεται, τὴν ἀρχὴν προσράψαι πρὸς τὰ κάτω τοῦ ποδὸς ἐπιδέσματα κατὰ τὴν ἴξιν τοῦ μικροῦ δακτύλου ἔπειτα ἐς τὸ ἄνω τείνοντα, ὅπως ἂν δοκέη μετρίως ἔχειν, περιβάλλειν ἄνωθεν τῆς γαστροκνημῆς, ὡς μόνιμον ἔη, κατατεταγμένον οὕτως. Ἀπλῶ δὲ λόγῳ, ὡσπερ κηροπλαστέοντα, χρή ἐς τὴν φύσιν τὴν δικαίην ἄγειν καὶ τὰ ἐκκεκλιμένα καὶ τὰ συντεταμένα παρὰ τὴν φύσιν, καὶ τῆσι χερσὶν οὕτω διορθοῦντα, καὶ τῆ ἐπιδέσει ὡσαύτως, προσάγειν δὲ οὐ βιαίως, ἀλλὰ παρηγορικῶς προσράπτειν δὲ τὰ ὀθόνια, ὅπως ἂν συμφέρη τὰς ἀναλήψιας ποιέεσθαι, ἄλλα γὰρ ἄλλης τῶν χλωμάτων δέεται ἀναλήψιος. Ὑποδημάτιον δὲ ποιέεσθαι μολύβδινον, ἔξωθεν τῆς ἐπιδέσεως

ἐπιδεδεμένον, οἷον αἱ χῆαι κρηπίδες ῥυθμὸν εἶχον ἀλλ' οὐδὲν αὐτοῦ δεῖ, ἢν τις ὀρθῶς μὲν τῆσι χερσὶ διορθώσῃ, ὀρθῶς δὲ τοῖσιν ὀθονίοισιν ἐπιδέῃ, ὀρθῶς δὲ καὶ τὰς ἀναλήψιας ποιοῖτο. Ἡ μὲν οὖν ἦσις αὕτη, καὶ οὔτε τομῆς, οὔτε καύσιος οὐδὲν δεῖ, οὔτ' ἄλλης ποικιλίης θᾶσσον γὰρ ἐνακούει τὰ τοιαῦτα τῆς ἰητρείης, ἢ ὡς ἂν τις οἶοιτο. Προσνικᾶν μέντοι χρή τῷ χρόνῳ, ἕως ἂν ἀυξηθῇ τὸ σῶμα ἐν τοῖσι δικαίοισι σχήμασιν. Ὅταν δὲ ἐς ὑποδήματος λόγον ἦ, ἀρβύλαι ἐπιτηδειόταται αἱ πηλοπάτιδες καλεόμεναι τοῦτο γὰρ ὑποδημάτων ἤκιστα κρατέεται ὑπὸ τοῦ ποδὸς, ἀλλὰ κρατέει μᾶλλον ἐπιτήδειος δὲ καὶ ὁ κρητικὸς τρόπος τῶν ὑποδημάτων.

63. Ὅσοισι δ' ἂν κνήμης ὀστέα ἐξαρθήσαντα καὶ ἔλκος

ποιήσαντα τελείως ἐξίσχη κατὰ τὰ παρὰ τὸν πόδα ἄρθρα, εἴτε ἔσω ῥέψαντα, εἴτε μέντοι καὶ ἔξω, τὰ τοιαῦτα μὴ ἐμβάλλειν, ἀλλ' ἔἴαν τὸν βουλόμενον τῶν ἰητρῶν ἐμβάλλειν. Σαφέως γὰρ εἰδέναι χρή, ὅτι ἀποθανεῖται, ὃ ἂν ἐμβληθέντα ἐμμεῖνη, καὶ ἡ ζωὴ δὲ ὀλιγήμερος τουτέοισι γενήσεται ὀλίγοι γὰρ ἂν αὐτέων τὰς ἐπτὰ ἡμέρας ὑπερβάλλοιεν σπασμὸς γὰρ ὁ κτείνων ἐστίν ἀτὰρ καὶ γαγγραινοῦσθαι ἰκνέεται τὴν κνήμην καὶ τὸν πόδα. Ταῦτα βεβαίως εἰδέναι χρή οὕτως ἐσόμενα καὶ οὐκ ἂν μοι δοκέει οὐδὲ ἐλλέβορος ὠφελήσειν, αὐθημερόν τε δοθεὶς, καὶ αὐθις πινόμενος, ἄγγιστα δὲ, εἴπερ τι τοιοῦτον οὐ μέντοι γε οὐδὲ τοῦτο δοκέω. Ἦν δὲ μὴ ἐμβληθῇ, μηδ' ἀπ' ἀρχῆς μηδεὶς πειρηθῇ ἐμβάλλειν, περιγίνονται οἱ πλεῖστοι αὐτέων. Χρὴ δὲ ἠρμόσθαι μὲν τὴν κνήμην καὶ τὸν πόδα οὕτως, ὡς αὐτὸς ἐθέλει, μῦνον δὲ, μὴ ἀπηρωμένα, μηδὲ κινεύμενα ἔστω ἰητρεύειν δὲ πισσηρῇ καὶ σπλήνεσιν οἰνηροῖσιν, ὀλίγοισι, μὴ ἄγαν ψυχροῖσι, ψῦχος γὰρ ἐν τοῖσι

τοιούτοισι σπασμὸν ἐπικαλέεται ἐπιτήδεια δὲ καὶ φύλλα σεύτλων, ἢ βηχίου, ἢ ἄλλου τινὸς τῶν τοιουτέων, ἐν οἴνῳ μέλανι αὐστηρῶ ἡμίεφθα ἐπιτιθέντα ἰητρεύειν ἐπὶ τε τὸ ἔλκος, ἐπὶ τε τὰ περιέχοντα, κηρωτῆ δὲ χλιερῆ ἐπιχρίειν αὐτὸ τὸ ἔλκος ἦν δὲ ἡ ὥρη χειμερινῆ ἔη, καὶ ἔρια ῥυπαρὰ οἴνῳ καὶ ἐλαίῳ καταρραίνοντα χλιεροῖσιν ἄνωθεν ἐπιτέγγειν καταδεῖν δὲ μηδὲν μηδενί, μηδε περιπλάσσειν εὖ γὰρ εἰδέναι χρῆ, ὅτι πίεξις καὶ ἀχθοφορὴ πᾶν κακὸν τοῖσι τοιούτοισιν ἐστίν. Ἐπιτήδεια δὲ πρὸς τὰ τοιαῦτα καὶ τῶν ἐναίμων μετεξέτερα, ὅσοισιν αὐτῶν ζυμφέρει ἔρια δὲ ἐπιτιθέντα, οἴνῳ ἐπιτέγγοντα, πουλὺν χρόνον ἔξω τὰ δὲ ὀλιγημερώτατα τῶν ἐναίμων, καὶ ὅσα ῥητίνη προσκαταλαμβάνεται, οὐχ ὁμοίως ἐπιτήδεια ἐκείνοισιν ἐστίν χρονίη γὰρ ἡ κάθαρσις τῶν ἐλκῶν γίνεται τούτων πουλὺν γὰρ χρόνον πλαδαρῆ γίνεται τινὰς δὲ τούτων ἀγαθὸν ἐπιδέειν. Εἰδέναι μὲν δὴ που σάφα χρῆ, ὅτι ἀνάγκη τὸν ἄνθρωπον χολὸν αἰσχροῶς γενέσθαι καὶ γὰρ ὁ πούς ἐς τὸ ἄνω ἀνέσπασται τῶν τοιούτων, καὶ τὰ ὀστέα

τὰ διολισθήσαντα ἔξω ἐξέχοντα φαίνεται οὔτε γὰρ ψιλοῦται τῶν τοιούτων ὀστέων οὐδὲν ὡς ἐπὶ τὸ πουλὺ, εἰ μὴ κατὰ βραχὺ τι, οὔτε ἀφίσταται, ἀλλὰ περιωτειλοῦται λεπτῆσιν ὠτειλῆσι καὶ ἀσθενέσι, καὶ ταῦτα, ἦν ἀτρεμίζωσι πουλὺν χρόνον ἦν δὲ μὴ, ἐλκύδριον ἐγκαταλειφθῆναι κίνδυνος ἀναλθές. Ὅμως δὲ, περὶ οὗ ὁ λόγος, οὔτω μὲν ἰητρευόμενοι σώζονται, ἐμβληθέντος δὲ τοῦ ἄρθρου καὶ ἐμμείναντος, ἀποθνήσκουσιν.

64. Ὡτὸς δὲ λόγος οὗτος, ἦν καὶ τὰ τοῦ πήχεος ὀστέα τὰ παρὰ τὸν καρπὸν τῆς χειρὸς ἔλκος ποιήσαντα ἐξίσχη, ἦν τε ἐς τὸ ἔσω μέρος τῆς χειρὸς, ἦν τε ἐς τὸ ἔξω. Σάφα γὰρ ἐπίστασθαι χρῆ, ὅτι ἀποθανεῖται ἐν ὀλίγησιν ἡμέρησι τοιούτῳ θανάτῳ, οἷωπερ καὶ πρόσθεν εἴρηται, ὅτῳ ἂν ἐμβληθέντα τὰ ὀστέα ἐμμεῖνη. Οἷσι δ' ἂν μὴ ἐμβληθῆ, μηδὲ πειρηθῆ ἐμβάλλεσθαι, οὔτοι πολὺ πλείονες περιγίνονται ἰητρείῃ δὲ τοιαύτῃ τοῖσι τοιουτέοισιν ἐπιτηδεῖη, οἷηπερ εἴρηται τὸ δὲ σχῆμα αἰσχροὺ τοῦ χολώματος ἀνάγκη εἶναι, καὶ τοὺς δακτύλους τῆς χειρὸς ἀσθενέας καὶ ἀχρηῖους ἦν μὲν γὰρ ἐς τὸ ἔσω μέρος ὀλίσθη τὰ ὀστέα, ξυγκάμπτειν οὐ δύνανται τοὺς δακτύλους ἦν δὲ ἐς τὸ ἔξω μέρος, ἐκτανύειν οὐ δύνανται.

65. Ὅσοισι δ' ἂν κνήμης ὀστέον, ἔλκος ποιησάμενον παρὰ τὸ

γόνυ, ἔξω ἐξίσχη, ἦν τε ἐς τὸ ἔξω μέρος, ἦν τε ἐς τὸ ἔσω, τούτοισιν ἦν μὲν τις ἐμβάλῃ, ἔτι ἐτοιμότερος ὁ θάνατός ἐστίν, ἢπερ τοῖσιν ἐτέροισι, καίπερ κάκεινοισιν ἔτοιμος ἐών. Ἦν δὲ μὴ ἐμβάλων ἰητρεύης, ἐλπίδες μὲν σωτηρίας οὔτω μόνως εἰσίν. Κινδυνωδέστερα δὲ ταῦτα τῶν ἐτέρων γίνεται, ὅσῳ ἂν



άνωτέρω, καὶ ὄσῳ ἂν ἰσχυρότερα ἔη, καὶ ἀπὸ ἰσχυροτέρων ὠλισθήκη. Ἦν δὲ τὸ ὀστέον τὸ τοῦ μηροῦ τὸ πρὸς τοῦ γόνατος ἔλκος ποιησάμενον ἐξολίσθη, ἐμβληθὲν μὲν καὶ ἐμμεῖναν, ἔτι βιαιότερον καὶ θᾶσσον τὸν θάνατον ποιήσει τῶν πρόσθεν εἰρημένων μὴ ἐμβληθὲν δὲ, πουλὸν κινδυνωδέστερον, ἢ τὰ πρόσθεν ὅμως δὲ μούνη ἐλπίς αὕτη σωτηρίας.

66. Ωὗτος δὲ λόγος καὶ περὶ τῶν κατὰ τὸν ἀγκῶνα ἄρθρων, καὶ περὶ τῶν τοῦ πήχεος καὶ βραχίονος ἃ γὰρ ἂν τούτων ἐξαρθήσαντα ἐξίσχη ἔλκος ποιησάμενα, πάντα, ἢν ἐμβληθῆ, θάνατον φέρει, μὴ ἐμβληθέντα δὲ, ἐλπίδα σωτηρίας χῶλωσις δὲ ἐτοίμη τοῖσι περιγενομένοιςιν. Θανατωδέστερα δὲ τοῖσιν ἐμβαλλομένοιςιν. ἐστὶ τὰ ἄνωτέρω τῶν ἄρθρων, ἀτὰρ καὶ τοῖσι μὴ ἐμβαλλομένοιςιν κινδυνωδέστερα αὐτὰ ταῦτα. Εἰ δὲ τινὶ τὰ ἀνώτατα ἄρθρα ἐξαρθήσαντα,

ἔλκος ποιήσαντα, ἐξίσχοι, ταῦτα ἂν ἔτι καὶ ἐμβαλλόμενα ταχυθανατώτατα εἴη, καὶ μὴ ἐμβαλλόμενα κινδυνωδέστατα ἰητρείη δὲ ἤδη εἴρηται, οἷη τις ἐμοὶ δοκέει ἐπιτηδειοτάτη εἶναι τῶν τοιουτέων.

67. Ὅσοισι δὲ ἄρθρα δακτύλων, ἢ ποδὸς ἢ χειρὸς, ἐξαρθήσαντα, ἔλκος ποιήσαντα, ἐξέσχε, μὴ κατηγότος τοῦ ὀστέου, ἀλλὰ κατ' αὐτὴν τὴν ξύμφυσιν ἀποσπασθέντος, τούτοιςιν ἢν ἐμβληθέντα ἐμμεῖνη, ἐνὶ μὲν τις κίνδυνος σπασμοῦ, ἢν μὴ χρηστῶς ἰητεύωνται ὅμως δὲ τι ἄξιον ἐμβάλλειν, προειπόντα ὅτι φυλακῆς πολλῆς καὶ μελέτης δέεται. Ἐμβάλλειν μέντοι ῥήιστον καὶ δυνατώτατον καὶ τεχνικώτατόν ἐστὶ τῷ μοχλίσκῳ, ὥσπερ καὶ πρόσθεν εἴρηται ἐν τοῖσι καταγνυμένοιςιν καὶ ἐξίσχουσιν ὀστέοιςιν ἔπειτα ἀτρεμέειν ὡς μάλιστα χρή, καὶ κατακεῖσθαι, καὶ ὀλιγοσιτέειν ἄμεινον δὲ καὶ φαρμακεῦσαι ἄνω κούφῳ τινὶ φαρμάκῳ τὸ δὲ ἔλκος, ἰητεύειν μὲν ἢ ἐναίμοισι τοῖσιν ἐπιτέγκτοιςιν, ἢ πολυοφθάλμοισιν, ἢ οἷσι κεφαλῆς ὀστέα κατηγότα ἰητεύεται, κατάψυχρον δὲ κάρτα μηδὲν προσφέρειν. Ἦκιστα μὲν οὖν τὰ πρῶτα ἄρθρα κινδυνώδεά ἐστὶ, τὰ δὲ ἔτι ἄνωτέρω κινδυνωδέστερα. Ἐμβάλλειν δὲ χρή αὐθημερόν, ἢ τῇ ὑστεραίῃ,

τριταίῳ δὲ ἢ τεταρταίῳ ἦκιστα τεταρταῖα γὰρ ἐόντα, ἐπισημαίνει τῆσι παλιγκοτήσι μάλιστα. Οἷσιν ἂν οὖν μὴ αὐτίκα ἐγγένηται ἐμβάλλειν, ὑπερβαίνειν χρή ταύτας τὰς εἰρημένας ἡμέρας ὅ τι γὰρ ἂν ἔσω δέκα ἡμερέων ἐμβάλλης, σπᾶν καταληπτέον. Ἦν δὲ ἄρα ἐμβεβλημένῳ σπασμὸς ἐπιγένηται, ἐκβάλλειν τὸ ἄρθρον δεῖ ταχὺ, καὶ θερμῷ τέγγειν ὡς πλειστάκις, καὶ τὸ ὅλον σῶμα θερμῶς καὶ λιπαρῶς καὶ μαλθακῶς ἔχειν, καὶ μάλιστα κατὰ τὰ ἄρθρα κεκάμφθαι δὲ μᾶλλον ἢ ἐκτετάσθαι πᾶν τὸ σῶμα χρή. Προσδέχεσθαι μέντοι χρή κατὰ τοὺς δακτύλους τὰ ἄρθρα τὰ ἐμβαλλόμενα ἀποστατικὰ ἔσεσθαι τὰ γὰρ πλεῖστα οὕτω γίνεται, ἢν καὶ ὀτιοῦν φλεγμονῆς ὑπογένηται, ὡς, εἰ μὴ δι' ἀμαθίην τῶν δημοτέων ἐν αἰτίῃ

ἔμελλεν ὁ ἰητρὸς ἔσεσθαι, οὐδὲν ἂν πάντως οὐδ' ἐμβάλλειν ἔδει. Τὰ μὲν οὖν κατὰ τὰ ἄρθρα ὅστέα ἐξίσχοντα ἐμβαλλόμενα οὕτω κινδυνώδεά ἐστιν, ὡς εἴρηται.

68. Ὅσα δὲ κατὰ τὰ ἄρθρα τὰ κατὰ τοὺς δακτύλους ἀποκόπτεται τελείως, ταῦτα ἀσινέα τὰ πλεῖστά ἐστιν, εἰ μὴ τις ἐν αὐτῇ τῇ τρώσει λειποθυμήσας βλαβεῖη καὶ ἰητρείη φαύλη ἀρκέσει τῶν τοιούτων ἐλκέων. Ἄτὰρ καὶ ὅσα μὴ κατὰ τὰ ἄρθρα, ἀλλὰ κατ' ἄλλην τινὰ ἴξιν τῶν ὀστέων ἀποκόπτεται, καὶ ταῦτα ἀσινέα ἐστὶ, καὶ ἔτι εὐαλθέστερα τῶν ἐτέρων καὶ ὅσα κατὰ τοὺς δακτύλους ὅστέα κατεηγότα ἐξίσχει μὴ κατὰ τὸ ἄρθρον, καὶ ταῦτα ἀσινέα ἐστὶν ἐμβαλλόμενα. Ἀποκόψεις δὲ τέλειαι ὀστέων καὶ κατὰ τὰ ἄρθρα καὶ ἐν ποδὶ, καὶ ἐν χειρὶ, καὶ ἐν κνήμῃ, τοῖσι παρὰ τὰ σφυρὰ, καὶ ἐν πήχεϊ, τοῖσι παρὰ τοὺς καρπούς, τοῖσι πλείστοισιν ἀποκοπτομένοισιν ἀσινέα γίνεται, ὅσα ἂν μὴ αὐτίκα λειποθυμῆ ἀνατρέψῃ, ἢ τεταρταίοισιν ἐοῦσι πυρετὸς ζυνεχῆς ἐπιγένηται.

69. Ἀποσφακελίσιες μέντοι σαρκῶν, καὶ ἐν τρώμασιν αἱμορροίοισι γενομένοισιν ἀποσφιγθεῖσιν ἰσχυρῶς, καὶ ἐν ὀστέων κατήγμασι πιεχθεῖσι μᾶλλον τοῦ καιροῦ, καὶ ἐν ἄλλοισι δεσμοῖσι βιαιόισιν ἀποληφθέντα ἀποπίπτει πολλοῖσι, καὶ οἱ πολλοὶ περιγίνονται τῶν τοιούτων, καὶ οἷσι μηροῦ μέρος τι ἀποπίπτει, καὶ τῶν σαρκῶν καὶ τοῦ ὀστέου, καὶ οἷσι βραχίονος, ἧσσαν δὲ πήχεός τε καὶ κνήμης ἀποπεσούσης, καὶ ἔτι εὐφόρως περιγίνονται. Οἷσι μὲν οὖν, κατεαγόντων τῶν ὀστέων, ἀποσφίγξιες αὐτίκα ἐγένοντο καὶ μελασμοὶ, τούτοισι μὲν ταχεῖαι αἱ περιρρήξιες γίνονται τοῦ

σώματος, καὶ τὰ ἀποπίπτοντα ταχέως ἀποπίπτει, ἤδη τῶν ὀστέων προενδεδωκότων οἷσι δὲ, ὑγιέων ἐόντων τῶν ὀστέων, οἱ μελασμοὶ γίνονται, αἱ μὲν σάρκες ταχέως θνήσκουσι καὶ τούτοισι, τὰ δὲ ὀστέα βραδέως ἀφίσταται, ἢ ἂν τὰ ὅρια τοῦ μελασμοῦ γένηται καὶ ἡ ψίλωσις τοῦ ὀστέου. Χρῆ δὲ, ὅσα ἂν κατωτέρω τοῦ σώματος τῶν ὀρίων τοῦ μελασμοῦ ἔη, ταῦτα, ὅταν ἤδη πάμπαν τεθνήκη καὶ ἀναλγέα ἔη, ἀφαιρέειν κατὰ τὸ ἄρθρον, προμηθεόμενον ὅπως μὴ τιτρώσκη ἦν γὰρ ὀδυνηθῆ ἀποταμνόμενος, καὶ μήπω κυρήση τὸ σῶμα τεθνεὸς ταύτη, ἢ ἀποτέμνεται, κάρτα κίνδυνος ὑπὸ τῆς ὀδύνης λειποθυμῆσαι αἱ δὲ τοιαῦται λειποθυμῖαι πολλοὺς παραχρῆμα ἤδη ἀπώλεσαν. Μηροῦ μὲν οὖν ὀστέον, ψιλωθὲν ἐκ τοιούτου τρόπου, ὀγδοηκοσταῖον εἶδον ἐγὼ ἀποστάν ἢ μέντοι κνήμη τούτῳ τῷ ἀνθρώπῳ κατὰ τὸ γόνυ ἀφηρέθη εἰκοσταίη, ἐδόκεε δὲ μοι καὶ ἐγγυτέρω οὐ γὰρ ἅμα, ἀλλ' ἐπὶ τὸ προμηθέστερον ἔδοξέ μοι τι ποιέειν. Κνήμης δὲ ὀστέα ἐκ τοιούτου μελασμοῦ, μάλα κατὰ μέσην τὴν κνήμην ἐόντα, ἐξηκοσταῖά μοι ἀπέπεσεν, ὅσα ἐψιλώθη αὐτέων. Διενέγκοι μὲν γὰρ ἂν τι καὶ ἰητρείη ἰητρείης ἐς τὸ θᾶσσόν τε καὶ βραδύτερον τὰ ὀστέα ψιλούμενα

ἀποπίπτειν

διενέγκοι δ' ἄν τι καὶ πίεξις πιέξιος, καὶ ἐπὶ τὸ ἰσχυρότερόν τε καὶ ἀσθενέστερον, καὶ ἐς τὸ θᾶσσόν τε καὶ βραδύτερον ἀπομελανθέντα ἀποθανεῖν τὰ νεῦρα καὶ τὰς σάρκας καὶ τὰς ἀρτηρίας καὶ τὰς φλέβας ἐπεὶ ὅσα μὴ ἰσχυρῶς ἀποληφθέντων θνήσκει, ἔνια τῶν τοιουτέων οὐκ ἀφικνέεται ἐς ὀστέων ψιλώματα, ἀλλ' ἐπιπολαιότερα ἐκπίπτει ἔνια δὲ οὐδὲ ἐς νεύρων ψιλώματα ἀφικνεῖται, ἀλλὰ ἐπιπολαιότερα ἐκπίπτει. Διὰ οὖν ταύτας τὰς εἰρημένας προφάσις οὐκ ἐστὶν ἐν οὖνομα ἀριθμοῦ τῷ χρόνῳ θέσθαι, ἐν ὁκόσῳ ἕκαστα τούτων κρίνεται. Προσδέχεσθαι δὲ μάλα χρὴ τὰ τοιαῦτα ἰήματα ἐσιδέειν γὰρ φοβερώτερα ἐστὶν, ἢ ἰητρεύειν καὶ ἰητρείη πραεὶή ἀρκέει πᾶσι τοιούτοις αὐτὰ γὰρ ἐωυτὰ κρίνει μῦνον τῆς δὲ διαίτης ἐπιμελέεσθαι χρὴ, ὡς κατὰ δύναμιν ἀπύρετος ἔη, καὶ ἐν σχήμασι δικαίοισιν εὐθετίζειν τὸ σῶμα δίκαια δὲ ταῦτα, μηδὲ μετέωρον ποιέειν, μηδὲ ἐς τὸ κάτω ῥέπον, ἀλλὰ μᾶλλον ἐς τὸ ἄνω, ποτὶ καὶ ἔστ' ἄν τελείως περιρραγῆ αἱμορραγιέων γὰρ ἐν τούτῳ τῷ χρόνῳ κίνδυνος διὰ τοῦτο οὖν οὐ χρὴ κατάρροπα τὰ τρώματα ποιέειν, ἀλλὰ τάναντία. Ἐπεὶ ὅταν γε χρόνος ἐγγένηται πλείων, καὶ καθαρὰ τὰ ἔλκεα γένηται, οὐκ ἔτι τὰ αὐτὰ σχήματα ἐπιτήδειά ἐστιν,

ἀλλ' ἢ εὐθεῖα θέσις, καὶ ἐνίοτε ἐπὶ τὸ κατάρροπον ῥέποντα ἀνὰ χρόνον γὰρ ἐνίοισι τοιούτων ἀποστάσις πύου γίνονται, καὶ ὑποδεσμίδων δέονται. Προσδέχεσθαι δὲ χρὴ τοὺς τοιούτους ἀνὰ χρόνον ὑπὸ δυσεντερίης πιέζεσθαι καὶ γὰρ ἐπὶ τοῖσι μελαιομένοισι τοῖσι πλείστοις ἐπιγίνεται δυσεντερίη, καὶ ἐπὶ τῆσιν αἱμορραγίησιν ἐξ ἐλκέων ἐπιγίνεται δὲ ὡς ἐπὶ τὸ πολὺ, κεκριμένων ἤδη τῶν μελασμῶν καὶ τῆς αἱμορραγίης, καὶ ὀρμᾶται μὲν λαύρως καὶ ἰσχυρῶς ἀτὰρ οὐτε πολυήμερος γίνεται, οὐτε θανατώδης οὐτε γὰρ μάλα ἀπόσιτοι γίνονται οἱ τοιοῦτοι, οὐτε ἄλλως ζυμφέρει κενεαγγείν.

70. Μηροῦ δὲ ὀλίσθημα κατ' ἰσχίον ὧδε χρὴ ἐμβάλλειν, ἣν ἐς τὸ ἔσω μέρος ὠλισθήκη ἀγαθὴ μὲν ἦδε καὶ δικαίη καὶ κατὰ φύσιν ἢ ἐμβολή, καὶ δὴ τι καὶ ἀγωνιστικὸν ἔχουσα, ὅστις γε τοῖσι τοιούτοις ἦδετα κομψευόμενος. Κρεμάσαι χρὴ τὸν ἄνθρωπον τῶν ποδῶν πρὸς μεσόδμην δεσμῶ δυνατῶ μὲν, μαλθακῶ δὲ καὶ πλάτος ἔχοντι τοὺς δὲ πόδας διέχειν χρὴ, ὅσον τέσσαρας δακτύλους ἀπ' ἀλλήλων, ἢ καὶ ἔλασσον χρὴ δὲ καὶ ἐπάνωθεν τῶν ἐπιγουνίδων προσπεριβεβλησθαι πλαῖ ἱμάντι καὶ μαλθακῶ,

ἀνατείνοντι ἐς τὴν μεσόδμην τὸ δὲ σκέλος τὸ σιναρὸν ἐντετάσθαι χρὴ ὡς δύο δακτύλους μᾶλλον τοῦ ἐτέρου ἀπὸ δὲ τῆς γῆς τὴν κεφαλὴν ἀπεχέτω ὡς δύο πήχεις, ἢ ὀλίγω πλέον, ἢ ἔλασσον τὰς δὲ χεῖρας παρατεταμένας παρὰ τὰς πλευρὰς προσδεδεμένος ἔστω μαλθακῶ τινι πάντα δὲ ταῦτα ὑπτίῳ κατακειμένῳ

κατασκευασθήτω, ὡς ὅτι ἐλάχιστον χρόνον κρέμηται. Ὅταν δὲ κρεμασθῆ, ἄνδρα χρή εὐπαίδευτον καὶ μὴ ἀσθενέα, ἐνείραντα τὸν πῆχυν μεσηγὺ τῶν μηρῶν, εἶτα θέσθαι τὸν πῆχυν μεσηγὺ τοῦ περιπέου καὶ τῆς κεφαλῆς τοῦ μηροῦ τῆς ἐξεστηκυῖης, ἔπειτα ξυνάψαντα τὴν ἐτέρην χεῖρα πρὸς τὴν διηρμένην, παραστάντα ὀρθὸν παρὰ τὸ σῶμα τοῦ κρεμαμένου, ἐξαπίνης ἐκκρεμασθέντα, μετέωρον αἰωρηθῆναι ὡς ἰσορροπώτατον. Αὕτη δὲ ἡ ἐμβολὴ παρέχεται πάντα, ὅσα χρή κατὰ φύσιν αὐτό τε γὰρ τὸ σῶμα, κρεμάμενον, τῷ ἐωυτοῦ βάρει κατάτασιν ποιέεται, ὃ τε ἐκκρεμασθεὶς ἅμα μὲν τῇ κατατάσει ἀναγκάζει ὑπεραιωρέεσθαι

τὴν κεφαλὴν τοῦ μηροῦ ὑπὲρ τῆς κοτύλης, ἅμα δὲ τῷ ὀστέῳ τοῦ πήχεος ἀπομοχλεύει καὶ ἀναγκάζει ἐς τὴν ἀρχαίην φύσιν ὀλισθάνειν. Χρὴ δὲ παγκάλως μὲν τοῖσι δεσμοῖσιν ἐσκευάσθαι, φρονέοντα δὲ καὶ ὡς ἐχυρώτατον τὸν ἐξαιωρούμενον εἶναι.

71. Ως μὲν οὖν καὶ πρόσθεν εἴρηται, μέγα τὸ διαφέρον ἐστὶ τῶν φύσεων τοῖσιν ἀνθρώποισιν ἐς τὸ εὐέμβλητα εἶναι, καὶ δυσέμβλητα καὶ διότι μέγα διαφέρει, εἴρηται πρόσθεν ἐν τοῖσι περὶ ὤμου. Ἐνίοισι γὰρ ὁ μηρὸς ἐμπίπτει ἀπ' οὐδεμιῆς παρασκευῆς, ἀλλ' ὀλίγης μὲν κατατάσιος, ὅσον τῆσι χερσὶ κατιθῆναι, βραχείης δὲ κιγκλίσιος πολλοῖσι δὲ ξυγκάμψασι τὸ σκέλος κατὰ τὸ ἄρθρον, ἐνέπεσεν, ἤδη ἀμφίσφαλσιν ποιησάμενον. Ἀλλὰ γὰρ τὰ πούλυ πλείω οὐκ ἐνακούει τῆς τυχούσης παρασκευῆς διὰ τοῦτο ἐπίστασθαι μὲν χρή τὰ κράτιστα περὶ ἐκάστου ἐν πάσῃ τῇ τέχνῃ χρέεσθαι δὲ, οἷσιν ἂν δόξη ἐκάστοτε. Εἴρηνται μὲν οὖν τρόποι κατατασίων καὶ ἐν τοῖσιν ἔμπροσθεν γεγραμμένοις, ὥστε χρέεσθαι τούτων, ὅστις ἂν παρατύχη. Δεῖ γὰρ ἀντικατατετάσθαι ἰσχυρῶς, ἐπὶ θάτερα μὲν τοῦ σκέλεος, ἐπὶ θάτερα δὲ τοῦ

σώματος ἦν γὰρ εὖ καταταθῆ, ὑπεραιωρηθήσεται ἡ κεφαλὴ τοῦ μηροῦ ὑπὲρ τῆς ἀρχαίης ἔδρης καὶ ἦν μὲν ὑπεραιωρηθῆ οὕτως, οὐδὲ κωλύσαι ἔτι ῥήϊδιον ἴζεσθαι αὐτὴν ἐς τὴν ἐωυτῆς ἔδρην, ὥστε ἤδη πᾶσα ἀρκέει μόχλευσίς τε καὶ κατόρθωσις ἀλλὰ γὰρ ἐλλείπουσιν ἐν τῇ κατατάσει διὰ τοῦτο ὄχλον πλείω παρέχει ἡ ἐμβολή. Χρὴ οὖν οὐ μόνον παρὰ τὸν πόδα τὰ δεσμὰ ἐξηρτηθῆναι, ἀλλὰ καὶ ἄνωθεν τοῦ γούνατος, ὅπως μὴ κατὰ τὸ τοῦ γούνατος ἄρθρον ἐν τῇ τανύσει ἡ ἐπίδεις ἐῆ μᾶλλον, ἢ κατὰ τὸ τοῦ ἰσχίου ἄρθρον. Οὕτω μὲν οὖν χρή τὴν κατάτασιν, τὴν πρὸς τὸ τοῦ ποδὸς μέρος, ἐσκευάσθαι ἀτὰρ καὶ τὴν ἐπὶ θάτερα κατάτασιν, μὴ μόνον ἐκ τῆς περὶ τὸ στῆθος καὶ τὰς μασχάλας περιβολῆς ἀντιτείνεσθαι, ἀλλὰ καὶ ἱμάντι μακρῷ, διπτύχῳ, ἰσχυρῷ, προσηνεῖ, παρὰ τὸν περίνεον βεβλημένῳ, παρατεταμένῳ ἐπὶ μὲν τὰ ὀπισθεν παρὰ τὴν ῥάχιν, ἐπὶ δὲ τὰ ἔμπροσθεν παρὰ τὴν κληῖδα, προσηρτημένῳ πρὸς τὴν ἀρχὴν τὴν ἀκτικατατείνουσαν, οὕτω

διαναγκάζεσθαι, τοῖσι μὲν ἔνθα διατεινομένοισι, τοῖσι δὲ ἔνθα, ὅκως δὲ ὁ ἰμάς ὁ παρὰ τὸν περινεὸν μὴ περὶ τὴν κεφαλὴν τοῦ μηροῦ παρατεταμένος ἔσται, ἀλλὰ μεσηγὺ τῆς κεφαλῆς καὶ τοῦ περινεοῦ ἐν δὲ τῇ κατάτασει, κατὰ μὲν τὴν κεφαλὴν τοῦ μηροῦ ἐρείσας

τὴν πυγμὴν, ἐς τὸ ἔξω ὠθεέτω ἢν δὲ μετεωρίζεται ἐλκόμενος, διέρσας τὴν χεῖρα καὶ ἐπιξυνάψας τῇ ἐτέρῃ χειρὶ, ἅμα μὲν συγκατατεινέτω, ἅμα δὲ ἐς τὸ ἔξω ξυναναγκαζέτω ἄλλος δὲ τις τὸ παρὰ τὸ γόνυ τοῦ μηροῦ ἡσύχως ἐς τὸ ἔσω μέρος κατορθούτω.

72. Εἴρηται δὲ καὶ πρόσθεν ἤδη, ὅτι ἐπάξιον, ὅστις ἐν πόλει πολυανθρώπων ἰητρεύει, ξύλον κεκτῆσθαι τετράγωνον, ὡς ἐξάπηχυ ἢ ὀλίγω μέζον, εὖρος δὲ, ὡς δίπηχυ, πάχος δὲ, ἀρκέει σπιθαμιαῖον ἔπειτα κατὰ μῆκος μὲν, ἔνθεν καὶ ἔνθεν ἐντομὴν ἔχειν χρῆ, ὡς μὴ ὑψηλοτέρη τοῦ καιροῦ ἢ μηχανήσις ἔῃ ἔπειτα φλιας βραχείας, ἰσχυράς, καὶ ἰσχυρῶς ἐνηρμοσμένας, ὀνίσκον ἔχειν ἐκατέρωθεν ἔπειτα ἀρκέει μὲν ἐν τῷ ἡμίσει τοῦ ξύλου

οὐδὲν δὲ κωλύει καὶ διὰ παντὸς ἐντεμῆσθαι ὡς καπέτους μακρὰς πέντε ἢ ἕξ, διαλείπουσας ἀπ' ἀλλήλων ὡς τέσσαρας δακτύλους, αὐτὰς δὲ ἀρκέει εὖρος τριδακτύλους εἶναι, καὶ βάθος οὕτως. Ἔχειν δὲ κατὰ μέσον τὸ ξύλον καὶ καταγλυφὴν χρῆ βαθυτέραν, ἐπὶ τετράγωνον, ὡς τριῶν δακτύλων, καὶ ἐς μὲν τὴν καταγλυφὴν ταύτην, ὅταν δοκέῃ προσδεῖν, ξύλον ἐμπηγνύναι ἐναρμόζον τῇ καταγλυφῇ, τὸ δὲ ἄνω στρογγύλον, ἐμπηγνύναι δὲ, ἐπὶν ποτε δοκέῃ ξυμφέρειν, μεσηγὺ τοῦ περινεοῦ καὶ τῆς κεφαλῆς τοῦ μηροῦ. Τοῦτο τὸ ξύλον ἐστεὸς κωλύει τὴν ἐπίδοσιν ἐπιδιδόναι τὸ σῶμα τοῖσι πρὸς ποδῶν ἔλκουσιν ἐνίοτε γὰρ ἀρκέει αὐτὸ τὸ ξύλον τοῦτο ἀντὶ τῆς ἄνωθεν ἀντικατατάσιος ἐνίοτε δὲ καὶ, κατατεινομένου τοῦ σκέλεος ἔνθεν καὶ ἔνθεν, αὐτὸ τὸ ξύλον τοῦτο, χαλαρὸν ἐγκείμενον ἢ τῇ ἢ τῇ, ἐκμοχλεύειν ἐπιτήδειον ἂν εἴη τὴν κεφαλὴν τοῦ μηροῦ ἐς τὸ ἔξω μέρος. Διὰ τοῦτο γὰρ καὶ αἱ κάπετοι ἐντεμνέονται, ὡς, καθ' ὁκοίην ἂν αὐτέων ἀρμόση, ἐμβαλλόμενος ξύλινος μοχλὸς μοχλεύοι, ἢ παρὰ τὰς κεφαλὰς τῶν ἄρθρων, ἢ κατὰ τὰς κεφαλὰς τελέως ἐρειδόμενος ἅμα τῇ κατατάσει, ἢν τε ἐς τὸ ἔξω μέρος ξυμφέρῃ ἐκμοχλεύεσθαι, ἢν τε ἐς τὸ ἔσω, καὶ ἢν τε στρογγύλον τὸν μοχλὸν ξυμφέρῃ εἶναι, ἢν τε πλάτος ἔχοντα ἄλλος γὰρ ἄλλω τῶν ἄρθρων ἀρμόζει. Εὐχρηστος δὲ ἐστὶν ἐπὶ πάντων τῶν ἄρθρων ἐμβολῆς, τῶν κατὰ τὰ σκέλεα, αὕτη ἢ

μόχλευσις ξὺν τῇ κατατάσει. Περὶ οὗ οὖν ὁ λόγος ἐστὶ, στρογγύλος ἀρμόζει ὁ μοχλὸς εἶναι τῷ μέντοι ἔξω ἐκπεπτωκότι ἄρθρω πλατὺς ἀρμόσει εἶναι. Ἀπὸ τουτέων τῶν μηχανέων καὶ ἀναγκέων οὐδὲν ἄρθρον μοι δοκέει οἷόν τε εἶναι

ἀπορηθῆναι ἐμπεσεῖν.

73. Εὐροι δ' ἂν τις καὶ ἄλλους τρόπους τούτου τοῦ ἄρθρου ἐμβολῆς εἰ γὰρ τὸ ξύλον τὸ μέγα τοῦτο ἔχοι κατὰ μέσον καὶ ἐκ πλαγίων φλιάς δύο, ὡς ποδιαίας, ὕψος δὲ ὅκως ἂν δοκέοι συμφέρειν, τὴν μὲν ἔνθεν, τὴν δὲ ἔνθεν, ἔπειτα ξύλον πλάγιον ἐνείη ἐν τῆσι φλιῆσιν ὡς κλιμακτῆρ, ἔπειτα διέρσαι τὸ ὑγιὲς σκέλος μεσηγὺ τῶν φλιέων, τὸ δὲ σιναρὸν ἄνωθεν τοῦ κλιμακτῆρος ἔχειν ἀρμόζον ἀπαρτὶ πρὸς τὸ ὕψος καὶ πρὸς τὸ ἄρθρον, ἧ ἐκπέπτωκεν ῥηΐδιον δὲ ἀρμόζειν τὸν γὰρ κλιμακτῆρα ὑψηλότερόν τινα χρῆ ποιέειν τοῦ μετρίου, καὶ ἰμάτιον πολύπτυχον, ὡς ἂν ἀρμόση, ὑποτείνειν ὑπὸ τὸ σῶμα. Ἐπειτα χρῆ ξύλον, ἔχον

πλάτος μέτριον καὶ μῆκος, ἄχρι τοῦ σφυροῦ ὑποτεταμένον ὑπὸ τὸ σκέλος εἶναι, ἰκνεόμενον ἐπέκεινα τῆς κεφαλῆς τοῦ μηροῦ ὡς οἶόν τε προσκαταδεδέσθαι δὲ χρῆ πρὸς τὸ σκέλος, ὅκως ἂν μετρίως ἔχη. Κἄπειτα κατατεινομένου τοῦ σκέλεος, εἴτε ξύλω. ὑπεροειδέϊ, εἴτε τουτέων τινὶ τῶν κατατασίων, ὁμοῦ χρῆ καταναγκάζεσθαι τὸ σκέλος περὶ τὸν κλιμακτῆρα ἐς τὸ κάτω μέρος ζὺν τῷ ξύλω τῷ προσδεδεμένῳ τὸν δὲ τινα κατέχειν τὸν ἄνθρωπον ἄνωτέρω τοῦ ἄρθρου κατὰ τὸ ἰσχίον. Καὶ γὰρ οὕτως ἅμα μὲν ἡ κατάτασις ὑπεραιωρέοι ἂν τὴν κεφαλὴν τοῦ μηροῦ ὑπὲρ τῆς κοτύλης, ἅμα δὲ ἡ μόχλευσις ἀπωθέοι τὴν κεφαλὴν τοῦ μηροῦ ἐς τὴν ἀρχαίην φύσιν. Αὗται πᾶσαι αἱ εἰρημένας ἀνάγκαι ἰσχυραὶ, καὶ πᾶσαι κρέσσους τῆς συμφορῆς, ἣν τις ὀρθῶς καὶ καλῶς σκευάζῃ. Ὡσπερ δὲ καὶ πρόσθεν ἤδη εἴρηται, πούλυ τι ἀπὸ ἀσθενεστέρων κατατασίων καὶ φαυλοτέρας κατασκευῆς τοῖσι πλείοσιν ἐμπίπτει.

74. Ἦν δὲ ἐς τὸ ἔξω κεφαλὴ μηροῦ ὀλίσθη, τὰς μὲν κατατάσιας

ἐνθα καὶ ἐνθα χρῆ ποιέεσθαι, ὡσπερ εἴρηται, ἧ τοιουτοτρόπως τὴν δὲ μόχλευσιν πλάτος ἔχοντι μοχλῶ μοχλεύειν χρῆ ἅμα τῇ κατατάσει, ἐκ τοῦ ἔξω μέρους ἐς τὸ ἔσω ἀναγκάζοντα, κατὰ γε αὐτὸν τὸν γλουτὸν τιθέμενον τὸν μοχλὸν καὶ ὀλίγω ἄνωτέρω ἐπὶ δὲ τὸ ὑγιὲς ἰσχίον κατὰ τὸν γλουτὸν ἀντιστηριζέτω τις τῆσι χερσίν, ὡς μὴ ὑπέικη τὸ σῶμα, ἧ ἑτέρῳ τινὶ τοιούτῳ μοχλῶ, ὑποβάλλον καὶ ἐρείσας, ἐκ τῶν καπέτων τὴν ἀρμόζουσαν ἀντικατεχέτω τοῦ δὲ μηροῦ τοῦ ἐξηρθρηκότος τὸ παρὰ τὸ γόνυ ἔσωθεν ἔξω παραγέτω ἡσύχως. Ἡ δὲ κρέμασις οὐχ ἀρμόσει τούτῳ τῷ τρόπῳ τῆς ὀλισθήσιος τοῦ ἄρθρου ὁ γὰρ πῆχυς τοῦ ἐκκρεμαμένου ἀπωθέοι ἂν τὴν κεφαλὴν τοῦ μηροῦ ἀπὸ τῆς κοτύλης. Τὴν μέντοι ζὺν τῷ ξύλω τῷ ὑποτετεινομένῳ μόχλευσιν μηχανήσαιτ' ἂν τις, ὥστε ἀρμόζειν καὶ τούτῳ τῷ τρόπῳ τοῦ ὀλισθήματος, ἔξωθεν προσαρτέων. Ἀλλὰ τί καὶ δεῖ πλείω λέγειν; ἦν γὰρ ὀρθῶς μὲν καὶ εὖ κατατείνηται, ὀρθῶς δὲ μοχλεύηται, τί οὐκ ἂν ἐμπέσοι ἄρθρον, οὕτως ἐκπεπτωκός;

75. Ἦν δὲ ἐς τοῦπισθεν μέρος ἐκπεπτώκη ὁ μηρὸς, τὰς

μὲν κατατάσιας καὶ ἀντιτάσιας οὕτω δεῖ ποιέεσθαι, καθάπερ εἴρηται ἐπιστορέσαντα δὲ ἐπὶ τὸ ξύλον ἰμάτιον πολύπτυχον, ὡς μαλακώτατον ἔη, πρηνέα κατακλίναντα τὸν ἄνθρωπον, οὕτω κατανείνειν ἅμα δὲ τῇ κατατάσει χρῆ τῇ σανίδι καταναγκάζειν τὸν αὐτὸν τρόπον ὡς τὰ ὑβώματα, κατ' ἴξιν τοῦ πυγαίου ποιησάμενον τὴν σανίδα, καὶ μᾶλλον ἐς τὸ κάτω μέρος, ἢ ἐς τὸ ἄνω τῶν ἰσχίων καὶ ἢ ἐντομή, ἢ ἐν τῷ τοίχῳ τῇ σανίδι, μὴ εὐθεῖα ἔστω, ἀλλ' ὀλίγον καταφερῆς πρὸς τὸ τῶν ποδῶν μέρος. Αὕτη ἡ ἐμβολὴ κατὰ φύσιν τε μάλιστα τῷ τρόπῳ τούτῳ τοῦ ὀλισθήματός ἐστι, καὶ ἅμα ἰσχυροτάτη. Ἀρκέσειε δ' ἂν ἴσως ἀντὶ τῆς σανίδος καὶ ἐφεζόμενόν τινα, ἢ τῆσι χερσὶν ἐρεισάμενον, ἢ ἐπιβάντα, ἐξαπίνης ἐπαιωρηθῆναι ἅμα τῇ κατατάσει. Ἄλλη δὲ οὐδεμίη ἐμβολὴ τῶν προειρημένων κατὰ φύσιν ἐστὶ τῷ τρόπῳ τούτῳ τοῦ ὀλισθήματος.

76. Ἦν δὲ ἐς τὸ ἔμπροσθεν ὀλίσθη, τῶν μὲν κατατασίων ὁ αὐτὸς τρόπος ποιητέος, ἄνδρα δὲ χρῆ ὡς ἰσχυρότατον ἀπὸ χειρῶν καὶ ὡς εὐπαιδευτότατον, ἐνερείσαντα τὸ θέναρ τῆς χειρὸς τῆς ἐτέρης παρὰ τὸν βουβῶνα, καὶ τῇ ἐτέρῃ χειρὶ τὴν ἐωυτοῦ χεῖρα προσκαταλαβόντα, ἅμα μὲν ἐς τὸ κάτω ὠθέειν τὸ

ὀλίσθημα, ἅμα δὲ ἐς τὸ ἔμπροσθεν τοῦ γούνατος μέρος. Οὗτος γὰρ ὁ τρόπος τῆς ἐμβολῆς μάλιστα κατὰ φύσιν τούτῳ τῷ ὀλισθήματί ἐστιν. Ἀτὰρ καὶ ὁ κρεμασμὸς ἐγγύς τι τοῦ κατὰ φύσιν δεῖ μέντοι τὸν ἐκκρεμάμενον ἔμπειρον εἶναι, ὡς μὴ ἐκμοχλεῦν τῷ πῆχεϊ τὸ ἄρθρον, ἀλλὰ περὶ μέσον τὸν περίνεον καὶ κατὰ τὸ ἱερὸν ὅστέον τὴν ἐκκρέμασιν ποιέηται.

77. Εὐδοκιμέει δὲ δὴ καὶ ἀσκῶ τοῦτο τὸ ἄρθρον ἐμβάλλεσθαι καὶ ἤδη μὲν τινὰς εἶδον, οἵτινες ὑπὸ φαυλότητος καὶ τὰ ἔξω ἐκκεκλιμένα καὶ τὰ ὀπισθεν ἀσκῶ ἐπειρῶντο ἐμβάλλειν, οὐ γινώσκοντες, ὅτι ἐξέβαλλον αὐτὸ μᾶλλον, ἢ ἐνέβαλλον ὁ μέντοι πρῶτος ἐπινοήσας δῆλον ὅτι πρὸς τὰ ἔσω ὠλισθηκότα, ἀσκῶ ἐμβάλλειν ἐπειρήσατο. Ἐπίστασθαι μὲν οὖν χρῆ, ὡς χρηστότεον ἀσκῶ, εἰ δέοι χρέεσθαι, διαγινώσκειν δὲ χρῆ, ὅτι ἕτερα πολλὰ ἀσκοῦ κρέσσω ἐστὶν χρῆ δὲ τὸν μὲν ἀσκὸν κατατιθέναι ἐς τοὺς μηροὺς ἀφύσητον ἐόντα, ὡς ἂν δύναιτο, ἀνωτάτω πρὸς τὸν περίνεον ἀνάγοντα ἀπὸ δὲ τῶν ἐπιγουνίδων ἀρξάμενον, ταινίη πρὸς ἀλλήλους τοὺς μηροὺς καταδῆσαι ἄχρι τοῦ ἡμίσεος τῶν μηρῶν ἔπειτα ἐς ἓνα τῶν ποδῶν, τὸν λελυμένον, ἐνθέντα αὐλὸν ἐκ χαλκείου, φῦσαν ἐσαναγκάζειν ἐς τὸν ἀσκὸν τὸν δὲ ἄνθρωπον

πλάγιον κατακέεσθαι. τὸ σιναρὸν σκέλος ἐπιπολῆς ἔχοντα. Ἡ μὲν οὖν παρασκευὴ αὕτη ἐστὶν σκευάζονται δὲ κάκιον οἱ πλειῖστοι, ἢ ὡς ἐγὼ εἴρηκα οὐ

γὰρ καταδέουσι τοὺς μηροὺς ἐπὶ συχνὸν, ἀλλὰ μοῦνον τὰ γούνατα. οὐδὲ κατατείνουσι, χρὴ δὲ καὶ προσκατατείνειν ὅμως δὲ ἤδη τινὲς ἐνέβαλον, ρηϊδίου πρήγματος ἐπιτυχόντες. Εὐφόρος δὲ οὐ πάνυ ἔχει διαναγκάζεσθαι οὕτως ὁ τε γὰρ ἄσκος, ἐμφυσώμενος, οὐ τὰ ὀγκηρότατα αὐτοῦ ἔχει πρὸς τῷ ἄρθρῳ τῆς κεφαλῆς, ἢν δεῖ μάλιστα ἐκμοχλεύσασθαι, ἀλλὰ κατὰ ἐωυτὸν αὐτὸς μέσος, καὶ τῶν μηρῶν ἴσως ἢ κατὰ τὸ μέσον ἢ ἔτι κατωτέρω οἷ τε αὖ μῆροὶ φύσει γαυσοὶ πεφύκασιν, ἄνωθεν γὰρ σαρκώδεές τε καὶ ξύμμηροι, ἐς δὲ τὸ κάτω ὑπόξηροι, ὥστε καὶ ἡ τῶν μηρῶν φύσις ἀπαναγκάζει τὸν ἄσκον ἀπὸ τοῦ ἐπικαιροτάτου χωρίου. Εἴ τε οὖν τις μικρὸν ἐνθήσει τὸν ἄσκον, μικρὴ ἢ ἰσχύς ἐοῦσα ἀδύνατος ἔσται ἀναγκάζειν τὸ ἄρθρον. Εἰ δὲ δεῖ ἄσκῳ χρέεσθαι, ἐπὶ πούλῳ οἱ μῆροὶ ξυνδετέοι πρὸς ἀλλήλους, καὶ ἅμα τῇ κατατάσει τοῦ σώματος ὁ ἄσκος φυσητέος τὰ δὲ σκέλεα ἀμφοτέρω ὁμοῦ καὶ καταδέειν ἐν τούτῳ τῷ τρόπῳ τῆς ἐμβολῆς ἐπὶ τὴν τελευτήν.

78. Χρὴ δὲ περὶ πλείστου μὲν ποιέεσθαι ἐν πάσῃ τῇ τέχνῃ, ὅπως ὑγιὲς μὲν ποιήσεις τὸ νοσέον εἰ δὲ πολλοῖσι τρόποισιν οἷόν τε εἶη ὑγιάς ποιέειν, τὸν ἀοχλότατον χρὴ αἰρέεσθαι καὶ γὰρ ἀνδραγαθικώτερον τοῦτο καὶ τεχνικώτερον, ὅστις μὴ ἐπιθυμείη δημοειδέος κιβδηλίας. Περὶ οὗ οὖν ὁ λόγος ἐστὶ, τοιαῖδε ἂν τινες κατοικίδιοι κατατάσεις εἶεν τοῦ σώματος, ὥστε ἐκ τῶν παρεόντων τὸ εὖπορον εὐρίσκειν τοῦτο μὲν, εἰ τὰ δεσμὰ τὰ ἱμάντινα μὴ παρείη τὰ μαλθακὰ καὶ προσηνέα, ἀλλ' ἢ σιδήρεα, ἢ ὄπλα, ἢ σχοινία, ταινίησι χρὴ ἢ ἐκρήγμασι τρυχίων ἐρινεῶν περιελίσσειν ταύτη μάλιστα, ἢ μέλλει τὰ δεσμὰ καθεξείν, καὶ ἔτι ἐπὶ πλέον ἔπειτα οὕτω δεῖν τοῖσι δεσμοῖσιν τοῦτο δὲ, ἐπὶ κλίνης χρὴ, ἥτις ἰσχυροτάτη καὶ μεγίστη τῶν παρεουσέων, κατατ ετάσθαι καλῶς τὸν ἄνθρωπον τῆς δὲ κλίνης τοὺς πόδας, ἢ τοὺς πρὸς κεφαλῆς, ἢ τοὺς πρὸς ποδῶν, ἐρηρεῖσθαι πρὸς τὸν οὐδὸν, εἴ τε ἔξωθεν ξυμφέρει, εἴτε ἔσωθεν παρὰ δὲ τοὺς ἐτέρους πόδας παρεμβεβληῖσθαι ξύλον τετράγωνον, πλάγιον, διῆκον ἀπὸ τοῦ ποδὸς πρὸς τὸν πόδα, καὶ ἢν μὲν λεπτὸν ἔη τὸ ξύλον, προσδεδέσθω πρὸς τοὺς πόδας τῆς κλίνης, ἢν δὲ παχὺ ἔη, μηδὲν ἔπειτα τὰς ἀρχὰς χρὴ τῶν δεσμῶν, καὶ τῶν πρὸς τῆς κεφαλῆς, καὶ τῶν πρὸς

τῶν ποδῶν, προσδεῖσθαι ἑκατέρας πρὸς ὑπερον, ἢ πρὸς ἄλλο τι τοιοῦτον ξύλον ὁ δὲ δεσμὸς ἐχέτω ἰθωρίην κατὰ τὸ σῶμα, ἢ καὶ ὀλίγον ἀνωτέρω, ξυμμέτρως δὲ ἐκτετάσθω πρὸς τὰ ὑπερα, ὡς, ὀρθὰ ἐστεῶτα, τὸ μὲν παρὰ τὸν οὐδὸν ἐρείδεται, τὸ δὲ παρὰ τὸ ξύλον τὸ παραβεβλημένον κἄπειτα οὕτω τὰ ὑπερα ἀνακλῶντα χρὴ τὴν κατάτασιν ποιέειν. Ἀρκέει δὲ καὶ κλίμαξ ἰσχυροὺς ἔχουσα τοὺς κλιμακτῆρας, ὑποτεταμένη ὑπὸ τὴν κλίνην, ἀντὶ τοῦ οὐδοῦ τε καὶ τοῦ ξύλου τοῦ παρατεταμένου, ὡς τὰ ὑπερα, πρὸς τῶν κλιμακτῆρων τοὺς ἀρμόζοντας ἐνθεν καὶ ἐνθεν προσερηρισμένα, ἀνακλῶμενα, οὕτω τὴν κατάτασιν ποιέεται τῶν



δεσμῶν. Ἐμβάλλεται δὲ μηροῦ ἄρθρον καὶ τόνδε τὸν τρόπον, ἦν ἐς τὸ ἔσω ὠλισθήκη καὶ ἐς τὸ ἔμπροσθεν κλίμακα χρῆ καταρύζαντα, ἐπικαθίσει τὸν ἄνθρωπον, ἔπειτα τὸ μὲν ὑγιὲς σκέλος ἡσυχῶς κατατείναντα προσδῆσαι, ὅκου ἂν ἀρμόση, ἐκ δὲ τοῦ σιναροῦ ἐς κεράμιον ὕδωρ ἐγγέαντα ἐκκρεμάσαι ἢ ἐς σφυρίδα λίθους ἐμβαλόντα. Ἔτερος τρόπος ἐμβολῆς ἦν ἐς τὸ ἔσω

ὠλισθήκη, στρωτῆρα χρῆ διαδῆσαι μεταξὺ δύο στύλων, ὕψος ἔχοντα σύμμετρον προεχέτω δὲ τοῦ στρωτῆρος κατὰ τὸ ἐν μέρος δκόσον τὸ πυγαῖον περιδήσας δὲ περὶ τὸ στῆθος τοῦ ἀνθρώπου ἱμάτιον, ἐπικαθίσει τὸν ἄνθρωπον ἐπὶ τὸ προέχον τοῦ στρωτῆρος εἶτα προσλαβεῖν τὸ στῆθος πρὸς τὸν στύλον πλατέϊ τινὶ ἔπειτα τὸ μὲν ὑγιὲς σκέλος κατεχέτω τις, ὡς μὴ περισφάλληται ἐκ δὲ τοῦ σιναροῦ ἐκκρεμάσαι βάρος, ὅσον ἂν ἀρμόζη, ὡς καὶ πρόσθεν ἤδη εἴρηται.

79. Πρῶτον μὲν οὖν δεῖ εἰδέναι, ὅτι πάντων τῶν ὀστέων αἱ ζυμβολαὶ εἰσιν ὡς ἐπὶ πουλὺ ἢ κεφαλὴ καὶ ἢ κοτύλη ἐφ' ὧν δὲ καὶ ἢ χώρα κοτυλοειδῆς καὶ ἐπίμακρος ἔναι δὲ τῶν χωρέων γληνοειδέες εἰσίν. Αἰεὶ δὲ ἐμβάλλειν δεῖ πάντα τὰ ἐκπίπτοντα ἄρθρα, μάλιστα μὲν εὐθύς παραχρῆμα ἔτι θερμῶν ἐόντων εἰ δὲ μὴ, ὡς τάχιστα καὶ γὰρ τῷ ἐμβάλλοντι ρῆϊτερον καὶ θᾶσσόν ἐστιν ἐμβαλεῖν, καὶ τῷ ἀσθενέοντι πουλὺ ἀπονωτέρη ἢ ἐμβολή, ἢ πρὶν διοιδεῖν, ἐστιν. Δεῖ δὲ αἰεὶ πάντα τὰ ἄρθρα, ὁκόταν μέλλης ἐμβάλλειν, προαναμαλάξαι καὶ διακιγκλίσει ρῆον γὰρ ἐθέλει

ἐμβάλλεσθαι. Παρὰ πάσας δὲ τὰς τῶν ἄρθρων ἐμβολὰς ἰσχυαίνειν δεῖ τὸν ἄνθρωπον, μάλιστα μὲν περὶ τὰ μέγιστα ἄρθρα καὶ χαλεπώτατα ἐμβάλλεσθαι, ἥκιστα δὲ περὶ τὰ ἐλάχιστα καὶ ρῆϊδια.

80. Δακτύλων δὲ ἦν ἐκπέση ἄρθρον τι τῶν τῆς χειρὸς, ἦν τε τὸ πρῶτον, ἦν τε τὸ δεύτερον, ἦν τε τὸ τρίτον, ωὗτος καὶ ἴσος τρόπος τῆς ἐμβολῆς χαλεπώτερα μέντοι αἰεὶ τὰ μέγιστα τῶν ἄρθρων ἐμβάλλειν. Ἐκπίπτει δὲ κατὰ τέσσαρας τρόπους, ἢ ἄνω, ἢ κάτω, ἢ ἐς τὸ πλάγιον ἐκατέρωθεν, μάλιστα μὲν ἐς τὸ ἄνω, ἥκιστα δὲ ἐς τὰ πλάγια, ἐν τῷ σφόδρα κινέεσθαι. Ἐκατέρωθεν δὲ τῆς χώρας, οὗ ἐκβέβηκεν, ὡσπερ ἄμβη ἐστίν. Ἦν μὲν οὖν ἐς τὸ ἄνω ἐκπέση ἢ ἐς τὸ κάτω διὰ τὸ λειοτέρην εἶναι ταύτην τὴν χώραν, ἢ ἐκ τῶν πλαγίων, καὶ ἅμα μικρῆς ἐούσης τῆς ὑπερβάσιος, ἦν μεταστῆ τὸ ἄρθρον, ρῆϊδιόν ἐστιν ἐμβάλλειν. Τρόπος δὲ τῆς ἐμβολῆς ὅδε περιελίξαι τὸν δάκτυλον ἄκρον ἢ ἐπιδέσματί τινι ἢ ἄλλω τρόπῳ τοιούτῳ τινὶ, ὅκως, ὁκόταν κατατείνης ἄκρου λαβόμενος, μὴ ἀπολισθάνῃ ὅταν δὲ περιελίξῃς, τὸν μὲν τινα διαλαβέσθαι ἄνωθεν τοῦ καρποῦ τῆς χειρὸς, τὸν δὲ τοῦ κατελιημμένου ἔπειτα κατατείνειν πρὸς ἐωυτὸν ἀμφοτέρους εὗ μάλα, καὶ ἅμα ἀπῶσαι τὸ ἐξεστηκὸς ἄρθρον ἐς τὴν χώραν. Ἦν δὲ ἐς τὰ πλάγια ἐκπέση, τῆς

μὲν κατατάσιος οὗτος τρόπος ὅταν δὲ δὴ δοκῆ σοι ὑπερβεβηκέναι τὴν γραμμὴν, ἅμα χρὴ κατατείναντας ἀπῶσαι ἐς τὴν χώραν εὐθὺς, ἕτερον δὲ τινα ἐκ τοῦ ἑτέρου μέρους τοῦ δακτύλου φυλάσσειν καὶ ἀνωθέειν, ὅπως μὴ πάλιν ἐκεῖθεν ἀπολίσθη. Ἐμβάλλουσι δὲ ἐπιεικέως

καὶ αἱ σαῦραι αἱ ἐκ τῶν φοινίκων πλεκόμεναι, ἦν κατατείνης ἔνθεν καὶ ἔνθεν τὸν δάκτυλον, λαβόμενος τῇ μὲν ἑτέρῃ τῆς σαύρης, τῇ δὲ ἑτέρῃ τοῦ καρποῦ τῆς χειρός. Ὅκοταν δὲ ἐμβάλης, ἐπιδεῖν δεῖ ὀθονίοισιν ὡς τάχιστα, λεπτοτάτοισι, κεκηρωμένοισι κηρωτῇ μήτε λίην μαλακῇ μήτε λίην σκληρῇ, ἀλλὰ μετρίως ἐχούσῃ ἢ μὲν γὰρ σκληρῇ ἀφέστηκεν ἀπὸ τοῦ δακτύλου, ἢ δὲ ἀπαλῇ καὶ ὑγρῇ διατήκεται καὶ ἀπόλλυται, θερμαινομένου τοῦ δακτύλου λύειν δὲ ἄρθρον δακτύλου τριταῖον ἢ τεταρταῖον τὸ δὲ ὅλον, ἦν μὲν φλεγμῆνη, πυκνότερον λύειν, ἦν δὲ μὴ, ἀραιότερον κατὰ πάντων δὲ τῶν ἁρθρῶν ταῦτα λέγω. Καθίσταται δὲ τοῦ δακτύλου τὸ ἄρθρον τεσσαρεσκαίδεκαταῖον. Ὁ αὐτὸς δὲ ἐστὶ θεραπείης τρόπος δακτύλων χειρός τε καὶ ποδός.

81. Παρὰ πάσας δὲ τὰς τῶν ἁρθρῶν ἐμβολὰς δεῖ ἰσχναίνειν καὶ λιμαγχοῦν ἄχρι ἐβδόμης καὶ εἰ μὲν φλεγμαῖνοι, πυκνότερον λύειν, εἰ δὲ μὴ, ἀραιότερον ἡσυχίην δὲ δεῖ ἔχειν αἰεὶ τὸ πονέον ἄρθρον, καὶ ὡς κάλλιστα ἐσηματισμένον κέεσθαι.

82. Γόνυ δὲ εὐηθέστερον ἀγκῶνος διὰ τὴν εὐσταλίην καὶ τὴν εὐφυΐην, διὸ καὶ ἐκπίπτει καὶ ἐμπίπτει ῥᾶον ἐκπίπτει δὲ πλειστάκις ἔσω, ἀτὰρ καὶ ἔξω καὶ ὀπισθεν. Ἐμβολαὶ δὲ, ἐκ

τοῦ ξυγκεκάμφθαι ἢ ἐκλακτίσαι ὀξέως, ἢ ξυνελίξας ταινίης ὄγκον, ἐν τῇ ἰγνυῖ θεῖς, ἀμφὶ τοῦτον ἐξαίφνης ἐς ὄκλασιν ἀφιέναι τὸ σῶμα. Δύναται δὲ καὶ κατατεινόμενον μετρίως, ὡσπερ ἀγκῶν, ἐμπίπτειν, τὰ ὀπισθεν τὰ δὲ ἔνθα ἢ ἔνθα, ἐκ τοῦ ξυγκεκάμφθαι, ἢ ἐκλακτίσαι, ἀτὰρ καὶ ἐκ κατατάσιος μετρίης. Ἡ διόρθωσις ἅπασι κοινή. Ἦν δὲ μὴ ἐμπέση, τοῖσι μὲν ὀπισθεν, ξυγκάμπτειν οὐ δύναται, ἀτὰρ οὐδὲ τοῖσιν ἄλλοισι πάνυ μινύθει δὲ μηροῦ καὶ κνήμης τοῦμπροσθεν ἦν δὲ ἐς τὸ ἔσω, βλαισότεροι, μινύθει δὲ τὰ ἔξω ἦν δὲ ἐς τὸ ἔξω, γαυσότεροι, χλωοὶ δὲ ἦσσαν, κατὰ γὰρ τὸ παχύτερον ὀστέον ὀχέει, μινύθει δὲ τὰ ἔσω, Ἐκ γενεῆς δὲ καὶ ἐν αὐξήσει κατὰ λόγον τὸν πρόσθεν.

83. Τὰ δὲ κατὰ τὰ σφυρὰ, κατατάσιος ἰσχυρῆς δέεται, ἢ τῆσι χερσίν, ἢ ἄλλοισι τοιούτοισι, κατορθώσιος δὲ ἅμα ἀμφοτέρα ποιούσης κοινὸν δὲ τοῦτο ἅπασιν.

84. Τὰ δὲ ἐν ποδὶ, ὡς καὶ τὰ ἐν χειρὶ, ὑγιέες.

85. Τὰ δὲ τῆς κνήμης ξυγκοινωνέοντα, καὶ ἐκπεσόντα ἐκ γενεῆς, ἢ καὶ ἐν αὐξήσει

ἐξαρθήσαντα, ταῦτά ἃ καὶ ἐν χειρί.

86. Ὀκόσοι δὲ πηδήσαντες ἄνωθεν ἐστηρίζαντο τῇ πτέρνῃ, ὥστε διαστήναι τὰ ὀστέα, καὶ φλέβας ἐκχυμωθῆναι, καὶ νεῦρα ἀμφιφλασθῆναι, ὀκόταν γένηται οἷα τὰ δεινὰ, κίνδυνος μὲν σφακελίσαντα τὸν αἰῶνα πρήγματα παρασχεῖν ῥοιώδη μὲν γὰρ τὰ ὀστέα, τὰ δὲ νεῦρα ἀλλήλοισι κοινωνέοντα. Ἐπεὶ καὶ οἷσιν ἂν μάλιστα κατεηγῆσιν, ἢ ὑπὸ τρώματος ἢ ἐν κνήμῃ, ἢ ἐν μηρῷ, ἢ νεύρων ἀπολυθέντων, ἃ κοινωνεῖ τούτων, ἢ ἐκ κατακλίσιος ἀμελέος ἐμελάνθη πτέρνῃ, καὶ τούτοισι τὰ παλιγοτέοντα ἐκ τῶν τοιούτων. Ἔστιν ὅτε καὶ πρὸς τῷ σφακελισμῷ γίνονται πυρετοὶ ὀξέες, λυγμώδεις, γνώμης ἀπτόμενοι, ταχυθάνατοι, καὶ ἔτι φλεβῶν αἱμορροϊέων πελιώσεις. Σημηῖα δὲ τῶν παλιγοτησάντων, ἦν τὰ ἐκχυμώματα καὶ τὰ μελάσματα καὶ τὰ περὶ ταῦτα ὑπόσκληρα καὶ ὑπέρυθρα ἦν τε ζὺν σκληρύσματι πελιδνωθῆ, κίνδυνος μελανθῆναι

ἦν δὲ ὑποπέλια ἦ, ἢ καὶ πέλια μάλα καὶ ἐκκεχυμωμένα, ἢ ὑπόχλωρα καὶ μαλακὰ, ταῦτα ἐπὶ πᾶσι τοῖσι τοιούτοισιν ἀγαθὰ. Ἴησις, ἦν μὲν ἀπύρετος ἔη, ἐλλέβορον ἦν δὲ μὴ, μὴ ἀλλὰ ποτὸν ὀξύγλυκυ, εἰ δέοι. Ἐπίδεσις δὲ, ἄρθρων ἐπὶ δὲ πάντα, μᾶλλον τοῖσι φλάσμασιν, ὀθονίοισι πλείοσι καὶ μαλθακωτέροισιν πίεξις ἦσσον προσπεριβάλλειν δὲ τὰ πλεῖστα τῇ πτέρνῃ. Τὸ σχῆμα, ὅπερ ἢ ἐπίδεσις, ὡς μὴ ἐς τὴν πτέρνῃ ἀποπιέζεται. Νάρθηξι δὲ μὴ χρέεσθαι.

87. Οἷσι δ' ἂν ἐκβῆ ὁ πούς ἢ αὐτὸς, ἢ ζὺν τῇ ἐπιφύσει, ἐκπίπτει μὲν μᾶλλον ἐς τὸ ἔσω. Ἦν δὲ μὴ ἐμπέση, λεπύνεται ἀνὰ χρόνον τό τε ἰσχίον καὶ ὁ μηρὸς καὶ κνήμης τὸ ἀντίον τοῦ ὀλισθήματος. Ἐμβολὴ δὲ ἄλλη, ὥσπερ καρποῦ, κατάτασις δὲ ἰσχυρή. Ἴησις δὲ, νόμος ἄρθρων. Παλιγοτέει, ἦσσον δὲ καρποῦ, ἦν ἡσυχάσωσιν. Δίαιτα μείων, ἐλινύουσιν. Τὰ δὲ ἐκ γενεῆς ἢ ἐν αὐξήσει, κατὰ λόγον τὸν πρότερον.

## ON FRACTURES - Περί άγμων

1. Έχρην τον ιητρών των έκπτωσίων τε και κατηγμάτων ως ίθυτάτας τας κατατάσιας ποιέεσθαι αύτη γάρ ή δικαιοτάτη φύσις. "Ην δέ τι έγκλίνη ή τή ή τή, έπί τὸ πρηνές ρέπειν έλάσσων γάρ ή άμαρτάς ή έπί τὸ ύπτιον. Οί μέν ούν μηδέν προβουλεύσαντες ούδέν έξαμαρτάνουσιν ως έπί τὸ πουλύ αυτός γάρ ο έπιδεόμενος τήν χειρα άπορέγει, ούτως

ύπὸ τής δικαίης φύσιος άναγκαζόμενος οί δέ ιητροί σοφίζόμενοι δήθεν έστιν οί άμαρτάνουσιν. Σπουδή μέν ού πολλή χειρα κατεαγυϊαν χειρίσαι, και παντός δέ ιητρού, ως έπος ειπειν άναγκάζομαι δ' έγώ πλείω γράφειν περι αύτέου, οτι οϊδα ιητρούς σοφούς δόξαντας εϊναι άπο σχημάτων χειρός εν έπιδέσει, άφ' ών άμαθέας αύτέους έχρην δοκέειν εϊναι. Άλλα γάρ πολλά ούτω ταύτης τής τέχνης κρίνεται τὸ γάρ ξενοπρεπές ούπω ξυνιέντες ει χρηστὸν, μάλλον επαινεουσιν, ή τὸ ξύνηθες, ο ήδη οϊδασιν οτι χρηστὸν, και τὸ άλλόκοτον, ή τὸ εϋδηλον. Ρητέον ούν όκόσας έθέλω των άμαρτάδων των ιητρών, τας μέν άποδιδάξαι, τας δέ διδάξαι περι τής φύσιος τής χειρός και γάρ άλλων όστέων των κατα τὸ σωμα δίδαγμα οδε ο λόγος έστιν.

2. Τήν μέν ούν χειρα, περι ού ο λόγος, έδωκέ τις επιδησαι,

πρηνεα ποιήσας ο δ' ήνάγκαζεν ούτως έχειν, ως περ οί τοξεύοντες, έπήν τον ώμον έμβάλλωσι, και ούτως έχουσαν επέδει, νομίζων έωυτῶ εϊναι τουτο αύτη τὸ κατα φύσιν και μαρτύριον επήγετο τά τε όστέα άπαντα τά εν τῶ πήχει, οτι ίθυωρίην κατάλληλα ειχε, τήν τε όμοχροίην, οτι αύτη καθ' έωυτήν τήν ίθυωρίην έχει ούτω και εκ του έξωθεν μέρος και εκ του έσωθεν ούτω δέ έφη και τας σάρκας και τα νεϋρα πεφυκέναι, και τήν τοξικήν επήγετο μαρτύριον. Ταυτα λέγων και ταυτα ποιέων, σοφός έδόκεεν εϊναι των δέ άλλων τεχνέων επελελήθει, και όκόσα ισχύϊ εργάζονται, και όκόσα τεχνήμασιν, ούκ ειδως οτι άλλο εν άλλω τὸ κατα φύσιν σχήμα έστιν, και εν τῶ αύτέω έργω έτερα τής δεξιής χειρός σχήματα κατα φύσιν έστι, και έτερα τής άριστερής, ήν ούτω τύχη. Άλλο μέν γάρ σχήμα εν

άκοντισμῶ κατα φύσιν, άλλο δέ εν σφενδονήσει, άλλο δέ εν λιθοβολίησιν, άλλο εν πυγμαϊ, άλλο εν τῶ ελινύειν. Όκόσας δ' αν τις τέχνας ευροι, έννοέοι ού τὸ αυτό σχήμα των χειρέων κατα φύσιν εϊναι εν εκάστη των τεχνέων αλλά προς τὸ άρμενον ο αν έχη εκαστος, και προς τὸ έργον ο αν επιτελέσασθαι θέλη, σχηματίζονται αι χειρες. Τοξικήν δέ άσκεόντι εικός τουτο τὸ σχήμα κράτιστον

εἶναι τῆς ἐτέρης χειρός τοῦ γὰρ βραχίονος τὸ γιγγλυμοειδές, ἐν τῇ τοῦ πήχεος βαθμίδι ἐν τουτέῳ τῷ σχήματι ἐρεῖδον, ἰθωρίην ποιέει τοῖσιν ὀστέοις τοῦ πήχεος καὶ τοῦ βραχίονος, ὡς εἰ ἐν εἴῃ τὸ πᾶν καὶ ἡ ἀνάκλασις τοῦ ἄρθρου κέκλασται ἐν τουτέῳ τῷ σχήματι. Εἰκὸς μὲν οὖν οὕτως ἀκαμπτότατόν τε καὶ τετανώτατον εἶναι τὸ χωρίον, καὶ μὴ ἡσσᾶσθαι, μηδὲ ξυνδιδόναι, ἐλκομένης τῆς νευρῆς ὑπὸ τῆς δεξιῆς χειρός

καὶ οὕτως ἐπὶ πλεῖστον μὲν τὴν νευρὴν ἐλκύσει, ἀφήσει δὲ ἀπὸ στερεωτάτου καὶ ἀθροωτάτου ἀπὸ τῶν τοιουτέων γὰρ ἀφροσίων τῶν τοξευμάτων, ταχεῖαι καὶ αἱ ἰσχυρές καὶ τὰ μήκεα γίνονται. Ἐπιδέσει δὲ καὶ τοξικῇ οὐδὲν κοινόν. Τοῦτο μὲν γὰρ, εἰ ἐπιδήσας ἔχειν τὴν χεῖρα οὕτως ἐκέλευε, πόνους ἂν ἄλλους πολλοὺς προσετίθει μείζονας τοῦ τρώματος τοῦτο δ', εἰ ξυγκάμψαι ἐκέλευεν, οὔτε τὰ ὀστέα, οὔτε τὰ νεῦρα, οὔτε αἱ σάρκες ἔτι ἐν τῷ αὐτέῳ ἐγίνοντο, ἀλλὰ ἄλλη μετεκοσμεῖτο, κρατέοντα τὴν ἐπίδωσιν καὶ τί ὄφελός ἐστι τοξικοῦ σχήματος; Καὶ ταῦτα ἴσως οὐκ ἂν ἐξημάρτανε σοφιζόμενος, εἰ εἶα τὸν τετρωμένον αὐτὸν τὴν χεῖρα παρασχέσθαι.

3. Ἄλλος δ' αὖ τις τῶν ἰητρῶν ὑπτήν τὴν χεῖρα δούς, οὕτω κατατείνειν ἐκέλευε, καὶ οὕτως ἔχουσαν ἐπέδει, τοῦτο νομίζων τὸ κατὰ φύσιν εἶναι, τῷ τε χροῖ σσημαινόμενος, καὶ τὰ ὀστέα νομίζων κατὰ φύσιν εἶναι οὕτως, ὅτι φαίνεται τὸ ἐξέχον ὀστέον τὸ παρὰ τὸν καρπὸν, ἧ ὁ μικρὸς δάκτυλος, κατ' ἰθωρίην εἶναι τοῦ ὀστέου ἀφ'

ὀτέου τὸν πῆχυν οἱ ἄνθρωποι μετρέουσιν. Ταῦτα τὰ μαρτύρια ἐπήγετο, ὅτι κατὰ φύσιν οὕτως ἔχει, καὶ ἐδόκεεν εὖ λέγειν. Ἀλλὰ τοῦτο μὲν, εἰ ὑπτή ἡ χεῖρ κατατείνοιτο, ἰσχυρῶς πονοίη ἂν γνοίη δ' ἂν τις τὴν ἐωυτοῦ χεῖρα κατατείνας, ὡς ἐπώδυνον τὸ σχῆμα. Ἐπεὶ καὶ ἀνήρ ἡσσω κρέσσονα διαλαβὼν οὕτως εὖ τῆσιν ἐωυτοῦ χερσίν, ὡς κλᾶται ὁ ἄγκων ὑπτιος, ἄγοι ἂν ὅπη ἐθέλοι οὔτε γὰρ εἰ ξίφος ἐν ταύτῃ τῇ χειρὶ ἔχοι, ἔχοι ἂν ὅ τι χρήσαιτο τῷ ξίφει, οὕτω βίαιον τοῦτο τὸ σχῆμά ἐστιν. Τοῦτο δὲ, εἰ ἐπιδήσας τις ἐν τουτέῳ τῷ σχήματι ἐώη, μέζων μὲν πόνος, εἰ περιοί, μέγας δὲ καὶ εἰ κατακέοιτο. Τοῦτο δὲ, εἰ ξυγκάμψαι τὴν χεῖρα, ἀνάγκη πᾶσα τούς τε μύας καὶ τὰ ὀστέα ἄλλο σχῆμα ἔχειν. Ἡγνόει δὲ καὶ τάδε τὰ ἐν τῷ σχήματι χωρὶς τῆς ἄλλης λύμης τὸ γὰρ ὀστέον τὸ παρὰ τὸν καρπὸν ἐξέχον, τὸ κατὰ τὸν μικρὸν δάκτυλον, τοῦτο μὲν τοῦ πήχεός ἐστιν τὸ δ' ἐν τῇ ξυγκάμψαι ἐόν, ἀπ' ὅτευ τὸν πῆχυν οἱ ἄνθρωποι μετρέουσι, τοῦτο δὲ

τοῦ βραχίονος ἡ κεφαλή ἐστιν. Ὁ δὲ ὤετο τωὐτὸ ὀστέον εἶναι τοῦτό τε κακεῖνο, πολλοὶ δὲ καὶ ἄλλοι ἔστι δ' ἐκεῖνῳ τῷ ὀστέῳ τωὐτὸ ὁ ἄγκων καλεόμενος, ᾧ ποτὶ στηριζόμεθα. Οὕτως οὖν ὑπτήν ἔχοντι τὴν χεῖρα, τοῦτο μὲν, τὸ ὀστέον

διεστραμμένον φαίνεται τοῦτο δὲ, τὰ νεῦρα τὰ ἀπὸ τοῦ καρποῦ τείνοντα ἐκ τοῦ εἴσω μέρος καὶ ἀπὸ τῶν δακτύλων, ταῦτα ὑπὲρ ἔχοντι τὴν χεῖρα διεστραμμένα γίνεται τείνει τε γὰρ ταῦτα τὰ νεῦρα πρὸς τὸ τοῦ βραχίονος ὀστέον, ὅθεν ὁ πῆχυς μετρεῖται. Αὗται τοσαῦται καὶ τοιαῦται αἱ ἀμαρτάδες καὶ ἄγνοιαί τῆς φύσιος τῆς χειρός. Εἰ δ', ὡς ἐγὼ κελεύω, χεῖρα κατεαγῶνα κατατείνει τις, ἐπιστρέψει μὲν τὸ ὀστέον ἐς ἰθὺ, τὸ κατὰ τὸν σμικρὸν δάκτυλον, τὸ ἐς τὸν ἀγκῶνα τείνον, ἰθυωρήν δὲ ἔξει τὰ νεῦρα τὰ ἀπὸ τοῦ καρποῦ πρὸς τοῦ βραχίονος τὰ ἄκρα τείνοντα ἀναλαμβανομένη δὲ ἡ χεῖρ ἐν παραπλησίῳ σχήματι ἔσται, ἐν ᾧ περ καὶ ἐπιδεομένη, ἄπονος μὲν ὁδοιποροῦντι, ἄπονος δὲ κατακειμένῳ καὶ ἀκάματος. Καθίνυσθαι δὲ χρή τὸν ἄνθρωπον οὕτως, ὅπως ἢ τὸ ἐξέχον τοῦ ὀστέου πρὸς τὴν λαμπροτάτην τῶν παρεουσέων αὐγέων, ὡς μὴ λάθῃ τὸν χειρίζοντα ἐν τῇ κατατάσει, εἰ ἰκανῶς ἐξίθουνται. Τοῦ γε μὴν ἐμπείρου οὐδ' ἂν τὴν χεῖρα λάθοι ἐπαγομένην τὸ ἐξέχον ἀτὰρ καὶ ἀλγέει μάλιστα κατὰ τὸ ἐξέχον ψαυόμενον.

4. Τῶν δὲ ὀστέων τοῦ πήχεος, ὧν μὴ ἀμφοτέρα κατέγηγε, ῥάων ἢ ἴησις, ἦν τὸ ἄνω ὀστέον τετρωμένον ἔη, καὶ περ παχύτερον ἐόν ἅμα μὲν ὅτι τὸ ὑγιὲς ὑποτεταμένον γίνεται ἀντὶ θεμελίου, ἅμα δ' ὅτι εὐκρυπτότερον γίνεται, πλὴν εἰ τὸ ἐγγὺς τοῦ καρποῦ παχεῖη γὰρ ἢ τῆς σαρκὸς ἐπίφυσις ἢ ἐπὶ τὸ ἄνω. Τὸ δὲ κάτω ὀστέον ἄσαρκον, καὶ οὐκ εὐξύγκρυπτον, καὶ κατατάσιος ἰσχυροτέρης δέεται. Ἦν δὲ μὴ τοῦτο ξυντριβῆ, ἀλλὰ τὸ ἕτερον, φαυλοτέρη ἢ κατάτασις ἀρκέει ἦν δὲ ἀμφοτέρα κατεγηγῆ, ἰσχυροτάτης κατάτασιος δεῖται παιδίου μὲν γὰρ ἤδη εἶδον καταταθέντα μᾶλλον ἢ ὡς ἔδει, οἱ δὲ πλεῖστοι ἦσσαν τείνονται ἢ ὡς δεῖ. Χρή δ', ἐπὴν τείνωσι, τὰ θέναρα προσβάλλοντα

διορθοῦν ἔπειτα χρίσαντα κηρωτῇ μὴ πάνυ πουλλῇ, ὡς μὴ περιπλέη τὰ ἐπιδέσματα, οὕτως ἐπιδεῖν, ὅπως μὴ κατωτέρω ἄκρην τὴν χεῖρα ἔξει τοῦ ἀγκῶνος, ἀλλὰ σμικρῶ τινι ἀνωτέρω, ὡς μὴ τὸ αἷμα ἐς ἄκρον ἐπιρρέη, ἀλλὰ ἀπολαμβάνηται ἔπειτα ἐπιδεῖν τῷ ὀθονίῳ, τὴν ἀρχὴν βαλλόμενος κατὰ τὸ κήτηγμα ἐρείδων μὲν οὖν, μὴ πιέζων δὲ κάρτα. Ἐπὴν δὲ περιβάλλῃ κατὰ τούτῳ δις ἢ τρίς, ἐπὶ τὸ ἄνω νεμέσθω ἐπιδέων, ἵνα αἱ ἐπιρροαὶ τοῦ αἵματος ἀπολαμβάνονται, καὶ τελευτησάτω κεῖθι χρή δὲ μὴ μακρὰ εἶναι τὰ πρῶτα ὀθόνια. Τῶν δὲ δευτέρων ὀθονίων, τὴν μὲν ἀρχὴν βάλλεσθαι ἐπὶ τὸ κήτηγμα περιβαλὼν δὲ ἅπαξ ἐς τούτῳ, ἔπειτα νεμέσθω ἐς τὸ κάτω, καὶ ἐπὶ ἦσσαν πιέζων, καὶ ἐπὶ μέζον διαβιβάσκων, ὡς ἂν αὐτὸ ἰκανὸν γένηται τὸ ὀθόνιον ἀναπαλινδρομησαί κεῖθι, ἵνα περ τὸ ἕτερον ἐτελεύτησεν. Ἐνταῦθα μὲν οὖν τὰ ὀθόνια ἐπ' ἀριστερὰ ἢ ἐπὶ δεξιὰ ἐπιδεδέσθω ἢ ἐπὶ ὁκότερα ἂν ζυμφέρῃ πρὸς τὸ σχῆμα τοῦ κατεηγότος, καὶ ἐφ' ὁκότερα ἂν περιρρέπειν ζυμφέρῃ. Μετὰ δὲ ταῦτα, σπλήνας κατατείνειν χρή κεχρισμένους κηρωτῇ ὀλίγη καὶ γὰρ

προσηγέστερον καὶ εὐθετώτερον ἔπειτα οὕτως ἐπιδεῖν τοῖσιν ὀθονίοισιν ὡς

ἐναλλάξ, ὅτε μὲν ἐπὶ δεξιᾷ, ὅτε δὲ ἐπ' ἀριστερᾷ καὶ τὰ μὲν πλείω κάτωθεν ἀρχόμενος, ἐς τὸ ἄνω ἄγειν, ἔστι δ' ὅτε καὶ ἄνωθεν ἐς τὸ κάτω. Τὰ δὲ ὑπόξηρα ἀκέεσθαι τοῖσι σπλήνεσι κυκλεῦντα τῷ δὲ πλήθει τῶν περιβολέων μὴ πᾶν ἀθρόον ξυνδιορθοῦντα, ἀλλὰ κατὰ μέρος περιβάλλειν δὲ χρὴ χαλαρὰ καὶ περὶ τὸν καρπὸν τῆς χειρὸς, ἄλλοτε καὶ ἄλλοτε. Πλήθος δὲ τῶν ὀθονίων ἱκανὸν τὸ πρῶτον, αἱ δύο μοῖραι.

5. Σημεῖα δὲ τοῦ καλῶς ἰητρευμένου ταῦτα, καὶ ὀρθῶς ἐπιδεομένου, εἰ ἐρωτῶης αὐτὸν εἰ πεπικται, καὶ εἰ φαίη μὲν πεπιέχθαι, ἡσύχως δὲ, καὶ μάλιστα εἰ κατὰ τὸ κήτηγμα φαίη τοιαῦτα τοίνυν φάναι χρὴ πεπρηγμένα διὰ τέλεος τὸν ὀρθῶς ἐπιδεόμενον. Σημεῖα δὲ ταῦτα τῆς μετριότητος, τὴν μὲν ἡμέρην ἦν ἂν ἐπιδεθῆ, καὶ τὴν νύκτα δοκεῖτω αὐτὸς ἐωυτῷ μὴ ἐπὶ ἥσσον πεπιέχθαι, ἀλλ' ἐπὶ μᾶλλον τῆ δ' ὑστεραίῃ οἰδημάτιον ἐλθεῖν ἐς χεῖρα ἄκρην μαλθακὸν μετριότητος γὰρ σημεῖον τῆς πιέξιός σου. Τελευτώσης δὲ τῆς ἡμέρης, ἐπὶ ἥσσον δοκεῖτω πεπιέχθαι τῆ δὲ τρίτῃ, χαλαρὰ σοι δοκεῖτω εἶναι τὰ ἐπιδέσματα. Κῆν μὲν τι τούτων τῶν εἰρημένων ἐλλείπη, γινώσκειν χρὴ ὅτι χαλαρωτέρη ἢ ἐπίδεσις τοῦ μετρίου ἦν δέ τι

τῶν εἰρημένων πλεονάζη, χρὴ γινώσκειν ὅτι μᾶλλον ἐπιέχθη τοῦ μετρίου καὶ τουτέοισι σημαινόμενος, τὸ ὕστερον ἐπιδέων, ἢ χαλᾶν μᾶλλον, ἢ πιέζειν. Ἀπολύσαντα δὲ χρὴ τριταῖον ἐόντα, κατατεινάμενον καὶ διορθωσάμενον, αὐθις ἐπιδῆσαι κῆν μετρίως τὸ πρῶτον τετυχήκης ἐπιδήσας, ταύτην τὴν ἐπίδεσιν χρὴ ὀλίγῳ μᾶλλον ἢ ἐκείνην πιέσαι. Βάλλεσθαι δὲ χρὴ τὰς ἀρχὰς κατὰ τὸ κήτηγμα, ὥσπερ καὶ τὸ πρότερον ἦν μὲν γὰρ τοῦτο πρότερον ἐπιδέης, ἐξειρύεται ἐκ τούτου οἱ ἰχώρες ἐς τὰς ἐσχατίας ἔνθα καὶ ἔνθα ἦν δέ τι ἄλλο πρότερον πιέξης, ἐς τοῦτο ἐξειρύεται ἐκ τοῦ πιεχθέντος ἐς πολλὰ δ' εὐχρηστον τὸ ξυνιέναι. Οὕτως οὖν ἄρχεσθαι μὲν αἰεὶ χρὴ τὴν ἐπίδεσιν καὶ τὴν πίεξιν ἐκ τουτέου τοῦ χωρίου, τὰ δ' ἄλλα κατὰ λόγον, ὡς προσωτέρω ἀπὸ τοῦ κατήγματος ἀγάγης, ἐπὶ ἥσσον τὴν πίεξιν ποιέεσθαι. Χαλαρὰ δὲ παντάπασι μηδέποτε περιβάλλειν, ἀλλὰ προσπεπτωκότα.

Ἐπειτα δὲ πλείοσιν ὀθονίοισι χρὴ ἐπιδεῖν ἐκάστην τῶν ἐπιδεσίων. Ἐρωτώμενος δὲ φάτω ὀλίγῳ μᾶλλον οἱ πεπιέχθαι, ἢ τὸ πρότερον, καὶ μάλιστα φάτω κατὰ τὸ κήτηγμα, καὶ τὰ ἄλλα δὲ κατὰ λόγον καὶ ἀμφὶ τῷ οἰδήματι, καὶ ἀμφὶ τῷ πονέειν, καὶ ἀμφὶ τῷ ρηῖζειν, κατὰ λόγον τῆς προτέρης ἐπιδέσιος γινέσθω. Ἐπὶ δὲ τριταῖος ἦ, χαλαρώτερά οἱ δοκεῖτω εἶναι τὰ ἐπιδέσματα. Ἐπειτα ἀπολύσαντα χρὴ αὐθις ἐπιδῆσαι, ὀλίγῳ μᾶλλον πιέζοντα, καὶ ἐν πᾶσι τοῖσιν ὀθονίοισιν οἷσί

περ ἤμελλεν ἐπιδεισθαι καὶ ἔπειτα αὐτὸν πάντα ταῦτα καταλαβέτω, ἅπερ καὶ ἐν τῆσι πρώτῃσι περιόδοισι τῶν ἐπιδεσίων.

6. Ἐπὴν δὲ τριταῖος γένηται, ἑβδομαῖος δὲ ἀπὸ τῆς πρώτης ἐπιδέσιος, ἦν ὀρθῶς ἐπιδέηται, τὸ μὲν οἶδημα ἐν ἄκρῃ τῇ χειρὶ ἔσται, οὐδὲ τοῦτο λίην μέγα τὸ δ' ἐπιδεόμενον χωρίον ἐν πάσῃσι τῆσιν ἐπιδέσεσιν ἐπὶ τὸ λεπτότερον καὶ ἰσχυρότερον εὔρεθήσεται, ἐν δὲ τῇ ἐβδόμῃ καὶ πάνυ λεπτὸν, καὶ τὰ ὀστέα τὰ κατεηγότα ἐπὶ μᾶλλον κινεύμενα καὶ εὐπαράγωγα ἐς κατόρθωσιν. Καὶ ἦν ἢ ταῦτα τοιαῦτα, κατορθωσάμενον χρὴ ἐπιδῆσαι ὡς ἐς νάρθηκας, ὀλίγω μᾶλλον πίεςαντα, ἢ τὸ πρότερον, ἦν μὴ πόνος τις πλείων ἢ ἀπὸ τοῦ οἰδήματος τοῦ ἐν ἄκρῃ τῇ χειρὶ. Ἐπὴν δὲ ἐπιδήσης τοῖσιν ὀθονίοισι, τοὺς νάρθηκας περιθεῖναι χρὴ καὶ περιλαβεῖν ἐν τοῖσι δεσμοῖσιν ὡς χαλαρωτάτοισιν, ὀκόσον ἠρεμέειν, ὥστε μηδὲν ζυμβάλλεσθαι ἐς τὴν πίεξιν τῆς χειρὸς τὴν τῶν ναρθήκων πρόσθεσιν.

Μετὰ δὲ ταῦτα, ὃ τε πόνος, αἱ τε ῥαστῶναι αἱ αὐταὶ γινέσθωσαν, αἱ περ καὶ ἐν τῆσι πρώτῃσι περιόδοισι τῶν ἐπιδεσίων. Ἐπὴν δὲ τριταῖος ἐὼν φῆ χαλαρὸν εἶναι, τότε ἔπειτα χρὴ τοὺς νάρθηκας ἐρείσασθαι, μάλιστα μὲν κατὰ τὸ κάτηγμα, ἀτὰρ καὶ τᾶλλα, κατὰ λόγον, ἢπερ καὶ ἡ ἐπίδεσις ἐχάλα μᾶλλον ἢ ἐπίεζεν. Παχύτατον δὲ χρὴ εἶναι τὸν νάρθηκα, ἢ ἐξέστη τὸ κάτηγμα, μὴ μὴν πολλῶ. Ἐπιτηδεύειν δὲ χρὴ μάλιστα μὲν κατ' ἰθυωρίην τοῦ μεγάλου δακτύλου, ὡς μὴ κείσῃται ὁ νάρθηξ, ἀλλὰ τῇ ἢ τῇ, μηδὲ κατὰ τὴν τοῦ μικροῦ ἰθυωρίην ἢ τὸ ὀστέον ὑπερέχει ἐν τῷ καρπῷ, ἀλλὰ τῇ ἢ τῇ. Ἦν δὲ ἄρα πρὸς τὸ κάτηγμα ζυμφέρῃ κείσθαι κατὰ ταῦτά τινος τῶν ναρθήκων, βραχυτέρους αὐτοὺς χρὴ τῶν ἄλλων ποιέειν, ὡς μὴ ἐξικνέωνται πρὸς τὰ ὀστέα τὰ ὑπερέχοντα παρὰ τὸν καρπὸν κίνδυνος γὰρ ἐλκώσιος, καὶ νεύρων ψιλώσιος. Χρὴ δὲ διὰ τρίτης ἐρείδειν τοῖσι νάρθηξι πάνυ ἡσυχῆ, οὕτω τῇ γνώμῃ ἔχοντα, ὡς οἱ νάρθηκες φυλακῆς εἵνεκα τῆς ἐπιδέσιος προσκέωνται, ἀλλ' οὐ τῆς πιέξιος εἵνεκεν ἐπιδέονται.

7. Ἦν μὲν οὖν εὖ εἰδῆς ὅτι ἰκανῶς τὰ ὀστέα ἀπίθονται ἐν τῆσι προτέρῃσιν ἐπιδέσεσι, καὶ μήτε κνησμοὶ τινες λυπέωσι, μήτε τις ἔλκωσις μηδεμία ὑποπτεύηται εἶναι, ἔἴαν χρὴ

ἐπιδεδέσθαι ἐν τοῖσι νάρθηξι, ἔστ' ἂν ὑπὲρ εἴκοσιν ἡμέρας γίνηται. Ἐν τριήκοντα δὲ μάλιστα τῆσι ζυμπάσῃσι κρατύνεται ὀστέα τὰ ἐν τῷ πῆχει τὸ ἐπίπαν ἀτρεκέες δὲ οὐδὲν μάλα γὰρ καὶ φύσις φύσιος, καὶ ἡλικίῃ ἡλικίης διαφέρει. Ἐπὴν δὲ λύσης, ὕδωρ θερμὸν καταχέαι χρὴ, καὶ μετεπιδῆσαι, ἥσσον μὲν ὀλίγω πίεςαντα, ἢ τὸ πρόσθεν, ἐλάσσοσι δὲ τοῖσιν ὀθονίοισιν, ἢ τὸ πρότερον καὶ ἔπειτα διὰ τρίτης ἡμέρης λύσαντα ἐπιδεῖν, ἐπὶ μὲν ἥσσον πιέζοντα, ἐπὶ δὲ ἐλάσσοσι τοῖσιν ὀθονίοισιν. Ἐπὴν δὲ, ὅταν τοῖσι νάρθηξι δεθῇ, ὑποπτεύῃς



τὰ ὀστέα μὴ ὀρθῶς κεῖσθαι, ἢ ἄλλο τι ὀχλήη τὸν τετρωμένον, λῦσαι ἐν τῷ ἡμίσει τοῦ χρόνου, ἢ ὀλίγῳ πρόσθεν, καὶ αὐθις μετεπιδῆσαι. Δίαιτα δὲ τουτέοισιν, οἷσιν ἂν μὴ ἔλκεα ἐξ ἀρχῆς γένηται, ἢ ὀστέα ἔξω ἐξίσχη, ἀρκέει ὑποφαύλη ἐνδεέστερον δὲ χρῆ διαιτᾶν ἄχρις ἡμερέων δέκα, ἅτε ἤδη καὶ ἐλινύοντας καὶ ὄψοισιν ἀπαλοῖσι χρῆσθαι, ὀκόσα τῇ διεξόδῳ μετριότητα παρασχῆσει οἴνου δὲ καὶ κρηφαγίης ἀπέχεσθαι ἔπειτα μέντοι ἐκ προσαγωγῆς

ἀνακομίζεσθαι. Οὗτος ὁ λόγος ὡςπερ νόμος κεῖται δίκαιος περὶ κατηγμάτων ἰήσιος, ὥστε χειρίζειν χρῆ, καὶ ὥστε ἀποβαίνει ἀπὸ τῆς δικαίης χειρίζιος ὅ τι δ' ἂν μὴ οὕτως ἀποβαίη, εἰδέναι χρῆ ὅτι ἐν τῇ χειρίζει τι ἐνδεές πεποιήται, ἢ πεπλέονασται. Ἔτι δὲ τάδε χρῆ προσξυνιέναι ἐν τούτῳ τῷ ἀπλῶ τρόπῳ, ἃ οὐ κάρτα ἐπιμελέονται οἱ ἰητροὶ, καίτοι πᾶσαν μελέτην καὶ πᾶσαν ἐπίδεσιν οἷά τε διαφθεῖρειν ἐστὶ, μὴ ὀρθῶς ποιούμενα ἦν γὰρ τὰ μὲν ὀστέα ἄμφω κατηγῆ, ἢ τὸ κάτω μῦνον, ὁ δὲ ἐπιδεδεμένος ἐν ταινίῃ τινὶ τὴν χεῖρα ἔχη ἀναλελαμμένην, τυγχάνη δὲ ἡ ταινίη κατὰ τὸ κήτηγμα πλείστη ἐοῦσα, ἐνθεν δὲ καὶ ἐνθεν ἡ χεῖρ ἀπαιωρέηται, τοῦτον ἀνάγκη τὸ ὀστέον εὑρεθῆναι διεστραμμένον ἔχοντα πρὸς τὸ ἄνω μέρος ἦν δὲ, κατηγόντων τῶν ὀστέων οὕτως, ἄκρην τε τὴν χεῖρα ἐν τῇ ταινίῃ ἔχη καὶ παρὰ τὸν ἀγκῶνα, ὁ δὲ ἄλλος πῆχυς μὴ μετέωρος ἔη, οὗτος εὑρεθήσεται τὸ ὀστέον ἐς τὸ κάτω μέρος διεστραμμένον ἔχων. Χρῆ οὖν ἐν ταινίῃ πλάτος ἐχούση, μαλθακῆ, τὸ πλείστον τοῦ πήχεος καὶ τὸν καρπὸν τῆς χειρὸς ὁμαλῶς αἰωρέεσθαι.

8. Ἦν δὲ ὁ βραχίων καταγῆ, ἦν μὲν τις ἀποτανύσας τὴν χεῖρα ἐν τουτέῳ τῷ σχήματι διατείνη, ὁ μῦς τοῦ βραχίονος κατατεταμένος ἐπιδεθήσεται ἐπὶ δ' ἐπιδεθείς ξυγκάμψη τὸν ἀγκῶνα, ὁ μῦς τοῦ βραχίονος ἄλλο σχῆμα σχήσει. Δικαιοτάτη οὖν βραχίονος κατάτασις ἦδε ξύλον πηχυαῖον ἢ ὀλίγῳ βραχύτερον, ὀκοῖοι οἱ στειλαιοὶ εἰσι τῶν σκαφίων, κρεμάσαι χρῆ, ἐνθεν καὶ ἐνθεν σειρῆ δῆσαντα καθίσαντα δὲ τὸν ἄνθρωπον ἐπὶ ὑψηλοῦ τινος, τὴν χεῖρα ὑπερκεῖσθαι, ὡς ὑπὸ τῇ μασχάλῃ γένηται ὁ στειλαιὸς ἔχων ξυμμέτρως, ὥστε μόλις δύνασθαι καθίνυσθαι τὸν ἄνθρωπον, σμικροῦ δέοντα μετέωρον εἶναι ἔπειτα θέντα τι ἄλλο ἔφεδρον, καὶ ὑποθέντα σκύτινον ὑποκεφάλαιον, ἢ ἐν ἡ πλείῳ ὅκως ξυμμέτρως σχοίη ὕψους τοῦ πήχεος πλαγίου πρὸς ὀρθὴν γωνίην. Ἄριστον μὲν σκύτος πλατὺ καὶ μαλθακόν, ἢ ταινίην πλατέην ἀμφιβάλλοντα, τῶν μεγάλων τι σταθμίων ἐξαρτῆσαι, ὅ τι μετρίως ἔξει κατατείνειν εἰ δὲ μὴ, τῶν ἀνδρῶν ὅστις ἐρρωμένος, ἐν τούτῳ τῷ σχήματι τοῦ πήχεος ἐόντος, παρὰ τὸν ἀγκῶνα καταναγκαζέτω

ἐς τὸ κάτω. Ὁ δὲ ἰητρός ὀρθὸς μὲν ἐὼν χειρίζετω, τὸν ἕτερον πόδα ἐπὶ ὑψηλοτέρου τινὸς ἔχων, κατορθώσας δὲ τοῖσι θέναρσι τὸ ὀστέον ῥηϊδίως δὲ

κατορθώσεται ἀγαθὴ γὰρ ἡ κατάστασις, ἣν τις καλῶς παρασκευάσῃται. Ἐπειτα ἐπιδείτω, τὰς τε ἀρχὰς βαλλόμενος ἐπὶ τὸ κήτηγμα, καὶ τᾶλλα πάντα ὥσπερ πρότερον παρηνέθη, χειρίζετω καὶ ἐρωτήματα ταῦτ᾽ ἐρωτάτω καὶ σημείοισι χρήσθω τοῖσιν αὐτέοισιν, εἰ μετρίως ἔχει, ἢ οὐ καὶ διὰ τρίτης ἐπιδείτω, καὶ ἐπὶ μᾶλλον πιεζέτω καὶ ἐβδομαῖον ἢ ἐναταῖον ἐν νάρθηξι δησάτω [, ἔστ' ἂν ὑπὲρ τριήκοντα ἡμέρας γίνηται]. Καὶ ἦν ὑποπτέυση μὴ καλῶς κειῖσθαι τὸ ὀστέον, μεσηγὺ τουτέου τοῦ χρόνου λυσάτω, καὶ εὐτεθισάμενος μετεπιδησάτω. Κρατύνεται δὲ μάλιστα βραχίονος ὀστέον ἐν τεσσαράκοντα ἡμέρησιν. Ἐπὴν δὲ ταύτας ὑπερβάλη, λύειν χρή, καὶ ἐπὶ ἥσσον πιέζειν τοῖσιν ὀθονίοισι, καὶ ἐπὶ ἐλάσσοσιν ἐπιδεῖν. Δίαιταν δὲ ἀκριβεστέρην τινὰ ἢ τὸ πρότερον διαιτᾶν, καὶ πλείω χρόνον τεκμαίρεσθαι δὲ πρὸς τοῦ οἰδήματος τοῦ ἐν ἄκρῃ τῇ χειρὶ,

τὴν ῥώμην ὀρέων. Προσξυνιέναι δὲ χρή καὶ τάδε, ὅτι ὁ βραχίον κυρτὸς πέφυκεν ἐς τὸ ἔξω μέρος ἐς τοῦτο τοῖνυν τὸ μέρος διαστρέφεσθαι φιλέει, ἐπὴν μὴ καλῶς ἰητρεύηται ἀτὰρ καὶ τᾶλλα πάντα ὀστέα, ἐς ὅπερ πέφυκε διεστραμμένα, ἐς τοῦτο καὶ ἰητρευόμενα φιλέει διαστρέφεσθαι, ἐπὴν κατεαγῆ. Χρὴ τοῖνυν, ἐπὴν τοιοῦτό τι ὑποπτέυηται, ταινίη πλατεῖη προσεπιλαμβάνειν τὸν βραχίονα κύκλω περὶ τὸ στῆθος περιδέοντα καὶ ἐπὴν ἀναπαύεσθαι μέλλῃ, μεσηγὺ τοῦ ἀγκῶνος καὶ τῶν πλευρέων σπλῆνᾶ τινὰ πουλύπτυχον πτύξαντα ὑποτιθέναι, ἢ ἄλλο τι ὃ τουτέω ἔοικεν οὕτω γὰρ ἂν ἰθὺ τὸ κύρτωμα τοῦ ὀστέου γένοιτο φυλάσσεσθαι μέντοι χρή, ὅπως μὴ ἢ ἄγαν ἐς τὸ ἔσω μέρος.

9. Πούς δὲ ἀνθρώπου ἐκ πολλῶν καὶ μικρῶν ὀστέων ζύγκειται, ὥσπερ χεὶρ ἄκρη. Κατάγνυται μὲν οὐ πάνυ τι ταῦτα τὰ ὀστέα, ἦν μὴ ξὺν τῷ χρωτὶ τιτρωσκομένῳ ὑπὸ ὀξέος τινὸς ἢ βαρέος τὰ μὲν οὖν τιτρωσκόμενα, ἐν ἐλκωσίῳν μέρει εἰρήσεται, ὡς χρή ἰητρεύειν. Ἦν δὲ τι κινηθῆ ἐκ τῆς χώρης, ἢ τῶν δακτύλων ἄρθρον, ἢ ἄλλο τι τῶν ὀστέων τοῦ ταρσοῦ καλεομένου, ἀναγκάζειν μὲν χρή ἐς τὴν ἐσωτοῦ χώρην ἕκαστον, ὥσπερ

καὶ τὰ ἐν τῇ χειρὶ εἴρηται ἰητρεύειν δὲ κηρωτῆ καὶ σπλῆνεσι καὶ ὀθονίοισιν, ὥσπερ καὶ τὰ κήτηματα, πλὴν τῶν ναρθήκων, τὸν μὲν αὐτὸν τρόπον πιεζέοντα, διὰ τρίτης δὲ ἐπιδέοντα ὑποκρινέσθω δὲ ὁ ἐπιδεόμενος παραπλήσια, οἷα περ καὶ ἐν τοῖσι κήτημασι, καὶ περὶ τοῦ πεπιέχθαι, καὶ περὶ τοῦ χαλᾶν. Ὑγιέα δὲ γίνεται ἐν εἴκοσιν ἡμέρησι τελῶς ἅπαντα, πλὴν ὀκόσα κοινωνέει τοῖσι τῆς κνήμης ὀστέοισι καὶ αὐτῇ τῇ ἴξει. Ξυμφέρει δὲ κατακεῖσθαι τοῦτον τὸν χρόνον ἀλλὰ γὰρ οὐ τολμέουσιν ὑπερορῶντες τὸ νόσημα, ἀλλὰ περιέρχονται, πρὶν ὑγιέες γενέσθαι. Διὰ τοῦτο καὶ οἱ πλεῖστοι οὐκ ἐξυγιαίνουσι τελῶς. Ἀλλὰ πολλάκις αὐτοὺς ὁ πόνος ὑπομνησκει εἰκότως ὅλον γὰρ τὸ ἄχθος τοῦ σώματος οἱ πόδες ὀχέουσιν. Ὅκόταν οὖν μήπω ὑγιέες ἐόντες ὀδοιπορέωσι, φλαύρως

ξυναλθάσεται τὰ ἄρθρα τὰ κινήθοντα διὰ τοῦτο ἄλλοτε καὶ ἄλλοτε ὀδοιπορέοντες ὀδυνῶνται τὰ πρὸς τῆ κνήμη.

10. Τὰ δὲ κοινωνέοντα τοῖσι τῆς κνήμης ὀστέοισι μείζω τε τῶν ἐτέρων ἐστὶ, καὶ κινήθοντων τούτων πουλυχρονωτέρη ἢ ἄλθεξις. Ἰησις μὲν οὖν ἡ αὐτὴ ὀθονίοισι δὲ πλείοσι

χρέεσθαι, καὶ σπλήνεσιν καὶ ἐπὶ πᾶν ἔνθεν καὶ ἔνθεν ἐπιδέειν πιέζειν δὲ, ὥσπερ καὶ τᾶλλα πάντα, ταύτη μάλιστα ἢ ἐκινήθη, καὶ τὰς πρώτας περιβολὰς τῶν ὀθονίων κατὰ ταῦτα ποιέεσθαι. Ἐν δὲ ἐκάστη τῶν ἀπολυσιῶν ὕδατι πολλῶ θερμῶ χρέεσθαι ἐν πᾶσι δὲ πολλὸν ὕδωρ θερμὸν καταχέειν τοῖσι κατ' ἄρθρα σίνεσιν. Αἱ δὲ πιέξεις καὶ αἱ χαλάσεις ἐν τοῖσιν αὐτέοισι χρόνοισι τὰ αὐτὰ σημεῖα δεικνύοντων, ἅπερ ἐπὶ τοῖσι πρόσθεν καὶ τὰς μετεπιδέσιας ὡσαύτως χρῆ ποιέεσθαι. Ὑγιέες δὲ τελέως οὗτοι γίνονται ἐν τεσσαράκοντα ἡμέρησι μάλιστα, ἢν τολμέωσι κατακεῖσθαι ἢν δὲ μὴ, πάσχουσι ταῦτα ἅ καὶ πρότερον, καὶ ἐπὶ μᾶλλον.

11. Ὅσοι δὲ πηδήσαντες ἀφ' ὑψηλοῦ τινος ἐστηρίζαντο τῆ πτέρνη ἰσχυρῶς, τουτέοισι δισταται μὲν τὰ ὀστέα, φλέβια δ' ἐκχυμοῦνται ἀμφιφλασθείσης τῆς σαρκὸς ἀμφὶ τὸ ὀστέον, οἴδημα δὲ ἐπιγίνεται καὶ πόνος πουλύς. Τὸ γὰρ ὀστέον τοῦτο οὐ σμικρὸν ἐστὶ, καὶ ὑπερέχει μὲν ὑπὸ τὴν ἰθυωρίην τῆς κνήμης, κοινωνεῖ δὲ φλεψὶ καὶ νεύροισιν ἐπικαίροισιν ὁ τένων δὲ ὁ ὀπίσθιος τούτῳ προσήρηται τῷ ὀστέῳ. Τούτους χρῆ ἰητρεύειν μὲν κηρωτῆ καὶ σπλήνεσι καὶ ὀθονίοισιν ὕδατι δὲ θερμῶ πλείστῳ ἐπὶ τουτέοισι χρῆσθαι καὶ ὀθονίων πλειόνων ἐπὶ τουτέοισι δεῖ, καὶ ἄλλως ὡς βελτίστων καὶ προσηνεστάτων. Καὶ ἢν μὲν τύχη

ἀπαλὸν τὸ δέρμα φύσει ἔχων τὸ ἀμφὶ τῆ πτέρνη, ἔῃν οὕτως ἢν δὲ παχὺ καὶ σκληρὸν, οἷα μετεξέτεροι ἴσχουσιν, κατὰτάμνειν χρῆ ὀμαλῶς, καὶ διαλεπτύνειν μὴ διατιτρώσκντ. Ἐπιδεῖν δὲ ἀγαθῶς οὐ παντὸς ἀνδρός ἐστὶ τὰ τοιαῦτα ἢν γὰρ τις ἐπιδέη, ὥσπερ καὶ τὰ ἄλλα τὰ κατὰ τὰ σφυρὰ ἐπιδεῖται, ὅτε μὲν περὶ τὸν πόδα περιβαλλόμενος, ὅτε δὲ περὶ τὸν τένοντα, αἱ ἀποσφίξεις αὐται χωρίζουσι τὴν πτέρνην, ἢ τὸ φλάσμα ἐγένετο καὶ οὕτω κίνδυνος σφακελίσαι τὸ ὀστέον τὸ τῆς πτέρνης καίτοι ἢν σφακελίση, τὸν αἰῶνα πάντα ἰκανὸν ἀντίσχειν τὸ νόσημα. Καὶ γὰρ τᾶλλα ὅσα μὴ ἐκ τοιοῦτου τρόπου σφακελίζει, ἀλλ' ἐν κατακλίσει μελανθείσης τῆς πτέρνης ὑπὸ ἀμελείης τοῦ σχήματος, ἢ ἐν κνήμη τρώματος γενομένου ἐπικαίρου καὶ χρονίου καὶ κοινῷ τῆ πτέρνη, ἢ ἐν μηρῶ, ἢ ἐπὶ ἄλλῳ νουσήματι ὑπτιασμοῦ χρονίου γενομένου, ὁμῶς καὶ τοῖσι τοιοῦτοισι χρόνια, καὶ ὀγλώδεα, καὶ πολλάκις ἀναρρηγνύμενα, ἢν μὴ χρηστῆ μὲν μελέτη θεραπευθῆ, πολλῆ δ' ἠσυχίῃ, ὡς τὰ

γε σφακελίζοντα ἐκ τοῦ τοιούτου δὲ τρόπου σφακελίζοντα καὶ κινδύνους μεγάλους τῷ σώματι παρέχει πρὸς τῇ ἄλλῃ λύμῃ Καὶ γὰρ πυρετοὶ ὑπεροξέες, ξυνεχές, τρομώδεις, λυγγώδεις, γνώμης ἀπτόμενοι, καὶ ὀλιγήμεροι, κτείνοντές τε γένοιτο δ' ἂν καὶ φλεβῶν αἰμορρόων πελιώσεις, ναυσιώσεις, καὶ γαγγραινώσεις ὑπὸ τῆς πιέξιος γένοιτο δ' ἂν ταῦτα ἔξω τοῦ ἄλλου σφακελισμοῦ. Ταῦτα μὲν οὖν εἴρηται, οἷα τὰ ἰσχυρότατα φλάσματα ἴνεται τὰ μέντοι πλεῖστα ἡσυχαιῶς ἀμφιφλᾶται, καὶ οὐδεμίῃ πολλῇ σπουδῇ τῆς μελέτης, ἀλλ' ὅμως ὀρθῶς γε χρῆ χεiriρίζειν. Ἐπὴν μέντοι ἰσχυρὸν δόξῃ εἶναι τὸ ἔρεισμα, τὰ τε εἰρημένα ποιέειν χρῆ, καὶ τὴν ἐπίδεδιν τὴν πλείστην ποιέεσθαι ἀμφὶ τὴν πτέρνην περιβάλλοντα, ἄλλοτε πρὸς τὰ ἄκρα τοῦ ποδὸς ἀντιπεριβάλλοντα, ἄλλοτε πρὸς τὰ μέσα, ἄλλοτε πρὸς τὰ περὶ τὴν κνήμην προσεπιδεῖν δὲ καὶ τὰ πλησίον πάντα ἔνθεν καὶ ἔνθεν, ὡσπερ καὶ πρόσθεν εἴρηται καὶ ἰσχυρὴν μὲν μὴ ποιέεσθαι τὴν πίεξιν, ἐν πολλοῖσι δὲ τοῖσιν ὀθονίοισιν ἄμεινον δὲ καὶ ἐλλέβορον

πιπίσκειν αὐθημερὸν, ἢ τῇ ὑστεραίῃ ἀπολῦσαι δὲ τριταῖον, καὶ αὐθις μετεπιδῆσαι. Σημεῖα δὲ τάδε, ἢν παλιγκοταίνῃ, ἢ οὐ ἔπῃν μὲν τὰ ἐκχυμώματα τῶν φλεβῶν, καὶ τὰ μελάσματα, καὶ τὰ ἐγγὺς ἐκείνων ὑπέρυθρα γινηται καὶ ὑπόσκληρα, κίνδυνος παλιγκοτῆσαι. Ἄλλ' ἢν μὲν ἀπύρετος ἦ, φαρμακεύειν ἄνω χρῆ, ὡσπερ εἴρηται, καὶ ὅσα ἂν μὴ ξυνεχῆ πυρεταίνηται ἢν δὲ ξυνεχῆ πυρεταίνηται, μὴ φάρμακεύειν, ἀπέχειν δὲ σιτίων καὶ ροφημάτων, ποτῶ δὲ χρῆσθαι ὕδατι, καὶ μὴ οἴνω, ἀλλὰ τῷ ὀξυγλυκεῖ. Ἦν δὲ μὴ μέλλῃ παλιγκοταίνειν, τὰ ἐκχυμώματα καὶ τὰ μελάσματα καὶ τὰ περιέχοντα ὑπόχλωρα γίνεται καὶ οὐ σκληρὰ ἀγαθὸν τοῦτο τὸ μαρτύριον ἐν πᾶσι τοῖσιν ἐκχυμώμασιν, τοῖσι μὴ μέλλουσι παλιγκοταίνειν ὅσα δὲ σὺν σκληρύσμασι πελιοῦται, κίνδυνος μὲν μελανθῆναι. Τὸν δὲ πόδα ἐπιτηδεύειν χρῆ, ὅκως ἀνωτέρω τοῦ ἄλλου σώματος ἔσται τὰ πλεῖστα ὀλίγον. Ὑγιῆς δ' ἂν γένοιτο ἐν ἐξήκοντα ἡμέρησιν, εἰ ἀτρεμέοι.

12. Ἡ δὲ κνήμη δύο ὀστέα ἐστὶ, τῇ μὲν συχνῶ λεπτότερον τὸ ἕτερον τοῦ ἐτέρου, τῇ δὲ οὐ πολλῶ λεπτότερον ξυνέχεται δὲ ἀλλήλοισι τὰ πρὸς τοῦ ποδὸς, καὶ ἐπίφυσιν κοινήν ἔχει, ἐν ἰθυωρίῃ δὲ τῆς κνήμης οὐ ξυνέχεται τὰ δὲ πρὸς τοῦ μηροῦ ξυνέχεται, καὶ ἐπίφυσιν ἔχει, καὶ ἡ ἐπίφυσις διάφυσιν μακρότερον δὲ τὸ ἕτερον ὀστέον σμικρῶ τὸ κατὰ τὸν σμικρὸν δάκτυλον ἢ μὲν φύσις τοιαύτη τῶν ὀστέων τῶν ἐν τῇ κνήμῃ.

13. Ὀλισθάνει δὲ ἔστιν ὅτε τὰ πρὸς τοῦ ποδὸς, ὅτε μὲν ξὺν τῇ ἐπίφυσει ἀμφότερα τὰ ὀστέα, ὅτε δὲ ἡ ἐπίφυσις ἐκινήθη, ὅτε δὲ τὸ ἕτερον ὀστέον. Ταῦτα δὲ ὀχλώδεα μὲν ἦσσαν, ἢ τὰ ἐν τῷ

καρπῶ τῶν χειρέων, εἰ τολμῶεν ἀτρεμέειν οἱ ἄνθρωποι. Ἰησις δὲ παραπλησίη, οἷη περ ἐκείνων τὴν τε γὰρ ἐμβολὴν χρῆ ποιέεσθαι ἐκ κατατάσιος ὥσπερ ἐκείνων, ἰσχυροτέρης δὲ δεῖται τῆς κακατάσιος, ὅσῳ καὶ ἰσχυρότερον τὸ σῶμα ταύτη. Ἐς τὰ πλεῖστα μὲν γὰρ ἀρκέουσιν ἄνδρες δύο, ὁ μὲν ἔνθεν, ὁ δὲ ἔνθεν τείνοντες. Ἦν δὲ μὴ ἰσχύωσιν, ἰσχυροτέρην ρηϊδίον ἐστι ποιέειν τὴν κατάτασιν ἢ γὰρ πλήμνην κατορύζαντα χρῆ, ἢ ἄλλο τι ὅ τι τούτῳ ἔοικεν, μαλθακόν τι περὶ τὸν πόδα περιβάλλειν ἔπειτα πλατέσι βοείοισιν ἰμάσι περιδήσαντα τὸν πόδα, τὰς ἀρχὰς τῶν ἰμάντων, ἢ πρὸς ὕπερον, ἢ πρὸς ἕτερον ξύλον προσδήσαντα, τὸ ξύλον πρὸς τὴν πλήμνην ἄκρον ἐνθέντα ἐπανακλῶν τοὺς δὲ ἀντιτείνειν, ἄνωθεν τῶν τε ὤμων ἐχομένους καὶ τῆς ἰγνύης. Ἔστι δὲ καὶ τὸ ἄνω τοῦ σώματος ἀνάγκη προσλαβεῖν τοῦτο μὲν ἦν βούλη,

ξύλον στρογγύλον, λεῖον, κατορύζας βαθέως, μέρος τι αὐτοῦ ὑπερέχον τοῦ ξύλου μεσηγὺ τῶν σκελέων ποιήσασθαι παρὰ τὸν περίνεον, ὡς κωλύη ἀκολουθέειν τὸ σῶμα τοῖσι πρὸς ποδῶν τείνουσιν ἔπειτα πρὸς τὸ τεινόμενον σκέλος μὴ ῥέπειν, τὸν δὲ τινα πλάγιον παρακαθήμενον ἀπωθέειν τὸν γλουτὸν, ὡς μὴ περιέλκεται τὸ σῶμα. Τοῦτο δὲ καὶ ἦν βούλη, περὶ τὰς μασχάλας ἔνθεν καὶ ἔνθεν τὰ ξύλα παραπέπηγεν, αἱ δὲ χεῖρες παρατεταμέναι φυλάσσονται, προσεπιλαμβανέτω δὲ τις κατὰ τὸ γόνυ, καὶ οὕτως ἀντιτείνοιτο. Τοῦτο δ' ἦν παρὰ τὸ γόνυ βούληται, ἄλλους ἰμάντας περιδήσας, ἢ περὶ τὸν μηρὸν, πλήμνην ἄλλην ὑπὲρ κεφαλῆς κατορύζας, ἐξαρτήσας τοὺς ἰμάντας ἔκ τινος ξύλου, τὸ ξύλον στηρίζων ἐς τὴν πλήμνην, τάναντία τῶν πρὸς ποδῶν ἔλκειν. Τοῦτο δ' ἦν βούλη, ἀντὶ τῶν πλημνέων δοκίδα ὑποτείνας ὑπὸ τὴν κλίνην μετρίην, ἔπειτα πρὸς τῆς δοκίδος ἔνθεν καὶ ἔνθεν τὴν κεφαλὴν στηρίζων

καὶ ἀνακλῶν τὰ ξύλα, κατατείνειν τοὺς ἰμάντας ἦν δὲ θέλης, ὀνίσκους καταστήσας ἔνθεν καὶ ἔνθεν, ἐπ' ἐκείνων τὴν κατάτασιν ποιέεσθαι. Πολλοὶ δὲ καὶ ἄλλοι τρόποι κατατασίων. Ἄριστον δὲ, ὅστις ἐν πόλει μεγάλη ἰητρεύει, κεκτῆσθαι ἐσκευασμένον ξύλον, ἐν ᾧ πᾶσαι αἱ ἀνάγκαι ἔσονται πάντων μὲν κατηγομάτων, πάντων δὲ ἄρθρων ἐμβολῆς ἐκ κατατάσιος καὶ μοχλεύσιος ἀρκέει δὲ τὸ ξύλον, ἦν ἢ τοιοῦτον οἶον οἱ τετράγωνοι τρίβολοι δρύϊνοι γίνονται, μῆκος καὶ πλάτος καὶ πάχος.

14. Ἐπὴν δὲ ἰκανῶς κατατανύσης, ρηϊδίον ἤδη τὸ ἄρθρον ἐμβαλεῖν ὑπεραιωρέεται γὰρ ἐς ἰθυωρίην ὑπὲρ τῆς ἀρχαίης ἔδρης. κατορθοῦσθαι οὖν χρῆ τοῖσι θέναρσι τῶν χειρῶν, τοῖσι μὲν ἐς τὸ ἐξεστηκὸς ἐρείδοντα, τοῖσι δὲ ἐπὶ θάτερα κατώτερον τοῦ σφυροῦ ἀντερείδοντα. Ἐπὴν δὲ ἐμβάλης, ἦν μὲν οἶόν τε ἦ, κατατεταμένα ἐπιδεῖν χρῆ ἦν δὲ κωλύηται ὑπὸ τῶν ἰμάντων, ἐκείνους λύσαντα ἀντικατατείνειν, ἔστ' ἂν ἐπιδήσης. Ἐπιδεῖν δὲ τὸν αὐτὸν τρόπον, καὶ

τάς ἀρχάς ὡσαύτως βαλλόμενον κατὰ τὸ ἐξεστηκός, καὶ τὰς περιβολὰς τὰς πρῶτας πλείστας κατὰ τοῦτο ποιέεσθαι, καὶ τοὺς σπλήνας πλείστους κατὰ τοῦτο, καὶ τὴν πίεξιν μάλιστα κατὰ

τούτῳ προσεπιθεῖν δὲ καὶ ἔνθεν καὶ ἔνθεν ἐπὶ συχνόν. Μᾶλλον δέ τι τοῦτο τὸ ἄρθρον περιέχθαι χρὴ ἐν τῇ πρώτῃ ἐπιδέσει, ἢ τὸ ἐν τῇ χειρί. Ἐπὴν δὲ ἐπιδήσης, ἀνωτέρω μὲν τοῦ ἄλλου σώματος ἐχέτω τὸ ἐπιθεθὲν, τὴν δὲ θέσιν δεῖ ποιέεσθαι οὕτως, ὅπως ἤκιστα ἀπαιωρηθήσεται ὁ πούς. Τὸν δὲ ἰσχυασμὸν τοῦ σώματος οὕτω ποιέεσθαι, ὁκοίην τινὰ δύναμιν ἔχει καὶ τὸ ὀλίσθημα τὰ μὲν γὰρ σμικρὸν, τὰ δὲ μέγα ὀλισθάνει. Τὸ ἐπίπαν δὲ ἰσχυαίνειν μᾶλλον καὶ ἐπὶ πλείω χρόνον χρὴ ἐν τοῖσι κατὰ τὰ σκέλεα τρώμασιν, ἢ ἐν τοῖσι κατὰ τὰς χεῖρας καὶ γὰρ μέζω καὶ παχύτερα ταῦτα ἐκείνων καὶ δὴ καὶ ἀναγκαῖον ἐλινύειν τὸ σῶμα καὶ κατακεῖσθαι. Μετεπιθεῖν δὲ τὸ ἄρθρον, οὔτε τι κωλύει τριταῖον, οὔτε κατεπεῖγει. Καὶ τὰ ἄλλα πάντα παραπλησίως χρὴ ἰητρεύειν, ὥσπερ καὶ τὰ παροιχόμενα. Καὶ ἦν μὲν τολμᾷ ἀτρέμα κατακεῖσθαι, ἱκαναὶ τεσσαράκοντα ἡμέραι, ἦν μόνον ἐς τὴν ἐσωτῶν χώραν τὰ ὀστέα αὐθις καθίζηται ἦν δὲ μὴ θέλη ἀτρέμειν, χρῆτο μὲν ἂν οὐ ῥαδίως τῷ σκέλει, ἐπιθεῖσθαι δὲ ἀναγκάζοιτ' ἂν πούλῳ χρόνον.

Ὅκοσα μέντοι τῶν ὀστέων μὴ τελέως ἴζει ἐς τὴν ἐσωτῶν χώραν, ἀλλὰ τι ἐπιλείπει, τῷ χρόνῳ λεπτύνεται ἰσχίον καὶ μηρὸς καὶ κνήμη καὶ ἦν μὲν εἴσω ὀλίσθη, τὸ ἔξω μέρος λεπτύνεται, ἦν δὲ ἔξω, τὸ εἴσω. Τὰ πλείστα δὲ ἐς τὸ ἔσω ὀλισθάνει.

15. Ἐπὴν δὲ κνήμης ὀστέα ἀμφοτέρα καταγῆ ἄνευ ἐλκώσιος, κατατάσιος ἰσχυροτέρας δεῖται. Τείνειν δὲ τουτέων τῶν τρόπων ἐνίοισι τῶν προειρημένων, ἦν μεγάλαι αἱ παραλλάξεις ἔωσιν. Ἰκαναὶ δὲ καὶ αἱ ἀπὸ τῶν ἀνδρῶν κατατάσεις τὰ πλείστα γὰρ ἀρκέοιεν ἂν δύο ἄνδρες ἐρρωμένοι, ὁ μὲν ἔνθεν, ὁ δ' ἔνθεν ἀντιτείνοντες. Τείνειν δὲ ἐς τὸ ἰθὺ χρὴ κατὰ φύσιν καὶ κατὰ τὴν ἰθυωρίην τῆς κνήμης καὶ τοῦ μηροῦ, καὶ ἦν κνήμης ὀστέα κατεγυῖης κατατείνης, καὶ ἦν μηροῦ. Καὶ ἐπιθεῖν δὲ οὕτως, ἐκτεταμένων ἀμφοτέρων, ὀκότερον ἂν τουτέων ἐπιδέης οὐ γὰρ ταῦτα ξυμφέρει σκέλει τε καὶ χειρί. Πήχεος μὲν γὰρ καὶ βραχίονος ἐπὴν ἐπιθεθῶσιν ὀστέα κατεγότα, ἀναλαμβάνεται ἡ χεῖρ, καὶ ἦν ἐκτεταμένα ἐπιδέης, τὰ σχήματα τῶν σαρκῶν ἑτεροιοῦται ἐν τῇ ξυγκάμψει τοῦ ἀγκῶνος ἀδύνατος γὰρ ὁ ἀγκῶν ἐκτετάσθαι πούλῳ χρόνον οὐ γὰρ πολλάκις ἐν τοιούτῳ

εἴθισται ἐσχηματίσθαι, ἀλλ' ἐν τῷ ξυγκεκάμφθαι καὶ δὴ καὶ ἄτε δυνάμενοι οἱ ἄνθρωποι περιέναι, ἐπὴν κατὰ χεῖρα τρωθῶσι, ξυγκεκάμφθαι κατὰ τὸν ἀγκῶνα

δέονται. Σκέλος δὲ ἐν τε τῆσιν ὀδοιπορίησιν καὶ ἐν τῷ ἐστάναι εἴθισται ὅτε μὲν ἐκτετάσθαι, ὅτε δὲ σμικροῦ δεῖν ἐκτετάσθαι καὶ εἴθισται καθεῖσθαι ἐς τὸ κάτω κατὰ φύσιν, καὶ δὴ καὶ πρὸς τὸ ὀχέειν τὸ ἄλλο σῶμα διὰ τοῦτο εὐφορον αὐτῷ ἐστὶ τὸ ἐκτετάσθαι, ὅταν ἀνάγκη ἔχη καὶ δὴ καὶ ἐν τῆσι κοίτησι πολλάκις ἐν τῷ σχήματι τουτέω ἐστὶν ἐπὶ δὲ δὴ τρωθῆ, ἀνάγκη καταδουλοῦται τὴν γνώμην, ὅτι ἀδύνατοι μετεωρίζεσθαι γίνονται, ὥστε οὐδὲ μέμνηνται περὶ τοῦ ζυγκαμφοθῆναι καὶ ἀναστῆναι, ἀλλὰ ἀτρεμέουσιν ἐν τουτέω τῷ σχήματι κείμενοι. Διὰ οὖν ταύτας τὰς προφάσιας χειρὸς καὶ σκέλεος, οὔτε ἡ κατάτασις, οὔτε ἡ ἐπίδεσις τοῦ σχήματος συμφέρει ἡ αὐτή. Ἦν μὲν οὖν ἰκανὴ ἡ κατάτασις ἡ ἀπὸ τῶν ἀνδρῶν ἦ, οὐ δεῖ μάτην πονέεσθαι καὶ γὰρ σολοικότερον μηχανοποιεῖν μηδὲν δέον ἦν δὲ μὴ ἰκανὴ ἡ κατάτασις ἡ ἀπὸ τῶν ἀνδρῶν, καὶ τῶν ἄλλων τινὰ τῶν ἀναγκέων προσφέρειν,

ἦν τινὰ γε προσχωρέοι. Ὅταν δὲ δὴ ἰκανῶς καταταθῆ, ῥήϊδιον ἤδη κατορθώσασθαι τὰ ὀστέα καὶ ἐς τὴν φύσιν ἀγαγεῖν, τοῖσι θέναρσι τῶν χειρέων ἀπευθύνοντα καὶ ἐξευκρινέοντα.

16. Ἐπὶ δὲ κατορθώσῃ, ἐπιδεῖν τοῖσιν ὀθονίοισι κατατεταμένα, ἦν τ' ἐπὶ δεξιᾷ, ἦν τ' ἐπ' ἀριστερὰ περιφέρειν συμφέρη αὐτέοισι τὰ πρῶτα ὀθόνια βαλλέσθω δὲ τὴν ἀρχὴν τοῦ ὀθονίου κατὰ τὸ κάτηγμα, καὶ περιβαλλέσθω κατὰ τοῦτο τὰς πρώτας περιβολὰς κάπειτα νεμέσθω ἐπὶ τὴν ἄνω κνήμην ἐπίδεων, ὥσπερ ἐπὶ τοῖσιν ἄλλοισι κατήγμασιν εἴρηται. Τὰ δὲ ὀθόνια πλατύτερα χρὴ εἶναι, καὶ μακρότερα καὶ πλέω πούλῳ τὰ κατὰ τὸ σκέλος τῶν ἐν τῇ χειρὶ. Ἐπὶ δὲ ἐπίδησης, καταθεῖναι ἐφ' ὀμαλοῦ τινος καὶ μαλθακοῦ, ὥστε μὴ διεστράφθαι ἢ τῆ, ἢ τῆ, μήτε λορδὸν, μήτε κυφὸν εἶναι μάλιστα δὲ συμφέρει προσκεφάλαιον, ἢ λίνεον, ἢ ἐρίνεον, μὴ σκληρὸν, λαπαρὸν μέσον κατὰ μῆκος ποιήσαντα, ὑποθεῖναι, ἢ ἄλλο τι ὃ τούτω ἔοικεν. Περὶ γὰρ τῶν σωλῆνων τῶν ὑποτιθεμένων ὑπὸ τὰ σκέλεα τὰ κατηγότα, ἀπορέω ὃ τι συμβουλεύσω, εἰ ὑποτιθέναι χρὴ ἢ οὐ. Ωφελέουσι μὲν γὰρ, οὐχ ὅσον δὲ οἱ ὑποτιθέντες οἴονται. Οὐ γὰρ

ἀναγκάζουσιν οἱ σωλῆνες ἀτρεμέειν, ὡς οἴονται οὔτε γὰρ τῷ ἄλλῳ σώματι στρεφομένῳ ἢ ἔνθα, ἢ ἔνθα, ἐπαναγκάζει ὁ σωλῆν μὴ ἐπακολουθέειν τὸ σκέλος, ἦν μὴ ἐπιμελῆται αὐτὸς ὄνθρωπος. οὔτε αὖ τὸ σκέλος ἄνευ τοῦ σώματος κωλύει ὁ σωλῆν κινηθῆναι ἢ τῆ ἢ τῆ. Ἀλλὰ μὴν ἀστεργέστερον ξύλον ὑποτετάσθαι, ἦν μὴ ὁμῶς ἂν τις μαλθακόν τι ἐς αὐτὸ ἐντεθῆ. Εὐχρηστότατον δὲ ἐστὶν ἐν τῆσι μεθυποστρώσεσι, καὶ ἐν τῆσιν ἐς ἄφοδον προχωρήσεσιν. Ἔστιν οὖν σὺν σωλῆνι καὶ ἄνευ σωλῆνος καὶ καλῶς καὶ αἰσχυρῶς κατασκευάσασθαι πιθανώτερον δὲ τοῖσι δημότησιν ἐστὶ, καὶ τὸν ἱητρὸν ἀναμαρτητότερον εἶναι, ἦν σωλῆν ὑποκείται καίτοι ἀτεχνέστερόν γέ ἐστιν. Δεῖ μὲν γὰρ ἐφ' ὀμαλοῦ καὶ μαλθακοῦ

κεῖσθαι πάντη πάντως ἐς ἰθύ ἐπεὶ τοί γε ἀνάγκη κρατηθῆναι τὴν ἐπίδεδειν ὑπὸ τῆς διαστροφῆς τῆς ἐν τῇ θέσει, ὅποι ἂν ῥέπη, καὶ ὀκόσα ἂν ῥέπη. Ὑποκρινέσθω δὲ ὁ ἐπιδεδεμένος ταῦτά, ἅπερ καὶ πρότερον εἴρηται καὶ γὰρ τὴν ἐπίδεδειν χρῆ τοιαύτην εἶναι, καὶ τὸ οἶδημα οὕτως ἐξαείρεσθαι ἐς τὰ ἄκρεα, καὶ τὰς χαλάσιαις οὕτω, καὶ τὰς μετεπιδέσιαις διὰ τρίτης, καὶ εὐρισκέσθω

ἰσχνότερον τὸ ἐπιδεδόμενον, καὶ τὰς ἐπιδέσιαις ἐπὶ μᾶλλον ποιέεσθαι, καὶ πλέοσι τοῖσιν ὀθονίοισιν περιλαμβάνειν τε καὶ τὸν πόδα χαλαρῶς, ἣν μὴ ἄγαν ἐγγὺς ἢ τοῦ γούνατος τὸ τρῶμα. Κατατείνειν δὲ μετρίως καὶ ἐπικατορθοῦν ἐφ' ἐκάστη ἐπίδεδειν χρῆ τὰ ὀστέα ἣν γὰρ ὀρθῶς μὲν ἰητρεύηται, κατὰ λόγον δὲ τὸ οἶδημα χωρῆ, ἔτι μὲν λεπτότερον καὶ ἰσχνότερον τὸ ἐπιδεδόμενον χωρίον ἔσται, ἔτι δὲ αὐτὰ παραγωγότερα τὰ ὀστέα, ἐνακούοντα τῆς κατατάσιος μᾶλλον. Ἐπὶ δὲ ἐβδομαῖος, ἢ ἐναταῖος, ἢ ἐνδεκαταῖος γένηται, τοὺς νάρθηκας προστιθέμεναι, ὥσπερ καὶ ἐπὶ τοῖσιν ἄλλοισι κατήγμασιν εἴρηται. Τῶν δὲ νάρθηκων τὰς ἐνέδρας χρῆ φυλάσσεσθαι κατὰ τε τῶν σφυρῶν τὴν ἴξιν, καὶ κατὰ τὸν τένοντα τὸν ἐν τῇ κνήμῃ τοῦ ποδός. Ὀστέα δὲ κνήμης κρατύνεται ἐν τεσσαράκοντα ἡμέρησιν, ἣν ὀρθῶς ἰητρεύηται. Ἦν δὲ ὑποπευῆς τῶν ὀστέων τι δεῖσθαι τινος διορθώσιος, ἢ τινα ἔλκωσιν ὀρρωδέης, ἐν τῷ μεσηγῷ χρόνῳ χρῆ λύσαντα καὶ εὐθετισάμενον μετεπιδῆσαι.

17. Ἦν δὲ τὸ ἕτερον ὀστέον κατεγῆ ἐν κνήμῃ, κατατάσιος μὲν ἀσθενεστέρης δεῖται, οὐ μὴν ἐπιλείπειν χρῆ, οὐδὲ βλακεύειν ἐν τῇ κατατάσει, μάλιστα μὲν ἐν τῇ πρώτῃ ἐπίδεδειν κατατείνεσθαι, ὅσον ἐφικνέεται αἰεὶ ποτε πάντα τὰ κατήγματα, εἰ δὲ μὴ, ὡς τάχιστα ὅ τι γὰρ ἂν μὴ κατὰ τροπὸν ἠθετισμένων τῶν ὀστέων ἐπιδέων τις πιέζει, ὀδυναίτερον τὸ χωρίον γίνεται. Ἡ δὲ ἄλλη ἰητρεία ἢ αὕτη.

18. Τῶν δὲ ὀστέων τὸ μὲν ἔσω τοῦ ἀντικνημίου καλεομένου ὀχλω

δέστερον ἐν τῇ ἰητρείῃ ἐστὶ, καὶ κατατάσιος μᾶλλον δεόμενον, καὶ ἣν μὴ ὀρθῶς τὰ ὀστέα τεθῆ, ἀδύνατον κρύψαι, φανερόν γὰρ καὶ ἄσαρκον πᾶν ἐστὶν καὶ ἐπιβαίνειν ἐπὶ τὸ σκέλος πολλῶ βραδύτερον δύναιντ' ἂν, τουτέου κατεηγότος. Ἦν δὲ τὸ ἔξω ὀστέον κατεγῆ, πουλὸν μὲν εὐφορότερον φέρουσι, πουλὸν δ' εὐκρυπτότερον, καὶ ἣν μὴ καλῶς ξυντεθῆ, ἐπίσαρκον γὰρ ἐστὶν ἐπὶ πόδας τε ταχέως ἴστανται, τὸ πλεῖστον γὰρ τοῦ ἄχθεος ὀχέει τὸ ἔσωθεν τοῦ ἀντικνημίου ὀστέον. Ἄμα μὲν γὰρ αὐτῷ τῷ σκέλει καὶ τῇ ἰθυωρίῃ τοῦ ἄχθεος τοῦ κατὰ τὸ σκέλος, τὸ πλεῖον ἔχει τοῦ πόνου τὸ ἔσω ὀστέον τοῦ γὰρ μηροῦ ἢ κεφαλῆ ὑπεροχέει τὸ ὑπερθεν τοῦ σώματος, αὕτη δὲ εἴσωθεν πέφυκε τοῦ σκέλους, καὶ οὐκ ἔξωθεν, ἀλλὰ κατὰ τὴν τοῦ ἀντικνημίου ἴξιν ἅμα δὲ τὸ ἄλλο ἥμισυ τοῦ



σώματος γειτονεύεται μᾶλλον ταύτη τῇ ἴξει, ἀλλ' οὐχὶ τῇ ἔξωθεν ἅμα δὲ, ὅτι παχύτερον τὸ ἔσω τοῦ ἔξωθεν, ὥσπερ τὸ ἐν τῷ πήχει τὸ κατὰ τὴν τοῦ μικροῦ δακτύλου ἴξιν λεπτότερον καὶ μακρότερον. Ἐν μέντοι τῷ ἄρθρῳ τῷ κάτω οὐχ ὁμοίη ἢ ὑπότασις τοῦ ὀστέου τοῦ μακροτέρου ἀνομοίως γὰρ ὁ ἀγκῶν καὶ ἢ ἰγνύη κάμπτεται. Διὰ οὖν ταύτας τὰς προφάσις, τοῦ μὲν ἔξωθεν ὀστέου κατεηγότος, ταχεῖαι αἱ ἐπιβάσεις, τοῦ δὲ ἔσωθεν κατεηγότος, βραδεῖαι αἱ ἐπιβάσεις.

19. Ἦν δὲ τὸ τοῦ μηροῦ ὀστέον καταγῆ, τὴν κατάτασιν χρὴ ποιέεσθαι περὶ παντὸς, ὅπως μὴ ἐνδεεστέως σχήσει πλεονασθεῖσα μὲν γὰρ οὐδὲν ἂν σίνοιτο. Οὐδὲ γὰρ, εἰ διεστεῶτα τὰ ὀστέα ὑπὸ τῆς ἰσχύος τῆς κατατάσιος ἐπιδέοι τις, οὐκ ἂν δύναίτο κρατέειν ἢ ἐπίδεσις, ὥστε διεστάναι, ἀλλὰ συνέλθοι ἂν πρὸς ἄλληλα τὰ ὀστέα, ὡς τάχιστα ἂν ἀφείησαν οἱ τείνοντες παχεῖαι γὰρ καὶ ἰσχυραὶ αἱ σάρκες εἰσῆσαι, κρατήσουσι τῆς ἐπίδεσιος, ἀλλ' οὐ κρατηθήσονται. Περὶ οὗ οὖν ὁ λόγος, διατείνειν εὖ μάλα καὶ ἀδιαστρέπτως χρὴ, μηδὲν ἐπιλείποντα μεγάλη γὰρ ἢ αἰσχύνη καὶ βλάβη βραχύτερον τὸν μηρὸν ἀποδείξει. Χεῖρ μὲν γὰρ, βραχυτέρη γενομένη, καὶ ξυγκρυφθεῖη ἂν, καὶ οὐ μέγα τὸ σφάλμα σκέλος δὲ βραχύτερον γενόμενον, χολὸν ἀποδείξει τὸν ἄνθρωπον τὸ γὰρ ὑγιὲς ἐλέγχει παρατιθέμενον, μακρότερον ἐόν, ὥστε λυσιτελεῖ τὸν μέλλοντα κακῶς ἰητρεύεσθαι, ἀμφοτέρω καταγῆναι τὰ σκέλεα μᾶλλον ἢ τὸ ἕτερον ἰσόρροπος γοῦν ἂν εἴη αὐτὸς ἐωυτῷ. Ἐπὴν μέντοι ἰκανῶς κατατανύσης, κατορθωσάμενον χρὴ τοῖσι θέναρσι τῶν χειρῶν ἐπιδεῖν τὸν αὐτὸν τρόπον, ὥσπερ καὶ πρόσθεν γέγραπται, καὶ τὰς ἀρχὰς βαλλόμενον, ὥσπερ εἴρηται, καὶ νεμόμενον ἐς τὸ ἄνω τῇ ἐπιδέσει. Καὶ ὑποκρινέσθω ταῦτα ὥσπερ καὶ πρόσθεν, καὶ πονεέτω κατὰ ταῦτα καὶ ῥηϊζέτω, καὶ μετεπιδείσθω

ὡσαύτως καὶ νερθήκων πρόσθεσις ἢ αὐτή. Κρατύνεται δὲ ὁ μηρὸς ἐν πενήκοντα ἡμέρησιν.

20. Προσξυνιέναι δὲ χρὴ καὶ τότε, ὅτι ὁ μηρὸς γαῦσός ἐστιν ἐς τὸ ἔξω μέρος, ἢ ἐς τὸ ἔσω, καὶ ἐς τὸ ἔμπροσθεν μᾶλλον, ἢ ἐς τοῦπισθεν ἐς ταῦτα τοίνυν τὰ μέρεα καὶ διαστρέφεται, ἐπὴν μὴ καλῶς ἰητρεύηται καὶ δὴ καὶ κατὰ ταῦτα ἀσαρκότερος αὐτὸς ἐωυτοῦ ἐστιν, ὥστε οὐδὲ ξυγκρυπτειν δύνανται ἐν τῇ διαστροφῇ. Ἦν οὖν τι τοιοῦτον ὑποπτεύης, μηχανοποιέεσθαι χρὴ οἷά περ ἐν τῷ βραχίονι τῷ διεστραμμένῳ παρήνηται. Προσπεριβάλλειν δὲ χρὴ ὀλίγα τῶν ὀθονίων κύκλῳ ἀμφὶ τὸ ἰσχίον καὶ τὰς ἰξύας, ὅπως ἂν οἱ βουβῶνές τε καὶ τὸ ἄρθρον τὸ κατὰ τὴν πλιχάδα καλεομένην

προσεπιδέηται καὶ γὰρ ἄλλως ξυμφέρει, καὶ ὅπως μὴ τὰ ἄκρεα τῶν νερθήκων

σίνηται πρὸς τὰ ἀνεπίδετα προσβαλλόμενα. Ἀπολείπειν δὲ χρή ἀπὸ τοῦ γυμνοῦ αἰεὶ τοὺς νάρθηκας, καὶ ἔνθεν καὶ ἔνθεν, ἱκανῶς καὶ τὴν θέσιν αἰεὶ τῶν ναρθήκων προμηθέεσθαι χρή, ὅπως μήτε κατὰ τὸ ὀστέον, τῶν ἐξεχόντων παρὰ τὰ ἄρθρα φύσει πεφυκότων, μήτε κατὰ τὸ νεῦρον ἔσται.

21. Τὰ δὲ οἰδήματα τὰ κατ' ἰγνύην, ἢ κατὰ πόδα, ἢ κατὰ τι ἄλλο ἐξαειρεύμενα ὑπὸ τῆς πιέξιος, εἰρίοισι πουλλοῖσι, ῥυπαροῖσιν, εὖ κατεργασμένοισιν, οἴνω καὶ ἐλαίῳ ῥήνας, κηρωτῇ ὑποχρίων, καταδεῖν, καὶ ἦν ζωσιν οἱ νάρθηκες, χαλᾶν. Θᾶσσον ἰσχναίνοισ δ' ἄν, εἰ, ἀφιεῖς τοὺς νάρθηκας, ὀθονίοισι συχνοῖσιν

ἐπιδέοις τὰ οἰδήματα, ἀρξάμενος ἀπὸ τοῦ κατωτάτω ἐπὶ τὸ ἄνω νεμόμενος οὕτω γὰρ ἄν τάχιστα ἰσχνὸν τὸ οἶδημα γένοιτο, καὶ ὑπερθοίῃ ἄν ὑπὸ τὰ ἀρχαῖα ἐπιδέσματα. Ἄλλ' οὐ χρή

τούτῳ τῷ τρόπῳ χρῆσθαι τῆς ἐπιδέσιος, ἦν μὴ κίνδυνος ἦ ἔν τῷ οἰδήματι φλυκταινώσιος ἢ μελασμοῦ γίνεται δὲ οὐδὲν τοιοῦτο, ἦν μὴ ἄγαν τις πιέξῃ τὸ κάτηγμα, ἢ κατακρεμάμενον ἔχη, ἢ κνήται τῇ χειρὶ, ἢ ἄλλο τι προσπίπτῃ ἐρεθιστικὸν πρὸς τὸν χρῶτα.

22. Σωλῆνα δὲ εἰ μὲν τις ὑπ' αὐτὸν τὸν μηρὸν ὑποθείῃ μὴ ὑπερβάλλοντα τὴν ἰγνύην, βλάβτοι ἄν μᾶλλον ἢ ὠφελέοι οὔτε γὰρ ἄν τὸ σῶμα κωλύοι, οὔτε τὴν κνήμην, ἄνευ τοῦ μηροῦ κινέεσθαι. Ἀσηρὸν γὰρ εἶη πρὸς τὴν ἰγνύην προσβαλλόμενον καὶ ὃ ἥκιστα δεῖ, τοῦτ' ἄν ἐποτρύνοι ποιέειν ἥκιστα γὰρ δεῖ κατὰ τὸ γόνυ κάμπτειν πᾶσαν γὰρ ἄν τύρβην παρέχοι τῆσιν ἐπιδέσεσιν καὶ μηροῦ ἐπιδεδεμένου καὶ κνήμης, ὅστις κατὰ τὸ γόνυ κάμπτοι, ἀνάγκη ἄν εἶη τούτῳ τοὺς μύας ἄλλοτε ἄλλο σχῆμα ἴσχειν ἀνάγκη δ' ἄν εἶη καὶ τὰ ὀστέα τὰ κατεηγότα κίνησιν ἔχειν. Περὶ παντὸς οὖν ποιητέον τὴν ἰγνύην ἐντετάσθαι. Δοκέοι ἄν οὖν μοι ὁ σωλῆν, ὁ περιέχων πρὸς τὸν πόδα ἀπὸ τοῦ ἰσχίου, ὠφελέειν ὑποτιθέμενος καὶ ἄλλως κατ' ἰγνύην ταινίην χαλαρῶς περιβάλλειν

ξὺν τῷ σωλῆνι, ὡσπερ τὰ παιδιά ἐν τῆσι κοίτησι σπαργανοῦται εἶτα ἐπὴν ὁ μηρὸς ἐς τὸ ἄνω διαστρέφοιτο, ἢ ἐς τὸ πλάγιον, εὐκατασχετώτερον εἶη ἄν ξὺν τῷ σωλῆνι οὕτως. Ἡ οὖν διαμπερές εἶη ποιητέος ὁ σωλῆν, ἢ οὐ ποιητέος.

23. Πτέρνης δὲ ἄκρης κάρτα χρή ἐπιμελέεσθαι, ὡς εὐθέτως ἔχοι, καὶ ἐν τοῖσι κατὰ κνήμην, καὶ ἐν τοῖσι κατὰ μηρὸν κατήγμασιν. Ἦν μὲν γὰρ ἀπαιωρῆται ὁ πούς, τῆς ἄλλης κνήμης ἠρματισμένης, ἀνάγκη κατὰ τὸ ἀντικνήμιον τὰ ὀστέα κυρτὰ φαίνεσθαι ἦν δὲ ἢ μὲν πτέρνη ὑψηλοτέρη ἢ τοῦ μετρίου ἠρματισμένη, ἢ δὲ ἄλλη κνήμη ὑπομετέωρος ἢ, ἀνάγκη τὸ ὀστέον τοῦτο κατὰ τὸ ἀντικνήμιον

κοιλότερον φανῆναι τοῦ μετρίου, προσέτι καὶ ἦν ἡ πτέρνη τυγχάνη ἐοῦσα τοῦ ἀνθρώπου φύσει μεγάλη. Ἄτὰρ καὶ κρατύνεται πάντα τὰ ὀστέα βραδύτερον, ἦν μὴ κατὰ φύσιν κείμενα ἦ, καὶ τὰ μὴ ἀτρεμέοντα ἐν τῷ αὐτέῳ σχήματι, καὶ αἱ πωρώσιες ἀσθενέστεραι.

24. Ταῦτα μὲν δὴ, ὅσοισι τὰ μὲν ὀστέα κατέγηγεν, ἐξέχει δὲ μὴ, μηδὲ ἄλλως ἔλκος ἐγένετο. Οἷσι δὲ τὰ ὀστέα

κατέγηγεν ἀπλῶ τῷ τρόπῳ, καὶ μὴ πουλυσχιδεῖ, ἐξέσχε δὲ, αὐθήμερα ἐμβληθέντα, ἢ τῆ ὑστεραίῃ, καὶ κατὰ χώραν ἰζόμενα, καὶ μὴ ἐπίδοξος ἢ ἀπόστασις παρασχίδων ὀστέων ἀπιέναι, ἢ καὶ οἷσιν ἔλκος μὲν ἐγένετο, τὰ δὲ ὀστέα τὰ κατεγότα οὐκ ἐξίσχει, οὐδ' ὁ τρόπος τῆς κατήξιος τοιοῦτος, οἷος παρασχίδας ὀστέων εἶναι ἐπιδόξους ἀναπλῶσαι, τοὺς τοιούτους οἱ μὲν μήτε μέγα

ἀγαθόν, μήτε μέγα κακὸν ποιέοντες, ἰητρεύουσι τὰ μὲν ἔλκεα καθαρτικῶ τινι, ἢ πισηρῆν ἐπιθέντες, ἢ ἔναιμον, ἢ ἄλλο τι ὧν εἰώθασι ποιέειν ἐπάνω δὲ τοὺς οἴνηρους σπλήνας ἢ εἴρια ῥυπαρὰ ἐπιδέουσιν, ἢ ἄλλο τι τοιοῦτον. Ἐπὴν δὲ τὰ ἔλκεα καθαρὰ γένηται, καὶ ἤδη ξυμφύηται, τότε τοῖσιν ὀθονίοισι συχοῖσι πειρῶνται ἐπιδεῖν, καὶ νάρθηξι κατορθοῦν. Αὕτη μὲν ἡ ἴησις ἀγαθόν τι ποιέει, κακὸν δὲ οὐ μέγα. Τὰ μέντοι ὀστέα οὐχ ὁμοίως δύναται ἰδρῦεσθαι ἐς τὴν ἐσωτῶν χώραν, ἀλλὰ τινι ὀγκηρότερα τὰ ὀστέα τοῦ καιροῦ ταύτη γίνεται γένοιτο δ' ἂν καὶ βραχύτερα, ὧν ἀμφοτέρα τὰ ὀστέα κατέγηγεν ἢ πήχεος, ἢ κνήμης.

25. Ἄλλοι δ' αὖ τινές εἰσιν, οἱ ὀθονίοισι τὰ τοιαῦτα ἰητρεύουσιν εὐθέως, καὶ ἔνθεν μὲν καὶ ἔνθεν ἐπιδέουσιν τοῖσιν ὀθονίοισι, κατὰ δὲ τὸ ἔλκος αὐτὸ διαλείπουσι, καὶ ἐῶσιν ἀνεψύχθαι ἔπειτα ἐπιτιθέασιν ἐπὶ τὸ ἔλκος τῶν καθαρτικῶν τι, καὶ σπλήνεσιν οἴνηροῖσιν, ἢ εἰρίοισι ῥυπαροῖσι θεραπεύουσιν. Αὕτη ἡ ἴησις κακῆ,

καὶ εἰκὸς τοὺς οὕτως ἰητρεύοντας τὰ μέγιστα ἀσυνετέειν, καὶ ἐν τοῖσιν ἄλλοισι κατήγμασι, καὶ ἐν τοῖσι τοιούτοισιν. Μέγιστον γάρ ἐστι τὸ γινώσκειν, καθ' ὅποιον τρόπον χρὴ τὴν ἀρχὴν βάλλεσθαι τοῦ ὀθονίου, καὶ καθ' ὅποιον μάλιστα πεπιέχθαι, καὶ οἷα τε ὠφελέονται, ἦν ὀρθῶς τις βάλληται τὴν ἀρχὴν καὶ πιέζη ἢ μάλιστα χρὴ, καὶ οἷα βλάπτονται, ἦν μὴ ὀρθῶς τις βάλληται, μηδὲ πιέζη ἢ μάλιστα χρὴ, ἀλλὰ ἔνθεν καὶ ἔνθεν. Εἴρηται μὲν οὖν καὶ ἐν τοῖσι πρόσθεν γεγραμμένοισιν, ὅποια ἀφ' ἑκατέρου ἀποβαίνει μαρτυρεῖ δὲ καὶ αὐτὴ ἡ ἰητρικὴ ἀνάγκη γὰρ τῷ οὕτως ἐπιδεομένῳ τὸ οἶδος ἐξαίρεσθαι ἐς αὐτὸ τὸ ἔλκος. Καὶ γὰρ εἰ ὑγιῆς χρῶς ἔνθεν καὶ ἔνθεν ἐπιδεθεῖη, ἐν μέσῳ δὲ διαλειφθεῖη, μάλιστα κατὰ τὴν διάλειψιν οἰδήσειεν ἂν, καὶ ἀχροίσειεν πῶς οὖν οὐχὶ ἔλκος γε ταῦτα

ἂν πάθοι; Αναγκαίως οὖν ἔχει ἄχροον μὲν καὶ ἐκπεπλιγμένον

τὸ ἔλκος εἶναι, δακρυῶδές τε καὶ ἀνεκπύητον, ὅστέα δὲ, καὶ μὴ μέλλοντα ἀποστῆναι, ἀποστατικὰ γενέσθαι σφυγμῶδές τε καὶ πυρῶδες τὸ ἔλκος ἂν εἴη. Αναγκάζονται δὲ διὰ τὸ οἶδος ἐπικαταπλάσσειν ἀσύμφορον δὲ καὶ τοῦτο τοῖσιν ἔνθεν καὶ ἔνθεν ἐπιδεομένοισιν ἄχθος γὰρ ἀνωφελές πρὸς τῷ ἄλλῳ σφυγμῷ ἐπιγίνεται. Τελευτῶντες δὲ ἀπολύουσι τὰ ἐπιδέσματα, ὅποταν σφιν παλιγκοτέη, καὶ ἰητρεύουσι τὸ λοιπὸν ἄνευ ἐπιδέσιος οὐδὲν δ' ἦσσαν, καὶ ἦν τι ἄλλο τρῶμα τοιοῦτο λάβωσι, τῷ αὐτῷ τρόπῳ ἰητρεύουσιν οὐ γὰρ οἴονται τὴν ἐπίδεσιν τὴν ἔνθεν καὶ ἔνθεν, καὶ τὴν ἀνάψυξιν τοῦ ἔλκεος αἰτίην εἶναι, ἀλλ' ἄλλην τινὰ ἀτυχήν. Οὐ μέντοι γε ἂν ἔγραφον περὶ τουτέου τοσαῦτα, εἰ μὴ εὖ μὲν ἦδειν ἀσύμφορον εἶναι τὴν ἐπίδεσιν, συχνούς δὲ οὕτως ἰητρεύοντας, ἐπίκαιρον δὲ τὸ ἀπομάθημα, μαρτύριον δὲ τοῦ ὀρθῶς γεγράφθαι τὰ πρόσθεν γεγραμμένα, εἴτε μάλιστα πιεστέα τὰ κατήγματα, εἴτε ἥκιστα.

26. Χρὴ δὲ, ὡς ἐν κεφαλαίῳ εἰρησθαι, οἷσιν ἂν μὴ ἐπίδοξος ἦ ἢ τῶν ὀστέων ἀπόστασις ἔσεσθαι, τὴν αὐτὴν ἰητρείην ἰητρεύειν, ὡσπερ ἂν οἷσιν ὀστέα μὲν κατεηγότα εἴη, ἔλκος δὲ μὴ ἔχοντα τάς

τε γὰρ κατατάσιος καὶ κατορθώσιος τῶν ὀστέων τὸν αὐτὸν τρόπον ποιέεσθαι, τὴν τε ἐπίδεσιν παραπλήσιον τρόπον. Ἐπὶ μὲν γὰρ αὐτὸ τὸ ἔλκος πισηρὴν κηρωτὴν χρίσαντα, σπλῆνα λεπτὸν διπλόον ἐπιδεθῆναι, τὰ δὲ πέριξ κηρωτῆ λευκῆ χρίειν. Τὰ δὲ ὀθόνια καὶ τὰ ἄλλα πλατύρερά τινι ἐσχισμένα ἔστω, ἢ εἰ μὴ ἔλκος εἶχεν καὶ ᾧ ἂν πρῶτῳ ἐπιδέηται, συχνῶ ἔστω τοῦ ἔλκεος πλατύτερον. Τὰ γὰρ στενότερα τοῦ ἔλκεος ζώσαντα ἔχει τὸ ἔλκος τὸ δὲ οὐ χρὴ ἄλλ' ἢ πρώτη περιβολὴ ὅλον κατεχέτω τὸ ἔλκος, καὶ ὑπερεχέτω τὸ ὀθόνιον ἔνθεν τε καὶ ἔνθεν. Βάλλεσθαι μὲν οὖν χρὴ τὸ ὀθόνιον κατ' αὐτὴν τὴν ἴξιν τοῦ ἔλκεος, πιέζειν δὲ ὀλίγῳ ἦσσαν ἢ εἰ μὴ ἔλκος εἶχεν, ἐπινέμεσθαι δὲ τῇ

ἐπιδέσει ὡσπερ καὶ πρόσθεν εἴρηται. Τὰ δὲ ὀθόνια αἰεὶ μὲν τοῦ τρόπου τοῦ μαλθακοῦ ἔστωσαν, μᾶλλον δὲ τι δεῖ ἐν τοῖσι τοιούτοισιν, ἢ εἰ μὴ ἔλκος εἶχεν. Πλῆθος δὲ τῶν ὀθονίων, μὴ ἐλάσσω ἔστω τῶν πρότερον εἰρημένων, ἀλλὰ τινὶ καὶ πλείῳ. Ἦν δὲ ἐπιδεθῆ, δοκεῖτω τῷ ἐπιδεδεμένῳ ἡρμόσθαι μὲν, πεπιέχθαι δὲ μὴ φάτω δὲ κατὰ τὸ ἔλκος μάλιστα ἡρμόσθαι. Τοὺς δὲ χρόνους τοὺς αὐτοὺς μὲν χρὴ εἶναι ἐπὶ τὸ μᾶλλον δοκέειν ἡρμόσθαι, τοὺς αὐτοὺς δὲ ἐπὶ τὸ μᾶλλον δοκέειν χαλᾶν, ὡσπερ καὶ ἐν τοῖσι πρόσθεν εἴρηται. Μετεπιδεῖν δὲ διὰ τρίτης, πάντα μεταποιέοντα ἐς τοὺς τρόπους τοὺς παραπλησίους, ὡσπερ καὶ πρόσθεν εἴρηται, πλὴν ἐς τὸ σύμπαν ἦσσόν τινι πιέζειν ταῦτα ἢ ἐκεῖνα. Καὶ ἦν κατὰ λόγον τὰ εἰκότα γένηται, ἰσχνότερον μὲν αἰεὶ εὐρεθήσεται τὸ κατὰ τὸ ἔλκος, ἰσχνὸν δὲ καὶ

τὸ ἄλλο πᾶν τὸ ὑπὸ τῆς ἐπιδέσιος κατεχόμενον καὶ αἶ τε ἐκπυήσεις ἔσονται θάσσους ἢ τῶν ἄλλως ἰητρευμένων ἐλκέων, ὅσα τε σαρκία ἐν τῷ τρώματι ἐμελάνθη καὶ ἐθανατώθη, θᾶσσον περιρρήγνυται καὶ ἐκπίπτει ἐπὶ ταύτη τῇ ἰητρείῃ, ἢ ἐν τῆσιν ἄλλησιν, ἐς ὠτειλάς τε θᾶσσον ὀρμᾶται τὸ ἔλκος οὕτως ἢ ἄλλως ἰητρευμένον. Πάντων δὲ τούτων αἴτιον, ὅτι ἰσχνὸν μὲν τὸ κατὰ τὸ ἔλκος χωρίον γίνεται, ἰσχνὰ δὲ τὰ περιέχοντα. Τὰ μὲν οὖν ἄλλα πάντα παραπλησίως χρὴ ἰητρεύειν, ὡς τὰ

ἄνευ ἐλκώσιος ὅστέα κατηγνύμενα. Τοὺς δὲ νάρθηκας οὐ χρὴ προστιθέναί. Διὰ τοῦτο καὶ τὰ ὀθόνια χρὴ τούτοισι πλείω εἶναι ἢ τοῖσιν ἐτέροισιν, ὅτι τε ἦσσαν πιέζεται, ὅτι τε οἱ νάρθηκες βραδύτεροι προστίθενται. Ἦν μέντοι τοὺς νάρθηκας προστιθῆς, μὴ κατὰ τὴν ἴξιν τοῦ ἔλκεος προστιθέναί, ἄλλως τε καὶ χαλαρῶς προστιθέναί, προμηθεύμενος ὅκως μηδεμία σφίγξις μεγάλη ἔσται ἀπὸ τῶν ναρθήκων. Εἴρηται δὲ τοῦτο καὶ ἐν τοῖσι πρότερον γεγραμμένοισιν. Τὴν μέντοι δίαιταν ἀκριβεστέραν καὶ πλείω χρόνον χρὴ ποιέεσθαι οἷσιν ἐξ ἀρχῆς ἔλκεα γίνεται, καὶ οἷσιν ὅστέα ἐξίσχει καὶ τὸ ζύμπαν δὲ εἰρῆσθαι, ἐπὶ τοῖσι ἰσχυροτάτοις τρώμασιν ἀκριβεστέραν καὶ πλουυχρονωτέραν εἶναι χρὴ τὴν δίαιταν.

27. Ἡ αὐτὴ δὲ ἰητρεία τῶν ἐλκέων, καὶ οἷσιν ὅστέα μὲν κατέηγεν, ἔλκος δὲ ἐξ ἀρχῆς μηδὲν ἦν, ἐν δὲ τῇ ἰητρείῃ ἐπιγίνεται, ἢ τοῖσιν ὀθονίοισιν μᾶλλον πιεχθέντος νάρθηκος ὑπὸ ἐνέδρης, ἢ ὑπὸ ἄλλης τινὸς προφάσιος. Γινώσκεται μὲν οὖν τὰ τοιαῦτα, ἦν ἔλκος ὑπῆ, τῇ τε ὀδύνη καὶ τοῖσι σφυγμοῖσιν καὶ τὸ οἴδημα τὸ ἐν τοῖσιν ἄκροισι, σκληρότερον γίνεται τῶν τοιουτέων, καὶ εἰ τὸν δάκτυλον ἐπαγάγοις, τὸ ἔρευθος ἐξαιρέεται, ἀτὰρ καὶ αὐθις

ὑποτρέχει ταχέως. Ἦν οὖν τι τοιοῦτον ὑποπτεύης, λύσαντα χρὴ, ἦν μὲν ἦ κνησμὸς κατὰ τὰς ὑποδεσμίδας, ἢ ἐπὶ τὸ ἄλλο τὸ ἐπιδεδεμένον, πισσηρῇ κηρωτῇ ἀντὶ τῆς ἐτέρης χρῆσθαι. Ἦν δὲ τούτων μὲν μηδὲν ἦ, αὐτὸ δὲ τὸ ἔλκος ἠρεθισμένον εὐρίσκηται, μέλαν ἐπὶ πούλῳ ἢ ἀκάθαρτον, καὶ τῶν μὲν σαρκῶν ἐκπυησομένων, τῶν δὲ νεύρων προσεκπεσομένων, τουτέους οὐδὲν χρὴ ἀναψύχειν παντάπασιν, οὐδέ τι φοβεῖσθαι τὰς ἐκπυήσιας ταύτας, ἀλλ' ἰητρεύειν, τὰ μὲν ἄλλα παραπλήσιον τρόπον, ὥσπερ καὶ οἷσιν ἐξ ἀρχῆς ἔλκος ἐγένετο. Τοῖσι δὲ ὀθονίοισιν ἄρχεσθαι χρὴ ἐπιδέοντα ἀπὸ τοῦ οἰδήματος τοῦ ἐν τοῖσιν ἀκραίοις πάνυ χαλαροῖσι,

καὶ ἔπειτα ἐπινέμεσθαι τῇ ἐπιδέσει αἰεὶ ἐς τὸ ἄνω, καὶ πεπιέχθαι μὲν μηδαμῆ, ἠρμόσθαι δὲ μάλιστα κατὰ τὸ ἔλκος, τὰ δὲ ἄλλα ἐπὶ ἦσσαν. Τὰ δὲ ὀθόνια τὰ πρῶτα, ταῦτα μὲν καθαρὰ ἔστω καὶ μὴ στενά τὸ δὲ πλῆθος τῶν ὀθονίων ἔστω,

ὅσον περ καὶ ἐν τοῖσι νάρθηξιν εἰ ἐπιδέονται, ἢ ὀλίγῳ ἔλασσον. Ἐπὶ δὲ αὐτὸ τὸ ἔλκος ἰκανὸν σπληνίον τῇ λευκῇ κηρωτῇ κεχρισμένον ἦν τε γὰρ σὰρξ, ἦν τε νεῦρον μελανθῆ, προσεκπεσεῖται τὰ γὰρ τοιαῦτα οὐ χρή δριμέσιν ἰητρεύειν, ἀλλὰ μαλθακοῖσιν, ὥσπερ τὰ πυρίκαυστα. Μετεπιδεῖν δὲ διὰ τρίτης, νάρθηκας δὲ μὴ προστιθέναι ἀτρεμέειν δὲ ἐπὶ μᾶλλον, ἢ τὸ πρόσθεν, καὶ ὀλιγοσιτέειν. Εἰδέναι δὲ χρή, εἴ τε σὰρξ, εἴ τε νεῦρον τὸ ἐκπεσούμενόν ἐστιν, ὅτι οὕτω πολλῶ μὲν ἦσσαν νέμεται ἐπὶ πλεῖον, πολλῶ δὲ θᾶσσον ἐκπεσεῖται, πολλῶ δὲ ἰσχυρότερα τὰ περιέχοντα ἔσται, ἢ εἴ τις, ἀπολύσας τὰ ὀθόνια, ἐπιθείη τι τῶν καθαρτικῶν φαρμάκων ἐπὶ τὸ ἔλκος. Καίτοι καὶ ἦν ἐκπέση τὸ ἐκπεσούμενον, θᾶσσόν τε σαρκουῖται ἐκείνως ἢ ἐτέρως ἰητρευόμενον, καὶ θᾶσσον ὠτειλουῖται. Πάντα μὴν ἐστὶ ταῦτα ὀρθῶς ἐπιδεῖν καὶ μετρίως ἐπίστασθαι. Προσσυμβάλλεται δὲ καὶ τὰ σχήματα, καὶ οἷα χρή, εἶναι, καὶ ἡ ἄλλη δίαιτα, καὶ τῶν ὀθονίων ἡ ἐπιτηδειότης.

28. Ἦν δ' ἄρα ἐξαπατηθῆς ἐν τοῖσι νεοτρώτοισι, μὴ οἰόμενος ὀστέων ἀπόστασιν ἔσεσθαι, τὰ δ' ἐπίδοξα ἢ ἀναπλῶσαι, οὐ

χρή ὀρρωδέειν τοῦτον τὸν τρόπον τῆς ἰητρείης οὐδὲν γὰρ ἂν μέγα φλαῦρον γένοιτο, ἦν μῶνον οἷός τε ἦς τῇ χειρὶ τὰς ἐπιδέσιαι ἀγαθὰς καὶ ἀσινέας ποιέεσθαι. Σημεῖον δὲ τόδε, ἦν μέλλη ὀστέων ἀπόστασις ἔσεσθαι ἐν τῷ τρόπῳ τούτῳ τῆς ἰητρείης πῦον γὰρ συχνὸν ῥέει ἐκ τοῦ ἔλκεος, καὶ ὀργᾶν φαίνεται. Πυκνότερον οὖν μετεπιδέεσθαι διὰ τὸν πλάδον ἐπεὶ ἄλλως τε καὶ ἀπύρετοι γίνονται, ἦν μὴ κάρτα πιέζονται ὑπο τῆς ἐπιδέσιος, καὶ τὸ ἔλκος, καὶ τὰ περιέχοντα ἰσχνά. Ὅσαι μὲν οὖν λεπτῶν πάνυ ὀστέων ἀποστάσις, οὐδεμιῆς μεγάλης μεταβολῆς δέονται, ἀλλ' ἢ χαλαρωτέρως ἐπιδεῖν, ὡς μὴ ἀπολαμβάνηται τὸ

πῦον, ἀλλ' εὐαπόρρυτον ἦ, καὶ πυκνότερον μετεπιδεῖν, ἔστ' ἂν ἀποστῆ τὸ ὀστέον, καὶ νάρθηκας μὴ προστιθέναι.

29. Ὀκόσοισι δὲ μείζονος ὀστέου ἀπόστασις ἐπίδοξος γένηται, ἦν τε ἐξ ἀρχῆς προγνῶς, ἦν τε καὶ ἔπειτα μεταγνῶς, οὐκ ἔτι τῆς αὐτῆς ἰητρείης δεῖται ἀλλὰ τὰς μὲν κατατάσιαι, καὶ τὰς διορθώσιαι οὕτω ποιέεσθαι, ὥσπερ εἴρηται σπληνας δὲ χρή διπλοῦς, πλάτος μὲν ἡμισπιθαιμιαίους, μὴ ἐλάσσους ὀκοῖον δὲ ἂν τι καὶ τὸ τρῶμα ἦ, πρὸς τοῦτο τεκμαίρεσθαι, μῆκος δὲ βραχυτέρους μὲν μὴ ὀλίγῳ, ἢ ὥστε δις περικνέεσθαι περὶ τὸ τετρωμένον, μακροτέρους δὲ συχνῶ, ἢ ὥστε ἅπαξ περικνέεσθαι, πλῆθος δὲ, ὀκόσους ἂν ξυμφέρη, ποιησάμενον, τούτους ἐν οἴνῳ μέλανι αὐστηρῶ βρέχοντα, χρή ἐκ μέσου ἀρχόμενον, ὡς ἀπὸ δύο ἀρχῶν ὑποδεσμῖς ἐπιδεῖται, περιελίσσειν, κάπειτα σκεπαρνηδὸν παραλλάσσοντα τὰς ἀρχὰς ἀφιέναι. Ταῦτα κατὰ τε αὐτὸ τὸ ἔλκος ποιέειν, καὶ κατὰ τὸ ἔνθεν καὶ ἔνθεν

τοῦ ἔλκεος καὶ πεπιέχθω μὲν μὴ, ἀλλ' ὅσον ἔρμασμοῦ ἔνεκεν τοῦ ἔλκεος

προσκείσθω. Ἐπὶ δὲ αὐτὸ τὸ ἔλκος ἐπιτιθέναι χρὴ πισσηρὴν, ἢ τι τῶν ἐναίμων, ἢ τι τῶν ἄλλων φαρμάκων, ὃ τι ζύντροφόν ἐστιν ἐπιτέγξει. Καὶ ἦν μὲν ἡ ὥρη θερινὴ ἢ, ἐπιτέγγειν τῷ οἴνῳ τοὺς σπλῆνας πυκνά ἦν δὲ χειμερινὴ ἡ ὥρη ἢ, εἰρία πουλλὰ ῥυπαρά, νενοτισμένα οἴνῳ καὶ ἐλαίῳ, ἐπικείσθω. Ἰξαλῆν δὲ χρὴ ὑποτετάσθαι, καὶ εὐαπόρρυτα ποιέειν, φυλάσσοντα τοὺς ὑπορρόους, μεμνημένον ὅτι οἱ τόποι οἱ ἐν τοῖσιν αὐτοῖσι σχήμασι πολλὸν χρόνον κείμενοι, ἐκτρίμματα δυσάκεστα ποιέουσιν.

30. Ὅσους δὲ μὴ οἶόν τε ἐπιδέσει ἰήσασθαι διὰ τινα τούτων τῶν εἰρημένων τρόπων, ἢ τῶν εἰρησομένων, τούτους περὶ πλείονος χρὴ ποιέεσθαι, ὅπως εὐθέτως σχήσουσι τὸ κατηγὸς τοῦ σώματος κατ' ἰθυωρίην, προσέχοντα τὸν νόον, καὶ τῷ ἀνωτέρῳ δὲ μᾶλλον ἢ τῷ κατωτέρῳ. Εἰ δὲ τις μέλλοι καλῶς καὶ εὐχερῶς ἐργάζεσθαι, ἄξιον καὶ μηχανοποιήσασθαι, ὅπως κατάτασιν δικαίην καὶ μὴ βιαίην σχήσει τὸ κατηγὸς τοῦ σώματος μάλιστα δὲ

ἐν κνήμῃ ἐνδέχεται μηχανοποιέειν. Εἰσὶ μὲν οὖν τινες, οἱ ἐπὶ πᾶσι τοῖσι τῆς κνήμης κατήγμασι καὶ τοῖσιν ἐπιδεμένοισι, καὶ τοῖσι μὴ ἐπιδεομένοισι, ὃν πόδα ἄκρον προσδέουσι πρὸς τὴν κλίνην, ἢ πρὸς ἄλλο τι ξύλον παρὰ τὴν κλίνην κατορύξαντες. Οὗτοι μὲν οὖν πάντα κακὰ ποιέουσιν, ἀγαθὸν δὲ οὐδὲν οὔτε γὰρ τοῦ κατατείνεσθαι ἄκος ἐστὶ τὸ προσδεδέσθαι τὸν πόδα, οὐδὲν γὰρ ἦσσαν τὸ ἄλλο σῶμα προσχωρήσει πρὸς τὸν πόδα, καὶ οὕτως ν' ἔτι τείνοιτο οὔτ' αὖ ἐς τὴν ἰθυωρίην οὐδὲν ὠφελέει, ἀλλὰ καὶ βλάπτει, στρεφομένου γὰρ τοῦ ἄλλου σώματος ἢ τῆ ἢ τῆ, οὐδὲ κωλύσει ὁ δεσμὸς τὸν πόδα καὶ τὰ ὀστέα τὰ τῷ ποδὶ προσηρητημένα ἐπακολουθεῖν τῷ ἄλλῳ σώματι. Εἰ δὲ μὴ προσεδέδετο, ἦσσαν ἂν διεστρέφετο ἦσσαν γὰρ ἂν ἐγκατελείπετο ἐν τῇ κινήσει τοῦ ἄλλου σώματος. Εἰ δὲ τις σφαίρας δύο ῥάψαιτο ἐκ σκύτεος αἰγυπτίου τοιαύτας οἷας φοροῦσιν οἱ ἐν τῆσι μεγάλῃσι πέδησι πολλὸν χρόνον πεπεδημένοι, αἱ δὲ σφαῖραι ἔχοιεν ἔνθεν καὶ ἔνθεν χιτῶνας, τὰ μὲν πρὸς τοῦ τρώματος βαθυτέρους, τὰ δὲ πρὸς τῶν ἄρθρων βρ χυτέρους, εἶεν δὲ ὀγκηραὶ μὲν καὶ μαλθακαὶ, ἀρμόζουσαι δὲ, ἢ μὲν ἄνωθεν τῶν σφυρῶν, ἢ δὲ κάτωθεν τοῦ γούνατος

ἐκ δὲ πλαγίης ἄκρης δισσὰ ἢ κάτωθεν ἔχοι προσηρητημένα, ἢ ἀπλόου ἱμάντος, ἢ διπλόου, βραχέα ὡσπερ ἀγκύλας, τὰ μὲν τι τοῦ σφυροῦ ἐκατέρωθεν, τὰ δὲ τι τοῦ γούνατος καὶ ἢ ἄνωθεν σφαῖρα

ἕτερα τοιαῦτα ἔχοι κατὰ τὴν ἰθυωρίην τὴν αὐτήν. Κάπειτα κραναῖνας ῥάβδους τέσσαρας λαβὼν ἴσον τὸ μέγεθος ἀλλήλησιν ἐχούσας, πάχος μὲν ὡς

δακτυλίας, μήκος δὲ ὡς κεκαμμένοι ἐναρμόσωσιν ἐς τὰ ἀπαιωρήματα, ἐπιμελόμενος ὅπως τὰ ἄκρα τῶν ράβδων μὴ ἐς τὸν χρῶτα, ἀλλ' ἐς τὰ ἄκρα τῶν σφαιρέων ἐγκέλσει. Εἶναι δὲ χρή ζεύγεα τρία τῶν ράβδων, καὶ πλέω, καὶ τινι μακροτέρας τὰς ἐτέρας τῶν ἐτέρων, καὶ τινι καὶ βραχυτέρας καὶ σμικροτέρας, ὡς καὶ μᾶλλον διατείνειν, ἣν βούληται, καὶ ἥσσον ἔστωσαν δὲ αἱ ράβδοι ἐκάτεροι ἔνθεν καὶ ἔνθεν τῶν σφυρῶν. Ταῦτα τοίνυν εἰ καλῶς μηχανοποιηθεῖ, τὴν τε κατάτασιν καὶ δικαίην ἂν παρέχοι καὶ ὁμαλὴν κατὰ τὴν ἰθυωρίην, καὶ τῷ τρώματι πόνος οὐδεὶς ἂν εἴη τὰ γὰρ ἀποπιέσματα, εἴ τι καὶ ἀποπιέζοιτο, τὰ μὲν ἂν ἐς τὸν πόδα ἀπάγοιτο, τὰ δὲ ἐς τὸν μηρόν αἱ τε ράβδοι εὐθετώτεροι, αἱ μὲν ἔνθεν, αἱ δὲ ἔνθεν τῶν σφυρῶν, ὥστε μὴ κωλύεσθαι τὴν θέσιν τῆς κνήμης τό τε τρώμα εὐκατάσκεπτον καὶ εὐβάστακτον οὐδὲν γὰρ ἐμποδῶν, εἴ τις ἐθέλοι τὰς δύο τῶν ράβδων τὰς ἀνωτέρω αὐτὰς πρὸς ἀλλήλας

ζεῦξαι, καὶ ἣν τις κούφως βούληται ἐπιβάλλειν, ὥστε τὸ ἐπιβαλλόμενον μετέωρον ἀπὸ τοῦ τρώματος εἶναι. Εἰ μὲν οὖν αἱ τε σφαῖραι προσηνέες καὶ καλαὶ καὶ μαλθακαὶ καὶ καιναὶ ῥαφεῖεν, καὶ ἡ ἔντασις τῶν ράβδων χρηστῶς ἐνταθεῖη, ὥσπερ ἤδη εἴρηται, εὐχρηστον τὸ μηχανήμα εἰ δέ τι τουτέων μὴ καλῶς ἔξει, βλάπτει ἂν μᾶλλον ἢ ὠφελέει. Χρὴ δὲ καὶ τὰς ἄλλας μηχανὰς ἢ καλῶς μηχανᾶσθαι, ἢ μὴ μηχανᾶσθαι αἰσχρὸν γὰρ καὶ ἄτεχνον μηχανοποιέοντα ἀμηχανοποιέεσθαι.

31. Τοῦτο δὲ, οἱ πλεῖστοι τῶν ἰητρῶν τὰ κατήγματα, καὶ τὰ μεθ' ἐλκείων, καὶ τὰ ἄνευ ἐλκείων, τὰς πρώτας τῶν ἡμερέων ἰητρεύουσιν εἰρίοισι ῥυπαροῖσιν καὶ οὐδὲν τι ἄτεχνον δοκέει τοῦτο εἶναι. Ὅσοι μὲν ἀναγκάζονται ὑπὸ τῶν αὐτίκα νεοτρώτων ἐόντων, μὴ ἔχοντες ὀθόνια, εἰρίοισι παρασκευάσασθαι, τουτέοισι πλείστη συγγνώμη οὐ γὰρ ἂν τις ἔχοι ἄνευ ὀθονίων ἄλλο τι πολλῶ βέλτιον εἰρίου ἐπιδῆσαι ἐπὶ τὰ τοιαῦτα εἶναι δὲ χρή πάμπολλα, καὶ πάνυ καλῶς εἰργασμένα, καὶ μὴ τρηχέα τῶν γὰρ ὀλίγων καὶ φλαύρων ὀλίγη καὶ ἡ δύναμις. Ὅσοι δὲ ἐπὶ μίαν ἢ δύο ἡμέρας εἴρια ἐπιδέειν δικαιοῦσι, τρίτη δὲ καὶ τετάρτη ὀθονίοισιν ἐπιδέοντες πιέζουσι καὶ κατατείνουσι τότε μάλιστα, οὗτοι πουλύ τι τῆς ἰητρικῆς καὶ κάρτα ἐπίκαιρον ἀσυνετέουσιν ἦκιστα γὰρ χρή τῇ τρίτῃ καὶ τετάρτῃ στυφελίζειν πάντα τὰ τρώματα, ὡς ἐν

κεφαλαίῳ εἰρηῆσθαι καὶ μηλώσιας δὲ πάσας φυλάσσεσθαι χρή ἐν ταύτῃσι τῆσιν ἡμέρησι, καὶ ὀκόσοισιν ἄλλοισι τρώμασιν ἠρέθισται. Τὸ ἐπίπαν γὰρ ἢ τρίτη καὶ τετὸτη ἡμέρη ἐπὶ τοῖσι πλείστοισι τῶν τρωμάτων τίκτει τὰς παλιγοκότησιας, καὶ ὅσα ἐς φλεγμονὴν καὶ ἀκαθαρσίην ὀρμᾶ, καὶ ὅσα ἂν ἐς πυρετοὺς ἴη. Καὶ μάλα πολλοῦ ἄξιον τοῦτο τὸ μάθημα, εἴ πέρ τι καὶ ἄλλο. Τίτι γὰρ οὐκ ἐπικοινωνεῖ τῶν ἐπικαιροτάτων ἐν ἰητρικῇ, οὐ κατὰ τὰ ἔλκεα μῶνον, ἀλλὰ καὶ κατὰ ἄλλα



πουλλά νουσήματα; εἰ μή τις φήσειε καὶ τᾶλλα νουσήματα ἔλκεα εἶναι. Ἔχει γάρ τινα καὶ οὗτος ὁ λόγος ἐπιείκειαν πολλαγῆ γὰρ ἠδέλφισται τὰ ἕτερα τοῖσιν ἑτέροισιν. Ὅκόσοι μέντοι δικαιοῦσιν εἰρίοισι χρῆσθαι, ἔστ' ἂν ἑπτὰ ἡμέραι παρέλθωσιν, ἔπειτα κατατείνειν τε καὶ κατορθοῦν, καὶ ὀθονίοισιν ἐπιδεῖν, οὗτοι οὐκ ἂν ἀσύνητοι ὁμοίως φανεῖεν καὶ γὰρ τῆς φλεγμονῆς τὸ ἐπικαιρότατον παρελήλυθε, καὶ τὰ ὀστέα χαλαρὰ καὶ εὐθετα μετὰ ταύτας τὰς ἡμέρας ἂν εἴη. Πολλῶ μέντοι ἡσσᾶται καὶ αὕτη ἡ μελέτη τῆς ἐξ ἀρχῆς τοῖσιν ὀθονίοισιν ἐπιδέσιος κείνος

μὲν γὰρ ὁ τρόπος ἐβδομαίους ἑόντας ἀφλεγμάντους ἀποδείκνυσι, καὶ παρασκευάζει νάρθηξι τελέως ἐπιδεῖν οὗτος δὲ ὁ τρόπος πούλῳ ὑστερεῖ, βλάβας δὲ τινὰς καὶ ἄλλας ἔχει, ἀλλὰ μακρὸν ἂν εἴη πάντα γράφειν.

32. Ὅκόσοισι δὲ τὰ ὀστέα κατηγότα καὶ ἐξίσχοντα μὴ δύνηται ἐς τὴν ἐωυτῶν χώραν καθιδρῦεσθαι, ἥδε ἡ κατάστασις σιδήρια χρῆ ποιέεσθαι ἐς τοῦτον τὸν τρόπον ὑπερ οἱ μοχλοὶ ἔχουσιν, οἷς οἱ λατύποι χρέονται, τὸ μὲν τι πλατύτερον, τὸ δὲ τι στενότερον εἶναι δὲ χρῆ καὶ τρία καὶ ἔτι πλείω, ὡς τοῖσι μάλιστα ἀρμόζουσί τις χρῆσαιτο ἔπειτα τουτέοισι χρῆ ἅμα τῆ κατατάσει μοχλεύειν ὑποβάλλοντα, πρὸς μὲν τὸ κατώτερον τοῦ ὀστέου τὸ κατώτερον ἐρείδοντα, πρὸς δὲ τὸ ἀνώτερον τὸ ἀνώτερον τοῦ σιδηρίου, ἀπλῶ δὲ λόγῳ ὥσπερ εἰ λίθον τις ἢ ξύλον μοχλεύοι ἰσχυρῶς ἔστω δὲ σθεναρὰ τὰ σιδήρια ὡς οἶόν τε, ὡς μὴ κάμπτηται. Αὕτη μεγάλη τιμωρὴ, ἣν τε τὰ σιδήρια ἐπιτήδεια ἦ, καὶ μοχλεύηται τις ὡς χρῆ. Ὅκόσα γὰρ ἀνθρώποις ἄρμενα μεμηχάνηται, πάντων, ἰσχυρότατά ἐστι τρία ταῦτα, ὄνου τε περιαγωγή, καὶ μόχλευσις, καὶ σφήνωσις. Ἄνευ δὲ τούτων, ἢ ἐνὸς δὴ τινος, ἢ πάντων, οὐδὲν τῶν ἔργων τῶν ἰσχυροτάτων οἱ

ἄνθρωποι ἐπιτελέουσιν. Οὐκ οὐκ ἀτιμαστέη αὕτη ἡ μόχλευσις ἢ γὰρ οὕτως ἐμπεσεῖται τὰ ὀστέα, ἢ οὐκ ἄλλως. Ἦν δ' ἄρα τοῦ ὀστέου τὸ ἄνω παρηλλαγμένον μὴ ἐπιτήδειον ἔχη ἐνέδρην τῷ μοχλῷ, ἀλλὰ πάροξυ ἐὼν παραφέρη, παραγλύψαντα χρῆ τοῦ ὀστέου ἐνέδρην τῷ μοχλῷ ἀσφαλέα ποιῆσαι. Μοχλεύειν δὲ χρῆ καὶ τείνειν αὐθήμερα, ἢ δευτεραῖα, τριταῖα δὲ μὴ, τεταρταῖα δὲ, ὡς ἦκιστα, καὶ πεμπταῖα. Καὶ γὰρ μὴ ἐμβάλλοντι, ὀχλήσαντι δὲ ἐν ταύτησι τῆσιν ἡμέρησιν, φλεγμονὴν ἂν ποιήσειε, καὶ ἐμβάλλοντι οὐδὲν ἦσσον σπασμὸν μέντοι ἐμβάλλοντι πούλῳ ἂν μᾶλλον ποιήσειεν, ἢ ἀπορήσαντι ἐμβάλλειν. Ταῦτα εὖ χρῆ εἰδέναι καὶ γὰρ εἰ ἐπιγένειτο σπασμὸς ἐμβάλλοντι, ἐλπίδες μὲν οὐ πολλαὶ σωτηρίας λυσιτελέει δὲ ὀπίσω ἐκβάλλειν τὸ ὀστέον, εἰ οἶόν τε εἴη ἀόχλως. Οὐ γὰρ ἐπὶ τοῖσι χαλαρωτέροισι τοῦ καιροῦ σπασμοὶ καὶ τέτανοι ἐπιγίνονται, ἀλλ' ἐπὶ τοῖσιν ἐντεταμένοις μᾶλλον. Περὶ οὗ οὖν ὁ λόγος, οὐ χρῆ ἐνοχλέειν ἐν τῆσι προειρημένησιν ἡμέρησι ταύτησιν, ἀλλὰ μελετᾶν ὅπως ἦκιστα φλεγμανεῖ τὸ

ἔλκος, καὶ μάλιστα ἐκπυήσει. Ἐπὴν δὲ ἑπτὰ ἡμέραι παρέλθωσιν, ἢ ὀλίγω πλείους, ἢν ἀπύρετος ἦ, καὶ μὴ φλεγμαίνῃ τὸ ἔλκος, τότε ἦσσον κωλύει πειρῆσθαι ἐμβάλλειν, ἢν

ἐλπίζης κρατήσῃν ἢν δὲ μὴ, οὐδὲν δεῖ μάτην ὀχλέειν καὶ ὀχλέεσθαι.

33. Ἦν μὲν οὖν ἐμβάλης τὰ ὀστέα ἐς τὴν ἐωυτῶν χώραν, γεγράφαται ἤδη οἱ τρόποι οἷως χρὴ ἰητρεύειν, ἢν τε ἐλπίζης ὀστέα ἀποστήσεσθαι, ἢν τε μὴ. Χρὴ δὲ, καὶ ἢν μὲν ἐλπίζης ὀστέα ἀποστήσεσθαι, τῷ τρόπῳ τῶν ὀθονίων ἐπὶ πᾶσι τοῖσι τοιουτέοισι τὴν ἐπίδεδιν ποιέεσθαι, ἐκ μέσου τοῦ ὀθονίου ἀρχόμενον ὡς ἐπὶ τὸ πούλυ, ὡς ἀπὸ δύο ἀρχέων ὑποδεσμὸς ἐπιδεῖται τεκμαίρεσθαι δὲ χρὴ πρὸς τὴν μορφήν τοῦ ἔλκεος, ὅκως ἦκιστα σεσηρὸς καὶ ἐκπεπλιγμένον ἔσται παρὰ τὴν ἐπίδεδιν τοῖσι μὲν γὰρ ἐπὶ δεξιὰ ἐπιδεῖν ζυντρόφως ἔχει, τοῖσι δὲ ἐπ' ἀριστερὰ, τοῖσι δὲ ἀπὸ δύο ἀρχέων.

34. Ὅκόσα δὲ κατηγορήθη ὀστέα ἐμπεσεῖν, ταῦτα αὐτὰ εἰδέναι χρὴ ὅτι ἀποστήσεται, καὶ ὅσα τελέως ἐπιλώθη τῶν σαρκῶν ψιλοῦται δὲ ἐνίων μὲν τὸ ἄνω μέρος, μετεξετέρων δὲ κύκλωθεν ἀμφιθνήσκουσιν αἱ σάρκες καὶ τῶν μὲν ἀπὸ τοῦ ἀρχαίου τρώματος σεσάπρισται ἔνια τῶν ὀστέων, τῶν δ' οὐ καὶ τῶν μὲν μᾶλλον, τῶν δ' ἦσσον καὶ τὰ μὲν μικρὰ, τὰ δὲ μεγάλα. Διὰ οὖν ταῦτα τὰ εἰρημένα οὐκ ἔστιν ἐνὶ ὀνόματι εἰπεῖν, ὅκοτε τὰ ὀστέα ἀποστήσεται. Τὰ μὲν γὰρ διὰ μικρότητα, τὰ δὲ διὰ τὸ ἐπ' ἄκρου ἔχεσθαι, θᾶσσον ἀφίσταται τὰ δὲ, διὰ τὸ μὴ ἀφίστασθαι, ἀλλὰ λεπιδοῦσθαι, καταξηρανθέντα, καὶ σαπρὰ γενόμενα πρὸς δὲ τούτοις, διαφέρει τι καὶ ἰητρείη

ἰητρείης. Ὡς μὲν οὖν τὸ ἐπίπαν τάχιστα τουτέων ὀστέα ἀφίσταται, ὧν τάχιστα μὲν αἱ ἐκπυήσεις, τάχιστα δὲ καὶ κάλλισται αἱ σαρκοφυῖαι καὶ γὰρ αἱ ὑποφυόμεναι σάρκες κατὰ τὸ σιναρὸν αὗται μετεωρίζουσι τὰ ὀστέα ὡς ἐπὶ τὸ πούλυ. Ὅλος μὲν ὁ κύκλος τοῦ ὀστέου, ἢν ἐν τεσσαράκοντα ἡμέρησιν ἀποστῆ, καλῶς ἀποστήσεται ἔνια γὰρ ἐς ἐξήκοντα ἡμέρας ἀφικνεῖται, ἢ καὶ πλείους τὰ μὲν γὰρ ἀραιότερα τῶν ὀστέων θᾶσσον ἀφίσταται τὰ δὲ στερεώτερα, βραδύτερον τὰ δὲ ἄλλα τὰ μείω, πολλὸν ἐνδοτέρω, ἄλλα δ' ἄλλως. Ἀποπρίειν δ' ὀστέον ἐξέχον ἐπὶ τῶνδε τῶν προφασίων χρὴ, ἢν μὴ δύνηται ἐμβάλλειν, μικροῦ δὲ τινος αὐτῷ δοκέη δεῖν παρελθεῖν, καὶ οἷόν τε ἦ παραιρεθῆναι ἢν τε ἀσηρὸν ἦ καὶ θραῦδόν τι τῶν σαρκίων, καὶ δυσθεσίην παρέχῃ, ψιλὸν δὲ τυγχάνῃ ἐόν, καὶ τὸ τοιοῦτον ἀφαιρέειν χρὴ. Τὰ δ' ἄλλα οὐδὲν μέγα διαφέρει, οὔτε ἀποπρίσαι, οὔτε μὴ ἀποπρίσαι. Σαφέως γὰρ εἰδέναι χρὴ, ὅτι ὀστέα, ὅσα τελέως στέρεται τῶν

σαρκῶν καὶ ἐπιξηραίνεται, πάντα τελέως ἀποστήσεται. Ὅσα δὲ ἀπολεπιδοῦσθαι

μέλλει, ταῦτα οὐ χρή ἀποπρίειν τεκμαίρεσθαι δὲ χρή ἀπὸ τῶν τεταγμένων σημείων τὰ τελέως ἀποστησόμενα.

35. Ἰητρεύειν δὲ τοὺς τοιούτους σπλήνεσι καὶ τῇ οἰνηρῇ ἰητρείῃ, ὥσπερ καὶ πρόσθεν γέγραπται ἐπὶ τῶν ἀποστησομένων ὀστέων. Φυλάσσεσθαι δὲ χρή μὴ ψυχροῖσι τέγγειν τὸν πρῶτον χρόνον ῥιγέων γὰρ πυρετωδῶν κίνδυνος κίνδυνος δὲ καὶ σπασμῶν προκαλέεται γὰρ σπασμὸν τὰ ψυχρὰ, ποτὶ δὲ καὶ ἔλκη. Εἰδέναι δὲ χρή, ὅτι ἀνάγκη βραχύτερα τὰ σώματα ταύτη γίνεσθαι, ὧν ἀμφοτέρα τὰ ὀστέα κατεηγότα καὶ παρηλλαγμένα ἰητρεύεται, καὶ οἷς ὅλος ὁ κύκλος τοῦ ὀστέου ἀπέσθη.

36. Ὅσοισι δὲ μηροῦ ὀστέον ἢ βραχίονος ἐξέσχεν, οὗτοι οὐ μάλα περιγίνονται. Τὰ γὰρ ὀστέα μεγάλα καὶ πολυμύελα, καὶ πολλὰ καὶ ἐπίκαιρα τὰ συντιρωσκόμενα νεῦρα καὶ μύες καὶ φλέβες καὶ ἦν μὲν ἐμβάλλης, σπασμοὶ φιλέουσιν ἐπιγίνεσθαι, μὴ ἐμβληθεῖσι δὲ, πυρετοὶ ὀξέες, καὶ ἐπίχολοι, καὶ λυγγώδεις, καὶ ἐπιμεαινονται. Περιγίνονται δὲ οὐχ ἦσσον, οἷσι μὴ ἐμβληθῆ, μηδὲ εἰρηθῆ ἐμβάλλεσθαι ἔτι δὲ μᾶλλον περιγίνονται, οἷσι τὸ κάτω μέρος τοῦ ὀστέου ἐξέσχεν, ἢ οἷσι τὸ ἄνω περιγένοιτο δ' ἂν καὶ οἷσιν ἐμβληθεῖ, σπανίως γε μὴν. Μελέται γὰρ μελετέων μέγα διαφέρουσι,

καὶ φύσιες φύσιων τῶν σωμάτων εἰς εὐφορίην. Διαφέρει δὲ μέγα, καὶ ἦν ἔσω τοῦ βραχίονος καὶ τοῦ μηροῦ τὰ ὀστέα ἐξέχη πολλὰ γὰρ καὶ ἐπίκαιροι κατατάσιες φλεβῶν ἐν τῷ ἔσω μέρει, ὧν ἔνιαι τιρωσκόμεναι σφάγιαί εἰσιν εἰσὶ δὲ καὶ ἐν τῷ ἔξω μέρει, ἦσσον δέ. Ἐν τοῖσιν οὖν τοιούτοις τρώμασι τοὺς μὲν κινδύνους οὐ χρή λήθειν, ὀκοῖοί τινές εἰσι, καὶ προλέγειν χρή πρὸς τοὺς καιρούς. Εἰ δὲ ἀναγκάζοιο μὲν ἐμβάλλειν, ἐλπίζοις δὲ ἐμβαλεῖν, καὶ μὴ πολλὴ ἢ παράλλαξις εἴη τοῦ ὀστέου, καὶ μὴ ξυνδεδραμηκοῖεν οἱ μύες φιλέουσι γὰρ ξυνθεῖν, ἢ μόχλευσις καὶ τούτοις μετὰ τῆς κατατάσιος εὖ ἂν ξυλλαμβάνοιτο.

37. Ἐμβάλλοντα δὲ, ἐλλέβορον μαλθακὸν πιπίσαι χρή αὐθημερὸν, ἦν αὐθημερὸν ἐμβληθῆ εἰ δὲ μὴ, οὐδ' ἐγχειρέειν χρή. Τὸ δὲ ἔλκος ἰητρεύειν χρή, οἷσι περ κεφαλῆς ὀστέα κατεηγύης, καὶ ψυχρὸν μηδὲν προσφέρειν σιτίου δέ στερεῆσαι τελέως καὶ ἦν μὲν πικρόχολος φύσει ἦ, ὀξύγλυκυ εὐῶδες ὀλίγον ἐπὶ ὕδωρ ἐπιστάζοντα, τουτέῳ διαιτᾶν ἦν δὲ μὴ πικρόχολος ἦ, ὕδατι

πόματι χρῆσθαι καὶ ἦν μὲν πυρεταίνῃ ξυνεχῶς, τεσσαρεσκαίδεκα ἡμέρησι τὸ ἐλάχιστον οὕτω διαιτᾶν, ἦν δὲ ἀπύρετος ἦ, ἐπτὰ ἡμέρησιν ἔπειτα ἐκ προσαγωγῆς κατὰ λόγον ἐς φαύλην δίαιταν ἄγειν. Καὶ οἷσιν ἂν μὴ ἐμβληθῆ τὰ ὀστέα, καὶ τὴν φαρμακεῖν χρή τοιαύτην ποιέεσθαι, καὶ τῶν ἐλκῶν τὴν μελέτην καὶ τὴν

δίαιταν ὡσαύτως καὶ τὸ ἀπαιωρούμενον τοῦ σώματος μὴ κατατείνειν, ἀλλὰ καὶ προσάγειν μᾶλλον, ὥστε χαλαρώτερον εἶναι τὸ κατὰ τὸ ἔλκος. Τῶν δὲ ὀστέων ἀπόστασις χρονίη, ὥσπερ καὶ πρόσθεν εἴρηται. Μάλιστα δὲ χρή τὰ τοιαῦτα διαφυγεῖν, ἅμα ἦν τις καλὴν ἔχη τὴν ἀποφυγὴν αἷ τε γὰρ ἐλπίδες ὀλίγαι, καὶ οἱ κίνδυνοι πολλοὶ καὶ μὴ ἐμβάλλον ἄτεχνος ἂν δοκέοι εἶναι, καὶ ἐμβάλλον ἐγγυτέρω ἂν τοῦ θανάτου ἀγάγοι, ἢ τῆς σωτηρίας.

38. Τὰ δὲ ὀλισθήματα τὰ κατὰ τὰ γούνατα, καὶ τὰ διακινήματα τῶν ὀστέων εὐηθέστερα πούλῳ τῶν κατ' ἀγκῶνα κινήματων καὶ ὀλισθημάτων. Τό τε γὰρ ἄρθρον τοῦ μηροῦ εὐσταλέστερον ὡς ἐπὶ μεγέθει, ἢ τὸ τοῦ βραχίονος, καὶ δικαίην φύσιν μούνον ἔχον, καὶ ταύτην περιφερέα τὸ δὲ τοῦ βραχίονος ἄρθρον μέγα τε καὶ βαθμίδας πλείονας ἔχον. Πρὸς δὲ τούτοις, τὰ μὲν τῆς κνήμης ὀστέα παραπλήσια μῆκός ἐστι, καὶ μικρόν τι οὐκ ἄξιον λόγου τὸ ἔξω ὀστέον ὑπερέχει, οὐδενὸς μεγάλου κώλυμα ἔδον,

ἀφ' οὗ περ πέφυκεν ὁ ἔξω τένων ὁ παρὰ τὴν ἰγνύην τὰ δὲ τοῦ πήχεος ὀστέα ἄνισά ἐστιν, καὶ τὸ βραχύτερον παχύτερον συχνῶ, τὸ δὲ λεπτότερον πολλῶ ὑπερβάλλει καὶ ὑπερέχει τὸ ἄρθρον ἐξήρηται μέντοι καὶ τοῦτο τῶν νεύρων κατὰ τὴν κοινὴν ζύμφυσιν

τῶν ὀστέων πλεῖον δὲ μέρος ἔχει τῆς ἐξαρτήσιος των νεύρων ἐν τῷ βραχίονι τὸ λεπτόν ὀστέον, ἢπερ τὸ παχύ. Ἡ μὲν οὖν φύσις τοιουτότροπος τῶν ἄρθρων τούτων καὶ τῶν ὀστέων τοῦ ἀγκῶνος. Καὶ διὰ τὸν τρόπον τῆς φύσιος τὰ κατὰ τὸ γόνυ ὀστέα πολλάκις μὲν ὀλισθάνει, ῥηϊδίως δὲ ἐμπίπτει φλεγμονὴ δὲ οὐ μεγάλη προσγίνεται, οὐδὲ δεσμός τοῦ ἄρθρου. Ὀλισθάνει δὲ τὰ πλεῖστα ἐς τὸ ἔσω μέρος, ἔστι δ' ὅτε καὶ ἐς τὸ ἔξω, ποτὲ δὲ καὶ ἐς τὴν ἰγνύην. Τούτων ἀπάντων αἱ ἐμβολαὶ οὐ χαλεπαί, ἀλλὰ τὰ μὲν ἔξω καὶ ἔσω ὀλισθάνοντα, καθῆσθαι μὲν χρή τὸν ἄνθρωπον ἐπὶ χαμαιζήλου τινός, τὸ δὲ σκέλος ἀνωτέρω ἔχειν, μὴ μὴν πολλῶ. Κατάτασις δὲ ὡς ἐπὶ τὸ πούλῳ μετρίῃ ἀρκέει, τῇ μὲν κατατείνειν τὴν κνήμην, τῇ δὲ ἀντιτείνειν τὸν μηρόν.

39. Τὰ δὲ κατὰ τὸν ἀγκῶνα ὀχλωδέστερά ἐστι τῶν κατὰ τὸ γόνυ, καὶ δυσεμβολώτερα καὶ διὰ τὴν φλεγμονὴν καὶ διὰ τὴν φύσιν, ἢν μὴ τις αὐτίκα ἐμβάλῃ. Ὀλισθάνει μὲν γὰρ ἦσσον, ἢ ἐκεῖνα, δυσεμβολώτερα δὲ καὶ δυσθετώτερα, καὶ ἐπιφλεγμαίνει μᾶλλον καὶ ἐπιπωροῦται.

40. Ἔστι δὲ καὶ τούτων τὰ μὲν πλεῖστα μικραὶ ἐγκλίσεις, ἄλλοτε ἐς τὸ πρὸς τῶν πλευρέων μέρος, ἄλλοτε ἐς τὸ ἔξω οὐ πᾶν δὲ τὸ ἄρθρον μεταβεβηκός, ἀλλὰ, μένον κατὰ τὸ κοῖλον

τοῦ ὀστέου τοῦ βραχίονος, ἢ τὸ τοῦ πήχεος ὀστέον τὸ ὑπερέχον, ἐξέσχεν. Τὰ μὲν οὖν τοιαῦτα, κὰν τῆ ἢ τῆ ὀλίσθη, ῥηϊδίον ἐμβάλλειν, καὶ ἀπόχρη ἢ κατάτασις ἢ ἐς τὸ ἰθὺ γινομένη κατ' ἰθυωρίην τοῦ βραχίονος, τὸν μὲν κατὰ τὸν καρπὸν τῆς χειρὸς τείνειν, τὸν δὲ κατὰ τὴν μασχάλην περιβάλλοντα, τὸν δὲ τῆ ἐτέρῃ πρὸς τὸ ἐξεστεὸς ἄρθρον τὸ θέναρ προσβάλλοντα ὠθέειν, τῆ δ' ἐτέρῃ ἀντωθέειν προσβάλλοντα ἐγγὺς τῷ ἄρθρῳ. Ἐνακούει δὲ οὐ βραδέως ἐμβαλλόμενα τὰ τοιαῦτα ὀλισθήματα, ἦν, πρὶν φλεγμῆν, ἐμβάλλῃ τις. Ὀλισθάνει δὲ ὡς ἐπὶ τὸ πούλυ μᾶλλον ἐς τὸ ἔσω μέρος, ὀλισθάνει δὲ καὶ ἐς τὸ ἔξω, εὐδηλα δὲ τῷ σχήματι. Καὶ πολλάκις ἐμπίπτει τὰ τοιαῦτα, καὶ ἄνευ ἰσχυρῆς κατατάσιος χρῆ δὲ τῶν ἔσω ὀλισθανόντων, τὸ μὲν ἄρθρον ἀπωθέειν ἐς τὴν φύσιν, τὸν δὲ πῆχυν ἐς τὸ καταπρηνὲς μᾶλλον ῥέποντα περιάγειν. Τὰ μὲν πλεῖστα ἀγκῶνος τοιαῦτα ὀλισθήματα.

41. Ἦν δὲ ὑπερβῆ τὸ ἄρθρον ἢ ἔνθα ἢ ἔνθα ὑπὲρ τὸ ὀστέον τοῦ πήχεος τὸ ἐξέχον ἐς τὸ κοῖλον τοῦ βραχίονος, γίνεται μὲν οὖν ὀλιγάκις τοῦτο, ἦν δὲ γένηται, οὐκ ἔτι ὁμοίως ἢ κατάτασις ἢ ἐς τὴν ἰθυωρίην γινομένη ἐπιτηδεῖ τῶν τοιούτων ὀλισθημάτων

κωλύει γὰρ ἐν τῆ τοιαύτῃ κατατάσει τὸ ἀπὸ τοῦ πήχεος ὑπρέχον ὀστέον τὴν ὀπέρβασιν τοῦ βραχίονος. Χρῆ τοίνυν τοῖσιν οὕτως ἐκβεβληκόσι τὴν κατάτασιν ποιέεσθαι τοιαύτην, οἷηπερ πρόσθεν γέγραπται, ἐπὶν τις ὀστέα βραχίονος κατεηγότα ἐπίδῃ, ἀπὸ μὲν τῆς μασχάλης ἐς τὸ ἄνω τείνεσθαι, ἀπὸ δὲ τοῦ ἀγκῶνος αὐτοῦ ἐς τὸ κάτω ἀναγκάζειν, οὕτω γὰρ ἂν μάλιστα ὁ βραχίων ὑπεραιωρηθεῖ ὑπὲρ τῆς ἐωυτοῦ βαθμίδος ἦν δὲ ὑπεραιωρηθῆ, ῥηϊδίῃ ἢ κατάτασις, τοῖσι θέναρσι τῶν χειρῶν τὸ μὲν ἐξεστεὸς τοῦ βραχίονος ἐμβάλλοντα ὠθέειν, τὸ δὲ ἐς τὸ τοῦ πήχεος ὀστέον τὸ παρὰ τὸ ἄρθρον ἐμβάλλοντα ἀντωθέειν, τὸν

αὐτὸν τρόπον ἄμφω. Ἴσως μέντοι ἢ τοιαύτη κατάτασις τοῦ τοιούτου ὀλισθήματος δικαιοτάτη ἐμβληθεῖ δ' ἂν καὶ ἀπὸ τῆς ἐς ἰθὺ κατάτασιος, ἥσσαν δὲ ἢ οὕτω.

42. Ἦν δὲ ἐς τοῦμπροσθεν ὀλίσθη ὁ βραχίων, ἐλαχιστάκις μὲν τοῦτο γίνεται, ἀλλὰ τί ἂν ἐξαπιναίῃ ἐκπάλησις οὐκ ἐκβάλλοι; πολλὰ γὰρ καὶ παρὰ τὴν οἰκείην φύσιν ἐκπίπτει, κῆν μέγα τι ἢ τὸ κωλύον ταύτη δὲ τῆ ἐκπαλήσει μέγα τι τὸ

ὑπερβαινόμενον τὸ ὑπὲρ τὸ παχύτερον τῶν ὀστέων, καὶ τῶν νεύρων συχνὴ κατάτασις ὅμως δὲ δὴ τισιν ἐξεπάλησεν. Σημεῖον δὲ τοῖσιν οὕτως ἐκπαλήσασιν οὐδὲν γὰρ χρῆμα τοῦ ἀγκῶνος κάμψαι δύνανται, εὐδηλον δὲ καὶ τὸ ἄρθρον

ψαυόμενον. Ἦν μὲν οὖν μὴ αὐτίκα ἐμβληθῆ; ἰσχυραὶ καὶ βίαιοι φλεγμοναὶ καὶ πυρετώδεις γίνονται ἢν δὲ δὴ αὐτίκα τις παρατύχη, εὐέμβολον. Χρῆ δὲ ὀθόνιον σκληρὸν ὀθόνιον γὰρ σκληρὸν εἰλιγμένον ἀρκέει μὴ μέγα ἐνθέντα πλάγιον ἐς τὴν καμπὴν τοῦ ἀγκῶνος, ἐξαπίνης ξυγκάμψαι τὸν ἀγκῶνα, καὶ προσαγαγεῖν ὡς μάλιστα τὴν χεῖρα πρὸς τὸν ὦμον. Ἰκανὴ μὲν οὖν αὕτη ἢ ἐμβολὴ τοῖσιν οὕτως ἐκπαλήσασιν ἀτὰρ καὶ ἢ ἐς τὸ ἰθὺ κατάτασις δύναται εὐθετίζειν τοῦτον τὸν τρόπον τῆς ἐκβολῆς τοῖσι μέντοι θέναρσι τῆς χειρὸς χρῆ, τὸν μὲν ἐμβάλλοντα ἐς τὸ τοῦ βραχίονος ἐξέχον τὸ παρὰ τὴν καμπὴν ὀπίσω ἀπωθέειν, τὸν δὲ τινα κάτωθεν ἐς τὸ τοῦ ἀγκῶνος ὀξὺ ἐμβάλλοντα ἀνωθέειν ἐς τὴν ἰθυωρίην τοῦ πήχεος

Ῥέποντα. Δύναται δὲ ἐν τουτέῳ τῷ τρόπῳ τῆς ὀλισθήσιος κάκεινη ἢ κατάτασις ἢ πρόσθεν γεγραμμένη, ὡς χρῆ κατατείνειν τὰ ὀστέα τοῦ βραχίονος κατεηγότα, ἐπὴν μέλλωσιν ἐπιδεισθαι ἐπὴν δὲ καταταθῆ, οὕτω χρῆ τοῖσι θέναρσι τὰς προσβολὰς ποιέεσθαι, ὥσπερ καὶ πρόσθεν γέγραπται.

43. Ἦν δὲ ἐς τοῦπίσω βραχίων ἐκπέση ὀλιγάκις δὲ τοῦτο γίνεται, ἐπωδυνώτατόν τε τοῦτο πάντων καὶ πυρετωδέστατον ξυνεχέων πυρετῶν καὶ ἀκρητοχόλων, θανατωδέων καὶ ὀλιγημέρων, οἱ τοιοῦτοι ἐκτανύειν οὐ δύναται. Ἦν μὲν οὖν αὐτίκα παρατύχης, βιάσασθαι χρῆ ἐκτανύσαντα τὸν ἀγκῶνα, καὶ αὐτομάτως ἐπίπτει. Ἦν δὲ σε φθάση πυρετήνας, οὐκ ἔτι χρῆ ἐμβάλλειν κατατείνειε γὰρ ἂν ἢ ὀδύνη ἀναγκαζομένου. Ως δ' ἐν κεφαλαίῳ εἰρησθαι, οὐδ' ἄλλο χρῆ ἄρθρον πυρεταίνοντι ἐμβάλλειν, ἥκιστα δὲ ἀγκῶνα.

44. Ἔστι δὲ καὶ ἄλλα σίνεα κατ' ἀγκῶνα ὀχλώδεα τοῦτο μὲν γὰρ, τὸ παχύτερον ὀστέον ἔστιν ὅτε ἐκινήθη ἀπὸ τοῦ ἑτέρου, καὶ οὐτε ξυγκάμπειν, οὐτε κατατανύειν ὁμοίως δύναται. Δῆλον δὲ γίνεται, ψαυόμενον κατὰ τὴν ξύγκαμψιν τοῦ ἀγκῶνος παρὰ τὴν διασχίδα τῆς φλεβὸς τὴν ἄνωθεν τοῦ μυὸς τείνουσαν. Οἷσι δὲ τὸ τοιοῦτον, οὐκ ἔτι ρηΐδιον ἐς τὴν ἑωυτοῦ φύσιν ἀγαγεῖν οὐδὲ γὰρ

ἄλλην οὐδεμίην ρηΐδιον ξυμφυάδα κοινήν δύο ὀστέων κινήθεισαν ἐς τὴν ἀρχαίην φύσιν ἰδρυνθῆναι, ἀλλ' ἀνάγκη ὄγκον ἴσχειν τὴν διάστασιν. Ως δ' ἐπιδέειν χρῆ ἐν ἄρθρῳ, ἐν τῇ κατὰ σφυρὸν ἐπιδέσει εἴρηται.

45. Ἔστι δ' οἷσι κατήγνυται τοῦ πήχεος τὸ ὀστέον τὸ ὀποτεταγμένον τῷ βραχίονι, ὅτε μὲν τὸ χονδρῶδες αὐτοῦ ἀφ' οὗ πέφυκεν ὁ τένων ὁ ὀπισθεν τοῦ βραχίονος [ὅτε δὲ τὰ πρόσω κατὰ τὴν ἀρχὴν τῆς ἐκφύσεως τοῦ προσθίου κορωνοῦ] καὶ ἐπὴν τοῦτο κινήθῃ, πυρετῶδες καὶ κακότηδες γίνεται τὸ μέντοι

ἄρθρον μένει ἐν τῇ ἐωυτοῦ χώρῃ πᾶσα γὰρ ἡ βάσις αὐτέου ταύτη ὑπερέχει. Ὅταν δὲ ἀπαγῆ ταύτη ἢ ὑπερέχει ἡ κεφαλὴ τοῦ βραχίονος, πλανωδέστερον τὸ ἄρθρον γίνεται, ἢν παντάπασιν ἀποκαυλισθῆ. Ἀσινέστερα δὲ, ὡς ἐν κεφαλαίῳ εἰρησθαι, πάντα τὰ κατηγνύμενα τῶν ὀστέων ἐστίν, ἢ οἷσι τὰ μὲν ὀστέα οὐ κατάγνυται, φλέβες δὲ καὶ νεῦρα ἐπίκαιρα ἀμφιφλάται ἐν τούτοις τοῖσι χωρίοισιν ἐγγυτέρῳ γὰρ θανάτου πελάζει ταῦτα ἢ ἐκεῖνα, ἢν ἐκπυρωθῆ ζυνεχεῖ πυρετῷ ὀλίγα γε μὴν τὰ τοιαῦτα κατήγματα γίνεται.

46. Ἔστι δ' ὅτε αὐτὴ ἡ κεφαλὴ τοῦ βραχίονος κατὰ τὴν ἐπίφυσιν

κατάγνυται τοῦτο δὲ δοκέον κακοσινώτερον εἶναι πολλῶ, πολλῶ τινι εὐηθέστερον τῶν κατ' ἀγκῶνα σινέων ἐστίν.

47. Ὡς μὲν οὖν ἕκαστα τῶν ὀλισθημάτων ἀρμόσσει μάλιστα ἱητρεύειν, γέγραπται, καὶ ὅτι παραχρῆμα ἐμβάλλειν μάλιστα ἄρθρον ζυμφέρει διὰ τὸ τάχος τῆς φλεγμονῆς τῶν νεύρων. Καὶ γὰρ ἢν ἐκπεσόντα αὐτίκα ἐμπέση, ὅμως φιλέει τὰ νεῦρα ζύντασιν ποιέεσθαι, καὶ κωλύειν ἐπὶ ποσὸν χρόνον τὴν τε ἕκτασιν ὄσιν περ φιλέει ποιέεσθαι, τὴν τε ζύγκαμψιν. Ἱητρεύειν δὲ πάντα παραπλησίως ταῦτα ζυμφέρει, καὶ ὀκόσα ἀπάγνυται, καὶ ὀκόσα δίσταται, καὶ ὀκόσα ὀλισθάνει πάντα γὰρ χρῆ ὀθονίοισι πολλοῖσι καὶ σπλήνεσι καὶ κηρωτῇ ἱητρεύειν, ὡσπερ καὶ τᾶλλα κατήγματα. Τὸ δὲ σχῆμα τοῦ ἀγκῶνος ἐν τούτοις παντάπασιν δεῖ τοιοῦτον ποιέεσθαι, οἷον περ οἷσι βραχίων ἐπεδεῖτο καταγεῖς, καὶ πῆχυς. Κοινότατον μὲν γὰρ πᾶσι τοῖσιν ὀλισθημασι καὶ τοῖσι κινήμασι καὶ τοῖσι κατήγμασι τοῦτο τὸ σχῆμά ἐστιν κοινότατον δὲ πρὸς τὴν ἔπειτα διάτασιν, καὶ τὸ ἐκτανύειν ἕκαστα, καὶ ζυγκάμπτειν ἐντεῦθεν γὰρ ὁδοὶ ἐς ἀμφοτέρα παραπλήσιοι. Εὐοχώτατον δὲ καὶ εὐανάληπτον αὐτῷ τῷ κάμνοντι τοῦτο τὸ σχῆμα. Ἔτι δὲ πρὸς τούτοις, εἴ ἄρα κρατηθεῖ ὑπὸ τοῦ πωρώματος, εἰ μὲν ἐκτεταμένη ἢ χεῖρ κρατηθεῖ, κρέσσων ἂν εἴη μὴ προσεοῦσα, πολλῶ μὲν γὰρ κώλυμα εἴη, ὠφελοῖ δὲ ὀλίγῳ εἰ δ' αὖ

ζυγκεκαμμένη, μᾶλλον εὐχρηστος ἂν εἴη πολλῶ δὲ εὐχρηστοτέρη, εἰ τὸ διὰ μέσου σχῆμα ἔχουσα πωρωθεῖ. Τὰ μὲν περὶ τοῦ σχήματος τοιαῦτα.

48. Ἐπιδεῖν δὲ χρῆ, τὴν τε ἀρχὴν τοῦ πρώτου ὀθονίου βαλλόμενον κατὰ τὸ βλαφθὲν, ἢν τε καταγῆ, ἢν τε ἐκστῆ, ἢν τε διαστῆ, καὶ τὰς περιβολὰς τὰς πρώτας κατὰ τοῦτο ποιέεσθαι καὶ ἐρηρεῖσθω μάλιστα ταύτη, ἔνθεν δὲ καὶ ἔνθεν ἐπὶ ἦσσαν. Τὴν δὲ ἐπίδεδιν κοινήν ποιέεσθαι χρῆ τοῦ τε πήχεος καὶ τοῦ βραχίονος, καὶ ἐπὶ πούλῳ πλέον ἐκάτερον ἢ ὡς οἱ πλεῖστοι ποιέουσιν, ὅκως ἐξαρύηται ὡς μάλιστα ἀπὸ τοῦ σίνεος τὸ οἶδημα ἔνθεν καὶ ἔνθεν. Προσπεριβαλλέσθω δὲ καὶ

τὸ ὄξυ τοῦ πήχεος, ἦν τὸ σίνος κατὰ τοῦτο ἦ, ἦν τε μὴ, ἵνα μὴ τὸ οἴδημα ἐνταῦθα περὶ αὐτὸ ξυλλέγηται. Περιφεύγειν δὲ χρὴ ἐν τῇ ἐπιδέσει, ὅπως μὴ κατὰ τὴν καμπὴν πολλὸν τοῦ ὀθονίου ἠθροισμένον ἔσται ἐκ τῶν δυνατῶν περιέχθαι δὲ κατὰ τὸ σίνος ὡς μάλιστα. Καὶ τὰ ἄλλα καταλαβέτω αὐτὸν περὶ τῆς πιέξιος καὶ τῆς χαλάσιος ταῦτά, καὶ κατὰ τοὺς αὐτοὺς χρόνους ἕκαστα, ὥσπερ τῶν ὀστέων τῶν κατεηγότων ἐν τῇ ἰητρείῃ πρόσθεν γέγραπται καὶ αἱ μετεπιδέσεις διὰ τρίτης ἔστωσαν χαλᾶν δὲ δοκεέτω τῇ τρίτῃ, ὥσπερ καὶ τότε. Καὶ νάρθηκας προσπεριβάλλειν

ἐν τῷ ἰκνεομένῳ χρόνῳ οὐδὲν γὰρ ἀπὸ τρόπου, καὶ τοῖσι τα ὀστέα κατεηγόσι, καὶ τοῖσι μὴ, ἦν μὴ πυρεταίνῃ, ὡς χαλαρωτάτους δὲ, τοὺς μὲν ἀπὸ τοῦ βραχίονος κατατεταγμένους, τοὺς δὲ ἀπὸ τοῦ πήχεος ἀνειμένους ἔστωσαν δὲ μὴ παχέες οἱ νάρθηκες ἀναγκαῖον δὲ καὶ ἀνίσους αὐτοὺς εἶναι ἀλλήλοισιν, παραλλάσσειν δὲ παρ' ἀλλήλους, ἧ ἂν ξυμφέρῃ, τεκμαιρόμενον πρὸς τὴν ζύγκαμψιν. Ἄτὰρ καὶ τῶν σπληνῶν τὴν πρόσθεσιν τοιαύτην χρὴ ποιέεσθαι, ὥσπερ καὶ τῶν νάρθηκων εἴρηται, ὀγκηροτέρους δὲ ὀλίγω κατὰ τὸ σίνος προστιθέναι. Τοὺς δὲ χρόνους τοὺς ἀπὸ τῆς φλεγμονῆς τεκμαίρεσθαι καὶ ἀπὸ τῶν πρόσθεν γεγραμμένων.



## ON THE INSTRUMENTS OF REDUCTION - Μοχλικός

1. Ὅστεων φύσις δακτύλων μὲν ἀπλᾶ καὶ ὀστέα καὶ ἄρθρα χειρὸς δὲ καὶ ποδὸς πούλλα, ἄλλα ἀλλοίως συνηρθωμένα μέγιστα δὲ τὰ ἀνωτάτω πτέρνης δὲ ἐν οἷον ἔξω φαίνεται, πρὸς δὲ αὐτὴν οἱ ὀπίσθιοι τένοντες τείνουσιν. Κνήμης δὲ δύο, ἄνωθεν καὶ κάτωθεν ξυνεχόμενα, κατὰ μέσον δὲ διέχοντα σμικρὸν τὸ ἔξωθεν, κατὰ τὸν σμικρὸν δάκτυλον λεπτότερον βραχεῖ, πλειῆστον δὲ ταύτη διεχούση καὶ σμικροτέρη ῥοπῇ κατὰ γόνυ, καὶ ὁ τένων ἐξ αὐτοῦ πέφυκεν, ὁ παρὰ τὴν ἰγγύην ἔξω ἔχουσι δὲ κάτωθεν κοινὴν ἐπίφυσιν, πρὸς ἣν ὁ πούς κινέεται ἄλλην δὲ ἄνωθεν ἔχουσιν ἐπίφυσιν, ἐν ἧ τὸ τοῦ μηροῦ ἄρθρον κινέεται, ἀπλόον καὶ εὐσταλές ὡς ἐπὶ μήκει εἶδος κονδυλῶδες, ἔχον ἐπιμυλίδα αὐτὸς δ' ἔγκυ ῥτος ἔξω καὶ ἔμπροσθεν ἢ δὲ κεφαλὴ ἐπίφυσις ἐστὶ στρογγύλη, ἐξ ἧς τὸ νεῦρον τὸ ἐν τῇ κοτύλῃ τοῦ ἰσχίου πέφυκεν ὑποπλάγιον δὲ καὶ τοῦτο προσήρτηται, ἦσσαν δὲ βραχίονος. Τὸ δ' ἰσχίον προσίσχεται πρὸς τῷ μεγάλῳ σπονδύλῳ τῷ παρὰ τὸ ἱερὸν ὀστέον, χονδρονευρώδει δεσμῷ. Ῥάχις δὲ ἀπὸ μὲν τοῦ ἱεροῦ ὀστέου μέχρι τοῦ μεγάλου σπονδύλου κυφῆ

κύστις τε καὶ γονὴ καὶ ἀρχοῦ τὸ ἐγκεκλιμένον, ἐν τούτῳ ἀπὸ δὲ τούτου ἄχρι φρενῶν ἦλθεν ἢ ἰθύλορδος, καὶ αἱ ψόαι κατὰ τοῦτο ἐντεῦθεν δὲ ἄχρι τοῦ μεγάλου σπονδύλου, τοῦ ὑπὲρ τῶν ἐπωμίδων, ἰθυκυφῆς ἔτι δὲ μᾶλλον δοκέει, ἢ ἐστὶν αἱ γὰρ ὀπισθεν τῶν σπονδύλων ἀποφύσεις ταύτη ὑψηλόταται τὸ δὲ τοῦ αὐχένος ἄρθρον, λορδόν. Σπόνδυλοι δὲ ἔσωθεν ἄρτιοι πρὸς ἀλλήλους, ἀπὸ δὲ τῶν ἔξωθεν χόνδρων νεύρῳ συνεχόμενοι ἢ δὲ ξυνάρθρωσις αὐτῶν, ἐν τῷ ὀπισθεν τοῦ νωτιαίου ὀπισθεν δὲ ἔχουσιν ἔκφυσιν ὀξειν, ἔχουσαν ἐπίφυσιν χονδρώδεα, ἐνθεν νεύρων ἀπόφυσις καταφερῆς, ὡσπερ καὶ οἱ μύες παραπεφύκασιν ἀπὸ αὐχένος ἐς ὀσφὺν, πληρεῦντες δὲ πλευρέων καὶ ἀκάνθης τὸ μέσον. Πλευραὶ δὲ κατὰ τὰς διαφύσιας τῶν σπονδύλων νευρίῳ προσπεφύκασιν ἀπ' αὐχένος ἐς ὀσφὺν ἔσωθεν, ἐπίπροσθεν δὲ κατὰ τὸ στῆθος, χαῦνον καὶ μαλθακὸν τὸ ἄκρον ἔχουσαι εἶδος ῥαιβοειδέστατον τῶν ζώων στενότατος γὰρ ταύτη ὁ ἄνθρωπος ἐπ' ὄγκον ἢ δὲ δὴ πλευρῆσιν ἔκφυσις πλαγίῃ βραχείῃ καὶ πλατείῃ, ἐφ' ἐκάστῳ σπονδύλῳ νευρίῳ προσπεφύκασιν. Στῆθος δὲ ξυνεχῆς αὐτὸ ἐωυτῷ, διαφύσιας ἔχον πλαγίας, ἢ πλευραὶ προσήρτηνται, χαῦνον δὲ καὶ χονδρώδες. Κληῖδες

δὲ περιφερῆες ἐς τοῦμπροσθεν, ἔχουσαι πρὸς μὲν τὸ στῆθος βραχείας κινήσιας, πρὸς δὲ τὸ ἀκρώμιον συχνοτέρας. Ἀκρώμιον δὲ ἐξ ὠμοπλατέων πέφυκεν, ἀνομοίως τοῖσι πλειστοῖσιν. Ὠμοπλάτη δὲ χονδρώδης τὸ πρὸς ῥάχιν, τὸ δ' ἄλλο χαῦνη, τὸ ἀνώμαλον ἔξω ἔχουσα, αὐχένα δὲ καὶ κοτύλην ἔχουσα χονδρώδεα, ἐξ

ἤς αἱ πλευραὶ κίνησιν ἔχουσιν, εὐαπόλυτος ἐοῦσα ὀστέων, πλὴν βραχίονος. Τούτου δὲ ἐκ τῆς κοτύλης νευρίῳ ἢ κεφαλῇ ἐξήρτηται, χόνδρου χαύνου περιφερῆ ἐπίφυσιν ἔχουσα αὐτὸς δ' ἔγκυρτος ἔξω καὶ ἔμπροσθεν, πλάγιος, οὐκ ὀρθὸς πρὸς κοτύλην. Τὸ δὲ πρὸς ἀγκῶνα αὐτοῦ, πλατὺ καὶ κονδυλῶδες καὶ βαλβιδῶδες καὶ στερεόν, ἔγκοιλον ὀπισθεν, ἐν ᾧ ἢ κορώνη ἢ ἐκ τοῦ πήχεος, ὅταν ἐκταθῆ ἢ χεὶρ, ἔνεστιν ἐς τοῦτο καὶ τὸ ναρκῶδες νεῦρον, ὃ ἐκ τῆς διαφύσιος τῶν τοῦ πήχεος ὀστέων, ἐκ μέσων, ἐκπέφυκε καὶ περαίνεται.

2. Ἴρις δὲ κατεαγεῖσα ἀναπλάσσεται, εἰ οἶόν τε, αὐθωρόν. Κῆν

μὲν οὖν ὁ χόνδρος, ἐντιθέναι ἄχνην ὀθονίου ἐναποδέοντα λοπῶ καρχηδονίῳ, ἢ ἐν ἄλλῳ, ὃ μὴ ἐρεθειῖ τῷ λοπῶ δὲ τὰς παραλλάξιας παρακολλᾶν, καὶ ἀναλαμβάνειν. Ταῦτα δὲ ἐπίδεσις κακὰ ποιέει. Ἴησις, ἀλήτῳ ξὺν μάννῃ, ἢ θείῳ ξὺν κηρωτῇ. Αὐτίκα ἀναπλάσεις, ἔπειτα ἀνακωχῆσεις τοῖσι δακτύλοισιν, ἐσματτεύομενος καὶ παραστρέφων καὶ τὸ καρχηδόνιον. Πωροῖτο ἂν, καὶ ἦν ἔλκος ἐνῆ, καὶ ἦν ὀστέα ἀπιέναι μέλλη οὐ γὰρ παλιγκοτώτατά, οὕτω ποιητέα.

3. Οὓς κατεαγὲν, μὴ ἐπιδεῖν, μηδὲ καταπλάσσειν ἦν δέ τι δέη, ὡς κουφότατον, ἢ κηρωτῇ καὶ θείῳ κατακολλᾶν. Ὡν δὲ ἔμπυα τὰ ὦτα, διὰ παχέος εὐρίσκεται πάντα δὲ τὰ ὑπόμυξα καὶ τῇ ὑγρῇ σαρκὶ πλήρεα ἐξάπατᾶ οὐ μὴ βλάβη γένηται στομωθὲν τὸ τοιοῦτον ἐστὶ γὰρ ἄσαρκα καὶ ὑδατώδεα, μύξης πλέα, ὅπου δὲ καὶ οἷα ἐόντα θανατώδεά ἐστι, παρεθέντα. Ὡτων καῦσις πέρην, τάχιστα ὑγιάζει κυλλὸν δὲ καὶ μεῖον γίνεται τὸ οὓς, ἦν πέρην καυθῆ. Ἦν δὲ στομωθῆ, κούφῳ ἐναίμῳ δεήσει χρῆσθαι.

4. Γνάθοι δὲ κατασπῶνται μὲν πολλάκις καὶ καθίστανται ἐκπίπτουσι δὲ ὀλιγάκις, μάλιστα μὲν χασμωμένοισιν οὐ γὰρ ἐκπίπτει, ἦν μὴ τις χανὼν μέγα παρανάγη ἐκπίπτει δὲ μᾶλλον, ὅτι τὰ νεῦρα ἐν πλαγίῳ καὶ λελυγισμένα συνδιδοῖ. Σημεῖα προέχει ἢ κάτω γνάθος, καὶ παρέστραπται τάναντία τοῦ ἐκπτώματος, ζυμβάλλειν οὐ δύνανται ἦν δ' ἀμφοτέραι, προΐσχουσι μᾶλλον, συμβάλλουσι ἥσσον, ἀστραβέες δηλοῖ δὲ τὰ ὄρια τῶν ὀδόντων τὰ ἄνω τοῖσι κάτω κατ' ἴξιν. Ἦν οὖν ἀμφοτέραι ἐκπεσοῦσαι μὴ αὐτίκα ἐμπέσωσι, θνήσκουσι δεκαταῖοι οὗτοι μάλιστα πυρετῶ ζυνεχεῖ, νωθρῆ τε καρῶσει οἱ γὰρ μύες οὗτοι, τοιοῦτοι γαστήρ ἐπιταράσσεται ὀλίγα ἄκρητα καὶ ἦν ἐμέωσι, τοιαῦτα ἐμέουσιν. Ἦ δ' ἐτέρη ἀσινεστέρα. Ἐμβολῆ δὲ ἢ αὐτῇ ἀμφοτέρων κατακειμένου ἢ καθημένου τοῦ ἀνθρώπου, τῆς κεφαλῆς ἐχόμενον, περιλαβόντα τὰς γνάθους ἀμφοτέρως ἀμφοτέρῃσι χερσὶν ἔσωθεν καὶ ἔξωθεν, τρία ἅμα ποιῆσαι ὥσαι ἐς ὀρθόν, καὶ ἐς τοῦπίσω, καὶ συσχεῖν τὸ στόμα. Ἴησις, μαλάγμασι, καὶ σχήμασι, καὶ ἀναλήψει γενείου, ποιοῦσι τατὰ τῇ ἐμβολῆ.

5. Ωμος δὲ ἐκπίπτει κάτω. Ἄλλη δὲ οὐπω ἤκουσα. Δοκέει μὲν γὰρ ἐς τοῦμπροσθεν ἐκπίπτειν, ὧν αἱ σάρκες αἱ περὶ τὸ ἄρθρον μεμινυθήκασι διὰ τὴν φθίσιν, οἶον καὶ τοῖσι βουσί χειμῶνος φαίνεται διὰ

λεπτότητα. Καὶ ἐκπίπτει μᾶλλον, τοῖσι δὲ λεπτοῖσιν, ἢ ἰσχυοῖσι, [ἢ ξηροῖσι] καὶ τοῖσιν ὑγράσματα περὶ τὰ ἄρθρα ἔχουσιν ἄνευ φλεγμονῆς αὐτὴ γὰρ συνδεῖ. Οἱ δὲ καὶ βουσὶν ἐμβάλλοντες καὶ ἀποπερονῶντες ἐξαμαρτάνουσι, καὶ ὅτι διὰ τὴν χρῆσιν, ὡς χρῆται βοῦς σκέλει, λήθει, καὶ ὅτι κοινὸν καὶ ἀνθρώπῳ οὕτως ἔχοντι τὸ σχῆμα τοῦτο τὸ τε Ὀμήρειον καὶ διότι λεπτότατοι βόες τηνικαῦτα. Ὅσα τε τὸν πῆχυν πλάγιον ἀπὸ πλευρέων ἄραντες δρῶσιν, οὐ πάνυ δύνανται δρᾶν, οἷσιν ἂν μὴ ἐμπέση. Οἷσι μὲν οὖν ἐκπίπτει μάλιστα, καὶ ὡς ἔχουσιν, εἴρηται. Οἷσι δὲ ἐκ γενεῆς, τὰ ἐγγύτατα μᾶλλον βραχύνεται ὅστέα, οἶον ἐν τούτῳ οἱ γαλιάγκωνες πῆχυς δὲ ἦσσαν, χεὶρ δὲ ἔτι ἦσσαν, τὰ δ' ἄνωθεν οὐδέν. Καὶ ἀσαρκότατα ἐγγύς μινύθει δὲ μάλιστα τὰ ἐναντία τῶν ὀλισθημάτων, καὶ τὰ ἐν αὐξήσει, ἦσσαν δὲ τινι τῶν ἐκ γενεῆς. Καὶ τὰ παραπυήματα, τὰ κατ' ἄρθρον βαθέα, νεογενέσι μάλιστα παρ' ὧμον γίνεται, καὶ τουτέοισιν ὥσπερ τὰ ἐξαρθρήσαντα ποιεῖ. Ἦν δὲ ἠύξημένοισι, τὰ μὲν ὅστέα οὐ μειοῦται, οὐδὲ γὰρ ἔχει, ἢ ἄλλα οὐ ξυναύξεται ὁμοίως αἱ δὲ μινυθήσεις τῶν σαρκῶν τοῦτο γὰρ καθ' ἡμέρη καὶ αὐξεται καὶ

μειοῦται, καὶ καθ' ἡλικίας. Καὶ ἃ δύνανται σχήματα, καὶ αὐτὸ σημεῖον τὸ παρὰ τὸ ἀκρώμιον κατεσπασμένον καὶ κοῖλον, διότι, ὅταν τὸ ἀκρώμιον ἀποσπασθῆ, καὶ κοῖλον ᾖ, οἶονται τὸν βραχίονα ἐκπεπτωκένας. Κεφαλὴ δὲ τοῦ βραχίονος ἐν τῇ μασχάλῃ φαίνεται αἶρειν γὰρ οὐ δύνανται, οὐδὲ παράγειν ἔνθα καὶ ἔνθα ὁμοίως ὁ ἕτερος ὧμος μηνύει. Ἐμβολαὶ δὲ αὐτὸς μὲν τὴν πυγμὴν ὑπὸ μασχάλῃν ὑποθείς, τὴν κεφαλὴν ἀνωθέειν, τὴν δὲ χεῖρα ἐπιπαράγειν ἐπὶ τὸ στήθος. Ἄλλη ἐς τοῦπίσω περιαναγκάσαι, ὡς ἀμφισφαλῆ. Ἄλλη κεφαλῆ μὲν πρὸς τὸ ἀκρώμιον, χερσὶ δὲ ὑπὸ μασχάλῃν, κεφαλὴν ἀπάγειν βραχίονος, γούνασι δὲ ἀγκῶνα ἀνωθέειν, ἢ ἀντὶ τῶν γουνάτων τὸν ἀγκῶνα τὸν ἕτερον παράγειν, ὡς τὸ πρότερον. Ἦ κατ' ὧμου ἴζεσθαι, ὑποθείς τῇ μασχάλῃ τὸν ὧμον ἢ τῇ πτέρνῃ, ἐνθέντα ἐκπλήρωμα τῇ μασχάλῃ, δεξιῇ δεξιόν ἢ περὶ ὑπερον ἢ περὶ κλιμακτῆρα ἢ περίοδος ξὺν τῷ ξύλῳ τῷ ὑπὸ χεῖρα τεινομένῳ. Ἴησις τὸ σχῆμα, πρὸς πλευρῆσι βραχίων, χεὶρ ἄκρη ἄνω, ὧμος ἄνω οὕτως ἐπίδεσις, ἀνάληψις. Ἦν δὲ μὴ ἐμπέση, ἀκρώμιον προσλεπτύνεται.

6. Ἀκρώμιον ἀποσπασθὲν, τὸ μὲν εἶδος φαίνεται, οἶόνπερ ὧμου ἐκπεσόντος, στερίσκεται δ' οὐδενός, ἐς δὲ τὸ αὐτὸ οὐ καθίσταται. Σχῆμα τὸ αὐτὸ, ᾧ καὶ ἐκπεσόντι, ἐν ἐπίδεσει καὶ ἀνάληψι ἐπίδεσιος καὶ ὡς νόμος.

7. Ἀγκῶνος ἄρθρον παραλλάξαν μὲν ἢ πρὸς πλευρῆν, ἢ ἔξω, μένοντος τοῦ ὀξέος

τοῦ ἐν τῷ κοίλῳ τοῦ βραχίονος, ἐς ἰθὺ κατατείνοντα, τὰ ἐξέχοντα ἀνωθέειν ὀπίσω καὶ ἐς τὸ πλάγιον.

8. Τὰ δὲ τελέως ἐκβάντα ἢ ἔνθα ἢ ἔνθα κατάτασις μὲν, ἐν ἧ

11. Ταῦτα δὲ ταχέως διαπωροῦται. Ἐκ γενεῆς δὲ, βραχύτερα τὰ κάτω ὅστεα τοῦ σίνεος, πλεῖστον τὰ ἐγγύτατα πήχεος, δεύτερον χειρὸς, τρίτον δακτύλων. Βραχίων δὲ καὶ ὤμος ἐγκρατέστερα διὰ τὴν τροφήν. Ἡ δ' ἑτέρα χεὶρ διὰ τὰ ἔργα πλείω ἔτι ἐγκρατεστέρα. Μινύθησις δὲ σαρκῶν, εἰ μὲν ἔξω ἐξέπεσεν, εἴσω, εἰ δὲ μὴ, ἐς τούναντίον ἧ ἐξέπεσεν.

12. Ἀγκῶν δὲ ἦν μὲν ἔξω ἢ ἔσω ἐκβῆ, κατάτασις μὲν ἐν σχήματι ἐγγωνίῳ, κοινῷ τῷ πήχει πρὸς βραχίονα τὴν γὰρ μασχάλην ἀναλαβὼν ταινίη ἀνακρεμάσαι, ἀγκῶνι δὲ ἄκρῳ ὑποθεῖς τι παρὰ τὸ ἄρθρον βάρους ἐκκρεμάσαι, ἢ χερσὶ καταναγκάσαι. Ὑπεραιωρηθέντος δὲ τοῦ ἄρθρου, αἱ παραγωγαὶ τοῖσι θέναρσιν, ὡς τὰ ἐν χερσίν. Ἐπίδεσις ἐν τούτῳ τῷ σχήματι, καὶ ἀνάληψις, καὶ θέσις.

13. Τὰ δ' ὀπισθεν ἐξαίφνης ἐκτείνοντα διορθοῦν τοῖσι θέναρσιν ἅμα δὲ δεῖ ἐν τῇ διορθώσει, καὶ τοῖσιν ἑτέροισιν. Ἦν δὲ πρόσθεν, ἀμφὶ ὀθόνιον ξυνειλεγμένον, εὔογκον, ξυγκάμπτοντα ἅμα διορθοῦσθαι.

14. Ἦν δ' ἑτεροκλινὲς ἧ, ἐν τῇ διορθώσει ἀμφοτέρα ἅμα χρὴ ποιέειν. Τῆς δὲ μελέτης, κοινὸν τὸ σχῆμα καὶ ἡ ἐπίδεσις. Δύναται γὰρ ἐκ τῆς διατάσιος κοινῇ ξυμπίπτειν πάντα.

15. Τῶν δὲ ἐμβολέων αἱ μὲν ἐξ ὑπεραιωρήσιος ἐμβάλλονται, αἱ δὲ ἐκ κατατάσιος, αἱ δὲ ἐκ περισφάλσιος αὐται δὲ ἐκ τῶν ὑπερβολέων τῶν σχημάτων, ἢ τῇ ἢ τῇ, ξὺν τῷ τάχει.

16. Χειρὸς δὲ ἄρθρον ὀλισθάνει ἢ ἔσω, ἢ ἔξω, ἔσω δὲ τὰ πλεῖστα. Σημεῖα δ' εὔσημα ἦν μὲν ἔσω, ξυγκάμπτειν ὅλως σφῶν τοὺς δακτύλους οὐ δύνανται ἦν δ' ἔξω, ἐκτείνειν. Ἐμβολὴ δὲ, ὑπὲρ τραπέζης τοὺς δακτύλους ἔχων, τοὺς μὲν τείνειν, τοὺς δ' ἀντιτείνειν, τὸ δὲ ἐξέχον ἢ θέναρι ἢ πτέρνη ἅμα ἀπωθέειν πρόσω καὶ κάτωθεν κατὰ τὸ ἕτερον ὀστέον, ὄγκον τε μαλθακὸν ὑποθεῖς, κῆν μὲν ἄνω, καταστρέψας τὴν χεῖρα, ἦν δὲ κάτω, ὑπτίην. Ἰησις, ὀθονίοισιν.

17. Ὅλη δὲ ἡ χεὶρ ὀλισθάνει ἢ ἔσω ἢ ἔξω, μάλιστα δὲ ἔσω, ἢ ἔνθα ἢ ἔνθα ἔστι δ' ὅτε ἡ ἐπίφυσις ἐκινήθη ἔστι δ' ὅτε τὸ ἕτερον τῶν ὀστέων διέστη. Τουτέοισι κατάτασις ἰσχυρὴ ποιητέη, καὶ τὸ μὲν ἐξέχον ἀπωθέειν, τὸ δ' ἕτερον ἀντωθέειν, δύο εἶδεα ἅμα, καὶ ἐς τούπισω καὶ ἐς τὸ πλάγιον, ἢ χερσὶν ἐπὶ τραπέζης, ἢ

πτέρνη. Παλίγκοτα δὲ καὶ ἀσχήμονα, τῷ χρόνῳ δὲ κρατύνεται ἐς χρῆσιν. Ἴησις, ὀθονίοισι ζὺν τῇ χειρὶ καὶ τῷ πήχει, καὶ νάρθηκας μέχρι δακτύλων τιθέναι ἐν νάρθηξι δὲ τεθέντα ταῦτα πυκνότερον λύειν, ἢ τὰ κατήγματα, καὶ καταχύσει πλέονι χρῆσθαι.

18. Ἐκ γενεῆς δὲ, βραχυτέρη ἢ χεὶρ γίνεται, καὶ ἡ μινύθησις σαρκῶν μάλιστα τάναντία, ἢ ὡς τὸ ἔκπτωμα ηὔξημένῳ δὲ τὰ ὀστέα μένει.

19. Δακτύλου δὲ ἄρθρον ὀλισθὸν μὲν, εὔσημον, οὐ δεῖ γράφειν. Ἐμβολὴ δὲ αὐτοῦ ἤδη κατατείναντα ἐς ἰθὺ, τὸ μὲν ἐξέχον ἀπωθέειν, τὸ δὲ ἐναντίον ἀντωθέειν. Ἴησις δὲ ἢ προσήκουσα, τοῖσιν ὀθονίοισιν ἐπίδεσις. Μὴ ἐμπεσὸν γὰρ ἐπιπωροῦται ἐξωθεν. Ἐκ γενεῆς δὲ ἢ ἐν αὐξήσει ἐξαρθρήσαντα τὰ ὀστέα βραχύνεται κάτω τοῦ ὀλισθήματος καὶ σάρκες μινύθουσιν τάναντία μάλιστα, ἢ ὡς τὸ ἔκπτωμα ηὔξημένῳ δὲ τὰ ὀστέα μένει.

20. Μηροῦ ἄρθρον ἐκπίπτει κατὰ τρόπους τέσσαρας ἔσω πλεῖστα, ἔξω δεύτερον, τὰ δ' ἄλλα ὁμοίως. Σημεῖα κοινὸν μὲν τὸ ἕτερον σκέλος ἴδιον δὲ τοῦ μὲν εἶσω παρὰ τὸν περίνεον ψαύεται ἢ κεφαλῇ, ζυγκάμπτουσιν οὐχ ὁμοίως, δοκέει δὲ μακρότερον τὸ σκέλος, καὶ πουλὺ, ἢν μὴ ἐς μέσον ἀμφοτέρα ἄγων παρατείνης καὶ γὰρ οὖν ἔξω ὁ πούς καὶ τὸ γόνυ ῥέπει. Ἦν μὲν οὖν ἐκ γενεῆς ἢ ἐν αὐξήσει ἐκπέση, βραχύτερος ὁ μηρὸς, ἦσσαν δὲ κνήμη, κατὰ λόγον δὲ τᾶλλα μινύθουσιν δὲ σάρκες, μάλιστα δὲ ἔξω. Οὗτοι κατοκνέουσιν ὀρθοῦσθαι, καὶ εἰλέονται ἐπὶ τὸ ὑγιές ἢν δὲ ἀναγκάζονται, σκίμπον ἐνὶ ἢ δυσὶν ὁδοιπορέουσιν, τὸ δὲ σκέλος αἴρουσιν ὅσῳ γὰρ μείον, τόσῳ ῥᾶον. Ἦν δ' ηὔξημένοισι, τὰ μὲν ὀστέα μένει, αἱ δὲ σάρκες μινύθουσιν, ὡς προείρηται ὁδοιπορέουσιν δὲ περιστροφάδην ὡς βόες, ἐν δὲ τῷ κενεῶνι καμπύλοι, ἐπὶ τὸ ὑγιές ἐξίσχιοι ἐόντες

τῷ μὲν γὰρ ἀνάγκη ὑποβαίνειν, ὡς ὀχέη, τῷ δ' ἀποβαίνειν οὐ γὰρ δύναται ὀχέειν, ὥσπερ οἱ ἐν ποδὶ ἔλκος ἔχοντες. Κατὰ δὲ τὸ ὑγιές, πλάγιον ζύλω τῷ σώματι ἀντικοντέουσιν, τὸ δὲ σιναρὸν τῇ χειρὶ ὑπὲρ τοῦ γούνατος καταναγκάζουσιν, ὡς ὀχέειν ἐν τῇ μεταβάσει τὸ σῶμα. Ἴσχιων κάτωθεν, εἰ χρῆται, κάτωθεν ἦσσαν μινύθει καὶ ὀστέα, μᾶλλον δὲ σάρκες.

21. Τοῦ δὲ ἔξω τάναντία καὶ τὰ σημεῖα καὶ αἱ στάσιες καὶ τὸ γόνυ καὶ ὁ πούς ἔσω ῥέπει βραχύ. Τοῖσι δὲ ἐν αὐξήσει ἢ ἐκ γενεῆς παθοῦσιν οὐχ ὁμοίως ζυναύζεται κατὰ τὸν αὐτὸν λόγον

ἰσχίον ἀνωτέρω τινὶ, οὐχ ὁμοίως. Οἷσι δὲ πυκνὰ ἐκπίπτει ἐς τὸ ἔξω ἄνευ φλεγμονῆς, ὑγροτέρῳ τῷ σκέλει χρωῶνται ὥσπερ ὁ μέγας τῆς χειρὸς δάκτυλος

μάλιστα γὰρ οὗτος ἐκπίπτει φύσει οἷς μὲν ἐκπίπτει μᾶλλον ἢ ἦσσον, καὶ οἷς μὲν ἐκπίπτει χαλεπώτερον ἢ ῥᾶον, καὶ οἷσιν ἐλπίς θᾶσσον ἔμπεσεῖν, καὶ οἷσιν οὐκ, ἄκη τούτου, καὶ οἷσι πολλάκις ἐκπίπτει, ἴησις τούτου. Ἐκ γενεῆς δὲ, ἢ ἐπ' αὐξήσει, ἢ ἐν νούσῳ, μάλιστα γὰρ ἐκ νούσου, ἔστι μὲν οὖν οἷσιν ἐπισφακελίζει τὸ ὀστέον, ἀτὰρ καὶ οἷσι μὴ, πάσχει μὲν πάντα, ἦσσον δὲ ἢ τὸ ἔσω, ἢν χρηστῶς ἐπιμεληθῶσιν, ὥστε, καὶ ὄλω βαίνοντας τῷ ποδὶ, διαρρίπτειν διὰ μελέτης πλείστης, τοῖσι νηπιωτάτοις ἐαθέντα κακοῦται, ἐπιμεληθέντα δὲ ὠφελέεται τοῖσιν ὄλοις, ἦσσον δὲ τι, μινύθουσιν.

22. Οἷσι δ' ἂν ἀμφοτέρω οὕτως ἐκπέση, τῶν ὀστέων ταῦτα παθήματα εὐσαρκοὶ μὲν, πλὴν ἔσωθεν, ἐξεχέλουτοι, ῥοικοὶ μηροὶ, ἢν μὴ ἐπισφακελίση. Εἰ κυφοὶ τὰ ἄνωθεν ἰσχύων γένοιτο, ὑγιηροὶ μὲν, ἀναυξέες δὲ τὸ σῶμα, πλὴν κεφαλῆς.

23. Οἷσι δὲ ὀπισθεν, σημεῖα, ἔμπροσθεν λαπαρώτερον, ὀπισθεν ἐξέχον, πούς ὀρθός, ξυγκάμπειν οὐ δύναται, εἰ μὴ μετ' ὀδύνης, ἐκτείνειν ἢκιστα τούτοις σκέλος βραχύτερον. Ἀτὰρ οὐδ' ἐκτανύειν δύναται κατ' ἰγνύην ἢ κατὰ βουβῶνα, ἢν μὴ πάνυ αἴρωσιν, οὐδὲ ξυγκάμπειν. Ἠγεῖται ἐν τοῖσι πλείστοις τὸ ἄνω ἄρθρον τὸ

πρῶτον κοινὸν τοῦτο ἄρθροισι, νεύροισι, μυσίν, ἐντέροισιν, ὑστέρησιν, ἄλλοισιν. Ταύτη τοῦ ἰσχύου τὸ ὀστέον καταφερὲς ἐς τὸν γλουτὸν, διὰ τοῦτο βραχὺ, καὶ ὅτι ἐκτείνειν οὐ δύναται. Σάρκες παντὸς τοῦ σκέλεος ἐν πᾶσι μινύθουσιν ἐφ' οἷσι δὲ μάλιστα, καὶ οἷ, εἴρηται. Τὰ ἔργα τὰ ἐωυτοῦ ἕκαστον τοῦ σώματος ἐργαζόμενον μὲν ἰσχύει, ἀργέον δὲ κακοῦται, πλὴν κόπου, πυρετοῦ, φλεγμονῆς. Καὶ τὸ ἔξω, ὅτι ἐς σάρκα ὑίκουσαν, βραχύτερον, τὸ δὲ ἔσω, ὅτι ἐπ' ὀστέον προέχον, μακρότερον. Ἦν μὲν οὖν ηὔξημένοις μὴ ἐμπέση, ἐπὶ βουβῶσι καμπύλοι ὀδοιπορέουσι, καὶ ἢ ἐτέρη ἰγνύη κάμπτεται στήθεσι μόλις ἰκνεῖται χειρὶ τὸ σκέλος καταλαμβάνει, ἄνευ ξύλου, ἢν ἐθέλωσιν ἢν μὲν γὰρ μακρότερον ἢ, οὐ βήσεται ἢν δὲ βαίνει, βραχὺ. Μινύθησις δὲ σαρκῶν οἷσι πόνοι, καὶ ἢ ἴξις ἔμπροσθεν, καὶ τῷ ὑγιῖ κατὰ λόγον. Οἷσι δὲ ἐκ γενεῆς, ἢ αὐξομένοισιν, ἢ ὑπὸ νούσου ἐνόσησε καὶ ἔξαρθρα ἐγένετο ἐν αἷσι, εἰρήσεται, οὔτοι μάλιστα κακοῦνται διὰ τὴν τῶν νεύρων καὶ ἄρθρων ἀργίην καὶ τὸ γόνυ διὰ τὰ εἰρημένα ξυγκακοῦνται. Ξυγκεκαμμένον οὔτοι ἔχοντες ὀδοιπορέουσι ἐπὶ ξύλου ἐνός ἢ δύο τὸ δὲ ὑγιῖς, εὐσαρκον διὰ χρῆσιν.

24. Οἷσι δὲ ἐς τοῦμπροσθεν, σημεῖα τάναντία, ὀπισθεν λαπαρόν, ἔμπροσθεν ἐξέχον, ἢκιστα ξυγκάμπουσιν οὔτοι τὸ σκέλος, μάλιστα δὲ ἐκτείνουσιν ὀρθός πούς, σκέλος ἴσον, πτέρνα βραχεῖ ἄκρως ἀνέσταται. Ἦ πονέουσι μάλιστα οὔτοι αὐτίκα, καὶ οὔρον ἴσχειται μάλιστα

ἐν τούτοισι τοῖσιν ἐξαρθρήμασιν ἐν γὰρ τόνοισιν ἔγκειται τοῖσιν ἐπικαίροισιν. Τὰ ἔμπροσθεν κατατέταται, ἀναυξέα, νοσώδεα, ταχύγηρα τὰ ὀπισθεν στολιδώδεις. Οἷσιν ηὔξημένοισιν, ὀδοιπορέουσιν ὀρθοῖ, πτέρνη μᾶλλον βαίνοντες εἰ δὲ ἠδύναντο μέγα προβαίνειν, κἂν πάνυ σύρουσι δὲ μινύθει δὲ ἥκιστα, τούτοισι δὲ ἡ χρῆσις αἰτία, μάλιστα δὲ ὀπισθεν διὰ παντὸς τοῦ σκέλεος ὀρθότεροι τοῦ μετρίου, ξύλου δέονται κατὰ τὸ σιναρόν. Οἷσι δὲ ἐκ γενεῆς ἢ αὐξανομένοισι, χρηστῶς μὲν ἐπιμεληθεῖσιν ἢ χρῆσις, ὥσπερ τοῖσιν ηὔξημένοισιν ἀμεληθεῖσι δὲ, βραχὺ, ἐκτεταμένον πωροῦται γὰρ τούτοισι μάλιστα ἐς ἰθὺ τὰ ἄρθρα. Αἰ δὲ τῶν ὀστέων μειώσεις καὶ αἰ τῶν σαρκῶν μινυθήσεις, κατὰ λόγον.

25. Μηροῦ δὲ κατάτασις μὲν ἰσχυρὴ καὶ ἡ διόρθωσις κοινὴ, ἢ χερσίν, ἢ σανίδι, ἢ μοχλῶ, τὰ μὲν ἔσω στρογγύλω, τὰ δὲ ἔξω πλατεῖ, μάλιστα δὲ τὰ ἔξω. Καὶ τὰ μὲν ἔσω, ἀσκοῖσιν ἀκεσάμενον, ἐς τὸ ὑπόξηρον τοῦ μηροῦ, κατάτασιος δὲ καὶ ξυνδέσιος σκελέων κρεμάσαι διαλείποντα σμικρὸν τοὺς πόδας, ἔπειτα πλέξαντα ἐκκρεμασθῆναί τινα, ἐν τῇ διορθώσει ἀμφοτέρα ἅμα ποιεῦντα. Καὶ τῶ ἔμπροσθεν τοῦτο ἰκανὸν καὶ τοῖσιν ἐτέροισιν, ἥκιστα δὲ τῶ ἔξω. Ἡ τοῦ ξύλου ὑπόστασις, ὥσπερ ὤμφω ὑπὸ τὴν χεῖρα, οἷς ἔσω τοῖσι γὰρ ἄλλοισιν ἦσσον. Καταναγκάσεις δὲ μετὰ διατάσιος, μάλιστα τῶν ἔμπροσθεν ἢ ὀπισθεν, ἢ ποδὶ ἢ χειρὶ ἐφίζεσθαι ἢ σανίδι.

26. Γόνυ δὲ εὐηθέστερον ἀγκῶνος, διὰ τὴν εὐσταλίην καὶ εὐφυῖν διὸ καὶ ἐκπίπτει καὶ ἐμπίπτει ῥᾶον. Ἐκπίπτει δὲ πλειστάκις ἔσω, ἀτὰρ καὶ ἔξω, καὶ ὀπισθεν. Ἐμβολαὶ δὲ, ἢ ἐκ τοῦ ξυγκεκάμφθαι, ἢ ἐκλακτίσαι ὀξέως, ἢ ξυνελίζας ταινίης ὄγκον, ἐν ἰγνύη θείς, ἀμφὶ τοῦτον ἐξαίφνης ἐς ὄκλασιν ἀφεῖναι τὸ σῶμα, μάλιστα ἐν τῇ τῶν ὀπισθεν δύναται δὲ καὶ κατατεινόμενα μετρίως, ὥσπερ ἀγκῶν, ἐμπίπτειν τὰ ὀπισθεν. Τὰ δὲ ἔνθα, ἢ ἔνθα, ἐκ τοῦ ξυγκεκάμφθαι, ἢ ἐκλακτίσαι, [ἢ] ἐν καταστάσει, μάλιστα δὲ αὐτὴ τὸ ὀπισθεν ἀτὰρ καὶ ἐκ κατάτασιος μετρίης. Ἡ διόρθωσις ἅπασι κοινὴ. Ἦν δὲ μὴ ἐμπέση, τοῖσι μὲν ὀπισθεν ξυγκάμπειν οὐ δύνανται, ἀτὰρ οὐδὲ τοῖσιν ἄλλοισι πάνυ τι μινύθει δὲ μηροῦ καὶ κνήμης τὸ ἔμπροσθεν. Ἦν δὲ ἐς τὸ ἔσω, βλαισότεροι, μινύθει δὲ τὰ ἔξω. Ἦν δὲ ἐς τὰ ἔξω, γαυσότεροι, χωλοὶ δὲ ἦσσον, κατὰ γὰρ τὸ παχύτερον ὀστέον ὀχέει, μινύθει δὲ τὰ ἔσω. Ἐκ γενεῆς δὲ ἢ ἐν αὐξήσει, κατὰ λόγον τὸν πρόσθεν.

27. Τὰ δὲ κατὰ τὰ σφυρὰ κατάτασιος ἰσχυρῆς δεῖται, ἢ τῆσι χερσίν ἢ ἄλλοισι τοιούτοισι, κατορθώσιος δὲ ἅμα ἀμφοτέρα ποιεύσης κοινὸν δὲ πᾶσιν.

28. Τὰ δὲ ἐν ποδὶ, ὡς τὰ ἐν χειρὶ, ὑγιῆ.

29. Τὰ δὲ ἐν τῇ κνήμῃ συγκοινωνέοντα καὶ μὴ ἐμπεσόντα, ἐκ γενεῆς καὶ ἐν αὐξήσει ἐξαρθρήσαντα, ταῦτα ἄ καὶ ἐν χειρὶ.

30. Ὅσοι δὲ πηδήσαντες ἄνωθεν ἐστηρίζαντο τῇ πτέρνῃ, ὥστε διαστῆναι τὰ ὀστέα, καὶ φλέβας ἐκχυμωθῆναι, καὶ νεῦρα ἀμφιθλασθῆναι, ὅταν γένηται οἷα τὰ δεινότερα, κίνδυνος μὲν σφακελίσαντα τὸν αἰῶνα πρήγματα παρασχεῖν. Καὶ ροικώδη μὲν τὰ ὀστέα, τὰ δὲ νεῦρα ἀλλήλοισι κοινωνέοντα. Ἐπεὶ καὶ οἷσιν ἂν καταγεῖσιν, ἢ ὑπὸ τρώματος οἷα ἐν κνήμῃ, ἢ μηρῶ, νεύρων ἀπολυθέντων, ἂ κοινωνέει τουτέοισιν, ἢ ἐξ ἄλλης κατακλίσιος ἀμελέος ἐμελάνθη ἢ πτέρνῃ, καὶ τουτέοισι παλίγκοτα ἐκ τοιουτέων. Ἔστιν ὅτε πρὸς σφακελισμῶ γίνονται πυρετοὶ ὑπεροξέες, λυγγώδεες, τρομώδεες, γνώμης ἀπτόμενοι, ταχυθάνατοι, καὶ ἔτι φλεβῶν αἰμορρόων πελιώσεις, καὶ γαγγραινώσεις. Σημεῖα τῶν παλιγκοτησάντων ἦν τὰ ἐκχυμώματα, καὶ τὰ μελάσματα, καὶ τὰ περὶ ταῦτα ὑπόσκληρα καὶ ὑπέρυθρα ἢ ἦν γὰρ ζῦν σκληρύσματι πελιωθῆ, κίνδυνος μελανθῆναι ἦν δ' ὑποπέλια ἢ καὶ πέλια μάλα, καὶ κεχυμένα, ἢ ὑπόχλωρα καὶ μαλθακά, ταῦτα ἐν πᾶσι τοῖσι τοιούτοισιν ἀγαθὰ. Ἴησις δὲ, ἦν μὲν ἀπύρετοι ἔωσιν, ἐλλεβορίζειν ἦν δὲ μὴ, μὴ ἀλλὰ ποτὸν διδόναι ὀξύγλυκυ, εἰ δέοι. Ἐπίδεσις δὲ, ἢ ἄρθρων σύνδεσις ἔτι δὲ ταῦτα μᾶλλον τοῖσι φλάσμασι, καὶ

ὀθονίοισι πλέοσι καὶ μαλθακώτεροισι χρῆσθαι πίεξις ἦσσον ὕδωρ πλέον προσπεριβάλλειν τὰ πλεῖστα τῇ πτέρνῃ. Τὸ σχῆμα, ὅπερ ἢ ἐπίδεσις, ὡς μὴ ἐς τὴν πτέρνῃ ἀποπιέζεται ἀνωτέρω γούνατος ἔστω εὐθετος νάρθηξι μὴ χρήσασθαι.

31. Ὅταν δὲ ἐκστῇ ὁ πούς, ἢ μοῦνος, ἢ ζῦν τῇ ἐπιφύσει, ἐκπίπτει μᾶλλον ἐς τὸ ἔσω. Εἰ δὲ μὴ ἐμπέσοι, λεπτύνεται ἀνά χρόνον ἰσχίου καὶ μηροῦ καὶ κνήμης τὸ ἀντίον τοῦ ὀλισθήματος. Ἐμβολή, ὡς ἢ καρποῦ, κατάτασις δὲ ἰσχυροτέρη. Ἴησις, νόμος ἄρθρων. Παλιγκοτέει ἦσσον καρποῦ, ἦν ἡσυχάση. Δίαιτα μειῶν, ἐλινύουσι γάρ. Τὰ δὲ ἐκ γενεῆς μὲν ἢ ἐν αὐξήσει, κατὰ λόγον τὸν πρότερον.

32. Ἐπεὶ τὰ σμικρὸν ὀλισθηκότα ἐκ γενεῆς, ἔνια οἷά τε διορθοῦσθαι μάλιστα δὲ ποδὸς κύλλωσις κυλλώσιος γὰρ οὐχ εἷς ἐστὶ τρόπος. Ἡ δὲ ἴησις τουτέου κηροπλαστεῖν κηρωτὴ ῥητινώδης, ὀθόνια συχνὰ, ἢ πέλημα, ἢ μολύβδιον προσεπιθεῖν, μὴ χρωτὶ ἀνάληψις, τά τε σχήματα ὁμολογεῖται.

33. Ἦν δὲ ἐξαρθρήσαντα ἔλκος ποιησάμενα ἐξίσχη, ἐώμενα ἀμείνω, ὥστε δὴ μὴ ἀπκιωρέεσθαι, μηδ' ἀπαναγκάζεσθαι. Ἴησις δὲ, πισσηρῆ, ἢ σπλήνεσιν οἰνηροῖσι θερμοῖσιν ἅπασιν γὰρ τουτέοισι τὸ ψυχρὸν κακὸν, καὶ φύλλοισιν χειμῶνος δὲ, εἰρίοισι ῥερυπωμένοις τῆς σκέπης εἵνεκα μὴ καταπλάσσειν, μηδὲ ἐπιθεῖν δίαιτα λεπτή. Ψῦχος, ἄχθος πουλὺ, πίεξις, ἀνάγκη, σχήματος τάξις εἰδέναι μὲν οὖν



ταῦτα πάντα ὀλέθρια. Μετρίως δὲ θεραπευθέντες, χωλοὶ αἰσχροῶς ἦν γὰρ παρὰ πόδας γένηται, πούς ἀνασπᾶται καὶ ἦν πη ἄλλη, κατὰ λόγον. Ὅστεα οὐ μάλα ἀφίστανται μικρὰ γὰρ ψιλοῦται,

περιωτειλοῦται λεπτῶς. Τουτέων τὰ μέγιστα κινδυνωδέστατα, καὶ τὰ ἀνωτάτω. Ἐλπίς δὲ μούνη σωτηρίας, ἐὰν μὴ ἐμβάλλη, πλὴν τὰ κατὰ δακτύλους, καὶ χεῖρα ἄκρην ταῦτα δὲ, προειπέτω τοὺς κινδύνους ἐγχειρέειν ἐμβάλλειν ἢ τῇ πρώτῃ, ἢ τῇ δευτέρῃ ἦν δὲ μὴ, πρὸς τὰς δέκα ἡκιστα τεταρταῖα ἐμβολὴ δὲ, οἱ μοχλίσκοι ἴησις δὲ, ὡς κεφαλῆς ὀστέων, καὶ θέρμη ἐλλεβόρω δὲ καὶ αὐτίκα ἐπὶ τοῖσιν ἐμβαλλομένοισι βέλτιον χρῆσθαι. Τὰ δ' ἄλλα, εὖ εἰδέναι δεῖ, ὅτι, ἐμβαλλομένων, θάνατοι τὰ μέγιστα καὶ τὰ ἀνωτάτω μάλιστα καὶ τάχιστα. Πούς δὲ ἐκβάς, σπασμὸς, γάγγραινα καὶ ἦν ἐμβληθέντι ἐπιγένηται τι τουτέων, ἐκβάλλοντι ἐλπίς, εἴ τις ἄρα ἐλπίς οὐ γὰρ ἀπὸ τῶν χαλόντων οἱ σπασμοὶ, ἀλλ' ἀπὸ τῶν ἐντεινόντων.

34. Αἰ δὲ ἀποκοπαὶ ἢ ἐν ἄρθρω, ἢ κατὰ τὰ ὀστέα, μὴ ἄνω, ἀλλ' ἢ παρὰ τῷ ποδί, ἢ παρὰ τῇ χειρὶ, ἐγγὺς περιγίνονται, ἦν μὴ αὐτίκα μάλα λειποθυμίη ἀπόλωνται. Ἴησις, ὡς κεφαλῆς, θέρμη.

35. Ἀποσφακελίσσιος μέντοι σαρκῶν, καὶ ἐν τρώμασιν αἰμορροίσις ἀποσφιγχθὲν, καὶ ἐν ὀστέων κατήγμασί πιεχθὲν, καὶ ἐν δεσμοῖς ἀπομελανθὲν. Καὶ οἷσι μηροῦ μέρος ἀποπίπτει καὶ βραχίονος, ὀστέα τε καὶ σάρκες [ἀποπίπτουσι], πολλοὶ περιγίνονται, ὡς τὰ γε ἄλλα εὐφορώτερα. Οἷσι μὲν οὖν καταγέντων ὀστέων, αἰ μὲν περιρρήξιες ταχεῖαι, αἰ δὲ τῶν ὀστέων ἀποπτώσιες, ἢ ἂν τὰ ὅρια τῆς ψιλώσιος ἢ, ταύτη ἀποπίπτουσι, βραδύτερον δέ. Δεῖ δὲ τὰ κατωτέρω

τοῦ τρώματος προσαφαιρέειν καὶ τοῦ σώματος τοῦ ὑγιέος προθνήσκει γὰρ, φυλασσόμενον ὀδύνην ἅμα γὰρ λειποθυμίη θνήσκουσιν. Μηροῦ ὀστέον ἀπελύθη ἐκ τοιούτου ὀγδοηκοσταῖον, ἢ δὲ κνήμη ἀφηρέθη εἰκοσταίη κνήμης δὲ ὀστέα κατὰ μέσην, ἐξηκοσταῖα ἀπελύθη. Ἐκ τοιούτων ταχὺ καὶ βραδέως, αἰ πιέξιες αἰ ἰητρικαί. Τὰ δ' ἄλλα ὅσα ἠσυχαίως, τὰ μὲν ὀστέα οὐκ ἀποπίπτει, οὐδὲ σαρκῶν ψιλοῦται, ἀλλ' ἐπιπολαιότερον. Προσδέχεσθαι ταῦτα χρή τὰ γὰρ πλεῖστα φοβερώτερα ἢ κακίω. Ἡ ἴησις πραεῖα θέρμη, διαίτη ἀκριβεῖ κίνδυνος αἰμορραγιῶν, ψύχεος σχήματα δὲ, ὡς μὲν ἀνάρροπα, ἔπειτα ὑποστάσιος πύου εἶνεκα ἐξ ἴσου ἢ ὅσα συμφέρεει. Ἐπὶ τοῖσι τοιούτοις καὶ ἐπὶ τοῖσι μελασμοῖσιν, αἰμορραγίαι δυσεντερίαί, περὶ κρίσιν, λαῦροι μὲν, ὀλιγήμεροι δὲ οὐκ ἀπόσιτοι δὲ πάνυ, οὐδὲ πυρετώδεες, οὐδέ τι κενεαγγητέον.

36. Ὑβωσις, ἢ μὲν εἴσω, ἐπιθάνατος, οὔρων σχέσιος, ἀποναρκώσιος τὰ δὲ ἔξω,

τουτέων άσινέα τὰ πλειῖστα, πουλὺ μᾶλλον, ἢ ὅσα σεισθέντα μὴ ἐξέστη αὐτὰ μὲν ἔουτοῖσι κρίσιν ποιησάμενα, κείνα δὲ ἐπὶ πλέον τῷ σώματι ἐπιδιδόντα, καὶ ἐν ἐπικαίροις ἔοντα. Οἷον πλευραὶ κατεαγεῖσαι μὲν, ὀλίγαι πυρετώδεις, καὶ αἵματος πτύσιος, καὶ σφακελισμοῦ, ἦν τε μία, ἦν τε πλείους, μὴ κατασχισθεῖσαι δὲ καὶ ἴησις φαύλη, μὴ κενεαγγοῦντα, ἦν ἀπύρετος ἔη ἐπίδεις, ὡς νόμος ἢ δὲ πώρωσις, ἐν εἴκοσιν ἡμέρησι, χαῦνον γάρ. Ἦν δ' ἀμφιφλασθῆ, φυματίαι, καὶ βηχώδεις, καὶ ἔμμοτοι,

καὶ πλευρὰς ἐσφακέλισαν παρὰ γὰρ πλευρὴν ἐκάστην, ἀπὸ πάντων τόνοι εἰσίν. Πολλοὶ δὲ καὶ αἷμα ἔπτυσαν, καὶ ἔμπυοι ἐγένοντο. Ἡ δὲ μελέτη, ἴησις, ἐτίδεις, ὡς νόμος διαίτης τὰ πρῶτα ἀτρεκέως, ἔπειτα ἀπαλύνειν ἠσυχίη, σιγῇ σχήματα, κοιλίη, ἀφροδίσια. Ἀτὰρ οἷς ἄναιμα, ἐπωδυνώτερα τῶν καταγνυμένων, καὶ φιλοποστροφώτερα χρόνουιν οἷσι δὲ καταλείπεται μυζῶδες, ὑπομιμνήσκει ἐν πόνοισιν. Ἰησις, καῦσις, τοῖσι μὲν ἀπ' ὀστέου, μέχρις ὀστέου, μὴ αὐτὸ δὲ ἦν δὲ μεταξὺ, μὴ πέρην, μηδὲ ἐπιπολῆς. Σφακελισμὸς καὶ τὰ ἔμμοτα πειρᾶσθαι εἰρήσεται ἅπαντα τὰ ἐπεσιόντα. Ὅρατὰ, λόγοις δ' οὐ μὴ, βρώματα, πόματα, θάλπος, ψῦχος, σχῆμα, ὅτι καὶ φάρμακα, τὰ μὲν ξηρὰ, τὰ δὲ ὑγρὰ, τὰ δὲ πυρρὰ, τὰ δὲ μέλανα, τὰ δὲ λευκὰ, τὰ δὲ στρυφνὰ, ἐπὶ ἔλκη, οὕτω καὶ δίαται.

37. Τὰ δ' ἀπὸ καταπτώσιος ἦσσον δύναται ἐξιθύνεσθαι χαλεπώτερα δὲ τὰ ἄνω φρενῶν ἐξιθύνεσθαι. Οἷσι δὲ παισίν, οὐ συναύξεται, ἀλλ' ἢ σκέλη καὶ χεῖρες καὶ κεφαλή. Ἡὕξημένοισιν ὑβωσις, παραχρῆμα μὲν τῆς νούσου ῥύεται, ἀνὰ χρόνον δ' ἐπισημαίνεται, δι' ὧνπερ καὶ τοῖσι νεωτέροισιν, ἦσσον δὲ κακοήθως. Εἰσὶ δὲ οἱ εὐφόρως ἠνεγκαν, ὅσιν ἂν ἐς εὔσαρκον καὶ πιμελῶδες τράπηται. Ὀλίγοι δὲ τουτέων περὶ ἐξήκοντα ἔτεα ἐβίωσαν. Ἀτὰρ καὶ ἐς

τὰ πλάγια ιαστρέμματα γίνεται συναίτια δὲ καὶ τὰ σχήματα, ἐν οἷσιν ἂν καακέωνται καὶ ἔχει προγνώσιας.

38. Νόμα ἐμβολῆς καὶ διορθώσιος, ὄνος, μοχλὸς, σφηνίσκος, ἵπο ὄνος μὲν ἀπάγειν, μοχλὸς δὲ παράγειν. Τὰ δὲ ἐμβλητέα ἢ δυρθωτέα διαναγκάσαι δεῖ ἐκτείνοντα, ἐν ᾧ ἂν ἕκαστα σχήματι μέλη ὑπεραιωρηθήσεσθαι τὸ δ' ἐκβάν, ὑπὲρ τούτου ὅθεν ἐξέβη τοῦτι δὲ, ἢ χερσίν, ἢ κρεμασμῶ, ἢ ὄνοισιν, ἢ περὶ τι. Χερσὶ μὲν ὄρθως κατὰ μέρεα καρπὸν δὲ καὶ ἀγκῶνα ἀπόχρη διαναγκάζε, καρπὸν μὲν ἐς ἰθὺ ἀγκῶνος, ἀγκῶνα δὲ ἐγγώνιον πρὸς βροχίονα ἔχοντα, οἷον παρὰ τῷ βραχίονι τὸ ὑπὸ τὴν χεῖρα ὑποτεινόμεον. Ἐν οἷσι δὲ δακτύλου ποδὸς, χειρὸς, καρποῦ, ὑβώματος τὸ ἴζω διαναγκάσαι δεῖ καὶ καταναγκάσαι, τὰ μὲν ἄλλα ὑπὸ χειῶν αἱ διαναγκάσεις ἱκαναί, καταναγκάσαι δὲ τὰ ὑπερέχοντα ἔδρην πτέρνη ἢ θέναρι ἐπὶ τινος ὥστε κατὰ μὲν τὸ ἐξέχον ὑπκέεσθαι ὄγκον σύμμετρον μαλθακόν

κατὰ δὲ τὸ ἕτερον μὴ στοσαντα χρὴ ὠθέειν ὀπίσω καὶ κάτω, ἦν τε ἔσω, ἦν τε ἔξω ἐκπεπώκη τὰ δ' ἐκ πλαγίων, τὰ μὲν ἀποθέειν, τὰ δὲ ἀντωθέειν ὀπίσω ἀμφοτέρω κατὰ τὸ ἕτερον. Τὰ δὲ ὑβώματα, τὰ μὲν

ἔσω οὔτε παρμῶ, οὔτε βηγί, οὔτε φύσης ἐνέσει, οὔτε σικύη εἰ δέ τι, ἢ κατάτασις. Ἡ δὲ ἀπάτη, ὅτι οἶονταί ποτε καταγέντων σπονδύλων, καὶ τὰ λορδώματα διὰ τὴν ὀδύνην δοκέει ἔσω ὠλισθηκέναι ταῦτα δὲ ταχύφουα καὶ ῥάδια. Τὰ δὲ ἔξω, κατάσεισις, τὰ μὲν ἄνω ἐπὶ πόδας, τὰ δὲ κάτω τάναντία κατανάγκασις δὲ σὺν κατατάσει, ἢ ἔδρη, ἢ ποδι, ἢ σανίδι. Τὰ δ' ἔνθα ἢ ἔνθα, εἴ τι, ἢ κατάτασις, καὶ ἔτι τὰ σχήματα ἐν τῇ διαίτη. Τὰ ἄρμενα πάντα εἶναι πλατέα, προσηνέα, ἰσχυρά εἰ δὲ μὴ, δεῖ ῥάκεσι προκατειλίχθαι ἐσκευάσθαι πρὶν ἢ ἐν τῆσιν ἀνάγκησι, πάντα συμμεμετρημένως τὰ μήκεα, καὶ ὕψεα, καὶ εὖρεα. Διάτασις οἶον μηροῦ, τὸ παρὰ σφυρὸν δεδέσθαι, καὶ ἄνω τοῦ γούνατος, ταῦτα μὲν ἐς τὸ αὐτὸ τείνοντα παρὰ δ' ἰξυῖ, καὶ περὶ μασχάλας, καὶ κατὰ περίνεον, καὶ μηρόν, τὰ μεταξὺ, τῆς ἀρχῆς τὸ μὲν ἐπὶ τὸ στήθος, τὸ δ' ἐπὶ νῶτον τείνοντα, ταῦτα δ' ἐς τὸ αὐτὸ ἅπαντα τείνοντα, προσδεθέντα ἢ πρὸς ὑπεροειδέα, ἢ πρὸς ὄνον. Ἐπὶ μὲν οὖν κλίνης ποιέοντι, τοῦτο μὲν τῶν ποδῶν πρὸς οὐδὸν χρὴ ἐρεῖσαι, πρὸς δὲ τὸ ἕτερον, ξύλον

ἰσχυρὸν πλάγιον παραβεβληῖσθαι, τὰ δὲ ὑπερθεν ὑπεροειδέα πρὸς ταῦτα ἀντιστηρίζοντα διατείνειν, ἢ πλήμνας κατορύξαντα, ἢ κλίμακα διαθέντα, ἀμφοτέρωθεν ὠθέειν. Τὸ δὲ κοινὸν, σανὶς ἐξάπηχυς, εὖρος δίπηχυς, πάχος σπιθαμῆς, ἔχουσα ὄνους δύο ταπεινοὺς ἔνθεν καὶ ἔνθεν, ἔχουσα δὲ καὶ κατὰ μέσον στυλίσκους ξυμμέτρους, ἐξ ὧν ὡς κλιμακτήρ ἤρμοσται ἐς τὴν ὑπόστασιν τῷ ξύλῳ, ὡσπερ τῷ κατ' ὤμον καταγλύφους δὲ, ὡσπερ ληνούς, λείας ἔχειν, τετραδακτύλους εὖρος καὶ βάθος, καὶ διαλιπεῖν τοσοῦτον, ὅσον αὐτῇ τῇ μοχλεύσει ἐς διόρθωσιν ἐν μέσῳ δὲ τετράγωνον καταγλυφὴν, ὡστε στυλίσκον ἐνεῖναι, ὃς παρὰ περίνεον ἐὼν περιῤῥέπειν τε κωλύσει, ἐὼν τε ὑποχάλαρος ὑπομοχλεύσει. Χρὴ δὲ, τῆς σανίδος [ἢ] ἐν τῷ τοίχῳ [τὸ ἄκρον] καταγεγλυμμένον τι ἐχούσης, τοῦ ξύλου ὦσαι τὸ ἄκρον, ἐπὶ δὲ θάτερα καταναγκάζειν, ὑποτιθέντα μαλθακά τινα σύμμετρα.

39. Οἷσιν ὀστέον ἀπὸ ὑπερώης ἀπῆλθε, μέση ἴζει ἢ ρὶς τουτέοισιν. Οἱ δὲ φλώμενοι κεφαλὰς ἄνευ ἔλκεος, ἢ πεσόντος, ἢ κατάξαντος, ἢ πιέσαντος, τουτέων ἐνίοισι τὰ δριμέα ἔρχεται ἀπὸ κεφαλῆς κατὰ τὰς φάρυγγας, καὶ ἀπὸ τρώματος ἐν τῇ κεφαλῇ, καὶ ἐς τὸ ἦπαρ, καὶ ἐς τὸν μηρόν.

40. Ση μεῖα παραλλαγμάτων καὶ ἐκπτώμάτων, καὶ ἦ, καὶ ὄκως,

καὶ ὅσον διαφέρει ταῦτα πρὸς ἄλληλα. Καὶ οἷσιν ἢ κοτύλη παρέαγε, καὶ οἷσι νευρίον ἀπεσπάρθη, καὶ οἷσιν ἐπίφουσις ἀπέαγε, καὶ οἷσι, καὶ ὡς, καὶ ἐν ἢ δύο, ὧν δύο ἐστὶν ἐπὶ τουτέοισι κίνδυνοι, ἐλπίδες, οἷσι κακαὶ, καὶ ὅτε κακώσεις θανάτου, ὑγιείης ἀσφαλείης. Καὶ ἃ ἐμβλητέα, ἢ χειριστέα, καὶ ὅτε, καὶ ἃ οὐ, ἢ ὅτε οὐ ἐπὶ τουτέοισιν ἐλπίδες, κίνδυνοι. Οἷα καὶ ὅτε χειριστέα καὶ τὰ ἐκ γενεῆς ἕξα ῥθρα, τὰ αὐξανόμενα, τὰ ἠϋξημένα, καὶ ὅ τι θᾶσσον, καὶ ὅ τι βραδύτερον, καὶ ὅ τι χωλὸν, καὶ ὡς, καὶ οὐ καὶ διότι καὶ ὅ τι μινυθήσει, καὶ ἦ, καὶ ὡς, καὶ οἷσιν ἦσσαν. Καὶ ὅτι τὰ καταγέντα θᾶσσον καὶ βραδύτερον φυόμενα, ἦ αἱ διαστροφαι καὶ ἐπιπρώσεις γίνονται, καὶ ἄκη τουτέων. Οἷσιν ἕλκεα αὐτίκα ἢ ὕστερον γίνονται οἷσι καὶ ὀστέα καταγεῖσι, μείω, οἷσιν οὐ οἷσι καταγέντα ἐξέσχεν, καὶ ἦ ἐξίσχει μᾶλλον οἷσιν ἐκβάντα [ἦ] ἄρθρα ἐξίσχει. Ἀπατῶνται,

καὶ δι' ἃ, ἐν οἷσιν ὀρῶσιν, ἐν οἷσι διανοεῦνται ἀμφὶ τὰ παθήματα, ἀμφὶ τὰ θεραπεύματα. Νόμοισι τοῖσι νομίμοισι, περὶ ἐπιδέσιος παρασκευῆ, πάρεξις, κατάτασις, διόρθωσις, ἀνάτριψις, ἐπίδεσις, ἀνάληψις, θέσις, σχῆμα, χρόνοι, δίαται. Τὰ χυνότατα τάχιστα φύεται, τὰ δ' ἐναντία ἐναντίως. Διαστροφαι, ἦ κυρτοὶ ἄσαρκοι, ἄνευροι, ἦ τὸ ἐκπεσόν. Τὸ ἐμπεσόν ὡς προσωτάτω ἔσται τοῦ χωρίου, οὐ ἐξέπεσεν. Νεύρων, τὰ μὲν ἐν κινήσει καὶ ἐν πλάδω, ἐπιδοτικά τὰ δὲ μὴ, ἦσσαν. Ἄριστον, ἦ ἂν ἐκπέση, εἰ ἐμπέσοι τάχιστα. Πυρεταίνοντι μὴ ἐμβάλλειν, μηδὲ τεταρταῖα, πεμπταῖα, ἦκιστα ἀγκῶνα, καὶ τὰ ναρκώδεα πάντα ὡς τάχιστα ἄριστα, τὴν φλεγμονὴν παρέντα. Τὰ ἀποσπώμενα, ἢ νεῦρα, ἢ χόνδρια, ἢ ἐπιφύσεις, ἢ διστάμενα κατὰ συμφύσεις, ἀδύνατα ὁμοιωθῆναι διαπωροῦνται ταχέως τοῖσι πλείστοισιν ἢ δὲ χρῆσις σώζεται. Ἐκβάντων, τὰ ἔσχατα, ῥᾶον. Τὰ ῥᾶστα ἐκπεσόντα ἦκιστα φλεγμαίνει τὰ δὲ ἦκιστα θερμαίνοντα, καὶ μὴ ἐπιθεραπευθέντα, μάλιστα αὔθις ἐκπίπτει. Κατατείνειν ἐν σχήματι τοιουτέω, ἐν ᾧ μάλιστα ὑπεραιωρηθήσεται, σκεπτόμενον ἐς τὴν φύσιν καὶ τὸν τόπον. Ἡ ἐξέβη, διόρθωσις ὀπίσω ἐς ὀρθὸν καὶ ἐς πλάγιον παρωθεῖν τὰ δὲ ταχέως

ἀντισπᾶσαντα ἀντισπᾶσαι ταχέως ἤδη ἐκ περιαγωγῆς. Τὰ πλειστάκις ἐκπίπτοντα ῥᾶον ἐμπίπτει αἷτιον φύσις, ἢ νεύρων, ἢ ὀστέων, νεύρων μὲν, μῆκος ἢ ἐπίδοσις, ὀστέων δὲ, κοτύλης ὀμαλότης, κεφαλῆς φαλακρότης τὸ ἔθος τρίβον ποιεῖ αἰτίη, καὶ σχέσις, καὶ ἕξις, καὶ ἡλικίη. Τὸ ὑπόμυξον, ἀφλέγμαντον.

41. Οἷσιν ἕλκεα ἐγένετο, ἢ αὐτίκα, ἢ ὀστέων ἐξισχόντων, ἢ ἔπειτα, ἢ κνησμῶν, ἢ τρηχυσμῶν, ταῦτα μὲν ἦν αἰσθη, εὐθέως σας, πισσηρὴν ἐπὶ τὸ ἕλκος ἐπιθεῖς, ἐπιδεῖν ὡς ἐπὶ τὸ ἕλκος πρῶτον τὴν ἀρχὴν βαλλόμενος, καὶ τᾶλλα ὡς οὐ ταύτη τοῦ σίνεος ἐόντος οὕτω γὰρ αὐτό τε ἰσχυρότατον, καὶ ἐκπυήσει τάχιστα, καὶ περιρῥήζεται, καὶ καθαρθέντα τάχιστα φύσεται νάρθηκας δὲ μήτε κατ' αὐτὸ

τοῦτο προσάγειν, μήτε πιέζειν καὶ ὧν ὀστέα μὴ μεγάλα ἄπεισιν, οὕτω ποιέειν ὧν δὲ μεγάλα, οὐ πολλή γὰρ ἐμπύησις, καὶ ταῦτ' οὐκ ἔτι οὕτως, ἀλλ' ἀνέψυκται τῶν ὑποστασίων εἵνεκα. Τὰ δὲ τοιαῦτα ὅποσα ἐξέσχε, καὶ, εἴ τε ἐμβληθῆ, εἴ τε μὴ, ἐπίδεςις μὲν οὐκ ἐπιτήδειον, διάτασις δὲ, σφαῖραι ποιηθεῖσαι, οἷαι πέδαις, ἢ μὲν παρὰ σφυρὸν, ἢ δὲ παρὰ γόνυ, ἐς κνήμην πλατεῖαι, προσηνέες, ἰσχυραὶ, κρίκους ἔχουσαι ῥάβδοι τε σύμμετροι κρανίης καὶ μῆκος καὶ πάχος, ὥστε διατείνειν ἱμάντια δὲ ἐξ ἄκρων ἀμφοτέρωθεν ἔχοντα εἰς τοὺς κρίκους ἐνδεδέσθαι, ὡς τὰ

ἄκρα ἐς τὰς σφαίρας ἐνστηριζόμενα διαναγκάζη. Ἴησις δὲ, πισσηρὴ θερμὴ σχήματα, καὶ ποδὸς. θέσις καὶ ἰσχίου δίαιτα ἀτρεκής. Ἐμβάλλειν τὰ ὀστέα τὰ ὑπερίσχοντα αὐθήμερα, ἢ δευτεραῖα, τεταρταῖα δὲ ἢ πεμπταῖα, μὴ, ἀλλ' ἐπὴν ἰσχνὰ ἦ. Ἡ δ' ἐμβολὴ τοῖσι μοχλικοῖσιν ἢ τὸ ἐμβαλλόμενον τοῦ ὀστέου, ἦν μὴ ἔχη ἀποστήριξιν, ἀποπρῖσαι τῶν κωλύόντων. Ἄτὰρ καὶ ὡς τὰ ψιλωθέντα ἀποπεσεῖται, καὶ βραχύτερα τὰ μέλα.

42. Τὰ δὲ ἄρθρα, τὰ μὲν πλέον, τὰ δὲ μεῖον ὀλισθάνει καὶ τὰ μὲν μεῖον, ἐμβαλεῖν ῥάδιον τὰ δὲ πλέον μέζους ποιεῖ τὰς κακώσιας καὶ ὀστέων, καὶ νεύρων, καὶ ἄρθρων, καὶ σαρκῶν, καὶ σχημάτων. Μηρὸς δὲ καὶ βραχίων ὁμοιότατα ἐκπίπτουσι.

## ON INJURIES OF THE HEAD - Περί τῶν ἐν κεφαλῇ τραυμάτων

1. Τῶν ἀνθρώπων αἱ κεφαλαὶ οὐδὲν ὁμοίως σφίσιν αὐταῖς, οὐδὲ αἱ ῥαφαὶ τῆς κεφαλῆς πάντων κατὰ ταῦτὰ πεφύκασιν. Ἄλλ' ὅστις μὲν ἔχει ἐκ τοῦ ἔμπροσθεν τῆς κεφαλῆς προβολὴν ἢ δὲ προβολή ἐστὶ τὸ τοῦ ὀστέου ἐξέχον στρογγύλον παρὰ τὸ ἄλλο, τουτέου εἰσὶν αἱ ῥαφαὶ πεφυκυῖαι ἐν τῇ κεφαλῇ, ὡς γράμμα τὸ ταῦ, T, γράφεται τὴν μὲν γὰρ βραχυτέραν γραμμὴν ἔχει πρὸ τῆς προβολῆς ἐπικαρσίην πεφυκυῖαν τὴν δ' ἑτέραν γραμμὴν ἔχει διὰ μέσης τῆς κεφαλῆς κατὰ μῆκος πεφυκυῖαν ἐς τὸν τράχηλον αἰεὶ. Ὅστις δ' ὀπισθεν τῆς κεφαλῆς τὴν προβολὴν ἔχει, αἱ ῥαφαὶ τουτέω πεφύκασιν τὰναντία ἢ τῷ προτέρω ἢ μὲν γὰρ βραχυτέρη γραμμὴ πρὸ τῆς προβολῆς πέφυκεν ἐπικαρσίη ἢ δὲ μακροτέρα διὰ μέσης τῆς κεφαλῆς πέφυκε κατὰ μῆκος ἐς τὸ μέτωπον αἰεὶ. Ὅστις δὲ ἀμφοτέρωθεν τῆς κεφαλῆς προβολὴν ἔχει, ἐκ τε τοῦ ἔμπροσθεν καὶ

ἐκ τοῦ ὀπισθεν, τουτέω αἱ ῥαφαὶ εἰσὶν ὁμοίως πεφυκυῖαι ὡς γράμμα τὸ ἦτα, , γράφεται πεφύκασιν δὲ τῶν γραμμέων αἱ μὲν μακραὶ, πρὸ τῆς προβολῆς ἐκατέρης ἐπικάρσιαι πεφυκυῖαι ἢ δὲ βραχεῖη διὰ μέσης τῆς κεφαλῆς κατὰ μῆκος πρὸς ἐκατέρην τελευτῶσα τὴν μακρὴν γραμμὴν. Ὅστις δὲ μὴδ' ἐτέρωθι μηδεμίαν προβολὴν ἔχει, οὗτος ἔχει τὰς ῥαφὰς τῆς κεφαλῆς, ὡς γράμμα τὸ χι, X, γράφεται πεφύκασιν δὲ αἱ γραμμαὶ, ἢ μὲν ἑτέρα ἐπικαρσίη πρὸς τὸν κρόταφον ἀφίκουσα ἢ δὲ ἑτέρα, κατὰ μῆκος διὰ μέσης τῆς κεφαλῆς. Δίπλοον δ' ἐστὶ τὸ ὀστέον κατὰ μέσην τὴν κεφαλὴν σκληρότατον δὲ καὶ πυκνότατον αὐτέου πέφυκεν τὸ τε ἀνώτατον, ἦ ἢ ὁμοχροίη τοῦ ὀστέου ἢ ὑπὸ τῇ σαρκί,

καὶ τὸ κατώτατον τὸ πρὸς τῇ μῆνιγγι, ἦ ἢ ὁμοχροίη τοῦ ὀστέου ἢ κάτω ἀποχωρέον δὲ ἀπὸ τοῦ ἀνωτάτου ὀστέου καὶ τοῦ κατωτάτου, ἀπὸ τῶν σκληροτάτων καὶ πυκνοτάτων ἐπὶ τὸ μαλθακώτερον καὶ ἥσσον πυκνὸν καὶ ἐπικοιλότερον ἐς τὴν διπλὴν αἰεὶ. Ἡ δὲ διπλὴ κοιλότατον καὶ μαλθακώτατον καὶ

μάλιστα σηραγγῶδες ἐστίν. Ἔστι δὲ καὶ πᾶν τὸ ὀστέον τῆς κεφαλῆς, πλὴν κάρτα ὀλίγου τοῦ τε ἀνωτάτου καὶ τοῦ κατωτάτου, σπόγγω ὅμοιον καὶ ἔχει τὸ ὀστέον ἐν ἐωυτῷ ὀκοῖα σαρκία πολλὰ καὶ ὑγρά, καὶ εἴ τις αὐτὰ διατρίβῃ τοῖσι δακτύλοισιν, αἷμα ἂν διαγίγνοιτο ἐξ αὐτέων. Ἐνὶ δ' ἐν τῷ ὀστέῳ καὶ φλέβια λεπτότερα καὶ κοιλότερα, αἵματος πλέα. Σκληρότητος μὲν οὖν καὶ μαλθακότητος καὶ κοιλότητος ὧδε ἔχει.

2. Παχύτητι δὲ καὶ λεπτότητι, ξυμπάσης τῆς κεφαλῆς τὸ ὀστέον λεπτότατόν

ἐστὶν καὶ ἀσθενέστατον τὸ κατὰ βρέγμα, καὶ σάρκα ὀλιγίστην καὶ λεπτοτάτην ἔχει ἐφ' ἐωυτέω ταύτη τῆς κεφαλῆς τὸ ὀστέον, καὶ ὁ ἐγκέφαλος κατὰ τοῦτο τῆς κεφαλῆς πλεῖστος ὑπεστὶν. Καὶ δὴ, ὅτι οὕτω ταῦτα ἔχει, τῶν τε τρωσίων

καὶ τῶν βελέων ἴσων τε ἐόντων κατὰ μεγέθος, καὶ ἐλασσόνων, καὶ ὁμοίως τε τρωθεὶς καὶ ἦσσον, τὸ ὀστέον ταύτη τῆς κεφαλῆς φλᾶται τε μᾶλλον καὶ ῥήγνυται, καὶ ἔσω ἐσφλᾶται, καὶ θανασιμώτερά ἐστὶ καὶ χαλεπώτερα ἡτρεύεσθαι τε καὶ ἐκφυγγάνειν τὸν θάνατον ταύτη ἥπου ἄλλοθι τῆς κεφαλῆς ἐξίσων τε ἐόντων τῶν τρωμάτων καὶ ἡσσόνων, καὶ ὁμοίως τε τρωθεὶς καὶ ἦσσον, ἀποθνήσκει ὁ ἄνθρωπος, ὅταν καὶ ἄλλως μέλλῃ ἀποθανεῖσθαι ἐκ τοῦ τρώματος, ἐν ἐλάσσονι χρόνῳ ὁ ταύτη ἔχων τὸ τρῶμα τῆς κεφαλῆς, ἥπου ἄλλοθι. Ὁ γὰρ ἐγκέφαλος τάχιστα τε καὶ μάλιστα κατὰ τὸ βρέγμα αἰσθάνεται τῶν κακῶν τῶν γινομένων ἐν τε τῇ σαρκὶ καὶ τῷ ὀστέῳ ὑπὸ λεπτοτάτῳ γὰρ ὀστέῳ ἐστὶ ταύτη ὁ ἐγκέφαλος καὶ ὀλιγίστη σαρκὶ, καὶ ὁ πλεῖστος ἐγκέφαλος ὑπὸ τῷ βρέγματι κεῖται. Τῶν δὲ ἄλλων τὸ κατὰ τοὺς κροτάφους ἀσθενέστατόν ἐστὶν ζυμβολή τε γὰρ τῆς κάτω γνάθου πρὸς τὸ κρανίον, καὶ κίνησις ἐνεστὶν ἐν τῷ κροτάφῳ ἄνω καὶ κάτω ὡσπερ ἄρθρου καὶ ἡ ἀκοὴ πλησίον γίνεταί αὐτέου, καὶ φλῆψ διὰ τοῦ κροτάφου τέταται κοίλη τε καὶ ἰσχυρὴ. Ἰσχυρότερον δ' ἐστὶ τῆς κεφαλῆς τὸ ὀστέον ἅπαν τὸ ὀπισθεν τῆς κορυφῆς καὶ τῶν

οὐάτων, ἢ ἅπαν τὸ πρόσθεν, καὶ σάρκα πλέονα καὶ βαθυτέραν ἐφ' ἐωυτέω ἔχει τοῦτο τὸ ὀστέον. Καὶ δὴ, τουτέων οὕτως ἐχόντων ὑπὸ τῶν τε τρωσίων καὶ τῶν βελέων ἴσων ἐόντων καὶ ὁμοίων, καὶ μεζόνων, καὶ ὁμοίως τιτρωσκόμενος καὶ μᾶλλον, ταύτη τῆς κεφαλῆς τὸ ὀστέον ἦσσον ῥήγνυται καὶ φλᾶται ἔσω κἢν μέλλῃ ὄνθρωπος ἀποθνήσκειν καὶ ἄλλως ἐκ τοῦ τρώματος, ἐν τῷ ὀπισθεν τῆς κεφαλῆς ἔχων τὸ τρῶμα, ἐν πλέονι χρόνῳ ἀποθανεῖται ἐν πλέονι γὰρ χρόνῳ τὸ ὀστέον ἐμπυῖσκεται τε καὶ διαπυῖσκεται κάτω ἐπὶ τὸν ἐγκέφαλον διὰ τὴν παχύτητα τοῦ ὀστέου, καὶ ἐλάσσων ταύτη τῆς κεφαλῆς ὁ ἐγκέφαλος ὑπεστὶ, καὶ πλέονες ἐκφυγγάνουσι τὸν θάνατον τῶν ὀπισθεν τιτρωσκομένων τῆς κεφαλῆς ὡς ἐπιτοπολὺ, ἢ τῶν ἐμπροσθεν. Καὶ ἐν χειμῶνι πλέονα χρόνον ζῆ ὄνθρωπος ἢ ἐν θέρει, ὅστις καὶ ἄλλως μέλλει ἀποθανεῖσθαι ἐκ τοῦ τρώματος, ὀκουοῦν τῆς κεφαλῆς ἔχων τὸ τρῶμα.

3. Αἱ δὲ ἔδραι τῶν βελέων τῶν ὀξέων καὶ κουφοτέρων, αὐταὶ

ἐπὶ σφῶν αὐτέων γινόμεναι ἐν τῷ ὀστέῳ, ἄνευ ῥωγμῆς τε καὶ φλάσιος, ἢ ἔσω ἐσφλάσιος αὐταὶ δὲ γίνονται ὁμοίως ἐν τε τῷ ἐμπροσθεν τῆς κεφαλῆς, καὶ ἐν τῷ ὀπισθεν, ἐκ τουτέων ὁ θάνατος οὐ γίνεται κατὰ γε δίκην, οὐδ' ἦν γένηται. Ῥαφὴ δὲ ἐν ἔλκει φανεῖσα, ὀστέου ψιλωθέντος, πανταχοῦ τῆς κεφαλῆς τοῦ ἔλκεος

γενομένου, ἀσθενέστατον γίνεται τῇ τρώσει καὶ τῷ βέλει ἀντέχειν, εἰ τύχοι τὸ βέλος ἐς αὐτὴν τὴν ραφὴν στηριχθέν πάντων δὲ μάλιστα ἐν τῷ βρέγματι γενόμενον κατὰ τὸ ἀσθενέστατον τῆς κεφαλῆς, καὶ αἱ ραφαὶ εἰ τύχοιεν ἐοῦσαι περὶ τὸ ἔλκος, καὶ τὸ βέλος αὐτέων τύχοι τῶν ραφῶν.

4. Τιτρώσκεται δὲ ὀστέον τὸ ἐν τῇ κεφαλῇ τοσοῦσδε τρόπους τῶν δὲ τρόπων ἐκάστου πλέονες ιδέαι γίνονται τοῦ κατήγματος

ἐν τῇ τρώσει. Ὅστέον ρήγνυται τιτρωσκόμενον, καὶ τῷ περιέχοντι ὀστέῳ τὴν ῥωγμὴν, ἀνάγκη φλάσιν προσγίνεσθαι, ἥνπερ ῥαγῆ τῶν γὰρ βελέων ὅ τι περ ρήγνυσι τὸ ὀστέον, τὸ αὐτὸ τοῦτο καὶ φλᾶ τὸ ὀστέον ἢ μᾶλλον, ἢ ἥσσον, αὐτό τε ἐν ᾧ περ καὶ ρήγνυσι τὴν ῥωγμὴν, καὶ τὰ περιέχοντα ὀστέα τὴν ῥωγμὴν εἰς οὗτος τρόπος. Ἰδέαι δὲ ῥωγμέων παντοῖαι γίνονται καὶ γὰρ λεπτότεραί τε καὶ λεπταὶ πάνυ, ὥστε οὐ καταφανέες γίνονται ἔστιν αἱ τῶν ῥωγμέων, οὔτε αὐτίκα μετὰ τὴν τρώσιν, οὔτ' ἐν τῆσιν ἡμέρησιν, ἐν ἧσιν ἂν καὶ πλεον ὄφελος γένοιτο ἐκ

τούτου τῷ ἀνθρώπῳ αἱ δ' αὖ παχύτεραι τε καὶ εὐρύτεραι ρήγνυνται τῶν ῥωγμέων ἔνιαι δὲ καὶ πάνυ εὐρέαι. Ἔστι δὲ αὐτέων καὶ αἱ μὲν ἐπὶ μακρότερον ρήγνυνται, αἱ δὲ ἐπὶ βραχύτερον. Καὶ αἱ μὲν ἰθύτεραι τε καὶ ἰθεῖαι πάνυ, αἱ δὲ καμπυλώτεραι τε καὶ καμπύλαι καὶ βαθύτεραι τε ἐς τὸ κάτω καὶ διὰ παντὸς τοῦ ὀστέου, καὶ ἥσσον βαθεῖαι ἐς τὸ κάτω, καὶ οὐ διὰ παντὸς τοῦ ὀστέου.

5. Φλασθεῖ δ' ἂν τὸ ὀστέον μένον ἐν τῇ ἐωυτοῦ φύσει, καὶ ῥωγμὴ τῇ φλάσει οὐκ ἂν προσγέναιτο ἐν τῷ ὀστέῳ οὐδεμία δεύτερος οὗτος τρόπος. Ἰδέαι δὲ τῆς φλάσιος πλείους γίνονται καὶ γὰρ μᾶλλον τε καὶ ἥσσον φλᾶται, καὶ ἐς βαθύτερόν τε καὶ διὰ παντὸς τοῦ ὀστέου, καὶ ἥσσον ἐς βαθύ, καὶ οὐ διὰ παντὸς τοῦ ὀστέου, καὶ ἐπὶ πλεον τε καὶ ἔλασσον μήκεός τε καὶ πλατύτητος. Ἄλλ' οὐ τουτέων τῶν ιδεῶν οὐδεμίαν ἔστιν ἰδόντα τοῖσιν ὀφθαλμοῖσι γνῶναι, ὁκοίη τίς ἔστι τὴν ιδέην, καὶ ὁκόση

τις τὸ μέγεθος οὐδὲ γὰρ εἰ πέφλασται, ἢ μὴ πέφλασται, ἐόντων πεφλασμένων καὶ τοῦ κακοῦ γεγενημένου, γίνεται τοῖσιν ὀφθαλμοῖσι καταφανὲς ἰδεῖν αὐτίκα μετὰ τὴν τρώσιν, ὥσπερ οὐδὲ τῶν ῥωγμέων ἔνιαι ἐκὰς ἐοῦσαι.

6. Καὶ ἐρρωγότος τοῦ ὀστέου, ἐσφλᾶται τὸ ὀστέον ἐκ τῆς

φύσιος τῆς ἐωυτοῦ ἔσω σὺν ῥωγμῆσιν ἄλλως γὰρ οὐκ ἂν ἐσφλασθεῖ τὸ γὰρ ἐσφλώμενον, ἀπορρηγνύμενόν τε καὶ καταγνύμενον, ἐσφλᾶται ἔσω ἀπὸ τοῦ ἄλλου ὀστέου μένοντος ἐν τῇ φύσει τῇ ἐωυτοῦ καὶ δὴ οὕτω ῥωγμὴ ἂν προσεῖη τῇ ἐσφλάσει τρίτος οὗτος τρόπος. Ἐσφλᾶται δὲ τὸ ὀστέον πολλὰς ιδέας καὶ γὰρ



ἐπὶ πλεον τοῦ ὀστέου καὶ ἐπ' ἔλασσον, καὶ μᾶλλον τε καὶ ἐς βαθύτερον κάτω, καὶ ἥσσόν τε καὶ ἐπιπολαιότερον.

7. Καὶ ἔδρης γενομένης ἐν τῷ ὀστέῳ βέλεος, προσγένειτο ἂν ῥωγμὴ τῇ ἐδραίῃ φλάσιν προσγενέσθαι ἀναγκαῖόν ἐστιν, ἢ

μᾶλλον, ἢ ἥσσον, ἢνπερ καὶ ῥωγμὴ προσγένηται, ἐνθάπερ ἢ ἔδρη ἐγένετο καὶ ἢ ῥωγμὴ, καὶ ἐν τῷ ὀστέῳ τῷ περιέχοντι τὴν τε ἔδρην καὶ τὴν ῥωγμὴν τέταρτος οὗτος τρόπος. Καὶ ἔδρη μὲν ἂν γένοιτο, φλάσιν ἔχουσα τοῦ ὀστέου περὶ αὐτὴν, ῥωγμὴ δὲ οὐκ ἂν προσγένειτο

τῇ ἔδρῃ καὶ τῇ φλάσει ὑπὸ τοῦ βέλεος. Καὶ ἔδρη δὲ τοῦ βέλεος γίνεταί ἐν τῷ ὀστέῳ ἔδρη δὲ καλέεται, ὅταν, μένον τὸ ὀστέον ἐν τῇ ἐωυτοῦ φύσει, τὸ βέλος στηρίζαν ἐς τὸ ὀστέον δῆλον ποιήσῃ ὅκου ἐστήριζεν. Ἐν δὲ τῷ τρόπῳ ἐκάστω πλεονες ιδέαι γίνονται καὶ περὶ μὲν φλάσιός τε καὶ ῥωγμῆς, ἢν ἄμφω ταῦτα προσγένηται τῇ ἔδρῃ, καὶ ἢν φλάσις μούνη γένηται, ἢδη πέφρασαι, ὅτι πολλαὶ ιδέαι γίνονται καὶ τῆς φλάσιος καὶ τῆς ῥωγμῆς. Ἡ δὲ ἔδρη αὐτὴ ἐφ' ἐωυτῆς γίνεταί, μακροτέρη καὶ βραχυτέρη ἐοῦσα, καὶ καμπυλωτέρη, καὶ ἰθυτέρη, καὶ κυκλοτερῆς καὶ πολλαὶ ἄλλαι ιδέαι τοῦ τοιοῦτέου τρόπου, ὅκοῖον ἂν τι καὶ τὸ σχῆμα τοῦ βέλεος ἢ αὐταὶ δὲ καὶ βαθύτεραι τὸ κάτω καὶ μᾶλλον καὶ ἥσσον, καὶ στενότεραι, καὶ εὐρύτεραι, καὶ πάνυ εὐρέαι. διακέκοπται διακοπὴ δ', ὀκοσητισοῦν γιγνομένη μήκεός τε καὶ εὐρύτητος ἐν τῷ ὀστέῳ, ἔδρη ἐστίν, ἢν τὰ ἄλλα

ὀστέα τὰ περιέχοντα τὴν διακοπὴν μένη ἐν τῇ φύσει τῇ ἐωυτέων, καὶ μὴ ξυνεσφλᾶται τῇ διακοπῇ ἔσω ἐκ τῆς φύσιος τῆς ἐωυτέων οὕτω δ' ἔσφλασις ἂν εἶη, καὶ οὐκ ἔτι ἔδρη.

8. Ὄστέον τιτρώσκεται ἄλλη τῆς κεφαλῆς, ἢ ἢ τὸ ἔλκος ἔχει ὦνθρωπος, καὶ τὸ ὀστέον ἐψιλώθη τῆς σαρκός πέμπτος οὗτος τρόπος. Καὶ ταύτην τὴν ξυμφορὴν, ὅταν γένηται, οὐκ ἂν ἔχοις ὠφελῆσαι οὐδέν. Οὐδὲ γὰρ, εἰ πέπονθε τὸ κακὸν τοῦτο, οὐκ ἔστιν ὅκος χρὴ αὐτὸν ἐξελέγξαντα εἰδέναι εἰ πέπονθε τὸ κακὸν τοῦτο ὦνθρωπος, οὐδ' ὅκοι τῆς κεφαλῆς.

9. Τούτων τῶν τρόπων τῆς κατήξιος ἐς πρίσιν ἀφήκει, ἢ τε φλάσις ἢ ἀφανῆς ιδεῖν, καὶ ἢν πῶς τύχη φανερὴ γενομένη, καὶ ἢ ῥωγμὴ ἢ ἀφανῆς ιδεῖν, καὶ ἢν φανερὴ ἢ. Καὶ ἢν, ἔδρης γενομένης τοῦ βέλεος ἐν τῷ ὀστέῳ, προσγένηται ῥωγμὴ καὶ φλάσις τῇ ἔδρῃ, καὶ ἢν φλάσις μούνον προσγένηται ἄνευ ῥωγμῆς τῇ ἔδρῃ, καὶ αὕτη ἐς πρίσιν ἀφήκει. Τὸ δ' ἔσω ἐσφλώμενον ὀστέον ἐκ τῆς φύσιος τῆς

έωυτοῦ, ὀλίγα τῶν πολλῶν πρίσιος προσδεῖται

καὶ τὰ μάλιστα ἐσφλασθέντα καὶ μάλιστα καταρραγέντα, ταῦτα πρίσιος ἤκιστα κέχρηται οὐδὲ ἔδρη αὐτὴ ἐφ' ἑωυτῆς γενομένη ἄτερ ῥωγμῆς καὶ φλάσιος, οὐδὲ αὐτὴ πρίσιος δεῖται οὐδ' ἢ διακοπῆ, ἣν μεγάλη καὶ εὐρέη, οὐδ' αὐτὴ διακοπὴ γὰρ καὶ ἔδρη τωυτόν ἐστιν.

10. Πρῶτον δὲ χρὴ τὸν τρωματὴν σποπεῖσθαι, ὅπη ἔχει τὸ τρῶμα τῆς κεφαλῆς, εἴτ' ἐν τοῖσιν ἰσχυροτέροισιν, εἴτ' ἐν τοῖσιν ἀσθενεστέροισιν, καὶ τὰς τρίχας καταμανθάνειν τὰς περὶ τὸ ἔλκος, εἰ διακεκόφαται ὑπὸ τοῦ βέλεος, καὶ εἰ ἔσω ἦσαν ἐς τὸ τρῶμα καὶ ἦν τοῦτο ἦ, φάναι κινδυνεύειν τὸ ὀστέον ψιλὸν εἶναι τῆς σαρκὸς, καὶ ἔχειν τι σίνος τὸ ὀστέον ὑπὸ τοῦ βέλεος. Ταῦτα μὲν οὖν χρὴ ἀπόπροσθεν σκεψάμενον λέξαι, μὴ ἀπτόμενον τοῦ ἀνθρώπου ἀπτόμενον δ' ἤδη πειρᾶσθαι εἰδέναι σάφα, εἰ ἐστι ψιλὸν τὸ ὀστέον τῆς σαρκὸς, ἢ οὐ καὶ ἦν μὲν καταφανὲς ἢ τοῖσιν ὀφθαλμοῖσι τὸ ὀστέον ψιλὸν εἰ δὲ μὴ, τῇ μήλῃ σκέπτεσθαι. Καὶ ἦν μὲν εὐρῆς

ψιλὸν ἐὸν τὸ ὀστέον τῆς σαρκὸς, καὶ μὴ ὑγιὲς ἀπὸ τοῦ τρώματος, χρὴ τοῦ ἐν τῷ ὀστέῳ ἐόντος τὴν διάγνωσιν πρῶτα ποιέεσθαι, ὀρέοντα ὅσον τέ ἐστι τὸ κακὸν, καὶ τίνος δεῖται ἔργου. Χρὴ δὲ καὶ ἐρωτᾶν τὸν τετρωμένον, ὅπως ἔπαθε καὶ τίνα τρόπον. Ἦν δὲ μὴ καταφανὲς ἢ τὸ ὀστέον, εἰ ἔχει τι κακὸν ἢ μὴ ἔχει, πολλῶ ἔτι χρὴ μᾶλλον τὴν ἐρώτησιν ποιέεσθαι, ψιλοῦ ἐόντος τοῦ ὀστέου, τὸ τρῶμα ὅπως ἐγένετο, καὶ ὄντινα τρόπον τὰς γὰρ φλάσιος καὶ τὰς ῥωγμὰς τὰς οὐ φαινομένας ἐν τῷ ὀστέῳ, ἐνεούσας δὲ, ἐκ τῆς ὑποκρίσιος τοῦ τετρωμένου πρῶτον διαγινώσκειν πειρῆσθαι, εἴ τι πέπονθε τουτέων τὸ ὀστέον ἢ οὐ πέπονθεν, ἔπειτα δὲ καὶ λόγῳ καὶ ἔργῳ ἐξελέγχειν πλὴν μῆλωσις. Μήλωσις γὰρ οὐκ ἐξελέγχει, εἰ πέπονθέ τι τουτέων τῶν κακῶν τὸ ὀστέον, καὶ εἴ τι ἔχει ἐν ἑωυτέῳ, ἢ οὐ πέπονθεν ἀλλ' ἔδρην τε τοῦ βέλεος ἐξελέγχει μήλωσις, καὶ ἦν ἐμφλασθῆ τὸ ὀστέον ἔσω ἐκ τῆς φύσιος τῆς ἑωυτέου, καὶ ἦν ἰσχυρῶς ῥαγῆ τὸ ὀστέον, ἄπερ καὶ τοῖσιν ὀφθαλμοῖσι καταφανέα ἐστὶν ὀρῶντα γινώσκειν.

11. Ῥήγνυται δὲ τὸ ὀστέον τὰς τε ἀφανέας ῥωγμὰς καὶ τὰς φανεράς, καὶ φλᾶται τὰς ἀφανέας φλάσιος, καὶ ἐσφλᾶται ἔσω ἐκ τῆς φύσιος τῆς ἑωυτέου, μάλιστα ὅταν ἕτερος ὑφ' ἑτέρου τιτρωσκόμενος

ἐπίτηδες τρωθῆ, ἢ ὀκόταν, ἐπίτηδες τρῶσαι βουλόμενος ἢ ἀέκων, ἐξ ὑψηλοτέρου γίγνηται ἢ βολῆ ἢ ἢ πληγῆ, ὀκοτέρη ἂν ἢ μᾶλλον, ἢ ὅταν ἐξ ἰσοπέδου τοῦ χωρίου, καὶ ἦν περικρατέη τῇ χειρὶ τὸ βέλος, ἦν τε βάλλη, ἦν τε τύπη, καὶ ἰσχυρότερος ἐὼν ἀσθενέστερον τιτρώσκη. Ὅσοι δὲ πίπτοντες

τιτρώσκονται πρὸς τε τὸ ὀστέον καὶ αὐτὸ τὸ ὀστέον, ὁ ἀπὸ ὑψηλοτάτου πίπτων καὶ ἐπὶ σκληρότατον καὶ ἀμβλύτατον, τουτέω κίνδυνος τὸ

ὀστέον ῥαγῆναι καὶ φλασθῆναι, καὶ ἔσω ἐσφλασθῆναι ἐκ τῆς φύσιος τῆς ἐωυτέου τῷ δ' ἐξ ἰσοπέδου μᾶλλον χωρίου πίπτοντι καὶ ἐπὶ μαλθακώτερον, ἦσσον ταῦτα πάσχει τὸ ὀστέον, ἢ οὐκ ἂν πάθοι. Ὅσα δὲ ἐσπίπτοντα ἐς τὴν κεφαλὴν βέλεα τιτρώσκει πρὸς τὸ ὀστέον καὶ αὐτὸ τὸ ὀστέον, τὸ ἀπὸ ὑψηλοτάτου ἐμπεσὸν καὶ ἦκιστα ἐξ ἰσοπέδου, καὶ σκληρότατόν τε ἅμα καὶ ἀμβλύτατον καὶ βαρύτατον, καὶ ἦκιστα κοῦφον καὶ ἦκιστα ὀξὺ καὶ μαλθακὸν, τοῦτο ἂν ῥήξειε τὸ ὀστέον καὶ φλάσειεν. Καὶ μάλιστα γε ταῦτα πάσχειν τὸ ὀστέον κίνδυνος, ὅταν ταῦτά τε γίνηται, καὶ ἐς ἰθὺ τρωθῆ, καὶ κατ' ἀντίον γένηται τὸ ὀστέον τοῦ βέλεος, ἦν τε πληγῆ ἐκ χειρὸς, ἦν τε βληθῆ, ἦν τέ τι ἐμπέση αὐτέω, καὶ ἦν αὐτὸς καταπεσὼν τρωθῆ, καὶ ὀκωσοῦν τρωθεὶς κατ' ἀντίον γενομένου τοῦ ὀστέου τῷ βέλει. Τὰ δ' ἐς πλάγιον τοῦ ὀστέου παρασύραντα βέλεα ἦσσον καὶ ῥήγνυσι τὸ ὀστέον, καὶ φλᾶ, καὶ ἔσω ἐσφλᾶ, κῆν ψλωθῆ τὸ ὀστέον τῆς σαρκὸς ἕνια γὰρ τῶν τρωμάτων τῶν οὕτω τρωθέντων οὐδὲ ψιλοῦται τὸ ὀστέον τῆς σαρκὸς. Τῶν δὲ βελέων ῥήγνυσι μάλιστα τὸ ὀστέον τὰς τε φανεράς ῥωγμὰς καὶ

τὰς ἀφανέας, καὶ φλᾶται καὶ ἐσφλᾶ ἔσω ἐκ τῆς φύσιος τῆς ἐωυτέου τὸ ὀστέον, τὰ στρογγύλα τε καὶ περιφερέα, καὶ ἀρτίστομα, ἀμβλέα τε ἔοντα καὶ βαρέα καὶ σκληρά καὶ τὴν σάρκα ταῦτα φλᾶται, καὶ πέπειρον ποιέει, καὶ κόπτει καὶ τὰ ἔλκεα γίνεται ὑπὸ τῶν τοιουτέων βελέων, ἔς τε πλάγιον καὶ ἐν κύκλῳ, ὑπόκοιλα, καὶ διάπυά τε μᾶλλον γίγνεται, καὶ ὑγρά ἐστὶ, καὶ ἐπὶ πλέονα χρόνον καθαίρεται ἀνάγκη γὰρ τὰς σάρκας τὰς φλασθείσας καὶ κοπέισας πῦον γενομένης ἐκτακῆναι. Τὰ δὲ βέλεα τὰ προμήκεα, ἐπιπολὺ λεπτὰ ἔοντα καὶ ὀξέα καὶ κοῦφα, τὴν τε σάρκα διατάμνει μᾶλλον ἢ φλᾶ, καὶ τὸ ὀστέον ὡσαύτως καὶ ἔδρην μὲν ἐμποιέει αὐτὸ καὶ διακόψαν διακοπὴ γὰρ καὶ ἔδρη τωυτόν ἐστὶ, φλᾶ δὲ οὐ μάλα τὸ ὀστέον τὰ τοιαῦτα βέλεα, οὐδὲ ῥήγνυσιν, οὐδ' ἐκ τῆς φύσιος ἔσω ἐσφλᾶ. Ἄλλὰ χρὴ πρὸς τῆ ὄψει τῆ ἐωυτέου, ὃ τι ἂν σοι φαίνεται ἐν τῷ ὀστέω, καὶ ἐρώτησιν ποιέεσθαι πάντων τουτέων τοῦ γὰρ μᾶλλον τε καὶ ἦσσον τρωθέντος ταῦτ' ἐστὶ σημηϊά, καὶ ἦν ὁ τρωθεὶς καρωθῆ, καὶ σκότος περιχυθῆ, καὶ δῖνος ἔχη, καὶ πέση.

12. Ὅταν δὲ τύχη ψλωθὲν τὸ ὀστέον τῆς σαρκὸς ὑπὸ τοῦ βέλεος, καὶ τύχη κατ' αὐτὰς τὰς ῥαφὰς γενόμενον τὸ ἔλκος, χαλεπὸν γίγνεται καὶ τὴν ἔδρην τοῦ βέλεος φράσασθαι τὴν ἐν τῷ ἄλλῳ ὀστέω φανερὴν γιγνομένην, εἴτ' ἔνεστιν ἐν τῷ ὀστέω, εἴτε μὴ ἔνεστιν, καὶ ἦν τύχη γενομένη ἢ ἔδρη ἐν αὐτέησι τῆσι ῥαφῆσιν. Ευκλέπτεται γὰρ αὐτὴ ἢ ῥαφὴ τρηχυτέρη εοῦσα τοῦ

ἄλλου ὀστέου, καὶ οὐ διάδηλον ὅ τι τε αὐτοῦ ραφή ἐῖν, καὶ ὅ τι τοῦ βέλεος ἔδρη, ἦν μὴ κάρτα μεγάλη γένηται ἢ ἔδρη. Προσγίνεται δὲ καὶ ῥήξις τῆ ἔδρη ὡς ἐπὶ τὸ πούλυ, τῆ ἐν τῆσι ραφήσι γιγνομένη, καὶ γίνεται καὶ αὐτὴ ἢ ῥήξις χαλεπωτέρη φράσασθαι, ἐρρωγότεος τοῦ ὀστέου, διὰ τοῦτο, ὅτι κατ' αὐτὴν τὴν ραφήν ἢ ῥήξις γίνεται ἦν ῥηγνύηται, ὡς ἐπὶ τὸ πούλυ. Ἐτοιμον γὰρ ταύτη ῥηγνυσθαι τὸ ὀστέον καὶ διαχαλᾶν, διὰ τὴν ἀσθενείην

τῆς φύσιος τοῦ ὀστέου ταύτη καὶ διὰ τὴν ἀραιότητα, καὶ δὴ ἄτε τῆς ραφῆς ἐτοίμης ἐούσης ῥηγνυσθαι καὶ διαχαλᾶν τὰ δ' ἄλλα ὀστέα, τὰ περιέχοντα τὴν ραφήν, μένει ἀρραγέα, ὅτι ἰσχυρότερα ἐστὶ τῆς ραφῆς. Ἡ δὲ ῥήξις ἢ κατὰ τὴν ραφήν γινομένη καὶ διαχάλασις ἐστὶ τῆς ραφῆς, καὶ φράσασθαι οὐκ εὐμαρῆς,

οὔτε ἦν ὑπὸ ἔδρης τοῦ βέλεος γενομένης ἐν τῆ ραφῆι ῥαγῆ καὶ διαχαλάσει, οὔτε ἦν, φλασθέντος τοῦ ὀστέου κατὰ τὰς ραφὰς, ῥαγῆ καὶ διαχαλάσει ἄλλ' ἔτι χαλεπώτερον φράσασθαι τὴν ἀπὸ τῆς φλάσιος ῥωγμῆν. Ξυγκλέπτουσι γὰρ τὴν γνώμην καὶ τὴν ὄψιν τοῦ ἰητροῦ αὐταὶ αἱ ραφαὶ ῥωγμοειδέες φαινόμεναι, καὶ τρηχύτεραι ἐοῦσαι τοῦ ἄλλου ὀστέου, ὅτι μὴ ἰσχυρῶς διεκόπη, καὶ διεχάλασεν διακοπὴ δὲ καὶ ἔδρη τούτων ἐστὶν. Ἀλλὰ χρῆ, εἰ κατὰ τὰς ραφὰς τὸ τρῶμα γένοιτο καὶ πρὸς γε τὸ ὀστέον καὶ ἐς τὸ ὀστέον στηρίξειε τὸ βέλος, προσέχοντα τὸν νόον, ἀνευρίσκειν ὅ τι πέπονθε τὸ ὀστέον. Ἀπὸ γὰρ ἴσων τε βελέων τὸ μέγεθος καὶ ὁμοίων, καὶ πολλὸν ἐλασσόνων, καὶ ὁμοίως τρωθεὶς καὶ πολὺ ἦσσαν, πολλῶ μῆζον ἐκτήσατο τὸ κακὸν ἐν τῷ ὀστέῳ ὁ ἐς τὰς ραφὰς δεξάμενος τὸ βέλος, ἢ ὁ μὴ ἐς τὰς ραφὰς δεξάμενος. Καὶ τουτέων τὰ πολλὰ πρίεσθαι δεῖ ἄλλ' οὐ χρῆ αὐτὰς τὰς ραφὰς πρίειν, ἀλλ' ἀποχωρήσαντα ἐν τῷ πλησίον ὀστέῳ τὴν πρίσιν ποιέεσθαι, ἦν πρίης.

13. Περὶ δὲ ἰήσιος τρωσίων τῶν ἐν τῆ κεφαλῇ, καὶ ὡς χρῆ ἐξελέγχειν τὰς πάθας τὰς ἐν τῷ ὀστέῳ γινομένας τὰς μὴ φανεράς, ὧδέ μοι δοκεῖ. Ἐλκος ἐν τῆ κεφαλῇ οὐ χρῆ τέγγειν οὐδενί, οὐδὲ οἴνω, ἀλλ' ὡς ἦκιστα οὐδὲ καταπλάσσειν, οὐδὲ μοτῶ τὴν

ἴησιν ποιέεσθαι, οὐδ' ἐπίδειν χρῆ ἔλκος ἐν κεφαλῇ, ἦν μὴ ἐν τῷ μετώπῳ ἦ τὸ ἔλκος, ἐν τῷ ψιλῷ τῶν τριχῶν, ἢ περὶ τὴν ὄφρυν καὶ τὸν ὀφθαλμόν. Ἐνταῦθα δὲ γινόμενα τὰ ἔλκεα καταπλάσιος καὶ ἐπιδέσιος μᾶλλον κέχρηται ἢ κου ἄλλοθι τῆς κεφαλῆς τῆς ἄλλης. Περιέχει γὰρ ἢ κεφαλῇ ἢ ἄλλῃ τὸ μέτωπον πᾶν ἐκ δὲ τῶν περιεχόντων τὰ ἔλκεα, καὶ ἐν ὅτῳ ἂν ἦ τὰ ἔλκεα, φλεγμαίνει καὶ ἐπανοιδίσκεται δι' αἵματος ἐπιρροήν. Χρῆ δὲ οὐδὲ τὰ ἐν τῷ μετώπῳ διὰ παντὸς τοῦ χρόνου καταπλάσσειν καὶ ἐπίδειν, ἀλλ' ἐπειδὴν παύσῃται φλεγμαίνοντα, καὶ τὸ οἶδημα καταστῆ, παύσασθαι καταπλάσσοντα καὶ ἐπιδέοντα. Ἐν δὲ τῆ ἄλλῃ κεφαλῇ

ἔλκος οὔτε μοτοῦν χρή, οὔτε καταπλάσσειν, οὔτ' ἐπιδεῖν, εἰ μὴ καὶ τομῆς δέοιτο. Τάμνειν δὲ χρή τῶν ἐλκέων τῶν ἐν τῇ κεφαλῇ γινομένων,

καὶ ἐν τῷ μετώπῳ, ὅκου ἂν τὸ μὲν ὀστέον ψιλὸν ἢ τῆς σαρκὸς, καὶ δοκέη τι σίνος ἔχειν ὑπὸ τοῦ βέλεος, τὰ ἔλκεα μὴ ἰκανὰ τὸ μέγεθος τοῦ μήκεος καὶ τῆς εὐρύτητος ἐς τὴν σκέψιν τοῦ ὀστέου, εἴ τι πέπονθεν ὑπὸ τοῦ βέλεος κακὸν, καὶ ὀκοῖόν τι πέπονθε, καὶ ὅσον μὲν ἢ σὰρξ πέφλασται, καὶ τὸ ὀστέον ἔχει τὸ σίνος, καὶ δ' αὖ εἰ ἀσινές τε ἐστὶ τὸ ὀστέον ὑπὸ τοῦ βέλεος, καὶ μηδὲν πέπονθε κακὸν, καὶ ἐς τὴν ἴησιν, ὀκοίης τινὸς δεῖται τό τε ἔλκος, ἢ τε σὰρξ, καὶ ἡ πάθη τοῦ ὀστέου. Τὰ δὴ τοιαῦτα τῶν ἐλκέων τομῆς δεῖται. Καὶ ἂν μὲν τὸ ὀστέον ψιλωθῇ τῆς σαρκὸς, ὑπόκοιλα δὲ ἢ ἐς πλάγιον ἐπιπολῶ, ἐπανατάμνειν τὸ κοῖλον, ὅκου μὴ

εὐχερὲς τῷ φαρμάκῳ ἐφικέσθαι, ὀκοίῳ ἂν τινι χρή καὶ τὰ κυκλοτερέα τῶν ἐλκέων καὶ ὑπόκοιλα ἐπὶ πουλὺ καὶ τὰ τοιαῦτα, ἐπανατάμνων τὸν κύκλον διχῆ κατὰ μῆκος, ὡς πέφυκεν ὠνθρωπος, μακρὸν ποιέειν τὸ ἔλκος. Τάμνοντι δὲ κεφαλὴν, τὰ μὲν ἄλλα τῆς κεφαλῆς ἀσφαλείην ἔχει ταμνόμενα ὁ δὲ κρόταφος, καὶ ἄνωθεν ἔτι τοῦ κροτάφου, κατὰ τὴν φλέβα τὴν διὰ τοῦ κροτάφου φερομένην, τοῦτο δὲ τὸ χωρίον μὴ τάμνειν. Σπασμὸς γὰρ ἐπιλαμβάνει τὸν τμηθέντα καὶ ἦν μὲν ἐπ' ἀριστερὰ τμηθῇ κροτάφου, τὰ ἐπὶ δεξιὰ ὁ σπασμὸς ἐπιλαμβάνει ἦν δ' ἐπὶ τὰ δεξιὰ τμηθῇ κροτάφου, τὰ ἐπ' ἀριστερὰ ὁ σπασμὸς ἐπιλαμβάνει.

14. Ὄταν οὖν τάμνης ἔλκος ἐν κεφαλῇ ὀστέων εἵνεκα τῆς σαρκὸς ἐψιλωμένων, θέλων εἰδέναι εἴ τι ἔχει τὸ ὀστέον κακὸν ὑπὸ τοῦ βέλεος, ἢ καὶ οὐκ ἔχει, τάμνειν χρή τὸ μέγεθος τὴν ὠτειλὴν, ὅση ἂν δοκέη ἀποχρῆναι. Τάμνοντα δὲ χρή ἀναστεῖλαι τὴν σάρκα ἀπὸ τοῦ ὀστέου, ἢ πρὸς τῇ μήνιγγι καὶ πρὸς τῷ ὀστέῳ

πέφυκεν ἔπειτα διαμοτῶσαι τὸ ἔλκος πᾶν μοτῶ, ὅστις εὐρύτατον τὸ ἔλκος παρέξει ἐς τὴν ὑστεραίην ζῦν ἐλαχίστῳ πόνῳ μοτώσαντα δὲ καταπλάσματι χρῆσθαι, ὅσον ἂν χρόνον καὶ τῷ μοτῶ, μάζην ἐκ λεπτῶν ἀλφίτων ἐν ὄξει διαμάσσειν, ἢ ἔψειν καὶ γλίσχρην ποιέειν ὡς μάλιστα. Τῇ δ' ὑστεραίῃ ἡμέρῃ, ἐπειδὴν ἐξέλης τὸν μοτὸν, κατιδὼν τὸ ὀστέον ὃ τι πέπονθεν, ἐὰν μὴ σοὶ καταφανῆς ἢ ἡ τρῶσις, ὀκοίη τίς ἐστὶν ἐν τῷ ὀστέῳ, μηδὲ διαγινώσκῃς εἴ τίς τι ἔχει τὸ ὀστέον κακὸν ἐν ἐαυτέῳ, ἢ καὶ οὐκ ἔχει, τὸ δὲ βέλος δοκέη ἀφικέσθαι ἐς τὸ ὀστέον καὶ σίνασθαι, ἐπιξύειν χρή τῷ ξυστήρι κατὰ βάθος καὶ κατὰ μῆκος τοῦ ἀνθρώπου ὡς πέφυκε, καὶ αὐθις ἐπικάρσιον τὸ ὀστέον, τῶν ῥηξίων εἵνεκα τῶν ἀφανέων ἰδεῖν, καὶ τῆς φλάσιος εἵνεκα τῆς ἀφανέος, τῆς οὐκ ἐσφλωμένης ἔσω ἐκ τῆς φύσιος τῆς κεφαλῆς τοῦ ἄλλου ὀστέου. Ἐξελέγχει γὰρ ἡ ζύσις μάλα τὸ κακὸν, ἦν μὴ καὶ ἄλλως καταφανέες ἔωσιν αὐταὶ αἰ πάθαι ἐοῦσαι ἐν

τῷ ὀστέῳ. Καὶ ἦν ἔδρην ἴδης ἐν τῷ ὀστέῳ τοῦ βέλεος, ἐπιζύειν χρῆ αὐτὴν τε τὴν ἔδρην, καὶ τὰ περιέχοντα αὐτὴν ὀστέα, μὴ πολλακίς τῇ ἔδρῃ προσγένηται ῥῆξις καὶ φλάσις, ἢ μούνη φλάσις, ἔπειτα λανθάνη οὐ καταφανέα ἔοντα. Ἐπειδὴν δὲ ζύσης τὸ ὀστέον τῷ ζυστήρι, ἦν μὲν δοκέη ἐς πρίσιν ἀφίκειν ἢ τρώσις τοῦ ὀστέου, πρίειν χρῆ, καὶ οὐ δεῖ τὰς τρεῖς ἡμέρας μὴ ὑπερβάλλειν ἀπρίωτον, ἀλλ' ἐν ταύτησι πρίειν, ἄλλως τε καὶ τῆς θερμῆς ὥρης, ἦν ἐξ ἀρχῆς λαμβάνης τὸ ἴημα. Ἦν δὲ ὑποπτεύσης μὲν τὸ ὀστέον ἐρρωγέναι, ἢ πεφλάσθαι, ἢ ἀμφοτέρα ταῦτα, τεκμαιρόμενος, ὅτι ἰσχυρῶς τέτρωται, ἐκ τῶν λόγων τοῦ τρωματίου, καὶ ὅτι ὑπὸ ἰσχυροτέρου τοῦ τρώσαντος, ἦν ἕτερος ὑφ' ἑτέρου τρωθῆ, καὶ τὸ βέλος ὄτω ἐτρώθη, ὅτι τῶν κακούργων βελέων ἦν, ἔπειτα τὸν ἄνθρωπον ὅτι δῖνός τε ἔλαβε καὶ σκότος, καὶ ἐκαρώθη καὶ κατέπεσεν τούτων δὲ οὕτω γιγνομένων, ἦν μὴ διαγινώσκης εἰ ἔρρωγε τὸ ὀστέον, ἢ πέφλασται, ἢ καὶ ἀμφοτέρα ταῦτα, μήτε ὄλως ὀρᾶν δύνη, δεῖ δὴ,

ἐπὶ τὸ ὀστέον τὸ τηκτὸν τὸ μελάντατον δεύσαντα, τῷ μέλανι φαρμάκῳ τῷ τηκομένῳ στεῖλαι τὸ ἔλκος, ὑποτείναντα ὀθόνιον, ἐλαίῳ τέγξαντα, εἶτα καταπλάσαντα τῇ μάζῃ ἐπιδιῆσαι τῇ δ' ὑστεραίῃ, ἀπολύσαντα, ἐκκαθήραντα τὸ ἔλκος, ἐπιζῦσαι. Καὶ ἦν μὴ ἦ ὑγιές, ἀλλ' ἐρρώγη καὶ πεφλασμένον ἦ, τὸ μὲν ἄλλο ἔσται ὀστέον λευκὸν ἐπιζυόμενον ἢ δὲ ῥωγμὴ καὶ ἢ φλάσις, κατατακέντος τοῦ

φαρμάκου, δεξαμένη τὸ φάρμακον ἐς ἐωυτὴν μέλαν ἔον, ἔσται μέλαινα ἐν λευκῷ τῷ ὀστέῳ τῷ ἄλλῳ. Ἀλλὰ χρῆ αὐθις τὴν ῥωγμὴν ταύτην φανεῖσαν μέλαιναν ἐπιζέειν κατὰ βάθος καὶ ἦν μὲν ἐπιζύων τὴν ῥωγμὴν ἐξέλης καὶ ἀφανέα ποιήσης, φλάσις μὲν γεγένηται τοῦ ὀστέου ἢ μᾶλλον ἢ ἦσσον, ἦτις περιέρρηξε καὶ τὴν ῥωγμὴν τὴν ἀφανισθεῖσαν ὑπὸ τοῦ ζυστήρος ἦσσον δὲ φοβερὸν καὶ ἦσσον ἂν πρῆγμα ἀπ' αὐτέης γένοιτο ἀφανισθείσης τῆς ῥωγμῆς. Ἦν δὲ κατὰ βάθος ἦ καὶ μὴ ἐθέλη ἐξιέναι ἐπιζυομένη, ἀφίκει ἐς πρίσιν ἢ τοιαύτη ζυμοφορῆ. Ἀλλὰ χρῆ πρίσαντα τὰ λοιπὰ ἰητρεύειν τὸ ἔλκος.

15. Φυλάσσεσθαι δὲ χρῆ, ὅπως μὴ τι κακὸν ἀπολαύση τὸ ὀστέον ἀπὸ τῆς σαρκὸς, ἦν κακῶς ἰητρεύηται. Ὅστέῳ γὰρ καὶ πεπρισμένῳ, καὶ ἄλλως ἐψιλωμένῳ, ὑγιεῖ δὲ ἔοντι, καὶ ἔχοντί τι σίνος ὑπὸ τοῦ βέλεος, δοκέοντι δὲ ὑγιεῖ εἶναι, κίνδυνός ἐστι μᾶλλον ὑπόπυον γενέσθαι ἦν καὶ ἄλλως μὴ μέλλῃ, ἦν καὶ ἢ σὰρξ ἢ περιέχουσα τὸ ὀστέον κακῶς θεραπεύηται, καὶ φλεγμαίνεται, καὶ περισφίγγηται πυρετῶδες γὰρ γίνεταί, καὶ πολλοῦ φλογμοῦ πλέον. Καὶ δὴ τὸ ὀστέον ἐκ τῶν περιεχουσῶν σαρκέων ἐς ἐωυτὸ θέρμη τε καὶ φλογμὸν καὶ ἄραδον ἐμποιεῖ καὶ σφυγμὸν, καὶ ὅσα περ ἢ σὰρξ ἔχει κακὰ ἐν ἐωυτέῃ, καὶ ἐκ τουτέων ὧδε ὑπόπυον γίνεται. Κακὸν δὲ καὶ ὑγρὴν τε εἶναι τὴν σάρκα ἐν τῷ ἔλκει καὶ μυδῶσαν, καὶ ἐπὶ

πολλὸν χρόνον καθαίρεσθαι. Ἀλλὰ χρὴ διάπυον μὲν ποιῆσαι τὸ ἔλκος ὡς τάχιστα οὕτω γὰρ ἂν ἦκιστα φλεγμαῖνοι τὰ περιέχοντα

τὸ ἔλκος, καὶ τάχιστα καθαρὸν εἶη ἀνάγκη γὰρ ἔχει τὰς σάρκας τὰς κοπείσας καὶ φλασθείσας ὑπὸ τοῦ βέλεος, ὑποπύους γενομένας, ἐκτακῆναι. Ἐπειδὴν δὲ καθαρῆ, ξηρότερον χρὴ γίνεσθαι τὸ ἔλκος οὕτω γὰρ ἂν τάχιστα ὑγιὲς γένοιτο, ξηρῆς σαρκὸς βλαστουσίης καὶ μὴ ὑγρῆς, καὶ οὕτως οὐκ ἂν ὑπερσαρκήσειε τὸ ἔλκος. Ὁ δ' αὐτὸς λόγος καὶ ὑπὲρ τῆς μήνιγγος τῆς περὶ τὸν ἐγκέφαλον ἦν γὰρ αὐτίκα ἐκπρίσας τὸ ὀστέον καὶ ἀφελὼν ἀπὸ τῆς μήνιγγος ψιλώσεως, αὐτὴν καθαρὴν χρὴ ποιῆσαι ὡς τάχιστα καὶ ξηρὴν, ὡς μὴ ἐπὶ πουλὺν χρόνον ὑγρὴ εὐοῦσα μυδῆη τε καὶ ἐξαίρηται τούτων γὰρ οὕτω γιγνομένων, σαπῆναι αὐτὴν κίνδυνος.

16. Ὅστέον δὲ, ὃ τι δεῖ ἀποστῆναι ἀπὸ τοῦ ἄλλου ὀστέου, ἔλκεος ἐν κεφαλῇ γενομένου, ἔδρης τε εὐούσης τοῦ βέλεος ἐν τῷ ὀστέῳ, ἢ ἄλλως ἐπὶ πουλὺ ψιλωθέντος τοῦ ὀστέου, ἀφίσταται ἐπὶ πουλὺ ἐξαιμον γινόμενον. Ἀναξηραίνεται γὰρ τὸ αἷμα ἐκ τοῦ ὀστέου ὑπὸ τε τοῦ χρόνου καὶ ὑπὸ φαρμάκων τῶν πλείστων τάχιστα δ' ἂν ἀποσταίη, εἴ τις τὸ ἔλκος ὡς τάχιστα καθήρας ξηραῖνοι τὸ λοιπὸν τό τε ἔλκος καὶ τὸ ὀστέον, καὶ τὸ μεῖζον καὶ τὸ ἥσσον. Τὸ γὰρ τάχιστα ἀποξηρανθὲν καὶ ἀποστρακωθὲν τούτῳ μάλιστα ἀφίεται ἀπὸ τοῦ ἄλλου ὀστέου τοῦ ἐναίμου τε καὶ ζῶντος αὐτέου, ἐξαιμόν τε γενόμενον καὶ ξηρὸν τῷ ἐναίμῳ καὶ ζῶντι μάλα ἐφίσταται.

17. Ὅσα δὲ τῶν ὀστέων ἐσφλᾶται ἔσω ἐκ τῆς φύσιος τῆς ἐωυτῶν, καταρραγέντα ἢ καὶ διακοπέντα πάνυ εὐρέα, ἀκινδυνότερα τὰ τοιαῦτα γίνεται, ἐπὴν ἢ μῆνιγξ ὑγιῆς ἢ καὶ τὰ πλέοσι ῥωγμῆσιν ἐσκαταρραγέντα καὶ εὐρυτέρησιν, ἔτι ἀκινδυνότερα καὶ εὐμαρέστερα ἐς τὴν ἀφαίρεσιν γίνεται. Καὶ οὐ χρὴ πρίειν τῶν τοιούτων οὐδὲν, οὐδὲ κινδυνεύειν τὰ ὀστέα πειρώμενον ἀφαιρέειν, πρὶν ἢ αὐτόματα ἐπανίη, οἶδεος πρῶτον χαλάσαντος. Ἐπανέρχεται δὲ τῆς σαρκὸς

ὑποφυομένης ὑποφύεται δὲ ἐκ τῆς διπλόης τοῦ ὀστέου καὶ ἐκ τοῦ ὑγιέος, ἦν ἢ ἄνωθεν μοῖρα μούνη σφακελίση. Οὕτω δ' ἂν τάχιστα ἢ τε σὰρξ ὑποφύοιτο καὶ βλαστάνοι, καὶ τὰ ὀστέα ἐπανίοι, εἴ τις τὸ ἔλκος ὡς τάχιστα διάπυον ποιήσας καθαρὸν ποιήσεται. Καὶ ἦν διὰ παντὸς τοῦ ὀστέου ἄμφω αἱ μοῖραι ἐσφλασθῶσιν ἔσω ἐς τὴν μήνιγγα, ἢ τε ἄνω μοῖρη τοῦ ὀστέου καὶ ἢ κάτω, ἰητρεύοντι ὡσαύτως τὸ ἔλκος ὑγιὲς τάχιστα ἔσται, καὶ τὰ ὀστέα τάχιστα ἐπάνεισι, τὰ ἐσφλασθέντα ἔσω.

18. Τῶν δὲ παιδίων τὰ ὀστέα καὶ λεπτότερα ἔστι καὶ μαλθακώτερα διὰ τοῦτο, ὅτι

έναιμότερά ἐστι, καὶ κοῖλα, καὶ σηραγγώδεα, καὶ οὔτε πυκνὰ, οὔτε στερεά. Καὶ ὑπὸ τῶν βελέων ἴσων τε ἐόντων καὶ ἀσθενεστέρων, καὶ τρωθέντων ὁμοίως τε καὶ ἦσσον, τὸ τοῦ νεωτέρου παιδίου καὶ μᾶλλον καὶ θᾶσσον ὑποπυῖσκειται, ἢ τὸ τοῦ πρεσβυτέρου, καὶ ἐν ἐλάσσονι χρόνῳ καὶ ὅσα ἂν ἄλλως μέλλῃ ἀποθανεῖσθαι ἐκ τοῦ τρώματος, ὁ νεώτερος τοῦ πρεσβυτέρου θᾶσσον ἀπόλλυται. Ἀλλὰ χρῆ, ἦν ψιλωθῆ τῆς σαρκὸς τὸ ὀστέον, προσέχοντα τὸν νόον, πειρηθῆσθαι διαγινώσκειν ὅ τι μὴ ἐστὶ τοῖσιν ὀφθαλμοῖσιν ἰδεῖν, καὶ γνῶναι εἰ ἔρρωγε τὸ ὀστέον καὶ εἰ πέφλασται, ἢ μοῦνον πέφλασται, καὶ εἰ, ἔδρης γενομένης τοῦ βέλεος, πρόσεστι φλάσις, ἢ ῥωγμῆ, ἢ ἄμφω ταῦτα καὶ ἦν τι τούτων πεπόνθη τὸ ὀστέον, ἀφεῖναι τοῦ αἵματος τρυπῶντα τὸ ὀστέον σμικρῶ τρυπᾶνῳ, φυλασσόμενον ἐπ' ὀλίγον λεπτότερον γὰρ τὸ ὀστέον, καὶ ἐπιπολαιότερον τῶν νέων ἢ τῶν πρεσβυτέρων.

19. Ὅστις δὲ μέλλει ἐκ τρωμάτων ἐν κεφαλῇ ἀποθνήσκειν, καὶ

μὴ δυνατὸν αὐτὸν ὑγιᾶ γενέσθαι, μηδὲ σωθῆναι, ἐκ τῶνδε τῶν σημείων χρῆ τὴν διάγνωσιν ποιέεσθαι τοῦ μέλλοντος ἀποθνήσκειν, καὶ προλέγειν τὸ μέλλον ἔσεσθαι. Πάσχει γὰρ τάδε ὁκόταν τις ὀστέον κατεηγὸς, ἢ ἔρρωγὸς, ἢ πεφλασμένον, ἢ ὄτῳ γοῦν τρόπῳ κατεηγὸς μὴ ἐννοήσας ἀμάρτη, καὶ μήτε ξύση, μήτε πρίση, δεόμενον, μεθῆ δὲ ὡς ὑγίεος ὄντος τοῦ ὀστέου, πρὸ τῶν τεσσαρεσκαίδεκα ἡμερέων πυρετὸς ἐπιλήψεται ὡς ἐπὶ πούλῳ ἐν χειμῶνι ἐν δὲ τῷ θέρει μετὰ τὰς ἐπτὰ ἡμέρας ὁ πυρετὸς ἐπιλαμβάνει. Καὶ ἐπειδὴν τοῦτο γένηται, τὸ ἔλκος ἄχρουν γίνεται καὶ ἐξ αὐτοῦ ἰχώρ ῥέει σμικρὸς καὶ τὸ φλεγμαῖνον ἐκτέθνηκεν ἐξ αὐτοῦ καὶ γλισχρῶδες γίνεται,

καὶ φαίνεται ὡσπερ τάριχος, χροίην πυρρὸν, ὑποπέλιον καὶ τὸ ὀστέον σφακελίζειν τηνικαῦτα ἄρχεται, καὶ γίνεται περκνόν, λευκὸν ὄν, τελευταῖον δὲ ἔπωχρον γενόμενον ἢ ἔκλευκον. Ὅταν δ' ἤδη ὑπόπυον ἦ, ἐπὶ τῇ γλώσση φλυκταῖναι γίνονται, καὶ παραφρονέων τελευτᾶ. Καὶ σπασμὸς ἐπιλαμβάνει τοὺς πλείστους τὰ ἐπὶ θάτερα τοῦ σώματος ἦν μὲν ἐν τῷ ἐπ' ἀριστερὰ τῆς κεφαλῆς ἔχη τὸ ἔλκος, τὰ ἐπὶ δεξιὰ τοῦ σώματος ὁ σπασμὸς λαμβάνει ἦν δ' ἐν τῷ ἐπὶ δεξιὰ τῆς κεφαλῆς ἔχη τὸ ἔλκος, τὰ ἐπ' ἀριστερὰ τοῦ σώματος ὁ σπασμὸς ἐπιλαμβάνει. Εἰσὶ δ' οἱ καὶ ἀπόπληκτοι γίνονται. Καὶ οὕτως ἀπόλλυνται πρὸ ἐπτὰ ἡμερέων ἐν θέρει, ἢ τεσσάρων καὶ δέκα ἐν χειμῶνι. Ὅμοίως δὲ τὰ σημεῖα ταῦτα σημαίνει, καὶ ἐν πρεσβυτέρῳ ἐόντι τῷ τρώματι, ἢ καὶ ἐν νεωτέρῳ. Ἀλλὰ χρῆ, εἰ ἐννοοίης τὸν πυρετὸν ἐπιλαμβάνοντα, καὶ τῶν ἄλλων τι σημεῖον τούτῳ προσγενόμενον, μὴ διατρίβειν, ἀλλὰ πρίσαντα τὸ ὀστέον πρὸς τὴν μήνιγγα, ἢ καταξύσαντα τῷ ξυστήρι εὐπριστον δὲ γίνεται καὶ εὐξύστον, ἔπειτα τὰ λοιπὰ οὕτως ἰητρεύειν, ὅπως ἂν δοκέῃ ξυμφέρειν, πρὸς τὸ γινόμενον ὄρων.



20. Ὄταν δ' ἐπὶ τρώματι ἐν κεφαλῇ ἀνθρώπου ἢ πεπρωμένου ἢ ἀπριώτου, ἐπιλωμένου δὲ τοῦ ὀστέου, οἴδημα ἐπιγένηται ἐρυθρὸν καὶ ἐρυσιπελατῶδες ἐν τῷ προσώπῳ, καὶ ἐν τοῖσιν ὀφθαλμοῖσιν

ἀμφοτέροισιν, ἢ τῷ ἐτέρῳ, καὶ, εἴ τις ἄπτοιτο τοῦ οἰδήματος, ὀδυνῶτο, καὶ πυρετὸς ἐπιλαμβάνοι καὶ ῥίγος, τὸ δὲ ἔλκος αὐτό τε ἀπὸ τῆς σαρκὸς καλῶς ἔχει ἰδέσθαι, καὶ τὰπὸ τοῦ ὀστέου, καὶ τὰ περιέχοντα τὸ ἔλκος ἔχει καλῶς, πλὴν τοῦ οἰδήματος τοῦ ἐν τῷ προσώπῳ, καὶ ἄλλην ἀμαρτάδα μηδεμίαν ἔχει τὸ οἴδημα τῆς ἄλλης διαίτης, τούτου χρὴ τὴν κάτω κοιλίην ὑποκαθῆραι φαρμάκῳ, ὃ τι χολὴν ἄγει καὶ οὕτω καθαρθέντος, ὃ τε πυρετὸς ἀφήσιν, καὶ τὸ οἴδημα καθίσταται, καὶ ὑγιῆς γίνεται. Τὸ δὲ φάρμακον χρὴ δίδοναι πρὸς τὴν δύναμιν τοῦ ἀνθρώπου ὀρῶν, ὡς ἂν ἔχη ἰσχύος.

21. Περὶ δὲ πρίσιος, ὅταν καταλάβῃ ἀνάγκη πρίσαι ἄνθρωπον, ὧδε γινώσκειν ἦν ἐξ ἀρχῆς λαβὼν τὸ ἴημα πρίης, οὐ χρὴ ἐκπρίειν τὸ ὀστέον πρὸς τὴν μήνιγγα αὐτίκα οὐ γὰρ συμφέρει τὴν μήνιγγασιλὴν εἶναι τοῦ ὀστέου ἐπὶ πουλὸν χρόνον κακοπαθοῦσαν, ἀλλὰ τελευτῶσά πη καὶ διεμύδησεν. Ἔστι δὲ καὶ ἕτερος κίνδυνος, ἦν αὐτίκα ἀφαιρέης πρὸς τὴν μήνιγγα ἐκπρίσας τὸ ὀστέον, τρῶσαι ἐν τῷ ἔργῳ τῷ πρίονι τὴν μήνιγγα. Ἀλλὰ χρὴ πρίοντα,

ἐπειδὰν ὀλίγον πάνυ δέη διαπεπρίσθαι, καὶ ἤδη κινεῖται τὸ ὀστέον, παύσασθαι πρίοντα, καὶ ἔαν ἐπὶ τὸ αὐτόματον ἀποστῆναι τὸ ὀστέον. Ἐν γὰρ τῷ διαπριωτῷ ὀστέῳ καὶ ἐπιλελειμμένῳ τῆς πρίσιος οὐκ ἂν ἐπιγένοιτο κακὸν οὐδὲν λεπτὸν γὰρ τὸ λειπόμενον ἤδη γίνεται. Τὰ δὲ λοιπὰ ἰῆσθαι χρὴ, ὡς ἂν δοκῆ ξυμφέρειν τῷ ἔλκεϊ. Πρίοντα δὲ χρὴ πυκινὰ ἐξαιρέειν τὸν πρίονα τῆς θερμασίης εἵνεκα τοῦ ὀστέου, καὶ ὕδατι ψυχρῷ ἐναποβάπτειν. Θερμαινόμενος γὰρ ὑπὸ τῆς περιόδου ὁ πρίων, καὶ τὸ ὀστέον ἐκθερμαίνων καὶ ἀναξηραίνων, κατακαίει, καὶ μείζον ποιεῖ ἀφίστασθαι τὸ ὀστέον τὸ περιέχον τὴν πρίσιν, ἢ ὅσον μέλλει ἀφίστασθαι. Καὶ ἦν αὐτίκα βούλῃ ἐκπρίσαι τὸ πρὸς τὴν μήνιγγα, ἔπειτα ἀφελείν τὸ ὀστέον, ὡσαύτως χρὴ πυκινὰ τε ἐξαιρέειν τὸν πρίονα, καὶ ἐναποβάπτειν τῷ ὕδατι τῷ ψυχρῷ. Ἦν δὲ μὴ ἐξ ἀρχῆς λαμβάνῃς τὸ ἴημα, ἀλλὰ παρ' ἄλλου παραδέχη ὑστερίζων τῆς ἰήσιος, πρίονι χρὴ χαρακτῷ ἐκπρίειν μὲν αὐτίκα τὸ ὀστέον πρὸς τὴν μήνιγγα, θαμινὰ δὲ ἐξαιρεῦντα τὸν πρίονα σκοπεῖσθαι καὶ ἄλλως καὶ τῇ μήλῃ πέριξ κατὰ τὴν ὁδὸν τοῦ πρίονος. Καὶ γὰρ πουλὸ θᾶσσον διαπρίεται τὸ ὀστέον, ἦν ὑπόπυόν τε ἐῆν ἤδη καὶ διάπυον πρίης, καὶ πολλάκις τυγχάνει ἐπιπόλαιον ἐὸν τὸ ὀστέον, ἄλλως τε καὶ ἦν ταύτη τῆς κεφαλῆς ἢ τὸ τρώμα, ἢ τυγχάνει λεπτότερον ἐὸν τὸ ὀστέον ἢ παχύτερον. Ἀλλὰ φυλάσσεσθαι χρὴ, ὡς μὴ λάθῃς προσβαλὼν τὸν πρίονα, ἀλλ' ὅπη δοκῆ παχύτατον εἶναι τὸ ὀστέον, ἐς τοῦτο αἰεὶ ἐνστηρίζειν τὸν πρίονα, θαμινὰ σκοπούμενος, καὶ πειρᾶσθαι

## ἀνακινέων τὸ ὀστέον

ἀναβάλλειν, ἀφελῶν δὲ, τὰ λοιπὰ ἰητρεύειν ὡς ἂν δοκῆ ξυμφέρειν τῷ ἔλκει. Καὶ ἦν, ἐξ ἀρχῆς λαβὼν τὸ ἴημα, αὐτίκα βούλη ἐκπρίσας τὸ ὀστέον ἀφελεῖν ἀπὸ τῆς μήνιγγος, ὡσαύτως χρῆ πυκινὰ τε σκοπεῖσθαι τῇ μήλῃ τὴν περίοδον τοῦ πρίονος, καὶ ἐς τὸ παχύτατον ἀεὶ τοῦ ὀστέου τὸν πρίονα ἐνστηρίζειν, καὶ ἀνακινέων βούλεσθαι ἀφελέειν τὸ ὀστέον. Ἦν δὲ τρυπάνῳ χρῆ, πρὸς δὲ τὴν μήνιγγα μὴ ἀφικνέεσθαι, ἦν ἐξ ἀρχῆς λαμβάνων τὸ ἴημα τρυπᾶς, ἀλλ' ἐπιλιπεῖν τοῦ ὀστέου λεπτόν, ὡσπερ καὶ ἐν τῇ πρίσει γέγραπται.

## THE HIPPOCRATIC OATH - Ιπποκράτειος Όρκος

ὄμνυμι Ἀπόλλωνα ἰητρὸν καὶ Ἀσκληπιὸν καὶ Ὑγίαν καὶ Πανάκειαν καὶ θεοὺς πάντας τε καὶ πάσας, ἴστορας ποιούμενος, ἐπιτελέα ποιήσῃν κατὰ δύναμιν καὶ κρίσιν ἐμὴν ὄρκον τόνδε καὶ συγγραφὴν τήνδε: ἠγήσεσθαι μὲν τὸν διδάξαντά με τὴν τέχνην ταύτην ἴσα γενέτησιν ἐμοῖς, καὶ βίου κοινώσεσθαι, καὶ χρεῶν χρηρίζοντι μετάδοσιν ποιήσεσθαι, καὶ γένος τὸ ἐξ αὐτοῦ ἀδελφοῖς ἴσον ἐπικρινεῖν ἄρρεσι, καὶ διδάξῃν 10. τὴν τέχνην ταύτην, ἣν χρηρίζωσι μανθάνειν, ἄνευ μισθοῦ καὶ συγγραφῆς, παραγγελίης τε καὶ ἀκροήσιος καὶ τῆς λοιπῆς ἀπάσης μαθήσιος μετάδοσιν ποιήσεσθαι υἱοῖς τε ἐμοῖς καὶ τοῖς τοῦ ἐμὲ διδάξαντος, καὶ μαθητῆσι συγγεγραμμένοις τε καὶ ὠρκισμένοις νόμῳ ἰητρικῷ, ἄλλῳ δὲ οὐδενί. διαιτήμασί τε χρήσομαι ἐπ' ὠφελείῃ καμνόντων κατὰ δύναμιν καὶ κρίσιν ἐμὴν, ἐπὶ δηλήσει δὲ καὶ ἀδικίῃ εἴρξῃν. οὐ δώσω δὲ οὐδὲ φάρμακον οὐδενὶ αἰτηθεὶς θανάσιμον, οὐδὲ ὑψηγήσομαι συμ 20. βουλίην τοιήνδε: ὁμοίως δὲ οὐδὲ γυναικὶ πεσσὸν φθόριον δώσω. ἀγνῶς δὲ καὶ ὀσίως διατηρήσω βίον τὸν ἐμὸν καὶ τέχνην τὴν ἐμὴν. οὐ τεμέω δὲ οὐδὲ μὴν λιθιῶντας, ἐκχωρήσω δὲ ἐργάτησιν ἀνδράσι πρήξιος τῆσδε. ἐς οἰκίας δὲ ὀκόσας ἂν ἐσίω, ἐσελεύσομαι ἐπ' ὠφελείῃ καμνόντων, ἐκτὸς ἐὼν πάσης ἀδικίης ἐκουσίης καὶ φθορίας, τῆς τε ἄλλης καὶ ἀφροδισίων ἔργων ἐπὶ τε γυναικείων σωμάτων καὶ ἀνδρῶν, ἐλευθέρων τε καὶ δούλων. ἃ δ' ἂν ἐν θεραπείῃ ἢ ἴδω ἢ ἀκούσω, ἢ καὶ ἄνευ 30. θεραπείης κατὰ βίον ἀνθρώπων, ἃ μὴ χρή ποτε ἐκλαλεῖσθαι ἔξω, σιγήσομαι, ἄρρητα ἠγεύμενος εἶναι τὰ τοιαῦτα. ὄρκον μὲν οὖν μοι τόνδε ἐπιτελέα ποιέοντι, καὶ μὴ συγγέοντι, εἴη ἐπαύρασθαι καὶ βίου καὶ τέχνης δοξαζομένῳ παρὰ πᾶσιν ἀνθρώποις ἐς τὸν αἰεὶ χρόνον: παραβαίνοντι δὲ 36. καὶ ἐπιορκέοντι, τάναντία τούτων.

## THE LAW - Νομος

1. Ἱητρικὴ τεχνέων μὲν πασέων ἐστὶν ἐπιφανεστάτη. διὰ δὲ ἀμαθίην τῶν τε χρεομένων αὐτῇ, καὶ τῶν εἰκῆ τοὺς τοιούσδε κρινόντων, πολὺ τι πασέων ἤδη τῶν τεχνέων ἀπολείπεται. Ἡ δὲ τῶνδε ἀμαρτὰς τὰ μάλιστά μοι δοκέει ἔχειν αἰτίην τοιήνδε. πρόστιμον γὰρ ἱητρικῆς μούνης ἐν τῆσι πόλεσιν οὐδὲν ὠρίσται, πλὴν ἀδοξίης. αὕτη δὲ οὐ τιτρώσκει τοὺς ἐξ αὐτέης συγκειμένους. Ὅμοιότατοι γὰρ εἰσιν οἱ τοιοῖδε τοῖσι παρειαγομένοισι προσώποισιν ἐν τῆσι τραγωδίησιν. ὡς γὰρ ἐκεῖνοι σχῆμα μὲν καὶ στολὴν καὶ πρόσωπον ὑποκριτοῦ ἔχουσιν, οὐκ εἰσὶ δὲ ὑποκριταί, οὕτω καὶ ἱητροί, φήμη μὲν πολλοί, ἔργῳ δὲ πάγχυ βαιοί.

2. Χρὴ γὰρ, ὅστις μέλλει ἱητρικῆς ζύνεσιν ἀτρεκέως ἀρμόζεσθαι, τῶνδὲ μιν ἐπήβολον γενέσθαι. φύσιος. διδασκαλίης. τόπου εὐφυέος. παιδομαθίης. φιλοπονίης. χρόνου. Πρῶτον μὲν οὖν πάντων δεῖ φύσιος. φύσιος γὰρ ἀντιπρησσοῦσης, κενεὰ πάντα. φύσιος δὲ ἐς τὸ ἄριστον ὀδηγεοῦσης, διδασκαλίη τέχνης γίνεται. ἦν μετὰ φρονήσιος δεῖ περιποιήσασθαι, παιδομαθέα γενόμενον ἐν τόπῳ, ὀκοῖος εὐφυῆς πρὸς μάθησιν ἔσται. ἔτι δὲ φιλοπονίην προσενέγκασθαι ἐς χρόνον πουλὺν, ὅκως ἢ μάθησις, ἐμφυσιωθεῖσα, δεξιῶς τε καὶ εὐαλδέως τοὺς καρποὺς ἐξενέγκηται.

3. Ὅκοίη γὰρ τῶν ἐν τῇ γῆ φυομένων [ἢ] θεωρήη, τοιήδε καὶ τῆς ἱητρικῆς ἢ μάθησις. Ἡ μὲν γὰρ φύσις ἡμέων, ὀκοῖον ἢ χώρα. τὰ δὲ δόγματα τῶν διδασκόντων, ὀκοῖον τὰ σπέρματα. ἢ δὲ παιδομαθίη, τὸ καθ' ὠρην αὐτὰ πεσεῖν εἰς τὴν ἄρουραν. ὁ δὲ τόπος ἐν ᾧ ἢ μάθησις, ὀκοῖον ἢ ἐκ τοῦ περιέχοντος ἡέρος τροφή γιγνομένη τοῖσι φυομένοισιν. ἢ δὲ φιλοπονίη, ἐργασίη. ὁ δὲ χρόνος ταῦτα ἐνισχύει πάντα, ὡς τραφῆναι τελέως.

4. Ταῦτα ὧν χρὴ ἐς τὴν ἱητρικὴν τέχνην ἐσενεγκαμένους, καὶ ἀτρεκέως αὐτέης γνῶσιν λαβόντας, οὕτως ἀνὰ τὰς πόλιας φοιτεῦντας, μὴ λόγῳ μόνον, ἀλλὰ καὶ ἔργῳ ἱητροὺς νομίζεσθαι. Ἡ δὲ ἀπειρίη, κακὸς θησαυρὸς καὶ κακὸν κειμήλιον τοῖσιν ἔχουσιν αὐτέην, καὶ ὄναρ καὶ ὕπαρ, εὐθυμίας τε καὶ εὐφροσύνης ἄμοιρος, δειλίης τε καὶ θρασύτητος τιθήνη. Δειλίη μὲν γὰρ ἀδυναμίην σημαίνει. θρασύτης δὲ, ἀτεχνίην. Δύο γὰρ, ἐπιστήμη τε καὶ δόξα, ὧν τὸ μὲν ἐπίστασθαι ποιέει, τὸ δὲ ἄγνοεῖν.

5. Τὰ δὲ ἱερὰ ἐόντα πρήγματα ἱεροῖσιν ἀνθρώποισι δείκνυται. βεβήλοισι δὲ, οὐ θέμις, πρὶν ἢ τελεσθῶσιν ὀργίοισιν ἐπιστήμης.

## THE PHYSICIAN'S ESTABLISHMENT - Κατ' ἰητροῖον

1. Ἡ ὁμοία ἢ ἀνόμοια ἐξ ἀρχῆς ἀπὸ τῶν μεγίστων, ἀπὸ τῶν ρηίστων, ἀπὸ τῶν πάντη πάντως γινωσκομένων. Ἄ καὶ ἰδεῖν, καὶ θιγεῖν, καὶ ἀκοῦσαι ἔστιν ἃ καὶ τῇ ὄψει, καὶ τῇ ἀφῆ, καὶ τῇ ἀκοῇ, καὶ τῇ ῥινί, καὶ τῇ γλώσση, καὶ τῇ γνώμῃ ἔστιν αἰσθέσθαι ἃ, οἷς γινώσκουμεν ἅπασιν, ἔστι γινῶναι.

2. Τὰ δ' ἐς χειρουργίην κατ' ἰητροῖον ὁ ἀσθενέων ὁ δρῶν οἱ

ὑπηρεταὶ τὰ ὄργανα τὸ φῶς ὅκου ὅκως ὅσα ὅκως ὅκου τὸ σῶμα, τὰ ἄρμενα ὁ χρόνος ὁ τρόπος ὁ τόπος.

3. Ὁ δρῶν, ἢ καθήμενος, ἢ ἐστεῶς, ξυμμέτρως πρὸς ἐωυτὸν, πρὸς τὸ χειριζόμενον, πρὸς τὴν αὐγήν. Αὐγέης μὲν οὖν δύο εἶδεα, τὸ μὲν κοινόν, τὸ δὲ τεχνητόν. Τὸ μὲν οὖν κοινόν οὐκ ἐφ' ἡμῖν τὸ δὲ τεχνητόν, καὶ ἐφ' ἡμῖν. Ὡν ἑκατέρου δισσαὶ χρήσεις, ἢ πρὸς αὐγήν, ἢ ὑπ' αὐγήν. Ὑπ' αὐγήν μὲν οὖν ὀλίγη τε ἢ χρῆσις, καταφανής τε ἢ μετριότης. Τὰ δὲ πρὸς αὐγήν ἐκ τῶν παρεουσέων, ἐκ τῶν ξυμφερουσέων αὐγέων, πρὸς τὴν λαμπροτάτην τρέπειν τὸ χειριζόμενον πλὴν ὀκόσα λαθεῖν δεῖ, ἢ ὀρηῖν αἰσχροῖν οὕτω δὲ τὸ μὲν χειριζόμενον ἐναντίον τῇ αὐγῇ, τὸν δὲ χειρίζοντα, ἐναντίον τῷ χειριζομένῳ, πλὴν ὥστε μὴ ἐπισκοτάζειν οὕτω

γὰρ ἂν ὁ μὲν δρῶν ὀρώη, τὸ δὲ χειριζόμενον οὐχ ὀρῶτο. Πρὸς ἐωυτὸν δὲ, καθημένῳ πόδες ἐς τὴν ἄνω ἴξιν κατ' ἰθὺ γούνασιν διάστασιν δὲ, ὀλίγον ξυμβεβῶτες γούνατα δὲ ἀνωτέρω βουβῶνων σμικρὸν, διάστασιν δὲ, ἀγκῶνων θέσει καὶ παραθέσει. Ἰμάτιον, εὐσταλέως, εὐκρινέως, ἴσως, ὀμοίως, ἀγκῶσιν, ὀμοίσιν. Πρὸς δὲ τὸ χειριζόμενον, τοῦ μὲν πρόσω καὶ ἐγγὺς, καὶ τοῦ ἄνω, καὶ τοῦ κάτω, καὶ ἔνθα ἢ ἔνθα, ἢ μέσον. Τοῦ μὲν πρόσω καὶ ἐγγὺς ὀριον, ἀγκῶνας ἐς μὲν τὸ πρόσθεν γούνατα μὴ ἀμείβειν, ἐς δὲ τὸ ὀπισθεν, πλευράς τοῦ δὲ ἄνω, μὴ ἀνωτέρω μαζῶν ἄκρας

χεῖρας ἔχειν τοῦ δὲ κάτω, μὴ κατωτέρω, ἢ ὡς τὸ στῆθος ἐπὶ γούνασιν ἔχοντα, ἔχειν ἄκρας χεῖρας ἐγγωνίους πρὸς βραχίονας τὰ μὲν κατὰ μέσον οὕτως τὰ δὲ ἔνθα, ἢ ἔνθα, μὴ ἔξω τῆς ἔδρης, κατὰ λόγον δὲ τῆς ἐπιτροφῆς προσβαλλόμενον τὸ σῶμα, καὶ τοῦ σώματος τὸ ἐργαζόμενον. Ἐστεῶτα δὲ, ἰδεῖν μὲν ἐπ' ἀμφοτέρων βεβῶτα ἐξ ἴσου τῶν ποδῶν ἄλῃς, δρῆν δὲ τῷ ἐτέρῳ ἐπιβεβῶτα, μὴ τῷ κατὰ τὴν δρῶσαν χεῖρα ὕψος γούνατος πρὸς βουβῶνας, ὡς ἐν ἔδρῃ καὶ τὰ ἄλλα ὀρια τὰ αὐτά. Ὁ δὲ χειριζόμενος τῷ χειρίζοντι τῷ ἄλλῳ τοῦ σώματος μέρει

ὑπηρετεῖτω, ἢ ἔστεως, ἢ καθήμενος, ἢ κείμενος, ὅκως ἂν ῥήϊστα, ὃ δεῖ, σχῆμα ἔχων διατελέη, φυλάσσωσιν ὑπόρρυσιν,

ὑπόστασιν, ἔκτρεψιν, καταντίαν, ὡς ὃ δεῖ, σώζεται καὶ σχῆμα καὶ εἶδος τοῦ χειριζομένου, ἐν παρέξει, ἐν χειρισμῶ, ἐν τῇ ἔπειτα ἔξει.

4. Ὅνουχας μῆτε ὑπερέχειν, μῆτε ἐλλείπειν δακτύλων κορυφῆσι

χρῆσις ἀσκέειν, δακτύλοισι μὲν ἄκροις, τὰ πλεῖστα λιχανῶ πρὸς μέγαν ὄλη δὲ, καταπρηνεῖ ἀμφοτέρησι δὲ, ἐναντίησιν δακτύλων εὐφυῖα, μέγα τὸ ἐν μέσῳ τῶν δακτύλων, καὶ ἀπεναντίον τὸν μέγαν τῷ λιχανῶ. Νοῦσος δὲ δι' ἣν καὶ βλάπτονται, οἷσιν ἐκ γενεῆς ἢ ἐν τροφῇ εἴθισται ὁ μέγας ὑπὸ τῶν ἄλλων

δακτύλων κατέχεσθαι, δῆλον. Τὰ ἔργα πάντα ἀσκέειν ἕκα τέρη δρῶντα, καὶ ἀμφοτέρησιν ἅμα ὁμοιαὶ γὰρ εἰσιν ἀμφοτέραί, στοχαζόμενον ἀγαθῶς, καλῶς, ταχέως, ἀπόνως, εὐρύθμως, εὐπόρως.

5. Ὅργανα μὲν, καὶ ὅτε, καὶ οἷως, εἰρήσεται ὅκου δεῖ μὴ ἐμποδῶν τῷ ἔργῳ, μηδὲ ἐμποδῶν τῇ ἀναίρεσει, παρὰ τὸ ἐργαζόμενον δὲ τοῦ σώματος ἄλλος δὲ ἦν διδῶ, ἔτοιμος ὀλίγῳ πρότερον ἔστω, ποιεῖτω δὲ, ὅταν κελεύης.

6. Οἱ δὲ περὶ τὸν ἀσθενέοντα τὸ μὲν χειριζόμενον παρεχόντων, ὡς ἂν δοκῆ τὸ δὲ ἄλλο σῶμα κατεχόντων, ὡς ἂν ἀτρεμέη, σιγῶντες, ἀκούοντες τοῦ ἐφεστεῶτος.

7. Ἐπίδεσις δύο εἶδεα, εἰργασμένον, καὶ ἐργαζόμενον. Ἐργαζόμενον μὲν, ταχέως, ἀπόνως, εὐπόρως, εὐρύθμως ταχέως μὲν, ἀνύειν τὰ ἔργα ἀπόνως δὲ, ῥηϊδίως δρῆν εὐπόρως δὲ, ἐς πᾶν ἐτοιμῶς εὐρύθμως δὲ, ὀρῆσθαι ἡδέως ἄφ' ὧν δὲ ταῦτα ἀσκημάτων, εἴρηται. Εἰργασμένον δὲ ἀγαθῶς, καλῶς καλῶς μὲν, ἀπλῶς, εὐκρινέως ἢ ὁμοια καὶ ἴσα, ἴσως καὶ ὁμοίως ἢ ἄνισα καὶ ἀνόμοια [, ἀνίσως καὶ ἀνομοίως] τὰ δὲ εἶδεα, ἀπλοῦν,

σκέπαρνον, σιμὸν, ὀφθαλμὸς, ῥόμβος, καὶ ἡμίτομον ἀρμόζον τὸ εἶδος τῷ εἶδει καὶ τῷ πάθει τοῦ ἐπιδεομένου.

8. Ἀγαθὰ δὲ δύο εἶδεα τοῦ ἐπιδεομένου ἰσχύος μὲν,

ἢ πιέξει, ἢ πλήθει ὀθονίων. Τὸ μὲν οὖν, αὐτῆ ἢ ἐπίδεσις ἰῆται, τὸ δὲ τοῖσιν ἰωμένοισιν ὑπηρετεῖ. Ἐς μὲν οὖν ταῦτα νόμος ἐν δὲ τουτέοισι μέγιστα ἐπίδεσις πίεξις μὲν, ὥστε τὰ ἐπικείμενα μὴ ἀφεστάναι, μηδὲ ἐρηρεῖσθαι κάρτα, ἀλλὰ ἡρμόσθαι μὲν, προσηναγκάσθαι δὲ μὴ, ἦσσον μὲν τὰ ἔσχατα, ἦκιστα δὲ τὰ

μέσα. Ἄμμα, καὶ ράμμα νεμόμενον

μὴ κάτω, ἀλλ' ἄνω, ἐν παρέξει, καὶ σχέσει, καὶ ἐπιδέσει, καὶ πιέξει. Ἀρχὰς βάλλεσθαι μὴ ἐπὶ τὸ ἔλκος, ἀλλ' ἔνθα τὸ ἄμμα. Τὸ δὲ ἄμμα μῆτε ἐν τρίβῳ, μῆτε ἐν ἔργῳ,

μῆτε ἐκεῖσε, ὅκου ἐνεόν. Ἄμμα δὲ καὶ ράμμα μαλθακὸν, οὐ μέγα.

9. Εὖ γε μὴν γνόντα, ὅτι ἐς τὰ κατάντη καὶ ἀπόξη φεύγει

πᾶς ἐπίδεσμος, οἶον, κεφαλῆς μὲν τὸ ἄνω, κνήμης δὲ τὸ κάτω. Ἐπιδεῖν δεξιὰ ἐπ' ἀριστερὰ, ἀριστερὰ ἐπὶ δεξιὰ, πλὴν τῆς κεφαλῆς ταύτην δὲ κατ' ἴξιν. Τὰ δ' ὑπεναντία, ἀπὸ δύο ἀρχέων ἦν δὲ ἀπὸ μιῆς, ἐφ' ὅμοιον ἐς τὸ μόνιμον, οἶον τὸ μέσον τῆς κεφαλῆς, ἢ ὅ τι ἄλλο τοιοῦτον. Τὰ δὲ κινεύμενα, οἶον ἄρθρα, ὅπη μὲν ξυγκάμπτεται, ὡς ἦκιστα, καὶ εὐσταλέστατα περιβάλλειν, οἶον ἰγνύη ὅπη δὲ περιτείνεται, ἀπλᾶ τε καὶ πλατέα, οἶον μύλη προσπεριβάλλειν δὲ καταλήψιος μὲν τῶν περὶ ταῦτα εἵνεκα, ἀναλήψιος δὲ τοῦ ξύμπαντος ἐπίδεσμος, ἐν τοῖσιν ἀτρεμέουσι

καὶ λαπαρωτέροισι τοῦ σώματος, οἶον τὸ ἄνω καὶ τὸ κάτω τοῦ γούνατος ὁμολογέει δὲ ὤμου μὲν ἢ περὶ τὴν ἐτέρην μασχάλην περιβολή, βουβῶνος δὲ, ἢ περὶ τὸν ἕτερον ἐνεῶνα, καὶ κνήμης, ἢ ὑπὲρ γαστροκνημίας. Ὀκόσοισι μὲν ἄνω ἢ φυγή, κάτωθεν ἢ ἀντίληψις οἷσι δὲ κάτω, τούναντίον οἷσι δὲ μὴ ἔστι, οἶον κεφαλῆ, τουτέων ἐν τῷ ὀμαλωτάτῳ τὰς καταλήψιας ποιέεσθαι, καὶ ἦκιστα λοξῶ τῷ ἐπίδεσμῳ χρέεσθαι, ὡς τὸ μονιμώτατον ὕστατον περιβληθὲν τὰ πλανωδέστατα κατέχη. Ὀκόσοισι δὲ τοῖσιν ὀθονίοισι μὴ εὐκαταλήπτως, μηδὲ εὐαναλήπτως ἔχει, ράμμασι τὰς ἀναλήψιας ποιέεσθαι ἐκ καταβολῆς ἢ ξυρῶραφῆς.

10. Ἐπιδέσματα καθαρὰ, κοῦφα, μαλθακὰ, λεπτά. Ἐλίσσειν ἀμφοτέρησιν ἄμμα, καὶ ἐκατέρη χωρὶς ἀσκέειν. Τῇ πρεπούση δὲ, ἐς τὰ πλάτη καὶ τὰ πάχη τῶν μορίων τεκμαιρόμενον,

χρέεσθαι. Ἐλίξιος κεφαλαὶ σκληραὶ, ὀμαλαὶ, εὐκρινέες. Τὰ δὲ δὴ μέλλοντα ἀποπίπτειν κακίῳ ταχέως ἀποπεσόντων τὰ δὲ, ὡς μῆτε πιέζειν, μῆτε ἀποπίπτειν.

11. Ὡν δὲ ἔχεται ἢ ἐπίδεσις, ἢ ὑπόδεσις, ἢ ἀμφότερα ὑπόδεσις μὲν αἰτίη, ὥστε ἢ ἀφεστεῶτα προστεῖλαι, ἢ ἐκπεπταμένα συστεῖλαι, ἢ ξυνεσταλμένα διαστεῖλαι, ἢ διεστραμμένα διορθῶσαι, ἢ τάναντία. Παρασκευάζειν δὲ ὀθόνια κοῦφα, λεπτά, μαλθακὰ, καθαρὰ, πλατέα, μὴ ἔχοντα ξυρῶραφὰς, μηδ' ἐξαστίας, καὶ ὑγία, ὥστε τάνυσιν φέρειν, καὶ ὀλίγῳ κρέσσω, μὴ ξηρὰ, ἀλλ' ἔγχυμα χυμῶ, ᾧ ἕκαστα

ζύντροφα. Αφεστεῶτα μὲν, ὥστε τὰ μετέωρα τῆς ἔδρης ψαύειν μὲν, πιέζειν δὲ μὴ ἄρχεσθαι δὲ ἐκ τοῦ ὑγιέος, τελευτᾶν δὲ

πρὸς τὸ ἔλκος, ὡς τὸ μὲν ὑπεὸν ἐξαθέλγηται, ἕτερον δὲ μὴ ἐπιζυλλέγηται ἐπιδεῖν τὰ μὲν ὀρθὰ ἐς ὀρθόν, τὰ δὲ λοξὰ λοξῶς, ἐν σχήματι ἀπόνω, ἐν ᾧ μήτε ἀπόσφιγξις, μήτε ἀπόστασις ἔσται τις, ἐξ οὗ, ὅταν μεταλλάσῃ ἢ ἐς ἀνάληψιν ἢ ἐς θέσιν, οὐ μεταλλάξουσιν, ἀλλ' ὅμοια ταῦτα ἔξουσιν, μύες, φλέβες, νεῦρα, ὅστέα, ἧ μάλιστα εὐθετα καὶ εὐσχετα ἀναλελάφθαι δὲ, ἢ κέεσθαι ἐν σχήματι ἀπόνω τῷ κατὰ φύσιν ὧν δὲ

ἂν ἀποστῇ, τάναντία. Ὡν δὲ ἐκπεπταμένα ζυστεῖλαι, τὰ μὲν ἄλλα κατὰ τὰ αὐτὰ, ἐκ πολλοῦ δὲ τινος δεῖ τὴν ζυναγωγὴν, καὶ ἐκ προσαγωγῆς τὴν πίεξιν, τὸ πρῶτον ἦκιστα, ἔπειτα ἐπὶ μᾶλλον, ὄριον τοῦ μάλιστα τὸ ζυμψαύειν. Ὡν δὲ ζυνεσταλμένα διαστεῖλαι, ζὺν μὲν φλεγμονῇ τάναντία ἄνευ δὲ ταύτης, παρασκευῆ μὲν τῇ αὐτῇ, ἐπιδέσει δὲ ἐναντίη. Διεστραμμένα δὲ διορθῶσαι, τὰ μὲν ἄλλα κατὰ τὰ αὐτὰ δεῖ δὲ τὰ μὲν ἀπεληλυθότα ἐπαγαγεῖν ὑποδέσει, παρακολλήσει, ἀναλήψει τὰ δὲ ἐναντία, ἐναντίως.

12. Κατήγμασι δὲ, σπληνῶν μήκεα, πλάτεα, πάχεα, πλήθεα

μῆκος, ὄση ἢ ἐπίδεσις πλάτος τριῶν ἢ τεσσάρων δακτύλων πάχος, τριπτύχους ἢ τετραπτύχους πλῆθος, κυκλεῦντας μὴ ὑπερβάλλειν, μηδὲ ἐλλείπειν οἷσι δὲ ἐς διόρθωσιν, μῆκος, κυκλεῦντα πλάτος καὶ πάχος τῇ ἐνδείῃ τεκμαίρεσθαι, μὴ ἀθρόα πληρεῦντα. Τῶν δὲ ὀθονίων ὑποδεσμίδες εἰσὶ δύο τῇ πρώτῃ ἐκ τοῦ σίνεος ἐς τὸ ἄνω τελευτώση, τῇ δὲ δευτέρῃ, ἐκ τοῦ σίνεος ἐς τὸ κάτω, ἐκ τοῦ κάτω ἐς τὸ ἄνω τελευτώση τὰ κατὰ τὸ σίνος πιέζειν μάλιστα, ἦκιστα τὰ ἄκρα, τὰ δὲ ἄλλακατὰ λόγον. Ἡ δὲ ἐπίδεσις πουλὸν τοῦ ὑγιέος προσλαμβάνετω. Ἐπιδέσμων δὲ πλῆθος, μῆκος, πλάτος πλῆθος μὲν, μὴ ἥσασθαι τοῦ σίνεος, μηδὲ νάρθηξιν ἐνέρεισιν εἶναι, μηδὲ ἄχθος, μηδὲ περιόρεισιν, μηδὲ ἐκθήλωνσιν μῆκος δὲ καὶ πλάτος, τριῶν, ἢ τεσσάρων,

ἢ πέντε, ἢ ἕξ, πήχεων μὲν μῆκος, δακτύλων δὲ πλάτος. Καὶ παραιρήματος περιβολαὶ τοσαῦται, ὥστε μὴ πιέζειν μαλθακὰ δὲ, μὴ παχέα ταῦτα πάντα, ὡς ἐπὶ μήκει καὶ πλάτει καὶ πάχει τοῦ παθόντος. Νάρθηκες δὲ λεῖοι, ὀμαλοὶ, σιμοὶ κατ' ἄκρα, σμικρῶ μείους ἔνθεν καὶ ἔνθεν τῆς ἐπιδέσιος, παχύτατοι δὲ, ἧ ἐξήριπε τὸ κήτηγμα. Ὀκόσα δὲ κυρτὰ καὶ ἄσαρκα φύσει, φυλασσόμενον τῶν ὑπερεχόντων, οἷον κατὰ δακτύλους ἢ σφυρὰ, ἢ τῇ θέσει, ἢ τῇ βραχύτητι. Παραιρήμασι δὲ ἐρμάζειν,



μὴ πιέζειν τὸ πρῶτον. Κηρωτῆ μαλθακῆ, καὶ λείη, καὶ καθαρῆ ἐλισσέσθω.

13. Ὑδατος θερμότης, πλῆθος θερμότης μὲν, κατὰ τῆς ἐωυτοῦ χειρὸς καταχεῖν πλῆθος δὲ, χαλάσαι μὲν καὶ ἰσχνῆναι τὸ

πλεῖστον, ἄριστον, σαρκῶσαι δὲ καὶ ἀπαλῦναι, τὸ μέτριον μέτρον δὲ τῆς καταχύσιος, ἔτι μετεωριζομένου, δεῖ, πρὶν ξυμπίπτειν, παύεσθαι τὸ μὲν γὰρ πρῶτον αἴρεται, ἔπειτα δὲ ἰσχναίνεται.

14. Θέσις δὲ μαλθακῆ, ὁμαλῆ, ἀνάρροπος τοῖσιν ἐξέχουσι τοῦ σώματος, οἷον πτέρνη καὶ ἰσχύω, ὡς μήτε ἀνακλᾶται, μήτε ἀποκλᾶται, μήτε ἐκτρέπηται. Σωλῆνα παντὶ τῷ σκέλει, ἢ ἡμίσει ἐς τὸ πάθος δὲ βλέπειν καὶ τᾶλλα ὅσα βλάπτει δῆλα.

15. Πάρεξις δὲ, καὶ διάτασις, καὶ ἀνάπλασις, καὶ τὰ ἄλλα κατὰ φύσιν. Φύσις δὲ ἐν μὲν ἔργοις, τοῦ ἔργου τῆς πρήξει, ὃ βούλεται, τεκμαρτέον ἐς δὲ ταῦτα, ἐκ τοῦ ἐλινύοντος, ἐκ τοῦ κοινοῦ,

ἐκ τοῦ ἔθεος ἐκ μὲν τοῦ ἐλινύοντος καὶ ἀφειμένου, τὰς ἰθυωρίας σκέπτεσθαι, οἷον τὸ τῆς χειρὸς ἐκ δὲ τοῦ κοινοῦ, ἔκτασιν, ζύγκαμψιν, οἷον τὸ ἐγγὺς τοῦ ἐγγωνίου πήχεος πρὸς βραχίονα ἐκ δὲ τοῦ ἔθεος, ὅτι οὐκ ἄλλα σχήματα φέρειν δυνατώτερον, οἷον σκέλεα ἔκτασιν ἀπὸ τουτέων γὰρ ῥήϊστα πλεῖστον χρόνον ἔχοι ἂν μὴ μεταλλάσσοντα. Ἐν δὲ τῆ μεταλλαγῇ ἐκ διατάσιος ὅμοια ταῦτα ἔξουσιν ἐς ἕξιν ἢ θέσιν μύες, φλέβες, νεῦρα, ὀστέα, ἢ μάλιστα εὐθετα καὶ εὐσχετα.

16. Διάτασις μάλιστα, τὰ μέγιστα καὶ πάχιστα, καὶ ὅκου ἀμφοτέρα δεύτερα, ὧν τὸ ὑποτεταγμένον ἥκιστα, ὧν τὸ ἄνω

μᾶλλον δὲ τοῦ μετρίου, βλάβη, πλὴν παιδίων ἔχειν ἀνάντη σμικρόν. Διορθώσιος παράδειγμα, τὸ ὁμώνυμον, τὸ ὁμόζυγον, τὸ ὅμοιον, τὸ ὑγιές.

17. Ἀνάτριψις δύναται λῦσαι, δῆσαι, σαρκῶσαι, μινυθῆσαι ἢ σκληρῆ, δῆσαι ἢ μαλακῆ, λῦσαι ἢ πολλῆ, μινυθῆσαι ἢ μετρίη, παχῦναι.

18. Ἐπιδεῖν δὲ τὸ πρῶτον ὁ μὲν ἐπιδεδεμένος μάλιστα φάτω πεπιέχθαι κατὰ τὸ σίνος, ἥκιστα τὰ ἄκρα ἠρμάσθαι δὲ, μὴ πεπιέχθαι πλήθει, μὴ ἰσχυῖ τὴν δὲ ἡμέρη ταύτην καὶ νύκτα, ὀλίγῳ μᾶλλον, τὴν δ' ὑστέρη, ἥσσον τρίτη, χαλαρά. Εὐρεθῆτω δὲ τῆ μὲν ὑστεραίῃ ἐν ἄκροισιν οἴδημα μαλθακόν τῆ τρίτη δὲ τὸ ἐπιδεθὲν λυθὲν, ἰσχνότερον, παρὰ πάσας τὰς

ἐπιδέσιας τοῦτο. Τῇ δὲ ὑστεραίῃ ἐπιδέσει, ἣν δικαίως ἐπιδεδεμένον φανῆ, μαθεῖν δεῖ ἐντεῦθεν δὲ μᾶλλον καὶ ἐπὶ πλέοσι πιεχθῆτω τῇ δὲ τρίτῃ ἐπὶ μᾶλλον καὶ ἐπὶ πλέοσιν. Τῇ δὲ ἐβδόμῃ ἀπὸ τῆς πρώτης ἐπιδέσιος λυθέντα, εὐρεθήτω ἰσχνὰ, χαλαρὰ τὰ ὀστέα. Ἐς δὲ νάρθηκας, δεθέντα, ἣν ἰσχνὰ καὶ ἄκνησμα καὶ ἀνέλκεα ἦ, ἔῤῃν μέχρις εἴκοσιν ἡμερέων ἀπὸ τοῦ σίνεος ἣν δέ τι ὑποπτεύεται, λῦσαι ἐν τῷ μέσῳ νάρθηκας διὰ τρίτης ἐρείδειν.

19. Ἡ ἀνάληψις, ἡ θέσις, ἡ ἐπίδεσις, ὡς ἐν τῷ αὐτῷ σχήματι διαφυλάσσειν. Κεφάλαια σχημάτων, ἔθεα, φύσιες ἐκάστου τῶν μελέων τὰ εἶδεα, ἐκ τοῦ τρέχειν, ὁδοιπορέειν, ἐστάναι, κατακεῖσθαι, ἐκ τοῦ ἔργου, ἐκ τοῦ ἀφεῖσθαι.

20. Ὅτι χρῆσις κρατύνει, ἀργίη δὲ τήκει.

21. Ἡ πίεξις πλήθει, μὴ ἰσχύϊ.

22. Ὅκοσα δὲ ἐκχυμώματα, ἡ φλάσματα, ἡ σπάσματα, ἡ οἰδήματα ἀφλέγμαντα, ἐξερύεται αἷμα ἐκ τοῦ τρώματος, ἐς μὲν τὸ ἄνω τοῦ σώματος πλεῖστον, βραχὺ δὲ τι καὶ ἐς τὸ κάτω μὴ κατάντη τὴν χεῖρα ἔχοντα, ἡ τὸ σκέλος τιθέμενον τὴν ἀρχὴν

κατὰ τὸ τρῶμα, καὶ μάλιστα ἐρείδοντα, ἡκιστα τὰ ἄκρα, μέσῳ τὰ διὰ μέσου τὸ ἔσχατον πρὸς τὰ ἄνω τοῦ σώματος νεμόμενον ἐπιδέσει, πίεξει ἀτὰρ καὶ ταῦτα, πλήθει μᾶλλον, ἡ ἰσχύϊ μάλιστα δὲ τουτέοισιν ὀθόνια λεπτὰ, κοῦφα, μαλθακὰ, καθαρὰ, πλατέα, ὑγέα, ὡς ἂν ἄνευ ναρθήκων καὶ καταχύσει χρῆσθαι.

23. Τὰ δὲ ἐκπτώματα, ἡ στρέμματα, ἡ διαστήματα, ἡ ἀποσπάσματα, ἡ ἀποκλάσματα, ἡ διαστρέμματα, οἷα τὰ κυλλὰ, τὰ ἑτερόρροπα, ὅθεν μὲν ἐξέστη, ξυνδιδόντα, ὅπη δὲ ξυντείνοντα, ὡς ἐς τάναντία ρέπη, ἐπιδεθέντα, ἡ πρὶν ἐπιδεθῆναι, σμικρῷ μᾶλλον, ἡ ὥστε ἐξ ἴσου εἶναι καὶ τοῖσιν ἐπιδέσμοισι, καὶ τοῖσι σπλήνεσι, καὶ τοῖσιν ἀναλήμμασι, καὶ τοῖσι σχήμασι, κατατάσει, ἀνατρίψει, διορθώσει, ταῦτα καὶ καταχύσει πλείονι.

24. Τὰ δὲ μινυθήματα, πουλὸν προσλαμβάνοντα τοῦ ὑγιέος, ἐπιδεῖν ὡς ἂν ἐξ ἐπιδρομῆς τὰ ξυντακέντα πλέον ἢ αὐτὰ ἐμινύθει,

ἀλλοίη τῇ ἐπιδέσει παραλλάξαντα, ἐκκλίνειν ἐς τὴν αὔξησιν καὶ ἀνάπλασιν τῶν σαρκῶν ποιήσεται. Βέλτιον δὲ καὶ τὸ ἄνωθεν, οἷον κνήμης, καὶ τὸν ἕτερον μηρὸν, καὶ τὸ σκέλος τὸ ὑγιές συνεπιδεῖν, ὡς ὁμοιότερον ἦ, καὶ ὁμοίως ἐλινύη, καὶ ὁμοίως τῆς τροφῆς ἀποκλείηται καὶ δέχεται ὀθονίων πλήθει, μὴ πίεξει ἀνιέντα πρῶτον τὸ μάλιστα δεόμενον, καὶ ἀνατρίψει χρώμενον σαρκούση, καὶ καταχύσει ἄνευ ναρθήκων.

25. Τὰ δὲ ἑρμάσματα καὶ ἀποστηρίγματα, οἷον στήθει, πλευρῆσι, κεφαλῇ, καὶ τοῖσιν ἄλλοισιν, ὅσα τοιαῦτα τὰ μὲν, σφυγμῶν ἕνεκεν, ὡς μὴ ἐνσεΐηται τὰ δὲ, καὶ τῶν διαστασίων τῶν κατὰ τὰς ἁρμονίας ἐν τοῖσι κατὰ τὴν κεφαλὴν ὀστέοισιν, ἑρμίσμάτων χάριν ἐπὶ τε βηχέων, ἢ παρμῶν, ἢ ἄλλης κινήσιος, οἷα τὰ κατὰ θώρηκα καὶ κεφαλὴν ἀποστηρίγματα γίνονται. Τουτέων ἀπάντων αἱ αὐταὶ ἑξυμετρίας τῆς ἐπιδέσιος ἢ μὲν γὰρ τὰ σίνη, μάλιστα πιέζει ὑποτιθέναι οὖν μαλθακόν τι ἁρμόζον τῷ πάθει ἐπιδεῖν δὲ μὴ μᾶλλον πιεζεῦντα, ἢ ὥστε τοὺς σφυγμοὺς μὴ ἐνσεΐειν, μηδὲ μᾶλλον ἢ ὥστε τῶν διεστηκότων τὰ ἔσχατα τῶν ἁρμονιῶν ψαύειν ἀλλήλων, μηδὲ τὰς

βῆχας καὶ τοὺς παρμῶν ὥστε κωλύειν, ἀλλ' ὥστε ἀποστήριγμα εἶναι, ὡς μήτε διαναγκάζεται, μήτε ἐνσεΐηται.

## The Dual Texts



*Sea of Marmara — Hippocrates was recorded as visiting here during his travels.*

# DUAL GREEK AND ENGLISH TEXTS



*Translated by Charles Darwin Adams and W. H. S. Jones*

In this section, readers can view a section by section text of Hippocrates' works, alternating between the original Greek and the English translations.

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## ON ANCIENT MEDICINE - Περὶ ἀρχαίας ἰητρικῆς

1. Ὅποσοι μὲν ἐπεχείρησαν περὶ ἰητρικῆς λέγειν ἢ γράφειν, ὑπόθεσιν αὐτοὶ αὐτοῖς ὑποθέμενοι τῷ λόγῳ, θερμὸν ἢ ψυχρὸν ἢ ὑγρὸν ἢ ξηρὸν ἢ ἄλλο τι ὃ ἂν θέλωσιν, ἐς βραχὺ ἄγοντες τὴν ἀρχὴν τῆς αἰτίας τοῖσι ἀνθρώποισι νούσων τε καὶ θανάτου, καὶ πᾶσι τὴν αὐτήν, ἐν ἣ δύο ὑποθέμενοι, ἐν πολλοῖσι μὲν καὶ οἷσι λέγουσι καταφανέες εἰσὶ ἀμαρτάνοντες, μάλιστα δὲ ἄξιον μέμψασθαι, ὅτι ἀμφὶ τέχνης ἐούσης, ἣ χρέονταί τε πάντες ἐπὶ τοῖσι μεγίστοισι καὶ τιμῶσι μάλιστα τοὺς ἀγαθοὺς χειροτέχνας καὶ δημιουργοὺς. εἰσὶν δὲ δημιουργοὶ οἱ μὲν φαῦλοι, οἱ δὲ πολλὸν διαφέροντες: ὅπερ, εἰ μὴ ἦν ἰητρικὴ ὅλως, μηδ' ἐν αὐτῇ ἔσκεπτο μηδ' εὖρητο μηδέν, οὐκ ἂν ἦν, ἀλλὰ πάντες ὁμοίως αὐτῆς ἄπειροί τε καὶ ἀνεπιστήμονες ἦσαν, τύχη δ' ἂν πάντα τὰ τῶν καμνόντων διοικεῖτο. νῦν δ' οὐχ οὕτως ἔχει, ἀλλ' ὥσπερ καὶ τῶν ἄλλων τεχνέων πασέων οἱ δημιουργοὶ πολλὸν ἀλλήλων διαφέρουσιν κατὰ χεῖρα καὶ κατὰ γνώμην, οὕτω δὲ καὶ ἐπὶ ἰητρικῆς. διὸ οὐκ ἠξίουσαν αὐτὴν ἔγωγε κενῆς ὑποθέσεως δεῖσθαι ὥσπερ τὰ ἀφανέα τε καὶ ἀπορεόμενα, περὶ ὧν ἀνάγκη, ἦν τις ἐπιχειρῆ τι λέγειν, ὑποθέσει χρῆσθαι, οἷον περὶ τῶν μετεώρων ἢ τῶν ὑπὸ γῆν: ἃ εἴ τις λέγοι καὶ γινώσκοι ὡς ἔχει, οὐτ' ἂν αὐτῷ τῷ λέγοντι οὕτε τοῖς ἀκούουσι δῆλα ἂν εἶη, εἴτε ἀληθέα ἐστὶν εἴτε μή. οὐ γὰρ ἔστι πρὸς ὃ τι χρὴ ἀνενέγκαντα εἰδέναι τὸ σαφές.

1. Whoever having undertaken to speak or write on Medicine, have first laid down for themselves some hypothesis to their argument, such as hot, or cold, or moist, or dry, or whatever else they choose (thus reducing their subject within a narrow compass, and supposing only one or two original causes of diseases or of death among mankind), are all clearly mistaken in much that they say; and this is the more reprehensible as relating to an art which all men avail themselves of on the most important occasions, and the good operators and practitioners in which they hold in especial honor. For there are practitioners, some bad and some far otherwise, which, if there had been no such thing as Medicine, and if nothing had been investigated or found out in it, would not have been the case, but all would have been equally unskilled and ignorant of it, and everything concerning the sick would have been directed by chance. But now it is not so; for, as in all the other arts, those who practise them differ much from one another in dexterity and knowledge, so is it in like manner with Medicine. Wherefore I have not thought that it stood in need of an empty hypothesis, like those subjects which are occult and dubious, in attempting to handle which it is necessary to use some hypothesis; as, for example, with regard to things above us and things below the earth; if any one should treat of these and undertake to declare how they are

constituted, the reader or hearer could not find out, whether what is delivered be true or false; for there is nothing which can be referred to in order to discover the truth.

2. Ἱητρικῆ δὲ πάλαι πάντα ὑπάρχει, καὶ ἀρχὴ καὶ ὁδὸς εὐρημένη, καθ' ἣν τὰ εὐρημένα πολλά τε καὶ καλῶς ἔχοντα εὕρηται ἐν πολλῶ χρόνῳ, καὶ τὰ λοιπὰ εὐρεθήσεται, ἣν τις ἰκανὸς τε ἐὼν καὶ τὰ εὐρημένα εἰδὼς ἐκ τούτων ὀρμώμενος ζητῆ. ὅστις δὲ ταῦτα ἀποβαλὼν καὶ ἀποδοκιμάσας πάντα, ἐτέρῃ ὁδῷ καὶ ἐτέρῳ σχήματι ἐπιχειρεῖ ζητεῖν, καὶ φησὶ τι ἐξευρηκέναι, ἐξηπάτηται καὶ ἐξαπατᾶται: ἀδύνατον γάρ: δι' ἃς δὲ ἀνάγκας ἀδύνατον, ἐγὼ πειρήσομαι ἐπιδειξάμενος, λέγων καὶ ἐπιδεικνύων τὴν τέχνην ὃ τι ἐστίν. ἐκ δὲ τούτου καταφανὲς ἔσται ἀδύνατα ἐόντα ἄλλως πῶς τούτων εὐρίσκεισθαι. μάλιστα δὲ μοι δοκεῖ περὶ ταύτης δεῖν λέγοντα τῆς τέχνης γνωστὰ λέγειν τοῖσι δημότησι. οὐ γὰρ περὶ ἄλλων τινῶν οὔτε ζητεῖν οὔτε λέγειν προσήκει ἢ περὶ τῶν παθημάτων ὧν αὐτοὶ οὔτοι νοσεουσί τε καὶ πονέουσι. αὐτοὺς μὲν οὖν τὰ σφέων αὐτῶν παθήματα καταμαθεῖν, ὡς γίνεται καὶ παύεται καὶ δι' οἷας προφάσις αὔξεταί τε καὶ φθίνει, δημότας ἐόντας οὐ ῥηίδιον: ὑπ' ἄλλου δὲ εὐρημένα καὶ λεγόμενα, εὐπετέες. οὐδὲν γὰρ ἕτερον ἢ ἀναμιμνήσκειται ἕκαστος ἀκούων τῶν αὐτῶ συμβαινόντων. εἰ δὲ τις τῆς τῶν ιδιωτέων γνώμης ἀποτεύξεται καὶ μὴ διαθήσει τοὺς ἀκούοντας οὕτως, τοῦ ἐόντος ἀποτεύξεται. καὶ διὰ ταῦτα οὖν ταῦτα οὐδὲν δεῖ ὑποθέσιος.

2. But all these requisites belong of old to Medicine, and an origin and way have been found out, by which many and elegant discoveries have been made, during a length of time, and others will yet be found out, if a person possessed of the proper ability, and knowing those discoveries which have been made, should proceed from them to prosecute his investigations. But whoever, rejecting and despising all these, attempts to pursue another course and form of inquiry, and says he has discovered anything, is deceived himself and deceives others, for the thing is impossible. And for what reason it is impossible, I will now endeavor to explain, by stating and showing what the art really is. From this it will be manifest that discoveries cannot possibly be made in any other way. And most especially, it appears to me, that whoever treats of this art should treat of things which are familiar to the common people. For of nothing else will such a one have to inquire or treat, but of the diseases under which the common people have labored, which diseases and the causes of their origin and departure, their increase and decline, illiterate persons cannot easily find out themselves, but still it is easy for them to understand these things when discovered and expounded by others. For it is nothing more than that every one is put in mind of what had occurred to himself. But whoever does not reach the capacity of the illiterate

vulgar and fails to make them listen to him, misses his mark. Wherefore, then, there is no necessity for any hypothesis.

3. Τὴν γὰρ ἀρχὴν οὐτ' ἂν εὐρέθη ἢ τέχνη ἢ ἰητρικὴ οὐτ' ἂν ἐζητήθη — οὐδὲν γὰρ αὐτῆς ἔδει-εἰ τοῖσι κάμνουσι τῶν ἀνθρώπων τὰ αὐτὰ διαιτωμένοισι τε καὶ προσφερομένοισι, ἅπερ οἱ ὑγιαίνοντες ἐσθίουσι τε καὶ πίνουσι καὶ τᾶλλα διαιτέονται, συνέφερον, καὶ μὴ ἦν ἕτερα τούτων βελτίω. νῦν δὲ αὐτὴ ἢ ἀνάγκη ἰητρικὴν ἐποίησεν ζητηθῆναι τε καὶ εὐρεθῆναι ἀνθρώποισι, ὅτι τοῖσι κάμνουσι ταῦτα προσφερομένοισι, ἅπερ οἱ ὑγιαίνοντες, οὐ συνέφερον, ὡς οὐδὲ νῦν συμφέρει. ἔτι δὲ ἄνωθεν ἔγωγε ἀξιῶ οὐδ' ἂν τὴν τῶν ὑγιαίνοντων διαίταν τε καὶ τροφήν, ἣ νῦν χρέονται, εὐρεθῆναι, εἰ ἐξήκει τῷ ἀνθρώπῳ ταῦτα ἐσθίοντι καὶ πίνοντι βοῖ τε καὶ ἵππῳ καὶ πᾶσιν ἐκτὸς ἀνθρώπου, οἷον τὰ ἐκ τῆς γῆς φυόμενα, καρπούς τε καὶ ὕλην καὶ χόρτον. ἀπὸ τούτων γὰρ καὶ τρέφονται καὶ αὔξονται καὶ ἄπονοι διάγουσιν οὐδὲν προσδεόμενοι ἄλλης διαίτης. καὶ τοι τὴν γε ἀρχὴν ἔγωγε δοκέω καὶ τὸν ἀνθρώπον τοιαύτη τροφῇ κεχρηῆσθαι. τὰ δὲ νῦν διαιτήματα εὐρημένα καὶ τετεχνημένα ἐν πολλῷ χρόνῳ γεγενῆσθαι μοι δοκεῖ. ὡς γὰρ ἔπασχον πολλά τε καὶ δεινὰ ὑπὸ ἰσχυρῆς τε καὶ θηριώδεος διαίτης ὡμά τε καὶ ἄκρητα καὶ μεγάλας δυνάμιας ἔχοντα ἐσφερόμενοι. οἷά περ ἂν καὶ νῦν ὑπ' αὐτῶν πάσχοιεν πόνοισί τε ἰσχυροῖσι καὶ νοῦσοις περιπίπτοντες καὶ διὰ τάχους θανάτοισι. ἦσσαν μὲν οὖν ταῦτα τότε εἰκὸς ἦν πάσχειν διὰ τὴν συνήθειαν, ἰσχυρῶς δὲ καὶ τότε. καὶ τοὺς μὲν πλείστους τε καὶ ἀσθενεστέρην φύσιν ἔχοντας ἀπόλλυσθαι εἰκὸς, τοὺς δὲ τούτων ὑπερέχοντας πλείω χρόνον ἀντέχειν: ὥσπερ καὶ νῦν ἀπὸ τῶν ἰσχυρῶν βρωμάτων οἱ μὲν ῥηϊδίως ἀπαλλάσσονται, οἱ δὲ μετὰ πολλῶν πόνων τε καὶ κακῶν. διὰ δὲ ταύτην τὴν αἰτίην καὶ οὗτοί μοι δοκέουσι ζητῆσαι τροφήν ἀρμόζουσαν τῇ φύσει καὶ εὐρεῖν ταύτην, ἣ νῦν χρεώμεθα. ἐκ μὲν οὖν τῶν πυρῶν βρέξαντές σφας καὶ πίσαντες καὶ καταλέσαντές τε καὶ διασήσαντες καὶ φορυξάντες καὶ ὀπτήσαντες ἀπετέλεσαν ἄρτον, ἐκ δὲ τῶν κριθέων μᾶζαν: ἄλλα τε πολλά περὶ ταῦτα πρηγματευσάμενοι ἤψησάν τε καὶ ὥπτησαν καὶ ἔμιξαν, καὶ ἐκέρασαν τὰ ἰσχυρά τε καὶ ἄκρητα τοῖς ἀσθενεστέροις, πλάσσοντες πάντα πρὸς τὴν τοῦ ἀνθρώπου φύσιν τε καὶ δύναμιν, ἠγεύμενοι, ὅσα μὲν ἂν ἰσχυρότερα ἢ ἢ δυνήσεται κρατεῖν ἢ φύσις, ἦν ἐμφέρηται, ἀπὸ τούτων δ' αὐτῶν πόνους τε καὶ νοῦσους καὶ θανάτους ἔσεσθαι, ὁπόσων δ' ἂν δύνηται ἐπικρατεῖν, ἀπὸ τούτων τροφήν τε καὶ αὔξησιν καὶ ὑγιείην. τῷ δὲ εὐρήματι τούτῳ καὶ ζητήματι τί ἂν τις ὄνομα δικαιότερον ἢ προσῆκον μᾶλλον θεῖη ἢ ἰητρικὴν; ὅτι γε εὐρηται ἐπὶ τῇ τοῦ ἀνθρώπου ὑγιείῃ τε καὶ σωτηρίῃ καὶ τροφῇ, ἀλλαγμὰ ἐκείνης τῆς διαίτης, ἐξ ἧς οἱ πόνοι καὶ νοῦσοι καὶ θάνατοι ἐγίνοντο.

3. For the art of Medicine would not have been invented at first, nor would it have been made a subject of investigation (for there would have been no need of



it), if when men are indisposed, the same food and other articles of regimen which they eat and drink when in good health were proper for them, and if no others were preferable to these. But now necessity itself made medicine to be sought out and discovered by men, since the same things when administered to the sick, which agreed with them when in good health, neither did nor do agree with them. But to go still further back, I hold that the diet and food which people in health now use would not have been discovered, provided it had suited with man to eat and drink in like manner as the ox, the horse, and all other animals, except man, do of the productions of the earth, such as fruits, weeds, and grass; for from such things these animals grow, live free of disease, and require no other kind of food. And, at first, I am of opinion that man used the same sort of food, and that the present articles of diet had been discovered and invented only after a long lapse of time, for when they suffered much and severely from strong and brutish diet, swallowing things which were raw, unmixed, and possessing great strength, they became exposed to strong pains and diseases, and to early deaths. It is likely, indeed, that from habit they would suffer less from these things then than we would now, but still they would suffer severely even then; and it is likely that the greater number, and those who had weaker constitutions, would all perish; whereas the stronger would hold out for a longer time, as even nowadays some, in consequence of using strong articles of food, get off with little trouble, but others with much pain and suffering. From this necessity it appears to me that they would search out the food befitting their nature, and thus discover that which we now use: and that from wheat, by macerating it, stripping it of its hull, grinding it all down, sifting, toasting, and baking it, they formed bread; and from barley they formed cake (maza), performing many operations in regard to it; they boiled, they roasted, they mixed, they diluted those things which are strong and of intense qualities with weaker things, fashioning them to the nature and powers of man, and considering that the stronger things Nature would not be able to manage if administered, and that from such things pains, diseases, and death would arise, but such as Nature could manage, that from them food, growth, and health, would arise. To such a discovery and investigation what more suitable name could one give than that of Medicine? since it was discovered for the health of man, for his nourishment and safety, as a substitute for that kind of diet by which pains, diseases, and deaths were occasioned.

4. Εἰ δὲ μὴ τέχνη αὕτη νομίζεται εἶναι, οὐκ ἀπεικός: ἥς γὰρ μηδεὶς ἐστὶν ιδιότης, ἀλλὰ πάντες ἐπιστήμονες διὰ τὴν χρῆσιν τε καὶ ἀνάγκην, οὐ προσήκει ταύτης οὐδένα τεχνίτην καλεῖσθαι: ἐπεὶ τό γε εὖρημα μέγα τε καὶ πολλῆς

σκέψιος τε καὶ τέχνης. ἔτι γοῦν καὶ νῦν οἱ τῶν γυμνασίων τε καὶ ἀσκησίων ἐπιμελόμενοι αἰεὶ τι προσεξευρίσκουσιν κατὰ τὴν αὐτὴν ὁδὸν ζητέοντες ὃ τι ἐσθίων τε καὶ πίνων ἐπικρατήσῃ τε αὐτοῦ μάλιστα καὶ ἰσχυρότερος αὐτὸς ἐωυτοῦ ἔσται.

4. And if this is not held to be an art, I do not object. For it is not suitable to call any one an artist of that which no one is ignorant of, but which all know from usage and necessity. But still the discovery is a great one, and requiring much art and investigation. Wherefore those who devote themselves to gymnastics and training, are always making some new discovery, by pursuing the same line of inquiry, where, by eating and drinking certain things, they are improved and grow stronger than they were.

5. Σκεψώμεθα δὲ καὶ τὴν ὁμολογεομένως ἰητρικὴν, τὴν ἀμφὶ τοὺς κάμνοντας εὐρημένην, ἣ καὶ ὄνομα καὶ τεχνίτας ἔχει, ἥρά τι καὶ αὐτὴ τῶν αὐτῶν ἐθέλει, καὶ πόθεν ποτὲ ἦρκεται. ἐμοὶ μὲν γάρ, ὅπερ ἐν ἀρχῇ εἶπον, οὐδ' ἂν ζητῆσαι ἰητρικὴν δοκεῖ οὐδεὶς, εἰ ταῦτά διαιτήματα τοῖσι τε κάμνουσι καὶ τοῖσι ὑγιαίνουσιν ἤρμοζεν. ἔτι γοῦν καὶ νῦν ὅσοι ἰητρικῇ μὴ χρέονται, οἱ τε βάρβαροι καὶ τῶν Ἑλλήνων ἔνιοι, τὸν αὐτὸν τρόπον, ὄνπερ οἱ ὑγιαίνοντες, διαιτέονται πρὸς ἡδονὴν, καὶ οὗτ' ἂν ἀπόσχοντο οὐδενὸς ὧν ἐπιθυμέουσιν οὔθ' ὑποστείλαιντο ἂν. οἱ δὲ ζητήσαντες καὶ εὐρόντες ἰητρικὴν τὴν αὐτὴν ἐκείνοισι διάνοιαν ἔχοντες, περὶ ὧν μοι ὁ πρότερος λόγος εἶρηται, πρῶτον μὲν, οἶμαι, ὑφεῖλον τοῦ πλήθεος τῶν σιτίων αὐτῶν τούτων, καὶ ἀντὶ πλειόνων ὀλίγιστα ἐποίησαν. ἐπεὶ δὲ αὐτοῖσι τοῦτο ἔστι μὲν ὅτε πρὸς τινὰς τῶν καμνόντων ἦρκεσε καὶ φανερόν ἐγένετο ὠφελῆσαν, οὐ μέντοι πᾶσι γε, ἀλλ' ἦσαν τινες οὕτως ἔχοντες, ὡς μὴ ὀλίγων σιτίων δύνασθαι ἐπικρατεῖν, ἀσθενεστέρου δὲ δὴ τινος οἱ τοιοῖδε ἐδόκεον δεῖσθαι, εὔρον τὰ ῥυφήματα μίξαντες ὀλίγα τῶν ἰσχυρῶν πολλῶ τῷ ὕδατι καὶ ἀφαιρέομενοι τὸ ἰσχυρὸν τῇ κρήσει τε καὶ ἐψήσει. ὅσοι δὲ μηδὲ τῶν ῥυφημάτων ἐδύναντο ἐπικρατεῖν, ἀφεῖλον καὶ ταῦτα, καὶ ἀφίκοντο ἐς πόματα, καὶ ταῦτα τῆσι τε κρήσεσι καὶ τῷ πλήθει διαφυλάσσοντες ὡς μετρίως ἔχοι, μήτε πλείω τῶν δεόντων μήτε ἀκρῆ τέστερα προσφερόμενοι μηδὲ ἐνδεέστερα.

5. Let us inquire then regarding what is admitted to be Medicine; namely, that which was invented for the sake of the sick, which possesses a name and practitioners, whether it also seeks to accomplish the same objects, and whence it derived its origin. To me, then, it appears, as I said at the commencement, that nobody would have sought for medicine at all, provided the same kinds of diet had suited with men in sickness as in good health. Wherefore, even yet, such races of men as make no use of medicine, namely, barbarians, and even certain

of the Greeks, live in the same way when sick as when in health; that is to say, they take what suits their appetite, and neither abstain from, nor restrict themselves in anything for which they have a desire. But those who have cultivated and invented medicine, having the same object in view as those of whom I formerly spoke, in the first place, I suppose, diminished the quantity of the articles of food which they used, and this alone would be sufficient for certain of the sick, and be manifestly beneficial to them, although not to all, for there would be some so affected as not to be able to manage even small quantities of their usual food, and as such persons would seem to require something weaker, they invented soups, by mixing a few strong things with much water, and thus abstracting that which was strong in them by dilution and boiling. But such as could not manage even soups, laid them aside, and had recourse to drinks, and so regulated them as to mixture and quantity, that they were administered neither stronger nor weaker than what was required.

6. Εὖ δὲ χρῆ τοῦτο εἰδέναι, ὅτι τισὶ τὰ ῥυφήματα ἐν τῆσι νούσοισιν οὐ συμφέρει, ἀλλ' ἀντικρυς, ὅταν ταῦτα προσαίρωνται, παροξύνονται σφισι οἱ τε πυρετοὶ καὶ τὰ ἀλγήματα: καὶ δῆλον τὸ προσενεχθὲν τῇ μὲν νούσῳ τροφή τε καὶ αὔξησις γενόμενον, τῷ δὲ σώματι φθίσις τε καὶ ἀρρωστίη. ὅσοι δὲ ἂν τῶν ἀνθρώπων ἐν ταύτῃ τῇ διαθέσει ἐόντες προσενέγκωνται ξηρὸν σιτίον ἢ μᾶζαν ἢ ἄρτον, καὶ ἦν πάνυ μικρόν, δεκαπλασίως ἂν μᾶλλον καὶ ἐπιφανέστερον κακωθεῖεν ἢ ῥυφέοντες, δι' οὐδὲν ἄλλο ἢ διὰ τὴν ἰσχὺν τοῦ βρώματος πρὸς τὴν διάθεσιν: καὶ ὅτῳ ῥυφεῖν μὲν συμφέρει, ἐσθίειν δ' οὐ, εἰ πλείω φάγοι, πολὺ ἂν μᾶλλον κακωθεῖη, ἢ εἰ ὀλίγα: καὶ εἰ ὀλίγα δέ, πονήσειεν ἄν. πάντα δὴ τὰ αἷτια τοῦ πόνου ἐς τὸ αὐτὸ ἀνάγεται, τὰ ἰσχυρότατα μάλιστα τε καὶ ἐπιφανέστατα λυμαίνεσθαι τὸν ἄνθρωπον καὶ τὸν ὑγιᾶ ἐόντα καὶ τὸν κάμνοντα.

6. But this ought to be well known, that soups do not agree with certain persons in their diseases, but, on the contrary, when administered both the fevers and the pains are exacerbated, and it becomes obvious that what was given has proved food and increase to the disease, but a wasting and weakness to the body. But whatever persons so affected partook of solid food, or cake, or bread, even in small quantity, would be ten times and more decidedly injured than those who had taken soups, for no other reason than from the strength of the food in reference to the affection; and to whomsoever it is proper to take soups and not eat solid food, such a one will be much more injured if he eat much than if he eat little, but even little food will be injurious to him. But all the causes of the sufferance refer themselves to this rule, that the strongest things most especially and decidedly hurt man, whether in health or in disease.

7. Τί οὖν φαίνεται ἕτεροῖον διανοηθεὶς ὁ καλούμενος ἰητρὸς καὶ ὁμολογεομένως χειροτέχνης, ὃς ἐξεῦρε τὴν ἀμφὶ τοὺς κάμνοντας δίαιτάν τε καὶ τροφήν, ἢ ἐκεῖνος ὁ ἀπ' ἀρχῆς τοῖσι πᾶσιν ἀνθρώποισιν τροφήν, ἢ νῦν χρώμεθα, ἐξ ἐκείνης τῆς ἀγρίας τε καὶ θηριώδεος διαίτης εὐρών τε καὶ παρασκευασάμενος; ἐμοὶ μὲν γὰρ φαίνεται ὁ αὐτὸς λόγος καὶ ἓν καὶ ὁμοῖον τὸ εὖρημα. ὁ μὲν, ὅσων μὴ ἐδύνατο ἡ φύσις ἢ ἀνθρωπίνη ὑγιαίνουσα ἐπικρατεῖν ἐμπιπτόντων διὰ τὴν θηριότητά τε καὶ τὴν ἀκρησίην, ὁ δέ, ὅσων ἢ διάθεσις, ἐν οἷῳ ἂν ἐκάστοτε ἕκαστος τύχη διακεείμενος, μὴ δύνηται ἐπικρατεῖν, ταῦτα ἐζήτησεν ἀφελεῖν. τί δὲ τοῦτο ἐκείνου διαφέρει ἀλλ' ἢ πλεον τό γε εἶδος, καὶ ὅτι ποικιλώτερον καὶ πλείονος πρηγματίης, ἀρχὴ δὲ ἐκείνη ἢ πρότερον γενομένη;

7. What other object, then, had he in view who is called a physician, and is admitted to be a practitioner of the art, who found out the regimen and diet befitting the sick, than he who originally found out and prepared for all mankind that kind of food which we all now use, in place of the former savage and brutish mode of living? To me it appears that the mode is the same, and the discovery of a similar nature. The one sought to abstract those things which the constitution of man cannot digest, because of their wildness and intemperature, and the other those things which are beyond the powers of the affection in which any one may happen to be laid up. Now, how does the one differ from the other, except that the latter admits of greater variety, and requires more application, whereas the former was the commencement of the process?

8. Εἰ δὲ τις σκέπτοιο τὴν τῶν καμνόντων δίαιταν πρὸς τὴν τῶν ὑγιαίνόντων, εὖροι ἂν τὴν τῶν θηρίων τε καὶ τῶν ἄλλων ζώων οὐ βλαβερωτέραν πρὸς τὴν τῶν ὑγιαίνόντων. ἀνὴρ γὰρ κάμνων νοσήματι μήτε τῶν χαλεπῶν τε καὶ ἀπόρων μήτε αὖ τῶν παντάπασιν εὐηθέων, ἀλλ' ὅ τι αὐτῷ ἐξαμαρτάνοντι μέλλει ἐπίδηλον ἔσσεσθαι, εἰ ἐθέλοι καταφαγεῖν ἄρτον καὶ κρέας ἢ ἄλλο τι ὧν οἱ ὑγιαίνοντες ἐσθίοντες ὠφελέονται, μὴ πολλόν, ἀλλὰ πολλῷ ἔλασσον ἢ ὑγιαίνων ἂν ἐδύνατο, ἄλλος τε τῶν ὑγιαίνόντων φύσιν ἔχων μήτε παντάπασιν ἀσθενέα μήτε αὖ ἰσχυρὴν φάγοι τι ὧν βοῦς ἢ ἵππος φαγὼν ἂν ὠφελοῖτό τε καὶ ἰσχύοι, ὀρόβους ἢ κριθὰς ἢ ἄλλο τι τῶν τοιούτων, μὴ πολύ, ἀλλὰ πολλῷ μειῶν ἢ δύναιτο, οὐκ ἂν ἦσσαν ὁ ὑγιαίνων τοῦτο ποιήσας πονήσειέ τε καὶ κινδυνεύσειε κείνου τοῦ νοσέοντος, ὃς τὸν ἄρτον ἢ τὴν μᾶζαν ἀκαίρως προσηνέγκατο. ταῦτα δὲ πάντα τεκμήρια, ὅτι αὕτη ἢ τέχνη πᾶσα ἢ ἰητρικὴ τῇ αὐτῇ ὁδῷ ζητεομένη εὐρίσκειτο ἂν.

8. And if one would compare the diet of sick persons with that of persons in health, he will find it not more injurious than that of healthy persons in

comparison with that of wild beasts and of other animals. For, suppose a man laboring under one of those diseases which are neither serious and unsupportable, nor yet altogether mild, but such as that, upon making any mistake in diet, it will become apparent, as if he should eat bread and flesh, or any other of those articles which prove beneficial to healthy persons, and that, too, not in great quantity, but much less than he could have taken when in good health; and that another man in good health, having a constitution neither very feeble, nor yet strong, eats of those things which are wholesome and strengthening to an ox or a horse, such as vetches, barley, and the like, and that, too, not in great quantity, but much less than he could take; the healthy person who did so would be subjected to no less disturbance and danger than the sick person who took bread or cake unseasonably. All these things are proofs that Medicine is to be prosecuted and discovered by the same method as the other.

9. Καὶ εἰ μὲν ἦν ἀπλοῦν, ὡσπερ ὑφήγητο, ὅσα μὲν ἦν ἰσχυρότερα, ἔβλαπτεν, ὅσα δ' ἦν ἀσθενέστερα, ὠφέλει τε καὶ ἔτρεφεν καὶ τὸν κάμνοντα καὶ τὸν ὑγιαίνοντα, εὐπετέες ἂν ἦν τὸ πρῆγμα: πολλὸν γὰρ τοῦ ἀσφαλέος ἂν ἔδει περιλαμβάνοντας ἄγειν ἐπὶ τὸ ἀσθενέστερον. νῦν δὲ οὐκ ἔλασσον ἀμάρτημα, οὐδὲ ἦσσον λυμαίνεται τὸν ἄνθρωπον, ἦν ἐλάσσονα καὶ ἐνδεέστερα τῶν ἱκανῶν προσφέρηται. τὸ γὰρ τοῦ λιμοῦ μένος δύναται ἰσχυρῶς ἐν τῇ φύσει τοῦ ἀνθρώπου καὶ γυῖωσαι καὶ ἀσθενέα ποιῆσαι καὶ ἀποκτεῖναι. πολλὰ δὲ καὶ ἄλλα κακὰ ἕτεροῖα τῶν ἀπὸ πληρώσιος, οὐχ ἦσσον δὲ δεινά, καὶ ἀπὸ κενώσιος. διότι πολλὸν ποικιλώτερά τε καὶ διὰ πλείονος ἀκριβείης ἐστί. δεῖ γὰρ μέτρου τινὸς στοχάσασθαι. μέτρον δὲ οὔτε ἀριθμὸν οὔτε σταθμὸν ἄλλον, πρὸς ὃ ἀναφέρων εἴση τὸ ἀκριβές, οὐκ ἂν εὖροις ἄλλ' ἢ τοῦ σώματος τὴν αἴσθησιν. διὸ ἔργον οὕτω καταμαθεῖν ἀκριβέως, ὥστε σμικρὰ ἀμαρτάνειν ἔνθα ἢ ἔνθα. κἂν ἐγὼ τοῦτον τὸν ἰητρὸν ἰσχυρῶς ἐπαινέοιμι τὸν σμικρὰ ἀμαρτάνοντα. τὸ δὲ ἀτρεκές ὀλιγάκις ἔστι κατιδεῖν. ἐπεὶ οἱ πολλοὶ γε τῶν ἰητρῶν τὰ αὐτὰ μοι δοκέουσιν τοῖσι κακοῖσι κυβερνήτησι πάσχειν. καὶ γὰρ ἐκεῖνοι ὅταν ἐν γαλήνῃ κυβερνῶντες ἀμαρτάνωσιν, οὐ καταφανέες εἰσίν: ὅταν δὲ αὐτοὺς κατάσχη χειμῶν τε μέγας καὶ ἄνεμος ἐξώστης, φανερῶς πᾶσιν ἤδη ἀνθρώποις δι' ἀγνωσίην καὶ ἀμαρτίην δῆλοί εἰσιν ἀπολέσαντες τὴν ναῦν. οὕτω δὲ καὶ οἱ κακοὶ τε καὶ οἱ πλεῖστοι ἰητροί, ὅταν μὲν θεραπεύωσιν ἀνθρώπους μηδὲν δεινὸν ἔχοντας, ἐς οὓς ἂν τις τὰ μέγιστα ἐξαμαρτάνων οὐδὲν δεινὸν ἐργάσαιτο-πολλὰ δὲ τοιαῦτα νοσήματα καὶ πολλὸν τι πλείω τῶν δεινῶν ἀνθρώποις συμβαίνει — ἐν μὲν τοῖσι τοιούτοις ἀμαρτάνοντες οὐ καταφανέες εἰσίν τοῖσιν ἰδιότησιν: ὅταν δ' ἐντύχωσιν μεγάλῳ τε καὶ ἰσχυρῷ καὶ ἐπισφαλεῖ νοσήματι, τότε σφέων τὰ τε ἀμαρτήματα καὶ ἡ ἀτεχνίη πᾶσι καταφανής: οὐ γὰρ ἐς μακρὸν αὐτῶν ἑκατέρου αἰ τιμωρίαι, ἀλλὰ διὰ τάχους πάρεισιν.

9. And if it were simply, as is laid down, that such things as are stronger prove injurious, but such as are weaker prove beneficial and nourishing, both to sick and healthy persons, it were an easy matter, for then the safest rule would be to circumscribe the diet to the lowest point. But then it is no less mistake, nor one that injures a man less, provided a deficient diet, or one consisting of weaker things than what are proper, be administered. For, in the constitution of man, abstinence may enervate, weaken, and kill. And there are many other ills, different from those of repletion, but no less dreadful, arising from deficiency of food; wherefore the practice in those cases is more varied, and requires greater accuracy. For one must aim at attaining a certain measure, and yet this measure admits neither weight nor calculation of any kind, by which it may be accurately determined, unless it be the sensation of the body; wherefore it is a task to learn this accurately, so as not to commit small blunders either on the one side or the other, and in fact I would give great praise to the physician whose mistakes are small, for perfect accuracy is seldom to be seen, since many physicians seem to me to be in the same plight as bad pilots, who, if they commit mistakes while conducting the ship in a calm do not expose themselves, but when a storm and violent hurricane overtake them, they then, from their ignorance and mistakes, are discovered to be what they are, by all men, namely, in losing their ship. And thus bad and commonplace physicians, when they treat men who have no serious illness, in which case one may commit great mistakes without producing any formidable mischief (and such complaints occur much more frequently to men than dangerous ones): under these circumstances, when they commit mistakes, they do not expose themselves to ordinary men; but when they fall in with a great, a strong, and a dangerous disease, then their mistakes and want of skill are made apparent to all. Their punishment is not far off, but is swift in overtaking both the one and the other.

10. Ὅτι δ' οὐδὲν ἐλάσσους ἀπὸ κενώσιος ἀκαίρου κακοπάθειαι γίνονται τῷ ἀνθρώπῳ ἢ ἀπὸ πληρώσιος, καταμανθάνειν καλῶς ἔχει ἐπαναφέροντας ἐπὶ τοὺς ὑγιαίνοντας. ἔστι γὰρ οἷσιν αὐτῶν συμφέρει μονοσιτεῖν, καὶ τοῦτο διὰ τὸ συμφέρον οὕτως αὐτοὶ ἐτάξαντο, ἄλλοισι δὲ ἀριστῆν διὰ τὴν αὐτὴν ἀνάγκην: οὕτω γὰρ αὐτοῖσι συμφέρει. καὶ μὴν τοῦτ' εἰσὶ οἱ δι' ἡδονὴν ἢ δι' ἄλλην τινὰ συγκυρίην ἐπετήδευσαν ὁπότερον αὐτῶν. τοῖς μὲν γὰρ πλείστοισι τῶν ἀνθρώπων οὐδὲν διαφέρει, ὁπότερον ἂν ἐπιτηδεύσωσιν, εἴτε μονοσιτεῖν εἴτε ἀριστῆν, τούτῳ τῷ ἔθει χρῆσθαι. εἰσὶ δὲ τινες οἱ οὐκ ἂν δύναιντο ἔξω τοῦ συμφέροντος ποιέοντες ῥηϊδίως ἀπαλλάσσειν, ἀλλὰ συμβαίνει αὐτῶν ἑκατέροισι παρ' ἡμέρην μιαν καὶ ταύτην οὐχ ὅλην μεταβάλλουσιν ὑπερφυῆς κακοπάθεια. οἱ μὲν γὰρ ἦν ἀριστήσωσιν μὴ συμφέροντος αὐτοῖσι, εὐθέως βαρέες καὶ νωθροὶ καὶ

τὸ σῶμα καὶ τὴν γνώμην χάσμις τε καὶ νυσταγμοῦ καὶ δίψης πλήρεις: ἦν δὲ καὶ ἐπιδειπνήσωσι, καὶ φῦσα καὶ στρόφος καὶ ἡ κοιλίη καταρρήγνυται. καὶ πολλοῖσιν ἀρχὴ νούσου αὕτη μεγάλης ἐγένετο, καὶ ἦν τὰ σιτία, ἃ μεμαθήκεσαν ἅπαξ ἀναλίσκειν, ταῦτα δις προσενέγκωνται καὶ μηδὲν πλείω. τοῦτο δέ, ἦν ἀριστῆν μεμαθηκώς τις — καὶ οὕτως αὐτῶ συμφέρον ἦν — μὴ ἀριστήση, ὅταν τάχιστα παρέλθῃ ἡ ὥρη, εὐθὺς ἀδυναμίη δεινή, τρόμος, ἀψυχίη: ἐπὶ τούτοις ὀφθαλμοὶ κοῖλοι, οὖρον χλωρότερον καὶ θερμότερον, στόμα πικρόν, καὶ τὰ σπλάγχνα δοκεῖ οἱ κρέμασθαι, σκοτοδινίη, δυσθυμίη, δυσεργείη. ταῦτα δὲ πάντα, καὶ ὅταν δειπνεῖν ἐπιχειρήσῃ, ἀηδέστερος μὲν ὁ σῖτος, ἀναλίσκειν δὲ οὐ δύναται ὅσα ἀριστιζόμενος πρότερον ἐδειπνεῖ. ταῦτα δὲ αὐτὰ μετὰ στρόφον καὶ ψόφου καταβαίνοντα συγκαίει τὴν κοιλίην, δυσκοιτέουσί τε καὶ ἐνυπνιάζουσι τεταραγμένα τε καὶ θορυβώδεα. πολλοῖσι δὲ καὶ τούτων αὕτη ἀρχὴ νούσου ἐγένετο.

10. And that no less mischief happens to a man from unseasonable depletion than from repletion, may be clearly seen upon reverting to the consideration of persons in health. For, to some, with whom it agrees to take only one meal in the day, and they have arranged it so accordingly; whilst others, for the same reason, also take dinner, and this they do because they find it good for them, and not like those persons who, for pleasure or from any casual circumstance, adopt the one or the other custom and to the bulk of mankind it is of little consequence which of these rules they observe, that is to say, whether they make it a practice to take one or two meals. But there are certain persons who cannot readily change their diet with impunity; and if they make any alteration in it for one day, or even for a part of a day, are greatly injured thereby. Such persons, provided they take dinner when it is not their wont, immediately become heavy and inactive, both in body and mind, and are weighed down with yawning, slumbering, and thirst; and if they take supper in addition, they are seized with flatulence, tormina, and diarrhea, and to many this has been the commencement of a serious disease, when they have merely taken twice in a day the same food which they have been in the custom of taking once. And thus, also, if one who has been accustomed to dine, and this rule agrees with him, should not dine at the accustomed hour, he will straightway feel great loss of strength, trembling, and want of spirits, the eyes of such a person will become more pallid, his urine thick and hot, his mouth bitter; his bowels will seem, as it were, to hang loose; he will suffer from vertigo, lowness of spirit, and inactivity,- such are the effects; and if he should attempt to take at supper the same food which he was wont to partake of at dinner, it will appear insipid, and he will not be able to take it off; and these things, passing downwards with tormina and rumbling, burn up his bowels; he

experiences insomnolency or troubled and disturbed dreams; and to many of them these symptoms are the commencement of some disease.

11. Σκέψασθαι δὲ χρή, διὰ τίνα αἰτίην αὐτοῖσιν ταῦτα συνέβη. τῷ μὲν, οἶμαι, μεμαθηκότι μονοσιτεῖν, ὅτι οὐκ ἀνέμεινεν τὸν χρόνον τὸν ἰκανόν, μέχρι αὐτοῦ ἢ κοιλίη τῶν τῆ προτεραίῃ προσενηγεγμένων σιτίων ἀπολαύση τελέως καὶ ἐπικρατήση καὶ λαπαχθῆ τε καὶ ἠσυχάση, ἀλλ' ἐπὶ ζέουσάν τε καὶ ἐζυμωμένην καινὰ ἐπεσηνέγκατο. αἱ δὲ τοιαῦται κοιλίαι πολλῶ τε βραδύτερον πέσσουσι καὶ πλείονος δέονται ἀναπαύσιός τε καὶ ἠσυχίης. ὁ δὲ μεμαθηκῶς ἀριστίζεσθαι, διότι, ἐπειδὴ τάχιστα ἐδεήθη τὸ σῶμα τροφῆς καὶ τὰ πρότερα κατανάλωτο καὶ οὐκ εἶχεν οὐδεμίαν ἀπόλαυσιν, οὐκ εὐθέως αὐτῷ προσεγένετο καινὴ τροφή, φθίνει δὴ καὶ συντήκεται ὑπὸ λιμοῦ. πάντα γάρ, ἃ λέγω πάσχειν τὸν τοιοῦτον ἄνθρωπον, λιμῶ ἀνατίθημι. φημι δὲ καὶ τοὺς ἄλλους ἀνθρώπους ἅπαντας, οἵτινες ἂν ὑγιαίνοντες ἄσιτοι δύο ἡμέρας ἢ τρεῖς γένωνται, ταῦτα πείσεσθαι, οἷάπερ ἐπὶ τῶν ἀναρίστων γενομένων εἶρηκα.

11. But let us inquire what are the causes of these things which happened to them. To him, then, who was accustomed to take only one meal in the day, they happened because he did not wait the proper time, until his bowels had completely derived benefit from and had digested the articles taken at the preceding meal, and until his belly had become soft, and got into a state of rest, but he gave it a new supply while in a state of heat and fermentation, for such bellies digest much more slowly, and require more rest and ease. And as to him who had been accustomed to dinner, since, as soon as the body required food, and when the former meal was consumed, and he wanted refreshment, no new supply was furnished to it, he wastes and is consumed from want of food. For all the symptoms which I describe as befalling to this man I refer to want of food. And I also say that all men who, when in a state of health, remain for two or three days without food, experience the same unpleasant symptoms as those which I described in the case of him who had omitted to take dinner.

12. Τὰς δὲ τοιαύτας φύσις ἔγωγέ φημι τὰς ταχέως τε καὶ ἰσχυρῶς τῶν ἀμαρτημάτων ἀπολανούσας ἀσθενεστέρας εἶναι τῶν ἐτέρων. ἐγγύτατα δὲ τοῦ ἀσθενέοντός ἐστιν ὁ ἀσθενής, ἔτι δὲ ἀσθενέστερος ὁ ἀσθενέων, καὶ μᾶλλον αὐτῷ προσήκει ὅ τι ἂν τοῦ καιροῦ ἀποτυγχάνη πονεῖν. χαλεπὸν δὲ τοιαύτης ἀκριβείης ἐούσης περὶ τὴν τέχνην τυγχάνειν αἰεὶ τοῦ ἀτρεκεστάτου. πολλὰ δὲ εἶδεα κατ' ἰητρικὴν ἐς τοσαύτην ἀκρίβειαν ἤκει, περὶ ὧν εἰρήσεται. οὐ φημι δὲ δεῖν διὰ τοῦτο τὴν τέχνην ὡς οὐκ εἰδῶσαν οὐδὲ καλῶς ζητεομένην τὴν ἀρχαίην ἀποβάλλεσθαι, εἰ μὴ ἔχει περὶ πάντα ἀκρίβειαν, ἀλλὰ πολὺ μᾶλλον διὰ τὸ ἐγγύς



οἶμαι τοῦ ἀτρεκεστάτου δύνασθαι ἢ κειν λογισμῶ ἐκ πολλῆς ἀγνωσίης θαυμάζειν τὰ ἐξευρημένα, ὡς καλῶς καὶ ὀρθῶς ἐξεύρηται καὶ οὐκ ἀπὸ τύχης.

12. Wherefore, I say, that such constitutions as suffer quickly and strongly from errors in diet, are weaker than others that do not; and that a weak person is in a state very nearly approaching to one in disease; but a person in disease is the weaker, and it is, therefore, more likely that he should suffer if he encounters anything that is unseasonable. It is difficult, seeing that there is no such accuracy in the Art, to hit always upon what is most expedient, and yet many cases occur in medicine which would require this accuracy, as we shall explain. But on that account, I say, we ought not to reject the ancient Art, as if it were not, and had not been properly founded, because it did not attain accuracy in all things, but rather, since it is capable of reaching to the greatest exactitude by reasoning, to receive it and admire its discoveries, made from a state of great ignorance, and as having been well and properly made, and not from chance.

13. Ἐπὶ δὲ τῶν τὸν καινὸν τρόπον τὴν τέχνην ζητούντων ἐξ ὑποθέσιος τὸν λόγον ἐπανελθεῖν βούλομαι. εἰ γὰρ τί ἐστὶν θερμὸν ἢ ψυχρὸν ἢ ξηρὸν ἢ ὑγρὸν τὸ λυμαινόμενον τὸν ἄνθρωπον, καὶ δεῖ τὸν ὀρθῶς ἰητρεύοντα βοηθεῖν τῷ μὲν θερμῷ ἐπὶ τὸ ψυχρὸν, τῷ δὲ ψυχρῷ ἐπὶ τὸ θερμὸν, τῷ δὲ ξηρῷ ἐπὶ τὸ ὑγρὸν, τῷ δὲ ὑγρῷ ἐπὶ τὸ ξηρὸν. ἔστω μοι ἄνθρωπος μὴ τῶν ἰσχυρῶν φύσει, ἀλλὰ τῶν ἀσθενεστέρων: οὗτος δὲ πυρούς ἐσθιέτω, οὓς ἂν ἀπὸ τῆς ἄλλω ἀνέλη, ὠμούς καὶ ἀργούς, καὶ κρέα ὠμὰ καὶ πινέτω ὕδωρ. ταύτη χρεώμενος τῇ διαίτῃ εὖ οἶδ' ὅτι πείσεται πολλὰ καὶ δεινά: καὶ γὰρ πόνους πονήσει καὶ τὸ σῶμα ἀσθενὲς ἔσται καὶ ἡ κοιλίη φθαρήσεται καὶ ζῆν πολὺν χρόνον οὐ δυνήσεται. τί δὴ χρῆ βοήθημα παρεσκευάσθαι ὧδ' ἔχοντι; θερμὸν ἢ ψυχρὸν ἢ ξηρὸν ἢ ὑγρὸν; δῆλον γὰρ ὅτι τούτων τι. εἰ γὰρ τὸ λυμαινόμενόν ἐστὶν τούτων τὸ ἕτερον, τῷ ὑπεναντίῳ προσήκει λῦσαι, ὡς ὁ ἐκείνων λόγος ἔχει. τὸ μὲν γὰρ βεβαιότατόν τε καὶ προφανέστατον φάρμακον ἀφελόντα τὰ διαιτήματα, οἷς ἐχρήτο, ἀντὶ μὲν τῶν πυρῶν ἄρτον δίδοναι, ἀντὶ δὲ τῶν ὠμῶν κρεῶν ἐφθά, πιεῖν τε ἐπὶ τούτοισιν οἴνου. ταῦτα μεταβαλόντα οὐχ οἶόν τε μὴ οὐχ ὑγιᾶ γενέσθαι, ἦν γε μὴ παντάπασιν ἢ διεφθαρμένος ὑπὸ χρόνου τε καὶ τῆς διαίτης. τί δὴ φήσομεν; πότερον αὐτῷ ἀπὸ ψυχροῦ κακοπαθέοντι θερμὰ ταῦτα προσενέγκαντες ὠφέλησαν ἢ τάναντία; οἶμαι γὰρ ἔγωγε πολλὴν ἀπορίην τῷ ἐρωτηθέντι παρασχεῖν. ὁ γὰρ τὸν ἄρτον παρασκευάζων τῶν πυρῶν τὸ θερμὸν ἢ τὸ ψυχρὸν ἢ τὸ ξηρὸν ἢ τὸ ὑγρὸν ἀφείλατο; ὁ γὰρ καὶ πυρὶ καὶ ὕδατι δέδοται καὶ ἄλλοις πολλοῖσι ἤργασται, ὧν ἕκαστον ἰδίην δύναμιν καὶ φύσιν ἔχει, τὰ μὲν τῶν ὑπαρχόντων ἀποβέβληκε, ἄλλοισι δὲ κέκρηται τε καὶ μέμικται.

13. But I wish the discourse to revert to the new method of those who prosecute their inquiries in the Art by hypothesis. For if hot, or cold, or moist, or dry, be that which proves injurious to man, and if the person who would treat him properly must apply cold to the hot, hot to the cold, moist to the dry, and dry to the moist- let me be presented with a man, not indeed one of a strong constitution, but one of the weaker, and let him eat wheat, such as it is supplied from the thrashing-floor, raw and unprepared, with raw meat, and let him drink water. By using such a diet I know that he will suffer much and severely, for he will experience pains, his body will become weak, and his bowels deranged, and he will not subsist long. What remedy, then, is to be provided for one so situated? Hot? or cold? or moist? or dry? For it is clear that it must be one or other of these. For, according to this principle, if it is one of the which is injuring the patient, it is to be removed by its contrary. But the surest and most obvious remedy is to change the diet which the person used, and instead of wheat to give bread, and instead of raw flesh, boiled, and to drink wine in addition to these; for by making these changes it is impossible but that he must get better, unless completely disorganized by time and diet. What, then, shall we say? whether that, as he suffered from cold, these hot things being applied were of use to him, or the contrary? I should think this question must prove a puzzler to whomsoever it is put. For whether did he who prepared bread out of wheat remove the hot, the cold, the moist, or the dry principle in it?- for the bread is consigned both to fire and to water, and is wrought with many things, each of which has its peculiar property and nature, some of which it loses, and with others it is diluted and mixed.

14. Οἶδα μὲν γὰρ καὶ τάδε δήπου, ὅτι διαφέρει ἐς τὸ σῶμα τοῦ ἀνθρώπου καθαρὸς ἄρτος ἢ συγκομιστός, ἢ ἀπίστων πυρῶν ἢ ἐπιτισμένων, ἢ πολλῶ ὕδατι πεφυρημένος ἢ ὀλίγῳ, ἢ ἰσχυρῶς πεφυρημένος ἢ ἀφύρητος, ἢ ἔξοπτος ἢ ἔνωμος, ἄλλα τε πρὸς τούτοισι μυρία. ὡς δ' αὐτῶς καὶ περὶ μάζης. καὶ αἱ δυνάμεις μεγάλαι τε ἐκάστου καὶ οὐδὲν ἢ ἑτέρη τῇ ἑτέρῃ εἰκυῖα. ὅστις δὲ ταῦτα οὐκ ἐπέσκεπται ἢ σκεπτόμενος οὐκ οἶδεν, πῶς ἂν τι οὕτως δύναιτο τῶν κατ' ἀνθρώπου παθημάτων εἰδέναι; ὑπὸ γὰρ ἐνὸς ἐκάστου τούτων πάσχει τε καὶ ἑτεροιοῦται ὁ ἄνθρωπος ἢ τοῖον ἢ τοῖον. καὶ διὰ τούτων πᾶς ὁ βίος καὶ ὑγιαίνουντι καὶ ἐκ νόσου ἀνατρεφομένῳ καὶ κάμνοντι. οὐκ ἂν οὖν ἕτερα τούτων χρησιμώτερα οὐδὲ ἀναγκαιότερα εἶη εἰδέναι δήπου, ὡς δὲ καλῶς καὶ λογισμῶ προσήκοντι ζητήσαντες πρὸς τὴν τοῦ ἀνθρώπου φύσιν εὔρον αὐτὰ οἱ πρῶτοι εὐρόντες καὶ ᾤθησαν ἀξίην τὴν τέχνην θεῶ προσθεῖναι, ὡσπερ καὶ νομίζεται. οὐ γὰρ τὸ ξηρὸν οὐδὲ τὸ ὑγρὸν οὐδὲ τὸ θερμὸν οὐδὲ τὸ ψυχρὸν οὐδὲ ἄλλο τούτων ἠγησάμενοι οὐδὲν οὔτε λυμαίνεσθαι οὔτε προσδεῖσθαι οὐδενὸς τούτων

τὸν ἄνθρωπον, ἀλλὰ τὸ ἰσχυρὸν ἐκάστου καὶ τὸ κρέσσον τῆς φύσιος τῆς ἀνθρωπεΐης, οὗ μὴ ἠδύνατο κρατεῖν, τοῦτο βλάπτειν ἠγάσαντο καὶ τοῦτο ἐζήτησαν ἀφαιρεῖν. ἰσχυρότατον δ' ἐστὶ τοῦ μὲν γλυκέος τὸ γλυκύτερον, τοῦ δὲ πικροῦ τὸ πικρότατον, τοῦ δὲ ὀξεύος τὸ ὀξύτατον, ἐκάστου δὲ πάντων τῶν ἐνεόντων ἢ ἀκμῆ. ταῦτα γὰρ ἐώρων καὶ ἐν τῷ ἀνθρώπῳ ἐνεόντα καὶ λυμαινόμενα τὸν ἄνθρωπον. ἔνι γὰρ ἐν ἀνθρώπῳ καὶ ἀλμυρὸν καὶ πικρὸν καὶ γλυκὺ καὶ ὀξύ καὶ στρυφνὸν καὶ πλαδαρὸν καὶ ἄλλα μυρία παντοίας δυνάμιας ἔχοντα πληθὸς τε καὶ ἰσχύς. ταῦτα μὲν μεμιγμένα καὶ κεκρημένα ἀλλήλοισιν οὔτε φανερά ἐστὶν οὔτε λυπεῖ τὸν ἄνθρωπον. ὅταν δὲ τι τούτων ἀποκριθῆ καὶ αὐτὸ ἐφ' ἑωυτοῦ γένηται, τότε καὶ φανερόν ἐστὶ καὶ λυπεῖ τὸν ἄνθρωπον: τοῦτο δὲ, τῶν βρωμάτων ὅσα ἡμῖν ἀνεπιτήδειά ἐστὶν καὶ λυμαίνεται τὸν ἄνθρωπον ἐμπεσόντα, τούτων ἐν ἑκάστῳ ἢ πικρὸν ἐστὶν ἢ ἀλμυρὸν ἢ ὀξύ ἢ ἄλλο τι ἄκρητον τε καὶ ἰσχυρὸν, καὶ διὰ τοῦτο ταρασσόμεθα ὑπ' αὐτῶν, ὥσπερ καὶ ὑπὸ τῶν ἐν τῷ σώματι ἀποκρινομένων. πάντα δὲ ὅσα ἄνθρωπος ἐσθίει ἢ πίνει, τὰ τοιαῦτα βρώματα ἢκιστα τοιοῦτου χυμοῦ ἀκρήτου τε καὶ διαφέροντος δὴλά ἐστὶν μετέχοντα, οἷον ἄρτος τε καὶ μᾶζα καὶ τὰ ἐπόμενα τούτοις, οἷς εἴθισται ὁ ἄνθρωπος πλείστοισί τε καὶ αἰεὶ χρῆσθαι, ἔξω τῶν πρὸς ἠδονὴν τε καὶ κόρον ἠρτυμένων τε καὶ ἐσκευασμένων. καὶ ἀπὸ τούτων πλείστων ἐσιόντων ἐς τὸν ἄνθρωπον τάραχος καὶ ἀπόκρισις τῶν ἀμφὶ τὸ σῶμα δυναμίων ἢκιστα γίνεται, ἰσχύς δὲ καὶ αὔξησις καὶ τροφή μάλιστα δι' οὐδὲν ἕτερον γίνεται ἢ ὅτι εὖ τε κέκρηται καὶ οὐδὲν ἔχει οὔτε ἄκρητον οὔτε ἰσχυρὸν, ἀλλ' ὅλον ἐν τε γέγονε καὶ ἀπλοῦν.

14. And this I know, moreover, that to the human body it makes a great difference whether the bread be fine or coarse; of wheat with or without the hull, whether mixed with much or little water, strongly wrought or scarcely at all, baked or raw- and a multitude of similar differences; and so, in like manner, with the cake (maza); the powers of each, too, are great, and the one nowise like the other. Whoever pays no attention to these things, or, paying attention, does not comprehend them, how can he understand the diseases which befall a man? For, by every one of these things, a man is affected and changed this way or that, and the whole of his life is subjected to them, whether in health, convalescence, or disease. Nothing else, then, can be more important or more necessary to know than these things. So that the first inventors, pursuing their investigations properly, and by a suitable train of reasoning, according to the nature of man, made their discoveries, and thought the Art worthy of being ascribed to a god, as is the established belief. For they did not suppose that the dry or the moist, the hot or the cold, or any of these are either injurious to man, or that man stands in need of them, but whatever in each was strong, and more than a match for a

man's constitution, whatever he could not manage, that they held to be hurtful, and sought to remove. Now, of the sweet, the strongest is that which is intensely sweet; of the bitter, that which is intensely bitter; of the acid, that which is intensely acid; and of all things that which is extreme, for these things they saw both existing in man, and proving injurious to him. For there is in man the bitter and the salt, the sweet and the acid, the sour and the insipid, and a multitude of other things having all sorts of powers both as regards quantity and strength. These, when all mixed and mingled up with one another, are not apparent, neither do they hurt a man; but when any of them is separate, and stands by itself, then it becomes perceptible, and hurts a man. And thus, of articles of food, those which are unsuitable and hurtful to man when administered, every one is either bitter, or intensely so, or saltish or acid, or something else intense and strong, and therefore we are disordered by them in like manner as we are by the secretions in the body. But all those things which a man eats and drinks are devoid of any such intense and well-marked quality, such as bread, cake, and many other things of a similar nature which man is accustomed to use for food, with the exception of condiments and confectioneries, which are made to gratify the palate and for luxury. And from those things, when received into the body abundantly, there is no disorder nor dissolution of the powers belonging to the body; but strength, growth, and nourishment result from them, and this for no other reason than because they are well mixed, have nothing in them of an immoderate character, nor anything strong, but the whole forms one simple and not strong substance.

15. Ἀπορέω δ' ἔγωγε, οἱ τὸν λόγον ἐκεῖνον λέγοντες καὶ ἄγοντες ἐκ ταύτης τῆς ὁδοῦ ἐπὶ ὑπόθεσιν τὴν τέχνην τίνα ποτὲ τρόπον θεραπεύουσι τοὺς ἀνθρώπους, ὥσπερ ὑποτίθενται. οὐ γὰρ ἐστὶν αὐτοῖς, οἶμαι, ἐξευρημένον αὐτό τι ἐφ' ἑωυτοῦ θερμὸν ἢ ψυχρὸν ἢ ξηρὸν ἢ ὑγρὸν μηδενὶ ἄλλῳ εἶδει κοινωνέον. ἀλλ' οἶομαι ἔγωγε ταῦτ' ἀβρώματα καὶ πόματα αὐτοῖσι ὑπάρχειν, οἷσι πάντες χρεώμεθα. προστιθέασι δὲ τῷ μὲν εἶναι θερμῷ, τῷ δὲ ψυχρῷ, τῷ δὲ ξηρῷ, τῷ δὲ ὑγρῷ, ἐπεὶ ἐκεῖνό γε ἄπορον προστάξαι τῷ κάμνοντι θερμὸν τι προσενέγκασθαι. εὐθὺ γὰρ ἐρωτήσῃ: τί; ὥστε ληρεῖν ἀνάγκη ἢ ἐς τούτων τι τῶν γνωσκομένων καταφεύγειν. εἰ δὲ δὴ τυγχάνει τι θερμὸν ἐὼν στρυφνόν, ἄλλο δὲ θερμὸν ἐὼν πλαδαρόν, ἄλλο δὲ θερμὸν ἄραδον ἔχον — ἔστι γὰρ καὶ ἄλλα πολλὰ θερμὰ καὶ ἄλλας δυνάμιας ἔχοντα ἐωυτοῖς ὑπεναντίας — ἢ διοίσει τι αὐτῶν προσενεγκεῖν τὸ θερμὸν καὶ στρυφνόν ἢ τὸ θερμὸν καὶ πλαδαρόν ἢ ἅμα τὸ ψυχρὸν καὶ στρυφνόν — ἔστι γὰρ καὶ τοιοῦτο — ἢ τὸ ψυχρὸν τε καὶ πλαδαρόν: ὥσπερ γὰρ ἐγὼ οἶδα, πᾶν τούναντίον ἀφ' ἑκατέρου αὐτῶν ἀποβαίνει, οὐ μόνον ἐν ἀνθρώπῳ, ἀλλὰ καὶ ἐν σκύτει καὶ ἐν ξύλῳ καὶ ἐν ἄλλοις πολλοῖς, ἃ ἐστὶν

ἀνθρώπου ἀναισθητότερα. οὐ γὰρ τὸ θερμὸν ἐστὶν τὸ τὴν μεγάλην δύναμιν ἔχον, ἀλλὰ τὸ στρυφνὸν καὶ τὸ πλαδαρὸν καὶ τᾶλλα ὅσα μοι εἴρηται καὶ ἐν τῷ ἀνθρώπῳ καὶ ἔξω τοῦ ἀνθρώπου, καὶ ἐσθιόμενα καὶ πινόμενα καὶ ἔξωθεν ἐπιχρίο μὲνά τε καὶ προσπρασσόμενα.

15. I cannot think in what manner they who advance this doctrine, and transfer Art from the cause I have described to hypothesis, will cure men according to the principle which they have laid down. For, as far as I know, neither the hot nor the cold, nor the dry, nor the moist, has ever been found unmixed with any other quality; but I suppose they use the same articles of meat and drink as all we other men do. But to this substance they give the attribute of being hot, to that cold, to that dry, and to that moist. Since it would be absurd to advise the patient to take something hot, for he would straightway ask what it is? so that he must either play the fool, or have recourse to some one of the well known substances; and if this hot thing happen to be sour, and that hot thing insipid, and this hot thing has the power of raising a disturbance in the body (and there are many other kinds of heat, possessing many opposite powers), he will be obliged to administer some one of them, either the hot and the sour, or the hot and the insipid, or that which, at the same time, is cold and sour (for there is such a substance), or the cold and the insipid. For, as I think, the very opposite effects will result from either of these, not only in man, but also in a bladder, a vessel of wood, and in many other things possessed of far less sensibility than man; for it is not the heat which is possessed of great efficacy, but the sour and the insipid, and other qualities as described by me, both in man and out of man, and that whether eaten or drunk, rubbed in externally, and otherwise applied.

16. Ψυχρότητα δ' ἐγὼ καὶ θερμότητα πασέων ἥκιστα τῶν δυναμίῳν νομίζω δυναστεύειν ἐν τῷ σώματι διὰ τάσδε τὰς αἰτίας: ὃν μὲν ἂν δήπου χρόνον μεμιγμένα αὐτὰ ἐσωτοῖς ἅμα τὸ θερμὸν τε καὶ ψυχρὸν ἐνῆ, οὐ λυπεῖ. κρησις γὰρ καὶ μετριότης τῷ μὲν θερμῷ γίνεται ἀπὸ τοῦ ψυχροῦ, τῷ δὲ ψυχρῷ ἀπὸ τοῦ θερμοῦ. ὅταν δ' ἀποκριθῆ χωρὶς ἐκάτερον, τότε λυπεῖ. ἐν δὲ δὴ τούτῳ τῷ καιρῷ, ὅταν τὸ ψυχρὸν ἐπιγένηται καὶ τι λυπήσῃ τὸν ἄνθρωπον, διὰ τάχους πρῶτον δι' αὐτὸ τοῦτο πάρεστιν τὸ θερμὸν αὐτόθεν ἐκ τοῦ ἀνθρώπου, οὐδεμιῆς βοηθείης οὐδὲ παρασκευῆς δεόμενον. καὶ ταῦτα καὶ ἐν ὑγιαίνουσι τοῖς ἀνθρώποις ἀπεργάζεται καὶ ἐν κάμνουσι. τοῦτο μὲν, εἴ τις θέλει ὑγιαίνων χειμῶνος διαψύξαι τὸ σῶμα ἢ λουσάμενος ψυχρῷ ἢ ἄλλῳ τῷ τρόπῳ, ὅσω ἂν ἐπὶ πλεῖον αὐτὸ ποιήσῃ, καὶ ἦν γε μὴ παντάπασιν παγῆ τὸ σῶμα, ὅταν εἴματα λάβῃ καὶ ἔλθῃ ἐς τὴν σκέπη, ἐτι μᾶλλον καὶ ἐπὶ πλεῖον θερμαίνεται τὸ σῶμα: τοῦτο δέ, εἰ ἐθέλοι ἐκθερμανθῆναι ἰσχυρῶς ἢ λουτρῷ θερμῷ ἢ πυρὶ πολλῷ, ἐκ δὲ τούτου τὸ αὐτὸ

εἶμα ἔχων ἐν τῷ αὐτῷ χωρίῳ τὴν διατριβὴν ποιῆσθαι ὥσπερ διεψυγμένος, πολὺ φαίνεται καὶ ψυχρότερος καὶ ἄλλως φρικαλεώτερος: ἢ εἰ ῥιπιζόμενος τις ὑπὸ πνίγους καὶ παρασκευαζόμενος αὐτὸς ἐωυτῷ ψῦχος ἐκ τοιούτου ἂν τρόπον διαπαύσαιτο τοῦτο ποιέων, δεκαπλάσιον ἔσται τὸ καῦμα καὶ πνίγος ἢ τῷ μηδὲν τοιούτο ποιέοντι. Τόδε δὴ καὶ πολὺ μέζον: ὅσοι ἂν διὰ χιόνος ἢ ἄλλου ψύχεος βαδίσαντες ῥιγώσωσι διαφερόντως πόδας ἢ χειράς ἢ κεφαλὴν, οἷα πάσχουσιν ἐς τὴν νύκτα, ὅταν περισταλεωσί τε καὶ ἐν ἀλέῃ γένωνται ὑπὸ καύματος καὶ κνησμοῦ. καὶ ἔστιν οἷσι φλύκταιναι ἀνίστανται ὥσπερ τοῖς ἀπὸ πυρὸς κατακεκαυμένοις. καὶ οὐ πρότερον τοῦτο πάσχουσιν, πρὶν θερμανθέωσιν. οὕτως ἐτοίμως ἐκάτερον αὐτῶν ἐπὶ θάτερον παραγίνεται. μυρία δ' ἂν καὶ ἄλλα ἔχοιμι εἰπεῖν. τὰ δὲ κατὰ τοὺς νοσέοντας, οὐχὶ ὅσοις ἂν ῥίγος γένηται, τούτοις ὀξύτατος ὁ πυρετὸς ἐκλάμπει; καὶ οὐχὶ ὅπως ἰσχυρός, ἀλλὰ καὶ παυόμενος δι' ὀλίγου, καὶ ἄλλως τὰ πολλὰ ἀσινήσκει καὶ ὅσον ἂν χρόνον παρῆ διάθερμος; καὶ διεξιὼν διὰ παντὸς τελευτᾷ ἐς τοὺς πόδας μάλιστα, οὐπερ τὸ ῥίγος καὶ ἡ ψῦξις νεηνικωτάτη καὶ ἐπὶ πλεῖον ἐνεχρόνισεν: πάλιν τε ὅταν ἰδρώσῃ τε καὶ ἀπαλλαγῆ ὁ πυρετός, πολὺ μᾶλλον διέψυξε ἢ εἰ μὴ ἔλαβε τὴν ἀρχὴν. ὧ οὖν διὰ τάχεος οὕτω παραγίνεται τὸ ἐναντιώτατόν τε καὶ ἀφαιρεόμενον τὴν δύναμιν ἀπὸ τούτομάτου, τί ἂν ἀπὸ τούτου μέγα ἢ δεινὸν γένοιτο; ἢ τί δεῖ πολλῆς ἐπὶ τούτῳ βοηθείης;

16. But I think that of all the qualities heat and cold exercise the least operation in the body, for these reasons: as long time as hot and cold are mixed up with one another they do not give trouble, for the cold is attempered and rendered more moderate by the hot, and the hot by the cold; but when the one is wholly separate from the other, then it gives pain; and at that season when cold is applied it creates some pain to a man, but quickly, for that very reason, heat spontaneously arises in him without requiring any aid or preparation. And these things operate thus both upon men in health and in disease. For example, if a person in health wishes to cool his body during winter, and bathes either in cold water or in any other way, the more he does this, unless his body be fairly congealed, when he resumes his clothes and comes into a place of shelter, his body becomes more heated than before. And thus, too, if a person wish to be warmed thoroughly either by means of a hot bath or strong fire, and straight-way having the same clothing on, takes up his abode again in the place he was in when he became congealed, he will appear much colder, and more disposed to chills than before. And if a person fan himself on account of a suffocating heat, and having procured refrigeration for himself in this manner, cease doing so, the heat and suffocation will be ten times greater in his case than in that of a person who does nothing of the kind. And, to give a more striking example, persons travelling in the snow, or otherwise in rigorous weather, and contracting great cold in their

feet, their hands, or their head, what do they not suffer from inflammation and tingling when they put on warm clothing and get into a hot place? In some instances, blisters arise as if from burning with fire, and they do not suffer from any of those unpleasant symptoms until they become heated. So readily does either of these pass into the other; and I could mention many other examples. And with regard to the sick, is it not in those who experience a rigor that the most acute fever is apt to break out? And yet not so strongly neither, but that it ceases in a short time, and, for the most part, without having occasioned much mischief; and while it remains, it is hot, and passing over the whole body, ends for the most part in the feet, where the chills and cold were most intense and lasted longest; and, when sweat supervenes, and the fever passes off, the patient is much colder than if he had not taken the fever at all. Why then should that which so quickly passes into the opposite extreme, and loses its own powers spontaneously, be reckoned a mighty and serious affair? And what necessity is there for any great remedy for it?

17. Εἶποι ἄν τις: ἀλλ' οἱ πυρεταίνοντες τοῖσι καύσοισί τε καὶ περιπνευμονίησι καὶ ἄλλοισι ἰσχυροῖσι νοσήμασι οὐ ταχέως ἐκ τῆς θερμῆς ἀπαλλάσσονται, οὐδὲ πάρεστιν ἐνταῦθα ἔτι τὸ θερμὸν ἢ τὸ ψυχρὸν. ἐγὼ δέ μοι τοῦτο μέγιστον τεκμήριον ἠγεῦμαι εἶναι, ὅτι οὐ διὰ τὸ θερμὸν ἀπλῶς πυρεταίνουσιν οἱ ἄνθρωποι, οὐδὲ τοῦτο εἶη τὸ αἷτιον τῆς κακώσιος μόνον, ἀλλ' ἔστι καὶ πικρὸν καὶ θερμὸν τὸ αὐτό, καὶ ὀξύ καὶ θερμὸν, καὶ ἀλμυρὸν καὶ θερμὸν, καὶ ἄλλα μυρία, καὶ πάλιν γε ψυχρὸν μετὰ δυναμίων ἑτέρων. τὰ μὲν οὖν λυμαινόμενα ταῦτ' ἐστὶ: συμπάρεστι δὲ καὶ τὸ θερμὸν, ῥώμης μὲν ἔχον ὅσον τὸ ἠγεύμενον καὶ παροξυνόμενον καὶ αὐξόμενον ἅμα ἐκείνω, 55 δύναμιν δὲ οὐδεμίαν πλείω τῆς προσηκούσης.

17. One might here say- but persons in ardent fevers, pneumonia, and other formidable diseases, do not quickly get rid of the heat, nor experience these rapid alterations of heat and cold. And I reckon this very circumstance the strongest proof that it is not from heat simply that men get into the febrile state, neither is it the sole cause of the mischief, but that this species of heat is bitter, and that acid, and the other saltish, and many other varieties; and again there is cold combined with other qualities. These are what proves injurious; heat, it is true, is present also, possessed of strength as being that which conducts, is exacerbated and increased along with the other, but has no power greater than what is peculiar to itself.

18. Δῆλα δὲ ταῦτα ὅτι ὧδε ἔχει ἐπὶ τῶνδε τῶν σημείων: πρῶτον μὲν ἐπὶ τὰ

φανερώτερα, ὧν πάντες ἔμπειροι πολλάκις ἐσμέν τε καὶ ἐσόμεθα. τοῦτο μὲν γάρ, ὅσοισι ἂν ἡμέων κόρυζα ἐγγένηται καὶ ῥεῦμα κινηθῆ διὰ τῶν ῥινῶν, τοῦτο ὡς τὸ πολὺ δριμύτερον τοῦ πρότερον γινομένου τε καὶ ἰόντος ἐκ τῶν ῥινῶν καθ' ἐκάστην ἡμέρην καὶ οἶδεῖν μὲν ποιεῖ τὴν ῥίνα καὶ συγκαίει θερμὴν τε καὶ διάπυρον ἐσχάτως, ἣν δὴ τὴν χεῖρα προς φέρης: κῆν πλείω χρόνον παρῆ, καὶ ἐξελκοῦται τὸ χωρίον ἄσαρκόν τε καὶ σκληρὸν ἐόν. παύεται δέ πως τὸ καῦμα ἐκ τῆς ῥινός, οὐχ ὅταν τὸ ῥεῦμα γίνηται καὶ ἡ φλεγμονὴ ᾗ, ἀλλ' ἐπειδὴν παχύτερόν τε καὶ ἥσσον δριμύ ῥέη, πέπον καὶ μεμιγμένον μᾶλλον τοῦ πρότερον γινομένου, τότε δὲ ἤδη καὶ τὸ καῦμα πέπαυται. ἀλλ' οἷσι δὲ ὑπὸ ψύχους φανερῶς αὐτοῦ μούνου γίνεται μηδενὸς ἄλλου συμπαραγενομένου, πᾶσι δὲ ἡ αὐτὴ ἀπαλλαγὴ, ἐκ μὲν τῆς ψύξις διαθερμανθῆναι, ἐκ δὲ τοῦ καύματος διαψυχθῆναι, καὶ ταῦτα ταχέως παραγίνεται καὶ πέψιος οὐδεμιῆς προσδεῖται. τὰ δ' ἄλλα πάντα, ὅσα διὰ χυμῶν δριμύτητος καὶ ἀκρησίας, φημὶ ἔγωγε γίνεσθαι τὸν αὐτὸν τρόπον καὶ ἀποκαθίστασθαι πεφθέντα καὶ κρηθέντα.

18. With regard to these symptoms, in the first place those are most obvious of which we have all often had experience. Thus, then, in such of us as have a coryza and defluxion from the nostrils, this discharge is much more acrid than that which formerly was formed in and ran from them daily; and it occasions swelling of the nose, and it inflames, being of a hot and extremely ardent nature, as you may know, if you apply your hand to the place; and, if the disease remains long, the part becomes ulcerated although destitute of flesh and hard; and the heat in the nose ceases, not when the defluxion takes place and the inflammation is present, but when the running becomes thicker and less acrid, and more mixed with the former secretion, then it is that the heat ceases. But in all those cases in which this decidedly proceeds from cold alone, without the concurrence of any other quality, there is a change from cold to hot, and from hot to cold, and these quickly supervene, and require no coction. But all the others being connected, as I have said, with acrimony and intemperance of humors, pass off in this way by being mixed and concocted.

19. Ὅσα τε αὐτὴ ἐπὶ τοὺς ὀφθαλμοὺς τρέπεται τῶν ῥευμάτων, ἰσχυρὰς καὶ παντοίας δριμύτητος ἔχοντα, ἐλκοῖ μὲν βλέφαρα, κατεσθίει δ' ἐνίων γνάθους τε καὶ τὰ ὑπὸ τοῖσι ὀφθαλμοῖσι, ἐφ' ὃ τι ἂν ἐπιρρυῆ, ῥήγνυσι δὲ καὶ διεσθίει τὸν ἀμφὶ τὴν ὄψιν χιτῶνα. ὀδύναί δὲ καὶ καῦμα καὶ φλογμὸς ἔσχατος κατέχει μέχρι τινός, μέχρι ἂν τὰ ῥεύματα πεφθῆ καὶ γένηται παχύτερα καὶ λήμη ἀπ' αὐτῶν ᾗ. τὸ δὲ πεφθῆναι γίνεται ἐκ τοῦ μιχθῆναι καὶ κρηθῆναι ἀλλήλοισι καὶ συνεψηθῆναι. τοῦτο δέ, ὅσα ἐς τὴν φάρυγγα, ἀφ' ὧν βράγχοι γίνονται καὶ συνάγχει, ἐρυσιπέλατά τε καὶ περιπνευμονίαι, πάντα ταῦτα τὸ μὲν πρῶτον ἀλμυρά τε καὶ



ὕγρα καὶ δριμύεια ἀφίει, καὶ ἐν τοῖσι τοιούτοις ἔρρωται τὰ νοσήματα. ὅταν δὲ παχύτερα καὶ πεπαίτερα γένηται καὶ πάσης δριμύτητος ἀπηλλαγμένα, τότε ἦδη καὶ οἱ πυρετοὶ παύονται καὶ τᾶλλα τὰ λυπέοντα τὸν ἄνθρωπον. δεῖ δὲ δήπου ταῦτα αἷτια ἐκάστου ἡγεῖσθαι εἶναι, ὧν παρεόντων μὲν τοιοῦτο τρόπον γίνεσθαι ἀνάγκη, μεταβαλλόντων δὲ ἐς ἄλλην κρῆσιν παύεσθαι. ὁπόσα οὖν ἀπ' αὐτῆς τῆς θέρμης εἰλικρινέος ἢ ψύξιος γίνεται καὶ μὴ μετέχει ἄλλης δυνάμιος μηδεμιᾶς, οὕτω παύοιτο ἄν, ὅταν μεταβάλλῃ ἐκ τοῦ θερμοῦ ἐς τὸ ψυχρὸν καὶ ἐκ τοῦ ψυχροῦ ἐς τὸ θερμόν. μεταβάλλει δὲ ὄνπερ προείρηται μοι τρόπον. ἔτι τοίνυν τᾶλλα ὅσα κακοπαθεῖ ὁ ἄνθρωπος πάντα ἀπὸ δυνάμιων γίνεται. τοῦτο μὲν γάρ, ὅταν πικρότης τις ἀποχυθῆ, ἣν δὴ χολὴν ξανθὴν καλέομεν, οἷαι ἄσαι καὶ καύματα καὶ ἀδυναμίαι κατέχουσιν: ἀπαλλασσόμενοι δὲ τούτου, ἐνίοτε καὶ καθαιρόμενοι, ἢ αὐτόματοι ἢ ὑπὸ φαρμάκου, ἣν ἐν καιρῷ τι αὐτῶν γίνηται, φανερῶς καὶ τῶν πόνων καὶ τῆς θέρμης ἀπαλλάσσονται. ὅσον δ' ἂν χρόνον ταῦτα μετέωρα ἦ καὶ ἄπεπτα καὶ ἄκρητα, μηχανὴ οὐδεμία οὔτε τῶν πόνων παύεσθαι οὔτε τῶν πυρετῶν. καὶ ὅσοισι δὲ ὀξύτητες προσίστανται δριμεῖαί τε καὶ ἰώδεες, οἷαι λύσσαι καὶ δήξιες σπλάγχμων καὶ θώρηκος καὶ ἀπορίη: οὐ παύεται τι τούτου πρότερον, πρὶν ἢ ἀποκαθαρθῆ τε καὶ καταστορεσθῆ καὶ μιχθῆ τοῖσιν ἄλλοισιν: πέσσεσθαι δὲ καὶ μεταβάλλειν καὶ λεπτύνεσθαι τε καὶ παχύνεσθαι ἐς χυμῶν εἶδος δι' ἄλλων εἰδέων καὶ παντοίων-διὸ καὶ κρίσεις καὶ ἀριθμοὶ τῶν χρόνων ἐν τοῖσι τοιούτοις μέγα δύνανται — πάντων δὴ τούτων ἥκιστα προσήκει θερμῷ ἢ ψυχρῷ πάσχειν: οὔτε γὰρ ἂν τοῦτό γε σαπίη οὔτε παχυνθείη. τί γὰρ αὐτὸ φήσωμεν εἶναι; κρήσιας αὐτῶν ἄλλην πρὸς ἄλληλα ἐχούσας δύνανται. ἐπεὶ ἄλλω γε οὐδενὶ τὸ θερμὸν μιχθὲν παύσεται τῆς θέρμης ἢ τῷ ψυχρῷ οὐδέ γε τὸ ψυχρὸν ἢ τῷ θερμῷ. τὰ δὲ ἄλλα πάντα τὰ περὶ τὸν ἄνθρωπον, ὅσῳ ἂν πλείοσι μίσηται, τοσοῦτω ἠπιώτερα καὶ βελτίω. πάντων δὲ ἄριστα διάκειται ὁ ἄνθρωπος, ὅταν πᾶνπέσσηται καὶ ἐν ἡσυχίῃ ἦ, μηδεμίαν δύνανται ἰδίην ἀποδεικνύμενον, περὶ οὗ ἡγεῖσθαι ἐπιδεδεῖχθαι.

19. But such defluxions as are determined to the eyes being possessed of strong and varied acrimonies, ulcerate the eyelids, and in some cases corrode the and parts below the eyes upon which they flow, and even occasion rupture and erosion of the tunic which surrounds the eyeball. But pain, heat, and extreme burning prevail until the defluxions are concocted and become thicker, and concretions form about the eyes, and the coction takes place from the fluids being mixed up, diluted, and digested together. And in defluxions upon the throat, from which are formed hoarseness, cynanche, crysipelas, and pneumonia, all these have at first saltish, watery, and acrid discharges, and with these the diseases gain strength. But when the discharges become thicker, more concocted, and are freed from all acrimony, then, indeed, the fevers pass away, and the other

symptoms which annoyed the patient; for we must account those things the cause of each complaint, which, being present in a certain fashion, the complaint exists, but it ceases when they change to another combination. But those which originate from pure heat or cold, and do not participate in any other quality, will then cease when they undergo a change from cold to hot, and from hot to cold; and they change in the manner I have described before. Wherefore, all the other complaints to which man is subject arise from powers (qualities?). Thus, when there is an overflow of the bitter principle, which we call yellow bile, what anxiety, burning heat, and loss of strength prevail! but if relieved from it, either by being purged spontaneously, or by means of a medicine seasonably administered, the patient is decidedly relieved of the pains and heat; but while these things float on the stomach, unconcocted and undigested, no contrivance could make the pains and fever cease; and when there are acidities of an acrid and aeruginous character, what varieties of frenzy, gnawing pains in the bowels and chest, and inquietude, prevail! and these do not cease until the acidities be purged away, or are calmed down and mixed with other fluids. The coction, change, attenuation, and thickening into the form of humors, take place through many and various forms; therefore the crises and calculations of time are of great importance in such matters; but to all such changes hot and cold are but little exposed, for these are neither liable to putrefaction nor thickening. What then shall we say of the change? that it is a combination (crasis) of these humors having different powers toward one another. But the hot does not loose its heat when mixed with any other thing except the cold; nor again, the cold, except when mixed with the hot. But all other things connected with man become the more mild and better in proportion as they are mixed with the more things besides. But a man is in the best possible state when they are concocted and at rest, exhibiting no one peculiar quality; but I think I have said enough in explanation of them.

20. Λέγουσι δέ τινες ἰητροὶ καὶ σοφισταί, ὡς οὐκ εἶη δυνατόν ἰητρικὴν εἰδέναι ὅστις μὴ οἶδεν ὃ τί ἐστὶν ἄνθρωπος. ἀλλὰ τοῦτο δεῖ καταμαθεῖν τὸν μέλλοντα ὀρθῶς θεραπεύσειν τοὺς ἀνθρώπους. τείνει δὲ αὐτοῖς ὁ λόγος ἐς φιλοσοφίην, καθάπερ Ἐμπεδοκλῆς ἢ ἄλλοι οἱ περὶ φύσιος γεγράφασιν ἐξ ἀρχῆς ὃ τί ἐστὶν ἄνθρωπος, καὶ ὅπως ἐγένετο πρῶτον καὶ ὀπόθεν συνεπάγη. ἐγὼ δὲ τοῦτο μὲν, ὅσα τινὲ εἴρηται ἢ σοφιστῆ ἢ ἰητρῶ ἢ γέγραπται περὶ φύσιος, ἧσσον νομίζω τῆ ἰητρικῆ τέχνῃ προσήκειν ἢ τῆ γραφικῆ. νομίζω δὲ περὶ φύσιος γνῶναί τι σαφές οὐδαμῶθεν ἄλλοθεν εἶναι ἢ ἐξ ἰητρικῆς: τοῦτο δὲ οἶόν τε καταμαθεῖν, ὅταν αὐτὴν τις τὴν ἰητρικὴν ὀρθῶς περιλάβῃ: μέχρι δὲ τούτου πολλοῦ μοι δοκεῖ δεῖν: λέγω δὲ ταύτην τὴν ἱστορίην εἰδέναι, ἄνθρωπος τί ἐστὶν καὶ δι' οἷας αἰτίας

γίνεται καὶ τᾶλλα ἀκριβέως. ἐπεὶ τοῦτό γέ μοι δοκεῖ ἀναγκαῖον εἶναι ἰητρῶ περὶ φύσιος εἰδέναι καὶ πάνυ σπουδάσαι ὡς εἴσεται, εἴπερ τι μέλλει τῶν δεόντων ποιήσῃν, ὃ τί τέ ἐστὶν ἄνθρωπος πρὸς τὰ ἐσθιόμενά τε καὶ πινόμενα καὶ ὃ τι πρὸς τὰ ἄλλα ἐπιτηδεύματα, καὶ ὃ τι ἀφ' ἐκάστου ἐκάστῳ συμβήσεται, καὶ μὴ ἀπλῶς οὕτως: πονηρόν ἐστὶν βρῶμα τυρός. πόνον γὰρ παρέχει τῷ πληρωθέντι αὐτοῦ, ἀλλὰ τίνα τε πόνον καὶ διὰ τί καὶ τίνι τῶν ἐν τῷ ἀνθρώπῳ ἐνεόντων ἀνεπιτήδειον. ἔστι γὰρ καὶ ἄλλα πολλὰ βρώματα καὶ πόματα πονηρά, ἃ διατίθησι τὸν ἄνθρωπον οὐ τὸν αὐτὸν τρόπον. οὕτως οὖν μοι ἔστω οἶνος: οἶνος ἄκρητος πολλὸς ποθεῖς διατίθησί πως τὸν ἄνθρωπον: καὶ πάντες ἂν οἱ εἰδότες τοῦτο γνοίησαν, ὅτι αὕτη δύναμις οἴνου καὶ αὐτὸς αἴτιος: καὶ οἷσι γε τῶν ἐν τῷ ἀνθρώπῳ τοῦτο δύναται μάλιστα, οἷδαμεν. τοιαύτην δὲ βούλομαι ἀληθεῖν καὶ περὶ τῶν ἄλλων φανῆναι. τυρός γάρ, ἐπειδὴ τούτῳ σημείῳ ἐχρησάμην, οὐ πάντας ἀνθρώπους ὁμοίως λυμαίνεται, ἀλλ' εἰσὶν οἵτινες αὐτοῦ πληρούμενοι οὐδ' ὅτιοῦν βλάπτονται, ἀλλὰ καὶ ἰσχύν, οἷσιν ἂν συμφέρη, θαυμασίως παρέχεται. εἰσὶ δ' οἱ χαλεπῶς ἀπαλλάσσουσι. διαφέρουσιν οὖν τούτων αἱ φύσιες. διαφέρουσιν δὲ κατὰ τοῦτο, ὅπερ ἐν τῷ σώματι ἐνεστί πολέμιον τυρῶ καὶ ὑπὸ τούτου ἐγείρεται τε καὶ κινεῖται: οἷς ὁ τοιοῦτος χυμὸς τυγχάνει πλείων ἐνεῶν καὶ μᾶλλον ἐνδυναστεύων ἐν τῷ σώματι, τούτους μᾶλλον καὶ κακοπαθεῖν εἰκός. εἰ δὲ πάσῃ τῇ ἀνθρωπίνῃ φύσει ἦν κακόν, πάντας ἂν ἐλυμήνατο. ταῦτα δὲ εἴ τις εἰδείη, οὐκ ἂν πάσχοι τάδε.

20. Certain sophists and physicians say that it is not possible for any one to know medicine who does not know what man is [and how he was made and how constructed], and that whoever would cure men properly, must learn this in the first place. But this saying rather appertains to philosophy, as Empedocles and certain others have described what man in his origin is, and how he first was made and constructed. But I think whatever such has been said or written by sophist or physician concerning nature has less connection with the art of medicine than with the art of painting. And I think that one cannot know anything certain respecting nature from any other quarter than from medicine; and that this knowledge is to be attained when one comprehends the whole subject of medicine properly, but not until then; and I say that this history shows what man is, by what causes he was made, and other things accurately. Wherefore it appears to me necessary to every physician to be skilled in nature, and strive to know, if he would wish to perform his duties, what man is in relation to the articles of food and drink, and to his other occupations, and what are the effects of each of them to every one. And it is not enough to know simply that cheese is a bad article of food, as disagreeing with whoever eats of it to satiety, but what sort of disturbance it creates, and wherefore, and with what

principle in man it disagrees; for there are many other articles of food and drink naturally bad which affect man in a different manner. Thus, to illustrate my meaning by an example, undiluted wine drunk in large quantity renders a man feeble; and everybody seeing this knows that such is the power of wine, and the cause thereof; and we know, moreover, on what parts of a man's body it principally exerts its action; and I wish the same certainty to appear in other cases. For cheese (since we used it as an example) does not prove equally injurious to all men, for there are some who can take it to satiety without being hurt by it in the least, but, on the contrary, it is wonderful what strength it imparts to those it agrees with; but there are some who do not bear it well, their constitutions are different, and they differ in this respect, that what in their body is incompatible with cheese, is roused and put in commotion by such a thing; and those in whose bodies such a humor happens to prevail in greater quantity and intensity, are likely to suffer the more from it. But if the thing had been pernicious to of man, it would have hurt all. Whoever knows these things will not suffer from it.

21. Ἐν τῆσιν ἀνακομιδῆσι τῆσιν ἐκ τῶν νόσων, ἔτι δὲ καὶ ἐν τῆσι νόσοισι τῆσι μακρῆσι γίνονται πολλαὶ συνταράξεις, αἱ μὲν ἀπὸ τῶν τομάτων, αἱ δὲ καὶ ἀπὸ τῶν προσενεχθέντων τῶν τυχόντων. οἶδα δὲ τοὺς πολλοὺς ἰητρούς, ὥσπερ τοὺς ιδιώτας, ἦν τύχῳσι περὶ τὴν ἡμέρην ταύτην τι κεκαινουρηγότες, ἢ λουσάμενοι ἢ περιπατήσαντες ἢ φαγόντες τι ἕτεροῖον, ταῦτα δὲ πάντα βελτίῳ προσενηνεγμένα ἢ μή, οὐδὲν ἤσσαν τὴν αἰτίην τούτων τινὶ ἀνατιθέντας καὶ τὸ μὲν αἴτιον ἀγνοεῦντας, τὸ δὲ συμφορώτατον, ἦν οὕτω τύχη, ἀφαιρέοντας. δεῖ δὲ οὐ, ἀλλ' εἶδέναι, τί λουτρὸν ἀκαίρως προσγενόμενον ἐργάσεται ἢ τί κόπος. οὐδέποτε γὰρ ἢ αὐτὴ κακοπάθεια τούτων οὐδετέρου, οὐδέ γε ἀπὸ πληρώσιος οὐδ' ἀπὸ βρώματος τοίου ἢ τοίου. ὅστις οὖν ταῦτα μὴ εἴσεται ὡς ἕκαστα ἔχει πρὸς τὸν ἄνθρωπον, οὔτε γινώσκειν τὰ γινόμενα ἀπ' αὐτῶν δυνησεται οὔτε χρῆσθαι ὀρθῶς.

21. During convalescence from diseases, and also in protracted diseases, many disorders occur, some spontaneously, and some from certain things accidentally administered. I know that the common herd of physicians, like the vulgar, if there happen to have been any innovation made about that day, such as the bath being used, a walk taken, or any unusual food eaten, all which were better done than otherwise, attribute notwithstanding the cause of these disorders, to some of these things, being ignorant of the true cause but proscribing what may have been very proper. Now this ought not to be so; but one should know the effects of a bath or a walk unseasonably applied; for thus there will never be any

mischief from these things, nor from any other thing, nor from repletion, nor from such and such an article of food. Whoever does not know what effect these things produce upon a man, cannot know the consequences which result from them, nor how to apply them.

22. Δεῖν δέ μοι δοκεῖ καὶ ταῦτα εἰδέναι, ὅσα τῷ ἀνθρώπῳ παθήματα ἀπὸ δυναμίων γίνεται καὶ ὅσα ἀπὸ σχημάτων. λέγω δέ τι τοιοῦτον, δύναμιν μὲν εἶναι τῶν χυμῶν τὰς ἀκρότητάς τε καὶ ἰσχύον, σχήματα δὲ λέγω ὅσα ἔνεστιν ἐν τῷ ἀνθρώπῳ, τὰ μὲν κοιλὰ τε καὶ ἐξ εὐρέος ἐς στενὸν συνηγμένα, τὰ δὲ καὶ ἐκπεπταμένα, τὰ δὲ στερεὰ τε καὶ στρογγύλα, τὰ δὲ πλατέα τε καὶ ἐπικρεμάμενα, τὰ δὲ διατεταμένα, τὰ δὲ μακρὰ, τὰ δὲ πυκνὰ, τὰ δὲ μανά τε καὶ τεθηλότα, τὰ δὲ σπογοειδέα τε καὶ ἀραιά. τοῦτο μὲν οὖν, ἐλκύσαι ἐφ' ἐωυτὸ καὶ ἐπισπάσασθαι ὑγρότητα ἐκ τοῦ ἄλλου σώματος, πότερον τὰ κοιλὰ τε καὶ ἐκπεπταμένα ἢ τὰ στερεὰ τε καὶ στρογγύλα ἢ τὰ κοιλὰ τε καὶ ἐς στενὸν ἐξ εὐρέος συνηγμένα δύναται ἂν μάλιστα; οἶμαι μὲν τὰ τοιαῦτα, τὰ ἐς στενὸν συνηγμένα ἐκ κοίλου τε καὶ εὐρέος. καταμανθάνειν δὲ δεῖ ταῦτα ἔξωθεν ἐκ τῶν φανερῶν. τοῦτο μὲν γάρ, τῷ στόματι κεχηγῶς ὑγρὸν οὐδὲν ἀνασπάσει: προμυλλήνας δὲ καὶ συστείλας, πιέσας τε τὰ χεῖλα καὶ ἔπειτεν αὐλὸν προσθέμενος ῥηϊδίως ἀνασπάσαις ἂν ὁ τι ἐθέλοις. τοῦτο δέ, αἱ σικύαι προσβαλλόμεναι ἐξ εὐρέος ἐς στενώτερον συνηγμένα πρὸς τοῦτο τετέχνηται, πρὸς τὸ ἔλκειν ἐκ τῆς σαρκὸς καὶ ἐπισπᾶσθαι, ἄλλα τε πολλὰ τοιουτότροπα. τῶν δὲ ἔσω φύσει τοῦ ἀνθρώπου σχῆμα τοιοῦτον κύστις τε καὶ κεφαλή, καὶ ὑστέρα γυναιξίν: καὶ φανερῶς ταῦτα μάλιστα ἔλκει καὶ πλήρεά ἐστιν ἐπάκτου ὑγρότητος αἰεὶ. τὰ δὲ κοῖλα καὶ ἐκπεπταμένα ἐπεστυεῖσαν μὲν ὑγρότητα μάλιστα δέξαιτο πάντων, ἐπισπᾶσαιτο δ' ἂν οὐχ ὁμοίως. τὰ δὲ γε στερεὰ καὶ στρογγύλα οὔτ' ἂν ἐπισπᾶσαιτο οὔτ' ἂν ἐπεστυεῖσαν δέξαιτο: περιολισθάνοι τε γὰρ καὶ οὐκ ἔχοι ἔδρην, ἐφ' ἧς μένοι. τὰ δὲ σπογοειδέα τε καὶ ἀραιά, οἶον σπλήν τε καὶ πνεύμων καὶ μαζοί, προσκαθεζόμενα μάλιστα ἀναπίνοι καὶ σκληρυνθείη ἂν καὶ αὐξηθείη ὑγρότητος προσγενομένης ταῦτα μάλιστα. οὐ γὰρ ἂν ὥσπερ ἐν κοιλίῃ, ἐν ἧ τὸ ὑγρὸν, ἔξω τε περιέχει αὐτὴ ἢ κοιλίῃ, ἐξαλίσσοιτ' ἂν καθ' ἐκάστην ἡμέρην, ἀλλ' ὅταν πῖη καὶ δέξηται αὐτὸ ἐς ἐωυτὸ τὸ ὑγρὸν, τὰ κενὰ καὶ ἀραιὰ ἐπληρώθη καὶ τὰ σμικρὰ πάντη καὶ ἀντὶ μαλθακοῦ τε καὶ ἀραιοῦ σκληρὸς τε καὶ πυκνὸς ἐγένετο καὶ οὔτ' ἐκπέσσει οὔτ' ἀφήσει. ταῦτα δὲ πάσχει διὰ τὴν φύσιν τοῦ σχήματος. ὅσα δὲ φῦσάν τε καὶ ἀνειλήματα ἀπεργάζεται ἐν τῷ σώματι, προσήκει ἐν μὲν τοῖσι κοίλοισι καὶ εὐρυχώροισι, οἶον κοιλίῃ τε καὶ θώρηκι, ψόφον τε καὶ πάταγον ἐμποιεῖν. ὅτε γὰρ ἂν μὴ ἀποπληρώση οὕτως ὥστε στῆναι, ἀλλ' ἔχη μεταβολὰς τε καὶ κινήσιας, ἀνάγκη ὑπ' αὐτῶν ψόφον καὶ καταφανέας κινήσιας γίνεσθαι. ὅσα δὲ σαρκώδεά τε καὶ μαλθακά, ἐν τοῖσι τοιούτοισι νάρκη τε καὶ πληρώματα οἷα ἐν τοῖσι ἀποπληγεῖσι γίνεται. ὅταν δ' ἐγκυρήσῃ πλατεῖ τε καὶ ἀντικειμένῳ, καὶ

πρὸς αὐτὸ ἀντιπέση, καὶ φύσει τοῦτο τύχη ἐὼν μήτε ἰσχυρόν, ὥστε δύνασθαι ἀνέχεσθαι τὴν βίην καὶ μηδὲν κακὸν παθεῖν, μήτε μαλθακὸν τε καὶ ἀραιόν, ὥστ' ἐκδέξασθαι τε καὶ ὑπεῖξαι, ἀπαλὸν δὲ καὶ τεθηλὸς καὶ ἔναιμον καὶ πυκνόν, οἶον ἦπαρ, διὰ μὲν τὴν πυκνότητα καὶ πλατύτητα ἀνθέστηκέ τε καὶ οὐχ ὑπείκει, φῦσα δ' ἐπισχομένη αὔξεται τε καὶ ἰσχυροτέρη γίνεται καὶ ὀρμᾷ μάλιστα πρὸς τὸ ἀντιπαῖον. διὰ δὲ τὴν ἀπαλότητα καὶ τὴν ἐναιμότητα οὐ δύναται ἄνευ πόνων εἶναι, καὶ διὰ ταύτας τὰς προφάσιας ὀδύνη τε ὀξύταται καὶ πυκνότεραι πρὸς τοῦτο τὸ χωρίον γίνονται ἐμπυρήματά τε καὶ φύματα πλεῖστα. γίνεται δὲ καὶ ὑπὸ φρένας ἰσχυρῶς, ἦσσον δὲ πολλόν. διάτασις μὲν γὰρ φρενῶν πλατεῖη καὶ ἀντικειμένη, φύσις δὲ νευρωδεστέρη τε καὶ ἰσχυροτέρη, διὸ ἦσσον ἐπώδυνά ἐστιν. γίνεται δὲ καὶ περὶ ταῦτα καὶ πόνοι καὶ φύματα.

22. And it appears to me that one ought also to know what diseases arise in man from the powers, and what from the structures. What do I mean by this? By powers, I mean intense and strong juices; and by structures, whatever conformations there are in man. For some are hollow, and from broad contracted into narrow; some expanded, some hard and round, some broad and suspended, some stretched, some long, some dense, some rare and succulent, some spongy and of loose texture. Now, then, which of these figures is the best calculated to suck to itself and attract humidity from another body? Whether what is hollow and expanded, or what is solid and round, or what is hollow, and from broad, gradually turning narrow? I think such as from hollow and broad are contracted into narrow: this may be ascertained otherwise from obvious facts: thus, if you gape wide with the mouth you cannot draw in any liquid; but by protruding, contracting, and compressing the lips, and still more by using a tube, you can readily draw in whatever you wish. And thus, too, the instruments which are used for cupping are broad below and gradually become narrow, and are so constructed in order to suck and draw in from the fleshy parts. The nature and construction of the parts within a man are of a like nature; the bladder, the head, the uterus in woman; these parts clearly attract, and are always filled with a juice which is foreign to them. Those parts which are hollow and expanded are most likely to receive any humidity flowing into them, but cannot attract it in like manner. Those parts which are solid and round could not attract a humidity, nor receive it when it flows to them, for it would glide past, and find no place of rest on them. But spongy and rare parts, such as the spleen, the lungs, and the breasts, drink up especially the juices around them, and become hardened and enlarged by the accession of juices. Such things happen to these organs especially. For it is not with the spleen as with the stomach, in which there is a liquid, which it contains and evacuates every day; but when it (the spleen) drinks

up and receives a fluid into itself, the hollow and lax parts of it are filled, even the small interstices; and, instead of being rare and soft, it becomes hard and dense, and it can neither digest nor discharge its contents: these things it suffers, owing to the nature of its structure. Those things which engender flatulence or tormina in the body, naturally do so in the hollow and broad parts of the body, such as the stomach and chest, where they produce rumbling noises; for when they do not fill the parts so as to be stationary, but have changes of place and movements, there must necessarily be noise and apparent movements from them. But such parts as are fleshy and soft, in these there occur torpor and obstructions, such as happen in apoplexy. But when it (the flatus?) encounters a broad and resisting structure, and rushes against such a part, and this happens when it is by nature not strong so as to be able to withstand it without suffering injury; nor soft and rare, so as to receive or yield to it, but tender, juicy, full of blood, and dense, like the liver, owing to its density and broadness, it resists and does not yield. But flatus, when it obtains admission, increases and becomes stronger, and rushes toward any resisting object; but owing to its tenderness, and the quantity of blood which it (the liver) contains, it cannot be without uneasiness; and for these reasons the most acute and frequent pains occur in the region of it, along with suppurations and chronic tumors (phymata). These symptoms also occur in the site of the diaphragm, but much less frequently; for the diaphragm is a broad, expanded, and resisting substance, of a nervous (tendinous?) and strong nature, and therefore less susceptible of pain; and yet pains and chronic abscesses do occur about it.

23. Πολλὰ δὲ καὶ ἄλλα καὶ ἔσω καὶ ἔξω τοῦ σώματος εἶδεα σχημάτων, ἃ μεγάλα ἀλλήλων διαφέρει πρὸς τὰ παθήματα καὶ νοσέοντι καὶ ὑγιαίνουντι, οἷον κεφαλαὶ σμικραὶ ἢ μεγάλαι, τράχηλοι λεπτοὶ ἢ παχέες, μακροὶ ἢ βραχέες, κοιλίαι μακρὰι ἢ στρογγύλαι, θώρηκος καὶ πλευρέων πλατύτητες ἢ στενότητες, ἄλλα μυρία, ἃ δεῖ πάντα εἰδέναι ἢ διαφέρει, ὅπως τὰ αἷτια ἐκάστων εἰδῶς ὀρθῶς φυλάσσηται:

23. There are both within and without the body many other kinds of structure, which differ much from one another as to sufferings both in health and disease; such as whether the head be small or large; the neck slender or thick, long or short; the belly long or round; the chest and ribs broad or narrow; and many others besides, all which you ought to be acquainted with, and their differences; so that knowing the causes of each, you may make the more accurate observations.

24. Περὶ δὲ δυναμίων χυμῶν αὐτῶν τε ἕκαστος ὃ τι δύναται ποιεῖν τὸν ἄνθρωπον

ἐσκέφθαι, ὡσπερ καὶ πρότερον εἴρηται, καὶ τὴν συγγένειαν ὡς ἔχουσι πρὸς ἀλλήλους. λέγω δὲ τὸ τοιοῦτον: εἰ γλυκὺς χυμὸς ἐὼν μεταβάλλοι εἰς ἄλλο εἶδος, μὴ ἀπὸ συγκρήσιος, ἀλλὰ αὐτὸς ἐξιστάμενος, ποῖός τις ἂν πρῶτος γένοιτο, πικρὸς ἢ ἀλμυρὸς ἢ στρυφνὸς ἢ ὀξύς; οἶμαι μὲν, ὀξύς. ὁ ἄρα ὀξύς χυμὸς ἀνεπιτήδειος προσφέρειν ἂν τῶν λοιπῶν εἴη μάλιστα, εἴπερ ὁ γλυκὺς τῶν γεπάντων ἀνεπιτηδείοτατος. οὕτως εἴ τις δύναιτο ζητέων ἐξωθεν ἐπιτυγχάνειν, καὶ δύναιτο ἂν πάντων ἐκλέγεσθαι αἰεὶ τὸ βέλτιστον. βέλτιστον δὲ ἐστὶ αἰεὶ τὸ προσωτάτω τοῦ ἀνεπιτηδείου ἀπέχον.

24. And, as has been formerly stated, one ought to be acquainted with the powers of juices, and what action each of them has upon man, and their alliances towards one another. What I say is this: if a sweet juice change to another kind, not from any admixture, but because it has undergone a mutation within itself; what does it first become?- bitter? salt? austere? or acid? I think acid. And hence, an acid juice is the most improper of all things that can be administered in cases in which a sweet juice is the most proper. Thus, if one should succeed in his investigations of external things, he would be the better able always to select the best; for that is best which is farthest removed from that which is unwholesome.



## PROGNOSTICS - Προγνωστικόν

1. Τὸν ἰητρὸν δοκέει μοι ἄριστον εἶναι πρόνοιαν ἐπιτηδεύειν προγιγνώσκων γὰρ καὶ προλέγων παρὰ τοῖσι νοσέουσι τά τε παρεόντα καὶ τὰ προγεγονότα καὶ τὰ μέλλοντα ἔσεσθαι, ὁκόσα τε παραλείπουσιν οἱ ἀσθενέοντες ἐκδιηγούμενος, πιστεύοιτ' ἂν μᾶλλον γινώσκειν τὰ τῶν νοσεόντων πρήγματα, ὥστε τολμᾶν ἐπιτρέπειν τοὺς ἀνθρώπους σφέας ἐωυτοὺς τῷ ἰητρῷ. Τὴν δὲ θεραπείην ἄριστα ἂν ποιέοιτο, προειδῶς τὰ ἐσόμενα ἐκ τῶν παρεόντων παθημάτων. Ὑγιέας μὲν γὰρ ποιέειν ἅπαντας τοὺς ἀσθενέοντας ἀδύνατον τοῦτο γὰρ τοῦ προγιγνώσκειν τὰ μέλλοντα ἀποβήσεσθαι κρέσσον ἂν ἦν ἐπειδὴ δὲ οἱ ἄνθρωποι ἀποθνήσκουσιν, οἱ μὲν πρὶν ἢ καλέσαι τὸν ἰητρὸν, ὑπὸ τῆς ἰσχύος τῆς νούσου, οἱ δὲ

καὶ ἐσκαλεσάμενοι παραχρῆμα ἐτελεύτησαν, οἱ μὲν ἡμέρην μίην ζήσαντες, οἱ δὲ ὀλίγῳ πλέονα χρόνον πρὶν ἢ τὸν ἰητρὸν τῇ τέχνῃ πρὸς ἕκαστον νοσήμα ἀνταγωνίσασθαι γινῶναι οὖν χρῆ τῶν παθέων τῶν τοιουτέων τὰς φύσεις, ὁκόσον ὑπὲρ τὴν δύναμιν εἰσι τῶν σωμάτων, ἅμα δὲ καὶ εἴ τι θεῖον ἔνεστιν ἐν τῆσι νούσοισι, καὶ τουτέου τὴν πρόνοιαν ἐκμανθάνειν. Οὕτω γὰρ ἂν θαυμάζοιτό τε δικαίως, καὶ ἰητρὸς ἀγαθὸς ἂν εἴη καὶ γὰρ οὐς οἶόν τε περιγίγνεσθαι, τούτους ἔτι μᾶλλον δύναιτ' ἂν ὀρθῶς διαφυλάσσειν, ἐκ πλείονος χρόνου προβουλευόμενος πρὸς ἕκαστα, καὶ τοὺς ἀποθανομένους τε καὶ σωθησομένους προγιγνώσκων καὶ προαγορεύων ἀναίτιος ἂν εἴη.

1. It appears to me a most excellent thing for the physician to cultivate Prognosis; for by foreseeing and foretelling, in the presence of the sick, the present, the past, and the future, and explaining the omissions which patients have been guilty of, he will be the more readily believed to be acquainted with the circumstances of the sick; so that men will have confidence to intrust themselves to such a physician. And he will manage the cure best who has foreseen what is to happen from the present state of matters. For it is impossible to make all the sick well; this, indeed, would have been better than to be able to foretell what is going to happen; but since men die, some even before calling the physician, from the violence of the disease, and some die immediately after calling him, having lived, perhaps, only one day or a little longer, and before the physician could bring his art to counteract the disease; it therefore becomes necessary to know the nature of such affections, how far they are above the powers of the constitution; and, moreover, if there be anything divine in the diseases, and to learn a foreknowledge of this also. Thus a man will be the more esteemed to be a

good physician, for he will be the better able to treat those aright who can be saved, having long anticipated everything; and by seeing and announcing beforehand those who will live and those who will die, he will thus escape censure.

2. Σκέπτεσθαι δὲ χρῆ ὧδε ἐν τοῖσιν ὀξέσι νουσήμασι πρῶτον μὲν τὸ πρόσωπον τοῦ νοσέοντος, εἰ ὁμοίον ἐστι τοῖσι τῶν ὑγιαινόντων, μάλιστα δὲ, εἰ αὐτὸ ἐωυτέω. Οὕτω γὰρ ἂν εἴη

ἄριστον, τὸ δ' ἐναντιώτατον τοῦ ὁμοίου, δεινότατον. Εἴη δ' ἂν τὸ τοιόνδε ρίς ὀξεῖα, ὀφθαλμοὶ κοῖλοι, κρόταφοι ξυμπεπτωκότες, ὄτα ψυχρὰ καὶ ξυνεσταλμένα, καὶ οἱ λοβοὶ τῶν ὠτων ἀπεστραμμένοι, καὶ τὸ δέρμα τὸ περὶ τὸ μέτωπον σκληρόν τε καὶ περιτεταμένον καὶ καρφαλέον ἐόν. Καὶ τὸ χρῶμα τοῦ ζύμπαντος προσώπου χλωρόν τε ἢ καὶ μέλαν ἐόν, καὶ πελιόν, ἢ μολιβδῶδες. "Ἦν μὲν οὖν ἐν ἀρχῇ τῆς νόσου τὸ πρόσωπον τοιοῦτον ἦ, καὶ μήπω οἷόν τε ἦ τοῖσιν ἄλλοισι σημείοισι ξυντεκμαίρεσθαι, ἐπανερέσθαι χρῆ, μὴ ἡγρύπνησεν ὁ νοσέων, ἢ τὰ τῆς κοιλῆς ἐξυγρασμένα ἢ ἰσχυρῶς, ἢ λιμῶδες τι ἔχη αὐτόν κῆν μὲν τι τουτέων ὁμολογῆ, ἦσσαν νομίζειν δεινὸν εἶναι κρίνεται δὲ τὰ τοιαῦτα ἐν ἡμέρῃ τε καὶ νυκτὶ, ἦν διὰ ταύτας τὰς προφάσιας τὸ πρόσωπον τοιοῦτον ἦ. "Ἦν δὲ μηδὲν τουτέων φῆ εἶναι, μηδὲ ἐν τῷ χρόνῳ τῷ προειρημένῳ καταστῆ, εἰδέναι χρῆ ἐγγὺς ἐόντα τοῦ θανάτου. "Ἦν δὲ καὶ παλαιότερου ἐόντος τοῦ νουσήματος, ἢ τριταίου

ἢ τεταρταίου, τὸ πρόσωπον τοιοῦτον ἦ, περὶ τουτέων ἐπανερέσθαι, περὶ ὧν καὶ πρότερον ἐκέλευσα, καὶ τἄλλα σημεία σκέπτεσθαι, τὰ τε ἐν τῷ ζύμπαντι προσώπῳ, τὰ τε ἐν τῷ σώματι, καὶ τὰ ἐν τοῖσιν ὀφθαλμοῖσιν. "Ἦν γὰρ τὴν αὐγὴν φεύγωσιν, ἢ δακρῦωσιν ἀπροαιρέτως, ἢ διαστρέφονται, ἢ ὁ ἕτερος τοῦ ἑτέρου ἐλάσσων γίγνηται, ἢ τὰ λευκὰ ἐρυθρὰ ἴσχωσιν, ἢ πελιὰ, ἢ φλέβια μέλανα ἐν ἐωυτέοισιν ἔχωσιν, ἢ λῆμαι φαίνωνται περὶ τὰς ὄψιας, ἢ καὶ ἐναιωρεύμενοι, ἢ ἐξίσχοντες, ἢ ἔγκοιλοι ἰσχυρῶς γιγνόμενοι, ἢ αἱ ὄψιες αὐχμῶσαι καὶ ἀλαμπέες, ἢ τὸ χρῶμα τοῦ ζύμπαντος προσώπου ἡλλοιωμένον ἦ, ταῦτα πάντα κακὰ νομίζειν καὶ ὀλέθρια εἶναι. Σκοπέειν δὲ χρῆ καὶ τὰς ὑποφάσιας τῶν ὀφθαλμῶν ἐν τοῖσιν ὕπνοισιν ἦν γὰρ τι ὑποφαίνεται τοῦ λευκοῦ, τῶν βλεφάρων

μὴ ξυμβαλλομένων, μὴ ἐκ διαρροῆς ἢ φαρμακοποσίης ἐόντι, ἢ μὴ εἰθισμένῳ οὕτω καθεύδειν, φλαῦρον τὸ σημεῖον καὶ θανατῶδες λίην. "Ἦν δὲ καμπύλον γένηται, ἢ πελιόν, ἢ ὠχρόν βλέφαρον, ἢ χεῖλος, ἢ ρίς, μετὰ τινος τῶν ἄλλων σημείων, εἰδέναι χρῆ ἐγγὺς ἐόντα θανάτου θανατῶδες δὲ καὶ χεῖλεα ἀπολυόμενα, καὶ κρεμάμενα, καὶ ψυχρὰ, καὶ ἔκλευκα γιγνόμενα.

2. He should observe thus in acute diseases: first, the countenance of the patient, if it be like those of persons in health, and more so, if like itself, for this is the best of all; whereas the most opposite to it is the worst, such as the following; a sharp nose, hollow eyes, collapsed temples; the ears cold, contracted, and their lobes turned out: the skin about the forehead being rough, distended, and parched; the color of the whole face being green, black, livid, or lead-colored. If the countenance be such at the commencement of the disease, and if this cannot be accounted for from the other symptoms, inquiry must be made whether the patient has long wanted sleep; whether his bowels have been very loose; and whether he has suffered from want of food; and if any of these causes be confessed to, the danger is to be reckoned so far less; and it becomes obvious, in the course of a day and a night, whether or not the appearance of the countenance proceeded from these causes. But if none of these be said to exist, if the symptoms do not subside in the aforesaid time, it is to be known for certain that death is at hand. And, also, if the disease be in a more advanced stage either on the third or fourth day, and the countenance be such, the same inquiries as formerly directed are to be made, and the other symptoms are to be noted, those in the whole countenance, those on the body, and those in the eyes; for if they shun the light, or weep involuntarily, or squint, or if the one be less than the other, or if the white of them be red, livid, or has black veins in it; if there be a gum upon the eyes, if they are restless, protruding, or are become very hollow; and if the countenance be squalid and dark, or the color of the whole face be changed- all these are to be reckoned bad and fatal symptoms. The physician should also observe the appearance of the eyes from below the eyelids in sleep; for when a portion of the white appears, owing to the eyelids not being closed together, and when this is not connected with diarrhea or purgation from medicine, or when the patient does not sleep thus from habit, it is to be reckoned an unfavorable and very deadly symptom; but if the eyelid be contracted, livid, or pale, or also the lip, or nose, along with some of the other symptoms, one may know for certain that death is close at hand. It is a mortal symptom, also, when the lips are relaxed, pendent, cold, and blanched.

3. Κεκλιμένον δὲ χρῆ καταλαμβάνεσθαι τὸν νοσέοντα ὑπὸ τοῦ ἰητροῦ ἐπὶ τὸ πλευρὸν τὸ δεξιὸν, ἢ τὸ ἀριστερὸν, καὶ τὰς χεῖρας καὶ τὸν τράχηλον καὶ τὰ σκέλεα ὀλίγον ἐπικεκαμμένα ἔχοντα, καὶ τὸ ζύμπαν σῶμα ὑγρὸν κείμενον οὕτω γὰρ καὶ οἱ πλεῖστοι τῶν ὀγκιαινόντων κατακλίνονται ἄρισται δὲ εἰσι τῶν κατακλίσιων αἱ ὁμοιαὶ τῆσι τῶν ὑγιαίνόντων. Ὑπτιον δὲ κέεσθαι καὶ τὰς χεῖρας καὶ τὸν τράχηλον καὶ τὰ σκέλεα ἐκτεταμένα ἔχοντα, ἦσσον ἀγαθόν. Εἰ δὲ καὶ προπετῆς γένοιτο, καὶ καταρρέοι ἐπὶ τῆς κλίνης ἐπὶ τοὺς πόδας, δεινότερόν

έστιν. Εἰ δὲ καὶ γυμνοὺς τοὺς πόδας εὐρίσκοιτο ἔχων, μὴ θερμοὺς κάρτα ἐόντας, καὶ τὰς χεῖρας, καὶ

τὸν τράχηλον, καὶ τὰ σκέλεα ἀνωμάλως διερριμμένα καὶ γυμνὰ, κακὸν ἄλυσμὸν γὰρ σημαίνει. Θανατῶδες δὲ καὶ τὸ κεχηνότα καθεύδειν αἰεὶ, καὶ τὰ σκέλεα ὑπτίου κειμένου ξυγκεκαμμένα εἶναι ἰσχυρῶς, καὶ διαπεπλεγμένα. Ἐπὶ γαστέρα δὲ κέεσθαι ᾧ μὴ ξύνηθές ἐστι καὶ ὑγιαίνουντι οὕτω κοιμᾶσθαι, παραφροσύνην τινὰ σημαίνει, ἢ ὀδύνην τῶν ἀμφὶ τὴν κοιλίην τόπων. Ἀνακαθίζειν δὲ βούλεσθαι τὸν νοσέοντα, τῆς νούσου ἀκμαζούσης, πονηρὸν μὲν ἐν πᾶσι τοῖσιν ὀξέσι νουσήμασι, κάκιστον δὲ ἐν τοῖσι περιπλευμονικοῖσιν. Ὀδόντας δὲ πρίειν ἐν πυρετοῖσιν, ὀκόσοισι μὴ ξύνηθές ἐστιν ἀπὸ παίδων, μανικὸν καὶ θανατῶδες, ἀλλὰ προλέγειν ἀπ' ἀμφοῖν κίνδυνον ἐσόμενον ἦν δὲ καὶ παραφρονέων

τὸ πο, ὀλέθριον γίνεται καρτα ἤδη. Ἔλκος δὲ ἦν τε καὶ προγεγονὸς τύχη ἔχων, ἦν τε καὶ ἐν τῇ νούσῳ γένηται, καταμανθάνειν δεῖ ἦν γὰρ μέλλη ἀπόλλυσθαι ὁ ἄνθρωπος, πρὸ τοῦ θανάτου πελιδνόν τε καὶ ξηρὸν ἔσται, ἢ ὠχρὸν τε καὶ ξηρόν.

3. It is well when the patient is found by his physician reclining upon either his right or his left side, having his hands, neck, and legs slightly bent, and the whole body lying in a relaxed state, for thus the most of persons in health recline, and these are the best of postures which most resemble those of healthy persons. But to lie upon one's back, with the hands, neck, and the legs extended, is far less favorable. And if the patient incline forward, and sink down to the foot of the bed, it is a still more dangerous symptom; but if he be found with his feet naked and not sufficiently warm, and the hands, neck, and legs tossed about in a disorderly manner and naked, it is bad, for it indicates aberration of intellect. It is a deadly symptom, also, when the patient sleeps constantly with his mouth open, having his legs strongly bent and plaited together, while he lies upon his back; and to lie upon one's belly, when not habitual to the patient to sleep thus while in good health, indicates delirium, or pain in the abdominal regions. And for the patient to wish to sit erect at the acme of a disease is a bad symptom in all acute diseases, but particularly so in pneumonia. To grind the teeth in fevers, when such has not been the custom of the patient from childhood, indicates madness and death, both which dangers are to be announced beforehand as likely to happen; and if a person in delirium do this it is a very deadly symptom. And if the patient had an ulcer previously, or if one has occurred in the course of the disease, it is to be observed; for if the man be about to die the sore will become livid and dry, or yellow and dry before death.

4. Περὶ δὲ χειρῶν φορῆς τάδε γινώσκω ὀκόσοισιν ἐν πυρετοῖσιν ὀξέσιν, ἢ ἐν περιπλευμονίησιν, ἢ ἐν φρενίτισιν, ἢ ἐν κεφαλαλγίησι, πρὸ τοῦ προσώπου φερομένας καὶ θηρευούσας διὰ κενῆς, καὶ ἀποκαρφολογεούσας, καὶ κροκίδας ἀπὸ τῶν ἱματίων ἀποτιλλούσας, καὶ ἀπὸ τοῦ τοίχου ἄχυρα ἀποσπώσας, πάσα ναι κακὰς καὶ θανατώδεας.

4. Respecting the movement of the hands I have these observations to make: When in acute fevers, pneumonia, phrenitis, or headache, the hands are waved before the face, hunting through empty space, as if gathering bits of straw, picking the nap from the coverlet, or tearing chaff from the wall- all such symptoms are bad and deadly.

5. Πνεῦμα δὲ πυκνὸν μὲν ἐὼν πόνον σημαίνει ἢ φλεγμονὴ ἐν τοῖσιν ὑπὲρ τῶν φρενῶν χωρίοισι μέγα δὲ ἀναπνεόμενον καὶ διὰ πολλοῦ χρόνου παραφροσύνην δηλοῖ ψυχρὸν δὲ ἐκπνεόμενον. τῶν ῥινῶν καὶ τοῦ στόματος ὀλέθριον κάρτα ἤδη γίγνεται. Εὖ πνοιαν δὲ χρῆ νομίζειν κάρτα μεγάλην δύναμιν ἔχειν ἐς σωτηρίη ἅπασι τοῖσιν ὀξέσι νουσήμασιν, ὅσα ζῦν πυρετοῖσιν ἐστι καὶ τεσσαράκοντα ἡμέρησι κρίνεται.

5. Respiration, when frequent, indicates pain or inflammation in the parts above the diaphragm: a large respiration performed at a great interval announces delirium; but a cold respiration at nose or mouth is a very fatal symptom. Free respiration is to be looked upon as contributing much to the safety of the patient in all acute diseases, such as fevers, and those complaints which come to a crisis in forty days.

6. Οἱ δὲ ἰδρῶτες ἀριστοὶ μὲν εἰσιν ἐν πᾶσι τοῖσιν ὀξέσι νου

μασιν, ὀκόσοι ἐν ἡμέρησί τε κρισίμοισι γίνονται καὶ τελείως τὸν πυρετὸν ἀπαλλάσσουσιν. Ἀγαθοὶ δὲ καὶ ὀκόσοι διὰ παντὸς τοῦ σώματος γινόμενοι ἀπέδειξαν τὸν ἄνθρωπον εὐπετέστερον φέροντα τὸ νόσημα. Οἱ δ' ἂν μὴ τοιοῦτόν τι ἐξεργάσωνται, οὐ λυσιτελέες. Κάκιστοι δὲ οἱ ψυχροὶ τε καὶ μῶνον περὶ τὴν κεφαλὴν τε καὶ τὸ πρόσωπον γινόμενοι καὶ τὸν αὐχένα οὗτοι γὰρ ζῦν μὲν ὀξεῖ πυρετῷ θάνατον προσημαίνουσι, ζῦν δὲ πρηυτέρω, μῆκος νόσου. Καὶ οἱ κατὰ πᾶν τὸ σῶμα ὡσαύτως γινόμενοι τοῖσι περὶ τὴν κεφαλὴν οἱ δὲ κεγχροειδέες καὶ μῶνον περὶ τὸν τράχηλον γινόμενοι πονηροί. Οἱ δὲ μετὰ σταλαγμῶν καὶ ἀτμίζοντες, ἀγαθοί. Κατανοεῖν δὲ χρῆ τὸ ζῦνολον τῶν ἰδρῶτων. Γίνονται γὰρ οἱ μὲν δι' ἔκλυσιν σωμάτων, οἱ δὲ διὰ ζυντονίην φλεγμονῆς.

6. Those sweats are the best in all acute diseases which occur on the critical days, and completely carry off the fever. Those are favorable, too, which taking place over the whole body, show that the man is bearing the disease better. But those that do not produce this effect are not beneficial. The worst are cold sweats, confined to the head, face, and neck; these in an acute fever prognosticate death, or in a milder one, a prolongation of the disease; and sweats which occur over the whole body, with the characters of those confined to the neck, are in like manner bad. Sweats attended with a miliary eruption, and taking place about the neck, are bad; sweats in the form of drops and of vapour are good. One ought to know the entire character of sweats, for some are connected with prostration of strength in the body, and some with intensity of the inflammation.

7. Ὑποχόνδριον δὲ ἄριστον μὲν ἀνώδυνόν τε ἔον καὶ μαλθακὸν

καὶ ὀμαλὸν, καὶ ἐπὶ δεξιὰ καὶ ἐπ' ἀριστερά. Φλεγμαῖνον δὲ, ἢ ὀδύνην παρέχον, ἢ ἐντεταμένον, ἢ ἀνωμάλως διακείμενα τὰ δεξιὰ πρὸς τὰ ἀριστερά, ταῦτα πάντα φυλάσσεσθαι χρή. Εἰ δὲ καὶ σφυγμὸς ἐνεῖη ἐν τῷ ὑποχονδρίῳ, θόρυβον σημαίνει, ἢ παραφροσύνην ἀλλὰ τοὺς ὀφθαλμοὺς ἐπικατιδεῖν τῶν τοιουτέων ἦν γὰρ αἱ ὄψεις πυκνὰ κινέωνται, μανῆναι τούτους ἐλπίς. Οἴδημα δὲ ἐν τῷ ὑποχονδρίῳ σκληρόν τε ἔον καὶ ἐπώδυνον, κάκιστον μὲν, εἰ παρ' ἅπαν εἶη τὸ ὑποχόνδριον εἰ δὲ καὶ εἶη ἐν τῷ ἑτέρῳ μέρει, ἀκινδυνότερόν ἐστιν ἐν τῷ ἐπ' ἀριστερά. Σημαίνει δὲ τὰ τοιαῦτα οἰδήματα ἐν ἀρχῇ μὲν θάνατον ὀλιγοχρόνιον ἔσεσθαι ἦν δὲ ὑπερβάλλη εἴκοσιν ἡμέρας ὃ τε πυρετὸς ἔχων καὶ τὸ οἴδημα μὴ καθιστάμενον, ἐς διαπύησιν τρέπεται. Γίγνεται δὲ τουτέοισιν ἐν τῇ πρώτῃ περιόδῳ καὶ αἵματος ῥῆξις ἐκ τῶν ῥινῶν, καὶ

κάρτα ὠφελέει ἀλλ' ἐπανερωτᾶν χρή, εἰ τὴν κεφαλὴν ἀλγέουσιν, ἢ ἀμβλυωπέουσιν ἦν γὰρ τι τοιοῦτον εἶη, ἐνταῦθα ἂν ῥέποι. Μᾶλλον δὲ τοῖσι νεωτέροισι πέντε καὶ τριήκοντα ἑτέων, τὴν τοῦ αἵματος ῥῆξιν προσδέχεσθαι χρή. Τὰ δὲ μαλθακὰ τῶν οἰδημάτων καὶ ἀνώδυνα καὶ τῷ δακτύλῳ ὑπέκοντα χρονωτέρας τὰς κρίσις ποιέεται, καὶ ἥσσον ἐκείνων δεινότερά ἐστιν. Εἰ δὲ ὑπερβάλλοι ἐξήκοντα ἡμέρας ὃ τε πυρετὸς ἔχων καὶ τὸ οἴδημα μὴ καθιστάμενον, ἔμπυον ἔσεσθαι σημαίνει καὶ τοῦτο, καὶ τὸ ἐν τῇ ἄλλῃ κοιλίῃ κατὰ τωυτό. Ὀκόσα μὲν οὖν ἐπώδυνά τε ἐστὶ καὶ σκληρὰ καὶ μεγάλα, σημαίνει κίνδυνον θανάτου ὀλιγοχρονίου ὀκόσα δὲ μαλθακὰ τε καὶ ἀνώδυνα καὶ τῷ δακτύλῳ πιεζόμενα ὑπέκκει, χρονωτέρα ἐκείνων. Τὰς δὲ ἀποστάσις ἥσσον τὰ ἐν τῇ γαστρὶ οἰδήματα ποιέεται τῶν ἐν τοῖσιν ὑποχονδρίοισιν, ἥκιστα δὲ τὰ ὑποκάτω τοῦ ὀμφαλοῦ ἐς ἐπιπύησιν τρέπεται αἵματος δὲ

Ρῆξις ἐκ τῶν ἄνω τόπων μάλιστα προσδέχεται. Ἀπάντων δὲ χρὴ τῶν οἰδημάτων χρονιζόντων περὶ ταῦτα τὰ χωρία ὑποσκέπτεσθαι τὰς ἐκπύσεις. Τὰ δὲ διαπυήματα ὧδε δεῖ σκέπτεσθαι τὰ ἐντεῦθεν ὀκόσα μὲν ἔξω τρέπεται, ἄριστά ἐστι, μικρά τε ἔοντα, καὶ ὡς μάλιστα ἐκκλίνοντα ἔξω, καὶ ἐς ὄξυ ἀποκυρτούμενα τὰ δὲ μεγάλα τε ἔοντα καὶ πλατέα, καὶ ἥκιστα ἐς ὄξυ ἀποκορυφούμενα, κάκιστα ὅσα δὲ ἔσω ρήγνυται, ἄριστά ἐστιν, ἃ μηδὲν τῷ ἔξω χωρίῳ ἐπικοινωνέει, ἀλλ' ἔστι προσεσταλμένα τε καὶ ἀνώδυνα καὶ πᾶν τὸ ἔξω χωρίον ὁμόχροον φαίνεται. Τὸ δὲ πῦον ἄριστον λευκόν τε εἶναι καὶ ὁμαλὸν καὶ λεῖον καὶ ὡς ἥκιστα δυσῶδες τὸ δὲ ἐναντίον τουτέου κάκιστον.

7. That state of the hypochondrium is best when it is free from pain, soft, and of equal size on the right side and the left. But if inflamed, or painful, or distended; or when the right and left sides are of disproportionate sizes;- all these appearances are to be dreaded. And if there be also pulsation in the hypochondrium, it indicates perturbation or delirium; and the physician should examine the eyes of such persons; for if their pupils be in rapid motion, such persons may be expected to go mad. A swelling in the hypochondrium, that is hard and painful, is very bad, provided it occupy the whole hypochondrium; but if it be on either side, it is less dangerous when on the left. Such swellings at the commencement of the disease prognosticate speedy death; but if the fever has passed twenty days, and the swelling has not subsided, it turns to a suppuration. A discharge of blood from the nose occurs to such in the first period, and proves very useful; but inquiry should be made if they have headache or indistinct vision; for if there be such, the disease will be determined thither. The discharge of blood is rather to be expected in those who are younger than thirty-five years. Such swellings as are soft, free from pain, and yield to the finger, occasion more protracted crises, and are less dangerous than the others. But if the fever continue beyond sixty days, without any subsidence of the swelling, it indicates that empyema is about to take place; and a swelling in any other part of the cavity will terminate in like manner. Such, then, as are painful, hard, and large, indicate danger of speedy death; but such as are soft, free of pain, and yield when pressed with the finger, are more chronic than these. Swellings in the belly less frequently form abscesses than those in the hypochondrium; and seldomest of all, those below the navel are converted into suppuration; but you may rather expect a hemorrhage from the upper parts. But the suppuration of all protracted swellings about these parts is to be anticipated. The collections of matter there are to be thus judged of: such as are determined outwards are the best when they are small, when they protrude very much, and swell to a point; such as are large and broad, and which do not swell out to a sharp point, are the worst. Of such as

break internally, the best are those which have no external communication, but are covered and indolent; and when the whole place is free from discoloration. That pus is best which is white, homogeneous, smooth, and not at all fetid; the contrary to this is the worst.

8. Οἱ δὲ ὕδρωπες οἱ ἐκ τῶν ὀξέων νοσημάτων πάντες κακοὶ οὔτε γὰρ τοῦ πυρὸς ἀπαλλάσσουσιν, ἐπώδυνοί τε εἰσι κάρτα καὶ θανατώδεις. Ἄρχονται δὲ οἱ πλεῖστοι μὲν ἀπὸ τῶν κενεώνων καὶ τῆς ὀσφύος, οἱ δὲ ἀπὸ τοῦ ἥπατος οἷσι μὲν οὖν ἀπὸ τῶν κενεώνων καὶ τῆς ὀσφύος αἱ ἀρχαὶ γίνονται, οἳ τε πόδες οἰδέουσι, καὶ διάρροια πολυχρόνιον ἔχουσιν, οὔτε τὰς ὀδύνας λύουσιν τὰς ἐκ τῶν κενεώνων καὶ τῆς ὀσφύος, οὔτε τὴν γαστέρα λαπάσσουσαι

ὀκόσοισι δὲ ἀπὸ τοῦ ἥπατος ὕδρωπες γίνονται, βῆξιαι τε θυμὸς τούτοις ἐγγίγνεται, καὶ οὐδὲν τι ἀποπτύουσιν ἄξιον λόγου, καὶ οἱ πόδες οἰδέουσι, καὶ ἡ γαστήρ οὐ διαχωρεῖ, εἰ μὴ σκληρὰ τε καὶ πρὸς ἀνάγκην, καὶ περὶ τὴν κοιλίην γίνονται οἰδήματα, τὰ μὲν ἐπὶ δεξιᾷ, τὰ δ' ἐπ' ἀριστερᾷ, ἰστάμενά τε καὶ καταπαυόμενα.

8. All dropsies arising from acute diseases are bad; for they do not remove the fever, and are very painful and fatal. The most of them commence from the flanks and loins, but some from the liver; in those which derive their origin from the flanks and loins the feet swell, protracted diarrhoeas supervene, which neither remove the pains in the flanks and loins, nor soften the belly, but in dropsies which are connected with the liver there is a tickling cough, with scarcely any perceptible expectoration, and the feet swell; there are no evacuations from the bowels, unless such as are hard and forced; and there are swellings about the belly, sometimes on the one side and sometimes on the other, and these increase and diminish by turns.

9. Κεφαλὴ δὲ καὶ χεῖρες καὶ πόδες ψυχρὰ ἔοντα κακὸν, τῆς τε κοιλίης καὶ τῶν πλευρῶν θερμῶν ἔοντων. Ἄριστον δὲ καὶ ὅλον τὸ σῶμα θερμὸν τε ἔον καὶ μαλθακὸν ὀμαλῶς. Στρέφεσθαι δὲ χρή ρηϊδίως τὸν ἀλγεῦντα, καὶ ἐν τοῖσι μετεωρισμοῖσιν ἐλαφρὸν εἶναι εἰ δὲ βαρὺς ἔων φαίνοιτο καὶ τὸ ἄλλο σῶμα καὶ τὰς χεῖρας καὶ τοὺς πόδας, ἐπικινδυνότερον. Εἰ δὲ πρὸς τῷ βάρει καὶ οἱ ὄνυχες καὶ οἱ δάκτυλοι πελιδνοὶ γίνονται, προσδόκιμος ὁ θάνατος παραυτίκα μελαινόμενοι δὲ παντελῶς οἱ δάκτυλοι καὶ οἱ πόδες ἤσσον ὀλέθριοι τῶν πελιδνῶν εἰσὶν ἀλλὰ καὶ τᾶλλα σημεῖα σκέπτεσθαι χρή ἦν γὰρ εὐπετέως φέρων φαίνεται τὸ κακὸν, καὶ ἄλλο τι τῶν περιεστικῶν πρὸς τουτέοισι τοῖσι σημεῖοισιν



ὑποδεικνύη, τὸ νόσημα ἐς ἀπόστασιν τραπήναι ἐλπίς, ὥστε τὸν μὲν ἄνθρωπον περιγενέσθαι, τὰ δὲ μελανθέντα τοῦ σώματος ἀποπεσεῖν. Ὀρχιες δὲ καὶ αἰδοῖα ἀνεσπασμένα πόνους ἰσχυροὺς σημαίνει καὶ κίνδυνον θανατώδεα.

9. It is a bad symptom when the head, hands, and feet are cold, while the belly and sides are hot; but it is a very good symptom when the whole body is equally hot. The patient ought to be able to turn round easily, and to be agile when raised up; but if he appear heavy in the rest of his body as well as in his hands and feet, it is more dangerous; and if, in addition to the weight, his nails and fingers become livid, immediate death may be anticipated; and if the hands and feet be black it is less dangerous than if they be livid, but the other symptoms must be attended, to; for if he appear to bear the illness well, and if certain of the salutary symptoms appear along with these there may be hope that the disease will turn to a deposition, so that the man may recover; but the blackened parts of the body will drop off. When the testicles and members are retracted upwards, they indicate strong pains and danger of death.

10. Περὶ δὲ ὕπνων, ὥσπερ κατὰ φύσιν ζύνηθες ἡμῖν ἐστὶ, τὴν μὲν ἡμέρην ἐγρηγορέναι χρὴ, τὴν δὲ νύκτα καθεύδειν. Ἦν δὲ εἴη τοῦτο μεταβεβλημένον, κάκιον ἤκιστα δ' ἂν λυπέοιτο, εἰ κοιμᾶτο τὸ πρωτὶ ἐς τὸ τρίτον μέρος τῆς ἡμέρης οἱ δὲ ἀπὸ τουτέου τοῦ χρόνου ὕπνοι πονηρότεροί εἰσι κάκιστον δὲ μὴ κοιμᾶσθαι, μήτε τῆς νυκτός, μήτε τῆς ἡμέρης ἢ γὰρ ὑπὸ ὀδύνης τε καὶ πόνων ἀγρυπνέειν ἢ παραφρονήσειν ἔπεται ἀπὸ τουτέου τοῦ σημείου.

10. With regard to sleep- as is usual with us in health, the patient should wake during the day and sleep during the night. If this rule be anywise altered it is so far worse: but there will be little harm provided he sleep in the morning for the third part of the day; such sleep as takes place after this time is more unfavorable; but the worst of all is to get no sleep either night or day; for it follows from this symptom that the insomnolency is connected with sorrow and pains, or that he is about to become delirious.

11. Διαχώρημα δὲ ἐστὶν ἄριστον τὸ μαλθακόν τε καὶ ξυνεστηκὸς, καὶ τὴν ὥρην ἦνπερ καὶ ὑγιαίνουντι ὑπεχώρει, πλῆθος δὲ πρὸς λόγον τῶν ἐσιόντων τοιαύτης γὰρ ἐούσης τῆς διεξόδου, ἢ κάτω κοιλίη ὑγιαίνοι ἂν. Εἰ δὲ εἴη ὑγρὸν τὸ διαχώρημα, ξυμφέρει μήτε τρύζειν, μήτε πυκνόν τι εἶναι, καὶ κατ' ὀλίγον

ὑποχωρέειν κοπιῶν γὰρ ὁ ἄνθρωπος ὑπὸ τῆς ξυνεχέος ἐξαναστάσιος ἀγρυπνοίη ἂν εἰ δὲ ἀθρόον πολλάκις διαχωρέει, κίνδυνος λειποθυμῆσαι. Ἄλλὰ χρὴ κατὰ τὸ

πλήθος τῶν ἐσιόντων ἢ δις ἢ τρίς τῆς ἡμέρης ὑποχωρέειν, καὶ τῆς νυκτὸς ἅπαξ, πλείονα δ' ἐπὶ τὸ πρωῖ, ὡσπερ ζύνηθές ἐστι τῷ ἀνθρώπῳ. Παχύνεσθαι δὲ χρὴ τὸ διαχώρημα, ἰούσης πρὸς κρίσιν τῆς νόσου. Ὑπόπυρρον δὲ ἔστω καὶ μὴ λίην δυσῶδες. Ἐπιτήδειον δὲ καὶ ἔλμινθας στρογγύλας διεξιέναι μετὰ τοῦ διαχωρήματος, πρὸς κρίσιν ἰούσης τῆς νόσου. Δεῖ δὲ ἐν παντὶ τῷ νοσήματι λαπαρὴν τὴν κοιλίην εἶναι καὶ εὐογκόν. Ὑδαρές δὲ κάρτα, ἢ λευκὸν, ἢ χλωρὸν, ἢ ἐρυθρὸν ἰσχυρῶς, ἢ ἀφρῶδες διαχωρέειν, πονηρὰ ταῦτα πάντα. Ἔτι δὲ πονηρὸν, καὶ σμικρὸν τε ἐὸν, καὶ γλισχρὸν, καὶ

λευκὸν, καὶ ὑπόχλωρον, καὶ λεῖον. Τουτέων δὲ θανατωδέστερα ἂν εἴη τὰ μέλανα, ἢ λιπαρὰ, ἢ πελιά, ἢ ἰώδεα, ἢ κάκοδμα. Τὰ δὲ ποικίλα, χρονιώτερα μὲν τουτέων, ὀλέθρια δὲ οὐδὲν ἦσσαν ἔστι δὲ τὰ τοιαῦτα ζυσματώδεα, καὶ χολώδεα, καὶ πρασοειδέα, καὶ μέλανα, ποτὲ μὲν ὁμοῦ διεξερχόμενα ἀλλήλοισι, ποτὲ δὲ κατὰ μέρος. Φῦσαν δὲ ἄνευ ψόφου καὶ περδῆσιος διεξιέναι ἄριστον κρέσσον δὲ καὶ ζὺν ψόφῳ διελθεῖν ἢ αὐτοῦ ἀνειλέεσθαι καὶ οὕτω διελθοῦσα σημαίνει ἢ πονέειν τι τὸν ἄνθρωπον, ἢ παραφρονέειν, ἢν μὴ ἐκὼν ὁ ἄνθρωπος οὕτω τὴν ἄφεσιν τῆς φύσης ποιήσεται. Τοὺς δὲ ἐκ τῶν ὑποχονδρίων πόνους τε καὶ κυρτώματα, ἢν ἢ νεαρὰ καὶ μὴ ζὺν φλεγμονῇ, λύει βορβορυγμὸς ἐγγενόμενος ἐν τῷ ὑποχονδρίῳ, καὶ μάλιστα μὲν διεξιῶν ζὺν κόπρῳ τε καὶ οὖρῳ καὶ φύσῃ, ἢν δὲ μὴ, καὶ αὐτὸς δὴ περαιωθεὶς ὠφελέει ὠφελέει δὲ καὶ ὑποκαταβάς ἐς τὰ κάτω χωρία.

11. The excrement is best which is soft and consistent, is passed at the hour which was customary to the patient when in health, in quantity proportionate to the ingests; for when the passages are such, the lower belly is in a healthy state. But if the discharges be fluid, it is favorable that they are not accompanied with a noise, nor are frequent, nor in great quantity; for the man being oppressed by frequently getting up, must be deprived of sleep; and if the evacuations be both frequent and large, there is danger of his falling into deliquium animi. But in proportion to the ingesta he should have evacuations twice or thrice in the day, once at night and more copiously in the morning, as is customary with a person in health. The faeces should become thicker when the disease is tending to a crisis; they ought to be yellowish and not very fetid. It is favorable that round worms be passed with the discharges when the disease is tending to a crisis. The belly, too, through the whole disease, should be soft and moderately distended; but excrements that are very watery, or white, or green, or very red, or frothy, are all bad. It is also bad when the discharge is small, and viscid, and white, and greenish, and smooth; but still more deadly appearances are the black, or fatty, or livid, or verdigris-green, or fetid. Such as are of varied characters indicate

greater duration of the complaint, but are no less dangerous; such as those which resemble scrapings, those which are bilious, those resembling leeks, and the black; these being sometimes passed together, and sometimes singly. It is best when wind passes without noise, but it is better that flatulence should pass even thus than that it should be retained; and when it does pass thus, it indicates either that the man is in pain or in delirium, unless he gives vent to the wind spontaneously. Pains in the hypochondria, and swellings, if recent, and not accompanied with inflammation, are relieved by borborygmi supervening in the hypochondrium, more especially if it pass off with faeces, urine, and wind; but even although not, it will do good by passing along, and it also does good by descending to the lower part of the belly.

12. Τὸ δὲ οὔρον ἄριστόν ἐστιν, ὅταν ᾗ λευκὴ τε ἢ ὑπόστασις, καὶ λεῖη, καὶ ὁμαλὴ παρὰ πάντα τὸν χρόνον, ἔστ' ἂν κριθῆ ἢ

νοῦσος σημαίνει γὰρ ἀσφάλειάν τε καὶ νούσημα ὀλιγοχρόνιον ἔσεσθαι. Εἰ δὲ διαλείποι, καὶ ποτὲ μὲν καθαρὸν οὐρέοιτο, ποτὲ δὲ ὑφίσταται τὸ λευκὸν καὶ λεῖον, χρονιωτέρη γίγνεται ἢ νοῦσος καὶ ἤσσον ἀσφαλῆς. Εἰ δὲ εἶη τό τε οὔρον ὑπέρυθρον καὶ ἢ ὑπόστασις αὐτέου ὁμοίη καὶ λεῖη, πολυχρονιώτερον μὲν τοῦτο τοῦ πρώτου γίγνεται, σωτήριον δὲ κάρτα. Κριμνώδεις δὲ ἐν τοῖσιν οὔροισιν αἱ ὑποστάσιες, πονηραὶ τουτέων δὲ εἰσι κακίους αἱ πεταλώδεις αἱ λευκαὶ δὲ καὶ λεπταὶ, κάρτα φλαῦραι τουτέων δ' ἔτι κακίους εἰσὶν αἱ πιτυρώδεις. Νεφέλαι δὲ ἐμφερόμεναι τοῖσιν οὔροισι, λευκαὶ μὲν ἀγαθαί, μέλαιναι δὲ φλαῦραι. Ἔστ' ἂν δὲ πυρρὸν τε εἶη τὸ οὔρον καὶ λεπτὸν, σημαίνει τὸ νούσημα ἄπεπτον εἶναι ἢν δὲ καὶ πουλυχρόνιον εἶη τοιοῦτον ἐόν, κίνδυνος μὴ οὐ δυνήσεται ὁ ἄνθρωπος διαρκέσαι, ἔστ' ἂν πεπανθῆ ἢ νοῦσος.

Θανατωδέστερα δὲ τῶν οὔρων τὰ τε δυσώδεα καὶ ὑδατώδεα καὶ μέλανα καὶ παχέα ἔστι δὲ τοῖσι μὲν ἀνδράσι καὶ τῆσι γυναιξὶ τὰ μέλανα τῶν οὔρων κάκιστα, τοῖσι δὲ παιδίοισι τὰ ὑδατώδεα. Ὀκόσοι δ' ἂν οὔρα λεπτὰ καὶ ὠμὰ οὐρέωσι πουλὸν χρόνον, ἢν τᾶλλα ὡς περιεσομένοισι σημεῖα ᾗ, τουτέοισιν ἀπόστασιν δεῖ προσδέχεσθαι ἐς τὰ κάτω τῶν φρενῶν χωρία. Καὶ τὰς λιπαρότητας δὲ τὰς ἄνω ἐφισταμένας ἀραχνοειδέας μέμφεσθαι ξυντήξιος γὰρ σημεῖα. Σκοπέειν δὲ χρῆ τῶν οὔρων, ἐν οἷσιν αἱ νεφέλαι, ἢν τε ἄνω, ἢν τε κάτω ἔωσι, καὶ τὰ χρώματα ὀκοῖα ἴσχουσι, καὶ τὰς μὲν κάτω φερομένας ξὺν τοῖσι χρώμασιν, οἷσιν εἴρηται, ἀγαθὰς εἶναι νομίζειν καὶ ἐπαινέειν, τὰς δὲ ἄνω ξὺν τοῖσι χρώμασιν, οἷσιν εἴρηται, κακὰς εἶναι, καὶ μέμφεσθαι. Μὴ ἐξαπατάτω δέ σε, ἢν γε ἢ κύστις τι νούσημα ἔχουσα τῶν οὔρων τὰ τοιαῦτα ἀποδιδῶ οὐ γὰρ τοῦ ὅλου σώματος σημεῖόν ἐστιν, ἀλλ' αὐτῆς καθ' ἑωυτῆς.

12. The urine is best when the sediment is white, smooth, and consistent during the whole time, until the disease come to a crisis, for it indicates freedom from danger, and an illness of short duration; but if deficient, and if it be sometimes passed clear, and sometimes with a white and smooth sediment, the disease will be more protracted, and not so void of danger. But if the urine be reddish, and the sediment consistent and smooth, the affection, in this case, will be more protracted than the former, but still not fatal. But farinaceous sediments in the urine are bad, and still worse are the leafy; the white and thin are very bad, but the furfuraceous are still worse than these. Clouds carried about in the urine are good when white, but bad if black. When the urine is yellow and thin, it indicates that the disease is unconcocted; and if it (the disease) should be protracted, there maybe danger lest the patient should not hold out until the urine be concocted. But the most deadly of all kinds of urine are the fetid, watery, black, and thick; in adult men and women the black is of all kinds of urine the worst, but in children, the watery. In those who pass thin and crude urine for a length of time, if they have otherwise symptoms of convalescence, an abscess may be expected to form in the parts below the diaphragm. And fatty substances floating on the surface are to be dreaded, for they are indications of melting. And one should consider respecting the kinds of urine, which have clouds, whether they tend upwards or downwards, and upwards or downwards, and the colors which they have and such as fall downwards, with the colors as described, are to be reckoned good and commended; but such as are carried upwards, with the colors as described, are to be held as bad, and are to be distrusted. But you must not allow yourself to be deceived if such urine be passed while the bladder is diseased; for then it is a symptom of the state, not of the general system, but of a particular viscus.

13. Ἐμετος δὲ ὠφελιμώτατος ὁ φλέγματος καὶ χολῆς ζυμμεμιγμένων

ὅτι μάλιστα καὶ μὴ παχὺς κάρτα, μηδὲ πολὺς ἐμεέσθω οἱ γὰρ ἀκρητέστεροι κακίους εἰσίν. Εἰ δὲ εἴη τὸ ἐμεύμενον πρασοειδές, ἢ πελιὸν, ἢ μέλαν, ὅ τι ἂν ἦ τουτέων τῶν χρωμάτων, νομίζειν χρή πονηρὸν εἶναι εἰ δὲ καὶ πάντα τὰ χρώματα ὁ αὐτὸς ἄνθρωπος ἐμέοι, κάρτα ὀλέθριον τοῦτο γίγνεται τάχιστον δὲ θάνατον σημαίνει τὸ πελιὸν τῶν ἐμεσμάτων, εἰ ὄζει δυσῶδες. Πᾶσαι δὲ αἱ ὑπόσαπροι καὶ δυσῶδες ὄσμαὶ κακαὶ ἐπὶ πᾶσι τοῖσιν ἐμεομένοισιν.

13. That vomiting is of most service which consists of phlegm and bile mixed together, and neither very thick nor in great quantity; but those vomitings which are more unmixed are worse. But if that which is vomited be of the color of

leeks or livid, or black, whatever of these colors it be, it is to be reckoned bad; but if the same man vomit all these colors, it is to be reckoned a very fatal symptom. But of all the vomitings, the livid indicates the danger of death, provided it be of a fetid smell. But all the smells which are somewhat putrid and fetid, are bad in all vomitings.

14. Πτύελον χρῆ ἐπὶ πᾶσι τοῖσιν ἀλγήμασι τοῖσι περὶ τὸν πλεύμονα καὶ τὰς πλευρὰς ταχέως τε ἀναπτύεσθαι καὶ εὐπετέως, ζυμμεμιγμένον τε φαίνεσθαι τὸ ξανθὸν ἰσχυρῶς τῷ ττυέλῳ. Εἰ γὰρ πολλῶ ὕστερον μετὰ τὴν ἀρχὴν τῆς ὀδύνης ἀναπτύοιτο, ξανθὸν ἔον, ἢ πυρρὸν, ἢ πολλὴν βῆχα παρέχον, ἢ μὴ ἰσχυρῶς ζυμμεμιγμένον, κάκιον γίγνεται τό τε γὰρ ξανθὸν

ἄκρητον ἔον κινδυνῶδες, τὸ δὲ λευκὸν καὶ γλίσχρον καὶ στρογγύλον ἀλυσιτελές. Κακὸν δὲ καὶ τὸ χλωρὸν ἔον κάρτα καὶ τὸ ἀφρῶδες εἰ δὲ εἶη οὕτως ἄκρητον ὥστε καὶ μέλαν φαίνεσθαι, δεινότερόν ἐστι τοῦτο ἐκείνων κακὸν δὲ καὶ ἦν μηδὲν ἀνακαθαίρηται, μηδὲ προῖη ὁ πλεύμων, ἀλλὰ πλήρης ἐὼν ζέη ἐν τῇ φάρυγγι. Κορύζας δὲ καὶ παρμούς ἐπὶ πᾶσι τοῖσι περὶ τὸν πλεύμονα νουσήμασι προγεγονέναι, ἢ ἐπιγενέσθαι, κακὸν ἀλλ' ἐν τοῖσιν ἄλλοισι νουσήμασι τοῖσι θανατωδεστάτοισιν οἱ παρμοὶ λυσιτελεύουσιν. Αἷματι δὲ ζυμμεμιγμένον μὴ πολλῶ πτύελον ξανθὸν ἐν τοῖσι περιπλευμονικοῖσιν, ἐν ἀρχῇ μὲν τῆς νόσου πτύόμενον, περιεστικὸν καὶ κάρτα ὠφελεεὶ ἐβδομαίῳ δὲ ἔοντι καὶ παλαιότερῳ ἦσσον ἀσφαλές. Πάντα δὲ πτύελα πονηρά ἐστιν ὀκόσα ἂν τὴν ὀδύνην μὴ παύη. Κάκιστα δὲ τὰ μέλανα, ὡς διαγέγραπται. Τὰ δὲ παύοντα ὀδύνην, πάντων ἀμείνω ἀναπτύόμενα.

14. The expectoration in all pains about the lungs and sides, should be quickly and easily brought up, and a certain degree of yellowness should appear strongly mixed up with the sputum. But if brought up long after the commencement of the pain, and of a yellow or ruddy color, or if it occasions much cough, or be not strongly mixed, it is worse; for that which is intensely yellow is dangerous, but the white, and viscid, and round, do no good. But that which is very green and frothy is bad; but if so intense as to appear black, it is still more dangerous than these; it is bad, if nothing is expectorated, and the lungs discharge nothing, but are gorged with matters which boil (as it were) in the air-passages. It is bad when coryza and sneezing either precede or follow affections of the lungs, but in all other affections, even the most deadly, sneezing is a salutary symptom. A yellow spittle mixed up with not much blood in cases of pneumonia, is salutary and very beneficial if spit up at the commencement of the disease, but if on the seventh day, or still later, it is less favorable. And all sputa are bad which do not remove

the pain. But the worst is the black, as has been described. Of all others the sputa which remove the pain are the best.

15. Ὅκόσα δὲ τῶν ἀλγημάτων ἐκ τουτέων τῶν χωρίων μὴ

παύηται, μήτε πρὸς τὰς τῶν πτυέλων καθάρσιος, μήτε πρὸς τὴν τῆς κοιλίης ἐκκόπρωσιν, μήτε πρὸς τὰς φλεβοτομίας τε καὶ φαρμακείας καὶ διαίτας, εἰδέναι δεῖ ἐκπυήσοντα. Τῶν δὲ ἐκπυημάτων ὁκόσα μὲν ἔτι χολώδεος ἐόντος τοῦ πτυέλου ἐκπυῖσκειται, ὀλέθρια κάρτα, ἦν τε ἐν μέρει τὸ χολώδες τῷ πύφῳ ἀναπτύοιτο, ἦν τε ὁμοῦ μάλιστα δὲ, ἦν ἄρξῃται χωρέειν τὸ ἐμπύημα ἀπὸ τουτέου τοῦ πτυέλου, ἐβδομαίου ἐόντος τοῦ νουσήματος. Ἐλπίς δὲ τὸν τὰ τοιαῦτα πτύοντα ἀποθανεῖσθαι τεσσαρεσκαίδεκαταῖον, ἦν μὴ τι αὐτέφῳ ἐπιγένῃται ἀγαθόν. Ἔστι δὲ τὰ μὲν ἀγαθὰ τάδε εὐπετέως φέρειν τὸ νούσημα, εὐπνοον εἶναι, τῆς ὀδύνης ἀπηλλάχθαι, τὸ τε πτύελον ῥηϊδίως ἀναβήσσειν, τὸ τε σῶμα ὁμαλῶς φαίνεσθαι θερμόν τε εἶναι καὶ μαλθακόν, καὶ δίψαν μὴ ἔχειν, οὐρά τε καὶ διαχωρήματα καὶ ὕπνους καὶ ἰδρῶτας, ὡς διαγέγραπται ἕκαστα εἶναι ἀγαθὰ, ἐπιγίγνεσθαι οὕτω μὲν γὰρ ἀπάντων τουτέων ἐπιγιγνομένων, οὐκ ἂν ἀποθάνοι ὁ ἄνθρωπος ἦν δὲ τὰ μὲν τοι αὐτέων ἐπιγίγνοιτο, τὰ δὲ μὴ, οὐ πλείονα χρόνον

ζήσας ἢ τεσσαρεσκαίδεκα ἡμέρας, ἀπόλοιτ' ἂν ὁ ἄνθρωπος. Κακὰ δὲ τὰ ἐναντία τουτέων, ἢ γουν δυσπετέως φέρειν τὴν νοῦσον, πνεῦμα μέγα καὶ πυκνὸν εἶναι, τὴν ὀδύνην μὴ παύεσθαι, τὸ πτύελον μόλις ἀναβήσσειν, διψῆν κάρτα, τὸ τε σῶμα ὑπὸ πυρὸς ἀνωμάλως ἔχεσθαι, καὶ τὴν μὲν κοιλίην καὶ τὰς πλευρὰς θερμὰς εἶναι ἰσχυρῶς, τὸ δὲ μέτωπον καὶ τὰς χεῖρας καὶ τοὺς πόδας ψυχροῦς, οὐρά δὲ καὶ διαχωρήματα καὶ ὕπνους καὶ ἰδρῶτας, ὡς διαγέγραπται ἕκαστα εἶναι κακὰ, ἐπιγίγνεσθαι οὕτω γὰρ εἰ ἐπιγένοιτό τι τῷ πτυέλῳ τουτέφῳ, ἀπόλοιτο ἂν ὁ ἄνθρωπος πρὶν ἢ ἐς τὰς τεσσαρεσκαίδεκα ἡμέρας ἀφικέσθαι, ἢ ἐναταῖος, ἢ ἐνδεκαταῖος. Οὕτως οὖν ξυμβάλλεσθαι χρὴ, ὡς τοῦ πτυέλου τουτέου θανατώδεος ἐόντος μάλα, καὶ οὐ φθάνοντος ἐς τὰς τεσσαρεσκαίδεκα ἡμέρας. Τὰ δὲ ἐπιγενόμενα κακὰ τε καὶ ἀγαθὰ συλλογιζόμενον ἐκ τουτέων χρὴ τὰς προρρήσιος προλέγειν οὕτω γὰρ ἂν τις ἀληθεύοι μάλιστα. Αἱ δὲ ἄλλαι ἐκπυήσιες ῥήγνυνται αἱ πλεῖσται, αἱ μὲν εἰκοσταῖαι, αἱ δὲ τριηκοσταῖαι, αἱ δὲ τεσσαρακοθημέροι, αἱ δὲ πρὸς τὰς ἐξήκοντα ἡμέρας ἀφικνέονται.

15. When the pains in these regions do not cease, either with the discharge of the sputa, nor with alvine evacuations, nor from venesection, purging with medicine, nor a suitable regimen, it is to be held that they will terminate in suppurations. Of empyemata such as are spit up while the sputum is still bilious, are very fatal,

whether the bilious portion be expectorated separate, or along with the other; but more especially if the empyema begin to advance after this sputum on the seventh day of the disease. It is to be expected that a person with such an expectoration shall die on the fourteenth day, unless something favorable supervene. The following are favorable symptoms: to support the disease easily, to have free respiration, to be free from pain, to have the sputa readily brought up, the whole body to appear equally warm and soft, to have no thirst, the urine, and faeces, sleep, and sweats to be all favorable, as described before; when all these symptoms concur, the patient certainly will not die; but if some of these be present and some not, he will not survive longer than the fourteenth day. The bad symptoms are the opposite of these, namely, to bear the disease with difficulty, respiration large and dense, the pain not ceasing, the sputum scarcely coughed up, strong thirst, to have the body unequally affected by the febrile heat, the belly and sides intensely hot, the forehead, hands, and feet cold; the urine, and excrements, the sleep, and sweats, all bad, agreeably to the characters described above; if such a combination of symptoms accompany the expectoration, the man will certainly die before the fourteenth day, and either on the ninth or eleventh. Thus then one may conclude regarding this expectoration, that it is very deadly, and that the patient will not survive until the fourteenth day. It is by balancing the concomitant symptoms whether good or bad, that one is to form a prognosis; for thus it will most probably prove to be a true one. Most other suppurations burst, some on the twentieth, some on the thirtieth, some on the fortieth, and some as late as the sixtieth day.

16. Ἐπισκέπτεσθαι δὲ χρὴ τὴν ἀρχὴν τοῦ ἐμπυήματος ἔσεσθαι

λογιζόμενον ἀπὸ τῆς ἡμέρης ἧς τὸ πρῶτον ὁ ἄνθρωπος ἐπύρεξεν, ἢ εἴ ποτε αὐτὸν ῥίγος ἔλαβε, καὶ εἰ φαίη ἀντὶ τῆς ὀδύνης αὐτέῳ βάρος γεγενῆσθαι ἐν τῷ τόπῳ ἐν ᾧ ἤλγεεν ταῦτα γὰρ ἐν ἀρχῇσι γίνεσθαι τῶν ἐμπυημάτων. Ἐξ οὖν τουτέων τῶν χρόνων τὴν ῥῆξιν χρὴ προσδέχεσθαι τῶν ἐμπυημάτων ἔσεσθαι ἐς τοὺς χρόνους τοὺς προειρημένους. Εἰ δὲ εἴη τὸ ἐμπύημα ἐπὶ θάτερα μόνον, στρεφειν τε καὶ καταμανθάνειν χρὴ ἐπὶ τουτέοισι, μή τι ἔχη ἄλγημα ἐν τῷ ἐτέρῳ πλευρῷ καὶ ἦν θερμότερον ἢ τὸ ἕτερον τοῦ ἐτέρου, κατακλινομένου ἐπὶ τὸ ὑγιαῖνον πλευρὸν, ἐρωτᾶν εἴ τι αὐτέῳ δοκέει βαρὺ ἀποκρέμασθαι ἐκ τοῦ ἄνωθεν. Εἰ γὰρ εἴη τοῦτο, ἐπὶ θάτερόν ἐστι τὸ ἐμπύημα, ἐπὶ ὀκοῖον ἂν πλευρὸν τὸ βάρος γίγνηται.

16. One should estimate when the commencement of the suppuration will take place, by calculating from the day on which the patient was first seized with

fever, or if he had a rigor, and if he says, that there is a weight in the place where he had pain formerly, for these symptoms occur in the commencement of suppurations. One then may expect the rupture of the abscesses to take place from these times according to the periods formerly stated. But if the empyema be only on either side, one should turn him and inquire if he has pain on the other side; and if the one side be hotter than the other, and when laid upon the sound side, one should inquire if he has the feeling of a weight hanging from above, for if so, the empyema will be upon the opposite side to that on which the weight was felt.

17. Τοὺς δὲ ζύμπαντας ἐμπύους γινώσκειν χρή τοισίδε τοῖσι σημείοισι. Πρῶτον μὲν, ὁ πυρετὸς οὐκ ἀφίησιν, ἀλλὰ τὴν μὲν ἡμέρην λεπτὸς ἴσχει, τὴν δὲ νύκτα πλείων, καὶ ἰδρῶτες

πολλοὶ ἐπιγίνονται, βῆξαι τε θυμὸς ἐγγίγνεται αὐτοῖσιν, καὶ ἀποπτύουσιν οὐδὲν ἄξιον λόγου, καὶ οἱ μὲν ὀφθαλμοὶ ἔκκοιλοι γίνονται, αἱ δὲ γνάθοι ἐρυθρήματα ἴσχουσι, καὶ οἱ μὲν ὄνυχες τῶν χειρῶν γρυποῦνται, οἱ δὲ δάκτυλοι θερμαίνονται, καὶ μάλιστα οἱ ἄκροι, καὶ ἐν τοῖσι ποσὶν οἰδήματα γίνονται, καὶ σιτίων οὐκ ἐπιθυμέουσι, καὶ φλύκταιναι γίνονται ἀνά τὸ σῶμα. Ὀκόσα μὲν οὖν ἐγχρονίζει τῶν ἐμπυημάτων, ἔχει τὰ σημεία ταῦτα, καὶ πιστεύειν αὐτέοισι χρή κάρτα ὀκόσα δὲ ὀλιγοχρόνιά ἐστι, τουτέοισιν ἐπισημαίνεται, ἢν τι ἐπιφαίνεται, οἷα καὶ τοῖσιν ἐν ἀρχῇσι γιγνομένοισιν, ἅμα δὲ καὶ ἢν τι δυσπνούστερος ἢ ὁ ἄνθρωπος. Τὰ δὲ ταχύτερον αὐτέων καὶ βραδύτερον ῥηγνύμενα τοισίδε γινώσκειν χρή ἢν μὲν ὁ πόνος ἐν ἀρχῇσι γίγηται, καὶ ἡ δύσπνοια καὶ ἡ βῆξ καὶ ὁ πτυαλισμὸς διατείνῃ, ἕς τὰς εἴκοσιν ἡμέρας προσδέχεσθαι τὴν ῥῆξιν, ἢ καὶ ἔτι πρόσθεν ἢν δὲ ἡσυχαιότερος ὁ πόνος ἢ, καὶ τᾶλλα πάντα κατὰ λόγον, τουτέοισι προσδέχεσθαι τὴν

Ῥῆξιν ἕς ὕστερον γίγνεσθαι δὲ ἀνάγκη καὶ πόνον καὶ δύσπνοιαν καὶ πτυαλισμὸν πρὸ τῆς τοῦ πύου ῥήξιος. Περιγίνονται δὲ τουτέων μάλιστα μὲν οὐς ἂν ἀφῆ ὁ πυρετὸς αὐθημερὸν μετὰ τὴν ῥῆξιν, καὶ σιτίων ταχέως ἐπιθυμέωσι, καὶ δίψης ἀπηλλαγμένοι ἔωσι, καὶ ἡ γαστήρ σμικρά τε καὶ ξυνεστηκότα ὑποχωρή, καὶ τὸ πῦον λευκὸν τε καὶ λεῖον καὶ ὁμόχροον ἢ καὶ φλέγματος ἀπηλλαγμένον, καὶ ἄτερ πόνου τε καὶ βηχὸς ἰσχυρῆς ἀνακαθαίρηται. Ἄριστα μὲν οὕτω καὶ τάχιστα ἀπαλλάσσουσιν ἢν δὲ μὴ, οἷσιν ἂν ἐγγυτάτω τουτέων γίγηται. Απόλλυνται δὲ οὐς ἂν ὁ τε πυρετὸς μὴ ἀφῆ, ἢ δοκέων αὐτέους ἀφιέναι, αὐθις φαίνηται ἀναθερμαινόμενος, καὶ δίψαν μὲν ἔχουσι, σιτίων δὲ μὴ ἐπιθυμέωσι, καὶ ἡ κοιλίη ὑγρὴ ἢ, καὶ τὸ πῦον χλωρὸν ἢ πελιὸν πτύη, ἢ φλεγματοῶδες καὶ ἀφρῶδες ἢν ταῦτα πάντα γίγηται, ἀπόλλυνται ὀκόσοισι δ' ἂν τουτέων τὰ μὲν ἐπιγένηται, τὰ



δὲ μὴ, οἱ μὲν αὐτέων ἀπόλλυνται, οἱ δὲ ἐν πολλῷ χρόνῳ περιγίγνονται.

Ἄλλ' ἐκ πάντων τῶν τεκμηρίων τῶν ἐόντων ἐν τούτοις σημαίνεσθαι, καὶ τοῖσι ἄλλοις πᾶσιν.

17. Empyema may be recognized in all cases by the following symptoms: In the first place, the fever does not go off, but is slight during the day, and increases at night, and copious sweats supervene, there is a desire to cough, and the patients expectorate nothing worth mentioning, the eyes become hollow, the cheeks have red spots on them, the nails of the hands are bent, the fingers are hot especially their extremities, there are swellings in the feet, they have no desire of food, and small blisters (phlyctaenae) occur over the body. These symptoms attend chronic empyemata, and may be much trusted to; and such as are of short standing are indicated by the same, provided they be accompanied by those signs which occur at the commencement, and if at the same time the patient has some difficulty of breathing. Whether they will break earlier or later may be determined by these symptoms; if there be pain at the commencement, and if the dyspnoea, cough, and ptyalism be severe, the rupture may be expected in the course of twenty days or still earlier; but if the pain be more mild, and all the other symptoms in proportion, you may expect from these the rupture to be later; but pain, dyspnoea, and ptyalism, must take place before the rupture of the abscess. Those patients recover most readily whom the fever leaves the same day that the abscess bursts,- when they recover their appetite speedily, and are freed from the thirst,- when the alvine discharges are small and consistent, the matter white, smooth, uniform in color, and free of phlegm, and if brought up without pain or strong coughing. Those die whom the fever does not leave, or when appearing to leave them it returns with an exacerbation; when they have thirst, but no desire of food, and there are watery discharges from the bowels; when the expectoration is green or livid, or pituitous and frothy; if all these occur they die, but if certain of these symptoms supervene, and others not, some patients die and some recover, after a long interval. But from all the symptoms taken together one should form a judgment, and so in all other cases.

18. Ὀκόσοις δὲ ἀποστάσις γίνονται ἐκ τῶν περιπλευμονικῶν νοσημάτων παρὰ τὰ ὦτα, καὶ ἐκπυέουσιν, ἢ ἐς τὰ κάτω χωρία, καὶ συριγγοῦνται, οὗτοι περιγίγνονται. Ἐπισκέπτεσθαι δὲ χρὴ τὰ τοιαῦτα ὧδε ἢν ὁ τε πυρετὸς ἔχη, καὶ ἡ ὀδύνη μὴ παύηται, καὶ τὸ πτύελον μὴ ἐκχωρήη κατὰ λόγον, μηδὲ χολώδεις αἱ τῆς κοιλίης διαχωρήσεις, μηδὲ εὐλυτοί τε καὶ ἄκρητοι γίνοιτο, καὶ μηδὲ τὸ οὔρον πούλυ τε κάρτα καὶ πολλήν

ὑπόστασιν ἔχον, ὑπηρετέηται δὲ πειοεστικῶς ὑπὸ τῶν λοιπῶν πάντων τῶν περιεστικῶν σημείων, τουτέοισι χρῆ τὰς τοιαύτας ἀποστάσιος ἐλπίζειν ἔσεσθαι. Γίνονται δὲ αἱ μὲν ἐς τὰ κάτω χωρία, οἷσιν ἂν περὶ τὰ ὑποχόνδρια τοῦ φλέγματός τι ἐγγένηται αἱ δὲ ἄνω, οἷσι τὸ ὑποχόνδριον λαπαρόν τε καὶ ἀνώδυνον διατελέη, δύσπνοος δὲ τινα χρόνον γενόμενος παύσηται, ἄτερ φανερῆς προφάσιος ἄλλης. Αἱ δὲ ἀποστάσιος αἱ ἐς τὰ σκέλεα ἐν τῆσι περιπλευμονίησι τῆσιν ἰσχυρῆσί τε καὶ ἐπικινδύνοισι λυσιτελέες μὲν πᾶσαι, ἄρισται δὲ αἱ τοῦ πτυέλου ἐν μεταβολῇ ἐόντος γιγνόμεναι εἰ γὰρ τὸ οἶδημα καὶ ἡ ὀδύνη γίγνοιτο, τοῦ πτυέλου ἀντὶ ξανθοῦ πυώδεος γενομένου καὶ ἐκχωρέοντος ἔξω, οὕτως ἂν ἀσφαλέςτατα ὅ τε ἄνθρωπος περιγίγνοιτο, καὶ ἡ ἀπόστασιος ἀνώδυνος τάχιστα παύσαιτο εἰ δὲ τὸ πτύελον μὴ ἐκχωρέοι καλῶς, μηδὲ τὸ οὔρον ὑπόστασιν ἀγαθὴν ἔχον φαίνοιτο, κίνδυνος χολὸν γενέσθαι τὸ

ἄρθρον ἢ πολλὰ πρήγματα παρασχεῖν. Ἦν δὲ ἀφανίζονται καὶ παλινδρομέωσιν αἱ ἀποστάσιος, τοῦ πτυλου μὴ ἐκχωρέοντος, καὶ τοῦ πυρετοῦ ἔχοντος, δεινὸν κίνδος γὰρ μὴ παραφρονήση καὶ ἀποθάνῃ ὁ ἄνθρωπος. Τῶν δὲ ἐμπύων τῶν ἐκ τῶν περιπλευμονικῶν οἱ γεραίτεροι μᾶλλον ἀπόλλυνται ἐκ δὲ τῶν ἄλλων ἐμπυημάτων οἱ νεώτεροι μᾶλλον ἀποθνήσκουσι. Ὀκόσοι δὲ τῶν

ἐμπύων καίονται ἢ τέμνονται, οἷσιν ἂν καθαρὸν μὲν το πῦον ἦ καὶ λευκὸν καὶ μὴ δυσῶδες, σώζονται οἷσι δὲ ὑφαιμόν τε καὶ βορβορῶδες, ἀπόλλυνται.

18. When abscesses form about the ears, after peripneumonic affections, or depositions of matter take place in the inferior extremities and end in fistula, such persons recover. The following observations are to be made upon them: if the fever persist, and the pain do not cease, if the expectoration be not normal, and if the alvine discharges be neither bilious, nor free and unmixed; and if the urine be neither copious nor have its proper sediment, but if, on the other hand, all the other salutary symptoms be present, in such cases abscesses may be expected to take place. They form in the inferior parts when there is a collection of phlegm about the hypochondria; and in the upper when the hypochondria continue soft and free of pain, and when dyspnoea having been present for a certain time, ceases without any obvious cause. All deposits which take place in the legs after severe and dangerous attacks of pneumonia, are salutary, but the best are those which occur at the time when the sputa undergo a change; for if the swelling and pain take place while the sputa are changing from yellow and becoming of a purulent character, and are expectorated freely, under these circumstances the man will recover most favorably and the abscess becoming free of pain, will soon cease; but if the expectoration is not free, and the urine

does not appear to have the proper sediment, there is danger lest the limb should be maimed, or that the case otherwise should give trouble. But if the abscesses disappear and go back, while expectoration does not take place, and fever prevails, it is a bad symptom; for there is danger that the man may get into a state of delirium and die. Of persons having empyema after peripneumonic affections, those that are advanced in life run the greatest risk of dying; but in the other kinds of empyema younger persons rather die. In cases of empyema treated by the cautery or incision, when the matter is pure, white, and not fetid, the patient recovers; but if of a bloody and dirty character, he dies.

19. Αἱ δὲ ζῦν πυρετῶ γιγνόμεναι ὀδύναι περὶ τὴν ὀσφῦν τε καὶ τὰ κάτω χωρία, ἢ τῶν φρενῶν ἄπτωνται, τὰ κάτω ἐκλείπουσαι, ὀλέθριαι κάρτα. Προσέχειν οὖν δεῖ τὸν νόον τοῖσιν ἄλλοισι σημείοισιν, ὡς ἦν τι καὶ τῶν ἄλλων σημείων ἐπιφαίνηται πονηρὸν, ἀνέλπιστος ὁ ἄνθρωπος ἦν δὲ, ἀναΐσσοντος τοῦ νοσήματος ὡς πρὸς τὰς φρένας, τᾶλλα σημεῖα μὴ πονηρὰ ἐπιγίγνηται, ἔμπυον ἔσεσθαι τοῦτον πολλὰ ἐλπίδες.

Κύστιες δὲ σκληραὶ τε καὶ ἐπώδυνοι δειναὶ μὲν παντελῶς καὶ ὀλέθριαι ὀλεθριώτεραι δὲ ὀκόσαι ζῦν πυρετῶ ζυνεχεῖ γίνονται καὶ γὰρ οἱ ἀπ' αὐτέων τῶν κύστιων πόνοι ἱκανοὶ ἀποκτεῖναι καὶ αἱ κοιλίαι οὐ διαχωρέουσιν ἐν τουτέῳ τῶ χρόνῳ, εἰ μὴ σκληρὰ τε καὶ πρὸς ἀνάγκην λύει δὲ οὔρον πυῶδις οὐρηθὲν, λευκὴν καὶ λείην ἔχον τὴν ὑπόστασιν. Ἦν δὲ μήτε

τὸ οὔρον μηδὲν ἐνδιδοίη, μήτε ἡ κύστις μαλάσσοιτο, ὃ τε πυρετος ζυνεχῆς ἦ, ἐν τῆσι πρώτῃσι περιόδοισι τοῦ νοσήματος ἐλπίς τὸν ἀλγέοντα ἀπολέσθαι. Ὁ δὲ τρόπος οὗτος ἄπτεται τῶν παιδίων μάλιστα τῶν ἑπταετέων, ἕως ἂν ἐς τὰ πεντεκαίδεκα ἔτεα γένωνται.

19. Pains accompanied with fever which occur about the loins and lower parts, if they attack the diaphragm, and leave the parts below, are very fatal. Wherefore one ought to pay attention to the other symptoms, since if any unfavorable one supervene, the case is hopeless; but if while the disease is determined to the diaphragm, the other symptoms are not bad, there is great reason to expect that it will end in empyema. When the bladder is hard and painful, it is an extremely bad and mortal symptom, more especially in cases attended with continued fever; for the pains proceeding from the bladder alone are to kill the patient; and at such a time the bowels are not moved, or the discharges are hard and forced. But urine of a purulent character, and having a white and smooth sediment, relieves the patient. But if no amendment takes place in the characters of the

urine, nor the bladder become soft, and the fever is of the continual type, it may be expected that the patient will die in the first stages of the complaint. This form attacks children more especially, from their seventh to their fifteenth year.

20. Οἱ δὲ πυρετοὶ κρίνονται ἐν τῆσιν αὐτέησιν ἡμέρησι τὸν ἀριθμὸν, ἐξ ὧν τε περιγίγνονται οἱ ἄνθρωποι καὶ ἐξ ὧν ἀπόλλυνται. Οἷ τε γὰρ εὐθέστατοι τῶν πυρετῶν καὶ ἐπὶ σημείων ἀσφαλεστάτων βεβῶτες τεταρταῖοι παύονται, ἢ πρόσθεν οἷ τε κακοηθέστατοι καὶ ἐπὶ σημείων δεινοτάτων γινόμενοι τεταρταῖοι κτείνουσιν, ἢ πρόσθεν. Ἡ μὲν οὖν πρώτη ἔφοδος αὐτέων οὕτω τελευτᾷ ἢ δὲ δευτέρῃ ἐς τὴν ἐβδόμην περιάγεται ἢ δὲ τρίτῃ ἐς τὴν ἐνδεκάτην ἢ δὲ τετάρτῃ ἐς τὴν τεσσαρεσκαίδεκάτην ἢ δὲ πέμπτῃ ἐς τὴν ἑπτακαίδεκάτην ἢ δὲ ἕκτῃ ἐς τὴν εἰκοστήν. Αὗται μὲν οὖν ἐκ τῶν ὀξυτάτων νοσημάτων διὰ τεσσάρων ἐς τὰς εἴκοσιν ἐκ προσθέσιος τελευτῶσιν. Οὐ δύναται δὲ ὄλησιν ἡμέρησιν οὐδὲν τουτέων

ἀριθμέεσθαι ἀτρεκέως οὐδὲ γὰρ ὁ ἐνιαυτός τε καὶ οἱ μῆνες ὄλησιν ἡμέρησι πεφύκασιν ἀριθμέεσθαι. Μετὰ δὲ ταῦτα ἐν τῷ αὐτέῳ τρόπῳ κατὰ τὴν αὐτέην πρόσθεσιν ἢ πρώτη περίοδος τεσσάρων καὶ τριήκονθ' ἡμερέων, ἢ δὲ δευτέρῃ τεσσαράκοντα ἡμερέων, ἢ δὲ τρίτῃ ἐξήκονθ' ἡμερέων. Τουτέων δ' ἐν ἀρχῆσιν ἐστιχαλεπώτατον διαγιγνώσκειν τὰ μέλλοντα ἐν πλείστῳ χρόνῳ κρίνεσθαι ὁμοιόταται γὰρ αἱ ἀρχαὶ εἰσιν αὐτέων ἀλλὰ χρὴ ἀπὸ τῆς πρώτης ἡμέρης ἐνθυμέεσθαι, καὶ καθ' ἑκάστην τετράδα προστιθεμένην σκέπτεσθαι καὶ οὐ λήσεται ὅπη τρέψεται τὸ νόσημα. Γίνεται δὲ ἢ τῶν τεταρταίων κατάστασις ἐκ τοῦ τοιούτου κόσμου. Τὰ δὲ ἐν ἐλαχίστῳ χρόνῳ μέλλοντα κρίνεσθαι, εὐπετέστερα γινώσκεσθαι μέγιστα γὰρ τὰ διαφέροντα ἀπ' ἀρχῆς αὐτέων ἐστὶν οἱ μὲν γὰρ περιεσόμενοι εὐπνοοὶ τε καὶ ἀνώδυνοί εἰσι, καίκοιμῶνται τὰς νύκτας, τὰ τε ἄλλασημεῖα ἔχουσιν ἀσφαλέστατα οἱ δὲ ἀπολούμενοι δύσπνοοι γίνονται, ἀλλοφάσσοντες, ἀγρυπνέοντες, τὰ τε ἄλλα σημεῖα κάκιστα ἔχοντες. Ὡς οὖν τουτέων οὕτω

γινομένων συμβάλλεσθαι χρὴ, κατὰ τε τὸν χρόνον, κατὰ τε τὴν πρόσθεσιν ἑκάστην ἐπὶ τὴν κρίσιν ἰόντων τῶν νοσημάτων. Κατὰ δὲ τὸν αὐτὸν λόγον καὶ τῆσι γυναιξὶν αἱ κρίσεις ἐκ τῶν τόκων γίνονται.

20. Fevers come to a crisis on the same days as to number on which men recover and die. For the mildest class of fevers, and those originating with the most favorable symptoms, cease on the fourth day or earlier; and the most malignant, and those setting in with the most dangerous symptoms, prove fatal on the fourth day or earlier. The first class of them as to violence ends thus: the second is

protracted to the seventh day, the third to the eleventh, the fourth to the fourteenth, the fifth to the seventeenth, and the sixth to the twentieth. Thus these periods from the most acute disease ascend by fours up to twenty. But none of these can be truly calculated by whole days, for neither the year nor the months can be numbered by entire days. After these in the same manner, according to the same progression, the first period is of thirty-four days, the second of forty days, and the third of sixty days. In the commencement of these it is very difficult to determine those which will come to a crisis after a long interval; for these beginnings are very similar, but one should pay attention from the first day, and observe further at every additional tetrad, and then one cannot miss seeing how the disease will terminate. The constitution of quartans is agreeable to the same order. Those which will come to a crisis in the shortest space of time, are the easiest to be judged of; for the differences of them are greatest from the commencement, thus those who are going to recover breathe freely, and do not suffer pain, they sleep during the night, and have the other salutary symptoms, whereas those that are to die have difficult respiration, are delirious, troubled with insomnolency, and have other bad symptoms. Matters being thus, one may conjecture, according to the time, and each additional period of the diseases, as they proceed to a crisis. And in women, after parturition, the crises proceed agreeably to the same ratio.

21. Κεφαλῆς δὲ ὀδύναί ισχυραὶ τε καὶ ξυνεχέες ξὺν πυρετῷ ἦν μὲν τι τῶν θανατωδῶν σημείων προσγίγνοιτο, ὀλέθριον κάρτα. Εἰ δὲ ἄτερ τῶν τοιούτων σημείων ἢ ὀδύνη ὑπερβάλλοι εἴκοσιν ἡμέρας, ὃ τε πυρετὸς ἔχοι, ὑποσκέπτεσθαι χρὴ αἵματος ῥῆξιν διὰ ῥινῶν, ἢ ἄλλην τινὰ ἀπόστασιν ἐς τὰ κάτω χωρία ἔστ' ἂν δὲ ἢ ὀδύνη ἢ νεαρὰ, προσδέχεσθαι χρὴ ὡσαύτως αἵματος ῥῆξιν διὰ ῥινῶν, ἢ ἐκπύησιν, ἄλλως τε ἦν ἢ ὀδύνη περὶ τοὺς κροτάφους καὶ τὸ μέτωπον ἢ μᾶλλον δὲ χρὴ προσδέχεσθαι τοῦ μὲν αἵματος τὴν ῥῆξιν τοῖσι νεωτέροισι πέντε καὶ τριήκοντα ἑτέων, τοῖσι δὲ γεραιτέροισι τὴν ἐκπύησιν.

21. Strong and continued headaches with fever, if any of the deadly symptoms be joined to them, are very fatal. But if without such symptoms the pain be prolonged beyond twenty days, a discharge of blood from the nose or some abscess in the inferior parts may be anticipated; but while the pain is recent, we may expect in like manner a discharge of blood from the nose, or a suppuration, especially if the pain be seated above the temples and forehead; but the hemorrhage is rather to be looked for in persons younger than thirty years, and the suppuration in more elderly persons.

22. Ωτὸς δὲ ὀξεῖη ὀδύνη ξὺν πυρετῷ ξυνεχεῖ τε καὶ ἰσχυρῷ δεινὸν κίνδυνος γὰρ παραφρονῆσαι τὸν ἄνθρωπον καὶ ἀπολέσθαι. Ως οὖν τουτέου τοῦ τόπου σφαλεροῦ ἐόντος, ταχέως δεῖ προσέχειν τὸν νόον τοῖσι σημείοισι πᾶσιν ἀπὸ τῆς πρώτης ἡμέρης. Ἀπόλλυνται δὲ οἱ μὲν νεώτεροι τῶν ἀνθρώπων ἑβδομαῖοι καὶ ἔτι θᾶσσον ὑπὸ τουτέου τοῦ νοσήματος οἱ δὲ γέροντες πολλῷ βραδύτερον οἷ τε γὰρ πυρετοὶ καὶ αἱ παραφροσύναι ἥσσον αὐτέοισιν ἐπιγίνονται, καὶ τὰ ὄτα διὰ τοῦτο φθάνει ἐκπυῖσκεσθαι ἀλλὰ ταύτησι μὲν τῆσιν ἡλικίησιν ὑποστροφῆς τοῦ νοσήματος ἐπιγιγνώμεναι ἀποκτείνουσι τοὺς πλείστους. Οἱ δὲ νεώτεροι, πρὶν ἐκπυῖσαι τὸ οὖς, ἀπόλλυνται πλὴν ἀλλ' ἦν γε ῥυῆ πῦον λευκὸν ἐκ τοῦ ὠτὸς, ἐλπὶς τῷ νεωτέρῳ περιγενέσθαι, ἦν γε καὶ ἄλλο τι αὐτέῳ ἐπιγένηται χρηστὸν σημεῖον.

22. Acute pain of the ear, with continual and strong fever, is to be dreaded; for there is danger that the man may become delirious and die. Since, then, this is a hazardous spot, one ought to pay particular attention to all these symptoms from the commencement. Younger persons die of this disease on the seventh day, or still earlier, but old persons much later; for the fevers and delirium less frequently supervene upon them, and on that account the ears previously come to a suppuration, but at these periods of life, relapses of the disease coming on generally prove fatal. Younger persons die before the ear suppurates; only if white matter run from the ear, there may be hope that a younger person will recover, provided any other favorable symptom be combined.

23. Φάρυγξ δὲ ἐλκουμένη ξὺν πυρετῷ δεινὸν ἀλλ' ἦν τι

καὶ ἄλλο σημεῖον γένηται τῶν προκεκριμένων πονηρῶν εἶναι, προλέγειν δεῖ ὡς ἐν κινδύνῳ ἐόντος τοῦ ἀνθρώπου. Αἱ δὲ κυνάγγαι δεινόταται μὲν εἰσι, καὶ τάχιστα ἀναιρέουσιν, ὀκόσαι μῆτε ἐν τῇ φάρυγγι μηδὲν ἔκδηλον ποιέουσιν, μῆτε ἐν τῷ αὐχένι, πλεῖστον δὲ πόνον παρέχουσι καὶ ὀρθόπνοϊαν αὐταὶ γὰρ καὶ αὐθημερὸν ἀποπνίγουσι, καὶ δευτεραῖαι, καὶ τριταῖαι, καὶ τεταρταῖαι. Ὅσαι δὲ τὰ μὲν ἄλλα παραπλησίως πόνον παρέχουσι, ἐπαίρονται δὲ, καὶ ἐρυθήματα ἐν τῇ φάρυγγι ποιέουσιν, ὀλέθρια μὲν κάρτα, χρονιώτεραι δὲ μᾶλλον τῶν πρόσθεν, ἦν τὸ ἐρυθήμα μέγα γίγνηται. Ὀκόσοισι δὲ ξυνεξερευθεῖη ἢ φάρυγξ καὶ ὁ αὐχὴν, αὐταὶ δὲ χρονιώτεραι, καὶ μάλιστα ἐξ αὐτέων τινὲς περιφεύγουσι, ἦν ὁ τε

αὐχὴν καὶ τὸ στῆθος ἐρυθήμα ἔχη, καὶ μὴ παλινδρομῆ τὸ ἐρυσίπελας ἔσω. Ἦν δὲ μῆτε ἐν ἡμέρησι κρισίμησιν ἀφανίζηται τὸ ἐρυσίπελας, μῆτε φύματος ξυστραφέντος ἐν τῷ ἔξω χωρίῳ, μῆτε πῦον ἀποβήσση, ῥηϊδίως τε καὶ ἀπόνως ἔχειν δοκέη, θάνατον σημαίνει, ἢ ὑποστροφῆν τοῦ ἐρυθήματος. Ἀσφαλέστερον

δὲ τὸ οἴδημα καὶ τὸ ἐρύθημα ὡς μάλιστα ἔξω τρέπεσθαι ἦν δὲ ἐς τὸν πλεύμονα  
τραπεῖη, παράνοιάν τε ποιέει, καὶ ἔμπυοι ἐξ αὐτέων τινὲς ὡς τὰ πολλὰ γίνονται.  
Οἱ δὲ γαργαρεῶνες ἐπικίνδυνοι καὶ ἀποτάμνεσθαι καὶ ἀποσχάζεσθαι, ἔστ' ἂν  
ἐρυθροὶ τε ἔωσι καὶ μεγάλοι καὶ γὰρ φλεγμοναὶ ἐπιγίνονται τουτέοισι καὶ  
αἰμορραγίαι ἀλλὰ χρὴ τὰ τοιαῦτα τοῖσιν ἄλλοισι μηχανήμασι πειρῆσθαι  
κατισχναίνειν ἐν τουτέῳ τῷ χρόνῳ. Ὅκόταν δὲ ἀποκριθῇ πᾶν, ὃ δὴ σταφυλὴν  
καλέουσι, καὶ γένηται τὸ

μὲν ἄκρον τοῦ γαργαρεῶνος μεῖζόν τε καὶ περιφερὲς, τὸ δὲ ἀνωτέρω  
λεπτότερον, ἐν τουτέῳ τῷ καιρῷ ἀσφαλὲς διαχειρίζειν. Ἄμεινον δὲ καὶ τὴν  
κοιλίην ὑποκενώσαντα τῇ χειρουργίῃ χρέεσθαι, ἦν ὃ τε χρόνος συγχωρῆ, καὶ μὴ  
ἀποπνίγηται ὁ ἄνθρωπος.

23. Ulceration of the throat with fever, is a serious affection, and if any other of the symptoms formerly described as being bad, be present, the physician ought to announce that his patient is in danger. Those quinsies are most dangerous, and most quickly prove fatal, which make no appearance in the fauces, nor in the neck, but occasion very great pain and difficulty of breathing; these induce suffocation on the first day, or on the second, the third, or the fourth. Such as, in like manner, are attended with pain, are swelled up, and have redness (erythema) in the throat, are indeed very fatal, but more protracted than the former, provided the redness be great. Those cases in which both the throat and the neck are red, are more protracted, and certain persons recover from them, especially if the neck and breast be affected with erythema, and the erysipelas be not determined inwardly. If neither the erysipelas disappear on the critical day, nor any abscess form outwardly, nor any pus be spit up, and if the patient fancy himself well, and be free from pain, death, or a relapse of the erythema is to be apprehended. It is much less hazardous when the swelling and redness are determined outwardly; but if determined to the lungs, they superinduce delirium, and frequently some of these cases terminate in empyema. It is very dangerous to cut off or scarify enlarged uvulae while they are red and large, for inflammations and hemorrhages supervene; but one should try to reduce such swellings by some other means at this season. When the whole of it is converted into an abscess, which is called Uva, or when the extremity of the variety called Columella is larger and round, but the upper part thinner, at this time it will be safe to operate. But it will be better to open the bowels gently before proceeding to the operation, if time will permit, and the patient be not in danger of being suffocated.

24. Ὀκόσοισι δ' ἂν οἱ πυρετοὶ παύωνται, μήτε σημείων γενομένων λυτηρίων, μήτε ἐν ἡμέρησι κρισίμησιν, ὑποστροφὴν προσδέχεσθαι χρὴ τουτέοισιν. Ὅστις δ' ἂν τῶν πυρετῶν μηκύνῃ περιεστικῶς διακειμένου τοῦ ἀνθρώπου, μηκέτι ὀδύνης ἐχούσης διὰ φλεγμονὴν τινα, μήτε διὰ πρόφασιν ἄλλην μηδεμίαν ἐμφανέα, τουτέῳ προσδέχεσθαι ἀπόστασιν μετ' οἰδήματός τε καὶ ὀδύνης ἕξ τι τῶν ἄρθρων, καὶ οὐχ ἦσσον ἐκ τῶν κάτω. Μᾶλλον δὲ γίνονται καὶ ἐν ἐλάσσονι χρόνῳ αἱ τοιαῦται ἀποστάσεις τοῖσι νεωτέροισι τριήκοντα ἑτέων ὑποσκέπτεσθαι δὲ χρὴ εὐθέως τὰ περὶ τῆς ἀποστάσιος, ἣν εἴκοσιν ἡμέρας ὁ πυρετὸς ἔχων ὑπερβάλλῃ τοῖσι δὲ γεραιτέροισιν

ἦσσον γίνεται, πολυχρονιωτέρου ἐόντος τοῦ πυρετοῦ. Χρὴ δὲ τὴν μὲν τοιαύτην ἀπόστασιν προσδέχεσθαι, ξυνεχέος ἐόντος τοῦ πυρετοῦ, ἕς δὲ τεταρταῖον καταστήσεσθαι, ἣν διαλείπη τε καὶ καταλαμβάνῃ πεπλανημένον τρόπον, καὶ ταῦτα ποιέων τῷ φθινοπώρῳ προσπελάσῃ. Ὡσπερ δὲ τοῖσι νεωτέροισι τῶν τριήκοντα ἑτέων αἱ ἀποστάσεις γίνονται, οὕτως οἱ τεταρταῖοι μᾶλλον τοῖσι τριήκοντα ἑτέων καὶ γεραιτέροισιν. Τὰς δὲ ἀποστάσιος εἰδέναι χρὴ τοῦ χειμῶνος μᾶλλον γινομένης χρονιώτερόν τε παυομένης, ἦσσον δὲ παλινδρομεύσας. Ὅστις δ' ἂν ἐν πυρετῷ μὴ θανατώδει φῆ τὴν κεφαλὴν ἀλγέειν, ἢ καὶ ὀρφνῶδές τι πρὸ τῶν ὀφθαλμῶν φαίνεσθαι, ἢ καρδιωγμὸς τουτέῳ προσγένηται, χολώδης ἔμετος παρέσται ἣν δὲ καὶ ῥίγος ἐπιλάβῃ, καὶ τὰ κάτω μέρη τοῦ ὑποχονδρίου ψυχρὰ ἦ, καὶ θᾶσσον ἔτι ὁ ἔμετος παρέσται ἣν δὲ τι πῆν ἢ φάγη ὑπὸ τοῦτον τὸν χρόνον, κάρτα τοῦτο ταχέως ἐμέεται. Τουτέων δὲ οἷσιν ἂν ἄρξηται ὁ πόνος τῆ πρώτῃ ἡμέρῃ γίνεσθαι, τεταρταῖοι πιεζεῦνται μάλιστα καὶ πεμπταῖοι ἕς δὲ τὴν ἐβδόμην ἀπαλλάσσονται οἱ μέντοι πλείονες αὐτέων ἄρχονται μὲν πονέεσθαι τριταῖοι, χειμάζονται δὲ μάλιστα πεμπταῖοι, ἀπαλλάσσονται δὲ ἐναταῖοι ἢ ἐνδεκαταῖοι οἱ δ' ἂν ἄρξονται πεμπταῖοι πονέεσθαι, καὶ τᾶλλα κατὰ λόγον αὐτέοισι γίγνηται, ἕς τὴν τεσσαρεσκαδεκάτην κρίνεται ἢ νοῦσος. Γίνεται δὲ ταῦτα τοῖσι μὲν ἀνδράσι καὶ τῆσι γυναιξίν ἐν τοῖσι τριταίοισι μάλιστα τοῖσι δὲ νεωτέροισι γίνεται μὲν καὶ ἐν τουτέοισι, μᾶλλον δὲ ἐν τοῖσι ξυνεχεστέροισι πυρετοῖσι, καὶ ἐν τοῖσι γνησίοισι τριταίοισιν. Οἷσι δ' ἂν ἐν τοιουτοτρόπῳ πυρετῷ κεφαλὴν ἀλγέουσιν ἀντὶ μὲν τοῦ ὀρφνῶδές τι πρὸ τῶν ὀφθαλμῶν φαίνεσθαι, ἀμβλυωγμὸς γίνεται, ἢ μαρμαρυγαὶ προφαίνονται, ἀντὶ δὲ τοῦ καρδιώσσειν, ἐν τῷ ὑποχονδρίῳ ἐπὶ δεξιὰ ἢ ἐπ' ἀριστερὰ ξυντείνεται τι μήτε ξὺν ὀδύνη μήτε ξὺν φλεγμονῇ, αἷμα διὰ τῶν ῥινῶν τουτέοισι ῥυῆναι προσδόκιμον ἀντὶ τοῦ ἐμέτου. Μᾶλλον δὲ καὶ ἐνταῦθα τοῖσι νέοισι τοῦ αἵματος τὴν ῥῆξιν προσδέχεσθαι τοῖσι δὲ πέντε καὶ τριήκοντα ἔτεσι καὶ γεραιτέροισιν ἦσσον, ἀλλὰ τοὺς ἐμέτους τουτέοισι προσδέχεσθαι. Τοῖσι δὲ παιδίοισι σπασμοὶ γίνονται, ἣν ὁ πυρετὸς ὀξὺς ἦ, καὶ γαστήρ μὴ διαχωρῆ, καὶ ἀγρυπνέωσί τε καὶ ἐκπλαγέωσι, καὶ κλαυθυρίζωσι, καὶ τὸ χρῶμα μεταβάλλωσι, καὶ χλωρὸν ἢ πελιδνὸν ἢ ἐρυθρὸν



ἴσχωσιν. Γίνεται δὲ ταῦτα ἐξ ἑτοιμοτάτου μὲν τοῖσι παιδίοισι τοῖσι νεωτάτοισιν ἐς τὰ ἑπτὰ ἔτεα τὰ δὲ πρεσβύτερα τῶν παιδίων καὶ οἱ ἄνδρες οὐκ ἔτι ἐν τοῖσι πυρετοῖσιν ὑπὸ τῶν σπασμῶν ἀλίσκονται, ἢν μὴ τι τῶν σημείων προσγένηται τῶν ἰσχυροτάτων τε καὶ κακίστων, οἷά περ ἐν τησι φρενίτισι γίνεται. Τοὺς δ' ἀπολουμένους τε καὶ περιεσομένους τῶν παιδίων τε καὶ τῶν ἄλλων τεκμαίρεσθαι τοῖσι ζύμπασι σημείοισιν, ὡς ἐφ' ἑκάστοισιν ἕκαστα διαγέγραπται. Ταῦτα δὲ λέγω περὶ τε τῶν ὀξέων νουσημάτων καὶ ὅσα ἐκ τουτέων γίνεται.

24. When the fevers cease without any symptoms of resolution occurring, and not on the critical days, in such cases a relapse may be anticipated. When any of the fevers is protracted, although the man exhibits symptoms of recovery, and there is no longer pain from any inflammation, nor from any other visible cause, in such a case a deposit, with swelling and pain, may be expected in some one of the joints, and not improbably in those below. Such deposits occur more readily and in less time to persons under thirty years of age; and one should immediately suspect the formation of such a deposit, if the fever be protracted beyond twenty days; but to aged persons these less seldom happen, and not until the fever be much longer protracted. Such a deposit may be expected, when the fever is of a continual type, and that it will pass into a quartan, if it become intermittent, and its paroxysms come on in an irregular manner, and if in this form it approach autumn. As deposits form most readily in persons below thirty years of age, so quartans most commonly occur to persons beyond that age. It is proper to know that deposits occur most readily in winter, that then they are most protracted, but are less given to return. Whoever, in a fever that is not of a fatal character, says that he has pain in his head, and that something dark appears to be before his eyes, and that he has pain at the stomach, will be seized with vomiting of bile; but if rigor also attack him, and the inferior parts of the hypochondrium are cold, vomiting is still nearer at hand; and if he eat or drink anything at such a season, it will be quickly vomited. In these cases, when the pain commences on the first day, they are particularly oppressed on the fourth and the fifth; and they are relieved on the seventh, but the greater part of them begin to have pain on the third day, and are most especially tossed on the fifth, but are relieved on the ninth or eleventh; but in those who begin to have pains on the fifth day, and other matters proceed properly with them, the disease comes to a crisis on the fourteenth day. But when in such a fever persons affected with headache, instead of having a dark appearance before their eyes, have dimness of vision, or flashes of light appear before their eyes, and instead of pain at the pit of the stomach, they have in their hypochondrium a fullness stretching either to the right or left side, without either pain or inflammation, a hemorrhage from the nose is to be

expected in such a case, rather than a vomiting. But it is in young persons particularly that the hemorrhage is to be expected, for in persons beyond the age of thirty-five, vomitings are rather to be anticipated. Convulsions occur to children if acute fever be present, and the belly be they cannot sleep, are agitated, and moan, and change color, and become green, livid, or ruddy. These complaints occur most readily to children which are very young up to their seventh year; older children and adults are not equally liable to be seized with convulsions in fevers, unless some of the strongest and worst symptoms precede, such as those which occur in frenzy. One must judge of children as of others, which will die and which recover, from the whole of the symptoms, as they have been specially described. These things I say respecting acute diseases, and the affections which spring from them.

25. Χρή δὲ τὸν μέλλοντα ὀρθῶς προγιγνώσκειν τοὺς περιεσομένους καὶ τοὺς ἀποθανομένους, ὅσοισί τε ἂν μέλλῃ πλέονας ἡμέρας παραμένειν τὸ νοῦσημα καὶ ὅσοισιν ἂν ἐλάσσους, τὰ σημεῖα ἐκμανθάνοντα πάντα δύνασθαι κρίνειν, λογιζόμενον τὰς δυνάμιας αὐτέων πρὸς ἀλλήλας, ὥσπερ διαγέγραπται περὶ τῶν ἄλλων καὶ τῶν οὖρων καὶ τῶν πτυέλων, ὅταν ὁμοῦ πῦόν τε ἀναβήσῃ καὶ χολήν. Χρή δὲ καὶ τὰς φορὰς τῶν νοσημάτων αἰεὶ ἐπιδημούντων ταχέως ἐνθυμέεσθαι, τὴν τε τῆς ὥρης κατάστασιν. Εὖ μέντοι χρή εἰδέναι περὶ τῶν τεκμηρίων καὶ τῶν ἄλλων σημείων, καὶ μὴ λανθάνειν ὅτι ἐν παντὶ ἔτει καὶ πάσῃ ὥρῃ τὰ τε κακὰ κακὸν σημαίνει, καὶ τὰ χρηστὰ ἀγαθόν, ἐπεὶ καὶ ἐν Λιβύῃ καὶ ἐν Δήλῳ καὶ ἐν Σκυθίῃ φαίνεται τὰ προγεγραμμένα ἀληθεύοντα σημεῖα. Ἐξ ὧν χρή εἰδέναι ὅτι ἐν γε τοῖς αὐτέοισι χωρίοισιν οὐδὲν δεινὸν τὸ μὴ οὐ τὰ πολλαπλάσια αὐτέων ἐπιτυχάνειν, ἢν ἐκμαθὼν τις αὐτὰ κρίνειν τε καὶ λογίζεσθαι ὀρθῶς ἐπίστηται. Ποθέειν δὲ χρή οὐδενὸς νοσήματος οὖνομα, ὃ τι μὴ τυγχάνῃ ἐνθάδε γεγραμμένον πάντα γὰρ ὀκόσα ἐν τοῖσι χρόνοισι τοῖσι προειρημένοισι κρίνεται, γνώση τοῖσιν αὐτέοισι σημείοισιν.

25. He who would correctly beforehand those that will recover, and those that will die, and in what cases the disease will be protracted for many days, and in what cases for a shorter time, must be able to form a judgment from having made himself acquainted with all the symptoms, and estimating their powers in comparison with one another, as has been described, with regard to the others, and the urine and sputa, as when the patient coughs up pus and bile together. One ought also to consider promptly the influx of epidemical diseases and the constitution of the season. One should likewise be well acquainted with the particular signs and the other symptoms, and not be ignorant how that, in every year, and at every season, bad symptoms prognosticate ill, and favorable

symptoms good, since the aforesaid symptoms appear to have held true in Libya, in Delos, and in Scythia, from which it may be known that, in the same regions, there is no difficulty in attaining a knowledge of many more things than these; if having learned them, one knows also how to judge and reason correctly of them. But you should not complain because the name of any disease may happen not to be described here, for you may know all such as come to a crisis in the aforementioned times, by the same symptoms.

# APHORISMS - Άφορισμοί

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## SECTION I.

1. Ὁ βίος βραχύς, ἡ δὲ τέχνη μακρὴ, ὁ δὲ καιρὸς ὀξύς, ἡ δὲ πεῖρα σφαλερὴ, ἡ δὲ κρίσις χαλεπὴ. Δεῖ δὲ οὐ μόνον ἑωυτὸν παρέχειν τὰ δέοντα ποιεῦντα, ἀλλὰ καὶ τὸν νοσέοντα, καὶ τοὺς παρεόντας, καὶ τὰ ἔξωθεν.

1. Life is short, and Art long; the crisis fleeting; experience perilous, and decision difficult. The physician must not only be prepared to do what is right himself, but also to make the patient, the attendants, and externals cooperate.

2. Ἐν τῆσι τα ραχῆσι τῆς κοιλίης, καὶ ἐμέτοισι, τοῖσιν αὐτομάτως γιγνομένοισιν, ἦν μὲν, οἷα δεῖ καθαίρεσθαι, καθαίρωνται, ξυμφέρει τε καὶ εὐφόρως φέρουσιν ἦν δὲ μὴ, τούναντίον. Οὕτω δὲ καὶ κενεαγγεῖη, ἦν μὲν, οἷα δεῖ γίγνεσθαι, γίγνηται, ξυμφέρει τε καὶ εὐφόρως φέρουσιν ἦν δὲ μὴ, τούναντίον. Ἐπιβλέπειν οὖν δεῖ καὶ χώραν, καὶ ὥρην, καὶ ἡλικίην, καὶ νούσους, ἐν ἧσι δεῖ, ἢ οὐ.

2. In disorders of the bowels and vomitings, occurring spontaneously, if the matters purged be such as ought to be purged, they do good, and are well borne; but if not, the contrary. And so artificial evacuations, if they consist of such matters as should be evacuated, do good, and are well borne; but if not, the contrary. One, then, ought to look to the country, the season, the age, and the diseases in which they are proper or not.

3. Ἐν τοῖσι γυμναστικοῖσιν αἱ ἐπ' ἄκρον εὐεξίαί σφαλεραί, ἦν ἐν τῷ ἐσχάτῳ ἔωσιν οὐ γὰρ δύνανται μένειν ἐν τῷ αὐτέῳ, οὐδὲ ἀτρεμέειν ἐπεὶ δὲ οὐκ ἀτρεμέουσιν, οὐδ' ἔτι δυνάνται ἐπὶ τὸ βέλτιον ἐπιδιδόναι, λείπεται ἐπὶ τὸ χειρὸν τουτέων οὖν εἵνεκεν τὴν εὐεξίην λύειν ξυμφέρει μὴ βραδέως, ἵνα πάλιν ἀρχὴν ἀναθρέψιος λαμβάνη τὸ σῶμα μηδὲ τὰς ξυμπτώσιας ἐς τὸ ἔσχατον ἄγειν, σφαλερὸν γὰρ, ἀλλ' ὀκοίη ἂν ἡ φύσις ἢ τοῦ μέλλοντος ὑπομένειν, ἐς τοῦτο ἄγειν. Ὡσαύτως δὲ καὶ αἱ κενώσεις αἱ ἐς τὸ ἔσχατον ἄγουσαι, σφαλεραὶ καὶ πάλιν αἱ ἀναθρέψεις, αἱ ἐν τῷ ἐσχάτῳ ἐοῦσαι, σφαλεραί.

3. In the athletae, embonpoint, if carried to its utmost limit, is dangerous, for they cannot remain in the same state nor be stationary; and since, then, they can neither remain stationary nor improve, it only remains for them to get worse; for these reasons the embonpoint should be reduced without delay, that the body may again have a commencement of reparation. Neither should the evacuations, in their case, be carried to an extreme, for this also is dangerous, but only to such

a point as the person's constitution can endure. In like manner, medicinal evacuations, if carried to an extreme, are dangerous; and again, a restorative course, if in the extreme, is dangerous.

4. Αἱ λεπταὶ καὶ ἀκριβέες δίαιται, καὶ ἐν τοῖσι μακροῖσιν αἰεὶ πάθεσι, καὶ ἐν τοῖσιν ὀξέσιν, οὗ μὴ ἐπιδέχεται, σφαλεραί. Καὶ πάλιν αἱ ἐς τὸ ἔσχατον λεπτότητος ἀφιγμέναι δίαιται, χαλεπαὶ καὶ γὰρ αἱ πληρώσεις αἱ ἐν τῷ ἐσχάτῳ εἶναι, χαλεπαί.

4. A slender restricted diet is always dangerous in chronic diseases, and also in acute diseases, where it is not requisite. And again, a diet brought to the extreme point of attenuation is dangerous; and repletion, when in the extreme, is also dangerous.

5. Ἐν τῆσι λεπτήσι διαίτησιν ἀμαρτάνουσιν οἱ νοσέοντες, διὸ μᾶλλον βλάπτονται πᾶν γὰρ τὸ ἀμάρτημα ὃ ἂν γίνηται, μέγα γίνεται μᾶλλον, ἢ ἐν τῆσιν ὀλίγον ἀδροτέρησι διαίτησιν διὰ τοῦτο καὶ τοῖσιν ὀγιαίνουσι σφαλεραὶ αἱ πάνυ λεπταὶ καὶ καθεστηκυῖαι καὶ ἀκριβέες δίαιται, ὅτι τὰ ἀμαρτανόμενα χαλεπώτερον φέρουσιν. Διὰ τοῦτο οὖν αἱ λεπταὶ καὶ ἀκριβέες δίαιται, σφαλεραὶ ἐς τὰ πλεῖστα τῶν σμικρῶ ἀδροτέρων.

5. In a restricted diet, patients who transgress are thereby more hurt (than in any other?); for every such transgression, whatever it may be, is followed by greater consequences than in a diet somewhat more generous. On this account, a very slender, regulated, and restricted diet is dangerous to persons in health, because they bear transgressions of it more difficultly. For this reason, a slender and restricted diet is generally more dangerous than one a little more liberal.

6. Ἐς δὲ τὰ ἔσχατα νοσήματα αἱ ἔσχαται θεραπείαι ἐς ἀκριβεῖν, κράτισται.

6. For extreme diseases, extreme methods of cure, as to restriction, are most suitable.

7. Ὅκου μὲν κάτοξυ τὸ νόσημα, αὐτίκα καὶ τοὺς ἐσχάτους πόνους ἔχει, καὶ τῆ ἐσχάτως λεπτοτάτῃ διαίτῃ ἀναγκαῖον χρέεσθαι ὅκου δὲ μὴ, ἀλλ' ἐνδέχεται ἀδροτέρως διαιτᾶν, τοσοῦτον ὑποκαταβαίνειν, ὅκόσον ἂν ἡ νοῦσος μαλθακώτερη τῶν ἐσχάτων ἔη.

7. When the disease is very acute, it is attended with extremely severe symptoms in its first stage; and therefore an extremely attenuating diet must be used. When

this is not the case, but it is allowable to give a more generous diet, we may depart as far from the severity of regimen as the disease, by its mildness, is removed from the extreme.

8. Ὄκοταν δὲ ἀκμάζει τὸ νόσημα, τότε λεπτοτάτη διαίτη ἀναγκαῖον χρέεσθαι.

8. When the disease is at its height, it will then be necessary to use the most slender diet.

9. Ξυντεκμαίρεσθαι δὲ χρή καὶ τὸν νοσέοντα, εἰ ἐξαρκέσει τῇ διαίτη πρὸς τὴν ἀκμὴν τῆς νόσου, καὶ πρότερον ἐκεῖνος ἀπαυδήσει πρότερον, καὶ οὐκ ἐξαρκέσει τῇ διαίτη, ἢ ἡ νοῦσος πρότερον ἀπαυδήσει καὶ ἀμβλυνεῖται.

9. We must form a particular judgment of the patient, whether he will support the diet until the acme of the disease, and whether he will sink previously and not support the diet, or the disease will give way previously, and become less acute.

10. Ὄκόσοισι μὲν οὖν αὐτίκα ἢ ἀκμῇ, αὐτίκα λεπτῶς διαιτῆν ὀκόσοισι δὲ ἐς ὕστερον ἢ ἀκμῇ, ἐς ἐκεῖνο, καὶ πρὸ ἐκείνου σμικρὸν, ἀφαιρετέον ἔμπροσθεν δὲ, πιστέρως διαιτῆν, ὡς ἂν ἐξαρκέσει ὁ νοσέων.

10. In those cases, then, which attain their acme speedily, a restricted diet should be enjoined at first; but in those cases which reach their acme later, we must retrench at that period or a little before it; but previously we must allow a more generous diet to support the patient.

11. Ἐν δὲ τοῖσι παροξυσμοῖσιν ὑποστέλλεσθαι χρή τὸ προστιθέναι γὰρ βλάβη καὶ ὀκόσα κατὰ περιόδους παροξύνεται, ἐν τοῖσι παροξυσμοῖσιν ὑποστέλλεσθαι χρή.

11. We must retrench during paroxysms, for to exhibit food would be injurious. And in all diseases having periodical paroxysms, we must restrict during the paroxysms.

12. Τοὺς δὲ παροξυσμοὺς καὶ τὰς καταστάσεις δηλώσουσιν αἱ νοῦσοι, καὶ αἱ ὥραι τοῦ ἔτους, καὶ αἱ τῶν περιόδων πρὸς ἀλλήλας ἀνταποδόσεις, ἢν τε καθ' ἡμέρη, ἢν τε παρ' ἡμέρη, ἢν τε καὶ διὰ πλείονος χρόνου γίνωνται ἀτὰρ καὶ τοῖσιν ἐπιφαινομένοισιν, οἷον ἐν πλευριτικοῖσι πτύελον ἢν μὲν αὐτίκα ἐπιφαίνεται, ἀρχομένου, βραχύνει, ἢν δ' ὕστερον ἐπιφαίνεται, μηκύνει καὶ οὔρα καὶ ὑποχωρήματα καὶ ἰδρῶτες, καὶ δύσκριτα καὶ εὐκριτα, καὶ βραχέα καὶ μακρὰ

τὰ νοσήματα, ἐπιφαινόμενα, δηλοῖ.

12. The exacerbations and remissions will be indicated by the diseases, the seasons of the year, the reciprocation of the periods, whether they occur every day, every alternate day, or after a longer period, and by the supervening symptoms; as, for example, in pleuritic cases, expectoration, if it occur at the commencement, shortens the attack, but if it appear later, it prolongs the same; and in the same manner the urine, and alvine discharges, and sweats, according as they appear along with favorable or unfavorable symptoms, indicate diseases of a short or long duration.

13. Γέροντες εὐφορώτατα νηστείην φέρουσι, δεύτερον, οἱ καθεστηκότες, ἥκιστα, μειράκια, πάντων δὲ μάλιστα, παιδιά, τουτέων δὲ αὐτέων ἃ ἂν τύχη αὐτὰ ἐωυτέων προθυμότερα ἐόντα.

13. Old persons endure fasting most easily; next, adults; young persons not nearly so well; and most especially infants, and of them such as are of a particularly lively spirit.

14. Τὰ αὐξανόμενα πλεῖστον ἔχει τὸ ἔμφυτον θερμόν πλείστης οὖν δεῖται τροφῆς εἰ δὲ μὴ, τὸ σῶμα ἀναλίσκεται γέρουσι δὲ ὀλίγον τὸ θερμόν, διὰ τοῦτο ἄρα ὀλίγων ὑπεκκαυμάτων δέονται ὑπὸ πολλῶν γὰρ ἀποσβέννυται διὰ τοῦτο καὶ οἱ πυρετοὶ τοῖσι γέρουσιν οὐχ ὁμοίως ὀξέεες ψυχρὸν γὰρ τὸ σῶμα.

14. Growing bodies have the most innate heat; they therefore require the most food, for otherwise their bodies are wasted. In old persons the heat is feeble, and therefore they require little fuel, as it were, to the flame, for it would be extinguished by much. On this account, also, fevers in old persons are not equally acute, because their bodies are cold.

15. Αἱ κοιλίαι χειμῶνος καὶ ἤρος θερμότεραι φύσει, καὶ ὕπνοι μακρότατοι ἐν ταύτησιν οὖν τῆσιν ὥρησι, καὶ τὰ προσάρματα πλείω δοτέον καὶ γὰρ τὸ ἔμφυτον θερμόν πλεῖστον ἔχει τροφῆς οὖν πλείονος δεῖται σημεῖον, αἱ ἡλικίαι καὶ οἱ ἀθληταί.

15. In winter and spring the bowels are naturally the hottest, and the sleep most prolonged; at these seasons, then, the most sustenance is to be administered; for as the belly has then most innate heat, it stands in need of most food. The well-known facts with regard to young persons and the athletae prove this.



16. Αἱ ὑγραὶ δίαται πᾶσι τοῖσι πυρεταίνουσι ξυμφέρουσι, μάλιστα δὲ παιδίοισι, καὶ τοῖσιν ἄλλοισι τοῖσιν οὔτως εἰθισμένοισι διαιτᾶσθαι.

16. A humid regimen is befitting in all febrile diseases, and particularly in children, and others accustomed to live on such a diet.

17. Καὶ οἷσιν ἄπαξ, ἢ δις, καὶ πλείω ἢ ἐλάσσω, καὶ κατὰ μέρος δοτέον δέ τι καὶ τῷ ἔθει, καὶ τῇ ὥρῃ, καὶ τῇ χώρῃ, καὶ τῇ ἡλικίῃ.

17. We must consider, also, in which cases food is to be given once or twice a day, and in greater or smaller quantities, and at intervals. Something must be conceded to habit, to season, to country, and to age.

18. Θέρεος καὶ φθινοπώρου σιτία δυσφορώτατα φέρουσι, χειμῶνος Πρῆιστα, ἤρος δεύτερον.

18. Invalids bear food worst during summer and autumn, most easily in winter, and next in spring.

19. Τοῖσιν ἐν τῆσι περιόδοισι παροξυνομένοισι μηδὲν διδόναι, μηδ' ἀναγκάζειν, ἀλλ' ἀφαιρέειν τῶν προσθεσίων πρὸ τῶν κρισίων.

19. Neither give nor enjoin anything to persons during periodical paroxysms, but abstract from the accustomed allowance before the crisis.

20. Τὰ κρινόμενα καὶ τὰ κεκριμένα ἀρτίως, μὴ κινέειν, μηδὲ νεωτεροποιέειν, μήτε φαρμακεῖησι, μήτ' ἄλλοισιν ἐρεθισμοῖσιν, ἀλλ' ἐᾶν.

20. When things are at the crisis, or when they have just passed it, neither move the bowels, nor make any innovation in the treatment, either as regards purgatives or any other such stimulants, but let things alone.

21. Ἄ δεῖ ἄγειν, ὅκου ἂν μάλιστα Ρέπη, ταύτη ἄγειν, διὰ τῶν ξυμφερόντων χωρίων

21. Those things which require to be evacuated should be evacuated, wherever they most tend, by the proper outlets.

22. Πέπονα φαρμακεύειν καὶ κινέειν, μὴ ὤμα, μηδὲ ἐν ἀρχῆσιν, ἣν μὴ ὀργᾶ τὰ δὲ πλεῖστα οὐκ ὀργᾶ.

22. We must purge and move such humors as are concocted, not such as are unconcocted, unless they are struggling to get out, which is mostly not the case.

23. Τὰ χωρέοντα μὴ τῷ πλήθει τεκμαίρεσθαι, ἀλλ' ὡς ἂν χωρήῃ οἷα δεῖ, καὶ φέρῃ εὐφόρως καὶ ὀκου δεῖ μέχρι λειποθυμίας ἄγειν, καὶ τοῦτο ποιέειν, ἢν ἐξάρκῃ ὁ νοσέων.

23. The evacuations are to be judged of not by their quantity, but whether they be such as they should be, and how they are borne. And when proper to carry the evacuation to *deliquium animi* , this also should be done, provided the patient can support it.

24. Ἐν τοῖσιν ὀξέσι πάθεσιν ὀλιγάκις καὶ ἐν ἀρχῆσι τῆσι φαρμακεύησι χρέεσθαι, καὶ τοῦτο προεξευκρινήσαντα ποιέειν.

24. Use purgative medicines sparingly in acute diseases, and at the commencement, and not without proper circumspection.

25. Ἦν, οἷα δεῖ καθαίρεσθαι, καθαίρωνται, ζυμφέρει τε, καὶ εὐφόρως φέρουσιν τὰ δ' ἐναντία, δυσχερῶς.

25. If the matters which are purged be such as should be purged, the evacuation is beneficial, and easily borne; but, notwithstanding, if otherwise, with difficulty.

## SECTION II

1. Ἐν ᾧ νοσήματι ὕπνος πόνον ποιεῖ, θανάσιμον ἦν δὲ ὕπνος ὠφελῆ, οὐ θανάσιμον.

1. In whatever disease sleep is laborious, it is a deadly symptom; but if sleep does good, it is not deadly.

2. Ὅκου παραφροσύνην ὕπνος παύει, ἀγαθόν.

2. When sleep puts an end to delirium, it is a good symptom.

3. Ὑπνος, ἀγρυπνίη, ἀμφοτέρα τοῦ μετρίου μᾶλλον γενόμενα, κακόν.

3. Both sleep and insomnolency, when immoderate, are bad.

4. Οὐ πλησμονή, οὐ λιμὸς, οὐδ' ἄλλο οὐδὲν ἀγαθόν, ὅ τι ἂν μᾶλλον τῆς φύσιος ἦ.

4. Neither repletion, nor fasting, nor anything else, is good when more than natural.

5. Κόποι αὐτόματοι φράζουσι νόσους.

5. Spontaneous lassitude indicates disease.

6. Ὁκόσοι, πονέοντές τι τοῦ σώματος, τὰ πολλὰ τῶν πόνων οὐκ αἰσθάνονται, τουτέοισιν ἡ γνώμη νοσέει.

6. Persons who have a painful affection in any part of the body, and are in a great measure sensible of the pain, are disordered in intellect.

7. Τὰ ἐν πολλῷ χρόνῳ λεπτυνόμενα σώματα νοθρῶς ἐπανατρέφειν, τὰ δὲ ἐν ὀλίγῳ, ὀλίγως.

7. Those bodies which have been slowly emaciated should be slowly recruited; and those which have been quickly emaciated should be quickly recruited.

8. Ἦν ἐκ νόσου τροφήν λαμβάνων τις μὴ ἰσχύη, σημαίνει ὅτι πλείονι τροφῇ τὸ σῶμα χρέεται ἦν δὲ, τροφήν μὴ λαμβάνοντος, τοῦτο γίγνηται, χρή εἰδέναι, ὅτι κενώσιος δεῖται.

8. When a person after a disease takes food, but does not improve in strength, it indicates that the body uses more food than is proper; but if this happen when he does not take food, it is to be understood evacuation is required.

9. Τὰ σώματα χρῆ, ὅκου τις βούλεται καθαίρειν, εὖροα ποιέειν.

9. When one wishes to purge, he should put the body into a fluent state.

10. Τὰ μὴ καθαρὰ τῶν σωμάτων, ὀκόσω ἂν θρέψῃς μᾶλλον, βλάψεις.

10. Bodies not properly cleansed, the more you nourish the more you injure.

11. Ῥᾶον πληροῦσθαι ποτοῦ, ἢ σιτίου.

11. It is easier to fill up with drink than with food.

12. Τὰ ἐγκαταλιμπανόμενα ἐν τῆσι νόσοισι μετὰ κρίσιν, ὑποστροφὰς ποιέειν εἴωθεν.

12. What remains in diseases after the crisis is apt to produce relapses.

13. Ὅκοσοισι κρίσις γίνεται, τουτέοισιν ἢ νύξ δύσφορος, ἢ πρὸ τοῦ παροξυσμοῦ, ἢ δὲ ἐπιούσα εὐφορωτέρη ὡς ἐπὶ τὸ πούλυ.

13. Persons in whom a crisis takes place pass the night preced-ing the paroxysm uncomfortably, but the succeeding night generally more comfortably.

14. Ἐν τῆσι τῆς κοιλίης Ῥύσεσιν αἱ μεταβολαὶ τῶν διαχωρημάτων ὠφελέουσιν, ἢν μὴ ἐς τὰ πονηρὰ μεταβάλλῃ.

14. In fluxes of the bowels, a change of the dejections does good, unless the change be of a bad character.

15. Ὅκου φάρυγξ νοσέει, ἢ φύματα ἐν τῷ σώματι ἐκφύεται, τὰς ἐκκρίσιας σκέπτεσθαι ἢν γὰρ χολώδεις ἔωσι, τὸ σῶμα ξυνοσέει ἢν δὲ ὁμοιαὶ τοῖσιν ὑγιαίνουσι γίνωνται, ἀσφαλὲς τὸ σῶμα τρέφειν.

15. When the throat is diseased, or tubercles ( *phymata* ) form on the body, attention must paid to the secretions; for if they be bilious, the disease affects the general system; but if they resemble those of a healthy person, it is safe to give

nourishing food.

16. Ὁκου λιμὸς, οὐ δεῖ πονέειν.

16. When in a state of hunger, one ought not to undertake labor.

17. Ὁκου ἂν τροφή πλείων παρὰ φύσιν ἐσέλθη, τοῦτο νοῦσον ποιεῖ, δηλοῖ δὲ ἡ ἴησις.

17. When more food than is proper has been taken, it occasions disease; this is shown by the treatment.

18. Τῶν τρεφόντων ἀθρόως καὶ ταχέως, ταχεῖαι καὶ αἱ διαχωρήσεις γίνονται.

18. From food which proves nourishing to the body either immediately or shortly, the dejections also are immediate.

19. Τῶν ὀξέων νοσημάτων οὐ πάμπαν ἀσφαλές αἱ προδιαγορεύσεις, οὔτε τοῦ θανάτου, οὔτε τῆς ὑγείης.

19. In acute diseases it is not quite safe to prognosticate either death or recovery.

20. Ὁκόσοισι νέοισιν ἐοῦσιν αἱ κοιλίαι ὑγραί εἰσι, τουτέοισιν ἀπογηράσκουσι ξηραίνονται ὀκόσοισι δὲ νέοισιν ἐοῦσιν αἱ κοιλίαι ξηραί εἰσι, τουτέοισι πρεσβυτέροισι γινομένοισιν ὑγραίνονται.

20. Those who have watery discharges from their bowels when young have dry when they are old; and those who have dry discharges when they are young will have watery when they are old.

21. Λιμὸν θώρηξις λύει.

21. Drinking strong wine cures hunger.

22. Ἀπὸ πλησμονῆς ὀκόσα ἂν νοσήματα γένηται, κένωσις ἰῆται, καὶ ὀκόσα ἀπὸ κενώσιος, πλησμονή, καὶ τῶν ἄλλων ἢ ὑπεναντίωσις.

22. Diseases which arise from repletion are cured by depletion; and those that arise from depletion are cured by repletion; and in general, diseases are cured by their contraries.

23. Τὰ ὀξέα τῶν νοσημάτων κρίνεται ἐν τεσσαρεσκαίδεκα ἡμέρησιν.

23. Acute disease come to a crisis in fourteen days.

24. Τῶν ἑπτὰ ἢ τετάρτη ἐπίδηλος ἐτέρης ἑβδομάδος ἢ ὀγδὴ ἀρχή, θεωρητὴ δὲ ἢ ἑνδεκάτη, αὕτη γάρ ἐστι τετάρτη τῆς ἐτέρης ἑβδομάδος θεωρητὴ δὲ πάλιν ἢ ἑπτακαιδεκάτη, αὕτη γάρ ἐστι τετάρτη μὲν ἀπὸ τῆς τεσσαρεσκαιδεκάτης, ἑβδόμη δὲ ἀπὸ τῆς ἑνδεκάτης.

24. The fourth day is indicative of the seventh; the eighth is the commencement of the second week; and hence, the eleventh being the fourth of the second week, is also indicative; and again, the seventeenth is indicative, as being the fourth from the fourteenth, and the seventh from the eleventh.

25. Οἱ θερινοὶ τεταρταῖοι τὰ πολλὰ γίνονται βραχέες, οἱ δὲ φθινοπωρινοὶ, μακροὶ, καὶ μάλιστα οἱ πρὸς τὸν χειμῶνα ξυνάπτοντες.

25. The summer quartans are, for the most part, of short duration; but the autumnal are protracted, especially those occurring near the approach of winter.

26. Πυρετὸν ἐπὶ σπασμῷ βέλτιον γενέσθαι, ἢ σπασμὸν ἐπὶ πυρετῷ.

26. It is better that a fever succeed to a convulsion, than a convulsion to a fever.

27. Τοῖσι μὴ κατὰ λόγον κουφίζουσιν οὐ δεῖ πιστεύειν, οὐδὲ φοβέεσθαι λίην τὰ μοχθηρὰ γινόμενα παραλόγως τὰ γὰρ πολλὰ τῶν τοιουτέων ἐστὶν ἀβέβαια, καὶ οὐ πάνυ τι διαμένειν, οὐδὲ χρονίζειν εἴθην.

27. We should not trust ameliorations in diseases when they are not regular, nor be much afraid of bad symptoms which occur in an irregular form; for such are commonly inconstant, and do not usually continue, nor have any duration.

28. Τῶν πυρεσσόντων μὴ παντάπασιν ἐπιπολαίως, τὸ διαμένειν, καὶ μηδὲν ἐνδιδόναι τὸ σῶμα, ἢ καὶ συντήκεσθαι μᾶλλον τοῦ κατὰ λόγον, μοχθηρὸν τὸ μὲν γὰρ μῆκος νόσου σημαίνει, τὸ δὲ, ἀσθένειαν.

28. In fevers which are not altogether slight, it is a bad symptom for the body to remain without any diminution of bulk, or to be wasted beyond measure; for the one state indicates a protracted disease, and the other weakness of body.

29. Ἀρχομένων τῶν νόσων, ἣν τι δοκέη κινεῖν, κίνει ἀκμαζουσῶν δὲ, ἡσυχίην ἔχειν βέλτιόν ἐστιν.

29. If it appear that evacuations are required, they should be made at the commencement of diseases; at the acme it is better to be quiet.

30. Περὶ τὰς ἀρχὰς καὶ τὰ τέλη, πάντα ἀσθενέστατα, περὶ δὲ τὰς ἀκμὰς, ἰσχυρότατα.

30. Toward the commencement and end of diseases all the symptoms are weaker, and toward the acme they are stronger.

31. Τῷ ἐξ ἀρρωστίης εὐσιτεῦντι, μηδὲν ἐπιδιδόναι τὸ σῶμα, μοχθηρόν.

31. When a person who is recovering from a disease has a good appetite, but his body does not improve in condition, it is a bad symptom.

32. Ὡς τὰ πολλὰ πάντες οἱ φαύλως ἔχοντες, κατ' ἀρχὰς μὲν εὐσιτεῦντες, καὶ μηδὲν ἐπιδιδόντες, πρὸς τῷ τέλει πάλιν ἀσιτέουσιν οἱ δὲ κατ' ἀρχὰς μὲν ἀσιτεῦντες ἰσχυρῶς, ὕστερον δὲ εὐσιτεῦντες, βέλτιον ἀπαλλάσσουσιν.

32. For the most part, all persons in ill health, who have a good appetite at the commencement, but do not improve, have a bad appetite again toward the end; whereas, those who have a very bad appetite at the commencement, and afterward acquire a good appetite, get better off.

33. Ἐν πάσῃ νόσῳ τὸ ἐρῶσθαι τὴν διάνοιαν, καὶ εὖ ἔχειν πρὸς τὰς προσφορὰς, ἀγαθόν τὸ δὲ ἐναντίον, κακόν.

33. In every disease it is a good sign when the patient's intellect is sound, and he is disposed to take whatever food is offered to him; but the contrary is bad.

34. Ἐν τῆσι νόσοισιν ἧσσον κινδυνεύουσιν, οἷσιν ἂν οἰκεῖη τῆς φύσις, καὶ τῆς ἕξις, καὶ τῆς ἡλικίης, καὶ τῆς ὥρης ἢ νοῦσος ἢ μᾶλλον, ἢ οἷσιν ἂν μὴ οἰκεῖη κατὰ τι τουτέων ἧ.

34. In diseases, there is less danger when the disease is one to which the patient's constitution, habit, age, and the season are allied, than when it is one to which they are not allied.

35. Ἐν πάσῃσι τῆσι νόσοισι, τὰ περὶ τὸν ὀμφαλὸν καὶ τὸ ἥτρον πάχος ἔχειν βέλτιόν ἐστι, τὸ δὲ σφόδρα λεπτὸν καὶ ἐκτετηκὸς, μοχθηρὸν ἐπισηφαλὲς δὲ τὸ τοιοῦτον καὶ πρὸς τὰς κάτω καθάρσιας.

35. In all diseases it is better that the umbilical and hypogastric regions preserve their fullness; and it is a bad sign when they are very slender and emaciated; in the latter case it is dangerous to administer purgatives.

36. Οἱ ὑγιεινῶς ἔχοντες τὰ σώματα, ἐν τῆσι φαρμακείῃσι καθαιρόμενοι ἐκλύονται ταχέως, καὶ οἱ πονηρῆ τροφῆ χρεόμενοι.

36. Persons in good health quickly lose their strength by taking purgative medicines, or using bad food.

37. Οἱ εὖ τὰ σώματα ἔχοντες, φαρμακεύεσθαι ἐργώδεις.

37. Purgative medicines agree ill with persons in good health.

38. Τὸ μικρῶ χειρὸν καὶ πόμα καὶ σιτίον, ἥδιον δὲ, τῶν βελτιόνων μὲν, ἀηδεστέρων δὲ, μᾶλλον αἰρετέον.

38. An article of food or drink which is slightly worse, but more palatable, is to be preferred to such as are better but less palatable.

39. Οἱ πρεσβῦται τῶν νέων τὰ μὲν πολλὰ νοσέουσιν ἥσσον ὅσα δ' ἂν αὐτέοισι χρόνια νοσήματα γένηται, τὰ πολλὰ ξυναποθνήσκει.

39. Old have fewer complaints than young; but those chronic diseases which do befall them generally never leave them.

40. Βράγχοι καὶ κόρυζαι τοῖσι σφόδρα πρεσβύτησιν οὐ πεπαίνονται.

40. Catarrhs and coryza in very old people are not concocted.

41. Οἱ ἐκλύόμενοι πολλάκις καὶ ἰσχυρῶς, ἄνευ φανερῆς προφάσιος, ἐξαπίνης τελευτῶσιν.

41. Persons who have had frequent and severe attacks of swooning, without any manifest cause, die suddenly.



42. Λύειν ἀποπληξίην ἰσχυρὴν μὲν ἀδύνατον, ἀσθενέα δὲ, οὐ Ρηΐδιον.

42. It is impossible to remove a strong attack of apoplexy, and not easy to remove a weak attack.

43. Τῶν ἀπαγχομένων καὶ καταλυομένων, μηδέπω δὲ τεθνηκότων, οὐκ ἀναφέρουσιν, οἷσιν ἂν ἀφρὸς ἦ περὶ τὸ στόμα.

43. Of persons who have been suspended by the neck, and are in a state of insensibility, but not quite dead, those do not recover who have foam at the mouth.

44. Οἱ παχέες σφόδρα κατὰ φύσιν, ταχυθάνατοι γίνονται μᾶλλον τῶν ἰσχνῶν.

44. Persons who are naturally very fat are apt to die earlier than those who are slender.

45. Τῶν ἐπιληπτικῶν τοῖσι νέοισιν ἀπαλλαγὴν αἰ μεταβολαὶ μάλιστα τῆς ἡλικίης, καὶ τῶν χωρίων, καὶ τῶν βίων ποιέουσιν.

45. Epilepsy in young persons is most frequently removed by changes of air, of country, and of modes of life.

46. Δύο πόνων ἅμα γινομένων μὴ κατὰ τὸν αὐτὸν τόπον, ὁ σφοδρότερος ἀμαυροὶ τὸν ἕτερον.

46. Of two pains occurring together, not in the same part of the body, the stronger weakens the other.

47. Περὶ τὰς γενέσιας τοῦ πύου οἱ πόνοι καὶ οἱ πυρετοὶ ξυμβαίνουσι μᾶλλον, ἢ γενομένου.

47. Pains and fevers occur rather at the formation of pus than when it is already formed.

48. Ἐν πάσῃ κινήσει τοῦ σώματος, ὁκόταν ἄρχηται πονέειν, τὸ διαναπαύειν εὐθὺς, ἄκοπον.

48. In every movement of the body, whenever one begins to endure pain, it will be relieved by rest.

49. Οἱ εἰθισμένοι τοὺς ξυνήθεας πόνους φέρειν, κῆν ὧσιν ἀσθενέες ἢ γέροντες, τῶν ἀξυνηθέων ἰσχυρῶν τε καὶ νέων ἄρον φέρουσιν.

49. Those who are accustomed to endure habitual labors, although they be weak or old, bear them better than strong and young persons who have not been so accustomed.

50. Τὰ ἐκ πολλοῦ χρόνου ξυνήθεα, κᾶν ἢ χεῖρω τῶν ἀξυνηθέων, ἥσσον ἐνοχλεῖν εἶωθεν δεῖ δὲ καὶ ἐς τὰ ἀξυνήθεα μεταβάλλειν

50. Those things which one has been accustomed to for a long time, although worse than things which one is not accustomed to, usually give less disturbance; but a change must sometimes be made to things one is not accustomed to.

51. Τὸ κατὰ πολὺ καὶ ἐξαπίνης κενοῦν, ἢ πληροῦν, ἢ θερμαίνειν, ἢ ψύχειν, ἢ ἄλλως ὀκωσοῦν τὸ σῶμα κινεῖν, σφαλερὸν, καὶ πᾶν τὸ πολὺ τῇ φύσει πολέμιον τὸ δὲ κατ' ὀλίγον, ἀσφαλές, καὶ ἄλλως, ἦν τις ἐξ ἑτέρου ἐφ' ἕτερον μεταβαίνει.

51. To evacuate, fill up, heat, cool, or otherwise, move the body in any way much and suddenly, is dangerous; and whatever is excessive is inimical to nature; but whatever is done by little and little is safe, more especially when a transition is made from one thing to another.

52. Πάντα κατὰ λόγον ποιέοντι, μὴ γινομένων τῶν κατὰ λόγον, μὴ μεταβαίνειν ἐφ' ἕτερον, μένοντος τοῦ δόξαντος ἐξ ἀρχῆς.

52. When doing everything according to indications, although things may not turn out agreeably to indication, we should not change to another while the original appearances remain.

53. Ὀκόσοι τὰς κοιλίας ὑγρὰς ἔχουσιν, νέοι μὲν ἐόντες, βέλτιον ἀπαλλάσσουσι τῶν ξηρὰς ἔχόντων, ἐς δὲ τὸ γῆρας χεῖρον ἀπαλλάσσουσιν ξηραίνονται γὰρ ὡς ἐπὶ τὸ πούλυ ἀπογηράσκουσιν.

53. Those persons who have watery discharges from the bowels when they are young, come off better than those who have dry; but in old age they come off worse, for the bowels in aged persons are usually dried up.

54. Μεγέθει δὲ σώματος, ἐννεάσαι μὲν, ἐλευθέριον καὶ οὐκ ἀηδὲς ἐγγηρᾶσαι δὲ, δύσχρηστον καὶ χεῖρον τῶν ἐλασσόνων.

54. Largeness of person in youth is noble and not unbecoming; but in old age it is inconvenient, and worse than a smaller structure.

### SECTION III

1. Αἱ μεταβολαὶ τῶν ὥρέων μάλιστα τίκτουσι νοσήματα, καὶ ἐν τῆσιν ὥρησιν αἱ μεγάλαι μεταλλαγαὶ ἢ ψύξιος ἢ θάλψιος, καὶ τᾶλλα κατὰ λόγον οὕτως.

1. The changes of the season mostly engender diseases, and in the seasons great changes either of heat or of cold, and the rest agreeably to the same rule.

2. Τῶν φύσιων αἱ μὲν πρὸς θέρος, αἱ δὲ πρὸς χειμῶνα εὖ ἢ κακῶς πεφύκασιν.

2. Of natures ( *temperaments?* ), some are well- or ill-adapted for summer, and some for winter.

3. Τῶν νόσων ἄλλαι πρὸς ἄλλας εὖ ἢ κακῶς πεφύκασι, καὶ ἡλικίαι τινὲς πρὸς ὥρας, καὶ χώρας, καὶ διαίτας.

3. Of diseases and ages, certain of them are well- or ill-adapted to different seasons, places, and kinds of diet.

4. Ἐν τῆσιν ὥρησιν, ὅταν τῆς αὐτῆς ἡμέρης ὅτε μὲν θάλπος, ὅτε δὲ ψῦχος γένηται, φθινοπωρινὰ τὰ νοσήματα προσδέχεσθαι χρή.

4. In the seasons, when during the same day there is at one time heat and at another time cold, the diseases of autumn may be expected.

5. Νότοι βαρυήκοοι, ἀγλυῶδες, κερηβαρικοὶ, νωθοὶ, διαλυτικοὶ ὁκόταν οὗτος δυναστεύῃ, τοιαῦτα ἐν τῆσιν ἀρρωστίησι πάσχουσιν. Ἦν δὲ βόρειον ἢ, βῆχες, φάρυγγες, κοιλίαι σκληραὶ, δυσουρίαι φρικώδες, ὀδύνη πλευρέων, στηθέων ὁκόταν οὗτος δυναστεύῃ, τοιαῦτα ἐν τῆσιν ἀρρωστίησι προσδέχεσθαι χρή.

5. South winds induce dullness of hearing, dimness of visions, heaviness of the head, torpor, and languor; when these prevail, such symptoms occur in diseases. But if the north wind prevail, coughs, affections of the throat, hardness of the bowels, dysuria attended with rigors, and pains of the sides and breast occur. When this wind prevails, all such symptoms may be expected in diseases.

6. Ὅκόταν θέρος γένηται ἤρι ὁμοιον, ἰδρῶτας ἐν τοῖσι πυρετοῖσι πολλοὺς προσδέχεσθαι χρή.

6. When summer is like spring, much sweating may be expected in fevers.

7. Ἐν τοῖσιν ἀύχοῖσι πυρετοὶ ὀξέες γίνονται καὶ ἦν μὲν ἐπὶ πλεόν ἢ τὸ ἔτος τοιούτεον ἔδν, οἷην τὴν κατάστασιν ἐποίησεν, ὡς ἐπιτοπουλὸ καὶ τὰ νοσήματα τοιαῦτα δεῖ προσδέχεσθαι.

7. Acute diseases occur in droughts; and if the summer be particularly such, according to the constitution which it has given to the year, for the most part such diseases maybe expected.

8. Ἐν τοῖσι καθεστεῶσι καιροῖσι, καὶ ὠραίως τὰ ὠραῖα ἀποδοῦσιν, εὐσταθέες καὶ εὐκρινέες αἱ νοῦσοι γίνονται, ἐν δὲ τοῖσιν τάτοισιν ἀκατάστατοι καὶ δύσκριτοι.

8. In seasons which are regular, and furnish the productions of the season at the seasonable time, the diseases are regular, and come readily to a crisis; but in inconstant seasons, the diseases are irregular, and come to a crisis with difficulty.

9. Ἐν φθινοπῶρῳ ὀξύταται αἱ νοῦσοι, καὶ θανατωδέσταται τοῦπίπαν, ἦρ δὲ ὑγιεινότατον, καὶ ἥκιστα θανατῶδες.

9. In autumn, diseases are most acute, and most mortal, on the whole. The spring is most healthy, and least mortal.

10. Τὸ φθινόπωρον τοῖσι φθίνουσι κακόν.

10. Autumn is a bad season for persons in consumption.

11. Περὶ δὲ τῶν ὠρέων, ἦν μὲν ὁ χειμῶν ἀύχμηρὸς καὶ βόρειος γένηται, τὸ δὲ ἔπομβρον καὶ νότιον, ἀνάγκη, τοῦ θέρους, πυρετοῦς ὀξέας, καὶ ὀφθαλμίας, καὶ δυσεντερίας γίνεσθαι, μάλιστα τῆσι γυναιξὶ, καὶ ἀνδρῶν τοῖσιν ὑγροῖσι τὰς φύσιας.

11. With regard to the seasons, if the winter be of a dry and northerly character, and the spring rainy and southerly, in summer there will necessarily be acute fevers, ophthalmies, and dysenteries, especially in women, and in men of a humid temperament.

12. Ἦν δὲ νότιος ὁ χειμῶν καὶ ἔπομβρος καὶ εὐδιεινὸς γένηται, τὸ δὲ ἔαρ ἀύχμηρὸν καὶ βόρειον, αἱ μὲν γυναῖκες, ἦσιν οἱ τόκοι πρὸς τὸ ἦρ, ἐκ πάσης προφάσιος ἐκτιτρώσκουσιν αἱ δ' ἂν τέκωσιν, ἀκρατέα καὶ νοσώδεα τὰ παιδιά

τίκτουσιν, ὥστε ἢ παραυτίκα ἀπόλλυσθαι, ἢ λεπτὰ καὶ νοσώδεα ζῆν ἔοντα τοῖσι δὲ ἄλλοισι βροτοῖσι δυσεντερίαι καὶ ὀφθαλμίαι ξηραὶ γίνονται, τοῖσι δὲ πρεσβυτέροισι κατάρροοι ξυντόμως ἀπολλύντες.

12. If the but the spring dry and northerly, women whose term of delivery should be in spring, have abortions from any slight cause; and those who reach their full time, bring forth children who are feeble, and diseased, so that they either die presently, or, if they live, are puny and unhealthy. Other people are subject to dysenteries and ophthalmies, and old men to catarrhs, which quickly cut them off.

13. Ἦν δὲ τὸ θέρος αὐχμηρὸν καὶ βόρειον γένηται, τὸ δὲ φθινόπωρον

πομβρον καὶ νότιον, κεφαλαλγίαι ἐς τὸν χειμῶνα γίνονται, καὶ βῆχες, καὶ βράγχοι, καὶ κόρυζαι, ἐνίοισι δὲ καὶ φθίσιες.

13. If the summer be dry and northerly and the autumn rainy and southerly, headaches occur in winter, with coughs, hoarsenesses, coryzae, and in some cases consumptions.

14. Ἦν δὲ βόρειον ἢ καὶ ἄνυδρον, τοῖσι μὲν ὑγροῖσι τὰς φύσιας καὶ τῆσι γυναιξὶ ξύμφορον τοῖσι δὲ λοιποῖσιν ὀφθαλμίαι ἔσονται ξηραὶ, καὶ πυρετοὶ ὀξέες, καὶ κόρυζαι, ἐνίοισι δὲ καὶ μελαγχολίαι.

14. But if the autumn be northerly and dry, it agrees well with persons of a humid temperament, and with women; but others will be subject to dry ophthalmies, acute fevers, coryzae, and in some cases melancholy.

15. Τῶν δὲ καταστασίων τοῦ ἐνιαυτοῦ τὸ μὲν ὅλον οἱ αὐχοῖ τῶν ἐπομβριῶν εἰσιν ὑγιεινότεροι, καὶ ἥσσον θανατώδεις.

15. Of the constitutions of the year, the dry, upon the whole, are more healthy than the rainy, and attended with less mortality.

16. Νοσήματα δὲ ἐν μὲν τῆσιν ἐπομβρίησιν ὡς τὰ πολλὰ γίνεται, πυρετοὶ τε μακροὶ, καὶ κοιλίης Ρύσιες, καὶ σηπεδόνες, καὶ ἐπίληπτοι, καὶ ἀπόπληκτοι, καὶ κυνάγχοι ἐν δὲ τοῖσιν αὐχοῖσιν, φθινάδες, ὀφθαλμίαι, ἀρθρίτιδες, στραγγουρία, καὶ δυσεντερίαι.

16. The diseases which occur most frequently in rainy seasons are, protracted

fevers, fluxes of the bowels, mortifications, epilepsies, apoplexies, and quinsies; and in dry, consumptive diseases, ophthalmies, arthritic diseases, stranguries, and dysenteries.

17. Αἱ δὲ καθ' ἡμέρην καταστάσεις, αἱ μὲν βόρειοι τὰ τε

σώματα ξυνιστᾶσι, καὶ εὐτόνα καὶ εὐκίνητα καὶ εὐχροα καὶ εὐηκοώτερα ποιέουσι, καὶ τὰς κοιλίας ξηραίνουσι, καὶ τὰ ὄμματα δάκνουσι, καὶ περὶ τὸν θώρηκα ἄλγημα ἦν τι προϋπάρχη, μᾶλλον πονέουσιν αἱ δὲ νότιοι διαλύουσι τὰ σώματα καὶ ὑγραίνουσι, καὶ βαρυηκοΐας καὶ καρηβαρίας καὶ ἰλίγγους ποιέουσιν, ἐν δὲ τοῖσιν ὀφθαλμοῖσι καὶ τοῖσι σώμασι δυσκινήσῃν, καὶ τὰς κοιλίας ὑγραίνουσιν.

17. With regard to the states of the weather which continue but for a day, that which is northerly, braces the body, giving it tone, agility, and color, improves the sense of hearing, dries up the bowels, pinches the eyes, and aggravates any previous pain which may have been seated in the chest. But the southerly relaxes the body, and renders it humid, brings on dullness of hearing, heaviness of the head, and vertigo, impairs the movements of the eyes and the whole body, and renders the alvine discharges watery.

18. Κατὰ δὲ τὰς ὥρας, τοῦ μὲν ἤρος καὶ ἄκρου τοῦ θέρεος, οἱ παῖδες καὶ οἱ τουτέων ἐχόμενοι τῆσιν ἡλικίησιν, ἄριστά τε διάγουσι, καὶ ὑγιαίνουσι μάλιστα τοῦ δὲ θέρεος καὶ τοῦ φθινοπώρου, μέχρι μὲν τινος οἱ γέροντες τὸ δὲ λοιπὸν, καὶ τοῦ χειμῶνος, οἱ μέσοι τῆσιν ἡλικίησιν.

18. With regard to the seasons, in spring and in the commencement of summer, children and those next to them in age are most comfortable, and enjoy best health; in summer and during a certain portion of autumn, old people; during the remainder of the autumn and in winter, those of the intermediate ages.

19. Νοσήματα δὲ πάντα μὲν ἐν πάσῃσι τῆσιν ὥρησι γίνεται, μᾶλλον δ' ἔνια κατ' ἐνίας αὐτέων καὶ γίνεται καὶ παροξύνεται.

19. All diseases occur at all seasons of the year, but certain of them are more apt to occur and be exacerbated at certain seasons.

20. Τοῦ μὲν γὰρ ἤρος, τὰ μανικὰ, καὶ τὰ μελαγχολικὰ, καὶ τὰ ἐπιληπτικὰ, καὶ αἵματος Ρύσιες, καὶ κυνάγχαι, καὶ κόρυζαι, καὶ βράγχοι, καὶ βῆχες, καὶ λέπραι, καὶ λειχηῆνες, καὶ ἀλφοὶ, καὶ ἐξανθήσιες ἐλκώδεις πλεῖσται, καὶ φύματα, καὶ

άρθριτικά.

20. The diseases of spring are, maniacal, melancholic, and epileptic disorders, bloody flux, quinsy, coryza, hoarseness, cough, leprosy, lichen alphas, exanthemata mostly ending in ulcerations, tubercles, and arthritic diseases.

21. Τοῦ δὲ θέρεος, ἔνια τε τουτέων, καὶ πυρετοὶ ζυνεχές, καὶ

καῦσοι, καὶ τριταῖοι πλεῖστοι, καὶ ἔμετοι, καὶ διάρροιαι, καὶ ὀφθαλμῖαι, καὶ ὠτων πόνοι, καὶ στομάτων ἐλκώσεις, καὶ σηπεδόνες αἰδοίων, καὶ ἴδρωα.

21. Of summer, certain of these, and continued, ardent, and tertian fevers, most especially vomiting, diarrhoea, ophthalmy, pains of the ears, ulcerations of the mouth, mortifications of the privy parts, and the sudamina.

22. Τοῦ δὲ φθινοπώρου, καὶ τῶν θερινῶν τὰ πολλὰ, καὶ πυρετοὶ τεταρταῖοι, καὶ πλανῆτες, καὶ σπλῆνες, καὶ ὑδρωπες, καὶ φθίσεις, καὶ στραγγουρίαι, καὶ λειεντερίαι, καὶ δυσεντερίαι, καὶ ἰσχιάδες, καὶ κυνάγχαι, καὶ ἄσθματα, καὶ εἰλεοὶ, καὶ ἐπιληψίαι, καὶ τὰ μανικὰ, καὶ τὰ μελαγχολικά.

22. Of autumn, most of the summer, quartan, and irregular fevers, enlarged spleen, dropsy, phthisis, strangury, lientery, dysentery, sciatica, quinsy, asthma, ileus, epilepsy, maniacal and melancholic disorders.

23. Τοῦ δὲ χειμῶνος, πλευρίτιδες, περιπλευμονίαι, κόρυζαι, βράγχοι, βῆχες, πόνοι στηθέων, πόνοι πλευρέων, ὄσφύος, κεφαλαλγῖαι, ἴλιγγοι, ἀποπληξίαι.

23. Of winter, pleurisy, pneumonia, coryza, hoarseness, cough, pains of the chest, pains of the ribs and loins, headache, vertigo, and apoplexy.

24. Ἐν δὲ τῆσιν ἡλικίησιν τοιάδε ζυμβαίνει τοῖσι μὲν μικροῖσι καὶ νεογνοῖσι παιδίοισιν, ἄφθαι, ἔμετοι, βῆχες, ἀγρυπνίαι, φόβοι, ὀμφαλοῦ φλεγμοναὶ, ὠτων ὑγρότητες.

24. In the different ages the following complaints occur: to little and new-born children, aphthae, vomiting, coughs, sleeplessness, frights inflammation of the navel, watery discharges from the ears.

25. Πρὸς δὲ τὸ ὀδοντοφυεῖν προσάγουσιν, οὖλων ὀδαξησμοὶ,



πυρετοὶ, σπασμοὶ, διάρροιαι, καὶ μάλιστα ὅταν ἀνάγωσι τοὺς κυνόδοντας, καὶ τοῖσι παχυτάτοισι τῶν παίδων, καὶ τοῖσι σκληρὰς τὰς κοιλίας ἔχουσιν.

25. At the approach of dentition, pruritus of the gums, fevers, convulsions, diarrhoea, especially when cutting the canine teeth, and in those who are particularly fat, and have constipated bowels.

26. Πρεσβυτέροισι δὲ γενομένοισι, παρίσθμια, σπονδύλου τοῦ κατὰ τὸ ἰνίον εἴσω ὤσιες, ἄσθματα, λιθιάσιες, ἔλμινθες στρογγύλαι, ἀσκαρίδες, ἀκροχορδόνες, σατυριασμοὶ, χοιράδες, καὶ τᾶλλα φύματα, μάλιστα δὲ τὰ προειρημένα.

26. To persons somewhat older, affections of the tonsils, incurvation of the spine at the vertebra next the occiput, asthma, calculus, round worms, ascarides, acrochordon, satyriasmus, struma, and other tubercles (phymata), but especially the aforesaid.

27. Τοῖσι δὲ ἔτι πρεσβυτέροισι καὶ πρὸς τὴν ἥβην προσάγουσι, τουτέων τε τὰ πολλὰ, καὶ πυρετοὶ χρόνιοι μᾶλλον, καὶ ἐκ Ρινῶν αἵματος Ρύσιες

27. To persons of a more advanced age, and now on the verge of manhood, the most of these diseases, and, moreover, more chronic fevers, and epistaxis.

28. Τὰ δὲ πλεῖστα τοῖσι παιδίοισι πάθεα κρίνεται, τὰ μὲν ἐν τεσσαράκοντα ἡμέρησι, τὰ δὲ ἐν ἑπτὰ μηνσὶ, τὰ δὲ ἐν ἑπτὰ ἔτεσι, τὰ δὲ πρὸς τὴν ἥβην προσάγουσιν ὅσα δ' ἂν διαμείνη τοῖσι παιδίοισι, καὶ μὴ ἀπολυθῆ περιὶ τὸ ἠβάσκειν, ἢ τῆσι θηλείησι περιὶ τὰς τῶν καταμηνίων Ρήξιας, χρονίζειν εἴωθεν.

28. Young people for the most part have a crisis in their complaints, some in forty days, some in seven months, some in seven years, some at the approach to puberty; and such complaints of children as remain, and do not pass away about puberty, or in females about the commencement of menstruation, usually become chronic.

29. Τοῖσι δὲ νεηνίσκοισιν, αἵματος πτύσιες, φθίσιες, πυρετοὶ ὀξέες, ἐπιληψίαι, καὶ τᾶλλα νουσήματα, μάλιστα δὲ τὰ προειρημένα.

29. To persons past boyhood, haemoptysis, phthisis, acute fevers, epilepsy, and other diseases, but especially the aforementioned.

30. Τοῖσι δὲ ὑπὲρ τὴν ἡλικίην ταύτην, ἄσθματα, πλευρίτιδες, περιπλευμονίαι,

λήθαργοι, φρενίτιδες, καῦσοι, διάρροια χρόνια, χολέραι, δυσεντερίαι, λειεντερίαι, αιμορροΐδες.

30. To persons beyond that age, asthma, pleurisy, pneumonia, lethargy, phrenitis, ardent fevers, chronic diarrhoea, cholera, dysentery, lientery, hemorrhoids.

31. Τοῖσι δὲ πρεσβύτησι, δύσπνοιαι, κατάρροια βηχώδεις, στραγγουρίαι, δυσουρίαι, ἄρθρων πόνοι, νεφρίτιδες, ἴλιγγοι, ἀποπληξίαι, καχεξίαι, ξυσμοὶ τοῦ σώματος ὅλου, ἀγρυπνίαι,

κοιλίης καὶ ὀφθαλμῶν καὶ ῤινῶν ὑγρότητες, ἀμβλυωπίαι, γλαυκώσεις, βαρυηκοΐαι.

31. To old people dyspnoea, catarrhs accompanied with coughs, dysuria, pains of the joints, nephritis, vertigo, apoplexy, cachexia, pruritus of the whole body, insomnolency, defluxions of the bowels, of the eyes, and of the nose, dimness of sight, cataract (glaucoma), and dullness of hearing.

## SECTION IV

1. Τὰς κούσας φαρμακεύειν, ἢν ὀργᾶ, τετράμηνα καὶ ἄχρι ἑπτὰ μηνῶν, ἧσσον δὲ ταύτας τὰ δὲ νήπια καὶ τὰ πρεσβύτερα εὐλαβέεσθαι χρή.

1. We must purge pregnant women, if matters be turgid (in a state of orgasm?), from the fourth to the seventh month, but less freely in the latter; in the first and last stages of pregnancy it should be avoided.

2. Ἐν τῆσι φαρμακείησι τοιαῦτα ἄγειν ἐκ τοῦ σώματος, ὁκοῖα καὶ αὐτόματα ἴοντα χρήσιμα, τὰ δὲ ἐναντίως ἴοντα παύειν,

2. In purging we should bring away such matters from the body as it would be advantageous had they come away spontaneously; but those of an opposite character should be stopped.

3. Ἦν μὲν οἷα δεῖ καθαίρεσθαι, καθαίρωνται, ξυμφέρει τε καὶ εὐφόρως φέρουσι, τὰ δὲ ἐναντία, δυσχερῶς.

3. If the matters which are purged be such as should be purged, it is beneficial and well borne; but if the contrary, with difficulty.

4. Φαρμακεύειν θέρεος μὲν μᾶλλον τὰς ἄνω, χειμῶνος δὲ τὰς κάτω.

4. We should rather purge upward in summer, and downward in winter.

5. Ὑπὸ κύνα καὶ πρὸ κυνὸς ἐργώδεες αἱ φαρμακεῖαι.

5. About the time of the dog-days, and before it, the administration of purgatives is unsuitable.

6. Τοὺς ἰσχνοὺς τοὺς εὐημέας ἄνω φαρμακεύειν, ὑποστελλομένους χειμῶνα.

6. Lean persons who are easily made to vomit should be purged upward, avoiding the winter season.

7. Τοὺς δὲ δυσημέας καὶ μέσως εὐσάρκους, κάτω, ὑποστελλομένους θέρος.

7. Persons who are difficult to vomit, and are moderately fat, should be purged

downward, avoiding the summer season.

8. Τοὺς δὲ φθινώδεας, ὑποστελλομένους τὰς ἄνω.

8. We must be guarded in purging phthisical persons upward.

9. Τοὺς δὲ μελαγχολικοὺς, ἀδροτέρως τὰς κάτω, τῷ αὐτῷ λογισμῷ τάναντία προστιθείς.

9. And from the same mode of reasoning, applying the opposite rule to melancholic persons, we must purge them freely downward.

10. Φαρμακεύειν ἐν τοῖσι λίην ὀξέσιν, ἣν ὀργᾶ, ἀύθημερόν χρονίζειν γὰρ ἐν τοῖσι τοιουτέοισι κακόν.

10. In very acute diseases, if matters be in a state of orgasm, we may purge on the first day, for it is a bad thing to procrastinate in such cases.

11. Ὅκόσοισι στρόφοι, καὶ περὶ ὀμφαλὸν πόνοι, καὶ ὀσφύος ἄλγημα μὴ λυόμενον μήτε ὑπὸ φαρμακείης, μήτ' ἄλλως, εἰς ὕδρωπα ξηρὸν ἰδρύεται.

11. Those cases in which there are tormina, pains about the umbilicus, and pains about the loins, not removed either by purgative medicines or otherwise, usually terminate in dry dropsy.

12. Ὅκόσοισι κοιλίαι λειεντεριώδεες, χειμῶνος φαρμακεύειν ἄνω, κακόν

12. It is a bad thing to purge upward in winter persons whose bowels are in a state of lientery.

13. Πρὸς τοὺς ἐλλεβόρους τοῖσι μὴ Ρηϊδίως ἄνω καθαιρομένοισι,

πρὸ τῆς πόσιος προὔγραίνειν τὰ σώματα πλείονι τροφῇ καὶ ἀναπαύσει.

13. Persons who are not easily purged upward by the hellebores, should have their bodies moistened by plenty of food and rest before taking the draught.

14. Ἐπὴν πῆ τις ἐλλέβορον, πρὸς μὲν τὰς κινήσιας τῶν σωμάτων μᾶλλον ἄγειν, πρὸς δὲ τοὺς ὕπνους καὶ μὴ κινήσιας, ἧσσον δηλοῖ δὲ καὶ ναυτιλίη, ὅτι κίνσις τὰ σώματα ταρασσει.

14. When one takes a draught of hellebore, one should be made to move more about, and indulge less in sleep and repose. Sailing on the sea shows that motion disorders the body.

15. Ἐπὴν βούλη μᾶλλον ἄγειν τὸν ἐλλέβορον, κίνει τὸ σῶμα ἐπὴν δὲ παῦσαι, ὕπνον ποίει, καὶ μὴ κίνει.

15. When you wish the hellebore to act more, move the body, and when to stop, let the patient get sleep and rest.

16. Ἐλλέβορος ἐπικίνδυνος τοῖσι τὰς σάρκας ὑγείας ἔχουσι, σπασμὸν γὰρ ἐμποίει.

16. Hellebore is dangerous to persons whose flesh is sound, for it induces convulsion.

17. Ἀπυρέτω ἐόντι, ἀποσιτή, καὶ καρδιωγμὸς, καὶ σκοτόδιμος, καὶ στόμα ἐκτικρούμενον, ἄνω φαρμακεῖης δέεσθαι σημαίνει.

17. Anorexia, heartburn, vertigo, and a bitter taste of the mouth, in a person free from fever, indicate the want of purging upward.

18. Τὰ ὑπὲρ τῶν φρενῶν ὀδυνήματα ἄνω φαρμακεῖην σημαίνει ὀκόσα δὲ κάτω, κάτω.

18. Pains seated above the diaphragm indicate purging upward, and those below it, downward.

19. Ὀκόσοι ἐν τῆσι φαρμακοποσίησι μὴ διψῶσι, καθαιρόμενοι οὐ παύονται πρὶν ἢ διψήσωσι.

19. Persons who have no thirst while under the action of a purgative medicine, do not cease from being purged until they become thirsty.

20. Ἀπυρέτοισιν ἐοῦσιν, ἣν γίνηται στρόφος, καὶ γουνάτων βάρος, καὶ ὀσφύος ἄλγημα, κάτω φαρμακεῖης δεῖσθαι σημαίνει.

20. If persons free from fever be seized with tormina, heaviness of the knees, and pains of the loins, this indicates that purging downward is required.

21. Ὑποχωρήματα μέλανα, οἷον αἷμα, ἀπὸ ταυτομάτου ἰόντα, καὶ ζῦν πυρετῶ, καὶ ἄνευ πυρετοῦ, κάκιστα καὶ ὀκόσω ἂν τὰ χρώματα πλείω καὶ πονηρότερα ἤ, μᾶλλον.

κάκιον ζῦν φαρμάκω δὲ ἄμεινον, καὶ ὀκόσω ἂν πλείω χρώματα ἤ, οὐ πονηρόν.

21. Alvine dejections which are black, like blood, taking place spontaneously, either with or without fever, are very bad; and the more numerous and unfavorable the colors, so much the worse; when with medicine it is better, and a variety of colors in this case is not bad.

22. Νοσημάτων ὀκόσων ἀρχομένων, ἢν χολὴ μέλαινα ἢ ἄνω ἢ κάτω ὑπέλθη, θανάσιμον.

22. When black bile is evacuated in the beginning of any disease whatever, either upward or downward, it is a mortal symptom.

23. Ὀκόσοισιν ἐκ νοσημάτων ὀξέων ἢ πολυχρονίων, ἢ ἐκ τραμάτων, ἢ ἄλλως πως λελεπτυσμένοισι χολὴ μέλαινα ἢ ὀκοῖον αἷμα μέλαν ὑπέλθη, τῇ ὑστεραίῃ ἀποθνήσκουσιν.

23. In persons attenuated from any disease, whether acute or chronic, or from wounds, or any other cause, if there be a discharge either of black bile, or resembling black blood, they die on the following day.

24. Δυσεντερὴ ἢν ἀπὸ χολῆς μελαίνης ἄρξεται, θανάσιμον.

24. Dysentery, if it commence with black bile, is mortal.

25. Αἷμα ἄνω μὲν ὀκοῖον ἂν ἤ, κακόν, κάτω δὲ, ἀγαθόν, καὶ τὰ μέλανα ὑποχωρέοντα.

25. Blood discharged upward, whatever be its character, is a bad symptom, but downward it is (more?) favorable, and so also black dejections.

26. Ἦν ὑπὸ δυσεντερίας ἐχομένω ὀκοῖαι σάρκες ὑποχωρήσωσι, θανάσιμον.

26. If in a person ill of dysentery, substances resembling flesh be discharged from the bowels, it is a mortal symptom.

27. Ὅκόσοισιν ἐν τοῖσι πυρεοῖσιν αἰμορραγέει πλῆθος ὀκοθενούν, ἐν τῆσιν ἀναλήψεσι τουτέοισιν αἱ κοιλίαι καθυγραίνονται.

27. In whatever cases of fever there is a copious hemorrhage from whatever channel, the bowels are in a loose state during convalescence.

28. Ὅκόσοισι χολώδεα τὰ διαχωρήματα, κωφώσιος γενομένης παύεται, καὶ ὀκόσοισι κώφωσις, χολωδέων γενομένων παύεται.

28. In all cases whatever, bilious discharges cease if deafness supervenes, and in all cases deafness ceases when bilious discharges supervene.

29. Ὅκόσοισιν ἐν τοῖσι πυρετοῖσιν ἐκταίοισιν ἐοῦσι Ρίγεα γίνεται, δύσκριτα.

29. Rigors which occur on the sixth day have a difficult crisis.

30. Ὅκόσοισι παροξυσμοὶ γίνονται, ἂν ὥρην ἀφῆ, ἐς τὴν αὔριον τὴν αὐτὴν ὥρην ἢν λάβη, δύσκριτα.

30. Diseases attended with paroxysms, if at the same hour that the fever leaves it return again next day, are of difficult crisis.

31. Τοῖσι κοπιώδεσιν ἐν τοῖσι πυρετοῖσιν, ἐς ἄρθρα καὶ παρὰ τὰς γνάθους μάλιστα ἀποστάσιες γίνονται.

31. In febrile diseases attended with a sense of lassitude, deposits form about the joints, and especially those of the jaws.

32. Ὅκόσοισι δὲ ἀνισταμένοισιν ἐκ τῶν νοῦσων τι πονέσει, ἐνταῦθα ἀποστάσιες γίνονται.

32. In convalescents from diseases, if any part be pained, there deposits are formed.

33. Ἀτὰρ ἢν καὶ προπεπονηκός τι ἦ πρὸ τοῦ νοσέειν, ἐνταῦθα στηρίζει ἡ νοῦσος.

33. But if any part be in a painful state previous to the illness, there the disease fixes.

34. Ἦν ὑπὸ πυρετοῦ ἐχομένῳ, οἰδήματος μὴ ἐόντος ἐν τῇ φάρυγγι, πνιξ ἐξαίφνης

ἐπιστῆ, θανάσιμον.

34. If a person laboring under a fever, without any swelling in the fauces, be seized with a sense of suffocation suddenly, it is a mortal symptom.

35. Ἦν ὑπὸ πυρετοῦ ἐχομένῳ ὁ τράχηλος ἐξαίφνης ἐπιστραφῆ, καὶ μόλις καταπίνειν δύνηται, οἰδήματος μὴ ἐόντος, θανάσιμον.

35. If in a person with fever, the become suddenly distorted, and he cannot swallow unless with difficulty, although no swelling be present, it is a mortal symptom.

36. Ἰδρῶτες πυρεταίνουσιν ἢν ἄρξωνται, ἀγαθοὶ τριταῖοι, καὶ πεμπταῖοι, καὶ ἑβδομαῖοι, καὶ ἑναταῖοι, καὶ ἑνδεκαταῖοι, καὶ τεσσαρεσκαίδεκαταῖοι, καὶ ἑπτακαίδεκαταῖοι, καὶ μῆ καὶ εἰκοστῆ, καὶ ἑβδόμη καὶ εἰκοστῆ, καὶ τριηκοστῆ πρώτη, καὶ τριηκοστῆ

τετάρτη οὗτοι γὰρ οἱ ἰδρῶτες νόσους κρίνουσιν οἱ δὲ μὴ οὕτω γινόμενοι πόνον σημαίνουσι καὶ μῆκος νόσου καὶ ὑποτροπιασμούς.

36. Sweats, in febrile diseases, are favorable, if they set in on the third, fifth, seventh, ninth, eleventh, fourteenth, seventeenth, twenty-first, twenty-seventh, and thirty-fourth day, for these sweats prove a crisis to the disease; but sweats not occurring thus, indicate pain, a protracted disease, and relapses.

37. Οἱ ψυχροὶ ἰδρῶτες, ξὺν μὲν ὀξεῖ πυρετῷ γινόμενοι, θάνατον, ξὺν πρηϋτέρῳ δὲ, μῆκος νόσου σημαίνουσιν.

37. Cold sweats occurring with an acute fever, indicate death; and along with a milder one, a protracted disease.

38. Καὶ ὅκου ἔνι τοῦ σώματος ἰδρῶς, ἐνταῦθα φράζει τὴν νοῦσον.

38. And in whatever part of the body there is a sweat, it shows that the disease is seated there.

39. Καὶ ὅκου ἔνι τοῦ σώματος θερμὸν ἢ ψυχρὸν, ἐνταῦθα ἡ νοῦσος.

39. And in whatever part of the body heat or cold is seated, there is disease.



40. Καὶ ὅκου ἐν ὅλῳ τῷ σώματι μεταβολαὶ, καὶ ἢν τὸ σῶμα καταψύχεται, ἢ αὖθις θερμαίνεται, ἢ χρῶμα ἕτερον ἐξ ἑτέρου γίνηται, μῆκος νούσου σημαίνει.

40. And wherever there are changes in the whole body, and if the body be alternately cold and hot, or if one color succeed another, this indicates a protracted disease.

41. Ἴδρῶς πουλὺς ἐξ ὕπνου ἄνευ τινὸς αἰτίας φανερῆς γινόμενος, τὸ σῶμα σημαίνει ὅτι πλείονι τροφῇ χρέεται ἢν δὲ τροφήν μὴ λαμβάνοντι τοῦτο γίνηται, σημαίνει ὅτι κενώσιος δέεται.

41. A copious sweat after sleep occurring without any manifest cause, indicates that the body is using too much food. But if it occur when one is not taking food, it indicates that evacuation is required.

42. Ἴδρῶς πουλὺς ψυχρὸς ἢ θερμὸς αἰεὶ Ρέων, ὁ μὲν ψυχρὸς, μέζω, ὁ δὲ θερμὸς, ἐλάσσω, νοῦσον σημαίνει.

42. A copious sweat, whether hot or cold, flowing continuously, indicates, the cold a greater, and the hot a lesser disease.

43. Οἱ πυρετοὶ ὀκόσοι, μὴ διαλείποντες, διὰ τρίτης ἰσχυρότεροι γίνονται, ἐπικίνδυνοι ὅτῳ δ' ἂν τρόπῳ διαλείπωσι, σημαίνει ὅτι ἀκίνδυνοι.

43. Fevers, not of the intermittent type, which are exacerbated on the third day, are dangerous; but if they intermit in any form, this indicates that they are not dangerous.

44. Ὀκόσοισι πυρετοὶ μακροὶ, τουτέοισι φύματα ἢ ἐς τὰ ἄρθρα πόνοι ἐγγίνονται.

44. In cases attended with protracted fevers, tubercles (*phymata*) or pains occur about the joints.

45. Ὀκόσοισι φύματα, ἢ ἐς τὰ ἄρθρα πόνοι ἐκ πυρετῶν γίνονται, οὔτοι σιτίοισι πλείοσι χρέονται.

45. When tubercles (*phymata*) or pains attack the joints after fevers, such persons are using too much food.

46. Ἦν Ρῖγος ἐπιπίπτη πυρετῶ μὴ διαλείποντι, ἤδη ἀσθενεῖ ἐόντι, θανάσιμον.

46. If in a fever not of the intermittent type a rigor seize a person already much debilitated, it is mortal.

47. Αἱ ἀποχρέμψεις αἱ ἐν τοῖσι πυρετοῖσι τοῖσι μὴ διαλείπουσιν, αἱ πελιδναὶ, καὶ αἱματώδεις, καὶ δυσώδεις, καὶ χολώδεις, πᾶσαι κακαὶ ἀποχωρέουσαι δὲ καλῶς, ἀγαθαὶ, καὶ κατὰ

τὰς διαχωρήσιας, καὶ κατὰ τὰ ὄρα ἢν δε μή τι τῶν ζυμφερόντων ἐκκρίνηται διὰ τῶν τόπων τούτων, κακόν.

47. In fevers not of the intermittent type, expectorations which are livid bloody, fetid and bilious, are all bad; but if evacuated properly, they are favorable. So it is with the alvine evacuations and the urine. But if none of the proper excretions take place by these channels, it is bad.

48. Ἐν τοῖσι μὴ διαλείπουσι πυρετοῖσιν, ἢν τὰ μὲν ἔξω ψυχρὰ ἦ, τὰ δὲ ἔνδον καίηται, καὶ δίψαν ἔχη, θανάσιμον.

48. In fevers not of the intermittent type, if the external parts be cold, but the internal be burnt up, and if there be thirst, it is a mortal symptom.

49. Ἐν μὴ διαλείποντι πυρετῶ, ἢν χεῖλος, ἢ ὄφρυς, ἢ ὄφθαλμὸς, ἢ ρίς διαστραφῆ, ἢν μὴ βλέπη, ἢν μὴ ἀκούη, ἀσθενέος ἐόντος τοῦ κάμνοντος, ὅ τι ἂν τουτέων γένηται, ἐγγὺς ὁ θάνατος.

49. In a fever not of the intermittent type, if a lip, an eye-brow, an eye, or the nose, be distorted; or if there be loss of sight or of hearing, and the patient be in a weak state-whatever of these symptoms occur, death is at hand.

50. Ὁκου ἐν πυρετῶ μὴ διαλείποντι δύσπνοια γίνεται καὶ παραφροσύνη, θανάσιμον.

50. Apostemes in fevers which are not resolved at the first crisis, indicate a protracted disease.

51. Ἐν τοῖσι πυρετοῖσιν ἀποστήματα μὴ λυόμενα πρὸς τὰς πρώτας κρίσιας, μῆκος νόσου σημαίνει.

51. When in a fever not of the intermittent type dyspnoea and delirium come on, the case is mortal.

52. Ὁκόσοι ἐν τοῖσι πυρετοῖσιν, ἢ ἐν τῆσιν ἄλλησιν ἀρρωστίησι κατὰ προαίρεσιν δακρύουσιν, οὐδὲν ἄτοπον ὀκόσοι δὲ μὴ κατὰ προαίρεσιν, ἀτοπώτερον.

52. When persons in fevers, or in other illnesses, shed tears voluntarily, it is nothing out of place; but when they shed tears involuntarily, it is more so.

53. Ὁκόσοισι δὲ ἐπὶ τῶν ὀδόντων ἐν τοῖσι πυρετοῖσι περίγλισχρα γίνεται, ἰσχυρότεροι γίνονται οἱ πυρετοί.

53. In whatever cases of fever very viscid concretions form about the teeth, the fevers turn out to be particularly strong.

54. Ὁκόσοισιν ἐπὶ πούλῳ βῆχες ξηραὶ, βραχέα ἐρεθίζουσαι, ἐν πυρετοῖσι καυσώδεσιν, οὐ πάνυ τι διψώδεές εἰσιν.

54. In whatever case of ardent fever dry coughs of a tickling nature with slight expectoration are long protracted, there is usually not much thirst.

55. Οἱ ἐπὶ βουβῶσι πυρετοί, πάντες κακοί, πλὴν τῶν ἐφημέρων.

55. All fevers complicated with buboes are bad, except ephemerals.

56. Πυρέσσοντι ἰδρῶς ἐπιγενόμενος, μὴ ἐκλείποντος τοῦ πυρετοῦ, κακόν μὴκύνει γὰρ ἢ νοῦσος, καὶ ὑγρασίην πλείω σημαίνει.

56. Sweat supervening in a case of the fever ceasing, is bad, for the disease is protracted, and it indicates more copious humors.

57. Ὑπὸ σπασμοῦ ἢ τετάνου ἐχομένῳ πυρετὸς ἐπιγενόμενος λύει τὸ νόσημα.

57. Fever supervening in a case of confirmed spasm, or of tetanus, removes the disease.

58. Ὑπὸ καύσου ἐχομένῳ, ἐπιγενομένου Ρίγος, λύσις.

58. A rigor supervening in a case of ardent fever, produces resolution of it.

59. Τριταῖος ἀκριβῆς κρίνεται ἐν ἑπτὰ περιόδοισι τὸ μακρότατον.

59. A true tertian comes to a crisis in seven periods at furthest.

60. Ὁκόσοισιν ἂν ἐν τοῖσι πυρετοῖσι τὰ ὄτα κωφωθῆ, αἷμα ἐκ Ρινῶν Ρυέν, ἢ κοιλίη ἐκταραχθεῖσα, λύει τὸ νόσημα.

60. When in fevers there is deafness, if blood run from the nostrils, or the bowels become disordered, it carries off the disease.

61. Πυρέσσοντι ἢν μὴ ἐν περισσῆσιν ἡμέρησιν ἀφῆ ὁ πυρετὸς, ὑποτροπιάζειν εἴωθεν.

61. In a febrile complaint, if the fever do not leave on the odd days, it relapses.

62. Ὁκόσοισιν ἐν τοῖσι πυρετοῖσιν ἴκτεροι ἐπιγίνονται πρὸ τῶν ἑπτὰ ἡμερῶν, κακὸν, ἢν μὴ ξυνδόσιες ὑγρῶν κατὰ τὴν κοιλίην γένωνται.

62. When jaundice supervenes in fevers before the seventh day, it a bad symptom, unless there be watery discharges from the bowels.

63. Ὁκόσοισιν ἂν ἐν τοῖσι πυρετοῖσι καθ' ἡμέρην Ρίγεια γίνηται, καθ' ἡμέρην οἱ πυρετοὶ λύονται.

63. In whatever cases of fever rigors occur during the day, the fevers come to a resolution during the day.

64. Ὁκόσοισιν ἐν τοῖσι πυρετοῖσι τῇ ἑβδόμῃ ἢ τῇ ἐνάτῃ ἢ τῇ ἐνδεκάτῃ ἢ τῇ τεσσαρεσκαδεκάτῃ ἴκτεροι ἐπιγίνονται, ἀγαθόν, ἢν μὴ τὸ δεξιὸν ὑποχόνδριον σκληρὸν ᾗ ἢν δὲ μὴ, οὐκ ἀγαθόν.

64. When in cases of fever jaundice occurs on the seventh, the ninth, the eleventh, or the fourteenth day, it is a good symptom, provided the hypochondriac region be not hard. Otherwise it is not a good symptom.

65. Ἐν τοῖσι πυρετοῖσι περὶ τὴν κοιλίην καῦμα ἰσχυρὸν καὶ καρδιωγμὸς, κακόν.

65. A strong heat about the stomach and cardialgia are bad symptoms in fevers.

66. Ἐν τοῖσι πυρετοῖσι τοῖσιν ὀξέσιν οἱ σπασμοὶ καὶ οἱ περὶ τὰ σπλάγγνα πόνοι ἰσχυροὶ, κακόν.

66. In acute fevers, spasms, and strong pains about the bowels are bad symptoms.

67. Ἐν τοῖσι πυρετοῖσιν οἱ ἐκ τῶν ὕπνων φόβοι, ἢ σπασμοὶ, κακόν.

67. In fevers, frights after sleep, or convulsions, are a bad symptom.

68. Ἐν τοῖσι πυρετοῖσι τὸ πνεῦμα προσκόπτον, κακόν σπασμὸν γὰρ σημαίνει.

68. In fevers, a stoppage of the respiration is a bad symptom, for it indicates convulsions.

69. Ὁκόσοισιν οὔρα παχέα, θρομβώδεα, ὀλίγα, οὐκ ἀπυρέτοισι, πλῆθος ἐπελθὸν ἐκ τουτέων λεπτὸν ὠφελέει μάλιστα δὲ τὰ τοιαῦτα ἔρχεται, οἷσιν ἐξ ἀρχῆς, ἢ διὰ ταχέων ὑπόστασιν ἴσχει.

69. When the urine is thick, grumoss, and scanty in cases not free from fever a copious discharge of thinner urine proves beneficial. Such a discharge more commonly takes place when the urine has had a sediment from the first, or soon after the commencement.

70. Ὁκόσοισι δὲ ἐν πυρετοῖσι τὰ οὔρα ἀνατεταραγμένα οἶον ὑποζυγίου, τουτέοισι κεφαλαλγία ἢ πάρειςιν, ἢ παρέσονται.

70. When in fevers the urine is turbid, like that of a beast of burden, in such a case there either is or will be headache.

71. Ὁκόσοισιν ἑβδομαῖα κρίνεται, τουτέοισιν ἐπινέφελον ἴσχει τὸ οὔρον τῇ τετάρτῃ ἐρυθρὸν, καὶ τᾶλλα κατὰ λόγον.

71. In cases which come to a crisis on the seventh day, the urine has a red nubecula on the fourth day, and the other symptoms accordingly.

72. Ὁκόσοισιν οὔρα διαφανέα λευκὰ, πονηρά μάλιστα δὲ ἐν τοῖσι φρενιτικοῖσιν ἐπιφαίνεται.

72. When the urine is transparent and white, it is bad; it appears principally in cases of phrenitis.

73. Ὁκόσοισιν ὑποχόνδρια μετέωρα, διαβορβορῦζοντα, ὄσφύος ἀλγήματος ἐπιγενομένου, αἱ κοιλία τουτέοισι καθυγραίνονται, ἢν μὴ φῦσαι καταρραγέωσιν, ἢ οὔρου πλῆθος ἐπέλθῃ ἐν πυρετοῖσι δὲ ταῦτα.

73. When the hypochondriac region is affected with meteorism and borborygmi, should pain of the loins supervene, the bowels get into a loose and watery state, unless there be an eruption of flatus or a copious evacuation of urine. These things occur in fevers.

74. Ὁκόσοισιν ἐλπὶς ἐς ἄρθρα ἀφίστασθαι, Ρύεται τῆς ἀποστάσιος οὖρον πουλὺ, κάρτα παχὺ, καὶ λευκὸν γινόμενον, οἶον

ἐν τοῖσι κοπιώδεσι πυρετοῖσι τεταρταίοισιν ἄρχεται ἐνίοισι γίνεσθαι ἢν δὲ καὶ ἐκ τῶν Ρινῶν αἰμορραγήση, καὶ πάνυ ταχὺ λύεται.

74. When there is reason to expect that an abscess will form in joints, the abscess is carried off by a copious discharge of urine, which is thick, and becomes white, like what begins to form in certain cases of quartan fever, attended with a sense of lassitude. It is also speedily carried off by a hemorrhage from the nose.

75. Ἦν αἷμα ἢ πῦον οὐρέη, τῶν νεφρῶν ἢ τῆς κύστιος ἔλκωσιν σημαίνει.

75. Blood or pus in the urine indicates ulceration either of the kidneys or of the bladder.

76. Ὁκόσοισιν ἐν τῷ οὐρῷ παχεῖ ἐόντι σαρκία σμικρὰ ὥσπερ τρίχες συνεξέρχονται, τουτέοισιν ἀπὸ τῶν νεφρῶν ἐκκρίνεται.

76. When small fleshy substances like hairs are discharged along with thick urine, these substances come from the kidneys.

77. Ὁκόσοισιν ἐν τῷ οὐρῷ παχεῖ ἐόντι πιτυρώδεα συνεξουρέεται, τουτέοισιν ἡ κύστις ψωριᾶ.

77. In those cases where there are furfuraceous particles discharged along with thick urine, there is scabies of the bladder.

78. Ὁκόσοι ἀπὸ ταῦτομάτου αἷμα οὐρέουσι, τουτέοισιν ἀπὸ τῶν νεφρῶν φλεβίου Ρῆξιν σημαίνει.

78. In those cases where there is a spontaneous discharge of bloody urine, it indicates rupture of a small vein in the kidneys.

79. Ὁκόσοισιν ἐν τῷ οὐρῷ ψαμμώδεα ὑφίσταται, τουτέοισιν ἡ κύστις λιθιᾶ.

79. In those cases where there is a sandy sediment in the urine, there is calculus in the bladder (or kidneys).

80. Ἦν αἷμα οὐρέη καὶ θρόμβους, καὶ στραγγουρίην ἔχη,

καὶ ὀδύνη ἐμπίπτῃ ἐς τὸ ὑπογάστριον καὶ ἐς τὸν περίνεον, τὰ περὶ τὴν κύστιν πονέει.

80. If a patient pass blood and clots in his urine, and have strangury, and if a pain seize the hypogastric region and perineum, the parts about the bladder are affected.

81. Ἦν αἷμα καὶ πῦον οὐρέη καὶ λεπίδας, καὶ ὀσμὴ βαρὴ ἢ, τῆς κύστιος ἔλκωσιν σημαίνει.

81. If a patient pass blood, pus, and scales, in the urine, and if it have a heavy smell, ulceration of the bladder is indicated.

82. Ὀκόσοισιν ἐν τῇ οὐρήθρῃ φύματα φύεται, τουτέοισι, διαπυήσαντος καὶ ἐκραγέντος, λύσις.

82. When tubercles form in the urethra, if these suppurate and burst, there is relief.

83. Οὖρησις νύκτωρ πολλὴ γινομένη, σμικρὴν τὴν ὑποχώρησιν σημαίνει.

83. When much urine is passed during the night, it indicates that the alvine evacuations are scanty.

## SECTION V

1. Σπασμὸς ἐξ ἔλλεβόρου, θανάσιμον.

1. A spasm from taking hellebore is of a fatal nature.

2. Ἐπὶ τρώματι σπασμὸς ἐπιγενόμενος, θανάσιμον.

2. Spasm supervening on a wound is fatal.

3. Αἵματος πολλοῦ Ρυέντος, σπασμὸς ἢ λυγμὸς ἐπιγενόμενος, κακόν.

3. A convulsion, or hiccup, supervening on a copious discharge of blood is bad.

4. Ἐπὶ ὑπερκαθάρσει σπασμὸς ἢ λυγμὸς ἐπιγενόμενος, κακόν.

4. A convulsion, or hiccup, supervening upon hypercatharsis is bad.

5. Ἦν μεθύων ἐξαίφνης ἄφωνός τις γένηται, σπασθεὶς ἀποθνήσκει, ἢν μὴ πυρετὸς ἐπιλάβῃ, ἢ ἐς τὴν ὥρην ἐλθὼν, καθ' ἣν αἱ κραιπάλαι λύονται, φθέγγεται.

5. If a drunken person suddenly lose his speech, he will die convulsed, unless fever come on, or he recover his speech at the time when the consequences of a debauch pass off.

6. Ὅκοσοι ὑπὸ τετάνου ἀλίσκονται, ἐν τέσσαρσιν ἡμέρησιν ἀπόλλυνται ἢν δὲ ταύτας διαφύγωσιν, ὑγιέες γίνονται.

6. Such persons as are seized with tetanus die within four days, or if they pass these they recover.

7. Τὰ ἐπιληπτικὰ ὀκόσοισι πρὸ τῆς ἥβης γίνεται, μετάστασιν ἴσχει ὀκόσοισι δὲ πέντε καὶ εἴκοσιν ἐτέων γίνεται, τουτέοισι τὰ πολλὰ ξυναποθνήσκει.

7. Those cases of epilepsy which come on before puberty may undergo a change; but those which come on after twenty-five years of age, for the most part terminate in death.

8. Ὅκοσοι πλευριτικοὶ γενόμενοι οὐκ ἀνακαθαίρονται ἐν τεσσαρεσκαίδεκα



ἡμέρησι, τουτέοισιν ἐς ἐμπύημα καθίσταται.

8. In pleuritic affections, when the disease is not purged off in fourteen days, it usually terminates in empyema.

9. Φθίσις γίνεται μάλιστα ἡλικίησι τῆσιν ἀπὸ ὀκτωκαίδεκα ἐτέων μέχρι πέντε καὶ τριήκοντα ἐτέων.

9. Phthisis most commonly occurs between the ages of eighteen and thirty-five years.

10. Ὁκόσοι κυνάγχην διαφεύγουσι, καὶ ἐς τὸν πλεύμονα αὐτέοισι

τρέπεται, ἐν ἑπτὰ ἡμέρησιν ἀποθνήσκουσιν ἢν δὲ ταύτας διαφύγωσιν, ἔμπυοι γίνονται.

10. Persons who escape an attack of quinsy, and when the disease is turned upon the lungs, die in seven days; or if they pass these they become affected with empyema.

11. Τοῖσιν ὑπὸ τῶν φθισίων ἐνοχλουμένοισιν, ἢν τὸ πτύσμα, ὅπερ ἂν ἀποβήσσωσι, βαρὺ ὄζη ἐπὶ τοὺς ἄνθρακας ἐπιχεόμενον, καὶ αἱ τρίχες ἀπὸ τῆς κεφαλῆς Ρέωσι, θανατῶδες.

11. In persons affected with phthisis, if the sputa which they cough up have a heavy smell when poured upon coals, and if the hairs of the head fall off, the case will prove fatal.

12. Ὁκόσοισι φθισιῶσιν αἱ τρίχες ἀπὸ τῆς κεφαλῆς Ρέουσιν, οὗτοι, διάρροίης ἐπιγενομένης, ἀποθνήσκουσιν.

12. Phthisical persons, the hairs of whose head fall off, die if diarrhoea set in.

13. Ὁκόσοι αἷμα ἀφρῶδες ἀναπτύουσι, τουτέοισιν ἐκ τοῦ πλεύμονος ἡ τοιαύτη ἀναγωγή γίνεται.

13. In persons who cough up frothy blood, the discharge of it comes from the lungs.

14. Ὑπὸ φθίσιος ἐχομένῳ διάρροια ἐπιγενομένη, θανατῶδες.

14. Diarrhoea attacking a person affected with phthisis is a mortal symptom.

15. Ὀκόσοι ἐκ πλευρίτιδος ἔμπυοι γίνονται, ἢν ἀνακαθαρθῶσιν ἐν τεσσαράκοντα ἡμέρησιν, ἀφ' ἧς ἂν ἡ Πῆξις γένηται, παύονται ἢν δὲ μὴ, ἐς φθίσιν μεθίσταντα.

15. Persons who become affected with empyema after pleurisy, if they get clear of it in forty days from the breaking of it, escape the disease; but if not, it passes into phthisis.

16. Τὸ θερμὸν βλάπτει ταῦτα πλεονάκις χρεομένοισι, σαρκῶν ἐκθήλυνσιν, νεύρων ἀκράτειαν, γνώμης νάρκωσιν, αἱμῶραγίας, λειποθυμίας, ταῦτα οἷσι θάνατος.

16. Heat produces the following bad effects on those who use it frequently: enervation of the fleshy parts, impotence of the nerves, torpor of the understanding, hemorrhages, deliquia, and, along with these, death.

17. Τὸ δὲ ψυχρὸν, σπασμοὺς, τετάνους, μελασμοὺς καὶ Ρίγεα πυρετώδεα.

17. Cold induces convulsions, tetanus, mortification, and febrile rigors.

18. Τὸ ψυχρὸν, πολέμιον ὀστέοισιν, ὀδοῦσι, νεύροισιν, ἐγκεφάλῳ, νωτιαίῳ μυελῷ τὸ δὲ θερμὸν ὠφέλιμον.

18. Cold is inimical to the bones, the teeth, the nerves, the brain, and the spinal marrow, but heat is beneficial.

19. Ὀκόσα κατέψυκται, ἐκθερμαίνειν, πλὴν ὀκόσα αἱμορραγεί, ἢ μέλλει.

19. Such parts as have been congealed should be heated, except where there either is a hemorrhage, or one is expected.

20. Ἐλκεσι τὸ μὲν ψυχρὸν δακνῶδες, δέρμα περισκληρύνει, ὀδύνην ἀνεκπύητον ποιέει, μελαίνει, Ρίγεα πυρετώδεα ποιέει, σπασμοὺς καὶ τετάνους.

20. Cold pinches ulcers, hardens the skin, occasions pain which does not end in suppuration, blackens, produces febrile rigors, convulsions, and tetanus.

21. Ἔστι δὲ ὄκου ἐπὶ τετάνου ἄνευ ἔλκεος νέω εὐσάρκῳ, θέρεος μέσου, ψυχροῦ πολλοῦ κατάχυσιν ἐπανάκλησιν θέρμησιν ποιέεται θέρμη δὲ ταῦτα Ρύεται.

21. In the case of a muscular youth having tetanus without a wound, during the midst of summer, it sometimes happens that the allusion of a large quantity of cold water recalls the heat. Heat relieves these diseases.

22. Τὸ θερμὸν ἐκπυητικὸν, οὐκ ἐπὶ παντὶ ἔλκει, μέγιστον σημεῖον ἐς ἀσφαλείην, δέρμα μαλάσσει, ἰσχυαίνει, ἀνώδυνον, Ριγέων, σπασμῶν, τετάνων παρηγορικόν τὰ δὲ ἐν τῇ κεφαλῇ, καὶ καρηβαρίην λύει πλεῖστον δὲ διαφέρει ὀστέων κατήγμασι, μάλιστα

δὲ τοῖσιν ἐπιλωμένοισι, τουτέων δὲ μάλιστα, τοῖσιν ἐν κεφαλῇ ἔλκεα ἔχουσι καὶ ὀκόσα ὑπὸ ψύξιος θνήσκει, ἢ ἐλκοῦται, καὶ ἔρπησιν ἐσθιομένοισιν, ἔδρη, αἰδοίω, ὑστέρη, κύστει, τουτέοισι τὸ μὲν θερμὸν φίλιον καὶ κρῖνον, τὸ δὲ ψυχρὸν πολέμιον καὶ κτεῖνον.

22. Heat is suppurative, but not in all kinds of sores, but when it is, it furnishes the greatest test of their being free from danger. It softens the skin, makes it thin, removes pain, soothes rigor, convulsions, and tetanus. It removes affections of the head, and heaviness of it. It is particularly efficacious in fractures of the bones, especially of those which have been exposed, and most especially in wounds of the head, and in mortifications and ulcers from cold; in herpes exedens, of the anus, the privy parts, the womb, the bladder, in all these cases heat is agreeable, and brings matters to a crisis; but cold is prejudicial, and does mischief.

23. Ἐν τουτέοισι δεῖ τῷ ψυχρῷ χρέεσθαι, ὀκόθεν αἰμορραγεί, ἢ μέλλει, μὴ ἐπ' αὐτὰ, ἀλλὰ περὶ αὐτὰ, ὀκόθεν ἐπιρρεῖ καὶ ὀκόσαι φλεγμοναί, ἢ ἐπιφλογίσματα ἐς τὸ ἐρυθρόν καὶ ὑφαιμον Ρέποντα αἷματι νεαρῷ, ἐπὶ ταῦτα, ἐπεὶ τὰ γε παλαιὰ μελαίνει καὶ ἐρυσίπελας τὸ μὴ ἐλκούμενον, ἐπεὶ τό γε ἐλκούμενον βλάπτει.

23. Cold water is to be applied in the following cases; when there is a hemorrhage, or when it is expected, but not applied *to* the spot, but *around* the spot whence the blood flows; and in inflammations and inflammatory affections, inclining to a red and subsanguineous color, and consisting of fresh blood, in these cases it is to be applied but it occasions mortification in old cases; and in erysipelas not attended with ulceration, as it proves injurious to erysipelas when ulcerated.

24. Τὰ ψυχρὰ, οἶον χιῶν, κρύσταλλος, τῷ στήθει πολέμια, βηγέων κινητικὰ, αἰμορροϊκὰ, καταρροϊκὰ.

24. Cold things, such as snow and ice, are inimical to the chest, being provocative of coughs, of discharges of blood, and of catarrhs.

25. Τὰ ἐν ἄρθροισιν οἰδήματα καὶ ἀλγήματα, ἄτερ ἔλκεος, καὶ ποδαγρικὰ, καὶ σπάσματα, τουτέων τὰ πλεῖστα ψυχρὸν πολλὸν καταχεόμενον Ρηΐζει τε καὶ ἰσχυαίνει, καὶ ὀδύνην λύει νάρκη δὲ μετρίῃ ὀδύνης λυτική.

25. Swellings and pains in the joints, ulceration, those of a gouty nature, and sprains, are generally improved by a copious affusion of cold water, which reduces the swelling, and removes the pain; for a moderate degree of numbness removes pain.

26. Ὑδωρ τὸ ταχέως θερμαινόμενον καὶ ταχέως ψυχόμενον, κουφότατον.

26. The lightest water is that which is quickly heated and quickly cooled.

27. Ὅκόσοισι πιεῖν ὀρέξεις νύκτωρ τοῖσι πάνυ διψῶσιν, ἢν ἐπικοιμηθῶσιν, ἀγαθόν.

27. When persons have intense thirst, it is a good thing if they can sleep off the desire of drinking.

28. Γυναικείων ἀγωγὸν, ἢ ἐν ἀρώμασι πυρίη, πολλαχῇ δὲ καὶ ἐς ἄλλα χρησίμη ἂν ᾗν, εἰ μὴ καρηβαρίας ἐνεποίεεν.

28. Fumigation with aromatics promotes menstruation, and would be useful in many other cases, if it did not occasion heaviness of the head.

29. Τὰς κούσας φαρμακεύειν, ἢν ὀργᾶ, τετράμηνα, καὶ ἄχρι ἑπτὰ μηνῶν ἦσσαν τὰ δὲ νήπια καὶ πρεσβύτερα εὐλαβέεσθαι.

29. Women in a state of pregnancy may be purged, if there be any urgent necessity ( *or* , if the humors be in a state of orgasm?), from the fourth to the seventh month, but less so in the latter case. In the first and last periods it must be avoided.

30. Γυναικὶ ἐν γαστρὶ ἐχούσῃ ὑπὸ τινος τῶν ὀξέων νοσημάτων ληφθῆναι, θανατῶδες.

30. It proves fatal to a woman in a state of pregnancy, if she be seized with any of

the acute diseases.

31. Γυνή ἐν γαστρὶ ἔχουσα, φλεβοτομηθεῖσα, ἐκτιτρώσκει καὶ μᾶλλον ἤσι μεῖζον τὸ ἔμβρυον.

31. If a woman with child be bled, she will have an abortion, and this will be the more likely to happen, the larger the foetus.

32. Γυναικὶ αἷμα ἐμεούση, τῶν καταμηνίων Παγέντων, λύσις.

32. Haemoptysis in a woman is removed by an eruption of the menses.

33. Γυναικὶ, τῶν καταμηνίων ἐκλειπόντων, αἷμα ἐκ τῶν Ρινῶν Ρυῆναι, ἀγαθόν.

33. In a woman when there is a stoppage the menses, a discharge of blood from the nose is good.

34. Γυναικὶ ἐν γαστρὶ ἐχούση, ἣν ἡ κοιλίη πουλλὰ Ρυῆ, κίνδυνος ἐκτρῶσαι.

34. When a pregnant woman has a violent diarrhoea, there is danger of her miscarrying.

35. Γυναικὶ ὑπὸ ὑστερικῶν ἐνοχλουμένη, ἢ δυστοκούση, παρμὸς ἐπιγινόμενος, ἀγαθόν.

35. Sneezing occurring to a woman affected with hysterics, and in difficult labor, is a good symptom.

36. Γυναικὶ τὰ καταμήνια ἄχροα, καὶ μὴ κατὰ τὰ αὐτὰ αἰεὶ γινόμενα, καθάρσιος δεῖσθαι σημαίνει.

36. When the menstrual discharge is of a bad color and irregular, it indicates that the woman stands in need of purging.

37. Γυναικὶ ἐν γαστρὶ ἐχούση, ἣν οἱ μασθοὶ ἐξαίφνης ἰσχυροὶ γένωνται, ἐκτιτρώσκει.

37. In a pregnant woman, if the breasts suddenly lose their fullness, she has a miscarriage.

38. Γυναικὶ ἐν γαστρὶ ἐχούση ἣν ὁ ἕτερος μασθὸς ἰσχνὸς γένηται, δίδυμα ἐχούση,

θάτερον ἐκτιτρώσκει καὶ ἦν μὲν ὁ δεξιὸς ἰσχνὸς γένηται, τὸ ἄρσεν ἦν δὲ ὁ ἀριστερὸς, τὸ θῆλυ.

38. If, in a woman pregnant with twins, either of her breasts lose its fullness, she will part with one of her children; and if it be the right breast which becomes slender, it will be the male child, or if the left, the female.

39. Ἦν γυνὴ μὴ κύουσα, μηδὲ τετοκυῖα, γάλα ἔχη, ταύτη τὰ καταμήνια ἐκκλέλοιπεν.

39. If a woman who is not with child, nor has brought forth, have milk, her menses are obstructed.

40. Γυναιξίν ὀκόσησιν ἐς τοὺς τιτθοὺς αἷμα συστρέφεται, μανίην σημαίνει.

40. In women, blood collected in the breasts indicates madness.

41. Γυναῖκα ἦν θέλης εἰδέναι εἰ κύει, ἐπὴν καθεύδειν μέλλη, ἀδείπνω εὐόση, μελίκρητον διδόναι πιεῖν κῆν μὲν στρόφος αὐτὴν ἔχη περὶ τὴν γαστέρα, κύει ἦν δὲ μὴ, οὐ κύει.

41. If you wish to ascertain if a woman be with child, give her hydromel to drink when she is going to sleep, and has not taken supper, and if she be seized with tormina in the belly, she is with child, but otherwise she is not pregnant.

42. Γυνὴ ἔγκυος, ἦν μὲν ῥσεν κύη, εὐχρόος ἐστιν ἦν δὲ θῆλυ, δύσχροος.

42. A woman with child, if it be a male, has a good color, but if a female, she has a bad color.

43. Ἦν γυναικὶ κούση ἐρυσίπελας ἐν τῇ ὑστέρῃ γένηται, θανατῶδες.

43. If erysipelas of the womb seize a woman with child, it will probably prove fatal.

44. Ὀκόσαι παρὰ φύσιν λεπταὶ εὐῶσαι ἐν γαστρὶ ἔχουσιν, ἐκτιτρώσκουσι, πρὶν ἢ παχυνθῆναι.

44. Women who are very lean, have miscarriages when they prove with child, until they get into better condition.

45. Ὀκόσαι δὲ μετρίως τὸ σῶμα ἔχουσαι ἐκτιτρώσκουσι δίμηνα καὶ τρίμηνα ἄτερ προφάσιος φανερῆς, ταύτησιν αἱ κοτυληδόνες μύξης μεσταί εἰσι, καὶ οὐ δύνανται κρατεῖν ὑπὸ τοῦ βάρους τὸ ἔμβρυον, ἀλλ' ἀπορρήγνυνται.

45. When women, in a moderate condition of body, miscarry in the second or third month, without any obvious cause, their cotyledones are filled with mucosity, and cannot support the weight of the foetus, but are broken asunder.

46. Ὀκόσαι παρὰ φύσιν παχεῖαι ἐοῦσαι μὴ ξυλλαμβάνουσιν ἐν γαστρὶ, ταύτησι τὸ ἐπίπλοον τὸ στόμα τῶν ὑστερέων ἀποπιέζει, καὶ, πρὶν ἢ λεπυνθῆναι, οὐ κύουσιν.

46. Such women as are immoderately fat, and do not prove with child, in them it is because the epiploon (*fat?*) blocks up the mouth of the womb, and until it be reduced, they do not conceive.

47. Ἦν ὑστέρα ἐν τῷ ἰσχύῳ ἐγκειμένη διαπυήση, ἀνάγκη ἔμμοτον γενέσθαι.

47. If the portion of the uterus seated near the hip-joint suppurate, it gets into a state requiring to be treated with tents.

48. Ἐμβρυα τὰ μὲν ἄρσενά ἐν τοῖσι δεξιόισι, τὰ δὲ θήλεα ἐν τοῖσιν ἀριστεροῖσι μᾶλλον.

48. The male foetus is usually seated in the right, and the female in the left side.

49. Ὑστέρων ἐκπτώσεις, παρμικὸν προσθεῖς, ἐπιλάμβανε τοὺς μυκτῆρας καὶ τὸ στόμα.

49. To procure the expulsion of the secundines, apply a sternutatory, and shut the nostrils and mouth.

50. Γυναικὶ τὰ καταμήνια ἦν βούλη ἐπισχεῖν, σικύην ὡς μεγίστην πρὸς τοὺς τιτθοὺς πρόσβαλλε.

50. If you wish to stop the menses in a woman, apply as large a cupping instrument as possible to the breasts.

51. Ὀκόσαι ἐν γαστρὶ ἔχουσι, τουτέων τὸ στόμα τῶν ὑστερέων ξυμμέμυκεν.

51. When women are with child, the mouth of their womb is closed.

52. Ἦν γυναικὶ ἐν γαστρὶ ἐχούσῃ γάλα πουλὸ ἐκ τῶν μαζῶν Ρυῆ, ἀσθενὲς τὸ ἔμβρυον σημαίνει ἢν δὲ στερεοὶ οἱ μαστοὶ ἔωσιν, ὑγιεινότερον τὸ ἔμβρυον σημαίνει.

52. If in a woman with child, much milk flow from the breasts, it indicates that the foetus is weak; but if the breasts be firm, it indicates that the foetus is in a more healthy state.

53. Ὀκόσαι διαφθεῖρουν μέλλουσι τὰ ἔμβρυα, ταύτησιν οἱ

τιτθοὶ ἰσχυροὶ γίνονται ἢν δὲ πάλιν σκληροὶ γένωνται, ὀδύνη ἔσται ἢ ἐν τοῖσι τιτθοῖσιν, ἢ ἐν τοῖσιν ἰσχύοισιν, ἢ ἐν τοῖσιν ὀφθαλμοῖσιν, ἢ ἐν τοῖσι γούνασι, καὶ οὐ διαφθεύουσιν.

53. In women that are about to miscarry, the breasts become slender; but if again they become hard, there will be pain, either in the breasts, or in the hip-joints, or in the eyes, or in the knees, and they will not miscarry.

54. Ὀκόσησι τὸ στόμα τῶν ὑστερέων σκληρόν ἐστι, ταύτησιν ἀνάγκη τὸ στόμα τῶν ὑστερέων ζυμύειν.

54. When the mouth of the uterus is hard, it is also necessarily shut.

55. Ὀκόσαι ἐν γαστρὶ ἔχουσαι ὑπὸ πυρετῶν λαμβάνονται, καὶ ἰσχυρῶς ἰσχυαίνονται, ἄνευ προφάσιος φανερῆς τίκτουσι χαλεπῶς καὶ ἐπικινδύνως, ἢ ἐκτιτρώκουσαι κινδυνεύουσιν.

55. Women with child who are seized with fevers, and who are greatly emaciated, without any (other?) obvious cause, have difficult and dangerous labors, and if they miscarry, they are in danger.

56. Ἐπὶ Ρόῳ γυναικείῳ σπασμὸς καὶ λειποθυμία ἢν ἐπιγένηται, κακόν.

56. In the female flux ( *immoderate menstruation?* ), if convulsion and deliquium come on, it is bad.

57. Καταμηνίων γενομένων πλειόνων, νοῦσοι ζυμβαίνουσι, καὶ μὴ γινομένων, ἀπὸ τῆς ὑστέρης γίνονται νοῦσοι.



57. When the menses are excessive, diseases take place, and when the menses are stopped, diseases from the uterus take place.

58. Ἐπὶ ἀρχῶ φλεγμαίνοντι, καὶ ὑστέρη φλεγμαινούση,

στραγγουρίη ἐπιγίνεται, καὶ ἐπὶ νεφροῖσιν ἐμπύοισι στραγγουρίη ἐπιγίνεται, ἐπὶ δὲ ἥπατι φλεγμαίνοντι λὺγξ ἐπιγίνεται.

58. Strangury supervenes upon inflammation of the rectum, and of the womb, and strangury supervenes upon suppuration of the kidney, and hiccup upon inflammation of the liver.

59. Γυνὴ ἣν μὴ λαμβάνη ἐν γαστρὶ, βούλη δὲ εἰδέναι εἰ λήψεται, περικαλύψας ἱματίοισι, θυμία κάτω κῆν μὲν πορεύεσθαι δοκέη ἢ ὁδμὴ διὰ τοῦ σώματος ἐς τὰς Πῖνας καὶ ἐς τὸ στόμα, γίνωσκε ὅτι αὐτὴ οὐ δι' ἑωυτὴν ἄγονός ἐστίν.

59. If a woman do not conceive, and wish to ascertain whether she can conceive, having wrapped her up in blankets, fumigate below, and if it appear that the scent passes through the body to the nostrils and mouth, know that of herself she is not unfruitful.

60. Ἦν γυναικὶ ἐν γαστρὶ ἐχούση αἱ καθάρσιες πορεύονται, ἀδύνατον τὸ ἔμβρυον ὑγιαίνειν.

60. If woman with a child have her courses, it is impossible that the child can be healthy.

61. Ἦν γυναικὶ αἱ καθάρσιες μὴ πορεύονται, μήτε φρίκης, μήτε πυρετοῦ ἐπιγινόμενου, ἄσαι δὲ αὐτῇ προσπίπτωσι, λογίζου ταύτην ἐν γαστρὶ ἔχειν.

61. If a woman's courses be suppressed, and neither rigor nor fever has followed, but she has been affected with nausea, you may reckon her to be with child.

62. Ὀκόσαι ψυχρὰς καὶ πυκνὰς τὰς μήτρας ἔχουσιν, οὐ κυῖσκουσιν καὶ ὀκόσαι καθύγρους ἔχουσι τὰς μήτρας, οὐ κυῖσκουσιν, ἀποσβέννυται γὰρ ὁ γόνος καὶ ὀκόσαι ξηρὰς μᾶλλον καὶ περικαέας, ἐνδείη γὰρ τῆς τροφῆς φθείρεται τὸ σπέρμα ὀκόσαι

δὲ ἐξ ἀμφοτέρων τὴν κρᾶσιν ἔχουσι ζύμμετρον, αἱ τοιαῦται ἐπίτεκνοι γίνονται.

62. Women who have the uterus cold and dense ( *compact?* ) do not conceive; and those also who have the uterus humid, do not conceive, for the semen is extinguished, and in women whose uterus is very dry, and very hot, the semen is lost from the want of food; but women whose uterus is in an intermediate state between these temperaments prove fertile.

63. Παραπλησίως δὲ καὶ ἐπὶ τῶν ἀρρένων ἢ γὰρ διὰ τὴν ἀραιότητα τοῦ σώματος τὸ πνεῦμα ἔξω φέρεται πρὸς τὸ μὴ παραπέμπειν τὸ σπέρμα ἢ διὰ τὴν πυκνότητα τὸ ὑγρὸν οὐ διαχωρεῖ ἔξω ἢ διὰ τὴν ψυχρότητα οὐκ ἐκπυροῦται, ὥστε ἀθροίζεσθαι πρὸς τὸν τόπον τοῦτον ἢ διὰ τὴν θερμασίην τὸ αὐτὸ τοῦτο γίνεται.

63. And in like manner with respect to males; for either, owing to the laxity of the body, the pneuma is dissipated outwardly, so as not to propel the semen, or, owing to its density, the fluid ( *semen?* ) does not pass outwardly; or, owing to coldness, it is not heated so as to collect in its proper place ( *seminal vessels?* ), or, owing to its heat, the very same thing happens.

64. Γάλα διδόναι κεφαλαλγέουσι κακὸν κακὸν δὲ καὶ πυρεταίνουσι, καὶ οἷσιν ὑποχόνδρια μετέωρα καὶ διαβορβορῦζοντα, καὶ τοῖσι

διψώδεσι κακὸν δὲ, καὶ οἷσι χολώδεις αἱ ὑπ' χωρήσεις ἐν ὀξέσι πυρετοῖσιν ἐοῦσι, καὶ οἷσιν αἵματος πολλοῦ διαχώρησις γέγονεν ἀρμόζει δὲ φθινώδεσι μὴ λίην πολλῶ πυρέσσουσιν διδόναι δὲ καὶ ἐν πυρετοῖσι μακροῖσι βληχροῖσι, μηδενὸς τῶν προειρημένων σημείων παρεόντος, παρὰ λόγον δὲ ἐκτετηκῶτων.

64. It is a bad thing to give milk to persons having headache, and it is also bad to give it in fevers, and to persons whose hypochondria are swelled up, and troubled with borborygmi, and to thirsty persons; it is bad also, when given to those who have bilious discharges in acute fevers, and to those who have copious discharges of blood; but it is suitable in phthisical cases, when not attended with very much fever; it is also to be given in fevers of a chronic and weak nature, when none of the aforementioned symptoms are present, and the patients are excessively emaciated.

65. Ὀκόσοισιν οἰδήματα ἐφ' ἔλκεσι φαίνεται, οὐ μάλα σπῶνται, οὐδὲ μαίνονται τουτέων δὲ ἀφανισθέντων ἐξαίφνης, τοῖσι μὲν ὀπισθεν σπασμοὶ, τέτανοι, τοῖσι δὲ ἔμπροσθεν μανία, ὀδύνη πλευροῦ ὀξεῖαι, ἢ ἐμπύησις, ἢ δυσεντερία, ἢν ἐρυθρὰ μᾶλλον ἢ τὰ οἰδήματα.

65. When swellings appear on wounds, such cases are not likely to be attacked

either with convulsions, or delirium, but when these disappear suddenly, if situated behind, spasms and tetanus supervene, and if before, mania, acute pains of the sides, or suppurations, or dysentery, if the swellings be rather red.

66. Ἦν, τραυμάτων ἰσχυρῶν ἐόντων καὶ πονηρῶν, οἴδημα μὴ φαίνεται, μέγα κακόν.

66. When no swelling appears on severe and bad wounds, it is a great evil.

67. Τὰ χαῦνα, χρηστὰ, τὰ ἔνωμα, κακά.

67. In such cases, the soft are favorable; and crude, unfavorable.

68. Τῷ τὰ ὀπισθεν τῆς κεφαλῆς ὀδυνωμένῳ ἢ ἐν μετώπῳ ὀρθίῃ φλέψι τμηθεῖσα, ὠφελέει.

68. When a person is pained in the back part of the head, he is benefited by having the straight vein in the forehead opened.

69. Ρίγεα ἄρχεται, γυναιξὶ μὲν ἐξ ὀσφύος μᾶλλον καὶ διὰ νότου ἐς κεφαλὴν ἀτὰρ καὶ ἀνδράσι μᾶλλον ὀπισθεν, ἢ ἔμπροσθεν τοῦ σώματος, οἶον ἀπὸ πήγχεων καὶ μηρῶν ἀτὰρ καὶ τὸ δέρμα ἀραιὸν ἔχουσι, δηλοῖ δὲ τοῦτο ἢ θρίξ.

69. Rigors commence in women, especially at the loins, and spread by the back to the head; and in men also, rather in the posterior than the anterior side of the body, as from the arms and thighs; the skin there is rare, as is obvious from the growth of hair on them.

70. Οἱ ὑπὸ τεταρταίων ἀλίσκόμενοι ὑπὸ σπασμοῦ οὐ πάνυ τι ἀλίσκονται ἢν δὲ ἀλίσκωνται πρότερον, εἶτα ἐπιγένηται τεταρταῖος, παύονται.

70. Persons attacked with quartans are not readily attacked with convulsions, or if previously attacked with convulsions, they cease if a quartan supervene.

71. Ὅκοσοισι δέρματα περιτείνεται καρφαλέα καὶ σκληρὰ, ἄνευ ἰδρωτός τελευτῶσιν ὅκοσοισι δὲ χαλαρὰ καὶ ἀραιὰ, σὺν ἰδρωτί τελευτῶσιν.

71. In those persons in whom the skin is stretched, and parched and hard, the disease terminates without sweats; but in those in whom the skin is loose and rare, it terminates with sweats.

72. Οἱ ἰκτεριώδεες οὐ πάνυ τι πνευματώδεές εἰσιν.

72. Persons disposed to jaundice are not very subject to flatulence.

## SECTION VI

1. Ἐν τῆσι χρονίησι λειεντερίησιν ὄξυρεγμὴ ἐπιγνομένη, μὴ γενομένη πρότερον, σημεῖον ἀγαθόν.

1. In cases of chronic lientery, acid eructations supervening when there were none previously, is a good symptom.

2. Οἷσι Ρῖνες ὑγρότεραι φύσει, καὶ ἡ γονὴ ὑγροτέρη, ὑγιαίνουσι νοσηρότερον οἷσι δὲ τάναντία, ὑγιεινότερον.

2. Persons whose noses are naturally watery, and their seed watery, have rather a deranged state of health; but those in the opposite state, a more favorable.

3. Ἐν τῆσι μακρῆσι δυσεντερίησιν αἱ ἀποσιτίαι, κακόν καὶ ζῦν πυρετῶ, κάκιον.

3. In protracted cases of dysentery, loathing of food is a bad symptom, and still worse, if along with fever.

4. Τὰ περιμάδαρα ἔλκεα, κακοθήεα.

4. Ulcers, attended with a falling off of the hair, are mali moris.

5. Τῶν ὀδυνέων ἐν πλευρῆσι, καὶ ἐν στήθεσι, καὶ ἐν τοῖσιν ἄλλοισι μέρεσιν, ἦν μέγα διαφέρωσι, καταμαθητέον.

5. It deserves to be considered whether the pains in the sides, and in the breasts, and in the other parts, differ much from one another.

6. Τὰ νεφριτικά, καὶ ὀκόσα κατὰ τὴν κύστιν, ἐργωδῶς ὑγιάζεται τοῖσι πρεσβύτησιν.

6. Diseases about the kidneys and bladder are cured with difficulty in old men.

7. Τὰ ἀλγήματα τὰ κατὰ τὴν κοιλίην γινόμενα, τὰ μὲν μετέωρα κουφότερα, τὰ δὲ μὴ μετέωρα, ἰσχυρότερα.

7. Pains occurring about the stomach, the more superficial they are, the more slight are they; and the less superficial, the more severe.

8. Τοῖσιν ὑδρωπικοῖσι τὰ γινόμενα ἔλκεα ἐν τῷ σώματι, οὐ Ρηϊδίως ὑγιάζεται.
8. In dropsical persons, ulcers forming on the body are not easily healed.
9. Τὰ πλατέα ἐξανθήματα, οὐ πάνυ τι κνησμώδεα.
9. Broad exanthemata are not very itchy.
10. Κεφαλὴν πονέοντι καὶ περιωδυνέοντι, πῦον, ἢ ὕδωρ, ἢ αἷμα Ρυέν κατὰ τὰς Ρῖνας, ἢ κατὰ τὸ στόμα, ἢ κατὰ τὰ ὦτα, λύει τὸ νοῦσημα.
10. In a person having a painful spot in the head, with intense cephalalgia, pus or water running from the nose, or by the mouth, or at the ears, removes the disease.
11. Τοῖσι μελαγχολικοῖσι, καὶ τοῖσι νεφριτικοῖσιν αἰμορροΐδες ἐπιγινόμεναι, ἀγαθόν.
11. Hemorrhoids appearing in melancholic and nephritic affections are favorable.
12. Τῷ ἰηθέντι χρονίας αἰμορροΐδας, ἣν μὴ μία φυλαχθῆ, κίνδυνος ὑδρωπα ἐπιγενέσθαι ἢ φθίσιν.
12. When a person has been cured of chronic hemorrhoids, unless one be left, there is danger of dropsy or phthisis supervening.
13. Ὑπὸ λυγμοῦ ἐχομένῳ παρμοὶ ἐπιγενόμενοι λύουσι τὸν λυγμόν.
13. Sneezing coming on, in the case of a person afflicted with hiccup, removes the hiccup.
14. Ὑπὸ ὑδρωπος ἐχομένῳ, κατὰ τὰς φλέβας ἐς τὴν κοιλίην ὕδατος Ρυέντος, λύσις.
14. In a case of dropsy, when the water runs by the veins into the belly, it removes the disease.
15. Ὑπὸ διάρροιας ἐχομένῳ μακρῆς ἀπὸ ταυτομάτου ἔμετος ἐπιγινόμενος λύει τὴν διάρροϊαν.
15. In confirmed diarrhoea, vomiting, when it comes on spontaneously, removes

the diarrhoea.

16. Ὑπὸ πλευρίτιδος, ἢ ὑπὸ περιπλευμονίης ἐχομένῳ διάρροια ἐπιγενομένη, κακόν.

16. A diarrhoea supervening in a confirmed case of pleurisy or pneumonia is bad.

17. Ὀφθαλμιῶντι, ὑπὸ διάρροίης ληφθῆναι, ἀγαθόν.

17. It is a good thing in ophthalmy for the patient to be seized with diarrhoea.

18. Κύστιν διακοπέντι, ἢ ἐγκέφαλον, ἢ καρδίην, ἢ φρένας, ἢ τῶν ἐντέρων τι τῶν λεπτῶν, ἢ κοιλίην, ἢ ἥπαρ, θανατῶδες.

18. A severe wound of the bladder, of the brain, of the heart, of the diaphragm, of the small intestines, of the stomach, and of the liver, is deadly.

19. Ἐπὴν διακοπῇ ὀστέον, ἢ χονδρὸς, ἢ νεῦρον, ἢ γνάθου τὸ λεπτόν, ἢ ἀκροποσθίη, οὔτε αὖξεται, οὔτε ζυμφύεται.

19. When a bone, cartilage, nerve, the slender part of the jaw, or prepuce, are cut out, the part is neither restored, nor does it unite.

20. Ἦν ἐς τὴν κοιλίην αἷμα ἐκχυθῆ παρὰ φύσιν, ἀνάγκη ἐκπτυθῆναι.

20. If blood be poured out preternaturally into a cavity, it must necessarily become corrupted.

21. Τοῖσι μαινομένοισι, κιστῶν ἢ αἰμορροΐδων ἐπιγνομένων, μανίης λύσις.

21. In maniacal affections, if varices or hemorrhoids come on, they remove the mania.

22. Ὀκόσα Ρήγματα ἐκ τοῦ νότου ἐς τοὺς ἀγκῶνας καταβαίνει, φλεβοτομὴ λύει.

22. Those ruptures in the back which spread down to the elbows are removed by venesection.

23. Ἦν φόβος ἢ δυσθυμίη πούλυν χρόνον διατελέη, μελαγχολικόν τὸ τοιοῦτον.

23. If a fright or despondency lasts for a long time, it is a melancholic affection.

24. Ἐντέρων ἢν διακοπῇ τῶν λεπτῶν τι, οὐ ζυμφύεται.

24. If any of the intestines be transfixed, it does not unite.

25. Ἐρυσίπελας, ἔξωθεν καταχεόμενον, ἔσω τρέπεσθαι οὐκ ἀγαθόν ἔσωθεν δὲ ἔξω, ἀγαθόν.

25. It is not a good sign for an erysipelas spreading outwardly to be determined inward; but for it to be determined outward from within is good.

26. Ὅκόσοισιν ἂν ἐν τοῖσι καύσοισι τρόμοι γενωνται, παρακοπή λύει.

26. In whatever cases of ardent fever tremors occur, they are carried off by a delirium.

27. Ὅκόσοι ἔμπυοι ἢ ὑδρωπικοὶ τέμνονται ἢ καίονται, ἐκρυνέντος τοῦ πύου ἢ τοῦ ὕδατος ἀθρόου, πάντως ἀπόλλυνται.

27. Those cases of empyema or dropsy which are treated by incision or the cautery, if the water or pus flow rapidly all at once, certainly prove fatal.

28. Εὐνοῦχοι οὐ ποδαгриῶσιν, οὐδὲ φαλακροὶ γίνονται.

28. Eunuchs do not take the gout, nor become bald.

29. Γυνὴ οὐ ποδαгриᾶ, ἢν μὴ τὰ καταμήνια αὐτέη ἐκλίπη.

29. A woman does not take the gout, unless her menses be stopped.

30. Παῖς οὐ ποδαгриᾶ πρὸ τοῦ ἀφροδισιασμοῦ.

30. A young man does not take the gout until he indulges in coition.

31. Ὀδύνας ὀφθαλμῶν ἀκρητοποσίη, ἢ λουτρὸν, ἢ πυρίη, ἢ φλεβοτομία, ἢ φαρμακοποσίη λύει.

31. Pains of the eyes are removed by drinking pure wine, or the bath, or a fomentation, or venesection, or purging.

32. Τραυλοὶ ὑπὸ διαρροίης μάλιστα ἀλίσκονται μακρῆς.



32. Persons whose speech has become impaired are likely to be seized with chronic diarrhoea.

33. Οἱ ὄξυρεγμιώδεες οὐ πάνυ τι πλευριτικοὶ γίνονται.

33. Persons having acid eructations are not very apt to be seized with pleurisy.

34. Ὅκόσοι φαλακροὶ, τουτέοισι κίρσοι μεγάλοι οὐ γίνονται ὀκόσοισι δὲ φαλακροῖσιν ἐοῦσιν κίρσοι γίνονται, πάλιν οὔτοι γίνονται δασέες.

34. Persons who have become bald are not subject to large varices; but should varices supervene upon persons who are bald, their hair again grows thick.

35. Τοῖσιν ὑδρωπικοῖσι βῆξ ἐπιγενομένη, κακόν.

35. Hiccup supervening in dropsical cases is bad.

36. Δυσουρίην φλεβοτομή λύει, τάμνει δὲ τὰς ἔσω.

36. Venesection cures dysuria; open the internal veins of the arm.

37. Ὑπὸ κυνάγχης ἐχομένω οἰδήματα γενέσθαι ἐν τῷ βρόγχῳ ἔξω, ἀγαθόν.

37. It is a good symptom when swelling on the outside of the neck seizes a person very ill of quinsy, for the disease is turned outwardly.

38. Ὅκόσοισι κρυπτοὶ καρκίνοι γίνονται, μὴ θεραπεύειν βέλτιον θεραπευόμενοι γὰρ ἀπόλλυνται ταχέως, μὴ θεραπευόμενοι δὲ, πουλὺν χρόνον διατελέουσιν.

38. It is better not to apply any treatment in cases of occult cancer; for, if treated, the patients die quickly; but if not treated, they hold out for a long time.

39. Σσπασμοὶ γίνονται, ἢ ὑπὸ πληρώσιος, ἢ κενώσιος οὔτω δὲ καὶ λυγμός.

39. Convulsions take place either from repletion or depletion; and so it is with hiccup.

40. Ὅκόσοισι περὶ τὸ ὑποχόνδριον πόνοι γίνονται ἄτερ φλεγμοῆς, τουτέοισι πυρετὸς ἐπιγενόμενος λύει τὸν πόνον.

40. When pains, without inflammation, occur about the hypochondria, in such

cases, fever supervening removes the pain.

41. Ὀκόσοισι διάπυόν τι ἐὸν ἐν τῷ σώματι μὴ διασημαίνει, τουτέοισι διὰ παχύτητα τοῦ τόπου οὐ διασημαίνει.

41. When pus formed anywhere in the body does not point, this is owing to the thickness of the part.

42. Ἐν τοῖσιν ἰκτερικοῖσι τὸ ἥπαρ σκληρὸν γενέσθαι, πονηρόν.

42. In cases of jaundice, it is a bad symptom when the liver becomes indurated.

43. Ὀκόσοι σπληνώδεις ὑπὸ δυσεντερίης ἀλίσκονται, τουτέοισιν, ἐπιγενομένης μακρῆς τῆς δυσεντερίης, ὕδρωψ ἐπιγίνεται, ἢ λειεντερίη, καὶ ἀπόλλυνται.

43. When persons having large spleens are seized with dysentery, and if the dysentery pass into a chronic state, either dropsy or lientery supervenes, and they die.

44. Ὀκόσοισιν ἐκ στραγγουρίας εἰλεοὶ γίνονται, ἐν ἑπτὰ ἡμέρησιν ἀπόλλυνται, ἢ γμῆ, πυρετοῦ ἐπιγενομένου, ἄλις τὸ οὔρον Ρυῆ.

44. When ileus comes on in a case of strangury, they prove fatal in seven days, unless, fever supervening, there be a copious discharge of urine.

45. Ἐλκεα ὀκόσα ἐνιαύσια γίνεται, ἢ μακρότερον χρόνον ἴσχει, ἀνάγκη ὀστέον ἀφίστασθαι, καὶ τὰς οὐλὰς κοίλας γίνεσθαι.

45. When ulcers continue open for a year or upward, there must necessarily be exfoliation of bone, and the cicatrices are hollow.

46. Ὀκόσοι ὑβοὶ ἐξ ἄσθματος ἢ βηχὸς γίνονται πρὸ τῆς ἡβης, ἀπόλλυνται.

46. Such persons as become hump-backed from asthma or cough before puberty, die.

47. Ὀκόσοισι φλεβοτομή ἢ φαρμακεῖη ζυμφέρει, τουτέους προσῆκον τοῦ ἥρος φλεβοτομεῖν, ἢ φαρμακεύειν.

47. Persons who are benefited by venesection or purging, should be bled or

purged in spring.

48. Τοῖσι σπληνώδεσι δυσεντερίη ἐπιγενομένη, ἀγαθόν.

48. In enlargement of the spleen, it is a good symptom when dysentery comes on.

49. Ὅκοντα ποδαγρικὰ νουσήματα γίνεται, ταῦτα ἀποφλεγμῆναντα ἐν τεσσαράκοντα ἡμέρησιν ἀποκαθίσταται.

49. In gouty affections, the inflammation subsides in the course of forty days.

50. Ὅκοντοισιν ἂν ὁ ἐγκέφαλος διακοπῆ, τουτέοισιν ἀνάγκη πυρετὸν καὶ χολῆς ἔμετον ἐπιγίνεσθαι.

50. When the brain is severely wounded, fever and vomiting of bile necessarily supervene.

51. Ὅκοντοισιν ὑγιαίνουσιν ὀδύνη γίνεται ἐξαίφνης ἐν τῇ κεφαλῇ, καὶ παραχρῆμα ἄφωνοι κεῖνται, καὶ Ρέγκουσιν, ἀπόλλυνται ἐν ἑπτὰ ἡμέρησιν, ἢν μὴ πυρετὸς ἐπιλάβῃ.

51. When persons in good health are suddenly seized with pains in the head, and straightway are laid down speechless, and breathe with stertor, they die in seven days, unless fever come on.

52. Σκοπεῖν δὲ χρῆ καὶ τὰς ὑποφάσιαι τῶν ὀφθαλμῶν ἐν τοῖσιν ὕπνοισιν ἦν γάρ τι ὑποφαίνεται, ξυμβαλλομένων τῶν βλεφάρων, τοῦ λευκοῦ μὴ ἐκ διαρροΐης ἔοντι ἢ φαρμακοποσίης, φλαῦρον τὸ σημεῖον καὶ θανατῶδες σφόδρα.

52. We must attend to the appearances of the eyes in sleep, as presented from below; for if a portion of the white be seen between the closed eyelids, and if this be not connected with diarrhoea or severe purging, it is a very bad and mortal symptom.

53. Αἱ παραφροσύναι αἱ μὲν μετὰ γέλωτος γινόμεναι, ἀσφαλέστεραι αἱ δὲ μετὰ σπουδῆς, ἐπισφαλέστεραι.

53. Delirium attended with laughter is less dangerous than delirium attended with a serious mood.

54. Ἐν τοῖσιν ὀξέσι πάθεσι τοῖσι μετὰ πυρετοῦ αἱ κλαυθμώδεις ἀναπνοαὶ, κακαί.

54. In acute diseases, complicated with fever, a moaning respiration is bad.

55. Τὰ ποδαγρικὰ τοῦ ἥρος καὶ τοῦ φθινοπώρου κινέεται ὡς ἐπὶ τὸ πούλυ.

55. For the most part, gouty affections rankle in spring and in autumn.

56. Τοῖσι μελαγχολικοῖσι νουσήμασιν ἐς τάδε ἐπικίνδυνοι αἱ ἀποσκήψεις ἢ ἀπόπληξιν τοῦ σώματος, ἢ σπασμὸν, ἢ μανίην, ἢ τύφλωσιν σημαίνουσιν.

56. In melancholic affections, determinations of the humor which occasions them produce the following diseases; either apoplexy of the whole body, or convulsion, or madness, or blindness.

57. Ἀπόπληκτοι δὲ μάλιστα γίνονται ἡλικίῃ τῇ ἀπὸ τεσσαράκοντα ἐτέων ἄχρις ἑξήκοντα.

57. Persons are most subject to apoplexy between the ages of forty and sixty.

58. Ἦν ἐπίπλοον ἐκπέση, ἀνάγκη ἀποσαπῆναι.

58. If the omentum protrude, it necessarily mortifies and drops off.

59. Ὀκόσοισιν ὑπὸ ἰσχιάδος ἐνοχλουμένοισιν ἐξίσταται τὸ ἰσχίον, καὶ πάλιν ἐμπίπτει, τουτέοισι μύξαι ἐπιγίνονται.

59. In chronic diseases of the hip-joint, if the bone protrude and return again into its socket, there is mucosity in the place.

60. Ὀκόσοισιν ὑπὸ ἰσχιάδος ἐνοχλουμένοισι χρονίης τὸ ἰσχίον ἐξίσταται, τουτέοισι τήκεται τὸ σκέλος, καὶ χωλοῦνται, ἢν μὴ καυθέωσιν.

60. In persons affected with chronic disease of the hip-joint, if the bone protrude from its socket, the limb becomes wasted and maimed, unless the part be cauterized.

## SECTION VII

1. Ἐν τοῖσιν ὀξέσι νοσήμασι ψύξις ἀκρωτηρίων, κακόν.  
1. In acute diseases, coldness of the extremities is bad.
2. Ἐπὶ ὀστέῳ νοσέοντι σὰρξ πελιδνὴ, κακόν.  
2. Livid flesh on a diseased bone is bad.
3. Ἐπὶ ἐμέτῳ λύγξ καὶ ὀφθαλμοὶ ἐρυθροὶ, κακόν.  
3. Hiccup and redness of the eyes, when they supervene on vomiting, are bad.
4. Ἐπὶ ἰδρῶτι φρίκη, οὐ χρηστόν.  
4. A chill supervening on a sweat is not good.
5. Ἐπὶ μανίῃ δυσεντερίῃ, ἢ ὕδρωψ, ἢ ἔκστασις, ἀγαθόν.  
5. Dysentery, or dropsy, or ecstasy coming on madness is good.
6. Ἐν νούσῳ πολυχρονίῃ ἀσιτίῃ καὶ ἄκρητοι ὑποχωρήσεις, κακόν.  
6. In a very protracted disease, loss of appetite and unmixed discharges from the bowels are bad symptoms.
7. Ἐκ πολυποσίης ῥῆγος καὶ παραφροσύνη, κακόν.  
7. A rigor and delirium from excessive drinking are bad.
8. Ἐπὶ φύματος ἔσω ῥήξει ἐκλυσίς, ἔμετος, καὶ λειποψυχὴ γίνεται.  
8. From the rupture of an internal abscess, prostration of strength, vomiting, and deliquium animi result.
9. Ἐπὶ αἵματος ῥύσει παραφροσύνη ἢ σπασμὸς, κακόν.  
9. Delirium or convulsion from a flow of blood is bad.

10. Ἐπὶ εἰλεῶ ἔμετος, ἢ λῦγξ, ἢ σπασμὸς, ἢ παραφροσύνη, κακόν
10. Vomiting, or hiccup, or convulsion, or delirium, in ileus, is bad.
11. Ἐπὶ πλευρίτιδι περιπλευμονίη, κακόν.
11. Pneumonia coming on pleurisy is bad.
12. Ἐπὶ περιπλευμονίη φρενίτις, κακόν.
12. Phrenitis along with pneumonia is bad.
13. Ἐπὶ καύμασιν ἰσχυροῖσι σπασμὸς ἢ τέτανος, κακόν.
13. Convulsion or tetanus, coming upon severe burning, is bad.
14. Ἐπὶ πληγῇ ἐς τὴν κεφαλὴν ἔκπληξις ἢ παραφροσύνη, κακόν.
14. Stupor or delirium from a blow on the head is bad.
15. Ἐπὶ αἵματος πτύσει, πύου τύσις.
15. From a spitting of blood there is a spitting of pus.
16. Ἐπὶ πύου πτύσει, φθίσις καὶ ῥύσις ἐπὶν δὲ τὸ σίελον ἴσχηται, ἀποθνήσκουσιν.
16. From spitting of pus arise phthisis and a flux; and when the sputa are stopped, they die.
17. Ἐπὶ φλεγμονῇ τοῦ ἥπατος λῦγξ, κακόν.
17. Hiccup in inflammation of the liver bad.
18. Ἐπὶ ἀγρυπνίη σπασμὸς ἢ παραφροσύνη, κακόν. 18 βις. Ἐπὶ ληθάργω τρόμος, κακόν.
18. Convulsion or delirium supervening upon insomnolency is bad. Trembling upon lethargus is bad.
19. Ἐπὶ ὀστέου ψιλώσει, ἐρυσίπελας.

19. Erysipelas upon exposure of a bone (is bad?).
20. Ἐπὶ ἐρυσιπέλατι σηπεδῶν ἢ ἐκπύησις.
20. Mortification or suppuration upon erysipelas is bad.
21. Ἐπὶ ἰσχυρῷ σφυγμῷ ἐν τοῖσιν ἔλκεσιν, αἰμορραγία.
21. Hemorrhage upon a strong pulsation in wounds is bad.
22. Ἐπὶ ὀδύνη πολυχρονίῳ τῶν περὶ τὴν κοιλίην, ἐκπύησις.
22. Suppuration upon a protracted pain of the parts about the bowels is bad.
23. Ἐπὶ ἀκρήτῳ ὑποχωρήσει, δυσεντερία.
23. Dysentery upon unmixed alvine discharges is bad.
24. Ἐπὶ ὀστέου διακοπῆ, παραφροσύνη, ἢν κενεὸν λάβη
24. Delirium upon division of the cranium, if it penetrate into the cavity of the head, is bad.
25. Ἐκ φαρμακοποσίας σπασμὸς, θανατῶδες.
25. Convulsion upon severe purging is mortal.
26. Ἐπὶ ὀδύνη ἰσχυρῇ τῶν περὶ τὴν κοιλίην, ἀκρωτηρίων ψύξις, κακόν.
26. Upon severe pain of the parts about the bowels, coldness of the extremities coming on is bad.
27. Ἐν γαστρὶ ἐχούσῃ τεινεσμὸς ἐπιγενόμενος ἐκτρῶσαι ποιέει.
27. Tenesmus coming on in a case of pregnancy causes abortion.
28. Ὅ τι ἂν ὀστέον, ἢ χόνδρος, ἢ νεῦρον ἀποκοπῆ ἐν τῷ σώματι, οὔτε αὖξεται, οὔτε συμφύεται.
28. Whatever piece of bone, cartilage, or nerve ( *tendon?* ) is cut off, it neither grows nor unites.

29. Ἦν ὑπὸ λευκοῦ φλέγματος ἐχομένῳ διάρροια ἐπιγένηται ἰσχυρῆ, λύει τὴν νοῦσον.

29. When strong diarrhoea supervenes in a case of leucophlegmatia, it removes the disease.

30. Ὀκόσοισιν ἀφρώδεα τὰ διαχωρήματα ἐν τῆσι διαρροίῃσι, τουτέοισιν ἀπὸ τῆς κεφαλῆς ταῦτα ἀποκαταρρέει.

30. In those cases in which frothy discharges occur in diarrhoea there are defluxions from the head.

31. Ὀκόσοισι πυρέσσουσιν ἐν τοῖσιν οὔροισι κριμνώδεες αἱ ὑποστάσιες γίνονται, μακρὴν τὴν ἀρρωστίην σημαίνουσιν.

31. When there is a farinaceous sediment in the urine during fever, it indicates a protracted illness.

32. Ὀκόσοισι δὲ χολώδεες αἱ ὑποστάσιες, ἄνωθεν δὲ λεπταὶ, ὀξείην τὴν ἀρρωστίην σημαίνουσιν.

32. In those cases in which the urine is thin at first, and the sediments become bilious, an acute disease is indicated.

33. Ὀκόσοισι δὲ διεστηκότα τὰ οὔρα γίνεται, τουτέοισι ταραχὴ ἰσχυρὴ ἐν τῷ σώματι ἐστίν.

33. In those cases in which the urine becomes divided there is great disorder in the body.

34. Ὀκόσοισι δὲ ἐπὶ τοῖσιν οὔροισιν ἐφίστανται πομφόλυγες, νεφριτικὰ σημαίνουσι, καὶ μακρὴν τὴν ἀρρωστίην ἔσεσθαι.

34. When bubbles settle on the surface of the urine, they indicate disease of the kidneys, and that the complaint will be protracted.

35. Ὀκόσοισι δὲ λιπαρὴ ἢ ἐπίστασις καὶ ἀθρόη, τουτέοισι νεφριτικὰ καὶ ὀξέα σημαίνει.

35. When the scum on the surface is fatty and copious, it indicates acute diseases



of the kidneys.

36. Ὅκοσοισι δὲ νεφριτικοῖσιν ἐοῦσι τὰ προειρημένα συμβαίνει σημήϊα, πόνοι τε ὀξέες περὶ τοὺς μύας τοὺς ῥαχιαίους γίνονται, ἢν μὲν περὶ τοὺς ἔξω τόπους γίνονται, ἀπόστημα προσδέχου ἐσόμενον ἔξω ἢν δὲ μᾶλλον οἱ πόνοι πρὸς τοὺς ἔσω τόπους γίνονται, καὶ τὸ ἀπόστημα προσδέχου ἐσόμενον μᾶλλον ἔσω.

36. Whenever the aforementioned symptoms occur in nephritic diseases, and along with them acute pains about the muscles of the back, provided these be seated about the external parts, you may expect that there will be an abscess; but if the pains be rather about the internal parts, you may also rather expect that the abscess will be seated internally.

37. Ὅκοσοι αἷμα ἐμέουσιν, ἢν μὲν ἄνευ πυρετοῦ, σωτήριον

ἢν δὲ ζῦν πυρετῶ, κακὸν θεραπεύειν δὲ τοῖσι ψυκτικοῖσι καὶ τοῖσι στυπτικοῖσιν.

37. Haematemesis, without fever, does not prove fatal, but with fever it is bad; it is to be treated with refrigerant and styptic things.

38. Κατάρροοι οἱ ἐς τὴν ἄνω κοιλίην ἐκπυέονται ἐν ἡμέρησιν εἴκοσιν.

38. Defluxions into the cavity of the chest suppurate in twenty days.

39. Ἦν οὐρὴ αἷμα καὶ θρόμβους, καὶ στραγγουρή ἔχη, καὶ ὀδύνη ἐπίπτῃ ἐς τὸν περίνεον καὶ τὸν κτένα, τὰ περὶ τὴν κύστιν νοσέειν σημαίνει.

39. When a patient passes blood and clots, and is seized with strangury and pain in the perineum and pubes, disease about the bladder is indicated.

40. Ἦν ἡ γλῶσσα ἐξαίφνης ἀκρατῆς γένηται, ἢ ἀπόπληκτόν τι τοῦ σώματος, μελαγχολικὸν τὸ τοιοῦτο γίνεται.

40. If the tongue suddenly lose its powers, or a part of the body become apoplectic, the affection is of a melancholic nature.

41. Ἦν, ὑπερκαθαιρομένων τῶν πρεσβυτέρων, λυγξ ἐπιγένηται, οὐκ ἀγαθόν

41. In hypercatharsis, of old persons, hiccup supervening is not a good symptom.

42. Ἦν πυρετὸς μὴ ἀπὸ χολῆς ἔχη, ὕδατος πολλοῦ καὶ θερμοῦ καταχεομένου κατὰ τῆς κεφαλῆς, λύσις τοῦ πυρετοῦ γίνεται.

42. In a fever, is not of a bilious nature, a copious allusion of hot water upon the head removes the fever.

43. Γυνὴ ἀμφιδέξιος οὐ γίνεται.

43. A woman does not become ambidexterous.

44. Ὀκόσοι ἔμπυοι καίονται ἢ τέμνονται, ἦν μὲν τὸ πῦον καθαρὸν ῥυῆ καὶ λευκὸν, περιγίνονται ἦν δὲ ὕφαιμον καὶ βορβορῶδες καὶ δυσῶδες, ἀπόλλυνται

44. When empyema is treated either by the cautery or incision, if pure and white pus flow from the wound, the patients recover; but if mixed with blood, slimy and fetid, they die.

45. Ὀκόσοι τὸ ἥπαρ διάπυον καίονται ἢ τέμνονται, ἦν μὲν τὸ πῦον καθαρὸν ῥυῆ καὶ λευκὸν, περιγίνονται ἐν χιτῶνι γὰρ τὸ πῦον τουτέοισιν ἐστὶν ἦν δὲ οἶον ἀμόργη ῥυῆ, ἀπόλλυνται.

45. When abscess of the liver is treated by the cautery or incision, if the pus which is discharged be pure and white, the patients recover, (for in this case it is situated in the coats of the liver;) but if it resemble the lees of oil as it flows, they die.

46. Ὀδύνας ὀφθαλμῶν, ἄκρητον ποτίσας καὶ λούσας πολλῶ θερμῶ, φλεβοτόμει.

46. Pains of the eyes are removed by drinking undiluted wine, plenteous bathing with hot water, and venesection.

47. Ὑδρωπιῶντα ἦν βῆξ ἔχη, ἀνέλπιστός ἐστὶν.

47. If a dropsical patient be seized with hiccup the case is hopeless.

48. Στραγγουρίην καὶ δυσουρίην θώρηξις καὶ φλεβοτομή λύει τάμνειν δὲ τὰς ἔσω.

48. Strangury and dysuria are cured by drinking pure wine, and venesection; open the vein on the inside.

49. Ὑπὸ κυνάγχης ἐχομένῳ οἴδημα καὶ ἐρύθημα ἐν τῷ στήθει ἐπιγενόμενον, ἀγαθὸν ἕξω γὰρ τρέπεται τὸ νόσημα.

49. It is a good sign when swelling and redness on the breast seize a person very ill of quinsy, for in this case the disease is diverted outwardly.

50. Ὀκόσοισιν ἂν σφακελισθῆ ὁ ἐγκέφαλος, ἐν τρισὶν ἡμέρησιν ἀπόλλυνται ἢν δὲ ταύτας διαφύγωσιν, ὑγιέες γίνονται.

50. When the brain is attacked with sphacelus, the patients die in three days; or if they escape these, they recover.

51. Πταρμὸς γίνεται ἐκ τῆς κεφαλῆς, διαθερμαινομένου τοῦ ἐγκεφάλου, ἢ διυγραιομένου τοῦ ἐν τῇ κεφαλῇ κενεοῦ ὑπερχέεται οὖν ὁ ἀήρ ὁ ἐνεῶν, ψοφέει δὲ, ὅτι διὰ στενοῦ ἢ διέξοδος αὐτοῦ ἐστίν

51. Sneezing arises from the head, owing to the brain being heated, or the cavity (*ventricle*) in the head being filled with humors; the air confined in it then is discharged, and makes a noise, because it comes through a narrow passage.

52. Ὀκόσοι ἤπαρ περιωδυνέουσι, τουτέοισι πυρετὸς ἐπιγενόμενος λύει τὴν ὀδύνην.

52. Fever supervening on painful affections of the liver removes the pain.

53. Ὀκόσοισι ξυμφέρει αἷμα ἀφαιρέεσθαι ἀπὸ τῶν φλεβῶν, τουτέοισι ξυμφέρει ἦρος φλεβοτομέεσθαι.

53. Those persons to whom it is beneficial to have blood taken from their veins, should have it done in spring.

54. Ὀκόσοισι μεταξὺ τῶν φρενῶν καὶ τῆς γαστρὸς φλέγμα ἀποκλείεται, καὶ ὀδύνην παρέχει, οὐκ ἔχον διέξοδον ἐς οὐδετέρην τῶν κοιλιῶν, τουτέοισι, κατὰ τὰς φλέβας ἐς τὴν κύστιν τραπέντος τοῦ φλέγματος, λύσις γίνεται τῆς νόσου.

54. In those cases where phlegm is collected between the diaphragm and the stomach, and occasions pain, as not finding a passage into either of the cavities, the disease will be carried off if the phlegm be diverted to the bladder by the veins.

55. Ὀκόσοισι δ' ἂν τὸ ἥπαρ ὕδατος πλησθὲν ἐς τὸ ἐπίπλοον ῥαγῆ, τουτέοισιν ἡ κοιλίη ὕδατος ἐμπίπεται, καὶ ἀποθνήσκουσιν.

55. When the liver is filled with water and bursts into the epiploon, in this case the belly is filled with water and the patient dies.

56. Ἀλύκη, χάσμη, φρίκη, οἶνος ἴσος ἴσῳ πινόμενος λύει.

56. Anxiety, yawning, rigor,-wine drunk with an equal proportion of water, removes these complaints.

57. Ὀκόσοισιν ἐν τῇ οὐρήθρη φύματα γίνεται, τουτέοισι, διαπυήσαντος καὶ ἐκραγέντος, λύεται ὁ πόνος

57. When tubercles ( *phymata* ) form in the urethra, if they suppurate and burst, the pain is carried off.

58. Ὀκόσοισιν ἂν ὁ ἐγκέφαλος σεισθῆ ὑπὸ τινος προφάσιος, ἀνάγκη ἀφώνους γίνεσθαι παραχρῆμα.

58. In cases of concussion of the brain produced by any cause, the patients necessarily lose their speech.

60. Τοῖσι σώμασι τοῖσιν ὑγράς τὰς σάρκας ἔχουσι δεῖ λιμὸν ἐμποιέειν λιμὸς γὰρ ξηραίνει τὰ σώματα.

59. In a person affected with fever, when there is no swelling in the fauces, should suffocation suddenly come on, and the patient not be able to swallow, except with difficulty, it is a mortal symptom. In the case of a person oppressed by fever, if the neck be turned aside, and the patient cannot swallow, while there is no swelling in the neck, it is a mortal sign.

59. Ἦν ὑπὸ πυρετοῦ ἐχομένῳ, οἰδήματος μὴ ἐόντος ἐν τῇ φάρυγγι, πνιξ ἐξαίφνης ἐπιγένηται, καὶ καταπίνειν μὴ δύνηται, ἀλλ' ἢ μόλις, θανάσιμον. 59 βις. Ἦν ὑπὸ πυρετοῦ ἐχομένῳ ὁ τράχηλος ἐπιστραφῆ, καὶ καταπίνειν μὴ δύνηται, οἰδήματος μὴ ἐόντος ἐν τῷ τραχήλῳ, θανάσιμον.

60. Fasting should be prescribed the those persons who have humid flesh; for fasting dries bodies.

61. Ὄκου ἂν ἐν ὅλῳ τῷ σώματι μεταβολαί, καὶ τὸ σῶμα καταψύχεται, καὶ πάλιν θερμαίνεται, ἢ χρῶμα ἕτερον ἐξ ἑτέρου μεταβάλλη, μῆκος νοῦσου σημαίνει.

61. When there are changes in the whole body, and the body becomes sometimes cold and sometimes hot, and the color changes, a protracted disease is indicated.

62. Ἰδρῶς πουλὺς, θερμὸς ἢ ψυχρὸς, ρέων αἰεὶ, σημαίνει ἔχειν πλησμονὴν ὑγροῦ ἀπάγειν οὖν χρὴ τῷ μὲν ἰσχυρῷ ἄνωθεν, τῷ δὲ ἀσθενεῖ κάτωθεν.

62. A copious sweat, hot or cold, constantly flowing, indicates a superabundance of humidity; we must evacuate then, in a strong person upward, and in a weak, downward.

63. Οἱ πυρετοὶ οἱ μὴ διαλείποντες, ἢν ἰσχυρότεροι διὰ τρίτης γίνονται, ἐπικίνδunami ὅτῳ δ' ἂν τρόπῳ διαλείπωσι, σημαίνει ὅτι ἀκίνδunami.

63. Fevers, not of the intermittent type, if they become exacerbated every third day are dangerous; but if they intermit in any form whatever, this shows that they are not dangerous.

64. Ὄκόσοισι πυρετοὶ μακροὶ, τουτέοισιν ἢ φύματα, ἢ ἐς τὰ ἄρθρα πόνοι ἐγγίνονται.

64. In cases of protracted fever, either chronic abscesses or pains in the joints come on.

65. Ὄκόσοισι φύματα ἢ ἐς τὰ ἄρθρα πόνοι ἐκ πυρετῶν γίνονται, οὗτοι σιτίοισι πλείοσι χρέονται.

65. When chronic abscesses ( *phymata* ) or pains in the joints take place after fevers, the patients are using too much food.

66. Ἦν τις πυρέσσοντι τροφήν διδῶ, ἢν ὑγιεῖ, τῷ μὲν ὑγιαίνουντι ἰσχὺς, τῷ δὲ κάμνοντι νοῦσος.

66. If one give to a person in fever the same food which is given to a person in good health, what is strength to the one is disease to the other.

67. Τὰ διὰ τῆς κύστιος διαχωρέοντα ὀρῆν δεῖ, εἰ οἷα τοῖς

ὕγιαίνουσιν ὑποχωρέεται τὰ ἥκιστα οὖν ὅμοια τουτέοισι, ταῦτα νοσωδέστερα, τὰ δ' ὅμοια τοῖσιν ὕγιαίνουσιν, ἥκιστα νοσερά.

67. We must look to the urinary evacuations, whether they resemble those of persons in health; if not at all so, they are particularly morbid, but if they are like those of healthy persons, they are not at all morbid.

68. Καὶ οἷσι τὰ ὑποχωρήματα, ἦν ἐάσης στῆναι καὶ μὴ κινήσης, ὑφίσταται οἰονεὶ ζύσματα, τουτέοισι συμφέρει ὑποκαθῆραι τὴν κοιλίην ἦν δὲ μὴ καθαρὴν ποιήσας διδῶς τὰ ροφήματα, ὀκόσω ἂν κλείω διδῶς, μᾶλλον βλάψεις.

68. When the dejections are allowed to stand and not shaken, and a sediment is formed like scrapings (of the bowels), in such a case it is proper to purge the bowels; and if you give ptisans before purging, the more you give the more harm you will do.

69. Ὀκόσοισιν ἂν κάτω ὤμᾳ διαχωρῆ, ἀπὸ χολῆς μελαίνης ἐστὶν, ἦν πλείονα, πλείονος, ἦν ἐλάσσονα, ἐλάσσονος.

69. Crude dejections are the product of black bile; if abundant, of more copious, and if deficient, of less copious collections of it.

70. Αἱ ἀποχρέμψεις αἱ ἐν τοῖσι πυρετοῖσι τοῖσι μὴ διαλείπουσι, πελιδναὶ καὶ αἱματώδεις καὶ δυσώδεις, πᾶσαι κακαὶ ἀποχωρέουσαι δὲ καλῶς, ἀγαθαί, καὶ κατὰ κοιλίην καὶ κύστιν καὶ ὄκου ἂν τι ἀποχωρέον στῆ μὴ κεκαθαρμένῳ, κακόν.

70. The sputa in fevers, not of an intermittent type, which are livid, streaked with blood, and fetid, are all bad, it is favorable when this evacuation, like the urinary and alvine, passes freely; and whenever any discharge is suppressed and not purged off it is bad.

71. Τὰ σώματα χρῆ, ὄκου τις βούλεται καθαίρεσθαι, εὔροα ποιέειν κῆν μὲν ἄνω βούλη εὔροα ποιέειν, στῆσαι τὴν κοιλίην ἦν δὲ κάτω εὔροα ποιέειν, ὑγρῆναι τὴν κοιλίην.

71. When you wish to purge the body, you must bring it into a state favorable to evacuations; and if you wish to dispose it to evacuations upward, you must bind the belly; and if you wish to dispose it to evacuations downward, you must moisten the belly.

72. Ὕπνος, ἀγρυπνίη, ἀμφοτέρω μᾶλλον τοῦ μετρίου γινόμενα, νοῦσος.

72. Sleep and watchfulness, both of them, when immoderate, constitute disease.

73. Ἐν τοῖσι μὴ διαλείπουσι πυρετοῖσιν, ἢν τὰ μὲν ἔξω ψυχρὰ ἦ, τὰ δὲ ἔσω καίηται, καὶ πυρετὸς ἔχη, θανάσιμον.

73. In fevers which do not intermit, if the external parts be cold, and the internal burning hot, and fever prevail, it is a mortal sign.

74. Ἐν μὴ διαλείποντι πυρετῷ, ἢν χειλὸς, ἢ ρίς, ἢ ὀφθαλμὸς διαστραφῆ, ἢν μὴ βλέπη, ἢν μὴ ἀκούη, ἢδη ἀσθενῆς ἐὼν, ὃ τι ἂν ἦ τουτέων τῶν σημείων, θανάσιμον.

74. In a fever which does not intermit, if a lip, the nose, or an eye be distorted, if the patient lose his sense of sight or of hearing, while now in a weak state, - whatever of these symptoms occurs it is mortal.

75. Ἐπὶ λευκῷ φλέγματι ὕδρωψ ἐπιγίνεται.

75. Upon leucophlegmatia dropsy supervenes.

76. Ἐπὶ διαρροίῃ δυσεντερίῃ.

76. Upon diarrhoea dysentery.

77. Ἐπὶ δυσεντερίῃ λειεντερίῃ.

77. Upon dysentery lientery.

78. Ἐπὶ σφακέλω ἀπόστασις ὀστέου.

79 et 80. Ἐπὶ αἵματος ἐμέτῳ φθορῇ, καὶ πύου κάθαρσις ἄνω ἐπὶ φθορῇ ῥεῦμα ἐκ τῆς κεφαλῆς ἐπὶ ῥεύματι διάρροια ἐπὶ διαρροίῃ σχέσις τῆς ἄνω καθάρσιος ἐπὶ τῇ σχέσει θάνατος.

78. Upon sphaelus exfoliation of the bone.

79 & 80. Ἐπὶ αἵματος ἐμέτῳ φθορῇ, καὶ πύου κάθαρσις ἄνω ἐπὶ φθορῇ ῥεῦμα ἐκ τῆς κεφαλῆς ἐπὶ ῥεύματι διάρροια ἐπὶ διαρροίῃ σχέσις τῆς ἄνω καθάρσιος ἐπὶ τῇ σχέσει θάνατος.

79. and 80

Upon vomiting of blood consumption, and a purging of pus upward; upon consumption a defluxion from the head; upon a defluxion diarrhoea; upon diarrhoea a stoppage of the purging upward; upon the stoppage of it death.

81. Ὅκοῖα καὶ ἐν τοῖσι κατὰ τὴν κύστιν, καὶ τοῖσι κατὰ τὴν κοιλίην ὑποχωρήμασι, καὶ ἐν τοῖσι κατὰ τὰς σάρκας, καὶ ἦν που

ἄλλη τῆς φύσιος ἐκβαίνει τὸ σῶμα, ἦν ὀλίγον, ὀλίγη ἢ νοῦσοξ γίνεται, ἦν πουλὺ, πολλή, ἦν πάνυ πουλὺ, θανάσιμον τὸ τοιοῦτον.

81. In the discharges by the bladder, the belly, and the flesh ( *the skin?* ) if the body has departed slightly from its natural condition, the disease is slight; if much, it is great; if very much, it is mortal.

82. Ὅκόσοι ὑπὲρ τὰ τεσσαράκοντα ἔτεα φρενιτικοὶ γίνονται, οὐ πάνυ τι ὑγιάζονται ἥσσον γὰρ κινδυνεύουσιν, οἷσιν ἂν οἰκεῖη τῆς φύσιος καὶ τῆς ἡλικίης ἢ νοῦσος ἦ.

82. Persons above forty years of age who are affected with frenzy, do not readily recover; the danger is less when the disease is cognate to the constitution and age.

83. Ὅκόσοισιν ἐν τῆσιν ἀρρωστήσιν οἱ ὀφθαλμοὶ κατὰ προαίρεσιν δακρῦουσιν, ἀγαθὸν ὀκόσοισι δὲ ἄνευ προαιρέσιος, κακόν.

83. In whatever diseases the eyes weep voluntarily, it is a good symptom, but when involuntarily, it is a bad.

84. Ὅκόσοισιν ἐν τοῖσι πυρετοῖσι τεταρταίοισιν ἐοῦσιν αἷμα ἐκ τῶν ῥινῶν ῥυῆ, πονηρόν.

84. When in quartan fevers blood flows from the nostrils it is a bad symptom.

85. Ἰδρῶτες ἐπικίνδυνοι ἐν τῆσι κρισίμοισιν ἡμέρησι μὴ γινόμενοι, σφοδροὶ τε καὶ ταχέως ὠθούμενοι ἐκ τοῦ μετώπου, ὥσπερ σταλαγμοὶ καὶ κρουνοὶ, καὶ ψυχροὶ σφόδρα καὶ πολλοὶ ἀνάγκη γὰρ τὸν τοιοῦτον ἰδρῶτα πορεύεσθαι μετὰ βίης, καὶ πόνου ὑπερβολῆς, καὶ ἐκθλίψιος πολυχρονίου.



85. Sweats are dangerous when they do not occur on critical days, when they are strong, and quickly forced out of the forehead, either in the form of drops or in streams, and if excessively cold and copious; for such a sweat must proceed from violence, excess of pain, and prolonged squeezing ( *affliction?* ).

86. Ἐπὶ χρονίῳ νοσήματι κοιλίης καταφορῆ, κακόν.

86. In a chronic disease an excessive flux from the bowels is bad.

87. Ὅκόσα φάρμακα οὐκ ἰῆται, σίδηρος ἰῆται ὅσα σίδηρος οὐκ ἰῆται, πῦρ ἰῆται ὅσα δὲ πῦρ οὐκ ἰῆται, ταῦτα χρῆ νομίζειν ἀνίατα.

87. Those diseases which medicines do not cure, iron ( *the knife?* ) cures; those which iron cannot cure, fire cures; and those which fire cannot cure, are to be reckoned wholly incurable.

# EPIDEMICS I AND III - Έπιδημιών

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## ΕΠΙΔΗΜΙΩΝ Α - EPIDEMICS I

### Κατάστασις πρώτη - FIRST CONSTITUTION

Ι. Ἐν Θάσῳ φθινοπώρου περὶ ἰσημερινὴν καὶ ὑπὸ πλειάδα ὕδατα πολλά, συνεχέα μαλθακῶς, ἐν νοτίοις. χειμῶν νότιος, σμικρὰ βόρεια, αὐχμοί· τὸ σύνολον ἕς γε χειμῶνα οἶον ἔαρ γίνεται. ἔαρ δὲ νότιον ψυχρινόν, σμικρὰ ὕσματα. θέρος ὡς ἐπὶ τὸ πολὺ ἐπινέφελον. ἀνυδρία. ἐτησίου ὀλίγα, σμικρὰ, διεσπασμένως ἔπνευσαν.

Γενομένης δὲ τῆς ἀγωγῆς ὅλης ἐπὶ τὰ νότια καὶ μετ' αὐχμῶν, πρωὶ μὲν τοῦ ἥρος ἐκ τῆς πρόσθεν καταστάσιος ὑπεναντίας καὶ βορείου γενομένης ὀλίγοις ἐγίνοντο καῦσοι καὶ τούτοις πάνυ εὐσταθέες, καὶ ὀλίγοις ἡμορράγει οὐδ' ἀπέθνησκον ἐκ τούτων. ἐπάρματα δὲ παρὰ τὰ ὄτα πολλοῖσιν ἑτερόρροπα καὶ ἐξ ἀμφοτέρων, τοῖσι πλείστοισιν ἀπύροισιν ὀρθοστάδην· ἔστι δὲ οἱ καὶ σμικρὰ ἐπεθερμαίνοντο. κατέσβη πᾶσιν ἀσινέως οὐδ' ἐξεπύησεν οὐδενὶ ὥσπερ τὰ ἐξ ἄλλων προφασίων. ἦν δὲ ὁ τρόπος αὐτῶν χαῦνα, μεγάλα, κεχυμένα, οὐ μετὰ φλεγμονῆς, ἀνώδυνα· πᾶσιν ἀσήμως ἠφανίσθη. ἐγίνετο δὲ ταῦτα μεираκίοισι, νέοισιν, ἀκμάζουσι, καὶ τούτων τοῖσι περὶ παλαιστρην καὶ γυμνάσια πλείστοισι· γυναίξι δὲ ὀλίγησιν ἐγίνετο. πολλοῖσι δὲ βῆχες ξηραὶ βήσσουσι καὶ οὐδὲν ἀνάγουσιν· φωναὶ βραγχώδεις. οὐ μετὰ πολὺ, τοῖσι δὲ καὶ μετὰ χρόνον, φλεγμοναὶ μετ' ὀδύνης ἐς ὄρχιν ἑτερόρροποι, τοῖσι δὲ ἕς ἀμφοτέρους. πυρετοὶ τοῖσι μὲν, τοῖσι δ' οὐ. ἐπιπόνως ταῦτα τοῖσι πλείστοισι. τὰ δ' ἄλλα ὅσα κατ' ἰητρῆιον ἀνόσως διῆγον.

I. IN Thasos during autumn, about the time of the equinox to near the setting of the Pleiades, there were many rains, gently continuous, with southerly winds. Winter southerly, north winds light, droughts ; on the whole, the winter was like a spring. Spring southerly and chilly ; slight showers. Summer in general cloudy. No rain. Etesian winds few, light and irregular.

The whole weather proved southerly, with droughts, but early in the spring, as the previous constitution had proved the opposite and northerly, a few patients suffered from ardent fevers, and these very mild, causing hemorrhage in few cases and no deaths. Many had swellings beside one ear, or both ears, in most cases unattended with fever, so that confinement to bed was unnecessary. In some cases there was slight heat, but in all the swellings subsided without causing harm ; in no case was there suppuration such as attends swellings of other origin. This was the character of them : — flabby, big, spreading, with neither inflammation nor pain ; in every case they disappeared without a sign.

The sufferers were youths, young men, and men in their prime, usually those who frequented the wrestling school and gymnasia. Few women were attacked. Many had dry coughs which brought up nothing when they coughed, but their voices were hoarse. Soon after, though in some cases after some time, painful inflammations occurred either in one testicle or in both, sometimes accompanied with fever, in other cases not. Usually they caused much suffering. In other respects the people had no ailments requiring medical assistance.

II. Πρωί δὲ τοῦ θέρους ἀρξάμενοι διὰ θέρους καὶ κατὰ χειμῶνα πολλοὶ τῶν ἤδη πολὺν χρόνον ὑποφερομένων φθινώδεις κατεκλίνησαν, ἐπεὶ καὶ τοῖς ἐνδοιαστῶς ἔχουσι πολλοῖσιν ἐβεβαίωσε τότε. ἔστι δ' οἷσιν ἤρξατο πρῶτον τότε, οἷσιν ἔρρεπεν ἢ φύσις ἐπὶ τὸ φθινῶδες. ἀπέθανον δὲ πολλοὶ καὶ πλεῖστοι τούτων, καὶ τῶν κατακλινέντων οὐκ οἶδα εἴ τις οὐδ' εἰ μέτριον χρόνον περιεγένετο. ἀπέθνησκον δὲ ὀξυτέρως ἢ ὡς εἴθισται διάγειν τὰ τοιαῦτα· ὡς τὰ γε ἄλλα καὶ μακρότερα καὶ ἐν πυρετοῖσιν ἐόντα εὐφόρως ἤνεγκαν καὶ οὐκ ἀπέθνησκον, περὶ ὧν γεγράφεται. μῦνον γὰρ καὶ μέγιστον τῶν γενομένων νοσημάτων τοὺς πολλοὺς τὸ φθινῶδες ἔκτεινεν.

Ἦν δὲ τοῖς πλείστοισιν αὐτῶν τὰ παθήματα τοιάδε· φρικώδεις πυρετοί, συνεχέες, ὀξέες, τὸ μὲν ὄλον οὐ διαλείποντες· ὁ δὲ τρόπος ἡμιτριταῖος· μίαν κουφότεροι, τῇ ἑτέρῃ παροξυνόμενοι, καὶ τὸ ὄλον ἐπὶ τὸ ὀξύτερον ἐπιδιδόντες. ἰδρῶτες αἰεὶ, οὐ δι' ὄλου· ψύξις ἀκρέων πολλή καὶ μόγις ἀναθερμαινόμενα. κοιλία ταραχώδεις χολώδεσιν, ὀλίγοις, ἀκρήτοις, λεπτοῖσι, δακνώδεσι· πυκνὰ ἀνίσταντο. οὖρα ἢ λεπτὰ καὶ ἄχρω καὶ ἄπεπτα καὶ ὀλίγα ἢ πάχος ἔχοντα καὶ σμικρὴν ὑπόστασιν, οὐ καλῶς καθιστάμενα, ἀλλ' ὠμῆ τινι καὶ ἀκαίρῳ ὑποστάσει. ἔβησσαν δὲ σμικρά, πυκνά, πέποννα, κατ' ὀλίγα μόγις ἀνάγοντες. οἷσι δὲ τὰ βιαιότατα συμπίπτει, οὐδ' ἐς ὀλίγον πεπασμὸν ἦει, ἀλλὰ διετέλεον ὠμὰ πτύοντες. φάρυγγες δὲ τοῖσι πλείστοισι τούτων ἐξ ἀρχῆς καὶ διὰ τέλους ἐπώδυνοι· εἶχον ἔρευθος μετὰ φλεγμονῆς· ρεύματα σμικρά, λεπτά, δριμέα· ταχὺν τηκόμενοι καὶ κακούμενοι, ἀπόσιτοι πάντων γευμάτων διὰ τέλους, ἄδιψοι· καὶ παράληροι πολλοὶ περὶ θάνατον. περὶ μὲν τὰ φθινώδεα ταῦτα.

II. Beginning early in the summer, throughout the summer and in winter many of those who had been ailing a long time took to their beds in a state of consumption, while many also who had hitherto been doubtful sufferers at this time showed undoubted symptoms. Some showed the symptoms now for the first time ; these were those whose constitution inclined to be consumptive. Many, in fact most of these, died ; of those who took to their beds I do not know one who survived even for a short time. Death came more promptly than is usual

in consumption, and yet the other complaints, which will be described presently, though longer and attended with fever, were easily supported and did not prove fatal. For consumption was the worst of the diseases that occurred, and alone was responsible for the great mortality.

In the majority of cases the symptoms were these. Fever with shivering, continuous, acute, not completely intermitting, but of the semitertian type ; remitting during one day they were exacerbated on the next, becoming on the whole more acute. Sweats were continual, but not all over the body. Severe chill in the extremities, which with difficulty recovered their warmth. Bowels disordered, with bilious, scanty, unmixed, thin, smarting stools, causing the patient to get up often. Urine either thin, colourless, unconcocted and scanty, or thick and with a slight deposit, not settling favourably, but with a crude and unfavourable deposit. The patients frequently coughed up small, concocted sputa, brought up little by little with difficulty. Those exhibiting the symptoms in their most violent form showed no concoction at all, but continued spitting crude sputa. In the majority of these cases the throat was throughout painful from the beginning, being red and inflamed. Fluxes slight, thin, pungent. Patients quickly wasted away and grew worse, being throughout averse to all food and experiencing no thirst. Delirium in many cases as death approached. Such were the symptoms of the consumption.

III. Κατὰ δὲ θέρος ἤδη καὶ φθινόπωρον πυρετοὶ πολλοὶ συνεχέες οὐ βιαίως, μακρὰ δὲ νοσέουσιν οὐδὲ περὶ τὰ ἄλλα δυσφόρως διάγουσιν ἐγένοντο· κοιλίαι τε γὰρ τοῖσι πλείστοισι πάνυ εὐφόρως καὶ οὐδὲν ἄξιον λόγου προσέβλαπτον. οὐρὰ τε τοῖσι πλείστοισιν εὐχρῶ μὲν καὶ καθαρὰ, λεπτὰ δὲ καὶ μετὰ χρόνον περὶ κρίσιν πεπαινώμενα. βηχώδεις οὐ λίην. οὐδὲ τὰ βησσόμενα δυσκόλως· οὐδ' ἀπόσιτοι, ἀλλὰ καὶ διδόναι πάνυ ἐνεδέχετο. τὸ μὲν ὅλον ὑπενόσεον, οὐ τὸν φθινώδεα τρόπον πυρετοῖσι φρικώδεις, σμικρὰ ὑφιδροῦντες, ἄλλοτε ἀλλοίως παροξυνόμενοι πεπλανημένως. ἔκρινε τούτων οἷσι τὰ βραχύτατα γίνοιτο περὶ εἰκοστήν, τοῖσι δὲ πλείστοισι περὶ τεσσαρακοστήν, πολλοῖσι δὲ περὶ τὰς ὀγδοήκοντα. ἔστι δ' οἷσιν οὐδ' οὕτως, ἀλλὰ πεπλανημένως καὶ ἀκρίτως ἐξέλιπον· τούτων δὲ τοῖσι πλείστοισιν οὐ πολὺν διαλιπόντες χρόνον ὑπέστρεψαν οἱ πυρετοὶ πάλιν, ἐκ δὲ τῶν ὑποστροφέων ἐν τῆσιν αὐτῆσι περιόδοισιν ἐκρίνοντο· πολλοῖσι δὲ αὐτῶν ἀνήγαγον, ὥστε καὶ ὑπὸ χεიმῶνα νοσεῖν.

Ἐκ πάντων δὲ τῶν ὑπογεγραμμένων ἐν τῇ καταστάσει ταύτῃ μόνουσι τοῖσι φθινώδεσι θανατώδεα συνέπεσεν· ἐπεὶ τοῖσί γε ἄλλοισι πᾶσιν εὐφόρως, καὶ θανατώδεις ἐν τοῖσιν ἄλλοισι πυρετοῖσιν οὐκ ἐγένοντο.

III. But when summer came, and during autumn occurred many continuous but not violent fevers, which attacked persons who were long ailing without suffering distress in any other particular manner ; for the bowels were in most cases quite easy, and hurt to no appreciable extent. Urine in most cases of good colour and clear, but thin, and after a time near the crisis it grew concocted. Coughing was slight, and caused no distress. No lack of appetite ; in fact it was quite possible even to give food. In general the patients did not sicken, as did the consumptives, with shivering fevers, but with slight sweats, the paroxysms being variable and irregular. The earliest crisis was about the twentieth day ; in most cases the crisis was about the fortieth day, though in many it was about the eightieth. In some cases the illness did not end in this way, but in an irregular manner without a crisis. In the majority of these cases the fevers relapsed after a brief interval, and after the relapse a crisis occurred at the end of the same periods as before. The disease in many of these instances was so protracted that it even lasted during the winter.

Out of all those described in this constitution only the consumptives showed a high mortality-rate ; for all the other patients bore up well, and the other fevers did not prove fatal.

## Κατάστασις δευτέρη - SECOND CONSTITUTION

iv. Ἐν Θάσῳ πρῶι τοῦ φθινοπώρου χειμῶνες οὐ κατὰ καιρόν, ἀλλ' ἐξαίφνης ἐν βορείοισι καὶ νοτίοισι πολλοῖς ὕγροι καὶ προεκρηγνύμενοι. ταῦτα δὴ ἐγένετο τοιαῦτα μέχρι πληιάδος δύσιος καὶ ὑπὸ πληιάδα. χειμῶν δὲ βόρειος· ὕδατα πολλά, λάβρα, μεγάλα, χιόνες· μειξαίθρια τὰ πλεῖστα. ταῦτα δὲ ἐγένετο μὲν πάντα, οὐ λίην δὲ ἀκαίρως τὰ τῶν ψυχέων. ἤδη δὲ μεθ' ἡλίου τροπὰς χειμερινὰς καὶ ἠνίκα ζέφυρος πνεῖν ἄρχεται, ὀπισθοχειμῶνες μεγάλοι, βόρεια πολλά, χιῶν καὶ ὕδατα πολλὰ συνεχέως, οὐρανὸς λαι λαπώδης καὶ ἐπινέφελος. ταῦτα δὲ συνέτεινε καὶ οὐκ ἀνίει μέχρι ἰσημερίας. ἔαρ δὲ ψυχρόν, βόρειον, ὕδατῶδες, ἐπινέφελον. θέρος οὐ λίην καυματῶδες ἐγένετο· ἐτησίαι συνεχέες ἔπνευσαν. ταχὺ δὲ περὶ ἀρκτοῦρον ἐν βορείοισι πολλὰ πάλιν ὕδατα.

iv. In Thasos early in autumn occurred unseasonable wintry storms, suddenly with many north and south winds bursting out into rains. These conditions continued until the setting of the Pleiades and during their season. Winter was northerly ; many violent and abundant rains ; snows ; generally there were fine intervals. With all this, however, the cold weather was not exceptionally unseasonable. But immediately after the winter solstice, when the west wind usually begins to blow, there was a return of severe wintry weather, much north wind, snow and copious rains continuously, sky stormy and clouded. These conditions lasted on, and did not remit before the equinox. Spring cold, northerly, wet, cloudy. Summer did not turn out excessively hot, the Etesian winds blowing continuously. But soon after, near the rising of Arcturus, there was much rain again, with northerly winds.

v. Γενομένου δὲ τοῦ ἔτεος ὅλου ὕγροῦ καὶ ψυχροῦ καὶ βορείου κατὰ χειμῶνα μὲν ὑγιρῶς εἶχον τὰ πλεῖστα, πρῶι δὲ τοῦ ἡρος πολλοὶ τινες καὶ οἱ πλεῖστοι διῆγον ἐπινόσως. ἤρξαντο μὲν οὖν τὸ πρῶτον ὀφθαλμῖαι ροώδεις, ὀδυνώδεις, ὕγραὶ ἀπέπτως· σμικρὰ λημία δυσκόλως πολλοῖσιν ἐκρηγνύμενα· τοῖσι πλεῖστοισιν ὑπέστρεφον· ἀπέλιπον ὀψὲ πρὸς τὸ φθινόπωρον. κατὰ δὲ θέρος καὶ φθινόπωρον δυσεντεριώδεις καὶ τεινεσμοὶ καὶ λειεντεριώδεις. καὶ διάρροιαὶ χολώδεις, πολλοῖσι λεπτοῖσιν, ὠμοῖσι καὶ δακνώδεις, ἔστι δ' οἷσι καὶ ὕδατῶδες. πολλοῖσι δὲ καὶ περιρροιαὶ μετὰ πόνου χολώδεις, ὕδατῶδες, ξυσματῶδες, πυώδεις, στραγγουριώδεις· οὐ νεφριτικά, ἀλλὰ τούτοισιν ἀντ' ἄλλων ἄλλα. ἔμετοι φλεγματῶδεις, χολώδεις καὶ σιτίων ἀπέπτων ἀναγωγαί. ἰδρῶτες· πᾶσι πάντοθεν πολὺς πλάδος. ἐγίνετο δὲ ταῦτα πολλοῖσιν ὀρθοστάδην ἀτύροισι, πολλοῖσι δὲ πυρετοῖ, περὶ ὧν γεγράφεται. ἐν οἷσι δὲ ὑπεφαίνετο πάντα

τὰ ὑπογεγραμμένα, μετὰ πόνου φθινώδεις. ἤδη δὲ φθινοπώρου καὶ ὑπὸ χειμῶνα πυρετοὶ συνεχέες-καὶ τισιν αὐτῶν ὀλίγοισι καυσώδεις — ἡμερινοί, νυκτερινοί, ἡμιτριταῖοι, τριταῖοι ἀκριβέες, τεταρταῖοι, πλάνητες. ἕκαστοι δὲ τῶν ὑπογεγραμμένων πυρετῶν πολλοῖσιν ἐγίνοντο.

v. The whole year having been wet, cold and northerly, in the winter the public health in most respects was good, but in early spring many, in fact most, suffered illnesses. Now there began at first inflammations of the eyes, marked by rheum, pain, and unconcocted discharges. Small gummy sores, in many cases causing distress when they broke out ; the great majority relapsed, and ceased late on the approach of autumn. In summer and autumn dysenteric diseases, tenesmus and lientery ; bilious diarrhoea, with copious, thin, crude, smarting stools ; in some cases it was also watery. In many cases there were also painful, bilious defluxions, watery, full of thin particles, purulent and causing strangury. No kidney trouble, but their various symptoms succeeded in various orders. Vomitings of phlegm, bile, and undigested food. Sweats ; in all cases much moisture over all the body. These complaints in many cases were unattended with fever, and the sufferers were not confined to bed ; but in many others there was fever, as I am going to describe. Those who showed all the symptoms mentioned above were consumptives who suffered pain. When autumn came, and during winter, continuous fevers — in some few cases ardent — day fevers, night fevers, semitertians, exact tertians, quartans, irregular fevers. Each of the fevers mentioned found many victims.

vi. Οἱ μὲν οὖν καῦσοι ἐλαχίστοισί τε ἐγένοντο καὶ ἥκιστα τῶν καμνόντων οὔτοι ἐπόνησαν. οὔτε γὰρ ἡμορράγει, εἰ μὴ πάνυ σμικρὰ καὶ ὀλίγοισιν, οὔτε οἱ παράληροι. τά τε ἄλλα πάντ' εὐφόρως. ἔκρινε τούτοισι πάνυ εὐτάκτως, τοῖσι πλείστοισι σὺν τῆσι διαλειπούσησιν ἐν ἑπτακαίδεκα ἡμέρησιν οὐδὲ ἀποθανόντα οὐδένα οἶδα τότε καύσω οὐδὲ φρενιτικὰ τότε γενόμενα. οἱ δὲ τριταῖοι πλείους μὲν τῶν καύσων καὶ ἐπιπονώτεροι· εὐτάκτως δὲ τούτοισι πᾶσιν ἀπὸ τῆς πρώτης λήψιος τέσσαρας περιόδους· ἐν ἑπτὰ δὲ τελέως ἔκριναν οὐδ' ὑπέστρεψαν οὐδενὶ τούτων. οἱ δὲ τεταρταῖοι πολλοῖσι μὲν ἐξ ἀρχῆς ἐν τάξει τεταρταίου ἤρξαντο, ἔστι δὲ οἷς οὐκ ὀλίγοισιν ἐξ ἄλλων πυρετῶν καὶ νοσημάτων ἀποστάσει τεταρταῖοι ἐγένοντο· μακρὰ δὲ καὶ ὡς εἴθισται τούτοισι καὶ ἔτι μακρότερα συνέπιπτεν. ἀμφημερινοὶ δὲ καὶ νυκτερινοὶ καὶ πλάνητες πολλοῖσι πολλοὶ καὶ πολὺν χρόνον παρέμενον ὀρθοστάδην τε καὶ κατακειμένοισι. τοῖσι πλείστοισι τούτων ὑπὸ πληϊάδα καὶ μέχρι χειμῶνος οἱ πυρετοὶ παρείποντο. σπασμοὶ δὲ πολλοῖσι, μᾶλλον δὲ παιδίσι, ἐξ ἀρχῆς καὶ ὑπεπύρεσσον, καὶ ἐπὶ πυρετοῖσιν ἐγίνοντο σπασμοί· χρόνια μὲν τοῖσι πλείστοισι τούτων, ἀβλαβέα δέ, εἰ μὴ τοῖσι



καὶ ἐκ τῶν ἄλλων πάντων ὀλεθρίως ἔχουσιν.

VI. Now the ardent fevers attacked the fewest persons, and these were less distressed than any of the other sick. There was no bleeding from the nose, except very slight discharges in a few cases, and no delirium. All the other symptoms were slight. The crises of these diseases were quite regular, generally in seventeen days, counting the days of intermission, and I know of no ardent fever proving fatal at this time, nor of any phrenitis. The tertians were more numerous than the ardent fevers and more painful. But all these had four regular periods from the first onset, had complete crises in seven, and in no case relapsed. But the quartans, while in many instances they began at first with quartan periodicity, yet in not a few they became quartan by an abscession from other fevers or illnesses. They were protracted, as quartans usually are, or even more protracted than usual. Many fell victims to quotidians, night fevers, or irregular fevers, and were ill for a long time, either in bed or walking about. In most of these cases the fevers continued during the season of the Pleiades or even until winter. In many patients, especially children, there were convulsions and slight feverishness from the beginning ; sometimes, too, convulsions supervened upon fevers. Mostly these illnesses were protracted, but not dangerous, except for those who from all other causes were predisposed to die.

VII. Οἱ δὲ δὴ συνεχέες μὲν τὸ ὅλον καὶ οὐδὲν ἐκλείποντες, παροξυνόμενοι δὲ πᾶσι τριταιοφυέα τρόπον, μίαν ὑποκουφίζοντες καὶ μίαν παροξυνόμενοι, πάντων βιαιότατοι τῶν τότε γενομένων καὶ μακρότατοι καὶ μετὰ πόνων μεγίστων γενόμενοι· πρηέως ἀρχόμενοι, τὸ δ' ὅλον ἐπιδιδόντες αἰεὶ καὶ παροξυνόμενοι καὶ ἀνάγοντες ἐπὶ τὸ κάκιον· σμικρὰ διακουφίζοντες καὶ ταχὺ πάλιν ἐξ ἐπισχέσιος βιαιότερος παροξυνόμενοι, ἐν κρισί μοις ὡς ἐπὶ τὸ πολὺ κακούμενοι. ῥίγεια δὲ πᾶσι μὲν ἀτάκτως καὶ πεπλανημένως ἐγίνετο, ἐλάχιστα δὲ καὶ ἥκιστα τούτοισιν, ἀλλ' ἐπὶ τῶν ἄλλων πυρετῶν μέζω. ἰδρῶτες πολλοί, τούτοισι δὲ ἐλάχιστοι, κουφίζοντες οὐδέν, ἀλλ' ὑπεναντίον βλάβας φερόντες. ψύξις δὲ πολλὴ τούτοισιν ἀκρέων καὶ μόγις ἀναθερμαινόμενα. ἄγρυπνοι τὸ σύνολον καὶ μάλιστα οὗτοι καὶ πάλιν κωματώδεις. κοιλίαι δὲ πᾶσι μὲν ταραχώδεις καὶ κακαί, πολὺ δὲ τούτοισι κάκιστα. οὔρα δὲ τοῖσι πλείστοισι τούτων ἢ λεπτὰ καὶ ὠμὰ καὶ ἄχρω καὶ μετὰ χρόνον σμικρὰ πεπαινόμενα κρισίμως ἢ πάχος μὲν ἔχοντα, θολερὰ δὲ καὶ οὐδὲν καθιστάμενα, οὐδ' ὑφιστάμενα, ἢ σμικρὰ καὶ κακὰ καὶ ὠμὰ τὰ ὑφιστάμενα· κάκιστα δὲ ταῦτα πάντων. βῆχες δὲ παρείποντο μὲν τοῖς πυρετοῖσι, γράψαι δὲ οὐκ ἔχω βλάβην οὐδ' ὠφελείην γενομένην διὰ βηχὸς τότε.

VII. But those fevers which were altogether continuous and never intermitted at

all, but in all cases grew worse after the manner of semitertians, with remission during one day followed by exacerbation during the next, were the most severe of all the fevers which occurred at this time, the longest and the most painful. Beginning mildly, and on the whole increasing always, with exacerbation, and growing worse, they had slight remissions followed quickly after an abatement by more violent exacerbations, generally becoming worse on the critical days. All patients had irregular rigors that followed no fixed law, most rarely and least in the semitertians, but more violent in the other fevers. Copious sweats, least copious in the semitertians ; they brought no relief, but on the contrary caused harm. These patients suffered great chill in the extremities, which grew warm again with difficulty. Generally there was sleeplessness, especially with the semitertians, followed afterwards by coma. In all the bowels were disordered and in a bad state, but in the semitertians they were far the worst. In most of them urine either ( *a* ) thin, crude, colourless, after a time becoming slightly concocted with signs of crisis, or ( *b* ) thick enough but turbid, in no way settling or forming sediment, or ( *c* ) with small, bad, crude sediments, these being the worst of all. Coughs attended the fevers, but I cannot say that either harm or good resulted from the coughing on this occasion.

VIII. Χρόνια μὲν οὖν καὶ δυσχερέα καὶ πάνυ ἀτάκτως καὶ πεπλανημένως καὶ ἀκρίτως τὰ πλεῖστα τούτων διετέλει γινόμενα καὶ τοῖσι πάνυ ὀλεθρίως ἔχουσι καὶ τοῖσι μὴ. εἰ γάρ τινες αὐτῶν καὶ διαλίποι σμικρά, ταχὺ πάλιν ὑπέστρεφεν. ἔστι δ' οἷσιν ἔκρινεν αὐτῶν ὀλίγοισιν, οἷσι τὰ βραχύτατα γένοιτο, περὶ ὀγδοηκοστὴν εὐοῦσι, καὶ τούτων ἐνίοις ὑπέστρεφεν, ὥστε κατὰ χειμῶνα τοὺς πλείστους αὐτῶν ἔτι νοσεῖν. τοῖσι δὲ πλείστοισιν ἀκρίτως ἐξέλειπεν. ὁμοίως δὲ ταῦτα συνέπιπτεν τοῖς περιγινομένοισιν καὶ τοῖσιν οὐ. πολλῆς δὲ τινος γινομένης ἀκρισίας καὶ ποικιλίης ἐπὶ τῶν νοσημάτων καὶ μεγίστου μὲν σημείου καὶ κακίστου διὰ τέλος παρεπομένου τοῖσι πλείστοισιν ἀποσίτοις εἶναι πάντων γευμάτων, μάλιστα δὲ τούτων, οἷσι καὶ τᾶλλα ὀλεθρίως ἔχοι, διψώδεις οὐ λίην ἀκαίρως ἦσαν ἐπὶ τοῖσι πυρετοῖσι τούτοις. γενομένων δὲ χρόνων μακρῶν καὶ πόνων πολλῶν καὶ κακῆς συντήξιος, ἐπὶ τούτοις ἀποστάσεις ἐγίνοντο ἢ μέζους, ὥστε ὑποφέρειν μὴ δύνασθαι, ἢ μείους, ὥστε μηδὲν ὠφελεῖν, ἀλλὰ ταχὺ παλινδρομεῖν καὶ συνεπιγεῖν ἐπὶ τὸ κάκιον.

VIII. Now the greatest number of these symptoms continued to be protracted, troublesome, very disordered, very irregular, and without any critical signs, both in the case of those who came very near death and in the case of those who did not. For even if some patients enjoyed slight intermissions, there followed a quick relapse. A few of them experienced a crisis, the earliest being about the

eightieth day, some of the latter having a relapse, so that most of them were still ill in the winter. The greatest number had no crisis before the disease terminated. These symptoms occurred in those who recovered just as much as in those who did not. The illnesses showed a marked absence of crisis and a great variety ; the most striking and the worst symptom, which throughout attended the great majority, was a complete loss of appetite, especially in those whose general condition exhibited fatal signs, but in these fevers they did not suffer much from unseasonable thirst. After long intervals, with many pains and with pernicious wasting, there supervened abscessions either too severe to be endured, or too slight to be beneficial, so that there was a speedy return of the original symptoms, and an aggravation of the mischief.

IX. Ἦν δὲ τούτοισι τὰ γινόμενα δυσεντεριώδεα καὶ τεινεσμοί, καὶ λειεντερικὸι καὶ ροώδεες. ἔστι δ' οἷσι καὶ ὕδρωπεσ μετὰ τούτων καὶ ἄνευ τούτων. ὅ τι δὲ παραγένειτο τούτων βιαίως ταχὺ συνήρει, ἢ πάλιν ἐπὶ τὸ μηδὲν ὠφελεῖν. ἐξανθήματα σμικρὰ καὶ οὐκ ἀξίως τῆς περιβολῆς τῶν νοσημάτων καὶ ταχὺ πάλιν ἀφανιζόμενα ἢ παρὰ τὰ ὦτα οἰδήματα μολυόμενα καὶ οὐδὲν ἀποσημαίνοντα, ἔστι δ' οἷς ἐς ἄρθρα, μάλιστα δὲ κατὰ ἰσχίον, ὀλίγοισι κρισίμως ἀπολείποντα καὶ ταχὺ πάλιν ἐπικρατεύμενα ἐπὶ τὴν ἐξ ἀρχῆς ἔξιν.

IX. The symptoms from which these patients suffered were dysenteries and tenesmus, lenteries also and fluxes. Some had dropsies also, either with or without these. Whenever any of these attacked violently they were quickly fatal, or, if mild, they did no good. Slight eruptions, which did not match the extent of the diseases and quickly disappeared again, or swellings by the ears that grew smaller and signified nothing, in some cases appearing at the joints, especially the hip-joint, in few instances leaving with signs of crisis, when they quickly re-established themselves in their original state.

X. Ἐθνησκον δ' ἐκ πάντων μὲν, πλεῖστοι δ' ἐκ τούτων, καὶ τούτων παιδιά, ὅσα ἀπὸ γάλακτος ἤδη, καὶ πρεσβύτερα, ὀκταετέα καὶ δεκαετέα, καὶ ὅσα πρὸ ἥβης. ἐγένετο δὲ τούτοισι ταῦτα οὐκ ἄνευ τῶν πρώτων γεγραμμένων, τὰ δὲ πρῶτα πολλοῖσιν ἄνευ τούτων. μούνον δὲ χρηστὸν καὶ μέγιστον τῶν γενομένων σημείων καὶ πλείστους ἐρρύσατο τῶν ἐόντων ἐπὶ τοῖσι μεγίστοισι κινδύνοισιν, οἷσιν ἐπὶ τὸ στραγγουριῶδες ἐτράπετο καὶ ἐς τοῦτο ἀποστάσις ἐγίνοντο. συνέπιπτε δὲ καὶ τὸ στραγγουριῶδες τῆσιν ἡλικίησιν ταύτησιν γίνεσθαι μάλιστα. ἐγένετο δὲ καὶ τῶν ἄλλων πολλοῖσιν ὀρθοστάδην καὶ ἐπὶ τῶν νοσημάτων. ταχὺ δὲ καὶ μεγάλη τις ἢ μεταβολὴ τούτοισι πάντων ἐγένετο. κοιλίαι τε γάρ, καὶ εἰ τύχοιεν ἐφυγραινόμενα κακοήθεα τρόπον, ταχὺ συνίσταντο, γεύμασιν τε πᾶσιν

ἡδέως εἶχον, οἳ τε πυρετοὶ πρηέες μετὰ ταῦτα. χρόνια δὲ καὶ τούτοισι τὰ περὶ τὴν στραγγουρίην καὶ ἐπιπόνως. οὔρα δὲ τούτοισιν ἦει πολλὰ παχέα καὶ ποικίλα καὶ ἐρυθρά, μειζόπυα μετ' ὀδύνης. περιεγένοντο δὲ πάντες οὔτοι, καὶ οὐδένα τούτων οἶδα ἀπο θανόντα.

x. From all the diseases some died, but the greatest number from these fevers, especially children — those just weaned, older children of eight or ten years, and those approaching puberty. These victims never suffered from the latter symptoms without the first I have described above, but often the first without the latter. The only good sign, the most striking that occurred, which saved very many of those who were in the greatest danger, was when there was a change to strangury, into which abscessions took place. The strangury, too, came mostly to patients of the ages mentioned, though it did happen to many of the others, either without their taking to bed or when they were ill. Rapid and great was the complete change that occurred in their case. For the bowels, even if they were perniciously loose, quickly recovered ; their appetite for everything returned, and hereafter the fever abated. But the strangury, even in these cases, was long and painful. Their urine was copious, thick, varied, red, mixed with pus, and passed with pain. But they all survived, and I know of none of these that died.

xι. Ὅσα διὰ κινδύνων, πεπασμοὺς τῶν ἀπιόντων πάντας πάντοθεν ἐπικαίρους ἢ καλὰς καὶ κρισίμους ἀποστάσιας σκοπεῖσθαι. πεπασμοὶ ταχυτῆτα κρίσιος καὶ ἀσφάλειαν ὑγιείης σημαί νουσιν, ὠμὰ δὲ καὶ ἄπεπτα καὶ ἐς κακὰς ἀποστάσιας τρεπόμενα ἀκρισίας ἢ πόνους ἢ χρόνους ἢ θανάτους ἢ τῶν αὐτῶν ὑποστροφάς. ὅ τι δὲ τούτων ἔσται μάλιστα, σκεπτέον ἐξ ἄλλων. λέγειν τὰ προγενόμενα, γινώσκειν τὰ παρεόντα, προλέγειν τὰ ἐσόμενα· μελετᾶν ταῦτα. ἀσκεῖν περὶ τὰ νοσήματα δύο, ὠφελεῖν ἢ μὴ βλάπτειν. ἡ τέχνη διὰ τριῶν, τὸ νόσημα καὶ ὁ νοσέων καὶ ὁ ἰητρός· ὁ ἰητρός ὑπηρέτης τῆς τέχνης· ὑπεναντιοῦσθαι τῷ νοσήματι τὸν νοσέοντα μετὰ τοῦ ἰητροῦ.

xι. In all dangerous cases you should be on the watch for all favourable coctions of the evacuations from all parts, or for fair and critical abscessions. Coctions signify nearness of crisis and sure recovery of health, but crude and unconcocted evacuations, which change into bad abscessions, denote absence of crisis, pain, prolonged illness, death, or a return of the same symptoms. But it is by a consideration of other signs that one must decide which of these results will be most likely. Declare the past, diagnose the present, foretell the future ; practise these acts. As to diseases, make a habit of two things — to help, or at least to do no harm. The art has three factors, the disease, the patient, the physician. The

physician is the servant of the art. The patient must co-operate with the physician in combating the disease.

XII. Τὰ περὶ κεφαλὴν καὶ τράχηλον ἀλγήματα καὶ βάρεια μετ' ὀδύνης ἄνευ πυρετῶν καὶ ἐν πυρετοῖσι φρενιτικοῖσι μὲν σπασμοί, καὶ ἰώδεα ἐπανεμεῦσιν, ἔνιοι ταχυθάνατοι τούτων. ἐν καύσοισι δὲ καὶ τοῖς ἄλλοις πυρετοῖς, οἷσι μὲν τραχήλου πόνος καὶ κροτάφων βάρος καὶ σκοτώδεα περὶ τὰς ὄψιας καὶ ὑποχονδρίου σύντασις οὐ μετ' ὀδύνης γίνεται, τούτοισιν αἰμορραγεῖ διὰ ῥινῶν· οἷσι δὲ βάρεια μὲν ὅλης τῆς κεφαλῆς, καρδιωγμοὶ δὲ καὶ ἀσώδεές εἰσιν, ἐπανεμέουσιν χολώδεα καὶ φλεγματώδεα. τὸ πολὺ δὲ παιδίοισιν ἐν τοῖσι τοιούτοισιν οἱ σπασμοὶ μάλιστα, γυναιξὶ δὲ καὶ ταῦτα καὶ ἀπὸ ὑστερέων πόνοι, πρεσβυτέροισι δὲ καὶ ὄσοις ἤδη τὸ θερμὸν κρατεῖται, παραπληγικὰ ἢ μανικὰ ἢ στερήσιες ὀφθαλμῶν.

XII. Pains about the head and neck, and heaviness combined with pain, occur both without and with fever. Sufferers from phrenitis have convulsions, and eject verdigris-coloured vomit ; some die very quickly. But in ardent and the other fevers, those with pain in the neck, heaviness of the temples, dimness of sight, and painless tension of the hypochondrium, bleed from the nose ; those with a general heaviness of the head, cardialgia, and nausea, vomit afterwards bile and phlegm. Children for the most part in such cases suffer chiefly from the convulsions. Women have both these symptoms and pains in the womb. Older people, and those whose natural heat is failing, have paralysis or raving or blindness.

## Κατάστασις Τρίτη - THIRD CONSTITUTION

XIII. Ἐν Θάσῳ πρὸ ἀρκτούρου ὀλίγον καὶ ἐπ' ἀρκτούρου ὕδατα πολλὰ μεγάλα ἐν βορείοις. περὶ δὲ ἰσημερίην καὶ μέχρι πληϊάδος νότια ὕσματα ὀλίγα. χειμῶν βόρειος, αὐχμοί, ψύχρα, πνεύματα μεγάλα, χιόνες. περὶ δὲ ἰσημερίην χειμῶνες μέγιστοι. ἔαρ βόρειον, αὐχμοί, ὕσματα ὀλίγα, ψύχρα. περὶ δὲ ἡλίου τροπὰς θερινὰς ὕδατα ὀλίγα, μεγάλα ψύχρα μέχρι κυνὸς ἐπλησίασε. μετὰ δὲ κύνα μέχρι ἀρκτούρου θέρος θερμόν· καύματα μεγάλα καὶ οὐκ ἐκ προσαγωγῆς, ἀλλὰ συνεχέα καὶ βίαια· ὕδωρ οὐκ ἐγένετο· ἐτησίαι ἔπνευσαν. περὶ ἀρκτούρον ὕσματα νότια μέχρι ἰσημερίας.

XIII. In Thasos a little before and at the season of Arcturus many violent rains with northerly winds. About the equinox until the setting of the Pleiades slight, southerly rains. Winter northerly, droughts, cold periods, violent winds, snow. About the equinox very severe storms. Spring northerly, droughts, slight rains, periods of cold. About the summer solstice slight showers, periods of great cold until near the Dog Star. After the Dog Star, until Arcturus, hot summer. Great heat, not intermittent but continuous and severe. No rain fell. The Etesian winds blew. About Arcturus southerly rains until the equinox.

XIV. Ἐν τῇ καταστάσει ταύτῃ κατὰ χειμῶνα μὲν ἤρξαντο παραπληγίαι καὶ πολλοῖσιν ἐγίνοντο, καὶ τινὲς αὐτῶν ἔθνησκον διὰ ταχέων· καὶ γὰρ ἄλλως τὸ νόσημα ἐπίδημον ἦν· τὰ δὲ ἄλλα διετέλεον ἄνοσοι. πρῶτῃ δὲ τοῦ ἤρος ἤρξαντο καῦσοι καὶ διετέλεον μέχρι ἰσημερίας καὶ πρὸς τὸ θέρος. ὅσοι μὲν οὖν ἤρος καὶ θέρος ἀρξαμένου αὐτίκα νοσεῖν ἤρξαντο, οἱ πλεῖστοι διεσώζοντο, ὀλίγοι δὲ τινες ἔθνησκον. ἤδη δὲ τοῦ φθινοπώρου καὶ τῶν ὑσμμάτων γενομένων θανατώδεις ἦσαν καὶ πλείους ἀπωλλυντο.

Ἦν δὲ τὰ παθήματα τῶν καύσων, οἷσι μὲν καλῶς καὶ δασιλέως ἐκ ῥινῶν αἱμορραγήσαι, διὰ τούτου μάλιστα σώζεσθαι, καὶ οὐδένα οἶδα, εἰ καλῶς αἱμορραγήσαι, ἐν τῇ καταστάσει ταύτῃ ἀποθανόντα. Φιλίσκῳ γὰρ καὶ Ἐπαμείνονι καὶ Σιληνῶ τεταρταίῳ καὶ πεμπταίῳ σμικρὸν ἀπὸ ῥινῶν ἔσταξεν· ἀπέθανον. οἱ μὲν οὖν πλεῖστοι τῶν νοσησάντων περὶ κρίσιν ἐπερρίγουν καὶ μάλιστα οἷσι μὴ αἱμορραγήσαι. ἐπερρίγουν δὲ καὶ οὔτοι καὶ ἐφίδρουν.

XIV. In this constitution during winter began paralyses which attacked many, a few of whom quickly died. In fact, the disease was generally epidemic. In other respects the public health continued good. Early in spring began ardent fevers

which continued until the equinox and on to summer. Now those who began to be ill at once, in spring or the beginning of summer, in most cases got well, though a few died ; but when autumn and the rains came the cases were dangerous, and more died.

As to the peculiarities of the ardent fevers, the most likely patients to survive were those who had a proper and copious bleeding from the nose, in fact I do not know of a single case in this constitution that proved fatal when a proper bleeding occurred, For Philiscus and Epaminon and Silenus, who died, had only a slight epistaxis on the fourth and fifth days. Now the majority of the patients had rigors near the crisis, especially such as had no epistaxis, but these had sweats also as well as rigors.

xv. Ἔστι δὲ οἷσιν ἴκτεροι ἑκταίοις, ἀλλὰ τούτοις ἢ κατὰ κύστιν κάθαρσις ἢ κοιλίη ἑκταραχθεῖσα ὠφέλει ἢ δαψιλῆς αἱμορραγίη, οἷον Ἡρακλείδῃ, ὃς κατέκειτο παρὰ Ἀριστοκύδει. καίτοι τούτῳ καὶ ἐκ ῥινῶν ἡμορράγησε καὶ ἡ κοιλίη ἐπεταράχθη, καὶ κατὰ κύστιν ἑκαθήρατο· ἐκρίθη εἰκοσταῖος· οὐχ οἷον ὁ Φαναγόρεω οἰκέτης, ᾧ οὐδὲν τούτων ἐγένετο· ἀπέθανεν. ἡμορράγει δὲ τοῖσι πλείστοισι, μάλιστα δὲ μειρακίοισι καὶ ἀκμάζουσι, καὶ ἔθνησκον πλεῖστοι τούτων, οἷσι μὴ αἱμορραγήσαι. πρεσβυτέροισι δὲ ἐς ἰκτέρους ἢ κοιλίαι ταραχώδεις, οἷον Βίωνι τῷ παρὰ Σιληνὸν κατακειμένῳ. ἐπεδήμησαν δὲ καὶ δυσεντερίαι κατὰ θέρος, καὶ τισι καὶ τῶν διανοσησάντων, οἷσι καὶ αἱμορραγία ἐγένοντο, ἐς δυσεντεριώδεα ἐτελεύτησεν, οἷον τῷ Ἐράτωνος παιδί καὶ Μύλλῳ πολλῆς αἱμορραγίης γενομένης ἐς δυσεντεριώδεα κατέστη· περιεγένοντο.

Πολὺς μὲν οὖν μάλιστα οὗτος ὁ χυμὸς ἐπε πόλασεν, ἐπεὶ καὶ οἷσι περὶ κρίσιν οὐχ ἡμορράγησεν, ἀλλὰ παρὰ τὰ ὦτα ἐπαναστάντα ἠφανίσθη — τούτων δὲ ἀφανισθέντων παρὰ τὸν κενεῶνα βᾶρος τὸν ἀριστερὸν καὶ ἐς ἄκρον ἰσχίον — ἀλγήματος μετὰ κρίσιν γενομένου καὶ οὖρων λεπτῶν διεξιόντων, αἱμορραγεῖν σμικρὰ ἤρξατο περὶ τετάρτην καὶ εἰκοστήν, καὶ ἐγένοντο ἐς αἱμορραγίην ἀποστάσιες· Ἀντιφῶντι Κριτοβούλου ἀπεπαύσατο καὶ ἐκρίθη τελῶς περὶ τεσσαρακοστήν.

xv. Some had jaundice on the sixth day, but these were benefited by either a purging through the bladder or a disturbance of the bowels or a copious hemorrhage, as was the case with Heraclides, who lay sick at the house of Aristocydes. This patient, however, who had a crisis on the twentieth day, not only bled from the nose, but also experienced disturbance of the bowels and a purging through the bladder. Far otherwise was it with the servant of

Phanagoras, who had none of these symptoms, and died. But the great majority had hemorrhage, especially youths and those in the prime of life, and of these the great majority who had no hemorrhage died. Older people had jaundice or disordered bowels, for example Bion, who lay sick at the house of Silenus. Dysenteries also were general in summer, and some too of those who had fallen ill, and also suffered from hemorrhage, finally had dysentery ; for example, the slave of Erato and Myllus, after copious hemorrhage, lapsed into dysentery. They recovered.

This humour, then, especially was in great abundance, since even those who had no hemorrhage near the crisis, but swellings by the ears which disappeared — and after their disappearance there was a heaviness along the left flank up to the extremity of the hip — after the crisis had pain and passed thin urine, and then began to suffer slight hemorrhage about the twenty-fourth day, and abscessions into hemorrhage occurred. In the case of Antipho, son of Critobulus, the illness ceased and came to a complete crisis about the fortieth day.

xvi. Γυναῖκες δὲ ἐνόσησαν μὲν πολλαί, ἐλάσσους δὲ ἢ ἄνδρες καὶ ἔθνησκον ἤσσον. ἐδυστόκεον δὲ αἱ πλεῖσται καὶ μετὰ τοὺς τόκους ἐπενόσεον, καὶ ἔθνησκον αὐταὶ μάλιστα, οἷον ἡ Τελεβούλου θυγάτηρ ἀπέθανεν ἑκταίῃ ἐκ τόκου. τῆσι μὲν οὖν πλείστησιν ἐν τοῖσι πυρετοῖσι γυναικεῖα ἐπεφαίνετο καὶ παρθένοισι πολλῆσι τότε πρῶτον ἐγένετο· ἔστι δ' ἧσιν ἡμορράγησεν ἐκ ῥινῶν· ἔστι δ' ὅτε καὶ ἐκ ῥινῶν καὶ τὰ γυναικεῖα τῆσιν αὐτῆσιν ἐπεφαίνετο, οἷον τῆ Δαιθάρσεος θυγατρὶ παρθένω ἐπεφάνη τότε πρῶτον καὶ ἐκ ῥινῶν λάβρον ἐρρῦη, καὶ οὐδεμίαν οἶδα ἀποθανοῦσαν, ἧσι τούτων τι καλῶς γένοιτο. ἧσι δὲ συνεκύρησεν ἐν γαστρὶ ἐχούσησι νοσῆσαι, πᾶσαι ἀπέφθειραν, ἃς καὶ ἐγὼ οἶδα.

xvi. Though many women fell ill, they were fewer than the men and less frequently died. But the great majority had difficult childbirth, and after giving birth they would fall ill, and these especially died, as did the daughter of Telebulus on the sixth day after delivery. Now menstruation appeared during the fevers in most cases, and with many maidens it occurred then for the first time. Some bled from the nose. Sometimes both epistaxis and menstruation appeared together ; for example, the maiden daughter of Daitharses had her first menstruation during fever and also a violent discharge from the nose. I know of no woman who died if any of these symptoms showed themselves properly, but all to my knowledge had abortions if they chanced to fall ill when with child.

xvii. Οὖρα δὲ τοῖσι πλείστοισιν εὐχρῶ μὲν, λεπτὰ δὲ καὶ ὑποστάσιας ὀλίγας



ἔχοντα, κοιλίαι δὲ ταραχώδεις τοῖσι πλείστοισι διαχωρήμασι λεπτοῖσι καὶ χολώδεσι. πολλοῖσι δὲ τῶν ἄλλων κεκριμένων ἐς δυσεντερίας ἐτελεύτα, οἷον Ξενοφάνει καὶ Κριτία. οὔρα δὲ ὑδατώδεα πολλὰ καθαρὰ καὶ λεπτὰ καὶ μετὰ κρίσιν καὶ ὑποστάσιος καλῆς γενομένης καὶ τῶν ἄλλων καλῶς κεκριμένων ἀναμνήσομαι οἷσιν ἐγένετο· Βίονι, ὃς κατέκειτο παρὰ Σιληνόν, Κράτιδι τῇ παρὰ Ξενοφάνεος, Ἀρέτωνος παιδί, Μνησιστράτου γυναικί. μετὰ δὲ δυσεντεριώδεις ἐγένοντο οὗτοι πάντες.

Περὶ δὲ ἀρκτοῦρον ἑνδεκαταίοισι πολλοῖσιν ἔκρινε καὶ τούτοισιν οὐδ' αἰ κατὰ λόγον γινόμεναι ὑποστροφαι ὑπέστρεφον· ἦσαν δὲ καὶ κωματώδεις περὶ τὸν χρόνον τοῦτον, πλείω δὲ παιδία, καὶ ἔθνησκον ἥκιστα οὗτοι πάντων.

xvii. Urine in most cases was of good colour, but thin and with slight sediments, and the bowels of most were disordered with thin, bilious excretions. Many after a crisis of the other symptoms ended with dysentery, as did Xenophanes and Critias. I will mention cases in which was passed copious, watery, clear and thin urine, even after a crisis in other respects favourable, and a favourable sediment : Bion, who lay sick at the house of Silenus, Cratis, who lodged with Xenophanes, the slave of Areto, and the wife of Mnesistratus. Afterwards all these suffered from dysentery.

About the season of Arcturus many had crisis on the eleventh day, and these did not suffer even the normal relapses. There were also comatose fevers about this time, usually in children, and of all patients these showed the lowest mortality.

xviii. Περὶ δὲ ἰσημερίην καὶ μέχρι πληϊάδος καὶ ὑπὸ χειμῶνα παρείποντο μὲν οἱ καῦσοι, ἀτὰρ καὶ οἱ φρενιτικοὶ τηνικαῦτα πλεῖστοι ἐγένοντο καὶ ἔθνησκον τούτων οἱ πλεῖστοι. ἐγένοντο δὲ καὶ κατὰ θέρος ὀλίγοι. τοῖσι μὲν οὖν καυσώδεσιν ἀρχομένοισιν ἐπεσήμαινεν, οἷσι τὰ ὀλέθρια συνέπιπτεν· αὐτίκα γὰρ ἀρχομένοισι πυρετὸς ὀξύς, σμικρὰ ἐπερρίγουν, ἄγρυπνοι, διψώδεις, ἀσώδεις, σμικρὰ ἐφίδρουν περὶ μέτωπον καὶ κληϊδας, οὐδεὶς δι' ὄλου, πολλὰ παρέλεγον, φόβοι, δυσθυμῖαι, ἄκρεα περίψυχρα, πόδες ἄκροι, μᾶλλον δὲ τὰ περὶ χεῖρας· οἱ παροξυσμοὶ ἐν ἀρτίησι· τοῖσι δὲ πλείστοισιν τεταρταίοισιν οἱ πόνοι μέγιστοι καὶ ἰδρῶς ἐπὶ πλεῖστον ὑπόψυχρος καὶ ἄκρεα οὐκ ἔτι ἀνεθερμαίνοντο, ἀλλὰ πελιδνὰ καὶ ψυχρά, οὐδ' ἐδίψων ἔτι ἐπὶ τούτοισιν· οὔρα τούτοις ὀλίγα, μέλανα, λεπτὰ καὶ κοιλίαι ἐφίσταντο· οὐδ' ἡμορράγησεν ἐκ ρίνων οὐδενί, οἷσι ταῦτα συμπίπτει, ἀλλ' ἢ σμικρὰ ἔσταξεν· οὐδ' ἐς ὑποστροφὴν οὐδενὶ τούτων ἦλθεν, ἀλλ' ἑκταῖοι ἀπέθνησκον σὺν ἰδρῶτι. τοῖσι δὲ φρενιτικοῖσι συνέπιπτε μὲν καὶ τὰ ὑπογεγραμμένα πάντα, ἔκρινε δὲ τούτοισιν ὡς ἐπὶ τὸ πολὺ ἑνδεκαταίοισιν· ἔστι

δ' οἷσι καὶ εἰκοσταίοισι, οἷσιν οὐκ εὐθὺς ἐξ ἀρχῆς ἢ φρενίτις ἤρξατο ἢ περὶ τρίτην ἢ τετάρτην ἡμέρην, ἀλλὰ μετρίως ἔχουσιν ἐν τῷ πρώτῳ χρόνῳ περὶ τὴν ἑβδόμην ἐς ὀξύτητα τὸ νόσημα μετέπεσεν.

xviii. About the equinox up to the setting of the Pleiades, and during winter, although the ardent fevers continued, yet cases of phrenitis were most frequent at this time, and most of them were fatal. In summer, too, a few cases had occurred. Now the sufferers from ardent fever, when fatal symptoms attended, showed signs at the beginning. For right from the beginning there was acute fever with slight rigors, sleeplessness, thirst, nausea, slight sweats about the forehead and collar-bones, but in no case general, much delirium, fears, depression, very cold extremities, toes and hands, especially the latter. The exacerbations on the even days ; but in most cases the pains were greatest on the fourth day, with sweat for the most part chilly, while the extremities could not now be warmed again, remaining livid and cold ; and in these cases the thirst ceased. Their urine was scanty, black, thin, with constipation of the bowels. Nor was there hemorrhage from the nose in any case when these symptoms occurred, but only slight epistaxis. None of these cases suffered relapse, but they died on the sixth day, with sweating. The cases of phrenitis had all the above symptoms, but the crises generally occurred on the eleventh day. Some had their crises on the twentieth day, namely those in whom the phrenitis did not begin at first, or began about the third or fourth day, but though these fared tolerably at the beginning, yet the disease assumed an acute form about the seventh day.

xix. Πλήθος μὲν οὖν τῶν νοσημάτων ἐγένετο. ἐκ δὲ τῶν καμνόντων ἀπέθνησκον μάλιστα μειράκια, νέοι, ἀκμάζοντες, λεῖοι, ὑπολευκόχρωτες, ἰθύτριχες, μελανότριχες, μελανόφθαλμοι, οἱ εἰκῆ καὶ ἐπὶ τὸ ῥάθυμον βεβιωκότες, ἰσχνόφωνοι, τρηχύφωνοι, τραυλοί, ὀργίλοι. καὶ γυναῖκες πλεῖσται ἐκ τούτου τοῦ εἶδος ἀπέθνησκον. ἐν δὲ ταύτῃ τῇ καταστάσει ἐπὶ σημείων μάλιστα τεσσάρων διεσώζοντο· οἷσι γὰρ ἢ διὰ ῥινῶν καλῶς αἷμορ ραγήσαι ἢ κατὰ κύστιν οὔρα πολλὰ καὶ πολλὴν καὶ καλὴν ὑπόστασιν ἔχοντα ἔλθοι ἢ κατὰ κοιλίην ταραχώδεα χολώδεσιν ἐπικαίρως, ἢ δυσεντερικοὶ γενοῖατο. πολλοῖσι δὲ συνέπιπτε μὴ ἐφ' ἑνὸς κρίνεσθαι τῶν ὑπογεγραμμένων σημείων, ἀλλὰ διεξιέναι διὰ πάντων τοῖσι πλείστοισι καὶ δοκεῖν μὲν ἔχειν ὀγληροτέρως· διεσώζοντο δὲ πάντες, οἷσι ταῦτα συμπίπτοι. γυναίξιν δὲ καὶ παρθένοισι συνέπιπτε μὲν καὶ τὰ ὑπογεγραμμένα σημεία πάντα, ἧσι δὲ ἢ τούτων τι καλῶς γένοιτο ἢ τὰ γυναικεῖα δαψιλῆως ἐπιφανείη, διὰ τούτων ἐσώζοντο καὶ ἔκρινε, καὶ οὐδεμίαν οἶδα ἀπολομένην, ἧσι τούτων τι καλῶς γένοιτο. Φίλωνος γὰρ θυγάτηρ, ἐκ ῥινῶν λάβρον ἐρρῦη, ἑβδομαίῃ ἐοῦσα ἐδείπνησεν ἀκαιροτέρως· ἀπέθανεν.

Οἷσιν ἐν πυρετοῖσιν ὀξέσι, μᾶλλον δὲ καυσώδεσιν, ἀέκουσιν δάκρυα παραρρεῖ, τούτοισιν ἀπὸ ῥινῶν αἰμορραγίην προσδέχεσθαι, ἦν καὶ τᾶλλα ὀλεθρίως μὴ ἔχωσιν, ἐπεὶ τοῖσι γε φλαύρως ἔχουσιν οὐχ αἰμορραγίην, ἀλλὰ θάνατον σημαίνει.

XIX. Now the number of illnesses was great. And of the patients there died chiefly striplings, young people, people in their prime, the smooth, the fair-skinned, the straight-haired, the black-haired, the black-eyed, those who had lived recklessly and care-lessly, the thin-voiced, the rough-voiced, the lispers, the passionate. Women too died in very great numbers who were of this kind. In this constitution there were four symptoms especially which denoted recovery : — a proper hemorrhage through the nostrils ; copious discharges by the bladder of urine with much sediment of a proper character ; disordered bowels with bilious evacuations at the right time ; the appearance of dysenteric characteristics. The crisis in many cases did not come with one only of the symptoms described above, but in most cases all symptoms were experienced, and the patients appeared to be more distressed ; but all with these symptoms got well. Women and maidens experienced all the above symptoms, but besides, whenever any took place properly, and whenever copious menstruation supervened, there was a crisis therefrom which resulted in recovery ; in fact I know of no woman who died when any of these symptoms took place properly. For the daughter of Philo, who died, though she had violent epistaxis, dined rather unseasonably on the seventh day.

In acute fevers, more especially in ardent fevers, when involuntary weeping occurs, epistaxis is to be expected if the patient have no fatal symptoms besides ; for when he is in a bad way such weeping portends not hemorrhage but death.

XX. Τὰ παρὰ τὰ ὥτα ἐν πυρετοῖσιν ἐπαιρόμενα μετ' ὀδύνης ἔστιν οἷσιν ἐκλείποντος τοῦ πυρετοῦ κρίσιμος οὔτε καθίστατο οὔτε ἐξέπυει· τούτοισι διάρροιαι χολωδέων ἢ δυσεντερίη ἢ παχέων οὔρων ὑπόστασις γενομένη ἔλυσεν, οἷον Ἐρμίππῳ τῷ Κλαζομενίῳ. τὰ δὲ περὶ τὰς κρίσιας, ἐξ ὧν καὶ διεγινώσκομεν, ἢ ὁμοια ἢ ἀνόμοια, οἷον οἱ δύο ἀδελφοί, οἱ ἤρξαντο ὁμοῦ τὴν αὐτὴν ὥρην· κατέκειντο παρὰ τὸ θέρετρον Ἐπιγένεος. τούτων τῷ πρεσβυτέρῳ ἔκρινεν ἑκταίῳ, τῷ δὲ νεωτέρῳ ἑβδομαίῳ. ὑπέστρεψεν ἀμφοτέροισιν ὁμοῦ τὴν αὐτὴν ὥρην καὶ διέλιπεν ἡμέρας πέντε. ἐκ δὲ τῆς ὑποστροφῆς ἐκρίθη ἀμφοτέροισιν ὁμοῦ τὸ σύμπαν ἑπτακαιδεκαταίοισιν. ἔκρινε δὲ τοῖσι πλείστοισιν ἑκταίοις. διέλειπεν ἕξ· ἐκ δὲ τῶν ὑποστροφῶν ἔκρινε πεμπταίοις. οἷσι δ' ἔκρινεν ἑβδομαίοισι, διέλειπεν ἑπτὰ· ἐκ δὲ τῆς ὑποστροφῆς ἔκρινε τριταίοις. οἷσι δ'

ἔκρινεν ἑβδομαίοισι, διαλείποντα τρεῖς ἔκρινεν ἑβδομαίοις. οἷσι δ' ἔκρινεν ἑκταίοισι, διαλείποντα ἕξ ἐλάμβανε τρισίν, διέλειπε μίαν, μίαν ἐλάμβανεν· ἔκρινεν, οἷον Εὐάγοντι τῷ Δαιθάρσεος. οἷσι δ' ἔκρινεν ἑκταίοισι, διέλειπεν ἑπτὰ, ἐκ δὲ τῆς ὑποστροφῆς ἔκρινε τετάρτη, οἷον τῆ Ἀγλαΐδου θυγατρί. οἱ μὲν οὖν πλεῖστοι τῶν νοσησάντων ἐν τῇ καταστάσει ταύτῃ τούτῳ τῷ τρόπῳ διενόσησαν, καὶ οὐδένα οἶδα τῶν περιγενομένων, ὧτινι οὐχ ὑπέστρεψαν αἱ κατὰ λόγον ὑποστροφαὶ γινόμεναι, καὶ διεσώζοντο πάντες, οὐς κἀγὼ οἶδα, οἷσιν αἱ ὑποστροφαὶ διὰ τοῦ εἶδεος τούτου γενοῖατο. οὐδὲ τῶν διανοσησάντων διὰ τούτου τοῦ τρόπου οὐδενὶ οἶδα ὑποστροφὴν γενομένην πάλιν.

xx. The painful swellings by the ears in fevers in some cases neither subsided nor suppurated when the fever ceased with a crisis. They were cured by bilious diarrhœa, or dysentery, or a sediment of thick urine such as closed the illness of Hermippus of Clazomenæ. The circumstances of the crises, from which too I formed my judgments, were either similar or dissimilar ; for example, the two brothers, who fell sick together at the same time, and lay ill near the bungalow of Epigenes. The elder of these had a crisis on the sixth day, the younger on the seventh. Both suffered a relapse together at the same time with an intermission of five days. After the relapse both had a complete crisis together on the seventeenth day. But the great majority had a crisis on the sixth day, with an intermission of six days followed by a crisis on the fifth day after the relapse. Those who had a crisis on the seventh day had an intermission of seven days, with a crisis on the third day after the relapse. Others with a crisis on the seventh had an intermission of three days, with a crisis on the seventh day after the relapse. Some who had a crisis on the sixth day had an intermission of six and a relapse of three, an intermission of one and a relapse of one, followed by a crisis ; for example, Euagon the son of Daitharses. Others with a crisis on the sixth had an intermission of seven days, and after the relapse a crisis on the fourth ; for example, the daughter of Aglai+das. Now most of those who fell ill in this constitution went through their illness in this manner, and none of those who recovered, so far as I know, failed to suffer the relapses which were normal in these cases, but all, so far as I know, recovered if their relapses took place after this fashion. Further, I know of none who suffered a fresh relapse after going through the illness in the manner described above.

xxi. Ἐθνησκον δὲ τοῖσι νοσήμασι τούτοις οἱ πλεῖστοι ἑκταῖοι, οἷον Ἐπαμεινώνδας καὶ Σιληνὸς καὶ Φιλίσκος ὁ Ἀνταγόρεω. οἷσι δὲ τὰ παρὰ τὰ ὦτα γενοῖατο, ἔκρινε μὲν εἰκοσταίοισι, κατέσβη δὲ πᾶσι καὶ οὐκ ἐξεπύησεν, ἀλλ' ἐπὶ κύστιν ἐτράπετο. Κρατιστώννακτι, ὃς παρ' Ἡρακλεῖ ὤκει, καὶ Σκύμνου τοῦ

γναφέως θεραπαίνη ἐξεπύησεν· ἀπέθανον· οἷσι δ' ἔκρινεν ἑβδομαίοισι, διέλειπεν ἑννέα, ὑπέστρεφεν, ἔκρινεν ἐκ τῆς ὑποστροφῆς τεταρταίοισι — Παντακλεῖ, ὃς ὄκει παρὰ Διονύσιον — . οἷσι δ' ἔκρινεν ἑβδομαίοισιν, διέλειπεν ἕξ· ὑποστροφή· ἐκ δὲ τῆς ὑποστροφῆς ἔκρινεν ἑβδομαίοισι — Φανοκρίτω, ὃς κατέκειτο παρὰ Γνάθωνι τῷ γναφεῖ.

xxi. In these diseases most died on the sixth day, as did Epaminondas, Silenus and Philiscus the son of Antagoras. Those who had the swellings by the ears had a crisis on the twentieth day, but these subsided in all cases without suppuration, being diverted to the bladder. There were two cases of suppuration, both fatal, Cratistonax, who lived near the temple of Heracles, and the serving-maid of Scymnus the fuller. When there was a crisis on the seventh day, with an intermission of nine days followed by a relapse, there was a second crisis on the fourth day after the relapse — in the case of Pantacles, for example, who lived by the temple of Dionysus. When there was a crisis on the seventh day, with an intermission of six days followed by a relapse, there was a second crisis on the seventh day after the relapse — in the case of Phanocritus, for example, who lay sick at the house of Gnathon the fuller.

xxii. Ὑπὸ δὲ χειμῶνα περὶ ἡλίου τροπᾶς χειμερινᾶς καὶ μέχρι ἰσημερίας παρέμενον μὲν καὶ οἱ καῦσοι καὶ τὰ φρενιτικά, καὶ ἔθνησκον πολλοί· αἱ μέντοι κρίσεις μετέπεσον, καὶ ἔκρινε τοῖσι πλείστοισιν ἕξ ἀρχῆς πεμπταίοισι, διέλειπε τέσσαρας, ὑπέστρεφεν, ἐκ δὲ τῆς ὑποστροφῆς ἔκρινε πεμπταίοισι, τὸ σύμπαν τεσσαρεσκαίδεκαταίοις. ἔκρινε δὲ παιδίοισιν οὕτω τοῖσι πλείστοισιν, ἀτὰρ καὶ πρεσβυτέροισιν. ἔστι δὲ οἷσιν ἔκρινεν ἑνδεκαταίοις, ὑποστροφή τεσσαρεσκαίδεκαταίοις, ἔκρινε τελῶς εἰκοστῇ. εἰ δὲ τινες ἐπερρίγουν περὶ τὴν εἰκοστὴν, τούτοιςιν ἔκρινε τεσσαρακοσταίοις. ἐπερρίγουν δ' οἱ πλείστοι περὶ κρίσιν τὴν ἕξ ἀρχῆς· οἱ δ' ἐπιρριγώσαντες ἕξ ἀρχῆς περὶ κρίσιν, καὶ ἐν τῆσιν ὑποστροφῆσιν ἅμα κρίσει. ἐρρίγουν δ' ἐλάχιστοι μὲν τοῦ ἥρος, θέρεος πλείους, φθινοπώρου ἔτι πλείους, ὑπὸ δὲ χειμῶνα πολὺ πλείστοι. αἱ δὲ αἰμορραγίαι ὑπέληγον.

xxii. During winter, near the time of the winter solstice, and continuing until the equinox, the ardent fevers and the phrenitis still caused many deaths, but their crises changed. Most cases had a crisis on the fifth day from the outset, then intermitted four days, relapsed, had a crisis on the fifth day after the relapse, that is, after thirteen days altogether. Mostly children experienced crises thus, but older people did so too. Some had a crisis on the eleventh day, a relapse on the fourteenth, and a complete crisis on the twentieth. But if rigor came on about the

twentieth day the crisis came on the fortieth. Most had rigors near the first crisis, and those who had rigors at first near the crisis, had rigors again in the relapses at the time of the crisis. Fewest experienced rigors in the spring, more in summer, more still in autumn, but by far the most during winter. But the hemorrhages tended to cease.

XXIII. Τὰ δὲ περὶ τὰ νοσήματα, ἐξ ὧν διεγινώσκομεν, μαθόντες ἐκ τῆς κοινῆς φύσιος ἀπάντων καὶ τῆς ἰδίης ἐκάστου, ἐκ τοῦ νοσήματος, ἐκ τοῦ νοσέοντος, ἐκ τῶν προσφερομένων, ἐκ τοῦ προσφέροντος — ἐπὶ τὸ ῥᾶονγὰρ καὶ χαλεπώτερον ἐκ τούτων — , ἐκ τῆς καταστάσιος ὅλης καὶ κατὰ μέρεια τῶν οὐρανίων καὶ χώρας ἐκάστης, ἐκ τοῦ ἔθεος, ἐκ τῆς διαίτης, ἐκ τῶν ἐπιτηδευμάτων, ἐκ τῆς ἡλικίης ἐκάστου, λόγοισι, τρόποισι, σιγῇ, δια νοήμασιν, ὕπνοισιν, οὐχ ὕπνοισιν, ἐνυπνίοισι, οἴοισι καὶ ὄτε, τιλμοῖσι, κνησμοῖσι, δάκρυσιν, ἐκ τῶν παροξυσμῶν, διαχωρήμασιν, οὔροισιν, πτυάλοισιν, ἐμέτοισι, καὶ ὅσαι ἐξ οἴων ἐς οἶα διαδοχαὶ νοσημάτων καὶ ἀποστάσιες ἐπὶ τὸ ὀλέθριον καὶ κρίσιμον, ἰδρώς, ῥίγος, ψύξις, βῆξις, πταρμοί, λυγμοί, πνεύματα, ἐρεύξιες, φῦσαι, σιγῶσαι, ψοφώδεες, αἱμορραγίαι, αἱμορροΐδες, ἐκ τούτων καὶ ὅσα διὰ τούτων σκεπτέον.

XXIII. The following were the circumstances attending the diseases, from which I framed my judgments, learning from the common nature of all and the particular nature of the individual, from the disease, the patient, the regimen prescribed and the prescriber — for these make a diagnosis more favourable or less ; from the constitution, both as a whole and with respect to the parts, of the weather and of each region ; from the custom, mode of life, practices and ages of each patient ; from talk, manner, silence, thoughts, sleep or absence of sleep, the nature and time of dreams, pluckings, scratchings, tears ; from the exacerbations, stools, urine, sputa, vomit, the antecedents and consequents of each member in the successions of diseases, and the abscessions to a fatal issue or a crisis, sweat, rigor, chill, cough, sneezes, hiccoughs, breathing, belchings, flatulence, silent or noisy, hemorrhages, and hemorrhoids. From these things must we consider what their consequents also will be.

XXIV. Πυρετοὶ οἱ μὲν συνεχέες, οἱ δ' ἡμέρην ἔχουσι, νύκτα διαλείπουσι, νύκτα ἔχουσι, ἡμέρην διαλείπουσιν· ἡμιτριταῖοι, τριταῖοι, τεταρταῖοι, πεμπταῖοι, ἑβδομαῖοι, ἑναταῖοι. εἰσὶ δὲ ὀξύταται μὲν καὶ μέγιστα καὶ χαλεπώταται νοῦσοι καὶ θανατωδέσταται ἐν τῷ συνεχεῖ πυρετῷ. ἀσφαλέστατος δὲ πάντων καὶ ῥήϊστος καὶ μακρότατος πάντων ὁ τεταρταῖος· οὐ γὰρ μόνον αὐτὸς ἐφ' ἑωυτοῦ τοιοῦτός ἐστιν, ἀλλὰ καὶ νοσημάτων ἐτέρων μεγάλων ῥύεται. ἐν δὲ τῷ ἡμιτριταίῳ καλεομένῳ συμπίπτει μὲν καὶ ὀξέα νοσήματα γίνεσθαι, καὶ ἔστι τῶν

λοιπῶν οὗτος θανατωδέστατος· ἀτὰρ καὶ φθινώδεις καὶ ὅσοι ἄλλα μακρότερα νοσήματα νοσέουσιν, ἐπὶ τούτῳ μάλιστα νοσέουσι. νυκτερινὸς οὐ λίην θανατώδης, μακρὸς δέ. ἡμερινὸς μακρότερος· ἔστι δ' οἷσι ῥέπει καὶ ἐπὶ τὸ φθινῶδες. ἑβδομαῖος μακρὸς, οὐ θανατώδης. ἑναταῖος ἔτι μακρότερος, οὐ θανατώδης. τριταῖος ἀκριβῆς ταχυκρίσιμος καὶ οὐ θανατώδης. ὁ δὲ πεμπταῖος πάντων μὲν κάκιστος· καὶ γὰρ πρὸ φθίσιος καὶ ἤδη φθίνουσιν ἐπιγινόμενος κτείνει.

XXIV. Some fevers are continuous, some have an access during the day and an intermission during the night, or an access during the night and an intermission during the day ; there are semitertians, tertians, quartans, quintans, septans, nonans. The most acute diseases, the most severe, difficult and fatal, belong to the continuous fevers. The least fatal and least difficult of all, but the longest of all, is the quartan. Not only is it such in itself, but it also ends other, and serious, diseases. In the fever called semitertian, which is more fatal than any other, there occur also acute diseases, while it especially precedes the illness of consumptives, and of those who suffer from other and longer diseases. The nocturnal is not very fatal, but it is long. The diurnal is longer still, and to some it also brings a tendency to consumption. The septan is long but not fatal. The nonan is longer still but not fatal. The exact tertian has a speedy crisis and is not fatal. But the quintan is the worst of all. For if it comes on before consumption or during consumption the patient dies.

XXV. Εἰσὶ δὲ τρόποι καὶ καταστάσεις καὶ παροξυσμοὶ τούτων ἐκάστου τῶν πυρετῶν. αὐτίκα γὰρ συνεχῆς ἔστιν οἷσιν ἀρχόμενος ἀνθεῖ καὶ ἀκμάζει μάλιστα καὶ ἀνάγει ἐπὶ τὸ χαλεπώτατον, περὶ δὲ κρίσιν καὶ ἅμα κρίσει λεπτύνεται· ἔστι δ' οἷσιν ἄρχεται μαλακῶς καὶ ὑποβρύχια, ἐπαναδιδοῖ δὲ καὶ παροξύνεται καθ' ἡμέρην ἐκάστην, περὶ δὲ κρίσιν ἄλις ἐξέλαμψεν· ἔστι δ' οἷσιν ἀρχόμενος πρηέως ἐπιδιδοῖ καὶ παροξύνεται καὶ μέχρι τινὸς ἀκμάσας πάλιν ὑφίησι μέχρι κρίσιος καὶ περὶ κρίσιν. συμπίπτει δὲ ταῦτα γίνεσθαι ἐπὶ παντὸς πυρετοῦ καὶ νοσήματος. δεῖ δὲ καὶ τὰ διαιτήματα σκοπεύμενον ἐκ τούτων προσφέρειν. πολλὰ δὲ καὶ ἄλλα ἐπίκαιρα σημεῖα τούτοις ἔστιν ἠδελφισμένα, περὶ ὧν τὰ μὲν που γέγραπται, τὰ δὲ καὶ γεγράφεται. πρὸς ἃ δεῖ διαλογιζόμενον δοκιμάζειν καὶ σκοπεῖσθαι, τίνι τούτων ὅζυ καὶ θανατώδεις ἢ περιεστικὸν καὶ τίνι μακρὸν καὶ θανατώδεις ἢ περιεστικὸν καὶ τίνι προσαρτέον ἢ οὐ καὶ πότε καὶ πόσον καὶ τί τὸ προσφερόμενον ἔσται.

XXV. Each of these fevers has its modes, its constitutions and its exacerbations. For example, a continuous fever in some cases from the beginning is high and at

its worst, leading up to the most severe stage, but about and at the crisis it moderates. In other cases it begins gently and in a suppressed manner, but rises and is exacerbated each day, bursting out violently near the crisis. In some cases it begins mildly, but increases and is exacerbated, reaching its height after a time ; then it declines again until the crisis or near the crisis. These characteristics may show themselves in any fever and in any disease. It is necessary also to consider the patient's mode of life and to take it into account when prescribing. Many other important symptoms there are which are akin to these, some of which I have described, while others I shall describe later. These must be duly weighed when considering and deciding who is suffering from one of these diseases in an acute, fatal form, or whether the patient may recover ; who has a chronic, fatal illness, or one from which he may recover ; who is to be prescribed for or not, what the prescription is to be, the quantity to be given and the time to give it.

XXVI. Τὰ δὲ παροξυνόμενα ἐν ἀρτίησι κρίνεται ἐν ἀρτίησιν· ὧν δὲ οἱ παροξυσμοὶ ἐν περισσῆσι, κρίνεται ἐν περισσῆσιν. ἔστι δὲ πρώτη περίοδος τῶν ἐν τῆσιν ἀρτίησι κρινόντων τετάρτη, ἕκτη, ὀγδόη, δεκάτη, τεσσαρεσκαιδεκάτη, εἰκοστή, τετάρτη καὶ εἰκοστή, τριακοστή, τεσσαρακοστή, ἑξηκοστή, ὀγδοηκοστή, εἰκοστή καὶ ἑκατοστή· τῶν δ' ἐν τῆσι περισσῆσι κρινόντων περίοδος πρώτη, τρίτη, πέμπτη, ἑβδόμη, ἑνάτη, ἑνδεκάτη, ἑπτακαιδεκάτη, εἰκοστή πρώτη, εἰκοστή ἑβδόμη, τριακοστή πρώτη. εἰδέναι δὲ χρὴ ἔτι, ἦν ἄλλως κριθῆ ἔξω τῶν ὑπογεγραμμένων, ἔσομένης ὑποστροφάς· γένοιτο δὲ ἂν καὶ ὀλέθρια. δεῖ δὲ προσέχειν τὸν νόον καὶ εἰδέναι ἐν τοῖσι χρόνοισι τούτοισι τὰς κρίσιαις ἔσομένης ἐπὶ σωτηρίην ἢ ὄλεθρον ἢ ῥοπὰς ἐπὶ τὸ ἄμεινον ἢ τὸ χειρόν. πλάνητες δὲ πυρετοὶ καὶ τεταρταῖοι καὶ πεμπταῖοι καὶ ἑβδομαῖοι καὶ ἑναταῖοι, ἐν ἧσι περίοδοι κρίνονται, σκεπτέον.

XXVI. When the exacerbations are on even days, the crises are on even days. But the diseases exacerbated on odd days have their crises on odd days. The first period of diseases with crises on the even days is the fourth day, then the sixth, eighth, tenth, fourteenth, twentieth, twenty-fourth, thirtieth, fortieth, sixtieth, eightieth, hundred and twentieth. Of those with a crisis on the odd days the first period is the third, then the fifth, seventh, ninth, eleventh, seventeenth, twenty-first, twenty-seventh, thirty-first. Further, one must know that, if the crises be on other days than the above, there will be relapses, and there may also be a fatal issue. So one must be attentive and know that at these times there will be the crises resulting in recovery, or death, or a tendency for better or worse. One must also consider in what periods the crises occur of irregular fevers, of quartans, of



quintans, of septans and of nonans.

## Ἄρρωστοὶ τέσσαρες καίδεκα - FOURTEEN CASES

[α'.] Φιλίσκος ᾤκει παρὰ τὸ τεῖχος· κατεκλίθη, τῇ πρώτῃ πυρετὸς ὀξύς, ἰδρωσεν, ἐς νύκτα ἐπιπόνως· δευτέρῃ πάντα παρωξύνθη, ὅψε δὲ ἀπὸ κλυσματίου καλῶς διῆλθε· νύκτα δι' ἠσυχίης. τρίτῃ πρωὶ καὶ μέχρι μέσου ἡμέρης ἔδοξε γενέσθαι ἄπυρος, πρὸς δείλην δὲ πυρετὸς ὀξύς μετὰ ἰδρῶτος, διψώδης, γλῶσσα ἐπεξηραίνετο, μέλανα οὔρησε· νύκτα δυσφόρως, οὐκ ἐκοιμήθη, πάντα παρέκρουσε. τετάρτῃ πάντα παρωξύνθη, οὔρα μέλανα· νύκτα εὐφορωτέραν, οὔρα εὐχροώτερα. πέμπτῃ περὶ μέσον ἡμέρης σμικρὸν ἀπὸ ῥινῶν ἔσταξεν ἄκρητον· οὔρα δὲ ποικίλα, ἔχοντα ἐναιωρήματα στρογγύλα, γονοειδέα, διεσπας μένα, οὐχ ἰδρῦετο· προσθεμένω δὲ βάλανον φυσώδεα σμικρὰ διῆλθε. νύκτα ἐπιπόνως, ὕπνοι σμικροί, λόγοι, λῆρος, ἄκρεα πάντοθεν ψυχρὰ καὶ οὐκέτι ἀναθερμαινόμενα, οὔρησε μέλανα, ἐκοιμήθη σμικρὰ πρὸς ἡμέρην, ἄφωνος, ἰδρωσε ψυχρῶ, ἄκρεα πελιδνά. περὶ δὲ μέσον ἡμέρης ἑκταῖος ἀπέθανεν. τοῦτω πνεῦμα διὰ τέλεος, ὥσπερ ἀνακαλεομένω, ἀραιὸν μέγα· σπλῆν ἐπήρθη περιφερεῖ κυρτώματι, ἰδρῶτες ψυχροὶ διὰ τέλεος. οἱ παροξυσμοὶ ἐν ἀρτίησιν.

### CASE I

Philiscus lived by the wall. He took to his bed with acute fever on the first day and sweating ; night uncomfortable.

*Second day.* General exacerbation, later a small clyster moved the bowels well. A restful night.

*Third day.* Early and until mid-day he appeared to have lost the fever ; but towards evening acute fever with sweating ; thirst ; dry tongue ; black urine. An uncomfortable night, without sleep ; completely out of his mind.

*Fourth day.* All symptoms exacerbated ; black urine ; a more comfortable night, and urine of a better colour.

*Fifth day.* About mid-day slight epistaxis of unmixed blood. Urine varied, with scattered, round particles suspended in it, resembling semen ; they did not settle. On the application of a suppository the patient passed, with flatulence, scanty excreta. A distressing night, snatches of sleep, irrational talk ; extremities everywhere cold, and would not get warm again ; black urine ; snatches of sleep towards dawn ; speechless ; cold sweat ; extremities livid. About mid-day on the

sixth day the patient died. The breathing throughout, as though he were recollecting to do it, was rare and large. Spleen raised in a round swelling ; cold sweats all the time. The exacerbations on even days.

[β'.] Σιληνὸς ᾧκει ἐπὶ τοῦ πλαταμῶνος πλησίον τῶν Εὐαλκίδεω. ἐκ κόπων καὶ πότων καὶ γυμνασιῶν ἀκαίρων πῦρ ἔλαβεν. ἤρξατο δὲ πονεῖν κατ' ὄσφῦν· καὶ κεφαλῆς βάρος καὶ τραχήλου σύντασις. ἀπὸ δὲ κοιλίης τῇ πρώτῃ χολώδεα, ἄκρητα, ἔπαφρα, κατακορέα πολλὰ διῆλθεν· οὔρα μέλανα, μέλαιναν ὑπόστασιν ἔχοντα, διψώδης, γλῶσσα ἐπίξηρος, νυκτὸς οὐδὲν ἐκοιμήθη. δευτέρῃ πυρετὸς ὄξύς, διαχωρήματα πλείω, λεπτότερα, ἔπαφρα, οὔρα μέλανα, νύκτα δυσφόρως, σμικρὰ παρέκρουσε. τρίτῃ πάντα παρωξύνθη· ὑποχονδρίου σύντασις ἐξ ἀμφοτέρων παραμήκης πρὸς ὀμφαλόν, ὑπολάπαρος· διαχωρήματα λεπτά, ὑπομέλανα, οὔρα θολερά, ὑπομέλανα, νυκτὸς οὐδὲν ἐκοιμήθη, λόγοι πολλοί, γέλως, ᾠδή, κατέχειν οὐκ ἠδύνατο. τετάρτῃ διὰ τῶν αὐτῶν. πέμπτῃ διαχωρήματα ἄκρητα, χολώδεα, λεῖα, λιπαρά, οὔρα λεπτά, διαφανέα· σμικρὰ κατενόει. ἕκτῃ περὶ κεφαλὴν σμικρὰ ἐφίδρωσεν, ἄκρεα ψυχρά, πελιδνά, πολὺς βληστρισμός, ἀπὸ κοιλίης οὐδὲν διῆλθεν, οὔρα ἐπέστη, πυρετὸς ὄξύς. ἐβδόμῃ ἄφωνος, ἄκρεα οὐκέτι ἀνεθερμαίνετο, οὔρησεν οὐδέν. ὀγδόῃ ἰδρωσεν δι' ὅλου ψυχρῶ· ἐξανθήματα μετὰ ἰδρώτος ἐρυθρά, στρογγύλα, σμικρὰ οἶον ἰονθοί, παρέμενεν, οὐ καθίστατο· ἀπὸ δὲ κοιλίης ἐρεθισμῶ σμικρῶ κοπρανα λεπτά, οἷα ἄπεπτα, πολλὰ διήει μετὰ πόνου· οὔρει μετ' ὀδύνης δακνώδεα· ἄκρεα σμικρὰ ἀνεθερμαίνετο, ὕπνοι λεπτοί, κωματώδης, ἄφωνος, οὔρα λεπτὰ διαφανέα. ἐνάτῃ διὰ τῶν αὐτῶν. δεκάτῃ ποτὰ οὐκ ἐδέχετο, κωματώδης, ὕπνοι λεπτοί· ἀπὸ δὲ κοιλίης ὁμοία, οὔρησεν ἀθρόον ὑπόπαχυν· κειμένῳ ὑπόστασις κριμνώδης λευκή, ἄκρεα πάλιν ψυχρά. ἐνδεκάτῃ ἀπέθανεν. ἐξ ἀρχῆς τούτῳ καὶ διὰ τέλεος πνεῦμα ἀραιόν, μέγα. ὑποχονδρίου παλμὸς συνεχῆς, ἡλικίῃ ὡς περὶ ἔτεα εἴκοσιν.

## CASE II

Silenus lived on Broadway near the place of Eualcidas. After over-exertion, drinking, and exercises at the wrong time he was attacked by fever. He began by having pains in the loins, with heaviness in the head and tightness of the neck. From the bowels on the first day there passed copious discharges of bilious matter, unmixed, frothy, and highly coloured. Urine black, with a black sediment ; thirst ; tongue dry ; no sleep at night.

*Second day.* Acute fever, stools more copious, thinner, frothy ; urine black ; uncomfortable night ; slightly out of his mind.

*Third day.* General exacerbation ; oblong tightness of the hypochondrium, soft underneath, extending on both sides to the navel ; stools thin, blackish ; urine turbid, blackish ; no sleep at night ; much rambling, laughter, singing ; no power of restraining himself.

*Fourth day.* Same symptoms.

*Fifth day.* Stools unmixed, bilious, smooth, greasy ; urine thin, transparent ; lucid intervals.

*Sixth day.* Slight sweats about the head ; extremities cold and livid ; much tossing ; nothing passed from the bowels ; urine suppressed ; acute fever.

*Seventh day.* Speechless ; extremities would no longer get warm ; no urine.

*Eighth day.* Cold sweat all over ; red spots with sweat, round, small like acne, which persisted without subsiding. From the bowels with slight stimulus there came a copious discharge of solid stools, thin, as it were unconcocted, painful. Urine painful and irritating. Extremities grow a little warmer ; fitful sleep ; coma ; speechlessness ; thin, transparent urine.

*Ninth day.* Same symptoms.

*Tenth day.* Took no drink ; coma ; fitful sleep. Discharges from the bowels similar ; had a copious discharge of thickish urine, which on standing left a farinaceous, white deposit ; extremities again cold.

*Eleventh day.* Death.

From the beginning the breath in this case was throughout rare and large. Continuous throbbing of the hypochondrium ; age about twenty years.

[γ'.] Ἡροφῶντι πυρετὸς ὀξύς, ἀπὸ κοιλίης ὀλίγα, τεινεσμώδεα κατ' ἀρχάς, μετὰ δὲ λεπτὰ διήει χολώδεα, ὑπόσυχνα· ὕπνοι οὐκ ἐνήσαν, οὔρα μέλανα λεπτά. πέμπτη πρῶτὴ κώφωσις, παρωξύνθη πάντα, σπλὴν ἐπήρθη, ὑποχονδρίου σύντασις, ἀπὸ κοιλίης ὀλίγα διήλθε μέλανα, παρεφρόνησεν. ἕκτη ἐλήρει, ἐς νύκτα ἰδρώς, ψύξις, παράληρος παρέμενε. ἐβδόμη περιένυκτο, διψώδης, παρέκρυσσε. νύκτα κατενόει, κατεκοιμήθη. ὀγδόη ἐπύρεσσε, σπλὴν ἐμειοῦτο, κατενόει πάντα, ἤλγησεν τὸ πρῶτον κατὰ βουβῶνα, σπληνὸς κατ' ἴξιν, ἔπειτα δὲ πόνοι ἐς ἀμφοτέρας κνήμας. νύκτα εὐφόρος, οὔρα εὐχροότερα, ὑπόστασιν εἶχε

σμηκρήν. ένάτη ἴδρωσεν, έκρίθη, διέλιπεν. πέμπτη ύπέστρεψεν. αύτίκα δέ σπλήν έπήρθη, πυρετός όξύς, κώφωσις πάλιν· μετά δέ τήν ύποστροφήν τρίτη σπλήν έμειούτο, κώφωσις ήσσον, σκέλεα έπωδύνως· νύκτα ἴδρωσεν. έκρίθη περι έπτακαιδεκάτην· ούδέ παρέκρουσεν έν τή ύποστροφή.

### CASE III

Herophon had acute fever ; scanty stools with tenesmus at the beginning, afterwards becoming thin, bilious and fairly frequent. No sleep ; urine black and thin.

*Fifth day.* Deafness early in the day ; general exacerbation ; spleen swollen ; tension of the hypochondrium ; scanty black stools ; delirium.

*Sixth day.* Wandering talk ; at night sweat and chill ; the wandering persisted.

*Seventh Day.* Chill all over ; thirst ; out of his mind. During the night he was rational, and slept.

*Eighth day.* Fever ; spleen lessened ; quite rational ; pain at first in the groin, on the side of the spleen ; then the pains extended to both legs. Night comfortable ; urine of a better colour, with a slight deposit.

*Ninth day.* Sweat, crisis, intermission. On the fifth day after the crisis the patient relapsed. Immediately the spleen swelled ; acute fever ; return of deafness. On the third day after the relapse the spleen grew less and the deafness diminished, but there was pain in the legs. During the night he sweated. The crisis was about the seventeenth day. There was no delirium during the relapse.

[δ'.] Έν Θάσφ Φιλίνου γυναίκα θυγατέρα τεκοῦσαν κατά φύσιν καθάρσιος γενομένης και τὰ άλλα κούφως διάγουσαν, τεσσαρεσκαιδεκαταιήν έοῦσαν μετά τόν τόκον, πῦρ έλαβε μετά ρίγεος· ήλγει δέ άρχομένη καρδίην και ύποχόνδριον δεξιόν· γυναικείων πόνοι· κάθαρσις έπαύσατο. προσθεμένη δέ ταῦτα μέν έκουφίσθη, κεφαλής δέ και τραχήλου και όσφύος πόνοι παρέμενον, ὕπνοι ούκ ένήσαν, άκρεα ψυχρά, διψώδης, κοιλίη συνεκαύθη, σμηκρά διήει, οὔρα λεπτά, άχρω κατ' άρχάς. έκταιή ές νύκτα παρέκρουσε πολλά και πάλιν κατενόει. έβδόμη διψώδης, διαχωρήματα όλίγα χολώδεα κατακορέα. όγδόη έπερρίγωσεν, πυρετός όξύς, σπασμοί πολλοί μετά πόνου, πολλά παρέλεγεν· έξανίστατο βάλανον προσθεμένη· πολλά διήλθε μετά περιρρόου χολώδεος· ὕπνοι ούκ ένήσαν. ένάτη σπασμοί. δεκάτη σμηκρά κατενόει. ένδεκάτη έκοιμήθη, πάντων

ἀνεμνήσθη, ταχὺ δὲ πάλιν παρέκρουσεν· οὔρει δὲ μετὰ σπασμῶν ἀθρόον πολὺ ὀλιγάκις ἀναμιμνησκόντων παχὺ λευκόν, οἶον γίνεται ἐκ τῶν καθισταμένων, ὅταν ἀναταραχθῆ· κείμενον πολὺν χρόνον οὐ καθίστατο· χρῶμα καὶ πάχος ἴκελον οἶον γίνεται ὑποζυγίου. τοιαῦτα οὔρει, οἷα κάγῳ εἶδον. περὶ τεσσαρεσκαίδεκάτην ἐούση παλμὸς δι' ὅλου τοῦ σώματος, λόγοι πολλοί, σμικρὰ κατενόει· διὰ ταχέων δὲ πάλιν παρέκρουσεν. περὶ δὲ ἑπτακαίδεκάτην ἐούσα ἄφωνος. εἰκοστῇ ἀπέθανε.

#### CASE IV

In Thasos the wife of Philinus gave birth to a daughter. The lochial discharge was normal, and the mother was doing well when on the fourteenth day after delivery she was seized with fever attended with rigor. At first she suffered in the stomach and the right hypochondrium. Pains in the genital organs. The discharge ceased. By a pessary these troubles were eased, but pains persisted in the head, neck and loins. No sleep ; extremities cold ; thirst ; bowels burnt ; scanty stools ; urine thin, and at first colourless.

*Sixth day.* Much delirium at night, followed by recovery of reason.

*Seventh day.* Thirst ; stools scanty, bilious, highly coloured.

*Eighth day.* Rigor ; acute fever ; many painful convulsions ; much delirium. The application of a suppository made her keep going to stool, and there were copious motions with a bilious flux. No sleep.

*Ninth day.* Convulsions.

*Tenth day.* Lucid intervals.

*Eleventh day.* Slept ; complete recovery of her memory, followed quickly by renewed delirium. A copious passing of urine with convulsions — her attendants seldom reminding her — which was white and thick, like urine with a sediment and then shaken ; it stood for a long time without forming a sediment ; colour and consistency like that of the urine of cattle. Such was the nature of the urine that I myself saw.

About the fourteenth day there were twitchings over all the body ; much wandering, with lucid intervals followed quickly by renewed delirium. About the seventeenth day she became speechless.

*Twentieth day. Death.*

[ε'.] Ἐπικράτεος γυναῖκα, ἣ κατέκειτο παρὰ ἀρχηγέτην, περὶ τόκον ἤδη ἐοῦσαν ῥίγος ἔλαβεν ἰσχυρῶς, οὐκ ἐθερμάνθη, ὡς ἔλεγον, καὶ τῇ ὑστεραίῃ τὰ αὐτά. τρίτη δ' ἔτεκεν θυγατέρα καὶ τᾶλλα πάντα κατὰ λόγον ἦλθε. δευτεραίην μετὰ τὸν τόκον ἔλαβε πυρετὸς ὀξύς, καρδίας πόνος καὶ γυναικείων. προσθεμένη δὲ ταῦτα μὲν ἐκουφίσθη, κεφαλῆς δὲ καὶ τραχήλου καὶ ὀσφύος πόνος· ὕπνοι οὐκ ἐνήσαν· ἀπὸ δὲ κοιλίας ὀλίγα χολώδεα λεπτὰ διήει ἄκρητα· οὔρα λεπτὰ ὑπομέλανα. ἀφ' ἧς δὲ ἔλαβε τὸ πῦρ, ἐς νύκτα ἐκταίη παρέκρουσεν. ἐβδομαίη πάντα παρωξύνθη, ἄγρυπνος, παρέκρουσεν, διψώδης, διαχωρήματα χολώδεα κατακορέα. ὀγδοῆ ἐπερρίγωσεν καὶ ἐκοιμήθη πλείω. ἐνάτη διὰ τῶν αὐτῶν. δεκάτη σκέλεα ἐπιπόνως ἦλγει, καρδίας πάλιν ὀδύνη, καρηβαρὴ, οὐ παρέκρουεν, ἐκοιμᾶτο μᾶλλον, κοιλίη ἐπέστη. ἐνδεκάτη οὔρησεν εὐχρόωτερα συχνὴν ὑπόστασιν ἔχοντα· διῆγε κουφότερον. τεσσαρεσκαίδεκάτη ἐπερρίγωσεν, πυρετὸς ὀξύς. πεντεκαίδεκάτη ἡμεσε χολώδεα ξανθὰ ὑπόσυχνα, ἴδρωσεν ἄπυρος, ἐς νύκτα δὲ πυρετὸς ὀξύς, οὔρα πάχος ἔχοντα, ὑπόστασις λευκή. ἑκκαίδεκάτη παρωξύνθη· νύκτα δυσφόρος· οὐχ ὕπνωσεν· παρέκρουσεν. ὀκτωκαίδεκάτη διψώδης, γλῶσσα ἐπεκαύθη, οὐχ ὕπνωσεν, παρέκρουσε πολλά, σκέλεα ἐπὸδύνως εἶχεν. περὶ δὲ εἰκοστὴν πρῶτὶ σμικρὰ ἐπερρίγωσεν, κωματώδης, δι' ἡσυχίης ὕπνωσεν, ἡμεσε χολώδεα ὀλίγα μέλανα, ἐς νύκτα κώφωσις. περὶ δὲ πρώτην καὶ εἰκοστὴν πλευροῦ ἀριστεροῦ βᾶρος δι' ὄλου μετ' ὀδύνης, σμικρὰ ὑπέβησεν. οὔρα δὲ πάχος ἔχοντα, θολερά, ὑπέρυθρα· κείμενα οὐ καθίστατο· τὰ δ' ἄλλα κουφοτέρως· οὐκ ἄπυρος. αὕτη ἐξ ἀρχῆς φάρυγγα ἐπώδυνος· ἔρευθος· κίων ἀνεσπασμένος· ῥεῦμα δριμύ, δακνωδές, ἀλμυρῶδες διὰ τέλεος παρέμενεν. περὶ δὲ εἰκοστὴν ἐβδόμην ἄπυρος, οὔροισιν ὑπόστασις, πλευρὸν ὑπήλγει. περὶ δὲ πρώτην καὶ τριακοστὴν πῦρ ἔλαβεν, κοιλίη χολώδεσιν ἐπεταράχθη. τεσσαρακοστῇ ἡμεσεν ὀλίγα χολώδεα. ἐκρίθη τελῶς ἄπυρος ὀγδοῆ κοστῇ.

CASE V

The wife of Epicrates, who lay sick near the founder, when near her delivery was seized with severe rigor without, it was said, becoming warm, and the same symptoms occurred on the following day. On the third day she gave birth to a daughter, and the delivery was in every respect normal. On the second day after the delivery she was seized with acute fever, pain at the stomach and in the genitals. A pessary relieved these symptoms, but there was pain in the head, neck and loins. No sleep. From the bowels passed scanty stools, bilious, thin and unmixed. Urine thin and blackish. Delirium on the night of the sixth day from

the day the fever began.

*Seventh day.* All symptoms exacerbated ; sleeplessness ; delirium ; thirst ; bilious, highly-coloured stools.

*Eighth day.* Rigor ; more sleep.

*Ninth day.* The same symptoms. *Tenth day.* Severe pains in the legs ; pain again at the stomach ; heaviness in the head ; no delirium ; more sleep ; constipation.

*Eleventh day.* Urine of better colour, with a thick deposit ; was easier.

*Fourteenth day.* Rigor ; acute fever.

*Fifteenth day.* Vomited fairly frequently bilious, yellow vomit ; sweated without fever ; at night, however, acute fever ; urine thick, with a white sediment.

*Sixteenth day.* Exacerbation ; an uncomfortable night ; no sleep ; delirium.

*Eighteenth day.* Thirst ; tongue parched ; no sleep ; much delirium ; pain in the legs.

About the twentieth day. Slight rigors in the early morning ; coma ; quiet sleep ; scanty, bilious, black vomits ; deafness at night.

About the twenty-first day. Heaviness all over the left side, with pain ; slight coughing ; urine thick, turbid, reddish, no sediment on standing. In other respects easier ; no fever. From the beginning she had pain in the throat ; redness ; uvula drawn back ; throughout there persisted an acrid flux, smarting, and salt.

About the twenty-seventh day. No fever ; sediment in urine ; some pain in the side.

About the thirty-first day. Attacked by fever ; bowels disordered and bilious.

*Fortieth day.* Scanty, bilious vomits.

*Eightieth day.* Complete crisis with cessation of fever.

[ς'.] Κλεανακτίδην, ὃς κατέκειτο ἐπάνω τοῦ Ἡρακλείου, πῦρ ἔλαβε πεπλανημένως· ἦλγει δὲ κεφαλὴν ἐξ ἀρχῆς καὶ πλευρὸν ἀριστερόν, καὶ τῶν



ἄλλων πόνοι κοπιώδεα τρόπον· οἱ πυρετοὶ παροξυνόμενοι ἄλλοτ' ἄλλοίως, ἀτάκτως· ἰδρῶτες ὅτε μὲν, ὅτε δ' οὐ· τὰ μὲν πλεῖστα ἐπεσήμαινον οἱ παροξυσμοὶ ἐν κρισίμοις μάλιστα. περὶ δὲ εἰκοστὴν τετάρτην χειῖρας ἄκρας ἐπόνησεν, ἤμεσε χολώδεα ξανθά, ὑπόσυχνα, μετ' ὀλίγον δὲ ἰώδεα· πάντων ἐκουφίσθη. περὶ δὲ τριακοστὴν ἐόντι ἤρξατο ἀπὸ ῥινῶν αἰμορραγεῖν ἐξ ἀμφοτέρων καὶ ταῦτα πεπλανημένως κατ' ὀλίγον μέχρι κρίσιος· οὐκ ἀπόσιτος οὐδὲ διψώδης παρὰ πάντα τὸν χρόνον οὐδ' ἄγρυπνος· οὔρα δὲ λεπτά, οὐκ ἄχρω. περὶ δὲ τεσσαρακοστὴν ἐὼν οὔρησεν ὑπέρυθρα ὑπόστασιν πολλὴν ἐρυθρὴν ἔχοντα· ἐκουφίσθη. μετὰ δὲ ποικίλως τὰ τῶν οὔρων· ὅτε μὲν ὑπόστασιν εἶχεν, ὅτε δ' οὐ· ἐξηκοστῇ οὔροισιν ὑπόστασις πολλὴ καὶ λευκὴ καὶ λείη, συνέδωκε πάντα, πυρετοὶ διελιπον, οὔρα δὲ πάλιν λεπτά μὲν, εὔχρω δέ. ἐβδομηκοστῇ πυρετός, διέλειπεν ἡμέρας δέκα. ὀγδοηκοστῇ ἐρρίγωσε, πυρετός ὅζυς ἔλαβεν· ἰδρωσεν πολλῶ· οὔροισιν ὑπόστασις ἐρυθρὴ, λείη. τελῶς ἐκρίθη.

## CASE VI

Cleanactides, who lay sick above the temple of Heracles, was seized by an irregular fever. He had at the beginning pains in the head and the left side, and in the other parts pains like those caused by fatigue. The exacerbations of the fever were varied and irregular ; sometimes there were sweats, sometimes there were not. Generally the exacerbations manifested themselves most on the critical days.

About the twenty-fourth day. Pain in the hands ; bilious, yellow vomits, fairly frequent, becoming after a while like verdigris ; general relief.

About the thirtieth day. Epistaxis from both nostrils began, and continued, irregular and slight, until the crisis. All the time he suffered no thirst, nor lack of appetite or sleep. Urine thin, and not colourless.

About the fortieth day. Urine reddish, and with an abundant, red deposit. Was eased. Afterwards the urine varied, sometimes having, sometimes not having, a sediment.

*Sixtieth day.* Urine had an abundant sediment, white and smooth ; general improvement ; fever intermitted ; urine again thin but of good colour.

*Seventieth day.* Fever, which intermitted for ten days.

*Eightieth day.* Rigor ; attacked by acute fever ; much sweat ; in the urine a red,

smooth sediment. A complete crisis.

[ζ'.] Μέτωνα πῦρ ἔλαβεν, ὀσφύος βάρος ἐπώδυνον. δευτέρῃ ὕδωρ πίνοντι ὑπόσυχνον ἀπὸ κοιλίης καλῶς διήλθε. τρίτη κεφαλῆς βάρος, διαχωρήματα λεπτά, χολώδεα, ὑπέρυθρα. τετάρτη πάντα παρωξύνθη, ἐρρῦη ἀπὸ δεξιοῦ δις κατ' ὀλίγον. νύκτα δυσφόρως, διαχωρήματα ὅμοια τῇ τρίτῃ, οὔρα ὑπομέλανα· εἶχεν ἐναιώρημα ὑπόμελαν ἐόν, διεσπασμένον· οὐχ ἰδρύετο. πέμπτη ἐρρῦη λάβρον ἐξ ἀριστεροῦ ἄκρητον, ἰδρωσεν, ἐκρίθη. μετὰ κρίσιν ἄγρυπνος, παρέλεγεν, οὔρα λεπτὰ ὑπομέλανα. λουτροῖσιν ἐχρήσατο κατὰ κεφαλῆς, ἐκοιμήθη, κατενόει. τούτῳ οὐχ ὑπέστρεψεν, ἀλλ' ἤμορράγει πολλακίς μετὰ κρίσιν.

### CASE VII

Meton was seized with fever, and painful heaviness in the loins.

*Second day.* After a fairly copious draught of water had his bowels well moved.

*Third day.* Heaviness in the head ; stools thin, bilious, rather red. *Fourth day.* General exacerbation ; slight epistaxis twice from the right nostril. An uncomfortable night ; stools as on the third day ; urine rather black ; had a rather black cloud floating in it, spread out, which did not settle.

*Fifth day.* Violent epistaxis of unmixed blood from the left nostril ; sweat ; crisis. After the crisis sleeplessness ; wandering ; urine thin and rather black. His head was bathed ; sleep ; reason restored. The patient suffered no relapse, but after the crisis bled several times from the nose.

[η'.] Ἐρασῖνος ᾧκει παρὰ Βοώτεω χαράδρην. πῦρ ἔλαβεν μετὰ δεῖπνον, νύκτα ταραχώδης. ἡμέρην τὴν πρώτην δι' ἠσυχίης, νύκτα ἐπιπόνως. δευτέρῃ πάντα παρωξύνθη, ἐς νύκτα παρέκρυσσε. τρίτη ἐπιπόνως, πολλὰ παρέκρυσσε. τετάρτη δυσφορώτατα· ἐς δὲ τὴν νύκτα οὐδὲν ἐκοιμήθη· ἐνύπνια καὶ λογισμοί· ἔπειτα χεῖρω, μεγάλα καὶ ἐπίκαιρα, φόβος, δυσφορή. πέμπτη πρωὶ κατήρητο· κατενόει πάντα· πολὺ δὲ πρὸ μέσου ἡμέρης ἐξεμάνη, κατέχειν οὐκ ἠδύνατο, ἄκρεα ψυχρὰ ὑποπέλια, οὔρα ἐπέστη· ἀπέθανε περὶ ἡλίου δυσμάς. τούτῳ πυρετοὶ διὰ τέλεος σὺν ἰδρῶτι, ὑποχόνδρια μετέωρα, σύντασις μετ' ὀδύνης· οὔρα μέλανα ἔχοντα ἐναιωρήματα στρογγύλα· οὐχ ἰδρύετο· ἀπὸ δὲ κοιλίης κόπρανα διήει· δίψα διὰ τέλεος οὐ λίην· σπασμοὶ πολλοὶ σὺν ἰδρῶτι περὶ θάνατον.

### CASE VIII

Erasmus lived by the gully of Boétes. Was seized with fever after supper ; a troubled night.

*First day.* Quiet, but the night was painful.

*Second day.* General exacerbation ; delirium at night.

*Third day.* Pain and much delirium.

*Fourth day.* Very uncomfortable ; no sleep at night ; dreams and wandering. Then worse symptoms, of a striking and significant character ; fear and discomfort.

*Fifth day.* Early in the morning was composed, and in complete possession of his senses. But long before mid-day was madly delirious ; could not restrain himself ; extremities cold and rather livid ; urine suppressed ; died about sunset.

In this patient the fever was throughout accompanied by sweat ; the hypochondria were swollen, distended and painful. Urine black, with round, suspended particles which did not settle. There were solid discharges from the bowels. Thirst throughout not very great. Many convulsions with sweating about the time of death.

[θ'.] Κρίτωνι ἐν Θάσῳ ποδὸς ὀδύνη ἤρξατο ἰσχυρὴ ἀπὸ δακτύλου τοῦ μεγάλου ὀρθοστάδην περιόντι. κατεκλίνη αὐθημερόν, φρικώδης, ἀσώδης, σμικρὰ ὑποθερμαινόμενος, ἐς νύκτα παρεφρόνησεν. δευτέρῃ οἴδημα δι' ὅλου τοῦ ποδὸς καὶ περὶ σφυρὸν ὑπέρυθρον μετὰ συντάσιος, φλυκταινίδια μέλανα, πυρετὸς ὀξύς, ἐξεμάνη· ἀπὸ δὲ κοιλίης ἄκρητα, χολώδεα, ὑπόσυχνα. ἀπέθανεν ἀπὸ τῆς ἀρχῆς δευτεραῖος.

## CASE IX

Crito, in Thasos, while walking about, was seized with a violent pain in the great toe. He took to bed the same day with shivering and nausea ; regained a little warmth ; at night was delirious.

*Second day.* Swelling of the whole foot, which was rather red about the ankle, and distended ; black blisters ; acute fever ; mad delirium. Alvine discharges unmixed, bilious and rather frequent. He died on the second day from the commencement.

[ι'.] Τὸν Κλαζομένιον, ὃς κατέκειτο παρὰ τὸ Φρυνιχίδεω φρέαρ, πῦρ ἔλαβε. ἤλγει δὲ κεφαλὴν, τράχηλον, ὀσφῦν ἐξ ἀρχῆς, αὐτίκα δὲ κώφωσις· ὕπνοι οὐκ ἐνήσαν, πυρετὸς ὄξυς ἔλαβεν, ὑποχόνδριον ἐπῆρτο μετ' ὄγκου οὐ λίην, σύντασις, γλῶσσα ξηρή. τετάρτη ἐς νύκτα παρεφρόνει. πέμπτη ἐπιπόνως. ἕκτη πάντα παρωξύνθη. περὶ δὲ ἐνδεκάτην σμικρὰ συνέδωκεν. ἀπὸ δὲ κοιλίας ἀπ' ἀρχῆς καὶ μέχρι τεσσαρεσκαιδεκάτης λεπτά, πολλά, ὑδατόχολα διήει· εὐφόρως τὰ περὶ διαχώρησιν διῆγεν. ἔπειτα κοιλίη ἐπέστη. οὔρα διὰ τέλεος λεπτά μὲν, εὐχρῶ δέ· καὶ πολὺ εἶχεν ἐναιώρημα ὑποδιεσπασμένον· οὐχ ἰδρῦετο. περὶ δὲ ἕκτην καὶ δεκάτην οὔρησεν ὀλίγω παχύτερα· εἶχε σμικρὴν ὑπόστασιν· ἐκούφισεν ὀλίγω· κατενόει μᾶλλον. ἑπτακαιδεκάτη πάλιν λεπτά, παρὰ δὲ τὰ ὦτα ἀμφοτέρα ἐπήρθη σὺν ὀδύνη· ὕπνοι οὐκ ἐνήσαν, παρελήρει, σκέλεα ἐπωδύνως εἶχεν. εἰκοστῇ ἄπυρος ἐκρίθη, οὐχ ἰδρωσε, πάντα κατενόει. περὶ δὲ εἰκοστὴν ἐβδόμην ἰσχύου ὀδύνη δεξιῷ ἰσχυρῶς· διὰ ταχέων ἐπαύσατο. τὰ δὲ παρὰ τὰ ὦτα οὔτε καθίστατο οὔτε ἐξεπύει, ἤλγει δέ. περὶ πρώτην καὶ τριηκοστὴν διάρροια πολλοῖσιν ὑδατώδεσιν μετὰ δυσεντεριωδέων· οὔρα παχέα οὔρει· κατέστη τὰ παρὰ τὰ ὦτα. τεσσαρακοστῇ ὀφθαλμὸν δεξιὸν ἤλγει, ἀμβλύτερον ἑώρα· κατέστη.

#### CASE X

The man of Clazomenae, who lay sick by the well of Phrynichides, was seized with fever. Pain at the beginning in head, neck and loins, followed immediately by deafness. No sleep ; seized with acute fever ; hypochondrium swollen, but not very much ; distension ; tongue dry.

*Fourth day.* Delirium at night.

*Fifth day.* Painful.

*Sixth day.* All symptoms exacerbated.

About the eleventh day slight improvement. From the beginning to the fourteenth day there were from the bowels thin discharges, copious, of a watery biliousness ; they were well supported by the patient. Then the bowels were constipated. Urine throughout thin, but of good colour. It had much cloud spread through it, which did not settle in a sediment. About the sixteenth day the urine was a little thicker, and had a slight sediment. The patient became a little easier, and was more rational.

*Seventeenth day.* Urine thin again ; painful swellings by both ears. No sleep ;

wandering ; pain in the legs.

*Twentieth day.* A crisis left the patient free from fever ; no sweating ; quite rational. About the twenty-seventh day violent pain in the right hip, which quickly ceased. The swellings by the ears neither subsided nor suppurated, but continued painful. About the thirty-first day diarrhœa with copious, watery discharges and signs of dysentery. Urine thick ; the swellings by the ears subsided.

*Fortieth day.* Pain in the right eye ; sight rather impaired ; recovery.

[ια'.] Τὴν Δρομεάδεω γυναῖκα θυγατέρα τεκοῦσαν καὶ τῶν ἄλλων πάντων γενομένων κατὰ λόγον δευτεραίην ἐοῦσαν ρίγος ἔλαβεν· πυρετὸς ὀξύς. ἤρξατο δὲ πονεῖν τῇ πρώτῃ περὶ ὑποχόνδριον· ἀσώδης, φρικώδης, ἀλύουσα καὶ τὰς ἐχομένας οὐχ ὑπνωσε. πνεῦμα ἀραιόν, μέγα, αὐτίκα ἀνεσπασμένον. δευτέρῃ ἀφ' ἧς ἐρρίγωσεν, ἀπὸ κοιλίης καλῶς κόπρανα διῆλθεν· οὔρα παχέα, λευκά, θολερά, οἷα γίνεται ἐκ τῶν καθισταμένων, ὅταν ἀναταραχθῆ κείμενα χρόνον πολύν· οὐ καθίστατο. νύκτα οὐκ ἐκοιμήθη. τρίτῃ περὶ μέσον ἡμέρης ἐπερρίγωσε, πυρετὸς ὀξύς, οὔρα ὅμοια, ὑποχονδρίου πόνος, ἀσώδης, νύκτα δυσφόρως, οὐκ ἐκοιμήθη· ἴδρωσε δι' ὄλου ψυχρῶ, ταχὺ δὲ πάλιν ἀνεθερμάνθη. τετάρτῃ περὶ ὑποχόνδριον σμικρὰ ἐκουφίσθη, κεφαλῆς δὲ βάρος μετ' ὀδύνης· ὑπεκαρώθη· σμικρὰ ἀπὸ ρινῶν ἔσταξε· γλῶσσα ἐπίξηρος· διψώδης· οὔρα σμικρὰ λεπτὰ ἐλαιώδεα· σμικρὰ ἐκοιμήθη. πέμπτῃ διψώδης, ἀσώδης, οὔρα ὅμοια, ἀπὸ κοιλίης οὐδέν, περὶ δὲ μέσον ἡμέρης πολλὰ παρέκρυσσε καὶ πάλιν ταχὺ σμικρὰ κατενόει· ἀνισταμένη ὑπεκαρώθη, ψύξις σμικρὰ, νυκτὸς ἐκοιμήθη, παρέκρυσσε. ἕκτῃ πρῶτὸν ἐπερρίγωσεν, ταχὺ διεθερμάνθη, ἴδρωσε δι' ὄλου· ἄκρεα ψυχρά, παρέκρυσσε, πνεῦμα μέγα, ἀραιόν· μετ' ὀλίγον σπασμοὶ ἀπὸ κεφαλῆς ἤρξαντο, ταχὺ ἀπέθανεν.

## CASE XI

The wife of Dromeades, after giving birth to a daughter, when everything had gone normally, on the second day was seized with rigor ; acute fever. On the first day she began to feel pain in the region of the hypochondrium ; nausea ; shivering ; restless ; and on the following days did not sleep. Respiration rare, large, interrupted at once as by an inspiration.

*Second day from rigor.* Healthy action of the bowels. Urine thick, white, turbid, like urine which has settled, stood a long time, and then been stirred up. It did

not settle. No sleep at night.

*Third day.* At about mid-day rigor ; acute fever ; urine similar ; pain in the hypochondrium ; nausea ; an uncomfortable night without sleep ; a cold sweat all over the body, but the patient quickly recovered heat. *Fourth day.* Slight relief of the pains about the hypochondrium ; painful heaviness of the head ; somewhat comatose ; slight epistaxis ; tongue dry ; thirst ; scanty urine, thin and oily ; snatches of sleep.

*Fifth day.* Thirst ; nausea ; urine similar ; no movement of the bowels ; about mid-day much delirium, followed quickly by lucid intervals ; rose, but grew somewhat comatose ; slight chilliness ; slept at night ; was delirious.

*Sixth day.* In the morning had a rigor ; quickly recovered heat ; sweated all over ; extremities cold ; was delirious ; respiration large and rare. After a while convulsions began from the head, quickly followed by death.

[ιβ' .] Ἄνθρωπος θερμαινόμενος ἐδείπνησεν καὶ ἔπιδεν πλέον. ἡμεσε πάντα νυκτός, πυρετός ὀξύς, ὑποχονδρίου δεξιού πόνος, φλεγμονή ὑπολάπαρος ἐκ τοῦ ἔσω μέρους, νύκτα δυσφόρος· οὔρα δὲ κατ' ἀρχὰς πάχος ἔχοντα, ἐρυθρά· κείμενα οὐ καθίστατο· γλῶσσα ἐπίξηρος, οὐ λίην διψώδης. τετάρτη πυρετός ὀξύς, πόνοι πάντων. πέμπτη οὔρησε λεῖον ἐλαιῶδες πολύ· πυρετός ὀξύς. ἕκτη δείλης πολλά παρέκρουσεν. οὐδὲ νύκτα ἐκοιμήθη. ἑβδόμη πάντα παρωξύνθη· οὔρα ὅμοια, λόγοι πολλοί, κατέχειν οὐκ ἠδύνατο· ἀπὸ δὲ κοιλίης ἐρεθισμῶ ὑγρὰ ταραχώδεα διήλθεν μετὰ ἐλμύγων. νύκτα ἐπιπόνως, πρωὶ δ' ἐρρίγωσε. πυρετός ὀξύς. ἴδρωσε θερμῶ, ἄπυρος ἔδοξε γενέσθαι· οὐ πολὺ ἐκοιμήθη, ἐξ ὕπνου ψύξις· πτυαλισμός. δείλης πολλά παρέκρουσε, μετ' ὀλίγον δὲ ἡμεσε μέλανα, ὀλίγα, χολώδεα. ἐνάτη ψύξις, παρελήρει πολλά, οὐχ ὕπνωσεν. δεκάτη σκέλεα ἐπωδύνως, πάντα παρωξύνθη, παρελήρει. ἐνδεκάτη ἀπέθανεν.

## CASE XII

A man dined when hot and drank too much. During the night he vomited everything ; acute fever ; pain in the right hypochondrium ; inflammation, soft underneath, from the inner part; an uncomfortable night ; urine at the first thick and red ; on standing it did not settle ; tongue dry ; no great thirst.

*Fourth day.* Acute fever ; pains all over.

*Fifth day.* Passed much smooth, oily urine ; acute fever.

*Sixth day.* In the afternoon much delirium. No sleep at night.

*Seventh day.* General exacerbation ; urine similar ; much rambling ; could not restrain himself ; on stimulation the bowels passed watery, disturbed discharges, with worms. An uncomfortable night, with rigor in the morning. Acute fever. Hot sweat, and the patient seemed to lose his fever ; little sleep, followed by chilliness ; expectoration. In the evening much delirium, and shortly afterwards he vomited black, scanty, bilious vomits.

*Ninth day.* Chill ; much wandering ; no sleep.

*Tenth day.* Legs painful ; general exacerbation ; wandering.

*Eleventh day.* Death.

[γ'.] Γυναῖκα, ἣ κατέκειτο ἐν ἀκτῆ, τρίμηνον πρὸς ἐωυτῆ ἔχουσαν πῦρ ἔλαβεν· αὐτίκα δὲ ἤρξατο πονεῖν ὀσφῦν. τρίτη πόνος τραχήλου καὶ κεφαλῆς καὶ κατὰ κληῖδα δεξιῆν· διὰ ταχέων δὲ γλῶσσα ἠφώνει, δεξιῆ χεὶρ παρελύθη μετὰ σπασμοῦ παραπληγικὸν τρόπον, παρελήρει πάντα. νύκτα δυσφόρως, οὐκ ἐκοιμήθη, κοιλίη ἐπεταράχθη χολώδεσιν ἀκρήτοισιν ὀλίγοισιν. τετάρτη γλῶσσα ἀσαφῆς ἦν, ἐλύθη, σπασμοί· πόννοι τῶν αὐτῶν παρέμενον, κατὰ ὑποχόνδριον ἔπαρμα σὺν ὀδύνη, οὐκ ἐκοιμάτο, παρέκρουσε πάντα, κοιλίη ταραχώδης, οὔρα λεπτά, οὐκ εὐχρω. πέμπτη πυρετὸς ὀξύς, ὑποχονδρίου πόνος, παρέκρουσε πάντα, διαχωρήματα χολώδεα. ἐς νύκτα ἴδρωσεν, ἄπυρος. ἕκτη κατενόει, πάντα ἐκουφίσθη, περὶ δὲ κληῖδα ἀριστερῆν πόνος παρέμενε· διψώδης, οὔρα λεπτά, οὐκ ἐκοιμήθη. ἑβδόμη τρόμος, ὑπεκαρώθη, σμικρὰ παρέκρουσεν, ἀλγήματα κατὰ κληῖδα καὶ βραχίονα ἀριστερὸν παρέμενε, τὰ δ' ἄλλα διεκούφισεν, πάντα κατενόει. τρεῖς διέλιπεν ἄπυρος. ἐνδεκάτη ὑπέστρεψεν, ἔπερ ρίγωσεν, πῦρ ἔλαβεν. περὶ δὲ τεσσαρεσκαίδεκάτην ἡμεσε χολώδεα ξανθὰ ὑπόσυχνα, ἴδρωσεν· ἄπυρος ἐκρίθη.

### CASE XIII

A woman lying sick by the shore, who was three months gone with child, was seized with fever, and immediately began to feel pains in the loins.

*Third day.* Pain in the neck and in the head, and in the region of the right collar-bone. Quickly she lost her power of speech, the right arm was paralyzed, with a convulsion, after the manner of a stroke ; completely delirious. An uncomfortable night, without sleep ; bowels disordered with bilious, unmixed,

scanty stools.

*Fourth day.* Her speech was recovered, but was indistinct ; convulsions ; pains of the same parts remained ; painful swelling in the hypochondrium ; no sleep ; utter delirium ; bowels disordered ; urine thin, and not of good colour.

*Fifth day.* Acute fever ; pain in the hypochondrium ; utter delirium ; bilious stools. At night sweated ; was without fever.

*Sixth day.* Rational ; general relief, but pain remained about the left collar-bone ; thirst ; urine thin ; no sleep.

*Seventh day.* Trembling ; some coma ; slight delirium ; pains in the region of the collar-bone and left upper arm remained ; other symptoms relieved ; quite rational. For three days there was an intermission of fever.

*Eleventh day.* Relapse ; rigor ; attack of fever. But about the fourteenth day the patient vomited bilious, yellow matter fairly frequently ; sweated ; a crisis took off the fever.

[ιδ'.] Μελιδίη, ἣ κατέκειτο παρὰ Ἑρης ἱρόν, ἤρξατο κεφαλῆς καὶ τραχήλου καὶ στήθεος πόνος ἰσχυρός· αὐτίκα δὲ πυρετὸς ὄξυς ἔλαβεν· γυναικεῖα δὲ σμικρὰ ἐπεφαίνετο· πόνοι τούτων πάντων συνεχέες. ἕκτη κωματώδης, ἀσώδης, φρικώδης, ἐρύθημα ἐπὶ γνάθων, σμικρὰ παρέκρυσεν. ἑβδόμη ἰδρωσε, πυρετὸς διέλιπεν, οἱ πόνοι παρέμενον, ὑπέστρεψεν, ὕπνοι σμικροί· οὖρα διὰ τέλεος εὐχρω μέν, λεπτὰ δέ· διαχωρήματα λεπτά, χολώδεα, δακνώδεα, ὀλίγα, μέλανα, δυσώδεα διήλθεν, οὖροις ὑπόστασις λευκή, λείη· ἰδρωσεν. ἐκρίθη τελέως ἑνδεκάτη.

#### CASE XIV

Melidia, who lay sick by the temple of Hera, began to suffer violent pain in the head, neck and chest. Immediately she was attacked by acute fever, and there followed a slight menstrual flow. There were continuous pains in all these parts.

*Sixth day.* Coma ; nausea ; shivering ; flushed cheeks ; slight delirium.

*Seventh day.* Sweat ; intermittence of fever ; the pains persisted ; relapse ; snatches of sleep ; urine throughout of good colour but thin ; stools thin, bilious, irritating, scanty, black and of bad odour ; sediment in the urine white and



smooth ; sweating.

*Eleventh day.* Perfect crisis.

## **ΕΠΙΔΗΜΙΩΝ Γ- EPIDEMICS III**

## THE CHARACTERS

I. [α'.] Πυθίωνι, ὃς ᾤκει παρὰ Γῆς ἱρόν, ἤρξατο τρόμος ἀπὸ χειρῶν· τῇ πρώτῃ πυρετὸς ὀξύς· λῆρος. δευτέρῃ πάντα παρωξύνθη. τρίτῃ τὰ αὐτά. τετάρτῃ ἀπὸ κοιλίης ὀλίγα, ἄκρητα, χολώδεα διῆλθε. πέμπτῃ πάντα παρωξύνθη· ὕπνοι λεπτοί· κοιλίη ἔστη. ἕκτῃ πτύαλα ποικίλα, ὑπέρυθρα. ἑβδόμῃ στόμα παρειρύσθη. ὀγδόῃ πάντα παρωξύνθη, τρόμοι παρέμενον· οὔρα δὲ κατ' ἀρχὰς μὲν καὶ μέχρι τῆς ὀγδόης λεπτά, ἄχρω· ἐναιώρημα εἶχον ἐπινέφελον. δεκάτῃ ἴδρωσε, πτύαλα ὑποπέποννα, ἐκρίθη· οὔρα ὑπόλεπτα περὶ κρίσιν. μετὰ δὲ κρίσιν, τεσσαράκοντα ἡμέρησιν ὕστερον, ἐμπύημα περὶ ἕδρην, καὶ στραγγουριώδης ἐγένετο ἀπόστασις.

### CASE I

Pythion, who lived by the temple of Earth, was seized with trembling which began in the hands.

*First day.* Acute fever ; wandering.

*Second day.* General exacerbation.

*Third day.* Same symptoms.

*Fourth day.* Stools scanty, uncompounded and bilious.

*Fifth day.* General exacerbation ; fitful sleep ; constipation.

*Sixth day.* Varied, reddish sputa.

*Seventh day.* Mouth drawn awry.

*Eighth day.* General exacerbation ; tremblings persisted ; urine from the beginning to the eighth day thin, colourless, with a cloudy substance floating in it.

*Tenth day.* Sweat ; sputa somewhat concocted ; crisis ; urine somewhat thin about the time of the crisis. After the crisis, forty days subsequent to it, abscess in the seat, and an abscession through strangury.

[β'.] Ἑρμοκράτην, ὃς κατέκειτο παρὰ τὸ καινὸν τεῖχος, πῦρ ἔλαβεν. ἤρξατο δὲ ἀλγεῖν κεφαλὴν, ὀσφῦν· ὑποχονδρίου ἔντασις λαπαρῶς· γλῶσσα δὲ ἀρχομενῶ ἐπεκαύθη· κώφωσις αὐτίκα· ὕπνοι οὐκ ἐνήσαν· διψώδης οὐ λίην· οὔρα παχέα, ἐρυθρά, κείμενα οὐ καθίστατο· ἀπὸ δὲ κοιλίης οὐκ ὀλίγα συγκεκαυμένα διήει. πέμπτη οὔρησε λεπτά, εἶχεν ἐναιώρημα, οὐχ ἴδρυτο, ἐς νύκτα παρέκρουσεν. ἕκτη ἰκτεριώδης, πάντα παρωξύνθη, οὐ κατενόει. ἐβδόμη δυσφόρως, οὔρα λεπτά, ὅμοια. τὰς ἐπομένας παραπλησίως. περὶ δὲ ἐνδεκάτην ἐόντι πάντα ἔδοξε κουφισθῆναι· κῶμα ἤρξατο, οὔρει παχύτερα, ὑπέρυθρα, κάτω λεπτά· οὐ καθίστατο· ἡσυχῇ κατενόει. τεσσαρεσκαιδεκάτη ἄπυρος, οὐχ ἴδρωσεν, ἐκοιμήθη, κατενόει πάντα, οὔρα παρα πλήσια. περὶ δὲ ἑπτακαιδεκάτην ἐόντι ὑπέστρεψεν, ἐθερμάνθη. τὰς ἐπομένας πυρετὸς ὀξύς, οὔρα λεπτά, παρέκρουσεν. πάλιν δὲ εἰκοστῇ ἐκρίθη, ἄπυρος, οὐχ ἴδρωσεν. ἀπόσιτος παρὰ πάντα τὸν χρόνον, κατενόει πάντα, διαλέγεσθαι οὐκ ἠδύνατο, γλῶσσα ἐπίξηρος, οὐκ ἐδίψη· κατεκοιμᾶτο σμικρά, κωματώδης. περὶ δὲ εἰκοστὴν καὶ τετάρτην ἐπεθερμάνθη, κοιλίη ὑγρὴ πολλοῖσι λεπτοῖσι. καὶ τὰς ἐπομένας πυρετὸς ὀξύς, γλῶσσα συνεκαύθη. ἐβδόμη καὶ εἰκοστῇ ἀπέθανε. τούτῳ κώφωσις διὰ τέλος παρέμενεν, οὔρα παχέα καὶ ἐρυθρά, οὐ καθιστάμενα, ἢ λεπτά καὶ ἄχρω καὶ ἐναιώρημα ἔχοντα· γεύεσθαι δὲ οὐκ ἠδύνατο.

## CASE II

Hermocrates, who lay sick by the new wall, was seized with fever. He began to feel pain in the head and loins ; tension of the hypochondrium without swelling; tongue at the beginning parched ; deafness at once ; no sleep ; no great thirst ; urine thick, red, with no sediment on standing ; stools not scanty, and burnt.

*Fifth day.* Urine thin, with particles floating in it, without sediment ; at night delirium.

*Sixth day.* Jaundice ; general exacerbation ; not rational.

*Seventh day.* Discomfort ; urine thin, and as before. The following days similar. About the eleventh day there seemed to be general relief ; coma began ; urine thicker, reddish, thin at the bottom, without sediment ; by degrees grew more rational.

*Fourteenth day.* No fever ; no sweat ; sleep ; reason quite recovered ; urine as before.

About the seventeenth day there was a relapse, and the patient grew hot. On the

following days there was acute fever ; urine thin ; delirium.

*Twentieth day.* A fresh crisis ; no fever ; no sweat. All the time the patient had no appetite ; was perfectly collected but could not talk ; tongue dry ; no thirst ; snatches of sleep ; coma. About the twenty-fourth day he grew hot ; bowels loose with copious, thin discharges. On the following days acute fever ; tongue parched.

*Twenty-seventh day.* Death.

In this case deafness persisted throughout ; urine thick, red, without settling, or thin, colourless, with substances floating in it. The patient had no power to take food.

[γ'.] Ὁ κατακείμενος ἐν τῷ Δελεάρκεος κήπῳ κεφαλῆς βάρος καὶ κρόταφον δεξιὸν ἐπώδυνον εἶχε χρόνον πολύν. μετὰ δὲ προφάσιος πῦρ ἔλαβε, κατεκλίθη. δευτέρῃ ἐξ ἀριστεροῦ ὀλίγον ἄκρητον ἐρρῦη· ἀπὸ δὲ κοιλίης κόπρανα καλῶς διήλθεν, οὔρα λεπτὰ ποικίλα, ἐναιωρήματα ἔχοντα κατὰ σμικρὰ οἶον κρίμνα, γονοειδέα. τρίτη πυρετὸς ὀξύς, διαχωρήματα μέλανα, λεπτά, ἔπαφρα, ὑπόστασις πελιδνὴ διαχωρήμασιν, ὑπεκαροῦτο, ἐδυσφόρει περὶ τὰς ἀναστάσιας, οὔροις ὑπόστασις πελιδνὴ, ὑπόγλισχος. τετάρτη ἡμεσε χολώδεα ξανθὰ ὀλίγα, διαλιπὼν ὀλίγον ἰώδεα, ἐξ ἀριστεροῦ ὀλίγον ἄκρητον ἐρρῦη, διαχωρήματα ὅμοια, οὔρα ὅμοια, ἐφίδρωσε περὶ κεφαλὴν καὶ κληϊδας, σπλὴν ἐπήρθη, μηροῦ ὀδύνη κατ' ἴξιν, ὑποχονδρίου δεξιοῦ σύντασις ὑπολάπαρος, νυκτὸς οὐκ ἐκοιμήθη, παρέκρουσε σμικρά. πέμπτη δια χωρήματα πλείω, μέλανα, ἔπαφρα, ὑπόστασις μέλαινα διαχωρήμασι, νύκτα οὐχ ὕπνωσε, παρέκρουσεν. ἕκτη διαχωρήματα μέλανα, λιπαρά, γλίσχρα, δυσώδεα, ὕπνωσε, κατενόει μᾶλλον. ἑβδόμη γλῶσσα ἐπίξηρος, διψώδης, οὐκ ἐκοιμήθη, παρέκρουσεν, οὔρα λεπτά, οὐκ εὐχρω. ὀγδόη διαχωρήματα μέλανα ὀλίγα, συνεστηκότα, ὕπνωσε, κατενόει, διψώδης οὐ λίην. ἐνάτη ἐπερρίγωσε, πυρετὸς ὀξύς, ἴδρωσε, ψύξις, παρέκρουσε, δεξιῶ ἴλλαινε, γλῶσσα ἐπίξηρος, διψώδης, ἄγρυπνος. δεκάτη περὶ τὰ αὐτά. ἐνδεκάτη κατενόει πάντα, ἄπυρος, ὕπνωσεν, οὔρα λεπτὰ περὶ κρίσιν. δύο διέλιπεν ἄπυρος, ὑπέστρεψεν τεσσαρες καιδεκάτη, αὐτίκα δὲ νύκτα οὐκ ἐκοιμήθη, πάντα παρέκρουσεν. πεντεκαιδεκάτη οὔρον θολερόν, οἶον ἐκ τῶν καθεστηκότων γίνεται, ὅταν ἀναταραχθῆ, πυρετὸς ὀξύς, πάντα παρέκρουσεν, οὐκ ἐκοιμήθη, γούνατα καὶ κνήμας ἐπώδυνα εἶχεν· ἀπὸ δὲ κοιλίης βάλανον προσθεμένῳ μέλανα κόπρανα διήλθεν. ἑξκαιδεκάτη οὔρα λεπτά, εἶχεν ἐναιώρημα ἐπινέφελον, παρέκρουσεν. ἑπτακαιδεκάτη πρωὶ ἄκρεα ψυχρά, περιεστέλλετο, πυρετὸς ὀξύς, ἴδρωσε δι' ὄλου, ἐκουφίσθη, κατενόει μᾶλλον, οὐκ ἄπυρος,

διψώδης, ἤμεσε χολώδεα, ξανθά, ὀλίγα, ἀπὸ δὲ κοιλίης κόπρανα διῆλθε, μετ' ὀλίγον δὲ μέλανα, ὀλίγα, λεπτά· οὔρα λεπτά, οὐκ εὔχρω. ὀκτωκαιδεκάτη οὐ κατενόει, κωματώδης. ἔννεακαιδεκάτη διὰ τῶν αὐτῶν. εἰκοστῇ ὑπνωσε, κατενόει πάντα, ἴδρωσεν, ἄπυρος, οὐκ ἐδίψη, οὔρα δὲ λεπτά. εἰκοστῇ πρώτη σμικρὰ παρέκρυσεν, ὑπεδίψη, ὑπο χονδρίου πόνος καὶ περὶ ὀμφαλὸν παλμὸς διὰ τέλεος. εἰκοστῇ τετάρτη οὔροισιν ὑπόστασις, κατενόει πάντα. εἰκοστῇ ἑβδόμη ἰσχίου δεξιοῦ ὀδύνη, τὰ δ' ἄλλα ἔσχεν ἐπιεικέστατα, οὔροισιν ὑπόστασις. περὶ δὲ εἰκοστὴν ἑνάτην ὀφθαλμοῦ δεξιοῦ ὀδύνη, οὔρα λεπτά. τεσσαρακοστῇ διεχώρησε φλεγματώδεα, λευκά, ὑπόσυχνα, ἴδρωσε πολλῶ δι' ὄλου, τελέως ἐκρίθη.

### CASE III

The man lying sick in the garden of Delearces had for a long time heaviness in the head and pain in the right temple. From some exciting cause he was seized with fever, and took to his bed.

*Second day.* Slight flow of unmixed blood from the left nostril. The bowels were well moved ; urine thin and varied, with particles in small groups, like barley-meal or semen, floating in it.

*Third day.* Acute fever ; stools black, thin, frothy, with a livid sediment in them ; slight stupor ; getting up caused distress ; in the urine a livid, rather viscous sediment.

*Fourth day.* Vomited scanty, bilious, yellow vomits, and after a short interval, verdigris-coloured ones ; slight flow of unmixed blood from the left nostril ; stools unaltered and urine unaltered ; sweat about the head and collar-bones ; spleen enlarged ; pain in the direction of the thigh ; tension, soft under-neath, of the right hypochondrium ; no sleep at night ; slight delirium.

*Fifth day.* Stools more copious, black, frothy ; a black sediment in the stools ; no sleep at night ; delirium.

*Sixth day.* Stools black, oily, viscid, foul-smelling ; slept ; was more rational.

*Seventh day.* Tongue dry ; thirsty ; no sleep ; delirium ; urine thin, not of a good colour.

*Eighth day.* Stools black, scanty, compact ; sleep ; was collected ; not very

thirsty.

*Ninth day.* Rigor, acute fever ; sweat ; chill ; delirium ; squinting of the right eye ; tongue dry ; thirsty ; sleepless. *Tenth day.* Symptoms about the same.

*Eleventh day.* Quite rational ; no fever ; slept, urine thin about the time of the crisis.

The patient remained free from fever for two days, relapsed on the fourteenth day, and immediately had no sleep at night and was completely delirious.

*Fifteenth day.* Urine muddy, like that which has been stirred up after settling ; acute fever ; completely delirious ; no sleep ; pain in knees and legs. On the application of a suppository, black, solid motions were passed.

*Sixteenth day.* Urine thin, with a cloudy substance floating in it ; delirium.

*Seventeenth day.* Extremities cold in the early morning ; would wrap himself up ; acute fever ; sweated all over ; was relieved ; more rational ; some fever ; thirst ; vomited bilious matters, yellow and scanty ; solid motions from the bowels ; after a while they became black, scanty and thin ; urine thin, and not of a good colour.

*Eighteenth day.* Was not rational ; comatose.

*Nineteenth day.* The same symptoms.

*Twentieth day.* Slept ; completely rational ; sweated ; no fever ; no thirst ; urine thin.

*Twenty-first day.* Slightly delirious ; rather thirsty ; pain in the hypochondrium and throbbing about the navel continuously.

*Twenty-fourth day.* Sediment in urine ; completely rational.

*Twenty-seventh day.* Pain in the right hip, but in other respects very comfortable ; sediment in the urine.

About the twenty-ninth day pain in the right eye ; urine thin. *Fortieth day.* Passed motions full of phlegm, white and rather frequent ; copious sweat all over

; a perfect crisis.

[δ'.] Ἐν Θάσῳ Φιλιστῆς κεφαλὴν ἐπόνει χρόνον πολὺν καὶ ποτε καὶ ὑποκαρωθεὶς κατεκλίθη· ἐκ δὲ πόνων πυρετῶν συνεχέων γενομένων ὁ πόνος παρωξύνθη. νυκτὸς ἐπεθερμάνθη τὸ πρῶτον. τῇ πρώτῃ ἡμέσῃ χολώδεα, ὀλίγα, ξανθὰ τὸ πρῶτον, μετὰ δὲ ταῦτα ἰώδεα πλείω, ἀπὸ δὲ κοιλίης κόπρανα διήλθε· νύκτα δυσφόρως. δευτέρῃ κώφωσις, πυρετὸς ὀξύς, ὑποχόνδριον δεξιὸν συνετάθη, ἔρρεπεν ἐς τὰ ἔσω· οὔρα λεπτά, διαφανέα, εἶχεν ἐναιώρημα γονοειδές, σμικρόν· ἐξεμάνη περὶ μέσον ἡμέρης. τρίτῃ δυσφόρως. τετάρτῃ σπασμοί, παρωξύνθη. πέμπτῃ πρῶτὸν ἀπέθανεν.

#### CASE IV

Philistes in Thasos had for a long time pain in the head, and at last fell into a state of stupor and took to his bed. Heavy drinking having caused continuous fevers the pain grew worse. At night he grew hot at the first.

*First day.* Vomited bilious matters, scanty, at first yellow, afterwards increasing and of the colour of verdigris ; solid motions from the bowels ; an uncomfortable night.

*Second day.* Deafness ; acute fever ; tension of the right hypochondrium, which fell inwards. Urine thin, transparent, with a small quantity of substance, like semen, floating in it. About mid-day became raving.

*Third day.* Uncomfortable.

*Fourth day.* Convulsions ; exacerbation.

*Fifth day.* Died early in the morning.

[ε'.] Χαιρίωνα, ὃς κατέκειτο παρὰ Δημαινέτῳ, ἐκ πόνου πῦρ ἔλαβεν. αὐτίκα δὲ κεφαλῆς βάρος ἐπώδυνον, οὐκ ἐκοιμᾶτο, κοιλίη ταραχώδης λεπτοῖσιν, ὑποχολώδεσι. τρίτῃ πυρετὸς ὀξύς, κεφαλῆς τρόμος, μάλιστα δὲ χεῖλος τοῦ κάτω· μετ' ὀλίγον δὲ ῥίγος, σπασμοί, πάντα παρέκρουσε, νύκτα δυσφόρως. τετάρτῃ δι' ἠσυχίης, σμικρὰ ἐκοιμήθη, παρέλεγε. πέμπτῃ ἐπιπόνως, πάντα παρωξύνθη, λῆρος, νύκτα δυσφόρως, οὐκ ἐκοιμήθη. ἕκτῃ διὰ τῶν αὐτῶν. ἐβδόμη ἐπερρίγωσε, πυρετὸς ὀξύς, ἴδρωσε δι' ὅλου, ἐκρίθη. τούτῳ διὰ τέλους ἀπὸ κοιλίης διαχωρήματα χολώδεα, ὀλίγα, ἄκρητα· οὔρα λεπτά, οὐκ εὐχρω, ἐναιώρημα ἐπινέφελον ἔχοντα. περὶ ὀγδόῃν οὔρησεν εὐχροώτερα, ἔχοντα



ὑπόστασιν λευκὴν ὀλίγην, κατενόει, ἄπυρος· διέλιπεν. ἐνάτῃ ὑπέστρεψε. περὶ δὲ τεσσαρεσκαίδεκάτῃ πυρετὸς ὀξύς. ἐκκαίδεκάτῃ ἡμεσε χολώδεα, ξανθά, ὑπόσυχνα. ἑπτακαίδεκάτῃ ἐπερρίγωσε, πυρετὸς ὀξύς, ἴδρωσεν, ἄπυρος ἐκρίθη. οὖρα μετὰ ὑποστροφὴν καὶ κρίσιν εὐχρω, ὑπόστασιν ἔχοντα, οὐδὲ παρέκρυσεν ἐν τῇ ὑποστροφῇ. ὀκτωκαίδεκάτῃ ἐθερμαίνετο σμικρά, ὑπεδίψη, οὖρα λεπτά, ἐναιώρημα ἐπινέφελον, σμικρὰ παρέκρυσεν. ἐννεακαίδεκάτῃ ἄπυρος, τράχηλον ἐπωδύνως εἶχεν, οὖροισιν ὑπόστασις. τελέως ἐκρίθη εἰκοστῇ.

## CASE V

Chaerion, who lay sick in the house of Demaenetus, was seized with fever after drinking. At once there was painful heaviness of the head ; no sleep ; bowels disturbed with thin, rather bilious stools.

*Third day.* Acute fever, trembling of the head, particularly of the lower lip ; after a while rigor, convulsions, complete delirium ; an uncomfortable night.

*Fourth day.* Quiet ; snatches of sleep ; wandering. *Fifth day.* Pain ; general exacerbation ; irrational talk ; uncomfortable night ; no sleep.

*Sixth day.* The same symptoms.

*Seventh day.* Rigor ; acute fever ; sweating all over ; crisis.

This patient's stools were throughout bilious, scanty and uncompounded. Urine thin, not of a good colour, with a cloudy substance floating in it. About the eighth day the urine had a better colour, with a slight, white sediment ; quite rational and no fever ; an intermission.

*Ninth day.* Relapse.

About the fourteenth day acute fever.

*Sixteenth day.* Vomited bilious, yellow matters rather frequently.

*Seventeenth day.* Rigor ; acute fever ; sweating ; crisis ended the fever.

Urine after relapse and crisis of a good colour, with a sediment ; no delirium during the relapse.

*Eighteenth day.* Slight heat ; rather thirsty ; urine thin, with cloudy substance floating in it ; slight delirium.

*Nineteenth day.* No fever ; pain in the neck ; sediment in urine.

*Twentieth day.* Complete crisis.

[ς'.] Τὴν Εὐρύανακτος θυγατέρα, παρθένον, πῦρ ἔλαβεν. ἦν δὲ ἄδιψος διὰ τέλεος· γεύματα οὐ προσεδέχετο. ἀπὸ δὲ κοιλίης σμικρὰ διήει, οὔρα λεπτά, ὀλίγα, οὐκ εὐχρω. ἀρχομένου δὲ τοῦ πυρετοῦ περὶ ἔδρην ἐπόνει. ἑκταίῃ δὲ εἰσὶν ἄπυρος οὐχ ἰδρωσεν· ἐκρίθη. τὸ δὲ περὶ τὴν ἔδρην σμικρὰ ἐξεπύησεν, ἐρράγη ἅμα κρίσει. μετὰ δὲ κρίσιν ἐβδομαίῃ εἰσὶν ἐρρίγωσε, σμικρὰ ἐπεθερμάνθη, ἰδρωσεν. ὕστερον δὲ ἄκρεα ψυχρὰ αἰεί. περὶ δὲ δεκάτην μετὰ τὸν ἰδρῶτα τὸν γενόμενον παρέκρουσε καὶ πάλιν ταχὺ κατενόει· ἔλεγον δὲ γευσάμενην βότρυος. διαλιποῦσα δὲ δωδεκάτῃ πάλιν πολλὰ παρελήρει, κοιλίη ἐπεταράχθη χολώδεσιν, ἀκρήτοισιν, ὀλίγοισι, λεπτοῖσι, δακνώδεσι, πυκνὰ ἀνίστατο. ἀφ' ἧς δὲ παρέκρουσε τὸ ὕστερον, ἀπέθανε ἐβδόμῃ. αὕτη ἀρχομένου τοῦ νοσήματος ἦλγει φάρυγγα, καὶ διὰ τέλεος ἔρευθος εἶχε, γαργαρεῶν ἀνεσπασμένος. ρεύματα πολλά, σμικρά, δριμέα. ἔβησσε πέπονα, οὐδὲν ἀνήγεν· ἀπόσιτος πάντων παρὰ πάντα τὸν χρόνον οὐδ' ἐπεθύμησεν οὐδενός. ἄδιψος, οὐδ' ἔπινεν οὐδὲν ἄξιον λόγου. σιγῶσα, οὐδὲν διελέγετο. δυσθυμῆ, ἀνελπίστως ἐωυτῆς εἶχεν. ἦν δέ τι καὶ συγγενικὸν φθινῶδες.

## CASE VI

The maiden daughter of Euryanax was seized with fever. Throughout the illness she suffered no thirst and had no inclination for food. Slight alvine discharges ; urine thin, scanty, and not of a good colour. At the beginning of the fever suffered pain in the seat. On the sixth day did not sweat, being without fever ; a crisis. The sore near the seat supplicated slightly, and burst at the crisis. After the crisis, on the seventh day, she had a rigor ; grew slightly hot ; sweated. Afterwards the extremities always cold. About the tenth day, after the sweating that occurred, she grew delirious, but was soon rational again. They said that the trouble was due to eating grapes. After an intermission, on the twelfth day she again wandered a great deal ; the bowels were disturbed, with bilious, uncompounded, scanty, thin, irritating stools, which frequently made her get up. She died the seventh day from the second attack of delirium. This patient at the beginning of the illness had pain in the throat, which was red throughout. The uvula was drawn back. Many fluxes, scanty and acrid. She had a cough with

signs of coction, but brought up nothing. No appetite for any food the whole time, nor did she desire anything. No thirst, and she drank nothing worth mentioning. She was silent, and did not converse at all. Depression, the patient despairing of herself. There was also some inherited tendency to consumption.

[ζ'.] Ἡ κυναγχικὴ ἢ παρὰ Ἀριστίωνος, ἥ πρῶτον ἤρξατο ἀσαφῆς φωνή. γλῶσσα ἐρυθρή, ἐπεξηράνθη. τῇ πρώτῃ φρικώδης, ἐπεθερμάνθη. τρίτῃ ῥίγος, πυρετὸς ὀξύς, οἴδημα ὑπέρυθρον, σκληρὸν τραχήλου καὶ ἐπὶ στῆθος ἐξ ἀμφοτέρων, ἄκρεα ψυχρά, πελιδνά, πνεῦμα μετέωρον, ποτὸν διὰ ῥινῶν, καταπίνειν οὐκ ἠδύνατο, διαχωρήματα καὶ οὔρα ἐπέστη. τετάρτῃ πάντα παρωξύνθη. πέμπτῃ ἀπέθανε.

## CASE VII

The woman suffering from angina who lay sick in the house of Aristion began her complaint with indistinctness of speech. Tongue red, and grew parched.

*First day.* Shivered, and grew hot. *Third day.* Rigor ; acute fever ; a reddish, hard swelling in the neck, extending to the breast on either side ; extremities cold and livid, breathing elevated ; drink returned through the nostrils — she could not swallow — stools and urine ceased.

*Fourth day.* General exacerbation.

*Fifth day.* Death.

[η'.] Τὸ μειράκιον, ὃ κατέκειτο ἐπὶ ψευδέων ἀγορῇ, πῦρ ἔλαβεν ἐκ κόπων καὶ πόνων καὶ δρόμων παρὰ τὸ ἔθος. τῇ πρώτῃ κοιλίῃ ταραχώδης χολώδεσι, λεπτοῖσι, πολλοῖσιν, οὔρα λεπτά, ὑπομέλινα, οὐχ ὑπνώσε, διψώδης. δευτέρῃ πάντα παρωξύνθη, διαχωρήματα πλείω, ἀκαιρότερα. οὐχ ὑπνώσε, τὰ τῆς γνώμης ταραχώδεα, σμικρὰ ὑφίδρωσε. τρίτῃ δυσφόρος, διψώδης, ἀσώδης, πολὺς βληστρισμός, ἀπορίη, παρέκρουσεν, ἄκρεα πελιδνά καὶ ψυχρά, ὑποχονδρίου ἔντασις ὑπολάπαρος ἐξ ἀμφοτέρων. τετάρτῃ οὐχ ὑπνώσεν· ἐπὶ τὸ χειρὸν. ἐβδόμῃ ἀπέθανεν, ἡλικίην περὶ ἔτεα εἴκοσιν.

## CASE VIII

The youth who lay sick by the Liars' Market was seized with fever after unaccustomed fatigue, toil and running.

*First day.* Bowels disturbed with bilious, thin, copious stools ; urine thin and blackish ; no sleep ; thirst.

*Second day.* General exacerbation ; stools more copious and more unfavourable. No sleep ; mind disordered ; slight sweating.

*Third day.* Uncomfortable ; thirst ; nausea ; much tossing ; distress ; delirium ; extremities livid and cold ; tension, soft underneath, of the hypochondrium on both sides.

*Fourth day.* No sleep ; grew worse.

*Seventh day.* Died, being about twenty years old.

[θ'.] Ἡ παρὰ Τεισαμενοῦ γυνὴ κατέκειτο, ἣ τὰ εἰλεώδεα δυσφόρως ὥρμησεν. ἔμετοι πολλοί, ποτὸν κατέχειν οὐκ ἠδύνατο. πόνοι περὶ ὑποχόνδρια. καὶ ἐν τοῖσι κάτω κατὰ κοιλίην οἱ πόνοι. στρόφοι συνεχέες. οὐ διψώδης. ἐπεθερμαίνετο, ἄκρεα ψυχρὰ διὰ τέλεος. ἀσώδης, ἄγρυπνος. οὔρα ὀλίγα, λεπτά. διαχωρήματα ὠμά, λεπτά, ὀλίγα. ὠφελεῖν οὐκέτι ἠδύνατο, ἀπέθανεν.

#### CASE IX

The woman who lodged with Tisamenus was in bed with a troublesome attack of inflammation of the upper bowel. Copious vomits ; could not retain her drink. Pains in the region of the hypochondria. The pains were also lower, in the region of the bowels. Constant tormina. No thirst. She grew hot, though the extremities were cold all the time. Nausea ; sleeplessness. Urine scanty and thin. Excreta crude, thin and scanty. It was no longer possible to do her any good, and she died.

[ι'.] Γυναῖκα ἐξ ἀποφορῆς νηπίου τῶν περὶ Παντιμίδην τῆ πρώτῃ πῦρ ἔλαβε. γλῶσσα ἐπίξηρος, διψώδης, ἀσώδης, ἄγρυπνος. κοιλίη ταραχώδης λεπτοῖσι, πολλοῖσιν, ὠμοῖσι. δευτέρῃ ἐπερρίγωσε, πυρετὸς ὀξύς, ἀπὸ κοιλίης πολλά, οὐχ ὑπνώσει. τρίτῃ μείζους οἱ πόνοι. τετάρτῃ παρέκρουσεν· ἐβδόμη ἀπέθανε. κοιλίη διὰ παντὸς ὑγρὴ διαχωρήμασι πολλοῖσι, λεπτοῖσιν, ὠμοῖσιν· οὔρα ὀλίγα λεπτά.

#### CASE X

A woman who was one of the house of Pantimides after a miscarriage was seized with fever on the first day. Tongue dry ; thirst ; nausea ; sleeplessness. Bowels

disordered, with thin, copious and crude stools.

*Second day.* Rigor ; acute fever ; copious stools ; no sleep.

*Third day.* The pains greater.

*Fourth day.* Delirium.

*Seventh day.* Death.

The bowels were throughout loose, with copious, thin, crude stools. Urine scanty and thin.

[ια'.] Ἐτέρην ἐξ ἀποφθορῆς περὶ πεντάμηνον, Ἰκέτεω γυναῖκα, πῦρ ἔλαβεν. ἀρχομένη κωματώδης ἦν, καὶ πάλιν ἄγρυπνος, ὀσφύος ὀδύνη, κεφαλῆς βάρος. δευτέρῃ κοιλίῃ ἐπεταράχθη ὀλίγοισι, λεπτοῖσιν, ἀκρήτοισι τὸ πρῶτον. τρίτῃ πλείω, χεῖρω· νυκτὸς οὐδὲν ἐκοιμήθη. τετάρτῃ παρέκρυσσε, φόβοι, δυσθυμῖαι. δεξιῷ ἴλλαινε, ἴδρωσε περὶ κεφαλὴν ὀλίγω ψυχρῷ, ἄκρεα ψυχρά· πέμπτῃ πάντα παρωξύνθη, πολλὰ παρέλεγε καὶ πάλιν ταχὺ κατενόει· ἄδιψος, ἄγρυπνος, κοιλίῃ πολλοῖσιν ἀκαίροισι διὰ τέλος· οὔρα ὀλίγα, λεπτά, ὑπομέλανα· ἄκρεα ψυχρά, ὑποπέλιδνα. ἕκτῃ διὰ τῶν αὐτῶν. ἑβδόμη ἀπέθανε.

#### CASE XI

Another woman, after a miscarriage about the fifth month, the wife of Hicetas, was seized with fever. At the beginning she had alternations of coma and sleeplessness ; pain in the loins ; heaviness in the head.

*Second day.* Bowels disordered with scanty, thin stools, which at first were uncompounded.

*Third day.* Stools more copious and worse ; no sleep at night.

*Fourth day.* Delirium ; fears ; depression. Squinting of the right eye ; slight cold sweat about the head ; extremities cold.

*Fifth day.* General exacerbation ; much wandering, with rapid recovery of reason ; no thirst ; no sleep ; stools copious and unfavourable throughout ; urine scanty, thin and blackish ; extremities cold and rather livid.

*Sixth day.* Same symptoms.

*Seventh day.* Death.

[ιβ'.] Γυναῖκα, ἣτις κατέκειτο ἐπὶ ψευδέων ἀγορῆ, τεκοῦσαν τότε πρῶτον ἐπιπόνως ἄρσεν πῦρ ἔλαβεν. αὐτίκα ἀρχομένη διψώδης, ἀσώδης, καρδίην ὑπήλγει, γλῶσσα ἐπίξηρος, κοιλίη ἐπεταράχθη λεπτοῖσιν ὀλίγοισιν, οὐχ ὕπνωσε. δευτέρη σμικρὰ ἐπερρίγωσε, πυρετὸς ὀξύς, σμικρὰ περὶ κεφαλὴν ἴδρωσε ψυχρῶ. τρίτη ἐπιπόνως· ἀπὸ κοιλίης ὡμά, λεπτὰ πολλὰ διήει. τετάρτη ἐπερρίγωσε, πάντα παρωξύνθη· ἄγρυπνος· πέμπτη ἐπιπόνως. ἕκτη διὰ τῶν αὐτῶν· ἀπὸ κοιλίης ἦλθε ὑγρὰ πολλά. ἑβδόμη ἐπερρίγωσε, πυρετὸς ὀξύς, δίψα, πολὺς βληστρισμός, περὶ δείλην ἴδρωσε δι' ὅλου ψυχρῶ, ψύξις, ἄκρεα ψυχρά, οὐκέτι ἀνεθερμαίνεται· καὶ πάλιν ἐς νύκτα ἐπερρίγωσεν, ἄκρεα οὐκ ἀνεθερμαίνεται, οὐχ ὕπνωσε, σμικρὰ παρέκρουσε, καὶ πάλιν ταχὺ κατενόει. ὀγδὴ περὶ μέσον ἡμέρης ἀνεθερμάνθη, διψώδης, κωματώδης, ἀσώδης, ἡμεσε χολώδεα σμικρὰ ὑπόξανθα. νύκτα δυσφόρος, οὐκ ἐκοιμήθη, οὔρησε πολὺ ἀθρόον οὐκ εἰδυῖα. ἐνάτη συνέδωκε πάντα, κωματώδης. πρὸς δείλην σμικρὰ ἐπερρίγωσεν, ἡμεσε σμικρὰ χολώδεα. δεκάτη ῥίγος, πυρετὸς παρωξύνθη, οὐχ ὕπνωσεν οὐδέν· πρωὶ οὔρησε πολὺ ὑπόστασιν οὐκ ἔχον, ἄκρεα ἀνεθερμάνθη. ἑνδεκάτη ἡμεσε χολώδεα, ἰώδεα. ἐπερρίγωσεν οὐ μετὰ πολὺ, καὶ πάλιν ἄκρεα ψυχρά, ἐς δείλην ἰδρώς, ῥίγος, ἡμεσε πολλά, νύκτα ἐπιπόνως. δωδεκάτη ἡμεσε πολλὰ μέλανα δυσώδεα, λυγμὸς πολὺς, δίψος ἐπιπόνως. τρισκαιδεκάτη μέλανα, δυσώδεα πολλὰ ἡμεσε, ῥίγος· περὶ δὲ μέσον ἡμέρης ἄφωνος. τεσσαρεσκαιδεκάτη αἷμα διὰ ῥινῶν· ἀπέθανε. ταύτη διὰ τέλεος κοιλίη ὑγρὴ· φρικώδης· ἠλικίη περὶ ἕτεα ἑπτακαίδεκα.

## CASE XII

A woman who lay sick by the Liars' Market, after giving birth in a first and painful delivery to a male child, was seized with fever. From the very first there was thirst, nausea, slight pain at the stomach, dry tongue, bowels disordered with thin and scanty discharges, no sleep.

*Second day.* Slight rigor ; acute fever ; slight, cold sweating around the head.

*Third day.* In pain ; crude, thin, copious discharges from the bowels.

*Fourth day.* Rigor ; general exacerbation ; sleepless.

*Fifth day.* In pain.

*Sixth day.* The same symptoms ; copious, fluid discharges from the bowels.

*Seventh day.* Rigor ; acute fever ; thirst ; much tossing ; towards evening cold sweat all over ; chill ; extremities cold, and would not be warmed. At night she again had a rigor ; the extremities would not be warmed ; no sleep ; slight delirium, but quickly was rational again.

*Eighth day.* About mid-day recovered her heat ; thirst ; coma ; nausea ; vomited bilious, scanty, yellowish matters. An uncomfortable night ; no sleep ; unconsciously passed a copious discharge of urine. *Ninth day.* General abatement of the symptoms ; coma. Towards evening slight rigor ; vomited scanty, bilious matters.

*Tenth day.* Rigor ; exacerbation of the fever ; no sleep whatsoever. In the early morning a copious discharge of urine without sediment ; extremities were warmed.

*Eleventh day.* Vomited bilious matters, of the colour of verdigris. A rigor shortly afterwards, and the extremities became cold again ; in the evening sweat, rigor and copious vomiting ; a painful night.

*Twelfth day.* Vomited copious, black, fetid matters ; much hiccoughing ; painful thirst.

*Thirteenth day.* Vomited black, fetid, copious matters ; rigor. About mid-day lost her speech.

*Fourteenth day.* Epistaxis ; death.

The bowels of this patient were throughout loose, and there were shivering fits. Age about seventeen.

## Κατάστασις - CONSTITUTION

II. Ἔτος νότιον ἔπομβρον· ἄπνοια διὰ τέλεος· αὐχμῶν δὲ γενομένων τοὺς ὑπόπροσθεν χρόνους ἐν νοτίοισι περὶ ἀρκτοῦρον ὕδατα πολλά. φθινόπωρον σκιῶδες, ἐπινέφελον, ὑδάτων πλήθρα. χειμῶν νότιος, ὑγρός, μαλθακὸς μετὰ ἡλίου τροπᾶς· ὕστερον πολλῶ, πλησίον ἰσημερίας, ὀπισθοχειμῶνες, καὶ ἤδη περὶ ἰσημερίην βόρεια, χιονώδεα, οὐ πολὺν χρόνον. ἦρ πάλιν νότιον, ἄπνοον· ὕδατα πολλά διὰ τέλεος μέχρι κυνός. θέρος αἴθριον, θερμόν, πνίγεα μεγάλα· ἔτησίαι σμικρὰ διεσπασμένως ἔπνευσαν· πάλιν δὲ περὶ ἀρκτοῦρον ἐν βορείοισιν ὕδατα πολλά.

Γενομένου δὲ τοῦ ἔτεος νοτίου καὶ ὑγροῦ καὶ μαλθακοῦ κατὰ μὲν χειμῶνα διήγον ὑγιηρῶς πλὴν τῶν φθινωδέων, περὶ ὧν γεγράφεται.

II. The year was southerly and rainy, with no winds throughout. About the rising of Arcturus, while during the immediately preceding period droughts had prevailed, there were now heavy rains, with southerly winds. Autumn dark and cloudy, with abundance of rain. The winter southerly, humid, and mild after the solstice. Long after the solstice, near the equinox, wintry weather returned, and at the actual equinoctial period there were northerly winds with snow, but not for long. The spring southerly again, with no winds ; many rains throughout until the Dog Star. The summer was clear and warm, with waves of stifling heat. The Etesian winds were faint and intermittent. But, on the other hand, near the rising of Arcturus there were heavy rains with northerly winds.

The year having proved southerly, wet and mild, in the winter the general health was good except for the consumptives, who will be described in due course.

III. Πρωὶ δὲ τοῦ ἤρος ἅμα τοῖσι γενομένοισι ψύχεσιν ἐρυσσιπέλατα πολλά, τοῖσι μὲν μετὰ προφάσιος, τοῖσι δ' οὐ, κακοήθεια· πολλοὺς ἔκτεινε, πολλοὶ φάρυγγας ἐπόνησαν· φωναὶ κακούμεναι, καῦσοι, φρενιτικοί, στόματα ἀφθώδεα, αἰδοίοισι φύματα, ὀφθαλμῖαι, ἀνθρακες, κοιλίαι ταραχώδεις, ἀπόσιτοι, διψώδεις οἱ μὲν, οἱ δ' οὐ, οὔρα ταραχώδεα, πολλά, κακά, κωματώδεις ἐπὶ πολὺ καὶ πάλιν ἄγρυπνοι, ἀκρισίαι πολλαί, δύσκριτα, ὕδρωπες, φθινώδεις πολλοί. τὰ μὲν ἐπιδημήσαντα νοσήματα ταῦτα. ἐκάστου δὲ τῶν ὑπογεγραμμένων εἰδέων ἦσαν οἱ κάμνοντες καὶ ἔθνησκον πολλοί. συνέπιπτε δ' ἐφ' ἐκάστοισι τούτων ὧδε.

III. Early in the spring, at the same time as the cold snaps which occurred, were



many malignant cases of erysipelas, some from a known exciting cause and some not. Many died, and many suffered pain in the throat. Voices impaired ; ardent fevers ; phrenitis ; aphthae in the mouth ; tumours in the private parts ; inflammations of the eyes ; carbuncles ; disordered bowels ; loss of appetite ; thirst in some cases, though not in all ; urine disordered, copious, bad ; long coma alternating with sleeplessness ; absence of crisis in many cases, and obscure crises ; dropsies ; many consumptives. Such were the diseases epidemic. There were patients suffering from each of the above types, and fatal cases were many. The symptoms in each type were as follow.

iv. Πολλοῖσι μὲν τὸ ἐρυσίπελας μετὰ προφάσιος ἐπὶ τοῖσι τυχοῦσι καὶ πάνυ ἐπὶ σμικροῖσι τραυματίοις ἐφ' ὄλω τῷ σώματι, μάλιστα δὲ τοῖσι περὶ ἐξήκοντα ἔτα καὶ περὶ κεφαλὴν, εἰ καὶ σμικρὸν ἀμεληθεῖη. πολλοῖσι δὲ καὶ ἐν θεραπείῃ ἐοῦσι μεγάλοι φλεγμοναὶ ἐγίνοντο, καὶ τὸ ἐρυσίπελας πολὺ ταχὺ πάντοθεν ἐπενέμετο. τοῖσι μὲν οὖν πλείστοισιν αὐτῶν ἀποστάσιες ἐς ἐμπυήματα συνέπιπτον· σαρκῶν καὶ νεύρων καὶ ὀστέων ἐκπτώσιες μεγάλοι. ἦν δὲ καὶ τὸ ρεῦμα τὸ συνιστάμενον οὐ πύω ἴκελον, ἀλλὰ σηπεδῶν τις ἄλλη καὶ ρεῦμα πολὺ καὶ ποικίλον. οἷσι μὲν οὖν περὶ κεφαλὴν τούτων τι συμπίπτοι γίνεσθαι, μάθησίς τε ὅλης τῆς κεφαλῆς ἐγένετο καὶ τοῦ γενείου καὶ ὀστέων ψιλώματα καὶ ἐκπτώσιες καὶ πολλὰ ρεύματα. ἐν πυρετοῖσι τε ταῦτα καὶ ἄνευ πυρετῶν. ἦν δὲ ταῦτα φοβερώτερα ἢ κακίω. οἷσι γὰρ ἐς ἐμπύημα ἢ τινα τοιοῦτον ἀφίκοιτο πεπασμόν, οἱ πλείστοι τούτων ἐσώζοντο. οἷσι δ' ἢ μὲν φλεγμονὴ καὶ τὸ ἐρυσίπελας ἀπέλθοι, τοιαύτην δὲ ἀπόστασιν μηδεμίαν ποιήσαιτο, τούτων ἀπώλλυντο πολλοί. ὁμοίως δὲ καὶ εἴ πη ἄλλη τοῦ σώματος πλανηθεῖη, συνέπιπτε ταῦτα. πολλοῖσι μὲν γὰρ βραχίων καὶ πῆχυς ὅλος περιερρῆη. οἷσι δ' ἐπὶ τὰ πλευρά, ταῦτα ἐκακοῦτο ἢ τῶν ἔμπροσθέν τι ἢ τῶν ὀπισθεν. οἷσι δ' ὅλος ὁ μηρὸς ἢ τὰ περὶ κνήμην ἀπεψιλοῦτο καὶ πούς ὅλος. ἦν δὲ πάντων χαλεπώτατα τῶν τοιούτων, ὅτε περὶ ἦβην καὶ αἰδοῖα γενοῖατο. τὰ μὲν περὶ ἔλκεα καὶ μετὰ προφάσιος τοιαῦτα. πολλοῖσι δὲ ἐν πυρετοῖσι καὶ πρὸ πυρετοῦ καὶ ἐπὶ πυρετοῖσι συνέπιπτεν. ἦν δὲ καὶ τούτων, ὅσα μὲν ἀπόστασιν ποιήσαιτο διὰ τοῦ ἐκτυῆσαι ἢ κατὰ κοιλίην ταραχὴ τις ἐπίκαιρος ἢ χρηστῶν οὔρων διάδοσις γένοιτο, διὰ τούτων λελύσθαι, οἷσι δὲ μηδὲν τούτων συμπίπτοι, ἀσήμως δὲ ἀφανιζομένων, θανατώδεα γίνεσθαι. πολὺ μὲν οὖν πλείστοισι συνέπιπτε τὰ περὶ τὸ ἐρυσίπελας τοῦ ἥρος. παρείπετο δὲ καὶ διὰ τοῦ θέρους καὶ ὑπὸ φθινόπωρον.

iv. Many were attacked by the erysipelas all over the body when the exciting cause was a trivial accident or a very small wound ; especially when the patients were about sixty years old and the wound was in the head, however little the neglect might have been. Many even while undergoing treatment suffered from

severe inflammations, and the erysipelas would quickly spread widely in all directions. Most of the patients experienced abscessions ending in suppurations. Flesh, sinews and bones fell away in large quantities. The flux which formed was not like pus, but was a different sort of putre-faction with a copious and varied flux. If any of these symptoms occurred in the head, there was loss of hair from all the head and from the chin ; the bones were bared and fell away, and there were copious fluxes. Fever was sometimes present and sometimes absent. These symptoms were terrifying rather than dangerous. For whenever they resulted in suppuration or some similar coction the cases usually recovered. But whenever the inflammation and the erysipelas disappeared without producing any such abscession, there were many deaths. The course of the disease was the same to whatever part of the body it spread. Many lost the arm and the entire forearm. If the malady settled in the sides there was rotting either before or behind. In some cases the entire thigh was bared, or the shin and the entire foot. But the most dangerous of all such cases were when the pubes and genital organs were attacked. Such were the sores which sprang from an exciting cause. In many cases, however, sores occurred in fevers, before a fever, or supervening on fevers. In some of these also, when an abscession took place through suppuration, or when a seasonable disturbance of the bowels occurred or a passing of favourable urine, this gave rise to a solution ; but when none of these events happened, and the symptoms disappeared without a sign, death resulted. It was in the spring that by far the greater number of cases of erysipelas occurred, but they continued throughout the summer and during autumn.

v. Πολλή δὲ ταραχή τισι καὶ τὰ περὶ φάρυγγα φύματα, καὶ φλεγμοναὶ γλώσσης, καὶ τὰ παρ' ὀδόντας ἀποστήματα. φωναί τε πολλοῖσιν ἐπεσήμαινον κακούμεναι καὶ κατίλλουσαι, πρῶτον μὲν τοῖσι φθινώδεσιν ἀρχομένοισιν, ἀτὰρ καὶ τοῖσι καυσώδεσι καὶ τοῖσι φρενιτικοῖσιν.

v. Much trouble was caused to some patients by the tumours in the throat, inflammations of the tongue and the abscesses about the teeth. Many had the symptom of impaired and muffled voice, at first at the beginning of the cases of consumption, but also in the ardent fevers and in phrenitis.

vi. Ἦρξαντο μὲν οὖν οἱ καῦσοι καὶ τὰ φρενιτικὰ πρῶτὸ τοῦ ἥρος μετὰ τὰ γενόμενα ψύχεια, καὶ πλείστοι τηνικαῦτα διενόσησαν· ὄξεα δὲ τούτοισι καὶ θανατώδεα συνέπιπτεν. ἦν δὲ ἡ κατάστασις τῶν γενομένων καύσων ὧδε· ἀρχόμενοι κωματώδεες, ἀσώδεες, φρικώδεες, πυρετὸς ὄξύς, οὐ διψώδεες λίην, οὐ παράληροι, ἀπὸ ρινῶν ἔσταξε σμικρὸν. οἱ παροξυσμοὶ τοῖσι πλείστοισιν ἐν

ἀρτίησι, περὶ δὲ τοὺς παροξυσμοὺς λήθη καὶ ἄφεις καὶ ἀφωνίη. ἄκρεά τε τούτοισιν αἰεὶ μὲν ψυχρότερα ποδῶν καὶ χειρῶν, πολὺ δὲ περὶ τοὺς παροξυσμοὺς μάλιστα· πάλιν τε βραδέως καὶ οὐ καλῶς ἀνεθερμαίνοντο καὶ πάλιν κατενόεον καὶ διελέγοντο. κατεῖχε δὲ ἢ τὸ κῶμα συνεχές, οὐχ ὑπνώδες, ἢ μετὰ πόνων ἄγρυπνοι. κοιλίαι ταραχώδεις τοῖσι πλείστοισι τούτων, διαχωρήμασιν ὠμοῖσι, λεπτοῖσι, πολλοῖσιν· οὗρά τε πολλὰ λεπτὰ κρίσιμον οὐδὲ χρηστὸν οὐδὲν ἔχοντα· οὐδὲ ἄλλο κρίσιμον οὐδὲν τοῖσιν οὕτως ἔχουσιν ἐφαίνετο· οὔτε γὰρ ἡμορράγει καλῶς οὔτε τις ἄλλη τῶν εἰθισμένων ἀπόστασις ἐγένετο κρίσιμος. ἔθνησκόν τε ἕκαστος ὡς τύχοι, πεπλανημένως τὰ πολλὰ, περὶ τὰς κρίσιας, ἐκ πολλοῦ δὲ τινες ἀφωνοί, ἰδρῶντες πολλοί. τοῖσι μὲν ὀλεθρίως ἔχουσι συνέπιπτε ταῦτα· παραπλήσια δὲ καὶ τοῖσι φρενιτικοῖσιν. ἄδιψοι δὲ πάνυ οὗτοι ἦσαν, οὐδ' ἐξεμάνη τῶν φρενιτικῶν οὐδεὶς, ὥσπερ ἐπ' ἄλλοισιν, ἀλλ' ἄλλη τινὶ καταφορῇ νωθρῇ καρηβαρές ἀπώλλυντο.

VI. Now the ardent fevers and phrenitis began early in the spring after the cold snaps which occurred, and very many fell sick at that time. These suffered acute and fatal symptoms. The constitution of the ardent fevers that occurred was as follows. At the beginning coma, nausea, shivering, acute fever, no great thirst, no delirium, slight epistaxis. The exacerbations in most cases on even days, and about the time of the exacerbations there was loss of memory with prostration and speechlessness. The feet and hands of these patients were always colder than usual, most especially about the times of exacerbation. Slowly and in no healthy manner they recovered their heat, becoming rational again and conversing. Either the coma held them continuously without sleep, or they were wakeful and in pain. Bowels disordered in the majority of these cases, with crude, thin, copious stools. Urine copious, thin, with no critical or favourable sign, nor did any other critical sign appear in these patients. For there occurred neither favourable hemorrhage nor any other of the usual critical abscessions. The manner of their dying varied with the individual ; it was usually irregular, at the crises, but in some cases after long loss of speech and in many with sweating. These were the symptoms attending the fatal cases of ardent fever, and the cases of phrenitis were similar. These suffered from no thirst at all, and no case showed the mad delirium that attacked others, but they passed away overpowered by a dull oppression of stupor.

VII. Ἦσαν δὲ καὶ ἄλλοι πυρετοί, περὶ ὧν γεγράφεται. στόματα πολλοῖσιν ἀφθώδεα, ἐλκώδεα. ρεύματα περὶ αἰδοῖα πολλά, ἐλκώματα, φύματα ἔξωθεν, ἔσωθεν· τὰ περὶ βουβῶνας. ὀφθαλμῖαι ὑγραί, μακροχρόνιοι μετὰ πόνων. ἐπιφύσεις βλεφάρων ἔξωθεν, ἔσωθεν, πολλῶν φθείροντα τὰς ὀψιας, ἃ σῦκα

ἐπονομάζουσιν. ἐφύετο δὲ καὶ ἐπὶ τῶν ἄλλων ἐλκῶν πολλὰ καὶ ἐν αἰδοίοισιν. ἄνθρακες πολλοὶ κατὰ θέρος καὶ ἄλλα, ἃ σὴν καλεῖται. ἐκθύματα μεγάλα. ἔρπητες πολλοῖσι μεγάλοι.

VII. There were other fevers also, which I shall describe in due course. Many had aphthae and sores in the mouth. Fluxes about the genitals were copious; sores, tumours external and internal ; the swellings which appear in the groin. Watery inflammations of the eyes, chronic and painful. Growths on the eyelids, external and internal, in many cases destroying the sight, which are called “figs.” There were also often growths on other sores, particularly in the genitals. Many carbuncles in the summer, and other affections called “rot.” Large pustules. Many had large tetters.

VIII. Τὰ δὲ κατὰ κοιλίην πολλοῖσι πολλὰ καὶ βλαβερὰ συνέβαινε. πρῶτον μὲν τεινεσμοὶ πολλοῖσιν ἐπιπόνως, πλείστοισι δὲ παιδίοισι, καὶ πᾶσιν ὅσα πρὸ ἡβης, καὶ ἀπώλλυντο τὰ πλεῖστα τούτων. λειεντερικοὶ πολλοί. δυσεντεριώδεις, οὐδ’ οὔτοι λίην ἐπιπόνως. τὰ δὲ χολώδεα καὶ λιπαρὰ καὶ λεπτὰ καὶ ὕδατώδεα· πολλοῖσι μὲν αὐτὸ τὸ νόσημα ἐς τοῦτο κατέσκηψεν ἄνευ τε πυρετῶν καὶ ἐν πυρετοῖσι. μετὰ πόνων στρόφοι καὶ ἀνειλήσιες κακοήθεις. διέξοδοί τε τῶν πολλῶν ἐνότων τε καὶ ἐπισχόντων. τὰ δὲ διεξιόντα πόνους οὐ λύοντα τοῖσι τε προσφερομένοισι δυσκόλως ὑπακούοντα· καὶ γὰρ αἱ καθάρσιες τοὺς πλείστους προσέβλαπτον. τῶν δὲ οὕτως ἐχόντων πολλοὶ μὲν ὀξέως ἀπώλλυντο, ἔστι δ’ οἷσι καὶ μακρότερα διῆγεν. ὡς δ’ ἐν κεφαλαίῳ εἰρηῆσθαι, πάντες, καὶ οἱ τὰ μακρὰ νοσέοντες καὶ οἱ τὰ ὀξέα, ἐκ τῶν κατὰ κοιλίην ἀπέθνησκον μάλιστα. πάντας γὰρ κοιλίη συναπήνεγκεν.

VIII. The bowel troubles in many cases turned out many and harmful. In the first place many were attacked by painful tenesmus, mostly children — all in fact who were approaching puberty — and most of these died. Many lenteries. Cases of dysentery, but they too were not very painful. Stools bilious, greasy, thin and watery. In many cases this condition of the bowels constituted the disease itself, fever being sometimes absent and sometimes present. Painful tormina and malignant colic. There were evacuations, though the bulk of the contents remained behind. The evacuations did not take away the pains, and yielded with difficulty to the remedies administered. Purgings, in fact, did harm in most cases. Of those in this condition many died rapidly, though a few held out longer. In brief, all patients, whether the disease was prolonged or acute, died chiefly from the bowel complaints. For the bowels carried all off together.

IX. Ἀπόσιτοι δ' ἐγένοντο πάντες μὲν καὶ ἐπὶ πᾶσι τοῖσι προγεγραμμένοισιν, ὡς ἐγὼ οὐδὲ πώποτε ἐνέτυχον, πολὺ δὲ μάλιστα οὗτοι καὶ ἐκ τούτων καὶ ἐκ τῶν ἄλλων δὲ οἱ καὶ ὀλεθρίως ἔχοιεν. διψώδεις οἱ μὲν, οἱ δ' οὐ· τῶν ἐν πυρετοῖσι καὶ τοῖσιν ἄλλοισιν οὐδεὶς ἀκαίρως, ἀλλ' ἦν κατὰ ποτὸν διαιτᾶν ὡς ἤθελες.

IX. Loss of appetite, to a degree that I never met before, attended all the cases described above, but most especially the last, and of them, and of the others also, especially such as were fatally stricken. Thirst afflicted some, but not others ; of the fever patients, as well as of the other cases, none were unseasonably affected, but as far as drink was concerned you could diet them as you pleased.

X. Οὖρα δὲ πολλὰ μὲν τὰ διεξιόντα ἦν, οὐκ ἐκ τῶν προσφερομένων ποτῶν, ἀλλὰ πολλὸν ὑπερβάλλοντα. πολλὴ δὲ τις καὶ τῶν οὔρων κακότης ἦν τῶν ἀπιόντων. οὔτε γὰρ πάχος οὔτε πεπασμούς οὔτε καθάρσιας χρηστὰς εἶχεν. ἐσήμαινεν δὲ τοῖσι πλείστοισι σύντηξιν καὶ ταραχὴν καὶ πόνους καὶ ἀκρισίας.

X. The urine that was passed was copious, not in proportion to, but far exceeding, the drink administered. Yet the urine too that was passed showed a great malignancy. For it had neither the proper consistency, nor coction, nor cleansing powers ; it signified for most patients wasting, trouble, pains, and absence of crisis.

XI. Κωματώδεις δὲ μάλιστα οἱ φρενιτικοὶ καὶ οἱ καυσώδεις ἦσαν, ἀτὰρ καὶ ἐπὶ τοῖς ἄλλοισι νοσήμασι πᾶσι τοῖσι μείστοισιν, ὅ τι μετὰ πυρετοῦ γίνοιτο. διὰ παντὸς δὲ τοῖσι πλείστοισιν ἢ βαρὺ κῶμα παρείπετο ἢ μικροὺς καὶ λεπτοὺς ὕπνους κοιμᾶσθαι.

XI. Coma attended mostly the phrenitis and ardent fevers, without excluding, however, all the other diseases of the most severe sort that were accompanied by fever. Most patients throughout either were sunk in heavy coma or slept only in fitful snatches.

XII. Πολλὰ δὲ καὶ ἄλλα πυρετῶν ἐπεδήμησεν εἶδεα, τριταίων, τεταρταίων, νυκτερινῶν, συνεχέων, μακρῶν, πεπλανημένων, ἀσωδέων, ἀκαταστάτων. ἅπαντες δὲ οὗτοι μετὰ πολλῆς ἐγένοντο ταραχῆς· κοιλίαι τε γὰρ τοῖσι πλείστοισιν ταραχώδεις, φρικώδεις· ἰδρῶτες οὐ κρίσιμοι, καὶ τὰ τῶν οὔρων ὡς ὑπογέγραπται. μακρὰ δὲ τοῖσι πλείστοισι τούτων· οὐδὲ γὰρ αἱ γινόμεναι τούτοισιν ἀποστάσεις ἔκρινον ὡς περ ἐπὶ τοῖσιν ἄλλοισι. δύσκριτα μὲν οὖν πᾶσι πάντα ἐγίνετο καὶ ἀκρισίαι καὶ χρόνια, πολὺ δὲ μάλιστα τούτοις. ἔκρινε δὲ

τούτων ὀλίγοισι περὶ ὀγδοηκοστήν. τοῖσι δὲ πλείστοισιν ἐξέλειπεν ὡς ἔτυχεν. ἔθνησκον δὲ τούτων ὀλίγοι ὑπὸ ὕδρωπος ὀρθοστάδην. πολλοῖσι δὲ καὶ ἐπὶ τοῖσιν ἄλλοισι νοσήμασιν οἰδήματα παρώχλει, πολὺ δὲ μάλιστα τοῖσι φθινώδεσι.

XII. Many other forms also of fever were epidemic : — tertians, quartans, night fevers, fevers continuous, protracted, irregular, fevers attended with nausea, fevers of no definite character. All these cases suffered severely from trouble. For the bowels in most cases were disordered, with shivering fits. Sweats portended no crisis, and the character of the urine was as I have described. Most of these cases were protracted, for the abscessions too which took place did not prove critical as in other cases ; nay rather, in all cases all symptoms marked obscurity of crisis, or absence of crisis, or protraction of the disease, but most especially in the patients last described. A few of these had a crisis about the eightieth day ; with most recovery followed no rule. A few of them died of dropsy, without taking to their bed ; many sufferers from the other diseases too were troubled with swellings, most particularly the consumptives.

XIII. Μέγιστον δὲ καὶ χαλεπώτατον καὶ πλείστους ἔκτεινε τὸ φθινῶδες. πολλοὶ γάρ τινες ἀρξάμενοι κατὰ χειμῶνα πολλοὶ μὲν κατεκλίθησαν, οἱ δὲ αὐτῶν ὀρθοστάδην ὑπεφέροντο· πρῶτὶ δὲ τοῦ ἤρος ἔθνησκον οἱ πλείστοι τῶν κατακλιθέντων· τῶν δὲ ἄλλων ἐξέλιπον μὲν αἱ βῆχες οὐδενί, ὑφίεσαν δὲ κατὰ θέρος. ὑπὸ δὲ τὸ φθινόπωρον κατεκλίθησαν πάντες καὶ πολλοὶ ἔθνησκον. μακρὰ δὲ τούτων οἱ πλείστοι διενόσεον. ἤρξατο μὲν οὖν τοῖσι πλείστοισι τούτων ἐξαίφνης ἐκ τούτων κακοῦσθαι· φρικώδεις πυκνά. πολλάκις πυρετοὶ συνεχέες, ὀξέες· ἰδρῶτες ἄκαιροι πολλοί, ψυχροὶ διὰ τέλεος· πολλὴ ψύξις, καὶ μόγις πάλιν ἀναθερμαινόμενοι· κοιλίαι ποικίλως ἐφιστάμεναι καὶ πάλιν ταχὺ καθυγραινόμεναι, περὶ δὲ τελευτὴν πᾶσι βιαίως καθυγραινόμεναι· καὶ τῶν περὶ πνεύμονα πάντων διάδοσις κάτω· πλῆθος οὔρων οὐ χρηστῶν· συντήξιες κακαί. αἱ δὲ βῆχες ἐνήσαν μὲν διὰ τέλεος πολλαὶ καὶ πολλὰ ἀνάγουσαι πέποννα καὶ ὑγρὰ, μετὰ πόνων δὲ οὐ λίην· ἀλλ' εἰ καὶ ἐπόνεον, πάνυ πρηέως πᾶσιν ἢ κάθαρσις τῶν ἀπὸ πνεύμονος ἐγίνετο. φάρυγγες οὐ λίην δακνώδεις, οὐδὲ ἀλμυρίδες οὐδὲν ἠνώχλεον· τὰ μέντοι γλίσχρα καὶ λευκὰ καὶ ὑγρὰ καὶ ἀφρώδεα πολλὰ ἀπὸ κεφαλῆς ἦει. πολὺ δὲ μέγιστον κακὸν παρείπετο καὶ τούτοισι καὶ τοῖσιν ἄλλοισι τὰ περὶ τὴν ἀποσιτίην, καθάπερ ὑπογέγραπται· οὐδὲ γὰρ πότων μετὰ τροφῆς ἠδέως εἶχον, ἀλλὰ πάνυ διῆγον ἀδίψως· βάρος σώματος· κωματώδεις· τοῖσι πλείστοισιν αὐτῶν οἴδημα, καὶ ἐς ὕδρωπα περιέστησαν· φρικώδεις, παράληροι περὶ θάνατον.

XIII. The severest and most troublesome disease, as well as the most fatal, was

the consumption. Many cases began in the winter, and of these several took to their bed, though some went about ailing without doing so. Early in the spring most of those who had gone to bed died, while none of the others lost their cough, though it became easier in the summer. During autumn all took to bed and many died. Most of these were ill for a long time. Now most of these began suddenly to grow worse, showing the following symptoms : — frequent shivering ; often continuous and acute fever ; unseasonable, copious, cold sweats throughout ; great chill with difficult recovery of heat ; bowels variously constipated, then quickly relaxing, and violently relaxing in all cases near the end ; the humours about the lungs spread downwards ; abundance of unfavourable urine ; malignant wasting. The coughs throughout were frequent, bringing up copious, concocted and liquid sputa, but without much pain ; but even if there was pain, in all cases the purging from the lungs took place very mildly. The throat did not smart very much, nor did salt humours cause any distress at all. The fluxes, however, viscid, white, moist, frothy, which came from the head, were abundant. But by far the worst symptom that attended both these cases and the others was the distaste for food, as has been mentioned. They had no relish either for drink with nourishment, but they remained entirely without thirst. Heaviness in the body. Coma. In most of them there was swelling, which developed into dropsy. Shivering fits and delirium near death.

XIV. Εἶδος δὲ τῶν φθινωδέων ἦν τὸ λεῖον, τὸ ὑπόλευκον, τὸ φακῶδες, τὸ ὑπέρυθρον, τὸ χαροπὸν, λευκοφλεγματίαι, πτερυγώδεες· καὶ γυναῖκες οὕτω. τὸ μελαγχολικὸν καὶ ὑφαιμον· οἱ καῦσοι καὶ τὰ φρενιτικὰ καὶ τὰ δυσεντεριώδεα τούτων ἤπτετο. τεινεσμοὶ νέοισι φλεγματώδεσιν· αἱ μακρὰι διάρροιαι καὶ τὰ δριμύα διαχωρήματα καὶ λιπαρὰ πικροχόλοισιν.

XIV. The physical characteristics of the consumptives were : — skin smooth, whitish, lentil-coloured, reddish ; bright eyes ; a leucophlegmatic condition ; shoulder-blades projecting like wings. Women too so. As to those with a melancholic or a rather sanguine complexion, they were attacked by ardent fevers, phrenitis and dysenteric troubles. Tenesmus affected young, phlegmatic people ; the chronic diarrhoea and acrid, greasy stools affected persons of a bilious temperament.

XV. Ἦν δὲ πᾶσι τοῖς ὑπογεγραμμένοις χαλεπώτατον μὲν τὸ ἔαρ καὶ πλείστους ἀπέκτεινε, τὸ δὲ θέρος ῥήϊστον, καὶ ἐλάχιστοι ἀπώλλυντο. τοῦ δὲ φθινοπώρου καὶ ὑπὸ πληϊάδα πάλιν ἔθνησκον, οἱ πολλοὶ τεταρταῖοι. δοκεῖ δὲ μοι προσωφελῆσαι κατὰ λόγον τὸ γενόμενον θέρος. τὰς γὰρ θερινὰς νόσους χειμῶν

ἐπιγενόμενος λύει, καὶ τὰς χειμερινὰς θέρος ἐπιγενόμενον μεθίστησι. καίτοι αὐτό γε ἐπὶ ἐωυτοῦ τὸ γενόμενον θέρος οὐκ εὐσταθὲς ἐγένετο· καὶ γὰρ ἐξαίφνης θερμὸν καὶ νότιον καὶ ἄπνοον· ἀλλ' ὅμως πρὸς τὴν ἄλλην κατάστασιν μεταλλάξαν ὠφέλησε.

xv. In all the cases described spring was the worst enemy, and caused the most deaths ; summer was the most favourable season, in which fewest died. In autumn and during the season of the Pleiades, on the other hand, there were again deaths, usually on the fourth day. And it seems to me natural that the coming on of summer should have been helpful. For the coming on of winter resolves the diseases of summer, and the coming on of summer removes those of winter. And yet in itself the summer in question was not healthful ; in fact it was suddenly hot, southerly, and calm. But nevertheless the change from the other constitution proved beneficial.

xvi. Μέγα δὲ μέρος ἡγεῦμαι τῆς τέχνης εἶναι τὸ δύνασθαι σκοπεῖν καὶ περὶ τῶν γεγραμμένων ὀρθῶς. ὁ γὰρ γνοὺς καὶ χρεώμενος τούτοις οὐκ ἂν μοι δοκεῖ μέγα σφάλλεσθαι ἐν τῇ τέχνῃ. δεῖ δὲ καταμανθάνειν τὴν κατάστασιν τῶν ὠρέων ἀκριβῶς ἐκάστην καὶ τὸ νόσημα, ἀγαθὸν ὃ τι κοινὸν ἐν τῇ καταστάσει ἢ ἐν τῇ νόσῳ, κακὸν ὃ τι κοινὸν ἐν τῇ καταστάσει ἢ ἐν τῇ νόσῳ, μακρὸν ὃ τι νόσημα καὶ θανάσιμον, μακρὸν ὃ τι καὶ περιεστικόν, ὄξυ ὃ τι θανάσιμον, ὄξυ ὃ τι περιεστικόν· τάξιν τῶν κρισίμων ἐκ τούτων σκοπεῖσθαι καὶ προλέγειν ἐκ τούτων εὐπορεῖται. εἰδότει περὶ τούτων ἔστιν εἰδέναι οὐς καὶ ὅτε καὶ ὡς δεῖ διαιτᾶν.

xvi. The power, too, to study correctly what has been written I consider to be an important part of the art of medicine. The man who has learnt these things and uses them will not, I think, make great mistakes in the art. And it is necessary to learn accurately each constitution of the seasons as well as the disease ; what common element in the constitution or in the disease is good, and what common element in the constitution or in the disease is bad ; what malady is protracted and fatal, what is protracted and likely to end in recovery ; what acute illness is fatal, what acute illness is likely to end in recovery. With this knowledge it is easy to examine the order of the critical days, and to prognosticate therefrom. One who has knowledge of these matters can know whom he ought to treat, as well as the time and method of treatment.



## Ἑκκαίδεκα ἄρρωστοὶ - SIXTEEN CASES

### CASE I

XVII. [α'.] Ἐν Θάσῳ τὸν Πάριον, ὃς κατέκειτο ὑπὲρ Ἀρτεμισίου, πυρετὸς ἔλαβεν ὀξύς, κατ' ἀρχὰς συνεχής, καυσώδης· δίψος· ἀρχόμενος κωματώδης καὶ πάλιν ἄγρυπνος· κοιλίη ταραχώδης ἐν ἀρχῇσιν, οὔρα λεπτά. ἕκτη οὔρησεν ἐλαιῶδες, παρέκρυσεν. ἑβδόμη παρωξύνθη πάντα, οὐδὲν ἐκοιμήθη, ἀλλὰ οὔρα τε ὅμοια καὶ τὰ τῆς γνώμης ταραχώδεια· ἀπὸ δὲ κοιλίης χολώδεια, λιπαρὰ διήλθεν. ὀγδόη σμικρὸν ἀπὸ ῥινῶν ἔσταξεν, ἤμεσεν ἰώδεια ὀλίγα, σμικρὰ ἐκοιμήθη. ἐνάτη διὰ τῶν αὐτῶν. δεκάτη πάντα συνέδωκεν. ἑνδεκάτη ἵδρωσε δι' ὄλου· περιέψυξε, ταχὺ δὲ πάλιν ἀνεθερμάνθη. τεσσαρεσκαίδεκάτη πυρετὸς ὀξύς, διαχωρήματα χολώδεια, λεπτά, πολλά, οὔροισιν ἐναιώρημα, παρέκρυσεν. ἑπτακαιδεκάτη ἐπιπόνως· οὔτε γὰρ ὕπνοι, ὃ τε πυρετὸς ἐπέτεινεν. εἰκοστῇ ἵδρωσε δι' ὄλου· ἄπυρος, διαχωρήματα χολώδεια, ἀπόσιτος, κωματώδης· εἰκοστῇ τετάρτη ὑπέστρεψε. τριηκοστῇ τετάρτη ἄπυρος, κοιλίη οὐ συνίστατο, καὶ πάλιν ἀνεθερμάνθη. τεσσαρακοστῇ ἄπυρος, κοιλίη συνέστη χρόνον οὐ πολύν, ἀπόσιτος, σμικρὰ πάλιν ἐπύρεξε καὶ διὰ παντὸς πεπλανημένως· ἄπυρος τὰ μὲν, τὰ δ' οὔ· εἰ γάρ τι διαλίποι καὶ διακουφίσει, ταχὺ πάλιν ὑπέστρεψε. σιταρίοισι τε ὀλίγοισι καὶ φαύλοισι προσεχρῆτο. ὕπνοι κακοί, περὶ τὰς ὑποστροφὰς παρέκρυσεν. οὔρα πάχος μὲν ἔχοντα οὔρει τηνικαῦτα, ταραχώδεια δὲ καὶ πονηρά. καὶ τὰ κατὰ κοιλίην συνιστάμενα καὶ πάλιν διαλυόμενα. πυρέτια συνεχέα. διαχωρήματα λεπτά, πολλά. ἐν εἰκοσι καὶ ἑκατὸν ἔθανε. τούτῳ κοιλίη συνεχέως ἀπὸ τῆς πρώτης ὑγρῆ χολώδεσιν, ὑγροῖσι πολλοῖσιν ἦν ἢ συν ἰσταμένη ζέουσι καὶ ἀπέπτοισιν· οὔρα διὰ τέλεος κακά· κωματώδης τὰ πλεῖστα, μετὰ πόνων ἄγρυπνος, ἀπόσιτος συνεχέως.

XVII. In Thasos the Parian who lay sick beyond the temple of Artemis was seized with acute fever, which at the beginning was continuous and ardent. Thirst. At the beginning coma followed by sleeplessness. Bowels disordered at the beginning ; urine thin.

*Sixth day.* Oily urine ; delirium.

*Seventh day.* General exacerbation ; no sleep ; urine similar and mind disordered ; stools bilious and fatty.

*Eighth day.* Slight epistaxis ; vomited scanty matters of the colour of verdigris ;

snatches of sleep.

*Ninth day.* Same symptoms.

*Tenth day.* General improvement.

*Eleventh day.* Sweated all over ; grew chilly, but quickly recovered heat.

*Fourteenth day.* Acute fever ; stools bilious, thin, copious ; substance floating in urine ; delirium.

*Seventeenth day.* In pain ; no sleep, while the fever grew worse.

*Twentieth day.* Sweated all over ; no fever ; stools bilious ; aversion to food ; coma.

*Twenty-fourth day.* Relapse.

*Thirty-fourth day.* No fever ; no constipation ; recovered heat.

*Fortieth day.* No fever ; bowels constipated for a short time ; aversion to food ; became slightly feverish again, throughout irregularly, the fever being sometimes absent, sometimes present ; for if the fever intermitted and was alleviated there was a relapse soon afterwards. He took little bits of food, and that of an unsuitable sort. Sleep bad ; delirium at the relapses. Urine at these times had consistency, but was troubled and bad. Bowels constipated, but afterwards relaxed. Continuous slight fevers. Stools thin and copious.

*Hundred and twentieth day.* Death.

In this case the bowels continuously from the first day loose with bilious, loose, copious stools, or constipated with hot, undigested stools. Urine throughout bad ; mostly comatose ; painful sleeplessness ; continued aversion to food.

[β'.] Ἐν Θάσῳ τὴν κατακειμένην παρὰ τὸ ψυχρὸν ὕδωρ ἐκ τόκου θυγατέρα τεκοῦσαν καθάρσιος οὐ γενομένης πυρετὸς ὀξὺς φρικώδης τρι ταίην ἔλαβεν. ἐκ χρόνου δὲ πολλοῦ πρὸ τοῦ τόκου πυρετώδης ἦν, κατακλινῆς, ἀπόσιτος. μετὰ δὲ τὸ γενόμενον ῥῖγος συνεχέες, ὀξέες, φρικώδεις οἱ πυρετοί. ὀγδόῃ πολλὰ παρέκρυσσε καὶ τὰς ἐχομένας καὶ ταχὺ πάλιν κατενόει· κοιλίη ταραχώδης πολλοῖσι λεπτοῖσιν, ὕδατοχόλοις· ἄδιψος. ἐνδεκάτῃ κατενόει, κωματώδης δ' ἦν·

οὔρα πολλά λεπτά καὶ μέλανα, ἄγρυπνος. εἰκοστῇ σμικρὰ περιέψυξε καὶ ταχὺ πάλιν ἀνεθερμάνθη, σμικρὰ παρέλεγεν, ἄγρυπνος· τὰ κατὰ κοιλίην ἐπὶ τῶν αὐτῶν· οὔρα ὑδατώδεια πολλά. εἰκοστῇ ἐβδόμη ἄπυρος, κοιλίη συνέστη, οὐ πολλῶ δὲ χρόνῳ ὕστερον ἰσχίου δεξιοῦ ὀδύνη ἰσχυρὴ χρόνον πολύν· πυρετοὶ πάλιν παρείποντο· οὔρα ὑδατώδεια. τεσσαρακοστῇ τὰ μὲν περὶ τὸ ἰσχίον ἐπεκούφισε, βῆχες δὲ συνεχέες ὑγραὶ πολλαί, κοιλίη συνέστη, ἀπόσιτος· οὔρα ἐπὶ τῶν αὐτῶν. οἱ δὲ πυρετοὶ τὸ μὲν ὅλον οὐκ ἐκλείποντες, πεπλανημένως δὲ παροξυνόμενοι, τὰ μὲν, τὰ δ' οὐ. ἐξηκοστῇ αἱ μὲν βῆχες ἀσήμως ἐξέλιπον· οὔτε γὰρ τις πτυάλων πεπασμὸς ἐγένετο οὔτε ἄλλη τῶν εἰθισμένων ἀπόστασις· σιγῶν δὲ ἢ ἐκ τῶν ἐπὶ δεξιᾷ κατεσπᾶσθη· κωματώδης· παρέλεγε καὶ ταχὺ πάλιν κατενόει· πρὸς δὲ τὰ γεύματα ἀπονενοημένως εἶχεν· σιγῶν μὲν ἐπανῆκε, κοιλίη δὲ χολώδεια σμικρὰ διέδωκεν, ἐπύρεξεν ὀξυτέρως, φρικώδης· καὶ τὰς ἐχομένας ἄφωνος καὶ πάλιν διελέγετο. ὀγδοηκοστῇ ἀπέθανε. ταύτη τὰ τῶν οὔρων διὰ τέλος ἦν μέλανα καὶ λεπτά καὶ ὑδατώδεια. κῶμα παρείπετο, ἀπόσιτος, ἄθυμος, ἄγρυπνος, ὀργαί, δυσφορίαι, τὰ περὶ τὴν γνώμην μελαγχολικά.

## CASE II

In Thasos the woman who lay sick by the Cold Water, on the third day after giving birth to a daughter without lochial discharge, was seized with acute fever accompanied by shivering. For a long time before her delivery she had suffered from fever, being confined to bed and averse to food. After the rigor that took place, the fevers were continuous, acute, and attended with shivering.

*Eighth and following days.* Much delirium, quickly followed by recovery of reason ; bowels disturbed with copious, thin, watery and bilious stools ; no thirst.

*Eleventh day.* Was rational, but comatose. Urine copious, thin and black ; no sleep.

*Twentieth day.* Slight chills, but heat quickly recovered ; slight wandering ; no sleep ; bowels the same ; urine watery and copious.

*Twenty-seventh day.* No fever ; bowels constipated ; not long afterwards severe pain in the right hip for a long time. Fevers again attended ; urine watery.

*Fortieth day.* Pain in the hip relieved ; continuous coughing, with watery, copious sputa ; bowels constipated ; aversion to food ; urine the same. The fevers, without entirely intermitting, were exacerbated irregularly, sometimes increasing and sometimes not doing so.

*Sixtieth day.* The coughing ceased without any critical sign ; there was no coction of the sputa, nor any of the usual abscessions ; jaw on the right side convulsed ; comatose ; wandering, but reason quickly recovered ; desperately averse to food ; jaw relaxed ; passed small, bilious stools ; fever grew more acute, with shivering. On the succeeding days she lost power of speech, but would afterwards converse.

*Eightieth day.* Death.

The urine of this patient was throughout black, thin and watery. Coma was present, aversion to food, despondency, sleeplessness, irritability, restlessness, the mind being affected by melancholy.

[γ'.] Ἐν Θάσῳ Πυθίωνα, ὃς κατέκειτο ὑπὲρ ἄνω τοῦ Ἡρακλείου, ἐκ πόνων καὶ κόπων καὶ διαίτης γενομένης ἀμελέος ῥίγος μέγα καὶ πυρετὸς ὄξυς ἔλαβε. γλῶσσα ἐπίξηρος, διψώδης, χολώδης, οὐχ ὑπνωσεν, οὔρα ὑπομέλανα, ἐναιώρημα μετέωρον, οὐχ ἴδρυτο. δευτέρῃ περὶ μέσον ἡμέρης ψύξις ἀκρέων, τὰ περὶ χεῖρας καὶ κεφαλὴν μᾶλλον, ἄναυδος, ἄφωνος, βραχύπνοος ἐπὶ πολὺν χρόνον, ἀνεθερμάνθη, δίψα, νύκτα δι' ἠσυχίης, ἴδρωσε περὶ κεφαλὴν σμικρά. τρίτῃ ἡμέρῃ δι' ἠσυχίης, ὄψε δὲ περὶ ἡλίου δυσμᾶς ὑπεψύχθη σμικρά, ἄση, ταραχὴ, νυκτὸς ἐπιπόνως, οὐδὲν ὑπνωσεν, ἀπὸ δὲ κοιλίης σμικρὰ συνεστηκότα κόπρανα διήλθε. τετάρτῃ πρωὶ δι' ἠσυχίης, περὶ δὲ μέσον ἡμέρης πάντα παρωξύνθη, ψύξις, ἄναυδος, ἄφωνος, ἐπὶ τὸ χεῖρον, ἀνεθερμάνθη μετὰ χρόνον, οὔρησε μέλανα ἐναιώρημα ἔχοντα, νύκτα δι' ἠσυχίης, ἐκοιμήθη. πέμπτῃ ἔδοξε κουφίσαι, κατὰ δὲ κοιλίην βάρος μετὰ πόνου, διψώδης, νύκτα ἐπιπόνως. ἕκτῃ πρωὶ μὲν δι' ἠσυχίης, δείλης δὲ οἱ πόνοι μέζουσιν, παρωξύνθη, ἀπὸ δὲ κοιλίης ὄψε κλυσματίῳ καλῶς διήλθε, νυκτὸς ἐκοιμήθη. ἑβδόμῃ ἡμέρῃ ἀσώδης, ὑπεδυσφόρει, οὔρησεν ἐλαιῶδες, νυκτὸς ταραχὴ πολλή, παρέλεγεν, οὐδὲν ἐκοιμήθη. ὀγδόῃ πρωὶ μὲν ἐκοιμήθη σμικρά, ταχὺ δὲ ψύξις, ἀφωνία, λεπτὸν πνεῦμα καὶ μινυθῶδες, ὄψε δὲ πάλιν ἀνεθερμάνθη, παρέκρυσεν, ἤδη δὲ πρὸς ἡμέρῃν σμικρὰ ἐκουφίσθη, διαχωρήματα ἄκρητα, σμικρὰ, χολώδεα. ἐνάτῃ κωματώδης, ἀσώδης, ὅτε διεγείροιτο· οὐ λήν διψώδης· περὶ δὲ ἡλίου δυσμᾶς ἐδυσφόρει, παρέλεγε, νύκτα κακὴν. δεκάτῃ πρωὶ ἄφωνος, πολλὴ ψύξις, πυρετὸς ὄξυς, πολὺς ἰδρῶς, ἔθανεν. ἐν ἀρτίησιν οἱ πόνοι τούτῳ.

### CASE III

In Thasos Pythion, who lay sick above the shrine of Heracles, after labour, fatigue and careless living, was seized by violent rigor and acute fever. Tongue

dry ; thirst ; bilious ; no sleep ; urine rather black, with a substance suspended in it, which formed no sediment.

*Second day.* About mid-day chill in the extremities, especially in the hands and head ; could not speak or utter a sound ; respiration short for a long time ; recovered warmth ; thirst ; a quiet night ; slight sweats about the head.

*Third day.* A quiet day, but later, about sunset, grew rather chilly ; nausea ; distress ; painful night without sleep ; small, solid stools were passed.

*Fourth day.* Early morning peaceful, but about mid-day all symptoms were exacerbated ; chill ; speechless and voiceless ; grew worse ; recovered warmth after a time ; black urine with a substance floating in it ; night peaceful ; slept.

*Fifth day.* Seemed to be relieved, but there was heaviness in the bowels with pain ; thirst ; painful night.

*Sixth day.* Early morning peaceful ; towards evening the pains were greater ; exacerbation ; but later a little clyster caused a good movement of the bowels. Slept at night.

*Seventh day.* Nausea ; rather uneasy ; urine oily ; much distress at night ; wandering ; no sleep at all.

*Eighth day.* Early in the morning snatches of sleep ; but quickly there was chill ; loss of speech ; respiration thin and weak ; in the evening he recovered warmth again ; was delirious ; towards morning slightly better ; stools uncompounded, small, bilious.

*Ninth day.* Comatose ; nausea whenever he woke up. Not over-thirsty. About sunset was uncomfortable ; wandered ; a bad night.

*Tenth day.* In the early morning was speechless ; great chill ; acute fever ; much sweat ; death.

In this case the pains on even days.

[δ'.] Ὁ φρενιτικὸς τῆ πρώτῃ κατακλιθεὶς ἤμεσεν ἰώδεα πολλὰ, λεπτά, πυρετὸς φρικώδης πολὺς, ἰδρῶς συνεχῆς δι' ὅλου, κεφαλῆς καὶ τραχήλου βάρος μετ' ὀδύνης, οὖρα λεπτά, ἐναιωρήματα σμικρά, διεσπασμένα, οὐχ ἴδρυτο. ἀπὸ δὲ

κοιλίης ἐξεκόπρισεν ἀθρόα πολλά, παρέκρυσεν, οὐδὲν ὑπνωσε. δευτέρῃ πρωὶ ἄφρονος, πυρετὸς ὄξύς, ἰδρωσεν, οὐ διέλιπε, παλμοὶ δι' ὅλου τοῦ σώματος, νυκτὸς σπασμοί. τρίτη πάντα παρωξύνθη. τετάρτη ἔθανεν.

#### CASE IV

The patient suffering from phrenitis on the first day that he took to bed vomited copiously thin vomits of the colour of verdigris ; much fever with shivering ; continuous sweating all over ; painful heaviness of head and neck ; urine thin, with small, scattered substances floating in it, which did not settle. Copious excreta at a single evacuation ; delirium ; no sleep. *Second day.* In the early morning speechless ; acute fever ; sweating ; no intermission ; throbbing all over the body ; convulsions at night.

*Third day.* General exacerbation.

*Fourth day.* Death.

[ε'.] Ἐν Λαρίσῃ φαλακρὸς μηρὸν δεξιὸν ἐπόνησεν ἐξαίφνης· τῶν δὲ προσφερομένων οὐδὲν ὠφέλει. τῇ πρώτῃ πυρετὸς ὄξύς, καυσώδης, ἀτρεμέως εἶχεν, οἱ δὲ πόνοι παρείποντο. δευτέρῃ τοῦ μηροῦ μὲν ὑφίεσαν οἱ πόνοι, ὁ δὲ πυρετὸς ἐπέτεινεν, ὑπεδυσφόρει, οὐκ ἐκοιμᾶτο, ἄκρεα ψυχρά, οὔρων πλῆθος διήει οὐ χρηστῶν. τρίτη τοῦ μηροῦ μὲν ὁ πόνος ἐπαύσατο, παρακοπή δὲ τῆς γνώμης καὶ ταραχὴ καὶ πολὺς βληστρισμός. τετάρτη περὶ μέσον ἡμέρης ἔθανεν.

#### CASE V

In Larisa a bald man suddenly experienced pain in the right thigh. No remedy did any good.

*First day.* Acute fever of the ardent type ; the patient was quiet, but the pains persisted.

*Second day.* The pains in the thigh subsided, but the fever grew worse ; the patient was rather uncomfortable and did not sleep ; extremities cold ; copious and unfavourable urine was passed.

*Third day.* The pain in the thigh ceased, but there was derangement of the intellect, with distress and much tossing.

*Fourth day.* Death about mid-day.

[ζ'.] Ἐν Ἀβδήροισι Περικλέα πυρετὸς ἔλαβεν ὀξύς, συνεχῆς μετὰ πονου, πολλὴ δίψα, ἄση, ποτὸν κατέχειν οὐκ ἠδύνατο· ἦν δὲ ὑπόσπληνός τε καὶ καρηβαρικός. τῇ πρώτῃ ἡμορράγησεν ἐξ ἀριστεροῦ· πολὺς μέντοι ὁ πυρετὸς ἐπέτειεν· οὖρησε πολὺ θολερὸν, λευκόν· κείμενον οὐ καθίστατο. δευτέρῃ πάντα παρωξύνθη· τὰ μέντοι οὔρα παχέα μὲν ἦν, ἰδρυμένα δὲ μᾶλλον· καὶ τὰ περὶ τὴν ἄσιν ἐκούφισεν, ἐκοιμήθη. τρίτῃ πυρετὸς ἐμαλάχθη, οὔρων πλῆθος, πέπονα, πολλὴν ὑπόστασιν ἔχοντα, νύκτα δι' ἡσυχίης. τετάρτῃ περὶ μέσον ἡμέρης ἵδρωσε πολλῶ θερμῶ δι' ὄλου, ἄπυρος, ἐκρίθη, οὐχ ὑπέστρεψεν.

## CASE VI

In Abdera Pericles was seized with acute fever, continuous and painful ; much thirst ; nausea ; could not retain what he drank. There was slight enlargement of the spleen and heaviness in the head.

*First day.* Epistaxis from the left nostril ; the fever, however, increased greatly. Copious urine, turbid and white. On standing it did not settle.

*Second day.* General exacerbation ; the urine, however, had consistency, but there was some sediment ; the nausea was relieved and the patient slept.

*Third day.* The fever went down ; abundance of urine, with concocted and copious sediment ; a quiet night. *Fourth day.* About mid-day a hot, violent sweating all over ; no fever ; crisis ; no relapse.

[ζ'.] Ἐν Ἀβδήροισι τὴν παρθένον, ἣ κατέκειτο ἐπὶ τῆς ἰρῆς ὁδοῦ, πυρετὸς καυσώδης ἔλαβεν· ἦν δὲ διψώδης καὶ ἄγρυπνος. κατέβη δὲ τὰ γυναικεῖα πρώτον αὐτῆ. ἕκτη ἄση πολλή, ἔρευθος, φρικώδης, ἀλύουσα. ἐβδόμη διὰ τῶν αὐτῶν, οὔρα λεπτὰ μὲν, εὐχρῶ δέ, τὰ περὶ τὴν κοιλίην οὐκ ἠνώχλει. ὀγδόη κώφωσις, πυρετὸς ὀξύς, ἄγρυπνος, ἀσώδης, φρικώδης, κατενόει, οὔρα ὅμοια. ἐνάτη διὰ τῶν αὐτῶν· καὶ τὰς ἐπομένας οὕτως· ἡ κώφωσις παρέμενε. τεσσαρεσκαίδεκάτη τὰ τῆς γνώμης ταραχώδεα, ὁ πυρετὸς συνέδωκεν. ἑπτακαίδεκάτη διὰ ῥινῶν ἐρρῦη πολὺ, ἡ κώφωσις σμικρὰ συνέδωκε. καὶ τὰς ἐπομένας ἄση, κωφότης· ἐνῆν καὶ παράληρος. εἰκοστῇ ποδῶν ὀδύνη· κωφότης, παράληρος ἀπέλιπεν, ἡμορράγησε σμικρὰ διὰ ῥινῶν, ἵδρωσεν, ἄπυρος. εἰκοστῇ τετάρτῃ ὁ πυρετὸς ὑπέστρεψε, κώφωσις πάλιν, ποδῶν ὀδύνη παρέμεινεν, παρακοπή. εἰκοστῇ ἐβδόμη ἵδρωσε πολλῶ, ἄπυρος, ἡ κώφωσις ἐξέλιπεν, ἡ τῶν ποδῶν ὑπέμενεν ὀδύνη, τὰ δ' ἄλλα τελέως ἐκρίθη.

## CASE VII

In Abdera the maiden who lay sick by the Sacred Way was seized with a fever of the ardent type. She was thirsty and sleepless. Menstruation occurred for the first time.

*Sixth day.* Much nausea ; redness ; shivering ; restlessness.

*Seventh day.* Same symptoms. Urine thin but of good colour ; no trouble in the bowels.

*Eighth day.* Deafness ; acute fever ; sleeplessness ; nausea ; shivering ; was rational ; urine similar.

*Ninth day* Same symptoms, and also on the following days. The deafness persisted.

*Fourteenth day.* Reason disturbed ; the fever subsided.

*Seventeenth day.* Copious epistaxis ; the deafness improved a little. On the following days nausea and deafness, while there was also delirium.

*Twentieth day.* Pain in the feet ; deafness ; the delirium ceased ; slight epistaxis ; sweating ; no fever.

*Twenty-fourth day.* The fever returned, with the deafness ; pain in the feet persisted ; delirium.

*Twenty-seventh day.* Copious sweating ; no fever ; the deafness ceased ; the pain in the feet remained, but in other respects there was a perfect crisis.

[η'.] Ἐν Ἀβδήροις Ἀναξίωνα, ὃς κατέκειτο παρὰ τὰς Θρηϊκίας πύλας, πυρετὸς ὀξύς ἔλαβε· πλευροῦ δεξιοῦ ὀδύνη συνεχής, ἔβησσε ξηρά, οὐδ' ἔπτυε τὰς πρώτας· διψώδης, ἄγρυπνος, οὖρα δὲ εὐχρω πολλὰ λεπτά. ἕκτη παράληρος· πρὸς δὲ τὰ θερμάσματα οὐδὲν ἐνεδίδου. ἐβδόμη ἐπιπόνως· ὁ γὰρ πυρετὸς ἐπέτεινεν, οἱ τε πόνοι οὐ συνεδίδοσαν, αἱ τε βῆχες ἠνώχλεον, δύσπνοός τε ἦν. ὀγδοὴ ἀγκῶνα ἔταμον· ἐρρῦη πολλὸν οἶον δεῖ· συνέδωκαν μὲν οἱ πόνοι, αἱ μέντοι βῆχες αἱ ξηραὶ παρείποντο. ἐνδεκάτῃ συνέδωκαν οἱ πυρετοί, σμικρὰ περὶ κεφαλὴν ἴδρωσεν, αἱ τε βῆχες καὶ τὰ ἀπὸ πνεύμονος ὑγρότερα. ἑπτακαιδεκάτῃ ἤρξατο σμικρὰ πέποννα πτύειν· ἐκουφίσθη. εἰκοστῇ ἴδρωσεν, ἄπυρος, μετὰ δὲ κρίσιν



διψώδης τε ἦν καὶ τῶν ἀπὸ πνεύμονος οὐ χρησταὶ αἱ καθάρσιες. εἰκοστῇ ἐβδόμη ὁ πυρετὸς ὑπέστρεψεν, ἔβησεν, ἀνῆγε πέπονα πολλά, οὔροις ὑπόστασις πολλή λευκή, ἄδιψος ἐγένετο, εὐπνοος. τριηκοστῇ τετάρτη ἴδρωσε δι' ὄλου, ἄπυρος, ἐκρίθη πάντα.

### CASE VIII

In Abdera Anaxion, who lay sick by the Thracian gate, was seized with acute fever. Continuous pain in the right side ; a dry cough, with no sputa on the first days. Thirst ; sleeplessness ; urine of good colour, copious and thin.

*Sixth day.* Delirium ; warm applications gave no relief.

*Seventh day.* In pain, for the fever grew worse and the pains were not relieved, while the coughing was troublesome and there was difficulty in breathing.

*Eighth day.* I bled him in the arm. There was an abundant, proper flow of blood ; the pains were relieved, although the dry coughing persisted.

*Eleventh day.* The fever went down ; slight sweating about the head ; the coughing and the sputa more moist.

*Seventeenth day.* Began to expectorate small, concocted sputa ; was relieved.

*Twentieth day.* Sweated and was free from fever ; after a crisis was thirsty, and the cleansings from the lungs were not favourable.

*Twenty-seventh day.* The fever returned ; coughing, with copious, concocted sputa ; copious, white sediment in urine ; thirst and difficulty in breathing disappeared.

*Thirty-fourth day.* Sweated all over ; no fever ; general crisis.

[θ'.] Ἐν Ἀβδήροις Ἡρόπυθος κεφαλὴν ὀρθοστάδην ἐπιπόνως εἶχεν, οὐ πολλῶ δὲ χρόνῳ ὕστερον κατεκλίθη. ὤκει πλησίον τῆς ἄνω ἀγωγῆς. πυρετὸς ἔλαβε καυσώδης, ὀξύς· ἔμετοι τὸ κατ' ἀρχὰς πολλῶν χολωδέων, διψώδης, πολλή δυσφορίη, οὔρα λεπτὰ μέλανα, ἐναιώρημα μετέωρον ὅτε μὲν, ὅτε δ' οὔ· νύκτα ἐπιπόνως, πυρετὸς ἄλλοτε ἀλλοίως παροξυνόμενος, τὰ πλεῖστα ἀτάκτως. περὶ δὲ τεσσαρεσκαίδεκάτην κώφωσις, οἱ πυρετοὶ ἐπέτεινον, οὔρα διὰ τῶν αὐτῶν. εἰκοστῇ πολλά παρέκρουσε καὶ τὰς ἐπομένας. τεσσαρακοστῇ διὰ ῥινῶν

ἡμορράγησε πολὺ καὶ κατενόει μᾶλλον· ἡ κώφωσις ἐνήν μὲν, ἦσσαν δέ· οἱ πυρετοὶ συνέδωκαν. ἡμορράγει τὰς ἐπομένας πυκνὰ κατ' ὀλίγον. περὶ δὲ ἐξηκοστὴν αἱ μὲν αἱμορραγίαι ἀπεπαύσαντο, ἰσχίου δὲ δεξιοῦ ὀδύνη ἰσχυρὴ καὶ οἱ πυρετοὶ ἐπέτεινον. οὐ πολλῶν δὲ χρόνων ὕστερον πόνου τῶν κάτω πάντων· συνέπιπτε δὲ ἢ τοὺς πυρετοὺς εἶναι μέζους καὶ τὴν κώφωσιν πολλὴν ἢ ταῦτα μὲν ὑφιέναι καὶ κουφίζειν, τῶν δὲ κάτω περὶ ἰσχία μέζους εἶναι τοὺς πόνους. ἤδη δὲ περὶ ὀγδοηκοστὴν συνέδωκε μὲν πάντα, ἐξέλιπε δὲ οὐδέν· οὐρά τε γὰρ εὐχρω καὶ πλείους ὑποστάσις ἔχοντα κατέβαινε, οἱ παράληροί τε μείους ἦσαν. περὶ δὲ ἑκατοστὴν κοιλίῃ πολλοῖσι χολώδεσιν ἐπεταράχθη, καὶ ἦει χρόνον οὐκ ὀλίγον πολλὰ τοιαῦτα, καὶ πάλιν δυσεντεριώδεα μετὰ πόνου, τῶν δὲ ἄλλων ῥαστώνη. τὸ δὲ σύνολον οἷ τε πυρετοὶ ἐξέλιπον καὶ ἡ κώφωσις ἐπαύσατο. ἐν ἑκατοστῇ εἰκοστῇ τελέως ἐκρίθη.

## CASE IX

In Abdera Heropythus had pain in the head without taking to bed, but shortly afterwards was compelled to do so. He lived close to the Upper Road. An acute, ardent fever seized him. Vomited at the beginning copious, bilious matters ; thirst ; great discomfort ; urine thin and black, sometimes with, sometimes without, substances suspended in it. Painful night, with fever rising now in this way, now in that, but for the most part irregularly. About the fourteenth day, deafness ; the fever grew worse ; urine the same.

*Twentieth day.* Much delirium, also on the following days.

*Fortieth day.* Copious epistaxis ; more rational ; some deafness, but less than before ; the fever went down. Frequent, but slight, epistaxis on the following days. About the sixtieth day the bleedings from the nose ceased, but there was violent pain in the right hip and the fever increased. Not long afterwards, pains in all the lower parts. It happened that either the fever was higher and the deafness great, or else, though these symptoms were relieved and less severe, yet the pains in the lower parts about the hips grew worse. But from about the eightieth day all the symptoms were relieved without any disappearing. The urine that was passed was of good colour and had greater deposits, while the delirious mutterings were less. About the hundredth day the bowels were disordered with copious, bilious stools, and copious evacuations of this nature were passed for a long time. Then followed painful symptoms of dysentery, with relief of the other symptoms. In brief, the fever disappeared and the deafness ceased.

*Hundred and twentieth day. Complete crisis.*

[ι'.] Ἐν Ἀβδήροισι Νικόδημον ἐξ ἀφροδισίων καὶ πότων πῦρ ἔλαβεν. ἀρχόμενος δὲ ἦν ἀσώδης καὶ καρδιαλγικός, διψώδης, γλῶσσα ἐπεκαύθη, οὔρα λεπτὰ μέλανα. δευτέρῃ ὁ πυρετὸς παρωξύνθη, φρικώδης, ἀσώδης, οὐδὲν ἐκοιμήθη, ἤμεσε χολώδεα ξανθὰ, οὔρα ὁμοία, νύκτα δι' ἠσυχίης, ὑπνωσε. τρίτη ὑφῆκε πάντα, ῥαστώνη· περὶ δὲ ἡλίου δυσμὰς πάλιν ὑπεδυσφόρει, νύκτα ἐπιπόνως. τετάρτη ῥίγος, πυρετὸς πολὺς, πόνοι πάντων, οὔρα λεπτά, ἐναιώρημα· νύκτα πάλιν δι' ἠσυχίης. πέμπτη ἐνῆν μὲν πάντα, ῥαστώνη δὲ ἦν. ἕκτη τῶν αὐτῶν πόνοι πάντων, οὔροισιν ἐναιώρημα, παρέκρουσε πολλά. ἑβδόμη ῥαστώνη. ὀγδόη τὰ ἄλλα συνέδωκε πάντα. δεκάτη καὶ τὰς ἐπομένας ἐνῆσαν μὲν οἱ πόνοι, ἦσσαν δὲ πάντες· οἱ δὲ παροξυσμοὶ καὶ οἱ πόνοι τούτῳ διὰ τέλεος ἐν ἀρτίησιν ἦσαν μᾶλλον. εἰκοστῇ οὔρησε λευκόν, πάχος εἶχε, κείμενον οὐ καθίστατο· ἴδρωσε πολλῶ, ἔδοξεν ἄπυρος γενέσθαι, δειλῆς δὲ πάλιν ἐθερμάνθη, καὶ τῶν αὐτῶν πόνοι, φρίκη, δίψα, σμικρὰ παρέκρουσεν. εἰκοστῇ τετάρτη οὔρησε πολὺ λευκόν, πολλὴν ὑπόστασιν ἔχον. ἴδρωσε πολλῶ θερμῶ δι' ὅλου, ἄπυρος ἐκρίθη.

#### CASE X

In Abdera Nicodemus after venery and drunkenness was seized with fever. At the beginning he had nausea and cardialgia ; thirst ; tongue parched ; urine thin and black.

*Second day.* The fever increased ; shivering ; nausea ; no sleep ; bilious, yellow vomits ; urine the same ; a quiet night ; sleep.

*Third day.* All symptoms less severe ; relief. But about sunset he was again somewhat uncomfortable ; painful night.

*Fourth day.* Rigor ; much fever ; pains every-where ; urine thin, with floating substance in it ; the night, on the other hand, was quiet.

*Fifth day.* All symptoms present, but relieved.

*Sixth day.* Same pains everywhere ; substance floating in urine ; much delirium.

*Seventh day.* Relief.

*Eighth day.* All the other symptoms less severe.

*Tenth day and following days.* The pains were present, but all less severe. The exacerbations and the pains in the case of this patient tended through-out to occur on the even days.

*Twentieth day.* Urine white, having consistency ; no sediment on standing. Copious sweating ; seemed to lose his fever, but towards evening grew hot again, with pains in the same parts ; shivering ; thirst ; slight delirium.

*Twenty-fourth day.* Much white urine, with much sediment. Hot sweating all over ; the fever passed away in a crisis.

[ια'.] Ἐν Θάσῳ γυνὴ δυσάνιος ἐκ λύπης μετὰ προφάσιος ὀρθοστάδην ἐγένετο ἄγρυπνός τε καὶ ἀπόσιτος καὶ διψώδης ἦν καὶ ἀσώδης. ὤκει δὲ πλησίον τῶν Πυλάδου ἐπὶ τοῦ λείου. τῇ πρώτῃ ἀρχομένης νυκτὸς φόβοι, λόγοι πολλοί, δυσθυμία, πυρέτιον λεπτόν. πρῶτὶ σπασμοὶ πολλοί· ὅτε δὲ διαλίποιν οἱ σπασμοὶ οἱ πολλοί, παρέλεγεν, ἠσχρομύθει· πολλοὶ πόνοι, μεγάλοι, συνεχέες. δευτέρῃ διὰ τῶν αὐτῶν, οὐδὲν ἐκοιμᾶτο, πυρετὸς ὀξύτερος. τρίτῃ οἱ μὲν σπασμοὶ ἀπέλιπον, κῶμα δὲ καὶ καταφορὴ καὶ πάλιν ἔγερσις· ἀνήϊσσε, κατέχειν οὐκ ἠδύνατο, παρέλεγε πολλά, πυρετὸς ὀξύς, ἐς νύκτα δὲ ταύτην ἴδρωσε πολλῶ θερμῶ δι' ὄλου· ἄπυρος, ὑπνωσε, πάντα κατενόει, ἐκρίθη. περὶ δὲ τρίτην ἡμέρην οὖρα μέλανα λεπτά, ἐναιώρημα δὲ ἐπὶ πολὺ στρογγύλον, οὐχ ἰδρῦετο, περὶ δὲ κρίσιν γυναικεῖα πολλὰ κατέβη.

## CASE XI

In Thasos a woman of gloomy temperament, after a grief with a reason for it, without taking to bed lost sleep and appetite, and suffered thirst and nausea. She lived near the place of Pylades on the plain.

*First day.* As night began there were fears, much rambling, depression and slight feverishness. Early in the morning frequent convulsions ; whenever these frequent convulsions intermitted, she wandered and uttered obscenities ; many pains, severe and continuous.

*Second day.* Same symptoms ; no sleep ; fever more acute.

*Third day.* The convulsions ceased, but were succeeded by coma and oppression, followed in turn by wakefulness. She would jump up ; could not restrain herself ; wandered a great deal ; fever acute ; on this night a copious, hot sweating all over ; no fever ; slept, was perfectly rational, and had a crisis. About the third

day urine black and thin, with particles mostly round floating in it, which did not settle. Near the crisis copious menstruation.

[ιβ'.] Ἐν Λαρίσῃ παρθένον πυρετὸς ἔλαβε καυσώδης, ὀξύς· ἄγρυπνος, διψώδης, γλῶσσα λιγνυώδης, ξηρή· οὔρα εὐχρῶ μὲν, λεπτὰ δέ. δευτέρῃ ἐπιπόνως, οὐχ ὕπνωσε. τρίτῃ πολλὰ διῆλθεν ἀπὸ κοιλῆς ὑδατόγλοα, καὶ τὰς ἐπομένας ἦι τοιαῦτα εὐφόρως. τετάρτῃ οὔρησε λεπτὸν ὀλίγον, εἶχεν ἐναιώρημα μετέωρον, οὐχ ἰδρῦετο, παρέκρουσεν ἐς νύκτα. ἕκτῃ διὰ ρινῶν λάβρον ἐρρῦη πολὺ· φρίζασα ἴδρωσε πολλῶ θερμῶ δι' ὄλου· ἄπυρος· ἐκρίθη. ἐν δὲ τοῖσι πυρετοῖσι καὶ ἤδη κεκριμένων γυναικεῖα κατέβη πρῶτον τότε· παρθένος γὰρ ἦν. ἦν δὲ διὰ παντὸς ἀσώδης, φρικώδης, ἔρευθος προσώπου, ὀμμάτων ὀδύνη· καρηβαρική· ταύτῃ οὐχ ὑπέστρεψεν, ἀλλ' ἐκρίθη. οἱ πόνοι ἐν ἀρτίησιν.

## CASE XII

In Larisa a maiden was seized with an acute fever of the ardent type. Sleeplessness ; thirst ; tongue sooty and parched ; urine of good colour, but thin.

*Second day.* In pain ; no sleep.

*Third day.* Copious stools, watery and of a yellowish green ; similar stools on the following days, passed without distress.

*Fourth day.* Scanty, thin urine, with a substance suspended in it which did not settle ; delirium at night.

*Sixth day.* Violent and abundant epistaxis ; after a shivering fit followed a hot, copious sweating all over ; no fever ; a crisis. In the fever and after the crisis menstruation for the first time, for she was a young maiden. Throughout she suffered nausea and shivering ; redness of the face ; pain in the eyes ; heaviness in the head. In this case there was no relapse, but a definite crisis. The pains on the even days.

[ιγ'.] Ἀπολλώνιος ἐν Ἀβδήροισιν ὀρθοστάδην ὑπεφέρετο χρόνον πολὺν. ἦν δὲ μεγάλοςπλαγ χνος, καὶ περὶ ἧπαρ συνήθης ὀδύνη χρόνον πολὺν παρείπετο, καὶ δὴ τότε καὶ ἰκτερώδης ἐγένετο, φουσώδης, χροίης τῆς ὑπολεύκου. φαγῶν δὲ καὶ πιῶν ἀκαιρότερον βόειον ἐθερμάνθη σμικρὰ τὸ πρῶτον, κατεκλίθη. γάλαξι δὲ χρησάμενος ἐφθοῖσι καὶ ὠμοῖσι πολλοῖσιν, αἰγείοισι καὶ μηλίοισι, καὶ διαίτη κακῇ πάντων, βλάβαι μεγάλαι· οἱ τε γὰρ πυρετοὶ παρωξύνθησαν, κοιλίη τε τῶν προσενεχθέντων οὐδὲν διέδωκεν ἄξιον λόγου, οὔρα τε λεπτὰ καὶ ὀλίγα διῆει·

ὑπνοι οὐκ ἐνήσαν· ἐμφύσημα κακόν, πολὺ δίψος, κωματώδης, ὑποχονδρίου δεξιοῦ ἔπαρμα σὺν ὀδύνη, ἄκρεα πάντοθεν ὑπόψυχρα, σμικρὰ παρέλεγε, λήθη πάντων ὅ τι λέγοι, παρεφέρετο. περὶ δὲ τεσσα ρεσκαϊδεκάτην, ἀφ' ἧς κατεκλίθη, ῥιγώσας ἐπεθερμάνθη· ἐξεμάνη· βοή, ταραχή, λόγοι πολλοί, καὶ πάλιν ἴδρυσις, καὶ τὸ κῶμα τηνικαῦτα προσῆλθε. μετὰ δὲ ταῦτα κοιλίη ταραχώδης πολλοῖσι χολώδεσιν, ἀκρήτοισιν, ὠμοῖσιν· οὔρα μέλανα, σμικρὰ, λεπτά· πολλὴ δυσφορίη· τὰ τῶν διαχωρημάτων ποικίλως· ἢ γὰρ μέλανα καὶ σμικρὰ καὶ ἰώδεα ἢ λιπαρὰ καὶ ὠμὰ καὶ δακνώδεα· κατὰ δὲ χρόνους ἐδόκει καὶ γαλακτώδεα διδόναι. περὶ δὲ εἰκοστὴν τετάρτην διὰ παρηγορίας· τὰ μὲν ἄλλα ἐπὶ τῶν αὐτῶν, σμικρὰ δὲ κατενόησεν· ἐξ οὗ δὲ κατεκλίθη, οὐδενὸς ἐμνήσθη· πάλιν δὲ ταχὺ παρενόει, ὥρμητο πάντα ἐπὶ τὸ χειρὸν. περὶ δὲ τριηκοστὴν πυρετὸς ὀξύς, διαχωρήματα πολλὰ λεπτά, παράληρος, ἄκρεα ψυχρά, ἄφωνος. τριηκοστῇ τετάρτη ἔθανε. τούτῳ διὰ τέλους, ἐξ οὗ καὶ ἐγὼ οἶδα, κοιλίη ταραχώδης, οὔρα λεπτὰ μέλανα, κωματώδης, ἄγρυπνος, ἄκρεα ψυχρά, παράληρος διὰ τέλους.

### CASE XIII

Apollonius in Abdera was ailing for a long time without being confined to bed. He had a swollen abdomen, and a continual pain in the region of the liver had been present for a long time ; moreover, he became during this period jaundiced and flatulent ; his complexion was whitish. After dining and drinking unseasonably cow's milk he at first grew rather hot ; he took to his bed. Having drunk copiously of milk, boiled and raw, both goat's and sheep's, and adopting a thoroughly bad regimen, he suffered much therefrom. For there were exacerbations of the fever ; the bowels passed practically nothing of the food taken ; the urine was thin and scanty. No sleep. Grievous distension ; much thirst ; coma ; painful swelling of the right hypochondrium ; extremities all round rather cold ; slight delirious mutterings ; forgetfulness of every-thing he said ; he was not himself. About the fourteenth day from his taking to bed, after a rigor, he grew hot ; wildly delirious ; shouting, distress, much rambling, followed by calm ; the coma came on at this time. Afterwards the bowels were disordered with copious stools, bilious, uncompounded and crude ; urine black, scanty and thin. Great discomfort. The evacuations showed varying symptoms ; they were either black, scanty and verdigris-coloured, or else greasy, crude and smarting ; at times they seemed actually to be like milk. About the twenty-fourth day comfortable ; in other respects the same, but he had lucid intervals. He remembered nothing since he took to bed. But he quickly was again delirious, and all symptoms took a sharp turn for the worse. About the thirtieth day acute fever ; copious, thin stools ; wandering ; cold extremities ; speechlessness.

*Thirty-fourth day.* Death.

This patient throughout, from the time I had knowledge of the case, suffered from disordered bowels ; urine thin and black ; coma ; sleeplessness ; extremities cold ; delirious throughout.

[ιδ'.] Ἐν Κυζίκῳ γυναικὶ θυγατέρας τεκούση διδύμας καὶ δυστοκησάση καὶ οὐ πάνυ καθαρθεῖση τῇ πρώτῃ πυρετὸς φρικώδης ὀξύς, κεφαλῆς καὶ τραχήλου βάρος μετ' ὀδύνης· ἄγρυπνος ἐξ ἀρχῆς, σιγῶσα δὲ καὶ σκυθρωπὴ καὶ οὐ πειθομένη· οὔρα λεπτὰ καὶ ἄχρω· διψώδης, ἀσώδης τὸ πολὺ, κοιλίη πεπλανημένως ταραχώδης καὶ πάλιν συνισταμένη. ἕκτη ἐς νύκτα πολλὰ παρέλεγε, οὐδὲν ἐκοιμήθη. περὶ δὲ ἑνδεκάτην ἐοῦσα ἐξεμάνη καὶ πάλιν κατενόει· οὔρα μέλανα, λεπτὰ καὶ πάλιν διαλείποντα ἐλαιώδεα· κοιλίη πολλοῖσι, λεπτοῖσι, ταραχώδεσι. τεσσαρεσκαίδεκάτῃ σπασμοὶ πολλοί, ἄκρεα ψυχρά, οὐδὲν ἔτι κατενόει, οὔρα ἐπέστη. ἐξκαιδεκάτῃ ἄφωνος· ἑπτακαιδεκάτῃ ἀπέθανε.

#### CASE XIV

In Cyzicus a woman gave birth with difficult labour to twin daughters, and the lochial discharge was far from good.

*First day.* Acute fever with shivering ; painful heaviness of head and neck. Sleepless from the first, but silent, sulky and refractory. Urine thin and of no colour ; thirsty ; nausea generally ; bowels irregularly disturbed with constipation following.

*Sixth day.* Much wandering at night ; no sleep. About the eleventh day she went out of her mind and then was rational again ; urine black, thin, and then, after an interval, oily ; copious, thin, disordered stools.

*Fourteenth day.* Many convulsions ; extremities cold ; no further recovery of reason ; urine suppressed.

*Sixteenth day.* Speechless.

*Seventeenth day.* Death.

[ιε'.] Ἐν Θάσῳ Δελεάρκεος γυναικᾶ, ἣ κατέκειτο ἐπὶ τοῦ λείου, πυρετὸς φρικώδης, ὀξύς ἐκ λύπης ἔλαβεν. ἐξ ἀρχῆς δὲ περιστέλλετο καὶ διὰ τέλους αἰεὶ σιγῶσα ἐψηλάφα, ἔτιλλεν, ἔγλυφεν, ἐτριχολόγει, δάκρυα καὶ πάλιν γέλως, οὐκ

έκοιμᾶτο· ἀπὸ κοιλῆς ἐρεθισμῶ οὐδὲν διήει· σμικρὰ ὑπομιμνησκόντων ἔπινεν· οὔρα λεπτὰ σμικρά· πυρετοὶ πρὸς χεῖρα λεπτοί· ἀκρέων ψύξις. ἐνάτη πολλὰ παρέλεγε καὶ πάλιν ἰδρύνθη· σιγῶσα. τεσσαρεσκαιδεκάτη πνεῦμα ἀραιόν, μέγα διὰ χρόνου καὶ πάλιν βραχύπνοος. ἑπτακαιδεκάτη ἀπὸ κοιλῆς ἐρεθισμῶ ταραχώδεα, ἔπειτα δὲ αὐτὰ τὰ ποτὰ διήει, οὐδὲν συνίστατο· ἀναισθήτως εἶχε πάντων· δέρματος περίτασις καρφαλέου. εἰκοστῇ λόγοι πολλοὶ καὶ πάλιν ἰδρύνθη· ἄφωνος, βραχύπνοος. εἰκοστῇ πρώτη ἀπέθανε. ταύτη διὰ τέλεος πνεῦμα ἀραιόν, μέγα· ἀναισθήτως πάντων εἶχεν· αἰεὶ περιεστέλλετο· ἢ λόγοι πολλοὶ ἢ σιγῶσα διὰ τέλεος.

## CASE XV

In Thasos the wife of Delearces, who lay sick on the plain, was seized after a grief with an acute fever with shivering. From the beginning she would wrap herself up, and throughout, without speaking a word, she would fumble, pluck, scratch, pick hairs, weep and then laugh, but she did not sleep ; though stimulated, the bowels passed nothing. She drank a little when the attendants suggested it. Urine thin and scanty ; fever slight to the touch ; coldness of the extremities.

*Ninth day.* Much wandering followed by return of reason ; silent.

*Fourteenth day.* Respiration rare and large with long intervals, becoming afterwards short.

*Seventeenth day.* Bowels under a stimulus passed disordered matters, then her very drink passed unchanged ; nothing coagulated. The patient noticed nothing ; the skin tense and dry.

*Twentieth day.* Much rambling followed by recovery of reason ; speechless ; respiration short.

*Twenty-first day.* Death.

The respiration of this patient throughout was rare and large ; took no notice of anything ; she constantly wrapped herself up ; either much rambling or silence throughout.

[15'.] Ἐν Μελιβοίῃ νεηνίσκος ἐκ πότων καὶ ἀφροδισίων πολλῶν πολὺν χρόνον θερμανθεὶς κατεκλίθη· φρικώδης δὲ καὶ ἀσώδης ἦν καὶ ἄγρυπνος καὶ ἄδιψος.



ἀπὸ δὲ κοιλίης τῆ πρώτῃ πολλὰ κόπρανα διῆλθε σὺν περιρρόω πολλῶ, καὶ τὰς ἐπομένας ὑδατόγλοα πολλὰ διῆει· οὔρα λεπτά, ὀλίγα, ἄχρω· πνεῦμα ἀραιόν, μέγα διὰ χρόνου· ὑποχονδρίου ἔντασις ὑπολάπαρος, παραμήκης ἐξ ἀμφοτέρων· καρδίας παλμὸς διὰ τέλεος συνεχής· οὔρησεν ἐλαιῶδες. δεκάτῃ παρέκρουσεν ἀτρεμέως, ἦν δὲ κόσμιός τε καὶ σιγῶν· δέρμα καρφαλέον καὶ περιτεταμένον· διαχωρήματα ἢ πολλὰ καὶ λεπτὰ ἢ χολώδεα, λιπαρά. τεσσαρες καιδεκάτῃ πάντα παρωξύνθη, παρέκρουσεν, πολλὰ παρέλεγεν. εἰκοστῇ ἐξεμάνη, πολὺς βληστρισμός, οὐδὲν οὔρει, σμικρὰ ποτὰ κατείχετο. εἰκοστῇ τετάρτῃ ἀπέθανε.

## CASE XVI

In Meliboea a youth took to his bed after being for a long time heated by drunkenness and sexual indulgence. He had shivering fits, nausea, sleeplessness, but no thirst.

*First day.* Copious, solid stools passed in abundance of fluid, and on the following days the excreta were copious, watery and of a greenish yellow. Urine thin, scanty and of no colour ; respiration rare and large with long intervals ; tension, soft underneath, of the hypochondrium, extending out to either side ; continual throbbing throughout of the epigastrium ; urine oily.

*Tenth day.* Delirious but quiet, for he was orderly and silent ; skin dry and tense ; stools either copious and thin or bilious and greasy. *Fourteenth day.* General exacerbation ; delirious with much wandering talk.

*Twentieth day.* Wildly out of his mind ; much tossing ; urine suppressed ; slight quantities of drink were retained.

*Twenty-fourth day.* Death.

## ON REGIMEN IN ACUTE DISEASES - Περί διαίτης όξεων

1. Οί ξυγγράψαντες τὰς Κνιδίας καλεομένας γνώμας, όκοΐα μὲν πάσχουσιν οί κάμνοντες ἐν ἐκάστοισι τῶν νοσημάτων όρθῶς ἔγραψαν, καὶ όκοίως ἔνια ἀπέβαιναν αὐτέων καὶ ἄχρι μὲν τουτέου καὶ μὴ ιητρὸς δύναίτο τις ἂν όρθῶς ξυγγράψαι, εἰ εὖ παρὰ τῶν καμνόντων ἕκαστον πύθοίτο όκοΐα πάσχουσιν. Όκόσα δὲ προκαταμαθεῖν χρὴ τὸν ιητρὸν, μὴ λέγοντος τοῦ κάμνοντος, τουτέων τὰ πολλὰ παρεῖται, ἄλλα ἐν ἄλλοισι, καὶ ἐπικαίρα ἔνια ἐόντα ἐς τέκμαρσιν. Όκόταν δὲ ἐς τέκμαρσιν λέγεται ὡς χρὴ ἕκαστα ιητρεύειν, ἐν τουτέοισι πολλὰ ἑτεροίως

γιγνώσκω ἢ ὡς ἐκεῖνοι ἐπεξήρσαν καὶ οὐ μούνον διὰ τοῦτο οὐκ ἐπαινέω, ἀλλ' ὅτι καὶ ὀλίγοισι τὸν ἀριθμὸν τοῖσιν ἀκέεσιν ἐχρέοντο τὰ γὰρ πλεῖστα αὐτέοισιν εἰρέεται πλὴν τῶν ὀξειῶν νοῦσων, φάρμακα ἐλατήρια διδόναι καὶ όρρον καὶ γάλα ἐς τὴν ὥρην πιπίσκειν. Εἰ μὲν οὖν ταῦτα ἀγαθὰ ἦν καὶ ἀρμόζοντα τοῖσι νοσημασιν, ἐφ' οἷσι παρήνεον διδόναι, ἔτι ἂν ἀξιώτερα ἐπαίνου ἦν, ὅτι, ὀλίγα ἐόντα, αὐτάρκεά ἐστιν νῦν δὲ οὐχ οὕτως ἔχει. Οἱ μὲν τοι ὕστερον ἐπιδιασκευάσαντες, ιητρικώτερον δὴ τι ἐπῆλθον περὶ τῶν προσοιστέων ἐκάστοισιν ἀτὰρ οὐδὲ περὶ διαίτης οἱ ἀρχαῖοι ξυνέγραψαν οὐδὲν ἄξιον λόγου, καίτοι μέγα τοῦτο παρήκαν. Τὰς μέντοι πολυτροπίας τὰς ἐν ἐκάστη τῶν νοῦσων καὶ τὴν πολυσχιδίην αὐτέων οὐκ ἠγνόεον

ἔνιοι τοὺς δὲ ἀριθμοὺς ἐκάστου τῶν νοσημάτων σάφα φράζειν ἐθέλοντες, οὐκ όρθῶς ἔγραψαν μὴ γὰρ οὐκ εὐαρίθμητον εἶη, εἰ τουτέω τις σημανεῖται τὴν τῶν καμνόντων νοῦσον, τῷ ἕτερον ἐτέρου διαφέρειν τι, καὶ, ἦν μὴ τωὐτὸ νοῦσημα δοκέη εἶναι, μὴ τωὐτὸ οὕνομα ἔχειν.

1. Those who composed what are called "The Cnidian Sentences" have described accurately what symptoms the sick experience in every disease, and how certain of them terminate; and in so far a man, even who is not a physician, might describe them correctly, provided he put the proper inquiries to the sick themselves what their complaints are. But those symptoms which the physician ought to know beforehand without being informed of them by the patient, are, for the most part, omitted, some in one case and some in others, and certain symptoms of vital importance for a conjectural judgment. But when, in addition to the diagnosis, they describe how each complaint should be treated, in these cases I entertain a still greater difference of opinion with them respecting the rules they have laid down; and not only do I not agree with them on this account,

but also because the remedies they use are few in number; for, with the exception of acute diseases, the only medicines which they give are drastic purgatives, with whey, and milk at certain times. If, indeed, these remedies had been good and suitable to the complaints in which they are recommended, they would have been still more deserving of recommendation, if, while few in number, they were sufficient; but this is by no means the case. Those, indeed, who have remodeled these “Sentences” have treated of the remedies applicable in each complaint more in a medical fashion. But neither have the ancients written anything worth regimen, although this be a great omission. Some of them, indeed, were not ignorant of the many varieties of each complaint, and their manifold divisions, but when they wish to tell clearly the numbers (species?) of each disease they do not write for their species would be almost innumerable if every symptom experienced by the patients were held to constitute a disease, and receive a different name.

2. Ἐμοὶ δ’ ἀνδάνει μὲν ἐν πάσῃ τῇ τέχνῃ προσέχειν τὸν νόον καὶ γὰρ ὀκόσα ἔργα καλῶς ἔχει ἢ ὀρθῶς, καλῶς ἕκαστα χρῆ ποιέειν καὶ ὀρθῶς, καὶ ὀκόσα ταχέως ἔργα, ταχέως, καὶ ὀκόσα καθαρῶς, καθαρῶς, καὶ ὀκόσα ἀνωδύνως διαχειρίζεσθαι,

ὡς ἀνωδυνώτατα ποιέειν, καὶ τᾶλλα πάντα τὰ τοιουτότροπα διαφερόντως τῶν πέλας ἐπὶ τὸ βέλτιον ποιέειν χρῆ. Μάλιστα δ’ ἂν ἐπαινέσαιμι ἱητρὸν, ὅστις ἐν τοῖσιν ὀξέσι νουσήμασιν, ἃ τοὺς πλείστους τῶν ἀνθρώπων κτείνει, ἐν τουτέοισι διαφέρων τι τῶν ἄλλων εἶη ἐπὶ τὸ βέλτιον. Ἔστι δὲ ταῦτα ὀξέα, ὀκοῖα ὀνόμασαν οἱ ἀρχαῖοι πλευρίτιν, καὶ περιπλευμονίην, καὶ φρενίτιν, καὶ λήθαργον, καὶ καῦσον, καὶ τᾶλλα νουσήματα ὀκόσα τουτέων ἐχόμενά ἐστιν, ὧν οἱ πυρετοὶ τὸ ἐπίπαν ξυνεχές. Ὅταν γὰρ μὴ λοιμώδεος νούσου τρόπος τις κοινὸς ἐπιδημήσῃ, ἀλλὰ σποράδες ἔωσιν αἱ νοῦσοι καὶ παραπλήσιοι,

ὑπὸ τουτέων τῶν νουσημάτων ἀποθνήσκουσι μᾶλλον ἢ ὑπὸ τῶν ἄλλων τῶν ξυμπάντων. Οἱ μὲν οὖν ἰδιῶται οὐ κάρτα γινώσκουσι τοὺς ἐς ταῦτα διαφέροντας τῶν πέλας, ἕτεροίων τε

μᾶλλον ἱημάτων ἐπαινέται καὶ ψέκται εἰσίν. Ἐπειτα μέγα σημεῖον τόδε, ὅτι οἱ δημόται ἀξυνετώτατοι αὐτοὶ ἐωυτῶν περὶ τουτέων τῶν νουσημάτων εἰσίν ὡς μελετητέα εἶναι οἱ γὰρ μὴ ἱητροὶ ἱητροὶ δοκέουσιν εἶναι μάλιστα διὰ

ταύτας τὰς νούσους ῥηΐδιον γὰρ τὰ ὀνόματα ἐκμανθάνειν, ὀκοῖα νενόμισται προσφέρεσθαι πρὸς τοὺς τὰ τοιαῦτα κάμνοντας. Ἦν γὰρ ὀνομάσῃ τις πτισάνῃς

τε χυλόν καὶ οἶνον τοῖον ἢ τοῖον καὶ μελίκρητον, ἅπαντα τοῖσι δημότησι δοκέουσιν οἱ ἰητροὶ ταῦτα λέγειν, οἳ τε βελτίους καὶ οἱ χείρους τὰ δὲ οὐχ οὕτως ἔχει, ἀλλ' ἐν τουτέοισι δὴ καὶ πάνυ μέγα διαφέρουσιν ἕτεροι ἐτέρων.

2. For my part, I approve of paying attention to everything relating to the art, and that those things which can be done well or properly should all be done properly; such as can be quickly done should be done quickly; such as can be neatly done should be done neatly; such operations as can be performed without pain should be done with the least possible pain; and that all other things of the like kind should be done better than they could be managed by the attendants. But I would more especially commend the physician who, in acute diseases, by which the bulk of mankind are cut off, conducts the treatment better than others. Acute diseases are those which the ancients named pleurisy, pneumonia, phrenitis, lethargy, causus, and the other diseases allied to these, including the continual fevers. For, unless when some general form of pestilential disease is epidemic, and diseases are sporadic and [not] of a similar character, there are more deaths from these diseases than from all the others taken together. The vulgar, indeed, do not recognize the difference between such physicians and their common attendants, and are rather disposed to commend and censure extraordinary remedies. This, then, is a great proof that the common people are most incompetent, of themselves, to form a judgment how such diseases should be treated: since persons who are not physicians pass for physicians owing most especially to these diseases, for it is an easy matter to learn the names of those things which are applicable to persons laboring under such complaints. For, if one names the juice of ptisan, and such and such a wine, and hydromel, the vulgar fancy that he prescribes exactly the same things as the physicians do, both the good and the bad, but in these matters there is a great difference between them.

3. Δοκίει δέ μοι ἄξια γραφῆς εἶναι ταῦτα μάλιστα, ὅκόσα τε ἀκαταμάθητά ἐστι τοῖσιν ἰητροῖσιν, ἐπίκαιρα ἐόντα εἰδέναι, καὶ ὅκόσα μεγάλας ὠφελείας φέρει ἢ μεγάλας βλάβας. Ἀκαταμάθητα μὲν οὖν τάδε ἐστὶ διὰ τί ἄρα ἐν τῆσιν ὀξεῖησι νούσοισιν οἱ μὲν τῶν ἰητρῶν ἅπαντα τὸν αἰῶνα διατελεῦσι πτισάνας διδόντες ἀδιηθήτους, καὶ νομίζουσιν

ὀρθῶς ἰητρεύειν, οἱ δὲ τινες περὶ παντὸς ποιέονται ὅκως κριθὴν μηδεμίην καταπίη ὁ κάμνων μεγάλην γὰρ βλάβην ἠγεῦνται εἶναι, ἀλλὰ δι' ὀθονίου διηθεῦντες τὸν χυλόν διδόασιν οἱ δ' αὖ τινες αὐτέων οὐτ' ἂν πτισάνην παχείην δοῖεν, οὔτε χυλόν οἱ μὲν μέχρις ἂν ἑβδομαῖος γένηται ὁ κάμνων, οἱ δὲ καὶ διὰ

τέλεος ἄχρις ἂν κριθῆ ἢ νοῦσος. Μάλα μὲν οὐδὲ προβάλλεσθαι τὰ τοιαῦτα ζητήματα εἰθισμένοι εἰσὶν οἱ ἰητροὶ ἴσως δὲ οὐδὲ προβαλλόμενα εὐρίσκεται καίτοι διαβολὴν γε ἔχει ὅλη ἡ τέχνη πρὸς τῶν δημοτέων μεγάλην, ὡς μηδὲ δοκέειν ὅλως ἰητρικὴν εἶναι ἔν γε τοῖσιν

ὁξέσι τῶν νοσημάτων τοσόνδε διοίσουσιν ἀλλήλων οἱ χειρωνάκται, ὥστε ἂ ὁ ἕτερος προσφέρει ἠγεύμενος ἄριστα εἶναι, ταῦτα νομίζειν ἤδη τὸν ἕτερον κακὰ εἶναι καὶ σχεδὸν ἂν κατὰ γε τὸ τοιόνδε τὴν τέχνην φαῖεν ὠμοιῶσθαι τῇ μαντικῇ, ὅτι οἱ μάντιες τὸν αὐτὸν ὄρνιθα, εἰ μὲν ἀριστερὸς εἶη, ἀγαθὸν νομίζουσιν εἶναι, εἰ δὲ δεξιὸς, κακόν καὶ ἐν ἱεροσκοπίῃ τὰ τοιάδε εὔροι τις ἂν ἄλλα ἐπ' ἄλλοισιν ἀλλ' ἔνιοι τῶν μάντιων

τάναντία τουτέων. Φημὶ δὲ πάγκαλον εἶναι τοῦτο τὸ σκέμμα καὶ ἠδελφισμένον τοῖσι πλείστοισι τῶν ἐν τῇ τέχνῃ καὶ ἐπικαιροτάτοισιν καὶ γὰρ τοῖσι νοσέουσι πᾶσιν ἐς ὑγείην μέγα τι δύνασθαι, καὶ τοῖσιν ὑγιαίνουσιν ἐς ἀσφαλείην, καὶ τοῖσιν ἀσκέουσιν ἐς εὐεξίην, καὶ ἐς ὃ τι ἂν ἕκαστος ἐθέλῃ.

3. But it appears to me that those things are more especially deserving of being consigned to writing which are undetermined by physicians, notwithstanding that they are of vital importance, and either do much good or much harm. By undetermined I mean such as these, wherefore certain physicians, during their whole lives, are constantly administering unstrained ptisans, and fancy they thus accomplish the cure properly, whereas others take great pains that the patient should not swallow a particle of the barley (thinking it would do much harm), but strain the juice through a cloth before giving it; others, again, will neither give thick ptisan nor the juice, some until the seventh day of the disease, and some until after the crisis. Physicians are not in the practice of mooted such questions; nor, perhaps, if mooted, would a solution of them be found; although the whole art is thereby exposed to much censure from the vulgar, who fancy that there really is no such science as medicine, since, in acute diseases, practitioners differ so much among themselves, that those things which one administers as thinking it the best that can be given, another holds to be bad; and, in this respect, they might say that the art of medicine resembles augury, since augurs hold that the same bird (omen) if seen on the left hand is good, but if on the right bad: and in divination by the inspection of entrails you will find similar differences; but certain diviners hold the very opposite of these opinions. I say, then, that this question is a most excellent one, and allied to very many others, some of the most vital importance in the Art, for that it can contribute much to the recovery of the sick, and to the preservation of health in the case of

those who are well; and that it promotes the strength of those who use gymnastic exercises, and is useful to whatever one may wish to apply it.

4. Πτισάνη μὲν οὖν μοι δοκέει ὀρθῶς προκεκρίσθαι τῶν σιτηρῶν γευμάτων ἐν τουτέοισι τοῖσι νουσήμασι, καὶ ἐπαινέω γε τοὺς προκρίναντας. Τὸ γὰρ γλίσχρασμα αὐτέης λεῖον καὶ ζυνεχὲς καὶ προσηνές ἐστι καὶ ὀλισθηρὸν καὶ πλαδαρὸν μετρίως καὶ

ἄδιψον καὶ εὐέκπλυτον, εἴ τι καὶ τουτέου προσδέοι, καὶ οὔτε στύψιν ἔχον, οὔτε ἄραδον κακὸν, οὔτε ἀνοιδίσκεται ἐν τῇ κοιλίῃ ἀνώδηκε γὰρ ἐν τῇ ἐψήσει ὀκόσον πλεῖστον ἐπεφύκει διογκοῦσθαι. Ὀκόσοι μὲν οὖν πτισάνησι χρέονται, ἐν τουτέοισι τοῖσι νουσήμασιν οὐδεμιῇ ἡμέρῃ κενεαγγητέον, ὡς ἔπος εἰρήσθαι, ἀλλὰ χρηστέον, καὶ οὐ διαλειπτέον, ἦν μὴ τι δέη ἢ διὰ φαρμακίην ἢ κλύσιν διαλιπεῖν. Καὶ τοῖσι μὲν γε εἰθισμένοισι δις σιτέεσθαι τῆς ἡμέρης, δις δοτέον τοῖσι δὲ μονοσιτέειν εἰθισμένοισιν, ἅπαξ δοτέον τὴν πρώτην, ἐκ προσαγωγῆς δὲ, ἦν ἐνδέχεται, καὶ τουτέοισι δις δοτέον, ἦν τι

δοκέη προσδεῖν. Πλήθος δὲ ἀρκέει κατ' ἀρχὰς διδόναι μὴ πουλὸν, μηδὲ ὑπέρπαχυν, ἀλλ' ὀκόσον ἔνεκεν τοῦ ἔθεος ἐσιέναι τι, καὶ κενεαγγίην μὴ γίνεσθαι πολλήν. Περὶ δὲ τῆς ἐπίδοσις ἐς πλῆθος τοῦ ῥοφήματος, ἦν μὲν ξηρότερον ἢ τὸ νούσημα ἢ ὡς ἂν τις οἶοιτο, οὐ χρή ἐπὶ πλέον διδόναι,

ἀλλὰ προπίνειν πρὸ τοῦ ῥοφήματος ἢ μελίκτητον, ἢ οἶνον, ὀκότερον ἂν ἀρμόζη τὸ δ' ἀρμόζον ἐφ' ἐκάστοισι τῶν τρόπων εἰρήσεται. Ἦν δὲ ὑγραίνεται τὸ στόμα καὶ τὰ ἀπὸ τοῦ πλεύμονος εἴη ὀκοῖα δεῖ, ἐπιδιδόναι χρή ἐς πλῆθος τοῦ ῥοφήματος, ὡς ἐν κεφαλαίῳ εἰρήσθαι τὰ μὲν γὰρ θᾶσσον καὶ μᾶλλον πλαδῶντα ταχυτῆτα κρίσιος σημαίνει, τὰ δὲ βραδύτερον καὶ ἥσσον βραδυτέρην σημαίνει τὴν κρίσιν. Καὶ ταῦτα αὐτὰ μὲν καθ' ἑωυτὰ τοιάδε τὸ ἐπίπαν ἐστὶν πολλὰ δὲ καὶ ἄλλα ἐπίκαιρα παρεῖται οἷσι προσημαίνεσθαι δεῖ, ἃ εἰρήσεται ὕστερον. Καὶ ὀκόσω ἂν πλείων ἢ κάθαρσις γίγνηται, τοσῶδε χρή πλέον ἐπιδιδόναι ἄχρι κρίσιος μάλιστα δὲ κρίσιος ὑπερβολῆς δύο ἡμερέων, οἷσί γε ἢ πεμπταίοισιν ἢ ἑβδομαίοισιν ἢ ἐναταίοισι δοκέει κρίνεσθαι, ὡς καὶ τὸ ἄρτιον

καὶ τὸ περισσὸν προμηθήσῃ μετὰ δὲ τοῦτο, τῷ μὲν ῥοφήματι τὸ πρῶτῳ χρηστέον, ὄψε δὲ ἐς σιτία μεταβάλλειν. Ξυμφέρει δὲ τὰ τοιάδε ὡς ἐπιτοπουλὸν τοῖσιν ὄλησι πτισάνησιν αὐτίκα

χρεομένοισιν. Αἶ τε γὰρ ὀδύναι ἐν τοῖσι πλευριτικοῖσιν αὐτίκα αὐτόματοι παύονται, ὅταν ἄρξωνται πτύειν τι ἄξιον λόγου καὶ ἐκκαθαίρεσθαι, αἶ τε

καθάρσιες πολλῶν τελεώτεραί εἰσι, καὶ ἔμπυοι ἦσσαν γίνονται ἢ εἰ ἀλλοίως τις δαιτώη, καὶ αἱ κρίσιες ἀπλούστεραι καὶ εὐκριτώτεραι καὶ ἦσσαν ὑποστροφώδεες.

4. Ptisan, then, appears to me to be justly preferred before all the other preparations from grain in these diseases, and I commend those who made this choice, for the mucilage of it is smooth, consistent, pleasant, lubricant, moderately diluent, quenches thirst if this be required, and has no astringency; gives no trouble nor swells up in the bowels, for in the boiling it swells up as much as it naturally can. Those, then, who make use of ptisan in such diseases, should never for a day allow their vessels to be empty of it, if I may say so, but should use it and not intermit, unless it be necessary to stop for a time, in order to administer medicine or a clyster. And to those who are accustomed to take two meals in the day it is to be given twice, and to those accustomed to live upon a single meal it is to be given once at first, and then, if the case permit, it is to be increased and given twice to them, if they appear to stand in need of it. At first it will be proper not to give a large quantity nor very thick, but in proportion to the quantity of food which one has been accustomed to take, and so as that the veins may not be much emptied. And, with regard to the augmentation of the dose, if the disease be of a drier nature than one had supposed, one must not give more of it, but should give before the draught of ptisan, either hydromel or wine, in as great quantity as may be proper; and what is proper in each case will be afterward stated by us. But if the mouth and the passages from the lungs be in a proper state as to moisture, the quantity of the draught is to be increased, as a general rule, for an early and abundant state of moisture indicates an early crisis, but a late and deficient moisture indicates a slower crisis. And these things are as I have stated for the most part; but many other things are omitted which are important to the prognosis, as will be explained afterwards. And the more that the patient is troubled with purging, in so much greater quantity is it to be given until the crisis, and moreover until two days beyond the crisis, in such cases as it appears to take place on the fifth, seventh, or ninth day, so as to have respect both for the odd and even day: after this the draught is to be given early in the day, and the other food in place is to be given in the evening. These things are proper, for the most part, to be given to those who, from the first, have used ptisan containing its whole substance; for the pains in pleuritic affections immediately cease of their own accord whenever the patients begin to expectorate anything worth mentioning, and the purgings become much better, and empyema much more seldom takes place, than if the patients used a different regimen, and the crises are more simple, occur earlier, and the cases are

less subject to relapses.

5. Τὰς δὲ πτισάνας χρῆ ἐκ κριθέων τε ὡς βελτίστων εἶναι καὶ κάλλιστα ἠψηθῆναι, καὶ ἄλλως ἢν μὴ τῷ χυλῷ μούνῳ μέλλῃς χρέεσθαι. Μετὰ γὰρ τῆς ἄλλης ἀρετῆς τῆς πτισάνης τὸ ὀλισθηρὸν

τὴν κριθὴν καταπινομένην ποιεῖ μὴ βλάπτειν οὐδαμοῦ γὰρ προσίσχει, οὐδὲ μένει κατὰ τὴν τοῦ θώρηκος ἴξιν. Ὀλισθηροτάτη τε καὶ ἀδιψοτάτη καὶ εὐπεπτοτάτη καὶ ἀσθενεστάτη ἐστὶν ἢ κάλλιστα ἐφθῆ, ὧν πάντων δεῖ. Ἦν οὖν μὴ προστιμωρήσῃ τις ὀκόσων δέεται αὐτάρκης εἶναι ὁ τρόπος τῆς τοιαύτης πτισανορροφίης, πολλαχῆ βεβλάπεται. Ὀκόσοισι γὰρ σῖτος αὐτίκα ἐγκατακέκλεισται, ἢν μὴ τις ὑποκενώσας τὸ ρόφημα δώῃ, τὴν ὀδύνην ἐνεοῦσαν προσπαροξύνειεν ἄν,

καὶ μὴ ἐνεοῦσαν εὐθύς ἐμποιήσειεν ἄν, καὶ πνεῦμα πυκνότερον γένοιτ' ἄν κακὸν δὲ τοῦτό ἐστὶν ξηραντικὸν γὰρ πλεύμονος, καὶ κοπῶδες ὑποχονδρίων καὶ ἥτρου καὶ φρενῶν. Τοῦτο δὲ, ἢν ἔτι τῆς ὀδύνης τοῦ πλευροῦ ξυνεχέος ἐούσης, καὶ πρὸς τὰ θερμάσματα μὴ χαλώσης, καὶ τοῦ πτυέλου μὴ ἀνιόντος, ἀλλὰ καταγλισχραينوμένου ἀσαπέως, ἢν μὴ λύσῃ τις

τὴν ὀδύνην, ἢ κοιλίην μαλθάξας, ἢ φλέβα ταμῶν, ὀκότερον ἄν τουτέων ξυμφέρῃ, τὰς δὲ πτισάνας ἢν οὕτως ἔχουσι διδῶ, ταχέες οἱ θάνατοὶ τῶν τοιουτέων γίνονται. Διὰ ταύτας οὖν τὰς προφάσις καὶ ἐτέρας τοιαύτας ἔτι μᾶλλον, οἱ ὄλησι τῆσι πτισάνησι χρεόμενοι, ἐβδομαῖοι καὶ ὀλιγημερώτεροι θνήσκουσιν οἱ μὲν τοὶ καὶ τὴν γνώμην βλαβέντες, οἱ δὲ ὑπὸ τῆς ὀρθοπνοίης τε καὶ τοῦ ῥέγγεος ἀποπνιγέντες. Μάλα δὲ τοὺς τοιουτέους οἱ ἀρχαῖοι βλητοὺς ἐνόμιζον εἶναι διὰ τόδε

μάλιστα οὐχ ἤκιστα δὲ, ὅτι καὶ ἀποθανόντων αὐτέων ἢ πλευρὴ πελιὴ εὐρίσκεται ἴκελόν τι πληγῆ. Αἴτιον δὲ τουτέου τόδε ἐστὶν, ὅτι, πρὶν λυθῆναι τὴν ὀδύνην, θνήσκουσιν ταχέως γὰρ πνευματῖαι γίνονται ὑπὸ δὲ τοῦ πολλοῦ καὶ πυκνοῦ πνεύματος, ὡς ἤδη εἴρηται, καταγλισχραινόμενον τὸ πτύελον ἀπέπτως κωλύει τὴν ἐπάνοδον γίνεσθαι, ἀλλὰ τὴν ῥέγγιν ποιεῖ ἐνισχόμενον ἐν τοῖσι βρογχίοισι τοῦ πλεύμονος. Καὶ ὀκόταν ἐς ταῦτό ἔλθῃ, θανατῶδες ἤδη ὡς ἐπιτοπουλὸν ἐστὶν καὶ γὰρ αὐτὸ τὸ πτύελον ἐνισχόμενον κωλύει μὲν τὸ πνεῦμα ἔσω φέρεσθαι, ἀναγκάζει δὲ ταχέως ἔξω φέρεσθαι καὶ οὕτως ἐς τὸ κακὸν ἀλλήλοισι τιμωρέουσι τό τε γὰρ πτύελον ἐνισχόμενον πυκνὸν τὸ πνεῦμα ποιεῖ, τό τε πνεῦμα πυκνὸν ἐὸν ἐπιγλισχραίνει τὸ πτύελον, καὶ κωλύει ἀπολισθαίνειν. Καταλαμβάνει



δὲ ταῦτα, οὐ μόνον ἦν πτισάνη ἀκαίρως χρέωνται, ἀλλὰ πούλῳ μᾶλλον ἦν τι ἄλλο φάγωσιν ἢ πίωσι πτισάνης ἀνεπιτηδειότερον.

5. Ptisans are to be made of the very best barley, and are to be well boiled, more especially if you do not intend to use them strained. For, besides the other virtues of ptisan, its lubricant quality prevents the barley that is swallowed from proving injurious, for it does not stick nor remain in the region of the breast; for that which is well boiled is very lubricant, excellent for quenching thirst, of very easy digestion, and very weak, all which qualities are wanted. If, then, one do not pay proper attention to the mode of administering the ptisan, much harm may be done; for when the food is shut up in the bowels, unless one procure some evacuation speedily, before administering the draught, the pain, if present, will be exasperated; and, if not present, it will be immediately created, and the respiration will become more frequent, which does mischief, for it dries the lungs, fatigues the hypochondria, the hypogastrium, and diaphragm. And moreover if, while the pain of the side persists, and does not yield to warm fomentations, and the sputa are not brought up, but are viscid and unconcocted, unless one get the pain resolved, either by loosening the bowels, or opening a vein, whichever of these may be proper;- if to persons so circumstanced ptisan be administered, their speedy death will be the result. For these reasons, and for others of a similar kind still more, those who use unstrained ptisan die on the seventh day, or still earlier, some being seized with delirium, and others dying suffocated with orthopnoe and riles. Such persons the ancients thought *struck*, for this reason more especially, that when dead the affected side was livid, like that of a person who had been struck. The cause of this is that they die before the pain is resolved, being seized with difficulty of respiration, and by large and rapid breathing, as has been already explained, the spittle becoming thick, acid, and unconcocted, cannot be brought up, but, being retained in the bronchi of the lungs, produces riles; and, when it has come to this, death, for the most part, is inevitable; for the sputa being retained prevent the breath from being drawn in, and force it speedily out, and thus the two conspire together to aggravate the sputa being retained renders the respiration frequent, while the respiration being frequent thickens the sputa, and prevents them from being evacuated. These symptoms supervene, not only if ptisan be administered unseasonably, but still more if any other food or drink worse than ptisan be given.

6. Μάλα μὲν οὖν τὰ πλεῖστα παραπλήσιαί εἰσιν αἱ τιμωρίαί τοῖσί τε ὄλησι τῆσι πτισάνησι χρεομένοισι, τοῖσί τε τῷ χυλῷ αὐτέῳ τοῖσι δὲ μηδετέρῳ τουτέων, ἀλλὰ ποτῷ μόνον, ἔστιν ὅπη καὶ διαφερόντως τιμωρητέον. Χρῆ δὲ τό γε

πάμπαν οὔτω ποιέειν ἦν νεοβρῶτι ἐόντι αὐτέω καὶ κοιλίης μήπω ὑποκεχωρηκυίης ἄρξηται ὁ πυρετός, ἦν τε ζὺν ὀδύνη, ἦν τε ἄνευ ὀδύνης, ἐπισχεῖν τὴν δόσιν τοῦ ῥοφήματος, ἔστ' ἂν οἴηται κεχωρηκέναι ἐς τὸ κάτω μέρος τοῦ ἐντέρου τὸ σιτίον. Χρέεσθαι δὲ ποτῶ, ἦν μὲν ἄλγημά τι ἔχη, ὄξυμέλιτι χειμῶνος

μὲν θερμῶ, θέρεος δὲ, ψυχρῶ ἦν δὲ πολλὴ δίψα ἦ, μελικρήτῳ καὶ ὕδατι. Ἐπειτα, ἦν μὲν ἄλγημά τι ἐνῆ, ἦ τῶν ἐπικινδύνων τι ἐμφαίνηται, διδόναι τὸ ῥόφημα μήτε πούλῳ μήτε παχῷ, μετὰ δὲ τὴν ἐβδόμην, ἦν ἰσχύη. Ἦν δὲ μὴ ὑπεληλύθη ὁ παλαιότερος σῖτος νεοβρῶτι ἐόντι, ἦν μὲν ἰσχύη τε καὶ ἀκμάζῃ τῇ ἡλικίῃ, κλύσαι ἦν δὲ ἀσθενέστερος ἦ, βαλάνῳ προσχρήσασθαι, ἦν μὴ αὐτόματα διεξίη καλῶς. Καιρὸν δὲ τῆς δόσιος τοῦ ῥοφήματος τόνδε μάλιστα φυλάσσεσθαι, κατ' ἀρχὰς καὶ διὰ παντός τοῦ νοσήματος ὅταν μὲν οἱ πόδες ψυχροὶ ἔωσιν, ἐπισχεῖν χρὴ τοῦ ῥοφήματος τὴν δόσιν, μάλιστα δὲ καὶ τοῦ ποτοῦ ἀπέχεσθαι ὀκόταν δὲ ἡ θέρμη καταβῆ ἐς τοὺς πόδας, τότε διδόναι, καὶ

νομίζειν μέγα δύνασθαι τὸν καιρὸν τοῦτον ἐν πάσῃσι τῆσι νόσοισιν οὐχ ἥκιστα δὲ ἐν τῆσιν ὀξειῆσι, μάλιστα δὲ ἐν τῆσι μᾶλλον πυρετώδεσι καὶ ἐπικινδυνωτάτησιν. Χρέεσθαι δὲ πρῶτον μάλιστα μὲν χυλῶ, ἔπειτα δὲ πτισάνῃ, κατὰ τὰ τεκμήρια τὰ προγεγραμμένα ἀκριβέως θεωρέων.

6. For the most part, then, the results are the same, whether the patient have used the unstrained ptisan or have used the juice alone; or even only drink; and sometimes it is necessary to proceed quite differently. In general, one should do thus: if fever commences shortly after taking food, and before the bowels have been evacuated, whether with or without pain, the physician ought to withhold the draught until he thinks that the food has descended to the lower part of the belly; and if any pain be present, the patient should use oxymel, hot if it is winter, and cold if it is summer; and, if there be much thirst, he should take hydromel and water. Then, if any pain be present, or any dangerous symptoms make their appearance, it will be proper to give the draught neither in large quantity nor thick, but after the seventh day, if the patient be strong. But if the earlier-taken food has not descended, in the case of a person who has recently swallowed food, and if he be strong and in the vigor of life, a clyster should be given, or if he be weaker, a suppository is to be administered, unless the bowels open properly of themselves. The time for administering the draught is to be particularly observed at the commencement and during the whole illness; when, then, the feet are cold, one should refrain from giving the ptisan, and more especially abstain from drink; but when the heat has descended to the feet, one

may then give it; and one should look upon this season as of great consequence in all diseases, and not least in acute diseases, especially those of a febrile character, and those of a very dangerous nature. One may first use the juice, and then the ptisan, attending accurately to the rules formerly laid down.

7. Ὀδύνη δὲ πλευροῦ ἦν τε κατ' ἀρχὰς γένηται, ἦν τε ἐς ὕστερον, θερμάσμασι μὲν πρῶτον οὐκ ἀπὸ τρόπου ἐστὶ χρησάμενον πειρηθῆναι διαλυῖσαι τὴν ὀδύνην. Θερμασμάτων δὲ κράτιστον μὲν ὕδωρ θερμὸν ἐν ἀσκῶ, ἢ ἐν κύστει, ἢ ἐν χαλκῶ ἀγγεῖω, ἢ ἐν ὀστρακίνω προὔποτιθέναί δὲ

χρῆ μαλθακὸν τι πρὸς τὴν πλευρὴν, προσηνεῖς εἶνεκεν. Αγαθὸν δὲ καὶ σπόγγος μαλθακὸς, μέγας, ἐξ ὕδατος θερμοῦ ἐκπεπιεσμένος προστίθεσθαι περιστέγειν τε ἄνω τὴν θάλμιν χρῆ πλείω τε γὰρ χρόνον διαρκέσει καὶ παραμενεῖ, καὶ ἅμα ὡς μὴ ἡ ἀτμίς πρὸς τὸ πνεῦμα τοῦ κάμνοντος προσφέρεται, ἦν ἄρα μὴ δοκῆ καὶ τοῦτο χρήσιμον πρὸς τι εἶναι ἔστι γὰρ ὅτε δεῖ πρὸς τι. Ἔτι δὲ καὶ κριθαὶ ἢ ὄροβοι ἐν ὄξει κεκρημένω σμικρῶ ὀξύτερον, ἢ ὡς ἂν τις πίει, διέντα καὶ ἀναζέσαντα, ἐς μαρσίππια καταρράψαντα προστιθέναί καὶ πίτυρα τὸν αὐτὸν τρόπον. Πυρὶ δὲ ξηρῇ, ἄλες, κέγχροι πεφρυγμένοι ἐν εἰρινέοισι μαρσιπίοισιν ἐπιτηδειότατοι καὶ γὰρ κοῦφον καὶ

προσηνὲς ὁ κέγχρος λύει δὲ μάλθαξις ἢ τοιήδε καὶ τὰς πρὸς κληῖδα περαιούσας ἀλγηδόνας. Τομὴ μέντοι γε οὐχ ὁμοίως λύει ὀδύνην, ἦν μὴ πρὸς τὴν κληῖδα περαίνῃ ἢ ὀδύνη. Ἦν δὲ μὴ λύηται πρὸς τὰ θερμάσματα ὁ πόνος, οὐ χρῆ πολὺν χρόνον θερμαίνειν καὶ γὰρ ξηραντικὸν τοῦ πλεύμονος τοῦτό ἐστι, καὶ ἐμπυητικὸν ἀλλ' ἦν μὲν σημαίνῃ ἢ ὀδύνη ἐς τὴν κληῖδα ἢ ἐς τὸν βραχίονα βάρος ἢ περὶ μαζὸν ἢ ὑπὲρ τῶν φρενῶν, τάμενιν χρῆ τὴν ἐν τῶ ἀγκῶνι φλέβα τὴν ἔσω, καὶ μὴ ὀκνέειν συχρὸν ἀφαιρέειν τὸ αἷμα ἕως ἂν ἐρυθρότερον πολλῶ ῥυῆ, ἀντὶ καθαροῦ τε καὶ ἐρυθροῦ

πελιὸν ἀμφοτέρω γὰρ γίγνεται. Ἦν δὲ ὑπὸ τὰς φρένας ἢ τὸ ἄλγημα, ἐς δὲ τὴν κληῖδα μὴ σημαίνῃ, μαλθάσσειν δεῖ τὴν κοιλίην, ἢ μέλανι ἐλλεβόρω ἢ πεπλίω, μέλανι μὲν δαῦκον ἢ σέσελι ἢ κύμινον ἢ ἄνησον ἢ ἄλλο τι τῶν εὐωδέων μίσγοντα, πεπλίω δὲ ὀπὸν σιλφίου ἀτὰρ καὶ μισγόμενα ἀλλήλοισιν ὁμοιότροπα ταῦτά ἐστιν. Ἄγει δὲ μέλας μὲν καλλίω καὶ κρισιμώτερα πεπλίου, πέπλιον δὲ μέλανος μᾶλλον φυσέων καταρρηκτικὸν ἐστὶν ἅμφω δὲ ταῦτα ὀδύνην παύει παύει δὲ καὶ ἄλλα πολλὰ τῶν ὑψηλάτων κράτιστα δὲ ταῦτα ὧν ἐγὼ οἶδα ἐστίν. Ἐπεὶ καὶ τὰ ἐν τοῖσι ῥοφήμασι

διδόμενα ὑπήλατα ἀρήγει, ὀκόσα μὴ ἄγαν ἐστὶν ἀηδέα ἢ διὰ πικρότητα ἢ δι'

ἄλλην τινὰ ἀηδίην, ἢ διὰ πλῆθος ἢ χροίην ἢ ὑποψίην τινά. Τῆς μὲν πτισάνης, ὀκόταν πῆ τὸ φάρμακον, ἐπιρροφῆν αὐτίκα χρὴ δίδοναι μηδὲν ἔλασσον ἀξίως λόγου ἢ ὀκόσον εἴθιστο ἐπεὶ καὶ κατὰ λόγον ἐστὶ μεσηγὺ τῆς καθάρσιος μὴ δίδοναι ῥοφῆν ὀκόταν δὲ λήξη ἢ κάθαρσις, τότε ἔλασσον ῥοφεέτω ἢ ὀκόσον εἴθιστο μετὰ δὲ τοῦτο, ἀναγέτω αἰεὶ ἐπὶ τὸ πλεῖον, ἦν ἢ τε ὀδύνη πεπαυμένη ἦ, καὶ μηδὲν ἄλλο ἐναντιῶται. Ὡτὸς δέ μοι λόγος ἐστὶ, καὶ ἦν χυλῶ πνης δέη χρέεσθαι φημί γὰρ ἄμεινον εἶναι αὐτίκα ἄρξασθαι ῥοφῆν τὸ ἐπίπαν μᾶλλον, ἢ προκενεαγγήσαντα ἄρξασθαι τοῦ ῥοφήματος, ἢ τριταῖον,

ἢ τεταρταῖον, ἢ πεμπταῖον, ἢ ἑκταῖον, ἢ ἑβδομαῖον, ἦν γε μὴ προκριθῆ ἢ νοῦσος ἐν τουτέῳ τῷ χρόνῳ αἰ δὲ προπαρασκευαῖ καὶ ἐπὶ τουτέοισι παραπλήσιοι ποιητέαι, ὀκοῖαι εἴρηνται.

7. When pain seizes the side, either at the commencement or at a later stage, it will not be improper to try to dissolve the pain by hot applications. Of hot applications the most powerful is hot water in a bottle, or bladder, or in a brazen vessel, or in an earthen one; but one must first apply something soft to the side, to prevent pain. A soft large sponge, squeezed out of hot water and applied, forms a good application; but it should be covered up above, for thus the heat will remain the longer, and at the same time the vapor will be prevented from being carried up to the patient's breath, unless when this is thought of use, for sometimes it is the case. And further, barley or tares may be infused and boiled in diluted vinegar, stronger than that it could be drunk, and may then be sewed into bladders and applied; and one may bran in like manner. Salts or toasted millet in woolen bags are excellent for forming a dry fomentation, for the millet is light and soothing. A soft fomentation like this soothes pains, even such as shoot to the clavicle. Venesection, however, does not alleviate the pain unless when it extends to the clavicle. But if the pain be not dissolved by the fomentations, one ought not to foment for a length of time, for this dries the lungs and promotes suppuration; but if the pain point to the clavicle, or if there be a heaviness in the arm, or about the breast, or above the diaphragm, one should open the inner vein at the elbow, and not hesitate to abstract a large quantity, until it become much redder, or instead of being pure red, it turns livid, for both these states occur. But if the pain be below the diaphragm, and do not point to the clavicle, we must open the belly either with black hellebore or peplium, mixing the black hellebore with carrot or seseli, or cumin, or anise, or any other of the fragrant herbs; and with the peplium the juice of sulphium (asafoetida), for these substances, when mixed up together, are of a similar nature. The black hellebore acts more pleasantly and effectually than the

peplium, while, on the other hand, the peplium expels wind much more effectually than the black hellebore, and both these stop the pain, and many other of the laxatives also stop it, but these two are the most efficacious that I am acquainted with. And the laxatives given in draughts are beneficial, when not very unpalatable owing to bitterness, or any other disagreeable taste, or from quantity, color, or any apprehension. When the patient has drunk the medicine, one ought to give him to swallow but little less of the ptisan than what he had been accustomed to; but it is according to rule not to give any draughts while the medicine is under operation; but when the purging is stopped then he should take a smaller draught than what he had been accustomed to, and afterwards go on increasing it progressively, until the pain cease, provided nothing else contra-indicate. This is my rule, also, if one would use the juice of ptisan (for I hold that it is better, on the whole, to begin with taking the decoction at once, rather than by first emptying the veins before doing so, or on the third, fourth, fifth, sixth, or seventh day, provided the disease has not previously come to a crisis in the course of this time), and similar preparations to those formerly described are to be made in those cases.

8. Περὶ μὲν οὖν ῥοφήματος προσάρσιος οὕτω γινώσκω ἀτὰρ καὶ περὶ ποτοῦ, ὀκοῖον ἂν τις μέλλη πίνειν τῶν γραφησομένων, οὗτός μοι λόγος ὡς ἐπίπαν ἐστίν. Οἶδα δὲ τοὺς ἰητροὺς τὰ ἐναντιώτατα ἢ ὡς δεῖ ποιέοντας βούλονται γὰρ πάντες, ὑπὸ τὰς ἀρχὰς τῶν νοῦσων προταριχεύσαντες τοὺς ἀνθρώπους ἢ δύο ἢ τρεῖς ἢ καὶ πλείονας ἡμέρας, οὕτω προσφέρειν τὰ ῥοφήματα καὶ τὰ ποτά καὶ ἴσως τι καὶ εἰκὸς δοκέει αὐτέοισιν εἶναι, μεγάλης μεταβολῆς γενομένης τῷ σώματι, μέγα τι κάρτα καὶ ἀντιμεταβάλλειν.

Τὸ δὲ μεταβάλλειν μὲν εὖ ἔχει μὴ ὀλίγον ὀρθῶς μέντοι ποιητέα καὶ βεβαίως ἢ μεταβολή, καὶ ἔκ γε τῆς μεταβολῆς ἢ πρόσαρσις τῶν γευματῶν ἔτι μᾶλλον. Μάλιστα μὲν οὖν βλάπτοντο ἂν, εἰ μὴ ὀρθῶς μεταβάλλοιεν, οἱ ὄλησι τῆσι πτισάνησι χρεόμενοι βλάπτοντο δ' ἂν καὶ οἱ μούνῳ τῷ χυλῷ χρεόμενοι βλάπτοντο δ' ἂν καὶ οἱ μούνῳ τῷ ποτῷ χρεόμενοι, ἥκιστα δ' ἂν οὗτοι.

8. Such are the opinions which I entertain respecting the administering of the ptisan; and, as regards drinks, whichsoever of those about to be described may be administered, the same directions are generally applicable. And here I know that physicians are in the practice of doing the very reverse of what is proper, for they all wish, at the commencement of diseases, to starve their patients for two, three, or more days, and then to administer the ptisans and drinks; and perhaps it appears to them reasonable that, as a great change has taken place in the body, it

should be counteracted by another great change. Now, indeed, to produce a change is no small matter, but the change must be effected well and cautiously, and after the change the administration of food must be conducted still more so. Those persons, then, would be most injured if the change is not properly managed, who used unstrained ptisans; they also would suffer who made use of the juice alone; and so also they would suffer who took merely drink, but these least of all.

9. Χρῆ δὲ καὶ τὰ μαθήματα ποιέεσθαι ἐν τῇ διαίτῃ τῶν ἀνθρώπων ἔτι ὑγιαινόντων, οἷα ζυμφέρει εἰ γὰρ δὴ τοῖσι γε

ὕγιαίνουσι φαίνεται διαφέροντα μεγάλα τὰ τοῖα ἢ τοῖα διαιτήματα καὶ ἐν ἄλλω τινί που καὶ ἐν τῆσι μεταβολῆσι, πῶς οὐχὶ καὶ ἐν γε τῆσι νούσοισι διαφέρει μεγάλα, καὶ τουτέων ἐν τῆσιν ὀξυτάτησι μέγιστα; Ἀλλὰ μὴν εὐκαταμάθητόν γε ἐστὶν, ὅτι φαύλη δίαιτα βρώσιος καὶ πόσιος αὐτῇ ἐωυτῇ ἐμφορῆς αἰεὶ, ἀσφαλεστέρα ἐστὶ τὸ ἐπίπαν ἐς ὑγείην, ἢ εἴ τις ἐξαπίνης μέγα μεταβάλλοι ἐς ἄλλο. Ἐπεὶ καὶ τοῖσι δις σιτεόμενοισι τῆς ἡμέρης καὶ τοῖσι μονοσιτέουσιν αἱ ἐξαπιναῖοι μεταβολαὶ βλαβὰς καὶ ἀρρωστίην παρέχουσιν. Καὶ τοὺς μὲν γε μὴ

μεμαθηκότας ἀριστῶν, εἰ ἀριστήσουσιν, εὐθέως ἀρρώστους ποιεῖ, καὶ βαρέας ὄλον τὸ σῶμα, καὶ ἀσθενέας καὶ ὀκνηροὺς ἦν δὲ καὶ ἐπιδειπνήσωσιν, ὀξυρεγμιώδεας ἐνίοισι δὲ καὶ σπατίλη γένοιτο ἂν, ὅτι παρὰ τὸ ἐωθὸς ἠγθοφόρηκεν ἡ κοιλίη εἰθισμένη ἐπιξηραίνεσθαι, καὶ μὴ δις διογκοῦσθαι, μήτε δις ἔψειν τὰ σιτία. Ἀρήγει οὖν τουτέοισιν ἀνασηκῶσαι

τὴν μεταβολὴν ἐγκοιμηθῆναι γὰρ χρῆ, ὥσπερ νυκτα ἀγαγόντα μετὰ τὸ δεῖπνον, τοῦ μὲν χειμῶνος ἀρριγέως, τοῦ δὲ θέρεος ἀθαλπέως ἦν δὲ μὴ δύνηται καθεῦδειν, βραδειν, συχνὴν περίοδον, πλανηθέντα, μὴ στασίμως, δειπνήσαι μηδὲν, ἢ ὀλίγα καὶ μὴ βλαβερά ἔτι δὲ ἔλασσον πιεῖν καὶ μὴ ὑδαρές. Ἐτι δ' ἂν μᾶλλον πονήσειεν ὁ τοιοῦτος, εἰ τρὶς σιτέοιτο τῆς ἡμέρης ἐς κόρον ἔτι δὲ μᾶλλον, εἰ

πλεονάκις καίτοι γε πολλοὶ εἰσιν, οἱ εὐφόρως φέρουσι τρὶς σιτέοιμοι τῆς ἡμέρης ἐς πλῆθος, οἱ ἂν οὕτως ἐθισθῶσιν. Ἀλλὰ μὴν καὶ οἱ μεμαθηκότες δις σιτέεσθαι τῆς ἡμέρης, ἦν μὴ ἀριστήσωσιν, ἀσθενέες καὶ ἀρρωστοὶ εἰσι, καὶ δειλοὶ ἐς πᾶν ἔργον, καὶ καρδιαλγέες κρεμᾶσθαι γὰρ δοκέει τὰ σπλάγχνα αὐτέοισι, καὶ οὐρέουσι θερμὸν καὶ χλωρὸν, καὶ ἡ ἀφοδος ζυγκαίεται ἔστι δ' οἷσι καὶ τὸ στόμα πικραίνεται, καὶ οἱ ὀφθαλμοὶ κοιλαίνονται, καὶ οἱ κρόταφοι πάλλονται, καὶ τὰ

ἄκρα διαψύχονται καὶ οἱ μὲν πλεῖστοι τῶν ἀνηριστηκοτῶν οὐ δύνανται κατεσθίειν τὸ δεῖπνον δειπνήσαντες δὲ βαρύνουσι τὴν κοιλίην, καὶ δυσκοιτέουσι πούλῳ μᾶλλον ἢ εἰ προηριστήκεσαν. Ὅκοτε οὖν ταῦτα τοιαῦτα γίγνεται τοῖσιν ὑγιαίνουσιν εἴνεκεν ἡμίσεος ἡμέρης διαίτης μεταβολῆς παρὰ τὸ ἔθος, οὔτε προσθεῖναι λυσιτελέειν φαίνεται, οὔτε ἀφελέειν. Εἰ τοίνυν οὗτος ὁ παρὰ τὸ ἔθος μονοσιτήσας, ὅλην ἡμέρην κενεαγγήσας, δειπνήσειεν ὀκόσον εἴθιστο, δειπνήσας δὲ, τότε βαρὺς ἦν, εἰκὸς αὐτὸν, εἰ, ὅτι ἀνάριστος ἐὼν ἐπόνεε καὶ ἠρρώσκει, δειπνήσειε πλείῳ ἢ ὀκόσον εἴθιστο, πούλῳ

μᾶλλον βαρύνεσθαι εἰ δέ γε ἐπὶ πλείῳ χρόνον κενεαγγήσας

ἐξαπίνης μεταδειπνήσειν, ἔτι μᾶλλον ἂν βαρύνοιτο. Τὸν οὖν παρὰ τὸ ἔθος κενεαγγήσαντα ζυμφέρει ταύτην τὴν ἡμέρην ἀντισηκῶσαι ὧδε ἀρριγέως καὶ ἀθαλπέως καὶ ἀταλαιπώρως, ταῦτα γὰρ πάντα βαρέως ἂν ἐνέγκοι τὸ δὲ δεῖπνον συχνῶ ἔλασσον ποιήσασθαι ἢ ὅσον εἴθιστο, καὶ μὴ ξηρὸν, ἀλλὰ τοῦ πλαδαρωτέρου τρόπου καὶ πιεῖν μὴ ὑδαρὲς, μηδ' ἔλασσον ἢ κατὰ λόγον βρώματος καὶ τῆ ὑστεραίῃ

ὀλίγα ἀριστήσαι, ὡς ἐκ προσαγωγῆς ἀφίκηται ἐς τὸ ἔθος. Αὐτοὶ μέντοι σφῶν αὐτῶν δυσφορώτερον δὴ τὰ τοιαῦτα φέρουσιν οἱ πικρόχολοι τὰ ἄνω τὴν δὲ γε ἀσιτίην τὴν παρὰ τὸ ἔθος οἱ φλεγματῖαι τὰ ἄνω εὐφορώτερον φέρουσι τὸ ἐπίπαν, ὥστε καὶ τὴν μονοσιτίην τὴν παρὰ τὸ ἔθος εὐφορώτερον ἂν οὔτοι ἐνέγκοιεν. Ἰκανὸν μὲν οὖν καὶ τοῦτο σημήϊον, ὅτι αἱ μέγιστα μεταβολαὶ τῶν περὶ τὰς φύσεως ἡμῶν καὶ τὰς ἕξιαις ζυμβαινόντων μάλιστα νοσοποιέουσιν οὐ δὴ οἷόν τε παρὰ καιρὸν οὔτε σφοδρὰς τὰς κενεαγγείας ποιέειν, οὔτε ἀκμαζόντων τῶν νοσημάτων καὶ ἐν φλεγμασίῃ ἐόντων προσφέρειν, οὔτε ἐξαπίνης οἷόν τε ὅλω τῷ πρήγματι μεταβάλλειν οὔτε ἐπὶ τὰ οὔτε ἐπὶ τὰ.

9. One may derive information from the regimen of persons in good health what things are proper; for if it appear that there is a great difference whether the diet be so and so, in other respects, but more especially in the changes, how can it be otherwise in diseases, and more especially in the most acute? But it is well ascertained that even a faulty diet of food and drink steadily persevered in, is safer in the main as regards health than if one suddenly change it to another. Wherefore, in the case of persons who take two meals in the day, or of those who take a single meal, sudden changes induce suffering and weakness; and thus persons who have not been accustomed to dine, if they shall take dinner, immediately become weak, have heaviness over their whole body, and become feeble and languid, and if, in addition, they take supper, they will have acid

eructations, and some will have diarrhoea whose bowels were previously dry, and not having been accustomed to be twice swelled out with food and to digest it twice a day, have been loaded beyond their wont. It is beneficial, in such cases, to counterbalance this change, for one should sleep after dinner, as if passing the night, and guard against cold in winter and heat in summer; or, if the person cannot sleep, he may stroll about slowly, but without making stops, for a good while, take no supper, or, at all events, eat little, and only things that are not unwholesome, and still more avoid drink, and especially water. Such a person will suffer still more if he take three full meals in the day, and more still if he take more meals; and yet there are many persons who readily bear to take three full meals in the day, provided they are so accustomed. And, moreover, those who have been in the habit of eating twice a day, if they omit dinner, become feeble and powerless, averse to all work, and have heartburn; their bowels seem, as it were, to hang loose, their urine is hot and green, and the excrement is parched; in some the mouth is bitter, the eyes are hollow, the temples throb, and the extremities are cold, and the most of those who have thus missed their dinner cannot eat supper; or, if they do sup, they load their stomach, and pass a much worse night than if they had previously taken dinner. Since, then, an unwonted change of diet for half a day produces such effects upon persons in health, it appears not to be a good thing either to add or take from. If, then, he who was restricted to a single meal, contrary to usage, having his veins thus left empty during a whole day, when he supped according to custom felt heavy, it is probable that if, because he was uneasy and weak from the want of dinner, he took a larger supper than wont, he would be still more oppressed; or if, wanting food for a still greater interval, he suddenly took a meal after supper, he will feel still greater oppression. He, then, who, contrary to usage, has had his veins kept empty by want of food, will find it beneficial to counteract the bad effects during that day as follows: let him avoid cold, heat, and exertion, for he could bear all these ill; let him make his supper considerably less than usual, and not of dry food, but rather liquid; and let him take some drink, not of a watery character, nor in smaller quantity than is proportionate to the food, and on the next day he should take a small dinner, so that, by degrees, he may return to his former practice. Persons who are bilious in the stomach bear these changes worst, while those who are pituitous, upon the whole, bear the want of food best, so that they suffer the least from being restricted to one meal in the day, contrary to usage. This, then, is a sufficient proof that the greatest changes as to those things which regard our constitutions and habits are most especially concerned in the production of diseases, for it is impossible to produce unseasonably a great emptying of the vessels by abstinence, or to administer food while diseases are at



their acme, or when inflammation prevails; nor, on the whole, to make a great change either one way or another with impunity.

10. Πολλὰ δ' ἂν τις ἠδελφισμένα τουτέοισι τῶν ἐς κοιλίην καὶ ἄλλα εἴποι, ὡς εὐφόρως μὲν φέρουσι τὰ βρώματα, ἃ εἰθισμένοι εἰσιν, ἦν καὶ μὴ ἀγαθὰ ἢ φύσει, ὡσαύτως δὲ καὶ τὰ ποτά δυσφόρως δὲ φέρουσι τὰ βρώματα, ἃ μὴ εἰθισμένοι εἰσιν, κῆν μὴ κακὰ ἢ, ὡσαύτως δὲ καὶ τὰ ποτά. Καὶ ὀκόσα μὲν κρηφαγίη πολλή παρὰ τὸ ἔθος βρωθεῖσα ποιέει, ἢ σκόροδα, ἢ σίλφιον ἢ ὀπὸς ἢ καυλὸς, ἢ ἄλλα ὀκόσα τοιουτότροπα μεγάλας δυνάμιας ἔχοντα ἰδίας, ἦσσαν ἂν τις θαυμάσειεν, εἰ τὰ τοιαῦτα πόνους ἐμποίει τῆσι κοιλίησι μᾶλλον τῶν ἄλλων ἄλλ' εἰ καταμάθοις ὀκόσον μᾶζα ὄχλον καὶ ὄγκον καὶ φῦσαν καὶ στρόφον τῆ

κοιλίη παρέχει παρὰ τὸ ἔθος βρωθεῖσα τῷ μὴ μαζοφαγέειν εἰθισμένῳ, ἢ ὀκοῖον ἄρτος βάρος καὶ τάσιν κοιλίης τῷ μαζοφαγέειν εἰθισμένῳ ἢ αὐτὸς τε ὁ ἄρτος θερμὸς βρωθεῖς οἶην δίψαν παρέχει, καὶ ἐξαπιναίην πληθώρην διὰ τὸ ξηραντικὸν τε καὶ βραδύπορον καὶ οἱ ἄγαν καθαροί τε καὶ ξυγκομιστοὶ παρὰ τὸ ἔθος βρωθέντες οἷα διαφέροντα ἀλλήλων ποιεῦσι καὶ μᾶζά τε ξηρὴ παρὰ τὸ ἔθος, ἢ ὑγρὴ, ἢ γλίσχρη καὶ τὰ ἄλφιτα οἷόν τι ποιέει τὰ ποταίνια τοῖσι μὴ εἰωθόσι, καὶ τὰ ἕτεροῖα τοῖσι τὰ ποταίνια εἰωθόσι καὶ οἰνοποσίη καὶ ὑδροποσίη παρὰ τὸ ἔθος ἐς θάτερα μεταβληθέντα ἐξαπίνης, καὶ ὑδαρῆς τε οἶνος καὶ ἄκρητος παρὰ τὸ εὖρος ἐξαπίνης ποθείς ὁ μὲν γὰρ πλάδον τε ἐν τῇ ἄνω κοιλίῃ ἐμποιήσει καὶ φῦσαν ἐν τῇ κάτω ὁ δὲ παλμόν

τε φλεβῶν καὶ καρηβαρίην καὶ δίψαν καὶ λευκὸς τε καιμέλας οἶνος παρὰ τὸ ἔθος μεταβάλλοντι, εἰ καὶ ἄμφω οἰνώδεες εἶεν, ὅμως πολλὰ ἂν ἕτεροιώσειαν κατὰ τὸ σῶμα, ὡς δὴ γλυκύν τε καὶ οἰνώδεα οἶνον ἦσσαν ἂν τις φαίη θαυμαστὸν εἶναι μὴ τωῦτό δύνασθαι ἐξαπίνης μεταβληθέντα.

10. One might mention many things akin to these respecting the stomach and bowels, to show how people readily bear such food as they are accustomed to, even if it is not naturally good, and drink in like manner, and how they bear unpleasantly such food as they are not accustomed to, even although not bad, and so in like manner with drink; and as to the effects of eating much flesh, contrary to usage, or garlic, or asafoetida, or the stem of the plant which produces it, or things of a similar kind possessed of strong properties, one would be less surprised if such things produce pains in the bowels, but rather when one learned what trouble, swelling, flatulence, and tormina the cake (maza) will raise in the belly when eaten by a person not accustomed to it; and how much weight and distention of the bowels bread will create to a person accustomed to live

upon the maza; and what thirst and sudden fullness will be occasioned by eating hot bread, owing to its desiccant and indigestible properties; and what different effects are produced by fine and coarse bread when eaten contrary to usage, or by the cake when usually dry, moist, or viscid; and what different effects polenta produces upon those who are accustomed and those who are unaccustomed to the use of it; or drinking of wine or drinking of water, when either custom is suddenly exchanged for the other; or when, contrary to usage, diluted wine or undiluted has been suddenly drunk, for the one will create water-brash in the upper part of the intestinal canal and flatulence in the lower, while the other will give rise to throbbing of the arteries, heaviness of the head, and thirst; and white and dark-colored wine, although both strong wines, if exchanged contrary to usage, will produce very different effects upon the body, so that one need the less wonder that a sweet and strong wine, if suddenly exchanged, should have by no means the same effect.

11. Τιμωρητέον δὲ τοιόνδε τι μέρος τῷ ἐναντίῳ λόγῳ μεταβολὴ τῆς διαίτης τουτέοισιν ἐγένετο, οὐ μεταβάλλοντος τοῦ σώματος οὔτε ἐπὶ τὴν ῥώμην, ὥστε προσθέσθαι δεῖν σιτία, οὔτε ἐπὶ τὴν ἀρρωστήην, ὥστε ἀφαιρεθῆναι προστεκμαρτέα δὴ καὶ ἡ ἰσχὺς καὶ ὁ τρόπος τοῦ νουσήματος

ἐκάστου, καὶ τῆς φύσιος τοῦ ἀνθρώπου, καὶ τοῦ ἔθεος τῆς διαίτης τοῦ κάμνοντος, οὐ μόνον σιτίων, ἀλλὰ καὶ ποτῶν. Πολλῶ δὲ ἦσσαν ἐπὶ τὴν πρόσθεσιν ἰτέον ἐπεὶ τὴν γε ἀφαίρεσιν ὅλως ἀφελεῖν πολλαχοῦ λυσιτελέει, ὅκου διαρκέειν μέλλει ὁ κάμνων, μέχρις ἂν τῆς νούσου ἢ ἀκμῆ πεπανθῆ ἔν ὀκοίοισι δὲ τὸ τοιόνδε ποιητέον γεγράφεται. Πολλὰ δ' ἂν τις καὶ ἄλλα ἠδελφισμένα τοῖσιν εἰρημένοισι γράφοι τὸ δὲ γε μὴν κρέσσον μαρτύριον οὐ γὰρ ἠδελφισμένον ἐστὶ τῷ πρήγματι, περὶ οὗ μοι ὁ πλεῖστος λόγος εἴρηται, ἀλλ' αὐτὸ τὸ πρήγμα ἐπικαιρότατόν ἐστι διδακτήριον οἱ γὰρ ἀρχόμενοι τῶν ὀξέων νουσημάτων ἔστιν ὅτε οἱ μὲν σιτία ἔφαγον

αὐθημερὸν ἠργμένοι ἤδη, οἱ δὲ καὶ τῆ ὑστεραίῃ, οἱ δὲ καὶ ἐρρόφειον τὸ προστυχόν, οἱ δὲ καὶ κυκεῶνα ἐρρόφειον ἅπαντα δὲ ταῦτα κακίῳ μὲν ἐστὶν ἢ εἰ ἕτεροίως τις διαιτηθεῖ πολλῶ μόντοι ἐλάσσω βλάβην φέρει ἐν τουτέῳ τῷ χρόνῳ ἀμαρτηθέντα, ἢ εἴ τις τὰς μὲν πρώτας ἡμέρας δύο ἢ τρεῖς κενεαγγήσειε τελείως, τεταρταῖος δὲ ἐὼν τοιάδε διαιτηθεῖ, ἢ καὶ πεμπταῖος ἔτι μόντοι κάκιον, εἰ ταύτας πάσας τὰς ἡμέρας προκενεαγγήσας, ἐν τῆσιν ὕστερον ἡμέρησιν οὕτω διαιτηθεῖ, πρὶν ἢ πέπειρον γενέσθαι τὴν νοῦσον οὕτω μὲν γὰρ θάνατον φέρει φανερώς τοῖσι πλείστοισιν, εἰ μὴ παντάπασιν εὐήθης ἢ νοῦσος εἴη. Αἱ δὲ κατ' ἀρχὰς ἀμα ἀδες οὐχ ὁμοίως ταύτησιν ἀνήκεστοί εἰσιν, ἀλλὰ πολλῶ εὐακεστότ

εραι. Τοῦτο οὖν ἡγεῦμαι μέγιστον διδακτήριον, ὅτι οὐ στερητέαι αἱ πρῶται ἡμέραι τοῦ ροφήματος ἢ τοίου ἢ τοίου

τοῖσι μέλλουσιν ὀλίγον ὕστερον ροφήμασιν ἢ τοίοισιν ἢ τοίοισι χρέεσθαι. Πυθμενόθεν μὲν οὖν οὐκ ἴσασιν οὐθ' οἱ τῆσι κριθώδεσι πτισάνησι χρεόμενοι, ὅτι αὐτέησι κακοῦνται, ὁκόταν ροφέειν ἄρξωνται, ἣν προκενεαγγήσωσι δύο ἢ τρεῖς ἡμέρας ἢ πλείους, οὐτ' αὖ οἱ τῷ χυλῷ χρεόμενοι γινώσκουσιν ὅτι αὐτέησι βλάπτονται ροφέοντες, ὅταν μὴ ὀρθῶς ἄρξωνται τοῦ ροφήματος. Τόδε γε μὴν καὶ φυλάσσουσι καὶ γινώσκουσιν, ὅτι μεγάλην τὴν βλάβην φέρει, ἣν, πρὶν πέπειρον τὴν νοῦσον γενέσθαι, κριθώδεα πτισάνην ροφήσῃ ὁ κάμων, εἰθισμένος χυλῷ χρέεσθαι. Πάντα οὖν ταῦτα μεγάλα μαρτύρια, ὅτι οὐκ ὀρθῶς ἄγουσιν ἐς τὰ διαιτήματα

οἱ ἰητροὶ τοὺς κάμνοντας ἀλλ' ἐν ἧσί τε νοῦσοισιν οὐ χρή κενεαγγέειν τοὺς μέλλοντας ροφήμασι διαιτᾶσθαι, κενεαγγέουσιν ἐν ἧσί τε οὐ χρή μεταβάλλειν ἐκ κενεαγγείης ἐς ροφήματα, ἐν ταύτησι μεταβάλλουσι καὶ ὡς ἐπιτοπολὺ ἀπαρτὶ ἐν τοῖσι τοιοῦτοισι καιροῖσι μεταβάλλουσιν ἐς

τὰ ροφήματα ἐκ τῆς κενεαγγείης, ἐν οἷσι πολλάκις ἀρήγει ἐκ τῶν ροφημάτων πλησιάζειν τῇ κενεαγγείῃ, ἣν οὕτω τύχη παροξυνομένη ἢ νοῦσος. Ἐνίστε δὲ καὶ ὠμὰ ἐπισπῶνται ἀπὸ τῆς κεφαλῆς καὶ τοῦ περὶ τὸν θώρηκα τόπου χολώδεα ἀγρυπνία τε ξυνεμπίπτουσιν αὐτέοισι, δι' ἃς οὐ πέσσειται ἡ νοῦσος, περίλυποι τε καὶ πικροὶ γίνονται, καὶ παραφρονέουσι, καὶ μαρμαρυγώδεα σφέων τὰ ὄμματα, καὶ αἱ ἀκοαὶ

ἤχου μεσταὶ, καὶ τὰ ἀκρωτήρια κατεψυγμένα, καὶ οὖρα ἄπεπτα, καὶ πτύσματα λεπτὰ καὶ ἀλυκὰ καὶ κεχρωσμένα ἀκρήτῳ χρώματι σμικρὰ, καὶ ἰδρῶτες περὶ τὸν τράχηλον, καὶ διαπορήματα, καὶ πνεῦμα προσπταῖον ἐν τῇ ἄνω φορῇ πυκνὸν ἢ μέγα λίην, ὄφρυες δεινώσιος μετέχουσαι, λειποψυχώδεα πονηρὰ, καὶ τῶν ἱματίων ἀπορρίψεις ἀπὸ τοῦ στήθεος, καὶ χεῖρες τρομώδεις, ἐνίστε δὲ καὶ χεῖλος τὸ κάτω σείεται. Ταῦτα δὲ ἐν ἀρχῆσιν ἐπιφαινόμενα παραφροσύνης δηλωτικὰ ἐστὶ σφοδρῆς, καὶ ὡς ἐπιτοπολὺ ἀποθνήσκουσιν οἱ δὲ διαφεύγοντες, ἢ μετὰ ἀποστήματος, ἢ αἵματος ῥύσιος ἐκ τῆς ῥίνος, ἢ πῦον παχὺ πτύσαντες διαφεύγουσιν, ἄλλως δὲ οὐ. Οὐδὲ γὰρ τῶν τοιουτέων ὀρέω ἐμπείρους

τοὺς ἰητροὺς, ὡς χρή διαγιγνώσκειν τὰς ἀσθενείας ἐν τῆσι νοῦσοισιν, αἱ τε διὰ κενεαγγείην ἀσθενεῦνται, αἱ τε δι' ἄλλον τινὰ ἐρεθισμὸν, αἱ τε διὰ πόνον καὶ ὑπὸ ὀξύτητος τῆς νοῦσου, ὁκόσα τε ἡμέων ἢ φύσις καὶ ἡ ἕξις ἐκάστοισιν ἐκτεκνοῖ πάθεα καὶ εἶδεα παντοῖα καίτοι σωτηρίην ἢ θάνατον φέρει γινωσκόμενα ἢ

ἀγνοούμενα τὰ τοιαῦτα. Μέζον μὲν γὰρ κακὸν ἐστίν, ἣν διὰ τὸν πόνον καὶ τὴν ὀξύτητα τῆς νόσου ἀσθενέοντι προσφέρῃ τις ποτὸν ἢ ρόφημα πλεῖον ἢ σιτίον, οἰόμενος διὰ κενεαγγεῖην ἀσθενέειν. Ἄεικὲς δὲ καὶ διὰ κενεαγγεῖην ἀσθενέοντα μὴ γνῶναι καὶ πιέζειν τῇ διαίτῃ φέρει μὲν γὰρ τινα κίνδυνον καὶ αὕτη ἡ ἁμαρτὰς, πολλῶ δὲ ἥσσονα τῆς ἐτέρης καταγελαστοτέρῃ δὲ πολλῶ αὕτη μᾶλλον ἢ ἁμαρτὰς τῆς ἐτέρης εἰ γὰρ ἄλλος ἰητρὸς ἢ καὶ ἰδιώτης

ἐσελθὼν, καὶ γνοὺς τὰ ξυμβεβηκότα, δώῃ καὶ φαγεῖν καὶ πιεῖν, ἃ ὁ ἕτερος ἐκώλυεν, ἐπιδήλως ἂν δοκοίη ὠφελικένοι. Τὰ δὲ τοιαῦτα μάλιστα καθυβρίζεται τῶν χειρωνακτέων ὑπὸ τῶν ἀνθρώπων δοκέει γὰρ αὐτέοισιν ὁ ἐσελθὼν ἰητρὸς ἢ ἰδιώτης ὡσπερὶ τεθνεῶτα ἀναστῆσαι. Γεγράφεται οὖν καὶ περὶ τουτέου σημήϊα οἷσι δεῖ ἕκαστα τουτέων διαγιγνώσκειν.

11. Let us here briefly advert to what may be said on the opposite side; namely, that a change of diet has occurred in these cases, without any change in their body, either as to strength, so as to require an increase of food, or as to weakness, so as to require a diminution. But the strength of the patient is to be taken into consideration, and the manner of the disease, and of the constitution of the man, and the habitual regimen of the patient, not only as regards food but also drink. Yet one must much less resort to augmentation, since it is often beneficial to have recourse to abstraction, when the patient can bear it, until the disease having reached its acme and has become concocted. But in what cases this must be done will be afterwards described. One might write many other things akin to those which have been now said, but there is a better proof, for it is not akin to the matter on which my discourse has principally turned, but the subject-matter itself is a most seasonable proof. For some at the commencement of acute diseases have taken food on the same day, some on the next day; some have swallowed whatever has come in their way, and some have taken *cyceon*. Now all these things are worse than if one had observed a different regimen; and yet these mistakes, committed at that time, do much less injury than if one were to abstain entirely from food for the first two or three days, and on the fourth or fifth day were to take such food; and it would be still worse, if one were to observe total abstinence for all these days, and on the following days were to take such a diet, before the disease is concocted; for in this way death would be the consequence to most people, unless the disease were of a very mild nature. But the mistakes committed at first were not so irremediable as these, but could be much more easily repaired. This, therefore, I think a strong proof that such or such a draught need not be prescribed on the first days to those who will use the same draughts afterwards. At the bottom, therefore, they do not know, neither

those using unstrained ptisans, that they are hurt by them, when they begin to swallow them, if they abstain entirely from food for two, three, or more days; nor do those using the juice know that they are injured in swallowing them, when they do not commence with the draught seasonably. But this they guard against, and know that it does much mischief, if, before the disease be concocted, the patient swallow unstrained ptisan, when accustomed to use strained. All these things are strong proofs that physicians do not conduct the regimen of patients properly, but that in those diseases in which total abstinence from food should not be enforced on patients that will be put on the use of ptisans, they do enforce total abstinence; that in those cases in which there should be no change made from total abstinence to ptisans, they do make the change; and that, for the most part, they change from abstinence to ptisans, exactly at the time when it is often beneficial to proceed from ptisans almost to total abstinence, if the disease happen to be in the state of exacerbation. And sometimes crude matters are attracted from the head, and bilious from the region near the chest, and the patients are attacked with insomnolency, so that the disease is not concocted; they become sorrowful, peevish, and delirious; there are flashes of light in their eyes, and noises in their ears; their extremities are cold, their urine unconcocted; the sputa thin, saltish, tinged with an intense color and smell; sweats about the neck, and anxiety; respiration, interrupted in the expulsion of the air, frequent and very large; expression of the eyelids dreadful; dangerous *deliquia* ; tossing of the bed-clothes from the breast; the hands trembling, and sometimes the lower lip agitated. These symptoms, appearing at the commencement, are indicative of strong delirium, and patients so affected generally die, or if they escape, it is with a deposit, hemorrhage from the nose, or the expectoration of thick matter, and not otherwise. Neither do I perceive that physicians are skilled in such things as these; how they ought to know such diseases as are connected with debility, and which are further weakened by abstinence from food, and those aggravated by some other irritation; those by pain, and from the acute nature of the disease, and what affections and various forms thereof our constitution and habit engender, although the knowledge or ignorance of such things brings safety or death to the patient. For it is a great mischief if to a patient debilitated by pain, and the acute nature of the disease, one administer drink, or more ptisan, or food, supposing that the debility proceeds from inanition. It is also disgraceful not to recognize a patient whose debility is connected with inanition, and to pinch him in his diet; this mistake, indeed, is attended with some danger, but much less than the other, and yet it is likely to expose one to much greater derision, for if another physician, or a private person, coming in and knowing what has happened, should give to eat or

drink those things which the other had forbidden, the benefit thus done to the patient would be manifest. Such mistakes of practitioners are particularly ridiculed by mankind, for the physician or nonprofessional man thus coming in, seems as it were to resuscitate the dead. On this subject I will describe elsewhere the symptoms by which each of them may be recognized.

12. Παραπλήσια μέντοι τοῖσι κατὰ κοιλίην ἐστὶ καὶ ταῦτα καὶ γὰρ ἦν ὅλον τὸ σῶμα ἀναπαύσεται πούλῳ παρὰ τὸ ἔθος, οὐκ αὐτίκα ἔρρωται μᾶλλον ἢν δὲ δὴ καὶ πλείω χρόνον διελινύσαν ἐξαπίνης ἐς τοὺς πόνους ἔλθῃ, φλαυρόν τι πρήξειεν ἐπιδήλως. Οὕτω δὲ καὶ ἐν ἕκαστον τοῦ σώματος καὶ γὰρ οἱ πόδες τοιόνδε τι πρήξειαν, καὶ τὰ ἄλλα ἄρθρα

μὴ εἰθισμένα πονέειν, ἦν διὰ χρόνου ἐξαπίνης πρὸς τὸ πονέειν ἔλθῃ. Ταῦτα δ' ἂν καὶ οἱ ὀδόντες καὶ οἱ ὀφθαλμοὶ πάθοιεν, καὶ πᾶν ὅτιοῦν. Ἐπεὶ καὶ κοίτη παρὰ τὸ ἔθος μαλθακὴ πόνον ἐμποιέει, καὶ σκληρὴ παρὰ τὸ ἔθος, καὶ ὑπαιθρος εὐνὴ παρὰ τὸ ἔθος σκληρύνει τὸ σῶμα. Ἄτὰρ καὶ τὰ τῶν τοιῶνδε πάντων ἀρκέει παραδείγματα γράψαι. Εἰ γὰρ τις ἔλκος λαβῶν ἐν κνήμῃ μῆτε λήν ἐπίκαιρον μῆτε λήν εὐηθες, μῆτε ἄγαν εὐελκῆς ἐὼν, μῆτε ἄγαν δυσελκῆς, αὐτίκα ἀρξάμενος ἐκ πρώτης κατακείμενος ἰητρεύοιτο, καὶ

μηδαμῆ μετεωρίζοι τὸ σκέλος, ἀφλέγμαντος μὲν ἂν οὕτως εἴη μᾶλλον, καὶ ὑγιῆς πολλῶ θᾶσσον ἂν γένοιτο, ἢ εἰ πλανώμενος ἰητρεύοιτο εἰ μέντοι πεμπταῖος ἢ ἑκταῖος ἐὼν ἢ καὶ ἔτι ἀνωτέρω, ἀναστὰς ἐθέλοι προβαίνειν, μᾶλλον ἂν πονέοι τότε ἢ αὐτίκα ἐξ ἀρχῆς πλανώμενος ἰητρεύοιτο εἰ δὲ καὶ πολλὰ ταλαιπωρήσειεν ἐξαπίνης, πολλῶ ἂν μᾶλλον πονήσειεν ἢ εἰ ἐκείνως ἰητρευόμενος

τὰ αὐτὰ ταῦτα ταλαιπωρήσειεν ἐν ταύτησι τῆσιν ἡμέρησιν. Διὰ τέλος οὖν μαρτυρεῖ ταῦτα πάντα ἀλλήλοισιν, ὅτι πάντα ἐξαπίνης μέζω πολλῶ τοῦ μετρίου μεταβαλλόμενα ἐπὶ τὰ, καὶ ἐπὶ τὰ, βλάπτει. Πολλαπλασίη μὲν οὖν κατὰ κοιλίην ἢ βλάβη ἐστίν, ἦν ἐκ πολλῆς κενεαγγείης ἐξαπίνης πλέον τοῦ μετρίου προσαίρηται ἄτὰρ καὶ κατὰ τὸ

ἄλλο σῶμα, ἦν ἐκ πολλῆς ἠσυχίης ἐξαίφνης ἐς πλείω πόνον ἔλθοι, πούλῳ πλείω βλαβεῖή, ἢ εἰ ἐκ πολλῆς ἐδωδῆς ἐς κενεαγγεῖην μεταβάλλοι δεῖ μέντοι καὶ τὸ σῶμα τούτοισιν

ἐλινύειν καὶ ἦν ἐκ πολλῆς ταλαιπωρίας ἐξαπίνης ἐς σχολήν τε καὶ ῥαθυμίην ἐμπέση, δεῖ δὲ καὶ τούτοισιν τὴν κοιλίην ἐλινύειν ἐκ πλήθους βρώμης ἦν δὲ μὴ, πόνον ἐν τῷ σώματι ἐμποιήσει καὶ βάρος ὅλου τοῦ σώματος.

12. And the following observations are similar to those now made respecting the bowels. If the whole body rest long, contrary to usage, it does not immediately recover its strength; but if, after a protracted repose, it proceed to labor, it will clearly expose its weakness. So it is with every one part of the body, for the feet will make a similar display, and any other of the joints, if, being unaccustomed to labor, they be suddenly brought into action, after a time. The teeth and the eyes will suffer in like manner, and also every other part whatever. A couch, also, that is either softer or harder than one has been accustomed to will create uneasiness, and sleeping in the open air, contrary to usage, hardens the body. But it is sufficient merely to state examples of all these cases. If a person having received a wound in the leg, neither very serious nor very trifling, and he being neither in a condition very favorable to its healing nor the contrary, at first betakes himself to bed, in order to promote the cure, and never raises his leg, it will thus be much less disposed to inflammation, and be much sooner well, than it would have been if he had strolled about during the process of healing; but if upon the fifth or sixth day, or even earlier, he should get up and attempt to walk, he will suffer much more than if he had walked about from the commencement of the cure, and if he should suddenly make many laborious exertions, he will suffer much more than if, when the treatment was conducted otherwise, he had made the same exertions on the same days. In fine, all these things concur in proving that all great changes, either one way or another, are hurtful. Wherefore much mischief takes place in the bowels, if from a state of great inanition more food than is moderate be administered (and also in the rest of the body, if from a state of great rest it be hastily brought to greater exertion, it will be much more injured), or if from the use of much food it be changed to complete abstinence, and therefore the body in such cases requires protracted repose, and if, from a state of laborious exertion, the body suddenly falls into a state of ease and indolence, in these cases also the bowels would require continued repose from abundance of food, for otherwise it will induce pain and heaviness in the whole body.

13. Ὁ δὴ οὖν πλεῖστός μοι λόγος γέγονε περὶ τῆς μεταβολῆς τῆς ἐπὶ τὰ καὶ ἐπὶ τὰ ἐς πάντα μὲν οὖν εὐχρηστον

ταῦτα εἰδέναι ἀτὰρ καὶ περὶ οὗ ὁ λόγος ἦν, ὅτι ἐν τῆσιν ὀξείησι νούσοισιν ἐς τὰ ροφήματα μεταβάλλουσιν ἐκ τῆς κενεαγγείης μεταβλητέον γὰρ ὡς ἐγὼ κελεύω ἔπειτα οὐ χρηστέον ροφήμασι πρὶν ἢ νοῦσος πεπανθῆ, ἢ ἄλλο τι σημεῖον φανῆ, ἢ κατ' ἔντερον κενεαγγικόν, ἢ ἐρεθιστικόν, ἢ κατὰ τὰ ὑποχόνδρια, ὅκοῖα γεγράφεται. Ἀγρυπνίη ἰσχυρὴ πόμα καὶ σιτίον ἀπεπτότερα ποιέει, καὶ ἡ ἐπὶ τὰ

ἕτερα αὖ μεταβολὴ διαλύει σῶμα, καὶ ἐφθότητα καὶ κα ρηβαρίην ἐμποιέει.

13. The greater part of my discourse has related to changes, this way or that. For all purposes it is profitable to know these things, and more especially respecting the subject under consideration,- that in acute diseases, in which a change is made to ptisans from a state of inanition, it should be made as I direct; and then that ptisans should not be used until the disease be concocted, or some other symptom, whether of evacuation or of irritation, appear in the intestines, or in the hypochondria, such as will be described. Obstinate insomnolency impairs the digestion of the food and drink, and in other respects changes and relaxes the body, and occasions a heated state, and heaviness of the head.

14. Γλυκὺν δὲ οἶνον καὶ οἰνώδεα καὶ λευκὸν καὶ μέλανα, καὶ μελίκρητον, καὶ ὕδωρ, καὶ ὀξύμελι, τοισίδε σημαινόμενον χρῆ διορίζειν ἐν τῆσιν ὀξειήσιν νούσοισιν. Ὁ μὲν γλυκὺς ἥσσον ἐστὶ καρηβαρικός τοῦ οἰνώδεος, καὶ ἥσσον φρενῶν ἀπτόμενος, καὶ διαχωρητικώτερος δὴ τι τοῦ ἐτέρου κατ' ἔντερον, μεγαλόσπλαγχνος δὲ σπληνὸς καὶ ἥπατος οὐκ ἐπιτήδειος δὲ οὐδὲ τοῖσι πικροχόλοισι καὶ γὰρ οὖν διψώδης τοῖσί γε τοιουτέοισιν ἐστὶν ἀτὰρ καὶ φυσώδης τοῦ ἐντέρου τοῦ ἄνω οὐ μὴν πολέμιός γε τῷ ἐντέρῳ τῷ κάτω, ὡς κατὰ λόγον τῆς φύσης καίτοι γε οὐ πάνυ πορίμη ἐστὶν ἢ ἀπὸ τοῦ γλυκέος οἴνου φῦσα, ἀλλ' ἐγγχρονίζει περὶ ὑποχόνδρια. Καὶ γὰρ οὖν

οὗτος ἥσσον διουρητικός γίγνεται τὸ ἐπίπαν τοῦ οἰνώδεος λευκοῦ πτυάλου δὲ μᾶλλον ἀναγωγός ἐστὶ τοῦ ἐτέρου ὁ γλυκὺς. Καὶ οἷσι μὲν διψώδης ἐστὶ πινόμενος, ἥσσον ἂν τούτοις ἀνάγοι ἢ ὁ ἕτερος οἶνος, οἷσι δὲ μὴ διψώσης, μᾶλλον ἀνάγοι ἂν τοῦ ἐτέρου. Ὁ δὲ λευκὸς οἰνώδης οἶνος ἐπήνηται μὲν καὶ ἔψεκται τὰ πλεῖστα καὶ τὰ μέγιστα ἤδη ἐν τῇ τοῦ γλυκέος οἴνου διηγῆσει ἐς δὲ κύστιν μᾶλλον πόριμος ἐὼν τοῦ ἐτέρου καὶ διουρητικός καὶ καταρρηκτικός, αἰεὶ πολλὰ προσωφελέοι ἂν ἐν ταύτησι τῆσι νούσοισι καὶ γὰρ εἰ πρὸς ἄλλα ἀνεπιτηδειότερος τοῦ ἐτέρου πέφυκεν, ἀλλ' ὅμως ἢ κατὰ κύστιν κάθαρσις ὑπ' αὐτέου γιγνομένη ρύεται, ἢν προτρέπηται ὀκοῖον δεῖ. Καλὰ δὲ ταῦτα τεκμήριά ἐστι τὰ περὶ οἴνου ὠφελίης καὶ βλάβης, ὀκόσα ἀκαταμάθητα ἦν τοῖσιν ἐμεῦ γεραιτέροισιν. Κιρρῶ δὲ οἴνῳ καὶ μέλανι αὐστηρῶ ἐν ταύτησι τῆσι νούσοισιν ἐς τάδε ἂν χρήσαιο εἰ καρηβαρίη

μὲν μὴ ἐνεῖη, μηδὲ φρενῶν ἄψις, μηδὲ τὸ πτύελον κωλύοιτο τῆς ἀνόδου, μηδὲ τὸ οὔρον ἴσχοιτο, τὰ διαχωρήματα δὲ πλαδαρώτερα καὶ ξυσματωδέστερα εἶη, ἐν δὴ τοῖσι τοιουτέοισι πρέποι ἂν μάλιστα μεταβάλλειν ἐκ τοῦ λευκοῦ, καὶ ὀκόσα τουτέοισιν ἐμφερέα. Προσξυνιέναι δὲ δεῖ, ὅτι τὰ μὲν ἄνω πάντα καὶ τὰ κατὰ



κύστιν ἥσσον βλάβει, ἣν ὑδαρέστερος ἤ, τὰ δὲ κατ' ἔντερον μᾶλλον ὀνήσει, ἣν ἀκρητέστερος ἤ.

14. One must determine by such marks as these, when sweet, strong, and dark wine, hydromel, water and oxymel, should be given in acute diseases. Wherefore the sweet affects the head less than the strong, attacks the brain less, evacuates the bowels more than the other, but induces swelling of the spleen and liver; it does not agree with bilious persons, for it causes them to thirst; it creates flatulence in the upper part of the intestinal canal, but does not disagree with the lower part, as far as regards flatulence; and yet flatulence engendered by sweet wine is not of a transient nature, but rests for a long time in the hypochondria. And therefore it in general is less diuretic than wine which is strong and thin; but sweet wine is more expectorant than the other. But when it creates thirst, it is less expectorant in such cases than the other wine, but if it do not create thirst, it promotes expecto-ration better than the other. The good and bad effects of a white, strong wine, have been already frequently and fully stated in the disquisition on sweet wine; it is determined to the bladder more than the other, is diuretic and laxative, and should be very useful in such complaints; for if in other respects it be less suitable than the other, the clearing out of the bladder effected by it is beneficial to the patient, if properly administered. There are excellent examples of the beneficial and injurious effects of wine, all which were left undetermined by my predecessors. In these diseases you may use a yellow wine, and a dark austere wine for the following purposes: if there be no heaviness of the head, nor delirium, nor stoppage of the expectoration, nor retention of the urine, and if the alvine discharges be more loose and like scrapings than usual, in such cases a change from a white wine to such as I have mentioned, might be very proper. It deserves further to be known, that it will prove less injurious to all the parts above, and to the bladder, if it be of a more watery nature, but that the stronger it is, it will be the more beneficial to the bowels.

15. Μελίκρητον δὲ πινόμενον διὰ πάσης τῆς νόσου ἐν τῆσιν ὀξειῆσι νόσοισι τὸ ἐπίπαν μὲν τοῖσι πικροχόλοισι καὶ μεγαλοσπλάγγχοισιν ἥσσον ἐπιτήδειον ἢ τοῖσι μὴ τοιούτοισιν ἐστὶν διψῶδές γε μὴ ἥσσον τοῦ γλυκέος οἴνου πλεύμονός τε γὰρ μαλθακτικόν ἐστι, καὶ πτυέλου ἀναγωγὸν μετρίως, καὶ βηχὸς παρηγορικόν ἔχει γὰρ σμηγματῶδές

τι, ὃ μᾶλλον τοῦ μετρίου καταγλισχραίνει τὸ πτύελον.

Ἔστι δὲ καὶ οὐρητικὸν μελίκρητον ἱκανῶς, ἦν μὴ τι τῶν ἀπὸ σπλάγχνων κωλύη. Καὶ διαχωρητικώτερον δὲ κάτω χολωδέων, ἔστι μὲν ὅτε καλῶν, ἔστι δ' ὅτε κατακορεστέρων

μᾶλλον τοῦ καιροῦ, καὶ ἀφρωδεστέρων μᾶλλον δὲ τὸ τοιοῦτο τοῖσι χολώδεσι τε καὶ μεγαλοσπλάγχνοισι γίγνεται. Πτυάλου μὲν οὖν ἀναγωγὴν καὶ μονος μάλθαξιν τὸ ὑδαρέστερον μελίκρητον ποιεῖ μᾶλλον. μέντοι ἀφρώδεα διαχωρήματα καὶ μᾶλλον τοῦ καιροῦ κατακορέως χολώδεα, καὶ μᾶλλον θερμὰ, τὸ ἄκρητον μᾶλλον τοῦ ὑδαρέος ἄγει τὸ δὲ τοιόνδε διαχώρημα ἔχει μὲν καὶ ἄλλα σίνεα μεγάλα οὔτε γὰρ ἐξ ὑποχονδρίων καῦμα σβεννύει, ἀλλὰ ὀρμᾶ, δυσφορίην τε καὶ ῥιπτασμόν τῶν μελέων ποιεῖ, ἐλκῶδές τε ἔστι καὶ ἐντέρου καὶ ἔδρης ἀλεξητήρια δὲ τουτέων γεγράφεται. Ἄνευ μὲν οὖν ῥοφημάτων μελικρήτω χρεόμενος ἀντ' ἄλλου ποτοῦ ἐν ταύτησι τῆσι νούσοισι πολλὰ ἂν εὐτυχοίης, καὶ οὐκ ἂν πολλὰ ἀτυχοίης οἷσι δὲ δοτέον, καὶ οἷσιν οὐ δοτέον, τὰ μέγιστα εἴρηται, καὶ δι' ἃ οὐ δοτέον Κατέγνωσται

δὲ μελίκρητον ὑπὸ τῶν ἀνθρώπων, ὡς καταγυιοῖ τοὺς πίνοντας, καὶ διὰ τοῦτο ταχυθάνατον εἶναι νενόμισται ἐκλήθη δὲ τοῦτο διὰ τοὺς ἀποκαρτερέοντας ἔνιοι γὰρ μελικρήτω μούνω χρέονται ποτῶ, ὡς τοιούτῳ δῆθεν ἐόντι τὸ δὲ οὐ παντάπασιν ὧδε ἔχει ἀλλ' ὕδατος μὲν πολλῶ ἰσχυρότερόν ἐστι πινόμενον μούνον, εἰ μὴ τaráσσοι τὴν κοιλίην ἀτάρ καὶ οἴνου λεπτοῦ καὶ ὀλιγοφόρου καὶ ἀνόσμου ἧ μὲν ἰσχυρότερον, ἧ δὲ ἀσθενέστερον.

Μέγα μὴν διαφέρει καὶ οἴνου καὶ μέλιτος ἀκρητότης ἐς ἰσχὺν ἀμφοτέρων δ' ὅμως τούτων, εἰ διπλάσιον μέτρον οἴνου ἀκρήτου πίνει τις ἢ ὀκόσον μέλι ἐκλείχοι, πολλῶ ἂν δήπου ἰσχυρότερος εἴη ὑπὸ τοῦ μέλιτος, εἰ μούνον μὴ τaráσσοι τὴν κοιλίην πολλαπλάσιον γὰρ καὶ τὸ κόπριον διεξίει ἂν αὐτέω. Εἰ μέντοι ῥοφήματι χρέοιτο πτισάνη, ἐπιπίνοι δὲ μελίκρητον, ἄγαν πλησμονῶδες ἂν εἴη καὶ φυσῶδες, καὶ τοῖσι κατὰ τὰ ὑποχόνδρια σπλάγχνοισιν ἀξύμφορον προπινόμενον μέντοι πρὸ ῥοφήματος μελίκρητον οὐ βλάπτει ὡς μεταπινόμενον, ἀλλὰ τι καὶ ὠφελείη. Ἐφθὸν δὲ μελίκρητον ἐσιδεῖν μὲν πολλῶ κάλλιον τοῦ ὠμοῦ λαμπρόν γὰρ καὶ λεπτόν καὶ λευκὸν καὶ διαφανές γίγνεται ἀρετὴν δὲ ἦντινα αὐτέω προσθέω διαφέρουσάν τι τοῦ ὠμοῦ οὐκ ἔχω οὐδὲ γὰρ ἠδιόν ἐστι τοῦ ὠμοῦ, ἦν τυγχάνη

γε τὸ μέλι καλὸν ἐὸν ἀσθενέστερον μέντοι γε τοῦ ὠμοῦ καὶ ἀκοπρωδέστερόν ἐστιν ὧν οὐδετέρης τιμωρίας προσδέεται μελίκρητον. Ἄγχιστα δὲ χρηστέον αὐτέω τοιῶδε ἐόντι, εἰ τὸ μέλι τυγχάνοι πονηρὸν ἐὸν καὶ ἀκάθαρον καὶ μέλαν καὶ μὴ εὐῶδες ἀφέλοιτο γὰρ ἂν ἡ ἔψησις τῶν κακοτήτων αὐτέου τὰ πλείονα τοῦ

αἴσχεος.

15. Hydromel, when drunk in any stage of acute disease, is less suitable to persons of a bilious temperament, and to those who have enlarged viscera, than to those of a different character; it increases thirst less than sweet wine; it softens the lungs, is moderately expectorant, and alleviates a cough; for it has some detergent quality in it, whence it lubricates the sputum. Hydromel is also moderately diuretic, unless prevented by the state of any of the viscera. And it also occasions bilious discharges downwards, sometimes of a proper character, and sometimes more intense and frothy than is suitable; but such rather occurs in persons who are bilious, and have enlarged viscera. Hydromel rather produces expectoration, and softening of the lungs, when given diluted with water. But unmixed hydromel, rather than the diluted, produces frothy evacuations, such as are unseasonably and intensely bilious, and too hot; but such an evacuation occasions other great mischiefs, for it neither extinguishes the heat in the hypochondria, but rouses it, induces inquietude, and jactitation of the limbs, and ulcerates the intestines and anus. The remedies for all these will be described afterwards. By using hydromel without ptisans, instead of any other drink, you will generally succeed in the treatment of such diseases, and fail in few cases; but in what instances it is to be given, and in what it is not to be given, and wherefore it is not to be given,- all this has been explained already, for the most part. Hydromel is generally condemned, as if it weakened the powers of those who drink it, and on that account it is supposed to accelerate death; and this opinion arose from persons who starve themselves to death, some of whom use hydromel alone for drink, as fancying that it really has this effect. But this is by no means always the case. For hydromel, if drunk alone, is much stronger than water, if it do not disorder the bowels; but in some respects it is stronger, and in some weaker, than wine that is thin, weak, and devoid of *bouquet*. There is a great difference between unmixed wine and unmixed honey, as to their nutritive powers, for if a man will drink double the quantity of pure wine, to a certain quantity of honey which is swallowed, he will find himself much stronger from the honey, provided it do not disagree with his bowels, and that his alvine evacuations from it will be much more copious. But if he shall use ptisan for a draught, and drink afterward hydromel, he will feel full, flatulent, and uncomfortable in the viscera of the hypochondrium; but if the hydromel be taken before the draught, it will not have the same injurious effects as if taken after it, but will be rather beneficial. And boiled hydromel has a much more elegant appearance than the unboiled, being clear, thin, white, and transparent, but I am unable to mention any good quality which it possesses that the other wants. For

it is not sweeter than the unboiled, provided the honey be fine, and it is weaker, and occasions less copious evacuations of the bowels, neither of which effects is required from the hydromel. But one should by all means use it boiled, provided the honey be bad, impure, black, and not fragrant, for the boiling will remove the most of its bad qualities and appearances.

16. Τὸ δὲ ὀξύμελι καλούμενον ποτὸν πολλαχοῦ μὲν εὐχρηστον ἐν ταύτησι τῆσι νούσοισιν εὐρήσεις ἐόν καὶ γὰρ πτυάλου ἀναγωγὸν ἐστὶ, καὶ εὐπνοον. Καιροῦς μέντοι τοιούσδε ἔχει τὸ μὲν γὰρ κάρτα ὀξὺ οὐδὲν ἂν μέσον

ποιήσῃ πρὸς τὰ πτύελα τὰ μὴ ῥηϊδίως ἀνιόντα εἰ γὰρ ἀνάγοι μὲν τὰ ἐγκέρχοντα, καὶ ὄλισθον ἐμποιήσῃ, καὶ ὥσπερ διαπτερώσῃ τὸν βρόγχον, παρηγορήσῃεν ἂν τὸν πλεύμονα μαλθακτικὸν γὰρ αὐτέου καὶ εἰ μὲν ταῦτα ξυγκυρήσῃ, μεγάλην ἂν ὠφελείην ποιήσῃεν. Ἔστι δ' ὅτε τὸ κάρτα ὀξὺ οὐκ ἐκράτησε τῆς ἀναγωγῆς τοῦ πτυέλου, ἀλλὰ προσεγλίσχρηνέ τε καὶ ἔβλαψεν μάλιστα δὲ τοῦτο πάσχουσιν οἵπερ καὶ ἄλλως ὀλέθριοι εἰσι, καὶ

ἀδύνατοι βήσῃεν τε καὶ ἀποχρέμπεσθαι τὰ ἐνεχόμενα. Ἐς μὲν οὖν τόδε προστεκμαίρεσθαι χρὴ τὴν ῥώμην τοῦ κάμνοντος, κῆν ἐλπίδα ἔχη, διδόναι διδόναι δὲ, ἣν διδῶς, ἀκροχλίαν καὶ κατ' ὀλίγον τὸ τοιόνδε, καὶ μὴ λάβρως. Τὸ μέντοι ὀλίγον ἔποξυ ὑγραίνει μὲν τὸ στόμα καὶ φάρυγγα ἀναγωγὸν δὲ πτυέλου ἐστὶ καὶ ἄδιψον ὑποχονδρίῳ δὲ καὶ σπλάγχνοισι καὶ ταύτη εὐμένεσ καὶ τὰς ἀπὸ μέλιτος βλάβας κωλύει τὸ γὰρ χολῶδες ἐν μέλιτι κολάζεται. Ἔστι δὲ καὶ φουσέων καταρρηκτικὸν, καὶ ἐς οὖρησιν προτρεπτικὸν ἐντέρου μέντοι τῷ κάτω μέρει πλαδαρώτερον,

καὶ ζύσματα ἐμποιέει ἐστὶ δ' ὅτε καὶ φλαῦρον τοῦτο ἐν τῆσιν ὀξείησι νούσοισι γίνεσθαι, μάλιστα μὲν ὅτι φῦσαν κωλύει περαιούσθαι, ἀλλὰ παλινδρομέειν ποιέει ἔτι δὲ καὶ ἄλλως γυιοῖ καὶ τὰ ἀκρωτήρια ψύχει ταύτην καὶ οἶδα μούνην δι' ὀξυμέλιτος γινομένην βλάβην, ἣτις καὶ ἀξίη γραφῆς. Ὀλίγον δὲ τὸ τοιόνδε ποτὸν νυκτὸς μὲν καὶ νήσται πρὸ ροφήματος ἐπιτήδειον προπίνεσθαι ἀτὰρ καὶ ὀκόταν πούλῳ μετὰ ρόφημα ἢ, οὐδὲν κωλύει πίνειν. Τοῖσι δὲ ποτῶ μούνον διαιτωμένοισιν ἄνευ ροφημάτων διὰ τόδε οὐκ ἐπιτήδειόν ἐστὶν αἰεὶ καὶ διὰ παντὸς χρέεσθαι

τούτῳ, μάλιστα μὲν διὰ ζύσιν ἢ τρηχυσμὸν τοῦ ἐντέρου ἀκόπρῳ γὰρ ἐόντι μᾶλλον ἐμποιέει ἂν, καὶ ταῦτα κενεαγγείης παρεούσης ἔπειτα δὲ καὶ τὸ μελίκρητον τῆς ἰσχύος ἀφαιρέοιτο ἂν. Ἦν μέντοι ἀρήγειν φαίνεται πρὸς τὴν ζύμπασαν νοῦσον, πολλῶ ποτῶ τούτῳ χρέεσθαι, ὀλίγον χρὴ τὸ ὄξος παραχέειν,

ὅσον μούνον γινώσκεισθαι οὕτω γὰρ καὶ ἄ φιλέει βλάπτειν, ἤκιστα ἂν βλάπτοι, καὶ ἄ δεῖται προσωφελείν, προσωφελοίη ἄν. Ἐν κεφαλαίῳ δ'

εἶρησθαι, αἱ ἀπὸ ὀξέος ὀξύτητες πικροχόλοισι μᾶλλον ἢ μελαγχολικοῖσι  
ξυμφέρουσι τὰ μὲν γὰρ πικρὰ διαλύεται καὶ ἐκφλεγματοῦται, μετεωριζόμενα ὑπ'  
αὐτέου τὰ δὲ μέλανα ζυμοῦται καὶ μετεωρίζεται καὶ πολλαπλασιοῦται ἀναγωγὸν  
γὰρ μελάνων, ὄξος. Γυναιξὶ δὲ τὸ ἐπίπαν πολεμιώτερον ἢ ἀνδράσιν ὄξος  
ὑστεραλγὲς γὰρ ἔστιν.

16. You will find the drink, called oxymel, often very useful in these complaints, for it promotes expectoration and freedom of breathing. the following are the proper occasions for administering it. When strongly acid it has no mean operation in rendering the expectoration more easy, for by bringing up the sputa, which occasion troublesome hawking, and rendering them more slippery, and, as it were, clearing the windpipe with a feather, it relieves the lungs and proves emollient to them; and when it succeeds in producing these effects it must do much good. But there are cases in which hydromel, strongly acid, does not promote expectoration, but renders it more viscid and thus does harm, and it is most apt to produce these bad effects in cases which are otherwise of a fatal character, when the patient is unable to cough or bring up the sputa. On this account, then, one ought to consider beforehand the strength of the patient, and if there be any hope, then one may give it, but if given at all in such cases it should be quite tepid, and in by no means large doses. But if slightly acrid it moistens the mouth and throat, promotes expectoration, and quenches thirst; agrees with the viscera seated in the hypochondrium, and obviates the bad effects of the honey; for the bilious quality of the honey is thereby corrected. It also promotes flatulent discharges from the bowels, and is diuretic, but it occasions watery discharges and those resembling scrapings, from the lower part of the intestine, which is sometimes a bad thing in acute diseases, more especially when the flatulence cannot be passed, but rolls backwards; and otherwise it diminishes the strength and makes the extremities cold, this is the only bad effect worth mentioning which I have known to arise from the oxymel. It may suit well to drink a little of this at night before the draught of ptisan, and when a considerable interval of time has passed after the draught there will be nothing to prevent its being taken. But to those who are restricted entirely to drinks without draughts of ptisan, it will therefore not be proper at all times to give it, more especially from the fretting and irritation of the intestine which it occasions, (and these bad effects it will be the more apt to produce provided there be no faeces in the intestines and the patient is laboring under inanition,) and then it will weaken

the powers of the hydromel. But if it appears advantageous to use a great deal of this drink during the whole course of the disease, one should add to it merely as much vinegar as can just be perceived by the taste, for thus what is prejudicial in it will do the least possible harm, and what is beneficial will do the more good. In a word, the acidity of vinegar agrees rather with those who are troubled with bitter bile, than with those patients whose bile is black; for the bitter principle is dissolved in it and turned to phlegm, by being suspended in it; whereas black bile is fermented, swells up, and is multiplied thereby: for vinegar is a melanagogue. Vinegar is more prejudicial to women than to men, for it creates pains in the uterus.

17. Ὑδατι δὲ ποτῶ ἐν τῆσιν ὀξεῖησι νόσοισιν ἄλλο μὲν οὐδὲν ἔχω ἔργον ὅ τι προσθέω οὔτε γὰρ βηχὸς παρηγορικὸν ἐστὶν ἐν τοῖσι περιπλευμονικοῖσιν, οὔτε πτυέλου ἀναγωγόν, ἀλλ' ἦσσον τῶν ἄλλων, εἴ τις διὰ παντὸς ὕδατι ποτῶ χρέοιτο. Μεσηγὺ μέντοι ὄξυμέλιτος καὶ μελικρήτου ὕδωρ ἐπιρροφεόμενον ὀλίγον πτυέλου ἀναγωγόν ἐστὶ διὰ τὴν μεταβολὴν τῆς ποιότητος τῶν ποτῶν πλημμυρίδα γὰρ τινα ἐμποιέει. Ἄλλως δὲ οὔτε δίψαν παύει, ἀλλ' ἐπιπικραίνει χολῶδες γὰρ φύσει χολῶδει, καὶ ὑποχονδρίῳ κακόν καὶ κάκιστον

έωντοῦ καὶ χολωδέστατον καὶ φιλαδυναμώτατον, ὅταν ἐς κενεότητα ἐσέλθῃ καὶ σπληνὸς δὲ αὐξητικὸν καὶ ἥπατός ἐστὶν, ὁκόταν πεπυρωμένον ἦ καὶ ἐγκλυδαστικὸν τε καὶ ἐπιπολαστικὸν βραδύπορόν τε γὰρ ἐστὶ διὰ τὸ ὑπόψυχρον καὶ ἄπεπτον εἶναι καὶ οὔτε διαχωρητικὸν, οὔτε διουρητικὸν προσβλάπτει δέ τι καὶ διὰ τόδε, ὅτι ἄκοπρόν ἐστὶ φύσει ἢν δὲ δὴ καὶ ποδῶν ψυχρῶν ποτε ἐόντων ποθῆ, πάντα ταῦτα πολλαπλασίως βλάπτει, ἐς ὅ τι ἂν αὐτέων ὀρμήσῃ. Ὑποπτέουσιν μέντοι ἐν ταύτησιν τῆσιν νόσοισιν ἢ καρηβαρίην ἰσχυρὴν ἢ φρενῶν ἄψιν, παντάπασιν οἴνου ἀποσχετέον ὕδατι δὲ ἐν τῶ τοιῶδε χρηστέον, ἢ ὕδαρέα καὶ κίρρον παντελῶς δοτέον οἶνον καὶ ἄοσμον

παντάπασιν, καὶ μετὰ τὴν πόσιν αὐτοῦ ὕδωρ μεταποτέον ὀλίγον οὔτω γὰρ ἂν ἦσσον τὸ ἀπὸ τοῦ οἴνου μένος ἄπτοιτο τῆς κεφαλῆς καὶ γνώμης ἐν οἷσιν δὲ μάλιστα αὐτέων ὕδατι ποτῶ χρηστέον, καὶ ὁκότε πολλῶ κάρτα, καὶ ὄκου μετρίῳ, καὶ ὄκου ψυχρῶ, καὶ ὄκου θερμῶ, τὰ μὲν που πρόσθεν εἰρέεται, τὰ δὲ ἐν αὐτέοισιν τοῖσιν καιροῖσιν ῥηθήσεται. Κατὰ ταῦτα δὲ καὶ περὶ τῶν ἄλλων ποτῶν, οἶον τὸ κρίθινον, καὶ τὰ ἀπὸ χλοΐης ποιούμενα, καὶ τὰ ἀπὸ σταφίδος καὶ στεμφύλων καὶ πυρῶν

καὶ κνήκου καὶ μύρτων καὶ ροιῆς καὶ τῶν ἄλλων, ὅταν τινὸς αὐτέων καιρὸς ἦ χρέεσθαι, γεγράφεται παρ' αὐτέῳ τῶ νοσήματι, ὅπως περ καὶ τᾶλλα τῶν

ξυνθέτων φαρμάκων.

17. I have nothing further to add as to the effects of water when used as a drink in acute diseases; for it neither soothes the cough in pneumonia, nor promotes expectoration, but does less than the others in this respect, if used alone through the whole complaint. But if taken intermediate between oxymel and hydromel, in small quantity, it promotes expectoration from the change which it occasions in the qualities of these drinks, for it produces, as it were, a certain overflow. Otherwise it does not quench the thirst, for it creates bile in a bilious temperament, and is injurious to the hypochondrium; and it does the most harm, engenders most bile, and does the least good when the bowels are empty; and it increases the swelling of the spleen and liver when they are in an inflamed state; it produces a gurgling noise in the intestines and swims on the stomach; for it passes slowly downwards, as being of a coldish and indigestible nature, and neither proves laxative nor diuretic; and in this respect, too, it proves prejudicial, that it does not naturally form does in the intestines: and, if it be drunk while the feet are cold, its injurious effects will be greatly aggravated, in all those parts to which it may be determined. When you suspect in these diseases either strong heaviness of the head, or mental alienation, you must abstain entirely from wine, and in this case use water, or give weak, straw-colored wine, entirely devoid of *bouquet*, after which a little water is to be given in addition; for thus the strength of the will less affect the head and the understanding: but in which cases water is mostly to be given for drink, when in large quantity, when in moderate, when cold, and when hot; all these things have either been discussed already or will be treated of at the proper time. In like manner, with respect to all the others, such as barley-water, the drinks made from green shoots, those from raisins, and the skins of grapes and wheat, and bastard saffron, and myrtles, pomegranates, and the others, when the proper time for using them is come, they will be treated of along with the disease in question, in like manner as the other compound medicines.

18. Λουτρὸν δὲ συχνοῖσι τῶν νοσημάτων ἀρήγοι ἂν χρεομένοισιν, ἐς τὰ μὲν ξυνεχέως, ἐς τὰ δ' οὐ. Ἔστι δὲ ὅτε ἤσσον χρηστέον διὰ τὴν ἀπαρασκευασίην τῶν ἀνθρώπων ἐν ὀλίγησι γὰρ οἰκίησι παρεσκευάσται τὰ ἄρμενα καὶ οἱ θεραπεύοντες ὡς δεῖ εἰ δὲ μὴ παγκάλως λούοιτο, βλάπτειτ' ἂν οὐ σμικρά καὶ γὰρ σκέπης ἀκάπνου δεῖ, καὶ ὕδατος δαυιλέος, καὶ τοῦ λουτροῦ συχνοῦ καὶ μὴ λίην λάβρου, ἣν γε μὴ οὕτω δέη. Καὶ μᾶλλον μὲν μὴ σμήχεσθαι ἦν δὲ σμήχηται, θερμῷ χρέεσθαι αὐτέῳ καὶ πολλαπλασίῳ ἢ ὡς

νομίζεται σμήγματι, καὶ προσκαταχέεσθαι μὴ ὀλίγω, καὶ ταχέως μετακαταχέεσθαι. Δεῖ δὲ καὶ τῆς ὁδοῦ βραχείης ἐς τὴν πύελον, καὶ ἐς εὐέμβατον καὶ ἐς εὐέκβατον εἶναι δὲ καὶ τὸν λουόμενον κόσμιον καὶ σιγηλὸν, καὶ μηδὲν αὐτὸν προσεξεργάζεσθαι, ἀλλ' ἄλλους καὶ καταχέειν καὶ σμήχειν καὶ μετακέρασμα πολλὸν ἡτοιμάσθαι, καὶ τὰς ἐπαντλήσιας ταχείας ποιέεσθαι καὶ σπόγγοισι χρέεσθαι ἀντὶ στλεγγίδος, καὶ μὴ ἄγαν ξηρὸν χρίεσθαι τὸ σῶμα. Κεφαλὴν μέντοι ἀνεξηράνθαι χρὴ ὡς οἶόν τε μάλιστα ὑπὸ σπόγγου ἐκμασσομένην, καὶ μὴ διαψύχεσθαι τὰ ἄκρεα, μήτε τὴν

κεφαλὴν, μήτε τὸ ἄλλο σῶμα καὶ μήτε νεορρόφητον μήτε νεόποτον λούεσθαι, μηδὲ ῥοφέειν, μηδὲ πίνειν ταχὺ μετὰ τὸ λουτρὸν. Μέγα μὲν δὴ μέρος χρὴ νέμειν τῷ κάμνοντι, ἦν ὑγιαίνων ἢ φιλόλουτρος ἄγαν καὶ εἰθισμένος λούεσθαι καὶ γὰρ ποθέουσι μᾶλλον οἱ τοιοῖδε, καὶ ὠφελέονται λουσάμενοι, καὶ βλάπτονται μὴ λουσάμενοι. Ἀρμόζει δὲ ἐν περιπλευμονίῃσι μᾶλλον ἢ ἐν καύσοισι τὸ ἐπίπαν καὶ γὰρ ὀδύνης τῆς κατὰ πλευρὴν καὶ στήθεα καὶ μετάφρενον παρηγορικὸν ἐστὶ τὸ λουτρὸν, καὶ πτυέλου πεπαντικὸν καὶ ἀναγωγὸν, καὶ εὐπνοον καὶ ἄκοπον μαλθακτικὸν γὰρ καὶ ἄρθρων καὶ τοῦ ἐπιπολαίου δέρματος καὶ οὐρητικὸν δὲ, καὶ καρηβαρίην λύει, καὶ ῥίνας ὑγραίνει. Ἀγαθὰ μὲν οὖν λουτρῷ τοσαῦτα πάρεστιν, ὧν πάντων δεῖ ἦν μέντοι τῆς παρασκευῆς ἔνδειά τις ἢ ἐνὸς ἢ πλειόνων, κίνδυνος μὴ λυσιτελέειν

τὸ λουτρὸν, ἀλλὰ μᾶλλον βλάπτειν ἐν γὰρ ἕκαστον αὐτέων μεγάλην φέρει τὴν βλάβην, μὴ παρασκευασθὲν ὑπὸ τῶν ὑπουργῶν ὡς δεῖ. Ἦκιστα δὲ λούειν καιρὸς τούτους οἷσιν ἢ κοιλίῃ ὑγροτέρῃ τοῦ καιροῦ ἐν τῆσι νούσοις ἀτὰρ οὐδὲ οἷσιν ἔστηκε μᾶλλον τοῦ καιροῦ καὶ μὴ προδιελήλυθεν οὐδὲ δὴ τοὺς γεγυιωμένους χρὴ λούειν, οὐδὲ τοὺς ἀσώδεας ἢ ἐμετικούς, οὐδὲ τοὺς ἐπανερευγομένους χολῶδες, οὐδὲ τοὺς ἐκ ῥινῶν αἱμορραγέοντας, εἰ μὴ ἔλασσον τοῦ καιροῦ ῥέοι τοὺς δὲ καιροὺς οἷδας ἦν δὲ ἔλασσον τοῦ καιροῦ ῥέοι, λούειν, ἦν τε ὅλον τὸ σῶμα πρὸς τὰ ἄλλα ἀρήγη, ἦν τε τὴν κεφαλὴν μούνον. Ἦν οὖν αἱ τε παρασκευαὶ ἔωσιν ἐπιτήδειοι καὶ ὁ κάμων μέλλῃ εὖ δέξασθαι τὸ λουτρὸν, λούειν χρὴ ἐκάστης ἡμέρης τοὺς δὲ φιλολουτρέοντας

οὐδ' εἰ δις τῆς ἡμέρης λούοις, οὐδὲν ἂν βλάπτεις. Χρέεσθαι δὲ λουτροῖσι τοῖσιν ὄλησι πτισάνησι χρεομένοις παραποῦλὸ μᾶλλον ἐνδέχεται, ἢ τοῖσι χυλῷ μούνον χρεομένοισιν ἐνδέχεται δὲ καὶ τουτέοισιν ἐνίστε ἦκιστα δὲ καὶ τοῖσι ποτῷ μούνον χρεομένοισιν ἔστι δὲ καὶ οἷσι τουτέων ἐνδέχεται τεκμαίρεσθαι δὲ χρὴ τοῖσι προγεγραμμένοισιν οὓς τε μέλλει λουτρὸν ὠφελέειν ἐν ἐκάστοισι τῶν τρόπων τῆς διαίτης, οὓς τε μή. Οἷσι μὲν γὰρ προσδέεται



τινος κάρτα τουτέων, όκόσα λουτρών άγαθά ποιέει, καί πρόσεστιν αύτεοισιν όσα  
άν λουτρῶ ώφελήηται, δεῖ λούειν οἷσι δέ τουτέων

μηθενός προσδεῖ, καί πρόσεστιν αύτεοισι τῶν σημείων έφ' οἷσι λούεσθαι ού  
ξυμφέρει, ού δεῖ λούειν.

18. The bath is useful in many diseases, in some of them when used steadily, and in others when not so. Sometimes it must be less used than it would be otherwise, from the want of accommodation; for in few families are all the conveniences prepared, and persons who can manage them as they ought to be. And if the patient be not bathed properly, he maybe thereby hurt in no inconsiderable degree, for there is required a place to cover him that is free of smoke, abundance of water, materials for frequent baths, but not very large, unless this should be required. It is better that no friction should be applied, but if so, a hot soap ( *smegma* ) must be used in greater abundance than is common, and an affusion of a considerable quantity of water is to be made at the same time and afterwards repeated. There must also be a short passage to the basin, and it should be of easy ingress and egress. But the person who takes the bath should be orderly and reserved in his manner, should do nothing for himself, but others should pour the water upon him and rub him, and plenty of waters, of various temperatures, should be in readiness for the *douche* , and the affusions quickly made; and sponges should be used instead of the comb ( *strigil* ), and the body should be anointed when not quite dry. But the head should be rubbed by the sponge until it is quite dry; the extremities should be protected from cold, as also the head and the rest of the body; and a man should not be washed immediately after he has taken a draught of ptisan or a drink; neither should he take ptisan as a drink immediately after the bath. Much will depend upon whether the patient, when in good health, was very fond of the bath, and in the custom of taking it: for such persons, especially, feel the want of it, and are benefited if they are bathed, and injured if they are not. In general it suits better with cases of pneumonia than in ardent fevers; for the bath soothes the pain in the side, chest, and back; concocts the sputa, promotes expectoration, improves the respiration, and allays lassitude; for it soothes the joints and outer skin, and is diuretic, removes heaviness of the head, and moistens the nose. Such are the benefits to be derived from the bath, if all the proper requisites be present; but if one or more of these be wanting, the bath, instead of doing good, may rather prove injurious; for every one of them may do harm if not prepared by the attendants in the proper manner. It is by no means a suitable thing in these diseases to persons whose bowels are too loose, or when they are unusually

confined, and there has been no previous evacuation; neither must we bathe those who are debilitated, nor such as have nausea or vomiting, or bilious eructations; nor such as have hemorrhage from the nose, unless it be less than required at that stage of the disease (with those stages you are acquainted), but if the discharge be less than proper, one should use the bath, whether in order to benefit the whole body or the head alone. If then the proper requisites be at hand, and the patient be well disposed to the bath, it may be administered once every day, or if the patient be fond of the bath there will be no harm, though he should take it twice in the day. The use of the bath is much more appropriate to those who take unstrained ptisan, than to those who take only the juice of it, although even in their case it may be proper; but least of all does it suit with those who use only plain drink, although, in their case too it may be suitable; but one must form a judgment from the rules laid down before, in which of these modes of regimen the bath will be beneficial, and in which not. Such as want some of the requisites for a proper bath, but have those symptoms which would be benefited by it, should be bathed; whereas those who want none of the proper requisites, but have certain symptoms which contraindicate the bath, are not to be bathed.

## ON AIRS, WATERS, AND PLACES - Περὶ ἀέρων, ὑδάτων, τόπων

1. Ἰητρικὴν ὅστις βούλεται ὀρθῶς ζητεῖν, τάδε χρὴ ποιεῖν· πρῶτον μὲν ἐνθυμεῖσθαι τὰς ὥρας τοῦ ἔτεος, ὅ τι δύναται ἀπεργάζεσθαι ἐκάστη· οὐ γὰρ εἰκόασιν ἀλλήλοισιν οὐδέν, ἀλλὰ πολὺ διαφέρουσιν αὐταί τε ἐφ' ἑωυτέων καὶ ἐν τῆσι μεταβολῆσιν· ἔπειτα δὲ τὰ πνεύματα τὰ θερμά τε καὶ τὰ ψυχρά, μάλιστα μὲν τὰ κοινὰ πᾶσιν ἀνθρώποισιν, ἔπειτα δὲ καὶ τὰ ἐν ἐκάστη χώρῃ ἐπιχώρια ἔόντα. δεῖ δὲ καὶ τῶν ὑδάτων ἐνθυμεῖσθαι τὰς δυνάμιας· ὡσπερ γὰρ ἐν τῷ στόματι διαφέρουσι καὶ ἐν τῷ σταθμῷ, οὕτω καὶ ἡ δύναμις διαφέρει πολὺ ἐκάστου. ὥστε ἐς πόλιν ἐπειδὴν ἀφίκηται τις, ἧς ἄπειρός ἐστι, διαφροντίσαι χρὴ τὴν θέσιν αὐτῆς, ὅπως κεῖται καὶ πρὸς τὰ πνεύματα καὶ πρὸς τὰς ἀνατολάς τοῦ ἡλίου. οὐ γὰρ τούτῳ δύναται ἦτις πρὸς βορέην κεῖται καὶ ἦτις πρὸς νότον οὐδ' ἦτις πρὸς ἥλιον ἀνίσχοντα οὐδ' ἦτις πρὸς δύνοντα. ταῦτα δὲ χρὴ ἐνθυμεῖσθαι ὡς κάλλιστα καὶ τῶν ὑδάτων πέρι ὡς ἔχουσι, καὶ πότερον ἐλώδεσι χρέονται καὶ μαλθακοῖσιν ἢ σκληροῖσί τε καὶ ἐκ μετεώρων καὶ πετρωδέων εἴτε ἀλυκοῖσι καὶ ἀτεράμνοισιν· καὶ τὴν γῆν, πότερον ψιλὴ τε καὶ ἄνυδρος ἢ δασεῖα καὶ ἔφυδρος καὶ εἴτε ἔγκοιλός ἐστι καὶ πνιγηρὴ εἴτε μετέωρος καὶ ψυχρὴ· καὶ τὴν δίαιταν τῶν ἀνθρώπων, ὅκοιη ἡδονται, πότερον φιλοπόται καὶ ἀριστηταὶ καὶ ἀταλαίπωροι ἢ φιλογυμνασταὶ τε καὶ φιλόπονοι καὶ ἐδωδοὶ καὶ ἄποτοι.

1. Whoever wishes to investigate medicine properly, should proceed thus: in the first place to consider the seasons of the year, and what effects each of them produces (for they are not at all alike, but differ much from themselves in regard to their changes). Then the winds, the hot and the cold, especially such as are common to all countries, and then such as are peculiar to each locality. We must also consider the qualities of the waters, for as they differ from one another in taste and weight, so also do they differ much in their qualities. In the same manner, when one comes into a city to which he is a stranger, he ought to consider its situation, how it lies as to the winds and the rising of the sun; for its influence is not the same whether it lies to the north or the south, to the rising or to the setting sun. These things one ought to consider most attentively, and concerning the waters which the inhabitants use, whether they be marshy and soft, or hard, and running from elevated and rocky situations, and then if saltish and unfit for cooking; and the ground, whether it be naked and deficient in water, or wooded and well watered, and whether it lies in a hollow, confined situation, or is elevated and cold; and the mode in which the inhabitants live, and what are their pursuits, whether they are fond of drinking and eating to excess, and given

to indolence, or are fond of exercise and labor, and not given to excess in eating and drinking.

2. Καὶ ἀπὸ τούτων χρὴ ἐνθυμεῖσθαι ἕκαστα. εἰ γὰρ ταῦτα εἰδείη τις καλῶς, μάλιστα μὲν πάντα, εἰ δὲ μὴ, τά γε πλεῖστα, οὐκ ἂν αὐτὸν λανθάνοι ἐς πόλιν ἀφικνεόμενον, ἥς ἂν ἄπειρος ᾖ, οὔτε νοσήματα ἐπιχώρια οὔτε τῶν κοινῶν ἢ φύσις, ὅκοιή τις ἐστίν· ὥστε μὴ ἀπορεῖσθαι ἐν τῇ θεραπείῃ τῶν νούσων μηδὲ διαμαρτάνειν· ἃ εἰκός ἐστι γίνεσθαι, ἢν μὴ τις ταῦτα πρότερον εἰδῶς προφροντίση περὶ ἐκάστου· τοῦ δὲ χρόνου προϊόντος καὶ τοῦ ἐνιαυτοῦ λέγοι ἂν, ὅκόσα τε νοσήματα μέλλει πάγκοινα τὴν πόλιν κατασχέσειν ἢ θέρους ἢ χειμῶνος, ὅκόσα τε ἴδια ἐκάστῳ κίνδυνος γίνεσθαι ἐκ μεταβολῆς τῆς διαίτης. εἰδῶς γὰρ τῶν ὥρέων τὰς μεταβολὰς καὶ τῶν ἄστρον τὰς ἐπιτολάς τε καὶ δύσιας, καθότι ἕκαστον τούτων γίνεται, προειδείη ἂν τὸ ἔτος ὅκοῖόν τι μέλλει γίνεσθαι. οὕτως ἂν τις ἐννοεῦμενος καὶ προγινώσκων τοὺς καιροὺς μάλιστ' ἂν εἰδείη περὶ ἐκάστου καὶ τὰ πλεῖστα τυγχάνοι τῆς ὑγιείης καὶ κατορθοῖη οὐκ ἐλάχιστα ἐν τῇ τέχνῃ. εἰ δὲ δοκέοι τις ταῦτα μετεωρολόγια εἶναι, εἰ μετασταίη τῆς γνώμης, μάθοι ἂν, ὅτι οὐκ ἐλάχιστον μέρος συμβάλλεται ἀστρονομίῃ ἐς ἰητρικὴν, ἀλλὰ πάνυ πλεῖστον. ἅμα γὰρ τῆσιν ὥρησι καὶ αἱ νοῦσοι καὶ αἱ κοιλίαι μεταβάλλουσιν τοῖσιν ἀνθρώποισιν.

2. From these things he must proceed to investigate everything else. For if one knows all these things well, or at least the greater part of them, he cannot miss knowing, when he comes into a strange city, either the diseases peculiar to the place, or the particular nature of common diseases, so that he will not be in doubt as to the treatment of the diseases, or commit mistakes, as is likely to be the case provided one had not previously considered these matters. And in particular, as the season and the year advances, he can tell what epidemic diseases will attack the city, either in summer or in winter, and what each individual will be in danger of experiencing from the change of regimen. For knowing the changes of the seasons, the risings and settings of the stars, how each of them takes place, he will be able to know beforehand what sort of a year is going to ensue. Having made these investigations, and knowing beforehand the seasons, such a one must be acquainted with each particular, and must succeed in the preservation of health, and be by no means unsuccessful in the practice of his art. And if it shall be thought that these things belong rather to meteorology, it will be admitted, on second thoughts, that astronomy contributes not a little, but a very great deal, indeed, to medicine. For with the seasons the digestive organs of men undergo a change.

3. Ὅπως δὲ χρὴ ἕκαστα τῶν προειρημένων σκοπεῖν καὶ βασανίζειν, ἐγὼ φράσω σαφέως. ἥτις μὲν πόλις πρὸς τὰ πνεύματα κεῖται τὰ θερμά — ταῦτα δ' ἐστὶ μεταξὺ τῆς τε χειμερινῆς ἀνατολῆς τοῦ ἡλίου καὶ τῶν δυσμέων τῶν χειμερινῶν — καὶ αὐτῇ ταῦτα τὰ πνεύματά ἐστι σύννομα, τῶν δὲ ἀπὸ τῶν ἄρκτων πνευμάτων σκέπη, ἐν ταύτῃ τῇ πόλει ἐστὶ τὰ τε ὕδατα πολλὰ καὶ ὕφαλα, καὶ ἀνάγκη εἶναι μετέωρα, τοῦ μὲν θέρεος θερμά, τοῦ δὲ χειμῶνος ψυχρά· τούς τε ἀνθρώπους τὰς κεφαλὰς ὑγρὰς ἔχειν καὶ φλεγματοῦδεις, τὰς τε κοιλίας αὐτῶν πυκνὰ ἐκταράσσεσθαι ἀπὸ τῆς κεφαλῆς τοῦ φλέγματος ἐπικαταρρέοντος· τὰ τε εἶδεα ἐπὶ τὸ πλῆθος αὐτῶν ἀτονώτερα εἶναι· ἐσθίειν δ' οὐκ ἀγαθοὺς εἶναι οὐδὲ πίνειν. ὀκόσοι μὲν γὰρ κεφαλὰς ἀσθενέας ἔχουσιν, οὐκ ἂν εἴησαν ἀγαθοὶ πίνειν· ἢ γὰρ κραιπάλη μᾶλλον πέζει. νοσήματά τε τάδε ἐπιχώρια εἶναι· πρῶτον μὲν τὰς γυναῖκας νοσερὰς καὶ ροώδεις εἶναι· ἔπειτα πολλὰς ἀτόκους ὑπὸ νοῦσου καὶ οὐ φύσει ἐκτιτρώσκεσθαι τε πυκνὰ· τοῖσι τε παιδίοισιν ἐπιπίπτειν σπασμούς τε καὶ ἄσθματα καὶ ἃ νομίζουσι τὸ παιδίον ποιεῖν καὶ ἱερὴν νοῦσον εἶναι· τοῖσι δὲ ἀνδράσι δυσεντερίας καὶ διαρροίας καὶ ἠπιάλους καὶ πυρετοὺς πολυχρονίους χειμερινούς καὶ ἐπινυκτίδας πολλὰς καὶ αἱμορροΐδας ἐν τῇ ἔδρῃ. πλευρίτιδες δὲ καὶ περιπνευμονίαι καὶ καῦσοι καὶ ὀκόσα ὀξέα νοσήματα νομίζονται εἶναι οὐκ ἐγγίνονται πολλὰ. οὐ γὰρ οἶόν τε, ὅκου ἂν κοιλία ὑγραὶ ἔωσι, τὰς νοῦσους ταύτας ἰσχύειν. ὀφθαλμίαι τε ἐγγίνονται ὑγραὶ καὶ οὐ χαλεπαί, ὀλιγοχρόνιοι, ἦν μὴ τι κατάσχη νόσημα πάγκοινον ἐκ μεταβολῆς μεγάλης. καὶ ὀκόταν τὰ πενήκοντα ἔτεα ὑπερβάλωσι, κατάρροοι ἐπιγενόμενοι ἐκ τοῦ ἐγκεφάλου παραπληκτικούς ποιέουσι τοὺς ἀνθρώπους, ὀκόταν ἐξαίφνης ἠλιωθέωσι τὴν κεφαλὴν ἢ ῥιγώσωσι. ταῦτα μὲν τὰ νοσήματα αὐτοῖσιν ἐπιχώριά ἐστι. χωρὶς δὲ, ἦν τι πάγκοινον κατάσχη νόσημα ἐκ μεταβολῆς τῶν ὠρέων, καὶ τούτου μετέχουσιν.

3. But how of the aforementioned things should be investigated and explained, I will now declare in a clear manner. A city that is exposed to hot winds (these are between the wintry rising, and the wintry setting of the sun), and to which these are peculiar, but which is sheltered from the north winds; in such a city the waters will be plenteous and saltish, and as they run from an elevated source, they are necessarily hot in summer, and cold in winter; the heads of the inhabitants are of a humid and pituitous constitution, and their bellies subject to frequent disorders, owing to the phlegm running down from the head; the forms of their bodies, for the most part, are rather flabby; they do not eat nor drink much; drinking wine in particular, and more especially if carried to intoxication, is oppressive to them; and the following diseases are peculiar to the district: in the first place, the women are sickly and subject to excessive menstruation; then many are unfruitful from disease, and not from nature, and they have

frequent miscarriages; infants are subject to attacks of convulsions and asthma, which they consider to be connected with infancy, and hold to be a sacred disease (epilepsy). The men are subject to attacks of dysentery, diarrhea, hepialus, chronic fevers in winter, of epinyctis, frequently, and of hemorrhoids about the anus. Pleurisies, peripneumonies, ardent fevers, and whatever diseases are reckoned acute, do not often occur, for such diseases are not apt to prevail where the bowels are loose. Ophthalmies occur of a humid character, but not of a serious nature, and of short duration, unless they attack epidemically from the change of the seasons. And when they pass their fiftieth year, defluxions supervening from the brain, render them paralytic when exposed suddenly to strokes of the sun, or to cold. These diseases are endemic to them, and, moreover, if any epidemic disease connected with the change of the seasons, prevail, they are also liable to it.

4. Ὀκόσαι δ' ἀντικέονται τούτων πρὸς τὰ πνεύματα τὰ ψυχρὰ τὰ μεταξὺ τῶν δυσμέων τῶν θερινῶν τοῦ ἡλίου καὶ τῆς ἀνατολῆς τῆς θερινῆς, καὶ αὐτῆσι ταῦτα τὰ πνεύματα ἐπιχώριά ἐστι, τοῦ δὲ νότου καὶ τῶν θερμῶν πνευμάτων σκέπη, ὧδε ἔχει περὶ τῶν πολίων τούτων· πρῶτον μὲν τὰ ὕδατα σκληρὰ τε καὶ ψυχρὰ ὡς ἐπὶ τὸ πλῆθος ἐγγίνεται. τοὺς δὲ ἀνθρώπους εὐτόνους τε καὶ σκελιφροὺς ἀνάγκη εἶναι, τοὺς τε πλείους τὰς κοιλίας ἀτεράμνους ἔχειν καὶ σκληρὰς τὰς κάτω, τὰς δὲ ἄνω εὐρωτέρας· χολώδεάς τε μᾶλλον ἢ φλεγματίας εἶναι. τὰς δὲ κεφαλὰς ὑγιεῖρας ἔχουσι καὶ σκληρὰς· ῥηγματίαι τέ εἰσιν ἐπὶ τὸ πλῆθος. νοσεύματα δὲ αὐτοῖσιν ἐπιδημεῖ τάδε· πλευρίτιδές τε πολλαὶ αἱ τε ὀξεῖαι νομιζόμεναι νοῦσοι. ἀνάγκη δὲ ὧδε ἔχειν, ὀκόταν αἱ κοιλίαι σκληραὶ ἔωσιν· ἔμπυοί τε πολλοὶ γίνονται ἀπὸ πάσης προφάσιος. τούτου δὲ αἷτιόν ἐστι τοῦ σώματος ἡ ἔντασις καὶ ἡ σκληρότης τῆς κοιλίης. ἡ γὰρ ξηρότης ῥηγματίας ποιεῖ εἶναι καὶ τοῦ ὕδατος ἡ ψυχρότης. ἐδωδούς δὲ ἀνάγκη τὰς τοιαύτας φύσις εἶναι καὶ οὐ πολυπότας· οὐ γὰρ οἷόν τε ἅμα πολυβόρους τε εἶναι καὶ πολυπότας· ὀφθαλμίας τε γίνεσθαι μὲν διὰ χρόνου, γίνεσθαι δὲ σκληρὰς καὶ ἰσχυρὰς, καὶ εὐθέως ῥήγνυσθαι τὰ ὄμματα· αἱμορροίας δὲ ἐκ τῶν ῥινῶν τοῖσι νεωτέροισι τριήκοντα ἑτέων γίνεσθαι ἰσχυρὰς τοῦ θέρους· τὰ τε ἱερὰ νοσεύματα καλούμενα, ὀλίγα μὲν ταῦτα, ἰσχυρὰ δέ. μακροβίους δὲ τοὺς ἀνθρώπους τούτους μᾶλλον εἰκὸς εἶναι τῶν ἐτέρων· τὰ τε ἔλκεα οὐ φλεγματώδεα ἐγγίνεσθαι οὐδὲ ἀγριοῦσθαι· τὰ τε ἡθεα ἀγριώτερα ἢ ἡμερώτερα. τοῖσι μὲν ἀνδράσι ταῦτα τὰ νοσήματα ἐπιχώριά ἐστι· καὶ χωρὶς, ἢν τι πάγκοινον κατάσχη ἐκ μεταβολῆς τῶν ὠρέων· τῆσι δὲ γυναῖξί· πρῶτον μὲν στερίφαι πολλαὶ γίνονται διὰ τὰ ὕδατα ἐόντα σκληρὰ τε καὶ ἀτέραμνα καὶ ψυχρὰ. αἱ γὰρ καθάρσιες οὐκ ἐπιγίνονται τῶν ἐπιμηνίων ἐπιτήδεια, ἀλλὰ ὀλίγαι καὶ πονηραί. ἔπειτα τίκτουσι χαλεπῶς· ἐκτιτρώσκουσι δὲ οὐ σφόδρα. ὀκόταν δὲ τέκωσι, τὰ παιδιά ἀδύνατοι τρέφειν εἰσί· τὸ γὰρ γάλα ἀποσβέννυται ἀπὸ τῶν

ὕδατων τῆς σκληρότητος καὶ ἀτεραμνίης· φθίσιές τε γίνονται συχναὶ ἀπὸ τῶν τοκετῶν. ὑπὸ γὰρ βίης ῥήγματα ἴσχουσι καὶ σπάσματα. τοῖς δὲ παιδίοισιν ὕδρωπες ἐγγίνονται ἐν τοῖσιν ὄρχεσιν, ἕως μικρὰ ἤ· ἔπειτα προϊούσης τῆς ἡλικίης ἀφανί ζονται· ἡβῶσί τε ὀψὲ ἐν ταύτῃ τῇ πόλει.

4. But the following is the condition of cities which have the opposite exposure, namely, to cold winds, between the summer settings and the summer risings of the sun, and to which these winds are peculiar, and which are sheltered from the south and the hot breezes. In the first place the waters are, for the most part, hard cold. The men must necessarily be well braced and slender, and they must have the discharges downwards of the alimentary canal hard, and of difficult evacuation, while those upwards are more fluid, and rather bilious than pituitous. Their heads are sound and hard, and they are liable to burstings (of vessels?) for the most part. The diseases which prevail epidemically with them, are pleurisies, and those which are called acute diseases. This must be the case when the bowels are bound; and from any causes, many become affected with suppurations in the lungs, the cause of which is the tension of the body, and hardness of the bowels; for their dryness and the coldness of the water dispose them to ruptures (of vessels?). Such constitutions must be given to excess of eating, but not of drinking; for it is not possible to be gourmands and drunkards at the same time. Ophthalmies, too, at length supervene; these being of a hard and violent nature, and soon ending in rupture of the eyes; persons under thirty years of age are liable to severe bleedings at the nose in summer; attacks of epilepsy are rare but severe. Such people are likely to be rather long-lived; their ulcers are not attended with serious discharges, nor of a malignant character; in disposition they are rather ferocious than gentle. The diseases I have mentioned are peculiar to the men, and besides they are liable to any common complaint which may be prevailing from the changes of the seasons. But the women, in the first place, are of a hard constitution, from the waters being hard, indigestible, and cold; and their menstrual discharges are not regular, but in small quantity, and painful. Then they have difficult parturition, but are not very subject to abortions. And when they do bring forth children, they are unable to nurse them; for the hardness and indigestible nature of the water puts away their milk. Phthisis frequently supervenes after childbirth, for the efforts of it frequently bring on ruptures and strains. Children while still little are subject to dropsies in the testicle, which disappear as they grow older; in such a town they are late in attaining manhood. It is, as I have now stated, with regard to hot and cold winds and cities thus exposed.

5. Περὶ μὲν οὖν τῶν θερμῶν πνευμάτων καὶ τῶν ψυχρῶν καὶ τῶν πολίων τούτων ὧδε ἔχει ὡς προείρηται. ὀκόσαι δὲ κέονται πρὸς τὰ πνεύματα τὰ μεταξὺ τῶν θερινῶν ἀνατολέων τοῦ ἡλίου καὶ τῶν χειμερινῶν καὶ ὀκόσαι τὸ ἐναντίον τούτων, ὧδε ἔχει περὶ αὐτέων· ὀκόσαι μὲν πρὸς τὰς ἀνατολάς τοῦ ἡλίου κέονται, ταύτας εἰκὸς εἶναι ὑγιεινοτέρας τῶν πρὸς τὰς ἄρκτους ἐστραμμένων καὶ τῶν πρὸς τὰ θερμά, ἦν καὶ στάδιον τὸ μεταξὺ ἧ. πρῶτον μὲν γὰρ μετριώτερον ἔχει τὸ θερμὸν καὶ τὸ ψυχρόν· ἔπειτα τὰ ὕδατα, ὀκόσαι πρὸς τὰς τοῦ ἡλίου ἀνατολάς ἐστὶ, ταῦτα λαμπρά τε εἶναι ἀνάγκη καὶ εὐώδεα καὶ μαλθακὰ καὶ ἐρατεινὰ ἐγγίνεσθαι ἐν ταύτῃ τῇ πόλει· ὁ γὰρ ἡλιος κωλύει ἀνίσχων καὶ καταλάμπων. τὸ γὰρ ἐωθινὸν ἐκάστοτε αὐτὸς ὁ ἡῆρ ἐπέχει ὡς ἐπὶ τὸ πολὺ. τὰ τε εἶδεα τῶν ἀνθρώπων εὐχροά τε καὶ ἀνθηρά ἐστὶ μᾶλλον ἢ ἄλλη ἦν μὴ τις νοῦσος κωλύῃ. λαμπρόφωνοί τε οἱ ἄνθρωποι ὀργὴν τε καὶ σύνεσιν βελτίους εἰσὶ τῶν προσβορείων, ἧπερ καὶ τὰ ἄλλα τὰ ἐμφυόμενα ἀμείνω ἐστίν. ἔοικέ τε μάλιστα ἢ οὕτω κειμένη πόλις ἦρι κατὰ τὴν μετριότητα τοῦ θερμοῦ καὶ τοῦ ψυχροῦ· τὰ τε νοσεύματα ἐλάσσω μὲν γίνεται καὶ ἀσθενέστερα, ἔοικε δὲ τοῖς ἐν τῇσι πόλεσι γενομένοις νοσεύμασι τῇσι πρὸς τὰ θερμὰ πνεύματα ἐστραμμένῃσιν. αἱ τε γυναῖκες αὐτόθι ἀρικούμονές εἰσι σφόδρα καὶ τίκτουσι ῥηϊδίως.

5. Cities that are exposed to winds between the summer and the winter risings of the sun, and those the opposite to them, have the following characters:- Those which lie to the rising of the sun are all likely to be more healthy than such as are turned to the North, or those exposed to the hot winds, even if there should not be a furlong between them. In the first place, both the heat and cold are more moderate. Then such waters as flow to the rising sun, must necessarily be clear, fragrant, soft, and delightful to drink, in such a city. For the sun in rising and shining upon them purifies them, by dispelling the vapors which generally prevail in the morning. The persons of the inhabitants are, for the most part, well colored and blooming, unless some disease counteract. The inhabitants have clear voices, and in temper and intellect are superior to those which are exposed to the north, and all the productions of the country in like manner are better. A city so situated resembles the spring as to moderation between heat and cold, and the diseases are few in number, and of a feeble kind, and bear a resemblance to the diseases which prevail in regions exposed to hot winds. The women there are very prolific, and have easy deliveries. Thus it is with regard to them.

6. Περὶ μὲν τούτων ὧδε ἔχει. ὀκόσαι δὲ πρὸς τὰς δύσιας κεῖνται καὶ αὐτῆσιν ἐστὶ σκέπη τῶν πνευμάτων τῶν ἀπὸ τῆς ἡοῦς πνεόντων τὰ τε θερμὰ πνεύματα παραρρεῖ καὶ τὰ ψυχρὰ ἀπὸ τῶν ἄρκτων, ἀνάγκη ταύτας τὰς πόλιας θέσιν κεῖσθαι νοσερωτάτην. πρῶτον μὲν γὰρ τὰ ὕδατα οὐ λαμπρά· αἴτιον δέ, ὅτι ὁ ἡῆρ



τὸ ἐωθινὸν κατέχει ὡς ἐπὶ τὸ πολὺ, ὅστις τῷ ὕδατι ἐγκαταμιγνύμενος τὸ λαμπρὸν ἀφανίζει· ὁ γὰρ ἥλιος πρὶν ἄνω ἀρθῆναι οὐκ ἐπιλάμπει. τοῦ δὲ θέρους ἕθεν μὲν αὔραι ψυχραὶ πνέουσι καὶ δρόσοι πίπτουσι· τὸ δὲ λοιπὸν ἥλιος ἐγκαταδύνων ὥστε μάλιστα διέψει τοὺς ἀνθρώπους, διὸ καὶ ἀχρόους τε εἰκὸς εἶναι καὶ ἀρρώστους, τῶν τε νοσευμάτων πάντων μετέχειν μέρος τῶν προειρημένων· οὐδὲν γὰρ αὐτοῖς ἀποκέκριται. βαρυφώνους τε εἰκὸς εἶναι καὶ βραγχώδεας διὰ τὸν ἥερα, ὅτι ἀκάθαρτος ὡς ἐπὶ τὸ πολὺ αὐτόθι γίνεται καὶ νοσώδης· οὔτε γὰρ ὑπὸ τῶν βορείων ἐκκρίνεται σφόδρα· οὐ γὰρ προς ἔχουσι τὰ πνεύματα· ἃ τε προσέχουσιν αὐτοῖσι καὶ πρόσκεινται ὑδατεινότητά ἐστιν· ἐπεὶ τοιαῦτα τὰ ἀπὸ τῆς ἐσπέρης πνεύματα· ἔοικέν τε μετοπώρῳ μάλιστα ἢ θέσις ἢ τοιαύτη τῆς πόλιος κατὰ τὰς τῆς ἡμέρης μεταβολάς, ὅτι πολὺ τὸ μέσον γίνεται τοῦ τε ἐωθινοῦ καὶ τοῦ πρὸς τὴν δείλην.

6. But such cities as lie to the west, and which are sheltered from winds blowing from the east, and which the hot winds and the cold winds of the north scarcely touch, must necessarily be in a very unhealthy situation: in the first place the waters are not clear, the cause of which is, because the mist prevails commonly in the morning, and it is mixed up with the water and destroys its clearness, for the sun does not shine upon the water until he be considerably raised above the horizon. And in summer, cold breezes from the east blow and dews fall; and in the latter part of the day the setting sun particularly scorches the inhabitants, and therefore they are pale and enfeebled, and are partly subject to all the aforesaid diseases, but no one is peculiar to them. Their voices are rough and hoarse owing to the state of the air, which in such a situation is generally impure and unwholesome, for they have not the northern winds to purify it; and these winds they have are of a very humid character, such being the nature of the evening breezes. Such a situation of a city bears a great resemblance to autumn as regards the changes of the day, inasmuch as the difference between morning and evening is great. So it is with regard to the winds that are conducive to health, or the contrary.

7. Περὶ μὲν πνευμάτων, ἃ τέ ἐστιν ἐπιτήδεια καὶ ἀνεπιτήδεια, ὧδε ἔχει. περὶ δὲ τῶν λοιπῶν ὑδάτων βούλομαι διηγήσασθαι, ἃ τέ ἐστι νοσώδεα καὶ ἃ ὑγιεινότεα καὶ ὀκόσα ἀφ' ὕδατος κακὰ εἰκὸς γίνεσθαι καὶ ὅσα ἀγαθὰ. πλεῖστον γὰρ μέρος συμβάλλεται ἐς τὴν ὑγιείην. ὀκόσα μὲν οὖν ἐστιν ἐλώδεα καὶ στάσιμα καὶ λιμναῖα, ταῦτα ἀνάγκη τοῦ μὲν θέρους εἶναι θερμὰ καὶ παχέα καὶ ὀδμὴν ἔχοντα, ἅτε οὐκ ἀπόρρυτα ἐόντα· ἀλλὰ τοῦ τε ὀμβρίου ὕδατος ἐπιφερομένου αἰεὶ νέου τοῦ τε ἡλίου καίοντος ἀνάγκη ἄχροά τε εἶναι καὶ πονηρὰ καὶ χολώδεα, τοῦ δὲ χειμῶνος παγετώδεά τε καὶ ψυχρὰ καὶ τεθολωμένα ὑπὸ τε χιόνος καὶ παγετῶν,

ὥστε φλεγματοδέστατα εἶναι καὶ βραγχοδέστατα. τοῖσι δὲ πίνουσι σπλήνας μὲν αἰεὶ μεγάλους εἶναι καὶ μεμυμένους καὶ τὰς γαστέρας σκληράς τε καὶ λεπτάς καὶ θερμάς, τοὺς δὲ ὤμους καὶ τὰς κληῖδας καὶ τὸ πρόσωπον καταλελεπτύσθαι· ἐς γὰρ τὸν σπλήνα αἱ σάρκες συντήκονται, διότι ἰσχυροὶ εἰσιν· ἐδωδούς τε εἶναι τοὺς τοιούτους καὶ διψηρούς· τὰς τε κοιλίας ξηροτάτας τε καὶ θερμοτάτας καὶ τὰς ἄνω καὶ τὰς κάτω ἔχειν, ὥστε τῶν φαρμάκων ἰσχυροτέρων δεῖσθαι. τοῦτο μὲν τὸ νόσημα αὐτοῖσι σύντροφόν ἐστι καὶ θέρεος καὶ χειμῶνος. πρὸς δὲ τούτοις οἱ ὑδρωπεσ πλεῖστοί τε γίνονται καὶ θανατωδέστατοι. τοῦ γὰρ θέρεος δυσεντερίαί τε πολλαὶ ἐμπίπτουσι καὶ διάρροιαί καὶ πυρετοὶ τεταρταῖοι πολυχρόνιοι. ταῦτα δὲ τὰ νοσεύματα μηκυνθέντα τὰς τοιαύτας φύσιος ἐς ὑδρωπας καθίστησι καὶ ἀποκτείνει. ταῦτα μὲν αὐτοῖσι τοῦ θέρεος γίνεται. τοῦ δὲ χειμῶνος τοῖσι νεωτέροις μὲν περιπνευμονίαί τε καὶ μανιώδεα νοσεύματα, τοῖσι δὲ πρεσβυτέροις καῦσοι διὰ τὴν τῆς κοιλίης σκληρότητα. τῆσι δὲ γυναιξὶν οἰδήματα ἐγγίνεται καὶ φλέγμα λευκόν, καὶ ἐν γαστρὶ ἴσχυουσι μόλις καὶ τίκτουσι χαλεπῶς· μεγάλα τε τὰ ἔμβρυα καὶ οἰδέοντα. ἔπειτα ἐν τῆσι τροφῆσι φθινώδεά τε καὶ πονηρὰ γίνεται· ἢ τε κάθαρσις τῆσι γυναιξὶν οὐκ ἐπιγίνεται χρηστὴ μετὰ τὸν τόκον. τοῖσι δὲ παιδίοις κῆλαι ἐπιγίνονται μάλιστα καὶ τοῖσιν ἀνδράσι κίρσοι καὶ ἔλκεα ἐν τῆσι κνήμησιν, ὥστε τὰς τοιαύτας φύσιος οὐχ οἷόν τε μακροβίους εἶναι, ἀλλὰ προγηράσκειν τοῦ χρόνου τοῦ ἰκνευμένου. ἔτι δὲ αἱ γυναῖκες δοκέουσιν ἔχειν ἐν γαστρὶ, καὶ ὁκόταν ὁ τόκος ἦ, ἀφανίζεται τὸ πλήρωμα τῆς γαστρός. τοῦτο δὲ γίνεται, ὁκόταν ὑδρωπιήσωσιν αἱ ὑστέραι. τὰ μὲν τοιαῦτα ὕδατα νομίζω μοχθηρὰ εἶναι πρὸς ἅπαν χρῆμα· δευτέρα δὲ ὄσων εἶεν αἱ πηγαὶ ἐκ πετρώων — σκληρὰ γὰρ ἀνάγκη εἶναι — ἢ ἐκ γῆς, ὅκου θερμὰ ὕδατά ἐστιν, ἢ σίδηρος γίνεται ἢ χαλκὸς ἢ ἄργυρος ἢ χρυσοὺς ἢ θεῖον ἢ στυπτηρὴν ἢ ἄσφαλτον ἢ νίτρον. ταῦτα γὰρ πάντα ὑπὸ βίης γίνονται τοῦ θερμοῦ. οὐ τοίνυν οἷόν τε ἐκ τοιαύτης γῆς ὕδατα ἀγαθὰ γίνεσθαι, ἀλλὰ σκληρὰ καὶ καυσώδεα διουρεῖσθαι τε χαλεπὰ καὶ πρὸς τὴν διαχώρησιν ἐναντία εἶναι. ἄριστα δὲ ὁκόσα ἐκ μετεώρων χωρίων ῥεῖ καὶ λόφων γεηρῶν. αὐτὰ τε γὰρ ἐστὶ γλυκέα καὶ λευκὰ καὶ τὸν οἶνον φέρειν ὀλίγον οἷά τε ἐστὶν. τοῦ δὲ χειμῶνος θερμὰ γίνεται, τοῦ δὲ θέρεος ψυχρά. οὕτω γὰρ ἂν εἴη ἐκ βαθυτάτων πηγέων. μάλιστα δὲ ἐπαινέω ὧν τὰ ρεύματα πρὸς τὰς ἀνατολάς τοῦ ἡλίου ἐρρώγασι καὶ μᾶλλον πρὸς τὰς θερινάς. ἀνάγκη γὰρ λαμπρότερα εἶναι καὶ εὐώδεα καὶ κοῦφα. ὁκόσα δὲ ἐστὶν ἀλυκὰ καὶ ἀτέραμνα καὶ σκληρά, ταῦτα μὲν πάντα πίνειν οὐκ ἀγαθὰ· εἰσὶ δ' ἐν αὐτοῖς φύσιος καὶ νοσεύματα, ἐς ἃ ἐπιτήδειά ἐστι τὰ τοιαῦτα ὕδατα πινόμενα, περὶ ὧν φράσω αὐτίκα. ἔχει δὲ περὶ τούτων ὧδε· ὁκόσων μὲν αἱ πηγαὶ πρὸς τὰς ἀνατολάς ἔχουσι, ταῦτα μὲν ἄριστα αὐτὰ ἐωυτῶν ἐστὶ· δευτέρα δὲ τὰ μεταξὺ τῶν θερινῶν ἀνατολέων ἐστὶ τοῦ ἡλίου καὶ δυσίων, καὶ μᾶλλον τὰ πρὸς τὰς ἀνατολάς· τρίτα δὲ τὰ μεταξὺ τῶν δυσμέων τῶν θερινῶν καὶ τῶν χειμερινῶν· φαυλότατα δὲ τὰ πρὸς τὸν νότον καὶ τὰ μεταξὺ τῆς χειμερινῆς ἀνατολῆς καὶ

δύσιος. καὶ ταῦτα τοῖσι μὲν νοτίοισι πάνυ πονηρά, τοῖσι δὲ βορείοισιν ἀμείνω. τούτοισι δὲ πρέπει ὧδε χρῆσθαι· ὅστις μὲν ὑγιαίνει τε καὶ ἔρρωται, μηδὲν διακρίνειν, ἀλλὰ πίνειν αἰεὶ τὸ παρεόν. ὅστις δὲ νόσου εἵνεκα βούλεται τὸ ἐπιτηδειότατον πίνειν, ὧδε ἂν ποιέων μάλιστα τυγχάνοι τῆς ὑγιείης· ὁκόσων μὲν αἱ κοιλίαι σκληραὶ εἰσι καὶ συγκαίειν ἀγαθαί, τούτοισι μὲν τὰ γλυκύτατα συμφέρει καὶ κουφότατα καὶ λαμπρότατα· ὁκόσων δὲ μαλθακαὶ αἱ νηδύες καὶ ὑγραὶ εἰσι καὶ φλεγματώδεις, τούτοισι δὲ τὰ σκληρότατα καὶ ἀτεραμνότατα καὶ τὰ ὑφαλυκὰ· οὕτω γὰρ ἂν ξηραίνοντο μάλιστα. ὁκόσα γὰρ ὕδατά ἐστιν ἔψειν ἄριστα καὶ τακερώτατα, ταῦτα καὶ τὴν κοιλίην διαλύειν εἰκὸς μάλιστα καὶ διατήκειν· ὁκόσα δὲ ἐστὶν ἀτέραμνα καὶ σκληρὰ καὶ ἥκιστα ἐψανά, ταῦτα δὲ συνίστησι μάλιστα τὰς κοιλίας καὶ ξηραίνει. ἀλλὰ γὰρ ψευδάμενοι εἰσὶν οἱ ἄνθρωποι τῶν ἀλμυρῶν ὑδάτων πέρι δι' ἀπειρίην, καὶ ὅτι νομίζεται διαχωρητικά· τὰ δὲ ἐναντιώτατά ἐστι πρὸς τὴν διαχώρησιν· ἀτέραμνα γὰρ καὶ ἀνέψανα, ὥστε καὶ τὴν κοιλίην ὑπ' αὐτῶν στύφεσθαι μᾶλλον ἢ τήκεσθαι.

7. And I wish to give an account of the other kinds of waters, namely, of such as are wholesome and such as are unwholesome, and what bad and what good effects may be derived from water; for water contributes much towards health. Such waters then as are marshy, stagnant, and belong to lakes, are necessarily hot in summer, thick, and have a strong smell, since they have no current; but being constantly supplied by rain-water, and the sun heating them, they necessarily want their proper color, are unwholesome and form bile; in winter, they become congealed, cold, and muddy with the snow and ice, so that they are most apt to engender phlegm, and bring on hoarseness; those who drink them have large and obstructed spleens, their bellies are hard, emaciated, and hot; and their shoulders, collar-bones, and faces are emaciated; for their flesh is melted down and taken up by the spleen, and hence they are slender; such persons then are voracious and thirsty; their bellies are very dry both above and below, so that they require the strongest medicines. This disease is habitual to them both in summer and in winter, and in addition they are very subject to dropsies of a most fatal character; and in summer dysenteries, diarrheas, and protracted quartan fevers frequently seize them, and these diseases when prolonged dispose such constitutions to dropsies, and thus prove fatal. These are the diseases which attack them in summer; but in winter younger persons are liable to pneumonia, and maniacal affections; and older persons to ardent fevers, from hardness of the belly. Women are subject to oedema and leucophlegmasiae; when pregnant they have difficult deliveries; their infants are large and swelled, and then during nursing they become wasted and sickly, and the lochial discharge after parturition does not proceed properly with the women. The children are

particularly subject to hernia, and adults to varices and ulcers on their legs, so that persons with such constitutions cannot be long-lived, but before the usual period they fall into a state of premature old age. And further, the women appear to be with child, and when the time of parturition arrives, the fulness of the belly disappears, and this happens from dropsy of the uterus. Such waters then I reckon bad for every purpose. The next to them in badness are those which have their fountains in rocks, so that they must necessarily be hard, or come from a soil which produces thermal waters, such as those having iron, copper, silver, gold, sulphur, alum, bitumen, or nitre (soda) in them; for all these are formed by the force of heat. Good waters cannot proceed from such a soil, but those that are hard and of a heating nature, difficult to pass by urine, and of difficult evacuation by the bowels. The best are those which flow from elevated grounds, and hills of earth; these are sweet, clear, and can bear a little wine; they are hot in summer and cold in winter, for such necessarily must be the waters from deep wells. But those are most to be commended which run to the rising of the sun, and especially to the summer sun; for such are necessarily more clear, fragrant, and light. But all such as are salty, crude, and harsh, are not good for drink. But there are certain constitutions and diseases with which such waters agree when drunk, as I will explain presently. Their characters are as follows: the best are such as have their fountains to the east; the next, those between the summer risings and settings of the sun, and especially those to the risings; and third, those between the summer and winter settings; but the worst are those to the south, and the parts between the winter rising and setting, and those to the south are very bad, but those to the north are better. They are to be used as follows: whoever is in good health and strength need not mind, but may always drink whatever is at hand. But whoever wishes to drink the most suitable for any disease, may accomplish his purpose by attending to the following directions: To persons whose bellies are hard and easily burnt up, the sweetest, the lightest, and the most limpid waters will be proper; but those persons whose bellies are soft, loose, and pituitous, should choose the hardest, those kinds that are most crude, and the saltiest, for thus will they be most readily dried up; for such waters as are adapted for boiling, and are of a very solvent nature, naturally loosen readily and melt down the bowels; but such as are intractable, hard, and by no means proper for boiling, these rather bind and dry up the bowels. People have deceived themselves with regard to salt waters, from inexperience, for they think these waters purgative, whereas they are the very reverse; for such waters are crude, and ill adapted for boiling, so that the belly is more likely to be bound up than loosened by them. And thus it is with regard to the waters of springs.

8. Καὶ περὶ μὲν τῶν πηγαίων ὑδάτων ὧδε ἔχει. περὶ δὲ τῶν ὄμβριων καὶ ὀκόσα ἀπὸ χιόνος φράσω ὅπως ἔχει. τὰ μὲν οὖν ὄμβρια κουφότατα καὶ γλυκύτατά ἐστι καὶ λεπτότατα καὶ λαμπρότατα. τὴν τε γὰρ ἀρχὴν ὁ ἥλιος ἀνάγει καὶ ἀναρπάζει τοῦ ὕδατος τό τε λεπτότατον καὶ κουφότατον. δῆλον δὲ οἱ ἄλλες ποιέουσι. τὸ μὲν γὰρ ἀλμυρὸν λείπεται αὐτοῦ ὑπὸ πάχεος καὶ βάρεος καὶ γίνεται ἄλες, τὸ δὲ λεπτότατον ὁ ἥλιος ἀναρπάζει ὑπὸ κουφότητος· ἀνάγει δὲ τὸ τοιοῦτο οὐκ ἀπὸ τῶν ὑδάτων μόνον τῶν λιμναίων, ἀλλὰ καὶ ἀπὸ τῆς θαλάσσης καὶ ἐξ ἀπάντων ἐν ὀκόσοισι ὑγρὸν τι ἔνεστιν. ἔνεστι δὲ ἐν παντὶ χρήματι. καὶ ἐξ αὐτῶν τῶν ἀνθρώπων ἄγει τὸ λεπτότατον τῆς ἰκμάδος καὶ κουφότατον. τεκμήριον δὲ μέγιστον· ὅταν ἄνθρωπος ἐν ἡλίῳ βαδίῃ ἢ καθίῃ ἱμάτιον ἔχων, ὀκόσα μὲν τοῦ χρωτὸς ὁ ἥλιος ἐφορᾷ, οὐχ ἰδρῶν ἄν· ὁ γὰρ ἥλιος ἀναρπάζει τὸ προφαινόμενον τοῦ ἰδρῶτος· ὀκόσα δὲ ὑπὸ τοῦ ἱματίου ἐσκέπασται ἢ ὑπ' ἄλλου του, ἰδροῖ. ἐξάγεται μὲν γὰρ ὑπὸ τοῦ ἡλίου καὶ βιάζεται, σῶζεται δὲ ὑπὸ τῆς σκέπης, ὥστε μὴ ἀφανίζεσθαι ὑπὸ τοῦ ἡλίου. ὀκόταν δὲ ἐς σκιὴν ἀφίκηται, ἅπαν τὸ σῶμα ὁμοίως ἰδίει· οὐ γὰρ ἔτι ὁ ἥλιος ἐπιλάμπει. διὰ ταῦτα δὲ καὶ σήπεται τῶν ὑδάτων τάχιστα ταῦτα καὶ ὀδμὴν ἴσχει πονηρὴν τὸ ὄμβριον, ὅτι ἀπὸ πλείστων συνῆκται καὶ συμμέμικται, ὥστε σήπεσθαι τάχιστα. ἔτι δὲ πρὸς τούτοις ἐπειδὴν ἀρπασθῆ καὶ μετεωρισθῆ περιφερόμενον καὶ καταμεμιγμένον ἐς τὸν ἡέρα, τὸ μὲν θολερὸν αὐτοῦ καὶ νυκτοειδὲς ἐκκρίνεται καὶ ἐξίσταται καὶ γίνεται ἡῆρ καὶ ὀμίγλη, τὸ δὲ λαμπρότατον καὶ κουφότατον αὐτοῦ λείπεται καὶ γλυκαίνεται ὑπὸ τοῦ ἡλίου καιόμενόν τε καὶ ἐψόμενον. γίνεται δὲ καὶ τᾶλλα πάντα τὰ ἐψόμενα αἰεὶ γλυκύτερα. ἕως μὲν οὖν διεξ κεδας μένον ἦ καὶ μήπω συνεστήκη, φέρεται μετέωρον. ὀκόταν δὲ κου ἀθροισθῆ καὶ συστραφῆ ἐς τὸ αὐτὸ ὑπὸ ἀνέμων ἀλλήλοισιν ἐναντιωθέντων ἐξαίφνης, τότε καταρρήγνυται, ἦ ἂν τύχη πλεῖστον συστραφέν. τότε γὰρ εἰκόδες τοῦτο μᾶλλον γίνεσθαι, ὀκόταν τὰ νέφεα ὑπὸ ἀνέμου στάσιν μὴ ἔχοντος ὠρμημένα ἐόντα καὶ χωρέοντα ἐξαίφνης ἀντικώπη πνεῦμα ἐναντίον καὶ ἕτερα νέφεα· ἐνταῦθα τὸ μὲν πρῶτον αὐτοῦ συστρέφεται, τὰ δὲ ὀπισθεν ἐπιφέρεται τε καὶ οὕτω παχύνεται καὶ μελαίνεται καὶ συστρέφεται ἐς τὸ αὐτὸ καὶ ὑπὸ βάρεος καταρρήγνυται καὶ ὄμβροι γίνονται. ταῦτα μὲν ἐστιν ἄριστα κατὰ τὸ εἰκός. δεῖται δὲ ἀφέψεσθαι καὶ ἀποσήπεσθαι· εἰ δὲ μή, ὀδμὴν ἴσχει πονηρὴν καὶ βράγχος καὶ βῆγχεσ καὶ βαρυφωνή τοῖς πίνουσι προσίσταται.

Τὰ δὲ ἀπὸ χιόνος καὶ κρυστάλλων πονηρὰ πάντα. ὀκόταν γὰρ ἄπαξ παγῆ, οὐκ ἔτι ἐς τὴν ἀρχαίην φύσιν καθίσταται, ἀλλὰ τὸ μὲν αὐτοῦ λαμπρὸν καὶ κοῦφον καὶ γλυκὺ ἐκκρίνεται καὶ ἀφανίζεται, τὸ δὲ θολωδέστατον καὶ σταθμωδέστατον λείπεται. γνοίης δ' ἂν ὧδε· εἰ γὰρ βούλει, ὅταν ἦ χειμῶν, ἐς ἀγγεῖον μέτρῳ ἐγγέας ὕδωρ θεῖναι ἐς τὴν αἰθρίην, ἵνα πήξεται μάλιστα, ἔπειτα τῆ ὕστεραίη ἐσενεγκῶν ἐς ἀλέην, ὅκου χαλάσει μάλιστα ὁ παγετός, ὀκόταν δὲ λυθῆ, ἀναμετρεῖν τὸ ὕδωρ, εὐρήσεις ἔλασσον συχνῶ. τοῦτο τεκμήριον, ὅτι ὑπὸ τῆς

πήξιος ἀφανίζεται καὶ ἀναξηραίνεται τὸ κουφότατον καὶ λεπτότατον, οὐ τὸ βαρύτετατον καὶ παχύτετατον· οὐ γὰρ ἂν δύναιτο. ταύτη οὖν νομίζω πονηρότατα ταῦτα τὰ ὕδατα εἶναι τὰ ἀπὸ χιόνος καὶ κρυστάλλου καὶ τὰ τοῦ τοισιν ἐπόμενα πρὸς ἅπαντα χρήματα.

8. I will now tell how it is with respect to rain-water, and water from snow. Rain waters, then, are the lightest, the sweetest, the thinnest, and the clearest; for originally the sun raises and attracts the thinnest and lightest part of the water, as is obvious from the nature of salts; for the saltish part is left behind owing to its thickness and weight, and forms salts; but the sun attracts the thinnest part, owing to its lightness, and he abstracts this not only from the lakes, but also from the sea, and from all things which contain humidity, and there is humidity in everything; and from man himself the sun draws off the thinnest and lightest part of the juices. As a strong proof of this, when a man walks in the sun, or sits down having a garment on, whatever parts of the body the sun shines upon do not sweat, for the sun carries off whatever sweat makes its appearance; but those parts which are covered by the garment, or anything else, sweat, for the particles of sweat are drawn and forced out by the sun, and are preserved by the cover so as not to be dissipated by the sun; but when the person comes into the shade the whole body equally perspires, because the sun no longer shines upon it. Wherefore, of all kinds of water, these spoil the soonest; and rain water has a bad spot smell, because its particles are collected and mixed together from most objects, so as to spoil the soonest. And in addition to this, when attracted and raised up, being carried about and mixed with the air, whatever part of it is turbid and darkish is separated and removed from the other, and becomes cloud and mist, but the most attenuated and lightest part is left, and becomes sweet, being heated and concocted by the sun, for all other things when concocted become sweet. While dissipated then and not in a state of consistence it is carried aloft. But when collected and condensed by contrary winds, it falls down wherever it happens to be most condensed. For this is likely to happen when the clouds being carried along and moving with a wind which does not allow them to rest, suddenly encounters another wind and other clouds from the opposite direction: there it is first condensed, and what is behind is carried up to the spot, and thus it thickens, blackens, and is conglomerated, and by its weight it falls down and becomes rain. Such, to all appearance, are the best of waters, but they require to be boiled and strained; for otherwise they have a bad smell, and occasion hoarseness and thickness of the voice to those who drink them. Those from snow and ice are all bad, for when once congealed, they never again recover their former nature; for whatever is clear, light, and sweet in them, is separated and

disappears; but the most turbid and weightiest part is left behind. You may ascertain this in the following manner: If in winter you will pour water by measure into a vessel and expose it to the open air until it is all frozen, and then on the following day bring it into a warm situation where the ice will thaw, if you will measure the water again when dissolved you will find it much less in quantity. This is a proof that the lightest and thinnest part is dissipated and dried up by the congelation, and not the heaviest and thickest, for that is impossible: wherefore I hold that waters from snow and ice, and those allied to them, are the worst of any for all purposes whatever. Such are the characters of rain-water, and those from ice and snow.

9. Περὶ μὲν οὖν ὀμβρίων ὑδάτων καὶ τῶν ἀπὸ χιόνος καὶ κρυστάλλων οὕτως ἔχει. λιθιῶσι δὲ μάλιστα ἄνθρωποι καὶ ὑπὸ νεφριτίδων καὶ στραγγουρίας ἀλίσκονται καὶ ἰσχιάδων, καὶ κῆλαι γίνονται, ὅκου ὕδατα πίνουσι παντοδαπώτατα καὶ ἀπὸ ποταμῶν μεγάλων, ἐς οὓς ποταμοὶ ἕτεροι ἐμβάλλουσι, καὶ ἀπὸ λίμνης, ἐς ἣν ῥεύματα πολλὰ καὶ παντοδαπὰ ἀφικνεῦνται, καὶ ὀκόσοι ὕδασιν ἐπακτοῖσι χρέονται διὰ μακροῦ ἀγομένοισι καὶ μὴ ἐκ βραχέος. οὐ γὰρ οἷόν τε ἕτερον ἐτέρῳ εἰκέναι ὕδωρ, ἀλλὰ τὰ μὲν γλυκέα εἶναι, τὰ δὲ ἀλυκά τε καὶ στυπτηριώδεα, τὰ δὲ ἀπὸ θερμῶν ῥεῖν. συμμισγόμενα δὲ ταῦτα ἐς τωὐτὸ ἀλλήλοισι στασιάζει καὶ κρατεῖ αἰεὶ τὸ ἰσχυρότατον. ἰσχύει δὲ οὐκ αἰεὶ τωὐτό, ἀλλὰ ἄλλοτε ἄλλο κατὰ τὰ πνεύματα· τῷ μὲν γὰρ βορέης τὴν ἰσχὺν παρέχεται, τῷ δὲ ὁ νότος, καὶ τῶν λοιπῶν πέρι αὐτὸς λόγος. ὑφίστασθαι οὖν τοῖσι τοιούτοισιν ἀνάγκη ἐν τοῖς ἀγγείοις ἰλὸν καὶ ψάμμον· καὶ ἀπὸ τούτων πινομένων τὰ νοσήματα γίνεται τὰ προειρημένα· ὅτι δὲ οὐχ ἅπασιν, ἐξῆς φράσω.

Ὀκόσων μὲν ἢ τε κοιλίη εὐροός τε καὶ ὑγιερὴ ἐστὶ καὶ ἡ κύστις μὴ πυρετώδης μηδὲ ὁ στόμαχος τῆς κύστιος συμπέφρακται λίην, οὗτοι μὲν διου ρεῦσι ῥηϊδίως, καὶ ἐν τῇ κύστει οὐδὲν συστρέφεται. ὀκόσων δὲ ἂν ἢ κοιλίη πυρετώδης ᾖ, ἀνάγκη καὶ τὴν κύστιν τωὐτὸ πάσχειν. ὀκόταν γὰρ θερμανθῆ μάλλον τῆς φύσιος, ἐφλέγμηνεν αὐτῆς ὁ στόμαχος. ὀκόταν δὲ ταῦτα πάθη, τὸ οὔρον οὐκ ἀφήσιν, ἀλλ' ἐν ἐωυτῇ συνέψει καὶ συγκαίει. καὶ τὸ μὲν λεπτότατον αὐτοῦ ἀποκρίνεται καὶ τὸ καθαρώτατον διεῖ καὶ ἐξουρεῖται, τὸ δὲ παχύτατον καὶ θολωδέστατον συστρέφεται καὶ συμπήγνυται. καὶ τὸ μὲν πρῶτον μικρόν, ἔπειτα δὲ μέζον γίνεται. κυλινδούμενον γὰρ ὑπὸ τοῦ οὔρου, ὃ τι ἂν συνίστηται παχύ, συναρμόζει πρὸς ἐωυτό, καὶ οὕτως αὐξεται τε καὶ πωροῦται· καὶ ὀκόταν οὐρῆ, πρὸς τὸν στόμαχον τῆς κύστιος προσπίπτει ὑπὸ τοῦ οὔρου βιαζόμενον καὶ κωλύει οὔρειν καὶ ὀδύνην παρέχει ἰσχυρήν· ὥστε τὰ αἰδοῖα τρίβουσι καὶ ἔλκουσι τὰ παιδιά τὰ λιθιῶντα· δοκεῖ γὰρ αὐτοῖς τὸ αἷτιον ἐνταῦθα εἶναι τῆς οὐρήσιος. τεκμήριον δὲ, ὅτι οὕτως ἔχει· τὸ γὰρ οὔρον λαμπρότατον οὔρεουσιν οἱ λιθιῶντες, ὅτι τὸ

παχύτατον καὶ θολωδέστατον αὐτοῦ μένει καὶ συστρέφεται. τὰ μὲν πλεῖστα οὕτω λιθιᾶ· γίνεται δὲ παισὶν καὶ ἀπὸ τοῦ γάλακτος, ἣν μὴ ὑγιερὸν ἦ, ἀλλὰ θερμόν τε λίην καὶ χολῶδες. τὴν γὰρ κοιλίην διαθερμαίνει καὶ τὴν κύστιν, ὥστε τὸ οὔρον συγκαιόμενον ταῦτα πάσχειν. καὶ φημι ἄμεινον εἶναι τοῖς παιδίοισι τὸν οἶνον ὡς ὑδαρέστατον διδόναι· ἦσσαν γὰρ τὰς φλέβας συγκαίει καὶ συναναίνει. τοῖσι δὲ θήλεσι λίθοι οὐ γίνονται ὁμοίως· ὁ γὰρ οὐρητῆρ βραχὺς ἐστὶν ὁ τῆς κύστιος καὶ εὐρύς, ὥστε βιάζεσθαι τὸ οὔρον ῥηϊδίως. οὔτε γὰρ τῇ χειρὶ τρίβει τὸ αἰδοῖον ὥσπερ τὸ ἄρσεν, οὔτε ἄπτεται τοῦ οὐρητῆρος· ἐς γὰρ τὰ αἰδοῖα ξυντέτρηνται, οἱ δὲ ἄνδρες οὐκ εὐθὺ τέτρηνται, καὶ διότι οἱ οὐρητῆρες οὐκ εὐρεῖς· καὶ πίνουσι πλεῖον ἢ οἱ παῖδες.

9. Men become affected with the stone, and are seized with diseases of the kidneys, strangury, sciatica, and become ruptured, when they drink all sorts of waters, and those from great rivers into which other rivulets run, or from a lake into which many streams of all sorts flow, and such as are brought from a considerable distance. For it is impossible that such waters can resemble one another, but one kind is sweet, another saltish and aluminous, and some flow from thermal springs; and these being all mixed up together disagree, and the strongest part always prevails; but the same kind is not always the strongest, but sometimes one and sometimes another, according to the winds, for the north wind imparts strength to this water, and the south to that, and so also with regard to the others. There must be deposits of mud and sand in the vessels from such waters, and the aforesaid diseases must be engendered by them when drunk, but why not to all I will now explain. When the bowels are loose and in a healthy state, and when the bladder is not hot, nor the neck of the bladder very contracted, all such persons pass water freely, and no concretion forms in the bladder; but those in whom the belly is hot, the bladder must be in the same condition; and when preternaturally heated, its neck becomes inflamed; and when these things happen, the bladder does not expel the urine, but raises its heat excessively. And the thinnest part of it is secreted, and the purest part is passed off in the form of urine, but the thickest and most turbid part is condensed and concreted, at first in small quantity, but afterwards in greater; for being rolled about in the urine, whatever is of a thick consistence it assimilates to itself, and thus it increases and becomes indurated. And when such persons make water, the stone forced down by the urine falls into the neck of the bladder and stops the urine, and occasions intense pain; so that calculous children rub their privy parts and tear at them, as supposing that the obstruction to the urine is situated there. As a proof that it is as I say, persons affected with calculus have very limpid urine, because the thickest and foulest part remains and is concreted. Thus it



generally is in cases of calculus. It forms also in children from milk, when it is not wholesome, but very hot and bilious, for it heats the bowels and bladder, so that the urine being also heated undergoes the same change. And I hold that it is better to give children only the most diluted wine, for such will least burn up and dry the veins. Calculi do not form so readily in women, for in them the urethra is short and wide, so that in them the urine is easily expelled; neither do they rub the pudendum with their hands, nor handle the passage like males; for the urethra in women opens direct into the pudendum, which is not the case with men, neither in them is the urethra so wide, and they drink more than children do. Thus, or nearly so, is it with regard to them.

10. Περὶ μὲν οὖν τούτων ὧδε ἔχει ἢ ὅτι τούτων ἐγγύτατα. περὶ δὲ τῶν ὠρέων ὧδε ἂν τις ἐνθυμύμενος διαγινώσκῃ, ὀκοῖόν τι μέλλει ἔσεσθαι τὸ ἔτος, εἴτε νοσερὸν εἴτε ὑγιερὸν· ἦν μὲν γὰρ κατὰ λόγον γένηται τὰ σημεῖα ἐπὶ τοῖς ἀστροισι δύνουσί τε καὶ ἐπιτέλλουσιν, ἔν τε τῷ μετοπώρῳ ὕδατα γένηται, καὶ ὁ χειμῶν μέτριος καὶ μήτε λίην εὐδῖος μήτε ὑπερβάλλων τὸν καιρὸν τῷ ψύχει, ἔν τε τῷ ἥρι ὕδατα γένηται ὠραῖα καὶ ἐν τῷ θέρει, οὕτω τὸ ἔτος ὑγιεινότατον εἰκὸς εἶναι. ἦν δὲ ὁ μὲν χειμῶν ἀύχηρὸς καὶ βόρειος γένηται, τὸ δὲ ἥρ ἔπομβρον καὶ νότιον, ἀνάγκη τὸ θέρος πυρετῶδες γίνεσθαι καὶ ὀφθαλμίας καὶ δυσεντερίας ἐμποιεῖν. ὀκόταν γὰρ τὸ πνῖγος ἐπιγένηται ἐξαίφνης τῆς τε γῆς ὑγρῆς ἐούσης ὑπὸ τῶν ὄμβρων τῶν ἑαρινῶν καὶ ὑπὸ τοῦ νότου, ἀνάγκη διπλόον τὸ καῦμα εἶναι, ἀπὸ τε τῆς γῆς διαβρόχου ἐούσης καὶ θερμῆς καὶ ὑπὸ τοῦ ἡλίου καίοντος, τῶν τε κοιλιῶν μὴ συνεστηκυῶν τοῖς ἀνθρώποις μήτε τοῦ ἐγκεφάλου ἀνεξηρασμένου — οὐ γὰρ οἶόν τε τοῦ ἥρος τοιοῦτου ἐόντος μὴ οὐ πλαδᾶν τὸ σῶμα καὶ τὴν σάρκα — ὥστε τοὺς πυρετοὺς ἐπιπίπτειν ὀξυτάτους ἀπασιν, μάλιστα δὲ τοῖσι φλεγματίησι. καὶ δυσεντερίας εἰκὸς ἐστὶ γίνεσθαι καὶ τῆσι γυναιξὶ καὶ τοῖς εἶδεσι τοῖς ὑγροτάτοις. καὶ ἦν μὲν ἐπὶ κυνὸς ἐπιτολῆ ὕδωρ ἐπιγένηται καὶ χειμῶν καὶ οἱ ἐτησίαι πνεύσωσιν, ἐλπίς παύσασθαι καὶ τὸ μετόπωρον ὑγιερὸν γενέσθαι· ἦν δὲ μή, κίνδυνος θανάτους τε γενέσθαι τοῖσι παιδίοισι καὶ τῆσι γυναιξίν, τοῖσι δὲ πρεσβύτησιν ἠκιστα, τοὺς τε περιγενομένους ἐς τεταρταίους ἀποτελευτᾶν καὶ ἐκ τῶν τεταρταίων ἐς ὕδρωπας. ἦν δ' ὁ μὲν χειμῶν νότιος γένηται καὶ ἔπομβρος καὶ εὐδῖος, τὸ δὲ ἥρ βόρειόν τε καὶ ἀύχηρὸν καὶ χειμέριον, πρῶτον μὲν τὰς γυναῖκας, ὀκόσαι ἂν τύχωσιν ἐν γαστρὶ ἔχουσαι καὶ ὁ τόκος αὐτῆσιν ἢ πρὸς τὸ ἥρ, ἐκτιπρώσκεσθαι· ὀκόσαι δ' ἂν καὶ τέκωσιν, ἀκρατέα τὰ παιδιά τίκτειν καὶ νοσώδεα, ὥστε ἢ αὐτίκα ἀπόλλυσθαι, ἢ ζῶσι λεπτά τε ἐόντα καὶ ἀσθενέα καὶ νοσώδεα. ταῦτα μὲν τῆσι γυναιξί· τοῖσι δὲ λοιποῖσι δυσεντερίας καὶ ὀφθαλμίας ξηρᾶς καὶ ἐνίοισι καταρροὺς ἀπὸ τῆς κεφαλῆς ἐπὶ τὸν πνεύμονα. τοῖσι μὲν οὖν φλεγματίησι τὰς δυσεντερίας εἰκὸς γίνεσθαι καὶ τῆσι γυναιξὶ φλέγματος ἐπικαταρρυσθέντος ἀπὸ τοῦ ἐγκεφάλου διὰ τὴν ὑγρότητα τῆς φύσεως· τοῖσι δὲ

χολώδεσιν ὀφθαλμίας ξηρὰς διὰ τὴν θερμότητα καὶ ξηρότητα τῆς σαρκός· τοῖσι δὲ πρεσβύτησι καταρρόους διὰ τὴν ἀραιότητα καὶ τὴν ἔκτηξιν τῶν φλεβῶν, ὥστε ἐξαίφνης τοὺς μὲν ἀπόλλυσθαι, τοὺς δὲ παραπλήκτους γίνεσθαι τὰ δεξιὰ ἢ τὰ ἀριστερά. ὁκόταν γὰρ τοῦ χειμῶνος ἐόντος νοτίου καὶ θερμοῦ τοῦ σώματος μὴ συνιστῆται ὁ ἐγκέφαλος μηδὲ αἱ φλέβες, τοῦ ἥρος ἐπιγενομένου βορείου καὶ ἀύχμηροῦ καὶ ψυχροῦ ὁ ἐγκέφαλος, ὀπηνίκα αὐτὸν ἔδει ἅμα καὶ τῷ ἥρι διαλύεσθαι καὶ καθαίρεσθαι ὑπὸ τε κορύζης καὶ βράγχων, τηνικαῦτα πήγνυται τε καὶ συνίσταται, ὥστε ἐξαίφνης τοῦ θέρους ἐπιγενομένου καὶ τοῦ καύματος καὶ τῆς μεταβολῆς ἐπιγενομένης ταῦτα τὰ νοσεύματα ἐπιπίπτειν. καὶ ὁκόσαι μὲν τῶν πολίων κέονταί τε καλῶς τοῦ ἡλίου καὶ τῶν πνευμάτων ὕδασι τε χρέονται ἀγαθοῖσιν, αὗται μὲν ἦσσαν αἰσθάνονται τῶν τοιούτων μεταβολέων· ὁκόσαι δὲ ὕδασι τε ἐλείοισι χρέονται καὶ λιμνώδεσι κέονταί τε μὴ καλῶς τῶν πνευμάτων καὶ τοῦ ἡλίου, αὗται δὲ μᾶλλον. κῆν μὲν τὸ θέρος ἀύχμηρὸν γένηται, θᾶσσαν παύονται αἱ νοῦσοι· ἦν δὲ ἔπομβρον, πολυχρόνιοι γίνονται· καὶ φαγεδαίνας κίνδυνος ἐγγίνεσθαι ἀπὸ πάσης προφάσις, ἦν ἔλκος ἐγγένηται. καὶ λειεντερίαι καὶ ὕδρωπες τελευτῶσι τοῖσι νοσεύμασιν ἐπιγίνονται· οὐ γὰρ ἀποξηραίνονται αἱ κοιλίαι ῥηϊδίως. ἦν δὲ τὸ θέρος ἔπομβρον γένηται καὶ νότιον καὶ τὸ μετόπωρον, τὸν χειμῶνα ἀνάγκη νοσερὸν εἶναι καὶ τοῖς φλεγματίησι καὶ τοῖς γεραιτέροισι τεσσαράκοντα ἐτέων καύσους γίνεσθαι εἰκός, τοῖσι δὲ χολώδεσι πλευρίτιδας καὶ περιπνευμονίας. ἦν δὲ τὸ θέρος ἀύχμηρὸν γένηται καὶ βόρειον, τὸ δὲ μετόπωρον ἔπομβρον καὶ νότιον, κεφαλαλγίας ἐς τὸν χειμῶνα καὶ σφακέλους τοῦ ἐγκεφάλου εἰκός γίνεσθαι, καὶ προσέτι βράγχους καὶ κορύζας καὶ βῆχας, ἐνίοισι δὲ καὶ φθίσις. ἦν δὲ βόρειόν τε ἦ καὶ ἄνυδρον καὶ μήτε ὑπὸ κύνα ἔπομβρον μήτε ἐπὶ τῷ ἀρκτούρω, τοῖσι μὲν φλεγματίησι φύσει συμφέρει μάλιστα καὶ τοῖς ὑγροῖς τὰς φύσις καὶ τῆσι γυναιξί· τοῖσι δὲ χολώδεσι τοῦτο πολεμιώτατον γίνεται. λίην γὰρ ἀναξηραίνονται καὶ ὀφθαλμίας αὐτοῖσιν ἐπιγίνονται ξηραί, καὶ πυρετοὶ ὀξέες καὶ πολυχρόνιοι, ἐνίοισι δὲ καὶ μελαγχολία. τῆς γὰρ χολῆς τὸ μὲν ὑγρότατον καὶ ὑδαρέστατον ἀναξηραίνεται καὶ ἀναλίσκεται, τὸ δὲ παχύτατον καὶ δριμύτατον λείπεται καὶ τοῦ αἵματος κατὰ τὸν αὐτὸν λόγον· ἀφ' ὧν ταῦτα τὰ νοσεύματα αὐτοῖσι γίνεται. τοῖσι δὲ φλεγματίησι πάντα ταῦτα ἀρωγά ἐστίν. ἀποξηραίνονται γὰρ καὶ ἐς τὸν χειμῶνα ἀφικνέονται οὐ πλαδῶντες, ἀλλὰ ἀναξηραίνόμενοι.

10. And respecting the seasons, one may judge whether the year will prove sickly or healthy from the following observations:- If the appearances connected with the rising and setting stars be as they should be; if there be rains in autumn; if the winter be mild, neither very tepid nor unseasonably cold, and if in spring the rains be seasonable, and so also in summer, the year is likely to prove healthy. But if the winter be dry and northerly, and the spring showery and southerly, the

summer will necessarily be of a febrile character, and give rise to ophthalmies and dysenteries. For when suffocating heat sets in all of a sudden, while the earth is moistened by the vernal showers, and by the south wind, the heat is necessarily doubled from the earth, which is thus soaked by rain and heated by a burning sun, while, at the same time, men's bellies are not in an orderly state, nor the brain properly dried; for it is impossible, after such a spring, but that the body and its flesh must be loaded with humors, so that very acute fevers will attack all, but especially those of a phlegmatic constitution. Dysenteries are also likely to occur to women and those of a very humid temperament. And if at the rising of the Dogstar rain and wintry storms supervene, and if the etesian winds blow, there is reason to hope that these diseases will cease, and that the autumn will be healthy; but if not, it is likely to be a fatal season to children and women, but least of all to old men; and that convalescents will pass into quartans, and from quartans into dropsies; but if the winter be southerly, showery and mild, but the spring northerly, dry, and of a wintry character, in the first place women who happen to be with child, and whose accouchement should take place in spring, are apt to miscarry; and such as bring forth, have feeble and sickly children, so that they either die presently or are tender, feeble, and sickly, if they live. Such is the case with the women. The others are subject to dysenteries and dry ophthalmies, and some have catarrhs beginning in the head and descending to the lungs. Men of a phlegmatic temperament are likely to have dysenteries; and women, also, from the humidity of their nature, the phlegm descending downwards from the brain; those who are bilious, too, have dry ophthalmies from the heat and dryness of their flesh; the aged, too, have catarrhs from their flabbiness and melting of the veins, so that some of them die suddenly and some become paralytic on the right side or the left. For when, the winter being southerly and the body hot, the blood and veins are not properly constricted; a spring that is northerly, dry, and cold, having come on, the brain when it should have been expanded and purged, by the coryza and hoarseness is then constricted and contracted, so that the summer and the heat occurring suddenly, and a change supervening, these diseases fall out. And such cities as lie well to the sun and winds, and use good waters, feel these changes less, but such as use marshy and pooly waters, and lie well both as regards the winds and the sun, these all feel it more. And if the summer be dry, those diseases soon cease, but if rainy, they are protracted; and there is danger of any sore that there is becoming phagedenic from any cause; and lenteries and dropsies supervene at the conclusion of diseases; for the bowels are not readily dried up. And if the summer be rainy and southerly, and next the autumn, the winter must, of necessity, be sickly, and ardent fevers are likely to attack those that are

phlegmatic, and more elderly than forty years, and pleurisies and peripneumonies those that are bilious. But if the summer is parched and northerly, but the autumn rainy and southerly, headache and sphacelus of the brain are likely to occur; and in addition hoarseness, coryza, coughs, and in some cases, consumption. But if the season is northerly and without water, there being no rain, neither after the Dogstar nor Arcturus; this state agrees best with those who are naturally phlegmatic, with those who are of a humid temperament, and with women; but it is most inimical to the bilious; for they become much parched up, and ophthalmies of a dry nature supervene, fevers both acute and chronic, and in some cases melancholy; for the most humid and watery part of the bile being consumed, the thickest and most acrid portion is left, and of the blood likewise, when these diseases came upon them. But all these are beneficial to the phlegmatic, for they are thereby dried up, and reach winter not oppressed with humors, but with them dried up.

11. Κατὰ ταῦτά τις ἐννοεῦμενος καὶ σκοπεύμενος προειδεῖ ἂν τὰ πλεῖστα τῶν μελλόντων ἔσσεσθαι ἀπὸ τῶν μεταβολέων. φυλάσσεσθαι δὲ χρὴ μάλιστα τὰς μεταβολὰς τῶν ὥρέων τὰς μεγίστας καὶ μήτε φάρμακον διδόναι ἐκόντα μήτε καίειν ὃ τι ἐς κοιλίην μήτε τάμνειν, πρὶν παρέλθωσιν ἡμέραι δέκα ἢ καὶ πλείονες· μέγιστα δὲ εἰσιν αἶδε αἱ τέσσαρες καὶ ἐπικινδυνόταται· ἡλίου τροπαὶ ἀμφοτέραι καὶ μᾶλλον αἱ θεριναὶ καὶ αἱ ἰσημερία νομιζόμεναι εἶναι ἀμφοτέραι, μᾶλλον δὲ αἱ μετοπωριναί· δεῖδὲ καὶ τῶν ἄστρον τὰς ἐπιτολὰς φυλάσσεσθαι καὶ μάλιστα τοῦ κυνός, ἔπειτα ἀρκτούρου, καὶ ἔτι πληϊάδων δύσιν. τὰ τε γὰρ νοσεύματα μάλιστα ἐν ταύτησι τῆσιν ἡμέρησιν κρίνεται. καὶ τὰ μὲν ἀποφθίνει, τὰ δὲ λήγει, τὰ δὲ ἄλλα πάντα μεθίσταται ἐς ἕτερον εἶδος καὶ ἐτέρην κατάστασιν.

11. Whoever studies and observes these things may be able to foresee most of the effects which will result from the changes of the seasons; and one ought to be particularly guarded during the greatest changes of the seasons, and neither willingly give medicines, nor apply the cautery to the belly, nor make incisions there until ten or more days be past. Now, the greatest and most dangerous are the two solstices, and especially the summer, and also the two equinoxes, but especially the autumnal. One ought also to be guarded about the rising of the stars, especially of the Dogstar, then of Arcturus, and then the setting of the Pleiades; for diseases are especially apt to prove critical in those days, and some prove fatal, some pass off, and all others change to another form and another constitution. So it is with regard to them.

12. Περὶ μὲν τούτων οὕτως ἔχει. βούλομαι δὲ περὶ τῆς Ἀσίας καὶ τῆς Εὐρώπης δεῖξαι ὅκόσον διαφέρουσιν ἀλλήλων ἐς τὰ πάντα καὶ περὶ τῶν ἐθνέων τῆς μορφῆς, ὅτι διαλλάσσει καὶ μηδὲν ἔοικεν ἀλλήλοισιν. περὶ μὲν οὖν ἀπάντων πολὺς ἂν εἴη λόγος, περὶ δὲ τῶν μεγίστων καὶ πλεῖστον διαφερόντων ἐρέω ὡς μοι δοκεῖ ἔχειν. τὴν Ἀσίην πλεῖστον διαφέρειν φημὶ τῆς Εὐρώπης ἐς τὰς φύσεις τῶν συμπάντων τῶν τε ἐκ τῆς γῆς φυομένων καὶ τῶν ἀνθρώπων. πολὺ γὰρ καλλίονα καὶ μέζονα πάντα γίνεται ἐν τῇ Ἀσίῃ, ἢ τε χώρα τῆς χώρας ἡμερωτέρη καὶ τὰ ἥθεα τῶν ἀνθρώπων ἡπιώτερα καὶ εὐοργητότερα. τὸ δὲ αἴτιον τούτων ἡ κρήσις τῶν ὠρέων, ὅτι τοῦ ἡλίου ἐν μέσῳ τῶν ἀνατολέων κεῖται πρὸς τὴν ἡῶ τοῦ τε ψυχροῦ πορρωτέρω. τὴν δὲ αὔξησιν καὶ ἡμερότητα παρέχει πλεῖστον ἀπάντων, ὅκοταν μηδὲν ἢ ἐπικρατέον βιαίως, ἀλλὰ παντὸς ἰσομοιρῆ δυναστεύῃ. ἔχει δὲ κατὰ τὴν Ἀσίην πανταχῆ ὁμοίως, ἀλλ' ὅση μὲν τῆς χώρας ἐν μέσῳ κεῖται τοῦ θερμοῦ καὶ τοῦ ψυχροῦ, αὕτη μὲν εὐκαρποτάτη ἐστὶ καὶ εὐδενδροτάτη καὶ εὐδιεστάτη καὶ ὕδασι καλλίστοισι κέχρηται τοῖσιν τε οὐρανίοισι καὶ τοῖς ἐκ τῆς γῆς. οὔτε γὰρ ὑπὸ τοῦ θερμοῦ ἐκκέκασται λίην οὔτε ὑπὸ αὐχμῶν καὶ ἀνυδρίας ἀναξηραίνεται, οὔτε ὑπὸ ψύχους βεβιασμένη οὔτε νοτία τε καὶ διάβροχος ἐστὶν ὑπὸ τε ὄμβρων πολλῶν καὶ χιόνος· τὰ τε ὠραῖα αὐτόθι πολλὰ εἰκὸς γίνεσθαι, ὅκοσα τε ἀπὸ σπερμάτων καὶ ὅκοσα αὐτῇ ἡ γῆ ἀναδιδοῖ φυτὰ, ὧν τοῖς καρποῖσι χρέονται ἄνθρωποι, ἡμεροῦντες ἐξ ἀγρίων καὶ ἐς ἐπιτήδειον μεταφυτεύοντες· τὰ τε ἐντρεφόμενα κτήνεα εὐθηνεῖν εἰκὸς, καὶ μάλιστα τίκτειν τε πυκνότατα καὶ ἐκτρέφειν κάλλιστα· τοὺς τε ἀνθρώπους εὐτραφέας εἶναι καὶ τὰ εἶδεα καλλίστους καὶ μεγέθει μεγίστους καὶ ἡκιστα διαφόρους ἐς τὰ τε εἶδεα αὐτῶν καὶ τὰ μεγέθεα· εἰκὸς τε τὴν χώραν ταύτην τοῦ ἥρος ἐγγύτατα εἶναι κατὰ τὴν φύσιν καὶ τὴν μετριότητα τῶν ὠρέων. τὸ δὲ ἀνδρεῖον καὶ τὸ ταλαίπωρον καὶ τὸ ἔμπονον καὶ τὸ θυμοειδὲς οὐκ ἂν δύναίτο ἐν τοιαύτῃ φύσει ἐγγίνεσθαι οὔτε ὁμοφύλου οὔτε ἀλλοφύλου, ἀλλὰ τὴν ἡδονὴν ἀνάγκη κρατεῖν ..... διότι πολὺμορφα γίνεται τὰ ἐν τοῖς θηρίοις.

12. I wish to show, respecting Asia and Europe, how, in all respects, they differ from one another, and concerning the figure of the inhabitants, for they are different, and do not at all resemble one another. To treat of all would be a long story, but I will tell you how I think it is with regard to the greatest and most marked differences. I say, then, that Asia differs very much from Europe as to the nature of all things, both with regard to the productions of the earth and the inhabitants, for everything is produced much more beautiful and large in Asia; the country is milder, and the dispositions of the inhabitants also are more gentle and affectionate. The cause of this is the temperature of the seasons, because it lies in the middle of the risings of the sun towards the east, and removed from the cold (and heat), for nothing tends to growth and mildness so much as when

the climate has no predominant quality, but a general equality of temperature prevails. It is not everywhere the same with regard to Asia, but such parts of the country as lie intermediate between the heat and the cold, are the best supplied with fruits and trees, and have the most genial climate, and enjoy the purest waters, both celestial and terrestrial. For neither are they much burnt up by the heat, nor dried up by the drought and want of rain, nor do they suffer from the cold; since they are well watered from abundant showers and snow, and the fruits of the season, as might be supposed, grow in abundance, both such as are raised from seed that has been sown, and such plants as the earth produces of its own accord, the fruits of which the inhabitants make use of, training them from their wild state and transplanting them to a suitable soil; the cattle also which are reared there are vigorous, particularly prolific, and bring up young of the fairest description; the inhabitants too, are well fed, most beautiful in shape, of large stature, and differ little from one another either as to figure or size; and the country itself, both as regards its constitution and mildness of the seasons, may be said to bear a close resemblance to the spring. Manly courage, endurance of suffering, laborious enterprise, and high spirit, could not be produced in such a state of things either among the native inhabitants or those of a different country, for there pleasure necessarily reigns. For this reason, also, the forms of wild beasts there are much varied. Thus it is, as I think, with the Egyptians and Libyans.

13. Περὶ μὲν οὖν Αἰγυπτίων καὶ Λιβύων οὕτως ἔχειν μοι δοκεῖ. περὶ δὲ τῶν ἐν δεξιῇ τοῦ ἡλίου τῶν ἀνατολέων τῶν θερινῶν μέχρι Μαιώτιδος λίμνης — οὗτος γὰρ ὄρος τῆς Εὐρώπης καὶ τῆς Ἀσίας — ὧδε ἔχει περὶ αὐτῶν· τὰ δὲ ἔθνεα ταῦτα ταύτη διάφορα αὐτὰ ἐσὺτῶν μᾶλλον ἐστὶ τῶν προδιηγημένων διὰ τὰς μεταβολὰς τῶν ὥρέων καὶ τῆς χώρας τὴν φύσιν. ἔχει δὲ καὶ κατὰ τὴν γῆν ὁμοίως ἄπερ καὶ κατὰ τοὺς ἄλλους ἀνθρώπους. ὅκου γὰρ αἱ ὄραι μεγίστας μεταβολὰς ποιοῦνται καὶ πυκνοτάτας, ἐκεῖ καὶ ἡ χώρα ἀγριωτάτη καὶ ἀνωμαλωτάτη ἐστὶ, καὶ εὐρήσεις ὄρεα τε πλεῖστα καὶ δάσέα καὶ πεδία καὶ λειμῶνας ἐόντας. ὅκου δὲ αἱ ὄραι μὴ μέγα ἀλλάσσουσιν, ἐκείνοις ἡ χώρα ὁμαλωτάτη ἐστίν. οὕτω δὲ ἔχει καὶ περὶ τῶν ἀνθρώπων, εἴ τις βούλεται ἐνθυμεῖσθαι. εἰσὶ γὰρ φύσεις αἱ μὲν ὄρεσιν ἐοικυῖαι δενδρώδεσί τε καὶ ἐφύδροισιν, αἱ δὲ λεπτοῖσί τε καὶ ἀνύδροις, αἱ δὲ λειμακεστέροις τε καὶ ἐλώδεσι, αἱ δὲ πεδίῳ τε καὶ ψιλῇ καὶ ξηρῇ γῆ. αἱ γὰρ ὄραι αἱ μεταλλάσσουσαι τῆς μορφῆς τὴν φύσιν εἰσὶ διάφοροι. ἦν δὲ διάφοροι ἕωσι μέγα σφέων αὐτέων, διαφοραὶ καὶ πλείονες γίνονται τοῖς εἶδεσι.

13. But concerning those on the right hand of the summer risings of the sun as far as the Palus Maeotis (for this is the boundary of Europe and Asia), it is with

them as follows: the inhabitants there differ far more from one another than those I have treated of above, owing to the differences of the seasons and the nature of the soil. But with regard to the country itself, matters are the same there as among all other men; for where the seasons undergo the greatest and most rapid changes, there the country is the wildest and most unequal; and you will find the greatest variety of mountains, forests, plains, and meadows; but where the seasons do not change much there the country is the most even; and, if one will consider it, so is it also with regard to the inhabitants; for the nature of some is like to a country covered with trees and well watered; of some, to a thin soil deficient in water; of others, to fenny and marshy places; and of some again, to a plain of bare and parched land. For the seasons which modify their natural frame of body are varied, and the greater the varieties of them the greater also will be the differences of their shapes.

14. Καὶ ὀκόσα μὲν ὀλίγον διαφέρει τῶν ἐθνέων παραλείψω, ὀκόσα δὲ μεγάλα ἢ φύσει ἢ νόμῳ, ἐρέω περὶ αὐτῶν ὡς ἔχει. καὶ πρῶτον περὶ τῶν Μακροκεφάλων. τούτων γὰρ οὐκ ἔστιν ἄλλο ἔθνος ὀμοίᾳς τὰς κεφαλὰς ἔχον οὐδέν· τὴν μὲν γὰρ ἀρχὴν ὁ νόμος αἰτιώτατος ἐγένετο τοῦ μήκεος τῆς κεφαλῆς, νῦν δὲ καὶ ἡ φύσις συμβάλλεται τῷ νόμῳ. τοὺς γὰρ μακροτάτην ἔχοντας τὴν κεφαλὴν γενναιοτάτους ἠγέονται. ἔχει δὲ περὶ νόμου ὧδε· τὸ παιδίον ὀκόταν γένηται τάχιστα, τὴν κεφαλὴν αὐτοῦ ἔτι ἀπαλὴν ἐοῦσαν μαλθακοῦ ἐόντος ἀναπλάσσουσι τῆσι χερσὶ καὶ ἀναγκάζουσιν ἐς τὸ μῆκος αὐξεσθαι δεσμά τε προσφέροντες καὶ τεχνήματα ἐπιτήδεια, ὑφ' ὧν τὸ μὲν σφαιροειδὲς τῆς κεφαλῆς κακοῦται, τὸ δὲ μῆκος αὐξεται. οὕτως τὴν ἀρχὴν ὁ νόμος κατειργάσατο, ὥστε ὑπὸ βίης τοιαύτην τὴν φύσιν γενέσθαι· τοῦ δὲ χρόνου προϊόντος ἐν φύσει ἐγένετο, ὥστε τὸν νόμον μηκέτι ἀναγκάζειν. ὁ γὰρ γόνος πανταχόθεν ἔρχεται τοῦ σώματος, ἀπὸ τε τῶν ὑγιερῶν ὑγιερὸς ἀπὸ τε τῶν νοσερῶν νοσερός. εἰ οὖν γίνονται ἔκ τε φαλακρῶν φαλακροὶ καὶ ἐκ γλαυκῶν γλαυκοὶ καὶ ἐκ διεστραμμένων στρεβλοὶ ὡς ἐπὶ τὸ πλῆθος, καὶ περὶ τῆς ἄλλης μορφῆς ὁ αὐτὸς λόγος, τί κωλύει καὶ ἐκ μακροκεφάλου μακροκέφαλον γίνεσθαι; νῦν δὲ ὀμοίως οὐκέτι γίνονται ὡς πρότερον· ὁ γὰρ νόμος οὐκέτι ἰσχύει διὰ τὴν ὀμιλίην τῶν ἀνθρώπων.

14. I will pass over the smaller differences among the nations, but will now treat of such as are great either from nature, or custom; and, first, concerning the Macrocephali. There is no other race of men which have heads in the least resembling theirs. At first, usage was the principal cause of the length of their head, but now nature cooperates with usage. They think those the most noble who have the longest heads. It is thus with regard to the usage: immediately after the child is born, and while its head is still tender, they fashion it with their

hands, and constrain it to assume a lengthened shape by applying bandages and other suitable contrivances whereby the spherical form of the head is destroyed, and it is made to increase in length. Thus, at first, usage operated, so that this constitution was the result of force: but, in the course of time, it was formed naturally; so that usage had nothing to do with it; for the semen comes from all parts of the body, sound from the sound parts, and unhealthy from the unhealthy parts. If, then, children with bald heads are born to parents with bald heads; and children with blue eyes to parents who have blue eyes; and if the children of parents having distorted eyes squint also for the most part; and if the same may be said of other forms of the body, what is to prevent it from happening that a child with a long head should be produced by a parent having a long head? But now these things do not happen as they did formerly, for the custom no longer prevails owing to their intercourse with other men. Thus it appears to me to be with regard to them.

15. Περὶ μὲν οὖν τούτων οὕτως ἔχει μοι δοκεῖ. περὶ δὲ τῶν ἐν Φάσει· ἡ χώρα ἐκείνη ἐλώδης ἐστὶ καὶ θερμὴ καὶ ὑδατείνῃ καὶ δασεῖα, ὄμβροι τε αὐτόθι γίνονται πᾶσαν ὥρην πολλοὶ τε καὶ ἰσχυροί· ἢ τε δίαιτα τοῖς ἀνθρώποις ἐν τοῖς ἔλεσιν ἐστίν, τὰ τε οἰκήματα ξύλινα καὶ καλάμινα ἐν τοῖς ὕδασι μεμηχανημένα· ὀλίγη τε χρέονται βαδίσει κατὰ τὴν πόλιν καὶ τὸ ἐμπόριον, ἀλλὰ μονοξύλοις διαπλέουσιν ἄνω καὶ κάτω· διώρυγες γὰρ πολλαὶ εἰσι. τὰ δὲ ὕδατα θερμὰ καὶ στάσιμα πίνουσιν ὑπὸ τε τοῦ ἡλίου σηπόμενα καὶ ὑπὸ τῶν ὀμβρῶν ἐπαυξόμενα. αὐτός τε ὁ Φᾶσις στασιμώτατος πάντων τῶν ποταμῶν καὶ ῥέων ἠπιώτατα. οἱ τε καρποὶ οἱ γινόμενοι αὐτόθι πάντες ἀναλδέες εἰσὶ καὶ τεθηλυσμένοι καὶ ἀτελέες ὑπὸ πολυπληθείης τοῦ ὕδατος· διὸ καὶ οὐ πεπαίνονται. ἡὲρ τε πολὺς κατέχει τὴν χώραν ἀπὸ τῶν ὑδάτων. διὰ ταύτας δὲ τὰς προφάσις τὰ εἶδεα ἀπηλλαγμένα τῶν λοιπῶν ἀνθρώπων ἔχουσιν οἱ Φασηνοί· τὰ τε γὰρ μεγέθεα μεγάλοι, τὰ πάχεα δ' ὑπερπάχητες, ἄρθρον τε κατάδηλον οὐδὲν οὐδὲ φλέψ· τὴν τε χροίην ὠχρὴν ἔχουσιν ὥσπερ ὑπὸ ἰκτέρου ἐχόμενοι· φθέγγονται τε βαρύτατον ἀνθρώπων, τῷ ἡέρι χρεώμενοι οὐ λαμπρῷ, ἀλλὰ νοτώδει καὶ θολερῷ· πρὸς τε τὸ ταλαιπωρεῖν τὸ σῶμα ἀργότεροι πεφύκασιν. αἱ τε ὥραι οὐ πολὺ μεταλλάσσουν οὔτε πρὸς τὸ πνίγος οὔτε πρὸς τὸ ψυχός. τὰ τε πνεύματα τὰ πολλὰ νότια πλὴν αὔρης μιῆς ἐπιχωρίας. αὕτη δὲ πνεῖ ἐνίοτε βίαιος καὶ χαλεπὴ καὶ θερμὴ· καὶ κέγχρονα ὀνομάζουσι τοῦτο τὸ πνεῦμα. ὁ δὲ βορέης οὐ σφόδρα ἀφ' ἰκνεῖται· ὀκόταν δὲ πνέη, ἀσθενὴς καὶ βληχρὸς.

15. As to the inhabitants of Phasis, their country is fenny, warm, humid, and wooded; copious and severe rains occur there at all seasons; and the life of the inhabitants is spent among the fens; for their dwellings are constructed of wood



and reeds, and are erected amidst the waters; they seldom practice walking either to the city or the market, but sail about, up and down, in canoes constructed out of single trees, for there are many canals there. They drink the hot and stagnant waters, both when rendered putrid by the sun, and when swollen with rains. The Phasis itself is the most stagnant of all rivers, and runs the smoothest; all the fruits which spring there are unwholesome, feeble and imperfect growth, owing to the redundance of water, and on this account they do not ripen, for much vapor from the waters overspreads the country. For these reasons the Phasians have shapes different from those of all other men; for they are large in stature, and of a very gross habit of body, so that not a joint nor vein is visible; in color they are sallow, as if affected with jaundice. Of all men they have the roughest voices, from their breathing an atmosphere which is not clear, but misty and humid; they are naturally rather languid in supporting bodily fatigue. The seasons undergo but little change either as to heat or cold; their winds for the most part are southerly, with the exception of one peculiar to the country, which sometimes blows strong, is violent and hot, and is called by them the wind cenchron. The north wind scarcely reaches them, and when it does blow it is weak and gentle. Thus it is with regard to the different nature and shape of the inhabitants of Asia and Europe.

16. Καὶ περὶ μὲν τῆς φύσιος τῆς διαφορῆς καὶ τῆς μορφῆς τῶν ἐν τῇ Ἀσίῃ καὶ τῇ Εὐρώπῃ οὕτως ἔχει. περὶ δὲ τῆς ἀθυμίας τῶν ἀνθρώπων καὶ τῆς ἀνανδρείης, ὅτι ἀπολεμώτεροί εἰσι τῶν Εὐρωπαίων οἱ Ἀσιηνοὶ καὶ ἡμερώτεροι τὰ ἥθεα αἱ ὥραι αἴτιαι μάλιστα, οὐ μεγάλας τὰς μεταβολὰς ποιούμεναι οὔτε ἐπὶ τὸ θερμὸν οὔτε ἐπὶ τὸ ψυχρὸν, ἀλλὰ παραπλησίως. οὐ γὰρ γίνονται ἐκπλήξεις τῆς γνώμης οὔτε μετὰστασις ἰσχυρὴ τοῦ σώματος, ἀφ' ὅτων εἰκὸς τὴν ὀργὴν ἀγριοῦσθαι τε καὶ τοῦ ἀγνώμονος καὶ θυμοειδέος μετέχειν μᾶλλον ἢ ἐν τῷ αὐτῷ αἰεὶ ἔοντα. αἱ γὰρ μεταβολαὶ εἰσι τῶν πάντων αἱ ἐπεγείρουσαι τὴν γνώμην τῶν ἀνθρώπων καὶ οὐκ ἔδωσαι ἀτρεμίζειν. διὰ ταύτας ἐμοὶ δοκεῖ τὰς προφάσιας ἀναλκῆς εἶναι τὸ γένος τὸ Ἀσιηνὸν καὶ προσέτι διὰ τοὺς νόμους. τῆς γὰρ Ἀσίης τὰ πολλὰ βασιλεύεται. ὅκου δὲ μὴ αὐτοὶ ἐωυτῶν εἰσι καρτεροὶ οἱ ἄνθρωποι μηδὲ αὐτόνομοι, ἀλλὰ δεσπόζονται, οὐ περὶ τούτου αὐτοῖσιν ὁ λόγος ἐστίν, ὅκως τὰ πολέμια ἀσκήσωσιν, ἀλλ' ὅκως μὴ δόξωσι μάχιμοι εἶναι. οἱ γὰρ κίνδυνοι οὐχ ὁμοιοὶ εἰσι. τοὺς μὲν γὰρ στρατεύεσθαι εἰκὸς καὶ ταλαιπωρεῖν καὶ ἀποθνήσκειν ἐξ ἀνάγκης ὑπὲρ τῶν δεσποτέων ἀπὸ τε παιδίων καὶ γυναικὸς ἔοντας καὶ τῶν λοιπῶν φίλων. καὶ ὅκόσα μὲν ἂν χρηστὰ καὶ ἀνδρεῖα ἐργάσωνται, οἱ δεσπότες ἀπ' αὐτῶν αὔξονται τε καὶ ἐκφύονται, τοὺς δὲ κινδύνους καὶ θανάτους αὐτοὶ καρποῦνται. ἔτι δὲ πρὸς τούτοις τῶν τοιούτων ἀνθρώπων ἀνάγκη ἐρημοῦσθαι τὴν γῆν ὑπὸ τε πολεμίων καὶ ἀργίης, ὥστε καὶ εἴ τις φύσει πέφυκεν ἀνδρεῖος καὶ εὐψυχος,

ἀποτρέπεσθαι τὴν γνώμην ὑπὸ τῶν νόμων. μέγα δὲ τεκμήριον τούτων· ὀκόσοι γὰρ ἐν τῇ Ἀσίῃ Ἕλληνες ἢ βάρβαροι μὴ δεσπόζονται, ἀλλ' αὐτόνομοί εἰσι καὶ ἐωυτοῖσι ταλαιπωρεῦσιν, οὗτοι μαχιμώτατοί εἰσι πάντων· τοὺς γὰρ κινδύνους ἐωυτῶν περὶ κινδυνεύουσι, καὶ τῆς ἀνδρείης αὐτοὶ τὰ ἄθλα φέρονται καὶ τῆς δειλίας τὴν ζημίην ὡσαύτως. εὐρήσεις δὲ καὶ τοὺς Ἀσιηνοὺς διαφέροντας αὐτοὺς ἐωυτῶν, τοὺς μὲν βελτίονας, τοὺς δὲ φαυλοτέρους ἐόντας. τούτων δὲ αἱ μεταβολαὶ αἴτιαι τῶν ὥρέων, ὥσπερ μοι εἴρηται ἐν τοῖς προτέροισι.

16. And with regard to the pusillanimity and cowardice of the inhabitants, the principal reason the Asiatics are more unwarlike and of gentler disposition than the Europeans is, the nature of the seasons, which do not undergo any great changes either to heat or cold, or the like; for there is neither excitement of the understanding nor any strong change of the body whereby the temper might be ruffled and they be roused to inconsiderate emotion and passion, rather than living as they do always in the state. It is changes of all kinds which arouse understanding of mankind, and do not allow them to get into a torpid condition. For these reasons, it appears to me, the Asiatic race is feeble, and further, owing to their laws; for monarchy prevails in the greater part of Asia, and where men are not their own masters nor independent, but are the slaves of others, it is not a matter of consideration with them how they may acquire military discipline, but how they may seem not to be warlike, for the dangers are not equally shared, since they must serve as soldiers, perhaps endure fatigue, and die for their masters, far from their children, their wives, and other friends; and whatever noble and manly actions they may perform lead only to the aggrandizement of their masters, whilst the fruits which they reap are dangers and death; and, in addition to all this, the lands of such persons must be laid waste by the enemy and want of culture. Thus, then, if any one be naturally warlike and courageous, his disposition will be changed by the institutions. As a strong proof of all this, such Greeks or barbarians in Asia as are not under a despotic form of government, but are independent, and enjoy the fruits of their own labors, are of all others the most warlike; for these encounter dangers on their own account, bear the prizes of their own valor, and in like manner endure the punishment of their own cowardice. And you will find the Asiatics differing from one another, for some are better and others more dastardly; of these differences, as I stated before, the changes of the seasons are the cause. Thus it is with Asia.

17. Καὶ περὶ μὲν τῶν ἐν τῇ Ἀσίῃ οὕτως ἔχει. ἐν δὲ τῇ Εὐρώπῃ ἔστιν ἔθνος Σκυθικόν, ὃ περὶ τὴν λίμνην οἰκεῖ τὴν Μαιῶτιν διαφέρον τῶν ἐθνέων τῶν ἄλλων. Σαυρομάται καλεῦνται. τούτων αἱ γυναῖκες ἰπάζονται τε καὶ τοξεύουσι

καὶ ἀκοντίζουσιν ἀπὸ τῶν ἵππων καὶ μάχονται τοῖς πολεμίοις, ἕως ἂν παρθένοι ἕωσιν. οὐκ ἀποπαρθενεύονται δέ, μέχρι ἂν τῶν πολεμίων τρεῖς ἀποκτείνωσι, καὶ οὐ πρότερον συνοικέουσιν ἢπερ τὰ ἱερὰ θύσωσιν τὰ ἔννομα. ἢ δ' ἂν ἄνδρα ἐωυτῇ ἄρηται, παύεται ἱπαζομένη, ἕως ἂν μὴ ἀνάγκη καταλάβῃ παγκοίνου στρατείας. τὸν δεξιὸν δὲ μαζὸν οὐκ ἔχουσι. παιδίους γὰρ ἐοῦσιν ἔτι νηπίους αἱ μητέρες χαλκίον τετεχνημένον ἐπ' αὐτῷ τούτῳ διάπυρον ποιέουσαι πρὸς τὸν μαζὸν τιθέασιν τὸν δεξιὸν καὶ ἐπικαίεται, ὥστε τὴν αὔξησιν φθείρεσθαι, ἐς δὲ τὸν δεξιὸν ὦμον καὶ βραχίονα πᾶσαν τὴν ἰσχὺν καὶ τὸ πλῆθος ἐκδιδόναι.

17. In Europe there is a Scythian race, called Sauromatae, which inhabits the confines of the Palus Maeotis, and is different from all other races. Their women mount on horseback, use the bow, and throw the javelin from their horses, and fight with their enemies as long as they are virgins; and they do not lay aside their virginity until they kill three of their enemies, nor have any connection with men until they perform the sacrifices according to law. Whoever takes to herself a husband, gives up riding on horseback unless the necessity of a general expedition obliges her. They have no right breast; for while still of a tender age their mothers heat strongly a copper instrument constructed for this very purpose, and apply it to the right breast, which is burnt up, and its development being arrested, all the strength and fullness are determined to the right shoulder and arm.

18. Περὶ δὲ τῶν λοιπῶν Σκυθέων τῆς μορφῆς, ὅτι αὐτοὶ αὐτοῖσιν εἰκόμασι καὶ οὐδαμῶς ἄλλοις, οὗτος λόγος καὶ περὶ τῶν Αἰγυπτίων, πλὴν ὅτι οἱ μὲν ὑπὸ τοῦ θερμοῦ εἰσι βεβιασμένοι, οἱ δὲ ὑπὸ τοῦ ψυχροῦ. ἢ δὲ Σκυθέων ἐρημὴ καλυμένη πεδιάς ἐστὶ καὶ λειμακώδης καὶ ψιλὴ καὶ ἔνυδρος μετρίως. ποταμοὶ γὰρ εἰσι μεγάλοι, οἱ ἐξοχετεύουσι τὸ ὕδωρ ἐκ τῶν πεδίων. ἐνταῦθα καὶ οἱ Σκύθαι διαιτεῦνται, Νομάδες δὲ καλεῦνται, ὅτι οὐκ ἔστιν οἰκήματα, ἀλλ' ἐν ἀμάξησιν οἰκεῦσιν. αἱ δὲ ἄμαξαί εἰσιν αἱ μὲν ἐλάχισται τετράκυκλοι, αἱ δὲ ἐξάκυκλοι· αὗται δὲ πῖλοις περιπεφραγμένοι· εἰσὶ δὲ καὶ τετεχνασμένοι ὥσπερ οἰκήματα τὰ μὲν διπλᾶ, τὰ δὲ τριπλᾶ. ταῦτα δὲ καὶ στεγνὰ πρὸς ὕδωρ καὶ πρὸς χιόνα καὶ πρὸς τὰ πνεύματα. τὰς δὲ ἀμάξας ἔλκουσι ζεύγεα τὰς μὲν δύο, τὰς δὲ τρία βοῶν κέρως ἄτερ. οὐ γὰρ ἔχουσι κέρατα ὑπὸ τοῦ ψύχους. ἐν ταύτησι μὲν οὖν τῆσιν ἀμάξησιν αἱ γυναῖκες διαιτεῦνται. αὐτοὶ δ' ἐφ' ἵππων ὀχεῦνται οἱ ἄνδρες. ἔπονται δὲ αὐτοῖς καὶ τὰ πρόβατα τὰ ἐόντα καὶ αἱ βόες καὶ οἱ ἵπποι. μένουσι δ' ἐν τῷ αὐτῷ τοσοῦτον χρόνον, ὅσον ἂν ἀποχρῆ αὐτοῖσι τοῖς κτήνεσιν ὁ χόρτος· ὁκόταν δὲ μηκέτι, ἐς ἐτέρην χώραν ἔρχονται. αὐτοὶ δ' ἐσθίουσι κρέα ἐφθὰ καὶ πίνουσι γάλα ἵππων. καὶ ἱπάκην τρώγουσι· τοῦτο δ' ἐστὶ τυρὸς ἵππων.

18. As the other Scythians have a peculiarity of shape, and do not resemble any other, the same observation applies to the Egyptians, only that the latter are oppressed by heat and the former by cold. What is called the Scythian desert is a prairie, rich in meadows, high-lying, and well watered; for the rivers which carry off the water from the plains are large. There live those Scythians which are called Nomades, because they have no houses, but live in wagons. The smallest of these wagons have four wheels, but some have six; they are covered in with felt, and they are constructed in the manner of houses, some having but a single apartment, and some three; they are proof against rain, snow, and winds. The wagons are drawn by yokes of oxen, some of two and others of three, and all without horns, for they have no horns, owing to the cold. In these wagons the women live, but the men are carried about on horses, and the sheep, oxen, and horses accompany them; and they remain on any spot as long as there is provender for their cattle, and when that fails they migrate to some other place. They eat boiled meat, and drink the milk of mares, and also eat hippace, which is cheese prepared from the milk of the mare. Such is their mode of life and their customs.

19. Τὰ μὲν ἐς τὴν δίαιταν αὐτῶν οὕτως ἔχει καὶ τοὺς νόμους· περὶ δὲ τῶν ὠρέων καὶ τῆς μορφῆς, ὅτι πολὺ ἀπήλλακται τῶν λοιπῶν ἀνθρώπων τὸ Σκυθικὸν γένος καὶ ἔοικεν αὐτὸ ἐωυτῷ ὥσπερ τὸ Αἰγύπτιον καὶ ἥκιστα πολὺγονόν ἐστι, καὶ ἡ χώρα ἐλάχιστα θηρία τρέφει κατὰ μέγεθος καὶ πλῆθος. κεῖται γὰρ ὑπ' αὐτῆσι τῆσιν ἄρκτοις καὶ τοῖς ὄρεσι τοῖς Ῥιπαίοισιν, ὅθεν ὁ βορέης πνεῖ. ὁ τε ἥλιος τελευτῶν ἐγγύτατα γίνεται, ὁκόταν ἐπὶ τὰς θερινὰς ἔλθῃ περιόδους, καὶ τότε ὀλίγον χρόνον θερμαίνει καὶ οὐ σφόδρα· τὰ δὲ πνεύματα τὰ ἀπὸ τῶν θερμῶν πνέοντα οὐκ ἀφικνεῖται, ἢν μὴ ὀλιγάκις καὶ ἀσθενέα, ἀλλ' ἀπὸ τῶν ἄρκτων αἰεὶ πνέουσι πνεύματα ψυχρὰ ἀπὸ τε χιόνος καὶ κρυστάλλου καὶ ὑδάτων πολλῶν. οὐδέποτε δὲ τὰ ὄρεα ἐκλείπει· ἀπὸ τούτων δὲ δυσοίκητά ἐστιν. ἡὴρ τε κατέχει πολὺς τῆς ἡμέρης τὰ πεδία, καὶ ἐν τούτοις διαιτεῦνται· ὥστε τὸν μὲν χειμῶνα αἰεὶ εἶναι, τὸ δὲ θέρος ὀλίγας ἡμέρας καὶ ταύτας μὴ λίην. μετέωρα γὰρ τὰ πεδία καὶ ψιλὰ καὶ οὐκ ἐστεφάνωνται ὄρεσιν, ἀλλ' ἢ ἀνάντεα ἀπὸ τῶν ἄρκτων· αὐτόθι καὶ τὰ θηρία οὐ γίνεται μεγάλα, ἀλλ' οἷά τε ἐστὶν ὑπὸ γῆν σκεπάζεσθαι. ὁ γὰρ χειμῶν κωλύει καὶ τῆς γῆς ἢ ψιλότης, ὅτι οὐκ ἔστιν ἀλέη οὐδὲ σκέπη. αἱ δὲ μεταβολαὶ τῶν ὠρέων οὐκ εἰσι μεγάλαι οὐδὲ ἰσχυραί, ἀλλ' ὁμοῖαι καὶ ὀλίγον μεταλλάσσουσαι· διότι καὶ τὰ εἶδεα ὁμοῖοι αὐτοῖς ἐωυτοῖς εἰσι σίτω τε χρεώμενοι αἰεὶ ὁμοίῳ ἐσθῆτί τε τῇ αὐτῇ καὶ θέρος καὶ χειμῶνος, τὸν τε ἡέρα ὑδατεινὸν ἔλκοντες καὶ παχύν, τὰ τε ὑδάτα πίνοντες ἀπὸ χιόνος καὶ παγετῶν, τοῦ τε ταλαιπώρου ἀπεόντες. οὐ γὰρ οἷόν τε τὸ σῶμα ταλαιπωρεῖσθαι οὐδὲ τὴν ψυχὴν, ὅκου μεταβολαὶ μὴ γίνονται ἰσχυραί. διὰ ταύτας τὰς ἀνάγκας τὰ εἶδεα αὐτῶν

παχέα ἐστὶ καὶ σαρκώδεα καὶ ἄναρθρα καὶ ὑγρὰ καὶ ἄτονα, αἱ τε κοιλίαι ὑγρόταται πασέων κοιλιῶν αἱ κάτω. οὐ γὰρ οἶόν τε νηδὺν ἀναξηραίνεσθαι ἐν τοιαύτῃ χώρῃ καὶ φύσει καὶ ὥρης καταστάσει, ἀλλὰ διὰ πικελήν τε καὶ ψιλὴν τὴν σάρκα τά τε εἶδεα ἔοικεν ἀλλήλοισι τά τε ἄρσενα τοῖς ἄρσεσι καὶ τὰ θήλεα τοῖς θήλεσι. τῶν γὰρ ὥρέων παραπλησίων ἐουσέων φθοραὶ οὐκ ἐγγίνονται οὐδὲ κακώσεις ἐν τῇ τοῦ γόνου συμπήξει, ἢν μὴ τινος ἀνάγκης βιαίου τύχη ἢ νούσου.

19. In respect of the seasons and figure of body, the Scythian race, like the Egyptian, have a uniformity of resemblance, different from all other nations; they are by no means prolific, and the wild beasts which are indigenous there are small in size and few in number, for the country lies under the Northern Bears, and the Rhiphaean mountains, whence the north wind blows; the sun comes very near to them only when in the summer solstice, and warms them but for a short period, and not strongly; and the winds blowing from the hot regions of the earth do not reach them, or but seldom, and with little force; but the winds from the north always blow, congealed, as they are, by the snow, ice, and much water, for these never leave the mountains, which are thereby rendered uninhabitable. A thick fog covers the plains during the day, and amidst it they live, so that winter may be said to be always present with them; or, if they have summer, it is only for a few days, and the heat is not very strong. Their plains are high-lying and naked, not crowned with mountains, but extending upwards under the Northern Bears. The wild beasts there are not large, but such as can be sheltered underground; for the cold of winter and the barrenness of the country prevent their growth, and because they have no covert nor shelter. The changes of the seasons, too, are not great nor violent, for, in fact, they change gradually; and therefore their figures resemble one another, as they all equally use the same food, and the same clothing summer and winter, respiring a humid and dense atmosphere, and drinking water from snow and ice; neither do they make any laborious exertions, for neither body nor mind is capable of enduring fatigue when the changes of the seasons are not great. For these reasons their shapes are gross and fleshy, with ill-marked joints, of a humid temperament, and deficient in tone: the internal cavities, and especially those of the intestines, are full of humors; for the belly cannot possibly be dry in such a country, with such a constitution and in such a climate; but owing to their fat, and the absence of hairs from their bodies, their shapes resemble one another, the males being all alike, and so also with the women; for the seasons being of a uniform temperature, no corruption or deterioration takes place in the concretion of the semen, unless from some violent cause, or from disease.

20. Μέγα δὲ τεκμήριον ἐς τὴν ὑγρότητα παρέξομαι. Σκυθέων γὰρ τοὺς πολλοὺς, ἅπαντας ὅσοι Νομάδες, εὐρήσεις κεκαυμένους τοὺς τε ὠμούς καὶ τοὺς βραχίονας καὶ τοὺς καρπούς τῶν χειρῶν καὶ τὰ στήθεα καὶ τὰ ἰσχία καὶ τὴν ὀσφῦν δι' ἄλλ' οὐδὲν ἢ διὰ τὴν ὑγρότητα τῆς φύσιος καὶ τὴν μαλακίην. οὐ γὰρ δύνανται οὔτε τοῖς τόξοις συντείνειν οὔτε τῷ ἀκοντίῳ ἐμπίπτειν τῷ ὠμῷ ὑπὸ ὑγρότητος καὶ ἀτονίης. ὀκόταν δὲ καυθέωσιν, ἀναξηραίνεται ἐκ τῶν ἄρθρων τὸ πολὺ τοῦ ὑγροῦ, καὶ ἐντονώτερα μάλλον γίνεται καὶ τροφιμώτερα καὶ ἠρθρωμένα τὰ σώματα μᾶλλον. ῥοϊκὰ δὲ γίνεται καὶ πλατέα, πρῶτον μὲν ὅτι οὐ σπαργανοῦνται ὥσπερ ἐν Αἰγύπτῳ οὐδὲ νομίζουσι διὰ τὴν ἵππασιν, ὅπως ἂν εὐέδροι ἔωσιν· ἔπειτα δὲ διὰ τὴν ἔδρην· τὰ τε γὰρ ἄρσενά, ἕως ἂν οὐχ οἶά τε ἐφ' ἵππου ὀχεῖσθαι, τὸ πολὺ τοῦ χρόνου κάθηνται ἐν τῇ ἀμάξῃ καὶ βραχὺ τῇ βαδίσει χρέονται διὰ τὰς μεταναστάσιας καὶ περιελάσιας· τὰ δὲ θήλεα θαυμαστὸν οἶον ῥοϊκὰ ἐστὶ τε καὶ βραδέα τὰ εἶδεα. πυρρὸν δὲ τὸ γένος ἐστὶ τὸ Σκυθικὸν διὰ τὸ ψῦχος, οὐκ ἐπιγυνομένου ὀξέος τοῦ ἡλίου. ὑπὸ δὲ τοῦ ψύχους ἢ λευκότης ἐπι καίεται καὶ γίνεται πυρρή.

20. I Will give you a strong proof of the humidity (laxity?) of their constitutions. You will find the greater part of the Scythians, and all the Nomades, with marks of the cautery on their shoulders, arms, wrists, breasts, hip-joints, and loins, and that for no other reason but the humidity and flabbiness of their constitution, for they can neither strain with their bows, nor launch the javelin from their shoulder owing to their humidity and atony: but when they are burnt, much of the humidity in their joints is dried up, and they become better braced, better fed, and their joints get into a more suitable condition. They are flabby and squat at first, because, as in Egypt, they are not swathed (?); and then they pay no attention to horsemanship, so that they may be adepts at it; and because of their sedentary mode of life; for the males, when they cannot be carried about on horseback, sit the most of their time in the wagon, and rarely practise walking, because of their frequent migrations and shiftings of situation; and as to the women, it is amazing how flabby and sluggish they are. The Scythian race are tawny from the cold, and not from the intense heat of the sun, for the whiteness of the skin is parched by the cold, and becomes tawny.

21. Πολύγονον δὲ οὐχ οἶόν τε εἶναι φύσιν τοιαύτην. οὔτε γὰρ τῷ ἀνδρὶ ἢ ἐπιθυμίῃ τῆς μείξιος γίνεται πολλὴ διὰ τὴν ὑγρότητα τῆς φύσιος καὶ τῆς κοιλῆς τὴν μαλθακότητά τε καὶ τὴν ψυχρότητα, ἀφ' ὅτων ἠκιστα εἰκὸς ἄνδρα οἶόν τε λαγνεύειν· καὶ ἔτι ὑπὸ τῶν ἵππων αἰεὶ κοπτόμενοι ἀσθενέες γίνονται ἐς τὴν μεῖξιν. τοῖσι μὲν ἀνδράσιν αὐταὶ αἱ προφάσιες γίνονται, τῆσι δὲ γυναιξίν ἢ τε πιότης τῆς σαρκὸς καὶ ὑγρότης· οὐ γὰρ δύνανται ἔτι συναρπάζειν αἱ μῆτραι τὸν

γόνον· οὔτε γὰρ ἐπιμήνιος κάθαρσις αὐτῆσι γίνεται ὡς χρεῶν ἐστίν, ἀλλ' ὀλίγον καὶ διὰ χρόνου, τό τε στόμα τῶν μητρέων ὑπὸ πιμελῆς συγκλείεται καὶ οὐχ ὑποδέχεται τὸν γόνον· αὐταὶ τε ἀταλαίπωροι καὶ πίερα καὶ αἱ κοιλίαι ψυχραὶ καὶ μαλθακαί. ὑπὸ τούτων τῶν ἀναγκέων οὐ πολύγονόν ἐστι τὸ γένος τὸ Σκυθικόν. μέγα δὲ τεκμήριον αἱ οἰκέτιδες ποιέουσιν· οὐ γὰρ φθάνουσι παρὰ ἄνδρα ἀφικνεύμεναι καὶ ἐν γαστρὶ ἴσχουσιν διὰ τὴν ταλαιπωρίην καὶ ἰσχνότητα τῆς σαρκός.

21. It is impossible that persons of such a constitution could be prolific, for, with the man, the sexual desires are not strong, owing to the laxity of his constitution, the softness and coldness of his belly, from all which causes it is little likely that a man should be given to venery; and besides, from being jaded by exercise on horseback, the men become weak in their desires. On the part of the men these are the causes; but on that of the women, they are embonpoint and humidity; for the womb cannot take in the semen, nor is the menstrual discharge such as it should be, but scanty and at too long intervals; and the mouth of the womb is shut up by fat and does not admit the semen; and, moreover, they themselves are indolent and fat, and their bellies cold and soft. From these causes the Scythian race is not prolific. Their female servants furnish a strong proof of this; for they no sooner have connection with a man than they prove with child, owing to their active course of life and the slenderness of body.

22. Ἔτι τε πρὸς τούτοις εὐνουχίαι γίνονται οἱ πλεῖστοι ἐν Σκύθησι καὶ γυναικεῖα ἐργάζονται καὶ ὡς αἱ γυναῖκες διατεῦνται διαλέγονται τε ὁμοίως· καλεῦνται τε οἱ τοιοῦτοι Ἀναριεῖς. οἱ μὲν οὖν ἐπιχώριοι τὴν αἰτίην προστιθέασιν θεῶ καὶ σέβονται τούτους τοὺς ἀνθρώπους καὶ προσκυνέουσι, δεδοκότες περὶ ἐωυτῶν ἕκαστοι. ἐμοὶ δὲ καὶ αὐτῶ δοκεῖ ταῦτα τὰ πάθεα θεῶ εἶναι καὶ τᾶλλα πάντα καὶ οὐδὲν ἕτερον ἑτέρου θεϊότερον οὐδὲ ἀνθρωπινώτερον, ἀλλὰ πάντα ὁμοῖα καὶ πάντα θεῶ. ἕκαστον δὲ αὐτῶν ἔχει φύσιν τὴν ἐωυτοῦ καὶ οὐδὲν ἄνευ φύσιος γίνεται. καὶ τοῦτο τὸ πάθος ὡς μοι δοκεῖ γίνεσθαι φράσω· ὑπὸ τῆς ἵππασίης αὐτοὺς κέδματα λαμβάνει, ἅτε αἰεὶ κρεμαμένων ἀπὸ τῶν ἵππων τοῖς ποσίν· ἔπειτα ἀποχωλοῦνται καὶ ἐλκοῦνται τὰ ἰσχία, οἱ ἂν σφόδρα νοσήσωσιν. ἰῶνται δὲ σφᾶς αὐτοὺς τρόπῳ τοιῶδε. ὀκόταν γὰρ ἄρχηται ἢ νοῦσος, ὀπισθεν τοῦ ὠτὸς ἑκατέρου φλέβα τάμνουσιν. ὀκόταν δὲ ἀπορρυῆ τὸ αἷμα, ὑπνος ὑπολαμβάνει ὑπὸ ἀσθενείης καὶ καθεύδουσιν. ἔπειτα ἀνεγείρονται, οἱ μὲν τινες ὑγιεῖς ἐόντες, οἱ δ' οὐ. ἐμοὶ μὲν οὖν δοκεῖ ἐν ταύτῃ τῇ ἰήσει διαφθεῖρεσθαι ὁ γόνος. εἰσὶ γὰρ παρὰ τὰ ὄτα φλέβες, ἃς ἐάν τις ἐπιτάμη, ἄγονοι γίνονται οἱ ἐπιτηθέντες. ταύτας τοίνυν μοι δοκέουσι τὰς φλέβας ἐπιτάμνειν. οἱ δὲ μετὰ ταῦτα ἐπειδὴν ἀφίκονται παρὰ γυναῖκας καὶ μὴ οἰοί τ' ἕωσι χρῆσθαι σφισιν, τὸ

πρῶτον οὐκ ἐνθυμεῦνται, ἀλλ' ἠσυχίην ἔχουσι. ὁκόταν δὲ δις καὶ τρίς καὶ πλεονάκις αὐτοῖσι πειρωμένοισι μηδὲν ἀλλοιότερον ἀποβαίνει, νομίσαντές τι ἡμαρτηκέναι τῷ θεῷ, ὃν ἐπαιτῶνται, ἐνδύονται στολὴν γυναικεῖν καταγνόντες ἑωυτῶν ἀνανδρεῖν. γυναικίζουσί τε καὶ ἐργάζονται μετὰ τῶν γυναικῶν ἃ καὶ ἐκεῖναι.

Τοῦτο δὲ πάσχουσι Σκυθέων οἱ πλούσιοι, οὐχ οἱ κάκιστοι ἀλλ' οἱ εὐγενέστατοι καὶ ἰσχὺν πλείστην κεκτημένοι, διὰ τὴν ἵππασίην, οἱ δὲ πένητες ἦσσαν· οὐ γὰρ ἱπάζονται. καίτοι ἐχρῆν, ἐπεὶ θειότερον τοῦτο τὸ νόσευμα τῶν λοιπῶν ἐστίν, οὐ τοῖς γενναιοτάτοις τῶν Σκυθέων καὶ τοῖς πλουσιωτάτοις προσπίπτει μούνοις, ἀλλὰ τοῖς ἅπασιν ὁμοίως, καὶ μᾶλλον τοῖσιν ὀλίγα κεκτημένοισιν, εἰ δὲ τιμώμενοι χαίρουσιν οἱ θεοὶ καὶ θαυμαζόμενοι ὑπ' ἀνθρώπων καὶ ἀντὶ τούτων χάριτας ἀποδιδόασιν. εἰκὸς γὰρ τοὺς μὲν πλουσίους θύειν πολλὰ τοῖς θεοῖς καὶ ἀνατιθέναι ἀναθήματα ἐόντων χρημάτων πολλῶν καὶ τιμᾶν, τοὺς δὲ πένητας ἦσσαν διὰ τὸ μὴ ἔχειν, ἔπειτα καὶ ἐπιμεφομένους ὅτι οὐ δίδοασι χρήματα αὐτοῖσιν, ὥστε τῶν τοιούτων ἀμαρτιῶν τὰς ζημίας τοὺς ὀλίγα κεκτημένους φέρειν μᾶλλον ἢ τοὺς πλουσίους. ἀλλὰ γάρ, ὥσπερ καὶ πρότερον ἔλεξα, θεῖα μὲν καὶ ταῦτά ἐστιν ὁμοίως τοῖς ἄλλοις· γίνεται δὲ κατὰ φύσιν ἕκαστα. καὶ ἡ τοιαύτη νοῦσος ἀπὸ τοιαύτης προφάσιος τοῖς Σκύθησι γίνεται οἷον εἴρηκα. ἔχει δὲ καὶ κατὰ τοὺς λοιποὺς ἀνθρώπους ὁμοίως. ὅκου γὰρ ἱπάζονται μάλιστα καὶ πυκνότατα, ἐκεῖ πλεῖστοι ὑπὸ κεδμάτων καὶ ἰσχιᾶδων καὶ ποδαγριῶν ἀλίσκονται καὶ λαγνεύειν κάκιστοὶ εἰσι. ταῦτα δὲ τοῖσι Σκύθησι πρόσεστι, καὶ εὐνουχοειδέστατοὶ εἰσιν ἀνθρώπων διὰ ταύτας τε τὰς προφάσιος καὶ ὅτι ἀναξυρίδας ἔχουσιν αἰεὶ καὶ εἰσιν ἐπὶ τῶν ἵππων τὸ πλεῖστον τοῦ χρόνου, ὥστε μήτε χειρὶ ἄπτεσθαι τοῦ αἰδοίου, ὑπὸ τε τοῦ ψύχεος καὶ τοῦ κόπου ἐπιλήθεσθαι τοῦ ἱμέρου καὶ τῆς μεξίσιος, καὶ μηδὲν παρακινεῖν πρότερον ἢ ἀνανδρωθῆναι.

22. And, in addition to these, there are many eunuchs among the Scythians, who perform female work, and speak like women. Such persons are called effeminate. The inhabitants of the country attribute the cause of their impotence to a god, and venerate and worship such persons, every one dreading that the like might befall himself; but to me it appears that such affections are just as much divine as all others are, and that no one disease is either more divine or more human than another, but that all are alike divine, for that each has its own nature, and that no one arises without a natural cause. But I will explain how I think that the affection takes its rise. From continued exercise on horseback they are seized with chronic defluxions in their joints owing to their legs always hanging down below their horses; they afterwards become lame and stiff at the hip-joint, such of them, at least, as are severely attacked with it. They treat themselves in this



way: when the disease is commencing, they open the vein behind either ear, and when the blood flows, sleep, from feebleness, seizes them, and afterwards they awaken, some in good health and others not. To me it appears that the semen is altered by this treatment, for there are veins behind the ears which, if cut, induce impotence; now, these veins would appear to me to be cut. Such persons afterwards, when they go in to women and cannot have connection with them, at first do not think much about it, but remain quiet; but when, after making the attempt two, three, or more times, they succeed no better, fancying they have committed some offence against the god whom they blame for the affection, they put on female attire, reproach themselves for effeminacy, play the part of women, and perform the same work as women do. This the rich among the Scythians endure, not the basest, but the most noble and powerful, owing to their riding on horseback; for the poor are less affected, as they do not ride on horses. And yet, if this disease had been more divine than the others, it ought not to have befallen the most noble and the richest of the Scythians alone, but all alike, or rather those who have little, as not being able to pay honors to the gods, if, indeed, they delight in being thus rewarded by men, and grant favors in return; for it is likely that the rich sacrifice more to the gods, and dedicate more votive offerings, inasmuch as they have wealth, and worship the gods; whereas the poor, from want, do less in this way, and, moreover, upbraid the gods for not giving them wealth, so that those who have few possessions were more likely to bear the punishments of these offences than the rich. But, as I formerly said, these affections are divine just as much as others, for each springs from a natural cause, and this disease arises among the Scythians from such a cause as I have stated. But it attacks other men in like manner, for whenever men ride much and very frequently on horseback, then many are affected with rheums in the joints, sciatica, and gout, and they are inept at venery. But these complaints befall the Scythians, and they are the most impotent of men for the aforesaid causes, and because they always wear breeches, and spend the most of their time on horseback, so as not to touch their privy parts with the hands, and from the cold and fatigue they forget the sexual desire, and do not make the attempt until after they have lost their virility. Thus it is with the race of the Scythians.

23. Περὶ μὲν οὖν τῶν Σκυθέων οὕτως ἔχει τοῦ γένεος. τὸ δὲ λοιπὸν γένος τὸ ἐν τῇ Εὐρώπῃ διάφορον αὐτὸ ἐουτῶ ἐστὶ καὶ κατὰ τὸ μέγεθος καὶ κατὰ τὰς μορφὰς διὰ τὰς μεταλλαγὰς τῶν ὠρέων, ὅτι μεγάλαι γίνονται καὶ πυκναί, καὶ θάλπεά τε ἰσχυρὰ καὶ χειμῶνες καρτεροὶ καὶ ὄμβροι πολλοὶ καὶ αὐτὶς αὐχμοὶ πολυχρόνιοι καὶ πνεύματα, ἐξ ὧν μεταβολαὶ πολλαὶ καὶ παντοδαπαί. ἀπὸ τούτων εἰκὸς αἰσθάνεσθαι καὶ τὴν γένεσιν ἐν τῇ συμπήξει τοῦ γόνου ἄλλοτε ἄλλην καὶ μὴ τῶ

αὐτῷ τὴν αὐτὴν γίνεσθαι ἔν τε τῷ θέρει καὶ τῷ χειμῶνι μηδὲ ἐν ἐπομβρίῃ καὶ αὐχμῷ. διότι τὰ εἶδεα διηλλάχθαι νομίζω τῶν Εὐρωπαϊῶν μᾶλλον ἢ τῶν Ἀσιηνῶν καὶ τὰ μεγέθεα διαφορώτατα αὐτὰ ἐωυτοῖς εἶναι κατὰ πόλιν ἐκάστην. αἱ γὰρ φθοραὶ πλείονες ἐγγίνονται τοῦ γόνου ἐν τῇ συμπήξει ἐν τῆσι μεταλλαγῆσι τῶν ὥρέων πυκνῆ σιν ἐούσησιν ἢ ἐν τῆσι παραπλησίησι καὶ ὁμοίησι. περὶ τε τῶν ἠθέων ὁ αὐτὸς λόγος· τό τε ἄγριον καὶ τὸ ἄμεικτον καὶ τὸ θυμοειδὲς ἐν τῇ τοιαύτῃ φύσει ἐγγίνεται. αἱ γὰρ ἐκπλήξεις πυκναὶ γινόμεναι τῆς γνώμης τὴν ἀγριότητα ἐντιθέασιν, τὸ δὲ ἡμερόν τε καὶ ἡπιον ἀμαυροῦσι. διὸ καὶ εὐψυχοτέρους νομίζω τοὺς τὴν Εὐρώπην οἰκέοντας εἶναι ἢ τοὺς τὴν Ἀσίην. ἐν μὲν γὰρ τῷ αἰεὶ παραπλησίῳ αἱ ῥαθυμίαι ἔνεισιν, ἐν δὲ τῷ μεταβαλλομένῳ αἱ ταλαιπωρίαὶ τῷ σώματι καὶ τῇ ψυχῇ. καὶ ἀπὸ μὲν ἠσυχίης καὶ ῥαθυμίας ἡ δειλίη αὐξεται, ἀπὸ δὲ τῆς ταλαιπωρίας καὶ τῶν πόνων αἱ ἀνδρεῖαι. διὰ τοῦτο εἰσι μαχιμώτεροι οἱ τὴν Εὐρώπην οἰκέοντες καὶ διὰ τοὺς νόμους, ὅτι οὐ βασιλεύονται ὥσπερ οἱ Ἀσιηνοί. ὅκου γὰρ βασιλεύονται, ἐκεῖ ἀνάγκη δειλοτάτους εἶναι. εἴρηται δέ μοι καὶ πρότερον. αἱ γὰρ ψυχαὶ δεδούλωνται καὶ οὐ βούλονται παρακινδυνεύειν ἐκόντες εἰκῆ ὑπὲρ ἀλλοτρίας δυνάμιος. ὅσοι δὲ αὐτόνομοι — ὑπὲρ ἐωυτῶν γὰρ τοὺς κινδύνους αἰρεῦνται καὶ οὐκ ἄλλων — προθυμεῦνται ἐκόντες καὶ ἐς τὸ δεινὸν ἔρχονται. τὰ γὰρ ἀριστεῖα τῆς νίκης αὐτοὶ φέρονται. οὕτως οἱ νόμοι οὐχ ἤκιστα τὴν εὐψυχίην ἐργάζονται.

23. The other races in Europe differ from one another, both as to stature and shape, owing to the changes of the seasons, which are very great and frequent, and because the heat is strong, the winters severe, and there are frequent rains, and again protracted droughts, and winds, from which many and diversified changes are induced. These changes are likely to have an effect upon generation in the coagulation of the semen, as this process cannot be the same in summer as in winter, nor in rainy as in dry weather; wherefore, I think, that the figures of Europeans differ more than those of Asiatics; and they differ very much from one another as to stature in the same city; for vitiations of the semen occur in its coagulation more frequently during frequent changes of the seasons, than where they are alike and equable. And the same may be said of their dispositions, for the wild, and unsociable, and the passionate occur in such a constitution; for frequent excitement of the mind induces wildness, and extinguishes sociableness and mildness of disposition, and therefore I think the inhabitants of Europe more courageous than those of Asia; for a climate which is always the same induces indolence, but a changeable climate, laborious exertions both of body and mind; and from rest and indolence cowardice is engendered, and from laborious exertions and pains, courage. On this account the inhabitants of Europe are than the Asiatics, and also owing to their institutions, because they are not governed

by kings like the latter, for where men are governed by kings there they must be very cowardly, as I have stated before; for their souls are enslaved, and they will not willingly, or readily undergo dangers in order to promote the power of another; but those that are free undertake dangers on their own account, and not for the sake of others; they court hazard and go out to meet it, for they themselves bear off the rewards of victory, and thus their institutions contribute not a little to their courage. Such is the general character of Europe and Asia.

24. Τὸ μὲν οὖν ὅλον καὶ τὸ ἅπαν οὕτως ἔχει περί τε τῆς Εὐρώπης καὶ τῆς Ἀσίας. ἔνεισι δὲ καὶ ἐν τῇ Εὐρώπῃ φύλα διάφορα ἕτερα ἑτέροισι καὶ τὰ μεγέθεα καὶ τὰς μορφὰς καὶ τὰς ἀνδρείας. τὰ δὲ διαλλάσσοντα ταῦτά ἐστιν, ἃ καὶ ἐπὶ τῶν πρότερον εἴρηται. ἔτι δὲ σαφέστερον φράσω. ὀκόσοι μὲν χώραν ὀρεινὴν τε οἰκέουσι καὶ τρηχεῖαν καὶ ὑψηλὴν καὶ ἔνυδρον, καὶ αἱ μεταβολαὶ αὐτοῖσι γίνονται τῶν ὠρέων μέγα διάφοροι, ἐνταῦθα εἰκὸς εἶδεα μεγάλα εἶναι καὶ πρὸς τὸ ταλαίπωρον καὶ τὸ ἀνδρεῖον εὖ πεφυκότα, καὶ τό τε ἄγριον καὶ τὸ θηριῶδες αἰ τοιαῦται φύσεις οὐχ ἥκιστα ἔχουσιν. ὀκόσοι δὲ κοῖλα χωρία καὶ λειμακώδεα καὶ πνιγηρὰ καὶ τῶν θερμῶν πνευμάτων πλέον μέρος μετέχουσιν ἢ τῶν ψυχρῶν ὕδασι τε χρέονται θερμοῖσιν, οὗτοι δὲ μεγάλοι μὲν οὐκ ἂν εἶησαν οὐδὲ κανονίαί, ἐς εὖρος δὲ πεφυκότες καὶ σαρκώδεις καὶ μελανότριχες, καὶ αὐτοὶ μέλανες μᾶλλον ἢ λευκότεροι, φλεγματῖαι δὲ ἦσσαν ἢ χολώδεις· τὸ δὲ ἀνδρεῖον καὶ τὸ ταλαίπωρον ἐν τῇ ψυχῇ φύσει μὲν οὐκ ἂν ὁμοίως ἐνεῖη, νόμος δὲ προσγενόμενος ἀπεργάζοιτ' ἂν. καὶ εἰ μὲν ποταμοὶ ἐνεῖησαν ἐν τῇ χώρῃ, οἵτινες ἐκ τῆς χώρας ἐξοχετεύουσι τό τε στάσιμον καὶ τὸ ὄμβριον, οὗτοι ἂν ὑγιηροὶ τε εἶησαν καὶ λαμπροί. εἰ μὲντοι ποταμοὶ μὲν μὴ εἶησαι, τὰ δὲ ὕδατα λιμναῖά τε καὶ στάσιμα πίνοιεν καὶ ἐλώδεα, ἀνάγκη τὰ τοιαῦτα εἶδεα προγαστρότερα καὶ σπληνώδεα εἶναι. ὀκόσοι δὲ ὑψηλὴν τε οἰκέουσι χώραν καὶ λεινὴν καὶ ἀνεμώδεα καὶ ἔνυδρον, εἶεν ἂν εἶδεα μεγάλοι καὶ ἐωυτοῖσι παραπλήσιοι· ἀνανδρότεροι δὲ καὶ ἡμερώτεροι αἱ γνῶμαι. ὀκόσοι δὲ λεπτά τε καὶ ἄνυδρα καὶ ψιλὰ, τῆσι μεταβολῆσι τῶν ὠρέων οὐκ εὐκρητα, ἐν ταύτῃ τῇ χώρῃ τὰ εἶδεα εἰκὸς σκληρὰ τε εἶναι καὶ ἔντονα καὶ ξανθότερα ἢ μελάντερα καὶ τὰ ἥθεα καὶ τὰς ὀργὰς αὐθάδεάς τε καὶ ἰδιογνώμονας. ὄκου γὰρ αἱ μεταβολαὶ εἰσι πυκνόταται τῶν ὠρέων καὶ πλεῖστον διάφοροι αὐταὶ ἐωυτῆσιν, ἐκεῖ καὶ τὰ εἶδεα καὶ τὰ ἥθεα καὶ τὰς φύσεως εὐρήσεις πλεῖστον διαφερούσας. Μέγισται μὲν οὖν εἰσιν αὗται τῆς φύσεως αἱ διαλλαγαί, ἔπειτα δὲ καὶ ἡ χώρα, ἐν ἣ ἂν τις τρέφηται καὶ τὰ ὕδατα. εὐρήσεις γὰρ ἐπὶ τὸ πλῆθος τῆς χώρας τῇ φύσει ἀκολουθέοντα καὶ τὰ εἶδεα τῶν ἀνθρώπων καὶ τοὺς τρόπους. ὄκου μὲν γὰρ ἡ γῆ πίειρα καὶ μαλθακὴ καὶ ἔνυδρος, καὶ τὰ ὕδατα κάρτα μετέωρα, ὥστε θερμὰ εἶναι τοῦ θέρους καὶ τοῦ χειμῶνος ψυχρά, καὶ τῶν ὠρέων καλῶς κεῖται, ἐνταῦθα καὶ οἱ ἄνθρωποι σαρκώδεές εἰσι καὶ ἄναρθροι καὶ ὑγροὶ καὶ ἀταλαίπωροι καὶ τὴν ψυχὴν κακοὶ ὡς

ἐπὶ τὸ πολὺ. τό τε ῥάθυμον καὶ τὸ ὑπνηρὸν ἔνεστιν ἐν αὐτοῖς ἰδεῖν· ἕς τε τὰς τέχνας παχέες καὶ οὐ λεπτοὶ οὐδ' ὀξέες. ὅκου δ' ἐστὶν ἡ χώρα ψιλὴ τε καὶ ἄνυδρος καὶ τρηγεῖα καὶ ὑπὸ τοῦ χειμῶνος πιεζομένη καὶ ὑπὸ τοῦ ἡλίου κεκαυμένη, ἐνταῦθα δὲ σκληροὺς τε καὶ ἰσχνοὺς καὶ διηρθρωμένους καὶ ἐντόνους καὶ δασέας ἴδοις. τό τε ἐργατικὸν ἐνεὸν ἐν τῇ φύσει τῇ τοιαύτῃ καὶ τὸ ἄγρυπνον, τὰ τε ἡθεα καὶ τὰς ὀργὰς αὐθάδεας καὶ ἰδιογνώμονας, τοῦ τε ἀγρίου μᾶλλον μετέχοντας ἢ τοῦ ἡμέρου, ἕς τε τὰς τέχνας ὀξυτέρους τε καὶ συνετωτέρους καὶ τὰ πολέμια ἀμείνους εὐρήσεις· καὶ τᾶλλα τὰ ἐν τῇ γῆ φυόμενα πάντα ἀκόλουθα ἐόντα τῇ γῆ. αἱ μὲν ἐναντιώταται φύσιές τε καὶ ἰδέαι ἔχουσιν οὕτως. ἀπὸ δὲ τούτων τεκμαιρόμενος τὰ λοιπὰ ἐνθυμεῖσθαι, καὶ οὐχ ἀμαρτήση.

24. And there are in Europe other tribes, differing from one another in stature, shape, and courage: the differences are those I formerly mentioned, and will now explain more clearly. Such as inhabit a country which is mountainous, rugged, elevated, and well watered, and where the changes of the seasons are very great, are likely to have great variety of shapes among them, and to be naturally of an enterprising and warlike disposition; and such persons are apt to have no little of the savage and ferocious in their nature; but such as dwell in places which are low-lying, abounding in meadows and ill ventilated, and who have a larger proportion of hot than of cold winds, and who make use of warm waters- these are not likely to be of large stature nor well proportioned, but are of a broad make, fleshy, and have black hair; and they are rather of a dark than of a light complexion, and are less likely to be phlegmatic than bilious; courage and laborious enterprise are not naturally in them, but may be engendered in them by means of their institutions. And if there be rivers in the country which carry off the stagnant and rain water from it, these may be wholesome and clear; but if there be no rivers, but the inhabitants drink the waters of fountains, and such as are stagnant and marshy, they must necessarily have prominent bellies and enlarged spleens. But such as inhabit a high country, and one that is level, windy, and well-watered, will be large of stature, and like to one another; but their minds will be rather unmanly and gentle. Those who live on thin, ill-watered, and bare soils, and not well attuned to the changes of the seasons, in such a country they are likely to be in their persons rather hard and well braced, rather of a blond than a dark complexion, and in disposition and passions haughty and self-willed. For, where the changes of the seasons are most frequent, and where they differ most from one another, there you will find their forms, dispositions, and nature the most varied. These are the strongest of the natural causes of difference, and next the country in which one lives, and the waters; for, in general, you will find the forms and dispositions of mankind to correspond with

the nature of the country; for where the land is fertile, soft, and well-watered, and supplied with waters from very elevated situations, so as to be hot in summer and cold in winter, and where the seasons are fine, there the men are fleshy, have ill-formed joints, and are of a humid temperament; they are not disposed to endure labor, and, for the most part, are base in spirit; indolence and sluggishness are visible in them, and to the arts they are dull, and not clever nor acute. When the country is bare, not fenced, and rugged, blasted by the winter and scorched by the sun, there you may see the men hardy, slender, with well-shaped joints, well-braced, and shaggy; sharp industry and vigilance accompany such a constitution; in morals and passions they are haughty and opinionative, inclining rather to the fierce than to the mild; and you will find them acute and ingenious as regards the arts, and excelling in military affairs; and likewise all the other productions of the earth corresponding to the earth itself. Thus it is with regard to the most opposite natures and shapes; drawing conclusions from them, you may judge of the rest without any risk of error.

## ON THE ARTICULATIONS - Περί ἄρθρων

1. Ωμου δὲ ἄρθρον ἓνα τρόπον οἶδα ὀλισθάνον, τὸν ἐς τὴν μασχάλην ἄνω δὲ οὐδέποτε εἶδον, οὐδὲ ἐς τὸ ἔξω οὐ μέντοι δυσχυριεῖω ἔγωγε, εἰ ὀλισθάνοι ἂν, ἢ οὐ, καίπερ ἔχων περὶ αὐτοῦ ὅ τι λέγω. Ἀτὰρ οὐδὲ ἐς τὸ ἔμπροσθεν οὐδὲ ὄπωπα, ὅ τι ἔδοξέ μοι ὠλισθηκέναι. Τοῖσι μέντοι ἰητροῖσι δοκέει κάρτα ἐς τοῦμπροσθεν ὀλισθάνειν, καὶ μάλιστα ἐξαπατέονται ἐν τουτέοισιν, ὧν ἂν φθίσις καταλάβῃ τὰς σάρκας τὰς περὶ τὸ ἄρθρον τε καὶ τὸν βραχίονα φαίνεται γὰρ ἐν τοῖσι τοιουτέοισι παντάπασιν ἢ κεφαλὴ τοῦ βραχίονος ἐξέχουσα ἐς τοῦμπροσθεν. Καὶ ἔγωγέ ποτε τὸ τοιοῦτον οὐ φὰς ἐκπεπτωκέναι, ἤκουσα φλαύρως ὑπὸ τε τῶν ἰητρῶν, ὑπὸ τε τῶν δημοτέων, διὰ τοῦτο τὸ πρῆγμα ἐδόκεον γὰρ αὐτοῖσιν ἠγνοηκέναι μῦθος, οἱ δὲ ἄλλοι ἐγνωκέναι, καὶ οὐκ ἠδυνάμην αὐτοὺς ἀναγνῶσαι,

εἰ μὴ μόλις, ὅτι τόδ' ἐστὶ τοιόνδε εἴ τις τοῦ βραχίονος ψιλώσκει μὲν τῶν σαρκέων τὴν ἐπωμίδα, ψιλώσκει δὲ ἢ ὁ μῦς ἀνατείνει, ψιλώσκει δὲ τὸν τένοντα τὸν κατὰ τὴν μασχάλην καὶ τὴν κληῖδα πρὸς τὸ στήθος ἔχοντα, φαίνοιτο ἂν ἢ κεφαλὴ τοῦ βραχίονος ἐς τοῦμπροσθεν ἐξέχουσα ἰσχυρῶς, καίπερ οὐκ ἐκπεπτωκυῖα πέφυκε γὰρ ἐς τοῦμπροσθεν προπετῆς ἢ κεφαλὴ τοῦ βραχίονος τὸ δ' ἄλλο ὀστέον τοῦ βραχίονος ἐς τὸ ἔξω καμπύλον. Ὅμιλέει δὲ ὁ βραχίων τῷ κοίλῳ τῆς ὠμοπλάτης πλάγιος, ὅταν παρὰ τὰς πλευρὰς παρατεταμένος ἔῃ ὅταν μέντοι ἐς τοῦμπροσθεν ἐκτανυθῆ ἢ ζύμπασα χεῖρ, τότε ἢ κεφαλὴ τοῦ βραχίονος κατ' ἴξιν τῆς ὠμοπλάτης τῷ κοίλῳ γίνεται, καὶ οὐκ ἔτι ἐξέχειν ἐς τοῦμπροσθεν φαίνεται. Περί οὗ οὖν ὁ λόγος, οὐδέποτε εἶδον οὐδὲ ἐς τοῦμπροσθεν ἐκπεσόν οὐ μὴν ἰσχυριεῖω γε οὐδὲ περὶ τούτου, εἰ μὴ ἐκπέσοι ἂν οὕτως, ἢ οὐ. Ὅταν οὖν ἐκπέσῃ ὁ βραχίων ἐς τὴν μασχάλην, ἅτε πολλοῖσιν ἐκπίπτοντος, πολλοὶ ἐπίστανται ἐμβάλλειν εὐπαίδευτον δέ ἐστὶ τὸ εἶδέναι πάντας τοὺς τρόπους, οἷσιν οἱ ἰητροὶ ἐμβάλλουσι, καὶ ὡς ἂν τις αὐτοῖσι τοῖσι τρόποισι τούτοις κάλλιστα χρῶτο. Χρέεσθαι δὲ χρὴ τῷ κρατίστῳ τῶν τρόπων, ἢν τὴν ἰσχυρονάτην ἀνάγκην ὀρᾶς κράτιστος δὲ ὁ ὕστατος γεγραψόμενος.

1. I am acquainted with one form in which the shoulder-joint is dislocated, namely, that into the armpit; I have never seen it take place upward nor outward; and yet I do not positively affirm whether it might be dislocated in these directions or not, although I have something which I might say on this subject. But neither have I ever seen what I considered to be a dislocation forward. Physicians, indeed, fancy that dislocation is very apt to occur forward, and they are more particularly deceived in those persons who have the fleshy parts about

the joint and arm much emaciated; for, in all such cases, the head of the arm appears to protrude forward. And I in one case of this kind having said that there was no dislocation, exposed myself to censure from certain physicians and common people on that account, for they fancied that I alone was ignorant of what everybody else was acquainted with, and I could not convince them but with difficulty, that the matter was so. But if one will strip the point of the shoulder of the fleshy parts, and where the muscle (*deltoid?*) extends, and also lay bare the tendon that goes from the armpit and clavicle to the breast (*pectoral muscle?*), the head of the humerus will appear to protrude strongly forward, although not dislocated, for the head of the humerus naturally inclines forward, but the rest of the bone is turned outward. The humerus is connected obliquely with the cavity of the scapula, when the arm is stretched along the sides; but when the whole arm is stretched forward, then the head of the humerus is in a line with the cavity of the humerus, and no longer appears to protrude forward. And with regard to the variety we are now treating of, I have never seen a case of dislocation forward; and yet I do not speak decidedly respecting it, whether such a dislocation may take place or not. When, then, a dislocation into the armpit takes place, seeing it is of frequent occurrence, many persons know how to reduce it, for it is an easy thing to teach all the methods by which physicians effect the reductions, and the best manner of applying them. The strongest of those methods should be used when the difficulty of reduction is particularly great. The strongest is the method to be last described.

2. Ὅσοισι μὲν οὖν πυκινὰ ἐκπίπτει ὁ ὤμος, ἱκανοὶ ὡς ἐπὶ τὸ

πλεῖστον αὐτοὶ σφίσιν αὐτοῖσιν ἐμβάλλειν εἰσὶν ἐνθέντες γὰρ τῆς ἐτέρης χειρὸς τοὺς κονδύλους ἐς τὴν μασχάλην, ἀναγκάζουσιν ἄνω τὸ ἄρθρον, τὸν δὲ ἀγκῶνα παράγουσιν ἐπὶ τὸ στῆθος. Τὸν αὐτὸν δὲ τρόπον τοῦτον καὶ ὁ ἰητρὸς ἂν ἐμβάλλοι, εἰ αὐτὸς μὲν ὑπὸ τὴν μασχάλην ἐσωτέρω τοῦ ἄρθρου τοῦ ἐκπεπτωκότος ὑποτείνας τοὺς δακτύλους, ἀπαναγκάζει ἀπὸ τῶν πλευρέων, ἐμβάλλων τὴν ἐσωτοῦ κεφαλὴν ἐς τὸ ἀκρώμιον, ἀντερείσιος ἔνεκα, τοῖσι δὲ γούνασι παρὰ τὸν ἀγκῶνα ἐς τὸν βραχίονα ἐμβάλλων, ἀντωθέοι πρὸς τὰς πλευράς ξυμφέρει δὲ κρατερὰς τὰς χεῖρας ἔχειν τὸν ἐμβάλλοντα. Ἡ αὐτὸς μὲν τῆσι χερσὶ καὶ τῇ κεφαλῇ οὕτω ποιοίη, ἄλλος δὲ τις τὸν ἀγκῶνα παράγοι παρὰ τὸ στῆθος. Ἔστι δὲ ἐμβολὴ ὤμου, καὶ ἐς τούπισω ὑπερβάλλοντα τὸν πῆχυν ἐπὶ τὴν ράχιν, ἔπειτα τῇ μὲν ἐτέρῃ χειρὶ ἀνακλᾶν ἐς τὸ ἄνω τοῦ ἀγκῶνος ἐχόμενον, τῇ δὲ ἐτέρῃ παρὰ τὸ ἄρθρον ὀπισθεν ἐρείδειν. Αὕτη ἡ ἐμβολή, καὶ ἡ πρόσθεν εἰρημένη, οὐ κατὰ φύσιν ἐοῦσαι, ὅμως ἀμφισφάλλουσαι τὸ ἄρθρον, ἀναγκάζουσιν ἐμπίπτειν.

2. Those who are subject to frequent dislocations at the shoulder-joint, are for the most part competent to effect the reduction themselves; for, having introduced the knuckles of the other hand into the armpit, they force the joint upward, and bring the elbow toward the breast. The physician might reduce it in the same manner, if having introduced his fingers into the armpit on the inside of the dislocated joint, he would force it from the ribs, pushing his own head against the acromion, in order to make counter-pressure, and with his knees applied to the patient's elbow pushing the arm to the sides. It will be of advantage if the operator has strong hands, or the physician may do as directed with his head and hands, while another person brings the elbow toward the breast. Reduction of the shoulder may also be effected by carrying the fore-arm backward to the spine, and then with the one hand grasping it at the elbow, to bend the arm upward, and with the other to support it behind at the articulation. This mode of reduction, and the one formerly described, are not natural, and yet by rotating the bone of the joint, they force it to return.

3. Οἱ δὲ τῆ πτέρνη πειρώμενοι ἐμβάλλειν, ἐγγύς τι τοῦ κατὰ φύσιν ἀναγκάζουσιν χρῆ δὲ τὸν μὲν ἄνθρωπον χαμαὶ κατακλῖναι ὕπτιον, τὸν δὲ ἐμβάλλοντα χαμαὶ ἴζεσθαι ἐφ' ὀκότερα ἂν τὸ ἄρθρον ἐκπεπτώκη ἔπειτα λαβόμενον τῆσι χερσὶ τῆσιν ἐωυτέου τῆς χειρὸς τῆς σιναρῆς, κατατείνειν αὐτὴν, τὴν δὲ πτέρνην ἐς τὴν μασχάλην

ἐμβάλλοντα ἀντωθέειν, τῆ μὲν δεξιῇ ἐς τὴν δεξιήν, τῆ δὲ ἀριστερῇ ἐς τὴν ἀριστερήν. Δεῖ δὲ ἐς τὸ κοῖλον τῆς μασχάλης ἐνθεῖναι στρογγύλον τι ἐναρμόσσον ἐπιτηδειόταται δὲ αἱ πάνυ σμικραὶ σφαῖραι καὶ σκληραὶ, οἷαι ἐκ τῶν πολλῶν σκυτέων ράπτονται ἦν γὰρ μή τι τοιοῦτον ἐγκέηται, οὐ δύναται ἡ πτέρνη ἐξικνέεσθαι πρὸς τὴν κεφαλὴν τοῦ βραχίονος κατατεινομένης γὰρ τῆς χειρὸς, κοιλαίνεται ἡ μασχάλη οἱ γὰρ τένοντες οἱ ἔνθεν καὶ ἔνθεν τῆς μασχάλης, ἀντισφίγγοντες, ἐναντίοι εἰσίν. Χρῆ δὲ τινα ἐπὶ θάτερα τοῦ κατατεινομένου καθήμενον κατέχειν κατὰ τὸν ὑγιέα ὦμον, ὡς μὴ περιέλκηται τὸ σῶμα, τῆς χειρὸς τῆς σιναρῆς ἐπὶ θάτερα τεινομένης ἔπειτα ἰμάντος μαλθακοῦ πλάτος ἔχοντος ἰκανόν, ὅταν ἡ σφαῖρη ἐντεθῇ ἐς τὴν μασχάλην, περὶ τὴν σφαῖρην περιβεβλημένου τοῦ ἰμάντος, καὶ κατέχοντος, λαβόμενον ἀμφοτερέων τῶν ἀρχέων τοῦ ἰμάντος, ἀντικατατείνειν τινά, ὑπὲρ κεφαλῆς τοῦ κατατεινομένου καθήμενον, τῷ ποδὶ προσβάντα πρὸς τοῦ ἀκρωμίου τὸ ὀστέον. Ἡ δὲ σφαῖρη ὡς ἐσωτάτω καὶ ὡς μάλιστα πρὸς τῶν πλευρέων κείσθω, καὶ μὴ ἐπὶ τῆ κεφαλῇ τοῦ βραχίονος.

3. Those who attempt to perform reduction with the heel, operate in a manner



which is an approach to the natural. The patient must lie on the ground upon his back, while the person who is to effect the reduction is seated on the ground upon the side of the dislocation; then the operator, seizing with his hand the affected arm, is to pull it, while with his heel in the armpit he pushes in the contrary direction, the right heel being placed in the right armpit, and the left heel in the left armpit. But a round ball of a suitable size must be placed in the hollow of the armpit; the most convenient are very small and hard balls, formed from several pieces of leather sewed together. For without something of the kind the heel cannot reach to the head of the humerus, since, when the arm is stretched, the armpit becomes hollow, the tendons on both sides of the armpit making counter-contraction so as to oppose the reduction. But another person should be seated on the other side of the patient to hold the sound shoulder, so that the body may not be dragged along when the arm of the affected side is pulled; and then, when the ball is placed in the armpit, a supple piece of thong sufficiently broad is to be placed round it, and some person taking hold of its two ends is to seat himself above the patient's head to make counter-extension, while at the same time he pushes with his foot against the bone at the top of the shoulder. The ball should be placed as much on the inside as possible, upon the ribs, and not upon the head of the humerus.

4. Ἔστι δὲ καὶ ἄλλη ἐμβολή, ἣ κατωμίζουσιν ἐς ὀρθὸν μείζω μέντοι εἶναι χρὴ τὸν κατωμίζοντα, διαλαβόντα δὲ τὴν χεῖρα, ὑποθεῖναι τὸν ὤμον τὸν ἐσωτοῦ ὑπὸ τὴν μασχάλην ὀξὺν κᾶπειτα

ὑποστρέψαι, ὡς ἂν ἐνίζηται ἔδρη, οὕτω στοχασάμενον ὅκως ἀμφὶ τὸν ὤμον τὸν ἐσωτοῦ κρεμάσαι τὸν ἄνθρωπον κατὰ τὴν μασχάλην αὐτὸς δὲ ἐσωτὸν ὑψηλότερον ἐπὶ τοῦτον τὸν ὤμον ποιέτω, ἢ ἐπὶ τὸν ἕτερον τοῦ δὲ κρεμαμένου τὸν βραχίονα πρὸς τὸ ἐσωτοῦ στήθος προσαναγκάζετω ὡς τάχιστα ἐν τούτῳ δὲ τῷ σχήματι προσανασειέτω, ὀκόταν μετεωρίσῃ τὸν ἄνθρωπον, ὡς ἀντιρρέποι τὸ ἄλλο σῶμα αὐτῷ, ἀντίον τοῦ βραχίονος τοῦ κατεχομένου ἣν δὲ ἄγαν κοῦφος ἔῃ ὁ ἄνθρωπος, προσεπικρεμασθήτω τούτου ὀπισθεν τις κοῦφος παῖς. Αὗται δὲ αἱ ἐμβολαὶ πᾶσαι κατὰ παλαιστρην εὐχρηστοί εἰσιν, ὅτι οὐδὲν ἀλλοίων ἀρμένων δέονται ἐπεισενεχθῆναι χρῆσαιτο δ' ἂν τις καὶ ἄλλοθι.

4. There is another method of reduction performed by the shoulder of a person standing. The person operating in this way, who should be taller than the patient, is to take hold of his arm and place the sharp point of his own shoulder in the patient's armpit, and push it in so that it may lodge there, and having for his object that the patient may be suspended at his back by the armpit, he must raise

himself higher on this shoulder than the other; and he must bring the arm of the suspended patient as quickly as possible to his own breast. In this position he should shake the patient when he raises him up, in order that the rest of the body may be a counterpoise to the arm which is thus held. But if the patient be very light, a light child should be suspended behind along with him. These methods of reduction are all of easy application in the palestra, as they can all be performed without instruments, but they may also be used elsewhere.

5. Ἀτὰρ καὶ οἱ περὶ τὸ ὑπερον ἀναγκάζοντες, ἐγγύς τι τοῦ κατὰ φύσιν ἐμβάλλουσιν χρῆ δὲ τὸ μὲν ὑπερον κατειλίχθαι ταινίῃ τινὶ μαλθακῇ ἥσσον γὰρ ἂν ὑπολισθάνοι, ὑπηναγκάσθαι δὲ μεσηγὺ τῶν πλευρέων καὶ τῆς κεφαλῆς τοῦ βραχίονος καὶ ἦν μὲν βραχὺ ἔη τὸ ὑπερον, καθῆσθαι χρῆ τὸν ἄνθρωπον ἐπὶ τινος, ὡς μόλις

τὸν βραχίονα περιβάλλειν δύνηται περὶ τὸ ὑπερον μάλιστα δὲ ἔστω μακρότερον τὸ ὑπερον, ὡς ἂν ἔστεῶς ὁ ἄνθρωπος κρέμασθαι μικροῦ δέη ἀμφὶ τῷ ξύλῳ. Κᾶπειτα ὁ μὲν βραχίον καὶ ὁ πῆχυς παρατεταμένος παρὰ τὸ ὑπερον ἔστω, τὸ δὲ ἐπὶ θάτερα τοῦ σώματος καταταγκαζέτω τις, περιβάλλων κατὰ τὸν αὐχένα παρὰ τὴν κληῖδα τὰς χεῖρας. Αὕτη ἡ ἐμβολὴ κατὰ φύσιν ἐπεικέως ἐστὶ, καὶ ἐμβάλλειν δύναται, ἦν χρηστῶς σκευάσωνται αὐτήν.

5. Those who accomplish the reduction by forcibly bending it round a pestle, operate in a manner which is nearly natural. But the pestle should be wrapped in a soft shawl (for thus it will be less slippery), and it should be forced between the ribs and the head of the humerus. And if the pestle be short, the patient should be seated upon something, that his arm can with difficulty pass above the pestle. But for the most part the pestle should be longer, so that the patient when standing may be almost suspended upon the piece of wood. And then the arm and forearm should be stretched along the pestle, whilst some person secures the opposite side of the body by throwing his arms round the neck, near the clavicle.

6. Ἀτὰρ καὶ ἡ διὰ τοῦ κλιμακίου ἐτέρη τις τοιαύτη, καὶ ἔτι βελτίων, ὅτι ἀσφαλεστέρως ἂν τὸ σῶμα, τὸ μὲν τῆ, τὸ δὲ τῆ, ἀντισηκωθεῖ μετεωρισθέν περὶ γὰρ τὸ ὑπεροειδὲς ὁ ὤμος ἦν καὶ καταπεπήγη, περισφάλλεσθαι τὸ σῶμα κίνδυνος ἢ τῆ, ἢ τῆ χρῆ μέντοι, καὶ ἐπὶ τῷ κλιμακτῆρι ἐπιδεδέσθαι τι ἄνωθεν στρογγύλον ἐναρμόσσον ἐς τὸ κοῖλον τῆς μασχάλης, ὃ προσδιαναγκάσει τὴν κεφαλὴν τοῦ βραχίονος ἐς τὴν φύσιν ἀπιέναι.

6. But the method with a ladder is another of the same kind, and still better, since

by it the body can be more safely counterpoised on this side; and that, while in the method which the piece of wood resembling a pestle, there is danger of the body tumbling to either side. But some round thing should be tied upon the step of the ladder which may be fitted to the armpit, whereby the head of the bone may be forced into its natural place.

7. Κρατίστη μέντοι πασέων τῶν ἐμβολέων ἢ τοιήδε ξύλον χρῆ εἶναι, πλάτος μὲν ὡς πενταδάκτυλον, ἢ τετραδάκτυλον τὸ ἐπίπαν, πάχος δὲ ὡς διδάκτυλον, ἢ καὶ λεπτότερον, μῆκος δὲ δίπηχυ, ἢ ὀλίγω ἔλασσον ἔστω δὲ ἐπὶ θάτερα τὸ ἄκρον περιφερὲς καὶ στενότατον ταύτη καὶ λεπτότατον ἄμβην δὲ ἐχέτω, σμικρὸν

ὑπερέχουσαν, ἐπὶ τῷ ὑστάτῳ τοῦ περιφερέος, ἐν τῷ μέρει, μὴ τῷ πρὸς τὰς πλευράς, ἀλλὰ τῷ πρὸς τὴν κεφαλὴν τοῦ βραχίονος ἔχοντι, ὡς ὑφαρμόσειε τῇ μασχάλῃ παρὰ τὰς πλευράς ὑπὸ τὴν κεφαλὴν τοῦ βραχίονος ὑποτιθέμενον ὀθονίῳ δὲ ἢ ταινίῃ μαλθακῇ κατακεκολλησθῶ ἄκρον τὸ ξύλον, ὅπως προσηνέστερον ἔη. Ἐπειτα χρῆ ὑπόσαντα τὴν κεφαλὴν τοῦ ξύλου ὑπὸ τὴν μασχάλῃν ὡς ἐσωτάτῳ μεσηγὺ τῶν πλευρέων καὶ τῆς κεφαλῆς τοῦ βραχίονος, τὴν δὲ ὅλην χεῖρα πρὸς τὸ ξύλον κατατείναντα, προσκαταδῆσαι κατὰ τε τὸν βραχίονα, κατὰ τε τὸν πῆχυν, κατὰ τε τὸν καρπὸν τῆς χειρὸς, ὡς ἂν ἀτρεμέῃ ὅτι μάλιστα περὶ παντὸς δὲ χρῆ ποιέεσθαι, ὅπως τὸ ἄκρον τοῦ ξύλου ὡς ἐσωτάτῳ τῆς μασχάλῃς ἔσται, ὑπερβεβηκὸς τὴν κεφαλὴν τοῦ βραχίονος. Ἐπειτα χρῆ μεσηγὺ δύο στύλων στρωτῆρα πλάγιον εὖ προσδῆσαι, ἔπειτα ὑπερενεγκεῖν τὴν χεῖρα ξὺν τῷ ξύλῳ ὑπὲρ τοῦ στρωτῆρος, ὅπως ἢ μὲν χεῖρ ἐπὶ θάτερα ἔη, ἐπὶ θάτερα δὲ τὸ σῶμα, κατὰ δὲ τὴν μασχάλῃν ὁ στρωτῆρ κᾶπειτα ἐπὶ μὲν θάτερα τὴν χεῖρα καταναγκάζειν ξὺν τῷ ξύλῳ περὶ τὸν στρωτῆρα, ἐπὶ θάτερα δὲ τὸ ἄλλο σῶμα. Ὑψος δὲ ἔχων ὁ στρωτῆρ προσδεδέσθω, ὥστε μετέωρον τὸ ἄλλο σῶμα εἶναι ἐπ' ἄκρων τῶν ποδῶν. Οὗτος ὁ τρόπος παραπολὺ κράτιστος ἐμβολῆς ὤμου δικαιοτάτα μὲν γὰρ μοχλεύει, ἦν μούνον ἐσωτέρῳ ἔη τὸ ξύλον τῆς κεφαλῆς τοῦ βραχίονος δικαιοτάτα δὲ αἱ ἀντιροπαῖ,

ἀσφαλέες δὲ τῷ ὀστέῳ τοῦ βραχίονος. Τὰ μὲν οὖν νεαρὰ ἐμπίπτει θᾶσσον, ἢ ὡς ἂν τις οἴοιτο, πρὶν ἢ καὶ κατατετάσθαι δοκέειν ἀτὰρ καὶ τὰ παλαιὰ μούνη αὕτη τῶν ἐμβολέων οἷη τε ἐμβιβάσαι, ἦν μὴ ἤδη ὑπὸ χρόνου σὰρξ μὲν ἐπεληλύθη ἐπὶ τὴν κοτύλην, ἢ δὲ κεφαλὴ τοῦ βραχίονος ἤδη τρίβον ἐσωτῆ πεποιημένη ἔη ἐν τῷ χωρίῳ, ἵνα ἐξεκλίθη οὐ μὴν ἀλλ' ἐμβάλλειν γὰρ μοι δοκέει καὶ οὕτω πεπαλαιωμένον ἔκπτωμα τοῦ βραχίονος τί γὰρ ἂν δικαίη μόχλευσις οὐχὶ κινήσειε; μένειν μέντοι οὐκ ἂν μοι δοκέοι κατὰ χώραν, ἀλλ' ὀλισθάνοι ἂν ὡς τὸ ἔθος. Τὸ αὐτὸ δὲ ποιεῖ καὶ περὶ κλιμακτῆρα καταναγκάζειν, τοῦτον τὸν τρόπον σκευάσαντα. Πάνυ μὴν ἱκανῶς ἔχει, καὶ περὶ μέγα ἔδος θεσσαλικὸν ἀναγκάζειν,

ἦν νεαρὸν ἔη τὸ ὀλίστημα ἐσκευάσθαι μέντοι χρή τὸ ξύλον οὕτως, ὥσπερ εἴρηται ἀτὰρ τὸν ἄνθρωπον καθίσει πλάγιον ἐπὶ τῷ δίφρῳ κᾶπειτα τὸν βραχίονα ξὺν τῷ ξύλῳ ὑπερβάλλειν ὑπὲρ τοῦ ἀνακλισμοῦ, καὶ ἐπὶ μὲν θάτερα τὸ σῶμα καταναγκάζειν, ἐπὶ δὲ θάτερα τὸν βραχίονα σὺν τῷ ξύλῳ. Τὸ αὐτὸ δὲ ποιεῖ καὶ ὑπὲρ δίκλειδος θύρης

ἀναγκάζειν. Χρέεσθαι δὲ χρή αἰεὶ τούτοισιν, ἃ ἂν τύχη παρεόντα.

7. The following, however, is the strongest of all the methods of reduction. We must get a piece of wood, five, or at least four inches broad, two inches in thickness, or still thinner, and two cubits in length, or a little less; and its extremity at one end should be rounded, and made very narrow and very slender there, and it should have a slightly projecting edge ( *ambe* ) on its round extremity, not on the part that is to be applied to the side, but to the head of the humerus, so that it may be adjusted in the armpit at the sides under the head of the humerus; and a piece of soft shawl or cloth should be glued to the end of the piece of wood, so as to give the less pain upon pressure. Then having pushed the head of this piece of wood as far inward as possible between the ribs and the head of the humerus, the whole arm is to be stretched along this piece of wood, and is to be bound round at the arm, the fore-arm, and the wrist, so that it may be particularly well secured; but great pains should be taken that the extremity of this piece of wood should be introduced as far as possible into the armpit, and that it is carried past the head of the humerus. Then a cross-beam is to be securely fastened between two pillars, and afterward the arm with the piece of wood attached to it is to be brought over this cross-beam, so that the arm may be on the one side of it and the body on the other, and the cross-beam in the armpit; and then the arm with the piece of wood is to be forced down on the one side of the cross-beam, and the rest of the body on the other. The cross-beam is to be bound so high that the rest of the body may be raised upon tip-toes. This is by far the most powerful method of effecting reduction of the shoulder; for one thus operates with the lever upon the most correct principles, provided only the piece of wood be placed as much as possible within the head of the humerus, and thus also the counter-balancing weights will be most properly adjusted, and safely applied to the bone of the arm. Wherefore recent cases in this way may be reduced more quickly than could be believed, before even extension would appear to be applied; and this is the only mode of reduction capable of replacing old dislocations, and this it will effect, unless flesh has already filled up the (glenoid) cavity, and the head of the humerus has formed a socket for itself in the place to which it has been displaced; and even in such an old case of dislocation,

it appears to me that we could effect reduction (for what object would a lever power properly applied not it move?), but it would not remain in its place, but would be again displaced as formerly. The same thing may be effected by means of the ladder, by preparing it in the same manner. If the dislocation be recent, a large Thessalian chair may be sufficient to accomplish this purpose; the wood, however, should be dressed up as described before; but the patient should be seated sideways on the chair, and then the arm, with the piece of wood attached to it, is to be brought over the back of the chair, and force is to be applied to the arm, with the wood on the one side, and the body on the other side. The same means may be applied with a double door. One should always use what happens to be at hand.

8. Ειδέναι μὲν οὖν χρῆ, ὅτι φύσεις φυσίων μέγα διαφέρουσιν ἐς τὸ ρηϊδίως ἐπίπτειν τὰ ἐκπίπτοντα διενέγκοι μὲν γὰρ ἄν τι κα κοτύλη κοτύλης, ἢ μὲν εὐυπέρβατος εἰσῆ, ἢ δὲ ἦσσον πλεῖστον δὲ διαφέρει καὶ τῶν νεύρων ὁ σύνδεσμος, τοῖσι μὲν ἐπιδόσιας ἔχων, τοῖσι δὲ ζυντεταμένος ἐών. Καὶ γὰρ ἡ ὑγρότης τοῖσιν ἀνθρώποισι γίνεται ἢ ἐκ τῶν ἄρθρων, διὰ τῶν νεύρων τὴν ἀπάρτισιν, ἣν χαλαρά τε ἔη φύσει, καὶ τὰς ἐπιτάσιας εὐφόρως φέρη συχνοὺς γὰρ ἄν τις ἴδοι, οἳ οὕτως ὑγροὶ εἰσιν, ὥστε, ὅποταν ἐθέλωσι, τότε αὐτοῖσι τὰ ἄρθρα ἐξίσταται ἀνωδύνως, καὶ καθίσταται ἀνωδύνως. Διαφέρει μέντοι τι καὶ σχέσις τοῦ σώματος τοῖσι μὲν γὰρ εὖ ἔχουσι τὸ γυῖον καὶ σεσαρκωμένοισιν ἐκπίπτει τε ἦσσον, ἐπίπτει τε χαλεπότερον ὅταν δὲ αὐτοὶ σφέων αὐτῶν λεπτότεροι καὶ ἀσαρκότεροι ἔωσι, τότε ἐκπίπτει τε μᾶλλον, ἐπίπτει τε ῥᾶον. Σημῆιον δὲ, ὅτι ταῦτα οὕτως ἔχει, καὶ τόδε τοῖσι γὰρ βουσι τότε ἐκπίπτουσι μᾶλλον οἳ μηροὶ ἐκ τῆς κοτύλης, ἠνίκα ἄν αὐτοὶ σφέων

αὐτῶν λεπτότατοι ἔωσι γίνονται δὲ βόες λεπτότατοι, τοῦ χειμῶνος τελευτῶντος τότε οὖν καὶ ἐξαρθρέουσι μάλιστα, εἰ δὴ τι καὶ τοιοῦτο δεῖ ἐν ἰητρικῇ γράψαι δεῖ δὲ καλῶς γὰρ Ὅμηρος καταμεμαθήκει, ὅτι πάντων τῶν προβάτων βόες μάλιστα πονέουσι ταύτην τὴν ὥρην, καὶ βοῶν οἳ ἀρόται, ὅτι κατὰ τὸν χειμῶνα ἐργάζονται. Τούτοισι τοίνυν ἐκπίπτει μάλιστα οὗτοι γὰρ μάλιστα λεπτύνονται. Τὰ μὲν γὰρ ἄλλα βοσκήματα δύναται βραχεῖν τὴν ποίην βόσκεσθαι βοῦς δὲ οὐ μάλα, πρὶν βαθεῖα γένηται τοῖσι μὲν γὰρ ἄλλοισίν ἐστι λεπτή ἢ προβολὴ τοῦ χεῖλεος, λεπτή δὲ ἢ ἄνω γνάθος βοῖ δὲ παχεῖ μὲν ἢ προβολὴ τοῦ χεῖλεος, παχεῖ δὲ καὶ ἀμβλεῖα ἢ ἄνω γνάθος διὰ ταῦτα ὑποβάλλειν ὑπὸ τὰς βραχείας ποίας οὐ δύναται. Τὰ τε αὖ μόνυχα τῶν ζώων, ἅτε ἀμφοδόντα ἐόντα, δύναται μὲν σαρκάζειν, δύναται δὲ ὑπὸ τὴν βραχεῖν ποίην ὑποβάλλειν τοὺς ὀδόντας, καὶ ἥδεται τῇ οὕτως ἐχούση ποίη μᾶλλον, ἢ τῇ βαθείη καὶ γὰρ τὸ ἐπίπαν ἀμείνων καὶ στερεωτέρη ἢ βραχεῖ ποίη τῆς βαθείης, ποτὶ καὶ πρὶν ἐκκαρπεῖν τὴν βαθείην.

Διὰ τοῦτο οὖν ἐποίησεν ὧδε τάδε τὰ ἔπη [Ὡς δ' ὀπὸτ' ἀσπάσιον ἔαρ ἦλυθε βουσὶν ἔλιξιν], ὅτι ἀσμενωτάτη αὐτοῖσιν ἡ βαθεῖη ποίη φαίνεται. Ἀτὰρ καὶ ἄλλως ὁ βουὸς χαλαρὸν φύσει τὸ ἄρθρον τοῦτο ἔχει μᾶλλον τῶν ἄλλων ζώων διὰ τοῦτο καὶ εἰλίπουν ἐστὶ μᾶλλον τῶν ἄλλων ζώων, καὶ μάλιστα ὅταν λεπτὸν καὶ γηραλέον ᾖ. Διὰ ταῦτα πάντα καὶ ἐκπίπτει βοῖ μάλιστα πλείω δὲ γέγραπται περὶ αὐτέου, ὅτι πάντων τῶν προειρημένων ταῦτα μαρτύριά ἐστιν. Περὶ οὗ οὖν ὁ λόγος, τοῖσιν ἀσάρκοισι μᾶλλον ἐκπίπτει, καὶ θᾶσσον ἐμπίπτει, ἢ τοῖσι σεσαρκωμένοισιν καὶ ἦσσον ἐπιφλεγμαίνει τοῖσιν ὑγροῖσιν καὶ τοῖσιν ἀσάρκοισιν, ἢ τοῖσι σκελιφροῖσι καὶ σεσαρκωμένοισιν, καὶ ἦσσόν γε δέδεται ἐς τὸν ἔπειτα χρόνον ἀτὰρ καὶ ἡ μύξα πλείων ὑπεῖη τοῦ μετρίου μὴ ζῦν φλεγμονῆ, καὶ οὕτως ἂν ὀλισθηρὸν εἴη μυξωδέστερα γὰρ τούπιπαι τὰ ἄρθρα τοῖσιν ἀσάρκοισιν, ἢ τοῖσι σεσαρκωμένοισιν ἐστὶν καὶ γὰρ αὗται αἱ σάρκες τῶν μὴ ἀπὸ τέχνης ὀρθῶς λελιμαγχημένων, αἱ τῶν λεπτῶν, μυξωδέστεραὶ εἰσιν, ἢ αἱ τῶν παχέων. Ὅσοισι μέντοι ζῦν φλεγμονῆ μύξα ὑπογίνεται, ἡ φλεγμονὴ δήσασα ἔχει τὸ ἄρθρον διὰ τοῦτο οὐ μάλα ἐκπίπτει τὰ ὑπόμυξα, ἐκπίπτοντα ἂν, εἰ μὴ τι ἢ πλέον, ἢ ἔλασσον φλεγμονῆς ὑπεγένετο.

8. Wherefore it should be known that one constitution differs much from another as to the facility with which dislocations in them may be reduced, and one articular cavity differs much from another, the one being so constructed that the bone readily leaps out and another less so; but the greatest difference regards the binding together of the parts by the nerves ( *ligaments?* ) which are slack in some and tight in others. For the humidity in the joints of men is connected with the state of the ligaments, when they are slack and yielding; for you may see many people who are so humid ( *flabby?* ) that when they choose they can disarticulate their joints without pain, and reduce them in like manner. The habit of the body also occasions a certain difference, for in those who are in a state of embonpoint and fleshy the joint is rarely dislocated, but is more difficult to reduce; but when they are more attenuated and leaner than usual, then they are subject to dislocations which are more easily reduced. And the following observation is a proof that matters are so; for in cattle the thighs are most apt to be dislocated at the hip-joint, when they are most particularly lean, which they are at the end of winter, at which time then they are particularly subject to dislocations (if I may be allowed to make such an observation while treating of a medical subject); and therefore Homer has well remarked, that of all beasts oxen suffer the most at that season, and especially those employed at the plow as being worked in the winter season. In them, therefore, dislocations happen most frequently, as being at that time most particularly reduced in flesh. And other cattle can crop the grass when it is short, but the ox cannot do so until it becomes

long; for, in the others, the projection of the lip is slender, and so is the upper lip, but in the ox the projection of the lip is thick, and the upper jaw is thick and obtuse, and therefore they are incapable of seizing short herbs. But the *solidungula* as having prominent teeth in both their front jaws, can crop the grass and grasp it with their teeth while short, and delight more in short grass than in rank; for, in general, short grass is better and more substantial than rank, as having not yet given out its fructification. Wherefore the poet has the following line: “As when to horned cattle dear the vernal season comes,” because rank grass appears to be most sought after by them. But otherwise in the ox, this joint is slacker than in other animals, and, therefore, this animal drags his foot in walking more than any other, and especially when lank and old. For all these reasons the ox is most particularly subject to dislocations; and I have made the more observations respecting him, as they confirm all that was said before on this subject. With regard, then, to the matter on hand, I say that dislocations occur more readily, and are more speedily reduced in those who are lean than in those who are fleshy; and in those who are humid and lank there is less inflammation than in such as are dry and fleshy, and they are less compactly knit hereafter, and there is more mucosity than usual in cases not attended with inflammation, and hence the joints are more liable to luxations; for, in the main, the articulations are more subject to mucosities in those who are lean than in those who are fleshy; and the flesh of lean persons who have not been reduced by a proper course of discipline abounds more with mucosity than that of fat persons. But in those cases in which the mucosity is accompanied with inflammation, the inflammation binds (*braces?*) the joint, and hence those who have small collections of mucosities are not very subject to dislocations, which they would be if the mucosity had not been accompanied with more or less inflammation.

9. Οἷσι μὲν οὖν, ὅταν ἐμπέσῃ τὸ ἄρθρον, μὴ ἐπιφλεγμαίνει τὰ περιέχοντα, χρῆσθαι τε ἀνωδύνως αὐτίκα τῷ ὤμῳ δύνανται, οὗτοι μὲν οὐδὲν νομίζουσι δεῖν ἐωυτῶν ἐπιμελέεσθαι ἰητροῦ μὴν ἐστὶ καταμαντεύσασθαι τῶν τοιούτων τοῖσι τοιούτοις γὰρ ἐκπίπτει καὶ αὖθις μᾶλλον, ἢ οἷσιν ἂν ἐπιφλεγμῆναι τὰ νεῦρα. Τοῦτο κατὰ πάντα τὰ ἄρθρα οὕτως ἔχει, καὶ μάλιστα κατ’ ὤμον καὶ κατὰ γόνυ μάλιστα γὰρ οὖν ὀλισθάνει ταῦτα. Οἷσι δ’ ἂν ἐπιφλεγμῆναι τὰ νεῦρα, οὐ δύνανται χρέεσθαι τῷ ὤμῳ κωλύει γὰρ ἡ ὀδύνη καὶ ἡ ζύντασις τῆς φλεγμονῆς. Τοὺς οὖν τοιούτους ἰῆσθαι χρὴ κηρωτῆ καὶ σπλήνεσι καὶ ὀθονίοις πολλοῖσιν ἐπιδέοντα ὑποτιθέναι δὲ ἐς τὴν μασχάλην εἶριον μαλθακὸν, καθαρὸν ξυνειλίσσοντα, ἐκπλήρωμα τοῦ κοίλου ποιέοντα, ἵνα ἀντιστήριγμα μὲν τῇ ἐπιδέσει ἔη, ἀνακωχῆ δὲ τὸ ἄρθρον τὸν δὲ βραχίονα ἐς τὸ ἄνω ρέποντα ἴσχειν χρὴ τὰ

πλεῖστα οὕτω γὰρ ἂν ἐκαστάτω εἶη τοῦ χωρίου, ἐς ὃ ὠλισθεν ἡ κεφαλὴ τοῦ ὤμου. Χρὴ δὲ, ὅταν ἐπίδησης τὸν ὤμον, ἔπειτα προσκαταδεῖν τὸν βραχίονα πρὸς τὰς πλευρὰς ταινίη τινί, κύκλῳ περὶ τὸ σῶμα περιβάλλοντα. Χρὴ δὲ καὶ ἀνατρίβειν τὸν ὤμον ἡσυχαίως καὶ λιπαρῶς. Πολλῶν δὲ ἔμπειρον δεῖ εἶναι τὸν ἰητρὸν, ἀτὰρ δὴ καὶ ἀνατρίψιος ἀπὸ γὰρ τοῦ αὐτέου ὀνόματος οὐ τωῦτό

ἀποβαίνει καὶ γὰρ ἂν δήσειεν ἄρθρον ἀνάτριψις, χαλαρώτερον τοῦ καιροῦ ἐόν, καὶ λύσειεν ἄρθρον, σκληρότερον τοῦ καιροῦ ἐόν ἀλλὰ διοριεῖται ἡμῖν περὶ ἀνατρίψιος ἐν ἄλλῳ λόγῳ. Τὸν γοῦν τοιοῦτον ὤμον μαλθακῆσι ζυμφέρει τῆσι χερσὶν ἀνατρίβειν, καὶ ἄλλως πρηέως τὸ δὲ ἄρθρον διακινέειν μὴ βίη, ἀλλὰ τοσοῦτον, ὅσον ἀνωδύνως κινῆσαι. Καθίσταται δὲ πάντα, τὰ μὲν ἐν πλείονι χρόνῳ, τὰ δ' ἐν ἐλάσσονι.

9. In cases of dislocation those persons who are not attacked with inflammation of the surrounding parts, can use the shoulder immediately without pain, and do not think it necessary to take any precautions with themselves; it is therefore the business of the physician to warn them beforehand that dislocation is more likely to return in such cases than when the tendons have been inflamed. This remark applies to all the articulations, but particularly to those of the shoulder and knee, for these are the joints most subject to luxations. But those who have inflammation of the ligaments cannot use the shoulder, for the pain and the tension induced by the inflammation prevent them. Such cases are to be treated with cerate, compresses, and plenty of bandages; but a ball of soft clean wool is to be introduced into the armpit, to fill up the hollow of it, that it may be a support to the bandaging, and maintain the joint *in situ*. The arm, in general, should be inclined upward as much as possible, for thus it will be kept at the greatest possible distance from the place at which the head of the humerus escaped. And when you bandage the shoulder you must fasten the arms to the sides with a band, which is to be carried round the body. The shoulder should be rubbed gently and softly. The physician ought to be acquainted with many things, and among others with friction; for from the same name the same results are not always obtained; for friction could brace a joint when unseasonably relaxed, and relax it when unseasonably hard; but we will define what we know respecting friction in another place. The shoulder, then, in such a state, should be rubbed with soft hands; and, moreover, in a gentle manner, and the joint should be moved about, but not roughly, so as to excite pain. Things get restored sometimes in a greater space of time, and sometimes in a smaller.

10. Γινώσκειν δὲ, εἰ ἐκπέπτωκεν ὁ βραχίον, τοισίδε χρὴ τοῖσι σημείοισιν τοῦτο



μὲν, ἐπειδὴ δίκαιον ἔχουσι τὸ σῶμα οἱ ἄνθρωποι, καὶ τὰς χεῖρας, καὶ τὰ σκέλεα, παραδείγματι χρέεσθαι δεῖ τῷ ὑγιεῖ πρὸς τὸ μὴ ὑγιές, καὶ τῷ μὴ ὑγιεῖ πρὸς τὸ ὑγιές, μὴ τὰ ἀλλότρια ἄρθρα καθορῶντα ἄλλοι γὰρ ἄλλων μᾶλλον ἔξαρθροι πεφύκασιν, ἀλλὰ τὰ αὐτοῦ τοῦ κάμνοντος, ἦν ἀνόμοιον ἔη τὸ ὑγιές τῷ κάμνοντι. Καὶ τοῦτο εἴρηται μὲν ὀρθῶς, παραξύνεσιν δὲ ἔχει πάνυ πολλήν διὰ τὰ τοιαῦτα, καὶ οὐκ ἀρκέει μόνον λόγῳ εἰδέναι τὴν τέχνην ταύτην, ἀλλὰ καὶ ὁμιλίῃ ὁμιλέειν πολλοὶ γὰρ ὑπὸ ὀδύνης, ἢ καὶ ὑπ' ἀλλοίης προφάσιος, οὐκ ἐξεστεῶτων αὐτέοισι τῶν ἄρθρων, ὅμως οὐ δύνανται

ἐς τὰ ὅμοια σχήματα καθίστασθαι ἐς οἷά περ τὸ ὑγιαῖνον σῶμα σχηματίζεται προσξυνιέναι μὲν οὖν, καὶ ἐννοεῖν καὶ τὸ τοιόνδε σχῆμα χρή. Ἀτὰρ καὶ ἐν τῇ μασχάλῃ ἢ κεφαλῇ τοῦ βραχίονος φαίνεται ἐγκειμένη πολλῷ μᾶλλον τοῦ ἐκπεπτωκότος ἢ τοῦ ὑγιέος τοῦτο δὲ, ἄνωθεν κατὰ τὴν ἐπωμίδα κοῖλον φαίνεται τὸ χωρίον, καὶ τὸ τοῦ ἀκρωμίου ὀστέον ἐξέχον φαίνεται, ἅτε ὑποδεδυκότος τοῦ ἄρθρου ἐς τὸ κάτω χωρίον παραξύνεσιν μὴν καὶ ἐν τούτῳ ἔχει τινὰ, ἀλλ' ὕστερον περὶ αὐτοῦ γεγράφεται, ἄξιον γὰρ γραφῆς ἐστὶν τοῦτο δὲ, τοῦ ἐκπεπτωκότος ὁ ἀγκῶν φαίνεται ἀφεστεῶς μᾶλλον ἀπὸ τῶν πλευρέων, ἢ τοῦ ἐτέρου εἰ μέντοι τις προσαναγκάζει, προσάγεται μὲν, ἐπιπόνως δὲ τοῦτο δὲ, ἄνω τὴν χεῖρα ἄραι εὐθειᾶν παρὰ τὸ οὖς, ἐκτεταμένου τοῦ ἀγκῶνος, οὐ μάλα δύνανται, ὥσπερ τὴν ὑγίεια, οὐδὲ παράγειν ἔνθα καὶ ἔνθα ὁμοίως. Τὰ τε οὖν σημήια ταῦτά ἐστιν ὧμου ἐκπεπτωκότος αἷ τε ἐμβολαὶ αἱ γεγραμμένοι, αἷ τε ἰητρεῖαι αὐταί.

10. A dislocation may be recognized by the following symptoms:-Since the parts of a man's body are proportionate to one another, as the arms and the legs, the sound should always be compared with the unsound, and the unsound with the sound, not paying regard to the joints of other individuals (for one person's joints are more prominent than another's), but looking to those of the patient, to ascertain whether the sound joint be unlike the unsound. This is a proper rule, and yet it may lead to much error; and on this account it is not sufficient to know this art in theory, but also by actual practice; for many persons from pain, or from any other cause, when their joints are not dislocated, cannot put the parts into the same positions as the sound body can be put into; one ought therefore to know and be acquainted beforehand with such an attitude. But in a dislocated joint the head of the humerus appears lying much more in the armpit than it is in the sound joint; and also, above, at the top of the shoulder, the part appears hollow, and the acromion is prominent, owing to the bone of the joint having sunk into the part below; there is a source of error in this case also, as will be described afterward, for it deserves to be described; and also, the elbow of the

dislocated arm is farther removed from the ribs than that of the other; but by using force it may be approximated, though with considerable pain; and also they cannot, with the elbow extended, raise the arm to the ear, as they can the sound arm, nor move it about as formerly in this direction and that. These, then, are the symptoms of dislocation at the shoulder. The methods of reduction and the treatment are as described.

11. Ἐπάξιον δὲ τὸ μάθημα, ὡς χρὴ ἰητρεύειν τοὺς πυκνὰ ἐκπίπτοντας ὤμους πολλοὶ μὲν γὰρ ἤδη ἀγωνίης ἐκωλύθησαν διὰ ταύτην τὴν ξυμφορὴν, τᾶλλα πάντα ἀξιοχρεοὶ ἔοντες πολλοὶ δὲ ἐν πολεμικοῖσιν ἀχρήϊοι ἐγένοντο, καὶ διεφθάρησαν διὰ ταύτην τὴν ξυμφορὴν ἅμα δὲ ἐπάξιον καὶ διὰ τοῦτο, ὅτι οὐδένα οἶδα ὀρθῶς ἰητεύοντα, ἀλλὰ τοὺς μὲν μηδὲ ἐγχειρέοντας, τοὺς δὲ τάναντία τοῦ ξυμφέροντος φρονέοντάς τε καὶ ποιέοντας. Συχνοὶ γὰρ ἤδη ἰητροὶ

ἔκαυσαν ὤμους ἐκπίπτοντας, κατὰ τε τὴν ἐπωμίδα, κατὰ τε τὸ ἔμπροσθεν, ἢ ἢ κεφαλὴ τοῦ βραχίονος ἐξογκέει, κατὰ τε τοῦπισθεν ὀλίγον τῆς ἐπωμίδος αὐταὶ οὖν αἱ καύσεις, εἰ μὲν ἐς τὸ ἄνω ἐξέπιπτεν ὁ βραχίων, ἢ ἐς τοῦμπροσθεν, ἢ ἐς τοῦπισθεν, ὀρθῶς ἂν ἔκαιον νῦν δὲ δὴ, ὅτε ἐς τὸ κάτω ἐκίπτει, ἐκβάλλουσι αὐταὶ αἱ καύσεις μᾶλλον, ἢ κωλύουσι ἀποκλείουσι γὰρ τῆς ἄνω εὐρυχωρίας τὴν κεφαλὴν τοῦ βραχίονος. Χρὴ δὲ ὧδε καίειν ταῦτα ἀπολαβόντα τοῖσι δακτύλοισι κατὰ τὴν μασχάλην τὸ δέρμα ἀφελκύσαι κατ' αὐτὴν τὴν ἴξιν μάλιστα, καθ' ἣν ἢ κεφαλὴ τοῦ βραχίονος ἐκίπτει ἔπειτα οὕτως ἀφελκυσάμενον τὸ δέρμα διακαῦσαι ἐς τὸ πέρην. Σιδηρίοισι δὲ χρὴ ταῦτα καίειν, μὴ παχέσι, μηδὲ λίην φαλακροῖσιν, ἀλλὰ προμήκεσι ταχυπορώτερα γὰρ, καὶ τῇ χειρὶ ἐπερείδειν χρὴ δὲ καὶ διαφανέσι καίειν, ὡς ὅτι τάχιστα περαιωθῆ κατὰ δύναμιν τὰ γὰρ παχέα, βραδέως περαιούμενα, πλατυτέρας τὰς ἐκπτώσιας τῶν ἐσχαρῶν ποιέεται, καὶ κίνδυνος ἂν εἴη ξυρραγῆναι τὰς ὠτειλας καὶ κάκιον μὲν οὐδὲν ἂν εἴη, αἴσχιον δὲ καὶ ἀτεχνότερον. Ὅταν δὲ διακαύσης ἐς τὸ πέρην, τῶν μὲν πλείστων ἰκανῶς ἂν ἔχοι ἐν τῷ κάτω μέρει τὰς ἐσχάρας ταύτας μόνας θεῖναι ἢ δὲ μὴ κίνδυνος φαίνεται εἶναι ξυρραγῆναι τὰς ὠτειλάς, ἀλλὰ πολὺ τὸ διὰ μέσου ἔη, ὑπάλειπτρον χρὴ λεπτὸν διέρσαι διὰ τῶν καυμάτων,

ἔτι ἀναλελαμμένου τοῦ δέρματος, οὐ γὰρ ἂν ἄλλως δύναιο διέρσαι ἐπὴν δὲ διέρσης, ἀφεῖναι τὸ δέρμα, ἔπειτα μεσηγὺ τῶν ἐσχαρῶν ἄλλην ἐσχάρην ἐμβάλλειν λεπτῷ σιδηρίῳ, καὶ διακαῦσαι, ἄχρις ἂν τῷ ὑπαλείπτρῳ ἐγκύρση. Ὅκόσον δὲ τι χρὴ τὸ δέρμα τὸ ἀπὸ τῆς μασχάλης ἀπολαμβάνειν, τοισίδε χρὴ τεκμαίρεσθαι ἀδένες ὑπείσιν ἢ ἐλάσσους ἢ μείζους πᾶσιν ὑπὸ τῇ μασχάλῃ, πολλαχῆ δὲ καὶ ἄλλῃ τοῦ σώματος. Ἀλλὰ ἐν ἄλλῳ λόγῳ περὶ ἀδένων οὐλομελίας γεγράφεται, ὃ τι τέ εἰσι, καὶ οἷα ἐν οἰοῖσι σημαίνουσί τε καὶ δύνανται. Τοὺς μὲν

οὖν ἀδένας οὐ χρή προσπολαμβάνειν, οὐδ' ὅσα ἐσωτέρω τῶν ἀδένων μέγας γὰρ ὁ κίνδυνος τοῖσι γὰρ ἐπικαιροτάτοισι τόνοισι γειτονεύονται ὅσον δὲ ἐξωτέρω τῶν ἀδένων, ἐπιπλεῖστον ἀπολαμβάνειν ἀσινέα γάρ. Γινώσκειν δὲ χρή. καὶ τάδε, ὅτι, ἦν μὲν ἰσχυρῶς τὸν βραχίονα ἀνατείνης, οὐ δυνήση τοῦ δέρματος ἀπολαβεῖν οὐδὲν τοῦ ὑπὸ τῆ μασχάλῃ, ὅ τι καὶ ἄξιον λόγου καταναισιμοῦται γὰρ ἐν τῆ ἀνατάσει οἱ δ' αὖ τόνοι, οὐς

οὐδεμιῇ μηχανῇ δεῖ τιτρώσκειν, οὗτοι πρόχειροι γίνονται καὶ κατατεταμένοι ἐν τούτῳ τῷ σχήματι ἦν δὲ μικρὸν ἐπάρης τὸν βραχίονα, πολὺ μὲν τοῦ δέρματος ἀπολήψη, οἱ δὲ τόνοι, ὧν δεῖ προμηθέεσθαι, εἴσω καὶ πρόσω τοῦ χειρίσματος γίνονται. Ἄρ' οὖν οὐκ ἐν πάσῃ τῇ τέχνῃ περὶ παντὸς χρή ποιέεσθαι, τὰ δίκαια σχήματα ἐξευρίσκειν ἐφ' ἐκάστοισιν; ταῦτα μὲν τὰ κατὰ τὴν μασχάλην, καὶ ἱκαναὶ αὐταὶ αἱ καταλήψεις, ἦν ὀρθῶς τεθῶσιν αἱ ἐσχάροι. Ἐκτοσθεν δὲ τῆς μασχάλῃς, δισσὰ μόνον ἐστὶ χωρία, ἵνα ἂν τις ἐσχάρας θείῃ, τιμωρεύσας τῷ παθήματι μίαν μὲν ἐν τῷ ἔμπροσθεν μεσηγὺ τῆς τε κεφαλῆς τοῦ βραχίονος καὶ τοῦ τένοντος τοῦ κατὰ τὴν μασχάλην καὶ ταύτῃ τὸ μὲν δέρμα τελέως διακαίειν χρή, βαθύτερον δὲ οὐ χρή φλέψ τε γὰρ παχείη πλησίη, καὶ νεῖρα,

ὧν οὐδέτερα θερμαντέα. Ἐξωθεν δ' αὖ ἄλλην ἐσχάρην ἐνδέχεται ἐνθεῖναι ἀνωτέρω μὲν συχνῶ τοῦ τένοντος τοῦ κατὰ τὴν μασχάλην, κατωτέρω δὲ ὀλίγῳ τῆς κεφαλῆς τοῦ βραχίονος καὶ τὸ μὲν δέρμα τελέως χρή διακαίειν, βαθείην δὲ μηδὲ κάρτα ταύτην ποιέειν πολέμιον γὰρ τὸ πῦρ νεύροισιν. Ἰητρεύειν μὲν οὖν χρή διὰ πάσης τῆς ἰητρείης τὰ ἔλκεα, μηδέποτε ἰσχυρῶς ἀνατείνοντα τὸν βραχίονα, ἀλλὰ μετρίως, ὅσον τῶν ἐλκείων ἐπιμελείης εἵνεκα ἧσσον μὲν γὰρ ἂν διαψύχοιτο ξυμφέροι γὰρ πάντα τὰ καύματα σκέπειν, ὡς ἐπιεικέως ἰητρεύεσθαι ἧσσον δ' ἂν ἐκπλίσσοιτο ἧσσον δ' ἂν αἰμορραγοίη ἧσσον δ' ἂν σπασμὸς ἐπιγένοιτο. Ὅταν δὲ δὴ καθαρὰ γένηται τὰ ἔλκεα, ἐς ὠτειλάς τε ἦ, τότε δὴ καὶ παντάπασι χρή αἰεὶ τὸν βραχίονα πρὸς τῆσι πλευρῆσι προσδεδέσθαι, καὶ νύκτα καὶ ἡμέρην ἀτὰρ καὶ ὅταν ὑγιέα γένηται τὰ ἔλκεα, ὁμοίως ἐπὶ πολὺν χρόνον χρή προσδεῖν τὸν βραχίονα πρὸς τὰς πλευράς οὕτω γὰρ ἂν μάλιστα ἐπουλωθείη, καὶ ἀποληφθείη ἢ εὐρυχωρή, καθ' ἣν μάλιστα ὀλισθάνει ὁ βραχίων.

11. It deserves to be known how a shoulder which is subject to frequent dislocations should be treated. For many persons owing to this accident have been obliged to abandon gymnastic exercises, though otherwise well qualified for them; and from the same misfortune have become inept in warlike practices, and have thus perished. And this subject deserves to be noticed, because I have never known any physician treat the case properly; some abandon the attempt altogether, and others hold opinions and practice the very what is proper. For

physicians have burned the shoulders subject to dislocation, at the top of the shoulder, at the anterior part where the head of the humerus protrudes, and a little behind the top of the shoulder; these burnings, if the dislocation of the arm were upward, or forward, or backward, would have been properly performed; but now, when the dislocation is downward, they rather promote than prevent dislocations, for they shut out the head of the humerus from the free space above. The cautery should be applied thus: taking hold with the hands of the skin at the armpit, it is to be drawn into the line, in which the head of the humerus is dislocated; and then the skin thus drawn aside is to be burnt to the opposite side. The burnings should be performed with irons, which are not thick nor much rounded, but of an oblong form (for thus they pass the more readily through), and they are to be pushed forward with the hand; the cauteries should be red-hot, that they may pass through as quickly as possible; for such as are thick pass through slowly, and occasion eschars of a greater breadth than convenient, and there is danger that the cicatrices may break into one another; which, although nothing very bad, is most unseemly, or awkward. When you have burnt through, it will be sufficient, in most cases, to make eschars only in the lower part; but if there is no danger of the ulcers passing into one another, and there is a considerable piece of skin between them, a thin spatula is to be pushed through these holes which have been burned, while, at the same time, the skin is stretched, for otherwise the instrument could not pass through; but when you have passed it through you must let go the skin, and then between the two eschars you should form another eschar with a slender iron, and burn through until you come in contact with the spatula. The following directions enable you to determine how much of the skin of the armpit should be grasped; all men have glands in the armpit greater or smaller, and also in many other parts of the body. But I will treat in another work of the whole constitution of the glands, and explain what they are, what they signify, and what are their offices. The glands, then, are not to be taken hold of, nor the parts internal to the glands; for this would be attended with great danger, as they are adjacent to the most important nerves. But the greater part of the substances external to the glands are to be grasped, for there is no danger from them. And this, also, it is proper to know, that if you raise the arm much, you will not be able to grasp any quantity of skin worth mentioning, for it is all taken up with the stretching; and also the nerves, which by all means you must avoid wounding, become exposed and stretched in this position; but if you only raise the arm a little, you can grasp a large quantity of skin, and the nerves which you ought to guard against are left within, and at a distance from the operation. Should not, then, the utmost pains be taken in the whole practice of the art to find out the proper attitude in every case? So much

regarding the armpit, and these contractions will be sufficient, provided the eschars be properly placed. Without the armpit there are only two places where one might place the eschars to obviate this affection; the one before and between the head of the humerus and the tendon at the armpit; and then the skin may be fairly burned through, but not to any great depth, for there is a large vein adjacent, and also nerves, neither of which must be touched with the heat. But externally, one may form another eschar considerably above the tendon at the armpit, but a little below the head of the humerus; and the skin must be burned fairly through, but it must not be made very deep, for fire is inimical to the nerves. Through the whole treatment the sores are to be so treated, as to avoid all strong extension of the arm, and this is to be done moderately, and only as far as the dressing requires; for thus they will be less cooled (for it is of importance to cover up all sorts of burns if one would treat them mildly), and then the lips of them will be less turned aside; there will be less hemorrhage and fear of convulsions. But when the sores have become clean, and are going on to cicatrization, then by all means the arm is to be bound to the side night and day; and even when the ulcers are completely healed, the arm must still be bound to the side for a long time; for thus more especially will cicatrization take place, and the wide space into which the humerus used to escape will become contracted.

12. Ὅσοισι δ' ἂν ὤμος καταπορηθῆ ἐμβληθῆναι, ἦν μὲν ἔτι ἐν αὐξήσει ἔωσιν, οὐκ ἐθέλει συναύξεσθαι τὸ ὀστέον τοῦ βραχίονος ὁμοίως τῷ ὑγιεῖ, ἀλλὰ αὐξεται μὲν ἐπί τι, βραχύτερον δὲ τοῦ ἑτέρου

γίνεται καὶ οἱ καλεομενοὶ δὲ ἐκ γενεῆς γαλιάγκωνες διὰ δισσὰς ξυμφορὰς ταύτας γίνονται, ἦν τέ τι τοιοῦτον αὐτοὺς ἐξάρθημα καταλάβη ἐν τῇ γαστρὶ ἐόντας, διὰ τε ἄλλην ξυμφορὴν, περὶ ἧς ὕστερόν ποτε γεγράφεται ἀτὰρ καὶ οἷσιν ἔτι νηπίοισιν ἐοῦσι κατὰ τὴν κεφαλὴν τοῦ βραχίονος βαθεῖαι καὶ ὑποβρύχιοι ἐκπυήσεις γίνονται, καὶ οὗτοι πάντες γαλιάγκωνες γίνονται καὶ ἦν τε τμηθῶσιν, ἦν τε καυθῶσιν, ἦν τε αὐτόματόν σφιν ἐκτραγῆ, εὖ εἰδέναι χρὴ, ὅτι ταῦτα οὕτως ἔχει. Χρέεσθαι μέντοι τῇ χειρὶ δυνατώτατοί εἰσιν οἱ ἐκ γενεῆς γαλιάγκωνες, οὐ μὴν οὐδὲ ἐκεῖνοί γε ἀνατεῖναι παρὰ τὸ οὖς τὸν βραχίονα, ἐκτανύσαντες τὸν ἀγκῶνα, δύνανται, ἀλλὰ πολὺ ἐνδεεστέρως, ἢ τὴν ὑγίεια χεῖρα. Οἷσι δ' ἂν ἤδη ἀνδράσιν ἐοῦσιν ἐκπέση ὁ ὤμος, καὶ μὴ ἐμβληθῆ, ἢ ἐπωμὶς ἀσαρκοτέρη γίνεται, καὶ ἢ ἕξις λεπτή ἢ κατὰ τοῦτο τὸ μέρος ὅταν μέντοι ὀδυνώμενοι παύσωνται, ὀκόσα μὲν δεῖ ἐργάζεσθαι ἐπάραντας τὸν ἀγκῶνα ἀπὸ τῶν πλευρέων ἐς τὸ πλάγιον, ταῦτα μὲν οὐ δύνανται ἅπαντα ὁμοίως ἐργάζεσθαι ὀκόσα δὲ δεῖ ἐργάζεσθαι, παραφέροντας τὸν βραχίονα παρὰ τὰς πλευρὰς, ἢ ἐς τοῦπίσω, ἢ ἐς

του̐μπροσθεν, ταῦτα δὲ δύνανται ἐργάζεσθαι καὶ γὰρ ἂν ἀρίδα ἐλκύσαιεν, καὶ

πρίονα, καὶ πελεκήσαιεν ἂν, καὶ σκάψαιεν ἂν, μὴ κάρτα ἄνω αἶροντες τὸν ἀγκῶνα, καὶ τᾶλλα ὅσα ἐκ τῶν τοιούτων σχημάτων ἐργάζονται.

12. When attempts to reduce a dislocated shoulder have failed, if the patient be still growing, the bone of the affected arm will not increase like the sound one, for although it does increase in so far it becomes shorter than the other; and those persons called *weasel-armed*, become so from two accidents, either from having met with this dislocation *in utero*, or from another accident, which will be described afterward. But those who while they were children have had deep-seated suppurations about the head of the bone, all become weasel-armed; and this, it should be well known, will be the issue, whether the abscess be opened by an incision or cautery, or whether it break spontaneously. Those who are thus affected from birth are quite able to use the arm yet neither can they raise the arm to the ear, by extending the elbow, but they do this much less efficiently than with the sound arm. But in those who have had the shoulder dislocated after they were grown up, and when it has not been reduced, the top of the shoulder becomes much less fleshy, and the habit of body at that part is attenuated; but when they cease to have pain, whatever they attempt to perform by raising the elbow from the sides obliquely, they can no longer accomplish as formerly; but whatever acts are performed by carrying the arm around by the sides, either backward or forward, all those they can perform; for they can work with an auger or a saw, or with a hatchet, and can dig, by not raising the elbow too much, and do all other kinds of work which are done in similar attitudes.

13. Ὅσοισι δ' ἂν τὸ ἀκρόμιον ἀποσπασθῆ, τουτέοισι φαίνεται ἐξέχον τὸ ὀστέον τὸ ἀπεσπασμένον ἔστι δὲ τοῦτο ὁ ζύνδεσμος τῆς κληῖδος καὶ τῆς ὠμοπλάτης ἑτεροίη γὰρ ἡ φύσις ἀνθρώπου ταύτη, ἢ τῶν ἄλλων ζώων. Οἱ οὖν ἰητροὶ μάλιστα ἐξαπατέονται ἐν τούτῳ τῷ τρώματι ἅτε γὰρ ἀνασχόντος τοῦ ὀστέου τοῦ ἀποσπασθέντος, ἡ ἐπωμὶς φαίνεται χαμαιζήγη καὶ κοίλῃ, ὥστε καὶ προμηθέεσθαι τῶν ὠμων τῶν ἐκπεπτωκότων πολλοὺς οὖν οἶδα ἰητροὺς, τᾶλλα οὐ φλαύρους ἐόντας, οἱ πολλὰ ἤδη ἐλυμήναντο, ἐμβάλλειν πειρώμενοι τοὺς τοιούτους ὠμους, οὕτως οἰόμενοι ἐκπεπτωκένας, καὶ οὐ πρόσθεν παύονται, πρὶν ἢ ἀπογνῶναι, ἢ ἀπορῆσαι, δοκέοντες αὐτοῖ σφέας αὐτοὺς ἐμβάλλειν τὸν ὠμον. Τούτοισιν ἰητροίη μὲν, ἢπερ καὶ τοῖσιν ἄλλοισιν τοῖσι τοιούτοισι, κηρωτὴ καὶ σπλῆνες καὶ ὀθόνια, καὶ ἐπίδεςις τοιαύτη. Καταναγκάζειν μέντοι τὸ ὑπερέχον χρῆ, καὶ τοὺς σπλῆνας κατὰ τοῦτο τιθέναι πλείστους, καὶ πιέζειν ταύτη μάλιστα, καὶ τὸν βραχίονα πρὸς τῆσι πλευρῆσι ποοσηρημένον ἐς τὸ ἄνω μέρος ἔχειν οὕτω γὰρ

ἂν μάλιστα πλησιάζοι τὸ ἀπεσπασμένον. Τάδε μὴν εὖ εἰδέναι χρῆ, καὶ προλέγειν ὡς ἀσφαλέα, εἰ ἄλλως ἐθέλοις, ὅτι βλάβη μὲν οὐδεμίη, οὔτε σμικρῆ, οὔτε μεγάλη, τῷ ὤμῳ γίνεται ἀπὸ τούτου τοῦ τρώματος, αἴσχιον δὲ τὸ χωρίον οὐδὲ γὰρ τοῦτο τὸ ὀστέον ἐς τὴν ἀρχαίην ἔδρην ὁμοίως ἂν

ἰδρυνθείη, ὡσπερ ἐπεφύκεεν, ἀλλ' ἀνάγκη πλέον ἢ ἔλασσον ὀγκηρότερον εἶναι ἐς τὸ ἄνω. Οὐδὲ γὰρ ἄλλο ὀστέον οὐδὲν ἐς τωῦτό καθίσταται, ὅ τι ἂν κοινωνέον ἦ ἐτέρῳ ὀστέῳ, καὶ προσπεφυκὸς ἀποσπασθῆ ἀπὸ τῆς ἀρχαίης φύσιος. Ἀνώδυνον δὲ τὸ ἀκρόμιον ἐν ὀλίγησιν ἡμέρησι γίνεται, ἣν χρηστῶς ἐπιδέηται.

13. In those cases where the acromion has been torn off, the bone which is thus separated appears prominent. The bone is the bond of connection between the clavicle and scapula, for in this respect the constitution of man is different from that of other animals; physicians are particularly liable to be deceived in this accident (for as the separated bone protrudes, the top of the shoulder appears low and hollow), so that they make preparations as if for dislocation of the shoulder; for I have known many physicians, otherwise not inexpert at the art, who have done much mischief by attempting to reduce such shoulders, thus supposing it a case of dislocation; and they did not desist until they gave over mistake of supposing that they had reduced the shoulder. The treatment, in these cases, is similar to that which is applicable in others of a like kind, namely, cerate, compresses, and suitable bandaging with linen cloths. The projecting part must be pushed down, and the greater number of compresses are to be placed on it, and most compression is to be applied at that part, and the arm being fastened to the side is to be kept elevated; for thus the parts which had been torn asunder are brought into closest proximity with one another. All this should be well known, and if you choose you may prognosticate safely that no impediment, small or great, will result from such an injury at the shoulder, only there will be a deformity in the place, for the bone cannot be properly restored to its natural situation, but there must necessarily be more or less tumefaction in the upper part. For neither can any other bone be made exactly as it was, which having become incorporated with another bone, and having grown to it as an apophysis, has been torn from its natural situation. If properly bandaged, the acromion becomes free of pain in a few days.

14. Κληῖς δὲ κατεαγεῖσα, ἣν μὲν ἀτρεκέως ἀποκαυλισθῆ, εὐητοτέρη ἐστίν ἢν δὲ παραμηκέως, δυσητοτέρη. Τάναντία δὲ τούτοισιν ἐστίν, ἢ ὡς ἂν τις οἶοιτο τὴν μὲν γὰρ ἀτρεκέως ἀποκαυλισθεῖσαν προσαναγκάσειεν ἂν τις μᾶλλον ἐς τὴν φύσιν ἐλθεῖν καὶ γὰρ εἰ πάνυ προμηθηθείη, τὸ ἀνωτέρω κατωτέρω ἂν ποιήσειε,

σχήμασί τε ἐπιτηδείοισι καὶ ἐπιδέσει ἀρμοζούσῃ εἰ δὲ μὴ τελέως ἰδρυνθείῃ, ἀλλ' οὖν τὸ ὑπερέχον γε τοῦ ὀστέου οὐ κάρτα ὅζυ γίνεται. Ὡν δὲ ἂν παράμηκες τὸ ὀστέον κατεαγῆ, ἰκέλη ἢ ξυμφορὴ γίνεται τοῖσιν ὀστέοισι τοῖσιν ἀπεσπασμένοισι, περὶ ὧν πρόσθεν γέγραπται οὔτε γὰρ ἰδρυνθῆναι αὐτὸ πρὸς ἑαυτὸ κάρτα ἐθέλει, ἢ τε ὑπερέχουσα ὄκρις τοῦ ὀστέου ὀξεῖη γίνεται κάρτα. Τὸ μὲν οὖν ξύμπαν, εἰδέναι χρὴ, ὅτι βλάβη οὐδεμίῃ τῷ ὤμῳ, οὐδὲ τῷ ἄλλῳ σώματι γίνεται διὰ τὴν κάτηξιν τῆς κληΐδος, ἣν μὴ ἐπισφακελίση ὀλιγάκις δὲ τοῦτο γίνεται. Αἴσχος γε μὴν προσγίνεται περὶ τὴν κάτηξιν τῆς κληΐδος, καὶ τούτοισι τὸ πρῶτον αἴσχιστον, ἔπειτα μὴν

ἐπὶ ἦσσον γίνεται. Ξυμφύεται δὲ ταχέως κληῖς, καὶ τὰλλα πάντα ὅσα χαῦνα ὀστέα ταχεῖν γὰρ τὴν ἐπιπώρωσιν ποιέεται τὰ τοιαῦτα. Ὅταν μὲν οὖν νεωστὶ κατεαγῆ, οἱ τετρωμένοι σπουδάζουσιν, οἴομενοι μέζον τὸ κακὸν εἶναι, ἢ ὅσον ἐστὶν οἷ τε ἰητροὶ προθυμέονται δῆθεν ὀρθῶς ἰῆσθαι προϊόντος δὲ τοῦ χρόνου, οἱ τετρωμένοι, ἅτε οὐκ ὀδυνώμενοι, οὐδὲ κωλύομενοι οὔτε ὀδοιπορίας, οὔτε ἐδωδῆς, καταμελέουσιν οἷ τε αὖ ἰητροὶ, ἅτε οὐ δυνάμενοι καλὰ τὰ χωρία ἀποδεικνύναι, ἀποδιδράσκουσι, καὶ οὐκ ἄχθονται τῇ ἀμελείῃ τῶν τετρωμένων ἐν τούτῳ δὲ ἡ ἐπιπώρωσις ξυνταχύνεται. Ἐπιδέσιος μὲν οὖν τρόπος καθέστηκε παραπλήσιος τοῖσι πλείστοισι, κηρωτῇ καὶ σπλήνεσι καὶ ὀθονίοισι μαλθακοῖσιν ἰητρεύειν καὶ τάδε δεῖ προσξυνιέναι καὶ μάλιστα ἐν τούτῳ τῷ χειρίσματι, ὅτι τοὺς τε σπλήνας πλείστους κατὰ τὸ ἐξέχον χρὴ τιθέναι, καὶ τοῖσιν ἐπιδέσμοισι πλείστοισι καὶ μάλιστα κατὰ τοῦτο πιέζειν. Ἐἰσὶ δὲ δὴ τινες, οἱ ἐπεσοφίσαντο ἤδη μολύβδιον βαρὺ προσεπικαταδεῖν, ὡς καταναγκάζειν τὸ ὑπερέχον ξυνιᾶσι μὲν οὖν ἴσως οὐδὲ οἱ ἀπλῶς ἐπιδέοντες ἀτὰρ δὴ οὐδ' οὗτος ὁ τρόπος κληΐδος κατήξιός ἐστιν οὐ γὰρ δυνατὸν τὸ ὑπερέχον καταναγκάζεσθαι οὐδὲν, ὅ τι καὶ ἄξιον λόγου. Ἄλλοι δ' αὖ τινές εἰσιν, οἵτινες, καταμαθόντες τοῦτο, ὅτι αὐταὶ αἱ ἐπιδέσιες παράφοροί εἰσι καὶ οὐ

κατὰ φύσιν καταναγκάζουσι τὰ ὑπερέχοντα, ἐπιδέουσι μὲν αὐτούς, σπλήνεσι καὶ ὀθονίοισι χρώμενοι, ὥσπερ καὶ οἱ ἄλλοι ζώσαντες δὲ τὸν ἄνθρωπον ταινίη τινὶ, ἢ εὐζωστότατος αὐτὸς ἑαυτοῦ ἐστιν, ὅταν ἐπιθῶσι τοὺς σπλήνας ἐπὶ τὰ ὑπερέχοντα τοῦ κατήγματος, ἐξογκώσαντες ἐπὶ τὰ ἐξέχοντα, τὴν ἀρχὴν τοῦ ὀθονίου προσέδησαν πρὸς τὸ ζῶσμα ἐκ τοῦ ἔμπροσθεν, καὶ οὕτως ἐπιδέουσιν, ἐπὶ τὴν ἴξιν τῆς κληΐδος ἐπιτανύοντες, ἐς τοῦπισθεν ἄγοντες κᾶπειτα περιβάλλοντες περὶ τὸ ζῶσμα, ἐς τοῦμπροσθεν ἄγουσι, καὶ αὖθις ἐς τοῦπισθεν. Οἱ δὲ τινες οὐχὶ περὶ τὸ ζῶσμα περιβάλλουσι τὸ ὀθόνιον, ἀλλὰ περὶ τὸ περίνεόν τε καὶ παρ' αὐτὴν τὴν ἔδρην, καὶ παρὰ τὴν ἄκανθαν κυκλεύοντες τὸ ὀθόνιον, οὕτω πιέζουσι τὸ κατήγμα. Ταῦτα γοῦν ἀπείρω μὲν ἀκοῦσαι φαίνεται ἐγγὺς τοῦ κατὰ φύσιν εἶναι, χρεομένῳ δὲ ἄχρηστα οὔτε γὰρ μόνιμα οὐδένα χρόνον, οὐδ' εἰ



κατακέοιτό τις, καίτοι ἐγγυτάτω ἂν οὕτως ἄλλ' ὅμως εἰ καὶ κατακείμενος ἢ τὸ σκέλος συγκάμψειεν, ἢ αὐτὸς καμφθεῖη, πάντα ἂν τὰ ἐπιδέσματα κινέοιτο ἄλλως τε ἀσηρῆ ἢ ἐπίδεσις ἢ τε γὰρ ἔδρη ἀπολαμβάνεται, ἀθρόα τε τὰ ὀθόνια ἐν ταύτῃ τῇ στενοχωρίῃ γίνεται τά τε αὖ περὶ τὴν ζώνην περιβαλλόμενα, οὐχ οὕτως

ἰσχυρῶς ἔζωσται, ὡς οὐκ ἀναγκάσαι ἐς τὸ ἄνω τὴν ζώνην ἐπανιέναι, καὶ οὕτως ἀνάγκη ἂν εἴη πάντα χαλᾶν τὰ ἐπιδέσματα. Ἄγχιστα δ' ἂν τις δοκέοι ποιέειν, καίπερ οὐ μεγάλα ποιέων, εἰ τοῖσι μὲν τισι τῶν ὀθονίων περὶ τὴν ζώνην περιβάλλοι, τοῖσι δὲ πλείστοισι τῶν ὀθονίων τὴν ἀρχαίην ἐπίδεσιν ἐπιδέοι οὕτω γὰρ ἂν μάλιστο τὰ ἐπιδέσματα μόνιμά τε εἴη, καὶ ἀλλήλοισι τιμωρέοι. Τὰ μὲν οὖν πλεῖσταεῖρηται, ἄσσα καταλαμβάνει τοὺς τὴν κληῖδα καταγνυμένους. Προσξυνιέναι δὲ καὶ τόδε χρῆ, ὅτι κληῖς ὡς ἐπὶ τὸ πολὺ κατάγνυται, ὥστε τὸ μὲν ἀπὸ τοῦ στήθεος πεφυκὸς ὀστέον ἐς τὸ ἄνω μέρος ὑπερέχειν, τὸ δὲ ἀπὸ τῆς ἀκρωμίας πεφυκὸς ὀστέον ἐν τῷ κάτω μέρει εἶναι. Αἴτια δὲ τούτων τάδε, ὅτι τὸ μὲν στήθος οὐτε κατωτέρω ἂν πολὺ, οὐτε ἀνωτέρω χωρήσειεν σμικρὸς γὰρ ὁ κιγκλισμὸς τοῦ ἄρθρου τοῦ ἐν τῷ στήθει αὐτό τε γὰρ ἐωυτῷ ξυνεχές ἐστὶ τὸ στήθος, καὶ τῇ ῥάχει ἄγχιστα μὴν ἢ κληῖς πρὸς τὸ τοῦ ὤμου ἄρθρον πλοώδης ἐστὶν ἠνάγκασται γὰρ πυκινοκίνητος εἶναι

διὰ τὴν τῆς ἀκρωμίας σύζευξιν. Ἄλλως τε, ὅταν τρωθῆ, φεύγει ἐς τὸ ἄνω μέρος τὸ πρὸς τῷ στήθει προσεχόμενον, καὶ οὐ μάλια ἐς τὸ κάτω μέρος ἀναγκάζεσθαι ἐθέλει καὶ γὰρ πέφυκε κοῦφον, καὶ ἡ εὐρυχωρίῃ αὐτῷ ἄνω πλείων ἢ κάτω. Ὁ δὲ ὤμος, καὶ ὁ βραχίων, καὶ τὰ προσηρτημένα τούτοιςιν εὐαπόλυτά ἐστὶν ἀπὸ τῶν πλευρέων καὶ τοῦ στήθεος, καὶ διὰ τοῦτο δύναται καὶ ἀνωτέρω πολὺ ἀνάγεσθαι καὶ κατωτέρω ὅταν οὖν καταγῆ ἢ κληῖς, τὸ πρὸς τῷ ὤμῳ ὀστέον ἐς τὸ κατωτέρω ἐπιρρέπει ἐς τοῦτο γὰρ ἐπιφορώτερον αὐτὸ ἅμα τῷ ὤμῳ καὶ τῷ βραχίονι κάτω ῥέψαι μᾶλλον, ἢ ἐς τὸ ἄνω. Ὅποτε οὖν ταῦτα τοιαῦτά ἐστὶν, ἀξυνετέουσιν ὅσοι τὸ ὑπερέχον τοῦ ὀστέου ἐς τὸ κάτω καταναγκάσαι οἴονται. Ἀλλὰ δῆλον, ὅτι τὸ κάτω πρὸς τὸ ἄνω προσακτέον ἐστὶν τοῦτο γὰρ ἔχει κίνησιν, τοῦτο γὰρ ἐστὶ καὶ τὸ ἀποστὰν ἀπὸ τῆς φύσιος. Δῆλον οὖν, ὅτι ἄλλως μὲν οὐδαμῶς ἐστὶν ἀναγκάσαι τοῦτο αἰ γὰρ ἐπίδεσιες οὐδέν τι μᾶλλον προσαναγκάζουσιν ἢ ἀπαναγκάζουσιν εἰ δὲ τις τὸν βραχίονα πρὸς τῆσι πλευρῆσιν ἐόντα ἀναγκάζοι ὡς μάλιστα ἄνω, ὡς ὅτι ὀξύτατος ὁ ὤμος φαίνεται εἶναι, δῆλον ὅτι οὕτως ἂν ἀρμοσθεῖη πρὸς τὸ ὀστέον τὸ ἀπὸ τοῦ στήθεος πεφυκὸς, ὅθεν ἀπεσπάσθη. Εἰ οὖν τις τῇ μὲν ἐπιδέσει χρῶτο τῇ νομίμῃ τοῦ ταχέως ξυναλθεσθῆναι εἵνεκα, ἠγήσαιτο δὲ τᾶλλα πάντα μάτην εἶναι παρὰ τὸ σχῆμα τὸ εἰρημένον, ὀρθῶς τε ἂν ξυνίοι, ἰητρεῦοι τε ἂν τάχιστα καὶ κάλλιστα. Κατακέεσθαι μέντοι τὸν ἄνθρωπον μέγα τὸ διάφορόν

ἔστιν καὶ ἡμέραι ἱκαναὶ τεσσαρεσκαίδεκα, εἰ ἀτρεμέοι, εἴκοσι δὲ πάμπολλαι.

14. When a fractured clavicle is fairly broken across it is more easily treated, but when broken obliquely it is more difficult to manage. Matters are different in these cases from what one would have supposed; for a bone fairly broken across can be more easily restored to its natural state, and with proper care the upper part may be brought down by means of suitable position and proper bandaging, and even if not properly set, the projecting part of the bone is not very sharp. But in oblique fractures the case is similar to that of bones which have been torn away, as formerly described; for they do not admit of being restored to their place, and the prominence of the bone is very sharp. For the most part, then, it should be known, no harm results to the shoulder or to the rest of the body from fracture of the clavicle, unless it sphacelate, and this rarely happens. A deformity, however, may arise from fracture of the clavicle, and in these cases it is very great at first, but by and by it becomes less. A fractured clavicle, like all other spongy bones, gets speedily united; for all such bones form callus in a short time. When, then, a fracture has recently taken place, the patients attach much importance to it, as supposing the mischief greater than it really is, and the physicians bestow great pains in order that it may be properly bandaged; but in a little time the patients, having no pain, nor finding any impediment to their walking or eating, become negligent; and the physicians finding they cannot make the parts look well, take themselves off, and are not sorry at the neglect of the patients, and in the meantime the callus is quickly formed. The method of dressing which is most appropriate, is similar to that used in ordinary cases, consisting of cerate, compresses, and bandages; and it should be most especially known in this operation, that most compresses should be placed on the projecting bone, and that the greatest pressure should be made there. There are certain physicians who make a show of superior skill by binding a heavy piece of lead on the part in order to depress the projecting bone; but this mode of treatment does not apply to the clavicle, for it is impossible to depress the projecting part to any extent worth mentioning. There are others who, knowing the fact that the bandages are apt to slip off, and that they do not keep the projecting parts in their place, apply compresses and bandages like the others, and then having girt the patient with a girdle, where it is usually applied with most effect, they make a heap of the compresses upon the projecting bone when they apply them, and having fastened the head of the bandage to the girdle in front, they apply it so as to bring the turns of it into the line of the clavicle, carrying them to the back, and then bringing them around the girdle they carry them to the fore part and again backward. There are others who do not apply the

bandage round the girdle, but carry the rounds of it by the perineum and anus, and along the spine, so as to compress the fracture. To an inexperienced person these methods will appear not far from natural, but when tried, they will be found of no service; for they do not remain firm any length of time, even if the patient keep his bed, although in this position they answer best; and yet even when lying in bed, should he bend his leg, or should his trunk be bent, all the will be displaced; and, moreover, the bandaging is inconvenient, in as much as the anus is comprehended by it, and many turns of the bandage are crowded there in a narrow space. And in the method with the girdle, the girdle cannot be so firmly girt around, but that the turns of the bandage force the girdle to ascend, and hence of necessity all the other bandages must be slackened. He would seem to me to come nearest his purpose, although after all he effects but little, who would take a few turns round the girdle, but would use the bandage principally to secure the former bandaging; for in this manner the bandages would be most secure, and would mutually assist one another. Every thing now almost has been said which applies to fracture of the clavicle. But this also should be known, that in fractures of the clavicle, it is the part attached to the breast which is uppermost, and that the piece attached to the acromion is the lowermost. The cause of this is, that for the most part the breast can neither be depressed nor raised, there being but a slight movement of the joint at the breast, for the sternum is connected together on both sides with the spine. The clavicle admits of most motion at the joint of the shoulder, and this arises from its connection with the acromion. And, moreover, when broken, the part which is connected with the sternum flies upward, and is not easily forced downward; for it is naturally light, and there is more room for it above than below. But the shoulder, the arm, and the parts connected with them, are easily moved from the sides and breast, and, on that account, they admit of being considerably elevated and depressed. When, therefore, the clavicle is broken, the fragment attached to the shoulder inclines downward, for it inclines much more readily with the shoulder and arm downward than upward. Matters being as I have stated, they act imprudently who think to depress the projecting end of the bone. But it is clear that the under part ought to be brought to the upper, for the former is the movable part, and that which has been displaced from its natural position. It is obvious, therefore, that there is no other way of applying force to it (for the bandages no more force it to than they force it from); but if one will push the arm when at the sides as much as possible upward, so that the shoulder may appear as sharp as possible, it is clear that in this way it will be adjusted to the fragment of the bone connected with the breast from which it was torn. If one then will apply a bandage, *secundum artem*, for the purpose of promoting a

speedy cure, and will reckon everything else of no value, except the position as described, he will form a correct opinion of the case, and will effect a cure in the speediest and most appropriate manner. It is of great importance, however, that the patient should lie in a recumbent posture. Fourteen days will be sufficient if he keep quiet, and twenty at most.

15. Εἰ μέντοι τινὶ ἐπὶ τάναντία ἢ κληῖς κατεαγείη, ὃ οὐ μάλα γίνεται, ὥστε τὸ μὲν ἀπὸ τοῦ στήθεος ὀστέον ὑποδεδυκέναι, τὸ δὲ ἀπὸ τῆς ἀκρωμίας ὀστέον ὑπερέχειν καὶ ἐποχέεσθαι ἐπὶ τοῦ ἐτέρου, οὐδεμιῆς μεγάλης ἰητρείης ταῦτά γ' ἂν δέοιτο αὐτὸς γὰρ ὁ ὤμος ἀφιέμενος καὶ ὁ βραχίων ἰδρύοι ἂν τὰ ὀστέα πρὸς ἄλληλα, καὶ φαύλη ἂν τις ἐπίδεσις ἀρκέοι, καὶ ὀλίγαι ἡμέραι τῆς πωρώσιος γένοιντ' ἂν.

15. But if the clavicle be fractured in the opposite manner (which does not readily happen), so that the fragment of bone connected with the breast is depressed, while the piece connected with the acromion is raised up and rides over other, this case does not require much management, for if the shoulder and arm be let go, the fragments of the bone will be adjusted to one another, and an ordinary bandage will suffice, and the callus will be formed in the course of a few days.

16. Εἰ δὲ μὴ κατεαγείη μὲν οὕτως, παρολισθάνοι δὲ ἐς τὸ πλάγιον ἢ τῆ ἢ τῆ, ἐς τὴν φύσιν μὲν ἀπαγαγεῖν ἂν δέοι, ἀναγαγόντα τὸν ὤμον σὺν τῷ βραχίονι, ὥσπερ καὶ πρόσθεν εἴρηται ὅταν δὲ ἴζηται ἐς τὴν ἀρχαίην φύσιν, ταχείη ἂν ἢ ἄλλη ἰητεία εἴη. Τὰ μὲν οὖν πλεῖστα τῶν παραλλαγμάτων κατορθοῖ αὐτὸς ὁ βραχίων ἀναγκαζόμενος πρὸς τὰ ἄνω. Ὅσα δὲ τῶν ἄνωθεν παρολισθάνοντα ἐς τὸ πλάγιον ἦλθεν, ἢ ἐς τὸ κατωτέρω, συμπορσύνοι ἂν τὴν κατόρθωσιν, εἰ ὁ μὲν ἄνθρωπος ὑπτίος κέοιτο, κατὰ δὲ τὸ μεσηγὺ τῶν ὠμοπλατέων ὑψηλότερόν τι ὀλίγω ὑποκέοιτο, ὡς περιρρηδὲς ἔη τὸ στήθος ὡς μάλιστα καὶ τὸν βραχίονα εἰ ἀνάγοι τις παρὰ τὰς πλευρὰς παρατεταμένον, ὁ δὲ ἰητρός τῆ μὲν ἐτέρῃ χειρὶ ἐς τὴν

κεφαλὴν τοῦ βραχίονος ἐμβαλὼν τὸ θέναρ τῆς χειρὸς ἀπωθέοι, τῆ δὲ ἐτέρῃ τὰ ὀστέα τὰ κατεηγότα εὐτεθίζοι, οὕτως ἂν μάλιστα ἐς τὴν φύσιν ἄγοι ἀτὰρ, ὥσπερ ἤδη εἴρηται, οὐ μάλα τὸ ἄνωθεν ὀστέον ἐς τὸ κάτω φιλέει ὑποδύνειν. Τοῖσι μὲν οὖν πλείστοισιν, ὅταν ἐπιθεθῶσι, τὸ σχῆμα ἀρήγει, παρ' αὐτὰς τὰς πλευρὰς τὸν ἀγκῶνα ἔχοντα, οὕτως ἐς τὸ ἄνω τὸν ὤμον ἀναγκάζεσθαι ἔστι δ' οἷσι μὲν τὸν ὤμον ἀναγκάζειν δεῖ ἐς τὸ ἄνω, ὡς εἴρηται, τὸν δὲ ἀγκῶνα πρὸς τὸ στήθος παράγειν, ἄκρην δὲ τὴν χεῖρα παρὰ τὸ ἀκρόμιον τοῦ ὑγιέος ὤμου ἴσχειν. Ἦν μὲν οὖν κατακέεσθαι τολμᾷ, ἀντιστήριγμά τι προστιθέναι χρῆ, ὡς ἂν ὁ ὤμος ἀνωτάτω ἔη ἢν δὲ περιίη, σφενδόνην χρῆ, ἐκ ταινίης περὶ τὸ ὄξυ τοῦ ἀγκῶνος

ποιήσαντα, ἀναλαμβάνειν περὶ τὸν αὐχένα.

16. If the fracture be not thus, but if it incline either forward or backward, it may be restored to its natural position, by raising the shoulder with the arm as formerly described, and brought back to its natural place, when the cure will be speedily accomplished. Most of the varieties of displacement may be rectified by raising the arm upward. When the upper bone is displaced laterally or downward, it would favor the adaptation of the parts if the patient would lie on his back, and if some elevated substance were placed between the shoulder-blades, so that the breast may be depressed as much as possible upon the two sides; and if, while another person raised the arm extended along the sides, the physician, applying the palm of the one hand to the head of the bone, would push it away, and with the other would adjust the broken bones, he would thus reduce the parts most readily to their natural position. But, as formerly stated, the upper bone ( *sternal fragment?* ) is rarely depressed downward. In most cases, after the bandages have been applied, that position is beneficial in which the elbow is fixed to the same side, and the shoulder is kept elevated; but in certain cases, the shoulder is to be raised, as has been directed, and the elbow is to be brought forward to the breast, and the hand laid on the acromion of the sound side. If the patient has the resolution to lie in bed, something should be placed so as to support the shoulder, and keep it as much elevated as possible. But if he walk about, the arm should be slung in a shawl, which embraces the point of the elbow, and is passed round the neck.

17. Ἀγκῶνος δὲ ἄρθρον παραλλάξαν μὲν ἢ παραρθρῆσαν πρὸς πλευρὴν ἢ ἔξω, μένοντος τοῦ ὀξέος τοῦ ἐν τῷ κοίλῳ τοῦ βραχίονος, ἐς εὐθὺ κατατείναντα, τὸ ἐξέχον ἀπωθεῖν ὀπίσω καὶ ἐς τὸ πλάγιον.

17. When the elbow-joint is displaced or dislocated to the side or outward, while its sharp point ( *olecranon?* ) remains in the cavity of the humerus, extension is to be made in a straight line, and the projecting part is to be pushed backward and to the side.

18. Τὰ δὲ τελείως ἐκβάντα ἢ ἔνθα, ἢ ἔνθα, κατὰτασις μὲν, ἐν

ἢ ὁ βραχίον καταγαίς ἐπιδέεται οὕτω γὰρ ἂν τὸ καμπύλον τοῦ ἀγκῶνος οὐ κωλύσει. Ἐκπίπτει δὲ μάλιστα ἐς τὸ πρὸς πλευρὰς μέρος. Τὰς δὲ κατορθώσις, ἀπάγοντα ὅτι πλεῖστον, ὡς μὴ ψαυῆ τῆς κορώνης ἢ κεφαλῆ, μετέωρον περιάγειν, καὶ περικάμπειν, καὶ μὴ ἐς εὐθὺ βιάζεσθαι, ἅμα δὲ ὠθέειν τάναντία ἐφ’

ἐκάτερα, καὶ παρωθέειν ἐς χώρην ξυνωφελοίη δ' ἂν καὶ ἐπίστρεψις ἀγκῶνος ἐν τουτέοισιν, ἐν τῷ μὲν ἐς τὸ ὕπτιον, ἐν τῷ δὲ ἐς τὸ πρηνές. Ἴησις δὲ, σχήματος μὲν, ὀλίγῳ ἀνωτέρω ἄκρην τὴν χειρὰ τοῦ ἀγκῶνος ἔχειν, βραχίονα δὲ κατὰ πλευράς οὕτω δὲ καὶ ἀνάληψις, καὶ θέσις, καὶ εὐφορον καὶ φύσις, καὶ χρῆσις ἐν κοινῷ, ἦν ἄρα μὴ κακῶς παρωθῆῃ παροῦται δὲ ταχέως. Ἴησις δὲ, ὀθονίοισι κατὰ τὸν νόμον τὸν ἀρθριτικὸν, καὶ τὸ ὄξυ προσεπιδέειν.

18. In complete dislocations toward either side, extension is to be made as in bandaging fracture of the arm; for thus the rounded part of the elbow will not form an obstacle to it. Dislocation, for the most part, takes place toward the sides (*inwardly?*). Reduction is to be effected by separating (the bones) as much as possible, so that the end (of the humerus) may not come in contact with the olecranon, and it is to be carried up, and turned round, and not forced in a straight line, and, at the same time, the opposite sides are to be pushed together, and propelled into their proper place. It will further assist if rotation of the forearm be made at the elbow, sometimes turning it into a supine position, and sometimes into a prone. The position for the treatment consists in keeping the hand a little higher than the elbow, and the arm at the sides; then it may either be suspended or laid at rest, for either position will answer; and nature and the usage of common means will accomplish the cure, if the callus does not form improperly: it is formed quickly. The treatment is to be conducted with bandages according to the rule for bandaging articulations, and the point of the elbow is to be included in the bandage.

19. Παλιγκοτώτατον δὲ ὁ ἀγκῶν πυρετοῖσιν, ὀδύνη ἀσώδει, ἀκρητοχόλω, ἀγκῶνος δὲ μάλιστα τοῦπίσω διὰ τὸ νερκῶδες, δεύτερον δὲ τοῦμπροσθεν ἴησις δὲ ἢ αὐτὴ ἐμβολαὶ δὲ, τοῦ μὲν ὀπίσω, ἐκτείναντα κατατεῖναι σημεῖον δὲ οὐ γὰρ δύνανται ἐκτείνειν τοῦ δὲ ἔμπροσθεν, οὐ δύνανται ξυγκάμπειν τουτέω δὲ ἐνθέντα

τι ξυνειλιγμένον σκληρὸν, περὶ τοῦτο ξυγκάμψαι ἐξ ἐκτάσιος ἐξαίφνης.

19. Dislocations at the elbow give rise to the most serious consequences, such as fevers, pain, nausea, vomitings of pure bile, and more especially when the humerus is displaced backward from pressure on the nerve, which occasions numbness; next to it is the dislocation forward; the treatment is the same; reduction in dislocation backward is by extension and adaptation; the symptom of this variety-loss of the power of extension; of dislocation forward-loss of the power of flexion, and in this case reduction is to be accomplished by placing a

hard ball (in the bend of the elbow), and bending the fore-arm about it, along with sudden extension.

20. Διαστάσιος δὲ ὀστέων σημήϊον, κατὰ τὴν φλέβα τὴν κατὰ τὸν βραχίονα σχιζομένην διαψαύονται.

20. Diastasis of the bones may be recognized by examining the part where the vein that runs along the arm divides.

The Genuine Works of Hippocrates. Hippocrates. Charles Darwin Adams. New York. Dover. 1868.

21. Ταῦτα δὲ ταχέως διαπωροῦται ἐκ γενεῆς δὲ, βραχύτερα τὰ κάτω τοῦ σίνεος ὀστέα, πλεῖστον τὰ ἐγγύτατα τοῦ πήχεος, δεύτερον, χεῖρὸς, τρίτον, δακτύλων βραχίων δὲ καὶ ὤμος, ἐγκρατέστερα διὰ τὴν τροφήν ἢ δὲ ἐτέρη χεῖρ διὰ τὰ ἔργα ἔτι πλείω ἐγκρατεστέρη. Μινύθησις δὲ σαρκῶν, εἰ μὲν ἔξω ἐξέπεσεν, ἔσωθεν εἰ δὲ μὴ, ἐς τούναντιον, ἢ ἐξέπεσεν.

21. In those cases callus is quickly formed. In congenital dislocations the bones below the seat of the injury are shorter than natural, and, mostly, those nearest to the place; namely, the bones of the fore-arm, next those of the hand; and, third, those of the fingers. The arm and shoulder are stronger, owing to the nourishment which they receive, and the other arm, from the additional work which it has to perform, is still more strong. Wasting of the flesh takes place on the inside if the dislocation be on the outside; or otherwise, on the side opposite the dislocation.

22. Ἀγκῶν δὲ ἢν ἔσω ἢ ἔξω ἐκβῆ, κατάτασις μὲν ἐν σχήματι ἐγγωνίῳ τῷ πήχεϊ πρὸς βραχίονα τὴν μὲν μασχάλην ἀναλαμβάνοντα ταινίη ἀνακρεμάσαι, ἀγκῶνι δὲ ἄκρῳ ὑποτιθέντα τι παρὰ τὸ ἄρθρον βάρος, ἐκκρεμάσαι, ἢ χερσὶ καταναγκάζειν ὑπεραιωρηθέντος δὲ τοῦ ἄρθρου, αἱ παραγωγαὶ τοῖσι θέναρσιν, ὡς τὰ ἐν χερσίν ἐπίδεσις ἐν τουτέῳ τῷ σχήματι, καὶ ἀνάληψις, καὶ θέσις.

22. When the elbow is dislocated either inward or outward, extension is to be made with the fore-arm at a right angle to the arm; the arm, suspended by means of a shawl passed through the armpit, and a weight attached to the extremity of the elbow; or force may be applied with the hands; when the articular extremity has been cleared, the displaced parts are to be rectified with the palms of the hand, as in dislocations of the hands. It is to be bandaged, suspended in a sling, and placed while in this attitude.

23. Τὰ δὲ ὀπισθεν, ἐξαίφνης ἐκτείνοντα, διορθοῦν τοῖσι θέναρσιν ἅμα δὲ δεῖ ἐν τῇ διορθώσει καὶ ἐν τοῖσιν ἐτέροισιν. Ἦν δὲ

ἔμπροσθεν, ἀμφὶ ὀθόνιον ζυνειλιγμένον, εὖογκον, ζυγκάμπτοντα ἅμα διορθοῦν.

23. Dislocations backward are to be rectified by the palms of the hands, along with sudden extension; the two acts are to be performed together, as in other cases of the kind. But in dislocation forward the arm is to be bent around a ball of cloth of proper size, and at the same time replaced.

24. Ἦν δὲ ἐτεροκλινὲς ἔη, ἐν τῇ διορθώσει ἀμφοτέρα ἅμα χρῆ ποιέειν. Τῆς δὲ μελέτης τῆς θεραπείης, κοινὸν τὸ σχῆμα καὶ ἡ ἐπίδεσις. Δύναται δὲ καὶ ἐκ τῆς διατάσιος κοινῇ ζυμπίπτειν ἅπαντα.

24. But if the displacement be on the other side, both these operations are to be performed in effecting the adjustment. For conducting the treatment, the position and bandaging are the same as in the other cases. But all these cases may be reduced by ordinary distention.

25. Τῶν δὲ ἐμβολέων, αἱ μὲν ἐξ ὑπεραιωρήσιος ἐμβάλλονται, αἱ δὲ ἐκ κατατάσιος, αἱ δὲ ἐκ περισφάλσιος αὗται δὲ ἐκ τῶν ὑπερβολέων τῶν σχημάτων, ἢ τῆ, ἢ τῆ, ζὺν τῷ τάχει.

25. Of the methods of reduction, some operate by raising up the part, some by extension, and some by rotation: the last consists in rapidly turning the fore-arm to this side and that.

26. Χειρὸς δὲ ἄρθρον ὀλισθάνει ἢ ἔσω, ἢ ἔξω, ἔσω δὲ τὰ πλεῖστα. Σημῆια δὲ εὖσημα ἦν μὲν εἶσω, ζυγκάμπτειν τοὺς δακτύλους οὐ δύναται ἦν δὲ ἔξω, ἐκτείνειν. Ἐμβολὴ δὲ, ὑπὲρ τραπέζης τοὺς δακτύλους ἔχων, τοὺς μὲν τείνειν, τοὺς δὲ ἀντιτείνειν, τὸ δὲ ἐξέχον ἢ θέναρι, ἢ πτέρνη ἅμα ἀπωθέειν, πρόσω καὶ κάτωθεν

κατὰ τὸ ἕτερον ὀστέον, ὄγκον μαλθακὸν ὑποθεῖς, ἦν μὲν ἄνω, καταστρέψας τὴν χεῖρα, ἦν δὲ κάτω, ὑπτίην. Ἰησις δὲ, ὀθονίοισιν.

26. The joint of the hand is dislocated either inward or outward, most frequently inward. The symptoms are easily recognized: if inward, the patient cannot at all bend his fingers; and if outward, he cannot extend them. With regard to the reduction, -by placing the fingers above a table, extension and counter-extension



are to be made by other persons, while with the palm or heel of the hand on the projecting bone one pushes forward, and another from behind on the other bone; some soft substance is to be applied to it, and the arm is to be turned to the prone position if the dislocation was forward, but to the supine, if backward. The treatment is to be conducted with bandages.

27. Ὅλη δὲ ἡ χεὶρ ὀλισθάνει, ἢ ἔσω, ἢ ἔξω, ἢ ἔνθα, ἢ ἔνθα, μάλιστα δὲ εἴσω ἔστι δ' ὅτε καὶ ἡ ἐπίφυσις ἐκινήθη ἔστι δ' ὅτε τὸ ἕτερον τῶν ὀστέων διέστη. Τουτέοισι κατάτασις ἰσχυρὴ ποιητέη καὶ τὸ μὲν ἐξέχον ἀπωθέειν, τὸ δὲ ἕτερον ἀντωθέειν, δύο εἶδεα ἅμα, ἐς τοῦπίσω καὶ ἐς τὸ πλάγιον, ἢ χερσὶν ἐπὶ τραπέζης, ἢ πτέρνῃ. Παλίγκοτα δὲ καὶ ἀσχήμονα τῷ δὲ χρόνῳ κρατύνεται ἐς χρῆσιν. Ἰησις, ὀθονίοισι ξὺν τῇ χειρὶ καὶ τῷ πήχει καὶ νάρθηκας μέχρι δακτύλων τιθέναι ἐν νάρθηξι δὲ τεθέντα ταῦτα πυκνότερον λύειν, ἢ τὰ κατήγματα, καὶ καταχύσει πλείονι χρέεσθαι.

27. The whole hand is dislocated either inward or outward, or to this side or that, but more especially inward; and sometimes the epiphysis is displaced, and sometimes the other of these bones is separated. In these cases strong extension is to be applied, and pressure is to be made on the projecting bone, and counter-pressure on the opposite side, both at the same time, behind and at the side, with the hands upon a table, or with the heel. These accidents give rise to serious consequences and deformities; but in the course of time the part gets strong, and admits of being used. The cure is with bandages, which ought to embrace both the hand and fore-arm; and splints are to be applied as far as the fingers; and when they are used they should be more frequently unloosed than infractions, and more copious affusions of water should be used.

28. Ἐκ γενεῆς δὲ, βραχυτέρη ἡ χεὶρ γίνεται, καὶ μινύθησις σαρκῶν μάλιστα τάναντία, ἢ ἢ τὸ ἔκπτωμα ηὔξημένῳ δὲ τὰ ὀστέα μένει.

28. In congenital dislocations (at the wrist) the hand becomes shortened, and the atrophy of the flesh occurs, for the most part, on the side opposite to the dislocation. In an adult the bones remain of their natural size.

29. Δακτύλου δὲ ἄρθρον, ὀλισθὸν μὲν, εὔσημον. Ἐμβολὴ δὲ, κατατείναντα ἐς ἰθὺς, τὸ μὲν ἐξέχον ἀπωθέειν, τὸ δὲ ἐναντίον ἀντωθέειν

ἴησις δὲ, ὀθονίοισιν. Μὴ ἐμπροσθὸν δὲ, ἐπιπωροῦται ἔξωθεν Ἐκ γενεῆς δὲ ἢ ἐν αὐξήσει ἐξαρθρήσαντα, τὰ ὀστέα βραχύνεται τὰ κάτω τοῦ ὀλισθήματος, καὶ

σάρκες μινύθουσι τάναντία μάλιστα, ἢ ὡς τὸ ἔκπτωμα ηὔξημένῳ δὲ τὰ ὀστέα μένει.

29. Dislocation at the joint of a finger is easily recognized. Reduction is to be effected by making extension in a straight line, and applying pressure on the projecting bone, and counter-pressure on the opposite side of the other. The treatment is with bandages. When not reduced, callus is formed outside of the joint. When the dislocation takes place at birth, during adolescence the bones below the dislocation are shortened, and the flesh is wasted rather on the opposite than on the same side with the dislocation. When it occurs in an adult the bones remain of their proper size.

30. Γνάθος δὲ ὀλίγοισι τελέως ἐξήρθησεν ὀστέον τε γὰρ τὸ ἀπὸ τῆς ἄνω γνάθου πεφυκὸς ὑπεζύγεται πρὸς τῷ ὑπὸ τὸ οὖς ὀστέῳ προσπεφυκῶτι, ὅπερ ἀποκλείει τὰς κεφαλὰς τῆς κάτω γνάθου, τῆς μὲν ἀνωτέρω ἐὼν, τῆς δὲ κατωτέρω τῶν κεφαλέων. Τὰ δὲ ἄκρεα τῆς κάτω γνάθου, τὸ μὲν διὰ τὸ μῆκος οὐκ εὐπαρείδυτον, τὸ δ' αὖ κορωνόν τε καὶ ὑπερέχον ὑπὲρ τοῦ ζυγώματος ἅμα τε ἀπ' ἀμφοτέρων τῶν ἀκρέων τούτων νευρώδεις τένοντες πεφύκασιν, ἐξ ὧν ἐξήρτηνται οἱ μύες οἱ κροταφῖται καὶ μασσητήρες καλεόμενοι διὰ τοῦτο δὲ καλέονται, καὶ διὰ τοῦτο κινέονται, ὅτι ἐντεῦθεν

ἐξήρτηνται ἐν γὰρ τῇ ἐδώδ, καὶ ἐν τῇ διαλέκτῳ, καὶ ἐν τῇ ἄλλῃ χρήσει τοῦ στόματος, ἢ μὲν ἄνω γνάθος ἀτρεμέει ξυνήρτηται γὰρ τῇ κεφαλῇ. καὶ οὐ διήρθρωται ἢ δὲ κάτω γνάθος κινέεται ἀπήρθρωται γὰρ ἀπὸ τῆς ἄνω γνάθου, καὶ ἀπὸ τῆς κεφαλῆς. Διότι μὲν οὖν ἐν σπασμοῖσι καὶ τετάνοισι πρῶτον τοῦτο τὸ ἄρθρον ἐπισημαίνει συντεταμένον, καὶ διότι πληγαὶ καίριοι καὶ καροῦσαι αἱ κροταφίτιδες γίνονται, ἐν ἄλλῳ λόγῳ εἰρήσεται. Περὶ δὲ τοῦ μὴ κάρτα ἐξαρθρέειν τάδε τὰ αἷτια αἷτιον δὲ καὶ τόδε, ὅτι οὐ μάλα καταλαμβάνουσι τοιαῦται ἀνάγκαι βρωμάτων, ὥστε τὸν ἄνθρωπον χανέειν μέζον ἢ ὅσον δύναται ἐκπέσοι δ' ἂν ἀπ' οὐδενὸς ἄλλου σχήματος, ἢ ἀπὸ τοῦ μέγα χανόντα παραγαγεῖν τὴν γένυν ἐπὶ θάτερα. Προσζυμβάλλεται μέντοι καὶ τόδε πρὸς τὸ ἐκπίπτειν ὀκόσα γὰρ νεῦρα καὶ ὀκόσοι μύες παρὰ τὰ ἄρθρα εἰσὶν, ἢ ἀπὸ ἄρθρων ἀφ' ὧν ξυνδέδενται, τούτων ὅσα ἐν τῇ χρήσει πλειστάκις διακινέεται, ταῦτα καὶ ἐς τὰς κατατάσιας δυνατώτατα ἐπιδιδόναι, ὥσπερ καὶ τὰ δέρματα τὰ εὐδερμητότατα πλείστην ἐπίδοσιν ἔχει. Περὶ οὗ οὖν ὁ λόγος, ἐκπίπτει μὲν γνάθος ὀλιγάκις σχᾶται μέντοι πολλάκις ἐν

χάσμησιν, ὥσπερ καὶ ἄλλαι πολλαὶ μυῶν παραλλαγαὶ καὶ νεύρων τούτο ποιέουσιν. Δῆλον μὲν οὖν ἐκ τῶνδε μάλιστα ἐστίν, ὅταν ἐκπεπτώκη προΐσχει

γὰρ ἡ κάτω γνάθος ἐς τοῦμπροσθεν, καὶ παρῆκται τάναντία τοῦ ὀλισθήματος, καὶ τοῦ ὀστέου τὸ κορωνὸν ὀγκηρότερον φαίνεται παρὰ τὴν ἄνω γνάθον, καὶ χαλεπῶς ξυμβάλλουσι τὰς κάτω γνάθους. Τούτοισι δὲ ἐμβολὴ πρόδηλος, ἥτις γίνοιτ' ἂν ἀρμόζουσα χρὴ γὰρ τὸν μὲν τινα κατέχειν τὴν κεφαλὴν τοῦ τετρωμένου, τὸν δὲ περιλαβόντα τὴν κάτω γνάθον καὶ ἔσωθεν καὶ ἔξωθεν τοῖσι δακτύλοισι κατὰ τὸ γένειον, χάσκοντος τοῦ ἀνθρώπου ὅσον μετρίως δύναται, πρῶτον μὲν διακινέειν τὴν κάτω γνάθον χρόνον τινὰ, τῇ καὶ τῇ παράγοντα τῇ χειρὶ, καὶ αὐτὸν τὸν ἄνθρωπον κελεύειν χαλαρὴν τὴν γνάθον ἔχειν, καὶ ξυμπαράγειν, καὶ ξυνδιδόναι ὡς μάλιστα ἔπειτα ἐξαπίνης σχάσαι, τρισὶ σχήμασιν ὁμοῦ προσέχοντα τὸν νόον δεῖ μὲν γὰρ παράγεσθαι ἐκ τῆς διαστροφῆς ἐς τὴν φύσιν, δεῖ δὲ ἐς τοῦπίσω ἀπωσθῆναι τὴν γνάθον τὴν κάτω, δεῖ δὲ ἐπόμενον τούτοισι ξυμβάλλειν τὰς γνάθους, καὶ μὴ χάσκειν. Ἐμβολὴ μὲν οὖν αὕτη, καὶ οὐκ ἂν γένοιτο ἀπ' ἄλλων σχημάτων. Ἰητρείη δὲ βραχεῖη ἀρκέει σπλῆνα προστιθέντα κεκηρωμένον χαλαρῶ ἐπιδέσμῳ ἐπιδεῖν. Ἀσφαλέστερον δὲ χειρίζειν ἐστὶν ὑπτίον κατακλίναντα τὸν ἄνθρωπον, ἐρείσαντα τὴν κεφαλὴν αὐτοῦ ἐπὶ σκυτίνου ὑποκεφαλαίου ὡς πληρεστάτου, ἵνα ὡς ἥκιστα ὑπεῖκη προσκατέχειν δέ τινα χρὴ τὴν κεφαλὴν τοῦ τετρωμένου.

30. The jaw-bone, in few cases, is completely dislocated, for the zygomatic process formed from the upper jaw-bone (*malar?*) and the bone behind the ear (*temporal?*) shuts up the heads of the under jaw, being above the one (*condyloid process?*), and below the other (*coronoid process?*). Of these extremities of the lower jaw, the one, from its length, is not much exposed to accidents, while the other, the coronoid, is more prominent than the zygoma, and from both these heads nervous tendons arise, with which the muscles called temporal and masseter are connected; they have got these names from their actions and connections; for in eating, speaking, and the other functional uses of the mouth, the upper jaw is at rest, as being connected with the head by synarthrosis, and not by diarthrosis (*enarthrosis?*): but the lower jaw has motion, for it is connected with the upper jaw and the head by enarthrosis. Wherefore, in convulsions and tetanus, the first symptom manifested is rigidity of the lower jaw; and the reason why wounds in the temporal region are fatal and induce coma, will be stated in another place. These are the reasons why complete dislocation does not readily take place, and this is another reason, because there is seldom a necessity for swallowing so large pieces of food as would make a man gape more than he easily can, and dislocation could not take place in any other position than in great gaping, by which the jaw is displaced to either side. This circumstance, however, contributes to dislocation there; of nerves (*ligaments?*) and muscles around joints, or connected with joints, such as are

frequently moved in using the member are the most yielding to extension, in the same manner as well-dressed hides yield the most. With regard, then, to the matter on hand, the jaw-bone is rarely dislocated, but is frequently slackened ( *partially displaced?* ) in gaping, in the same manner as many other derangements of muscles and tendons arise. Dislocation is particularly recognized by these symptoms: the lower jaw protrudes forward, there is displacement to the opposite side, the coronoid process appears more prominent than natural on the upper jaw, and the patient cannot shut his lower jaw but with difficulty. The mode of reduction which will apply in such cases is obvious: one person must secure the patient's head, and another, taking hold of the lower jaw with his fingers within and without at the chin, while the patient gapes as much as he can, first moves the lower jaw about for a time, pushing it to this side and that with the hand, and directing the patient himself to relax the jaw, to move it about, and yield as much as possible; then all of a sudden the operator must open the mouth, while he attends at the same time to three positions: for the lower jaw is to be moved from the place to which it is dislocated to its natural position; it is to be pushed backward, and along with these the jaws are to be brought together and kept shut. This is the method of reduction, and it cannot be performed in any other way. A short treatment suffices, a waxed compress is to be laid on, and bound with a loose bandage. It is safer to operate with the patient laid on his back, and his head supported on a leather cushion well filled, so that it may yield as little as possible, but some person must hold the patient's head.

31. Ἦν δ' ἀμφοτέραι αἱ γνάθοι ἐξαρθρήσωσιν, ἡ μὲν ἴησις ἡ αὐτή. Ξυμβάλλειν δέ τι ἦσσαν οὗτοι τὸ στόμα δύνανται καὶ γὰρ προπετέστεραι αἱ γένυες τούτοισιν, ἀστραβέες δὲ τὸ δὲ ἀστραβὲς μάλιστ' ἂν γνοίης τοῖσιν ὀρίοισι τῶν ὀδόντων, τῶν τε ἄνω καὶ τῶν κάτω κατ' ἴξιν. Τούτοισι συμφέρει ἐμβάλλειν ὡς τάχιστα ἐμβολῆς δὲ τρόπος πρόσθεν εἴρηται. Ἦν δὲ μὴ ἐμπέση, κίνδυνος περὶ τῆς ψυχῆς ὑπὸ πυρετῶν ξυνεχέων καὶ νωθρῆς καρώσιος καρώδεες γὰρ οἱ μύες οὗτοι, καὶ ἀλλοιούμενοι, καὶ ἐντεινόμενοι παρὰ φύσιν φιλέει δὲ καὶ ἡ γαστήρ ὑποχωρέειν τούτοισι χολώδεα, ἄκρητα, ὀλίγα καὶ ἦν ἐμέωσιν, ἄκρητα ἐμέουσιν οὗτοι οὖν καὶ θνήσκουσι δεκαταῖοι μάλιστα.

31. When the jaw is dislocated on both sides, the treatment is the same. The patients are less able to shut the mouth than in the former variety; and the jaw protrudes farther in this case, but is not distorted; the absence of distortion may be recognized by comparing the corresponding rows of the teeth in the upper and lower jaws. In such cases reduction should be performed as quickly as possible; the method of reduction has been described above. If not reduced, the patient's

life will be in danger from continual fevers, coma attended with stupor (for these muscles, when disordered and stretched preternaturally, induce coma); and there is usually diarrhea attended with billous, unmixed, and scanty dejections; and the vomitings, if any, consist of pure bile, and the patients commonly die on the tenth day.

32. Ἦν δὲ κατεαγῆ ἢ κάτω γνάθος, ἦν μὲν μὴ ἀποκαυλισθῆ παντάπασι, ἀλλὰ ξυνέχεται τὸ ὀστέον, ἐκκεκλιμένον δὲ ἔη, κατορθῶσαι μὲν χρὴ τὸ ὀστέον, παρά γε τὴν γλῶσσαν πλαγίην ὑπείραντα τοὺς δακτύλους, τὸ δὲ ἔξωθεν ἀντερείδοντα, ὡς ἂν ξυμφέρη καὶ ἦν διεστραμμένοι ἕωσιν οἱ ὀδόντες οἱ κατὰ τὸ τρῶμα καὶ κεκινημένοι, ὀκόταν τὸ ὀστέον κατορθωθῆ, ζευῆσαι τοὺς ὀδόντας χρὴ πρὸς ἀλλήλους, μὴ μόνον τοὺς δύο, ἀλλὰ καὶ πλέονας, μάλιστα μὲν χρυσίῳ, ἔστ' ἂν κρατυνθῆ τὸ ὀστέον, εἰ δὲ μὴ, λίνῳ ἔπειτα

ἐπιδεῖν κηρωτῆ καὶ σπλήνεσιν ὀλίγοισι καὶ ὀθονίοισιν ὀλίγοισι, μὴ ἄγαν ἐρείδοντα, ἀλλὰ χαλαροῖσιν. Εὖ γὰρ εἶδέναι χρὴ, ὅτι ἐπίδεσις ὀθονίων, γνάθου καταγείσης, μικρὰ μὲν ἂν ὠφελέοι, εἰ χρηστῶς ἐπιδέοιτο, μεγάλα δ' ἂν βλάβητο, εἰ κακῶς ἐπιδέοιτο. Πυκνὰ δὲ παρὰ τὴν γλῶσσαν ἐσματέεσθαι χρὴ, καὶ πουλὸν χρόνον ἀντέχειν τοῖσι δακτύλοισι κατορθοῦντα τοῦ ὀστέου τὸ ἐκκλιθὲν ἄριστον δὲ, εἰ αἰεὶ δύναιτο, ἀλλ' οὐχ οἷόν τε.

32. In fracture of the lower jaw, when the bone is not fairly broken across, and is still partially retained, but displaced, it should be adjusted by introducing the fingers at the side of the tongue, and making suitable counter-pressure on the outside; and if the teeth at the wound be distorted and loosened, when the bone is adjusted, they should be connected together, not only two, but more of them, with a gold thread, if possible, but otherwise, with a linen thread, until the bone be consolidated, and then the part is to be dressed with cerate, a few compresses, and a few bandages, which should not be very tight, but rather loose. For it should be well known that in fracture of the jaw, dressing with bandages, if properly performed, is of little advantage, but occasions great mischief if improperly done. Frequent examinations should be made about the tongue, and prolonged pressure should be applied with the fingers, in order to rectify the displaced bone. It would be best if one could do so constantly, but that is impossible.

33. Ἦν δὲ ἀποκαυλισθῆ παντάπασι τὸ ὀστέον ὀλιγάκις δὲ τοῦτο γίνεται, κατορθοῦν μὲν χρὴ τὸ ὀστέον οὕτω, καθάπερ εἴρηται. Ὅταν δὲ κατορθώσης, τοὺς ὀδόντας χρὴ ζευγνῶναι, ὡς πρόσθεν εἴρηται μέγα γὰρ ἂν ξυλλαμβάνοι ἐς

τὴν ἀτρεμίην, προσέτι καὶ ἦν τις ὀρθῶς ζεύξη, ὥσπερ χρῆ, τὰς ἀρχὰς ράψας. Ἄλλα γὰρ οὐ ρηϊδίον ἐν γραφῇ χειρουργίην πᾶσαν ἀτρεκέως διηγέεσθαι, ἀλλὰ καὶ αὐτὸν ὑποτοπέεσθαι χρῆ ἐκ

τῶν γεγραμμένων. Ἐπειτα χρῆ δέρματος καρχηδονίου, ἦν μὲν νηπιώτερος ἔη ὁ τρωθεὶς, ἀρκέει τῷ λοπῶ χρέεσθαι, ἦν δὲ τελειότερος ἔη, αὐτῷ τῷ δέρματι ταμόντα δὲ χρῆ εὖρος ὡς τριδάκτυλον, ἢ ὅκως ἂν ἀρμόζῃ, ὑπαλείψαντα κόμμι τὴν γνάθον εὐμενέστερον γὰρ, κόλλη προσκολλῆσαι τὸ δέσμα ἄκρον πρὸς τὸ ἀποκεκαυλισμένον τῆς γνάθου, ἀπολείποντα ὡς δάκτυλον ἀπὸ τοῦ τρώματος ἢ ὀλίγῳ πλέον τοῦτο μὲν ἐς τὸ κάτω μέρος ἐχέτω δὲ ἐντομὴν κατὰ τὴν ἴξιν τοῦ γενείου ὁ ἱμάς, ὡς ἀμφιβεβήκη ἀμφὶ τὸ ὄξυ τοῦ γενείου. Ἐτερον δὲ ἱμάντα τοιοῦτον, ἢ ὀλίγῳ πλατύτερον προσκολλῆσαι χρῆ πρὸς τὸ ἄνω μέρος τῆς γνάθου, ἀπολείποντα καὶ τοῦτον ἀπὸ τοῦ τρώματος, ὅσον περ ὁ ἕτερος ἀπέλιπεν ἐσχίσθω δὲ καὶ οὗτος ὁ ἱμάς τὴν ἀμφὶ τὸ οὖς περίβασιν. Ἀποξέες δὲ ἔστωσαν οἱ ἱμάντες ἀμφὶ τὴν ξυναφήν ἐν δὲ τῇ κολλήσει ἢ σὰρξ τοῦ σκύτεος πρὸς τοῦ χρωτὸς ἔστω, ἐχεκολλότερον γὰρ οὕτως. Ἐπειτα κακατείναντα χρῆ καὶ τοῦτον τὸν ἱμάντα μᾶλλον δέ

τι τὸν περὶ τὸ γένειον, ὡς ὅτι μάλιστα μὴ ἀπομυλλήνη ἢ γνάθος, ξυνάψαι τοὺς ἱμάντας κατὰ τὴν κορυφήν, κᾶπειτα περὶ τὸ μέτωπον ὀθονίῳ καταδῆσαι, καὶ κατάβλημα χρῆ εἶναι, ὥσπερ νομίζεται, ὡς ἀτρεμέη τὰ δεσμά. Τὴν δὲ κατάκλισην ποιέεσθω ἐπὶ τὴν ὑγιέα γνάθον, μὴ τῇ γνάθῳ ἐρηρισμένος, ἀλλὰ τῇ κεφαλῇ. Ἰσχυαίνειν δὲ χρῆ τὸ σῶμα ἄχρι ἡμερέων δέκα, ἔπειτα ἀνατρέφειν

μὴ βραδέως ἦν γὰρ ἐν τῆσι πρώτησιν ἡμέρησι μὴ φλεγμῆνη, ἐν εἴκοσιν ἡμέρησιν ἢ γνάθος κρατύνεται ταχέως γὰρ ἐπιπωροῦται, ὥσπερ καὶ τὰ ἄλλα τὰ ἀραιὰ ὀστέα, ἦν μὴ ἐπισφακελίση. Ἄλλα γὰρ περὶ σφακελισμῶν τῶν ξυμπάντων ὀστέων ἄλλος μακρὸς λόγος λείπεται. Αὕτη ἢ διάτασις ἢ ἀπὸ τῶν κολλημάτων εὐμενῆς, καὶ εὐταμίευτος, καὶ ἐς πολλὰ καὶ πολλαχοῦ διορθώματα εὐχρηστος. Τῶν δὲ ἰητρῶν οἱ μὴ ξὺν νόῳ εὐχειρες, καὶ ἐν ἄλλοισι τρώμασι τοιοῦτοί εἰσι καὶ ἐν γνάθων κατήξεσιν ἐπιδέουσι γὰρ γνάθον κατεαγεῖσαν ποικίλως καὶ καλῶς καὶ κακῶς. Πᾶσα γὰρ ἐπίδεσις γνάθου οὕτω καταγείσης ἐκκλίνει τὰ ὀστέα τὰ ἐς τὸ κάτω μέρος ῥέποντα μᾶλλον, ἢ ἐς τὴν φύσιν ἄγει.

33. But if the bone be fairly broken across (this, however, rarely happens), it is to be set in the manner now described. When adjusted, the teeth are to be fastened together as formerly described, for this will contribute much toward keeping the parts at rest, especially if properly fastened, and the ends of the thread secured with knots. But it is not easy to describe exactly in writing the whole

manipulation of the case; but the reader must figure the thing to himself from the description given. Then one must take a piece of Carthaginian leather; if the patient be a younger person, it will be sufficient to use the outer skin, but if an adult the whole thickness of the hide will be required; it is to be cut to the breadth of about three inches, or as much as will be required, and having smeared the jaw with a little gum (for thus it sticks more pleasantly), the end of the skin is to be fastened with the glue near the fractured part of the jaw, at the distance of an inch or a little more, from the wound. This piece is to be applied below the jaw; but the thong should have a cut in it, in the direction of the chin, so that it may go over the sharp point of the chin. Another piece of thong like this, or somewhat broader, is to be glued to the upper part of the jaw, at about the same distance from the wound as the other thong; this thong should be so cut as to encircle the ear. The thongs should be sharp-pointed at the part where they unite, and in gluing them, the flesh of the thong should be turned to the patient's skin, for in this way it will be more tenacious; then we must stretch this thong, but still more so the one at the chin, in order to prevent the fragments of the jaw from riding over each other, and the thongs are to be fastened at the vertex, and then a bandage is to be bound round the forehead, and a proper apparatus is to be put over all, to prevent the bandages from being displaced. The patient should lie upon the sound side of the jaw, not resting upon the jaw, but upon the head. He is to be kept on a spare diet for ten days, and then nourished without delay. If there be no inflammation during the first days, the jaw is consolidated in twenty days; for callus quickly forms in this, as in all the other porous bones, provided there be no sphacelus ( *exfoliation?* ). But much remains to be said on the sphacelus of bones in another place. This method of distention with glued substances is mild, of easy application, and is useful for many dislocations in many parts of the body. Those physicians who have not judgment combined with their dexterity, expose themselves in fractures of the jaws, as in other cases, for they apply a variety of bandages to a fractured jaw-bone, sometimes properly, and sometimes improperly. For all such bandaging of a fractured jawbone has a tendency rather to derange the bones connected with the fracture, than to bring them into their natural position.

34. Ἦν δὲ ἡ κάτω γνάθος κατὰ τὴν ζύμφυσιν τὴν κατὰ τὸ γένειον διασπασθῆ μούνη δὲ αὐτὴ ζύμφυσις ἐν τῇ κάτω γνάθῳ ἐστίν, ἐν δὲ τῇ ἄνω πολλαί ἄλλ' οὐ βούλομαι ἀποπλανᾶν τὸν λόγον, ἐν ἄλλοισι γὰρ εἶδεσι νοουσημάτων περὶ τούτων λεκτέον, ἦν οὖν διαστῆ ἡ κατὰ τὸ γένειον ζύμφυσις, κατορθῶσαι μὲν παντὸς ἀνδρὸς ἐστίν τὸ μὲν γὰρ ἐξεστεῶς ἐσωθέειν χρὴ ἐς τὸ ἔσω μέρος, προσβάλλοντα τοῦς δακτύλους τὸ δὲ εἴσω ῥέπον ἀνάγειν ἐς τὸ ἔξω μέρος, ἐνερεΐσαντα τοῦς

δακτύλους. Ἐς διάστασιν μέντοι διατεινόμενον, ταῦτα χρή ποιέειν ῥᾶον γὰρ οὕτως ἐς τὴν φύσιν ἤξει, ἢ εἰ ἐγχρίπτων τις ἐς ἄλληλα

τὰ ὅστέα, καταναγκάζειν πειρᾶται τοῦτο παρὰ πάντα τὰ τοιαῦτα ὑπομνήματα χάριεν εἰδέναί. Ὅκοταν δὲ κατορθώσης, ζευξαι μὲν χρή τοὺς ὀδόντας τοὺς ἔνθεν καὶ ἔνθεν πρὸς ἀλλήλους, ὥσπερ καὶ πρόσθεν εἴρηται. Ἰῆσθαι δὲ χρή κηρωτῆ καὶ σπλήνεσιν ὀλίγοισι καὶ ὀθονίοισιν. Ἐπίδεσιν δὲ βραχείην ποικίλην μάλιστα τοῦτο τὸ χωρίον ἐπιδέχεται, ἐγγὺς γὰρ τι τοῦ ἰσορρόπου ἐστίν, ὡς δὴ μὴ ἰσόρροπον ἐόν τοῦ δὲ ὀθονίου τὴν περιβολὴν ποιέεσθαι χρή, ἣν μὲν ἡ δεξιὴ γνάθος ἐξεστήκη, ἐπὶ δεξιὰ ἐπὶ δεξιὰ γὰρ νομίζεται εἶναι, ἣν ἡ δεξιὴ χεὶρ προηγῆται τῆς ἐπιδέσιος ἣν δὲ ἡ ἐτέρη γνάθος ἐξεστήκη, ὡς ἐτέρως χρή τὴν ἐπίδεσιν ἄγειν. Κῆν μὲν ὀρθῶς τις κατορθώσεται καὶ ἐπατρεμήσῃ ὡς χρή, ταχείη

μὲν ἡ ἄλθεξις, οἱ δὲ ὀδόντες ἀσινέες γίνονται ἣν δὲ μὴ, χρονιωτέρη μὲν ἡ ἄλθεξις, διαστροφὴν δὲ ἴσχουσιν οἱ ὀδόντες, καὶ σιναροὶ καὶ ἀχρήϊοι γίνονται.

34. But if the lower jaw be disjointed at its symphysis in the chin (there is but one symphysis in the lower jaw, but there are several in the upper; but I am unwilling to digress from the subject, as these matters will have to be touched upon in other kinds of disease)-if, then, the symphysis be separated at the chin, it is the work which anybody can perform, to rectify it; for the part which protrudes is to be pushed inward by pressure with the fingers, and the part that inclines inward is to be forced outward by pushing with the fingers from within. It is after having applied extension to separate the fragments that this is to be done, for they will thus be more easily restored to their natural position, than if one should bring them together by using force. This is proper to be known as applying to all such cases. When you have set the parts, you must fasten the teeth on both sides to one another, as formerly directed. The treatment is to be accomplished with cerate, a few compresses, and bandages. This part, in particular, requires a short but complex (?) bandaging, for it is nearly cylindrical, though not exactly so; but the turn of the bandage is to be made, if the right jaw was dislocated, to the right hand (that is said to be to the right hand when the right hand conducts the bandaging); but if the other jaw be the seat of the dislocation, the bandaging is to be made in the other direction. And if matters be properly adjusted, and the patient keep quiet, there will be a speedy recovery, and the teeth will be uninjured; but if not, the recovery will be more protracted, the teeth will be distorted, will give trouble, and become useless.

35. Ἦν δὲ ἡ ρίς καταγῆ, τρόπος μὲν οὐχ εἷς ἐστὶ κατήξιος ἀτὰρ πολλὰ μὲν δὴ καὶ



ἄλλα λωβέονται οἱ χαίροντες τῆσι καλῆσιν ἐπιδέσεσιν ἄνευ νόου, ἐν δὲ τοῖσι περὶ τὴν ῥῖνα μάλιστα ἐπιδεσίων γὰρ ἔστιν αὕτη ποικιλωτάτη, καὶ πλείστους μὲν σκεπάρνους ἔχουσα, διαρρωγὰς δὲ καὶ διαλείψιας ποικιλωτάτας τοῦ χρωτὸς ῥομβοειδέας. Ὡς οὖν εἴρηται, οἱ τὴν ἀνόητον εὐχειρίην ἐπιτηδεύοντες ἄσμενοι ῥινὸς κατεαγυίης ἐπιτυγχάνουσιν, ὡς ἐπιδήσωσιν. Μίαν μὲν οὖν ἡμέρην, ἢ δύο, ἀγάλλεται μὲν ὁ ἰητρὸς, χαίρει δὲ ὁ ἐπιδεδεμένος ἔπειτα ταχέως μὲν ὁ ἐπιδεδεμένος κορίσκειται, ἀσηρὸν γὰρ τὸ φόρημα ἀρκέει δὲ τῷ ἰητρῷ, ἐπειδὴ ἐπέδειξεν,

ὅτι ἐπίσταται ποικίλως ῥῖνα ἐπιδέειν. Ποιέει δὲ ἡ ἐπίδεσις ἢ τοιαύτη πάντα τάναντία τοῦ δέοντος τοῦτο μὲν γὰρ, ὁκόσοι σιμοῦνται διὰ τὴν κάτηξιν, δηλονότι, εἰ ἄνωθεν τις μᾶλλον πιέζοι, σιμώτεροι ἂν ἔτι εἶεν τοῦτο δὲ, ὅσοισι παραστρέφεται ἢ ἔνθα ἢ ἔνθα ἢ ῥίς, ἢ κατὰ τὸν χόνδρον, ἢ ἀνωτέρω, δηλονότι οὐδὲν αὐτοὺς ἢ ἄνωθεν ἐπίδεσις ὠφελήσει, ἀλλὰ καὶ βλάψει μᾶλλον οὐχ οὕτω γὰρ εὖ ξυναρμόσει σπλήνεσι τὸ ἐπὶ θάτερον τῆς ῥινὸς, καίτοι οὐδὲ τοῦτο ποιέουσιν οἱ ἐπιδέοντες.

35. Of fractures of the nose there are more than one variety, but those who, without judgment, delight in fine bandagings, do much mischief, most especially in injuries about the nose. For this is the most complex of all the forms of bandaging, having most of the turns of the bandage called "ascia," and rhomboidal intervals and uncovered spaces of the skin. As has been said, those who practice manipulation without judgment are fond of meeting with a case of fractured nose, that they may apply the bandage. For a day or two, then, the physician glories in his performance, and the patient who has been bandaged is well pleased, but speedily the patient complains of the incumbrance of the bandage, and the physician is satisfied, because he has had an opportunity of showing his skill in applying a complex bandage to the nose. Such a bandaging does everything the very reverse of what is proper; for, in the first place, those who have their nose flattened by the fracture, will clearly have the part rendered still more flat, if pressure above be applied to it; and further, those cases in which the nose is distorted to either side, whether at the cartilage or higher up, will evidently derive no benefit from bandaging above it, but will rather be injured; for it will not admit of having compresses properly arranged on either side of the nose, and indeed, persons applying this bandage do not seek to do this.

36. Ἄγχιστα δὲ ἡ ἐπίδεσις μοι δοκέη ἂν τι ποιέειν, εἰ κατὰ μέσην τὴν ῥῖνα, κατὰ τὸ ὄξυ, ἀμφιφλασθεῖη ἢ σὰρξ κατὰ τὸ ὀστέον, ἢ εἰ κατὰ τὸ ὀστέον μικρὸν τι

σίνος εἶη, καὶ μὴ μέγα τοῖσι γὰρ τοιούτοισιν ἐπιώρωμα ἴσχει ἢ ρίς, καὶ ὀκραιοειδεστέρα τινὶ γίνεται ἀλλ' ὅμως οὐδὲ τούτοισι δὴ που πολλοῦ ὄχλου δέεται ἢ ἐπίδεσις, εἰ δὴ τι καὶ δεῖ ἐπιδέειν ἀρκέει δὲ ἐπὶ μὲν τὸ φλάσμα σπληνίον ἐπιτείναντα κεκηρωμένον, ἔπειτα ὡς ἀπὸ δύο ἀρχέων ἐπιδέεται, οὕτως ὀθονίῳ ἐς ἅπαξ περιβάλλειν. Ἀρίστη μέντοι ἰητρεῖη, τῷ ἀλήτῳ, τῷ σιτανίῳ, τῷ πλυτῷ, γλίσχρῳ, πεφυρημένῳ, ὀλίγῳ,

καταπλάσσειν τὰ τοιαῦτα χρὴ δὲ, ἦν μὲν ἐξ ἀγαθῶν ἔη τῶν πυρῶν τὸ ἄλητον καὶ εὐόλκιμον, τούτῳ χρέεσθαι ἐς πάντα τὰ τοιαῦτα ἦν δὲ μὴ πάνυ ὀλκιμον ἔη, ὀλίγην μάννην ὕδατι ὡς λειοτάτην διέντα, τούτῳ φυρᾶν τὸ ἄλητον, ἢ κόμμι πάνυ ὀλίγον ὡσαύτως μίσειν.

36. This bandaging would appear to me to answer best when the skin surrounding the bone is contused on its ridge near the middle, or if the bone itself have sustained some injury, but not a great one, in such cases, redundant callus forms in the nose, and the part becomes a little too prominent; and yet, even in these cases, the bandaging need not require much trouble, if, indeed, any bandage be applied at all; for it is enough if one lay a waxed compress on the contusion, and then apply the double-headed bandage, thus taking one turn with it. The best application to such accidents is a small cataplasm of wheaten flour, washed, and mixed up into a viscid mass. If the flour be made from good wheat, and if it be glutinous, it should be used alone for all such cases, but if it be not very glutinous, a little of the manna of frankincense, well pulverized, is to be moistened with water, and the flour is to be mixed up with it, or a very little gum may be mixed in like manner.

37. Ὀκόσοισι μὲν οὖν ρίς ἐς τὸ κάτω καὶ ἐς τὸ σιμὸν ῥέπουσα κατεαγῆ, ἦν μὲν ἐκ τοῦ ἔμπροσθεν μέρεος κατὰ τὸν χόνδρον ἴζηται, οἷόν τέ ἐστι καὶ ἐντιθέναι τι διόρθωμα ἐς τοὺς μυκτῆρας ἦν δὲ μὴ, ἀνορθοῦν μὲν χρὴ πάντα τὰ τοιαῦτα, τοὺς δακτύλους ἐς τοὺς μυκτῆρας ἐντιθέντα, ἦν ἐνδέχεται ἦν δὲ μὴ, παχὺ ὑπάλειπτρον

μὴ ἐς τὸ ἔμπροσθεν τῆς ρίνος ἀνάγοντα τοῖσι δακτύλοισιν, ἀλλ' ἢ ἴδρυται ἔξωθεν δὲ τῆς ρίνος ἔνθεν καὶ ἔνθεν ἀμφιλαμβάνοντα τοῖσι δακτύλοισι, ξυναναγκάζειν τε ἅμα καὶ ἀναφέρειν ἐς τὸ ἄνω. Καὶ ἦν μὲν πάνυ ἐν τῷ ἔμπροσθεν τὸ κάτηγμα ἔη, οἷόν τέ τι καὶ ἔσω τῶν μυκτῆρων ἐντιθέναι, ὡσπερ ἤδη εἴρηται, ἢ ἄχνην τὴν ἀφ' ἡμιτυβίου, ἢ ἄλλο τι τοιοῦτον ἐν ὀθονίῳ εἰλίσσοντα, μᾶλλον δὲ ἐν καρχηδονίῳ δέρματι ἐρράψαντα, σχηματίσαντα τὸ ἀρμόσσον σχῆμα τῷ χωρίῳ, ἵνα ἐγκείσεται. Ἦν μὲντοι πρωσώτέρῳ ἔη τὸ

κάτηγμα, οὐδὲν οἶόν τε ἔσω ἐντιθέναι καὶ γὰρ εἰ ἐν τῷ ἔμπροσθεν ἀσηρὸν τὸ φόρημα, πῶς γε δὴ οὐκ ἐν τῷ ἐσωτέρῳ; Τὸ μὲν οὖν πρῶτον, καὶ ἔσωθεν ἀναπλάσσεσθαι καὶ ἔξωθεν ἀφειδήσαντα, χρὴ ἀναγαγεῖν ἐς τὴν ἀρχαίην φύσιν, καὶ διορθώσασθαι. Κάρτα γὰρ οἷη τε ρίς καταγεῖσα ἀναπλάσσεσθαι, μάλιστα μὲν αὐθήμερος, ἦν δὲ μὴ, ὀλίγῳ ὕστερον ἀλλὰ καταβλακεύουσιν οἱ ἰητροὶ, καὶ ἀπαλωτέρως τὸ πρῶτον ἄπτονται, ἢ ὡς χρὴ παραβάλλοντα γὰρ τοὺς δακτύλους χρὴ ἔνθεν καὶ ἔνθεν κατὰ τὴν φύσιν τῆς ρίνος ὡς κατωτάτω, κάτωθεν ζυναναγκάζειν, καὶ οὕτω μάλιστα ἀνορθοῦται

σὺν τῇ ἔσωθεν διορθώσει. Ἐπειτα δὲ ἐς ταῦτα ἰητρὸς οὐδεὶς ἄλλος ἐστὶ τοιοῦτος, εἰ ἐθέλοι καὶ μελετᾶν καὶ τολμᾶν, ὡς οἱ δάκτυλοι αὐτοῦ οἱ λιχανοὶ οὗτοι γὰρ κατὰ φύσιν μάλιστα εἰσιν. Παραβάλλοντα γὰρ χρὴ τῶν δακτύλων ἐκάτερον, παρὰ πᾶσαν τὴν ρῖνα ἐρείδοντα, ἡσύχως οὕτως ἔχειν, μάλιστα μὲν, εἰοῖόν τε εἶη, αἰεὶ, ἐστ' ἂν κρατυνηθῆ, εἰ δὲ μὴ, ὡς πλεῖστον χρόνον, αὐτὸν, ὡς εἴρηται εἰ δὲ μὴ, ἢ παῖδα ἢ γυναῖκά τινα μαλθακὰς γὰρ τὰς χεῖρας δεῖ εἶναι. Οὕτω γὰρ ἂν κάλλιστα ἰητρευθῆ, ὅτε ἢ ρίς μὴ ἐς τὸ σκολιὸν, ἀλλ' ἐς τὸ κάτω ἰδρυμένη, ἰσόρροπος εἶη. Ἐγὼ μὲν οὖν οὐδεμίην που ρῖνα εἶδον, ἥτις οὕτω κατεαγεῖσα οὐχ οἷη τε διορθωθῆναι, αὐτίκα πρὶν πωρωθῆναι ζυναναγκαζομένη, ἐγένετο, εἴ τις ὀρθῶς ἐθέλοι ἰητρεύειν. Ἀλλὰ γὰρ οἱ ἄνθρωποι αἰσχροὶ μὲν εἶναι πολλοῦ ἀποτιμῶνται, μελετᾶν δὲ ἅμα μὲν οὐκ ἐπίστανται, ἅμα δὲ οὐ τολμέουσιν, ἦν μὴ ὀδυνέωνται, ἢ θάνατον δεδοίκωσιν καίτοι ὀλιγοχρόνιος ἢ πώρωσις τῆς ρίνος ἐν γὰρ δέκα ἡμέρησι κρατύνεται, ἦν μὴ ἐπισφακελίση.

37. In those cases in which the fractured portions are depressed and flattened, if it is depressed in front at the cartilage, something may be introduced into the nostrils to rectify the parts. If not, all such deformities may be restored by introducing the fingers into the nostrils, if this can be managed, but if not, a thick spatula is to be introduced with the fingers, not to the fore part of the nose, but to the depressed portion, and the physician is to take hold of the nose externally on both sides, and at the same time raise it up. And if the fracture be much in the fore part one may introduce into the nostrils as already stated, either caddis scraped from a linen towel, or something such wrapped up in a piece of cloth, or rather stitched in Carthaginian leather, and moulded into a shape suitable to the place into which it is to be introduced. But if the fracture be at a greater distance, it is not possible to introduce anything within, for if it was irksome to bear anything of the kind in the fore part, how is it not to be so when introduced farther in? At first, then, by rectifying the parts from within, and sparing no pains upon them from without, they are to be brought to their natural position, and set. A fractured nose may be readily restored to shape, especially on the day

of the accident, or even a little later, but the physicians act irresolutely, and touch it more delicately at first than they should; for the fingers should be applied on both sides along the natural line of the nose, and it is to be pushed downward, and thus, with pressure from within, the displacement is to be rectified. But for these purposes no physician is equal to the index-fingers of the patient himself, if he will pay attention and has resolution, for they are the most natural means. Either of the fingers is to be placed firmly along the whole nose, and thus it is to be gently held, and steadily, if possible until it become firm, but if not, he himself is to hold it for as long a time as possible, or if he cannot, a child or woman should do it, for the hands ought to be soft. Thus may a fracture of the nose, attended with depression, and not with displacement to the side, but in a straight line, be most properly treated. I have never seen a case of fractured nose which could not be rectified when attempted, before callus is formed, provided the treatment be properly applied. But although men would give a great price to escape being deformed, yet at the same time they do not know how to take care, nor have resolution, if they do not experience pain, nor fear death, although the formation of callus in the nose speedily place, for the most part is consolidated in ten days, provided sphacelus do not take place.

38. Ὀκόσοισι δὲ τὸ ὀστέον ἐς τὸ πλάγιον κατάγνυται, ἢ μὲν ἴησις ἢ αὐτὴ τὴν δὲ διόρθωσιν δηλονότι χρή ποιέεσθαι, οὐκ ἰσόρροπον ἀμφοτέρωθεν, ἀλλὰ τὸ τε ἐκκεκλιμένον ὠθέειν ἐς τὴν φύσιν, ἔκτοσθεν ἀναγκάζοντα, καὶ ἐσματτευόμενον ἐς τοὺς μυκτῆρας, καὶ τὰ εἴσω ῥέψαντα διορθοῦν ἀόκνως, ἔστ' ἂν κατορθώσης,

εὖ εἰδότα, ὅτι, ἦν μὴ αὐτίκα κατορθώσης, οὐχ οἷόν τε μὴ οὐχὶ διεστράφθαι τὴν ῥῖνα. Ὄταν δὲ ἀγάγης ἐς τὴν φύσιν, προσβάλλοντα χρή ἐς τὸ χωρίον, ἢ τοὺς δακτύλους, ἢ τὸν ἓνα δάκτυλον, ἢ ἐξέσχεν, ἀνακωχέειν, ἢ αὐτὸν, ἢ ἄλλον τινά, ἔστ' ἂν κρατυνθῆ τὸ τρῶμα ἀτὰρ καὶ ἐς τὸν μυκτῆρα τὸν σμικρὸν δάκτυλον ἀπωθέοντα, ἄλλοτε καὶ ἄλλοτε διορθοῦν χρή τὰ ἐγκλιθέντα. Ὅτι δ' ἂν φλεγμονῆς ὑπογίνηται τουτέοισι, χρή τῷ σταιτὶ χρέεσθαι τοῖσι μέντοι δακτύλοισι προσέχειν χρή ὁμοίως, καὶ τοῦ σταιτὸς ἐπικειμένου. Ἦν δέ που κατὰ τὸν χόνδρον ἐς τὰ πλάγια καταγῆ, ἀνάγκη τὴν ῥῖνα ἄκρην παρεστράφθαι. Χρή οὖν τοῖσι τοιούτοισιν ἐς τὸν μυκτῆρα ἄκρον διόρθωμά τι τῶν εἰρημένων, ἢ ὅτι τούτοισιν ἔοικεν, ἐντιθέσθαι πολλὰ δ' ἂν τις εὔροι τὰ ἐπιτήδεια, ὅσα μήτε ὀδμὴν ἴσχει, ἄλλως τε καὶ προσηνέα ἐστὶν ἐγὼ δὲ ποτε πλεύμονος προβάτου ἀπότμημα ἐνέθηκα, τοῦτο γὰρ πως παρέτυχεν οἱ γὰρ σπόγγοι ἐντιθεμένοι ὑγράσματα δέχονται. Ἐπειτα χρή καρχηδονίου δέρματος λοπὸν, πλάτος ὡς τοῦ μεγάλου δακτύλου τετμημένον, ἢ ὅκως ἂν ξυμφέρη, προσκολλῆσαι ἐς τὸ ἔκτοσθεν πρὸς τὸν μυκτῆρα τὸν ἐκκεκλιμένον κᾶπειτα κατατεῖναι τὸν ἱμάντα, ὅκως ἂν ξυμφέρη

μᾶλλον δὲ ὀλίγω τείνειν χρῆ, [ἦ] ὥστε ὀρθὴν καὶ ἀπαρτῆ τὴν ῥίνα εἶναι. Ἐπειτα μακρὸς γὰρ ἔστω ὁ ἱμᾶς, κάτωθεν τοῦ ὠτὸς ἀγαγόντα αὐτὸν, ἀναγαγεῖν περὶ τὴν κεφαλὴν καὶ ἔξεστι μὲν κατὰ τὸ μέτωπον προσκολληῖσαι τὴν τελευτὴν τοῦ ἱμάντος, ἔξεστι δὲ καὶ μακρότερον ἐπιπεριελίσσοντα περὶ τὴν κεφαλὴν καταδέειν. Τοῦτο ἅμα μὲν δικαίην τὴν διόρθωσιν ἔχει, ἅμα δὲ εὐταμίευτον, καὶ μᾶλλον, ἣν ἐθέλη, καὶ ἦσσον τὴν ἀντιρροπίνην ποιῆσαι τῆς ῥινός. Ἀτὰρ καὶ ὀκόσοισιν ἐς τὸ πλάγιον ἢ ῥίς κατάγνυται, τὰ μὲν ἄλλα ἰητρεύειν χρῆ, ὡς προείρηται προσδέεται δὲ τοῖσι πλείστοισι καὶ τοῦ ἱμάντος πρὸς ἄκρην τὴν ῥίνα προσκολληθῆναι τῆς ἀντιρροπίης εἵνεκα.

38. When the fractured bone is displaced laterally, the treatment is the same, but it is obvious that the reduction is to be made, not by applying equal force on both sides, but by pushing the displaced portion into its natural position, and pressing on it from without, and introducing something into the nostrils, and boldly rectifying the fragments which incline inward, until the whole be properly adjusted, well knowing that if you do not restore the parts at once, it is impossible but that the nose must be distorted. But when you restore the parts to their natural position, either the patient himself, or some other person, is to apply one finger or more to the part which protrudes, and keep it in position until the fracture be consolidated; but the little finger is, from time to time, to be pushed into the nostril, to rectify the parts which incline inward. When any inflammation supervenes, dough must be used, but attention must still be equally paid to the application of the fingers, although the dough be on the part. But if the fracture be in the cartilage, with lateral displacement, the end of the nose must necessarily be distorted. In such cases some of the aforementioned means of reduction, or whatever suits, is to be introduced into the nostril; but there are many convenient things to be found which have no smell, and are appropriate in other respects; thus, on one occasion, I introduced a slice of sheep's lung, as it happened to be at hand; for sponges, if introduced, imbibe humidities. Then the outer skin of Carthaginian leather is to be taken, and a piece of the size of the thumb, or what will answer, is to be cut off and glued to the outside of the nostril which is turned aside, and then this piece of thong is to be stretched to the proper degree, or rather a little more than what will be sufficient to make the nose straight and regular. Then (for the thong must be long) it is to be brought below the ear and round the head, and the end of the thong may either be glued to the forehead, or a still longer one may be carried all round the head, and secured. This is a natural mode of setting the nose, is of easy application, and is calculated to enable the counter-extension on the nose to be made greater or less, as you may incline. In a case where the fractured nose is turned to the side, the

treatment is to be conducted otherwise, as already described; and in most of them the thong ought to be glued to the end of the nose, in order to make extension in the opposite direction.

39. Ὅσοισι δὲ σὺν τῇ κτήξει καὶ ἔλκεα προσγίνεται, οὐδὲν δεῖ ταράσσεσθαι διὰ τοῦτο ἄλλ' ἐπὶ μὲν τὰ ἔλκεα ἐπιτιθέναι ἢ πισηρῆν, ἢ τῶν ἐναίμων τι εὐαλθέα γὰρ τῶν τοιούτων τὰ πλεῖστά ἐστιν ὁμοίως, κῆν ὅστεα μέλλη ἀπιέναι. Τὴν δὲ διόρθωσιν τὴν πρώτην ἀόκνως χρῆ ποιέεσθαι, μηδὲν ἐπιλείποντα, καὶ τὰς διορθώσας τοῖσι δακτύλοισιν ἐν τῷ ἔπειτα χρόνῳ, χαλαρωτέροισι μὲν

χρεόμενον, χρεόμενον δὲ εὐπλαστότατον γὰρ τι παντὸς τοῦ σώματος ἢ ρίς ἐστιν. Τῶν δὲ ἱμάντων τῇ κολλήσει καὶ τῇ ἀντιρροπιῇ παντάπασι οὐδὲν κωλύει χρέεσθαι, οὔτ' ἦν ἔλκος ἦ, οὔτ' ἦν ἐπιφλεγμῆν ἀλυπόταται γὰρ εἰσιν.

39. When the fracture is complicated with a wound, one need not be troubled on that account, but pitch-cerate or any of the applications for fresh wounds is to be applied to the sores; for, in general, they admit of easy cure, even when there is reason to apprehend that pieces of bone will come out. The parts, at first, are to be adjusted fearlessly, taking care that nothing is omitted, and, subsequently, they are also to be adjusted with the fingers; more softly, indeed, but still it must be done; and of all parts of the body the nose is modeled with the greatest ease. And there is nothing to prevent us from having recourse to the practice of gluing on the thongs, and drawing the nose to the opposite side, even if there be a wound or the parts be inflamed, for these thongs give no pain.

40. Ἦν δὲ οὓς κατεαγῆ, ἐπιδέσιες μὲν πᾶσαι πολέμιαι οὐ γὰρ οὕτω τις καλαρὸν περιβάλλοι ἦν δὲ μᾶλλον πιέζει, πλέον κακὸν ἐργάζεται ἐπεὶ καὶ ὑγιὲς οὓς, ἐπιδέσει πιεχθὲν, ὀδυνηρὸν καὶ σφυγματῶδες καὶ πυρετῶδες γίνεται. Ἀτὰρ καὶ τὰ ἐπιπλάσματα, κάκιστα μὲν τὰ βαρύτερα τὸ ἐπίπαν ἀτὰρ καὶ τὰ πλεῖστα φλαῦρα καὶ ἀποστατικὰ, καὶ μύξαν τε ὑποποιεῖ πλείω, κάπειτα ἐκπυήσας ἀσηράς τούτων δὲ ἥκιστα οὓς κατὰ γέν προσδέεται ἄγχιστα μὴν, εἴπερ χρῆ, τὸ γλίσχρον ἄλητον χρῆ δὲ μηδὲ τοῦτο βᾶρος ἔχειν. Ψάυειν δὲ ὡς ἥκιστα συμφέρει ἀγαθὸν γὰρ φάρμακόν ἐστιν ἐνίοτε καὶ τὸ μηδὲν προσφέρειν καὶ πρὸς οὓς καὶ πρὸς ἄλλα πολλά. Χρῆ δὲ καὶ τὴν ἐπικοίμησιν φυλάσσεσθαι τὸ δὲ σῶμα ἰσχυαίνειν, καὶ μᾶλλον, ὃ ἂν κίνδυνος ἔη ἔμπυον τὸ οὓς γενέσθαι ἄμεινον δὲ καὶ μαλθάξει τὴν κοιλίην ἦν δὲ καὶ εὐήμετος

ἔη, ἐμέειν ἀπὸ συρμαΐσμοῦ. Ἦν δὲ ἐς ἐμπύησιν ἔλθη, ταχέως μὲν οὐ χρῆ στομοῦν πολλά γὰρ καὶ τῶν δοκεόντων ἐκπυέεσθαι ἀναπίνεταί ποτε, κῆν μηδὲν

τις καταπλάση. Ἦν δὲ ἀναγκασθῆ̅ στομῶσαι, τάχιστα μὲν ὑγιὲς γίνεται, ἦν τις πέρην διακαύση εἰδέναι μέντοι χρή σαφῶς, ὅτι κυλλὸν ἔσται τὸ οὖς καὶ μείον τοῦ ἑτέρου, ἦν πέρην διακαυθῆ̅. Ἦν δὲ μὴ πέρην καίηται, τάμνειν χρή τὸ μετέωρον, μὴ πάνυ σμικρὴν τομήν διὰ παχυτέρου μὴν καὶ τὸ πῦον εὐρίσκεται, ἢ ὡς ἂν τις δοκέοι ὡς δ' ἐν κεφαλαίῳ εἰπεῖν, καὶ πάντα τᾶλλα τὰ μυξώδεα καὶ μυξοποιὰ, ἅτε γλίσχρα ἔόντα, ὑποθιγγανόμενα διολισθάνει ταχέως ὑπὸ τοὺς δακτύλους καὶ ἔνθα καὶ ἔνθα διὰ τοῦτο διὰ παχυτέρου εὐρίσκουσι τὰ τοιαῦτα οἱ ἰητροὶ, ἢ ὡς οἴονται ἐπεὶ καὶ τῶν γαγγλιωδῶν ἔνια, ὅσα ἂν πλαδαρὰ ἔη, καὶ μυξώδεα σάρκα ἔχη, πολλοὶ στομοῦσιν, οἴομενοι ῥεῦμα ἀνευρήσειν ἐς τὰ τοιαῦτα ἢ μὲν οὖν γνώμη τοῦ ἰητροῦ ἐξαπατᾶται τῷ δὲ πρήγματι τῷ τοιούτῳ οὐδεμία βλάβη στομωθέντι. Ὅσα δὲ ὑδατώδεα χωρία ἔστιν, ἢ μύξης πεπληρωμένα, καὶ ἐν οἴοισι χωρίοισιν ἕκαστα θάνατον φέρει στομούμενα, ἢ καὶ ἀλλοίας βλάβας, περὶ τούτων ἐν ἄλλῳ λόγῳ γεγράφεται. Ὅταν οὖν τάμη τις τὸ οὖς, πάντων μὲν καταπλασμάτων, πάσης τε μοτώσιος ἀπέχεσθαι χρή ἰητρεύειν

δὲ ἢ ἐναίμῳ, ἢ ἄλλῳ τῷ, ὅ τι μήτε βάρος, μήτε πόνον παρασχῆσει ἦν γὰρ ὁ χόνδρος ἄρξεται ψιλοῦσθαι, καὶ ὑποστάσιος ἴσχη, ὀχλῶδες γιγνεται δὲ τοῦτο δι' ἐκείνας τὰς ἰήσιας. Πάντων δὲ τῶν παλιγκοτησάντων ἢ πέρην διάκαυσις αὐταρκέστατον.

40. In fractures of the ear all sorts of bandages do harm. For one would not think of applying it quite loose, and if applied more tightly, it only does the more harm, for even the sound ear, when confined with a bandage, becomes painful, throbs, and gets into a febrile state. With regard to cataplasms, the heaviest, on the whole, are the worst; but almost all kinds are bad, form abscesses, occasion an increase of humors, and afterward troublesome suppurations; and a fractured ear stands in less need of such applications than any other part; the most ready, if required, is the paste of meal, but neither should it have weight. It should touch as little as possible; for it is a good sometimes to apply nothing at all, both to the ear and to many other cases. Attention must be paid to the patient's position during sleep. And the body must be reduced, more especially if there be danger lest the ear suppurate; it will also be better to open the bowels, and if the patient can be readily made to vomit, this may be accomplished by means of the *syрмаism*. If the part come to suppuration, it should not be hastily opened; for often when matter appears to be formed it is absorbed again, even when no cataplasm is applied. But if forced to open it, the part will get soonest well if transfixed with a cautery, and yet it should be well understood that the ear gets maimed, and is less than the other if burned through. If not burned through, an incision, and not a very small one, should be made on the upper side; for the pus

is found to be surrounded with a thicker covering than one would have supposed; and it may be said, in general, that all parts of a mucous nature and which form mucus, as being all viscid, when touched, slip from below the fingers to either side; and on that account the physician, in such cases, finds that he has to pass his instrument through a thicker substance than he supposed; and in certain ganglionic cases, when the skin is flabby and mucous, many physicians open them, expecting to find a collection in them; here the physician forms a wrong judgment, but by such a procedure no great harm results to the patient from having had the part opened. But with regard to watery parts, and such as are filled with mucus, and which are situated in regions where every one of the parts, if opened, will occasion death or some other injury, these will be treated of in another work. When, therefore, incision is made in the ear, all sorts of cataplasms and pledges should be avoided, and it is to be treated either with applications for recent wounds, or anything else which is neither heavy nor will occasion pain, for if the cartilage be laid bare and abscesses form, the case will be troublesome; this happens from such modes of treatment. In all aggravated cases, the most effectual remedy is the transfixing of the part with a hot iron.

41. Σπόνδυλοι δὲ οἱ κατὰ ράχιν, ὅσοισι μὲν ὑπὸ νοσημάτων ἔλκονται ἐς τὸ κυφὸν, τὰ μὲν πλεῖστα ἀδύνατα λύεσθαι, ποτὶ καὶ ὅσα ἀνωτέρω τῶν φρενῶν τῆς προσφύσιος κυφοῦται. Τῶν δὲ κατωτέρω μετεξέτερα λύουσι κισσοὶ γενόμενοι ἐν τοῖσι σκέλεσι, μᾶλλον δὲ τι ἐγγινόμενοι κισσοὶ ἐν τῇ κατ' ἰγνύην φλεβί οἷσι δ' ἂν τὰ

κυφώματα λύηται, ἐγγίνονται δὲ καὶ ἐν τῇ κατὰ βουβῶνα ἤδη δὲ τισιν ἔλυσε καὶ δυσεντερίη πολυχρόνιος γενομένη. Καὶ οἷσι μὲν κυφοῦται ράχιν παισὶν ἐοῦσι, πρὶν ἢ τὸ σῶμα τελειωθῆναι ἐς αὔξησιν, τουτέοισι μὲν οὐδὲ ξυναύξεσθαι ἐθέλει κατὰ τὴν ράχιν τὸ σῶμα, ἀλλὰ σκέλεα μὲν καὶ χεῖρες τελειοῦνται ταῦτα δὲ ἐνδεέστερα γίνεται. Καὶ ὅσοισιν ἂν ἢ ἀνωτέρω τῶν φρενῶν τὸ κῦφος, τούτοις μὲν αἶ τε πλευραὶ οὐκ ἐθέλουσιν ἐς τὸ εὐρὸν αὔξεσθαι, ἀλλ' ἐς τοῦμπροσθεν, τό τε στῆθος ὄξυ γίνεται, ἀλλ' οὐ πλατὺ, αὐτοὶ τε δύσπνοοι γίνονται, καὶ κερχῶδες ἦσσον γὰρ εὐρυχωρίην ἔχουσιν αἱ κοιλίαι αἱ τὸ πνεῦμα δεχόμεναι καὶ προπέμπουσαι. Καὶ μέντοι καὶ ἀναγκάζονται κατὰ τὸν μέγαν σπόνδυλον λορδὸν τὸν αὐχένα ἔχειν, ὡς μὴ προπετῆς ἔῃ αὐτέοισιν ἢ κεφαλὴ στενοχωρίην μὲν οὖν πολλὴν τῇ φάρυγγι παρέχει καὶ τοῦτο, ἐς τὸ ἔσω ρέπον καὶ γὰρ τοῖσιν ὀρθοῖσι φύσει δύσπνοιαν παρέχει

τοῦτο τὸ ὀστέον, ἢν ἔσω ρέψη, ἔστ' ἂν ἀναπιεχθῆ. Δι' οὖν τὸ τοιοῦτον σχῆμα ἐξεχέβρογχοι οἱ τοιοῦτοι τῶν ἀνθρώπων μᾶλλον φαίνονται, ἢ οἱ ὑγιᾶς φυματίαι



τε ὡς ἐπὶ τὸ πολὺ κατὰ τὸν πλευμόνα εἰσιν οἱ τοιοῦτοι σκληρῶν φυμάτων καὶ ἀπέπτων καὶ γὰρ ἡ πρόφασις τοῦ κυφώματος καὶ ἡ ζύντασις τοῖσι πλείστοισι διὰ τοιαύτας ζυστροφὰς γίνεται, ἧσιν ἂν κοινωνήσωσιν οἱ τόνοι οἱ ζύνεγγυς. Ὅσοισι δὲ κατωτέρω τῶν φρενῶν τὸ κύφωμά ἐστι, τούτοισι νοσήματα μὲν ἐνίοισι προσγίνεται νεφριτικὰ, καὶ κατὰ κύστιν ἀτὰρ καὶ ἀποστάσιες ἐμπυήματι καὶ κατὰ κενεῶνας, καὶ κατὰ βουβῶνας, χρόνιαι καὶ δυσαλθέες, καὶ τουτέων οὐδετέρη λύει τὰ κυφώματα ἰσχία δὲ τοῖσι τοιουτέοισιν ἔτι ἀσαρκότερα γίνεται, ἢ τοῖσιν ἄνωθεν κυφοῖσιν ἢ μέντοι ζύμπασα ράχις μακροτέρη τουτέοισιν, ἢ τοῖσιν ἄνωθεν κυφοῖσιν ἢ βη δὲ καὶ γένειον βραδύτερα καὶ ἀτελέστερα, καὶ ἀγονώτεροι οὗτοι τῶν ἄνωθεν κυφῶν. Οἷσι δ' ἂν ηὔξημένοισιν ἤδη τὸ σῶμα ἢ κύφωσις γένηται, τούτοισιν ἀπαντικρὺ μὲν τῆς νούσου τῆς τότε παρεούσης κρίσιν ποιέει ἢ κύφωσις ἀνὰ χρόνον μέντοι ἐπισημαίνει τι τῶν αὐτέων, ὥσπερ καὶ τοῖσι νεωτέροισιν, ἢ πλέον, ἢ ἔλασσον ἦσσαν

δὲ κακοήθως ὡς τὸ ἐπίπαν μὴν τοιαῦτα πάντα ἐστίν. Πολλοὶ μέντοι ἤδη καὶ εὐφόρως ἤνεγκαν καὶ ὑγιεινῶς τὴν κύφωσιν ἄχρι γήρωσ, μάλιστα δὲ οὗτοι, οἷσιν ἂν ἐς τὸ εὖσαρκον καὶ πιμελῶδες προτράπηται τὸ σῶμα ὀλίγοι μὴν ἤδη καὶ τῶν τοιούτων ὑπὲρ ἐξήκοντα ἔτη ἐβίωσαν οἱ δὲ πλείστοι βραχυβιώτεροί εἰσιν. Ἔστι δ' οἷσι καὶ ἐς τὸ πλάγιον σκολιοῦνται σπόνδυλοι ἢ τῆ, ἢ τῆ πάντα μὴν ἢ τὰ πλεῖστα τὰ τοιαῦτα γίνεται διὰ ζυστροφὰς τὰς ἔσωθεν τῆς ράχιος προσζυμβάλλεται δὲ ἐνίοισι ζὺν τῆ νούσῳ καὶ τὰ σχήματα, ἐφ' ὁκοῖα ἂν ἐθισθέωσι κεκλίσθαι. Ἀλλὰ περὶ μὲν τούτων ἐν τοῖσι χρονίοισι κατὰ πλευμόνα νοσήμασιν εἰρήσεται ἐκεῖ γὰρ εἰσιν αὐτῶν χαριέσταται προγνώσιες περὶ τῶν μελλόντων ἔσεσθαι.

41. The vertebrae of the spine when contracted into a hump behind from disease, for the most part cannot be remedied, more especially when the gibbosity is above the attachment of the diaphragm to the spine. Certain of those below the diaphragm are carried off by varices in the legs, more especially by such as occur in the vein at the ham; and in those cases where the gibbosities are removed, the varices take place also in the groin; and some have been carried off by a dysentery when it becomes chronic. And when the gibbosity occurs in youth before the body has attained its full growth, in these cases the body does not usually grow along the spine, but the legs and the arms are fully developed, whilst the parts (about the back) are arrested in their development. And in those cases where the gibbosity is above the diaphragm, the ribs do not usually expand properly in width, but forward, and the chest becomes sharp-pointed and not broad, and they become affected with difficulty of breathing and hoarseness; for the cavities which inspire and expire the breath do not attain their proper

capacity. And they are under the necessity of keeping the neck bent forward at the great vertebra, in order that their head may not hang downward; this, therefore, occasions great contraction of the pharynx by its inclination inward; for, even in those who are erect in stature, dyspnoea is induced by this bone inclining inward, until it be restored to its place. From this frame of body, such persons appear to have more prominent necks than persons in good health, and they generally have hard and unconcocted tubercles in the lungs, for the gibbosity and the distension are produced mostly by such tubercles, with which the neighboring nerves communicate. When the gibbosity is below the diaphragm, in some of these cases nephritic diseases and affections of the bladder supervene, but abscesses of a chronic nature, and difficult to cure, occur in the loins and groins, and neither of these carries off the gibbosity; and in these cases the hips are more emaciated than when the gibbosity is seated higher up; but the whole spine is more elongated in them than in those who have the gibbosity seated higher up, the hair of the pubes and chin is of slower growth and less developed, and they are less capable of generation than those who have the gibbosity higher up. When the gibbosity seizes persons who have already attained their full growth, it usually occasions a crisis of the then existing disease, but in the course of time some of them attack, as in the case of younger persons, to a greater or less degree; but, notwithstanding, for the most part, all these diseases are less malignant. And yet many have borne the affection well, and have enjoyed good health until old age, more especially those persons whose body is inclined to be plump and fat; and a few of them have lived to beyond sixty years of age, but the most of them are more short-lived. In some cases the curvature of the spine is lateral, that is to say, either to the one side or the other; the most of such cases are connected with tubercles ( *abscesses?* ) within the spine; and in some, the positions in which they have been accustomed to lie cooperate with the disease. But these will be treated of among the chronic affections of the lungs; for these the most suitable prognostics of what will happen in these cases are given.

42. Ὅσοισι δὲ ἐκ καταπτώσιος ῥάχις κυφοῦται, ὀλίγα δὴ τούτων ἐκρατήθη, ὥστε ἐξίθνηται. Τοῦτο μὲν γὰρ, αἱ ἐν τῇ κλίμακι κατασεΐσιες οὐδένα πω ἐξίθνησαν, ὧν γε ἐγὼ οἶδα χρέονται δὲ οἱ ἰητροὶ μάλιστα αὐτῇ οὗτοι οἱ ἐπιθυμέοντες ἐκχαυνοῦν τὸν πολὺν ὄχλον τοῖσι γὰρ τοιούτοισι ταῦτα θαυμάσιά ἐστιν, ἢν ἢ κρεμάμενον ἴδωσιν, ἢ ῥιπτεόμενον, ἢ ὅσα τοῖσι τοιούτοισιν ἔοικε, καὶ ταῦτα κληίζουσιν αἰεὶ, καὶ οὐκέτι αὐτοῖσι μέλει, ὀκοῖόν τι ἀπέβη ἀπὸ τοῦ χειρίσματος, εἴτε κακὸν, εἴτε ἀγαθόν. Οἱ μέντοι ἰητροὶ οἱ τὰ τοιαῦτα ἐπιτηδεύοντες, σκαιοὶ εἰσιν, οὐς ἔγωγε ἔγνω τὸ μὲν γὰρ ἐπινόημα ἀρχαῖον, καὶ ἐπαινέω ἔγωγε σφόδρα

τὸν πρῶτον ἐπινοήσαντα καὶ τοῦτο καὶ ἄλλο πᾶν, ὃ τι μηχανήματα κατὰ φύσιν

ἐπεινοήθη οὐδὲν γὰρ μοι ἄελπτον, εἴ τις καλῶς σκευάσας καλῶς κατασείσειε, κἂν ἐξιθνηθῆναι ἔνια. Αὐτὸς μέντοι κατησχύνθην πάντα τὰ τοιοῦτότροπα ἰητρεύειν οὕτω, διὰ τοῦτο ὅτι πρὸς ἀπατεῶνων μᾶλλον οἱ τοιοῦτοι τρόποι.

42. When the spine protrudes backward, in consequence of a fall, it seldom happens that one succeeds in straightening it. Wherefore succussion on a ladder has never straightened anybody, as far as I know, but it is principally practiced by those physicians who seek to astonish the mob-for to such persons these things appear wonderful, for example, if they see a man suspended or thrown down, or the like; and they always extol such practices, and never give themselves any concern whatever may result from the experiment, whether bad or good. But the physicians who follow such practices, as far as I have known them, are all stupid. The device, however, is an old one, and I give great praise to him who first invented this, and any other mechanical contrivance which is according to nature. For neither would I despair, but that if succussion were properly gone about, the spine, in certain cases, might be thereby rectified. But, indeed, for my own part, I have been ashamed to treat all such cases in this way, because such modes of procedure are generally practiced by charlatans.

43. Ὅσοισι μὲν οὖν ἐγγὺς τοῦ ἀγένορος ἢ κύφωσις γίνεται, ἥσσον εἰκὸς ὠφελείην τὰς κατασεΐσιαις ταύταις τὰς ἐπὶ κεφαλῆν μικρὸν γὰρ τὸ βάρος ἢ κεφαλῆ καὶ τὰ ἀκρόμια καταρρέποντα ἀλλὰ τοὺς γε τοιοῦτους εἰκὸς ἐπὶ τοὺς πόδας κατασεισθέντας μᾶλλον ἐξιθνηθῆναι μέζων γὰρ οὕτως ἢ καταρροπίη ἢ ἐπὶ ταῦτα. Ὅσοισι δὲ κατωτέρω τὸ ὕβωμα, τουτέοισιν εἰκὸς μᾶλλον ἐπὶ κεφαλῆν κατασεΐσθαι. Εἰ οὖν τις ἐθέλοι κατασεΐειν, ὀρθῶς ἂν ὧδε σκευάζοι τὴν μὲν κλίμακα χρῆ σκυτίνοισιν ὑποκεφαλαίοισι πλαγίοισιν, ἢ ἐρινέοισι, καταστρώσαι εὖ πρὸς δεδεμένοισιν, ὀλίγῳ πλέον καὶ ἐπὶ μῆκος καὶ ἔνθεν καὶ ἔνθεν, ἢ ὅσον ἂν τὸ σῶμα τοῦ ἀνθρώπου κατάσχοι ἔπειτα τὸν ἄνθρωπον ὑπτίον κατακλίνειν ἐπὶ τὴν κλίμακα χρῆ κάπειτα προσδῆσαι μὲν τοὺς πόδας παρὰ τὰ σφυρὰ πρὸς τὴν κλίμακα μὴ διαβεβῶτας, δεσμῶ εὐόχῳ μὲν, μαλθακῶ δὲ προσδῆσαι δὲ κατωτέρω ἐκότερον τῶν γουνάτων, καὶ ἀνωτέρω προσδῆσαι δὲ καὶ κατὰ τὰ ἰσχία κατὰ δὲ τοὺς κενεῶνας καὶ κατὰ τὸ στῆθος χαλαρῆσι ταινίησι περιβαλέειν οὕτως, ὅπως μὴ κωλύωσι

τὴν κατάσεισιν τὰς δὲ χεῖρας παρὰ τὰς πλευρὰς παρατείναντα προσκαταλαβεῖν πρὸς αὐτὸ τὸ σῶμα, καὶ μὴ πρὸς τὴν κλίμακα. Ὅταν δὲ ταῦτα κατασκευάσης οὕτως, ἀνέλκειν τὴν κλίμακα ἢ πρὸς τύρσιν τινὰ ὑψηλὴν, ἢ πρὸς ἀέτωμα οἴκου

τὸ δὲ χωρίον, ἵνα κατασείεις, ἀντίτυπον ἔστω τοὺς δὲ ἀνατείνοντας εὐπαιδεύτους χρῆ εἶναι, ὅκως ὀμαλῶς καὶ ἰσορρόπως καὶ ἐξαπιναίως ἀφήσουσι, καὶ μήτε ἡ κλίμαξ ἐτερόρροπος ἐπὶ τὴν γῆν ἀφίξεται, μήτε αὐτοὶ προπετέες ἔσονται. Ἀπὸ μέντοι τύρσιος ἀφιεῖς ἢ ἀπὸ ἰστοῦ καταπεπηγότος καρχήσιον ἔχοντος, ἔτι κάλλιον ἂν τις σκευάσαιτο, ὥστε ἀπὸ τροχιλῆς τὰ χαλῶμενα εἶναι ὄπλα, ἢ ἀπὸ ὄνου. Ἄηδὲς μὴν καὶ μακρολογεῖν περὶ τούτων ὅμως δὲ ἐκ τούτων ἂν τῶν κατασκευῶν κάλλιστ' ἂν τις κατασεισθῆι.

43. Those cases in which the gibbosity is near the neck, are less likely to be benefited by these succussions with the head downward, for the weight of the head, and tops of the shoulders, when allowed to hang down, is but small; and such cases are more likely to be made straight by succussion applied with the feet hanging down, since the inclination downward is greater in this way. When the hump is lower down, it is more likely in this case that succussion with the head downward should do good. If one, then, should think of trying succussion, it may be applied in the following manner:-The ladder is to be padded with leather lined cushions, laid across, and well secured to one another, to a somewhat greater extent, both in length and breadth, than the space which the man's body will occupy; he is then to be laid on the ladder upon his back, and the feet, at the ankles, are to be fastened, at no great distance from one another, to the ladder, with some firm but soft band; and he is further to be secured, in like manner, both above and below the knee, and also at the nates; and at the groins and chest loose shawls are to be put round in such a fashion as not to interfere with the effect of the succussion; and his arms are to be fastened along his sides to his own body, and not to the ladder. When you have arranged these matters thus, you must hoist up the ladder, either to a high tower or to the gable-end of a house; but the place where you make the succussion should be firm, and those who perform the extension should be well instructed, so that they may let go their hold equally to the same extent, and suddenly, and that the ladder may neither tumble to the ground on either side, nor they themselves fall forward. But, if the ladder be let go from a tower, or the mast of a ship, fastened into the ground with its cordage, it will be better, so that the ropes run upon a pulley or axle-tree. But it is disagreeable even to enlarge upon these matters; and yet, by the contrivances now described, the proper succussion may be made.

44. Εἰ μέντοι κάρτα ἄνω εἶη τὸ ὕβωμα, δέοι δὲ κατασεῖειν πάντως, ἐπὶ πόδας κατασεῖειν λυσιτελέει, ὥσπερ ἤδη εἴρηται πλείων γὰρ οὕτω γίνεται ἡ καταρροπή ἐπὶ ταῦτα. Ἐρμάσαι δὲ χρῆ, κατὰ μὲν τὸ στήθος πρὸς τὴν κλίμακα προσδήσαντα ἰσχυρῶς, κατὰ δὲ τὸν αὐχένα ὡς χαλαρωτάτη ταινίη, ὅσον τοῦ

κατορθοῦσθαι εἵνεκα καὶ αὐτὴν τὴν κεφαλὴν κατὰ τὸ μέτωπον προσδῆσαι πρὸς τὴν κλίμακα τὰς δὲ χεῖρας παρατανύσαντα πρὸς τὸ σῶμα προσδῆσαι, καὶ μὴ πρὸς τὴν κλίμακα τὸ μέντοι ἄλλο σῶμα ἄδετον εἶναι χρῆ, πλήν, ὅσον τοῦ κατορθοῦσθαι εἵνεκα, ἄλλη καὶ ἄλλη ταινίη χαλαρῇ περιβεβλησθαι ὅπως δὲ μὴ κωλύωσιν οὗτοι οἱ δεσμοὶ τὴν κατασεισιν, σκοπέειν τὰ δὲ σκέλεα πρὸς μὲν τὴν κλίμακα μὴ προσδεδέσθω, πρὸς ἄλληλα δὲ, ὡς κατὰ τὴν ῥάχιν ἰθύρροπα ἔη. Ταῦτα μέντοι τοιουτοτρόπως ποιητέα, εἰ πάντως δεοὶ ἐν κλίμακι κατασεισθῆναι αἰσχροὺς μέντοι καὶ ἐν πάσῃ τέχνῃ καὶ οὐχ ἥκιστα ἐν ἰητρικῇ πουλὺν ὄχλον, καὶ πολλὴν ὄψιν, καὶ πουλὺν λόγον παρασχόντα, ἔπειτα μηδὲν ὠφελῆσαι.

44. But if the hump be situated very high up, and if succussion be by all means to be used, it will be better to do it with the feet downward, as has been said, for the force downward will be the greater in this case. The patient is to be well fastened to the ladder by cords at the breast, at the neck by means of a very loose shawl so as merely to keep the part properly on the ladder, and the head is to be fastened to the ladder at the forehead, the arms are to be stretched along and attached to the patient's body, and not to the ladder, and the rest of the body is not to be bound, except so as to keep it in place by means of a loose shawl wrapped round it and the ladder; attention, moreover, should be paid that these ligatures do not interfere with the force of the succussion, and the legs are not to be fastened to the ladder, but should be placed near one another, so as to be in line with the spine. These matters should be thus arranged, if recourse is to be had at all to succussion on a ladder; for it is disgraceful in every art, and more especially in medicine, after much trouble, much display, and much talk, to do no good after all.

45. Χρῆ δὲ πρῶτον μὲν γινώσκειν τὴν φύσιν τῆς ῥάχιος, οἷη τίς ἐστὶν ἐς πολλὰ γὰρ νοσήματα προσδέοι ἂν αὐτῆς. Τοῦτο μὲν γὰρ, τὸ πρὸς τὴν κοιλίην ῥέπον, οἱ σπόνδυλοι ἐντὸ ἄρτιοί εἰσιν ἀλλήλοισι, καὶ δέδενται πρὸς ἀλλήλους δεσμῶ μὲν μὲν καὶ νευρώδεϊ, ἀπὸ χόνδρων ἀποπεφυκότει ἄχρι πρὸς τὸν νωτιαῖον. Ἄλλοι δὲ τινες τόνοι νευρώδεες διανταῖοι, πρόσφυτοι, παρατέτανται ἔνθεν καὶ ἔνθεν αὐτῶν. Αἱ δὲ φλεβῶν καὶ ἀρτηριῶν κοινωνία ἐν ἑτέρῳ λόγῳ δεδηλώσονται, ὅσαι τε καὶ οἷαι, καὶ ὅθεν ὠρμημένα, καὶ ἐν οἷοισιν οἷα δύνανται, αὐτὸς δὲ ὁ νωτιαῖος οἷσιν ἐλύτρωται ἐλύτροισι, καὶ ὅθεν ὠρμημένοι, καὶ ὅπη κραινουσιν, καὶ οἷσι κοινωνέουσι, καὶ οἷα δυναμένοι. Ἐν δὲ τῷ ἐπέκεινα, ἐν ἄρθροισι γεγγυλῶνται πρὸς ἀλλήλους οἱ σπόνδυλοι. Τόνοι δὲ κοινοὶ παρὰ πάντα, καὶ ἐν τοῖσιν ἔξω μέρεσι, καὶ ἐν τοῖσιν ἔσω παρατέτανται. Ἀπόφυσες δὲ ἐστὶν ὅστεου ἐς τὸ ἔξω μέρος ἀπὸ πάντων τῶν σπονδύλων, μία ἀπὸ ἐνὸς ἐκάστου, ἀπὸ τε τῶν μειζόνων, ἀπὸ τε τῶν ἐλασσόνων ἐπὶ δὲ τῆσιν ἀποφύσεσι ταύτησι χονδρίων

ἐπιφύσεις, καὶ

ἀπ' ἐκείνων νεύρων ἀποβλάστησις ἠδελφισμένη τοῖσιν ἐξωτάτω τόνοισιν. Πλευραὶ δὲ προσπεφύκασιν, ἐς τὸ εἶως μέρος τὰς κεφαλὰς ρέπουσαι μᾶλλον, ἢ ἐς τὸ ἔξω καθ' ἓνα δὲ ἕκαστον τῶν σπονδύλων προσήρθρονται καμπυλώταται δὲ πλευραὶ ἀνθρώπου εἰσὶ ραιβοειδέα τρόπον. Τὸ δὲ μεσηγὺ τῶν πλευρέων καὶ τῶν ὀστέων τῶν ἀποπεφυκότων ἀπὸ τῶν σπονδύλων, ἀποπληρέουσιν ἐκατέρωθεν

οἱ μύες ἀπὸ τοῦ αὐχένος ἀρξάμενοι, ἄχρι τῆς προσφύσιος. Αὕτη δὲ ἡ ράχις κατὰ μῆκος ἰθυσκόλιός ἐστιν ἀπὸ μὲν τοῦ ἱεροῦ ὀστέου ἄχρι τοῦ μεγάλου σπονδύλου, παρ' ὃν προσήρτηται τῶν σκελέων ἢ πρόσφυσις, ἄχρι μὲν τούτου κυφὴ κύστις τε γὰρ, καὶ γοναὶ, καὶ ἀρχοῦ τὸ χαλαρὸν ἐν τουτέῳ ἔκτισται. Ἀπὸ δὲ τούτου ἄχρι φρενῶν προσαρτήσιος, ἰθυλόρδη καὶ παραφύσιος ἔχει μυῶν τοῦτο μούνον τὸ χωρίον ἐκ τῶν εἰσωθεν μερῶν, ἃς δὴ καλέουσι ψόας. Ἀπὸ δὲ τούτου ἄχρι τοῦ μεγάλου σπονδύλου τοῦ ὑπὲρ τῶν ἐπωμίδων, ἰθυκύφη ἔτι δὲ μᾶλλον δοκέει ἢ ἐστίν ἢ γὰρ ἄκανθα κατὰ μέσον ὑψηλοτάτας τὰς ἐκφύσιος τῶν ὀστέων ἔχει, ἔνθεν δὲ καὶ ἔνθεν ἐλάσσους. Αὐτὸ δὲ τὸ ἄρθρον τοῦ αὐχένος λορδὸν ἐστιν.

45. In the first place, the structure of the spine should be known, for this knowledge is requisite in many diseases. Wherefore, on the side turned to the belly ( *the anterior?* ) the vertebrae are in a regular line, and are united together by a pulpy and nervous band of connection, originating from the cartilages, and extending to the spinal marrow. There are certain other nervous cords which decussate, are attached ( *to the vertebrae?* ), and are extended from both sides of them. But we will describe in another work the connections of the veins and arteries, their numbers, their qualities, their origin, their functional offices in particular parts, in what sort of sheaths the spinal marrow is inclosed, where they arise, where they terminate, how they communicate, and what their uses. On the opposite side ( *behind?* ) the vertebrae are connected together by a ginglymoid articulation. Common cords ( *nerves?* ) are extended to all parts, both those within and without. There is an osseous process from the posterior part of all and each of the vertebra, whether greater or smaller; and upon these processes there are cartilaginous epiphyses, and from them arise nervous productions ( *ligaments?* ), akin to the external nerves ( *tonoi* ). The ribs are united to them, having their heads inclined rather to the inside than the out, and every one of them is articulated with the vertebrae; and the ribs in man are very curved, and, as it were, arched. The space between the ribs and the processes of the vertebrae is filled on both sides by muscles, which arise from the neck and extend to the loins ( ? ). The spine, longitudinally, is a straight line slightly curved; from the os

sacrum to the great vertebra which is connected with the articulation of the femur, the spine inclines backward, for the bladder, the organs of generation, and the loose portion of the rectum, are situated there. From this, to the attachment of the diaphragm, the spine inclines inward, and this portion alone, from the internal parts, gives origin to muscles, which are called *psoae*. From this to the great vertebra (*seventh cervical?*) which is above the tops of the shoulders, it is convex behind lengthways; but it is more in appearance than it really is, for the spinous processes are highest in the middle, and less so above and below. The region of the neck is convex before.

46. Ὀκόσοισι μὲν οὖν κυφώματα γίνεται κατὰ τοὺς σπονδύλους, ἔξωσις μὲν μεγάλη ἀπορραγεῖσα ἀπὸ τῆς ξυμφύσιος ἢ ἐνὸς σπονδύλου, ἢ καὶ πλειόνων, οὐ μάλα πολλοῖσι γίνεται, ἀλλ' ὀλίγοισιν. Οὐδὲ γὰρ τὰ τρώματα τὰ τοιαῦτα ῥηϊδίον γίνεσθαι οὔτε γὰρ ἐς τὸ ἔξω ἔξωσθῆναι ῥηϊδίον ἐστίν, εἰ μὴ ἐκ τοῦ ἔμπροσθεν ἰσχυρῶ τινι τρωθείη διὰ τῆς κοιλῆς οὔτω δ' ἂν ἀπόλοιτό, ἢ εἴ τις ἀφ' ὑψηλοῦ τοῦ χωρίου πεσὼν ἐρείσειε τοῖσιν ἰσχύοισιν ἢ τοῖσιν ὤμοισιν ἀλλὰ καὶ οὔτως ἂν ἀποθάνοι, παραχρῆμα δὲ οὐκ ἂν ἀποθάνοι ἐκ δὲ τοῦ ὀπισθεν οὐ ῥηϊδίον τοιαύτην ἔξαλσιν γενέσθαι ἐς τὸ ἔσω, εἰ μὴ ὑπέρβαρύ τι ἄχθος ἐμπέσοι τῶν τε γὰρ ὀστέων τῶν ἐκπεφυκότων ἔξω ἐν ἕκαστον τοιοῦτόν ἐστίν, ὥστε πρόσθεν ἂν αὐτὸ καταγῆναι, πρὶν ἢ μεγάλην ῥοπὴν εἶσω ποιῆσαι, τοὺς τε ξυνδέσμους βησάμενον, καὶ τὰ ἄρθρα τὰ ἐνγλαυμένα. Ὁ τε αὖ νωτιαῖος πονοίη ἂν, εἰ ἐξ ὀλίγου χωρίου τὴν περικαμπὴν ἔχει, τοιαύτην ἔξαλσιν ἐξαλλομένου σπονδύλου ὃ τ' ἐκπηδήσας σπόνδυλος πιέζοι ἂν τὸν νωτιαῖον, εἰ μὴ καὶ ἀπορρήξειεν πιεχθεὶς δ' ἂν καὶ ἀπολελαμμένος, πολλῶν ἂν καὶ μεγάλων καὶ ἐπικαίρων ἀπονάρκωσιν ποιήσειεν ὥστε οὐκ ἂν μέλοι τῷ ἰητρῶ, ὅπως χρὴ τὸν σπόνδυλον κατορθῶσαι, πολλῶν καὶ βιαίων ἄλλων κακῶν παρεόντων. Ὡστε

δὴ οὐδ' ἐμβαλεῖν οἶόν τε πρόδηλον τὸν τοιοῦτον οὔτε κατασεισει, οὔτε ἄλλω τρόπῳ οὐδενί, εἰ μὴ τις διαταμῶν τὸν ἄνθρωπον, ἔπειτα ἐσμασάμενος ἐς τὴν κοιλῆν, ἐκ τοῦ εἶσωθεν τῇ χειρὶ ἐς τὸ ἔξω ἀντωθέοι καὶ ταῦτα νεκρῶ μὲν οἶόν τε ποιέειν, ζῶντι δὲ οὐ πάνυ. Διὰ τί οὖν ταῦτα γράφω; Ὅτι οἶονταί τινες ἰητρευκένας ἀνθρώπους, οἷσιν ἔσωθεν ἔπεσον σπόνδυλοι, τελέως ὑπερβάντες τὰ ἄρθρα καίτοι γε ῥηϊστην ἐς τὸ περιγενέσθαι τῶν διαστροφέων ταύτην ἔνιοι νομίζουσι, καὶ οὐδὲν δέεσθαι ἐμβολῆς, ἀλλ' αὐτόματα ὑγιέα γίνεσθαι τὰ τοιαῦτα. Ἀγνοέουσι δὲ πολλοὶ, καὶ κερδαίνουσιν, ὅτι ἀγνοέουσιν πείθουσι γὰρ τοὺς πέλας. Ἐξαπατῶνται δὲ διὰ τὸδε οἶονται γὰρ τὴν ἄκανθαν τὴν ἐξέχουσαν κατὰ τὴν ῥάχιν ταύτην τοὺς σπονδύλους αὐτοὺς εἶναι, ὅτι στρογγύλον αὐτῶν ἕκαστον φαίνεται ψαυόμενον, ἀγνοεῦντες ὅτι τὰ ὀστέα ταῦτά ἐστι τὰ ἀπὸ τῶν σπονδύλων πεφυκότα, περὶ ὧν ὁ λόγος ὀλίγῳ πρόσθεν εἴρηται οἱ δὲ σπόνδυλοι

πολὺ προσωτέρω ἄπεισιν στενοτάτην γὰρ πάντων τῶν ζώων ὄνθρωπος κοιλίην ἔχει, ὡς ἐπὶ τῷ μεγέθει, ἀπὸ τοῦ ὀπισθεν εἰς τὸ ἔμπροσθεν, ποτὶ καὶ κατὰ τὸ στῆθος. Ὅταν οὖν τι τούτων τῶν ὀστέων τῶν ὑπερεχόντων ἰσχυρῶς καταγῆ, ἦν τε ἔν, ἦν τε πλείω, ταύτη ταπεινότερον τὸ χωρίον γίνεται, ἢ τὸ ἔνθεν καὶ ἔνθεν, καὶ διὰ τοῦτο ἐξαπατῶνται, οἰόμενοι τοὺς σπονδύλους ἔσω οἴχεσθαι. Προσεξαπατᾷ δὲ ἔτι αὐτοὺς καὶ

τὰ σχήματα τῶν τετρωμένων ἦν μὲν γὰρ πειρῶνται καμπύλλεσθαι, ὀδυνῶνται, περιτενέος γινομένου ταύτη τοῦ δέρματος, ἧ τέτρωνται καὶ ἅμα τὰ ὀστέα τὰ κατεηγότα ἐνθράσσει οὕτω μᾶλλον τὸν χρῶτα ἦν δὲ λорδαίνωσι, ῥάους εἰσὶν χαλαρότερον γὰρ τὸ δέρμα κατὰ τὸ τρῶμα ταύτη γίνεται, καὶ τὰ ὀστέα ἦσσαν ἐνθράσσει ἀτὰρ καὶ ἦν τις ψαύη αὐτῶν, κατὰ τοῦτο ὑπεΐκουσι λорδοῦντες, καὶ τὸ χωρίον κενεὸν καὶ μαλθακὸν ψαυόμενον ταύτη φαίνεται. Ταῦτα πάντα τὰ εἰρημένα προσεξαπατᾷ τοὺς ἰητρούς Ὑγιέες δὲ ταχέως καὶ ἀσινέες αὐτόματοι οἱ τοιοῦτοι γίνονται ταχέως γὰρ πάντα τὰ τοιαῦτα ὀστέα ἐπιπωροῦται, ὅσα χαῦνά ἐστιν.

46. In cases of displacement backward along the vertebrae, it does not often happen, in fact, it is very rare, that one or more vertebrae are torn from one another and displaced. For such injuries do not readily occur, as the spine could not easily be displaced backward but by a severe injury on the fore part through the belly (which would prove fatal), or if a person falling from a height should pitch on the nates, or shoulders (and even in this case he would die, but not immediately); and it also would not readily happen that such a displacement could take place forward, unless some very heavy weight should fall upon it behind; for each of the posterior spinal processes is so constructed, that it would sooner be broken than undergo any great inclination forward from a force which would have to overcome the ligaments and the articulations mutually connecting them. And the spinal marrow would suffer, if from the displacement of a vertebra it were to be bent even to a small extent; for the displaced vertebra would compress the spinal marrow, if it did not break it; and if compressed and strangled, it would induce insensibility of many great and important parts, so that the physician need not give himself any concern about rectifying the displacement of the vertebra, accompanied, as it is, by many other ill consequences of a serious nature. It is evident, then, that such a case could not be reduced either by succussion or by any other method, unless one were to cut open the patient, and then, having introduced the hand into one of the great cavities, were to push outward from within, which one might do on the dead body, but not at all on the living. Wherefore, then, do I write all this? Because



certain persons fancy that they have cured patients in whom the vertebra had undergone complete dislocation forward. Some, indeed, suppose that this is the easiest of all these dislocations to be recovered from, and that such cases do not stand in need of reduction, but get well spontaneously. Many are ignorant, and profit by their ignorance, for they obtain credit from those about them. These are deceived in this way, for they suppose the spinous processes to be the vertebrae themselves, because every one of them appears round to the touch, not knowing that these bones are processes from the vertebrae, as formerly stated; but the vertebrae are at a considerable distance before them; for of all animals, man, in proportion to his bulk, has the belly ( *internal cavity?* ) the narrowest from behind to before, especially at the breast. When, therefore, any of these processes are severely fractured, whether one or more, the part there appears lower than on either side, and for that reason they are deceived, supposing that the vertebrae are displaced inward. And the attitudes of the patient contribute also to deceive them; for if they attempt to put themselves into a bent position, they are pained, from the skin being stretched at the seat of the injury, and at the same time the fragments of the bones wound the skin still more; but if they bend forward, they feel easier, for the skin at the wound is thus relaxed, and the bones are less disposed to hurt them; and if touched, they shrink and bend forward, and the part which is touched appears empty and soft. All the circumstances now mentioned contribute to deceive the physician. Such patients speedily get well without any bad effects, for callus readily forms in all such bones as are porous.

47. Σκολιαίνεται μὲν οὖν ῥάχις, καὶ ὑγιαίνουσι, κατὰ πολλοὺς τρόπους καὶ γὰρ ἐν τῇ φύσει καὶ ἐν τῇ χρήσει οὕτως ἔχει ἀτὰρ καὶ ὑπὸ γήραος καὶ ὑπὸ ὀδυνημάτων ζυνδοτική ἐστίν. Αἱ δὲ δὴ κυφώσεις, αἱ ἐν τοῖσι πτώμασιν, ὡς ἐπὶ τὸ πολὺ γίνονται, ἦν ἢ τοῖσιν ἰσχίοισιν ἐρείση, ἢ ἐπὶ τοὺς ὤμους πέση. Ἀνάγκη γὰρ ἕξω φαίνεσθαι ἐν τῷ κυφώματι ἓνα μὲν τινα ὑψηλότερον τῶν σπονδύλων,

τοὺς δὲ ἔνθεν καὶ ἔνθεν, ἐπὶ ἧσσον οὐκ οὐκ εἰς ἐπὶ πούλῳ ἀποπεπηδηκῶς ἀπὸ τῶν ἄλλων ἐστίν, ἀλλὰ μικρὸν ἕκαστος ζυνδιδοῖ, ἀθρόον δὲ πολὺ γίνεται. Διὰ οὖν τοῦτο καὶ ὁ νοτιαῖος μυελὸς εὐφόρως φέρει τὰς τοιαύτας διαστροφάς, ὅτι κυκλώδης αὐτῷ ἢ διαστροφή γίνεται, ἀλλ' οὐ γωνιώδης. Χρὴ δὲ τὴν κατασκευὴν τοῦ διαναγκασμοῦ τοιήνδε κατασκευάσαι ἕξεστι μὲν ξύλον ἰσχυρὸν καὶ πλατὺ, ἐντομὴν παραμήκεα ἔχον, κατορύξαι ἕξεστι δὲ καὶ ἀντὶ τοῦ ξύλου ἐν τοίχῳ ἐντομὴν παραμήκεα ἐνταμεῖν, ἢ πήχεϊ ἀνωτέρω τοῦ ἐδάφους, ἢ ὅπως ἂν μετρίως ἔχη ἔπειτα οἶον στύλον δρύϊνον, τετράγωνον, πλάγιον παραβάλλειν, ἀπολείποντα ἀπὸ

τοῦ τοίχου, ὅσον παρελθεῖν τινα, ἦν δέη καὶ ἐπὶ μὲν τὸν στύλον ἐπιστορέσαι ἢ χλαίνας, ἢ ἄλλο τι, ὃ μαλθακὸν μὲν ἔσται, ὑπείξει δὲ μὴ μέγα τὸν δὲ ἄνθρωπον πυριῆσαι, ἦν ἐνδέχεται, ἢ πολλῶ θερμῶ λοῦσαι κάπειτα πρηνέα κατακλῖναι κατατεταμένον, καὶ τὰς μὲν χεῖρας αὐτοῦ παρατείναντα κατὰ φύσιν προσδῆσαι πρὸς τὸ σῶμα ἱμάντι δὲ μαλθακῶ, ἱκανῶς πλατεῖ τε καὶ μακρῶ, ἐκ δύο διανταίων ξυμβεβλημένῳ, μέσῳ, κατὰ μέσον τὸ στηθος δις περιβεβληῖσθαι χρὴ ὡς ἐγγυτάτῳ τῶν μασχαλέων ἔπειτα τὸ περισσεῦον τῶν ἱμάντων κατὰ τὴν μασχάλην, ἐκάτερον περὶ τοὺς ὠμούς περιβεβλήσθω ἔπειτα αἱ ἀρχαὶ πρὸς ξύλον ὑπεροειδές τι προσδεδέσθωσαν, ἀρμόζουσαι τὸ μῆκος τῷ ξύλῳ τῷ ὑποτεταμένῳ, πρὸς ὃ τι προσβάλλον τὸ ὑπεροειδές ἀντιστηρίζοντα κατατείνειν. Τοιούτῳ δὲ τινι ἐτέρῳ δεσμῶ χρὴ ἄνωθεν τῶν γουνάτων δῆσαντα καὶ ἄνωθεν τῶν περνεῶν, τὰς ἀρχὰς τῶν ἱμάντων πρὸς τοιοῦτό τι ξύλον προσδῆσαι ἄλλῳ δὲ ἱμάντι πλατεῖ, καὶ μαλθακῶ, καὶ δυνατῶ, ταινοειδέϊ, πλάτος ἔχοντι καὶ μῆκος ἱκανόν, ἰσχυρῶς περὶ τὰς ἰζύας κύκλῳ περιδεδέσθαι ὡς ἐγγύτατα τῶν ἰσχύων ἔπειτα τὸ

περισεῦον τοῦ ταινοειδέος, ἅμα ἀμφοτέρας τὰς ἀρχὰς τῶν ἱμάντων, πρὸς τὸ ξύλον προσδῆσαι τὸ πρὸς τῶν ποδῶν κάπειτα κατατείνειν ἐν τούτῳ τῷ σχήματι ἔνθα καὶ ἔνθα, ἅμα μὲν ἰσορρόπως, ἅμα δὲ ἐς ἰθὺ. Οὐδὲν γὰρ ἂν μέγα κακὸν ἢ τοιαύτη κατάτασις ποιήσειεν, εἰ χρηστῶς σκευασθῆι, εἰ μὴ ἄρα ἐξεπίτηδές τις βούλοιο σίνεσθαι. Τὸν δὲ ἰητρὸν χρὴ ἢ ἄλλον, ὅστις ἰσχυρὸς καὶ μὴ ἀμαθής, ἐπιθέντα τὸ θέναρ τῆς χειρὸς ἐπὶ τὸ ὕβωμα, καὶ τὴν ἐτέρην χεῖρα προσεπιθέντα ἐπὶ τὴν ἐτέρην, καταναγκάζειν, προσξυνιέντα, ἦν τε ἐς ἰθὺ ἐς τὸ κάτω πεφύκη καταναγκάζεσθαι, ἦν τε πρὸς τῆς κεφαλῆς, ἦν τε πρὸς τῶν ἰσχύων. Καὶ ἀσινεστάτη μὲν αὕτη ἢ ἀνάγκη ἀσινές δὲ καὶ ἐπικαθίζεσθαι τινα ἐπὶ τὸ κύφωμα, αὐτοῦ ἅμα κατατεινομένου, καὶ ἐνσεῖσαι μετεωρισθέντα. Ἀτὰρ καὶ ἐπιβῆναι τῷ ποδὶ, καὶ ὀχηθῆναι ἐπὶ τὸ κύφωμα, ἡσύχως τε ἐπενσεῖσαι οὐδὲν κωλύει τὸ τοιοῦτο δὲ ποιῆσαι μετρίως ἐπιτήδειος ἂν τις εἴη τῶν ἀμφὶ παλαιστρη εἰθισμένων. Δυνατωτάτη μέντοι τῶν ἀναγκέων ἐστίν, εἰ ὁ μὲν τοῖχος, ἢ ἐντέτμηται, ἢ τὸ ξύλον τὸ κα. τορωρυγμένον, ἢ ἐντέτμηται, κατωτέρω εἴη τῆς ράχιος τοῦ ἀνθρώπου, ὀκόσω ἂν δοκῆ μετρίως ἔχειν, σανὶς δὲ φιλυρίνη, μὴ λεπτή, ἐνεῖη, ἢ καὶ ἄλλου τινὸς ξύλου ἔπειτα ἐπὶ τὸ ὕβωμα ἐπιτεθεῖη ἢ τρύχιόν τι πολύπτυχον, ἢ σμικρόν τι σκύτινον ὑποκεφάλαιον ὡς ἐλάχιστα μὴν ἐπικεῖσθαι ξυμφέρει, μόνον προμηθεόμενον, ὡς

μὴ ἢ σανὶς ὑπὸ σκληρότητος ὀδύνην παρὰ καιρὸν προσπαρέχη κατ' ἴξιν δὲ ἔστω ὡς μάλιστα τῇ ἐντομῇ τῇ ἐς τὸν τοῖχον, τὸ ὕβωμα, ὡς ἂν ἢ σανὶς, ἢ μάλιστα ἐξέστηκε, ταύτη μάλιστα πιέζει ἐπιτεθεῖσα. Ὅταν δὲ ἐπιτεθεῖ, τὸν μὲν τινα καταναγκάζειν χρὴ τὸ ἄκρον τῆς σανίδος, ἦν τε ἓνα δέη, ἦν τε δύο, τοὺς δὲ κατατείνειν τὸ σῶμα κατὰ μῆκος, ὡς πρόσθεν εἴρηται, τοὺς μὲν τῇ, τοὺς δὲ τῇ.

Ἐξεστι δὲ καὶ ὀνίσκοισι τὴν κατάτασιν ποιέεσθαι, ἢ παρακατορύζαντα παρὰ τὸ ξύλον, ἢ ἐν αὐτῷ τῷ ξύλῳ τὰς φλιάς τῶν ὀνίσκων ἐντεκτηνάμενον, ἦν τε ὀρθὰς ἐθέλης ἐκατέρωθεν σμικρὸν ὑπερεχούσας, ἦν τε κατὰ κορυφὴν τοῦ ξύλου ἔνθεν καὶ ἔνθεν. Αὗται αἱ ἀνάγκαι εὐταμίευτοί εἰσι καὶ ἐς τὸ ἰσχυρότερον καὶ ἐς τὸ ἥσσον, καὶ ἰσχὺν ἔχουσι τοιαύτην, ὥστε, καὶ εἴ τις ἐπὶ λύμῃ βούλοιο, ἀλλὰ μὴ ἐπὶ ἰητρείῃ, ἐς τοιαύτας ἀνάγκας ἀγαγεῖν, κἂν τούτῳ ἰσχυρῶς δύνασθαι καὶ γὰρ ἂν κατατείνων κατὰ μῆκος μόνον ἔνθεν καὶ ἔνθεν οὕτω, καὶ ἄλλην ἀνάγκην οὐδεμίην προστιθείς, ὅμως κατατείνειεν ἂν τις ἰκανῶς καὶ εἰ μὴ κατατείνων, αὐτῇ δὲ μόνον τῇ σανίδι οὕτως ἰποίῃ τις, καὶ οὕτως ἂν ἰκανῶς καταναγκάσειεν. Καλαὶ οὖν αἱ τοιαῦται ἰσχύες εἰσιν, ἦσιν ἔξεστι καὶ ἀσθενεστέρησι καὶ ἰσχυροτέρησι χρέεσθαι αὐτὸν ταμιεύοντα. Καὶ μὲν δὴ καὶ κατὰ φύσιν γε ἀναγκάζουσιν

τὰ μὲν γὰρ ἐξεστεῶτα ἐς τὴν χώραν ἀναγκάζει ἢ ἴψωσις ἰέναι, τὰ δὲ ξυνεληλυθότα κατὰ φύσιν κατατείνουσιν αἱ κατὰ φύσιν κατατάσεις. Οὐκ οὖν ἐγὼ ἔχω τουτέων ἀνάγκας καλλίους, οὐδὲ δικαιότερας ἢ γὰρ κατ' αὐτὴν τὴν ἄκανθαν ἰθυωρὴ τῆς κατατάσεως κάτωθεν τε καὶ κατὰ τὸ ἱερὸν ὀστέον καλεόμενον οὐκ ἔχει ἐπιλαβὴν οὐδεμίην ἄνωθεν δὲ κατὰ τὸν αὐχένα καὶ κατὰ τὴν κεφαλὴν, ἐπιλαβὴν μὲν ἔχει, ἀλλ' ἐσιδέειν γε ἀπρεπῆς ταύτη τοι γινομένη ἢ κατάτασις, καὶ ἄλλας βλάβας ἂν προσπαρέχοι πλεονασθεῖσα. Ἐπειρήθη δὲ δὴ ποτε, ὑπτιον τὸν ἄνθρωπον κατατείνας, ἄσκον ἀφύσητον ὑποθεῖναι ὑπὸ τὸ ὕβωμα, κἄπειτα αὐλῶ ἐκ χαλκείου ἐς τὸν ἄσκον τὸν ὑποκείμενον ἐνιέναι φῦσαν. Ἀλλὰ μοι οὐκ εὐπορεῖτο ὅτε μὲν γὰρ εὖ κατατείνομι τὸν ἄνθρωπον, ἡσῶτο ὁ ἄσκος, καὶ οὐκ ἠδύνατο ἢ φῦσα ἐσαναγκάζεσθαι καὶ ἄλλως ἔτοιμον περιολισθάνειν ἦν, ἅτε ἐς τὸ αὐτὸ ἀναγκαζόμενον, τό τε τοῦ ἀνθρώπου

ὑβωμα, καὶ τὸ τοῦ ἀσκοῦ πληρουμένου κύρτωμα. Ὅτε δ' αὖ μὴ κάρτα κατατείνομι τὸν ἄνθρωπον, ὁ μὲν ἄσκος ὑπὸ τῆς φύσεως ἐκυρτοῦτο, ὁ δὲ ἄνθρωπος πάντῃ μᾶλλον ἐλορδαίνετο ἢ ἢ ξυνέφερον. Ἐγραψα δὲ ἐπίτηδες τοῦτο καλὰ γὰρ καὶ ταῦτα τὰ μαθήματά ἐστιν, ἃ, πειρηθέντα, ἀπορηθέντα ἐφάνη, καὶ δι' ἄσσα ἠπορήθη.

47. There are many varieties of curvature of the spine even in persons who are in good health; for it takes place from natural conformation and from habit, and the spine is liable to be bent from old age, and from pains. Gibbosities (or projections backward) from falls generally take place when one pitches on the nates, or falls on the shoulders. In this case some one of the vertebrae must necessarily appear higher than natural, and those on either side to a less degree; but yet no one generally has started out of the line of the others, but every one

has yielded a little, so that a considerable extent of them is curved. On this account the spinal marrow easily bears such distortions, because they are of a circular shape, and not angular. The apparatus for the reduction in this case must be managed in the following manner: a strong and broad board, having an oblong furrow in it, is to be fastened in the ground, or, in place of the board, we may scoop out an oblong furrow in the wall, about a cubit above the floor, or at any suitable height, and then something like an oaken bench, of a quadrangular shape, is to be laid along (the wall?) at a distance from the wall, which will admit of persons to pass round if necessary, and the bench is to be covered with robes, or anything else which is soft, but does not yield much; and the patient is to be stoved with vapor, if necessary, or bathed with much hot water, and then he is to be stretched along the board on his face, with his arms laid along and bound to his body; the middle, then, of a thong which is soft, sufficiently broad and long, and composed of two cross straps of leather, is to be twice carried along the middle of the patient's breast, as near the armpits as possible, then what is over of the thongs at the armpits is to be carried round the shoulders, and afterward the ends of the thong are to be fastened to a piece of wood resembling a pestle; they are to be adapted to the length of the bench laid below the patient, and so that the pestle-like piece of wood resting against this bench may make extension. Another such band is to be applied above the knees and the ankles, and the ends of the thongs fastened to a similar piece of wood; and another thong, broad, soft, and strong, in the form of a swathe, having breadth and length sufficient, is to be bound tightly round the loins, as near the hips as possible; and then what remains of this swathelike thong, with the ends of the thongs, must be fastened to the piece of wood placed at the patient's feet, and extension in this fashion is to be made upward and downward, equally and at the same time, in a straight line. For extension thus made could do no harm, if properly performed, unless one sought to do mischief purposely. But the physicians, or some person who is strong, and not uninstructed, should apply the palm of one hand to the hump, and then, having laid the other hand upon the former, he should make pressure, attending whether this force should be applied directly downward, or toward the head, or toward the hips. This method of applying force is particularly safe; and it is also safe for a person to sit upon the hump while extension is made, and raising himself up, to let himself fall again upon the patient. And there is nothing to prevent a person from placing a foot on the hump, and supporting his weight on it, and making gentle pressure; one of the men who is practiced in the palestra would be a proper person for doing this in a suitable manner. But the most powerful of the mechanical means is this: if the hole in the wall, or in the piece of wood fastened into the ground, be made as

much below the man's back as may be judged proper, and if a board, made of limetree, or any other wood, and not too narrow, be put into the hole, then a rag, folded several times or a small leather cushion, should be laid on the hump; nothing large, however, should be laid on the back, but just as much as may prevent the board from giving unnecessary pain by its hardness; but the hump should be as much as possible on a line with the hole made in the wall, so that the board introduced into it may make pressure more especially at that spot. When matters are thus adjusted, one person, or two if necessary, must press down the end of the board, whilst others at the same time make extension and counter-extension as along the body, as formerly described. Extension may also be made with axles, which may either be fastened in the ground beside the bench, or the post of the axles may be attached to the bench itself, if you will make them perpendicular and overtopping ( *the bench?* ) a little at both ends, or at either end of the bench. These powers are easily regulated, so as to be made stronger or weaker, and they are of such force, that if one were to have recourse to them for a mischievous purpose, and not as a remedy, they would operate strongly in this way also; for by making merely extension and counter-extension longitudinally, without any additional force, one might make sufficient extension; and if, without making extension at all, one were only to press down properly with the board, sufficient force might be applied in this way. Such powers, then, are excellent which admit of being so regulated, that they can be made weaker and stronger as required. And the forces are applied in the natural way; for the pressure above forces the displaced parts into their place. Natural extension restores parts which have come too near one another to their natural position. I, then, am acquainted with no powers which are better or more appropriate than these; for extension along the spine downward has no proper hold at the bone called the os sacrum; and extension upward, along the neck and head, has indeed a hold; but extension thus made is unseemly to behold, and, besides, if increased, may occasion much mischief otherwise. I once made trial of the following plan. Having placed the patient on his back, I put below the hump a bladder, not inflated, and afterward introduced air into the bladder by means of a brass pipe connected with it. But the experiment did not succeed; for, when the man was fairly extended, the bladder yielded, and the air could not be forced into it; and, besides, the hump of the patient was apt to slip off the distended bladder when they were pressed together. But when I did not extend the man strongly, the bladder was swelled up by the air, and the man became more bent forward than proper. I have written this expressly; for it is a valuable piece of knowledge to learn what things have been tried and have proved ineffectual, and wherefore they did not succeed.

48. Ὅσοισι δὲ ἐς τὸ εἴσω σκολιαίνονται οἱ σπόνδυλοι ὑπὸ πτώματος, ἢ καὶ ἐμπεσόντος τινὸς βαρέος, εἷς μὲν οὐδεὶς τῶν σπονδύλων μέγα ἐξίσταται κάρτα ὡς ἐπὶ τὸ πολὺ ἐκ τῶν ἄλλων, ἦν δὲ ἐκστῆ μέγα ἢ εἷς, ἢ πλείονες, θάνατον φέρουσιν ὡσπερ δὲ καὶ πρόσθεν εἴρηται, κυκλώδης καὶ αὐτῆ, καὶ οὐ γωνιώδης γίνεται ἢ παραλλαγή. Οὕρα μὲν οὖν τούτοισι καὶ ἀπόπατος μᾶλλον ἴσχεται, ἢ τοῖσιν ἔξω κυφοῖσι, καὶ πόδες καὶ ὅλα τὰ σκέλεα ψύχεται μᾶλλον, καὶ θανατηφόρα ταῦτα μᾶλλον ἐκείνων καὶ ἦν περιγέωνται δὲ, ῥυώδεες τὰ οὕρα μᾶλλον οὗτοι, καὶ τῶν σκελέων ἀκρατέστεροι καὶ ναρκωδέστεροι ἦν δὲ καὶ ἐν τῷ ἄνω μέρει μᾶλλον τὸ λόρδωμα γένηται, παντὸς τοῦ σώματος ἀκρατέες καὶ καταναρκακωμένοι γίνονται. Μηχανὴν δὲ οὐκ ἔχω οὐδεμίην ἔγωγε, ὅκως χρῆ τὸν

τοιοῦτον ἐς τὸ αὐτὸ καταστῆσαι, εἰ μὴ τινα ἢ κατὰ τῆς κλίμακος κατάσεισις ὠφελέειν οἷη τε εἶη, ἢ καὶ ἄλλη τις τοιαύτη ἴησις, ἢ κατάτασις, οἷηπερ ὀλίγω πρόσθεν εἴρηται. Κατανάγκασιν δὲ σὺν τῇ κατατάσει οὐδεμίην ἔχω, ἣτις ἂν γίνοιτο, ὡσπερ τῷ κυφώματι τὴν κατανάγκασιν ἢ σανὶς ἐποιέετο. Πῶς γὰρ ἂν τις ἐκ τοῦ ἔμπροσθεν διὰ τῆς κοιλῆς ἀναγκάσαι δύναιτο; οὐ γὰρ οἶόν τε. Ἀλλὰ μὴν οὔτε βῆχες, οὔτε παρμοὶ οὐδεμίην δύναμιν ἔχουσιν, ὥστε τῇ κατατάσει ξυντιμωρέειν οὐ μὴν οὐδ' ἔνεσις φύσης ἐνιεμένη ἐς τὴν κοιλίην οὐδὲν ἂν δυνασθεῖη. Καὶ μὴν αἱ μεγάλαι σικύαι προσβαλλόμεναι ἀνασπᾶσιος εἶνεκα δῆθεν τῶν ἔσω ῥεπόντων, σπονδύλων, μεγάλη ἀμαρτὰς γνώμης ἐστὶν ἀπωθέουσι γὰρ μᾶλλον, ἢ ἀνασπᾶσιν καὶ οὐδ' αὐτὸ τοῦτο γινώσκουσιν οἱ προσβάλλοντες ὅσω γὰρ ἂν τις μέζω προσβάλλῃ, τοσοῦτω μᾶλλον λορδοῦνται οἱ προσβληθέντες, ξυναναγκαζομένου ἄνω τοῦ δέρματος. Τρόπους δὲ ἄλλους κατασεισίων, ἢ οἷοι πρόσθεν εἴρηται, ἔχοιμι ἂν εἰπεῖν, ἀρμόσαι οὐς ἂν τις δοκέοι τῷ παθήματι μᾶλλον ἄλλ' οὐ κάρτα πιστεύω αὐτοῖσιν διὰ τοῦτο οὐ γράφω. Ἀθρόον δὲ ξυνιέναι χρῆ περὶ

τούτων, ὧν ἐν κεφαλαίῳ εἴρηται, ὅτι τὰ μὲν ἐς τὸ λορδὸν ῥέψαντα ὀλέθριά ἐστι καὶ σινάμωρα, τὰ δὲ ἐς τὸ κυφὸν ἀσινέα θανάτου, καὶ οὕρων σχεσίων, καὶ ἀποναρκασιῶν τὸ ἐπίπαν οὐ γὰρ ἐντείνει τοὺς ὀχετοὺς τοὺς κατὰ τὴν κοιλίην, οὐδὲ κωλύει εὐρόους εἶναι ἢ ἐς τὸ ἔξω κύφωσις ἢ δὲ λόρδωσις ταῦτά τε ἀμφοτέρω ποιέει, καὶ ἐς τὰ ἄλλα πολλὰ προσγίνεται. Ἐπεὶ τοι πολὺ πλείονες σκελέων τε καὶ χειρῶν ἀκρατέες γίνονται, καὶ καταναρκοῦνται τὸ σῶμα, καὶ οὕρα ἴσχεται αὐτέοισιν, οἷσιν ἂν μὴ ἐκστῆ μὲν τὸ ὕβωμα μήτε ἔξω, μήτε ἔσω, σεισθέωσι δὲ ἰσχυρῶς ἐς τὴν ἰθυωρίην τῆς ῥάχιος οἷσι δὲ ἂν ἐκστῆ τὸ ὕβωμα, ἦσσαν τοιαῦτα πάσχουσιν.

48. In curvatures forward of the vertebrae from a fall, or from some heavy body falling upon them, in general no one of them is displaced far beyond the others,

but if one or more be so displaced, the case proves fatal; but, not withstanding, as formerly stated, the displacement is circular, and not angular. In such cases, then, the urine and faeces are more apt to be retained than in displacement outward, the feet and the whole inferior extremities are colder, and the symptoms are more fatal than in the former case; and if they do survive, they are more subject to retention of the urine, and to loss of strength, and to torpor in their legs. But if the displacement be in the upper part, they experience loss of strength and torpor of the whole body. I know no mechanical contrivance by which such a displacement could be reduced, unless that one might be benefited by succussion on a bladder, or any other similar plan of treatment, such as extension, as formerly described. I am not aware of any mode of pressure which might be applied along with the extension, like that of the board in displacement backward; for how could one apply pressure from before through the belly? (*internal cavity?*) The thing is impossible. But neither coughing nor sneezing has any power so as to cooperate with the extension, nor would the injection of air into the bowels have any effect. And to apply large cupping instruments with the view of drawing back the vertebrae which have protruded forward, shows a great error of judgment; for they rather propel than attract, and those who apply them are not aware even of this fact, for the greater will be the inclination forward the greater the instrument applied, the skin being forcibly drawn into the cupping-instrument. I could tell of other modes of succussion than those formerly described, which one might fancy would be more applicable in such an affection; but I have no great confidence in them, and therefore I do not describe them. On the main, it should be known, respecting the accidents which I have briefly described, that displacements forward are of a fatal and injurious nature; but that displacements backward, for the most part, do not prove fatal, nor occasion retention of urine nor torpor of the limbs, for they do not stretch the ducts leading toward the intestines, nor occasion obstruction of the same; but displacements forward produce both these bad effects, and many others in addition. And truly they are more apt to lose the power of their legs and arms, to have torpor of the body, and retention of urine, who experience no displacement either forward or backward, but merely a violent concussion along the spine, while those who have displacement backward are least subject to these symptoms.

49. Πολλὰ δὲ καὶ ἄλλα ἐν ἰητρικῇ ἂν τις θεάσοιτο, ὧν τὰ μὲν ἰσχυρὰ ἀσινέα ἐστὶ, καὶ καθ' ἑωυτὰ τὴν κρίσιν ὅλην λαμβάνοντα τοῦ νοσήματος, τὰ δὲ ἀσθενέστερα σινάμωρα, καὶ ἀποτόκους νοσημάτων χρονίους ποιέοντα, καὶ κοινωνέοντα τῷ ἄλλῳ σώματι ἐπὶ πλεόν. Ἐπεὶ καὶ πλευρέων κάτηξις τοιοῦτόν τι

πέπονθεν οἷσι μὲν γὰρ ἂν καταγῆ πλευρῆ, μία ἢ πλέονες, ὡς τοῖσι πλείστοισι

κατάγνυται, μὴ διασχόντα τὰ ὀστέα ἐς τὸ ἔσω μέρος, μηδὲ ψιλωθέντα, ὀλίγοι μὲν ἤδη ἐπυρέτηναν ἀτὰρ οὐδὲ αἷμα πολλοὶ ἤδη ἔπτυσαν, οὐδὲ ἔμπτουι πολλοὶ γίνονται, οὐδὲ ἔμμοτοι, οὐδὲ ἐπισφακελίσιες τῶν ὀστέων διαίτα τε φαύλη ἀρκέει ἦν γὰρ μὴ πυρετὸς ξυνεχῆς ἐπιλαμβάνη αὐτούς, κενεαγγέειν κάκιον τοῖσι τοιούτοισιν, ἢ μὴ κενεαγγέειν, καὶ ἐπωδυνέστερον, καὶ πυρετωδέστερον, καὶ βηχωδέστερον τὸ γὰρ πλήρωμα τὸ μέτριον τῆς κοιλῆς, διόρθωμα τῶν πλευρέων γίνεται ἢ δὲ κένωσις κρεμασμὸν τῆσι πλευρῆσι ποιέει ὁ δὲ κρεμασμός, ὀδύνην. Ἐξωθέν τε αὖ φαύλη ἐπίδεσις τοῖσι τοιούτοισιν ἀρκέει κηρωτῆ καὶ σπλήνεσι καὶ ὀθονίοισιν ἡσυχῶς ἐρείδοντα, ὀμαλὴν τὴν ἐπίδεσιν ποιέεσθαι, ἢ καὶ ἐριῶδές τι προσεπιθέντα. Κρατύνεται δὲ πλευρῆ ἐν εἴκοσιν ἡμέρησιν ταχεῖαι γὰρ αἱ ἐπιπωρώσιες τῶν τοιουτέων ὀστέων.

49. And one might observe many other instances in medicine, of considerable injuries not proving serious, but producing a crisis in some affection, while less considerable injuries prove more serious, give rise to chronic diseases, and extend their effects to the whole system. Now something similar may happen in fracture of the ribs; for in fracture of one or more ribs, in general, if the fractured bones are not driven inward, nor are laid bare, fever rarely supervenes, neither does it often happen that there is haemoptysis, empyema, and suppurating sores, which require treatment with pledgets, nor necrosis of the bones; and in these cases the ordinary regimen is sufficient. For, unless they be seized with continual fever, a strict diet does more harm than good, by inducing inanition, and increasing the pain, fever, and cough; for moderate fullness of the intestines has a tendency to replace the ribs, while evacuation leads to suspension of the ribs, and suspension induces pain. Ordinary bandaging, externally, is sufficient in such cases; the bandages should be applied moderately tight, along with cerate and compresses, or a pad of wool may be applied. The rib is consolidated in twenty days, for callus soon forms in such bones.

50. Ἀμφιφλασθείσης μέντοι τῆς σαρκὸς ἀμφὶ τῆσι πλευρῆσιν, ἢ ὑπὸ πληγῆς, ἢ ὑπὸ πτώματος, ἢ ὑπὸ ἀντερείσιος, ἢ ἄλλου τινὸς τοιουτοτρόπου, πολλοὶ ἤδη πούλῳ αἷμα ἔπτυσαν οἱ γὰρ ὀχετοὶ οἱ κατὰ τὸ λαπαρὸν τῆς πλευρῆς ἐκάστης παρατεταμένοι, καὶ οἱ τόνοι ἀπὸ τῶν ἐπικαιροτάτων τῶν ἐν τῷ σώματι τὰς ἀφορμὰς ἔχουσιν πολλοὶ οὖν ἤδη βηχώδεες, καὶ φυματίαι, καὶ ἔμπτουι ἐγένοντο, καὶ ἔμμοτοι, καὶ ἡ πλευρῆ ἐπεσφακέλισεν αὐτοῖσιν. Ἀτὰρ καὶ οἷσι μηδὲν τοιοῦτον προσεγένετο, ἀμφιφλασθείσης τῆς σαρκὸς ἀμφὶ τῆσι πλευρῆσιν, ὅμως δὲ βραδύτερον ὀδυνώμενοι παύονται οὗτοι, ἢ οἷσιν ἂν πλευρῆ καταγῆ, καὶ



ύποστροφάς μάλλον

ἴσχει ὀδυνημάτων τὸ χωρίον ἐν τοῖσι τοιούτοισι τρώμασιν, ἢ τοῖσιν ἐτέροισιν. Μάλα μὲν οὖν μετεξέτεροι καταμελέουσι τῶν τοιούτων σινέων, μᾶλλον ἢ ἦν πλευρὴ κατεαγῆ αὐτέοισιν ἀτὰρ καὶ ἰήσιος σκεθροτέρης οἱ τοιοῦτοι δέονται, εἰ σωφρονοῖεν τῇ τε γὰρ διαίτη ζυμφέρει ζυνεστάλθαι, ἀτρεμέειν τε τῷ σώματι ὡς μάλιστα, ἀφροδισίων τε ἀπέχεσθαι, βρωμάτων τε λιπαρῶν, καὶ κερχνωδέων, καὶ ἰσχυρῶν πάντων, φλέβα τε κατ' ἀγκῶνα τέμνεσθαι, σιγᾶν τε ὡς μάλιστα, ἐπιδέεσθαι τε τὸ χωρίον τὸ φλασθὲν σπλήνεσι μὴ πολυπτύχοισι, συχνοῖσι δὲ καὶ πολὺ πλατυτέροισι πάντα τοῦ φλάσματος, κηρωτῇ τε ὑποχρίειν, ὀθονίοισι τε πλατέσι σὺν ταινίησι πλατεΐησι καὶ μαλθακῆσιν ἐπιδέειν, ἐρείδειν τε μετρίως, ὥστε μὴ κάρτα πεπιέχθαι φάναι τὸν ἐπιδεδεμένον, μηδ' αὖ χαλαρόν ἄρχεσθαι δὲ τὸν ἐπιδέοντα κατὰ τὸ φλάσμα, καὶ ἐρηρεῖσθαι ταύτη μάλιστα, τὴν δὲ ἐπίδεδειν ποιέεσθαι, ὡς ἀπὸ δύο ἀρχέων ἐπιδέεται, ἵνα μὴ περιρρεπὲς τὸ δέρμα τὸ περὶ τὰς πλευρὰς ἔη, ἀλλ' ἰσόρροπον, ἐπιδέειν δὲ ἢ καθ' ἐκάστην ἡμέρην, ἢ παρ' ἐτέρην. Ἄμεινον δὲ καὶ τὴν κοιλίην μαλθάξαι κούφω τινὶ, ὅσον κενώσιος εἶνεκεν τοῦ σίτου, καὶ ἐπὶ μὲν δέκα ἡμέρας ἰσχναίνειν, ἔπειτα ἀναθρέψαι τὸ σῶμα, καὶ ἀπαλῦναι τῇ δὲ ἐπιδέσει, ἔστ' ἂν μὲν ἰσχναίνης, ἐρηρυσμένη μᾶλλον χρέεσθαι, ὀκόταν δὲ ἔς τὸν ἀπαλυσμὸν ἄγης, ἐπιχαλαρωτέρη καὶ ἦν μὲν αἷμα ἀποπτύση

καταρχᾶς, τεσσαρακονθήμερον τὴν μελέτην καὶ τὴν ἐπίδεδειν ποιέεσθαι χρὴ ἦν δὲ μὴ πτύση τὸ αἷμα, ἀρκέει ἐν εἴκοσιν ἡμέρησιν ἢ μελέτη ὡς ἐπὶ τὸ πολὺ τῇ ἰσχύϊ δὲ τοῦ τρώματος τοὺς χρόνους προτεκμαίρεσθαι χρὴ. Ὅσοι δ' ἂν ἀμελήσωσι τῶν τοιούτων ἀμφιφλασμάτων, ἦν καὶ ἄλλο μηδὲν αὐτοῖσι φλαῦρον μέζον γένηται, ὅμως τό γε χωρίον ἀμφιφλασθὲν μυξωδεστέραν τὴν σάρκα ἴσχει, ἢ πρόσθεν εἶχεν. Ὅκου δὲ τι τοιοῦτον ἐγκαταλείπεται, καὶ μὴ εὖ ἐξιποῦται τῇ γε ἀλθέξει, φαυλότερον μὲν, ἦν παρ' αὐτὸ τὸ ὀστέον ἐγκαταλειφθῆ τὸ μυξῶδες οὔτε γὰρ ἔτι ἢ σὰρξ ὁμοίως ἄπτεται τοῦ ὀστέου, τό τε ὀστέον νοσηρότερον γίνεται, σφακελισμοὶ τε χρόνιοι ὀστέου πολλοῖσιν ἤδη ἀπὸ τοιούτων προφασίων ἐγένοντο. Ἀτὰρ καὶ ἦν μὴ παρὰ τὸ ὀστέον, ἀλλ' αὐτὴ ἢ σὰρξ μυξώδης ἔη, ὅμως ὑποστροφαι γίνονται καὶ ὀδύναι ἄλλοτε καὶ ἄλλοτε, ἦν τι τῷ σώματι τύχη πονήσας καὶ διὰ τοῦτο τῇ ἐπιδέσει χρέεσθαι χρὴ, ἅμα μὲν ἀγαθῇ, ἅμα δὲ ἐπὶ πούλῳ προηκούση, ἕως ἂν ξηρανθῆ μὲν καὶ ἀναποθῆ τὸ ἐκχύμωμα τὸ ἐν τῇ φλάσει γενόμενον, αὐξηθῆ δὲ σαρκὶ ὑγιεῖ τὸ χωρίον, ἄψηται δὲ τοῦ ὀστέου ἢ σὰρξ. Οἷσι δ' ἂ ἀμεληθεῖσι χρονιωθῆ, καὶ ὀδυνῶδες τὸ χωρίον γένηται, καὶ ἢ σὰρξ ὑπόμυξος ἔη, τούτοισι καῦσις ἴησις ἀρίστη. Καὶ ἦν μὲν αὐτὴ ἢ σὰρξ μυξώδης ἔη, ἄχρι τοῦ ὀστέου καίειν χρὴ, μὴ μὴν διαθερμανθῆναι τὸ ὀστέον ἦν δὲ μεσηγὺ τῶν πλευρέων ἔη, ἐπιπολῆς μὲν οὐδ' οὔτω χρὴ καίειν, φυλάσσεσθαι μέντοι, μὴ διακαύσης πέρην.

Ἦν δὲ πρὸς τῷ ὀστέῳ δοκέη εἶναι τὸ φλάσμα, καὶ ἔτι νεαρὸν ἔη, καὶ μήπω σφακελίση τὸ ὀστέον, ἦν μὲν κάρτα ὀλίγον ἔη, οὕτω καίειν χρή ὥσπερ εἴρηται ἦν μέντοι παραμήκης ἔη ὁ μετεωρισμὸς ὁ κατὰ τὸ ὀστέον, πλείονας ἐσχάρας ἐμβάλλειν χρή περὶ δὲ σφακελισμοῦ πλευρῆς ἅμα τῇ τῶν ἐμμότων ἰητρείῃ εἰρήσεται.

50. But when there is contusion of the flesh about the ribs, either from a blow, or a fall, or a bruise, or any like cause, there is often copious vomiting of blood, for there are canals stretched along the vacuity of each rib ( *intercostal space?* ), and nerves proceeding from the most important parts of the body have their origin there. Many of these, therefore, are troubled with coughs, tubercles, empyema, external suppurations, and sphacelus of the ribs. And even when no such symptoms supervene from contusion of the skin about the ribs, still in such cases there is, generally, more combined pain than in fractures of the ribs, and relapses of pain in the seat of the injury are more apt to occur. Wherefore some physicians pay much less attention to such injuries, than where the rib is fractured, whereas, if they were wise, they would treat such cases with far greater care than the other; for it is proper that the diet should be restricted, that the patients should remain at rest as much as possible, and abstain from venery, from fat articles of food, from such as excite cough, and from everything strong; they should be bled in the arm, speak as little as possible, should have the contused part bound round with folded compresses, plenty of bandages, broader than the contusion, and which should be smeared with cerate; in applying the bandages, broad and soft shawls should be used, and they should be put on moderately firm, so that the patient will say that they are neither too tight nor loose, and the bandaging should commence at the seat of the injury, and be made more particularly tight there, and the bandaging should be conducted as is done with a double-headed roller, so that the skin about the ribs may not be ruffled, but may lie smooth, and the bandaging should be renewed every day, or every alternate day. It is better also to open the bowels with some gentle medicine, so as just to produce an evacuation of the food, and the diet is to be restricted for ten days, and then the body is to be recruited and filled up; while you are upon the reducing system, the bandaging should be tighter, but when you are making him up again, it must be looser; and, if he spit blood from the commencement, the treatment and bandaging should be continued for forty days; but if there be no haemoptysis, treatment for twenty days will generally be sufficient; but the length of time must be regulated by the magnitude of the injury. When such contusions are neglected, if no greater mischief result there from, at all events the bruised part has its flesh more pulpy than it had formerly. When, therefore,

any such thing is left behind, and is not properly dissipated by the treatment, it will be worse if the mucosity be lodged near the bone, for the flesh no longer adheres to the bone as formerly, the bone becomes diseased, and chronic sloughings of the bone in many cases arise from such causes. But if the mischief be not upon the bone, but it is the flesh itself which is pulpy, relapses and pains will return from time to time, if there happen to be any disorder in the body; wherefore proper bandaging, and for a considerable time, must be had recourse to, until the extravasated blood forming in the bruise be dried up and absorbed, and the part be made up with sound flesh, and the flesh adhere to the bone. The best cure is the cautery in those cases which, from neglect, have become chronic, and the place turns painful, and the flesh is pulpy. And when the flesh itself is pulpy, the burning should be carried as far as the bone, but the bone itself should not be heated; but if it be in the intercostal space, you need not make the burning so superficial, only you must take care not to burn quite through. But if the contusion appear to be at the bone, if it be still recent, and the bone has not yet become necrosed, if it be very small, it is to be burned as has been described; but if the rising along the bone be oblong, several eschars are to be burned over it. Necrosis of the rib will be described along with the treatment of suppurating sores.

51. Ἦν δὲ μηροῦ ἄρθρον ἐξ ἰσχίου ἐκπέση, ἐκπίπτει δὲ κατὰ τέσσαρας τρόπους, ἐς μὲν τὸ ἔσω πλειστάκις, ἐς δὲ τὸ ἔξω τῶν ἄλλων πλειστάκις ἐς δὲ τὸ ὀπισθεν καὶ τὸ ἔμπροσθεν ἐκπίπτει μὲν, ὀλιγάκις δὲ οἷσι μὲν οὖν ἂν ἐκβῆ ἔς τὸ ἔσω, μακρότερον τὸ σκέλος φαίνεται, παραβαλλόμενον πρὸς τὸ ἕτερον, διὰ δισσᾶς προφάσιας εἰκότως ἐπὶ τε γὰρ τὸ ἀπὸ τοῦ ἰσχίου πεφυκὸς ὀστέον, τὸ ἄνω φερόμενον πρὸς τὸν κτένα, ἐπὶ τοῦτο ἢ ἐπίβασις τῆς κεφαλῆς τοῦ μηροῦ γίνεται, καὶ ὁ αὐχὴν τοῦ ἄρθρου ἐπὶ τῆς κοτύλης ὀχέεται. Ἐξωθέν τε αὖ ὁ γλουτὸς κοῖλος φαίνεται, ἅτε ἔσω ῥεψάσης τῆς κεφαλῆς τοῦ μηροῦ, τό τε αὖ κατὰ τὸ γόνυ τοῦ μηροῦ ἄκρον ἀναγκάζεται ἔξω ῥέπειν, καὶ ἡ κνήμη καὶ ὁ πούς ὠσαύτως. Ἄτε οὖν ἔξω ῥέποντος τοῦ ποδὸς, οἱ ἰητροὶ δι' ἀπειρίην τὸν ὑγίεια πόδα πρὸς τοῦτον προσίσχουσιν, ἀλλ' οὐ τοῦτον πρὸς τὸν ὑγίεια διὰ τοῦτο πούλῳ μακρότερον φαίνεται τὸ σιναρὸν τοῦ ὑγίεος πολλαχῆ δὲ

καὶ ἄλλη τὰ τοιαῦτα παραξύνεσιν ἔχει. Οὐ μὴν οὐδὲ ξυγκάμπειν δύνανται κατὰ τὸν βουβῶνα ὁμοίως τῷ ὑγίει ἀτὰρ καὶ ψαυομένη ἢ κεφαλὴ τοῦ μηροῦ κατὰ τὸν περίνεον ὑπερογκέουσα εὐδηλὸς ἐστίν. Τὰ μὲν οὖν σημήϊα ταῦτά ἐστιν, οἷσιν ἂν ἔσω ἐκπεπτώκη ὁ μηρός.

51. There are four modes of dislocation at the hip-joint: of which modes,

dislocation inward takes place most frequently, outward, the most frequently of all the other modes; and it sometimes takes place backward and forward, but seldom. When, therefore, dislocation takes place inward, the leg appears longer than natural, when compared with the other leg, for two reasons truly; for the bone which articulates with the hip-joint is carried from above down to the ischium where it rises up to the pubes, upon it, then, the head of the femur rests, and the neck of the femur is lodged in the cotyloid foramen ( *foramen thyroideum?* ). The buttock appears hollow externally, from the head of the thighbone having shifted inward, and the extremity of the femur at the knee is turned outward, and the leg and foot in like manner. The foot then being turned outward, physicians, from ignorance, bring the sound leg to it and not it to the sound leg; on this account, the injured limb appears to be much longer than the sound one, and in many other cases similar circumstances lead to error in judgment. Neither does the limb at the groin admit of flexion as in the sound limb, and the head of the bone is felt at the perineum too prominent. These, then, are the symptoms attending dislocation of the thigh inward.

52. Οἷσι μὲν ἂν οὖν ἐκπεσὼν μὴ ἐμπέσῃ, ἀλλὰ καταπορηθῆ καὶ ἀμεληθῆ, ἢ τε ὀδοιπορίῃ περιφοράδην τοῦ σκέλεος ὥσπερ τοῖσι βουσι γίνεται, καὶ ἡ ὄχησις πλείστη αὐτέοισιν ἐπὶ τοῦ ὑγίεος σκέλεός ἐστιν. Καὶ ἀναγκάζονται κατὰ τὸν κενεῶνα καὶ κατὰ τὸ ἄρθρον τὸ ἐκπεπτωκὸς κοῖλοι καὶ σκολιοὶ εἶναι κατὰ δὲ τὸ ὑγιὲς ἐς τὸ ἔξω ὁ γλουτὸς ἀναγκάζεται περιφερῆς εἶναι εἰ γάρ τις ἔξω τῷ ποδὶ τοῦ ὑγίεος σκέλεος βαίνοι, ἀπωθοίῃ ἂν τὸ σῶμα τὸ ἄλλο ἐς τὸ σιναρὸν σκέλος τὴν ὄχησιν ποιέεσθαι τὸ δὲ σιναρὸν οὐκ ἂν δύναίτο ὀχέειν πῶς γάρ; ἀναγκάζεται οὖν οὕτω κατὰ τοῦ ὑγίεος σκέλεος τῷ ποδὶ ἔσω βαίνειν, ἀλλὰ μὴ ἔξω οὕτω γὰρ ὀχέει μάλιστα τὸ σκέλος τὸ ὑγιὲς, καὶ τὸ ἐνυτοῦ μέρος τοῦ σώματος, καὶ τὸ τοῦ σιναρῶ σκέλεος μέρος. Κοιλαινόμενοι δὲ κατὰ τὸν κενεῶνα καὶ κατὰ τὰ ἄρθρα, μικροὶ φαίνονται, καὶ τῷ ξύλῳ ἀναγκάζονται ἀντερείδεσθαι πλάγιοι κατὰ τὸ ὑγιὲς σκέλος δέονται γὰρ ἀντικοντώσιος ταύτη

ἐπὶ τοῦτο γὰρ οἱ γλουτοὶ ρέπουσι, καὶ τὸ ἄχθος τοῦ σώματος ὀχεεται ἐπὶ τοῦτο. Ἀναγκάζονται δὲ καὶ ἐπικύπτειν τὴν γὰρ χεῖρα τὴν κατὰ τὸ σκέλος τὸ σιναρὸν ἀναγκάζονται κατὰ πλάγιον τὸν μηρὸν ἐρείδειν οὐ γὰρ δύναται τὸ σιναρὸν σκέλος ὀχέειν τὸ σῶμα ἐν τῇ μεταλλαγῇ τῶν σκελέων, ἢν μὴ κατέχηται πρὸς τὴν γῆν πιεζόμενον. Ἐν τούτοισιν οὖν τοῖσι σχήμασιν ἀναγκάζονται ἐσχηματίσθαι, οἷσιν ἂν ἔσω ἐκβάν τὸ ἄρθρον μὴ ἐμπέσῃ, οὐ προβουλεύσαντος τοῦ ἀνθρώπου, ὅπως ἂν ῥήϊστα ἐσχηματισμένον ἔῃ, ἀλλ' αὐτὴ ἡ ξυμφορὴ διδάσκει ἐκ τῶν παρεόντων τὰ ῥήϊστα αἰρέεσθαι. Ἐπεὶ καὶ ὀκόσοι ἔλκος ἔχοντες ἐν ποδὶ ἢ κνήμη οὐ κάρτα δύνανται ἐπιβαίνειν τῷ σκέλει, πάντες, καὶ οἱ νήπιοι, οὕτως

ὀδοιπορεύουσιν ἔξω γὰρ βαίνουσι τῷ σιναρῷ σκέλει καὶ δισσὰ κερδαίνουσι, δισσῶν γὰρ δέονται τό τε γὰρ σῶμα οὐκ ὀχέεται ὁμοίως ἐπὶ τοῦ ἔξω ἀποβαινομένου, ὡσπερ ἐπὶ τοῦ εἴσω οὐδὲ γὰρ κατ' ἰθυωρίην αὐτῷ γίνεται τὸ ἄχθος, ἀλλὰ πολλῷ μᾶλλον ἐπὶ τοῦ ὑποβαινομένου κατ' ἰθυωρίην γὰρ αὐτῷ γίνεται τὸ ἄχθος ἔν τε αὐτῇ τῇ ὀδοιπορίῃ καὶ τῇ μεταλλαγῇ τῶν σκελέων. Ἐν τούτῳ τῷ σχήματι τάχιστα ἂν δύναίτο ὑποτιθέναι τὸ ὑγιὲς σκέλος, εἰ τῷ μὲν σιναρῷ ἔξωτέρῳ βαίνοι, τῷ δὲ ὑγιεῖ ἐσωτέρῳ. Περὶ οὗ οὖν ὁ λόγος, ἀγαθὸν εὐρίσκεσθαι αὐτὸ ἐνωτῷ τὸ σῶμα [ἔς] τὰ ῥήιστα τῶν

σχημάτων. Ὅσοισι μὲν οὖν μήπω τετελειωμένοισιν ἐς αὔξησιν ἐκπεσῶν μὴ ἐμπέσοι, γυιοῦται ὁ μηρὸς καὶ ἡ κνήμη καὶ ὁ πούς οὔτε γὰρ τὰ ὀστέα ἐς τὸ μῆκος ὁμοίως αὔξεται, ἀλλὰ βραχύτερα γίνεται, μάλιστα δὲ τὸ τοῦ μηροῦ, ἄσαρκόν τε ἅπαν τὸ σκέλος καὶ ἄμυον καὶ ἐκτεθηλυσμένον καὶ λεπτότερον γίνεται, ἅμα μὲν, διὰ τὴν στέρησιν τῆς χώρας τοῦ ἄρθρου, ἅμα δὲ, ὅτι ἀδύνατον χρέεσθαι ἐστίν, ὅτι οὐ κατὰ φύσιν κέεται χρήσις γὰρ μετεξετέρη ῥύεται τῆς ἄγαν ἐκθηλύνσιος ῥύεται δὲ τι καὶ τῆς ἐπὶ μῆκος ἀναυξήσιος. Κακοῦται μὲν οὖν μάλιστα, οἷσιν ἂν ἐν γαστρὶ ἐοῦσιν ἐξαρθρήσῃ τοῦτο τὸ ἄρθρον, δεύτερον δὲ, οἷσιν ἂν ὡς νηπιωτάτοισιν ἐοῦσιν, ἥκιστα δὲ τοῖσι τετελειωμένοισιν. Τοῖσι μὲν οὖν τετελειωμένοισιν εἴρηται, οἷη τις ἡ ὀδοιπορία γίνεται οἷσι δ' ἂν νηπίοισιν ἐοῦσιν ἡ ξυμφορὴ αὐτὴ γένηται, οἱ μὲν πλεῖστοι καταβλακεύουσι τὴν διόρθωσιν τοῦ σώματος, ἀλλὰ κακῶς εἰλέονται ἐπὶ τὸ ὑγιὲς σκέλος, τῇ χειρὶ πρὸς τὴν γῆν ἀπερειδόμενοι τῇ κατὰ τὸ ὑγιὲς σκέλος καταβλακεύουσι δὲ ἔνιοι τὴν ἐς τὸ ὀρθὸν ὀδοιπορίην, καὶ οἷσιν ἂν τετελειωμένοισιν αὐτὴ ἡ ξυμφορὴ γένηται. Ὀκόσοι δ' ἂν νήπιοι ἐόντες, ταύτῃ τῇ ξυμφορῇ χρῆσάμενοι, ὀρθῶς παιδαγωγηθῶσι, τῷ μὲν ὑγιεῖ σκέλει χρέονται ἐς ὀρθὸν, ὑπὸ δὲ τὴν μασχάλην τὴν κατὰ τὸ ὑγιὲς σκέλος σκίπωνα περιφέρουσι,

μετεξετέροι δὲ, καὶ ὑπ' ἀμφοτέρας τὰς χεῖρας τὸ δὲ σιναρὸν σκέλος μετέωρον ἔχουσι, καὶ τοσοῦτῳ ῥήϊους εἰσίν, ὅσῳ ἂν αὐτοῖσιν ἔλασσον τὸ σκέλος τὸ σιναρὸν ἔῃ τὸ δὲ ὑγιὲς ἰσχύει αὐτέοισιν οὐδὲν ἦσσαν, ἢ εἰ καὶ ἀμφότερα ὑγιέα ἦν. Θηλύνονται δὲ πᾶσι τοῖσι τοιοῦτοισιν αἱ σάρκες τοῦ σκέλεος, μᾶλλον δὲ τι θηλύνονται αἱ ἐκ τοῦ ἔξω μέρους, ἢ αἱ ἐκ τοῦ ἔσω ὡς ἐπὶ πολὺ.

52. When, then, a dislocation has not been reduced, but has been misunderstood or neglected, the leg, in walking, is rolled about as is the case with oxen, and the weight of the body is mostly supported on the sound leg, and the limb at the flank, and the joint where the dislocation has occurred is necessarily hollow and bent, while on the sound side the buttock is necessarily rounded. For if one should walk with the foot of the sound leg turned outward, the weight of the

body would be thrown upon the injured limb, but the injured limb could not carry it, for how could it? One, then, is forced in walking to turn the leg inward, and not outward, for thus the sound leg best supports its own half of the body, and also that of the injured side. But being hollow at the flank and the hip-joint, they appear small in stature, and are forced to rest on a staff at the side of the sound leg. For they require the support of a staff there, since the nates inclines to this side, and the weight of the body is carried to it. They are forced also to stoop, for they are obliged to rest the hand on the side of the thigh against the affected limb; for the limb which is injured cannot support the body in changing the legs, unless it be held when it is applied to the ground. They who have got an unreduced dislocation inward are forced to put themselves into these attitudes, and this from no premeditation on their part how they should assume the easiest position, but the impediment itself teaches them to choose that which is most conformable to their present circumstances. For persons who have a sore on the foot, or leg, and cannot rest upon the limb, all, even children, walk in this way; for they turn the injured limb outward in walking, and they derive two advantages therefrom, to supply two wants; the weight of the body is not equally thrown upon the limb turned outward, as upon the one turned inward, for neither is the weight in a line with it, but is much more thrown upon the one under the body; for the weight is in a straight line with it, both in walking and in the shifting of the legs. In this position one can most quickly turn the sound limb under the body, by walking with the unsound limb outward, and the sound inward. In the case we are now treating of, it is well that the body finds out the attitudes which are the easiest for itself. Those persons, then, who have not attained their growth at the time when they met with a dislocation which is not reduced, become maimed in the thigh, the leg, and the foot, for neither do the bones grow properly, but become shortened, and especially the bone of the thigh; and the whole limb is emaciated, loses its muscularity, and becomes enervated and thinner, both from the impediment at the joint, and because the patient cannot use the limb, as it does not lie in its natural position, for a certain amount of exercise will relieve excessive enervation, and it will remedy in so far the deficiency of growth in length. Those persons, then, are most maimed who have experienced the dislocation *in utero*, next those who have met with it in infancy, and least of all, those who are full grown. The mode of walking adopted by adults has been already described; but those who are children when this accident befalls them, generally lose the erect position of the body, and crawl about miserably on the sound leg, supporting themselves with the hand of the sound side resting on the ground. Some, also, who had attained manhood before they met with this accident, have also lost the faculty of walking erect. Those who

were children when they met with the accident, and have been properly instructed, stand erect upon the sound leg, but carry about a staff, which they apply under the armpit of the sound side, and some use a staff in both arms; the unsound limb they bear up, and the smaller the unsound limb, the greater facility have they in walking, and their sound leg is no less strong than when both are sound. The fleshy parts of the limb are enervated in all such cases, but those who have dislocation inward are more subject to this loss of strength than, for the most part, those who have it outward.

53. Μυθολογοῦσι δέ τινες, ὅτι αἱ Ἀμαζονίδες τὸ ἄρσεν γένος τὸ ἐωυτῶν αὐτίκα νήπιον ἐὼν ἐξαρθρέουσιν, αἱ μὲν, κατὰ [τὰ] γούνατα, αἱ δὲ, κατὰ τὰ ἰσχία, ὡς δῆθεν χωλὰ γίνοιτο, καὶ μὴ ἐπιβουλεύοι τὸ ἄρσεν γένος τῷ θήλει χειρώναξιν ἄρα τουτέοισι χρέονται, ὀκόσα ἢ σκυτεῖης ἔργα, ἢ χαλκείης, ἢ ἄλλο ὃ τι ἐδραῖον ἔργον. Εἰ μὲν οὖν ἀληθέα ταῦτά ἐστιν, ἐγὼ μὲν οὐκ οἶδα ὅτι δὲ γίνοιτο ἂν τοιαῦτα, οἶδα, εἴ τις ἐξαρθρέοι αὐτίκα νήπια ἐόντα. Κατὰ μὲν οὖν τὰ ἰσχία μέζον τὸ διάφορόν ἐστιν ἐς τὸ ἔσω, ἢ ἐς τὸ ἔξω ἐξαρθρῆσαι κατὰ δὲ τὰ γούνατα διαφέρει μὲν τι, ἔλασσον δὲ τι διαφέρει τρόπος δὲ ἐκατέρου τοῦ χωλώματος ἴδιός ἐστιν κυλλοῦται

γὰρ μᾶλλον, οἷσιν ἂν ἐς τὸ ἔξω ἐξαρθρήση ὀρθοὶ δὲ ἦσσαν ἴστανται, οἷσιν ἂν ἐς τὸ ἔσω ἐξαρθρήση. Ὡσαύτως δὲ καὶ ἦν παρὰ τὸ σφυρὸν ἐξαρθρήση, ἦν μὲν ἐς τὸ ἔξω μέρος, κυλλοὶ μὲν γίνονται, ἐστάναι δὲ δύνανται ἦν δὲ ἐς τὸ ἔσω μέρος, βλαιοὶ μὲν γίνονται, ἦσσαν δὲ ἐστάναι δύνανται. Ἡ γὰρ μὴν ξυναύξησης τῶν ὀστέων τοιήδε γίνεται οἷσι μὲν ἂν τὸ κατὰ τὸ σφυρὸν ὀστέον τὸ τῆς κνήμης ἐκστῆ, τούτοισι μὲν τὰ τοῦ ποδὸς ὀστέα ἠκιστα ξυναύξεται, ταῦτα γὰρ ἐγγυτάτω τοῦ τρώματός ἐστι, τὰ δὲ τῆς κνήμης ὀστέα αὔξεται μὲν, οὐ πολὺ δὲ ἐνδεεστέρως, αἱ μέντοι σάρκες μινύθουσιν. Οἷσι δ' ἂν κατὰ μὲν τὸ σφυρὸν μένη τὸ ἄρθρον κατὰ φύσιν, κατὰ δὲ τὸ γόνυ ἐξεστήκη, τούτοισι τὸ τῆς κνήμης ὀστέον οὐκ ἐθέλει ξυναύξεσθαι ὁμοίως, ἀλλὰ βραχύτατον γίνεται, τοῦτο γὰρ ἐγγυτάτω τοῦ τρώματός ἐστι τοῦ μέντοι ποδὸς τὰ ὀστέα μινύθει μὲν, ἀτὰρ οὐχ ὁμοίως, ὥσπερ ὀλίγον τι πρόσθεν εἴρηται, ὅτι τὸ ἄρθρον τὸ παρὰ τὸν πόδα σῶν ἐστιν εἰ δὲ οἱ χρέεσθαι ἠδύναντο, ὥσπερ καὶ τῷ κυλλῷ, ἔτι ἂν ἦσσαν ἐμινύθει τὰ τοῦ ποδὸς ὀστέα τούτοισιν. Οἷσι δ' ἂν κατὰ τὸ ἰσχίον ἢ ἐξάρθρησις γένηται, τούτοισι τοῦ μηροῦ τὸ ὀστέον οὐκ ἐθέλει ξυναύξεσθαι ὁμοίως, τοῦτο γὰρ ἐγγυτάτω τοῦ τρώματός ἐστιν, ἀλλὰ βραχύτερον τοῦ ὑγιέος γίνεται τὰ μέντοι τῆς κνήμης ὀστέα οὐχ ὁμοίως τούτοισιν ἀναυξέα γίνεται, οὐδὲ τὰ τοῦ ποδὸς, διὰ τοῦτο δὲ, ὅτι τὸ τοῦ μηροῦ ἄρθρον τὸ παρὰ τὴν κνήμην ἐν τῇ ἐωυτοῦ φύσει μένει, καὶ τὸ τῆς κνήμης τὸ παρὰ τὸν



πόδα σάρκες μέντοι μινύθουσι παντός τοῦ σκέλεος τούτοισιν εἰ μέντοι χρέεσθαι τῷ σκέλει ἠδύναντο, ἔτι ἂν μᾶλλον τὰ ὀστέα ζυνηυζάνετο, ὡς καὶ πρόσθεν εἴρηται, πλὴν τοῦ μηροῦ, κἂν ἦσσαν ἄσαρκα εἶη, ἄσαρκότερα δὲ πολλῶ ἢ εἰ ὑγία ἦν. Σημήϊον δὲ, ὅτι ταῦτα τοιαῦτά ἐστιν ὀκόσοι γὰρ, τοῦ βραχίονος ἐκπεσόντος, γαλιάγκωνες ἐγένοντο ἐκ γενεῆς, ἢ καὶ ἐν αὐξήσει πρὶν τελειωθῆναι, οὗτοι τὸ μὲν ὀστέον τοῦ βραχίονος βραχὺ ἴσχουσι, τὸν δὲ πῆχυν καὶ ἄκρην τὴν χειρὰ ὀλίγῳ ἐνδεεστέραν τοῦ ὑγίεος, διὰ ταύτας τὰς προφάσιας τὰς εἰρημένας, ὅτι ὁ μὲν βραχίων ἐγγυτάτω τοῦ ἄρθρου τοῦ τρώματός ἐστιν, ὥστε διὰ τοῦτο βραχύτερος γέγονεν ὁ δ' αὖ πῆχυς διὰ τοῦτο οὐχ ὁμοίως ἐνακούει τῆς ζυμφορῆς, ὅτι τὸ τοῦ βραχίονος ἄρθρον τὸ πρὸς τοῦ πήχεος ἐν τῇ ἀρχαίῃ φύσει μένει, ἢ τε αὖ χεὶρ ἄκρη ἔτι τηλοτέρῳ ἄπεστιν, ἢ ὁ πῆχυς, ἀπὸ τῆς ζυμφορῆς. Διὰ ταύτας οὖν τὰς εἰρημένας προφάσιας, τῶν ὀστέων τὰ τε μὴ ζυναυξανόμενα οὐ ζυναυζάνεται, τὰ τε ζυναυξανόμενα ζυναυζάνεται. Ἐς δὲ τὸ εὐσαρκον τῇ χειρὶ καὶ τῷ βραχίονι ἢ τάλαιπωρή τῆς χειρὸς μέγα προσωφελείη ὅσα γὰρ χειρῶν ἔργα ἐστὶ, τὰ πλεῖστα προθυμούνται οἱ γαλιάγκωνες ἐργάζεσθαι τῇ χειρὶ ταύτῃ, ὅσα περ καὶ τῇ ἐτέρῃ δύνανται, οὐδὲν ἐνδεεστέρωσ τῆς ἀσινέος οὐ γὰρ δεῖ ὀχέεσθαι τὸ σῶμα ἐπὶ τῶν χειρῶν, ὡς ἐπὶ τῶν σκελέων, ἀλλὰ κοῦφα αὐτέησι τὰ ἔργα ἐστίν. Διὰ δὲ τὴν χρῆσιν οὐ μινύθουσιν αἱ σάρκες αἱ κατὰ τὴν χειρὰ καὶ τὸν πῆχυν τοῖσι γαλιάγκωσιν,

ἀλλὰ καὶ ὁ βραχίων τι προσωφελέεται ἐς εὐσαρκίην διὰ ταῦτα ὅταν δὲ ἰσχίον ἐκπαλὲς γένηται ἐς τὸ ἔσω μέρος ἐκ γενεῆς, ἢ καὶ ἔτι νηπίῳ ἐόντι, μινύθουσιν αἱ σάρκες διὰ τοῦτο μᾶλλον ἢ τῆς χειρὸς, ὅτι οὐ δύνανται χρέεσθαι τῷ σκέλει. Μαρτύριον δὲ τι ἐν ἔσται καὶ ἐν τοῖσιν ὀλίγον ὑστερον εἰρησομένοισιν, ὅτι ταῦτα τοιαῦτά ἐστιν.

53. Some tell a story how the Amazonian women dislocate the joints of their male children while mere infants, some at the knee, and others at the hip-joint, that they may be maimed, and that the male sex may not conspire against the female, and that they use them as artisans to perform any sedentary work, such as that of a shoemaker or brazier. Whether these things be true or not I do not know, but this I know, that matters would be such as is represented, provided their children, while infants, were to have their joints dislocated. The consequences of dislocation inward at the hip-joint are much greater than of dislocation outward at the hip-joint, but at the knee, although there be some difference, it is less; but the mode of either impediment is peculiar, their legs are more bandied when the dislocation is outward, but those who have dislocation inward stand erect on their feet with less freedom. In like manner, when the dislocation is at the anklejoint, if outward they become *vari* ( *their toes are*

*turned inward?* ), but they can stand; but if the dislocation be inward they become *valgi* ( *their toes are turned outward?* ), but they have less freedom of standing. The proportional growth of their bones is as follows: in those cases in which the bone of the leg is dislocated, the bones of the feet grow very little, as being very near the injury, but the bones of the leg increase in size, and with very little defect, but the fleshy parts ( *muscles?* ) are wasted. But when the ankle-joint is in its natural state, but the knee is dislocated, in these cases the bones of the leg do not grow in like manner, but become shortened, as being nearest the seat of the injury, and the bones of the feet also are atrophied, but not in the same proportion; because, as was said a little while ago, the ankle-joint is safe, and if they could use it, as in the case of club-foot, the bones of the foot would be still less atrophied. When the dislocation takes place at the hip-joint, the bone of the thigh, in this case, does not generally grow in like manner, as being the one nearest the seat of the injury, but becomes shorter than the sound one; but the growth of the bones of the leg is not arrested in like manner; nor of those of the feet, for this reason, that there is no displacement between the bones of the thigh and leg, nor between those of the leg and foot; in those cases, however, the fleshy parts of the whole limb are atrophied; but if they could make use of the limb, the growth of the bones would be still more developed, as formerly stated, only the thigh, although its flesh would be much less wasted, would still be by no means so fleshy as the sound limb. The following observations are a proof of this: those persons who are weasel-armed ( *galiancones* ) from birth, owing to dislocation of the humerus, or when the accident has happened to them before they have attained their full growth, such persons have the bone of the arm shortened, but those of the fore-arm and hand are little inferior in size to the sound, for the reasons which have been stated, because the humerus is the bone nearest to the joint affected, and, on that account, it is shorter than natural; but the fore-arm is not equally affected by the accident, because the joint at which the bones of the arm and forearm are articulated remains in its natural condition, and the hand is still further distant than the fore-arm from the seat of the injury. Such are the reasons why certain of the bones in this case increase in growth, and certain do not. The laborious office of the hand contributes much to the development of the flesh in the fore-arm and hand, for whatever work is done by the hand, these weasel-armed persons strive to do no less effectually with the other hand than with the sound; for the arms do not support the weight of the body like the legs, and the work performed by them is light. From exercise, then, the fleshy parts on the hand and fore-arm are not atrophied in weasel-armed persons, and by these means the arm, too, gains flesh. But in dislocation inward at the hip-joint, whether from birth or from childhood, the fleshy parts, on that

account, are much more atrophied than those of the hand, because the patients cannot exercise the leg. Another proof will be given in the observations which will be presently stated, that these things are such as I things are such as I have represented.

54. Ὅκοσοισι δ' ἂν ἐς τὸ ἔξω ἢ τοῦ μηροῦ κεφαλὴ ἐκβῆ, τούτοισι βραχύτερον μὲν τὸ σκέλος φαίνεται παρατεινόμενον παρὰ τὸ ἕτερον εἰκότως οὐ γὰρ ἐπ' ὀστέον ἢ ἐπίβασις τῆς κεφαλῆς τοῦ μηροῦ ἐστίν, ὡς ὅτε ἔσω ἐκπέπτωκεν, ἀλλὰ παρ' ὀστέον παρεγκεκλιμένην τὴν φύσιν ἔχον, ἐν σαρκὶ δὲ στηρίζεται ὑγρῇ καὶ ὑπεικούσῃ διὰ τοῦτο μὲν βραχύτερον φαίνεται. Ἐσωθεν δὲ ὁ μηρὸς παρὰ τὴν πλιχάδα καλεομένην κοιλότερος καὶ ἀσαρκότερος φαίνεται ἔξωθεν δὲ ὁ γλουτὸς ὑποκυρτώτερος, ἅτε ἐς τὸ ἔξω τῆς κεφαλῆς τοῦ μηροῦ ὠλισθηκυίας ἀτὰρ καὶ ἀνωτέρω φαίνεται ὁ γλουτὸς, ἅτε ὑπειξάσης τῆς σαρκὸς τῆς ἐνταῦθα τῆ τοῦ μηροῦ κεφαλῆς τὸ δὲ παρὰ τὸ γόνυ τοῦ μηροῦ ἄκρον ἔσω ῥέπον φαίνεται, καὶ ἡ κνήμη, καὶ ὁ πούς ἀτὰρ οὐδὲ ξυγκάμπειν ὥσπερ τὸ ὑγιὲς σκέλος δύνανται. Τὰ μὲν οὖν σημήια ταῦτα τοῦ ἔξω ἐκπεπτώκοτος μηροῦ εἰσιν.

54. When the head of the femur is dislocated outward, the limb in these cases, when compared with the other, appears shortened, and this is natural, for the head of the femur no longer rests on a bone as in dislocation inward, but along the side of a bone which naturally inclines to the side, and it is lodged in flesh of a pulpy and yielding nature, and on that account it appears more shortened. Inwardly, the thigh about the perineum appears more hollow and flabby, but externally the buttock is more rounded, from the head of the thigh having slipped outward, but the nates appear to be raised up, owing to the flesh there having yielded to the head of the thigh-bone; but the extremity of the thigh-bone, at the knee, appears to be turned inward, and the leg and foot in like manner, neither does it admit of flexion like the sound limb. These, then, are the symptoms of dislocation outward.

55. Οἷσι μὲν οὖν ἂν τετελειωμένοισιν ἤδη ἐκπεσὸν τὸ ἄρθρον

μὴ ἐμπέση, τούτοισι βραχύτερον μὲν φαίνεται τὸ ζύμπαν σκέλος, ἐν δὲ τῇ ὀδοιοπορίῃ τῇ μὲν πτέρνῃ οὐ δύνανται καθικνέεσθαι ἐπὶ τῆς γῆς, τῷ δὲ στήθει τοῦ ποδὸς βαίνουσιν ἐπὶ τὴν γῆν ὀλίγον δὲ ἐς τὸ ἔσω μέρος ῥέπουσι τοῖσι δακτύλοισιν ἄκροισιν. Ὅχέειν δὲ δύναται τὸ σῶμα τὸ σιναρὸν σκέλος τούτοισι πολλῶ μᾶλλον, ἢ οἷσιν ἂν ἐς τὸ ἔσω μέρος ἐκπεπτώκη, ἅμα μὲν, ὅτι ἡ κεφαλὴ τοῦ μηροῦ, καὶ ὁ αὐχὴν τοῦ ἄρθρου πλάγιος φύσει πεφυκῶς, ὑπὸ συχνῶ μέρει τοῦ ἰσχίου τὴν ὑπόστασιν πεποιήται, ἅμα δὲ, ὅτι ἄκρος ὁ πούς οὐκ ἐς τὸ ἔξω

μέρος ἀναγκάζεται ἐκκεκλίσθαι, ἀλλ' ἐγγύς ἐστι τῆς ἰθυωρίας τῆς κατὰ τὸ σῶμα, καὶ τείνει καὶ ἐσωτέρω. Ὅταν οὖν τρίβον μὲν λάβῃ τὸ ἄρθρον ἐν τῇ σαρκί, εἰς ἣν ἐξεκλίθη, ἢ δὲ σὰρξ γλισχρανθῆ, ἀνώδυνον τῷ χρόνῳ γίνεται ὅταν δὲ ἀνώδυνον γένηται, δύνανται μὲν ὀδοιπορέειν ἄνευ ξύλου, ἢ ἄλλως βούλωνται δύνανται δὲ ὀχέειν τὸ σῶμα ἐπὶ τὸ σιναρὸν σκέλος. Δι' οὖν τὴν χρῆσιν ἥσσον τοῖσι τοιούτοισιν ἐκθηλύνονται αἱ σάρκες, ἢ οἷσιν ὀλίγον πρόσθεν εἴρηται ἐκθηλύνονται δὲ ἢ πλεῖον, ἢ ἔλασσον μᾶλλον δὲ τι ἐκθηλύνονται κατὰ τὸ ἔσω μέρος, ἢ κατὰ τὸ ἔξω, ὡς ἐπὶ τὸ πολὺ. Τὸ μέντοι ὑπόδημα μετεξέτεροι τούτων ὑποδέεσθαι οὐ δύνανται διὰ τὴν ἀκαμπίην τοῦ σκέλεος, οἱ δὲ τινες καὶ δύνανται. Οἷσι δὲ ἂν ἐν γαστρὶ ἐοῦσιν ἐξαρθρήσῃ τοῦτο τὸ ἄρθρον, ἢ ἔτι ἐν αὐξήσει ἐοῦσι βίῃ ἐκπεσὸν ἤδη μὴ ἐμπέσῃ, ἢ καὶ ὑπὸ νόσου ἐξαρθρήσῃ τοῦτο τὸ ἄρθρον καὶ ἐκπαλήσῃ πολλὰ γὰρ τοιαῦτα γίνεται, καὶ ἐνίων μὲν τῶν τοιούτων ἦν ἐπισφακελίση ὁ μηρὸς, ἐμπυήματα χρόνια καὶ ἔμμοτα γίνεται, καὶ ὀστέων ψιλώσεις ἐνίοισιν, ὁμοίως δὲ καὶ οἷσιν ἐπισφακελίζει,

καὶ οἷσι μὴ ἐπισφακελίζει, τοῦ μηροῦ τὸ ὀστέον πολλῶ βραχύτερον γίνεται, καὶ οὐκ ἐθέλει ξυναύξεσθαι, ὥσπερ τοῦ ὑγιέος τὰ μέντοι τῆς κνήμης βραχύτερα μὲν γίνεται, ἢ τὰ τῆς ἐτέρης, ὀλίγῳ δὲ, διὰ τὰς αὐτὰς προφάσις, αἱ καὶ πρόσθεν εἴρηται ὀδοιπορέειν τε δύνανται οἱ τοιοῦτοι, οἱ μὲν τινες αὐτῶν τοῦτον τὸν τρόπον, ὥσπερ οἷσι τετελειωμένοισιν ἐξέπεσε καὶ μὴ ἐνέπεσεν, οἱ δὲ καὶ βαίνουσι μὲν παντὶ τῷ ποδὶ, διαρρέπουσι δὲ ἐν τῆσιν ὀδοιπορήσιν, ἀναγκαζόμενοι διὰ τὴν βραχύτητα τοῦ σκέλεος. Ταῦτα δὲ τοιαῦτα γίνεται, ἦν ἐπιμελέως μὲν παιδαγωγηθῶσιν ἐν τοῖσι σχήμασι καὶ ὀρθῶς, ἐν οἷσι δεῖ, πρὶν κρατυνθῆναι ἐς τὴν ὀδοιπορίην, ἐπιμελέως δὲ καὶ ὀρθῶς, ἐπὶν κρατυνθῶσιν πλείστης δὲ ἐπιμελείης δέονται, οἷσιν ἂν νηπιωτάτοισιν ἐοῦσιν αὕτη ἢ ξυμφορὴ γένηται ἦν γὰρ ἀμεληθῶσι νήπιοι ἐόντες, ἀχρήϊον παντάπασιν καὶ ἀναυξῆς ὅλον τὸ σκέλος γίνεται. Αἱ δὲ σάρκες τοῦ ξύμπαντος σκέλεος μινύθουσι μᾶλλον, ἢ τοῦ ὑγιέος πάνυ μὴν πολλῶ ἥσσον τούτοισι μινύθουσιν, ἢ οἷσιν ἂν ἔσω ἐκπεπτώκη, διὰ τὴν χρῆσιν καὶ τὴν ταλαιπωρίην, οἷον εὐθέως δύνασθαι χρέεσθαι τῷ σκέλει, ὡς καὶ πρόσθεν ὀλίγῳ περὶ τῶν γαλιαγκῶνων εἴρηται.

55. When such a dislocation is not reduced in adults, the whole limb appears to be shortened, and in walking they cannot reach the ground with the heel, but they walk with the ball of the foot on the ground, and the points of their toes incline a little inward. But the injured limb, in this case, can support the body much better than in dislocation inward, both because the head of the femur and the neck of its articular extremity, being naturally oblique, have formed a bed under a considerable portion of the hip, and because the extremity of the foot is not forcibly turned outward, but is nearly in a line with the body, and is even

inclined more inwardly. When, then, the articular extremity of the femur has worn out a socket for itself in the flesh where it was lodged, and the flesh is lubricated, it ceases to be painful in the course of time, and when it becomes free from pain, they can walk without a staff, if so inclined, and they can support the body on the injured limb. From usage then, in such cases, the fleshy parts are less enervated than in those which have been mentioned a little before, still, however, they lose their strength more or less; but in general there is more enervation when the dislocation is inward than when it is outward. Some of them, then, cannot wear their shoes, owing to the unbending state of their leg, and some of them can. But when this dislocation takes place *in utero*, and when the dislocation having occurred at any time before manhood, from violence, has not been replaced, or when from disease the articular extremity has started from its socket, and is displaced (for many such cases occur, and from some of them, if the femur become necrosed, obstinate suppurations requiring the use of tents are formed, and in certain of them the bone is laid bare), whether the bone become necrosed or not, the bone of the thigh is much shortened, and does not usually grow like the sound one, the bones, too, of the leg, become shorter than those of the other, but in a small degree, for the same reasons that were formerly stated; such persons can walk, some of them in the same fashion as adults having an unreduced dislocation, and some of them walk with the whole foot on the ground, but limp in walking, being obliged to do so by the shortness of the limb. Such is the result, even though they be carefully and properly trained in the attitudes before they have strength for walking, and in like manner also, after they have acquired the necessary strength; but those persons require the most care who were very young when they met with the accident, for, if neglected while children, the limb becomes entirely useless and atrophied. The fleshy parts of the entire limb are more wasted than those of the sound limb, but this is much less apt to happen in their case than in dislocation inward, owing to usage and exercise, as they are speedily able to make use of the limb, as was stated a little before with regard to the weasel-armed (*galiancones*).

56. Εἰσὶ δὲ τινες, ὧν τοῖσι μὲν ἐκ γενεῆς αὐτίκα, τοῖσι δὲ καὶ ὑπὸ νούσου ἀμφοτέρων τῶν σκελέων ἐξέστη τὰ ἄρθρα ἐς τὸ ἔξω μέρος τούτοισιν οὖν τὰ μὲν ὅστέα ταῦτὰ παθήματα πάσχει αἱ μέντοι

σάρκες ἤκιστα ἐκθηλύνονται τοῖσι τοιούτοισιν εὐσαρκα δὲ καὶ τὰ σκέεα γίνεται, πλὴν εἴ τι ἄρα κατὰ τὸ εἶσω μέρος ἐλλείποι ὀλίγον διὰ τοῦτο δὲ εὐσαρκά ἐστιν, ὅτι ἀμφοτέροισι τοῖσι σκέλεσιν ὁμοίως ἢ χρήσις γίνεται ὁμοίως γὰρ σαλεύουσιν ἐν τῇ ὀδοιπορίῃ ἔνθα καὶ ἔνθα ἐξεχέγλουτοι δὲ οὔτοι ἰσχυρῶς

φαίνονται διὰ τὴν ἔκστασιν τῶν ἄρθρων. Ἦν δὲ μὴ ἐπισφακελίση αὐτοῖσι τὰ ὀστέα, μηδὲ κυφοὶ ἀνωτέρω τῶν ἰσχύων γένωνται ἐνίους γὰρ καὶ τὰ τοιαῦτα καταλαμβάνει, ἦν οὖν μὴ τοιοῦτόν τι γένηται, ἱκανῶς ὑγιηροὶ τᾶλλα διαφέρονται ἀναυξέστεροι μέντοι τὸ πᾶν σῶμα οὗτοι γίνονται, πλὴν τῆς κεφαλῆς.

56. There are persons who, from birth or from disease, have dislocations outward of both the thighs; in them, then, the bones are affected in like manner, but the fleshy parts in their case lose their strength less; the legs, too, are plump and fleshy, except that there is some little deficiency at the inside, and they are plump because they have the equal use of both their legs, for in walking they totter equally to this side that. Their nates appear very prominent, from the displacement of the bones of the joint. But if in their case the bones do not sphacelate ( *become carious?* ) and if they do not become bent above the hip-joint, if nothing of this kind happen to them, they become otherwise sufficiently healthy, but the growth of all the rest of the body, with the exception of the head, is arrested.

57. Ὅσοισι δ' ἂν ἐς τοῦπισθεν ἢ κεφαλὴ τοῦ μηροῦ ἐκπέση, ὀλίγοισι δὲ ἐκπίπτει, οὗτοι ἐκτανύειν οὐ δύνανται τὸ σκέλος, οὔτε κατὰ τὸ ἄρθρον τὸ ἐκπεσόν, οὔτε τι κάρτα κατὰ τὴν ἰγνύην ἀλλ' ἦκιστα τῶν ἐκπαλέων οὗτοι ἐκτανύουσι καὶ τὸ κατὰ τὸν βουβῶνα, καὶ τὸ κατὰ τὴν ἰγνύην ἄρθρον. Προσξυνιέναι μὲν οὖν καὶ τόδε χρὴ εὐχρηστον γὰρ καὶ πολλοῦ ἄξιόν ἐστι, καὶ τοὺς πλείστους λήθει, ὅτι οὐδ' ὑγιαίνοντες δύνανται κατὰ τὴν ἰγνύην ἐκτανύειν

τὸ ἄρθρον, ἦν μὴ ξυνεκτανύωσι καὶ τὸ κατὰ τὸν βουβῶνα ἄρθρον, πλὴν ἦν μὴ πάνυ ἄνω ἀείρωσι τὸν πόδα, οὕτω δ' ἂν δύναιντο οὐ τοίνυν οὐδὲ ξυγκάμπτειν δύνανται τὸ κατὰ τὴν ἰγνύην ἄρθρον ὁμοίως, ἀλλὰ πολὺ χαλεπότερον, ἦν μὴ ξυγκάμπωσι καὶ τὸ κατὰ τὸν βουβῶνα ἄρθρον. Πολλὰ δὲ καὶ ἄλλα κατὰ τὸ σῶμα τοιαύτας ἀδελφίξιας ἔχει, καὶ κατὰ νεύρων ξυντάσιας, καὶ κατὰ μυῶν σχήματα, καὶ πλεῖστά τε καὶ πλείστου ἄξια γινώσκεσθαι, ἢ ὥς τις οἶεται, καὶ κατὰ τὴν τοῦ ἐντέρου φύσιν, καὶ τὴν τῆς ξυμπάσης κοιλίης, καὶ κατὰ τὰς τῶν ὑστερέων πλάνας καὶ ξυντάσιας ἀλλὰ περὶ μὲν τούτων ἐτέρωθι λόγος ἔσται, ἠδελφισμένος τοῖσι νῦν λεγομένοισιν. Περὶ οὗ δὲ ὁ λόγος ἐστίν, οὔτε ἐκτανύειν δύνανται, ὥσπερ ἤδη εἴρηται βραχύτερόν τε τὸ σκέλος φαίνεται διὰ δισσὰς προφάσιας, ὅτι τε οὐκ ἐκτανύεται, ὅτι τε πρὸς τὴν σάρκα ὠλίσθηκε τὴν τοῦ πυγαίου ἢ γὰρ φύσις τοῦ ἰσχίου τοῦ ὀστέου ταύτη, ἢ καὶ ἡ κεφαλὴ καὶ ὁ αὐχὴν τοῦ μηροῦ γίνεται, ὅταν δὲ ἐξαρθρήσῃ, καταφερῆς πέφυκεν ἐπὶ τοῦ πυγαίου τὸ ἔξω μέρος. Ξυγκάμπτειν μέντοι δύνανται, ὅταν μὴ ἡ ὀδύνη κωλύῃ καὶ ἡ κνήμη τε καὶ ὁ πούς ὀρθὰ ἐπιεικέως φαίνεται, καὶ οὔτε τῆ, οὔτε τῆ πολὺ ἐκκεκλιμένα

κατὰ δὲ τὸν βουβῶνα δοκέει τι ἢ σὰρξ λαπαρωτέρη εἶναι, ποτὶ καὶ ψαυομένη, ἅτε τοῦ ἄρθρου ἐς τὰ ἐπὶ θάτερα μέρη

ὠλισθηκότης κατὰ δὲ αὐτὸ τὸ πυγαῖον διαψαυομένη ἢ κεφαλὴ τοῦ μηροῦ δοκέει ἐξογκέειν μᾶλλον. Τὰ μὲν οὖν σημήϊα ταῦτα, ᾧ ἂν ἐς τὸ ὀπισθεν ἐκπεπτώκη ὁ μηρός.

57. In dislocations of the head of the femur backward, which rarely occur, the patient cannot extend the leg, either at the dislocated joint, or at the ham, to any extent, and of all the dislocations, this is the variety in which the patients have the least power of making extension at the groin and the ham. But, moreover, this also should be known (for it is a valuable piece of knowledge, and of much importance, and yet most yet most people are ignorant of it), that persons in health cannot extend the joint at the ham, if they do not extend the joint at the groin at the same time, unless they raise the foot very high, for in this way they could do it; neither also could they bend the joint at the ham, but with much greater difficulty, if they do not bend the joint at the groin at the same time. There are many other things in the body which have similar connections, both with regard to the contractions of nerves (*ligaments?*), and the positions of muscles, and many of them more worthy of being known than is generally supposed, and with regard to the nature of the intestine and that of the whole internal cavity, and with regard to the displacements and contractions of the uterus; but all these things will be treated of elsewhere, in a work akin to the present one. But with regard to the matter on hand, they cannot make extension, as has been already stated; and the limb appears shortened, for two reasons-first, because it cannot be extended, and also because the bone has slipped into the flesh of the nates; for the head and neck of the femur, in this dislocation, are carried downward from their natural situation, to the outside of the nates. But yet they can bend the limb, unless prevented by pain, and the leg and foot appear pretty straight, and not much inclined toward either side, but at the groin the flesh, when felt, appears looser, from the bone of the joint having slipped to the other side, but at the nates the head of the femur may be felt to be more prominent than natural. Such are the symptoms accompanying dislocation of the thigh backward.

58. Ὅτεω μὲν οὖν ἂν τετελειωμένω ἤδη ἐκπεσῶν μὴ ἐμπέση, ὀδοιπορέειν μὲν δύναται, ὅταν ὁ χρόνος ἐγγένηται, καὶ ἢ ὀδύνη παύσηται, καὶ ἐθισθῆ τὸ ἄρθρον ἐν τῇ σαρκὶ ἐνστροφᾶσθαι ἀναγκάζεται μέντοι ἰσχυρῶς ξυγκάμπτειν κατὰ τοὺς βουβῶνας ὀδοιπορέων, διὰ δισσὰς προφάσιας, ἅμα μὲν ὅτι πολλῶ βραχύτερον

τὸ σκέλος γίνεται διὰ τὰ προειρημένα, καὶ τῇ μὲν πτέρνῃ καὶ πάνυ πολλοῦ δέεται ψαύειν τῆς γῆς μόλις δὲ τῷ στήθει τοῦ ποδὸς καθικνέεται, καὶ οὐδὲ οὕτως, ἦν μὴ κάμψη αὐτὸς ἐωυτὸν κατὰ τοὺς βουβῶνας, καὶ τῷ ἑτέρῳ σκέλει κατὰ τὴν ἰγνύην ἐπιξυγκάμψη. Ἐπὶ δὲ τούτοις ἀναγκάζεται, ὥστε τῇ χειρὶ τῇ κατὰ τὸ σιναρὸν σκέλος ἐρείδεσθαι ἐς τὸ ἄνω τοῦ μηροῦ ἐφ' ἑκάστη ξυμβάσει ἀναγκάζει οὖν τι καὶ τοῦτο αὐτὸ, ὥστε κάμπτεσθαι κατὰ τοὺς βουβῶνας ἐν γὰρ τῇ μεταλλαγῇ τῶν σκελέων ἐν τῇ ὁδοιπορίῃ οὐ δύναται τὸ σῶμα ὀχέεσθαι ἐπὶ τοῦ σιναρῶ σκέλεος, εἰ μὴ προσκατερίδεται

τὸ σιναρὸν πρὸς τὴν γῆν ὑπὸ τῆς χειρὸς, ἅτε οὐχ ὑφεστεῶτος τοῦ ἄρθρου ὑπὸ τῷ σῶματι, ἀλλ' ἐς τὸ ὀπισθεν ἐξεστεῶτος κατὰ τὸ ἰσχίον εἰ γὰρ πειρήσαιτο καὶ ἐπ' ὀλίγον τοῦ ποδὸς ὀχηθῆναι μηδενὶ ἄλλῳ ἀντιστηριζόμενος, ἐς τὸ ὀπίσω ἂν πέσοι ἢ γὰρ ῥοπή πολλὴ ἂν εἴη, τῶν ἰσχιῶν ἐπὶ πούλῳ ἐς τοῦπίσω ὑπερεχόντων ὑπὲρ τοῦ ποδὸς τῆς βάσιος, καὶ τῆς ῥάχιος ἐς τὰ ἰσχία ῥεπούσης. Ἄνευ μὲν οὖν ξύλου δύναται ὁδοιπορεῖν οἱ τοιοῦτοι, ἦν ἄλλως ἐθισθέωσιν διὰ τοῦτο, ὅτι ἡ βᾶσις τοῦ ποδὸς κατὰ τὴν ἀρχαίην ἰθυωρίην ἐστίν, ἀλλ' οὐκ ἐς τὸ ἔξω ἐκκεκλιμένη, διὰ τοῦτο οὐδὲ δέονται τῆς ἀντικοντώσιος. Ὅσοι μὲντοι βούλονται ἀντὶ τῆς τοῦ μηροῦ ἐπιλαβῆς ὑπὸ τὴν μασχάλην τὴν κατὰ τὸ σιναρὸν σκέλος ὑποτιθέμενοι σκίπωνα ἀντερίδειν, κεῖνοι, ἦν μὲν μακρότερον τὸν σκίπωνα ὑποτιθέοιντο, ὀρθότεροι μὲν ὁδοιπορήσουσι, τῷ δὲ ποδὶ πρὸς τὴν γῆν οὐκ ἐρείδονται εἰ δ' αὖ βούλονται ἐρείδεσθαι τῷ ποδὶ, βραχύτερον μὲν τὸ ξύλον φορητέον, κατὰ δὲ τοὺς βουβῶνας ἐπιξυγκάμπτεσθαι ἂν δεοῖ αὐτούς. Τῶν δὲ σαρκῶν αἱ μινυθήσιες κατὰ λόγον. γίνονται καὶ τούτοις, ὥσπερ πρόσθεν εἴρηται τοῖσι μὲν γὰρ μετέωρον ἔχουσι τὸ σκέλος καὶ μηδὲν ταλαιπωροῦσιν, τούτοις καὶ μάλιστα μινύθουσιν οἱ δ' ἂν πλεῖστα χρέωνται τῇ ἐπιβάσει, τούτοις

ἤκιστα μινύθουσιν. Τὸ μὲντοι ὑγιὲς σκέλος οὐκ ὠφελέεται, ἀλλὰ μᾶλλον αἱ ἀσχημονέστερον γίνεται, ἦν χρέωνται τῷ σιναρῷ σκέλει ἐπὶ τὴν γῆν ξυνυπουργέον γὰρ ἐκείνῳ ἐξίσχίον τε ἀπαναγκάζεται εἶναι, καὶ κατὰ τὴν ἰγνύην ξυγκάμπτειν ἦν δὲ μὴ προσχρέηται τῷ σιναρῷ ἐπὶ τὴν γῆν, ἀλλὰ, μετέωρον ἔχων, σκίπωνι ἀντερίδεται, οὕτω δὲ καρτερόν γίνεται τὸ ὑγιὲς σκέλος ἐν τε γὰρ τῇ φύσει διαιτᾶται, καὶ τὰ γυμνάσια προσκρατύνει αὐτό. Φαίη μὲν οὖν ἂν τις, ἔξω ἰητρικῆς τὰ τοιαῦτα εἶναι τί γὰρ δῆθεν δεῖ περὶ τῶν ἤδη ἀνηκέστων γεγονότων ἔτι προσξυνιέναι; πολλοῦ δὲ δεῖ οὕτως ἔχειν τῆς γὰρ αὐτῆς γνώμης καὶ ταῦτα ξυνιέναι οὐ γὰρ οἷόν τε ἀπαλλοτριωθῆναι ἀπ' ἀλλήλων. Δεῖ μὲν γὰρ ἐς τὰ ἀκεστὰ μηχανάσθαι, ὅπως μὴ ἀνήκεστα ἔσται, ξυνιέντα ὅκη ἂν μάλιστα κωλυτέα ἐς τὸ ἀνήκεστον ἐλθεῖν δεῖ δὲ τὰ ἀνήκεστα ξυνιέναι, ὡς μὴ μάτην λυμαίνεται τὰ δὲ προρρήματα λαμπρὰ καὶ ἀγωνιστικά, ἀπὸ τοῦ διαγινώσκειν, ὅπη ἕκαστον, καὶ οἷως, καὶ ὁκότε τελευτήσῃ, ἦν τε ἐς τὸ ἀκεστὸν τράπηται, ἦν



τε ἐς τὸ ἀνήκεστον. Ὀκόσοισι δ' ἂν ἐκ γενεῆς, ἢ καὶ ἄλλως πως ἐν αὐξήσει εὐοῦσιν, οὕτως ὀλίσθη τὸ ἄρθρον ὀπίσω, καὶ μὴ ἐμπέση, ἣν τε βίη ὀλίσθη, ἣν τε καὶ ὑπὸ νοῦσου πολλὰ γὰρ τοιαῦτα ἐξαρθρήματα γίνετα ἐν νοῦσοισιν οἷαι δέ τινές εἰσιν αἱ νοῦσοι, ἐν ἧσιν ἐξθρέεται τὰ τοιαῦτα, ὕστερον γεγράφεται, ἣν οὖν ἐκστὰν μὴ ἐμπέση, τοῦ μὲν μηροῦ τὸ ὀστέον βραχὺ γίνετα, κακοῦται δὲ καὶ

πᾶν τὸ σκέλος, καὶ ἀναυξέστερον γίνετα καὶ ἀσαρκότερον πολλῶ δια τὸ μηδὲν προσχρέεσθαι αὐτῷ κακοῦται γὰρ τούτοισι καὶ τὸ κατὰ τὴν ἰγνύην ἄρθρον τὰ γὰρ νεῦρα ἐντεταμένα γίνετα διὰ τὰ πρόσθεν εἰρημένα διὸ οὐ δύνανται τὸ κατὰ τὴν ἰγνύην ἄρθρον ἐκτανύειν, οἷσιν ἂν οὕτως ἰσχίον ἐκπέση. Ὡς γὰρ ἐν κεφαλαίῳ εἶπειν, πάντα τὰ ἐν τῷ σώματι ὀκόσα ἐπὶ χρήσει γέγονε, χρεομένοισι μὲν μέτρια καὶ γυμναζόμενοισιν ἐν τῆσι ταλαιπωρίησιν, ἐν ἧσιν ἕκαστα εἴθισται, οὕτω μὲν ὑγιεινὰ καὶ αὔξιμα καὶ εὐγῆρα γίνετα μὴ χρεομένοισι δὲ, ἀλλ' ἐλινύουσι νοσηρότερα γίνετα καὶ ἀναυξέα καὶ ταχύγηρα. Ἐν δὲ τούτοισιν οὐχ ἥκιστα τὰ ἄρθρα τοῦτο πέπονθε καὶ τὰ νεῦρα, ἣν μὴ τις αὐτοῖσι χρέηται κακοῦνται μὲν οὖν διὰ ταύτας τὰς προφάσιας μᾶλλον τι ἐν τούτῳ τῷ τρόπῳ τοῦ ὀλισθήματος, ἢ ἐν τοῖσιν ἄλλοισιν ὅλον γὰρ τὸ σκέλος ἀναυξές γίνετα, καὶ τῆ ἀπὸ τῶν ὀστέων φύσει, καὶ τῆ ἀπὸ τῶν σαρκῶν οἱ οὖν τοιοῦτοι ὀκόταν ἀνδρωθῶσι, μετέωρον καὶ ξυγκεκαμμένον τὸ σκέλος ἴσχουσιν, ἐπὶ δὲ τοῦ ἑτέρου ὀχέονται, καὶ τῷ ξύλῳ ἀντιστηριζόμενοι, οἱ μὲν, ἐνὶ, οἱ δὲ, δυσίν.

58. When this dislocation occurs in an adult, and is not reduced, he can walk, indeed, after a time, and when the pain has abated, and when he has been accustomed to rotate the articular bone in the flesh; he finds it necessary, however, to make strong flexion at the groin in walking, for two reasons, both because the limb, for the causes already stated, becomes much shorter, and he is far from touching the ground with his heel, and he can barely reach it with the ball of his foot, and not even thus, unless he bend himself at the groins, and also bend with the other leg at the ham. And in this case, he is under the necessity of supporting the upper part of the thigh with his hand at each step: this also contributes, in a certain degree, to make him bend the body at the groins; for, during the shifting of the feet in walking, the body cannot be supported on the unsound be supported on the unsound limb, unless it be pressed to the ground by the hand,-the end of the femur not being placed properly under the body, but having slipped backward to the nates; and if he should try to rest the weight of his body for a little, upon the foot, without any other support, he would fall backward, for there would be a great inclination in this direction, from the hips having protruded backward far beyond the line of the foot, and the spine inclining toward the hips. Such persons can walk, indeed, without a staff, if so

accustomed, for because the sole of the foot is in its old line, and is not inclined outward, they do not require anything to balance them. Such, however, as, instead of grasping the thigh, prefer resting their weight upon a staff introduced into the armpit of the affected side, these, if they use a longer staff, will walk, indeed, more erect, but will not be able to reach the ground with the foot, or if they wish to rest upon the foot, they must take a shorter staff, and will require to bend the body at the groins. The wasting of the fleshy parts is analogous to what happens in the cases formerly described, for the wasting is greatest in those cases in which the patients keep the limb up, and do not exercise it, whilst those who practice walking, have the least atrophy. The sound leg, however, is not benefited, but is rather rendered more deformed, if the injured limb be applied to the ground, for it is forced to cooperate with the other, being protruded at the hip, and bent at the ham. But if the patient does not use the injured limb by applying it to the ground, but carries it up, and rests upon a staff, the sound leg thereby gains strength, for it is employed in its natural position, and further, the exercise gives it strength. But it may be said, these things are foreign to medicine; for what is the use of enlarging upon cases which are already past remedy? This is far from being the case, for it belongs to the knowledge of medicine to be acquainted also with these, and they cannot possibly be separated from one another; for to such as are curable, means are to be used to prevent them from becoming incurable, studying how they may best be prevented from getting into an incurable state. And incurable cases should be known, that they may not be aggravated by useless applications, and splendid and creditable prognostics are made by knowing where, how, and when every case will terminate, and whether it will be converted into a curable or an incurable disease. When then, from birth, or during one's youth, this dislocation backward occurs, and is not reduced, whether it be connected with violence or disease (for many such dislocations occur in diseases, but the nature of the diseases in which dislocations take place, will be described afterward); if, then, the dislocated limb be not reduced, the bone of the thigh becomes shortened, the whole limb is impaired, is arrested in its growth, and loses its flesh from want of use; the articulation at the ham is also impaired, for the nerves ( *ligaments?* ) become stretched, from cases formerly stated, wherefore those who have this dislocation, cannot make extension at the knee-joint. In a word, all parts of the body which were made for active use, if moderately used and exercised at the labor to which they are habituated, become healthy, increase in bulk, and bear their age well, but when not used, and when left without exercise, they become diseased, their growth is arrested, and they soon become old. Among these parts the joints and nerves ( *ligaments?* ), if not used, are not the least liable to be so affected; they

are impaired, then, for the reasons we have stated, more in this variety of dislocation than in the others, for the whole limb is wasted, both in its bones and in its fleshy parts. Such persons, then, when they attain their full growth, keep the limb raised and flexed, rest the weight of the body on the other leg, and support themselves with a staff, some with one, and others with two.

59. Οἷσι δ' ἂν ἐς τοῦμπροσθεν ἡ κεφαλὴ τοῦ μηροῦ ἐκπέσῃ, ὀλίγοισι δὲ τοῦτο γίνεται, οὗτοι ἐκτανύειν μὲν τὸ σκέλος δύνανται τελείως, ξυγκάμπτειν δὲ ἤκιστα οὗτοι δύνανται τὰ κατὰ τὸν βουβῶνα πονέουσι δὲ, καὶ ἢν κατὰ τὴν ἰγνύην ἀναγκάζονται ξυγκάμπτειν. Μῆκος δὲ τοῦ σκέλεος παραπλήσιον φαίνεται, κατὰ

μὲν τὴν πτέρνην καὶ πάνυ ἄκρος δὲ ὁ πούς ἤσσόν τι προκύπτειν ἐθέλει ἐς τοῦμπροσθεν ὅλον δὲ τὸ σκέλος ἔχει τὴν ἰθωρίην τὴν κατὰ φύσιν, καὶ οὔτε τῆ, οὔτε τῆ ῥέπει. Ὀδυνῶνται δὲ αὐτίκα οὗτοι μάλιστα, καὶ οὔρον ἴσχεται τὸ πρῶτον τούτοισι μᾶλλον τι, ἢ τοῖσιν ἄλλοισιν ἐξαρθρήμασιν ἐγκέεται γὰρ ἡ κεφαλὴ τοῦ μηροῦ ἐγγυτάτω τούτοισι τῶν τόνων τῶν ἐπικαίρων. Καὶ κατὰ μὲν τὸν βουβῶνα ἐξογκέον τε καὶ κατατεταμένον τὸ χωρίον φαίνεται, κατὰ δὲ τὸ πυγαῖον, στολιδωδέστερον καὶ ἀσαρκότερον. Ταῦτα μὲν οὖν σημήϊά ἐστι τὰ εἰρημένα, ὧν ἂν οὕτως ἐκπεπτώκη ὁ μηρός.

59. In dislocations of the head of the thigh-bone forward (they are of rare occurrence), the patients cannot extend the leg completely, but least of all can they bend it at the groin; they are pained, also, if forced to bend the limb at the ham. The length of the leg, if compared at the heel, is the same as that of the other; but the extremity of the foot inclines less to project forward. But the whole limb has its natural direction, and inclines neither to this side nor to that. These cases are particularly attended with severe pain, and they are more apt to be accompanied with retention of urine at first than any of the other dislocations; for the head of the thigh-bone is lodged very near to important nerves. And the region of the groin appears swelled out and stretched, while that of the nates is more wrinkled and flabby. The symptoms now stated are those which attend this dislocation of the thigh-bone.

60. Ὀκόσοισι μὲν οὖν ἂν ἤδη ἠνδρωμένοισι τοῦτο τὸ ἄρθρον ἐκπεσὸν μὴ ἐμπέσῃ, οὗτοι, ὀκόταν αὐτοῖσιν ἡ ὀδύνη παύσεται καὶ τὸ ἄρθρον ἐθισθῆ ἔν τῷ χωρίῳ τούτῳ στροφᾶσθαι, ἵνα ἐξέπεσεν, οὗτοι δύνανται σχεδὸν εὐθύς ὀρθοὶ ὀδοιπορεῖν ἄνευ ξύλου, καὶ πάνυ μέντοι εὐθέες, ἐπὶ δὲ τὸ σιναρόν, ἅτε οὔτε κατὰ τὸν βουβῶνα εὐκαμπτοὶ ἐόντες, οὔτε κατὰ τὴν ἰγνύην διὰ οὖν τοῦ βουβῶνος τὴν ἀκαμπίην εὐθυτέρῳ ὄλω τῷ σκέλει ἐν τῇ ὀδοιπορίῃ χρέονται, ἢ

ὄτε ὑγίαινον. Καὶ σύρουσι δὲ ἐνίοτε πρὸς τὴν γῆν τὸν πόδα, ἅτε οὐ ρηϊδίως  
ξυγκάμπτοντες τὰ ἄνω ἄρθρα, καὶ ἅτε παντὶ βαίνοντες τῷ ποδί οὐδὲν γὰρ ἦσσαν  
τῇ πτέρνῃ οὗτοι βαίνουσιν, ἢ τῷ ἔμπροσθεν εἰ δέ γε ἠδύναντο μέγα προβαίνειν,  
κἂν πάνυ περνοβάται ἦσαν καὶ

γὰρ οἱ ὑγιάινοντες ὅσω ἂν μέζον προβαίνοντες ὁδοιπορέωσι, τοσούτω μᾶλλον  
περνοβάται εἰσὶ, τιθέντες τὸν πόδα, αἶροντες δὲ τὸν ἐναντίον. Ὀκόσοισι δὲ δὴ  
οὕτως ἐκπέπτωκε, καὶ ἔτι μᾶλλον τῇ πτέρνῃ προσεγχριπτοῦσιν, ἢ τῷ ἔμπροσθεν  
τὸ γὰρ ἔμπροσθεν τοῦ ποδός, ὅταν ἐκτεταμένον ἔη τὸ ἄλλο σκέλος, οὐχ ὁμοίως  
δύναται ἐς τὸ πρόσω καμπύλλεσθαι, ὥσπερ ὅταν ξυγκεκαμμένον ἔη τὸ σκέλος  
οὔτ' αὖ σιμοῦσθαι δύναται ὁ πούς, ξυγκεκαμμένου τοῦ σκέλεος, ὡς ὅταν  
ἐκτεταμένον ἔη τὸ σκέλος. Ὑγιάινουσά τε οὖν ἡ φύσις οὕτω πέφυκεν, ὥσπερ  
εἴρηται ὅταν δὲ ἐκπεσὸν μὴ ἐμπέση τὸ ἄρθρον, οὕτως ὁδοιπορέουσιν, ὡς  
εἴρηται, διὰ τὰς προφάσις ταύτας τὰς εἰρημένας ἀσαρκότερον μέντοι τὸ σκέλος  
τοῦ ἐτέρου γίνεται, κατὰ τε τὸ πυγαῖον, κατὰ τε τὴν γαστροκνημίην, καὶ κατὰ  
τὴν ὀπισθεν ἴξιν. Οἴσι δ' ἂν νηπίοισιν ἔτι ἐοῦσι τὸ ἄρθρον οὕτως ὀλισθάνον μὴ  
ἐμπέση, ἢ καὶ ἐκ γενεῆς οὕτω γένηται, καὶ τούτοις τὸ τοῦ μηροῦ ὀστέον μᾶλλον  
τι μινύθει, ἢ τὰ τῆς κνήμης καὶ τὰ τοῦ ποδός ἤκιστα μὴ ἐν τούτῳ τῷ τρόπῳ τοῦ  
ὀλισθήματος ὁ μηρὸς μειοῦται. Μινύθουσι μέντοι αἱ σάρκες πάντη, μάλιστα δὲ  
κατὰ τὴν ὀπισθεν ἴξιν, ὥσπερ ἤδη καὶ πρόσθεν εἴρηται. Ὅσοι μὲν οὖν ἂν  
τιθηνηθῶσιν ὀρθῶς, οὗτοι μὲν δύνανται προσχρέεσθαι τῷ σκέλει αὐξανόμενοι,  
βραχυτέρῳ μὲν τινι τοῦ ἐτέρου ἐόντι, ὅμως δὲ ἐρειδόμενοι ξύλῳ ἐπὶ ταῦτα, ἢ τὸ  
σιναρὸν σκέλος οὐ γὰρ κάρτα δύνανται ἄνευ τῆς πτέρνης τῷ στήθει τοῦ ποδός  
χρέεσθαι, ἐπικαθιέντες ὥσπερ

ἐν ἐτέροισι χωλεύμασιν ἔνιοι δύνανται αἴτιον δὲ τοῦ μὴ δύνασθαι τὸ ὀλίγω  
πρόσθεν εἰρημένον διὰ οὖν τοῦτο προσδέονται ξύλου. Ὅσοι δ' ἂν  
καταμεληθέωσι καὶ μηδὲν χρέωνται ἐπὶ τὴν γῆν τῷ σκέλει, ἀλλὰ μετέωρον  
ἔχωσι, τούτοις μινύθει μὲν τὰ ὀστέα ἐς αὔξησιν μᾶλλον, ἢ τοῖσι χρεομένοις  
μινύθουσι δὲ καὶ αἱ σάρκες πολὺ μᾶλλον, ἢ τοῖσι χρεομένοις κατὰ δὲ τὰ ἄρθρα  
ἐς τὸ εὐθὺ πηροῦται τούτοις τὸ σκέλος μᾶλλον τι, ἢ οἴσιν ἂν ἄλλως ἐκπεπτώκη.

60. When persons have attained their full growth before meeting with this  
dislocation, and when it has not been reduced, upon the subsidence of the pain,  
and when the bone of the joint has been accustomed to be rotated in the place  
where it is lodged, these persons can walk almost erect without a staff, and with  
the injured leg almost quite straight, as it does not admit of easy flexion at the  
groin and the ham; owing, then, to this want of flexion at the groin, they keep the  
limb more straight in walking than they do the sound one. And sometimes they

drag the foot along the ground, as not being able to bend the upper part of the limb, and they walk with the whole foot on the ground; for in walking they rest no less on the heel than on the fore part of the foot; and if they could take great steps, they would rest entirely on the heel in walking; for persons whose limbs are sound, the greater the steps they take in walking, rest so much the more on the heel, while they are putting down the one foot and raising the opposite. In this form of dislocation, persons rest their weight more on the heel than on the anterior part of the foot, for the fore part of the foot cannot be bent forward equally well when the rest of the limb is extended as when it is in a state of flexion; neither, again, can the foot be arched to the same degree the limb is bent as when it is extended. The natural state of matters is such as has been now described; and in an unreduced dislocation, persons walk in the manner described, for the reasons which have been stated. The limb, moreover, is less fleshy than the other, at the nates, the calf of the leg, and the whole of its posterior part. When this dislocation occurs in infancy, and is not reduced, or when it is congenital, in these cases the bone of the thigh is more atrophied than those of the leg and foot; but the atrophy of the thigh-bone is least of all in this form of dislocation. The fleshy parts, however, are everywhere attenuated, more especially behind, as has been stated above. If properly trained, such persons, when they grow up, can use the limb, which is only a little shorter than the other, and yet they support themselves on a staff at the affected side. For, not being able to use properly the ball of the foot without the heel, nor to put it down as some can in the other varieties of dislocation (the cause of which has been just now stated), on this account they require a staff. But those who are neglected, and are not in the practice of putting their foot to the ground, but keep the limb up, have the bones more atrophied than those who use the limb; and, at the articulations, the limb is more maimed in the direct line than in the other forms of dislocation.

61. Ως μὲν οὖν ἐν κεφαλαίῳ εἰρῆσθαι, τὰ ἄρθρα τὰ ἐκπίπτοντα καὶ τὰ ὀλισθάνοντα ἀνίσως αὐτὰ ἐουτοῖσιν ἐκπίπτει καὶ ὀλισθάνει, ἄλλοτε μὲν πολὺ πλεῖον, ἄλλοτε δὲ πολὺ ἔλασσον καὶ οἷσι μὲν ἂν πολὺ πλεῖον ὀλίσθη ἢ ἐκπέση, χαλεπώτερα ἐμβάλλειν τὸ ἐπίπαν ἐστὶ, καὶ ἦν μὴ ἐμβιβασθῆ, μέζους καὶ ἐπιδηλοτέρας τὰς πηρώσιας καὶ κακώσιας ἴσχει τὰ τοιαῦτα, καὶ ὀστέων, καὶ σαρκῶν, καὶ σχημάτων ὅταν δὲ μείον ἐκπέση καὶ ὀλίσθη, ῥηΐδιον μὲν ἐμβάλλειν τὰ τοιαῦτα τῶν ἐτέρων γίνεται, ἦν δὲ καταπορηθῆ ἢ ἀμεληθῆ ἐμπεσεῖν, μείους καὶ ἀσινέστεραι αἱ πηρώσιες γίνονται τούτοισιν, ἢ οἷσιν ὀλίγῳ πρόσθεν εἴρηται. Τὰ μὲν οὖν ἄλλα ἄρθρα καὶ πάνυ πολὺ διαφέρει ἐς τὸ ὅτε μὲν μείον, ὅτε δὲ μείζον τὸ ὀλίσθημα ποιέεσθαι μηροῦ δὲ καὶ βραχίονος κεφαλαί

παραπλησιώτατα ὀλισθάνουσιν αὐτὴ ἐωυτῇ ἑκατέρῃ ἅτε γὰρ στρογγύλαι μὲν αἰ κεφαλαὶ ἐοῦσαι, ἀπλῆν τῆν στρογγύλωσιν καὶ φαλακρὴν ἔχουσι, κυκλοτερέες δὲ αἰ κοιλίαι ἐοῦσαι, αἰ δεχόμεναι τὰς κεφαλὰς, ἀρμόζουσι δὲ τῆσι κεφαλῆσιν διὰ τοῦτο οὐκ ἔστιν αὐτῆσι τὸ ἥμισυ ἐκστῆναι τοῦ ἄρθρου ὀλισθάνοι γὰρ ἂν διὰ τὴν περιφερείην, ἢ ἐς τὸ ἔξω, ἢ ἐς τὸ ἔσω. Περὶ οὗ οὖν ὁ λόγος, ἐκπίπτουσι τελέως ἤδη, ἐπεὶ ἄλλως γε οὐκ ἐκπίπτουσιν ὅμως δὲ καὶ ταῦτα ὅτε μὲν πλεῖον ἀποπηδᾷ ἀπὸ τῆς φύσιος, ὅτε δὲ ἔλασσον μᾶλλον δέ τι μηρὸς τοῦτο βραχίονος πέπονθεν.

61. In a word, luxations and subluxations take place in different degrees, being sometimes greater and sometimes less; and those cases in which the bone has slipped or been displaced to a much greater extent, are in general more difficult to rectify than otherwise; and if not reduced, such cases have greater and more striking impairment and lesion of the bones, fleshy parts, and attitudes; but when the bone has slipped, or been displaced to a less extent, it is easier to reduce such cases than the other; and if the attempts at reduction have failed, or have been neglected, the impairment in such cases is less, and proves less injurious than in the cases just mentioned. The other joints present great differences as to the extent of the displacements which they are subject to. But the heads of the femur and humerus are very similar to one another as to their dislocations. For the heads of the bones are rounded and smooth, and the sockets which receive the heads are also circular, and adapted to the heads; they do not admit then of being dislocated in any intermediate degree, but, notwithstanding, from their rounded shape, the bones slip either outward or inward. In the case we are now treating of, then, there is either a complete dislocation or none at all, and yet these bones admit of being displaced to a greater or less extent; and the thigh is more subject to these differences than the arm.

62. Ἐπεὶ ἓνια καὶ τῶν ἐκ γενεῆς γενομένων ὀλισθημάτων, ἦν

μικρὸν ὀλίσθη, οἷά τε ἐς τὴν φύσιν ἄγεσθαι, καὶ μάλιστα τὰ παρὰ τοῦ ποδὸς ἄρθρα. Ὀκόσοι ἐκ γενεῆς κυλλοὶ γίνονται, τὰ πλεῖστα τούτων ἰήσιμά ἐστιν, ἦν μὴ πάνυ μεγάλη ἢ ἔκκλισις ἔη, ἢ καὶ προαυξέων γεγονότων ἤδη τῶν παιδίων ξυμβῆ. Ἄριστον μὲν οὖν ὡς τάχιστα ἰητρεύειν τὰ τοιαῦτα, πρὶν πάνυ μεγάλην τὴν ἔνδειαν τῶν ὀστέων τῶν ἐν τῷ ποδὶ γενέσθαι, πρὶν τε πάνυ μεγάλην τὴν ἔνδειαν τῶν σαρκῶν τῶν κατὰ τὴν κνήμην εἶναι. Τρόπος μὲν οὖν κυλλώσιος οὐχ εἷς, ἀλλὰ πλείονες, τὰ πλεῖστα μὴν οὐκ ἐξηρθρηκότα παντάπασι, ἀλλὰ δι' ἔθος σχήματος ἐν τινὶ ἀπολήψει τοῦ ποδὸς κεκυλλωμένα. Προσέχειν δὲ καὶ ἐν τῇ ἰητρείῃ τοισίδε χρὴ ἀπωθέειν μὲν καὶ κατορθοῦν τῆς κνήμης τὸ κατὰ τὸ σφυρὸν ὀστέον, τὸ ἔξωθεν, ἐς τὸ ἔσω μέρος, ἀντωθέειν δὲ ἐς τὸ ἔξω μέρος τὸ τῆς

πτέρνης τὸ κατὰ τὴν ἴξιν, ὅκως ἀλλήλοις ἀπαντήσῃ τὰ ὀστέα τὰ ἐξίσχοντα κατὰ μέσον τε καὶ πλάγιον τὸν πόδα τοῦς δ' αὖ δακτύλους ἀθρούς ζῦν τῷ μεγάλῳ δακτύλῳ ἐς

τὸ εἶσω μέρος ἐγκλίνειν καὶ περιαναγκάζειν οὕτως ἐπιδεῖν δὲ κηρωτῇ ἐρρητινωμένῃ εὖ, καὶ σπλήγεσι, καὶ ὀθονίοισι μαλθακοῖσι, μὴ ὀλίγοισι, μηδὲ ἄγαν πιέζοντα οὕτω δὲ τὰς περιαγωγὰς ποιέεσθαι τῆς ἐπιδέσιος, ὥσπερ καὶ τῆσι χερσὶν ἢ κατόρθωσις ἦν τοῦ ποδός, ὅκως ὁ πούς ὀλίγῳ μᾶλλον ἐς τὸ βλαισὸν ῥέπων φαίνεται. Ἴχνος δὲ τι χρὴ ποιέεσθαι, ἢ δέρματος μὴ ἄγαν σκληροῦ, ἢ μολύβδινον, προσεπιδεῖν δὲ, μὴ πρὸς τὸν χρῶτα τιθέντα, ἀλλ' ὅταν ἤδη τοῖσιν ὑστάτοισιν ὀθονίοισι μέλλῃς ἐπιδεῖν ὅταν δὲ ἤδη ἐπιδεδεμένος ἔῃ, ἐνός τινος τῶν ὀθονίων χρῆ, οἷσιν ἐπιδέεται, τὴν ἀρχὴν προσράψαι πρὸς τὰ κάτω τοῦ ποδός ἐπιδέσματα κατὰ τὴν ἴξιν τοῦ μικροῦ δακτύλου ἔπειτα ἐς τὸ ἄνω τείνοντα, ὅκως ἂν δοκέῃ μετρίως ἔχειν, περιβάλλειν ἄνωθεν τῆς γαστροκνημίης, ὡς μόνιμον ἔῃ, κατατεταγμένον οὕτως. Ἀπλῶ δὲ λόγῳ, ὥσπερ κηροπλαστέοντα, χρῆ ἐς τὴν φύσιν τὴν δικαίην ἄγειν καὶ τὰ ἐκκεκλιμένα καὶ τὰ συντεταμένα παρὰ τὴν φύσιν, καὶ τῆσι χερσὶν οὕτω διορθοῦντα, καὶ τῇ ἐπιδέσει ὡσαύτως, προσάγειν δὲ οὐ βιαίως, ἀλλὰ παρηγορικῶς προσράπτειν δὲ τὰ ὀθόνια, ὅκως ἂν ζυμφέρῃ τὰς ἀναλήψιας ποιέεσθαι, ἄλλα γὰρ ἄλλης τῶν χλωμάτων δέεται ἀναλήψιος. Ὑποδημάτιον δὲ ποιέεσθαι μολύβδινον, ἔξωθεν τῆς ἐπιδέσιος

ἐπιδεδεμένον, οἷον αἱ χῆαι κρηπίδες ῥυθμὸν εἶχον ἀλλ' οὐδὲν αὐτοῦ δεῖ, ἦν τις ὀρθῶς μὲν τῆσι χερσὶ διορθώσῃ, ὀρθῶς δὲ τοῖσιν ὀθονίοισιν ἐπιδέῃ, ὀρθῶς δὲ καὶ τὰς ἀναλήψιας ποιοῖτο. Ἡ μὲν οὖν ἴησις αὕτη, καὶ οὔτε τομῆς, οὔτε καύσιος οὐδὲν δεῖ, οὔτ' ἄλλης ποικιλίης θᾶσσον γὰρ ἐνακούει τὰ τοιαῦτα τῆς ἰητρείης, ἢ ὡς ἂν τις οἶοιτο. Προσνικᾶν μέντοι χρῆ τῷ χρόνῳ, ἕως ἂν αὐξηθῇ τὸ σῶμα ἐν τοῖσι δικαίοισι σχήμασιν. Ὅταν δὲ ἐς ὑποδήματος λόγον ἴῃ, ἀρβύλαι ἐπιτηδειόταται αἱ πηλοπάτιδες καλεόμεναι τοῦτο γὰρ ὑποδημάτων ἥκιστα κρατέεται ὑπὸ τοῦ ποδός, ἀλλὰ κρατέει μᾶλλον ἐπιτήδειος δὲ καὶ ὁ κρητικὸς τρόπος τῶν ὑποδημάτων.

62. Wherefore, then, some of these congenital displacements, if to a small extent, may be reduced to their natural condition, and especially those at the ankle-joint. Most cases of congenital club-foot are remediable, unless the declination be very great, or when the affection occurs at an advanced period of youth. The best plan, then, is to treat such cases at as early a period as possible, before the deficiency of the bones of the foot is very great, and before there is any great wasting of the flesh of the leg. There is more than one variety of club-foot, the most of them being not complete dislocations, but impairments connected with

the habitual maintenance of the limb in a certain position. In conducting the treatment, attention must be paid to the following points: to push back and rectify the bone of the leg at the ankle from without inward, and to make counter-pressure on the bone of the heel in an outward direction, so as to bring it into line, in order that the displaced bones may meet at the middle and side of the foot; and the mass of the toes, with the great toe, are to be inclined inward, and retained so; and the parts are to be secured, with cerate containing a full proportion of resin, with compresses, and soft bandages insufficient quantity, but not applied too tight; and the turns of the bandages should be in the same direction as the rectifying of the foot with the hand, so that the foot may appear to incline a little outward. And a sole made of leather not very hard, or of lead, is to be bound on, and it is not to be applied to the skin but when you are about to make the last turns of the bandages. And when it is all bandaged, you must attach the end of one of the bandages that are used to the bandages applied to the inferior part of the foot on the line of the little toe; and then this bandage is to be rolled upward in what is considered to be a sufficient degree, to above the calf of the leg, so that it may remain firm when thus arranged. In a word, as if moulding a wax model, you must bring to their natural position the parts which were abnormally displaced and contracted together, so rectifying them with your hands, and with the bandaging in like manner, as to bring them into their position, not by force, but gently; and the bandages are to be stitched so as to suit the position in which the limb is to be placed, for different modes of the deformity require different positions. And a small shoe made of lead is to be bound on externally to the bandaging, having the same shape as the Chian slippers had. But there is no necessity for it if the parts be properly adjusted with the hands, properly secured with the bandages, and properly disposed of afterward. This, then, is the mode of cure, and it neither requires cutting, burning, nor any other complex means, for such cases yield sooner to treatment than one would believe. However, they are to be fairly mastered only by time, and not until the body has grown up in the natural shape; when recourse is had to a shoe, the most suitable are the buskins, which derive their name from being used in traveling through mud; for this sort of shoe does not yield to the foot, but the foot yields to it. A shoe shaped like the Cretan is also suitable.

63. Ὅσοισι δ' ἂν κνήμης ὀστέα ἐξαρθήσαντα καὶ ἔλκος

ποιήσαντα τελείως ἐξίσχη κατὰ τὰ παρὰ τὸν πόδα ἄρθρα, εἴτε ἔσω ρέψαντα, εἴτε μέντοι καὶ ἔξω, τὰ τοιαῦτα μὴ ἐμβάλλειν, ἀλλ' ἐὰν τὸν βουλόμενον τῶν ἰητρῶν ἐμβάλλειν. Σαφέως γὰρ εἶδέναι χρὴ, ὅτι ἀποθανεῖται, ᾧ ἂν ἐμβληθέντα ἐμμεῖνη,



καὶ ἡ ζωὴ δὲ ὀλιγήμερος τουτέοισι γενήσεται ὀλίγοι γὰρ ἂν αὐτέων τὰς ἑπτὰ ἡμέρας ὑπερβάλλοιεν σπασμὸς γὰρ ὁ κτείνων ἐστὶν ἀτὰρ καὶ γαγγραινοῦσθαι ἰκνέεται τὴν κνήμην καὶ τὸν πόδα. Ταῦτα βεβαίως εἰδέναι χρὴ οὕτως ἐσόμενα καὶ οὐκ ἂν μοι δοκῆει οὐδὲ ἐλλέβορος ὠφελήσειν, αὐθημερόν τε δοθῆις, καὶ αὐθις πινόμενος, ἄγχιστα δὲ, εἴπερ τι τοιοῦτον οὐ μέντοι γε οὐδὲ τοῦτο δοκέω. Ἦν δὲ μὴ ἐμβληθῆ, μηδ' ἀπ' ἀρχῆς μηδεὶς πειρηθῆ ἐμβάλλειν, περιγίνονται οἱ πλεῖστοι αὐτέων. Χρὴ δὲ ἡρμόσθαι μὲν τὴν κνήμην καὶ τὸν πόδα οὕτως, ὡς αὐτὸς ἐθέλει, μούνον δὲ, μὴ ἀπηρωμένα, μηδὲ κινεύμενα ἔστω ἰητρεύειν δὲ πισσηρῆ καὶ σπλήνεσιν οἰνηροῖσιν, ὀλίγοισι, μὴ ἄγαν ψυχροῖσι, ψῦχος γὰρ ἐν τοῖσι

τοιούτοισι σπασμὸν ἐπικαλέεται ἐπιτήδεια δὲ καὶ φύλλα σεύτλων, ἢ βηχίου, ἢ ἄλλου τινὸς τῶν τοιουτέων, ἐν οἴνῳ μέλανι αὐστηρῶ ἡμίεφθα ἐπιτιθέντα ἰητρεύειν ἐπὶ τε τὸ ἔλκος, ἐπὶ τε τὰ περιέχοντα, κηρωτῆ δὲ χλιερῆ ἐπιχρίειν αὐτὸ τὸ ἔλκος ἦν δὲ ἡ ὥρη χειμερινῆ ἔη, καὶ ἔρια ῥυπαρὰ οἴνῳ καὶ ἐλαίῳ καταρραίνοντα χλιεροῖσιν ἄνωθεν ἐπιτέγγειν καταδεῖν δὲ μηδὲν μηδενί, μηδε περιπλάσσειν εὖ γὰρ εἰδέναι χρὴ, ὅτι πίεξις καὶ ἀχθοφορὴ πᾶν κακὸν τοῖσι τοιούτοισιν ἐστίν. Ἐπιτήδεια δὲ πρὸς τὰ τοιαῦτα καὶ τῶν ἐναίμων μετεξέτερα, ὅσοισιν αὐτῶν ζυμφέρει ἔρια δὲ ἐπιτιθέντα, οἴνῳ ἐπιτέγγοντα, πουλὺν χρόνον ἔἴαν τὰ δὲ ὀλιγημερώτατα τῶν ἐναίμων, καὶ ὅσα ῥητίνη προσκαταλαμβάνεται, οὐχ ὁμοίως ἐπιτήδεια ἐκείνοισιν ἐστίν χρονίη γὰρ ἡ κάθαρσις τῶν ἐλκέων γίνεται τούτων πουλὺν γὰρ χρόνον πλαδαρῆ γίνεται τινὰς δὲ τούτων ἀγαθὸν ἐπιδέειν. Εἰδέναι μὲν δὴ που σάφα χρὴ, ὅτι ἀνάγκη τὸν ἄνθρωπον χολὸν αἰσχροῶς γενέσθαι καὶ γὰρ ὁ πούς ἐς τὸ ἄνω ἀνέσπασται τῶν τοιούτων, καὶ τὰ ὀστέα

τὰ διολισθήσαντα ἔξω ἐξέχοντα φαίνεται οὔτε γὰρ ψιλοῦται τῶν τοιούτων ὀστέων οὐδὲν ὡς ἐπὶ τὸ πουλὺν, εἰ μὴ κατὰ βραχὺ τι, οὔτε ἀφίσταται, ἀλλὰ περιωτειλοῦται λεπτῆσιν ὠτειλῆσι καὶ ἀσθενέσι, καὶ ταῦτα, ἦν ἀτρεμίζωσι πουλὺν χρόνον ἦν δὲ μὴ, ἐλκύδριον ἐγκαταλειφθῆναι κίνδυνος ἀναλθές. Ὅμως δὲ, περὶ οὗ ὁ λόγος, οὕτω μὲν ἰητρευόμενοι σώζονται, ἐμβληθέντος δὲ τοῦ ἄρθρου καὶ ἐμμείναντος, ἀποθνήσκουσιν.

63. In cases of complete dislocation at the ankle-joint, complicated with an external wound, whether the displacement be inward or outward, you are not to reduce the parts, but let any other physician reduce them if he choose. For this you should know for certain, that the patient will die if the parts are allowed to remain reduced, and that he will not survive more than a few days, for few of them pass the seventh day, being cut off by convulsions, and sometimes the leg

and foot are seized with gangrene. It should be well known that such will be the results; and it does not appear to me that hellebore will do any good, though administered the same day, and the draught repeated, and yet it is the most likely means, if any such there be; but I am of opinion that not even it will be of service. But if not reduced, nor any attempts at first made to reduce them, most of such cases recover. The leg and foot are to be arranged as the patient wishes, only they must not be put in a dependent position, nor moved about; and they are to be treated with pitched cerate, a few compresses dipped in wine, and not very cold, for cold in such cases induces convulsions; the leaves also of beet, or of colt's foot, of any such, when boiled in dark-colored austere wine, form a suitable application to the wound and the surrounding parts; and the wound may further be anointed with cerate in a tepid state. But if it be the winter season, the part is to be covered with unscoured wool, which is to be sprinkled from above with tepid wine and oil, but on no account is either bandage or compress to be applied; for this should be known most especially, that whatever compresses, or is heavy, does mischief in such cases. And certain of the dressings used to recent wounds are suitable in such cases; and wool may be laid upon the sore, and sprinkled with wine, and allowed to remain for a considerable time; but those dressings for recent wounds which only last for a few days, and into which resin enters as an ingredient, do not agree with them; for the cleansing of the sores is a slow process, and the sore has a copious discharge for a long time. Certain of these cases it may be advantageous to bandage. It ought also to be well understood, that the patient must necessarily be much maimed and deformed, for the foot is retracted outward, and the bones which have been displaced outward protrude: these bones, in fact, not being generally laid bare, unless to a small extent; neither do they exfoliate, but they heal by thin and feeble cicatrices, provided the patient keeps quiet for a length of time; but otherwise there is danger that a small ulcer may remain incurable. And yet in the case we are treating of, those who are thus treated are saved; whereas, when the parts are reduced and allowed to remain in place, the patients die.

64. Οὗτος δὲ λόγος οὗτος, ἦν καὶ τὰ τοῦ πήχεος ὀστέα τὰ παρὰ τὸν καρπὸν τῆς χειρὸς ἔλκος ποιήσαντα ἐξίσχη, ἦν τε ἐς τὸ ἔσω μέρος τῆς χειρὸς, ἦν τε ἐς τὸ ἔξω. Σάφα γὰρ ἐπίστασθαι χρὴ, ὅτι ἀποθανεῖται ἐν ὀλίγησιν ἡμέρησι τοιοῦτω θανάτῳ, οἷωπερ καὶ πρόσθεν εἴρηται, ὅτῳ ἂν ἐμβληθέντα τὰ ὀστέα ἐμμεῖνη. Οἷσι δ' ἂν μὴ ἐμβληθῆ, μηδὲ πειρηθῆ ἐμβάλλεσθαι, οὗτοι πολὺ πλείονες περιγίνονται ἡτρεΐη δὲ τοιαύτη τοῖσι τοιουτέοισιν ἐπιτηδεΐη, οἷηπερ εἴρηται τὸ δὲ σχῆμα αἰσχρὸν τοῦ χολώματος ἀνάγκη εἶναι, καὶ τοὺς δακτύλους τῆς χειρὸς ἀσθενέας καὶ ἀχρηΐους ἦν μὲν γὰρ ἐς τὸ ἔσω μέρος ὀλίσθη τὰ ὀστέα,

ξυγκάμπτειν οὐ δύνανται τοὺς δακτύλους ἢν δὲ ἐς τὸ ἔξω μέρος, ἔκτανύειν οὐ δύνανται.

64. The same rule applies to dislocations at the wrist, attended with a wound and projection of the bone, whether the bones of the arm be displaced inward or outward. For this should be well understood, that the patient will die in the course of a few days, by the same mode of death as formerly described, if the bone be reduced, and allowed to remain so. But in those cases in which they are not reduced, nor any attempt made to reduce them, the patients, for the most part, recover; and the same mode of treatment as has been described will be applicable; but the deformity and impediment of the limb must necessarily be great, and the fingers of the hand will be weak and useless; for if the bones have slipped inward, they cannot bend the fingers, or if outward, they cannot extend them.

65. Ὅσοισι δ' ἂν κνήμης ὀστέον, ἔλκος ποιησάμενον παρὰ τὸ

γόναυ, ἔξω ἐξίσχη, ἢν τε ἐς τὸ ἔξω μέρος, ἢν τε ἐς τὸ ἔσω, τούτοισιν ἢν μὲν τις ἐμβάλῃ, ἔτι ἐτοιμότερος ὁ θάνατός ἐστιν, ἢπερ τοῖσιν ἑτέροισι, καίπερ κάκείνοισιν ἔτοιμος ἐών. Ἦν δὲ μὴ ἐμβαλῶν ἡτρεύῃς, ἐλπίδες μὲν σωτηρίας οὕτω μόνως εἰσίν. Κινδυνωδέστερα δὲ ταῦτα τῶν ἑτέρων γίνεται, ὅσῳ ἂν ἀνωτέρω, καὶ ὅσῳ ἂν ἰσχυρότερα ἔῃ, καὶ ἀπὸ ἰσχυροτέρων ὠλισθήκη. Ἦν δὲ τὸ ὀστέον τὸ τοῦ μηροῦ τὸ πρὸς τοῦ γόνατος ἔλκος ποιησάμενον ἐξολίσθη, ἐμβληθὲν μὲν καὶ ἐμμεῖναν, ἔτι βιαίότερον καὶ θᾶσσον τὸν θάνατον ποιήσει τῶν πρόσθεν εἰρημένων μὴ ἐμβληθὲν δὲ, πούλῳ κινδυνωδέστερον, ἢ τὰ πρόσθεν ὅμως δὲ μούνη ἐλπὶς αὕτη σωτηρίας.

65. When the os tibiae, having made a wound at the knee, has protruded through the skin, whether the dislocation be outward or inward, in such a case, if the bone be reduced, death will be even more speedy than in the other cases, although speedy also in them. But the only hope of recovery is if you treat them without reduction. These cases are more dangerous than the others, as being so much higher up, as being so much stronger joints, and displaced from bones which are so much stronger. But if the os femoris form a wound at the knee, and slip through it, provided it be reduced and left so, it will occasion a still more violent and speedy death than in the cases formerly described; but if not reduced, it will be much more dangerous than those cases mentioned before, and yet this is the only hope of recovery.

66. Οὗτος δὲ λόγος καὶ περὶ τῶν κατὰ τὸν ἀγκῶνα ἄρθρων, καὶ περὶ τῶν τοῦ πήχεος καὶ βραχίονος ἃ γὰρ ἂν τούτων ἐξαρθήσαντα ἐξίσχη ἔλκος ποιησάμενα, πάντα, ἦν ἐμβληθῆ, θάνατον φέρει, μὴ ἐμβληθέντα δὲ, ἐλπίδα σωτηρίας χῶλωσις δὲ ἐτοίμη τοῖσι περιγενομένοισιν. Θανατωδέστερα δὲ τοῖσιν ἐμβαλλομένοισιν. ἐστὶ τὰ ἀνωτέρω τῶν ἄρθρων, ἀτὰρ καὶ τοῖσι μὴ ἐμβαλλομένοισι κινδυνωδέστερα αὐτὰ ταῦτα. Εἰ δέ τι τὰ ἀνώτατα ἄρθρα ἐξαρθήσαντα,

ἔλκος ποιήσαντα, ἐξίσχοι, ταῦτα ἂν ἔτι καὶ ἐμβαλλόμενα ταχυθανατώτατα εἴη, καὶ μὴ ἐμβαλλόμενα κινδυνωδέστατα ἰητρείη δὲ ἤδη εἴρηται, οἷη τις ἐμοὶ δοκέει ἐπιτηδειοτάτη εἶναι τῶν τοιουτέων.

66. The same rule applies to the elbow-joint, and with regard to the bones of the fore-arm and arm. For when these bones protrude through a wound which they have made in the skin, all cases in which they are reduced prove fatal; but if not reduced, there is a chance of recovery; but to those that survive there is certain impediment. And if in any instance the bones of the upper articulations ( *shoulder-joint?* ), should be dislocated, and project through a wound which they have made in the skin, these, if reduced, are followed by more speedy death; and if not reduced, they are more dangerous than the others. But the mode of treatment which appears to me most suitable has been already described.

67. Ὅσοισι δὲ ἄρθρα δακτύλων, ἢ ποδὸς ἢ χειρὸς, ἐξαρθήσαντα, ἔλκος ποιήσαντα, ἐξέσχε, μὴ κατηγότος τοῦ ὀστέου, ἀλλὰ κατ' αὐτὴν τὴν ξύμφυσιν ἀποσπασθέντος, τούτοισιν ἦν ἐμβληθέντα ἐμμείνη, ἐνὶ μὲν τις κίνδυνος σπασμοῦ, ἦν μὴ χρηστῶς ἰητρεύονται ὅμως δὲ τι ἄξιον ἐμβάλλειν, προειπόντα ὅτι φυλακῆς πολλῆς καὶ μελέτης δέεται. Ἐμβάλλειν μέντοι ῥήιστον καὶ δυνατώτατον καὶ τεχνικώτατόν ἐστι τῷ μοχλίσκῳ, ὥσπερ καὶ πρόσθεν εἴρηται ἐν τοῖσι καταγνυμένοισι καὶ ἐξίσχουσιν ὀστέοισιν ἔπειτα ἀτρεμέειν ὡς μάλιστα χρῆ, καὶ κατακεῖσθαι, καὶ ὀλιγοσιτέειν ἄμεινον δὲ καὶ φαρμακεῦσαι ἄνω κούφῳ τινὶ φαρμάκῳ τὸ δὲ ἔλκος, ἰητρεύειν μὲν ἢ ἐναίμοισι τοῖσιν ἐπιτέγκτοισιν, ἢ πολυοφθάλμοισιν, ἢ οἷσι κεφαλῆς ὀστέα κατηγότα ἰητρεύεται, κατάψυχρον δὲ κάρτα μηδὲν προσφέρειν. Ἦκιστα μὲν οὖν τὰ πρῶτα ἄρθρα κινδυνώδεά ἐστι, τὰ δὲ ἔτι ἀνωτέρω κινδυνωδέστερα. Ἐμβάλλειν δὲ χρῆ αὐθημερόν, ἢ τῇ ὑστεραίῃ,

τριταίῳ δὲ ἢ τεταρταίῳ ἦκιστα τεταρταῖα γὰρ ἐόντα, ἐπισημαίνει τῆσι παλιγοτήσι μάλιστα. Οἷσιν ἂν οὖν μὴ αὐτίκα ἐγγένηται ἐμβάλλειν, ὑπερβαίνειν χρῆ ταύτας τὰς εἰρημένας ἡμέρας ὅ τι γὰρ ἂν ἔσω δέκα ἡμερέων ἐμβάλλης, σπᾶν καταληπτέον. Ἦν δὲ ἄρα ἐμβεβλημένῳ σπασμὸς ἐπιγένηται, ἐκβάλλειν τὸ ἄρθρον δεῖ ταχὺ, καὶ θερμῷ τέγγειν ὡς πλειστάκις, καὶ τὸ ὅλον σῶμα θερμῶς καὶ

λιπαρῶς καὶ μαλθακῶς ἔχειν, καὶ μάλιστα κατὰ τὰ ἄρθρα κεκάμφθαι δὲ μᾶλλον ἢ ἐκτετάσθαι πᾶν τὸ σῶμα χρή. Προσδέχεσθαι μέντοι χρή κατὰ τοὺς δακτύλους τὰ ἄρθρα τὰ ἐμβαλλόμενα ἀποστατικὰ ἔσεσθαι τὰ γὰρ πλεῖστα οὕτω γίνεται, ἦν καὶ ὀτιοῦν φλεγμονῆς ὑπογένηται, ὡς, εἰ μὴ δι' ἀμαθίην τῶν δημοτέων ἐν αἰτίῃ ἔμελλεν ὁ ἰητρὸς ἔσεσθαι, οὐδὲν ἂν πάντως οὐδ' ἐμβάλλειν ἔδει. Τὰ μὲν οὖν κατὰ τὰ ἄρθρα ὅστέα ἐξίσχοντα ἐμβαλλόμενα οὕτω κινδυνώδεά ἐστιν, ὡς εἴρηται.

67. When the joints of the toes or hands are dislocated, and the bones protrude through a wound which they have made, and when there is no fracture of the bone, but merely displacement of the joint, in these cases, if the reduction be made and allowed to remain, there is some danger of spasms ( *tetanus?* ) if not properly treated, and yet it may be worth while to reduce them, having warned the patient beforehand that much caution and care will be required. The easiest, the most efficient method, and the one most conformable to art, is that by the lever, as formerly described when treating of bones which have been fractured and protruded; then the patient must be as quiet as possible, lie in a recumbent position, and observe a restricted regimen. And it will be better also that he should get some gentle emetics. The sore is to be treated with dressings for fresh wounds, which permit of allusions, or with the leaves of camomile, or with the applications for fractured bones of the head, but nothing very cold must be applied. The first ( *most distant?* ) joints are least dangerous, but those still higher, are more so. Reduction should be made the same day, or the next, but by no means on the third or fourth, for it is on the fourth day that exacerbations especially attack. In those cases, then, where immediate reduction cannot be accomplished, we must wait until after the aforesaid days; for whatever you reduce within ten days, may be expected to induce spasm. But if the spasm supervene on its being reduced, the joint should be quickly displaced, and bathed frequently with warm water, and the whole body should be kept in a warm, soft, and easy condition, and more especially about the joints, for the whole body should rather be in a bent than in an extended state. Moreover, it is to be expected, that the articular extremities of the bones of the fingers will for this generally happens, if even the least degree of inflammation take place, so that if it were not that the physician would be exposed to censure, owing to the ignorance of the common people, no reduction should be made at all. The reduction of the bones of joints which have protruded through the skin, is attended with the dangers which have been described.

68. Ὅσα δὲ κατὰ τὰ ἄρθρα τὰ κατὰ τοὺς δακτύλους ἀποκόπτεται τελείως, ταῦτα

ἀσινέα τὰ πλεῖστά ἐστιν, εἰ μή τις ἐν αὐτῇ τῇ τρώσει λειποθυμήσας βλαβεῖη καὶ ἰητρείη φαύλη ἀρκέσει τῶν τοιούτων ἐλκέων. Ἀτὰρ καὶ ὅσα μὴ κατὰ τὰ ἄρθρα, ἀλλὰ κατ' ἄλλην τινὰ ἴξιν τῶν ὀστέων ἀποκόπεται, καὶ ταῦτα ἀσινέα ἐστὶ, καὶ ἔτι εὐαλθέστερα τῶν ἐτέρων καὶ ὅσα κατὰ τοὺς δακτύλους ὅστεα κατεηγότα ἐξίσχει μὴ κατὰ τὸ ἄρθρον, καὶ ταῦτα ἀσινέα ἐστὶν ἐμβαλλόμενα. Ἀποκόψεις δὲ τέλειαι ὀστέων καὶ κατὰ τὰ ἄρθρα καὶ ἐν ποδὶ, καὶ ἐν χειρὶ, καὶ ἐν κνήμῃ, τοῖσι παρὰ τὰ σφυρὰ, καὶ ἐν πήχεϊ, τοῖσι παρὰ τοὺς καρπούς, τοῖσι πλείστοισιν ἀποκοπτομένοισιν ἀσινέα γίνεται, ὅσα ἂν μὴ αὐτίκα λειποθυμὴ ἀνατρέψη, ἢ τεταρταίοισιν ἐοῦσι πυρετὸς ζυνεχῆς ἐπιγένηται.

68. When the articular bones of the fingers are fairly chopped off, these cases are mostly unattended with danger, unless deliquium come on in consequence of the injury, and ordinary treatment will be sufficient to such sores. But when resection is made, not at the articulations, but at some other point in the bones, these cases also are free from danger, and are still more easily cured than the others; and the fractured bones of the fingers which protrude otherwise than at the joint admit of reduction without danger. Complete resections of bones at the joints, whether the foot, the hand, the leg, the ankle, the forearm, the wrist, for the most part, are not unattended with danger, unless one be cut off at once by deliquium animi, or if continual fever supervene on the fourth day.

69. Ἀποσφακελίσιες μέντοι σαρκῶν, καὶ ἐν τρώμασιν αἰμορροίοισι γενομένοισιν ἀποσφιγθεῖσιν ἰσχυρῶς, καὶ ἐν ὀστέων κατήγμασι πιεχθεῖσι μᾶλλον τοῦ καιροῦ, καὶ ἐν ἄλλοισι δεσμοῖσι βιαιοῖσιν ἀποληφθέντα ἀποπίπτει πολλοῖσι, καὶ οἱ πολλοὶ περιγίνονται τῶν τοιούτων, καὶ οἷσι μηροῦ μέρος τι ἀποπίπτει, καὶ τῶν σαρκῶν καὶ τοῦ ὀστέου, καὶ οἷσι βραχίονος, ἧσσον δὲ πήχεός τε καὶ κνήμης ἀποπεσούσης, καὶ ἔτι εὐφόρως περιγίνονται. Οἷσι μὲν οὖν, κατεαγόντων τῶν ὀστέων, ἀποσφίγξιες αὐτίκα ἐγένοντο καὶ μελασμοὶ, τούτοισι μὲν ταχεῖαι αἱ περιρρήξιες γίνονται τοῦ

σώματος, καὶ τὰ ἀποπίπτοντα ταχέως ἀποπίπτει, ἤδη τῶν ὀστέων προενδεδωκότων οἷσι δὲ, ὑγιέων ἐόντων τῶν ὀστέων, οἱ μελασμοὶ γίνονται, αἱ μὲν σάρκες ταχέως θνήσκουσι καὶ τούτοισι, τὰ δὲ ὅστεα βραδέως ἀφίσταται, ἢ ἂν τὰ ὅρια τοῦ μελασμοῦ γένηται καὶ ἡ ψίλωσις τοῦ ὀστέου. Χρῆ δὲ, ὅσα ἂν κατωτέρω τοῦ σώματος τῶν ὀρίων τοῦ μελασμοῦ ἔη, ταῦτα, ὅταν ἤδη πάμπαν τεθνήκη καὶ ἀναλγέα ἔη, ἀφαιρέειν κατὰ τὸ ἄρθρον, προμηθεόμενον ὅπως μὴ τιτρώσκη ἦν γὰρ ὀδυνηθῆ ἀποταμνόμενος, καὶ μήπω κυρήσῃ τὸ σῶμα τεθνεὸς ταύτη, ἢ ἀποτέμενται, κάρτα κίνδυνος ὑπὸ τῆς ὀδύνης λειποθυμῆσαι αἱ δὲ τοιαῦται λειποθυμῖαι πολλοὺς παραχρῆμα ἤδη ἀπόλεσαν. Μηροῦ μὲν οὖν

ὀστέον, ψιλωθὲν ἐκ τοιούτου τρόπου, ὀγδοηκοσταῖον εἶδον ἐγὼ ἀποστάν ἢ μέντοι κνήμη τούτῳ τῷ ἀνθρώπῳ κατὰ τὸ γόνυ ἀφηρέθη εἰκοσταίη, ἐδόκεε δέ μοι καὶ ἐγγυτέρῳ οὐ γὰρ ἅμα, ἀλλ' ἐπὶ τὸ προμηθέστερον ἔδοξε μοί τι ποιέειν. Κνήμης δὲ ὀστέα ἐκ τοιούτου μελασμοῦ, μάλα κατὰ μέσην τὴν κνήμην ἔοντα, ἐξηκοσταῖά μοι ἀπέπεσεν, ὅσα ἐψιλώθη αὐτέων. Διενέγκοι μὲν γὰρ ἂν τι καὶ ἰητρειῇ ἰητρειῆς ἐς τὸ θᾶσσόν τε καὶ βραδύτερον τὰ ὀστέα ψιλούμενα ἀποπίπτειν

διενέγκοι δ' ἂν τι καὶ πίεξις πιέξις, καὶ ἐπὶ τὸ ἰσχυρότερόν τε καὶ ἀσθενέστερον, καὶ ἐς τὸ θᾶσσόν τε καὶ βραδύτερον ἀπομελανθέντα ἀποθανεῖν τὰ νεῦρα καὶ τὰς σάρκας καὶ τὰς ἀρτηρίας καὶ τὰς φλέβας ἐπεὶ ὅσα μὴ ἰσχυρῶς ἀποληφθέντων θνήσκει, ἔνια τῶν τοιούτων οὐκ ἀφικνέεται ἐς ὀστέων ψιλώματα, ἀλλ' ἐπιπολαιότερα ἐκπίπτει ἔνια δὲ οὐδὲ ἐς νεύρων ψιλώματα ἀφικνεῖται, ἀλλὰ ἐπιπολαιότερα ἐκπίπτει. Διὰ οὖν ταύτας τὰς εἰρημένας προφάσις οὐκ ἔστιν ἐν οὐνομα ἀριθμοῦ τῷ χρόνῳ θέσθαι, ἐν ὁκόσῳ ἕκαστα τούτων κρίνεται. Προσδέχεσθαι δὲ μάλα χρή τὰ τοιαῦτα ἰήματα ἐσιδέειν γὰρ φοβερώτερα ἔστιν, ἢ ἰητρεύειν καὶ ἰητρειῇ πραεῖη ἀρκέει πᾶσι τοιούτοις αὐτὰ γὰρ ἐωυτὰ κρίνει μῦνον τῆς δὲ διαίτης ἐπιμελέεσθαι χρή, ὡς κατὰ δύναμιν ἀπύρετος ἔη, καὶ ἐν σχήμασι δικαίοισιν εὐθετίζειν τὸ σῶμα δίκαια δὲ ταῦτα, μηδὲ μετέωρον ποιέειν, μηδὲ ἐς τὸ κάτω ῥέπον, ἀλλὰ μᾶλλον ἐς τὸ ἄνω, ποτὶ καὶ ἔστ' ἂν τελείως περιρραγῆ αἰμορραγιέων γὰρ ἐν τούτῳ τῷ χρόνῳ κίνδυνος διὰ τοῦτο οὖν οὐ χρή κατάρροπα τὰ τρώματα ποιέειν, ἀλλὰ τάναντία. Ἐπεὶ ὅταν γε χρόνος ἐγγένηται πλείων, καὶ καθαρὰ τὰ ἔλκεα γένηται, οὐκ ἔτι τὰ αὐτὰ σχήματα ἐπιτήδειά ἔστιν,

ἀλλ' ἢ εὐθεῖα θέσις, καὶ ἐνίοτε ἐπὶ τὸ κατάρροπον ῥέποντα ἀνὰ χρόνον γὰρ ἐνίοισι τούτων ἀποστάσεις πύου γίνονται, καὶ ὑποδεσμίδων δέονται. Προσδέχεσθαι δὲ χρή τοὺς τοιούτους ἀνὰ χρόνον ὑπὸ δυσεντερίης πιέζεσθαι καὶ γὰρ ἐπὶ τοῖσι μελαιομένοισι τοῖσι πλείστοισιν ἐπιγίνεται δυσεντερίη, καὶ ἐπὶ τῆσιν αἰμορραγιῆσιν ἐξ ἐλκέων ἐπιγίνεται δὲ ὡς ἐπὶ τὸ πολὺ, κεκριμένων ἤδη τῶν μελασμῶν καὶ τῆς αἰμορραγιῆς, καὶ ὀρμάται μὲν λαύρως καὶ ἰσχυρῶς ἀτὰρ οὔτε πολυήμερος γίνεται, οὔτε θανατώδης οὔτε γὰρ μάλα ἀπόσιτοι γίνονται οἱ τοιοῦτοι, οὔτε ἄλλως ζυμφέρει κενεαγγέειν.

69. With regard to the sphacelus of fleshy parts, it takes place in wounds where there are large blood-vessels, which have been strongly compressed, and in fractures of bones which have been bound too tight, and in other cases of immoderate constriction, when the parts which have been strangulated generally drop off; and the most of such patients recover, even when a portion of the thigh comes away, or of the arm, both bones and flesh, but less so in this case; and

when the fore-arm and leg drop off, the patients readily recover. In cases then, of fracture of the bones, when strangulation and blackening of the parts take place at first, the separation of the dead and living parts quickly occurs, and the parts speedily drop off, as the bones have already given way; but when the blackening (*mortification*) takes place while the bones are entire, the fleshy parts, in this case, also quickly die, but the bones are slow in separating at the boundary of the blackening, and where the bones are laid bare. Those parts of the body which are below the boundaries of the blackening are to be removed at the joint, as soon as they are fairly dead and have lost their sensibility; care being taken not to wound any living part; for if the part which is cut off give pain, and if it prove not to be quite dead, there is great danger lest the patient may swoon away from the pain, and such swoonings often are immediately fatal. I have known the thigh-bones, when denuded in this manner, drop off on the eightieth day; but in the case of this patient, the parts below were separated at the knee on the twentieth day, and, as I thought, too early, for it appeared to me that this should be done more guardedly. In a case which I had of such blackening in the leg, the bones of the leg, as far as they were denuded, separated at its middle on the sixtieth day. But the separation of denuded bones is quicker or slower, according to the mode of treatment; something, too, depends upon whether the compression be stronger or weaker, and whether the nerves, flesh, arteries, and veins are quicker or slower in becoming blackened and in dying; since, when the parts are not strongly compressed, the separation is more superficial, and does not go the length of laying the bones bare, and in some cases it is still more superficial, so as not even to expose the nerves. For the reasons now stated, it is impossible to define accurately the time at which each of these cases will terminate. The treatment of such cases, however, is to be readily undertaken, for they are more formidable to look at than to treat; and a mild treatment is sufficient in all such cases, for they come to a crisis of themselves; only the diet must be attended to, so that it may be as little calculated to create fever as possible, and the body is to be placed in the proper positions: these are, neither raised very high up, nor inclined much downward, but rather upward, until the separation be completed; for at that time there is most danger of hemorrhage; on this account, wounds should not be laid in a declining position, but the contrary. But after a while, and when the sores have become clean, the same positions will no longer be appropriate; but a straight position, and one inclining downward, may be proper; and in the course of time, in some of these cases, abscesses form, and require bandages. One may also expect that such patients will be attacked with dysentery; for dysentery usually supervenes in cases of mortification and of hemorrhage from wounds; it comes on generally when the blackening and hemorrhage have arrived at a



crisis, and is profuse and intense, but does not last many days; neither is it of a fatal nature, for such patients do not usually lose their appetite, nor is it proper to put them on a restricted diet.

70. Μηροῦ δὲ ὀλισθήμα κατ' ἰσχίον ὧδε χρὴ ἐμβάλλειν, ἣν ἐς τὸ ἔσω μέρος ὠλισθήκη ἀγαθὴ μὲν ἦδε καὶ δικαίη καὶ κατὰ φύσιν ἢ ἐμβολή, καὶ δὴ τι καὶ ἀγωνιστικὸν ἔχουσα, ὅστις γε τοῖσι τοιούτοισιν ἦδεται κομψευόμενος. Κρεμάσαι χρὴ τὸν ἄνθρωπον τῶν ποδῶν πρὸς μεσόδμην δεσμῶ δυνατῶ μὲν, μαλθακῶ δὲ καὶ πλάτος ἔχοντι τοὺς δὲ πόδας διέχειν χρὴ, ὅσον τέσσαρας δακτύλους ἀπ' ἀλλήλων, ἢ καὶ ἔλασσον χρὴ δὲ καὶ ἐπάνωθεν τῶν ἐπιγουνίδων προσπεριβεβλησθαι πλαῖ ἱμάντι καὶ μαλθακῶ,

ἀνατείνοντι ἐς τὴν μεσόδμην τὸ δὲ σκέλος τὸ σιναρὸν ἐντετάσθαι χρὴ ὡς δύο δακτύλους μᾶλλον τοῦ ἐτέρου ἀπὸ δὲ τῆς γῆς τὴν κεφαλὴν ἀπεχέτω ὡς δύο πήχειας, ἢ ὀλίγω πλεον, ἢ ἔλασσον τὰς δὲ χεῖρας παρατεταμένας παρὰ τὰς πλευρὰς προσδεδεμένος ἔστω μαλθακῶ τινι πάντα δὲ ταῦτα ὑπὶ κατακειμένῳ κατασκευασθήτω, ὡς ὅτι ἐλάχιστον χρόνον κρέμηται. Ὅταν δὲ κρεμασθῇ, ἄνδρα χρὴ εὐπαίδευτον καὶ μὴ ἀσθενέα, ἐνείραντα τὸν πῆχυν μεσηγὺ τῶν μηρῶν, εἶτα θέσθαι τὸν πῆχυν μεσηγὺ τοῦ περιέου καὶ τῆς κεφαλῆς τοῦ μηροῦ τῆς ἐξεστηκυῖης, ἔπειτα ξυνάψαντα τὴν ἐτέραν χεῖρα πρὸς τὴν διηρμένην, παραστάντα ὀρθὸν παρὰ τὸ σῶμα τοῦ κρεμαμένου, ἐξαπίνης ἐκκρεμασθέντα, μετέωρον αἰωρηθῆναι ὡς ἰσορροπώτατον. Αὕτη δὲ ἢ ἐμβολὴ παρέχεται πάντα, ὅσα χρὴ κατὰ φύσιν αὐτό τε γὰρ τὸ σῶμα, κρεμάμενον, τῶ ἐωυτοῦ βάρει κατάτασιν ποιέεται, ὃ τε ἐκκρεμασθεὶς ἅμα μὲν τῇ κατατάσει ἀναγκάζει ὑπεραιωρέεσθαι

τὴν κεφαλὴν τοῦ μηροῦ ὑπὲρ τῆς κοτύλης, ἅμα δὲ τῶ ὀστέῳ τοῦ πήχεος ἀπομοχλεύει καὶ ἀναγκάζει ἐς τὴν ἀρχαίην φύσιν ὀλισθάνειν. Χρὴ δὲ παγκάλως μὲν τοῖσι δεσμοῖσιν ἐσκευάσθαι, φρονέοντα δὲ καὶ ὡς ἐχυρώτατον τὸν ἐξαιωρούμενον εἶναι.

70. Dislocation inward at the hip-joint is to be reduced in the following manner: (it is a good, proper, and natural mode of reduction, and has something of display in it, if any one takes delight in such ostentatious modes of procedure). The patient is to be suspended by the feet from a cross-beam with a strong, soft, and broad cord; the feet are to be about four inches or less from one another; and a broad and soft leather collar connected with the cross-beam is to be put on above the knees; and the affected leg should be so extended as to moved be two inches longer than the other; the head should be about two cubits from the

ground, or a little more or less; and the arms should be stretched along the sides, and bound with something soft; all these preparations should be made while he is lying on his back, so that he may be suspended for as short a time as possible. But when the patient is suspended, a person properly instructed and not weak, having introduced his arm between his thighs, is to place his fore-arm between the perineum and the dislocated head of the os femoris; and then, having joined the other hand to the one thus passed through the thighs, he is to stand by the side of the suspended patient, and suddenly suspend and swing himself in the air as perpendicularly as possible. This method comprises all the conditions which are natural; for the body being suspended by its weight, produces extension, and the person suspended from him, along with the extension, forces the head of the thigh-bone to rise up above the acetabulum; and at the same time he uses the bone of the fore-arm as a lever, and forces the os femoris to slip into its old seat. The cords should be properly prepared, and care should be taken that the person suspended along with the patient have a sufficiently strong hold.

71. Ως μὲν οὖν καὶ πρόσθεν εἴρηται, μέγα τὸ διαφέρον ἐστὶ τῶν φυσίων τοῖσιν ἀνθρώποισιν ἐς τὸ εὐέμβλητα εἶναι, καὶ δυσέμβλητα καὶ διότι μέγα διαφέρει, εἴρηται πρόσθεν ἐν τοῖσι περὶ ὤμου. Ἐνίοισι γὰρ ὁ μηρὸς ἐμπίπτει ἀπ' οὐδεμιῆς παρασκευῆς, ἀλλ' ὀλίγης μὲν κατατάσιος, ὅσον τῆσι χερσὶ κατιθῆναι, βραχείης δὲ κιγκλίσιος πολλοῖσι δὲ ξυγκάμψασι τὸ σκέλος κατὰ τὸ ἄρθρον, ἐνέπεσεν, ἤδη ἀμφίσφαλσιν ποιησάμενον. Ἀλλὰ γὰρ τὰ πούλῳ πλείῳ οὐκ ἐνακούει τῆς τυχούσης παρασκευῆς διὰ τοῦτο ἐπίστασθαι μὲν χρὴ τὰ κράτιστα περὶ ἐκάστου ἐν πάσῃ τῇ τέχνῃ χρέεσθαι δὲ, οἷσιν ἂν δόξη ἐκάστοτε. Εἴρηται μὲν οὖν τρόποι κατατασίων καὶ ἐν τοῖσιν ἔμπροσθεν γεγραμμένοισιν, ὥστε χρέεσθαι τούτων, ὅστις ἂν παρατύχη. Δεῖ γὰρ ἀντικατατετάσθαι ἰσχυρῶς, ἐπὶ θάτερα μὲν τοῦ σκέλεος, ἐπὶ θάτερα δὲ τοῦ

σώματος ἦν γὰρ εὖ καταταθῆ, ὑπεραιωρηθήσεται ἡ κεφαλὴ τοῦ μηροῦ ὑπὲρ τῆς ἀρχαίης ἔδρης καὶ ἦν μὲν ὑπεραιωρηθῆ οὕτως, οὐδὲ κωλύσαι ἔτι ῥηίδιον ἴζεσθαι αὐτὴν ἐς τὴν ἐσωτῆς ἔδρην, ὥστε ἤδη πᾶσα ἀρκέει μόχλευσίς τε καὶ κατόρθωσις ἀλλὰ γὰρ ἐλλείπουσιν ἐν τῇ κατατάσει διὰ τοῦτο ὄχλον πλείῳ παρέχει ἢ ἐμβολή. Χρὴ οὖν οὐ μόνον παρὰ τὸν πόδα τὰ δεσμὰ ἐξηρητῆσθαι, ἀλλὰ καὶ ἄνωθεν τοῦ γούνατος, ὅπως μὴ κατὰ τὸ τοῦ γούνατος ἄρθρον ἐν τῇ τανύσει ἢ ἐπίδεσις ἔη μᾶλλον, ἢ κατὰ τὸ τοῦ ἰσχίου ἄρθρον. Οὕτω μὲν οὖν χρὴ τὴν κατάτασιν, τὴν πρὸς τὸ τοῦ ποδὸς μέρος, ἐσκευάσθαι ἀτὰρ καὶ τὴν ἐπὶ θάτερα κατάτασιν, μὴ μόνον ἐκ τῆς περὶ τὸ στῆθος καὶ τὰς μασχάλας περιβολῆς ἀντιτείνεσθαι, ἀλλὰ καὶ ἱμάντι μακρῶ, διπτύχῳ, ἰσχυρῶ, προσηνεῖ, παρὰ τὸν περίνεον βεβλημένῳ, παρατεταμένῳ ἐπὶ μὲν τὰ ὀπισθεν παρὰ τὴν ῥάχιν, ἐπὶ δὲ τὰ ἔμπροσθεν παρὰ τὴν

κληῖδα, προσηρτημένω πρὸς τὴν ἀρχὴν τὴν ἀκτικατατείνουσιν, οὕτω διαναγκάζεσθαι, τοῖσι μὲν ἔνθα διατεινομένοισι, τοῖσι δὲ ἔνθα, ὅπως δὲ ὁ ἰμάς ὁ παρὰ τὸν περίνεον μὴ περὶ τὴν κεφαλὴν τοῦ μηροῦ παρατεταμένος ἔσται, ἀλλὰ μεσηγὺ τῆς κεφαλῆς καὶ τοῦ περιπέου ἐν δὲ τῇ κατάτασει, κατὰ μὲν τὴν κεφαλὴν τοῦ μηροῦ ἐρείσας

τὴν πυγμὴν, ἐς τὸ ἔξω ὠθεῖτω ἢν δὲ μετεωρίζεται ἐλκόμενος, διέρσας τὴν χεῖρα καὶ ἐπιξυνάψας τῇ ἐτέρῃ χειρὶ, ἅμα μὲν συγκατατεινέτω, ἅμα δὲ ἐς τὸ ἔξω ξυναναγκάζετω ἄλλος δὲ τις τὸ παρὰ τὸ γόνυ τοῦ μηροῦ ἡσύχως ἐς τὸ ἔσω μέρος κατορθούτω.

71. Wherefore, as formerly stated, men's constitutions differ much from one another as to the facility or difficulty with which dislocations are reduced; and the cause of this was also stated formerly in treating of the shoulder. In some the thigh is reduced with no preparation, with slight extension, directed by the hands, and with slight movement; and in some the reduction is effected by bending the limb at the joint, and making rotation. But much more frequently it does not yield to any ordinary apparatus, and therefore one should be acquainted with the most powerful means which can be applied in each case, and use whatever maybe judged most proper under all circumstances. The modes of extension have been described in the former parts of the work, so that one may make use of whatever may happen to be at hand. For, extension and counter-extension are to be made in the direction of the limb and the body; and if this be properly effected, the head of the thigh-bone will be raised above its ancient seat; and if thus raised, it will not be easy to prevent it from settling in its place, so that any ordinary impulse with the lever and adjustment will be quite sufficient; but some apply insufficient extension, and hence the reduction gives much trouble. The bands then should be fastened, not only at the foot, but also above the knee, so that the force of the extension may not be expended on the knee-joint more than upon the hip-joint. The extension in the direction of the foot is to be thus contrived. But the counter-extension is not only to be managed by means of something carried round the chest and armpits, but also by a long, double, strong, and supple thong applied to the perineum, and carried behind along the spine, and in front along the collar-bone and fixed to the point from which counter-extension is made; and then force is to be so applied, by means of this extension and counter-extension, that the thong at the perineum may not pass over the head of the thigh-bone, but between it and the perineum; and during the extension one should strike the head of the femur with the fist, so as to drive it outward. And when the patient is raised up by the stretching, you

should pass a hand through ( *between the legs?* ) and grasp it with the other hand, so as at the same time to make extension, and force the dislocated limb outward; while some other person sitting by the knee quietly directs it inward.

72. Εἴρηται δὲ καὶ πρόσθεν ἤδη, ὅτι ἐπάξιον, ὅστις ἐν πόλει πολυανθρώπων ἰητρεύει, ξύλον κεκτῆσθαι τετράγωνον, ὡς ἐξάπηχυ ἢ ὀλίγω μῆζον, εὖρος δὲ, ὡς δίπηχυ, πάχος δὲ, ἀρκέει σπιθαμιαῖον ἔπειτα κατὰ μῆκος μὲν, ἔνθεν καὶ ἔνθεν ἐντομὴν ἔχειν χρῆ, ὡς μὴ ὑψηλοτέρη τοῦ καιροῦ ἢ μηχανήσις ἔη ἔπειτα φλιας βραχείας, ἰσχυράς, καὶ ἰσχυρῶς ἐνηρμοσμένας, ὀνίσκον ἔχειν ἐκατέρωθεν ἔπειτα ἀρκέει μὲν ἐν τῷ ἡμίσει τοῦ ξύλου

οὐδὲν δὲ κωλύει καὶ διὰ παντὸς ἐντετμηθῆσθαι ὡς καπέτους μακρὰς πέντε ἢ ἕξ, διαλείπουσας ἀπ' ἀλλήλων ὡς τέσσαρας δακτύλους, αὐτὰς δὲ ἀρκέει εὖρος τριδακτύλους εἶναι, καὶ βάθος οὕτως. Ἔχειν δὲ κατὰ μέσον τὸ ξύλον καὶ καταγλυφὴν χρῆ βαθυτέραν, ἐπὶ τετράγωνον, ὡς τριῶν δακτύλων, καὶ ἐς μὲν τὴν καταγλυφὴν ταύτην, ὅταν δοκῆ προσδεῖν, ξύλον ἐμπηγνύναι ἐναρμόζον τῇ καταγλυφῇ, τὸ δὲ ἄνω στρογγύλον, ἐμπηγνύναι δὲ, ἐπὶ ποτε δοκῆ ζυμφέρειν, μεσηγὺ τοῦ περιπέου καὶ τῆς κεφαλῆς τοῦ μηροῦ. Τοῦτο τὸ ξύλον ἐστερὸς κωλύει τὴν ἐπίδοσιν ἐπιδιδόναι τὸ σῶμα τοῖσι πρὸς ποδῶν ἔλκουσιν ἐνίοτε γὰρ ἀρκέει αὐτὸ τὸ ξύλον τοῦτο ἀντὶ τῆς ἄνωθεν ἀντικατατάσιος ἐνίοτε δὲ καὶ, κατατεινομένου τοῦ σκέλεος ἔνθεν καὶ ἔνθεν, αὐτὸ τὸ ξύλον τοῦτο, χαλαρὸν ἐγκείμενον ἢ τῇ ἢ τῇ, ἐκμοχλεύειν ἐπιτήδειον ἂν εἴη τὴν κεφαλὴν τοῦ μηροῦ ἐς τὸ ἔξω μέρος. Διὰ τοῦτο γὰρ καὶ αἱ κάπετοι ἐντετμέαται, ὡς, καθ' ὁκοίην ἂν αὐτέων ἀρμόση, ἐμβαλλόμενος ξύλινος μοχλὸς μοχλεύοι, ἢ παρὰ τὰς κεφαλὰς τῶν ἄρθρων, ἢ κατὰ τὰς κεφαλὰς τελῶς ἐρειδόμενος ἅμα τῇ κατατάσει, ἣν τε ἐς τὸ ἔξω μέρος ζυμφέρῃ ἐκμοχλεύεσθαι, ἣν τε ἐς τὸ ἔσω, καὶ ἣν τε στρογγύλον τὸν μοχλὸν ζυμφέρῃ εἶναι, ἣν τε πλάτος ἔχοντα ἄλλος γὰρ ἄλλω τῶν ἄρθρων ἀρμόζει. Εὐχρηστος δὲ ἐστὶν ἐπὶ πάντων τῶν ἄρθρων ἐμβολῆς, τῶν κατὰ τὰ σκέλεα, αὕτη ἢ

μόχλευσις ζὺν τῇ κατατάσει. Περὶ οὗ οὖν ὁ λόγος ἐστὶ, στρογγύλος ἀρμόζει ὁ μοχλὸς εἶναι τῷ μέντοι ἔξω ἐκπεπτοκότι ἄρθρω πλατὺς ἀρμόσει εἶναι. Ἀπὸ τουτέων τῶν μηχανέων καὶ ἀναγκέων οὐδὲν ἄρθρον μοι δοκῆει οἷόν τε εἶναι ἀπορηθῆναι ἐμπεσεῖν.

72. It has been formerly stated by us that it will be of importance for any person who practices medicine in a populous city to get prepared a quadrangular board, about six cubits or a little more in length, and about two cubits in breadth; a fathom will be sufficient thickness for it; and then along it from the one end to

the other, an excavation must be made, so that the working of the levers may not be higher than is proper; then at both sides we are to raise short, strong, and strongly-fixed posts, having axles; and in the middle of the bench five or six long grooves are to be scooped out about four inches distant from one another, three inches will be a sufficient breadth for them, and the depth in like manner; and although the number of grooves I have mentioned will be sufficient, there is nothing to prevent their being made all over the bench. And the bench should have in its middle a pretty deep hole, of a square shape, and of about three inches in size; and into this hole, when judged necessary, is to be adjusted a corresponding piece of wood, rounded above, which, at the proper time, is to be adjusted between the perineum and the head of the thigh-bone. This upright piece of wood prevents the body from yielding to the force dragging downward by the feet; for sometimes this piece of wood serves the purpose of counter-extension upward; and sometimes, too, when extension and counter-extension are made, this piece of wood, if susceptible of some motion to this side or that, will serve the purpose of a lever for pushing the head of the thigh-bone outward. It is on this account that several grooves are scooped out on the bench, so that this piece of wood, being erected at the one which answers, may act as a lever, either on the sides of the articular heads of bones, or may make pressure direct on the heads along with the extension, according as it may suit to push inward or outward with the lever; and the lever may be either of a round or broad form, as may be judged proper; for sometimes the one form and sometimes the other suits with the articulation. This mode of applying the lever along with extension is applicable in the reduction of all dislocations of the thigh. In the case now on hand, a round lever is proper; but in dislocations outward a flat lever will be the suitable one. By means of such machines and of such powers, it appears to me that we need never fail in reducing any dislocation at a joint.

73. Εὐροι δ' ἂν τις καὶ ἄλλους τρόπους τούτου τοῦ ἄρθρου ἐμβολῆς εἰ γὰρ τὸ ξύλον τὸ μέγα τοῦτο ἔχει κατὰ μέσον καὶ ἐκ πλαγίων φλιάς δύο, ὡς ποδιαίας, ὕψος δὲ ὅπως ἂν δοκέει συμφέρειν, τὴν μὲν ἔνθεν, τὴν δὲ ἐνθεν, ἔπειτα ξύλον πλάγιον ἐνείη ἐν τῆσι φλιῆσιν ὡς κλιμακτῆρ, ἔπειτα διέρσαι τὸ ὑγιὲς σκέλος μεσηγὺ τῶν φλιέων, τὸ δὲ σιναρὸν ἄνωθεν τοῦ κλιμακτῆρος ἔχειν ἀρμόζον ἀπαρτὶ πρὸς τὸ ὕψος καὶ πρὸς τὸ ἄρθρον, ἧ ἔκπέπτωκεν ῥηϊδίον δὲ ἀρμόζειν τὸν γὰρ κλιμακτῆρα ὑψηλότερόν τινα χρῆ ποιέειν τοῦ μετρίου, καὶ ἰμάτιον πολύπτυχον, ὡς ἂν ἀρμόση, ὑποτείνειν ὑπὸ τὸ σῶμα. Ἐπειτα χρῆ ξύλον, ἔχον

πλάτος μέτριον καὶ μῆκος, ἄχρι τοῦ σφυροῦ ὑποτεταμένον ὑπὸ τὸ σκέλος εἶναι, ἰκνεόμενον ἐπέκεινα τῆς κεφαλῆς τοῦ μηροῦ ὡς οἶόν τε προσκαταδεδέσθαι δὲ

χρῆ πρὸς τὸ σκέλος, ὅπως ἂν μετρίως ἔχη. Κᾶπειτα κατατεινομένου τοῦ σκέλεος, εἴτε ξύλῳ. ὑπεροειδέϊ, εἴτε τουτέων τινὶ τῶν κατατάσιων, ὁμοῦ χρῆ καταναγκάζεσθαι τὸ σκέλος περὶ τὸν κλιμακτῆρα ἐς τὸ κάτω μέρος ξὺν τῷ ξύλῳ τῷ προσδεδεμένῳ τὸν δέ τινα κατέχειν τὸν ἄνθρωπον ἀνωτέρω τοῦ ἄρθρου κατὰ τὸ ἰσχίον. Καὶ γὰρ οὕτως ἅμα μὲν ἡ κατάτασις ὑπεραιωρέοι ἂν τὴν κεφαλὴν τοῦ μηροῦ ὑπὲρ τῆς κοτύλης, ἅμα δὲ ἡ μόχλευσις ἀπωθέοι τὴν κεφαλὴν τοῦ μηροῦ ἐς τὴν ἀρχαίην φύσιν. Αὗται πᾶσαι αἱ εἰρημέναι ἀνάγκαι ἰσχυραὶ, καὶ πᾶσαι κρέσσους τῆς ξυμφορῆς, ἣν τις ὀρθῶς καὶ καλῶς σκευάζῃ. Ὡσπερ δὲ καὶ πρόσθεν ἤδη εἴρηται, πούλύ τι ἀπὸ ἀσθενεστέρων κατατάσιων καὶ φαυλοτέρης κατασκευῆς τοῖσι πλείοσιν ἐμπίπτει.

73. And one might find out other modes of reduction for this joint. If the large bench were to have raised on it two posts about a foot ( *in diameter?* ), and of a suitable height, on each side near its middle, and if a transverse piece of wood like the step of a ladder, were inserted in the posts, then if the sound leg were carried through between the posts, and the injured limb were brought over the transverse piece of wood, which should be exactly adapted in height to the joint which is dislocated (and it is an easy matter so to adjust it, for the step of the ladder should be made a little higher than required, and a convenient robe, folded several times, is to be laid below the patient's body), then a piece of wood, of suitable breadth and length, is to be laid below the limb, and it should reach from the ankle to beyond the head of the thigh-bone, and should be bound moderately tight to the limb. Then the limb being extended, either by means of the pestle-like piece of wood (formerly described), or by any of the other methods of extension, the limb which is carried over the step with the piece of wood attached to it, is to be forced downward, while somebody grasps the patient above the hip-joint. In this manner the extension will carry the head of the thighbone above the acetabulum, while the lever power that is exercised will push the head of the thigh-bone into its natural seat. All the above-mentioned powers are strong, and more than sufficient to rectify the accident, if properly and skill-fully applied. For, as formerly stated, in most cases reduction may be effected by much weaker extension, and an inferior apparatus.

74. Ἦν δὲ ἐς τὸ ἔξω κεφαλὴν μηροῦ ὀλίσθη, τὰς μὲν κατατάσιας

ἔνθα καὶ ἔνθα χρῆ ποιέεσθαι, ὡσπερ εἴρηται, ἢ τοιουτοτρόπως τὴν δὲ μόχλευσιν πλάτος ἔχοντι μοχλῶ μοχλεύειν χρῆ ἅμα τῇ κατατάσει, ἐκ τοῦ ἔξω μέρους ἐς τὸ ἔσω ἀναγκάζοντα, κατὰ γε αὐτὸν τὸν γλουτὸν τιθέμενον τὸν μοχλὸν καὶ ὀλίγῳ ἀνωτέρω ἐπὶ δὲ τὸ ὑγιὲς ἰσχίον κατὰ τὸν γλουτὸν ἀντιστηρίζετω τις τῆσι χερσίν,

ὡς μὴ ὑπείκη τὸ σῶμα, ἢ ἑτέρῳ τινὶ τοιούτῳ μοχλῶ, ὑποβάλλον καὶ ἐρείσας, ἐκ τῶν καπέτων τὴν ἀρμόζουσαν ἀντικατεχέτω τοῦ δὲ μηροῦ τοῦ ἐξηρθρηκότος τὸ παρὰ τὸ γόνυ ἔσωθεν ἔξω παραγέτω ἡσύχως. Ἡ δὲ κρέμασις οὐχ ἀρμόσει τούτῳ τῷ τρόπῳ τῆς ὀλισθήσιος τοῦ ἄρθρου ὃ γὰρ πῆχυς τοῦ ἐκκρεμαμένου ἀπωθέοι ἂν τὴν κεφαλὴν τοῦ μηροῦ ἀπὸ τῆς κοτύλης. Τὴν μέντοι ζὺν τῷ ξύλῳ τῷ ὑποτεينوμένῳ μόχλευσιν μηχανήσαιτ' ἂν τις, ὥστε ἀρμόζειν καὶ τούτῳ τῷ τρόπῳ τοῦ ὀλισθήματος, ἔξωθεν προσαρτέων. Ἀλλὰ τί καὶ δεῖ πλείω λέγειν; ἦν γὰρ ὀρθῶς μὲν καὶ εὖ κατατείνηται, ὀρθῶς δὲ μοχλεύηται, τί οὐκ ἂν ἐμπέσοι ἄρθρον, οὕτως ἐκπεπτωκός;

74. If the head of the bone slip outward, extension and counter-extension must be made as described, or in a similar manner. But along with the extension a broad lever is to be used to force the bone from without inward, the lever being placed at the nates or a little farther up, and some person is to steady the patient's body, so that it may not yield, either by grasping him at the buttocks with his hands, or this may be effected by means of another similar lever, adjusted to one of the grooves, while the patient has something laid below him, and he is secured, and the dislocated thigh is to be turned gently from within outward at the knee. Suspension will not answer in this form of dislocation, for, in this instance, the arm of the person suspended from him, would push the head of the thigh-bone from the acetabulum. But one might use the piece of wood placed below him as a lever, in such a manner as might suit with this mode of dislocation; it must work from without. But what use is there for more words? For if the extension be well and properly done, and if the lever be properly used, what dislocation of the joint could occur, that might not be thus reduced?

75. Ἦν δὲ ἐς τοῦπισθεν μέρος ἐκπεπτώκη ὁ μηρὸς, τὰς

μὲν κατατάσιας καὶ ἀντιτάσιας οὕτω δεῖ ποιέεσθαι, καθάπερ εἴρηται ἐπιστορέσαντα δὲ ἐπὶ τὸ ξύλον ἱμάτιον πολύπτυχον, ὡς μαλακώτατον ἔη, πρηνέα κατακλίναντα τὸν ἄνθρωπον, οὕτω κατανείνειν ἅμα δὲ τῇ κατατάσει χρὴ τῇ σανίδι καταναγκάζειν τὸν αὐτὸν τρόπον ὡς τὰ ὑβώματα, κατ' ἴξιν τοῦ πυγαίου ποιησάμενον τὴν σανίδα, καὶ μᾶλλον ἐς τὸ κάτω μέρος, ἢ ἐς τὸ ἄνω τῶν ἰσχίων καὶ ἢ ἐντομή, ἢ ἐν τῷ τοίχῳ τῇ σανίδι, μὴ εὐθεῖα ἔστω, ἀλλ' ὀλίγον καταφερῆς πρὸς τὸ τῶν ποδῶν μέρος. Αὕτη ἢ ἐμβολὴ κατὰ φύσιν τε μάλιστα τῷ τρόπῳ τούτῳ τοῦ ὀλισθήματος ἐστὶ, καὶ ἅμα ἰσχυροτάτη. Ἀρκέσειε δ' ἂν ἴσως ἀντὶ τῆς σανίδος καὶ ἐφεζόμενόν τινα, ἢ τῆσι χερσὶν ἐρεισάμενον, ἢ ἐπιβάντα, ἐξαπίνης ἐπαιωρηθῆναι ἅμα τῇ κατατάσει. Ἄλλη δὲ οὐδεμίη ἐμβολὴ τῶν προειρημένων κατὰ φύσιν ἐστὶ τῷ τρόπῳ τούτῳ τοῦ ὀλισθήματος.

75. In dislocation of the thigh, backward, extension and counter-extension should be made as has been described; and having laid on the bench a cloth which has been folded several times, so that the patient may lie soft, he is to be laid on his face, and extension thus made, and, along with the extension, pressure is to be made with a board, as in the case of humpback, the board being placed on the region of the nates, and rather below than above the hip-joint; and the hole made in the wall for the board should not be direct over, but should be inclined a little downward, toward the feet. This mode of reduction is particularly appropriate to this variety of dislocation, and at the same time is very strong. But perhaps, instead of the board, it might be sufficient to have a person sitting ( *on the seat of luxation?* ), or pressing with his hands, or with his foot, and suddenly raising himself up, along with the extension. None of the other afore-mentioned modes of reduction are natural in this form of dislocation.

76. Ἦν δὲ ἐς τὸ ἔμπροσθεν ὀλίσθη, τῶν μὲν κατατασίων ὁ αὐτὸς τρόπος ποιητέος, ἄνδρα δὲ χρῆ ὡς ἰσχυρότατον ἀπὸ χειρῶν καὶ ὡς εὐπαιδευτότατον, ἐνερείσαντα τὸ θέναρ τῆς χειρὸς τῆς ἐτέρης παρὰ τὸν βουβῶνα, καὶ τῇ ἐτέρῃ χειρὶ τὴν ἐνωτοῦ χεῖρα προσκαταλαβόντα, ἅμα μὲν ἐς τὸ κάτω ὠθέειν τὸ

ὀλίσθημα, ἅμα δὲ ἐς τὸ ἔμπροσθεν τοῦ γούνατος μέρος. Οὗτος γὰρ ὁ τρόπος τῆς ἐμβολῆς μάλιστα κατὰ φύσιν τούτῳ τῷ ὀλισθήματι ἐστίν. Ἀτὰρ καὶ ὁ κρεμασμὸς ἐγγύς τι τοῦ κατὰ φύσιν δεῖ μέντοι τὸν ἐκκρεμάμενον ἔμπειρον εἶναι, ὡς μὴ ἐκμοχλεύῃ τῷ πῆχει τὸ ἄρθρον, ἀλλὰ περὶ μέσον τὸν περίνεον καὶ κατὰ τὸ ἱερόν ὁστέον τὴν ἐκκρέμασιν ποιέηται.

76. In dislocation forward, the same mode of extension should be made; but a person who has very strong hands, and is well trained, should place the palm of the one hand on the groin, and taking hold of this hand with the other, is at the same time to push the dislocated part downward, and at the same time to the fore part of the knee. This method of reduction is most especially conformable to this mode of dislocation. And the mode of suspension is also not far removed from being natural, but the person suspended should be well trained, so that his arm may not act as a lever upon the joint, but that the force of the suspension may act about the middle of the perineum, and at the os sacrum.

77. Εὐδοκιμέει δὲ δὴ καὶ ἀσκῶ τοῦτο τὸ ἄρθρον ἐμβάλλεσθαι καὶ ἤδη μὲν τινὰς εἶδον, οἵτινες ὑπὸ φαυλότητος καὶ τὰ ἔξω ἐκκεκλιμένα καὶ τὰ ὀπισθεν ἀσκῶ ἐπειρῶντο ἐμβάλλειν, οὐ γινώσκοντες, ὅτι ἐξέβαλλον αὐτὸ μᾶλλον, ἢ ἐνέβαλλον ὁ μὲντοι πρῶτος ἐπινοήσας δῆλον ὅτι πρὸς τὰ ἔσω ὠλισθηκότα, ἀσκῶ ἐμβάλλειν



ἐπειρήσατο. Ἐπίστασθαι μὲν οὖν χρῆ, ὡς χρηστέον ἀσκῶ, εἰ δέοι χρέεσθαι, διαγινώσκειν δὲ χρῆ, ὅτι ἕτερα πολλὰ ἀσκοῦ κρέσσω ἐστὶν χρῆ δὲ τὸν μὲν ἀσκὸν κατατιθέναι ἐς τοὺς μηροὺς ἀφύσητον ἐόντα, ὡς ἂν δύναιτο, ἀνωτάτω πρὸς τὸν περίνεον ἀνάγοντα ἀπὸ δὲ τῶν ἐπιγουνίδων ἀρξάμενον, ταινίη πρὸς ἀλλήλους τοὺς μηροὺς καταδῆσαι ἄχρι τοῦ ἡμίσεος τῶν μηρῶν ἔπειτα ἐς ἓνα τῶν ποδῶν, τὸν λελυμένον, ἐνθέντα αὐλὸν ἐκ χαλκείου, φῦσαν ἐσαναγκάζειν ἐς τὸν ἀσκὸν τὸν δὲ ἄνθρωπον

πλάγιον κατακέεσθαι. τὸ σιναρὸν σκέλος ἐπιπολῆς ἔχοντα. Ἡ μὲν οὖν παρασκευὴ αὕτη ἐστὶν σκευάζονται δὲ κάκιον οἱ πλειῖστοι, ἢ ὡς ἐγὼ εἴρηκα οὐ γὰρ καταδέουσι τοὺς μηροὺς ἐπὶ συχνὸν, ἀλλὰ μῶνον τὰ γούνατα. οὐδὲ κατατείνουσι, χρῆ δὲ καὶ προσκατατείνειν ὅμως δὲ ἤδη τινὲς ἐνέβαλον, ῥηϊδίου πρήγματος ἐπιτυχόντες. Εὐφόρως δὲ οὐ πάνυ ἔχει διαναγκάζεσθαι οὕτως ὅ τε γὰρ ἀσκὸς, ἐμφυσώμενος, οὐ τὰ ὀγκηρότατα αὐτοῦ ἔχει πρὸς τῷ ἄρθρῳ τῆς κεφαλῆς, ἢν δεῖ μάλιστα ἐκμοχλεύσασθαι, ἀλλὰ κατὰ ἐωυτὸν αὐτὸς μέσος, καὶ τῶν μηρῶν ἴσως ἢ κατὰ τὸ μέσον ἢ ἔτι κατωτέρω οἱ τε αὖ μῆροι φύσει γαυσοὶ πεφύκασιν, ἄνωθεν γὰρ σαρκώδεές τε καὶ ζύμμηροι, ἐς δὲ τὸ κάτω ὑπόξηροι, ὥστε καὶ ἡ τῶν μηρῶν φύσις ἀπαναγκάζει τὸν ἀσκὸν ἀπὸ τοῦ ἐπικαιροτάτου χωρίου. Εἴ τε οὖν τις μικρὸν ἐνθήσει τὸν ἀσκὸν, μικρὴ ἢ ἰσχὺς ἐοῦσα ἀδύνατος ἔσται ἀναγκάζειν τὸ ἄρθρον. Εἰ δὲ δεῖ ἀσκῶ χρέεσθαι, ἐπὶ πούλῳ οἱ μῆροι ξυνδετέοι πρὸς ἀλλήλους, καὶ ἅμα τῇ κατατάσει τοῦ σώματος ὁ ἀσκὸς φυσητέος τὰ δὲ σκέλεα ἀμφοτέρα ὁμοῦ καὶ καταδέειν ἐν τούτῳ τῷ τρόπῳ τῆς ἐμβολῆς ἐπὶ τὴν τελευτήν.

77. Reduction by the bladder is also celebrated in dislocations at this joint, and I have seen certain persons who, from ignorance, attempted to reduce both dislocations outward and backward therewith, not knowing that they were rather displacing than replacing the parts; it is clear, however, that he who first invented this method intended it for dislocation inward. It is proper, then, to know how the bladder should be used, if it is to be used, and it should be understood that many other methods are more powerful than it. The bladder should be placed between the thighs uninflated, so that it may be carried as far up the perineum as possible, and the thighs beginning at the patella are to be bound together with a swathe, as far up as the middle of the thigh, and then a brass pipe is to be introduced into one of the loose feet of the bladder, and air forced into it, the patient is to lie on his side with the injured limb uppermost. This, then, is the preparation; some, however, do the thing worse than as I have described, for they do not bind the thighs together to any extent, but only at the knees, neither do they make extension, whereas extension should be made, and yet some people

by having the good fortune to meet with a favorable case, have succeeded in making reduction. But it is not a convenient method of applying force, for the bladder, when inflated, does not present its most prominent part to the articular extremity of the femur, which is the place that ought to be more especially pressed outward, but its middle, which probably corresponds with the middle of the thigh, or still lower down, for the thighs are naturally curved, being fleshy, and in contact above, and becoming smaller downward, so that the natural configuration of the parts forces the bladder from the most proper place. And if a small bladder be introduced, its power will be small, and unable to overcome the resistance of the articular bone. But if the bladder must be used, the thighs are to be bound together to a considerable extent, and the bladder is to be inflated along with the extension of the body, and in this method of reduction both legs are to be bound together at their extremity.

78. Χρή δὲ περὶ πλείστου μὲν ποιέεσθαι ἐν πάσῃ τῇ τέχνῃ, ὅπως ὑγιᾶς μὲν ποιήσεις τὸ νοσέον εἰ δὲ πολλοῖσι τρόποισιν οἷόν τε εἶη ὑγιᾶς ποιέειν, τὸν ἀοχλότατον χρὴ αἰρέεσθαι καὶ γὰρ ἀνδραγαθικώτερον τοῦτο καὶ τεχνικώτερον, ὅστις μὴ ἐπιθυμῆει δημοειδέος κιβδηλίας. Περὶ οὗ οὖν ὁ λόγος ἐστὶ, τοιαῖδε ἄν τινες κατοικίδιοι κατατάσεις εἶεν τοῦ σώματος, ὥστε ἐκ τῶν παρεόντων τὸ εὖπορον εὐρίσκειν τοῦτο μὲν, εἰ τὰ δεσμὰ τὰ ἱμάντινα μὴ παρείη τὰ μαλθακὰ καὶ προσηνέα, ἀλλ' ἢ σιδήρεα, ἢ ὄπλα, ἢ σχοινία, ταινίησι χρὴ ἢ ἐκρήγμασι τρυχίων ἐρινεῶν περιελίσσειν ταύτη μάλιστα, ἢ μέλλει τὰ δεσμὰ καθέξειν, καὶ ἔτι ἐπὶ πλέον ἔπειτα οὕτω δεῖν τοῖσι δεσμοῖσιν τοῦτο δὲ, ἐπὶ κλίνης χρὴ, ἥτις ἰσχυροτάτη καὶ μεγίστη τῶν παρεουσέων, κατατ ετάσθαι καλῶς τὸν ἄνθρωπον τῆς δὲ κλίνης τοὺς πόδας, ἢ τοὺς πρὸς κεφαλῆς, ἢ τοὺς πρὸς ποδῶν, ἐρηρεῖσθαι πρὸς τὸν οὐδὸν, εἴ τε ἔξωθεν ζυμφέρει, εἴτε ἔσωθεν παρὰ δὲ τοὺς ἑτέρους πόδας παρεμβεβληῖσθαι ξύλον τετράγωνον, πλάγιον, διῆκον ἀπὸ τοῦ ποδὸς πρὸς τὸν πόδα, καὶ ἦν μὲν λεπτὸν ἔη τὸ ξύλον, προσδεδέσθω πρὸς τοὺς πόδας τῆς κλίνης, ἦν δὲ παχὺ ἔη, μηδέν ἔπειτα τὰς ἀρχὰς χρὴ τῶν δεσμῶν, καὶ τῶν πρὸς τῆς κεφαλῆς, καὶ τῶν πρὸς

τῶν ποδῶν, προσδεῖσθαι ἑκατέρας πρὸς ὕπερον, ἢ πρὸς ἄλλο τι τοιοῦτον ξύλον ὁ δὲ δεσμὸς ἐχέτω ἰθωρίην κατὰ τὸ σῶμα, ἢ καὶ ὀλίγον ἀνωτέρω, ζυμμέτρως δὲ ἐκτετάσθω πρὸς τὰ ὕπερα, ὡς, ὀρθὰ ἐστεῶτα, τὸ μὲν παρὰ τὸν οὐδὸν ἐρείδεται, τὸ δὲ παρὰ τὸ ξύλον τὸ παραβεβλημένον κᾶπειτα οὕτω τὰ ὕπερα ἀνακλῶντα χρὴ τὴν κατάτασιν ποιέειν. Ἀρκέει δὲ καὶ κλίμαξ ἰσχυροὺς ἔχουσα τοὺς κλιμακτῆρας, ὑποτεταμένη ὑπὸ τὴν κλίνην, ἀντὶ τοῦ οὐδοῦ τε καὶ τοῦ ξύλου τοῦ παρατεταμένου, ὡς τὰ ὕπερα, πρὸς τῶν κλιμακτῆρων τοὺς ἀρμόζοντας ἔνθεν καὶ ἔνθεν προσερηρισμένα, ἀνακλῶμενα, οὕτω τὴν κατάτασιν ποιέηται τῶν

δεσμῶν. Ἐμβάλλεται δὲ μηροῦ ἄρθρον καὶ τόνδε τὸν τρόπον, ἣν ἐς τὸ ἔσω ὠλισθήκη καὶ ἐς τὸ ἔμπροσθεν κλίμακα χρῆ καταρύζαντα, ἐπικαθίσει τὸν ἄνθρωπον, ἔπειτα τὸ μὲν ὑγιὲς σκέλος ἡσυχῶς κατατείναντα προσδῆσαι, ὅκου ἂν ἀρμόση, ἐκ δὲ τοῦ σιναροῦ ἐς κεράμιον ὕδωρ ἐγγέαντα ἐκκρεμάσαι ἢ ἐς σφυρίδα λίθους ἐμβαλόντα. Ἔτερος τρόπος ἐμβολῆς ἣν ἐς τὸ ἔσω

ὠλισθήκη, στρωτῆρα χρῆ διαδῆσαι μεταξὺ δύο στύλων, ὕψος ἔχοντα σύμμετρον προεχέτω δὲ τοῦ στρωτῆρος κατὰ τὸ ἐν μέρος δκόσον τὸ πυγαῖον περιδήσας δὲ περὶ τὸ στῆθος τοῦ ἀνθρώπου ἱμάτιον, ἐπικαθίσει τὸν ἄνθρωπον ἐπὶ τὸ προέχον τοῦ στρωτῆρος εἶτα προσλαβεῖν τὸ στῆθος πρὸς τὸν στύλον πλατέϊ τινὶ ἔπειτα τὸ μὲν ὑγιὲς σκέλος κατεχέτω τις, ὡς μὴ περισφάλληται ἐκ δὲ τοῦ σιναροῦ ἐκκρεμάσαι βάρος, ὅσον ἂν ἀρμόζη, ὡς καὶ πρόσθεν ἤδη εἴρηται.

78. The prime object of the physician in the whole art of medicine should be to cure that which is diseased; and if this can be accomplished in various ways, the least troublesome should be selected; for this is more becoming a good man, and one well skilled in the art, who does not covet popular coin of base alloy. With regard to the subject now on hand, the following are domestic means of making extension of the body, so that it is easy to choose from among the things at hand:-In the first place, when soft and supple thongs are not at hand for ligatures, either iron chains, or cords, or cables of ships, are to be wrapped round with scarfs or pieces of woollen rags, especially at the parts of them which are to be applied, and in this state they are to be used as bands. In the second place, the patient is to be comfortably laid on the strongest and largest couch that is at hand, and the feet of the couch, either those at the (*patient's?*) head, or those at the feet, are to be fastened to the threshold, either within or without, as is most suitable; and a square piece of wood is to be laid across, and extending from the one foot to the other; and if this piece of wood be slender, it should be bound to the feet of the couch, but, not withstanding, if it be thick, there will be no necessity for this; then the heads of the ligatures, both of those at the head and those at the feet, are to be fastened to a pestle, or some such piece of wood, difficult to reduce at either end; the ligatures should run along the line of the body, or be a little elevated above it, and it should be stretched proportionally to the pestles, so that, standing erect, the one may be fastened to the threshold, and the other to the transverse piece of wood. Extension is then to be made by bending back the ends of the pestles. A ladder, having strong steps, if laid below the bed, will serve the purpose of the threshold and the piece of wood laid along (*the foot of the couch?*), as the pestles can be fastened to the steps at either end, and when drawn back they thus make extension of the ligatures. Dislocation,

inward or forward, may be reduced in the following manner: a ladder is to be fastened in the ground, and the man is to be seated upon it, and then the sound leg is to be gently stretched along and bound to it, wherever it is found convenient; and water is to be poured into an earthen vessel, or stones put into a hamper and slung from the injured leg, so as to effect the reduction. Another mode of reduction: a cross-beam is to be fastened between two pillars of moderate height; and at one part of the cross-beam there should be a protuberance proportionate to the size of the nates; and having bound a coverlet round the patient's breast, he is to be seated on the protuberant part of the cross-beam, and afterward the breast is to be fastened to the pillar by some broad ligature; then some one is to hold the sound leg so that he may not fall off, and from the injured limb is to be suspended some convenient weight, as formerly described.

79. Πρῶτον μὲν οὖν δεῖ εἰδέναι, ὅτι πάντων τῶν ὀστέων αἱ ζυμβολαί εἰσιν ὡς ἐπὶ πουλὺ ἢ κεφαλὴ καὶ ἡ κοτύλη ἐφ' ὧν δὲ καὶ ἡ χώρα κοτυλοειδῆς καὶ ἐπίμακρος ἔναι δὲ τῶν χωρέων γληνοειδέες εἰσίν. Ἄει δὲ ἐμβάλλειν δεῖ πάντα τὰ ἐκπίπτοντα ἄρθρα, μάλιστα μὲν εὐθὺς παραχρῆμα ἔτι θερμῶν ἐόντων εἰ δὲ μὴ, ὡς τάχιστα καὶ γὰρ τῷ ἐμβάλλοντι ῥῆϊτερον καὶ θᾶσσόν ἐστιν ἐμβαλεῖν, καὶ τῷ ἀσθενέοντι πουλὺ ἀπονωτέρη ἢ ἐμβολή, ἢ πρὶν διοιδεῖν, ἐστιν. Δεῖ δὲ ἀει πάντα τὰ ἄρθρα, ὁκόταν μέλλης ἐμβάλλειν, προαναμαλάξαι καὶ διακιγκλίσαι ῥᾶον γὰρ ἐθέλει

ἐμβάλλεσθαι. Παρὰ πάσας δὲ τὰς τῶν ἄρθρων ἐμβολὰς ἰσχυαίνειν δεῖ τὸν ἄνθρωπον, μάλιστα μὲν περὶ τὰ μέγιστα ἄρθρα καὶ χαλεπώτατα ἐμβάλλεσθαι, ἥκιστα δὲ περὶ τὰ ἐλάχιστα καὶ ῥῆϊδια.

79. It should be particularly known that the union of all bones is, for the most part, by a head and socket ( *cotyle* ); in some of these the place ( *socket?* ) is cotyloid and oblong, and in some the socket is glenoid ( *shallow?* ). In all dislocations reduction is to be effected, if possible, immediately, while still warm, but otherwise, as quickly as it can be done; for reduction will be a much easier and quicker process to the operator, and a much less painful one to the patient, if effected before swelling comes on. But all the joints when about to be reduced should be first softened, and gently moved about; for, thus they are more easily reduced. And, in all cases of reduction at joints, the patient must be put on a spare diet, but more especially in the case of the greatest joints, and those most difficult to reduce, and less so in those which are very small and easily reduced.

80. Δακτύλων δὲ ἦν ἐκπέση ἄρθρον τι τῶν τῆς χειρὸς, ἦν τε τὸ πρῶτον, ἦν τε τὸ δεύτερον, ἦν τε τὸ τρίτον, οὗτος καὶ ἴσος τρόπος τῆς ἐμβολῆς χαλεπώτερα μέντοι αἰεὶ τὰ μέγιστα τῶν ἄρθρων ἐμβάλλειν. Ἐκπίπτει δὲ κατὰ τέσσαρας τρόπους, ἢ ἄνω, ἢ κάτω, ἢ ἐς τὸ πλάγιον ἐκατέρωθεν, μάλιστα μὲν ἐς τὸ ἄνω, ἥκιστα δὲ ἐς τὰ πλάγια, ἐν τῷ σφόδρα κινέεσθαι. Ἐκατέρωθεν δὲ τῆς χώρας, οὗ ἐκβέβηκεν, ὥσπερ ἄμβη ἐστίν. Ἦν μὲν οὖν ἐς τὸ ἄνω ἐκπέση ἢ ἐς τὸ κάτω διὰ τὸ λειοτέραν εἶναι ταύτην τὴν χώραν, ἢ ἐκ τῶν πλαγίων, καὶ ἅμα μικρῆς ἐούσης τῆς ὑπερβάσιος, ἦν μεταστῆ τὸ ἄρθρον, ῥηϊδίον ἐστὶν ἐμβάλλειν. Τρόπος δὲ τῆς ἐμβολῆς ὅδε περιελίξαι τὸν δάκτυλον ἄκρον ἢ ἐπιδέσματί τι ἢ ἄλλω τρόπῳ τοιούτῳ τινί, ὅπως, ὀκόταν κατατείνης ἄκρου λαβόμενος, μὴ ἀπολισθάνη ὅταν δὲ περιελίξῃς, τὸν μὲν τινα διαλαβέσθαι ἄνωθεν τοῦ καρποῦ τῆς χειρὸς, τὸν δὲ τοῦ κατελημμένου ἔπειτα κατατείνειν πρὸς ἐωυτὸν ἀμφοτέρους εὖ μάλα, καὶ ἅμα ἀπῶσαι τὸ ἐξεστηκὸς ἄρθρον ἐς τὴν χώραν. Ἦν δὲ ἐς τὰ πλάγια ἐκπέση, τῆς μὲν κατατάσιος οὗτος τρόπος ὅταν δὲ δὴ δοκέῃ σοι ὑπερβεβηκέναι τὴν γραμμὴν, ἅμα χρὴ κατατείναντας ἀπῶσαι ἐς τὴν χώραν εὐθύς, ἕτερον δὲ τινα ἐκ τοῦ ἑτέρου μέρους τοῦ δακτύλου φυλάσσειν καὶ ἀνωθέειν, ὅπως μὴ πάλιν ἐκεῖθεν ἀπολίσθη. Ἐμβάλλουσι δὲ ἐπιεικέως

καὶ αἰ σαῦραι αἰ ἐκ τῶν φοινίκων πλεκόμεναι, ἦν κατατείνης ἔνθεν καὶ ἔνθεν τὸν δάκτυλον, λαβόμενος τῇ μὲν ἑτέρῃ τῆς σαύρης, τῇ δὲ ἑτέρῃ τοῦ καρποῦ τῆς χειρὸς. Ὀκόταν δὲ ἐμβάλλῃς, ἐπιδεῖν δεῖ ὀθονίοισιν ὡς τάχιστα, λεπτοτάτοισι, κεκηρωμένοισι κηρωτῇ μήτε λίην μαλακῇ μήτε λίην σκληρῇ, ἀλλὰ μετρίως ἐχούση ἢ μὲν γὰρ σκληρῇ ἀφέστηκεν ἀπὸ τοῦ δακτύλου, ἢ δὲ ἀπαλῇ καὶ ὑγρῇ διατήκεται καὶ ἀπόλλυται, θερμαινομένου τοῦ δακτύλου λύειν δὲ ἄρθρον δακτύλου τριταῖον ἢ τεταρταῖον τὸ δὲ ὅλον, ἦν μὲν φλεγμῆν, πυκνότερον λύειν, ἦν δὲ μὴ, ἀραιότερον κατὰ πάντων δὲ τῶν ἄρθρων ταῦτα λέγω. Καθίσταται δὲ τοῦ δακτύλου τὸ ἄρθρον τεσσαρεσκαίδεκαταῖον. Ὁ αὐτὸς δὲ ἐστὶ θεραπείης τρόπος δακτύλων χειρὸς τε καὶ ποδός.

80. If any joint of the fingers is dislocated, whether the first, second, or the third, the same method of reduction is to be applied, but the largest joints are the most difficult to reduce. There are four modes of displacement-either upward, downward, or to either side; most commonly upward, and most rarely laterally, and in consequence of violent motion. On both sides of its articular cavity there is a sort of raised border. When the dislocation is upward or downward, owing to the articular cavity having smoother edges there than at the sides, if the joint of it be dislocated, it is more easily reduced. This is the mode of reduction:-The end of the finger is to be wrapped round with a fillet, or something such, that, when you lay hold of it and make extension, it will not slip; and when this is done,

some person is to grasp the arm at the wrist, and another is to take hold of the finger which is wrapped in the fillet, and then each is to make considerable extension toward himself, and at the same time the projecting bone is to be pushed into its place. But, if the dislocation be lateral, the same mode of reduction is to be used; but when you think that the extremity of the bone has cleared the rim, at the same time that extension is made, the bone is to be pushed direct into its place, while another person on the other side of the finger is to take care and make counter-pressure, so that it may not again slip out there. The twisted nooses formed from palm-shoots are convenient for effecting reduction, if you will make extension and counter-extension by holding the twisted string in the one hand and the wrist in the other. When reduced, you must bind the part as quickly as possible with bandages; these are to be very slender and waxed with cerate, neither very soft nor very hard, but of middle consistence; for that which is hard drops off from the finger, while that which is soft and liquid is melted and lost by the increased heat of the finger. The bandage is to be loosed on the third or fourth day; but on the whole, if inflamed, it is to be the more frequently loosed, and if otherwise, more rarely; this I say respecting all the joints. The articulation of a finger is restored in fourteen days. The treatment of the fingers and of the toes is the same.

81. Παρὰ πάσας δὲ τὰς τῶν ἄρθρων ἐμβολὰς δεῖ ἰσχυραίνειν καὶ λιμαγχνόειν ἄχρι ἐβδόμης καὶ εἰ μὲν φλεγμαῖνοι, πυκνότερον λύειν, εἰ δὲ μὴ, ἀραιότερον ἠσυχίην δὲ δεῖ ἔχειν ἀεὶ τὸ πονέον ἄρθρον, καὶ ὡς κάλλιστα ἐσηματισμένον κέεσθαι.

81. After all reductions of joints the patient should be confined to a restricted diet and abstinence until the seventh day; and if there be inflammation, the bandages are to be the more frequently loosed, but otherwise, less frequently, and the pained joint is to be kept constantly in a state of rest, and is to be laid in the most convenient position possible.

82. Γόνυ δὲ εὐηθέστερον ἀγκῶνος διὰ τὴν εὐσταλίην καὶ τὴν εὐφυΐην, διὸ καὶ ἐκπίπτει καὶ ἐμπίπτει ῥᾶον ἐκπίπτει δὲ πλειστάκις ἔσω, ἀτὰρ καὶ ἔξω καὶ ὀπισθεν. Ἐμβολαὶ δὲ, ἐκ

τοῦ ξυγκεκάμφθαι ἢ ἐκλακτίσαι ὀξέως, ἢ ξυνελίξας ταινίης ὄγκον, ἐν τῇ ἰγνυΐθει, ἀμφὶ τοῦτον ἐξαίφνης ἐς ὄκλασιν ἀφιέναι τὸ σῶμα. Δύναται δὲ καὶ κατατεινόμενον μετρίως, ὥσπερ ἀγκῶν, ἐμπίπτειν, τὰ ὀπισθεν τὰ δὲ ἔνθα ἢ ἔνθα, ἐκ τοῦ ξυγκεκάμφθαι, ἢ ἐκλακτίσαι, ἀτὰρ καὶ ἐκ κατατάσιος μετρίης. Ἡ διόρθωσις ἅπασι κοινή. Ἦν δὲ μὴ ἐμπέση, τοῖσι μὲν ὀπισθεν, ξυγκάμπτειν οὐ

δύνανται, ἀτὰρ οὐδὲ τοῖσιν ἄλλοισι πάνυ μινύθει δὲ μηροῦ καὶ κνήμης τοῦμπροσθεν ἦν δὲ ἐς τὸ ἔσω, βλαισότεροι, μινύθει δὲ τὰ ἔξω ἦν δὲ ἐς τὸ ἔξω, γαυσότεροι, χωλοὶ δὲ ἦσσαν, κατὰ γὰρ τὸ παχύτερον ὀστέον ὀχέει, μινύθει δὲ τὰ ἔσω, Ἐκ γενεῆς δὲ καὶ ἐν αὐξήσει κατὰ λόγον τὸν πρόσθεν.

82. Accidents at the knee are more mild than at the elbow, from its being compact, regular, and elegant in its construction; and, therefore, it is more readily dislocated and reduced. It is most frequently dislocated inward, but also outward and backward. The modes of reduction are these: by flexion at the knee, or by sudden calcitration, or having rolled a swathe into a ball, and fixed it in the ham, the patient's body is to be suddenly dropped on its bended knees. Dislocation backward, also, as in the case of the elbow, may be reduced by moderate extension, and to either side, either by flexion or calcitration, but also by moderate extension. The adjustment is the same in all cases. In dislocations backward which are not reduced, the patient cannot bend the joint, but neither can he, to any great extent, in the other varieties; the thigh and leg are wasted in front; but if inward the patients become bow-legged, and the external parts are wasted; but if outward they become more bandy-legged, but the impediment is less, for the body is supported on the larger of the bones, and the inner parts are wasted. When these accidents happen at birth or during adolescence, they follow the rule formerly stated.

83. Τὰ δὲ κατὰ τὰ σφυρὰ, κατατάσιος ἰσχυρῆς δέεται, ἢ τῆσι χερσίν, ἢ ἄλλοισι τοιούτοις, κατορθώσιος δὲ ἅμα ἀμφοτέρα ποιεύσης κοινὸν δὲ τοῦτο ἅπασιν.

83. Dislocations at the ankle-joints require strong extension, either with the hands or some such means; and adjustment, which at the same time effects both purposes, as is common in all cases.

84. Τὰ δὲ ἐν ποδὶ, ὡς καὶ τὰ ἐν χειρὶ, ὑγιέες.

84. Injuries of the foot are to be remedied like those of the hand.

85. Τὰ δὲ τῆς κνήμης ξυγκοινωνέοντα, καὶ ἐκπεσόντα ἐκ γενεῆς, ἢ καὶ ἐν αὐξήσει ἐξarthήσαντα, ταῦτ' ἅ καὶ ἐν χειρὶ.

85. The bones connected with the leg, and which are dislocated, either at birth or during adolescence, follow the same course as those in the hand.

86. Ὀκόσοι δὲ πηδήσαντες ἄνωθεν ἐστηρίζαντο τῇ πτέρνῃ, ὥστε διαστῆναι τὰ

ὄστέα, καὶ φλέβας ἐκχυμωθῆναι, καὶ νεῦρα ἀμφιφλασθῆναι, ὁκόταν γένηται οἷα τὰ δεινὰ, κίνδυνος μὲν σφακελίσαντα τὸν αἰῶνα πρήγματα παρασχεῖν ροιῶδη μὲν γὰρ τὰ ὄστέα, τὰ δὲ νεῦρα ἀλλήλοισι κοινωνέοντα. Ἐπεὶ καὶ οἷσιν ἂν μάλιστα κατεηγείσιν, ἢ ὑπὸ τρώματος ἢ ἐν κνήμη, ἢ ἐν μηρῶ, ἢ νεύρων ἀπολυθέντων, ἃ κοινωνεῖ τούτων, ἢ ἐκ κατακλίσιος ἀμελέος ἐμελάνθη πτέρνη, καὶ τούτοισι τὰ παλιγκοτέοντα ἐκ τῶν τοιούτων. Ἔστιν ὅτε καὶ πρὸς τῷ σφακελισμῷ γίνονται πυρετοὶ ὀξέες, λυγμώδεις, γνώμης ἀπτόμενοι, ταχυθάνατοι, καὶ ἔτι φλεβῶν αἱμορροιέων πελιώσεις. Σημήϊα δὲ τῶν παλιγκοτησάντων, ἦν τὰ ἐκχυμώματα καὶ τὰ μελάσματα καὶ τὰ περὶ ταῦτα ὑπόσκληρα καὶ ὑπέρυθρα ἦν τε ζὺν σκληρύσματι πελιδνωθῆ, κίνδυνος μελανθῆναι

ἦν δὲ ὑποπέλια ἦ, ἢ καὶ πέλια μάλα καὶ ἐκκεχυμωμένα, ἢ ὑπόχλωρα καὶ μαλακὰ, ταῦτα ἐπὶ πᾶσι τοῖσι τοιούτοισιν ἀγαθὰ. Ἴησις, ἦν μὲν ἀπύρετος ἔη, ἐλλέβορον ἦν δὲ μὴ, μὴ ἀλλὰ ποτὸν ὀξύλυκυ, εἰ δέοι. Ἐπίδεσις δὲ, ἄρθρων ἐπὶ δὲ πάντα, μᾶλλον τοῖσι φλάσμασιν, ὀθονίοισι πλείοσι καὶ μαλθακωτέοισιν πίεξις ἦσσον προσπεριβάλλειν δὲ τὰ πλεῖστα τῇ πτέρνη. Τὸ σχῆμα, ὅπερ ἢ ἐπίδεσις, ὡς μὴ ἐς τὴν πτέρνην ἀποπιέζεται. Νάρθηξι δὲ μὴ χρέεσθαι.

86. When persons jumping from a height pitch on the heel, so as to occasion separation ( *diastasis* ) of the bones, ecchymosis of the veins, and contusion of the nerves; when these symptoms are very violent there is danger of sphacelus, and that the case may give trouble during life, for the bones are so constructed as to slip from one another, and the nerves communicate together. And, indeed, in cases of fracture, either from an injury in the leg or thigh, or in paralysis of the nerves ( *tendons?* ) connected with these parts, or from neglect during confinement to bed, when the heel gets blackened the most serious consequences result therefrom. Sometimes, in addition to the sphacelus, there come on acute fevers accompanied with hiccup, aberration of intellect, and speedy death, with lividities of the large blood-vessels. With regard to the symptoms attending exacerbations, if the ecchymosed and blackened parts and those around be somewhat hard and red, and if along with the hardness there be lividity, mortification is to be apprehended; but if the parts be slightly livid, or even very livid, and the swelling diffused, or if greenish and soft, these appearances, in such cases, are all favorable. The treatment, if no fever be present, consists in the administration of hellebore, but otherwise (it is not to be given, but *oxyglyky* ( *decoction of honeycombs and vinegar* ) is to be given for drink, if required. Bandaging as in the other articulations: above all, more especially in contusions, the bandages should be numerous and softer than usual, but the compression



should be less; most turns should be made around the heel. Position, like the bandaging, should be so regulated as not to determine to the heel. Splints are not to be used.

87. Οἷσι δ' ἂν ἐκβῆ ὁ πούς ἢ αὐτὸς, ἢ ζὺν τῇ ἐπιφύσει, ἐκπίπτει μὲν μᾶλλον ἐς τὸ ἔσω. Ἦν δὲ μὴ ἐμπέση, λεπτύνεται ἀνὰ χρόνον τό τε ἰσχίον καὶ ὁ μηρὸς καὶ κνήμη τὸ ἀντίον τοῦ ὀλισθήματος. Ἐμβολὴ δὲ ἄλλη, ὥσπερ καρποῦ, κατάτασις δὲ ἰσχυρή. Ἰησις δὲ, νόμος ἄρθρων. Παλιγκοτέει, ἦσσον δὲ καρποῦ, ἦν ἡσυχάσωσιν. Δίαιτα μείων, ἐλινύουσιν. Τὰ δὲ ἐκ γενεῆς ἢ ἐν αὐξήσει, κατὰ λόγον τὸν πρότερον.

87. When the foot is dislocated, either alone or along with its epiphysis, the displacement is, for the most part, to the inside. If not reduced, in the course of time, the hip, the thigh, and the side of the leg opposite the dislocation, become atrophied. Reduction is the same as in the wrist, but the extension requires to be very powerful. Treatment, agreeably to the general rule for joints. Exacerbations do occur, but less frequently than in dislocations at the wrist, provided the parts get rest. While they remain at rest the diet should be restricted. Those which occur at birth, or during adolescence, follow the rule formerly stated.

## ON FRACTURES - Περί ἀγμῶν

1. Ἐχρῆν τὸν ἰητρὸν τῶν ἐκπτώσιων τε καὶ κατηγμάτων ὡς ἰθυτάτας τὰς κατατάσας ποιέεσθαι αὕτη γὰρ ἡ δικαιοτάτη φύσις. Ἦν δέ τι ἐγκλίνη ἢ τῆ ἢ τῆ, ἐπὶ τὸ πρηνὲς ῥέπειν ἐλάσσων γὰρ ἡ ἀμαρτὰς ἢ ἐπὶ τὸ ὕπτιον. Οἱ μὲν οὖν μηδὲν προβουλεύσαντες οὐδὲν ἐξαμαρτάνουσιν ὡς ἐπὶ τὸ πούλυ αὐτὸς γὰρ ὁ ἐπιδεόμενος τὴν χεῖρα ἀπορέγει, οὕτως

ὑπὸ τῆς δικαίης φύσιος ἀναγκαζόμενος οἱ δὲ ἰητροὶ σοφίζόμενοι δῆθεν ἐστὶν οἱ ἀμαρτάνουσιν. Σπουδὴ μὲν οὐ πολλὴ χεῖρα κατεαγυῖαν χειρίσαι, καὶ παντὸς δὲ ἰητροῦ, ὡς ἔπος εἰπεῖν ἀναγκάζομαι δ' ἐγὼ πλείω γράφειν περὶ αὐτέου, ὅτι οἶδα ἰητροὺς σοφοὺς δόξαντας εἶναι ἀπὸ σχημάτων χειρὸς ἐν ἐπιδέσει, ἀφ' ὧν ἀμαθίας αὐτέους ἐχρῆν δοκέειν εἶναι. Ἄλλα γὰρ πολλὰ οὕτω ταύτης τῆς τέχνης κρίνεται τὸ γὰρ ξενοπρεπὲς οὕπω ξυνιέντες εἰ χρηστὸν, μᾶλλον ἐπαινεοῦσιν, ἢ τὸ ξύνηθες, ὃ ἤδη οἶδασιν ὅτι χρηστὸν, καὶ τὸ ἀλλόκοτον, ἢ τὸ εὐδηλον. Ῥητέον οὖν ὀκόσας ἐθέλω τῶν ἀμαρτάδων τῶν ἰητρῶν, τὰς μὲν ἀποδιδάξαι, τὰς δὲ διδάξαι περὶ τῆς φύσιος τῆς χειρὸς καὶ γὰρ ἄλλων ὀστέων τῶν κατὰ τὸ σῶμα δίδαγμα ὅδε ὁ λόγος ἐστίν.

1. In treating fractures and dislocations, the physician must make the extension as straight as possible, for this is the most natural direction. But if it incline to either side, it should rather turn to that of pronation, for there is thus less harm than if it be toward supination. Those, then, who act in such cases without deliberation, for the most part do not fall into any great mistake, for the person who is to have his arm bound, presents it in the proper position from necessity, but physicians who fancy themselves learned in these matters, are they who commit blunders. There is no necessity for much study, then, in order to set a broken arm, and in a word, any ordinary physician can perform it; but I am under the necessity of giving the longer directions on this subject, because I know physicians who have the reputation of being skilled in giving the proper positions to the arm in binding it up, while in reality they are only showing their own ignorance. But many other things in our art are judged of in this manner, for people rather admire what is new, although they do not know whether it be proper or not, than what they are accustomed to, and know already to be proper; and what is strange, they prefer to what is obvious. I must now state what the mistakes of medical men are, which I wish to unteach, and what instructions I have to give as to the management of the arm; for what I have to say regarding it, will apply to the other bones in the body.

2. Τὴν μὲν οὖν χεῖρα, περὶ οὗ ὁ λόγος, ἔδωκέ τις ἐπιδήσαι,

πρηνέα ποιήσας ὁ δ' ἠνάγκαζεν οὕτως ἔχειν, ὡς περ οἱ τοξεύοντες, ἐπὴν τὸν ὤμον ἐμβάλλωσι, καὶ οὕτως ἔχουσιν ἐπέδει, νομίζων ἐωυτῷ εἶναι τοῦτο αὐτῆ τὸ κατὰ φύσιν καὶ μαρτύριον ἐπήγετο τά τε ὀστέα ἅπαντα τὰ ἐν τῷ πήχει, ὅτι ἰθυωρίην κατάλληλα εἶχε, τὴν τε ὁμοχροίην, ὅτι αὐτὴ καθ' ἐωυτὴν τὴν ἰθυωρίην ἔχει οὕτω καὶ ἐκ τοῦ ἔξωθεν μέρους καὶ ἐκ τοῦ ἔσωθεν οὕτω δὲ ἔφη καὶ τὰς σάρκας καὶ τὰ νεῦρα πεφυκέναι, καὶ τὴν τοξικὴν ἐπήγετο μαρτύριον. Ταῦτα λέγων καὶ ταῦτα ποιῶν, σοφὸς ἐδόκεεν εἶναι τῶν δὲ ἄλλων τεχνέων ἐπελελήθει, καὶ ὀκόσα ἰσχυρῶς ἐργάζονται, καὶ ὀκόσα τεχνήμασιν, οὐκ εἰδὼς ὅτι ἄλλο ἐν ἄλλῳ τὸ κατὰ φύσιν σχῆμά ἐστιν, καὶ ἐν τῷ αὐτέῳ ἔργῳ ἕτερα τῆς δεξιῆς χειρὸς σχήματα κατὰ φύσιν ἐστὶ, καὶ ἕτερα τῆς ἀριστερῆς, ἣν οὕτω τύχη. Ἄλλο μὲν γὰρ σχῆμα ἐν

ἀκοντισμῷ κατὰ φύσιν, ἄλλο δὲ ἐν σφενδονήσει, ἄλλο δὲ ἐν λιθοβολίῃσιν, ἄλλο ἐν πυγμῇ, ἄλλο ἐν τῷ ἐλινύειν. Ὀκόσας δ' ἂν τις τέχνας εὖροι, ἐννοεοὶ οὐ τὸ αὐτὸ σχῆμα τῶν χειρῶν κατὰ φύσιν εἶναι ἐν ἐκάστη τῶν τεχνέων ἀλλὰ πρὸς τὸ ἄρμενον ὃ ἂν ἔχη ἕκαστος, καὶ πρὸς τὸ ἔργον ὃ ἂν ἐπιτελέσασθαι θέλη, σχηματίζονται αἱ χεῖρες. Τοξικὴν δὲ ἀσκέοντι εἰκὸς τοῦτο τὸ σχῆμα κράτιστον εἶναι τῆς ἐτέρας χειρὸς τοῦ γὰρ βραχίονος τὸ γιγγλυμοειδές, ἐν τῇ τοῦ πήχεος βαθμίδι ἐν τουτέῳ τῷ σχήματι ἐρεῖδον, ἰθυωρίην ποιεῖ τοῖσιν ὀστέοισι τοῦ πήχεος καὶ τοῦ βραχίονος, ὡς εἰ ἐν εἴῃ τὸ πᾶν καὶ ἡ ἀνάκλασις τοῦ ἄρθρου κέκλασται ἐν τουτέῳ τῷ σχήματι. Εἰκὸς μὲν οὖν οὕτως ἀκαμπτότατόν τε καὶ τετανώτατον εἶναι τὸ χωρίον, καὶ μὴ ἡσσᾶσθαι, μηδὲ ξυνδιδόναι, ἐλκομένης τῆς νευρῆς ὑπὸ τῆς δεξιῆς χειρὸς

καὶ οὕτως ἐπὶ πλεῖστον μὲν τὴν νευρὴν ἐλκύσει, ἀφήσει δὲ ἀπὸ στερεωτάτου καὶ ἀθροωτάτου ἀπὸ τῶν τοιουτέων γὰρ ἀφεσίων τῶν τοξευμάτων, ταχεῖαι καὶ αἱ ἰσχυεὶς καὶ τὰ μήκεα γίνονται. Ἐπιδέσει δὲ καὶ τοξικῇ οὐδὲν κοινόν. Τοῦτο μὲν γὰρ, εἰ ἐπιδήσας ἔχειν τὴν χεῖρα οὕτως ἐκέλευε, πόνους ἂν ἄλλους πολλοὺς προσετίθει μείζονας τοῦ τρώματος τοῦτο δ', εἰ ξυγκάμψαι ἐκέλευεν, οὔτε τὰ ὀστέα, οὔτε τὰ νεῦρα, οὔτε αἱ σάρκες ἔτι ἐν τῷ αὐτέῳ ἐγίνοντο, ἀλλὰ ἄλλη μετεκοσμεῖτο, κρατέοντα τὴν ἐπίδεσιν καὶ τί ὄφελός ἐστι τοξικοῦ σχήματος; Καὶ ταῦτα ἴσως οὐκ ἂν ἐξημάρτανε σοφίζόμενος, εἰ εἶα τὸν τετρωμένον αὐτὸν τὴν χεῖρα παρασχέσθαι.

2. The arm, then, for that is the subject we were treating of, was presented in the prone position to be bound, but the physician forced his patient to hold it as the archers do when they project the shoulder, and in this position he bound it up,

thinking within himself that he was acting according to Nature, and in proof of this he pointed out that all the bones in the fore-arm were thus in a straight line, and that the integuments both inside and outside, were also in a straight line, and that the flesh and nerves ( *tendons?* ) were thus put in their natural position, and he appealed to what happens in archery, as a proof of this. And so saying, and so doing, he is looked up to as a sage; and yet he forgets that in all the other arts and performances, whether executed by strength or dexterity, what is reckoned the natural position is not the same, and that in the same piece of work it may happen that the natural position of the right arm is not the same as that of the left. For there is one attitude in throwing the javelin, and another in slinging, another in casting stones, another in boxing, and another in a state of repose. And whatever arts one examines, it will be found that the natural position of the arms is not the same in each, but that in every case the arms are put into the attitude which suits best with the instrument that is used, and the work to be performed. In practicing archery, no doubt this is the best attitude of the left arm, for gingly-moid extremity of the humerus being fixed in the cavity of the ulna, in this position, throws the bones of the forearm and arm into a line, as if they constituted a single bone, and all flexion at the joint is prevented in this position. It is no doubt certain that the member is thus put into the most unbending and extended position possible, so as not to be overcome or yield when the string is drawn by the right arm, and thus will the archer be enabled to draw the string farthest, and discharge his arrow with the greatest force and rapidity, for arrows thus discharged have the greatest swiftness and force, and are carried to the greatest distances. But there is nothing in common between the binding up of an arm and archery. Moreover, if having thus bound up the arm, the physician direct the patient to keep it thus, he will occasion him greater pain than he had from the wound itself; and thus also, if the physician order him to bend the arm, neither the bones, the nerves, nor the flesh will any longer be in the same condition, but will be arranged differently, having overcome the bandaging. What use, then, is there of the archer's attitude? And these mistakes, the physician, conceited in his knowledge, would probably not have committed if he had allowed the patient himself to present his arm.

3. Ἄλλος δ' αὖ τις τῶν ἰητρῶν ὑπτίην τὴν χεῖρα δοῦς, οὕτω κατατείνειν ἐκέλευε, καὶ οὕτως ἔχουσαν ἐπέδει, τοῦτο νομίζων τὸ κατὰ φύσιν εἶναι, τῷ τε χροῖ σημαϊνόμενος, καὶ τὰ ὀστέα νομίζων κατὰ φύσιν εἶναι οὕτως, ὅτι φαίνεται τὸ ἐξέχον ὀστέον τὸ παρὰ τὸν καρπὸν, ἧ ὁ μικρὸς δάκτυλος, κατ' ἰθυωρίην εἶναι τοῦ ὀστέου ἀφ'

ότεου τὸν πῆχυν οἱ ἄνθρωποι μετρέουσιν. Ταῦτα τὰ μαρτύρια ἐπήγετο, ὅτι κατὰ φύσιν οὕτως ἔχει, καὶ ἐδόκεεν εὖ λέγειν. Ἀλλὰ τοῦτο μὲν, εἰ ὑπτίη ἡ χεὶρ κατατείνεται, ἰσχυρῶς πονοίη ἂν γνοίη δ' ἂν τις τὴν ἐσωτοῦ χεῖρα κατατείνων, ὡς ἐπώδυνον τὸ σχῆμα. Ἐπεὶ καὶ ἀνὴρ ἤσσω κρέσσονα διαλαβὼν οὕτως εὖ τῆσιν ἐσωτοῦ χερσὶν, ὡς κλᾶται ὁ ἄγκων ὑπτιος, ἄγοι ἂν ὅπη ἐθέλοι οὔτε γὰρ εἰ ξίφος ἐν ταύτῃ τῇ χειρὶ ἔχοι, ἔχοι ἂν ὅ τι χρήσαιτο τῷ ξίφει, οὕτω βίαιον τοῦτο τὸ σχῆμά ἐστιν. Τοῦτο δὲ, εἰ ἐπιδήσας τις ἐν τουτέῳ τῷ σχήματι ἐώη, μέζων μὲν πόνος, εἰ περιμοι, μέγας δὲ καὶ εἰ κατακέοιτο. Τοῦτο δὲ, εἰ ξυγκάμψει τὴν χεῖρα, ἀνάγκη πᾶσα τούς τε μύας καὶ τὰ ὀστέα ἄλλο σχῆμα ἔχειν. Ἦγνόει δὲ καὶ τάδε τὰ ἐν τῷ σχήματι χωρὶς τῆς ἄλλης λύμης τὸ γὰρ ὀστέον τὸ παρὰ τὸν καρπὸν ἐξέχον, τὸ κατὰ τὸν σμικρὸν δάκτυλον, τοῦτο μὲν τοῦ πήχεός ἐστιν τὸ δ' ἐν τῇ ξυγκάμψει ἐὼν, ἀπ' ὅτευ τὸν πῆχυν οἱ ἄνθρωποι μετρέουσι, τοῦτο δὲ

τοῦ βραχίονος ἡ κεφαλή ἐστιν. Ὁ δὲ ὦετο τούτῳ ὀστέον εἶναι τοῦτό τε κακεῖνο, πολλοὶ δὲ καὶ ἄλλοι ἔστι δ' ἐκείνῳ τῷ ὀστέῳ τούτῳ ὁ ἄγκων καλεόμενος, ᾧ ποτὶ στηριζόμεθα. Οὕτως οὖν ὑπτίην ἔχοντι τὴν χεῖρα, τοῦτο μὲν, τὸ ὀστέον διεστραμμένον φαίνεται τοῦτο δὲ, τὰ νεῦρα τὰ ἀπὸ τοῦ καρποῦ τείνοντα ἐκ τοῦ εἴσω μέρους καὶ ἀπὸ τῶν δακτύλων, ταῦτα ὑπτίην ἔχοντι τὴν χεῖρα διεστραμμένα γίνεται τείνει τε γὰρ ταῦτα τὰ νεῦρα πρὸς τὸ τοῦ βραχίονος ὀστέον, ὅθεν ὁ πῆχυς μετρεῖται. Αὗται τοσαῦται καὶ τοιαῦται αἱ ἀμαρτάδες καὶ ἄγνοιαί τῆς φύσεως τῆς χειρός. Εἰ δ', ὡς ἐγὼ κελεύω, χεῖρα κατεαγυῖαν κατατείνει τις, ἐπιστρέψει μὲν τὸ ὀστέον ἐς ἰθὺ, τὸ κατὰ τὸν σμικρὸν δάκτυλον, τὸ ἐς τὸν ἀγκῶνα τείνον, ἰθωρήν δὲ ἔξει τὰ νεῦρα τὰ ἀπὸ τοῦ καρποῦ πρὸς τοῦ βραχίονος τὰ ἄκρα τείνοντα ἀναλαμβανομένη δὲ ἡ χεὶρ ἐν παραπλησίῳ σχήματι ἔσται, ἐν ᾧ περ καὶ ἐπιδεομένη, ἄπονος μὲν ὁδοιποροῦντι, ἄπονος δὲ κατακειμένῳ καὶ ἀκάματος. Καθίννυσθαι δὲ χρὴ τὸν ἄνθρωπον οὕτως, ὅπως ἢ τὸ ἐξέχον τοῦ ὀστέου πρὸς τὴν λαμπροτάτην τῶν παρεουσέων αὐγέων, ὡς μὴ λάθῃ τὸν χειρίζοντα ἐν τῇ κατατάσει, εἰ ἰκανῶς ἐξίθουνται. Τοῦ γε μὴν ἐμπείρου οὐδ' ἂν τὴν χεῖρα λάθοι ἐπαγομένην τὸ ἐξέχον ἀτὰρ καὶ ἀλγέει μάλιστα κατὰ τὸ ἐξέχον ψαυόμενον.

3. But another physician putting the arm into the state of supination, gives orders to extend the arm thus, and bandages it in this position, reckoning it the one according to nature, judging thus from the skin, and also fancying the bones to be thus in their natural position, because the bone which protrudes at the wrist, where the little finger is, appears to be in a line with the bone from which people measure the bone of the fore-arm. These things he brings forward as proofs that the parts are in their natural state, and he is supposed to speak correctly. But, indeed, if the arm be kept stretched in a supine position, it will become very

painful, and this fact any one may ascertain by extending his own arm in this attitude. And also a weaker man grasping with his hands a stronger man whose arm is turned in a supine position, could lead him wherever he chose, and neither, if a man held a sword thus in his hand, could he make any proper use of it, so constrained is this position. And, moreover, if, when a physician has thus bound up the arm, he allow it to remain in the same position, the patient will endure greater pain if he walk about, but considerable, even if he remain at rest. And thus, too, if he shall bend the arm, the muscles and the bones must necessarily assume a different position. But, in addition to other mischief, he is ignorant of these facts regarding the position, that the bone which protrudes at the wrist, close to the little finger, belongs to the fore-arm, whereas the one at the joint, from which people measure the fore-arm, is the head of the humerus. He fancies that both these belong to the same bone, and many others are of this opinion. The latter, in fact, is the same part as that which is called the elbow, upon which we sometimes rest, and when he holds the arm thus in a supine position, in the first place the bone appears distorted, and in the next place the tendons which extend from the carpus along the inner side and from the fingers become distorted while the arm has a supine position; for these tendons proceed to the bone of the humerus, from which the fore-arm is measured. Such, and so many mistakes and marks of ignorance are committed, regarding the natural construction of the arm. But if one will extend a broken arm as I direct, he will turn the bone, situated at the extremity of the little finger, into the straight line, and also the one at the elbow, and the tendons which stretch from the carpus to the extremity of the humerus will be placed in the straight line; and when the arm is suspended in a sling, it will be in the same attitude as that in which it was bound up, and will give no pain to the patient when he walks about, nor when he lies reclined, and will not become fatigued. The man should be so seated that the prominent part of the bone may be turned to the brightest light which is at hand, so that the operator in making the extension, may be at no loss to discover if it be sufficiently straight. The prominence of a broken bone could not escape being detected by the hand of an experienced person, when applied for this purpose, and, moreover, the projecting part is particularly painful to the touch.

4. Τῶν δὲ ὀστέων τοῦ πήχεος, ὧν μὴ ἀμφοτέρα κατέγηε, ῥάων ἢ ἴησις, ἦν τὸ ἄνω ὀστέον τετρωμένον ἔη, καὶ περ παχύτερον ἔόν ἅμα μὲν ὅτι τὸ ὑγιὲς ὑποτεταμένον γίνεται ἀντὶ θεμελίου, ἅμα δ' ὅτι εὐκρυπτότερον γίνεται, πλὴν εἰ τὸ ἐγγὺς τοῦ καρποῦ παχεῖη γὰρ ἢ τῆς σαρκὸς ἐπίφυσις ἢ ἐπὶ τὸ ἄνω. Τὸ δὲ κάτω ὀστέον ἄσαρκον, καὶ οὐκ εὐξύγκρυπτον, καὶ κατατάσιος ἰσχυροτέρης δέεται. Ἦν δὲ μὴ τοῦτο ξυντριβῆ, ἀλλὰ τὸ ἕτερον, φαυλοτέρη ἢ κατάτασις

ἀρκέει ἦν δὲ ἀμφοτέρα κατεγηῆ, ἰσχυροτάτης κατατάσιος δεῖται παιδίου μὲν γὰρ ἤδη εἶδον καταταθέντα μᾶλλον ἢ ὡς ἔδει, οἱ δὲ πλεῖστοι ἦσσαν τείνονται ἢ ὡς δεῖ. Χρὴ δ', ἐπὶ τείνωσι, τὰ θέναρα προσβάλλοντα

διορθοῦν ἔπειτα χρίσαντα κηρωτῇ μὴ πάνυ πουλλῇ, ὡς μὴ περιπλήη τὰ ἐπιδέσματα, οὕτως ἐπιδεῖν, ὅπως μὴ κατωτέρω ἄκρην τὴν χεῖρα ἔξει τοῦ ἀγκῶνος, ἀλλὰ σμικρῶ τινι ἀνωτέρω, ὡς μὴ τὸ αἷμα ἐς ἄκρον ἐπιρρέη, ἀλλὰ ἀπολαμβάνηται ἔπειτα ἐπιδεῖν τῷ ὀθονίῳ, τὴν ἀρχὴν βαλλόμενος κατὰ τὸ κάτηγμα ἐρείδων μὲν οὖν, μὴ πιέζων δὲ κάρτα. Ἐπὶ δὲ περιβάλλη κατὰ τούτῳ δις ἢ τρίς, ἐπὶ τὸ ἄνω νεμέσθω ἐπιδέων, ἵνα αἱ ἐπιρροαὶ τοῦ αἵματος ἀπολαμβάνονται, καὶ τελευτησάτω κεῖθι χρὴ δὲ μὴ μακρὰ εἶναι τὰ πρῶτα ὀθόνια. Τῶν δὲ δευτέρων ὀθονίων, τὴν μὲν ἀρχὴν βάλλεσθαι ἐπὶ τὸ κάτηγμα περιβαλὼν δὲ ἅπαξ ἐς τούτῳ, ἔπειτα νεμέσθω ἐς τὸ κάτω, καὶ ἐπὶ ἦσσαν πιέζων, καὶ ἐπὶ μέζον διαβιβάσκων, ὡς ἂν αὐτὸ ἰκανὸν γένηται τὸ ὀθόνιον ἀναπαλινδρομῆσαι κεῖθι, ἵνα περὶ τὸ ἕτερον ἐτελεύτησεν. Ἐνταῦθα μὲν οὖν τὰ ὀθόνια ἐπ' ἀριστερὰ ἢ ἐπὶ δεξιὰ ἐπιδεδέσθω ἢ ἐπὶ ὁκότερα ἂν ζυμφέρη πρὸς τὸ σχῆμα τοῦ κατεηγότος, καὶ ἐφ' ὁκότερα ἂν περιρρέπειν ζυμφέρη. Μετὰ δὲ ταῦτα, σπλήνας κατατείνειν χρὴ κεχρισμένους κηρωτῇ ὀλίγη καὶ γὰρ προσηνέστερον καὶ εὐθετώτερον ἔπειτα οὕτως ἐπιδεῖν τοῖσιν ὀθονίοισιν ὡς

ἐναλλάξ, ὅτε μὲν ἐπὶ δεξιὰ, ὅτε δὲ ἐπ' ἀριστερὰ καὶ τὰ μὲν πλείω κάτωθεν ἀρχόμενος, ἐς τὸ ἄνω ἄγειν, ἔστι δ' ὅτε καὶ ἄνωθεν ἐς τὸ κάτω. Τὰ δὲ ὑπόξηρα ἀκέεσθαι τοῖσι σπλήνεσι κυκλεῦντα τῷ δὲ πλήθει τῶν περιβολέων μὴ πᾶν ἀθρόον ξυνδιορθοῦντα, ἀλλὰ κατὰ μέρος περιβάλλειν δὲ χρὴ χαλαρὰ καὶ περὶ τὸν καρπὸν τῆς χειρὸς, ἄλλοτε καὶ ἄλλοτε. Πλήθος δὲ τῶν ὀθονίων ἰκανὸν τὸ πρῶτον, αἱ δύο μοῖραι.

4. In cases of fracture in either of the bones of the forearm, it is easier to effect a cure if the upper bone be broken, although it be the thicker one, both because the sound bone is situated below, and forms a support to it, and because the deformity is more easily concealed, there being a thick mass of flesh on the upper side, except near to the wrist. But the lower bone is without a covering of flesh, is not easily concealed, and requires stronger extension. If it is not this bone, but the other which is broken, a more feeble extension proves sufficient, but if both be broken, a more powerful extension is required. In the case of a young person I have known the extension made more strong than was necessary, but in general the extension made is less than what is required. And when they are extended, the physician should apply the palms of the hands, and adjust the fractured parts and then having rubbed the parts with cerate, but not in large

quantity so that the bandages may not come off, it is to be bound up in this state, care being taken that the hand be not lower than the elbow, but a little higher, so that the blood do not flow toward the extremity, but may be determined to the upper part; and then it is to be secured with the bandage, the head of which is to be placed at the fracture, and the bandage should impart firmness to the parts without occasioning strong compression. When you have carried the bandage twice or thrice round at the seat of the fracture, it is to be carried upward, so that the afflux of blood into it may be stopped, and the bandage should terminate there, and the first bandages ought not to be long. The head of the second bandage is also to be placed upon the seat of the fracture, and a single round of it being made there, it is then to be carried downward, and is not to be applied so tight as the other, and there should be greater distances between the turns, so that the bandage may prove sufficient to revert to the spot where the other terminated. The bandages may be rolled to the left hand or to the right, or to whatever side suits best with the position of the fractured arm, or according to the inclination which it may have. Afterward we must place along the arm, compresses, smeared with a little cerate, for thus they occasion less uneasiness, and are more easily arranged. And then we must apply the bandages crossways, sometimes to the right hand, and sometimes to the left, for the most part beginning below and terminating above, but sometimes commencing above and ending below. The parts which are thinly covered with flesh should be wrapped round with compresses, and inequalities should be made up, not by a number of folds at once, but by degrees. Some slack turns are also to be made around the wrist, to this side and to that. These two bandages are sufficient at first.

5. Σημεῖα δὲ τοῦ καλῶς ἰητρευμένου ταῦτα, καὶ ὀρθῶς ἐπίδεομένου, εἰ ἐρωτῶης αὐτὸν εἰ πεπιέκται, καὶ εἰ φαίη μὲν πεπιέχθαι, ἡσύχως δὲ, καὶ μάλιστα εἰ κατὰ τὸ κάτηγμα φαίη τοιαῦτα τοίνυν φάναι χρὴ πεπρηγμένα διὰ τέλος τὸν ὀρθῶς ἐπίδεόμενον. Σημεῖα δὲ ταῦτα τῆς μετριότητος, τὴν μὲν ἡμέρην ἢν ἂν ἐπίδεθῆ, καὶ τὴν νύκτα δοκεῖτω αὐτὸς ἐωυτῷ μὴ ἐπὶ ἥσσον πεπιέχθαι, ἀλλ' ἐπὶ μᾶλλον τῆ δ' ὕστεραίη οἰδημάτιον ἐλθεῖν ἐς χεῖρα ἄκρην μαλθακόν μετριότητος γὰρ σημεῖον τῆς πιέξιός σου. Τελευτώσης δὲ τῆς ἡμέρης, ἐπὶ ἥσσον δοκεῖτω πεπιέχθαι τῆ δὲ τρίτῃ, χαλαρά σοι δοκεῖτω εἶναι τὰ ἐπιδέσματα. Κῆν μὲν τι τούτων τῶν εἰρημένων ἐλλείπη, γινώσκειν χρὴ ὅτι χαλαρωτέρῃ ἢ ἐπίδεσις τοῦ μετρίου ἢν δέ τι

τῶν εἰρημένων πλεονάζῃ, χρὴ γινώσκειν ὅτι μᾶλλον ἐπιέχθη τοῦ μετρίου καὶ τουτέοισι σημαινόμενος, τὸ ὕστερον ἐπιδέων, ἢ χαλᾶν μᾶλλον, ἢ πιέζειν. Ἀπολύσαντα δὲ χρὴ τριταῖον ἐόντα, κατατεινόμενον καὶ διορθωσάμενον, αὐθις



ἐπιδήσαι κῆν μετρίως τὸ πρῶτον τετυχῆκης ἐπιδήσας, ταύτην τὴν ἐπίδεσιν χρῆ ὀλίγῳ μᾶλλον ἢ ἐκείνην πῆσαι. Βάλλεσθαι δὲ χρῆ τὰς ἀρχὰς κατὰ τὸ κήτηγμα, ὡσπερ καὶ τὸ πρότερον ἦν μὲν γὰρ τοῦτο πρότερον ἐπιδέης, ἐξειρύεται ἐκ τούτου οἱ ἰχῶρες ἐς τὰς ἐσχατίας ἔνθα καὶ ἔνθα ἦν δὲ τι ἄλλο πρότερον πῆζης, ἐς τοῦτο ἐξειρύεται ἐκ τοῦ πιεχθέντος ἐς πολλὰ δ' εὐχρηστον τὸ ξυνιέναι. Οὕτως οὖν ἄρχεσθαι μὲν αἰεὶ χρῆ τὴν ἐπίδεσιν καὶ τὴν πῆξιν ἐκ τουτέου τοῦ χωρίου, τὰ δ' ἄλλα κατὰ λόγον, ὡς προσωτέρω ἀπὸ τοῦ κήτηματος ἀγάγης, ἐπὶ ἧσσον τὴν πῆξιν ποιέεσθαι. Χαλαρὰ δὲ παντάπασι μηδέποτε περιβάλλειν, ἀλλὰ προσπεπτωκότα.

Ἐπειτα δὲ πλείοσιν ὀθονίοισι χρῆ ἐπιδεῖν ἐκάστην τῶν ἐπιδεσίων. Ἐρωτώμενος δὲ φάτω ὀλίγῳ μᾶλλον οἱ πεπιέχθαι, ἢ τὸ πρότερον, καὶ μάλιστα φάτω κατὰ τὸ κήτηγμα, καὶ τὰ ἄλλα δὲ κατὰ λόγον καὶ ἀμφὶ τῷ οἰδήματι, καὶ ἀμφὶ τῷ πονέειν, καὶ ἀμφὶ τῷ ῥήϊζειν, κατὰ λόγον τῆς προτέρης ἐπιδέσιος γινέσθω. Ἐπὶ δὲ τριταῖος ἦ, χαλαρώτερὰ οἱ δοκεῖτω εἶναι τὰ ἐπιδέσματα. Ἐπειτα ἀπολύσαντα χρῆ αὐθις ἐπιδήσαι, ὀλίγῳ μᾶλλον πῆζοντα, καὶ ἐν πᾶσι τοῖσιν ὀθονίοισιν οἷσί περ ἡμελλεν ἐπιδεῖσθαι καὶ ἔπειτα αὐτὸν πάντα ταῦτα καταλαβέτω, ἅπερ καὶ ἐν τῆσι πρώτησι περιόδοισι τῶν ἐπιδεσίων.

5. And these are the signs that the patient has been well treated and properly bandaged: if you ask him if the arm feels tight, and he says it does, but moderately so, and especially about the fracture; and this reply he should make all along, if the bandage be properly applied. And these are symptoms of the bandaging being moderately tight; if for the first day and night he fancies that the tightness does not diminish, but rather increases; and if on the next day there be a soft swelling in the hand, for this is a sign of moderate compression, but at the end of the second day the compression should feel less, and on the third day the bandaging should appear loose. And if any of these symptoms be wanting, you may conclude that the bandaging is slacker than it should be; or if any of these symptoms be in excess, you may infer that the compression is more than moderate; and judging from these, you will apply the next bandages either slacker or tighter. Having removed the bandages on the third day, you must make extension and adjust the fracture, and bind it up again; and if the first bandaging was moderately applied, the second bandaging should be made somewhat tighter. The heads the bandages should be placed on the fractures as in the former case; for, so doing, the humors will be driven to the extremities, whereas if you bandage any other part beforehand, the humors will be forced from it to the seat of the fracture: it is of much importance that this should be properly understood. Thus the bandaging and compression should always commence at

the seat of the fracture, and everything else should be conducted on the same principle, so that the farther you proceed from the fracture, the compression should always be the less. The bandages should never be actually loose, but should be smoothly put on. At each dressing the number of bandages should be increased; and the patient, if asked, should answer, that he feels the bandages somewhat tighter than on the former occasion, especially about the fracture, and everything else in proportion; and with respect to the swelling, the pain, and recovery, everything should proceed as after the former dressing. But on the third day the outer bandaging should appear looser. Then having removed the bandages, you should bind it up again, somewhat tighter than before, and with all the bandages which will be required on the occasion, and afterwards one ought to experience the same train of symptoms as at the former periods of bandaging.

6. Ἐπὴν δὲ τριταῖος γένηται, ἑβδομαῖος δὲ ἀπὸ τῆς πρώτης ἐπίδεσις, ἣν ὀρθῶς ἐπίδεῖται, τὸ μὲν οἶδημα ἐν ἄκρῃ τῆ χειρὶ ἔσται, οὐδὲ τοῦτο λίην μέγα τὸ δ' ἐπιδεόμενον χωρίον ἐν πάσῃσι τῆσιν ἐπίδεσεσιν ἐπὶ τὸ λεπτότερον καὶ ἰσχυρότερον εὐρεθήσεται, ἐν δὲ τῇ ἐβδόμῃ καὶ πάνυ λεπτὸν, καὶ τὰ ὀστέα τὰ κατεγότα ἐπὶ μᾶλλον κινεούμενα καὶ εὐπαράγωγα ἐς κατόρθωσιν. Καὶ ἦν ἡ ταῦτα τοιαῦτα, κατορθωσάμενον χρὴ ἐπιδήσαι ὡς ἐς νάρθηκας, ὀλίγῳ μᾶλλον πύσαντα, ἢ τὸ πρότερον, ἦν μὴ πόνος τις πλείων ἢ ἀπὸ τοῦ οἰδήματος τοῦ ἐν ἄκρῃ τῆ χειρὶ. Ἐπὴν δὲ ἐπιδήσῃ τοῖσιν ὀθονίοισι, τοὺς νάρθηκας περιθεῖναι χρὴ καὶ περιλαβεῖν ἐν τοῖσι δεσμοῖσιν ὡς χαλαρωτάτοισιν, ὀκόσον ἡρεμέειν, ὥστε μηδὲν ξυμβάλλεσθαι ἐς τὴν πίεξιν τῆς χειρὸς τὴν τῶν νάρθηκων πρόσθεσιν.

Μετὰ δὲ ταῦτα, ὃ τε πόνος, αἶ τε ῥαστῶναι αἱ αὐταὶ γινέσθωσαν, αἶ περ καὶ ἐν τῆσιν πρώτῃσι περιόδοισι τῶν ἐπίδεσιων. Ἐπὴν δὲ τριταῖος ἐὼν φῆ χαλαρὸν εἶναι, τότε ἔπειτα χρὴ τοὺς νάρθηκας ἐρείσασθαι, μάλιστα μὲν κατὰ τὸ κάτηγμα, ἀτὰρ καὶ τᾶλλα, κατὰ λόγον, ἢ περ καὶ ἡ ἐπίδεσις ἐχάλα μᾶλλον ἢ ἐπίεζεν. Παχύτατον δὲ χρὴ εἶναι τὸν νάρθηκα, ἢ ἐξέστη τὸ κάτηγμα, μὴ μὴν πολλῶ. Ἐπιτηδεύειν δὲ χρὴ μάλιστα μὲν κατ' ἰθυωρίην τοῦ μεγάλου δακτύλου, ὡς μὴ κείσῃται ὁ νάρθηξ, ἀλλὰ τῆ ἢ τῆ, μηδὲ κατὰ τὴν τοῦ μικροῦ ἰθυωρίην ἢ τὸ ὀστέον ὑπερέχει ἐν τῷ καρπῷ, ἀλλὰ τῆ ἢ τῆ. Ἦν δὲ ἄρα πρὸς τὸ κάτηγμα ξυμφέρῃ κείσθαι κατὰ ταῦτά τινας τῶν νάρθηκων, βραχυτέρους αὐτοὺς χρὴ τῶν ἄλλων ποιέειν, ὡς μὴ ἐξικνέωνται πρὸς τὰ ὀστέα τὰ ὑπερέχοντα παρὰ τὸν καρπὸν κίνδυνος γὰρ ἐλκώσιος, καὶ νεύρων ψιλώσιος. Χρὴ δὲ διὰ τρίτης ἐρείδειν τοῖσιν νάρθηξι πάνυ ἡσυχῆ, οὕτω τῆ γνώμη ἔχοντα, ὡς οἱ νάρθηκες φυλακῆς εἵνεκα τῆς ἐπίδεσις προσκέωνται, ἀλλ' οὐ τῆς πίεξις εἵνεκεν ἐπιδέωνται.

6. When the third day arrives, that is to say, the seventh from the first dressing, if properly done, the swelling in the hand should be not very great; and the part which has been bandaged should be found more slender and less swelled at each time, and on the seventh day the swelling should be quite gone, and the broken bones should be more readily moved, and admit of being easily adjusted. And if these things be so, you should, after setting the fracture, apply the bandages so as to suit the splints, and a little more tight than formerly, unless there be more pain from the swelling in the hand. When you have applied the bandages, you must adjust the splints all around the limb, and secure them with strings so loose as just to keep them in their place, without the application of the splints contributing at all to the compression of the arm. After this the pain and recovery should proceed as in the preceding periods of the bandaging. But if, on the third day, the patient say that the bandaging is loose, you must then fasten the splints, especially at the fracture, but also elsewhere, wherever the bandaging is rather loose than tight. The splint should be thickest where the fracture protrudes, but it should not be much more so than elsewhere. Particular attention should be paid to the line of the arm corresponding to the thumb, so that no splint be laid on it, but upon each side of it, nor in the line of the little finger where the bone is prominent at the wrist, but on each side of it. And if it be found necessary that splints should be applied in these directions at the seat of the fracture, they should be made shorter than the others, so as that they may not reach the bones which are prominent at the wrist, for otherwise there is danger of ulceration, and of the tendons being laid bare. The splints should be adjusted anew every third day, in a very gentle manner, always keeping in mind that the object of the splints is to maintain the lower bandages in their place, and that they are not needed in order to contribute to the compression.

7. Ἦν μὲν οὖν εὖ εἰδῆς ὅτι ἰκανῶς τὰ ὀστέα ἀπίθονται ἐν τῆσι προτέρησιν ἐπιδέσεσι, καὶ μήτε κνησμοὶ τινες λυπέωσι, μήτε τις ἔλκωσις μηδεμία ὑποπτεύηται εἶναι, ἔᾶν χρῆ

ἐπιδεδέσθαι ἐν τοῖσι νάρθηξιν, ἔστ' ἂν ὑπὲρ εἴκοσιν ἡμέρας γίνηται. Ἐν τριήκοντα δὲ μάλιστα τῆσι ξυμπάσῃσι κρατύνεται ὀστέα τὰ ἐν τῷ πήχει τὸ ἐπίπαν ἀτρεκέες δὲ οὐδὲν μάλα γὰρ καὶ φύσις φύσιος, καὶ ἡλικίη ἡλικίης διαφέρει. Ἐπὴν δὲ λύσης, ὕδωρ θερμὸν καταχέαι χρῆ, καὶ μετεπιδήσαι, ἧσσον μὲν ὀλίγω πιέσαντα, ἢ τὸ πρόσθεν, ἐλάσσοσι δὲ τοῖσιν ὀθονίοισιν, ἢ τὸ πρότερον καὶ ἔπειτα διὰ τρίτης ἡμέρης λύσαντα ἐπιδεῖν, ἐπὶ μὲν ἧσσον πιέζοντα, ἐπὶ δὲ ἐλάσσοσι τοῖσιν ὀθονίοισιν. Ἐπὴν δὲ, ὅταν τοῖσι νάρθηξι δεθῆ, ὑποπτεύης τὰ ὀστέα μὴ ὀρθῶς κεῖσθαι, ἢ ἄλλο τι ὀχλέη τὸν τετρωμένον, λῦσαι ἐν τῷ ἡμίσει

τοῦ χρόνου, ἢ ὀλίγῳ πρόσθεν, καὶ αὖθις μετεπιδῆσαι. Δίαιτα δὲ τουτέοισιν, οἷσιν ἂν μὴ ἔλκεα ἐξ ἀρχῆς γένηται, ἢ ὅστέα ἐξω ἐξίσχη, ἀρκέει ὑποφάλη ἐνδεέστερον δὲ χρῆ διαιτῶν ἄχρις ἡμερέων δέκα, ἄτε ἤδη καὶ ἐλινύοντας καὶ ὄψοισιν ἀπαλοῖσι χρῆσθαι, ὅκόσα τῇ διεξόδῳ μετριότητα παρασχῆσει οἴνου δὲ καὶ κρηφαγίης ἀπέχεσθαι ἔπειτα μέντοι ἐκ προσαγωγῆς

ἀνακομίζεσθαι. Οὗτος ὁ λόγος ὡσπερ νόμος κεῖται δίκαιος περὶ κατηγμάτων ἰήσιος, ὥστε χειρίζειν χρῆ, καὶ ὥστε ἀποβαίνει ἀπὸ τῆς δικαίης χειρίζιος ὅ τι δ' ἂν μὴ οὕτως ἀποβαίνει, εἰδέναι χρῆ ὅτι ἐν τῇ χειρίζει τι ἐνδεές πεποιήται, ἢ πεπλέονασται. Ἔτι δὲ τάδε χρῆ προσξυνιέναι ἐν τούτῳ τῷ ἀπλῶ τρόπῳ, ἃ οὐ κάρτα ἐπιμελέονται οἱ ἰητροὶ, καίτοι πᾶσαν μελέτην καὶ πᾶσαν ἐπίδεσιν οἷά τε διαφθείρειν ἐστὶ, μὴ ὀρθῶς ποιούμενα ἢν γὰρ τὰ μὲν ὅστέα ἄμφω κατηγῆ, ἢ τὸ κάτω μῦνον, ὁ δὲ ἐπιδεδεμένος ἐν ταινίῃ τινὶ τὴν χεῖρα ἔχη ἀναλελαμμένην, τυγχάνη δὲ ἡ ταινίη κατὰ τὸ κήτηγμα πλείστη ἐοῦσα, ἔνθεν δὲ καὶ ἔνθεν ἡ χεῖρ ἀπαιωρέηται, τοῦτον ἀνάγκη τὸ ὀστέον εὔρεθῆναι διεστραμμένον ἔχοντα πρὸς τὸ ἄνω μέρος ἢν δὲ, κατηγόντων τῶν ὀστέων οὕτως, ἄκρην τε τὴν χεῖρα ἐν τῇ ταινίῃ ἔχη καὶ παρὰ τὸν ἀγκῶνα, ὁ δὲ ἄλλος πῆχυς μὴ μετέωρος ἔη, οὗτος εὔρεθήσεται τὸ ὀστέον ἐς τὸ κάτω μέρος διεστραμμένον ἔχων. Χρῆ οὖν ἐν ταινίῃ πλάτος ἐχούση, μαλθακῆ, τὸ πλεῖστον τοῦ πήχεος καὶ τὸν καρπὸν τῆς χειρὸς ὁμαλῶς αἰωρέεσθαι.

7. If, then, you see that the bones are properly adjusted by the first dressings, and that there is no troublesome pruritus in the part, nor any reason to suspect ulceration, you may allow the arm to remain bandaged in the splints until after the lapse of more than twenty days. The bones of the fore-arm generally get consolidated in thirty days altogether; but there is nothing precise in this matter, for one constitution differs from another, and one period of life from another. When you remove the bandages, you must pour hot water on the arm and bind it up again, but somewhat slacker, and with fewer bandages than formerly: and again on the third day you undo the bandages, and bind it still more loosely, and with still fewer bandages. And if, while the arm is bound up in the splints, you should at any time suspect that the bones do not lie properly, or if anything about the bandages annoys the patient, you should loose them at the middle of the time, or a little earlier, and apply them again. A diet slightly restricted will be sufficient in those cases in which there was no external wound at first, or when the bone does not protrude; but one should live rather sparingly until the tenth day, as being now deprived of exercise; and tender articles of food should be used, such as moderately loosen the bowels; but one should abstain altogether from flesh and wine, and then by degrees resume a more nourishing diet. This

diet. may be laid down as a just rule in the treatment of fractures, both as to how they should be treated, and what will be the results of a proper plan of treatment; so that one may know, that if things do not turn out thus, there has been some defect or excess in the treatment. And in this simple plan of treatment it is necessary to attend also to the following directions, which some physicians pay little attention to, although, when improperly executed, they are capable of marring the whole process of bandaging: for if both the bones be broken, or the lower one only, and the patient who has got his arm bandaged keep it slung in a shawl, and that the shawl is particularly loose at the fracture, so that the arm is not properly suspended at this end or that, in this case the bone must necessarily be found distorted upwards; whereas, when both bones are thus broken, if the arm recline in the shawl at the wrist and elbow, but the rest of it be not kept up, the bone in this case will be distorted to the lower side. The greater part of the arm and the wrist of the hand should therefore be equally suspended in a broad soft shawl.

8. Ἦν δὲ ὁ βραχίων καταγῆ, ἦν μὲν τις ἀποτανύσας τὴν χεῖρα ἐν τούτῳ τῷ σχήματι διατείνῃ, ὁ μῦς τοῦ βραχίονος κατατεταμένος ἐπιθεθήσεται ἐπὶ δ' ἐπιθεθεὶς ξυγκάμψῃ τὸν ἀγκῶνα, ὁ μῦς τοῦ βραχίονος ἄλλο σχῆμα σχήσει. Δικαιοτάτη οὖν βραχίονος κατάτασις ἦδε ξύλον πηχυαῖον ἢ ὀλίγω βραχύτερον, ὁκοῖοι οἱ στειλαιοὶ εἰσι τῶν σκαφίων, κρεμάσαι χρῆ, ἔνθεν καὶ ἔνθεν σειρῆ δῆσαντα καθίσαντα δὲ τὸν ἄνθρωπον ἐπὶ ὑψηλοῦ τινος, τὴν χεῖρα ὑπερκεῖσθαι, ὡς ὑπὸ τῆ μασχάλῃ γένηται ὁ στειλαιὸς ἔχων ξυμμέτρως, ὥστε μόλις δύνασθαι καθίνυσθαι τὸν ἄνθρωπον, σμικροῦ δέοντα μετέωρον εἶναι ἔπειτα θέντα τι ἄλλο ἔφεδρον, καὶ ὑποθέντα σκύτινον ὑποκεφάλαιον, ἢ ἐν ἢ πλείω ὄκως ξυμμέτρως σχοίῃ ὕψους τοῦ πήχεος πλαγίου πρὸς ὀρθὴν γωνίην. Ἄριστον μὲν σκύτος πλατὺ καὶ μαλθακόν, ἢ ταινίην πλατέην ἀμφιβάλλοντα, τῶν μεγάλων τι σταθμίων ἐξαρτῆσαι, ὅ τι μετρίως ἔξει κατατείνειν εἰ δὲ μὴ, τῶν ἀνδρῶν ὅστις ἐρρωμένος, ἐν τούτῳ τῷ σχήματι τοῦ πήχεος ἐόντος, παρὰ τὸν ἀγκῶνα καταναγκαζέτω

ἐς τὸ κάτω. Ὁ δὲ ἰητρός ὀρθὸς μὲν ἐὼν χειρίζετω, τὸν ἕτερον πόδα ἐπὶ ὑψηλοτέρου τινὸς ἔχων, κατορθώσας δὲ τοῖσι θέναρσι τὸ ὀστέον ῥηϊδίως δὲ κατορθώσεται ἀγαθὴ γὰρ ἡ κατάστασις, ἦν τις καλῶς παρασκευάσῃται. Ἐπειτα ἐπιδείτω, τὰς τε ἀρχὰς βαλλόμενος ἐπὶ τὸ κάτηγμα, καὶ τᾶλλα πάντα ὡσπερ πρότερον παρηνέθη, χειρίζετω καὶ ἐρωτήματα ταῦτα ἐρωτάτω καὶ σημείοισι χρήσθω τοῖσιν αὐτέοισιν, εἰ μετρίως ἔχει, ἢ οὐ καὶ διὰ τρίτης ἐπιδείτω, καὶ ἐπὶ μᾶλλον πιεζέτω καὶ ἐβδομαῖον ἢ ἐναταῖον ἐν νάρθηξι δησάτω [, ἔστ' ἂν ὑπὲρ τριήκοντα ἡμέρας γίνηται]. Καὶ ἦν ὑποπτέυση μὴ καλῶς κεῖσθαι τὸ ὀστέον,

μεσηγὺ τουτέου τοῦ χρόνου λυσάτω, καὶ εὐτεθισάμενος μετεπιδησάτω. Κρατύνεται δὲ μάλιστα βραχίονος ὀστέον ἐν τεσσαράκοντα ἡμέρησιν. Ἐπὴν δὲ ταύτας ὑπερβάλλῃ, λύειν χρῆ, καὶ ἐπὶ ἥσσον πιάζειν τοῖσιν ὀθονίοισι, καὶ ἐπὶ ἐλάσσοσιν ἐπίδειν. Δίαιταν δὲ ἀκριβεστέραν τινὰ ἢ τὸ πρότερον διαιτᾶν, καὶ πλείω χρόνον τεκμαίρεσθαι δὲ πρὸς τοῦ οἰδήματος τοῦ ἐν ἄκρῃ τῆ χειρὶ,

τὴν ῥώμην ὀρέων. Προσξυνιέναι δὲ χρῆ καὶ τάδε, ὅτι ὁ βραχίον κυρτὸς πέφυκεν ἐς τὸ ἔξω μέρος ἐς τοῦτο τοῖνυν τὸ μέρος διαστρέφεσθαι φιλέει, ἐπὴν μὴ καλῶς ἰητρεύηται ἀτὰρ καὶ τᾶλλα πάντα ὀστέα, ἐς ὅπερ πέφυκε διεστραμμένα, ἐς τοῦτο καὶ ἰητρευόμενα φιλέει διαστρέφεσθαι, ἐπὴν κατεαγῆ. Χρῆ τοῖνυν, ἐπὴν τοιοῦτό τι ὑποπεύηται, ταινίη πλατείη προσεπιλαμβάνειν τὸν βραχίονα κύκλω περὶ τὸ στῆθος περιδέοντα καὶ ἐπὴν ἀναπαύεσθαι μέλλῃ, μεσηγὺ τοῦ ἀγκῶνος καὶ τῶν πλευρέων σπλῆνά τινα πουλύπτυχον πτύζαντα ὑποτιθέναι, ἢ ἄλλο τι ὃ τουτέω ἔοικεν οὕτω γὰρ ἂν ἰθὺ τὸ κύρτωμα τοῦ ὀστέου γένοιτο φυλάσσεσθαι μέντοι χρῆ, ὅπως μὴ ἦ ἄγαν ἐς τὸ ἔσω μέρος.

8. When the arm is broken, if one stretch the fore-arm and adjust it while in this position, the muscle of the arm will be bound while extended; but when the dressing is over, and the patient bends his arm at the elbow, the muscle of the arm will assume a different shape. The following, then, is the most natural plan of setting the arm: having got a piece of wood a cubit or somewhat less in length, like the handles of spades, suspend it by means of a chain fastened to its extremities at both ends; and having seated the man on some high object, the arm is to be brought over, so that the armpit may rest on the piece of wood, and the man can scarcely touch the seat, being almost suspended; then having brought another seat, and placed one or more leather pillows under the arm, so as to keep it a moderate height while it is bent at a right angle, the best plan is to put round the arm a broad and soft skin, or broad shawl, and to hang some great weight to it, so as to produce moderate extension; or otherwise, while the arm is in the position I have described, a strong man is to take hold of it at the elbow and pull it downward. But the physician standing erect, must perform the proper manipulation, having the one foot on some pretty high object, and adjusting the bone with the palms of his hands; and it will readily be adjusted, for the extension is good if properly applied. Then let him bind the arm, commencing at the fracture, and do otherwise as directed above; let him put the same questions and avail himself of the same signs to ascertain whether the arm be moderately tight or not; and every third day let him bind it anew and make it tighter; and on the seventh or ninth day let him bind it up with splints, and leave it so until after the lapse of more than thirty days. And if he suspect that the bone is not lying

properly, let him remove the bandages in the interval, and having adjusted the arm, let him bind it up again. The bone of the arm is generally consolidated in forty days. When these are past, the dressing is to be removed, and fewer and slacker bandages applied instead of it. The patient is to be kept on a stricter diet, and for a longer space of time than in the former case; and we must form our judgment of it from the swelling in the hand, looking also to the strength of the patient. This also should be known, that the arm is naturally inclined outward; to this side, therefore, the distortion usually takes place, if not properly treated; but indeed, all the other bones are usually distorted during treatment for fracture to that side to which they naturally incline. When, therefore, anything of this kind is suspected, the arm is to be encircled in a broad shawl, which is to be carried round the breast, and when the patient goes to rest, a compress of many folds, or some such thing, is to be folded and placed between the elbow and the side, for thus the bending of the bone will be rectified, but care must be taken lest it be inclined too much inwards.

9. Πούς δὲ ἀνθρώπου ἐκ πολλῶν καὶ μικρῶν ὀστέων ζύγκειται, ὥσπερ χεὶρ ἄκρη. Κατάγνυται μὲν οὐ πάνυ τι ταῦτα τὰ ὀστέα, ἢν μὴ ξὺν τῷ χρωτὶ τιτρωσκομένῳ ὑπὸ ὀξέος τινὸς ἢ βαρέος τὰ μὲν οὖν τιτρωσκόμενα, ἐν ἐλκωσίῳν μέρει εἰρήσεται, ὡς χρὴ ἰητρεύειν. Ἦν δὲ τι κινηθῆ ἑκ τῆς χώρης, ἢ τῶν δακτύλων ἄρθρον, ἢ ἄλλο τι τῶν ὀστέων τοῦ ταρσοῦ καλεομένου, ἀναγκάζειν μὲν χρὴ ἐς τὴν ἐσωτοῦ χώρην ἕκαστον, ὥσπερ

καὶ τὰ ἐν τῇ χειρὶ εἴρηται ἰητρεύειν δὲ κηρωτῇ καὶ σπλήνεσι καὶ ὀθονίοισιν, ὥσπερ καὶ τὰ κατήγματα, πλὴν τῶν ναρθήκων, τὸν μὲν αὐτὸν τρόπον πιεζεῦντα, διὰ τρίτης δὲ ἐπιδέοντα ὑποκρινέσθω δὲ ὁ ἐπιδεόμενος παραπλήσια, οἷά περ καὶ ἐν τοῖσι κατήγμασι, καὶ περὶ τοῦ πεπιέχθαι, καὶ περὶ τοῦ χαλᾶν. Ὑγιέα δὲ γίνεται ἐν εἴκοσιν ἡμέρησι τελέως ἅπαντα, πλὴν ὀκόσα κοινωνέει τοῖσι τῆς κνήμης ὀστέοισι καὶ αὐτῇ τῇ ἴξει. Ἐυμφέρει δὲ κατακεῖσθαι τοῦτον τὸν χρόνον ἀλλὰ γὰρ οὐ τολμέουσιν ὑπερορῶντες τὸ νόσημα, ἀλλὰ περιέρχονται, πρὶν ὑγιέες γενέσθαι. Διὰ τοῦτο καὶ οἱ πλεῖστοι οὐκ ἐξυγιαίνουσι τελέως. Ἀλλὰ πολλάκις αὐτοὺς ὁ πόνος ὑπομιμνήσκει εἰκότως ὅλον γὰρ τὸ ἄχθος τοῦ σώματος οἱ πόδες ὀχέουσιν. Ὀκόταν οὖν μήπω ὑγιέες ἐόντες ὀδοιπορέωσι, φλαύρως ξυναλθάσεται τὰ ἄρθρα τὰ κινηθέντα διὰ τοῦτο ἄλλοτε καὶ ἄλλοτε ὀδοιπορέοντες ὀδυνῶνται τὰ πρὸς τῇ κνήμῃ.

9. The human foot is composed of several small bones like the hand. These bones therefore are scarcely ever broken, unless the skin at the same time be wounded by some sharp and heavy body. The treatment of such injuries, therefore, will be

delivered under the head of wounds. But if any bone be moved from its place, or a joint of the toes be luxated, or any of the bones of the part called the tarsus be displaced, it must be forced back again to its place as described with regard to the hand; and is to be treated with cerate, compresses, and bandages, like the fractures, with the exception of the splints; and is to be secured tightly in the same way, and the bandages renewed on the third day; and the patient thus bandaged should return the same answers as in fractures, as to the bandages feeling tight or slack. All these bones recover perfectly in twenty days, except those that are connected with the bones of the leg, and are in a line with them. It is advantageous to lie in bed during the whole of this time; but the patients, thinking light of the complaint, have not perseverance to do this, and they walk about before they get well; wherefore many of these do not make a perfect recovery. And often the pain puts them in mind of the injury; and deservedly, for the feet sustain the weight of the whole body. When, therefore, they walk about before they are whole, the joints which have been luxated are cured incompletely; and, on that account, while walking about, they have pains in the leg from time to time.

10. Τὰ δὲ κοινωνέοντα τοῖσι τῆς κνήμης ὀστέοισι μείζω τε τῶν ἐτέρων ἐστὶ, καὶ κινηθέντων τούτων πουλυχρονωτέρη ἢ ἄλθεξις. Ἰησις μὲν οὖν ἡ αὐτὴ ὀθονίοισι δὲ πλείοσι

χρέεσθαι, καὶ σπλήνεσιν καὶ ἐπὶ πᾶν ἔνθεν καὶ ἔνθεν ἐπιδέειν πιέζειν δὲ, ὥσπερ καὶ τᾶλλα πάντα, ταύτη μάλιστα ἢ ἐκινήθη, καὶ τὰς πρώτας περιβολὰς τῶν ὀθονίων κατὰ ταῦτα ποιέεσθαι. Ἐν δὲ ἐκάστη τῶν ἀπολυσίων ὕδατι πολλῶ θερμῶ χρέεσθαι ἐν πᾶσι δὲ πολλὸν ὕδωρ θερμὸν καταχέειν τοῖσι κατ' ἄρθρα σίνεσιν. Αἱ δὲ πιέξεις καὶ αἱ χαλάσιες ἐν τοῖσιν αὐτέοισι χρόνοισι τὰ αὐτὰ σημεῖα δεικνύοντων, ἅπερ ἐπὶ τοῖσι πρόσθεν καὶ τὰς μετεπιδέσιας ὡσαύτως χρὴ ποιέεσθαι. Ὑγιέες δὲ τελέως οὗτοι γίνονται ἐν τεσσαράκοντα ἡμέρησι μάλιστα, ἢν τολμέωσι κατακεῖσθαι ἢν δὲ μὴ, πάσχουσι ταῦτα ἄ καὶ πρότερον, καὶ ἐπὶ μᾶλλον.

10. But those bones which are connected with the bones of the leg are larger than the others, and the cure of them when luxuated is more protracted. The mode of treatment then is the same; but we must use more bandages and more splints, and the bandage is to be carried round to this side and to that, and pressure is to be made as in the other cases, particularly at the seat of the luxation, and the first circles of the bandages are to be made there. And at each time the bandages are taken off, much hot water is to be used, for in all injuries at joints the affusion of



hot water in large quantity is to be had recourse to. And the same symptoms of compression and relaxation should manifest themselves in the same times, as in the cases formerly treated of, and the subsequent bandagings should be conducted in like manner. These cases get completely well for the most part in forty days, if the patients have resolution to keep their bed; but if not, they are subjected to the complaints formerly described, or still worse.

11. Ὅσοι δὲ πηδήσαντες ἀφ' ὑψηλοῦ τινος ἐστηρίζαντο τῇ πτέρνῃ ἰσχυρῶς, τουτέοισι δισταταὶ μὲν τὰ ὀστέα, φλέβια δ' ἐκχυμοῦνται ἀμφιφλασθείσης τῆς σαρκὸς ἀμφὶ τὸ ὀστέον, οἴδημα δὲ ἐπιγίνεται καὶ πόνος πουλύς. Τὸ γὰρ ὀστέον τοῦτο οὐ σμικρὸν ἐστὶ, καὶ ὑπερέχει μὲν ὑπὸ τὴν ἰθυωρίην τῆς κνήμης, κοινωνεῖ δὲ φλεψὶ καὶ νεύροισιν ἐπικαίροισιν ὁ τένων δὲ ὁ ὀπίσθιος τούτῳ προσήρηται τῷ ὀστέῳ. Τούτους χρὴ ἰητρεύειν μὲν κηρωτῇ καὶ σπλήνεσι καὶ ὀθονίοισιν ὕδατι δὲ θερμῷ πλείστῳ ἐπὶ τουτέοισι χρῆσθαι καὶ ὀθονίων πλειόνων ἐπὶ τουτέοισι δεῖ, καὶ ἄλλως ὡς βελτίστων καὶ προσηνεστάτων. Καὶ ἦν μὲν τύχη

ἀπαλὸν τὸ δέρμα φύσει ἔχων τὸ ἀμφὶ τῇ πτέρνῃ, ἔῃν οὕτως ἦν δὲ παχὺ καὶ σκληρὸν, οἷα μετεξέτεροι ἰσχουσιν, κατὰτάμνειν χρὴ ὁμαλῶς, καὶ διαλεπτύνειν μὴ διατιτρώσκντ. Ἐπιδεῖν δὲ ἀγαθῶς οὐ παντὸς ἀνδρός ἐστὶ τὰ τοιαῦτα ἦν γάρ τις ἐπιδεῖν, ὡσπερ καὶ τὰ ἄλλα τὰ κατὰ τὰ σφυρὰ ἐπιδεῖται, ὅτε μὲν περὶ τὸν πόδα περιβαλλόμενος, ὅτε δὲ περὶ τὸν τένοντα, αἱ ἀποσφίγξεις αὐταὶ χωρίζουσι τὴν πτέρνην, ἣ τὸ φλάσμα ἐγένετο καὶ οὕτω κίνδυνος σφακελίσαι τὸ ὀστέον τὸ τῆς πτέρνης καίτοι ἦν σφακελίση, τὸν αἰῶνα πάντα ἱκανὸν ἀντίσχειν τὸ νόσημα. Καὶ γὰρ τὰλλα ὅσα μὴ ἐκ τοιούτου τρόπου σφακελίζει, ἀλλ' ἐν κατακλίσει μελανθείσης τῆς πτέρνης ὑπὸ ἀμελείης τοῦ σχήματος, ἢ ἐν κνήμῃ τρώματος γενομένου ἐπικαίρου καὶ χρονίου καὶ κοινοῦ τῇ πτέρνῃ, ἢ ἐν μηρῷ, ἢ ἐπὶ ἄλλῳ νουσήματι ὑπτιασμοῦ χρονίου γενομένου, ὁμῶς καὶ τοῖσι τοιούτοις χρόνια, καὶ ὀχλῶδεα, καὶ πολλὰκις ἀναρρηγνύμενα, ἦν μὴ χρηστῇ μὲν μελέτῃ θεραπευθῆ, πολλῇ δ' ἠσυχίῃ, ὡς τὰ

γε σφακελίζοντα ἐκ τοῦ τοιούτου δὲ τρόπου σφακελίζοντα καὶ κινδύνους μεγάλους τῷ σώματι παρέχει πρὸς τῇ ἄλλῃ λύμῃ. Καὶ γὰρ πυρετοὶ ὑπεροξέες, ξυνεχέες, τρομώδεις, λυγγώδεις, γνώμης ἀπτόμενοι, καὶ ὀλιγήμεροι, κτείνοντές τε γένοιτο δ' ἂν καὶ φλεβῶν αἰμορρῶων πελιώσιες, ναυσιώσιες, καὶ γαγγραινώσιες ὑπὸ τῆς πιέξιος γένοιτο δ' ἂν ταῦτα ἔξω τοῦ ἄλλου σφακελισμοῦ. Ταῦτα μὲν οὖν εἴρηται, οἷα τὰ ἰσχυρότατα φλάσματα ἴνεται τὰ μέντοι πλείστα ἠσυχαιῶς ἀμφιφλάται, καὶ οὐδεμίῃ πολλῇ σπουδῇ τῆς μελέτης, ἀλλ' ὁμως ὀρθῶς γε χρὴ χειρίζειν. Ἐπὶ μὲντοι ἰσχυρὸν δόξῃ εἶναι τὸ ἔρεισμα, τὰ τε εἰρημένα ποιέειν χρὴ, καὶ τὴν ἐπίδεσιν τὴν πλείστην ποιέεσθαι ἀμφὶ τὴν πτέρνην

περιβάλλοντα, ἄλλοτε πρὸς τὰ ἄκρα τοῦ ποδὸς ἀντιπεριβάλλοντα, ἄλλοτε πρὸς τὰ μέσα, ἄλλοτε πρὸς τὰ περὶ τὴν κνήμην προσεπιθεῖν δὲ καὶ τὰ πλησίον πάντα ἔνθεν καὶ ἔνθεν, ὡσπερ καὶ πρόσθεν εἴρηται καὶ ἰσχυρὴν μὲν μὴ ποιέεσθαι τὴν πίεξιν, ἐν πολλοῖσι δὲ τοῖσιν ὀθονίοισιν ἄμεινον δὲ καὶ ἐλλέβορον

πιπίσκειν αὐθμερὸν, ἢ τῆ ὑστεραίῃ ἀπολῦσαι δὲ τριταῖον, καὶ αὖθις μετεπιθεῖν. Σημεῖα δὲ τάδε, ἢν παλιγκοταίνῃ, ἢ οὐ ἐπὴν μὲν τὰ ἐκχυμώματα τῶν φλεβῶν, καὶ τὰ μελάσματα, καὶ τὰ ἐγγὺς ἐκείνων ὑπέρυθρα γινηται καὶ ὑπόσκληρα, κίνδυνος παλιγκοτῆσαι. Ἄλλ' ἢν μὲν ἀπύρετος ἦ, φαρμακεύειν ἄνω χρῆ, ὡσπερ εἴρηται, καὶ ὅσα ἂν μὴ ζυνεχῆ πυρεταίνηται ἢν δὲ ζυνεχῆ πυρεταίνηται, μὴ φάρμακεύειν, ἀπέχειν δὲ σιτίων καὶ ῥοφημάτων, ποτῶ δὲ χρῆσθαι ὕδατι, καὶ μὴ οἴνω, ἀλλὰ τῶ ὀξυγλυκεῖ. Ἦν δὲ μὴ μέλλῃ παλιγκοταίνειν, τὰ ἐκχυμώματα καὶ τὰ μελάσματα καὶ τὰ περιέχοντα ὑπόχλωρα γίνεται καὶ οὐ σκληρά ἀγαθὸν τοῦτο τὸ μαρτύριον ἐν πᾶσι τοῖσιν ἐκχυμώμασι, τοῖσι μὴ μέλλουσι παλιγκοταίνειν ὅσα δὲ σὺν σκληρύσμασι πελιοῦται, κίνδυνος μὲν μελανθῆναι. Τὸν δὲ πόδα ἐπιτηδεύειν χρῆ, ὅκως ἀνωτέρω τοῦ ἄλλου σώματος ἔσται τὰ πλεῖστα ὀλίγον. Ὑγιῆς δ' ἂν γένοιτο ἐν ἐξήκοντα ἡμέρησιν, εἰ ἀτρεμέοι.

11. In persons who jumping from any high object pitch upon their heel with great force, the bones are separated, and the veins pour forth their contents, owing to the contusion of the flesh surrounding the bone, and hence a swelling and much pain supervene. For this bone (os calcis) is not a small one, protrudes beyond the line of the leg, and is connected with important veins and tendons; for the back tendon of the leg is inserted into this bone. Such cases are to be treated with cerate, and with compresses and bandages; and hot water is to be used in large quantity; and they require many bandages, which ought to be particularly good and appropriate. And if the patient happen to have a tender skin about the heel, nothing is to be done to it; but if, as some have it, the skin be thick and hardened, it is to be pared down smoothly and thinned, but without wounding it. It is not everybody who can apply the bandage properly in such cases; for if one shall bind the parts, as in other accidents about the ankle, sometimes bringing a fold round the foot and sometimes round the tendon, these turns leave out the heel, which is the seat of the contusion, and thus there is danger that the os calcis may sphacelate; and if this should take place, the impediment may endure for life and also in all the other cases of sphacelus, not proceeding from such a cause as this; as when, from being carelessly allowed to lie in a certain position during confinement to bed, the heel becomes black, or when a serious wound has occurred in the leg and it is long of healing, and is connected with the heel, or

when the same thing happens in the thigh, or when in any disease a protracted decubitus takes place on the back, in all such cases the sores are inveterate, troublesome, and frequently break out again, unless particular attention be paid to the cure, along with much rest, as in all the cases attended with sphacelus. And cases of sphacelus connected with this cause, in addition to other inconveniences, are attended with great danger to the whole body. For they are apt to be attended with very acute fevers, of the continual type, accompanied with tremblings, hiccup, aberration of intellect, and which prove fatal within a few days: and there may be lividities of bloody veins, with nausea, and gangrene from pressure; these diseases may occur, besides the sphacelus. Those which have been described are the most violent contusion; but in general the contusions are mild, and no great care is required with regard to the treatment, and yet it must be conducted properly. But when the contusion appears to be severe, we must do as described above, making many turns of the bandage around the heel, sometimes carrying it to the extremity of the foot, sometimes to the middle, and sometimes around the leg; and, in addition, all the surrounding parts are to be bandaged in this direction and that, as formerly described; and the compression should not be made strong, but we should make use of many bandages, and it is better also to administer hellebore the same day or on the morrow; and the bandages should be removed on the third day and reapplied. And these are the symptoms by which we discover whether the case will get worse or not: when the extravasated blood, the lividities, and the surrounding parts become red and hard, there is danger of an exacerbation. But if there be no fever, we must give emetics, as has been said, and administer the other remedies which are applicable when the fever is not of a continual type; but if continual fever be present, we must not give strong medicines, but enjoin abstinence from solid food and soups, and give water for drink, and not allow wine but *oxyglyky* (a composition from vinegar and honey?). But if the case be not going to get worse, the ecchymosed and livid parts, and those surrounding them become greenish and not hard; for this is a satisfactory proof in all cases of ecchymosis, that they are not to get worse; but when lividity is complicated with hardness, there is danger that the part may become blackened. And we must so manage the foot as that it may be generally raised a little higher than the rest of the body. Such a patient will get well in sixty days if he keep quiet.

12. Ἡ δὲ κνήμη δύο ὀστέα ἐστὶ, τῇ μὲν συχνῶ λεπτότερον τὸ ἕτερον τοῦ ἑτέρου, τῇ δὲ οὐ πολλῶ λεπτότερον ξυνέχεται δὲ ἀλλήλοισι τὰ πρὸς τοῦ ποδός, καὶ ἐπίφυσιν κοινὴν ἔχει, ἐν ἰθυωρίῃ δὲ τῆς κνήμης οὐ ξυνέχεται τὰ δὲ πρὸς τοῦ μηροῦ ξυνέχεται, καὶ ἐπίφυσιν ἔχει, καὶ ἡ ἐπίφυσις διάφυσιν μακρότερον δὲ τὸ

ἕτερον ὀστέον σμικρῶ τὸ κατὰ τὸν σμικρὸν δάκτυλον ἢ μὲν φύσις τοιαύτη τῶν ὀστέων τῶν ἐν τῇ κνήμῃ.

12. The leg consists of two bones, of which the one is much more slender than the other at one part, but not much more slender at another. These are connected together at the foot, and form a common epiphysis, but they are not united together along the line of the leg; and at the thigh they are united together and form an epiphysis, and this epiphysis has a diaphysis; but the other bone in a line with the little toe is a little longer. Such is the nature of the bones of the leg.

13. Ὀλισθάνει δὲ ἔστιν ὅτε τὰ πρὸς τοῦ ποδὸς, ὅτε μὲν ζὺν τῇ ἐπιφύσει ἀμφοτέρα τὰ ὀστέα, ὅτε δὲ ἡ ἐπίφυσις ἐκινήθη, ὅτε δὲ τὸ ἕτερον ὀστέον. Ταῦτα δὲ ὀγλώδεα μὲν ἦσσαν, ἢ τὰ ἐν τῷ

καρπῶ τῶν χειρέων, εἰ τολμῶεν ἀτρεμέειν οἱ ἄνθρωποι. Ἰησις δὲ παραπλησίη, οἷη περ ἐκείνων τὴν τε γὰρ ἐμβολὴν χρὴ ποιέεσθαι ἐκ κατατάσιος ὡσπερ ἐκείνων, ἰσχυροτέρης δὲ δεῖται τῆς κακατάσιος, ὅσῳ καὶ ἰσχυρότερον τὸ σῶμα ταύτη. Ἐς τὰ πλεῖστα μὲν γὰρ ἀρκέουσιν ἄνδρες δύο, ὁ μὲν ἔνθεν, ὁ δὲ ἔνθεν τείνοντες. Ἦν δὲ μὴ ἰσχύωσιν, ἰσχυροτέρεην ῥηϊδίον ἔστι ποιέειν τὴν κατάτασιν ἢ γὰρ πλήμνην κατορύξαντα χρὴ, ἢ ἄλλο τι ὅ τι τούτῳ ἔοικεν, μαλθακόν τι περὶ τὸν πόδα περιβάλλειν ἔπειτα πλατέσι βοείοισιν ἰμάσι περιδήσαντα τὸν πόδα, τὰς ἀρχὰς τῶν ἰμάντων, ἢ πρὸς ὑπερον, ἢ πρὸς ἕτερον ξύλον προσδήσαντα, τὸ ξύλον πρὸς τὴν πλήμνην ἄκρον ἐνθέντα ἐπανακλᾶν τοὺς δὲ ἀντιτείνειν, ἄνωθεν τῶν τε ὠμων ἐχομένους καὶ τῆς ἰγνύης. Ἔστι δὲ καὶ τὸ ἄνω τοῦ σώματος ἀνάγκη προσλαβεῖν τοῦτο μὲν ἦν βούλη,

ξύλον στρογγύλον, λεῖον, κατορύξας βαθέως, μέρος τι αὐτοῦ ὑπερέχον τοῦ ξύλου μεσηγὺ τῶν σκελέων ποιήσασθαι παρὰ τὸν περίνεον, ὡς κωλύη ἀκολουθέειν τὸ σῶμα τοῖσι πρὸς ποδῶν τείνουσιν ἔπειτα πρὸς τὸ τεινόμενον σκέλος μὴ ῥέπειν, τὸν δὲ τινα πλάγιον παρακαθήμενον ἀπωθέειν τὸν γλουτὸν, ὡς μὴ περιέλκηται τὸ σῶμα. Τοῦτο δὲ καὶ ἦν βούλη, περὶ τὰς μασχάλας ἔνθεν καὶ ἔνθεν τὰ ξύλα παραπέπηγεν, αἱ δὲ χεῖρες παρατεταμέναι φυλάσσονται, προσεπιλαμβανέτω δὲ τις κατὰ τὸ γόνυ, καὶ οὕτως ἀντιτείνοιτο. Τοῦτο δ' ἦν παρὰ τὸ γόνυ βούληται, ἄλλους ἰμάντας περιδήσας, ἢ περὶ τὸν μηρὸν, πλήμνην ἄλλην ὑπὲρ κεφαλῆς κατορύξας, ἐξαρτήσας τοὺς ἰμάντας ἐκ τινος ξύλου, τὸ ξύλον στηρίζων ἐς τὴν πλήμνην, τάναντία τῶν πρὸς ποδῶν ἔλκειν. Τοῦτο δ' ἦν βούλη, ἀντὶ τῶν πλημνέων δοκίδα ὑποτείνας ὑπὸ τὴν κλίνην μετρίην, ἔπειτα πρὸς τῆς δοκίδος ἔνθεν καὶ ἔνθεν τὴν κεφαλὴν στηρίζων

καὶ ἀνακλῶν τὰ ξύλα, κατατείνειν τοὺς ἱμάντας ἦν δὲ θέλης, ὀνίσκους καταστήσας ἔνθεν καὶ ἔνθεν, ἐπ' ἐκείνων τὴν κατάτασιν ποιέεσθαι. Πολλοὶ δὲ καὶ ἄλλοι τρόποι κατατασίων. Ἄριστον δὲ, ὅστις ἐν πόλει μεγάλη ἰητρεύει, κεκτῆσθαι ἐσκευασμένον ξύλον, ἐν ᾧ πᾶσαι αἱ ἀνάγκαι ἔσονται πάντων μὲν κατηγομάτων, πάντων δὲ ἄρθρων ἐμβολῆς ἐκ κατατάσιος καὶ μοχλεύσιος ἀρκέει δὲ τὸ ξύλον, ἦν ἧ τοιοῦτον οἶον οἱ τετράγωνοι τρίβολοι δρύϊνοι γίνονται, μῆκος καὶ πλάτος καὶ πάχος.

13. Sometimes the bones connected with the foot are displaced, sometimes both bones with their epiphysis; sometimes the whole epiphysis is slightly moved, and sometimes the other bone. These cases are less troublesome than the same accidents at the wrist, if the patients will have resolution to give them rest. The mode of treatment is the same as that of the other, for the reduction is to be made, as of the other, by means of extension, but greater force is required, as the parts of the body concerned are stronger in this case. But, for the most part, two men will be sufficient, by making extension in opposite directions, but, not withstanding, if they are not sufficiently strong, it is easy to make more powerful extension in the following way: having fixed in the ground either the nave of a wheel, or any such object, something soft is to be bound round the foot, and then some broad thongs of ox-skin being brought round it, the heads of the thongs are to be fastened to a pestle or any other piece of wood, the end of which is to be inserted into the nave, and it, the pestle, is to be pulled away, while other persons make counter-extension by grasping the shoulders and the ham. It is also sometimes necessary to secure the upper extremity otherwise; this if you desire to effect, fasten deeply in the ground a round, smooth piece of wood, and place the upper extremity of the piece of wood at the perineum, so that it may prevent the body from yielding to the pulling at the foot, and, moreover, to prevent the leg while stretched, from inclining downward; some person seated at his side should push back the hip, so that the body may not turn round with the pulling, and for this purpose, if you think fit, pieces of wood may be fastened about the armpits on each side, and they are to be stretched by the hands, and thus secured, while another person takes hold of the limb at the knee, and aids in thus making counter-extension. Or thus, if you prefer it: having bound other thongs of leather about the limb, either at the knee, or around the thigh, and having fastened another nave of a wheel in the ground above the head, and adjusted the thongs piece of wood adapted to the nave, extension may thus be made in the opposite direction to the feet. Or if you choose, it may be done thus: instead of the naves, lay a moderate-sized beam under the couch, and then having fastened pieces of wood in this beam, both before and behind the head, make counter-extension by

means of thongs, or place windlasses at this extremity and that, and make extension by means of them. There are many other methods of making extension. But the best thing is, for any physician who practices in a large city, to have prepared a proper wooden machine, with all the mechanical powers applicable in cases of fractures and dislocation, either for making extension, or acting as a lever. For this purpose it will be sufficient to possess a board in length, breadth, and thickness, resembling the quadrangular threshing-boards made of oak.

14. Ἐπὴν δὲ ἰκανῶς κατατανύσης, ῥηΐδιον ἤδη τὸ ἄρθρον ἐμβαλεῖν ὑπεραιωρέεται γὰρ ἐς ἰθυωρίην ὑπὲρ τῆς ἀρχαίης ἔδρης. κατορθοῦσθαι οὖν χρή τοῖσι θέναρσι τῶν χειρῶν, τοῖσι μὲν ἐς τὸ ἐξεστηκὸς ἐρείδοντα, τοῖσι δὲ ἐπὶ θάτερα κατώτερον τοῦ σφυροῦ ἀντερείδοντα. Ἐπὴν δὲ ἐμβάλῃς, ἣν μὲν οἶόν τε ἦ, κατατεταμένα ἐπιδεῖν χρή ἣν δὲ κωλύηται ὑπὸ τῶν ἱμάντων, ἐκείνους λύσαντα ἀντικατατείνειν, ἔστ' ἂν ἐπιδήσης. Ἐπιδεῖν δὲ τὸν αὐτὸν τρόπον, καὶ τὰς ἀρχὰς ὡσαύτως βαλλόμενον κατὰ τὸ ἐξεστηκὸς, καὶ τὰς περιβολὰς τὰς πρώτας πλείστας κατὰ τοῦτο ποιέεσθαι, καὶ τοὺς σπλῆνας πλείστους κατὰ τοῦτο, καὶ τὴν πίεξιν μάλιστα κατὰ

τούτῳ προσεπιδεῖν δὲ καὶ ἔνθεν καὶ ἔνθεν ἐπὶ συχνόν. Μᾶλλον δέ τι τοῦτο τὸ ἄρθρον περιέχθαι χρή ἐν τῇ πρώτῃ ἐπιδέσει, ἢ τὸ ἐν τῇ χειρί. Ἐπὴν δὲ ἐπιδήσης, ἀνωτέρω μὲν τοῦ ἄλλου σώματος ἐχέτω τὸ ἐπιδεθὲν, τὴν δὲ θέσιν δεῖ ποιέεσθαι οὕτως, ὅπως ἤκιστα ἀπαιωρηθήσεται ὁ πούς. Τὸν δὲ ἰσχυασμὸν τοῦ σώματος οὕτω ποιέεσθαι, ὁκοίην τινὰ δύναμιν ἔχει καὶ τὸ ὀλίσθημα τὰ μὲν γὰρ σμικρὸν, τὰ δὲ μέγα ὀλισθάνει. Τὸ ἐπίπαν δὲ ἰσχυαίνειν μᾶλλον καὶ ἐπὶ πλείω χρόνον χρή ἐν τοῖσι κατὰ τὰ σκέλεα τρώμασιν, ἢ ἐν τοῖσι κατὰ τὰς χεῖρας καὶ γὰρ μέζω καὶ παχύτερα ταῦτα ἐκείνων καὶ δὴ καὶ ἀναγκαῖον ἐλινύειν τὸ σῶμα καὶ κατακεῖσθαι. Μετεπιδῆσαι δὲ τὸ ἄρθρον, οὔτε τι κωλύει τριταῖον, οὔτε κατεπείγει. Καὶ τὰ ἄλλα πάντα παραπλησίως χρή ἰητρεύειν, ὡσπερ καὶ τὰ παροιχόμενα. Καὶ ἣν μὲν τολμᾷ ἀτρέμα κατακεῖσθαι, ἰκαναὶ τεσσαράκοντα ἡμέραι, ἣν μόνον ἐς τὴν ἐσωτῶν χώραν τὰ ὀστέα αὖθις καθίζηται ἣν δὲ μὴ θέλη ἀτρεμέειν, χρῶτο μὲν ἂν οὐ ῥαδίως τῷ σκέλει, ἐπιδεῖσθαι δὲ ἀναγκάζοιτ' ἂν πολὺν χρόνον.

Ὅκοσα μέντοι τῶν ὀστέων μὴ τελέως ἴζει ἐς τὴν ἐσωτῶν χώραν, ἀλλὰ τι ἐπιλείπει, τῷ χρόνῳ λεπτύνεται ἰσχίον καὶ μηρὸς καὶ κνήμη καὶ ἣν μὲν εἶσω ὀλίσθη, τὸ ἔξω μέρος λεπτύνεται, ἣν δὲ ἔξω, τὸ εἶσω. Τὰ πλείστα δὲ ἐς τὸ ἔσω ὀλισθάνει.

14. When you have made proper extension, it is easy reduce the joint, for the displaced bone is thus raised into a line with the other. And the bones are to be adjusted with the palms of the hands, pressing upon the projecting bone with the one, and making counter-pressure below the ankle with the other. When you have replaced the bones, you must apply the bandages while the parts are upon the stretch, if you possibly can; but if prevented by the thongs, you must loose them, and make counter-extension until you get the bandages applied. The bandage is to be applied in the manner formerly described, the heads of the bandages being placed on the projecting part, and the first turns made in like manner, and so also with regard to the number of compresses and the compression; and turns of the bandages are to be brought frequently round on this and on that side of the ankle. But this joint must be bound more tight at the first dressing than in the case of the hand. But when you have applied the bandage, you must place the bandaged part somewhat higher than the rest of the body, and in such a position that the foot may hang as little as possible. The attenuation of the body is to be made proportionate to the magnitude of the luxation, for one luxation is to be a small, and another to a great extent. But in general we must reduce more, and for a longer time, in injuries about the legs, than in those about the hands; for the former parts are larger and thicker than the latter, and it is necessary that the body should be kept in a state of rest, and in a recumbent position. There is nothing to prevent or require the limb to be bandaged anew on the third day. And all the treatment otherwise is to be conducted in like manner, as in the preceding cases. And if the patient have resolution to lie quiet, forty days will be sufficient for this purpose, if only the bones be properly reduced, but if he will not lie quiet, he will not be able to use the limb with ease, and he will find it necessary to wear a bandage for a long time. When the bones are not properly replaced, but there has been some defect in this respect, the hip, the thigh, and the leg become wasted, and if the dislocation be inward, the external part of the thigh is wasted, and *vice versa* . But for the most part the dislocation is inward.

15. Ἐπὴν δὲ κνήμης ὀστέα ἀμφοτέρα καταγῆ ἄνευ ἐλκώσιος, κατατάσιος ἰσχυροτέρης δεῖται. Τείνειν δὲ τουτέων τῶν τρόπων ἐνίοισι τῶν προειρημένων, ἦν μεγάλαι αἱ παραλλάξεις ἔωσιν. Ἰκαναὶ δὲ καὶ αἱ ἀπὸ τῶν ἀνδρῶν κατατάσεις τὰ πλεῖστα γὰρ ἀρκέοιεν ἂν δύο ἄνδρες ἐρρωμένοι, ὁ μὲν ἔνθεν, ὁ δ' ἔνθεν ἀντιτείνοντες. Τείνειν δὲ ἐς τὸ ἰθὺ χρῆ κατὰ φύσιν καὶ κατὰ τὴν ἰθυωρίην τῆς κνήμης καὶ τοῦ μηροῦ, καὶ ἦν κνήμης ὀστέα κατεηγυῖης κατατείνης, καὶ ἦν μηροῦ. Καὶ ἐπιδεῖν δὲ οὕτως, ἐκτεταμένων ἀμφοτέρων, ὁκότερον ἂν τουτέων ἐπιδέης οὐ γὰρ ταῦτὰ ξυμφέρει σκέλει τε καὶ χειρί. Πήχεος μὲν γὰρ καὶ

βραχίονος ἐπὴν ἐπιδεθῶσιν ὅστέα κατεηγότα, ἀναλαμβάνεται ἡ χεὶρ, καὶ ἦν ἐκτεταμένα ἐπίδεξις, τὰ σχήματα τῶν σαρκῶν ἑτεροιοῦται ἐν τῇ ξυγκάμψει τοῦ ἀγκῶνος ἀδύνατος γὰρ ὁ ἀγκῶν ἐκτετάσθαι πούλυν χρόνον οὐ γὰρ πολλάκις ἐν τοιούτῳ

εἶθισται ἐσχηματίζεσθαι, ἀλλ' ἐν τῷ ξυγκεκάμφθαι καὶ δὴ καὶ ἄτε δυνάμενοι οἱ ἄνθρωποι περιέειναι, ἐπὴν κατὰ χεῖρα τρωθῶσι, ξυγκεκάμφθαι κατὰ τὸν ἀγκῶνα δέονται. Σκέλος δὲ ἐν τε τῆσιν ὀδοιπορήσιν καὶ ἐν τῷ ἐστάναι εἶθισται ὅτε μὲν ἐκτετάσθαι, ὅτε δὲ σμικροῦ δεῖν ἐκτετάσθαι καὶ εἶθισται καθεῖσθαι ἐς τὸ κάτω κατὰ φύσιν, καὶ δὴ καὶ πρὸς τὸ ὀχέειν τὸ ἄλλο σῶμα διὰ τοῦτο εὐφορον αὐτῷ ἐστὶ τὸ ἐκτετάσθαι, ὅταν ἀνάγκη ἔχη καὶ δὴ καὶ ἐν τῆσι κοίτησι πολλάκις ἐν τῷ σχήματι τουτέῳ ἐστὶν ἐπὴν δὲ δὴ τρωθῆ, ἀνάγκη καταδουλοῦται τὴν γνώμην, ὅτι ἀδύνατοι μετεωρίζεσθαι γίνονται, ὥστε οὐδὲ μέμνηνται περὶ τοῦ ξυγκαμφθῆναι καὶ ἀναστῆναι, ἀλλὰ ἀτρεμέουσιν ἐν τουτέῳ τῷ σχήματι κείμενοι. Διὰ οὖν ταύτας τὰς προφάσιας χειρὸς καὶ σκέλεος, οὔτε ἡ κατάτασις, οὔτε ἡ ἐπίδεξις τοῦ σχήματος ξυμφέρει ἢ αὐτή. Ἦν μὲν οὖν ἱκανὴ ἢ κατάτασις ἢ ἀπὸ τῶν ἀνδρῶν ἦ, οὐ δεῖ μάτην πονέεσθαι καὶ γὰρ σολοικότερον μηχανοποιεῖν μηδὲν δέον ἦν δὲ μὴ ἱκανὴ ἢ κατάτασις ἢ ἀπὸ τῶν ἀνδρῶν, καὶ τῶν ἄλλων τινὰ τῶν ἀναγκῶν προσφέρειν,

ἦν τινὰ γε προσχωρέει. Ὅταν δὲ δὴ ἱκανῶς καταταθῆ, ῥηΐδιον ἦδη κατορθώσασθαι τὰ ὅστέα καὶ ἐς τὴν φύσιν ἀγαγεῖν, τοῖσι θέναρσι τῶν χειρῶν ἀπευθύνοντα καὶ ἐξευκρινέοντα.

15. And when both bones of the leg are broken without a wound of the skin, stronger extension is required. We may make extension by some of the methods formerly described, provided the bones ride over one another to a considerable degree. But extension by men is also sufficient, and for the most part two strong men will suffice, by making extension and counterextension. Extension must naturally be made straight in a line with the leg and thigh, whether on account of a fracture of the bones of the leg or of the thigh. And in both cases they are to be bandaged while in a state of extension, for the same position does not suit with the leg and the arm. For when the fractured bones of the arm or fore-arm are bandaged, the fore-arm is suspended in a sling, and if you bind them up while extended, the figures of the fleshy parts will be changed in bending the arm at the elbow, for the elbow cannot be kept long extended, since persons are not in the custom of keeping the joint long in this form, but in a bent position, and persons who have been wounded in the arm, and are still able to walk about, require to have the arm bent at the elbow-joint. But the leg, both in walking and



standing, is habitually extended, either completely or nearly so, and is usually in a depending position from its construction, and in order that it may bear the weight of the rest of the body. Wherefore it readily bears to be extended when necessary, and even when in bed the limb is often in this position. And when wounded, necessity subdues the understanding, since the patients become incapable of raising themselves up, so that they neither think of bending the limb nor of getting up erect, but remain lying in the same position. For these reasons, neither the same position nor the same mode of bandaging applies to the arm and to the leg. If, then, extension by means of men be sufficient, we should not have recourse to any useless contrivances, for it is absurd to employ mechanical means when not required; but if extension by men be not sufficient, you may use any of the mechanical powers which is suitable. When sufficiently extended, it will be easy to adjust the bones and bring them into their natural position, by straightening and arranging them with the palms of the hand.

16. Ἐπὴν δὲ κατορθώσῃ, ἐπιδείν τοῖσιν ὀθονίοισι κατατεταμένα, ἦν τ' ἐπὶ δεξιᾷ, ἦν τ' ἐπ' ἀριστερὰ περιφέρειν ζυμφέρῃ αὐτέοισι τὰ πρῶτα ὀθόνια βαλλέσθω δὲ τὴν ἀρχὴν τοῦ ὀθονίου κατὰ τὸ κάτηγμα, καὶ περιβαλλέσθω κατὰ τοῦτο τὰς πρῶτας περιβολὰς κάπειτα νεμέσθω ἐπὶ τὴν ἄνω κνήμην ἐπιδέων, ὥσπερ ἐπὶ τοῖσιν ἄλλοισι κατήγμασιν εἴρηται. Τὰ δὲ ὀθόνια πλατύτερα χρὴ εἶναι, καὶ μακρότερα καὶ πλέω πούλῳ τὰ κατὰ τὸ σκέλος τῶν ἐν τῇ χειρὶ. Ἐπὴν δὲ ἐπιδήσῃς, καταθεῖναι ἐφ' ὀμαλοῦ τινος καὶ μαλθακοῦ, ὥστε μὴ διεστράφθαι ἢ τῆ, ἢ τῆ, μῆτε λορδὸν, μῆτε κυφὸν εἶναι μάλιστα δὲ ζυμφέρει προσκεφάλαιον, ἢ λίνεον, ἢ ἐρίνεον, μὴ σκληρὸν, λαπαρὸν μέσον κατὰ μῆκος ποιήσαντα, ὑποθεῖναι, ἢ ἄλλο τι ὃ τούτῳ ἔοικεν. Περὶ γὰρ τῶν σωλήνων τῶν ὑποτιθεμένων ὑπὸ τὰ σκέλεα τὰ κατηγότα, ἀπορέω ὃ τι ζυμβουλεύσω, εἰ ὑποτιθέναι χρὴ ἢ οὐ. Ωφελέουσι μὲν γὰρ, οὐχ ὅσον δὲ οἱ ὑποτιθέντες οἴονται. Οὐ γὰρ

ἀναγκάζουσιν οἱ σωλῆνες ἀτρεμέειν, ὡς οἴονται οὔτε γὰρ τῷ ἄλλῳ σώματι στρεφομένῳ ἢ ἐνθα, ἢ ἐνθα, ἐπαναγκάζει ὁ σωλὴν μὴ ἐπακολουθέειν τὸ σκέλος, ἦν μὴ ἐπιμελῆται αὐτὸς ὄνθρωπος. οὔτε αὖ τὸ σκέλος ἄνευ τοῦ σώματος κωλύει ὁ σωλὴν κινήθῃναι ἢ τῆ ἢ τῆ. Ἀλλὰ μὴν ἀστεργέστερον ζύλον ὑποτετάσθαι, ἦν μὴ ὁμῶς ἂν τις μαλθακόν τι ἐς αὐτὸ ἐντεθῆ. Εὐχρηστότατον δὲ ἐστὶν ἐν τῆσι μεθυποστρώσεσι, καὶ ἐν τῆσιν ἐς ἄφοδον προχωρήσεσιν. Ἔστιν οὖν σὺν σωλῆνι καὶ ἄνευ σωλῆνος καὶ καλῶς καὶ αἰσχυρῶς κατασκευάσασθαι πιθανώτερον δὲ τοῖσι δημότησιν ἐστὶ, καὶ τὸν ἰητρὸν ἀναμαρτητότερον εἶναι, ἦν σωλὴν ὑποκέηται καίτοι ἀτεχνέστερόν γε ἐστὶν. Δεῖ μὲν γὰρ ἐφ' ὀμαλοῦ καὶ μαλθακοῦ κεῖσθαι πάντη πάντως ἐς ἰθύ ἐπεὶ τοί γε ἀνάγκη κρατηθῆναι τὴν ἐπίδεσιν ὑπὸ τῆς διαστροφῆς τῆς ἐν τῇ θέσει, ὅποι ἂν ῥέπη, καὶ ὀκόσα ἂν ῥέπη. Ὑποκρινέσθω δὲ

ὁ ἐπιδεδεμένος ταῦτά, ἅπερ καὶ πρότερον εἴρηται καὶ γὰρ τὴν ἐπίδεσιν χρῆ τοιαύτην εἶναι, καὶ τὸ οἶδημα οὕτως ἐξαίρεσθαι ἐς τὰ ἄκρεα, καὶ τὰς χαλάσιαις οὕτω, καὶ τὰς μετεπιδέσιαις διὰ τρίτης, καὶ εὕρισκέσθω

ἰσχνότερον τὸ ἐπιδεόμενον, καὶ τὰς ἐπιδέσιαις ἐπὶ μᾶλλον ποιέεσθαι, καὶ πλέοσι τοῖσιν ὀθονίοισιν περιλαμβάνειν τε καὶ τὸν πόδα χαλαρῶς, ἣν μὴ ἄγαν ἐγγὺς ἢ τοῦ γούνατος τὸ τρῶμα. Κατατείνειν δὲ μετρίως καὶ ἐπικατορθοῦν ἐφ' ἐκάστη ἐπιδέσει χρῆ τὰ ὀστέα ἣν γὰρ ὀρθῶς μὲν ἰητρεύηται, κατὰ λόγον δὲ τὸ οἶδημα χωρὲν, ἔτι μὲν λεπτότερον καὶ ἰσχνότερον τὸ ἐπιδεόμενον χωρίον ἔσται, ἔτι δὲ αὖ παραγωγότερα τὰ ὀστέα, ἐνακούοντα τῆς κατατάσιος μᾶλλον. Ἐπὴν δὲ ἐβδομαῖος, ἢ ἐναταῖος, ἢ ἐνδεκαταῖος γένηται, τοὺς νάρθηκας προστιθέναι, ὥσπερ καὶ ἐπὶ τοῖσιν ἄλλοισι κατήγμασιν εἴρηται. Τῶν δὲ νάρθηκων τὰς ἐνέδρας χρῆ φυλάσσεσθαι κατὰ τε τῶν σφυρῶν τὴν ἴξιν, καὶ κατὰ τὸν τένοντα τὸν ἐν τῇ κνήμῃ τοῦ ποδός. Ὅστέα δὲ κνήμης κρατύνεται ἐν τεσσαράκοντα ἡμέρησιν, ἣν ὀρθῶς ἰητρεύηται. Ἦν δὲ ὑποπευῆς τῶν ὀστέων τι δεῖσθαι τινος διορθώσιος, ἢ τινα ἔλκωσιν ὀρρωδέης, ἐν τῷ μεσηγῷ χρόνῳ χρῆ λύσαντα καὶ εὐθετισάμενον μετεπιδῆσαι.

16. When the parts are adjusted, you should apply the bandages while the limb is in a stretched position, making the first turns to the right or to the left, as may be most suitable; and the end of the bandage should be placed over the fracture, and the first turns made at that place; and then the bandage should be carried up the leg, as described with regard to the other fractures. But the bandages should be broader and longer, and more numerous, in the case of the leg than in that of the arm. And when it is bandaged it should be laid upon some smooth and soft object, so that it may not be distorted to the one side or the other, and that there may be no protrusion of the bones either forward or backward; for this purpose nothing is more convenient than a cushion, or something similar, either of linen or wool, and not hard; it is to be made hollow along its middle, and placed below the limb. With regard to the canals ( *gutters?* ) usually placed below fractured legs, I am at a loss whether to advise that they should be used or not. For they certainly are beneficial, but not to the extent which those who use them suppose. For the canals do not preserve the leg at rest as they suppose; nor, when the rest of the body is turned to the one side or the other, does the canal prevent the leg from following, unless the patient himself pay attention; neither does the canal prevent the limb from being moved without the body to the one side or the other. And a board is an uncomfortable thing to have the limb laid upon, unless something soft be placed above it. But it is a very useful thing in making any subsequent arrangements of the bed and in going to stool. A limb then may be

well or ill arranged with or without the canal. But the common people have more confidence, and the surgeon is more likely to escape blame, when the canal is placed under the limb, although it is not *secundum artem*. For the limb should by all means lie straight upon some level and soft object, since the bandaging must necessarily be overcome by any distortion in the placing of the leg, whenever or to whatever extent it may be inclined. The patient, when bandaged, should return the same answers as formerly stated, for the bandaging should be the same, and the same swellings should arise in the extremities, and the slackening of the bandages in like manner, and the new bandaging on the third day; and the bandaged part should be found reduced in swelling; and the new bandagings should be more tightly put on, and more pieces of cloth should be used; and the bandages should be carried loosely about the foot, unless the wound be near the knee. Extension should be made and the bones adjusted at every new bandaging; for, if properly treated, and if the swelling progress in a suitable manner, the bandaged limb will have become more slender and attenuated, and the bones will be more mobile, and yield more readily to extension. On the seventh, the ninth, or the eleventh day, the splints should be applied as described in treating of the other fractures. Attention should be paid to the position of the splints about the ankles and along the tendon of the foot which runs up the leg. The bones of the leg get consolidated in forty days, if properly treated. But if you suspect that anything is wanting to the proper arrangement of the limb, or dread any ulceration, you should loose the bandages in the interval, and having put everything right, apply them again.

17. Ἦν δὲ τὸ ἕτερον ὀστέον κατεγῆ ἐν κνήμῃ, κατατάσιος μὲν ἀσθενεστέρης δεῖται, οὐ μὴν ἐπιλείπειν χρῆ, οὐδὲ βλακεύειν ἐν τῇ κατατάσει, μάλιστα μὲν ἐν τῇ πρώτῃ ἐπιδέσει κατατείνεσθαι, ὅσον ἐφικνέεται αἰεὶ ποτε πάντα τὰ κατήγματα, εἰ δὲ μὴ, ὡς τάχιστα ὅ τι γὰρ ἂν μὴ κατὰ τροπον ἠϋθετισμένων τῶν ὀστέων ἐπιδέων τις πιέζει, ὀδυναίτερον τὸ χωρίον γίνεται. Ἡ δὲ ἄλλη ἡτρεῖη ἢ αὐτή.

17. But if the other bone (*fibula?*) of the leg be broken, less powerful extension is required, and yet it must not be neglected, nor be performed slovenly, more especially at the first bandaging. For in all cases of fracture this object should be attained then as quickly as possible. For when the bandage is applied tight while the bones are not properly arranged, the properly arranged, the part becomes more painful. The treatment otherwise is the same.

18. Τῶν δὲ ὀστέων τὸ μὲν ἔσω τοῦ ἀντικνημίου καλεομένου ὀγλω

δέστερον ἐν τῇ ἰητρείῃ ἐστὶ, καὶ κατατάσιος μᾶλλον δεόμενον, καὶ ἦν μὴ ὀρθῶς τὰ ὀστέα τεθῆ, ἀδύνατον κρύψαι, φανερόν γάρ καὶ ἄσαρκον πᾶν ἐστὶν καὶ ἐπιβαίνειν ἐπὶ τὸ σκέλος πολλῶ βραδύτερον δύναιντ' ἂν, τουτέου κατεηγότος. Ἦν δὲ τὸ ἔξω ὀστέον κατεηγῆ, πουλὺ μὲν εὐφορώτερον φέρουσι, πουλὺ δ' εὐκρυπτότερον, καὶ ἦν μὴ καλῶς ξυντεθῆ, ἐπίσαρκον γάρ ἐστὶν ἐπὶ πόδας τε ταχέως ἴστανται, τὸ πλεῖστον γὰρ τοῦ ἄχθεος ὀχέει τὸ ἔσωθεν τοῦ ἀντικνημίου ὀστέον. Ἄμα μὲν γὰρ αὐτῶ τῶ σκέλει καὶ τῇ ἰθωρίῃ τοῦ ἄχθεος τοῦ κατὰ τὸ σκέλος, τὸ πλεῖον ἔχει τοῦ πόνου τὸ ἔσω ὀστέον τοῦ γὰρ μηροῦ ἢ κεφαλῆ ὑπεροχέει τὸ ὑπερθεν τοῦ σώματος, αὕτη δὲ εἴσωθεν πέφυκε τοῦ σκέλεος, καὶ οὐκ ἔξωθεν, ἀλλὰ κατὰ τὴν τοῦ ἀντικνημίου ἴξιν ἅμα δὲ τὸ ἄλλο ἥμισυ τοῦ σώματος γειτονεύεται μᾶλλον ταύτῃ τῇ ἴξει, ἀλλ' οὐχὶ τῇ ἔξωθεν ἅμα δὲ, ὅτι παχύτερον τὸ ἔσω τοῦ ἔξωθεν, ὥσπερ τὸ ἐν τῶ πήχει τὸ κατὰ τὴν τοῦ μικροῦ δακτύλου ἴξιν λεπτότερον καὶ μακρότερον. Ἐν μέντοι τῶ ἄρθρῳ τῶ κάτω οὐχ ὁμοίῃ ἢ ὑπότασις τοῦ ὀστέου τοῦ μακροτέρου ἀνομοίως γὰρ ὁ ἀγκῶν καὶ ἡ ἰγνύη κάμπτεται. Διὰ οὖν ταύτας τὰς προφάσις, τοῦ μὲν ἔξωθεν ὀστέου κατεηγότος, ταχεῖαι αἱ ἐπιβάσις, τοῦ δὲ ἔσωθεν κατεηγότος, βραδεῖαι αἱ ἐπιβάσις.

18. Of the bones of the leg, the inner one, called the tibia, is the more troublesome to manage, and requires the greater extension; and if the broken bones are not properly arranged, it is impossible to conceal the distortion, for the bone is exposed and wholly uncovered with flesh; and it is much longer before patients can walk on the leg when this bone is broken. But if the outer bone be broken, it causes much less trouble, and the deformity, when the bones are not properly set, is much more easily concealed, the bone being well covered with flesh; and the patients speedily get on foot, for it is the inner bone of the leg which supports the most of the weight of the body. For along with the thigh, as being in a line with weight thrown upon the thigh, the inner bone has more work to sustain; inasmuch as it is the head of the thigh-bone which sustains the upper part of the body, and it is on the inner and not on the outer side of the thigh, being in a line with the tibia; and the other half of the body approximates more to this line than to the external one; and at the same time the inner bone is larger than the outer, as in the fore-arm the bone in the line of the little finger is the slenderer and longer. But in the joint of the inferior extremity, the disposition of the longer bone is not alike, for the elbow and the ham are bent differently. For these reasons when the external bone is broken, the patients can soon walk about; but in fractures of the inner, it is a long time before they can walk.

19. Ἦν δὲ τὸ τοῦ μηροῦ ὀστέον καταγῆ, τὴν κατάτασιν χρὴ ποιέεσθαι περὶ

παντός, ὅπως μὴ ἐνδεεστέως σχήσει πλεονασθεῖσα μὲν γὰρ οὐδὲν ἂν σίνοιτο. Οὐδὲ γὰρ, εἰ διεστεῶτα τὰ ὀστέα ὑπὸ τῆς ἰσχύος τῆς κατατάσιος ἐπιδέοι τις, οὐκ ἂν δύναιτο κρατεῖν ἢ ἐπίδεσις, ὥστε διεστάναι, ἀλλὰ συνέλθοι ἂν πρὸς ἄλληλα τὰ ὀστέα, ὡς τάχιστα ἂν ἀφείησαν οἱ τείνοντες παχεῖαι γὰρ καὶ ἰσχυραὶ αἱ σάρκες ἐοῦσαι, κρατήσουσι τῆς ἐπίδεσιος, ἀλλ' οὐ κρατηθήσονται. Περὶ οὗ οὖν ὁ λόγος, διατείνειν εὖ μάλα καὶ ἀδιαστρέπτως χρῆ, μηδὲν ἐπιλείποντα μεγάλη γὰρ ἢ αἰσχύνη καὶ βλάβη βραχύτερον τὸν μηρὸν ἀποδειξαι. Χεῖρ μὲν γὰρ, βραχυτέρη γενομένη, καὶ ξυγκρυφθεῖη ἂν, καὶ οὐ μέγα τὸ σφάλμα σκέλος δὲ βραχύτερον γενόμενον, χολὸν ἀποδείξειε τὸν ἄνθρωπον τὸ γὰρ ὑγιὲς ἐλέγχει παρατιθέμενον, μακρότερον ἔον, ὥστε λυσιτελέει τὸν μέλλοντα κακῶς ἰητρεύεσθαι, ἀμφοτέρω καταγῆναι τὰ σκέλεα μᾶλλον ἢ τὸ ἕτερον ἰσόρροπος γοῦν ἂν εἴη αὐτὸς ἐωυτῶ. Ἐπὶ μὲντοι ἰκανῶς κατατανύσης, κατορθωσάμενον χρῆ τοῖσι θέναρσι τῶν χειρῶν ἐπιδεῖν τὸν αὐτὸν τρόπον, ὥσπερ καὶ πρόσθεν γέγραπται, καὶ τὰς ἀρχὰς βαλλόμενον, ὥσπερ εἴρηται, καὶ νεμόμενον ἐς τὸ ἄνω τῆ ἐπίδεσει. Καὶ ὑποκρινέσθω ταῦτα ὥσπερ καὶ πρόσθεν, καὶ πονεέτω κατὰ ταῦτα καὶ ῥηϊζέτω, καὶ μετεπιδείσθω

ὡσαύτως καὶ ναρθήκων πρόσθεσις ἢ αὐτή. Κρατύνεται δὲ ὁ μηρὸς ἐν πεντήκοντα ἡμέρησιν.

18. When the thigh-bone is broken, particular pains should be taken with regard to the extension that it may not be insufficient, for when excessive, no great harm results from it. For, if one should bandage a limb while the extremities of the bone are separated to a distance from one another by the force of the extension, the bandaging will not keep them separate, and so the bones will come together again as soon as the persons stretching it let go their hold; for the fleshy parts ( *muscles?* ) being thick and strong, are more powerful than the bandaging, instead of being less so. In the case then which we are now treating of, nothing should be omitted in order that the parts may be properly distended and put in a straight line; for it is a great disgrace and an injury to exhibit a shortened thigh. For the arm, when shortened, might be concealed, and the mistake would not be great; but a shortened thigh-bone would exhibit the man maimed. For when the sound limb is placed beside it, being longer than the other, it exposes the mistake, and therefore it would be to the advantage of a person who would be improperly treated that both his legs should be broken, rather than either of them; for in this case the one would be of the same length as the other. When, then, proper extension has been made, you must adjust the parts with the palms of the hands, and bandage the limb in the manner formerly described, placing the hands of the bandages as was directed, and making the

turns upward. And the patient should return the same answers to the same questions as formerly, should be pained and recover in like manner, and should have the bandaging renewed in the same way; and the application of the splints should be the same. The thigh-bone is consolidated in forty days.

20. Προσξυνιέναι δὲ χρὴ καὶ τότε, ὅτι ὁ μηρὸς γαῦσός ἐστιν ἐς τὸ ἔξω μέρος, ἢ ἐς τὸ ἔσω, καὶ ἐς τὸ ἔμπροσθεν μᾶλλον, ἢ ἐς τοῦπισθεν ἐς ταῦτα τοίνυν τὰ μέρεα καὶ διαστρέφεται, ἐπὴν μὴ καλῶς ἰητρεύηται καὶ δὴ καὶ κατὰ ταῦτα ἀσαρκότερος αὐτὸς ἐωυτοῦ ἐστιν, ὥστε οὐδὲ ξυγκρυσταίνονται ἐν τῇ διαστροφῇ. Ἦν οὖν τι τοιοῦτον ὑποπτέυης, μηχανοποιέεσθαι χρὴ οἷά περ ἐν τῷ βραχίονι τῷ διεστραμμένῳ παρήνηται. Προσπεριβάλλειν δὲ χρὴ ὀλίγα τῶν ὀθονίων κύκλῳ ἀμφὶ τὸ ἰσχίον καὶ τὰς ἰξύας, ὅπως ἂν οἱ βουβῶνες τε καὶ τὸ ἄρθρον τὸ κατὰ τὴν πλιγάδα καλεομένην

προσεπιδέηται καὶ γὰρ ἄλλως ξυμφέρει, καὶ ὅπως μὴ τὰ ἄκρεα τῶν ναρθήκων σίνηται πρὸς τὰ ἀνεπίδετα προσβαλλόμενα. Ἀπολείπειν δὲ χρὴ ἀπὸ τοῦ γυμνοῦ αἰεὶ τοὺς νάρθηκας, καὶ ἔνθεν καὶ ἔνθεν, ἰκανῶς καὶ τὴν θέσιν αἰεὶ τῶν ναρθήκων προμηθέεσθαι χρὴ, ὅπως μήτε κατὰ τὸ ὀστέον, τῶν ἐξεχόντων παρὰ τὰ ἄρθρα φύσει πεφυκότων, μήτε κατὰ τὸ νεῦρον ἔσται.

20. But this also should be known, that the thigh-bone is curved rather to the outside than to the inside, and rather forward than backward; when not properly treated, then, the distortions are in these directions; and the bone is least covered with flesh at the same parts, so that the distortion cannot be concealed. If, therefore, you suspect anything of this kind, you should have recourse to the mechanical contrivances recommended in distortion of the arm. And a few turns of the bandage should be brought round by the hip and the loins, so that the groin and the articulation near the perineum may be included in the bandage; and moreover, it is expedient that the extremities of the splints should not do mischief by being placed on parts not covered with the bandages. The splints, in fact, should be carefully kept off the naked parts at both ends; and the arrangement of them should be so managed, as that they may not be placed on the natural protuberances of the bone at the knee-joint, nor on the tendon which is situated there.

21. Τὰ δὲ οἰδήματα τὰ κατ' ἰγνύην, ἢ κατὰ πόδα, ἢ κατὰ τι ἄλλο ἐξαειρεύμενα ὑπὸ τῆς πιέξιος, εἰρίοισι πουλλοῖσι, ῥυπαροῖσιν, εὖ κατεργασμένοισιν, οἴνω καὶ ἐλαίῳ ῥήνας, κηρωτῇ ὑποχρίων, καταδεῖν, καὶ ἦν ζωσιν οἱ νάρθηκες, χαλᾶν. Θᾶσσον ἰσχυαίνοισ δ' ἂν, εἰ, ἀφιεῖς τοὺς νάρθηκας, ὀθονίοισι συχνοῖσιν

ἐπιδέοις τὰ οἰδήματα, ἀρξάμενος ἀπὸ τοῦ κατωτάτω ἐπὶ τὸ ἄνω νεμόμενος οὕτω γὰρ ἂν τάχιστα ἰσχνὸν τὸ οἶδημα γένοιτο, καὶ ὑπερθοίῃ ἂν ὑπὸ τὰ ἀρχαῖα ἐπιδέσματα. Ἄλλ' οὐ χρῆ

τούτω τῷ τρόπῳ χρῆσθαι τῆς ἐπιδέσιος, ἣν μὴ κίνδυνος ἦ ἐν τῷ οἰδήματι φλυκταινώσιος ἢ μελασμοῦ γίνεται δὲ οὐδὲν τοιοῦτο, ἣν μὴ ἄγαν τις πιέζη τὸ κάτηγμα, ἢ κατακρεμάμενον ἔχη, ἢ κνῆται τῇ χειρὶ, ἢ ἄλλο τι προσπίπτῃ ἐρεθιστικὸν πρὸς τὸν χρῶτα.

21. The swellings which arise in the ham, at the foot, or in any other part from the pressure, should be well wrapped in unscoured and carded wool, washed with wine and oil, and anointed with cerate, before bandaging; and if the splints give pain they should be slackened. You may sooner reduce the swellings, by laying aside the splints, and applying plenty of bandages to them, beginning from below and rolling upward; for thus the swellings will be most speedily reduced, and the humors be propelled to the parts above the former bandages. But this form of bandaging must not be used unless there be danger of vesications or blackening in the swelling, and nothing of the kind occurs unless the fracture be bound too tight, or unless the limb be allowed to hang, or it be rubbed with the hand, or some other thing of an irritant nature be applied to the skin.

22. Σωλῆνα δὲ εἰ μὲν τις ὑπ' αὐτὸν τὸν μηρὸν ὑποθεῖη μὴ ὑπερβάλλοντα τὴν ἰγνύην, βλάβητοι ἂν μᾶλλον ἢ ὠφελέοι οὔτε γὰρ ἂν τὸ σῶμα κωλύοι, οὔτε τὴν κνήμην, ἄνευ τοῦ μηροῦ κινέεσθαι. Ἀσηρὸν γὰρ εἶη πρὸς τὴν ἰγνύην προσβαλλόμενον καὶ ὃ ἥκιστα δεῖ, τοῦτ' ἂν ἐποτρύνει ποιεῖν ἥκιστα γὰρ δεῖ κατὰ τὸ γόνυ κάμπτεν πᾶσαν γὰρ ἂν τύρβην παρέχοι τῆσιν ἐπιδέσεσιν καὶ μηροῦ ἐπιδεδεμένου καὶ κνήμης, ὅστις κατὰ τὸ γόνυ κάμπτοι, ἀνάγκη ἂν εἶη τούτῳ τοὺς μύας ἄλλοτε ἄλλο σχῆμα ἴσχειν ἀνάγκη δ' ἂν εἶη καὶ τὰ ὀστέα τὰ κατεηγότα κίνησιν ἔχειν. Περὶ παντὸς οὖν ποιητέον τὴν ἰγνύην ἐντετάσθαι. Δοκέοι ἂν οὖν μοι ὁ σωλῆν, ὁ περιέχων πρὸς τὸν πόδα ἀπὸ τοῦ ἰσχίου, ὠφελέειν ὑποτιθέμενος καὶ ἄλλως κατ' ἰγνύην ταινίην χαλαρῶς περιβάλλειν

ξὺν τῷ σωλῆνι, ὡσπερ τὰ παιδιά ἐν τῆσι κοίτησι σπαργανοῦνται εἶτα ἐπὶ τὸν ὀστέον ἐς τὸ ἄνω διαστρέφοιτο, ἢ ἐς τὸ πλάγιον, εὐκατασχετώτερον εἶη ἂν ξὺν τῷ σωλῆνι οὕτως. Ἡ οὖν διαμπερὲς εἶη ποιητέος ὁ σωλῆν, ἢ οὐ ποιητέος.

22. More injury than good results from placing below the thigh a canal which does not pass farther down than the ham, for it neither prevents the body nor the leg from being moved without the thigh. And it creates uneasiness by being

brought down to the ham, and has a tendency to produce what of all things should be avoided, namely, flexion at the knee, for this completely disturbs the bandages; and when the thigh and leg are bandaged, if one bend the limb at the knee, the muscles necessarily assume another shape, and the broken bones are also necessarily moved. Every endeavor then should be made to keep the ham extended. But it appears to me, that a canal which embraces the limb from the nates to the foot is of use. And moreover, a shawl should be put loosely round at the ham, along with the canal, as children are swathed in bed; and then, if the thigh-bone gets displaced either upward or to the side, it can be more easily kept in position by this means along with the canal. The canal then should be made so as to extend all along the limb or not used at all.

23. Πτέρνης δὲ ἄκρης κάρτα χρὴ ἐπιμελέεσθαι, ὡς εὐθέτως ἔχοι, καὶ ἐν τοῖσι κατὰ κνήμην, καὶ ἐν τοῖσι κατὰ μηρὸν κατήγμασιν. Ἦν μὲν γὰρ ἀπαιωρῆται ὁ πούς, τῆς ἄλλης κνήμης ἡρματισμένης, ἀνάγκη κατὰ τὸ ἀντικνήμιον τὰ ὀστέα κυρτὰ φαίνεσθαι ἣν δὲ ἡ μὲν πτέρνη ὑψηλοτέρα ἢ τοῦ μετρίου ἡρματισμένη, ἡ δὲ ἄλλη κνήμη ὑπομετέωρος ἢ, ἀνάγκη τὸ ὀστέον τοῦτο κατὰ τὸ ἀντικνήμιον κοιλότερον φανῆναι τοῦ μετρίου, προσέτι καὶ ἣν ἡ πτέρνη τυγχάνη ἐοῦσα τοῦ ἀνθρώπου φύσει μεγάλη. Ἄτὰρ καὶ κρατύνεται πάντα τὰ ὀστέα βραδύτερον, ἣν μὴ κατὰ φύσιν κείμενα ἢ, καὶ τὰ μὴ ἀτρεμέοντα ἐν τῷ αὐτέῳ σχήματι, καὶ αἱ πωρώσιες ἀσθενέστεραι.

23. The extremity of the heel should be particularly attended to, so that it may be properly laid, both in fractures of the leg and of the thigh. For if the foot be placed in a dependent position, while the rest of the body is supported, the limb must present a curved appearance at the forepart of the leg; and if the heel be placed higher than is proper, and if the rest of the leg be rather too low, the bone at the forepart of the leg must present a hollow, more especially if the heel of the patient be naturally large. But all the bones get consolidated more slowly, if not laid properly, and if not kept steady in the same position, and in this case the callus is more feeble.

24. Ταῦτα μὲν δὴ, ὅσοισι τὰ μὲν ὀστέα κατέηγεν, ἐξέχει δὲ μὴ, μηδὲ ἄλλως ἔλκος ἐγένετο. Οἷσι δὲ τὰ ὀστέα

κατέηγεν ἀπλῶ τῷ τρόπῳ, καὶ μὴ πουλυσχιδεῖ, ἐξέσχε δὲ, αὐθήμερα ἐμβληθέντα, ἢ τῇ ὑστεραίῃ, καὶ κατὰ χώρην ἰζόμενα, καὶ μὴ ἐπίδοξος ἢ ἀπόστασις παρασχίδων ὀστέων ἀπιέναι, ἢ καὶ οἷσιν ἔλκος μὲν ἐγένετο, τὰ δὲ ὀστέα τὰ κατεηγότα οὐκ ἐξίσχει, οὐδ' ὁ τρόπος τῆς κατήξιος τοιοῦτος, οἷος παρασχίδας



ὄστέων εἶναι ἐπιδόξους ἀναπλῶσαι, τοὺς τοιοῦτους οἱ μὲν μήτε μέγα

ἀγαθόν, μήτε μέγα κακὸν ποιέοντες, ἰητρεύουσι τὰ μὲν ἔλκεα καθαρτικῶ τινι, ἢ πισσηρὴν ἐπιθέντες, ἢ ἔναιμον, ἢ ἄλλο τι ὧν εἰώθασι ποιέειν ἐπάνω δὲ τοὺς οἰνηροὺς σπληῆνας ἢ εἴρια ῥυπαρὰ ἐπιδέουσιν, ἢ ἄλλο τι τοιοῦτον. Ἐπὴν δὲ τὰ ἔλκεα καθαρὰ γένηται, καὶ ἤδη ξυμφύηται, τότε τοῖσιν ὀθονίοισι συχνοῖσι πειρῶνται ἐπιδεῖν, καὶ νάρθηξι κατορθοῦν. Αὕτη μὲν ἡ ἴησις ἀγαθόν τι ποιέει, κακὸν δὲ οὐ μέγα. Τὰ μέντοι ὄστέα οὐχ ὁμοίως δύναται ἰδρῦεσθαι ἐς τὴν ἔωυτῶν χώραν, ἀλλὰ τινι ὀγκηρότερα τὰ ὄστέα τοῦ καιροῦ ταύτη γίνεται γένοιτο δ' ἂν καὶ βραχύτερα, ὧν ἀμφοτέρα τὰ ὄστέα κατέηγεν ἢ πήχεος, ἢ κνήμης.

24. These things relate to cases in which there is fracture of the bones without protrusion of the same or wound of any other kind. In those cases in which the bones are simply broken across, and are not comminuted, but protrude, if reduced the same day or next, and secured in their place, and if there be no reason to anticipate that any splintered bones will come away; and in those in which the broken bones do not protrude, nor is the mode of fracture such that there is reason to expect the splinters will come out, some physicians heal the sores in a way which neither does much good nor harm, by means of a cleansing application, applying pitch ointment, or some of the dressings for fresh wounds, or anything else which they are accustomed to do, and binding above them compresses wetted with wine, or greasy wool, or something else of the like nature. And when the wounds become clean and are new healed, they endeavor to bind up the limb with plenty of bandages, and keep it straight with treatment does some good, and never much harm. The bones, however, can never be equally well restored to their place, but the part is a little more swelled than it should be; and the limb will be somewhat shortened, provided both bones either of the leg or fore-arm have been fractured.

25. Ἄλλοι δ' αὖ τινές εἰσιν, οἱ ὀθονίοισι τὰ τοιαῦτα ἰητρεύουσι εὐθέως, καὶ ἔνθεν μὲν καὶ ἔνθεν ἐπιδέουσι τοῖσιν ὀθονίοισι, κατὰ δὲ τὸ ἔλκος αὐτὸ διαλείπουσι, καὶ ἐῶσιν ἀνεψύχθαι ἔπειτα ἐπιτιθέασιν ἐπὶ τὸ ἔλκος τῶν καθαρτικῶν τι, καὶ σπλήνεσιν οἰνηροῖσιν, ἢ εἰρίοισι ῥυπαροῖσι θεραπεύουσι. Αὕτη ἡ ἴησις κακὴ,

καὶ εἰκὸς τοὺς οὕτως ἰητρεύοντας τὰ μέγιστα ἀσυνετέειν, καὶ ἐν τοῖσιν ἄλλοισι κατήγμασι, καὶ ἐν τοῖσι τοιοῦτοισιν. Μέγιστον γάρ ἐστι τὸ γινώσκειν, καθ' ὁποῖον τρόπον χρὴ τὴν ἀρχὴν βάλλεσθαι τοῦ ὀθονίου, καὶ καθ' ὁποῖον μάλιστα πεπιέχθαι, καὶ οἷά τε ὠφελέονται, ἢν ὀρθῶς τις βάλληται τὴν ἀρχὴν καὶ πιέζη ἢ

μάλιστα χρῆ, καὶ οἷα βλάπτονται, ἢν μὴ ὀρθῶς τις βάλληται, μηδὲ πιέζη ἢ μάλιστα χρῆ, ἀλλὰ ἔνθεν καὶ ἔνθεν. Εἴρηται μὲν οὖν καὶ ἐν τοῖσι πρόσθεν γεγραμμένοισιν, ὅποια ἀφ' ἑκατέρου ἀποβαίνει μαρτυρεῖ δὲ καὶ αὐτὴ ἡ ἰητρικὴ ἀνάγκη γὰρ τῷ οὕτως ἐπιδεομένῳ τὸ οἶδος ἐξαίρεσθαι ἐς αὐτὸ τὸ ἔλκος. Καὶ γὰρ εἰ ὑγιῆς χρῶς ἔνθεν καὶ ἔνθεν ἐπιθεθῆι, ἐν μέσῳ δὲ διαλειφθεῖ, μάλιστα κατὰ τὴν διάλειψιν οἰδήσειεν ἂν, καὶ ἀχροίησειεν πῶς οὖν οὐχὶ ἔλκος γε ταῦτα ἂν πάθοι; Ἀναγκαίως οὖν ἔχει ἄχροον μὲν καὶ ἐκπεπλιγμένον

τὸ ἔλκος εἶναι, δακρυῶδές τε καὶ ἀνεκπύητον, ὅστέα δὲ, καὶ μὴ μέλλοντα ἀποστῆναι, ἀποστατικὰ γενέσθαι σφυγμῶδές τε καὶ πυρῶδες τὸ ἔλκος ἂν εἴη. Ἀναγκάζονται δὲ διὰ τὸ οἶδος ἐπικαταπλάσσειν ἀσύμφορον δὲ καὶ τοῦτο τοῖσιν ἔνθεν καὶ ἔνθεν ἐπιδεομένοισιν ἄχθος γὰρ ἀνωφελές πρὸς τῷ ἄλλῳ σφυγμῷ ἐπιγίνεται. Τελευτῶντες δὲ ἀπολύουσι τὰ ἐπίδεσματα, ὅποταν σφιν παλιγκοτέη, καὶ ἰητρεύουσι τὸ λοιπὸν ἄνευ ἐπίδεσιος οὐδὲν δ' ἦσσαν, καὶ ἦν τι ἄλλο τρῶμα τοιοῦτο λάβωσι, τῷ αὐτῷ τρόπῳ ἰητρεύουσιν οὐ γὰρ οἴονται τὴν ἐπίδεσιν τὴν ἔνθεν καὶ ἔνθεν, καὶ τὴν ἀνάψυξιν τοῦ ἔλκεος αἰτίην εἶναι, ἀλλ' ἄλλην τινὰ ἀτυχήν. Οὐ μέντοι γε ἂν ἔγραφον περὶ τουτέου τοσαῦτα, εἰ μὴ εὖ μὲν ἦδειν ἀσύμφορον εἶναι τὴν ἐπίδεσιν, συχνοὺς δὲ οὕτως ἰητρεύοντας, ἐπίκαιρον δὲ τὸ ἀπομάθημα, μαρτύριον δὲ τοῦ ὀρθῶς γεγράφθαι τὰ πρόσθεν γεγραμμένα, εἴτε μάλιστα πιεστέα τὰ κατήγματα, εἴτε ἥκιστα.

25. There are others who treat such cases at first with bandages, applying them on both sides of the seat of the injury, but omit them there, and leave the wound uncovered, and afterward they apply to the wound some cleansing medicine, and complete the dressing with compresses dipped in wine and greasy wool. This plan of treatment is bad, and it is clear that those who adopt this mode of practice are guilty of great mistakes in other cases of fracture as well as these. For it is a most important consideration to know in what manner the head of the bandage should be placed and at what part the greatest pressure should be, and what benefits would result from applying the end of the bandage and the pressure at the proper place, and what mischiefs would result from applying the head of the bandage and the pressure otherwise than at the proper place. Wherefore it has been stated in the preceding part of the work what are the results of either; and the practice of medicine bears witness to the truth of it, for in a person thus bandaged, a swelling must necessarily arise on the wound. For, if even a sound piece of skin were bandaged on either side, and a part were left in the middle, the part thus left unbandaged would become most swelled, and would assume a bad color; how then could it be that a wound would not suffer in like manner? The wound then must necessarily become discolored and its lips

everted, the discharge will be ichorous and without pus, and the bones, which should not have got into a state of necrosis, exfoliate; and the wound gets into a throbbing and inflamed condition. And they are obliged to apply a cataplasm on account of the swelling, but this is an unsuitable application to parts which are bandaged on both sides, for a useless load is added to the throbbing which formerly existed in it. At last they loose the bandages when matters get very serious, and conduct the rest of the treatment without bandaging; and notwithstanding, if they meet with another case of the same description, they treat it in the same manner, for they do not think that the application of the bandages on both sides, and the exposure of the wound are the cause of what happened, but some other untoward circumstance. Wherefore I would not have written so much on this subject, if I had not well known that this mode of bandaging is unsuitable, and yet that many conduct the treatment in this way, whose mistake it is of vital importance to correct, while what is here said is a proof, that what was formerly written as to the circumstances under which bandages should be tightly applied to fractures or otherwise has been correctly written.

26. Χρή δὲ, ὡς ἐν κεφαλαίῳ εἰρηῆσθαι, οἷσιν ἂν μὴ ἐπίδοξος ἦ ἢ τῶν ὀστέων ἀπόστασις ἔσσεσθαι, τὴν αὐτὴν ἰητρειὴν ἰητρεύειν, ὡσπερ ἂν οἷσιν ὀστέα μὲν κατεγότα εἶη, ἔλκος δὲ μὴ ἔχοντα τὰς

τε γὰρ κατατάσιας καὶ κατορθώσιας τῶν ὀστέων τὸν αὐτὸν τρόπον ποιέεσθαι, τὴν τε ἐπίδεσιν παραπλήσιον τρόπον. Ἐπὶ μὲν γὰρ αὐτὸ τὸ ἔλκος πισηρὴν κηρωτὴν χρίσαντα, σπλῆνα λεπτὸν διπλόον ἐπίδεθῆναι, τὰ δὲ πέριξ κηρωτῆ λευκῆ χρίειν. Τὰ δὲ ὀθόνια καὶ τὰ ἄλλα πλατύρερά τινι ἐσχισμένα ἔστω, ἢ εἰ μὴ ἔλκος εἶχεν καὶ ὧ ἂν πρώτῳ ἐπίδεθῆται, συχνῶ ἔστω τοῦ ἔλκεος πλατύτερον. Τὰ γὰρ στενότερα τοῦ ἔλκεος ζώσαντα ἔχει τὸ ἔλκος τὸ δὲ οὐ χρή ἄλλ' ἢ πρώτη περιβολὴ ὅλον κατεχέτω τὸ ἔλκος, καὶ ὑπερεχέτω τὸ ὀθόνιον ἔνθεν τε καὶ ἔνθεν. Βάλλεσθαι μὲν οὖν χρή τὸ ὀθόνιον κατ' αὐτὴν τὴν ἴξιν τοῦ ἔλκεος, πιέζειν δὲ ὀλίγῳ ἦσσον ἢ εἰ μὴ ἔλκος εἶχεν, ἐπινέμεσθαι δὲ τῇ

ἐπιδέσει ὡσπερ καὶ πρόσθεν εἴρηται. Τὰ δὲ ὀθόνια αἰεὶ μὲν τοῦ τρόπου τοῦ μαλθακοῦ ἔστωσαν, μᾶλλον δὲ τι δεῖ ἐν τοῖσι τοιούτοισιν, ἢ εἰ μὴ ἔλκος εἶχεν. Πλήθος δὲ τῶν ὀθονίων, μὴ ἐλάσσῳ ἔστω τῶν πρότερον εἰρημένων, ἀλλά τινι καὶ πλείῳ. Ἦν δὲ ἐπίδεθῆ, δοκείτω τῷ ἐπίδεδεμένῳ ἡρμόσθαι μὲν, πεπιέχθαι δὲ μὴ φάτω δὲ κατὰ τὸ ἔλκος μάλιστα ἡρμόσθαι. Τοὺς δὲ χρόνους τοὺς αὐτοὺς μὲν χρή εἶναι ἐπὶ τὸ μᾶλλον δοκείν ἡρμόσθαι, τοὺς αὐτοὺς δὲ ἐπὶ τὸ μᾶλλον δοκείν χαλᾶν, ὡσπερ καὶ ἐν τοῖσι πρόσθεν εἴρηται. Μετεπιδεῖν δὲ διὰ τρίτης, πάντα

μεταποιέοντα ἐς τοὺς τρόπους τοὺς παραπλησίους, ὥσπερ καὶ πρόσθεν εἴρηται, πλὴν ἐς τὸ σύμπαν ἥσσόν τινι πιέζειν ταῦτα ἢ ἐκεῖνα. Καὶ ἦν κατὰ λόγον τὰ εἰκότα γένηται, ἰσχνότερον μὲν αἰεὶ εὐρεθήσεται τὸ κατὰ τὸ ἔλκος, ἰσχνὸν δὲ καὶ τὸ ἄλλο πᾶν τὸ ὑπὸ τῆς ἐπίδεσιος κατεχόμενον καὶ αἷ τε ἐκπυήσιες ἔσονται θάσσους ἢ τῶν ἄλλως ἰητρευμένων ἐλκέων, ὅσα τε σαρκία ἐν τῷ τρώματι ἐμελάνθη καὶ ἐθανατώθη, θᾶσσον περιρρήγνυται καὶ ἐκπίπτει ἐπὶ ταύτη τῇ ἰητρείῃ, ἢ ἐν τῆσιν ἄλλησιν, ἐς ὠτειλᾶς τε θᾶσσον ὀρμᾶται τὸ ἔλκος οὕτως ἢ ἄλλως ἰητρευμένον. Πάντων δὲ τούτων αἴτιον, ὅτι ἰσχνὸν μὲν τὸ κατὰ τὸ ἔλκος χωρίον γίνεται, ἰσχνὰ δὲ τὰ περιέχοντα. Τὰ μὲν οὖν ἄλλα πάντα παραπλησίως χρὴ ἰητρεύειν, ὡς τὰ

ἄνευ ἐλκώσιος ὅστέα κατηγνύμενα. Τοὺς δὲ νάρθηκας οὐ χρὴ προστιθέναί. Διὰ τοῦτο καὶ τὰ ὀθόνια χρὴ τούτοισι πλείω εἶναι ἢ τοῖσιν ἐτέροισιν, ὅτι τε ἥσσον πιέζεται, ὅτι τε οἱ νάρθηκες βραδύτεροι προστίθενται. Ἦν μέντοι τοὺς νάρθηκας προστιθῆς, μὴ κατὰ τὴν ἴξιν τοῦ ἔλκεος προστιθέναί, ἄλλως τε καὶ χαλαρῶς προστιθέναί, προμηθεύμενος ὅκως μηδεμία σφίγις μεγάλη ἔσται ἀπὸ τῶν ναρθήκων. Εἴρηται δὲ τοῦτο καὶ ἐν τοῖσι πρότερον γεγραμμένοισιν. Τὴν μέντοι δίαιταν ἀκριβεστέραν καὶ πλείω χρόνον χρὴ ποιέεσθαι οἷσιν ἐξ ἀρχῆς ἔλκεα γίνεται, καὶ οἷσιν ὅστέα ἐξίσχει καὶ τὸ ζύμπαν δὲ εἰρήσθαι, ἐπὶ τοῖσι ἰσχυροτάτοις τρώμασιν ἀκριβεστέραν καὶ πούλυχρονωτέραν εἶναι χρὴ τὴν δίαιταν.

26. As a general rule it may be said, that in those cases in which a separation of bone is not expected, the same treatment should be applied as when the fractures are not complicated with an external wound; for the extension, adjustment of the bones, and the bandaging, are to be conducted in the same manner. To the wound itself a cerate mixed with pitch is to be applied, a thin folded compress is to be bound upon it, and the parts around are to be anointed with white cerate. The cloths for bandages and the other things should be torn broader than in cases in which there is no wound, and the first turn of the bandage should be a good deal broader than the wound. For a narrower bandage than the wound binds the wound like a girdle, which is not proper, or the first turn should comprehend the whole wound, and the bandaging should extend beyond it on both sides. The bandage then should be put on in the direction of the wound, and should be not quite so tight as when there is no wound, but the bandage should be otherwise applied in the manner described above. The bandages should be of a soft consistence, and more especially so in such cases than in those not complicated with a wound. The number of bandages should not be smaller, but rather greater than those formerly described. When applied, the patient should have the feeling

of the parts being properly secured, but not too tight, and in particular he should be able to say that they are firm about the wound. And the intervals of time during which the parts seem to be properly adjusted, and those in which they get loose, should be the same as those formerly described. The bandages should be renewed on the third day, and the after treatment conducted in the same manner as formerly described, except that in the latter case the compression should be somewhat less than in the former. And if matters go on properly, the parts about the wound should be found at every dressing always more and more free of swelling, and the swelling should have subsided on the whole part comprehended by the bandages. And the suppurations will take place more speedily than in the case of wounds treated otherwise; and the pieces of flesh in the wound which have become black and dead, will sooner separate and fall off under this plan of treatment than any other, and the sore will come more quickly to cicatrization when thus treated than otherwise. The reason of all this is, that the parts in which the wound is situated, and the surrounding parts, are kept free of swelling. In all other respects the treatment is to be conducted as in cases of fracture without a wound of the integuments. Splints should not be applied. On this account the bandages should be more numerous than in the former case, both because they must be put on less tight, and because the splints are later of being applied. But if you do apply the splints, they should not be applied along the wound, and they are to be put on in a loose manner, especial care being taken that there may be no great compression from the splints. This direction has been formerly given. And the diet should be more restricted, and for a longer period, in those cases in which there is a wound at the commencement, and when the bones protrude through the skin; and, in a word, the greater the wound, the more severe and protracted should the regimen be.

27. Ἡ αὐτὴ δὲ ἰητρείη τῶν ἐλκῶν, καὶ οἷσιν ὀστέα μὲν κατέηγεν, ἕλκος δὲ ἐξ ἀρχῆς μηδὲν ἦν, ἐν δὲ τῇ ἰητρείᾳ ἐπιγίνεται, ἢ τοῖσιν ὀθονίοισιν μᾶλλον πιεχθέντος νάρθηκος ὑπὸ ἐνέδρης, ἢ ὑπὸ ἄλλης τινὸς προφάσιος. Γινώσκειται μὲν οὖν τὰ τοιαῦτα, ἦν ἕλκος ὑπῆ, τῇ τε ὀδύνη καὶ τοῖσι σφυγμοῖσιν καὶ τὸ οἶδημα τὸ ἐν τοῖσιν ἄκροισι, σκληρότερον γίνεται τῶν τοιουτέων, καὶ εἰ τὸν δάκτυλον ἐπαγάγοις, τὸ ἔρευθος ἐξαιρέεται, ἀτὰρ καὶ αὖθις

ὑποτρέχει ταχέως. Ἦν οὖν τι τοιοῦτον ὑποπτεύης, λύσαντα χρή, ἦν μὲν ἢ κνησμὸς κατὰ τὰς ὑποδεσμίδας, ἢ ἐπὶ τὸ ἄλλο τὸ ἐπιδεδεμένον, πισηρῆ κηρωτῆ ἀντὶ τῆς ἐτέρης χρῆσθαι. Ἦν δὲ τούτων μὲν μηδὲν ἦ, αὐτὸ δὲ τὸ ἕλκος ἠρεθισμένον εὐρίσκηται, μέλαν ἐπὶ πουλὺ ἢ ἀκάθαρτον, καὶ τῶν μὲν σαρκῶν ἐκπτυησομένων, τῶν δὲ νεύρων προσεκπεσομένων, τουτέους οὐδὲν χρή

ἀναψύχειν παντάπασιν, οὐδέ τι φοβεῖσθαι τὰς ἐκπυήσιας ταύτας, ἀλλ' ἰητρεύειν, τὰ μὲν ἄλλα παραπλήσιον τρόπον, ὥσπερ καὶ οἷσιν ἐξ ἀρχῆς ἔλκος ἐγένετο. Τοῖσι δὲ ὀθονίοισιν ἄρχεσθαι χρῆ ἐπιδέοντα ἀπὸ τοῦ οἰδήματος τοῦ ἐν τοῖσιν ἀκράιουσιν πάνυ χαλαροῖσι,

καὶ ἔπειτα ἐπινέμεσθαι τῇ ἐπιδέσει αἰεὶ ἐς τὸ ἄνω, καὶ περιέχθαι μὲν μηδαμῆ, ἠρμόσθαι δὲ μάλιστα κατὰ τὸ ἔλκος, τὰ δὲ ἄλλα ἐπὶ ἥσσον. Τὰ δὲ ὀθόνια τὰ πρῶτα, ταῦτα μὲν καθαρὰ ἔστω καὶ μὴ στενά τὸ δὲ πλῆθος τῶν ὀθονίων ἔστω, ὅσον περ καὶ ἐν τοῖσι νάρθηξιν εἰ ἐπιδέονται, ἢ ὀλίγῳ ἔλασσον. Ἐπὶ δὲ αὐτὸ τὸ ἔλκος ἰκανὸν σπληνίον τῇ λευκῇ κηρωτῇ κεχρισμένον ἦν τε γὰρ σὰρξ, ἦν τε νεῦρον μελανθῆ, προσεκπεσεῖται τὰ γὰρ τοιαῦτα οὐ χρῆ δριμέσιν ἰητρεύειν, ἀλλὰ μαλθακοῖσιν, ὥσπερ τὰ πυρίκαυστα. Μετεπιδεῖν δὲ διὰ τρίτης, νάρθηκας δὲ μὴ προστιθέναι ἀτρεμέειν δὲ ἐπὶ μᾶλλον, ἢ τὸ πρόσθεν, καὶ ὀλιγοσιτέειν. Εἰδέναι δὲ χρῆ, εἴ τε σὰρξ, εἴ τε νεῦρον τὸ ἐκπεσούμενόν ἐστιν, ὅτι οὕτω πολλῶ μὲν ἥσσον νέμεται ἐπὶ πλείον, πολλῶ δὲ θᾶσσον ἐκπεσεῖται, πολλῶ δὲ ἰσχυρότερα τὰ περιέχοντα ἔσται, ἢ εἴ τις, ἀπολύσας τὰ ὀθόνια, ἐπιθείη τι τῶν καθαρτικῶν φαρμάκων ἐπὶ τὸ ἔλκος. Καίτοι καὶ ἦν ἐκπέση τὸ ἐκπεσούμενον, θᾶσσόν τε σαρκουῖται ἐκείνως ἢ ἐτέρως ἰητρευόμενον, καὶ θᾶσσον ὠτειλουῖται. Πάντα μὴν ἐστί ταῦτα ὀρθῶς ἐπιδεῖν καὶ μετρίως ἐπίστασθαι. Προσσυμβάλλεται δὲ καὶ τὰ σχήματα, καὶ οἷα χρῆ, εἶναι, καὶ ἡ ἄλλη δίαιτα, καὶ τῶν ὀθονίων ἡ ἐπιτηδειότης.

27. The treatment of the sores is the same in those cases of fracture in which there was no wound of the skin at first, but one has formed in the course of treatment, owing to the pressure of the splints occasioned by the bandages, or from any other cause. In such cases it is ascertained that there is an ulcer, by the pain and the throbbing; and the swelling in the extremities becomes harder than usual, and if you apply your finger the redness disappears, but speedily returns. If you suspect anything of the kind you must loose the dressing, if there be any itching below the under-bandages, or in any other part that is bandaged, and used a pitched cerate instead of the other. If there be nothing of that, but if the ulcer be found in an irritable state, being very black and foul, and the fleshy parts about to suppurate, and the tendons to slough away, in these cases no part is to be exposed to the air, nor is anything to be apprehended from these suppurations, but the treatment is to be conducted in the same manner as in those cases in which there was an external wound at first. You must begin to apply the bandages loosely at the swelling in the extremities, and then gradually proceed upward with the bandaging, so that it may be tight at no place, but particularly firm at the sore, and less so elsewhere. The first bandages should be clean and not narrow, and the number of bandages should be as great as in those cases in

which the splints were used, or somewhat fewer. To the sore itself a compress, anointed with white cerate, will be sufficient, for if a piece of flesh or nerve ( *tendon?* ) become black, it will fall off; for such sores are not to be treated with acrid, but with emollient applications, like burns. The bandages are to be renewed every third day, and no splints are to be applied, but rest is to be more rigidly maintained than in the former cases, along with a restricted diet. It should be known, that if any piece of flesh or tendon be to come away, the mischief will spread much less, and the parts will much more speedily drop off, and the swelling in the surrounding parts will much more completely subside, under this treatment, than if any of the cleansing applications be put upon the sore. And if any part that is to come away shall fall off, the part will incarnate sooner when thus treated than otherwise, and will more speedily cicatrize. Such are the good effects of knowing how a bandage can be well and moderately applied. But a proper position, the other parts of the regimen, and suitable bandages cooperate.

28. Ἦν δ' ἄρα ἐξαπατηθῆς ἐν τοῖσι νεοτρότοισι, μὴ οἰόμενος ὀστέων ἀπόστασιν ἔσεσθαι, τὰ δ' ἐπίδοξα ἢ ἀναπλῶσαι, οὐ

χρὴ ὀρρωδέειν τοῦτον τὸν τρόπον τῆς ἰητρείης οὐδὲν γὰρ ἂν μέγα φλαῦρον γένοιτο, ἢν μόνον οἶός τε ἦς τῇ χειρὶ τὰς ἐπιδέσιας ἀγαθὰς καὶ ἀσινέας ποιέεσθαι. Σημεῖον δὲ τόδε, ἢν μέλλη ὀστέων ἀπόστασις ἔσεσθαι ἐν τῷ τρόπῳ τούτῳ τῆς ἰητρείης πῦον γὰρ συχνὸν ῥέει ἐκ τοῦ ἔλκεος, καὶ ὀργᾶν φαίνεται. Πυκνότερον οὖν μετεπιδέεσθαι διὰ τὸν πλάδον ἐπεὶ ἄλλως τε καὶ ἀπύρετοι γίνονται, ἢν μὴ κάρτα πιέζονται ὑπο τῆς ἐπιδέσιος, καὶ τὸ ἔλκος, καὶ τὰ περιέχοντα ἰσχνά. Ὅσαι μὲν οὖν λεπτῶν πάνυ ὀστέων ἀποστάσις, οὐδεμιῆς μεγάλης μεταβολῆς δέονται, ἀλλ' ἢ χαλαρωτέρως ἐπίδειν, ὡς μὴ ἀπολαμβάνηται τὸ

πῦον, ἀλλ' εὐαπόρρυτον ἦ, καὶ πυκνότερον μετεπιδεῖν, ἔστ' ἂν ἀποστῇ τὸ ὀστέον, καὶ νάρθηκας μὴ προστιθέναι.

28. If you are deceived with regard to a recent wound, supposing there will be no exfoliation of the bones, while they are on the eve of coming out of the sore, you must not hesitate to adopt this mode of treatment; for no great mischief will result, provided you have the necessary dexterity to apply the bandages well and without doing any harm. And this is a symptom of an exfoliation of bone being about to take place under this mode of treatment; pus runs copiously from the sore, and appears striving to make its escape. The bandage must be renewed more frequently on account of the discharge, since otherwise fevers come on; if

the sore and surrounding parts be compressed by the bandages they become wasted. Cases complicated with the exfoliation of very small bones, do not require any change of treatment, only the bandages should be put on more loosely, so that the discharge of pus may not be intercepted, but left free, and the dressings are to be frequently renewed until the bone exfoliate, and the splints should not be applied until then.

29. Ὀκόσοισι δὲ μείζονος ὀστέου ἀπόστασις ἐπίδοξος γένηται, ἣν τε ἐξ ἀρχῆς προγνῶς, ἣν τε καὶ ἔπειτα μεταγνῶς, οὐκ ἔτι τῆς αὐτῆς ἰητρείης δεῖται ἀλλὰ τὰς μὲν κατατάσιος, καὶ τὰς διορθώσιος οὕτω ποιέεσθαι, ὡσπερ εἴρηται σπληνας δὲ χρῆ διπλοῦς, πλάτος μὲν ἡμισπιθαιμιάιους, μὴ ἐλάσσους ὀκοῖον δὲ ἂν τι καὶ τὸ τρῶμα ἦ, πρὸς τοῦτο τεκμαίρεσθαι, μῆκος δὲ βραχυτέρους μὲν μὴ ὀλίγω, ἢ ὥστε δις περικνέεσθαι περὶ τὸ τετρωμένον, μακροτέρους δὲ συχνῶ, ἢ ὥστε ἅπαξ περικνέεσθαι, πλῆθος δὲ, ὀκόσους ἂν ζυμφέρῃ, ποιησάμενον, τούτους ἐν οἴνω μέλανι αὐστηρῶ βρέχοντα, χρῆ ἐκ μέσου ἀρχόμενον, ὡς ἀπὸ δύο ἀρχῶν ὑποδεσμὸς ἐπιδεῖται, περιελίσσειν, κάπειτα σκεπαρνηδὸν παραλλάσσοντα τὰς ἀρχὰς ἀφιέναι. Ταῦτα κατὰ τε αὐτὸ τὸ ἔλκος ποιέειν, καὶ κατὰ τὸ ἔνθεν καὶ ἔνθεν τοῦ ἔλκεος καὶ πεπιέχθω μὲν μὴ, ἀλλ' ὅσον ἔρμασμοῦ ἔνεκεν τοῦ ἔλκεος

προσκειῖσθω. Ἐπὶ δὲ αὐτὸ τὸ ἔλκος ἐπιτιθέναι χρῆ πισηρῆν, ἢ τι τῶν ἐναίμων, ἢ τι τῶν ἄλλων φαρμάκων, ὃ τι ζύντροφόν ἐστὶν ἐπιτέγγει. Καὶ ἣν μὲν ἡ ὥρη θερινὴ ἦ, ἐπιτέγγειν τῶ οἴνω τοὺς σπληνας πυκνά ἣν δὲ χειμερινὴ ἡ ὥρη ἦ, εἰρία πούλλα ῥυπαρά, νενοτισμένα οἴνω καὶ ἐλαίῳ, ἐπικεῖσθω. Ἴξαλῆν δὲ χρῆ ὑποτετάσθαι, καὶ εὐαπόρρυτα ποιέειν, φυλάσσοντα τοὺς ὑπορρόους, μεμνημένον ὅτι οἱ τόποι οἱ ἐν τοῖσιν αὐτοῖσι σχήμασι πολλὸν χρόνον κείμενοι, ἐκτρίμματα δυσάκεστα ποιέουσιν.

29. Those cases in which the exfoliation of a larger piece of bone is expected, whether you discover this at the commencement, or perceive subsequently that it is to happen, no longer require the same mode of treatment, only that the extension and arrangement of the parts are to be performed in a manner that has been described; but having formed double compresses, not less than half a fathom in breadth (being guided in this by the nature of the wound), and considerably shorter than what would be required to go twice round the part that is wounded, but considerably longer than to go once round, and in number what will be sufficient, these are to be dipped in a black austere wine; and beginning at the middle, as is done in applying the double-headed bandage, you are to wrap the part around and proceed crossing the heads in the form of the bandage called "ascia." These things are to be done at the wound, and on both sides of it; and



there must be no compression, but they are to be laid on so as to give support to the wound. And on the wound itself is to be applied the pitched cerate, or one of the applications to recent wounds, or any other medicine which will suit with the embrocation. And if it be the summer season, the compresses are to be frequently damped with wine; but if the winter season, plenty of greasy wool, moistened with wine and oil, should be applied. And a goat's skin should be spread below, so as to carry off the fluids which run from the wound; these must be guarded against, and it should be kept in mind, that parts which remain long in the same position are subject to excoriations which are difficult to cure.

30. Ὅσους δὲ μὴ οἶόν τε ἐπιδέσει ἰήσασθαι διὰ τινὰ τούτων τῶν εἰρημένων τρόπων, ἢ τῶν εἰρησομένων, τούτους περὶ πλείονος χρή ποιέεσθαι, ὅκως εὐθέτως σχήσουσι τὸ κατηγὸς τοῦ σώματος κατ' ἰθωρίην, προσέχοντα τὸν νόον, καὶ τῷ ἀνωτέρω δὲ μᾶλλον ἢ τῷ κατωτέρω. Εἰ δέ τις μέλλοι καλῶς καὶ εὐχερῶς ἐργάζεσθαι, ἄξιον καὶ μηχανοποιήσασθαι, ὅκως κατάτασιν δικαίην καὶ μὴ βιαίην σχήσει τὸ κατηγὸς τοῦ σώματος μάλιστα δὲ

ἐν κνήμῃ ἐνδέχεται μηχανοποιέειν. Εἰσὶ μὲν οὖν τινες, οἱ ἐπὶ πᾶσι τοῖσι τῆς κνήμης κατήγμασι καὶ τοῖσιν ἐπιδεμένοισι, καὶ τοῖσι μὴ ἐπιδεομένοισι, ὃν πόδα ἄκρον προσδέουσι πρὸς τὴν κλίνην, ἢ πρὸς ἄλλο τι ξύλον παρὰ τὴν κλίνην κατορύξαντες. Οὗτοι μὲν οὖν πάντα κακὰ ποιέουσιν, ἀγαθὸν δὲ οὐδὲν οὔτε γὰρ τοῦ κατατείνεσθαι ἄκος ἐστὶ τὸ προσδεδέσθαι τὸν πόδα, οὐδὲν γὰρ ἦσσαν τὸ ἄλλο σῶμα προσχωρήσει πρὸς τὸν πόδα, καὶ οὕτως ἔτι τείνοιτο οὔτ' αὖ ἐς τὴν ἰθωρίην οὐδὲν ὠφελείη, ἀλλὰ καὶ βλάπτει, στρεφομένου γὰρ τοῦ ἄλλου σώματος ἢ τῆ ἢ τῆ, οὐδὲ κωλύσει ὁ δεσμὸς τὸν πόδα καὶ τὰ ὀστέα τὰ τῷ ποδὶ προσηρτημένα ἐπακολουθέειν τῷ ἄλλῳ σώματι. Εἰ δὲ μὴ προσεδέδετο, ἦσσαν ἂν διεστρέφετο ἦσσαν γὰρ ἂν ἐγκατελείπετο ἐν τῇ κινήσει τοῦ ἄλλου σώματος. Εἰ δέ τις σφαῖρας δύο ράψαιτο ἐκ σκύτεος αἰγυπτίου τοιαύτας οἷας φοροῦσιν οἱ ἐν τῆσι μεγάλῃσι πέδησι πολλὸν χρόνον πεπεδημένοι, αἱ δὲ σφαῖραι ἔχουσιν ἔνθεν καὶ ἔνθεν χιτῶνας, τὰ μὲν πρὸς τοῦ τρώματος βαθυτέρους, τὰ δὲ πρὸς τῶν ἄρθρων βρ χυτέρους, εἶεν δὲ ὀγκηραὶ μὲν καὶ μαλθακαὶ, ἀρμόζουσαι δὲ, ἢ μὲν ἄνωθεν τῶν σφυρῶν, ἢ δὲ κάτωθεν τοῦ γούνατος

ἐκ δὲ πλαγίης ἄκρης δισσὰ ἢ κάτωθεν ἔχει προσηρτημένα, ἢ ἀπλόου ἱμάντος, ἢ διπλόου, βραχέα ὥσπερ ἀγκύλας, τὰ μὲν τι τοῦ σφυροῦ ἐκατέρωθεν, τὰ δὲ τι τοῦ γούνατος καὶ ἢ ἄνωθεν σφαῖρα

ἕτερα τοιαῦτα ἔχει κατὰ τὴν ἰθωρίην τὴν αὐτήν. Κάπειτα κранаῖνας ράβδους τέσσαρας λαβὼν ἴσον τὸ μέγεθος ἀλλήλησιν ἐχούσας, πάχος μὲν ὡς

δακτυλίας, μήκος δὲ ὡς κεκαμμένοι ἐναρμόσωσιν ἐς τὰ ἀπαιωρήματα, ἐπιμελόμενος ὅπως τὰ ἄκρα τῶν ράβδων μὴ ἐς τὸν χρῶτα, ἀλλ' ἐς τὰ ἄκρα τῶν σφαιρέων ἐγκέλσει. Εἶναι δὲ χρὴ ζεύγεα τρία τῶν ράβδων, καὶ πλέω, καὶ τινι μακροτέρας τὰς ἐτέρας τῶν ἐτέρων, καὶ τινι καὶ βραχυτέρας καὶ σμικροτέρας, ὡς καὶ μᾶλλον διατείνειν, ἣν βούληται, καὶ ἥσσον ἔστωσαν δὲ αἱ ράβδοι ἐκάτεραι ἔνθεν καὶ ἔνθεν τῶν σφυρῶν. Ταῦτα τοίνυν εἰ καλῶς μηχανοποιηθεῖ, τὴν τε κατάτασιν καὶ δικαίην ἂν παρέχοι καὶ ὁμαλὴν κατὰ τὴν ἰθυωρίην, καὶ τῷ τρώματι πόνος οὐδεὶς ἂν εἴη τὰ γὰρ ἀποπιέσματα, εἴ τι καὶ ἀποπιέζοιτο, τὰ μὲν ἂν ἐς τὸν πόδα ἀπάγοιτο, τὰ δὲ ἐς τὸν μηρόν αἱ τε ράβδοι εὐθετώτεραι, αἱ μὲν ἔνθεν, αἱ δὲ ἔνθεν τῶν σφυρῶν, ὥστε μὴ κωλύεσθαι τὴν θέσιν τῆς κνήμης τό τε τρώμα εὐκατάσκεπτον καὶ εὐβάστακτον οὐδὲν γὰρ ἐμποδῶν, εἴ τις ἐθέλοι τὰς δύο τῶν ράβδων τὰς ἀνωτέρω αὐτὰς πρὸς ἀλλήλας

ζεῦξαι, καὶ ἣν τις κούφως βούληται ἐπιβάλλειν, ὥστε τὸ ἐπιβαλλόμενον μετέωρον ἀπὸ τοῦ τρώματος εἶναι. Εἰ μὲν οὖν αἱ τε σφαῖραι προσηνέες καὶ καλά καὶ μαλθακαὶ καὶ καιναὶ ῥαφεῖεν, καὶ ἡ ἔντασις τῶν ράβδων χρηστῶς ἐνταθεῖη, ὥσπερ ἤδη εἴρηται, εὐχρηστον τὸ μηχανήμα εἰ δέ τι τουτέων μὴ καλῶς ἔξει, βλάπτει ἂν μᾶλλον ἢ ὠφελέει. Χρὴ δὲ καὶ τὰς ἄλλας μηχανὰς ἢ καλῶς μηχανᾶσθαι, ἢ μὴ μηχανᾶσθαι αἰσχρὸν γὰρ καὶ ἄτεχνον μηχανοποιέοντα ἀμηχανοποιέεσθαι.

30. In such cases as do not admit of bandaging according to any of the methods which have been described, or which will be described, great pains should be taken that the fractured part of the body be laid in a right position, and attention should be paid that it may incline upward rather than downward. But if one would wish to do the thing well and dexterously, it is proper to have recourse to some mechanical contrivance, in order that the fractured part of the body may undergo proper and not violent extension; and this means is particularly applicable in fractures of the leg. There are certain physicians who, in all fractures of the leg, whether bandages be applied or not, fasten the sole of the foot to the couch, or to some other piece of wood which they have fixed in the ground near the couch. These persons thus do all sorts of mischief but no good; for it contributes nothing to the extension that the foot is thus bound, as the rest of the body will no less sink down to the foot, and thus the limb will no longer be stretched, neither will it do any good toward keeping the limb in a proper position, but will do harm, for when the rest of the body is turned to this side or that, the bandaging will not prevent the foot and the bones belonging to it from following the rest of the body. For if it had not been bound it would have been less distorted, as it would have been the less prevented from following the

motion of the rest of the body. But one should sew two balls of Egyptian leather, such as are worn by persons confined for a length of time in large shackles, and the balls should have coats on each side, deeper toward the wound, but shorter toward the joints; and the balls should be well stuffed and soft, and fit well, the one above the ankles, and the other below the knee. Sideways it should have below two appendages, either of a single or double thong, and short, like loops, the one set being placed on either side of the ankle, and the other on the knee. And the other upper ball should have others of the same kind in the same line. Then taking four rods, made of the cornel tree, of equal length, and of the thickness of a finger, and of such length that when bent they will admit of being adjusted to the appendages, care should be taken that the extremities of the rods bear not upon the skin, but on the extremities of the balls. There should be three sets of rods, or more, one set a little longer than another, and another a little shorter and smaller, so that they may produce greater or less distention, if required. Either of these sets of rods should be placed on this side and that of the ankles. If these things be properly contrived, they should occasion a proper and equable extension in a straight line, without giving any pain to the wound; for the pressure, if there is any, should be thrown at the foot and the thigh. And the rods are commodiously arranged on either side of the ankles, so as not to interfere with the position of the limb; and the wound is easily examined and easily arranged. And, if thought proper, there is nothing to prevent the two upper rods from being fastened to one another; and if any light covering be thrown over the limb, it will thus be kept off from the wound. If, then, the balls be well made, handsome, soft, and newly stitched, and if the extension by the rods be properly managed, as has been already described, this is an excellent contrivance; but if any of them do not fit properly, it does more harm than good. And all other mechanical contrivances should either be properly done, or not be had recourse to at all, for it is a disgraceful and awkward thing to use mechanical means in an unmechanical way.

31. Τοῦτο δὲ, οἱ πλεῖστοι τῶν ἰητρῶν τὰ κατήγματα, καὶ τὰ μεθ' ἑλκέων, καὶ τὰ ἄνευ ἑλκέων, τὰς πρώτας τῶν ἡμερέων ἰητεύουσιν εἰρίοισι ῥυπαροῖσιν καὶ οὐδέν τι ἄτεχνον δοκέει τοῦτο εἶναι. Ὅσοι μὲν ἀναγκάζονται ὑπὸ τῶν αὐτίκα νεοτρότων ἐόντων, μὴ ἔχοντες ὀθόνια, εἰρίοισι παρασκευάσασθαι, τουτέοισι πλείστη συγγνώμη οὐ γὰρ ἂν τις ἔχοι ἄνευ ὀθονίων ἄλλο τι πολλῶ βέλτιον εἰρίου ἐπιδῆσαι ἐπὶ τὰ τοιαῦτα εἶναι δὲ χρὴ πάμπολλα, καὶ πάνυ καλῶς εἰργασμένα, καὶ μὴ τρηχέα τῶν γὰρ ὀλίγων καὶ φλαύρων ὀλίγη καὶ ἡ δύναμις. Ὅσοι δὲ ἐπὶ μίαν ἢ δύο ἡμέρας εἴρια ἐπιδέειν δικαιοῦσι, τρίτη δὲ καὶ τετάρτη ὀθονίοισιν ἐπιδέοντες πιέζουσι καὶ κατατείνουσι τότε μάλιστα, οὗτοι πούλυ τι

τῆς ἰητρικῆς καὶ κάρτα ἐπίκαιρον ἀσυνετέουσιν ἦκιστα γὰρ χρὴ τῆ τρίτη καὶ τετάρτη στυφελίζειν πάντα τὰ τρώματα, ὡς ἐν

κεφαλαίῳ εἰρηῆσθαι καὶ μηλώσιας δὲ πάσας φυλάσσεσθαι χρὴ ἐν ταύτησι τῆσιν ἡμέρησι, καὶ ὀκόσοισιν ἄλλοισι τρώμασιν ἠρέθισται. Τὸ ἐπίπαν γὰρ ἢ τρίτη καὶ τετὸτη ἡμέρη ἐπὶ τοῖσι πλείστοισι τῶν τρωμάτων τίκει τὰς παλιγοκότησιας, καὶ ὅσα ἐς φλεγμονὴν καὶ ἀκαθαρσίην ὀρμᾶ, καὶ ὅσα ἂν ἐς πυρετοὺς ἴη. Καὶ μάλα πολλοῦ ἄξιον τοῦτο τὸ μάθημα, εἴ πέρ τι καὶ ἄλλο. Τίτι γὰρ οὐκ ἐπικοινωνεῖ τῶν ἐπικαιροτάτων ἐν ἰητρικῇ, οὐ κατὰ τὰ ἔλκεα μῶνον, ἀλλὰ καὶ κατὰ ἄλλα πουλλὰ νουσήματα; εἴ μή τις φήσειε καὶ τᾶλλα νουσήματα ἔλκεα εἶναι. Ἔχει γὰρ τινα καὶ οὗτος ὁ λόγος ἐπιείκειαν πολλαγῆ γὰρ ἠδέλφισται τὰ ἔτερα τοῖσιν ἑτέροισιν. Ὀκόσοι μέντοι δικαιοῦσιν εἰρίοισι χρῆσθαι, ἔστ' ἂν ἐπτὰ ἡμέραι παρέλθωσιν, ἔπειτα κατατείνειν τε καὶ κατορθοῦν, καὶ ὀθονίοισιν ἐπιδεῖν, οὗτοι οὐκ ἂν ἀσύνετοι ὀμοίως φανεῖεν καὶ γὰρ τῆς φλεγμονῆς τὸ ἐπικαιρότατον παρελήλυθε, καὶ τὰ ὀστέα χαλαρὰ καὶ εὔθετα μετὰ ταύτας τὰς ἡμέρας ἂν εἴη. Πολλῶ μέντοι ἡσσᾶται καὶ αὕτη ἡ μελέτη τῆς ἐξ ἀρχῆς τοῖσιν ὀθονίοισιν ἐπιδέσιος κεῖνος

μὲν γὰρ ὁ τρόπος ἐβδομαίους ἐόντας ἀφλεγμάντους ἀποδείκνυσι, καὶ παρασκευάζει νάρθηξι τελέως ἐπιδεῖν οὗτος δὲ ὁ τρόπος πουλὸ ὑστερεῖ, βλάβας δὲ τινας καὶ ἄλλας ἔχει, ἀλλὰ μακρὸν ἂν εἴη πάντα γράφειν.

31. Moreover, the greater part of physicians treat fractures, both with and without an external wound, during the first days, by means of unwashed wool, and there does not appear to be anything improper in this. It is very excusable for those who are called upon to treat newly-received accidents of this kind, and who have no cloth for bandages at hand, to do them up with wool; for, except cloth for bandages, one could not have anything better than wool in such cases; but a good deal should be used for this purpose, and it should be well carded and not rough, for in small quantity and of a bad quality it has little power. But those who approve of binding up the limb with wool for a day or two, and on the third and fourth apply bandages, and make the greatest compression and extension at that period, such persons show themselves to be ignorant of the most important principles of medicine; for, in a word, at no time is it so little proper to disturb all kinds of wounds as on the third and fourth day; and all sort of probing should be avoided on these days in whatever other injuries are attended with irritation. For, generally, the third and fourth day in most cases of wounds, are those which give rise to exacerbations, whether the tendency be to inflammation, to a foul condition of the sore, or to fevers. And if any piece of information be

particularly valuable this is; to which of the most important cases in medicine does it not apply? and that not only in wounds but in many other diseases, unless one should call all other diseases wounds. And this doctrine is not devoid of a certain degree of plausibility, for they are allied to one another in many respects. But those who maintain that wool should be used until after the first seven days, and then that the parts should be extended and adjusted, and secured with bandages, would appear not to be equally devoid of proper judgment, for the proper judgment, for the most dangerous season for inflammation is then past, and the bones being loose can be easily set after the lapse of these days. But still this mode of treatment is far inferior to that with bandages from the commencement; for, the latter method exhibits the patient on the seventh day free from inflammation, and ready for complete bandaging with splints; while the former method is far behind in this respect, and is attended with many other bad effects which it would be tedious to describe. In those cases of fracture in which the bones protrude and cannot be restored to their place, the following mode of reduction may be practiced:- Some small pieces of iron are to be prepared like the levers which the cutters of stone make use of, one being rather broader and another narrower; and there should be three of them at least, and still more, so that you may use those that suit best; and then, along with extension, we must use these as levers, applying the under surface of the piece of iron to the under fragment of the bone, and the upper surface to the upper bone; and, in a word, we must operate powerfully with the lever as we would do upon a stone or a piece of wood. The pieces of iron should be as strong as possible, so that they may not bend. This is a powerful assistance, provided the pieces of iron be suitable, and one use them properly as levers. Of all the mechanical instruments used by men, the most powerful are these three, the axis in peritrochio, the lever, and the wedge. Without these, one or all, men could not perform any of their works which require great force. Wherefore, reduction with the lever is not to be despised, for the bones will be reduced in this way, or not at all. But if the upper fragment which rides over the other does not furnish a suitable point of support a suitable point of support for the lever, but the protruding part is sharp, you must scoop out of the bone what will furnish a proper place for the lever to rest on. The lever, along with extension, may be had recourse to on the day of the accident, or next day, but by no means on the third, the fourth, and the fifth. For if the limb is disturbed on these days, and yet the fractured bones not reduced, inflammation will be excited, and this no less if they are reduced; for convulsions are more apt to occur if reduction take place, than if the attempt should fail. These facts should be well known, for if convulsions should come on when reduction is effected, there is little hope of

recovery; but it is of use to displace the bones again if this can be done with out trouble. For it is not at the time when the parts are in a particularly relaxed condition that convulsions and tetanus are apt to supervene, but when they are more than usually tense. In the case we are now treating of, we should not disturb the limb on the aforesaid days, but strive to keep the wound as free from inflammation as possible, and especially encourage suppuration in it. But when seven days have elapsed, or rather more, if there be no fever, and if the wound be not inflamed, then there will be less to prevent an attempt at reduction, if you hope to succeed; but otherwise you need not take and give trouble in vain.

32. Ὀκόσοισι δὲ τὰ ὀστέα κατεηγότα καὶ ἐξίσχοντα μὴ δύνηται ἐς τὴν ἐωυτῶν χώραν καθιδρῦεσθαι, ἥδε ἢ κατάστασις σιδήρια χρῆ ποιέεσθαι ἐς τοῦτον τὸν τρόπον ὑνπερ οἱ μοχλοὶ ἔχουσιν, οἷς οἱ λατύποι χρέονται, τὸ μὲν τι πλατύτερον, τὸ δὲ τι στενότερον εἶναι δὲ χρῆ καὶ τρία καὶ ἔτι πλείω, ὡς τοῖσι μάλιστα ἀρμόζουσί τις χρῆσαιτο ἔπειτα τουτέοισι χρῆ ἅμα τῇ κατατάσει μοχλεύειν ὑποβάλλοντα, πρὸς μὲν τὸ κατώτερον τοῦ ὀστέου τὸ κατώτερον ἐρείδοντα, πρὸς δὲ τὸ ἀνώτερον τὸ ἀνώτερον τοῦ σιδηρίου, ἀπλῶ δὲ λόγῳ ὥσπερ εἰ λίθον τις ἢ ξύλον μοχλεῦοι ἰσχυρῶς ἔστω δὲ σθυναρὰ τὰ σιδήρια ὡς οἶόν τε, ὡς μὴ κάμπτηται. Αὕτη μεγάλη τιμωρὴ, ἦν τε τὰ σιδήρια ἐπιτήδεια ἦ, καὶ μοχλεῦηταί τις ὡς χρῆ. Ὀκόσα γὰρ ἀνθρώποις ἄρμενα μεμηχάνηται, πάντων, ἰσχυρότατά ἐστι τρία ταῦτα, ὄνου τε περιαγωγή, καὶ μόχλευσις, καὶ σφήνωσις. Ἄνευ δὲ τούτων, ἢ ἐνὸς δὴ τινος, ἢ πάντων, οὐδὲν τῶν ἔργων τῶν ἰσχυροτάτων οἱ

ἄνθρωποι ἐπιτελέουσιν. Οὐκ οὐκ ἀτιμαστέη αὕτη ἢ μόχλευσις ἢ γὰρ οὕτως ἐμπεσεῖται τὰ ὀστέα, ἢ οὐκ ἄλλως. Ἦν δ' ἄρα τοῦ ὀστέου τὸ ἄνω παρηλλαγμένον μὴ ἐπιτήδειον ἔχη ἐνέδρην τῷ μοχλῷ, ἀλλὰ πάροξυ ἐὼν παραφέρη, παραγλύψαντα χρῆ τοῦ ὀστέου ἐνέδρην τῷ μοχλῷ ἀσφαλέα ποιῆσαι. Μοχλεύειν δὲ χρῆ καὶ τείνειν αὐθήμερα, ἢ δευτεραῖα, τριταῖα δὲ μὴ, τεταρταῖα δὲ, ὡς ἦκιστα, καὶ πεμπταῖα. Καὶ γὰρ μὴ ἐμβάλλοντι, ὀχλήσαντι δὲ ἐν ταύτησι τῆσιν ἡμέρησιν, φλεγμονὴν ἂν ποιήσῃ, καὶ ἐμβάλλοντι οὐδὲν ἦσσον σπασμὸν μέντοι ἐμβάλλοντι πούλῳ ἂν μᾶλλον ποιήσῃ, ἢ ἀπορήσαντι ἐμβάλλειν. Ταῦτα εὖ χρῆ εἰδέναι καὶ γὰρ εἰ ἐπιγένειτο σπασμὸς ἐμβάλλοντι, ἐλπίδες μὲν οὐ πολλαὶ σωτηρίας λυσιτελέει δὲ ὀπίσω ἐκβάλλειν τὸ ὀστέον, εἰ οἶόν τε εἶη ἀόχλως. Οὐ γὰρ ἐπὶ τοῖσι χαλαρωτέροισι τοῦ καιροῦ σπασμοὶ καὶ τέτανοι ἐπιγίνονται, ἀλλ' ἐπὶ τοῖσιν ἐντεταμένοις μᾶλλον. Περὶ οὗ οὖν ὁ λόγος, οὐ χρῆ ἐνοχλέειν ἐν τῆσι προειρημένησιν ἡμέρησι ταύτησιν, ἀλλὰ μελετᾶν ὅπως ἦκιστα φλεγμανεῖ τὸ ἔλκος, καὶ μάλιστα ἐκπυήσῃ. Ἐπὴν δὲ ἐπτὰ ἡμέραι παρέλθωσιν, ἢ ὀλίγω πλείους, ἦν ἀπύρετος ἦ, καὶ μὴ φλεγμαίνῃ τὸ ἔλκος, τότε ἦσσον κωλύει πειρῆσθαι ἐμβάλλειν, ἦν

ἐλπίζης κρατήσῃν ἢν δὲ μὴ, οὐδὲν δεῖ μάτην ὀχλέειν καὶ ὀχλέεσθαι.

32. When you have reduced the bones to their place, the modes of treatment, whether you expect the bones to exfoliate or not, have been already described. All those cases in which an exfoliation of bone is expected, should be treated by the method of bandaging with cloths, beginning for the most part at the middle of the bandage, as is done with the double-headed bandage; but particular attention should be paid to the shape of the wound, so that its lips may gape or be distorted as little as possible under the bandage. Sometimes the turns of the bandage have to be made to the right, and sometimes to the left, and sometimes a double-headed bandage is to be used.

33. Ἦν μὲν οὖν ἐμβάλῃς τὰ ὀστέα ἐς τὴν ἐσωτῶν χώραν, γεγράφαται ἤδη οἱ τρόποι οἷως χρὴ ἰητρεύειν, ἢν τε ἐλπίζῃς ὀστέα ἀποστήσεσθαι, ἢν τε μὴ. Χρὴ δὲ, καὶ ἢν μὲν ἐλπίζῃς ὀστέα ἀποστήσεσθαι, τῷ τρόπῳ τῶν ὀθονίων ἐπὶ πᾶσι τοῖσι τοιοῦτέοισι τὴν ἐπίδεδιν ποιέεσθαι, ἐκ μέσου τοῦ ὀθονίου ἀρχόμενον ὡς ἐπὶ τὸ πούλυ, ὡς ἀπὸ δύο ἀρχέων ὑποδεσμῖς ἐπιδειῖται τεκμαίρεσθαι δὲ χρὴ πρὸς τὴν μορφήν τοῦ ἔλκεος, ὅκως ἤκιστα σεσηρὸς καὶ ἐκπεπλιγμένον ἔσται παρὰ τὴν ἐπίδεδιν τοῖσι μὲν γὰρ ἐπὶ δεξιὰ ἐπιδειῖν ζυντρόφως ἔχει, τοῖσι δὲ ἐπ' ἀριστερὰ, τοῖσι δὲ ἀπὸ δύο ἀρχέων.

33. It should be known that bones, which it has been found impossible to reduce, as well as those which are wholly denuded of flesh, will become detached. In some cases the upper part of the bone is laid bare, and in others the flesh dies all around; and, from a sore of long standing, certain of the bones become carious, and some not, some more, and some less; and in some the small, and in others the large bones. From what has been said it will be seen, that it is impossible to tell in one word when the bones will separate. Some come away more quickly, owing to their smallness, and some from being merely fixed at the point; and some, from pieces not separating, but merely exfoliating, become dried up and putrid; and besides, different modes of treatment have different effects. For the most part, the bones separate most quickly in those cases in which suppuration takes place most quickly, and when new flesh is most quickly formed, and is particularly sound, for the flesh which grows up below in the wound generally elevates the pieces of bone. It will be well if the whole circle of the bone separate in forty days; for in some cases it is protracted to sixty days, and in some to more; for the more porous pieces of bone separate more quickly, but the more solid come away more slowly; but the other smaller splinters in much less time, and others otherwise. A portion of bone which protrudes should be sawn

off for the following reasons: if it cannot be reduced, and if it appears that only a small piece is required in order that it may get back into its place; and if it be such that it can be taken out, and if it occasions inconvenience and irritates any part of the flesh, and prevents the limb from being properly laid, and if, moreover, it be denuded of flesh, such a piece of bone should be taken off. With regard to the others, it is not of much consequence whether they be sawed off or not. For it should be known for certain, that such bones as are completely deprived of flesh, and have become dried, all separate completely. Those which are about to exfoliate should not be sawn off. Those that will separate completely must be judged of from the symptoms that have been laid down.

34. Ὅκῳσα δὲ κατηγορήθη ὀστέα ἐμπεσεῖν, ταῦτα αὐτὰ εἰδέναι χρή ὅτι ἀποστήσεται, καὶ ὅσα τελέως ἐπιλώθη τῶν σαρκῶν ψιλοῦται δὲ ἐνίων μὲν τὸ ἄνω μέρος, μετεξετέρων δὲ κύκλωθεν ἀμφιθνήσκουσιν αἱ σάρκες καὶ τῶν μὲν ἀπὸ τοῦ ἀρχαίου τρώματος σεσάπρισται ἔνια τῶν ὀστέων, τῶν δ' οὐ καὶ τῶν μὲν μᾶλλον, τῶν δ' ἥσσον καὶ τὰ μὲν μικρὰ, τὰ δὲ μεγάλα. Διὰ οὖν ταῦτα τὰ εἰρημένα οὐκ ἔστιν ἐνὶ ὀνόματι εἰπεῖν, ὅκότε τὰ ὀστέα ἀποστήσεται. Τὰ μὲν γὰρ διὰ μικρότητα, τὰ δὲ διὰ τὸ ἐπ' ἄκρου ἔχεσθαι, θᾶσσον ἀφίσταται τὰ δὲ, διὰ τὸ μὴ ἀφίστασθαι, ἀλλὰ λεπιδοῦσθαι, καταξηρανθέντα, καὶ σαπρὰ γενόμενα πρὸς δὲ τούτοις, διαφέρει τι καὶ ἰητρείη

ἰητρείης. Ὡς μὲν οὖν τὸ ἐπίπαν τάχιστα τουτέων ὀστέα ἀφίσταται, ὧν τάχιστα μὲν αἱ ἐκπυήσεις, τάχιστα δὲ καὶ κάλλισται αἱ σαρκοφυῖαι καὶ γὰρ αἱ ὑποφυόμεναι σάρκες κατὰ τὸ σιναρὸν αὐταὶ μετεωρίζουσι τὰ ὀστέα ὡς ἐπὶ τὸ πουλύ. Ὅλος μὲν ὁ κύκλος τοῦ ὀστέου, ἦν ἐν τεσσαράκοντα ἡμέρησιν ἀποστή, καλῶς ἀποστήσεται ἔνια γὰρ ἐς ἐξήκοντα ἡμέρας ἀφικνεῖται, ἢ καὶ πλείους τὰ μὲν γὰρ ἀραιότερα τῶν ὀστέων θᾶσσον ἀφίσταται τὰ δὲ στερεώτερα, βραδύτερον τὰ δὲ ἄλλα τὰ μείω, πολλὸν ἐνδοτέρω, ἄλλα δ' ἄλλως. Ἀποπρίειν δ' ὀστέον ἐξέχον ἐπὶ τῶνδε τῶν προφασίων χρή, ἦν μὴ δύνηται ἐμβάλλειν, μικροῦ δὲ τινος αὐτῷ δοκέη δεῖν παρελθεῖν, καὶ οἷόν τε ἢ παραιρεθῆναι ἦν τε ἀσηρὸν ἢ καὶ θραυδόν τι τῶν σαρκίων, καὶ δυσθεσίην παρέχει, ψιλὸν δὲ τυγχάνη ἐόν, καὶ τὸ τοιοῦτον ἀφαιρέειν χρή. Τὰ δ' ἄλλα οὐδὲν μέγα διαφέρει, οὔτε ἀποπρίσαι, οὔτε μὴ ἀποπρίσαι. Σαφέως γὰρ εἰδέναι χρή, ὅτι ὀστέα, ὅσα τελέως στέρεται τῶν

σαρκῶν καὶ ἐπιξηραίνεται, πάντα τελέως ἀποστήσεται. Ὅσα δὲ ἀπολεπιδοῦσθαι μέλλει, ταῦτα οὐ χρή ἀποπρίειν τεκμαίρεσθαι δὲ χρή ἀπὸ τῶν τεταγμένων σημείων τὰ τελέως ἀποστησόμενα.

34. Such cases are to be treated with compresses and vinous applications, as



formerly laid down regarding bones which will separate. We must avoid wetting it at the beginning with anything cold; for there is danger of febrile rigors, and also of convulsions; for convulsions are induced by cold things, and also sometimes by wounds. It is proper to know that the members are necessarily shortened in those cases in which the bones have been broken, and have healed the one across the other, and in those cases in which the whole circle of the bone has become detached.

35. Ἰητρεύειν δὲ τοὺς τοιούτους σπλήνεσι καὶ τῇ οἰνηρῇ ἰητρείῃ, ὥσπερ καὶ πρόσθεν γέγραπται ἐπὶ τῶν ἀποστησομένων ὀστέων. Φυλάσσεσθαι δὲ χρὴ μὴ ψυχροῖσι τέγγειν τὸν πρῶτον χρόνον ῥιγέων γὰρ πυρετωδῶν κίνδυνος κίνδυνος δὲ καὶ σπασμῶν προκαλέεται γὰρ σπασμὸν τὰ ψυχρὰ, ποτὶ δὲ καὶ ἔλκη. Εἰδέναι δὲ χρὴ, ὅτι ἀνάγκη βραχύτερα τὰ σώματα ταύτη γίνεσθαι, ὧν ἀμφοτέρα τὰ ὀστέα κατεηγότα καὶ παρηλλαγμένα ἰητρεύεται, καὶ οἷς ὅλος ὁ κύκλος τοῦ ὀστέου ἀπέστη.

35. Those cases in which the bone of the thigh, or of the arm, protrudes, do not easily recover. For the bones are large, and contain much marrow; and many important nerves, muscles, and veins are wounded at the same time. And if you reduce them, convulsions usually supervene; and, if not reduced, acute bilious fevers come on, with singultus and mortification. The chances of recovery are not fewer in those cases in which the parts have not been reduced, nor any attempts made at reduction. Still more recover in those cases in which the lower, than those in which the upper part of the bone protrudes; and some will recover when reduction has been made, but very rarely indeed. For modes of treatment and peculiarity of constitution make a great difference as to the capability of enduring such an injury. And it makes a great difference if the bones of the arm and of the thigh protrude to the inside; for there are many and important vessels situated there, some of which, if wounded, will prove fatal; there are such also on the outside, but of less importance. In wounds of this sort, then, one ought not to be ignorant of the dangers, and should prognosticate them in due time. But if you are compelled to have recourse to reduction, and hope to succeed, and if the bones do not cross one another much, and if the muscles are not contracted (for they usually are contracted), the lever in such cases may be advantageously employed.

36. Ὅσοισι δὲ μηροῦ ὀστέον ἢ βραχίονος ἐξέσχεν, οὗτοι οὐ μάλα περιγίνονται. Τὰ γὰρ ὀστέα μεγάλα καὶ πολυμύελα, καὶ πολλὰ καὶ ἐπίκαιρα τὰ συντιτρωσκόμενα νεῦρα καὶ μύες καὶ φλέβες καὶ ἦν μὲν ἐμβάλλης, σπασμοῖ

φιλέουσιν ἐπιγίνεσθαι, μὴ ἐμβληθεῖσι δὲ, πυρετοὶ ὀξέες, καὶ ἐπίχολοι, καὶ λυγγώδεις, καὶ ἐπιμεαινόνται. Περιγίνονται δὲ οὐχ ἦσσον, οἷσι μὴ ἐμβληθῆ, μηδὲ εἰρηθῆ ἐμβάλλεσθαι ἔτι δὲ μᾶλλον περιγίνονται, οἷσι τὸ κάτω μέρος τοῦ ὀστέου ἐξέσχεν, ἢ οἷσι τὸ ἄνω περιγένοιτο δ' ἂν καὶ οἷσιν ἐμβληθεῖ, σπανίως γε μὴν. Μελέται γὰρ μελετέων μέγα διαφέρουσι,

καὶ φύσιες φύσιων τῶν σωμάτων εἰς εὐφορίην. Διαφέρει δὲ μέγα, καὶ ἦν ἔσω τοῦ βραχίονος καὶ τοῦ μηροῦ τὰ ὀστέα ἐξέχη πολλὰ γὰρ καὶ ἐπίκαιροι κατατάσιες φλεβῶν ἐν τῷ ἔσω μέρει, ὧν ἔναι τιτρωσκόμεναι σφάγιαί εἰσιν εἰσὶ δὲ καὶ ἐν τῷ ἔξω μέρει, ἦσσον δέ. Ἐν τοῖσιν οὖν τοιούτοις τρώμασι τοὺς μὲν κινδύνους οὐ χρὴ λήθειν, ὁκοῖοί τινές εἰσι, καὶ προλέγειν χρὴ πρὸς τοὺς καιρούς. Εἰ δὲ ἀναγκάζοιο μὲν ἐμβάλλειν, ἐλπίζοις δὲ ἐμβαλεῖν, καὶ μὴ πολλὴ ἢ παράλλαξις εἴη τοῦ ὀστέου, καὶ μὴ ξυνδεδραμηκοῖεν οἱ μύες φιλέουσι γὰρ ξυνηεῖν, ἢ μόχλευσις καὶ τούτοις μετὰ τῆς κατατάσιος εὖ ἂν ξυλλαμβάνοιτο.

36. Having effected the reduction, you must give an emollient draught of hellebore the same day, provided it has been reduced on the day of the accident, but otherwise it should not be attempted. The wound should be treated with the same things as are used in fractures of the bones of the head, and nothing cold should be applied; the patient should be restricted from food altogether, and if naturally of a bilious constitution, he should have for a diet a little fragrant *oxyglyky* sprinkled on water; but if he is not bilious, he should have water for drink; and if fever of the continual type come on, he is to be confined to this regimen for fourteen days at least, but if he be free of fever, for only seven days, and then you must bring him back by degrees to a common diet. To those cases in which the bones have not been reduced, a similar course of medicine should be administered, along with the same treatment of the sores and regimen; and in like manner the suspended part of the body should not be stretched, but should rather be contracted, so as to relax the parts about the wound. The separation of the bones is protracted, as also was formerly stated. But one should try to escape from such cases, provided one can do so honourably, for the hopes of recovery are small, and the dangers many; and if the physician do not reduce the fractured bones he will be looked upon as unskillful, while by reducing them he will bring the patient nearer to death than to recovery.

37. Ἐμβάλλοντα δὲ, ἐλλέβορον μαλθακὸν πιπίσαι χρὴ αὐθημερὸν, ἦν αὐθημερὸν ἐμβληθῆ εἰ δὲ μὴ, οὐδ' ἐγχειρέειν χρὴ. Τὸ δὲ ἔλκος ἰητρεύειν χρὴ, οἷσι περ κεφαλῆς ὀστέα κατεηγυῖς, καὶ ψυχρὸν μηδὲν προσφέρειν σιτίου δὲ στερεῆσαι τελέως καὶ ἦν μὲν πικρόχολος φύσει ἦ, ὀξύγλυκυ εὐῶδες ὀλίγον ἐπὶ ὕδωρ

ἐπιστάζοντα, τουτέω διαιτᾶν ἦν δὲ μὴ πικρόχολος ἦ, ὕδατι

πόματι χρῆσθαι καὶ ἦν μὲν πυρεταίνῃ ξυνεχῶς, τεσσαρεσκαίδεκα ἡμέρησι τὸ ἐλάχιστον οὕτω διαιτᾶν, ἦν δὲ ἀπύρετος ἦ, ἑπτὰ ἡμέρησιν ἔπειτα ἐκ προσαγωγῆς κατὰ λόγον ἐς φαύλην δίαιταν ἄγειν. Καὶ οἷσιν ἂν μὴ ἐμβληθῆ τὰ ὀστέα, καὶ τὴν φαρμακεῖν χρῆ τοιαύτην ποιέεσθαι, καὶ τῶν ἐλκέων τὴν μελέτην καὶ τὴν δίαιταν ὡσαύτως καὶ τὸ ἀπαιωρούμενον τοῦ σώματος μὴ κατατείνειν, ἀλλὰ καὶ προσάγειν μᾶλλον, ὥστε χαλαρώτερον εἶναι τὸ κατὰ τὸ ἔλκος. Τῶν δὲ ὀστέων ἀπόστασις χρονίη, ὥσπερ καὶ πρόσθεν εἴρηται. Μάλιστα δὲ χρῆ τὰ τοιαῦτα διαφυγεῖν, ἅμα ἦν τις καλὴν ἔχη τὴν ἀποφυγὴν αἷ τε γὰρ ἐλπίδες ὀλίγαι, καὶ οἱ κίνδυνοι πολλοὶ καὶ μὴ ἐμβάλλον ἄτεχνος ἂν δοκέοι εἶναι, καὶ ἐμβάλλον ἐγγυτέρω ἂν τοῦ θανάτου ἀγάγοι, ἢ τῆς σωτηρίας.

37. Luxations and sublaxations at the knee are much milder accidents than sublaxations and luxations at the elbow. For the knee-joint, in proportion to its size, is more compact than that of the arm, and has a more even conformation, and is rounded, while the joint of the arm is large, and has many cavities. And in addition, the bones of the leg are nearly of the same length, for the external one overtops the other to so small an extent as hardly to deserve being mentioned, and therefore affords no great resistance, although the external nerve ( *ligament?* ) at the ham arises from it; but the bones of the fore-arm are unequal, and the shorter is considerably thicker than the other, and the more slender ( *ulna?* ) protrudes, and passes up above the joint, and to it (the *olecranon?* ) are attached the nerves ( *ligaments?* ) which go downward to the junction of the bones; and the slender bone ( *ulna?* ) has more to do with the insertion of the ligaments in the arm than the thick bone ( *radius?* ). The configuration then of the articulations, and of the bones of the elbow, is such as I have described. Owing to their configuration, the bones at the knee are indeed frequently dislocated, but they are easily reduced, for no great inflammation follows, nor any constriction of the joint. They are displaced for the most part to the inside, sometimes to the outside, and occasionally into the ham. The reduction in all these cases is not difficult, but in the dislocations inward and outward, the patient should be placed on a low seat, and the thigh should be elevated, but not much. Moderate extension for the most part sufficeth, extension being made at the leg, and counter-extension at the thigh.

38. Τὰ δὲ ὀλισθήματα τὰ κατὰ τὰ γούνατα, καὶ τὰ διακινήματα τῶν ὀστέων εὐηθέστερα πούλὸ τῶν κατ' ἀγκῶνα κινήματων καὶ ὀλισθημάτων. Τό τε γὰρ ἄρθρον τοῦ μηροῦ εὐσταλέστερον ὡς ἐπὶ μεγέθει, ἢ τὸ τοῦ βραχίονος, καὶ

δικαίην φύσιν μοῦνον ἔχον, καὶ ταύτην περιφερέα τὸ δὲ τοῦ βραχίονος ἄρθρον μέγα τε καὶ βαθμίδας πλείονας ἔχον. Πρὸς δὲ τούτοις, τὰ μὲν τῆς κνήμης ὅστέα παραπλήσια μῆκός ἐστι, καὶ σμικρόν τι οὐκ ἄξιον λόγου τὸ ἔξω ὀστέον ὑπερέχει, οὐδενὸς μεγάλου κώλυμα ἐὼν,

ἀφ' οὗ περ πέφυκεν ὁ ἔξω τένων ὁ παρὰ τὴν ἰγνύην τὰ δὲ τοῦ πήχεος ὅστέα ἄνισά ἐστιν, καὶ τὸ βραχύτερον παχύτερον συχνῶ, τὸ δὲ λεπτότερον πολλῶ ὑπερβάλλει καὶ ὑπερέχει τὸ ἄρθρον ἐξήρηται μέντοι καὶ τοῦτο τῶν νεύρων κατὰ τὴν κοινὴν ζύμφυσιν

τῶν ὀστέων πλεῖον δὲ μέρος ἔχει τῆς ἐξαρτήσιος τῶν νεύρων ἐν τῷ βραχίονι τὸ λεπτὸν ὀστέον, ἢ περ τὸ παχύ. Ἡ μὲν οὖν φύσις τοιουτότροπος τῶν ἄρθρων τούτων καὶ τῶν ὀστέων τοῦ ἀγκῶνος. Καὶ διὰ τὸν τρόπον τῆς φύσιος τὰ κατὰ τὸ γόνυ ὅστέα πολλάκις μὲν ὀλισθάνει, ῥηϊδίως δὲ ἐμπίπτει φλεγμονὴ δὲ οὐ μεγάλη προσγίνεται, οὐδὲ δεσμὸς τοῦ ἄρθρου. Ὀλισθάνει δὲ τὰ πλεῖστα ἐς τὸ ἔσω μέρος, ἔστι δ' ὅτε καὶ ἐς τὸ ἔξω, ποτὲ δὲ καὶ ἐς τὴν ἰγνύην. Τούτων ἀπάντων αἱ ἐμβολαὶ οὐ χαλεπαὶ, ἀλλὰ τὰ μὲν ἔξω καὶ ἔσω ὀλισθάνοντα, καθῆσθαι μὲν χρὴ τὸν ἄνθρωπον ἐπὶ χαμαιζήλου τινός, τὸ δὲ σκέλος ἀνωτέρω ἔχειν, μὴ μὴν πολλῶ. Κατάτασις δὲ ὡς ἐπὶ τὸ πούλυ μετρίῃ ἀρκέει, τῇ μὲν κατατείνειν τὴν κνήμην, τῇ δὲ ἀντιτείνειν τὸν μηρόν.

38. Dislocations at the elbow are more troublesome than those at the knee, and, owing to the inflammation which comes on, and the configuration of the joint, are more difficult to reduce if the bones are not immediately replaced. For the bones at the elbow are less subject to dislocation than those of the knee, but are more difficult to reduce and keep in their position, and are more apt to become inflamed and ankylosed.

39. Τὰ δὲ κατὰ τὸν ἀγκῶνα ὀχλωδέστερά ἐστι τῶν κατὰ τὸ γόνυ, καὶ δυσεμβολώτερα καὶ διὰ τὴν φλεγμονὴν καὶ διὰ τὴν φύσιν, ἢν μή τις αὐτίκα ἐμβάλῃ. Ὀλισθάνει μὲν γὰρ ἦσσον, ἢ ἐκεῖνα, δυσεμβολώτερα δὲ καὶ δυσθετώτερα, καὶ ἐπιφλεγμαίνει μᾶλλον καὶ ἐπιπωροῦται.

39. For the most part the displacements of these bones are small, sometimes toward the ribs, and sometimes to the outside; and the whole articulation is not displaced, but that part of the humerus remains in place which is articulated with the cavity of the bone of the forearm that has a protuberance ( *ulna?* ). Such dislocations, to whatever side, are easily reduced, and the extension is to be made in the line of the arm, one person making extension at the wrist, and

another grasping the armpit, while a third, applying the palm of his hand to the part of the joint which is displaced, pushes it inward, and at the same time makes counterpressure on the opposite side near the joint with the other hand.

40. Ἔστι δὲ καὶ τούτων τὰ μὲν πλεῖστα σμικραὶ ἐγκλίσεις, ἄλλοτε ἐς τὸ πρὸς τῶν πλευρέων μέρος, ἄλλοτε ἐς τὸ ἔξω οὐ πᾶν δὲ τὸ ἄρθρον μεταβεβηκός, ἀλλὰ, μένον κατὰ τὸ κοῖλον

τοῦ ὀστέου τοῦ βραχίονος, ἢ τὸ τοῦ πήχεος ὀστέον τὸ ὑπερέχον, ἐξέσχεν. Τὰ μὲν οὖν τοιαῦτα, κἂν τῆ ἢ τῆ ὀλισθη, ῥηΐδιον ἐμβάλλειν, καὶ ἀπόχρη ἢ κατάτασις ἢ ἐς τὸ ἰθὺ γινομένη κατ' ἰθωρίην τοῦ βραχίονος, τὸν μὲν κατὰ τὸν καρπὸν τῆς χειρὸς τείνειν, τὸν δὲ κατὰ τὴν μασχάλην περιβάλλοντα, τὸν δὲ τῆ ἑτέρῃ πρὸς τὸ ἐξεστεὸς ἄρθρον τὸ θέναρ προσβάλλοντα ὠθέειν, τῆ δ' ἑτέρῃ ἀντωθέειν προσβάλλοντα ἐγγὺς τῷ ἄρθρῳ. Ἐνακούει δὲ οὐ βραδέως ἐμβαλλόμενα τὰ τοιαῦτα ὀλισθήματα, ἢν, πρὶν φλεγμῆν, ἐμβάλλῃ τις. Ὀλισθάνει δὲ ὡς ἐπὶ τὸ πούλῳ μᾶλλον ἐς τὸ ἔσω μέρος, ὀλισθάνει δὲ καὶ ἐς τὸ ἔξω, εὐδηλα δὲ τῷ σχήματι. Καὶ πολλάκις ἐμπίπτει τὰ τοιαῦτα, καὶ ἄνευ ἰσχυρῆς κατατάσιος χρῆ δὲ τῶν ἔσω ὀλισθανόντων, τὸ μὲν ἄρθρον ἀπωθέειν ἐς τὴν φύσιν, τὸν δὲ πῆχυν ἐς τὸ καταπρηνὲς μᾶλλον ῥέποντα περιάγειν. Τὰ μὲν πλεῖστα ἀγκῶνος τοιαῦτα ὀλισθήματα.

40. The end of the humerus at the elbow gets displaced ( *subluxated?* ) by leaving the cavity of the ulna. Such luxations readily yield to reduction, if applied before the parts get inflamed. The displacement for the most part is to the inside, but sometimes to the outside, and they are readily recognized by the shape of the limb. And often such luxations are reduced without any powerful extension. In dislocations inward, the joint is to be pushed into its place, while the fore-arm is brought round to a state of pronation. Such are most of the dislocations at the elbow.

41. Ἦν δὲ ὑπερβῆ τὸ ἄρθρον ἢ ἔνθα ἢ ἔνθα ὑπὲρ τὸ ὀστέον τοῦ πήχεος τὸ ἐξέχον ἐς τὸ κοῖλον τοῦ βραχίονος, γίνεται μὲν οὖν ὀλιγάκις τοῦτο, ἢν δὲ γένηται, οὐκ ἔτι ὁμοίως ἢ κατάτασις ἢ ἐς τὴν ἰθωρίην γινομένη ἐπιτηδεῖ τῶν τοιούτων ὀλισθημάτων

κωλύει γὰρ ἐν τῆ τοιαύτῃ κατατάσει τὸ ἀπὸ τοῦ πήχεος ὑπερέχον ὀστέον τὴν ὀπέρβασιν τοῦ βραχίονος. Χρῆ τοίνυν τοῖσιν οὕτως ἐκβεβληκόσι τὴν κατάτασιν ποιέεσθαι τοιαύτην, οἷηπερ πρόσθεν γέγραπται, ἐπὶν τις ὀστέα βραχίονος κατηγότα ἐπιδέῃ, ἀπὸ μὲν τῆς μασχάλῃς ἐς τὸ ἄνω τείνεσθαι, ἀπὸ δὲ τοῦ

ἀγκῶνος αὐτοῦ ἐς τὸ κάτω ἀναγκάζειν, οὕτω γὰρ ἂν μάλιστα ὁ βραχίων ὑπεραιωρηθεῖ ὑπὲρ τῆς ἐωυτοῦ βαθμίδος ἣν δὲ ὑπεραιωρηθῆ, ῥηϊδίη ἢ κατάστασις, τοῖσι θέναρσι τῶν χειρῶν τὸ μὲν ἐξεστεὸς τοῦ βραχίονος ἐμβάλλοντα ὠθέειν, τὸ δὲ ἐς τὸ τοῦ πήχεος ὀστέον τὸ παρὰ τὸ ἄρθρον ἐμβάλλοντα ἀντωθέειν, τὸν

αὐτὸν τρόπον ἄμφω. Ἴσως μέντοι ἢ τοιαύτη κατάτασις τοῦ τοιούτου ὀλισθήματος δικαιοτάτη ἐμβληθεῖ δ' ἂν καὶ ἀπὸ τῆς ἐς ἰθὺ κατατάσιος, ἥσσον δὲ ἢ οὕτω.

41. But if the articular extremity of the humerus be carried to either side above the bone of the fore-arm, which is prominent, into the hollow of the arm (?), this rarely happens; but if it does happen, extension in the straight line is not so proper under such circumstances; for in such a mode of extension, the process of the ulna ( *olecranon?* ) prevents the bone of the arm ( *humerus?* ) from passing over it. In dislocations of this kind, extension should be made in the manner described when treating of the bandaging of fractured bones of the arm, extension being made upward at the armpit, while the parts at the elbow are pushed downward, for in this manner can the humerus be most readily raised above its cavity; and when so raised, the reduction is easy with the palms of the hand, the one being applied so as to make pressure on the protuberant part of the arm, and the other making counter-pressure, so as to push the bone of the fore-arm into the joint. This method answers with both cases. And perhaps this is the most suitable mode of reduction in such a case of dislocation. The parts may be reduced by extension in a straight line, but less readily than thus.

42. Ἦν δὲ ἐς τοῦμπροσθεν ὀλίσθη ὁ βραχίων, ἐλαχιστάκις μὲν τοῦτο γίνεται, ἀλλὰ τί ἂν ἐξαπιναίη ἐκπάλησις οὐκ ἐκβάλλοι; πολλὰ γὰρ καὶ παρὰ τὴν οἰκείην φύσιν ἐκπίπτει, κῆν μέγα τι ἢ τὸ κωλύον ταύτη δὲ τῇ ἐκπαλήσει μέγα τι τὸ

ὑπερβαινόμενον τὸ ὑπὲρ τὸ παχύτερον τῶν ὀστέων, καὶ τῶν νεύρων συχνὴ κατάτασις ὅμως δὲ δὴ τισιν ἐξεπάλησεν. Σημεῖον δὲ τοῖσιν οὕτως ἐκπαλήσασιν οὐδὲν γὰρ χρῆμα τοῦ ἀγκῶνος κάμψαι δύνανται, εὐδηλον δὲ καὶ τὸ ἄρθρον ψαυόμενον. Ἦν μὲν οὖν μὴ αὐτίκα ἐμβληθῆ; ἰσχυραὶ καὶ βίαιοι φλεγμοναὶ καὶ πυρετώδεις γίνονται ἣν δὲ δὴ αὐτίκα τις παρατύχη, εὐέμβολον. Χρῆ δὲ ὀθόνιον σκληρὸν ὀθόνιον γὰρ σκληρὸν εἰλιγμένον ἀρκέει μὴ μὲν ἐνθέντα πλάγιον ἐς τὴν καμπὴν τοῦ ἀγκῶνος, ἐξαπίνης ξυγκάμψαι τὸν ἀγκῶνα, καὶ προσαγαγεῖν ὡς μάλιστα τὴν χεῖρα πρὸς τὸν ὦμον. Ἰκανὴ μὲν οὖν αὕτη ἢ ἐμβολὴ τοῖσιν οὕτως ἐκπαλήσασιν ἀτὰρ καὶ ἢ ἐς τὸ ἰθὺ κατάτασις δύναται εὐθετίξειν τοῦτον τὸν

τρόπον τῆς ἐκβολῆς τοῖσι μέντοι θέναρσι τῆς χειρὸς χρῆ, τὸν μὲν ἐμβάλλοντα ἐς τὸ τοῦ βραχίονος ἐξέχον τὸ παρὰ τὴν καμπὴν ὀπίσω ἀπωθέειν, τὸν δὲ τινα κάτωθεν ἐς τὸ τοῦ ἀγκῶνος ὀξὺ ἐμβάλλοντα ἀνωθέειν ἐς τὴν ἰθυωρίην τοῦ πήχεος

ῤέποντα. Δύναται δὲ ἐν τουτέῳ τῷ τρόπῳ τῆς ὀλισθήσιος κάκεινη ἢ κατὰτασις ἢ πρόσθεν γεγραμμένη, ὡς χρῆ κατατείνειν τὰ ὀστέα τοῦ βραχίονος κατεηγότα, ἐπὴν μέλλωσιν ἐπιδειῖσθαι ἐπὴν δὲ καταταθῆ, οὕτω χρῆ τοῖσι θέναρσι τὰς προσβολὰς ποιέεσθαι, ὥσπερ καὶ πρόσθεν γέγραπται.

42. If the arm be dislocated forward- this rarely happens, indeed, but what would a sudden shock not displace? for many other things are removed from their proper place, notwithstanding a great obstacle,- in such a violent displacement the part ( *olecranon?* ) which passes above the prominent part of the bones is large, and the stretching of the nerves ( *ligaments?* ) is intense; and yet the parts have been so dislocated in certain cases. The following is the symptom of such a displacement: the arm cannot be bent in the least degree at the elbow, and upon feeling the joint the nature of the accident becomes obvious. If, then, it is not speedily reduced, strong and violent inflammation, attended with fever, will come on, but if one happen to be on the spot at the time it is easily reduced. A piece of hard linen cloth (or a piece of hard linen, not very large, rolled up in a ball, will be sufficient) is to be placed across the bend of the elbow, and the arm is then to be suddenly bent at the elbow, and the hand brought up to the shoulder. This mode of reduction is sufficient in such displacements; and extension in the straight line can rectify this manner of dislocation, but we must use at the same time the palms of the hands, applying the one to the projecting part of the humerus at the bend of the arm for the purpose of pushing it back, and applying the other below to the sharp extremity of the elbow, to make counter-pressure, and incline the parts into the straight line. And one may use with advantage in this form of dislocation the method of extension formerly described, for the application of the bandages in the case of fracture of the arm; but when extension is made, the parts are to be adjusted, as has been also described above.

43. Ἦν δὲ ἐς τοῦπίσω βραχίων ἐκπέση ὀλιγάκις δὲ τοῦτο γίνεται, ἐπωδυνώτατόν τε τοῦτο πάντων καὶ πυρετωδέστατον ζυνεχέων πυρετῶν καὶ ἀκρητοχόλων, θανατωδέων καὶ ὀλιγημέρων, οἱ τοιοῦτοι ἐκτανύειν οὐ δύναται. Ἦν μὲν οὖν αὐτίκα παρατύχης, βιάσασθαι χρῆ ἐκτανύσαντα τὸν ἀγκῶνα, καὶ αὐτομάτως ἐμπίπτει. Ἦν δὲ σε φθάση πυρετήνας, οὐκ ἔτι χρῆ ἐμβάλλειν κατατείνειει γὰρ ἂν ἢ ὀδύνη ἀναγκαζομένου. Ως δ' ἐν κεφαλαίῳ εἰρηῆσθαι, οὐδ' ἄλλο χρῆ ἄρθρον

πυρεταίνοντι ἐμβάλλειν, ἥκιστα δὲ ἀγκῶνα.

43. But if the arm be dislocated backward (but this very rarely happens, and it is the most painful of all, and the most subject to bilious fevers of the continual type, which prove fatal in the course of a few days), in such a case the patient cannot extend the arm. If you are quickly present, by forcible extension the parts may return to their place of their own accord; but if fever have previously come on, you must no longer attempt reduction, for the pain will be rendered more intense by any such violent attempt. In a word, no joint whatever should be reduced during the prevalence of fever, and least of all the elbow-joint.

44. Ἔστι δὲ καὶ ἄλλα σίνεα κατ' ἀγκῶνα ὀχλώδεα τοῦτο μὲν γὰρ, τὸ παχύτερον ὀστέον ἔστιν ὅτε ἐκινήθη ἀπὸ τοῦ ἐτέρου, καὶ οὔτε ξυγκάμπειν, οὔτε κατατανύειν ὁμοίως δύνανται. Δῆλον δὲ γίνεται, ψαυόμενον κατὰ τὴν ξύγκαμψιν τοῦ ἀγκῶνος παρὰ τὴν διασχίδα τῆς φλεβὸς τὴν ἄνωθεν τοῦ μυὸς τείνουσαν. Οἷσι δὲ τὸ τοιοῦτον, οὐκ ἔτι ῥήϊδιον ἐς τὴν ἐωυτοῦ φύσιν ἀγαγεῖν οὐδὲ γὰρ

ἄλλην οὐδεμίαν ῥήϊδιον ξυμφυάδα κοινήν δύο ὀστέων κινηθεῖσαν ἐς τὴν ἀρχαίην φύσιν ἰδρυνθῆναι, ἀλλ' ἀνάγκη ὄγκον ἴσχειν τὴν διάστασιν. Ως δ' ἐπιδέειν χρὴ ἐν ἄρθρῳ, ἐν τῇ κατὰ σφυρὸν ἐπιδέσει εἴρηται.

44. There are also other troublesome injuries connected with the elbow-joint; for example, the thicker bone ( *radius?* ) is sometime partially displaced from the other, and the patient can neither perform extension nor flexion properly. This accident becomes obvious upon examination with the hand at the bend of the arm near the division of the vein that runs up the muscle. In such a case it is not easy to reduce the parts to their natural state, nor is it easy, in the separation of any two bones united by symphysis, to restore them to their natural state, for there will necessarily be a swelling at the seat of the diastasis. The method of bandaging a joint has been already described in treating of the application of bandages to the ankle.

45. Ἔστι δ' οἷσι κατήγγνυται τοῦ πήχεος τὸ ὀστέον τὸ ὀποτεταγμένον τῷ βραχίονι, ὅτε μὲν τὸ χονδρῶδες αὐτοῦ ἀφ' οὗ πέφυκεν ὁ τένων ὁ ὀπισθεν τοῦ βραχίονος [ὅτε δὲ τὰ πρόσω κατὰ τὴν ἀρχὴν τῆς ἐκφύσεως τοῦ προσθίου κορωνοῦ] καὶ ἐπὴν τοῦτο κινηθῆ, πυρετῶδες καὶ κακότηδες γίνεται τὸ μέντοι ἄρθρον μένει ἐν τῇ ἐωυτοῦ χώρῃ πᾶσα γὰρ ἡ βᾶσις αὐτέου ταύτη ὑπερέχει. Ὅταν δὲ ἀπαγῆ ταύτη ἢ ὑπερέχει ἢ κεφαλὴ τοῦ βραχίονος, πλανωδέστερον τὸ



ἄρθρον γίνεται, ἣν παντάπασιν ἀποκαυλισθῆ. Ἀσινέστερα δὲ, ὡς ἐν κεφαλαίῳ εἰρησθαι, πάντα τὰ κατηγνύμενα τῶν ὀστέων ἐστίν, ἢ οἷσι τὰ μὲν ὀστέα οὐ κατάγνυται, φλέβες δὲ καὶ νεῦρα ἐπίκαιρα ἀμφιφλᾶται ἐν τούτοισι τοῖσι χωρίοισιν ἐγγυτέρῳ γὰρ θανάτου πελάζει ταῦτα ἢ ἐκεῖνα, ἣν ἐκπυρωθῆ ζυνεχεῖ πυρετῷ ὀλίγα γε μὴν τὰ τοιαῦτα κατήγματα γίνεται.

45. In certain cases the process of the ulna ( *olecranon?* ) behind the humerus is broken; sometimes its cartilaginous part, which gives origin to the posterior tendon of the arm, and sometimes its fore part, at the base of the anterior coronoid process; and when this displacement takes place, it is apt to be attended with malignant fever. The joint, however, remains in place, for its whole base protrudes at that point. But when the displacement takes place where its head overtops the arm, the joint becomes looser if the bone be fairly broken across. To speak in general terms, all cases of fractured bones are less dangerous than those in which the bones are not broken, but the veins and important nerves ( *tendons?* ) situated in these places are contused; for the risk of death is more immediate in the latter class of cases than in the former, if continual fever come on. But fractures of this nature seldom occur.

46. Ἔστι δ' ὅτε αὐτὴ ἡ κεφαλὴ τοῦ βραχίονος κατὰ τὴν ἐπίφυσιν

κατάγνυται τοῦτο δὲ δοκέον κακοσινώτερον εἶναι πολλῶ, πολλῶ τιμὴ εὐηθέστερον τῶν κατ' ἀγκῶνα σινέων ἐστίν.

46. It sometimes happens that the head of the humerus is fractured at its epiphysis; and this, although it may appear to be a much more troublesome accident, is in fact a much milder one than the other injuries at the joint.

47. Ὡς μὲν οὖν ἕκαστα τῶν ὀλισθημάτων ἀρμόσσει μάλιστα ἰητρεύειν, γέγραπται, καὶ ὅτι παραχρῆμα ἐμβάλλειν μάλιστα ἄρθρον ζυμφέρει διὰ τὸ τάχος τῆς φλεγμονῆς τῶν νεύρων. Καὶ γὰρ ἣν ἐκπεσόντα αὐτίκα ἐμπέση, ὅμως φιλέει τὰ νεῦρα ζύντασιν ποιέεσθαι, καὶ κωλύειν ἐπὶ ποσὸν χρόνον τὴν τε ἕκτασιν ὅσην περ φιλέει ποιέεσθαι, τὴν τε ζύγκαμψιν. Ἰητρεύειν δὲ πάντα παραπλησίως ταῦτα ζυμφέρει, καὶ ὀκόσα ἀπάγνυται, καὶ ὀκόσα δίσταται, καὶ ὀκόσα ὀλισθάνει πάντα γὰρ χρὴ ὀθονίοισι πολλοῖσι καὶ σπλήνεσι καὶ κηρωτῇ ἰητρεύειν, ὥσπερ καὶ τᾶλλα κατήγματα. Τὸ δὲ σχῆμα τοῦ ἀγκῶνος ἐν τούτοισι παντάπασιν δεῖ τοιοῦτον ποιέεσθαι, οἷόν περ οἷσι βραχίων ἐπεδεῖτο καταγείς, καὶ πῆχυς. Κοινότατον μὲν γὰρ πᾶσι τοῖσιν ὀλισθήμασι καὶ τοῖσι κινήμασι καὶ τοῖσι κατήγμασι τοῦτο τὸ σχῆμά ἐστίν κοινότατον δὲ πρὸς τὴν ἔπειτα διάτασιν, καὶ τὸ

έκτανύειν ἕκαστα, καὶ ζυγκάμπτειν ἐντεῦθεν γὰρ ὁδοὶ ἐς ἀμφοτέρα παραπλήσιοι. Εὐοχώτατον δὲ καὶ εὐανάληπτον αὐτῶ τῶ κάμνοντι τοῦτο τὸ σχῆμα. Ἔτι δὲ πρὸς τούτοισιν, εἴ ἄρα κρατηθεῖη ὑπὸ τοῦ πωρώματος, εἰ μὲν ἐκτεταμένη ἢ χεὶρ κρατηθεῖη, κρέσσων ἂν εἴη μὴ προσεοῦσα, πολλῶ μὲν γὰρ κώλυμα εἴη, ὠφελοίη δὲ ὀλίγῳ εἰ δ' αὖ

ζυγκεκαμμένη, μᾶλλον εὐχρηστος ἂν εἴη πολλῶ δὲ εὐχρηστοτέρη, εἰ τὸ διὰ μέσου σχῆμα ἔχουσα πωρωθεῖη. Τὰ μὲν περὶ τοῦ σχήματος τοιαῦτα.

47. The treatment especially befitting each particular dislocation has been described; and it has been laid down as a rule, that immediate reduction is of the utmost advantage, owing to the rapid manner in which inflammation of the tendons supervenes. For even when the luxated parts are immediately reduced, the tendons usually become stiffened, and for a considerable time prevent extension and flexion from being performed to the ordinary extent. All these cases are to be treated in a similar way, whether the extremity of the articulating bone be snapped off, whether the bones be separated, or whether they be dislocated; for they are all to be treated with plenty of bandages, compresses, and cerate, like other fractures. The position of the joint in all these cases should be the same, as when a fractured arm or fore-arm has been bound up. For this is the most common position in all dislocations, displacements, and fractures; and it is the most convenient for the subsequent movements, whether of extension or flexion, as being the intermediate stage between both. And this is the position in which the patient can most conveniently carry or suspend his arm in a sling. And besides, if the joint is to be stiffened by callus, it were better that this should not take place when the arm is extended, for this position will be a great impediment and little advantage; if the arm be wholly bent, it will be more useful; but it will be much more convenient to have the joint in the intermediate position when it becomes ankylosed. So much with regard to position.

48. Ἐπιδεῖν δὲ χρῆ, τὴν τε ἀρχὴν τοῦ πρώτου ὀθονίου βαλλόμενον κατὰ τὸ βλαφθὲν, ἢν τε καταγῆ, ἢν τε ἐκστῆ, ἢν τε διαστῆ, καὶ τὰς περιβολὰς τὰς πρώτας κατὰ τοῦτο ποιέεσθαι καὶ ἐρηρεῖσθω μάλιστα ταύτη, ἔνθεν δὲ καὶ ἔνθεν ἐπὶ ἦσσον. Τὴν δὲ ἐπίδεσιν κοινὴν ποιέεσθαι χρῆ τοῦ τε πήχεος καὶ τοῦ βραχίονος, καὶ ἐπὶ πουλὸν πλέον ἐκάτερον ἢ ὡς οἱ πλεῖστοι ποιέουσιν, ὅπως ἐξαρύηται ὡς μάλιστα ἀπὸ τοῦ σίνεος τὸ οἶδημα ἔνθεν καὶ ἔνθεν. Προσπεριβαλλέσθω δὲ καὶ τὸ ὄξυ τοῦ πήχεος, ἢν τὸ σίνος κατὰ τοῦτο ἦ, ἢν τε μὴ, ἵνα μὴ τὸ οἶδημα ἐνταῦθα περὶ αὐτὸ ξυλλέγηται. Περιφεύγειν δὲ χρῆ ἐν τῇ ἐπιδέσει, ὅπως μὴ κατὰ τὴν καμπὴν πολλὸν τοῦ ὀθονίου ἠθροισμένον ἔσται ἐκ τῶν δυνατῶν περιέχθαι δὲ

κατὰ τὸ σίνος ὡς μάλιστα. Καὶ τὰ ἄλλα καταλαβέτω αὐτὸν περὶ τῆς πιέξιος καὶ τῆς χαλάσιος ταῦτά, καὶ κατὰ τοὺς αὐτοὺς χρόνους ἕκαστα, ὥσπερ τῶν ὀστέων τῶν κατεηγότων ἐν τῇ ἰητρείῃ πρόσθεν γέγραπται καὶ αἱ μετεπιδέσεις διὰ τρίτης ἔστωσαν χαλᾶν δὲ δοκεέτω τῇ τρίτῃ, ὥσπερ καὶ τότε. Καὶ νάρθηκας προσπεριβάλλειν

ἐν τῷ ἰκνεομένῳ χρόνῳ οὐδὲν γὰρ ἀπὸ τρόπου, καὶ τοῖσι τα ὀστέα κατεηγόσι, καὶ τοῖσι μὴ, ἢν μὴ πυρεταίνῃ, ὡς χαλαρωτάτους δὲ, τοὺς μὲν ἀπὸ τοῦ βραχίονος κατατεταγμένους, τοὺς δὲ ἀπὸ τοῦ πήχεος ἀνειμένους ἔστωσαν δὲ μὴ παχές οἱ νάρθηκες ἀναγκαῖον δὲ καὶ ἀνίσους αὐτοὺς εἶναι ἀλλήλοισιν, παραλλάσσειν δὲ παρ' ἀλλήλους, ἢ ἂν ξυμφέρῃ, τεκμαιρόμενον πρὸς τὴν ζύγκαμψιν. Ἀτὰρ καὶ τῶν σπληνῶν τὴν πρόσθεσιν τοιαύτην χρὴ ποιέεσθαι, ὥσπερ καὶ τῶν ναρθήκων εἴρηται, ὀγκηροτέρους δὲ ὀλίγω κατὰ τὸ σίνος προστιθέναι. Τοὺς δὲ χρόνους τοὺς ἀπὸ τῆς φλεγμονῆς τεκμαίρεσθαι καὶ ἀπὸ τῶν πρόσθεν γεγραμμένων.

48. In bandaging, the head of the first bandage should be placed at the seat of the injury, whether it be a case of fracture, of dislocation, or of diastasis ( *separation?* ), and the first turns should be made there, and the bandages should be applied most firmly at that place, and less so on either side. The bandaging should comprehend both the arm and the fore-arm, and on both should be to a much greater extent than most physicians apply it, so that the swelling may be expelled from the seat of the injury to either side. And point of the fore-arm should be comprehended in the bandaging, whether the injury be in that place or not, in order that the swelling may not collect there. In applying bandages, we must avoid as much as possible accumulating many turns of the bandage at the bend of the arm. For the principal compression should be at the seat of the injury, and the same rules are to be observed, and at the same periods, with regard to compression and relaxation, as formerly described respecting the treatment of broken bones; and the bandages should be renewed every third day; and they should appear loose on the third day, as in the other case. And splints should be applied at the proper time (for there is nothing unsuitable in them, whether the bones be fractured or not, provided there is no fever); they should be particularly loose, whether applied to the arm or the forearm, but they must not be thick. It is necessary that they should be of unequal size, and that the one should ride over the other, whenever from the flexion it is judged proper. And the application of the compresses should be regulated in the same manner as has been stated with regard to the splints; and they should be put on in a somewhat more bulky form at the seat of the injury. The periods are to be estimated from the inflammation, and from what has been written on them above.

## ON THE INSTRUMENTS OF REDUCTION - Μοχλικός

1. Ὅστεων φύσις δακτύλων μὲν ἀπλᾶ καὶ ὀστέα καὶ ἄρθρα χειρὸς δὲ καὶ ποδὸς πούλλα, ἄλλα ἀλλοίως συνηρθωμένα μέγιστα δὲ τὰ ἀνωτάτω πτέρνης δὲ ἐν οἷον ἔξω φαίνεται, πρὸς δὲ αὐτὴν οἱ ὀπίσθιοι τένοντες τείνουσιν. Κνήμης δὲ δύο, ἄνωθεν καὶ κάτωθεν ξυνεχόμενα, κατὰ μέσον δὲ διέχοντα σμικρὸν τὸ ἔξωθεν, κατὰ τὸν σμικρὸν δάκτυλον λεπτότερον βραχεῖ, πλειῆστον δὲ ταύτη διεχούση καὶ σμικροτέρη ῥοπῇ κατὰ γόνυ, καὶ ὁ τένων ἐξ αὐτοῦ πέφυκεν, ὁ παρὰ τὴν ἰγγύην ἔξω ἔχουσι δὲ κάτωθεν κοινὴν ἐπίφυσιν, πρὸς ἣν ὁ πούς κινέεται ἄλλην δὲ ἄνωθεν ἔχουσιν ἐπίφυσιν, ἐν ἧ τὸ τοῦ μηροῦ ἄρθρον κινέεται, ἀπλόον καὶ εὐσταλὲς ὡς ἐπὶ μήκει εἶδος κονδυλῶδες, ἔχον ἐπιμυλίδα αὐτὸς δ' ἔγκυ ῥτος ἔξω καὶ ἔμπροσθεν ἢ δὲ κεφαλὴ ἐπίφυσις ἐστὶ στρογγύλη, ἐξ ἧς τὸ νεῦρον τὸ ἐν τῇ κοτύλῃ τοῦ ἰσχίου πέφυκεν ὑποπλάγιον δὲ καὶ τοῦτο προσήρτηται, ἦσσον δὲ βραχίονος. Τὸ δ' ἰσχίον προσίσχεται πρὸς τῷ μεγάλῳ σπονδύλῳ τῷ παρὰ τὸ ἱερὸν ὀστέον, χονδρονευρώδει δεσμῷ. Ῥάχις δὲ ἀπὸ μὲν τοῦ ἱεροῦ ὀστέου μέχρι τοῦ μεγάλου σπονδύλου κυφῆ

κύστις τε καὶ γονὴ καὶ ἀρχοῦ τὸ ἐγκεκλιμένον, ἐν τούτῳ ἀπὸ δὲ τούτου ἄχρι φρενῶν ἦλθεν ἢ ἰθύλορδος, καὶ αἱ ψόαι κατὰ τοῦτο ἐντεῦθεν δὲ ἄχρι τοῦ μεγάλου σπονδύλου, τοῦ ὑπὲρ τῶν ἐπωμίδων, ἰθυκυφῆς ἔτι δὲ μᾶλλον δοκέει, ἢ ἐστὶν αἱ γὰρ ὀπισθεν τῶν σπονδύλων ἀποφύσεις ταύτη ὑψηλόταται τὸ δὲ τοῦ αὐχένος ἄρθρον, λορδόν. Σπόνδυλοι δὲ ἔσωθεν ἄρτιοι πρὸς ἀλλήλους, ἀπὸ δὲ τῶν ἔξωθεν χόνδρων νεύρῳ συνεχόμενοι ἢ δὲ ξυνάρθρωσις αὐτῶν, ἐν τῷ ὀπισθεν τοῦ νωτιαίου ὀπισθεν δὲ ἔχουσιν ἔκφυσιν ὀξειν, ἔχουσαν ἐπίφυσιν χονδρώδεα, ἐνθεν νεύρων ἀπόφυσις καταφερῆς, ὡσπερ καὶ οἱ μύες παραπεφύκασιν ἀπὸ αὐχένος ἐς ὀσφὺν, πληρεῦντες δὲ πλευρέων καὶ ἀκάνθης τὸ μέσον. Πλευραὶ δὲ κατὰ τὰς διαφύσιας τῶν σπονδύλων νευρίῳ προσπεφύκασιν ἀπ' αὐχένος ἐς ὀσφὺν ἔσωθεν, ἐπίπροσθεν δὲ κατὰ τὸ στῆθος, χαῦνον καὶ μαλθακὸν τὸ ἄκρον ἔχουσαι εἶδος ῥαιβοειδέστατον τῶν ζώων στενότατος γὰρ ταύτη ὁ ἄνθρωπος ἐπ' ὄγκον ἢ δὲ δὴ πλευρῆσιν ἔκφυσις πλαγίῃ βραχείῃ καὶ πλατείῃ, ἐφ' ἐκάστῳ σπονδύλῳ νευρίῳ προσπεφύκασιν. Στῆθος δὲ ξυνεχὲς αὐτὸ ἐωυτῷ, διαφύσιας ἔχον πλαγίας, ἢ πλευραὶ προσήρτηνται, χαῦνον δὲ καὶ χονδρώδες. Κληῖδες

δὲ περιφερῆες ἐς τοῦμπροσθεν, ἔχουσαι πρὸς μὲν τὸ στῆθος βραχείας κινήσιας, πρὸς δὲ τὸ ἀκρώμιον συχνοτέρας. Ἀκρώμιον δὲ ἐξ ὠμοπλατέων πέφυκεν, ἀνομοίως τοῖσι πλειστοῖσιν. Ὠμοπλάτη δὲ χονδρώδης τὸ πρὸς ῥάχιν, τὸ δ' ἄλλο χαῦνη, τὸ ἀνώμαλον ἔξω ἔχουσα, αὐχένα δὲ καὶ κοτύλην ἔχουσα χονδρώδεα, ἐξ

ἤς αἱ πλευραὶ κίνησιν ἔχουσιν, εὐαπόλυτος ἐοῦσα ὀστέων, πλὴν βραχίονος. Τούτου δὲ ἐκ τῆς κοτύλης νευρίῳ ἢ κεφαλῇ ἐξήρτηται, χόνδρου χαύνου περιφερῆ ἐπίφυσιν ἔχουσα αὐτὸς δ' ἔγκυρτος ἔξω καὶ ἔμπροσθεν, πλάγιος, οὐκ ὀρθὸς πρὸς κοτύλην. Τὸ δὲ πρὸς ἀγκῶνα αὐτοῦ, πλατὺ καὶ κονδυλῶδες καὶ βαλβιδῶδες καὶ στερεόν, ἔγκοιλον ὀπισθεν, ἐν ᾧ ἢ κορώνη ἢ ἐκ τοῦ πήχεος, ὅταν ἐκταθῆ ἢ χεὶρ, ἔνεστιν ἐς τοῦτο καὶ τὸ ναρκῶδες νεῦρον, ὃ ἐκ τῆς διαφύσιος τῶν τοῦ πήχεος ὀστέων, ἐκ μέσων, ἐκπέφυκε καὶ περαίνεται.

1. With regard to the construction of bones, the bones and joints of the fingers are simple, the bones of the hand and foot are numerous, and articulated in various ways; the uppermost are the largest; the heel consists of one bone which is seen to project outward, and the back tendons are attached to it. The leg consists of two bones, united together above and below, but slightly separated in the middle; the external bone (*fibula*), where it comes into proximity with the little toe, is but slightly smaller than the other, more so where they are separated, and at the knee, the outer hamstring arises from it; these bones have a common epiphysis below, with which the foot is moved, and another epiphys is above in which is moved the articular extremity of the femur, which is simple and light in proportion to its length, in the form of a condyle, and having the patella (connected with it?), the femur itself bends outward and forward; its head is a round epiphysis which gives origin to ligament inserted in the acetabulum of the hip-joint. This bone is articulated somewhat obliquely, but less so than the humerus. The ischium is united to the great vertebra contiguous to the os sacrum by a cartilaginous ligament. The spine, from the os sacrum to the great vertebra, is curved backward; in this quarter are situated the bladder, the organs of generation, and the inclined portion of the rectum; from this to the diaphragm it proceeds in a straight line inclining forward, and the psoae are situated there; from this point, to the great vertebra above the tops of the shoulders, it rises in a line that is curved backward, and the curvature appears greater than it is in reality, for the posterior processes of the spine are there highest; the articulation of the neck inclines forward. The vertebrae on the inside are regularly placed upon one another, but behind they are connected by a cartilaginous ligament; they are articulated in the form of synarthrosis at the back part of the spinal marrow; behind they have a sharp process having a cartilaginous epiphysis, whence proceeds the roots of nerves running downward, as also muscles extending from the neck to the loins, and filling the space between the ribs and the spine. The ribs are connected to all the intervertebral spaces on the inside, from the neck to the lumbar region, by a small ligament, and before to the sternum, their extremities being spongy and soft; their form is the most arched in

man of all animals; for in this part, man is, of all animals, the narrowest in proportion to his bulk. The ribs are united to each vertebra by a small ligament at the place from which the short and broad lateral processes ( *transverse processes?* ) arise. The sternum is one continuous bone, having lateral pits for the insertion of the ribs; it is of a spongy and cartilaginous structure. The clavicles are rounded in front, having some slight movements at the sternum, but more free at the acromion. The acromion, in man, arises from the scapula differently from most other animals. The scapula is cartilaginous toward the spine, and spongy elsewhere, having an irregular figure externally; its neck and articular cavity cartilaginous; it does not interfere with the movements of the ribs, and is free of all connection with the other bones, except the humerus. The head of the humerus is articulated with its ( *glenoid?* ) cavity, by means of a small ligament, and it consists of a rounded epiphysis composed of spongy cartilage, the humerus itself is bent outward and forward, and it is articulated with its ( *glenoid?* ) cavity by its side, and not in a straight line. At the elbow it is broad, and has condyles and cavities, and is of a solid consistence; behind it is a cavity in which the coronoid process ( *olecranon?* ) of the ulna is lodged, when the arm is extended; here, too, is inserted the benumbing nerve, which arises from between the two bones of the forearm at their junction, and terminates there.

2. Ἐὰν δὲ κατεαγεῖσα ἀναπλάσσεται, εἰ οἶόν τε, αὐθωρόν. Κῆν

μὲν οὖν ὁ χόνδρος, ἐντιθέναι ἄχνην ὀθονίου ἐναποδέοντα λοπῶ καρρηδονίῳ, ἢ ἐν ἄλλῳ, ὃ μὴ ἐρεθειῖ τῷ λοπῶ δὲ τὰς παραλλάξιας παρακολλᾶν, καὶ ἀναλαμβάνειν. Ταῦτα δὲ ἐπίδεσις κακὰ ποιέει. Ἰησις, ἀλήτῳ ξὺν μάννῃ, ἢ θείῳ ξὺν κηρωτῇ. Αὐτίκα ἀναπλάσεις, ἔπειτα ἀνακωχῆσεις τοῖσι δακτύλοισιν, ἐσμαπτευόμενος καὶ παραστρέφων καὶ τὸ καρρηδόνιον. Πωροῖτο ἄν, καὶ ἦν ἔλκος ἐνῆ, καὶ ἦν ὅστέα ἀπιέναι μέλλη οὐ γὰρ παλιγκοτώτατά, οὕτω ποιητέα.

2. When the nose is fractured, the parts should be modeled instantly, if possible. If the fracture be in its cartilaginous part, introduce into the nostrils a tent formed of caddis, inclosed in the outer skin of a Carthaginian hide, or anything else which does not irritate; the skin is to be glued to the parts displaced, which are to be thus rectified. Bandaging in this case does mischief. The treatment is to consist of flour with manna, or of sulphur with cerate. You will immediately adjust the fragments, and afterward retain them in place with your fingers introduced into the nostrils, and turning the parts into place; then the Carthaginian skin is to be used. Callus forms even when there is a wound; and

the same things are to be done, even when there is to be exfoliation of the bones, for this is not of a serious nature.

3. Οὓς κατεαγὲν, μὴ ἐπιδεῖν, μηδὲ καταπλάσσειν ἢν δέ τι δέη, ὡς κουφότατον, ἢ κηρωτὴ καὶ θείω κατακολλᾶν. Ὡν δὲ ἔμπυα τὰ ὦτα, διὰ παχέος εὐρίσκεται πάντα δὲ τὰ ὑπόμυξα καὶ τῆ ὑγρῆ σαρκὶ πλήρεα ἔξαπατᾶ οὐ μὴ βλάβη γένηται στομωθὲν τὸ τοιοῦτον ἐστὶ γὰρ ἄσαρκα καὶ ὑδατώδεα, μύξης πλέα, ὅπου δὲ καὶ οἷα ἐόντα θανατώδεά ἐστι, παρεθέντα. Ὡτων καῦσις πέρην, τάχιστα ὑγιάζει κυλλὸν δὲ καὶ μεῖον γίνεται τὸ οὓς, ἢν πέρην καυθῆ. Ἦν δὲ στομωθῆ, κούφω ἐναίμω δεήσει χρῆσθαι.

3. In fractures of the ears, neither bandages nor cataplasms should be used; or, if any bandage be used, it should be put on very tight; the cerate and sulphur should be applied to agglutinate the bandages. When matter forms in the ears, it is found to be more deeply seated than might be supposed, for all parts that are pulpy, and consist of juicy flesh, prove deceptive in such a case. But no harm will result from making an opening, for the parts are lean, watery, and full of mucus. No mention is here made of the places and circumstances which render it fatal to make an opening. The cure is soonest effected by transfixing the ear with a cautery; but the ear is maimed and diminished in size, if burned across. If opened, one of the gentle medicines for flesh wounds should be used as a dressing.

4. Γνάθοι δὲ κατασπῶνται μὲν πολλάκις καὶ καθίστανται ἐκπίπτουσι δὲ ὀλιγάκις, μάλιστα μὲν χασμωμένοισιν οὐ γὰρ ἐκπίπτει, ἢν μὴ τις χανὼν μέγα παρανάγη ἐκπίπτει δὲ μᾶλλον, ὅτι τὰ νεῦρα ἐν πλαγίῳ καὶ λελυγισμένα συνδιδοῖ. Σημεῖα προέχει ἢ κάτω γνάθος, καὶ παρέστραπται τάναντία τοῦ ἐκπτώματος, ζυμβάλλειν οὐ δύνανται ἢν δ' ἀμφοτέραι, προϊσχοῦσι μᾶλλον, συμβάλλουσι ἤσσον, ἀστραβέες δηλοῖ δὲ τὰ ὄρια τῶν ὀδόντων τὰ ἄνω τοῖσι κάτω κατ' ἴξιν. Ἦν οὖν ἀμφοτέραι ἐκπεσοῦσαι μὴ αὐτίκα ἐμπέσωσι, θνήσκουσι δεκαταῖοι οὗτοι μάλιστα πυρετῶ ζυνεχεῖ, νωθρῆ τε καρῶσει οἱ γὰρ μύες οὗτοι, τοιοῦτοι γαστήρ ἐπιταράσσεται ὀλίγα ἄκρητα καὶ ἢν ἐμέωσι, τοιαῦτα ἐμέουσιν. Ἡ δ' ἑτέρη ἀσινεστέρα. Ἐμβολὴ δὲ ἢ αὐτὴ ἀμφοτέρων κατακειμένου ἢ καθημένου τοῦ ἀνθρώπου, τῆς κεφαλῆς ἐχόμενον, περιλαβόντα τὰς γνάθους ἀμφοτέρας ἀμφοτέρησι χερσὶν ἔσωθεν καὶ ἔξωθεν, τρία ἅμα ποιῆσαι ὦσαι ἐς ὀρθὸν, καὶ ἐς τοῦπίσω, καὶ συσχεῖν τὸ στόμα. Ἴησις, μαλάγμασι, καὶ σχήμασι, καὶ ἀναλήψει γενείου, ποιοῦσι τατὰ τῆ ἐμβολῆ.

4. The jaw-bone is often slightly displaced ( *subluxated?* ), and is restored again;

it is dislocated but rarely, especially in gaping; in fact, the bone is never dislocated unless it slips while the mouth is opened wide. It slips, however, the more readily from its ligaments being oblique, supple, and of a yielding nature. The symptoms are: the lower jaw protrudes, it is distorted to the side opposite the dislocation, and the patient cannot shut his mouth; when both sides are dislocated, the jaw projects more, the mouth can be less shut, but there is no distortion; this is shown by the rows of the teeth in the upper and lower jaw corresponding with one another. If, then, both sides be dislocated, and not immediately reduced, the patient for the most part dies on the tenth day, with symptoms of continued fever, stupor, and coma, for the muscles there induce such effects; there is disorder of the bowels attended with scanty and unmixed dejection; and the vomitings, if any, are of the same character. The other variety is less troublesome. The method of reduction is the same in both:-The patient being laid down or seated, the physician is to take hold of his head, and grasping both sides of the jaw-bone with both hands, within and without, he must perform three manoeuvres at once,-rectify the position of the jaw, push it backward, and shut the mouth. The treatment should consist of soothing applications, position, and applying a suitable bandage to support the jaw-bone, so as to cooperate with the reduction.

5. Ωμος δὲ ἐκπίπτει κάτω. Ἄλλη δὲ οὐπω ἤκουσα. Δοκέει μὲν γὰρ ἐς τοῦμπροσθεν ἐκπίπτειν, ὧν αἱ σάρκες αἱ περὶ τὸ ἄρθρον μεμινυθήκασι διὰ τὴν φθίσιν, οἷον καὶ τοῖσι βουσί χειμῶνος φαίνεται διὰ

λεπτότητα. Καὶ ἐκπίπτει μᾶλλον, τοῖσι δὲ λεπτοῖσιν, ἢ ἰσχυοῖσι, [ἢ ξηροῖσι] καὶ τοῖσιν ὑγράσματα περὶ τὰ ἄρθρα ἔχουσιν ἄνευ φλεγμονῆς αὐτὴ γὰρ συνδεῖ. Οἱ δὲ καὶ βουσὶν ἐμβάλλοντες καὶ ἀποπερονῶντες ἐξαμαρτάνουσι, καὶ ὅτι διὰ τὴν χρῆσιν, ὡς χρῆται βοῦς σκέλει, λήθει, καὶ ὅτι κοινὸν καὶ ἀνθρώπῳ οὕτως ἔχοντι τὸ σχῆμα τοῦτο τό τε Ὀμήρειον καὶ διότι λεπτότατοι βόες τηνικαῦτα. Ὅσα τε τὸν πῆχυν πλάγιον ἀπὸ πλευρέων ἄραντες δρῶσιν, οὐ πάνυ δύνανται δρᾶν, οἷσιν ἂν μὴ ἐμπέση. Οἷσι μὲν οὖν ἐκπίπτει μάλιστα, καὶ ὡς ἔχουσιν, εἴρηται. Οἷσι δὲ ἐκ γενεῆς, τὰ ἐγγύτατα μᾶλλον βραχύνεται ὅστέα, οἷον ἐν τούτῳ οἱ γαλιάγκωνες πῆχυς δὲ ἦσσαν, χεὶρ δὲ ἔτι ἦσσαν, τὰ δ' ἄνωθεν οὐδέν. Καὶ ἀσαρκότατα ἐγγύς μινύθει δὲ μάλιστα τὰ ἐναντία τῶν ὀλισθημάτων, καὶ τὰ ἐν αὐξήσει, ἦσσαν δὲ τινι τῶν ἐκ γενεῆς. Καὶ τὰ παραπυήματα, τὰ κατ' ἄρθρον βαθέα, νεογενέσι μάλιστα παρ' ὄμῳ γίνεται, καὶ τουτέοισιν ὥσπερ τὰ ἐξαρθρήσαντα ποιεῖ. Ἦν δὲ ηὔξημένοισι, τὰ μὲν ὅστέα οὐ μειοῦται, οὐδὲ γὰρ ἔχει, ἢ ἄλλα οὐ ξυναύξεται ὁμοίως αἱ δὲ μινυθήσεις τῶν σαρκῶν τοῦτο γὰρ καθ' ἡμέρη καὶ αὐξεται καὶ



μειοῦται, καὶ καθ' ἡλικίας. Καὶ ἃ δύναται σχήματα, καὶ αὖ σημεῖον τὸ παρὰ τὸ ἀκρώμιον κατεσπασμένον καὶ κοῖλον, διότι, ὅταν τὸ ἀκρώμιον ἀποσπασθῆ, καὶ κοῖλον ᾖ, οἴονται τὸν βραχίονα ἐκπεπτωκένοι. Κεφαλὴ δὲ τοῦ βραχίονος ἐν τῇ μασχάλῃ φαίνεται αἶρειν γὰρ οὐ δύνανται, οὐδὲ παράγειν ἔνθα καὶ ἔνθα ὁμοίως ὁ ἕτερος ὤμος μηνύει. Ἐμβολαὶ δὲ αὐτὸς μὲν τὴν πυγμὴν ὑπὸ μασχάλῃν ὑποθεῖς, τὴν κεφαλὴν ἀνωθέειν, τὴν δὲ χεῖρα ἐπιπαράγειν ἐπὶ τὸ στῆθος. Ἄλλη ἐς τοῦπίσω περιαναγκάσαι, ὡς ἀμφισφαλῆ. Ἄλλη κεφαλῆ μὲν πρὸς τὸ ἀκρώμιον, χερσὶ δὲ ὑπὸ μασχάλῃν, κεφαλὴν ἀπάγειν βραχίονος, γούνασι δὲ ἀγκῶνα ἀπωθέειν, ἢ ἀντὶ τῶν γουνάτων τὸν ἀγκῶνα τὸν ἕτερον παράγειν, ὡς τὸ πρότερον. Ἡ κατ' ὤμου ἴζεσθαι, ὑποθεῖς τῇ μασχάλῃ τὸν ὤμον ἢ τῇ πτέρνῃ, ἐνθέντα ἐκπλήρωμα τῇ μασχάλῃ, δεξιῇ δεξιόν ἢ περὶ ὑπερον ἢ περὶ κλιμακτῆρα ἢ περίοδος ξὺν τῷ ξύλῳ τῷ ὑπὸ χεῖρα τεινομένῳ. Ἴησις τὸ σχῆμα, πρὸς πλευρῆσι βραχίον, χεῖρ ἄκρη ἄνω, ὤμος ἄνω οὕτως ἐπίδεσις, ἀνάληψις. Ἦν δὲ μὴ ἐμπέση, ἀκρώμιον προσλεπτύνεται.

5. The bone of the shoulder is dislocated downward. I have never heard of any other mode. The parts put on the appearance of dislocation forward, when the flesh about the joint is wasted during consumption, as also seems to be the case with cattle when in a state of leanness after winter. Those persons are most liable to dislocations who are thin, slender, and have humidities about their joints without inflammation, for it knits the joints. Those who attempt to reduce and rectify dislocations in oxen, commit a blunder, as forgetting that the symptoms arise from the manner in which the ox uses the limb, and that the appearance is the same in a man who is in a similar condition, and forgetting also that Homer has said, that oxen are most lean at that season. In this dislocation, then, when not reduced, the patient cannot perform any of those acts which others do, by raising the arm from the side. I have thus stated who are the persons most subject to this dislocation, and how they are affected. In congenital dislocations the nearest bones are most shortened, as is the case with persons who are *weasel-armed*; the fore-arm less so, and the hand still less; the bones above are not affected. And the parts (near the seat of the injury) are most wasted in flesh; and this happens more especially on the side of the arm opposite the dislocation, and that during adolescence, yet in a somewhat less degree than in congenital cases. The deep-seated suppurations occur most frequently to new-born infants about the joint of the shoulder, and these produce the same consequences as dislocations. In adults, the bones are not so diminished in size, and justly, seeing that the others will not increase as in the former case; but wasting of the flesh takes place, for it is increased, and is diminished every day, and at all ages. And attention should be paid to the force of habit, and to the symptom produced by

the tearing away of the acromion, whereby a void is left, which makes people suppose that the humerus is dislocated. The head of the humerus is felt in the armpit, and the patient cannot raise his arm, nor swing it to this side and that, as formerly. The other shoulder shows the difference. Modes of reduction:-The patient himself having placed his fist in the arm pit, pushes up the head of the humerus with it, and brings the hand forward to the breast. Another:-Force it backward, so that you may turn it round. Another:-Apply your head to the acromion, and your hands to the armpit, separate the head of the humerus (*from the side?* ), and push the elbow in the opposite direction; or, instead of your knees, another person may turn aside the elbow, as formerly directed. Or, place the patient on your shoulder, with the shoulder in his armpit. Or, with the heel, something being introduced to fill up the hollow of the armpit, and using the right foot to the right shoulder. Or, with a pestle. Or, with the step of a ladder. Or, by rotation made with piece of wood stretched below the arm. Treatment:-As to attitude, the arm placed by the side, the hand and shoulder raised; the bandaging and adjustment of the parts while in this attitude. If not reduced, the top of the shoulder becomes attenuated.

6. Ἀκρώμιον ἀποσπασθὲν, τὸ μὲν εἶδος φαίνεται, οἷόνπερ ὤμου ἐκπεσόντος, στερίσκεται δ' οὐδενός, ἐς δὲ τὸ αὐτὸ οὐ καθίσταται. Σχῆμα τὸ αὐτὸ, ᾧ καὶ ἐκπεσόντι, ἐν ἐπιδέσει καὶ ἀνάληψει ἐπιδέσιος καὶ ὡς νόμος.

6. When the acromion is torn away, the appearance is the same as in dislocation of the shoulder; but there is no impediment, except that the bone does not return to its position. The figure should be the same as in dislocation, both as regards bandaging and suspending the limb. The bandaging according to rule.

7. Ἀγκῶνος ἄρθρον παραλλάξαν μὲν ἢ πρὸς πλευρὴν, ἢ ἔξω, μένοντος τοῦ ὀξέος τοῦ ἐν τῷ κοίλῳ τοῦ βραχίονος, ἐς ἰθὺ κατατείνοντα, τὰ ἐξέχοντα ἀνωθέειν ὀπίσω καὶ ἐς τὸ πλάγιον.

7. When partial displacement (*sub-luxation?* ) takes place at the elbow, either inside or outside, but the sharp point (*olecranon?* ) remains in the cavity of the humerus, make extension in a straight line, and push the projecting parts backward and to the sides.

8. Τὰ δὲ τελέως ἐκβάντα ἢ ἔνθα ἢ ἔνθα κατάτασις μὲν, ἐν ἣ

8. In complete dislocations to either side, make extension while the arm is in the

position it is put in to be bandaged for a fracture, for thus the rounded part of the elbow will not form an obstacle to it. Dislocation most commonly takes place inward. The parts are to be adjusted by separating the bones as much as possible, so that the end of the humerus may not come in contact with the olecranon, but it is to be carried up and turned round, and not forced in a straight line; at the same time the opposite sides are to be pushed together, and the bones reduced to their place. In these cases rotation of the elbow cooperates; that is to say, turning the arm into a state of supination and pronation; so much for the reduction. With regard to the attitude in which it is to be put, -the hand is to be placed somewhat higher than the elbow, and the arm by the side; this position suits with it when slung from the neck, is easily borne, is its natural position, and one adapted for ordinary purposes, unless callus form improperly: the callus soon forms. Treatment: -By bandages according to the common rule for articulations, and the point of the elbow is to be included in the bandage.

9. The elbow, when luxated, induces the most serious consequences, fevers, pain, nausea, vomiting of pure bile; and this especially in dislocations backward, from pressure on the nerve which occasions numbness; next to it is dislocation forward. The treatment is the same. The reduction of dislocation backward is by extension and adaptation: the symptom of this variety, loss of the power of extension; of dislocation forward, loss of the power of flexion. In it a hard ball is to be placed in the bend of the elbow, and the fore-arm is to be bent over this while sudden extension is made.

10. Diastasis of the bones may be recognized by examining the part where the vein which runs along the arm divides.

11. Ταῦτα δὲ ταχέως διαπωροῦται. Ἐκ γενεῆς δὲ, βραχύτερα τὰ κάτω ὀστέα τοῦ σίνεος, πλεῖστον τὰ ἐγγύτατα πήχεος, δεύτερον χειρὸς, τρίτον δακτύλων. Βραχίων δὲ καὶ ὤμος ἐγκρατέστερα διὰ τὴν τροφήν. Ἡ δ' ἑτέρα χεὶρ διὰ τὰ ἔργα πλείω ἔτι ἐγκρατεστέρα. Μινύθησις δὲ σαρκῶν, εἰ μὲν ἔξω ἐξέπεσεν, εἴσω, εἰ δὲ μὴ, ἐς τὸναντίον ἢ ἐξέπεσεν.

11. In these cases callus is speedily formed. In congenital dislocations, the bones below the seat of the injury are shorter than natural; in this case, the greatest shortening is in the nearest, namely, those of the fore-arm; second, those of the hand; third, those of the fingers. The arm and shoulders are stronger, owing to the nourishment which they receive, and the other arm, from the additional work it has to perform, is still more strong. The wasting of the flesh, if the dislocation

was outward, is on the inside; or if otherwise, on the side opposite the dislocation.

12. Ἀγκῶν δὲ ἣν μὲν ἔξω ἢ ἔσω ἐκβῆ, κατάτασις μὲν ἐν σχήματι ἐγγωνίῳ, κοινῶ τῷ πήχει πρὸς βραχίονα τὴν γὰρ μασχάλην ἀναλαβὼν ταινίῃ ἀνακρεμάσαι, ἀγκῶνι δὲ ἄκρῳ ὑποθεῖς τι παρὰ τὸ ἄρθρον βάρος ἐκκρεμάσαι, ἢ χερσὶ καταναγκάσαι. Ὑπεραιωρηθέντος δὲ τοῦ ἄρθρου, αἱ παραγωγαὶ τοῖσι θέναρσιν, ὡς τὰ ἐν χερσίν. Ἐπίδεσις ἐν τούτῳ τῷ σχήματι, καὶ ἀνάληψις, καὶ θέσις.

12. In dislocation at the elbow, whether outward or inward, extension is to be made with the fore-arm at right angles to the arm; the arm is to be suspended by a shawl passed through the armpit, and a weight is to be attached to the extremity of the elbow; or force is to be applied with the hands. The articular extremity being properly raised, the parts are to be adjusted with the palms of the hands, as in dislocations of the hands. It is to be bandaged, suspended in a sling, and placed, while in this attitude.

13. Τὰ δ' ὀπισθεν ἐξαίφνης ἐκτείνοντα διορθοῦν τοῖσι θέναρσιν ἅμα δὲ δεῖ ἐν τῇ διορθώσει, καὶ τοῖσιν ἐτέροισιν. Ἦν δὲ πρόσθεν, ἀμφὶ ὀθόνιον ξυνειλεγμένον, εὐογκον, ξυγκάμπτοντα ἅμα διορθοῦσθαι.

13. Dislocations backward are to be rectified with the palms of the hands along with sudden extension. These two acts are to be performed together, as in other cases of the kind. In dislocation forward, the arm is to bend around a ball of cloth, of proper size, and at the same time replaced.

14. Ἦν δ' ἑτεροκλινὲς ἦ, ἐν τῇ διορθώσει ἀμφοτέρω ἅμα χρὴ ποιέειν. Τῆς δὲ μελέτης, κοινὸν τὸ σχῆμα καὶ ἡ ἐπίδεσις. Δύναται γὰρ ἐκ τῆς διατάσιος κοινῇ ξυμπίπτειν πάντα.

14. If the displacement be on the other side both these operations are to be performed in effecting the adjustment of the arm. With regard to the treatment, the position and the bandaging are the same as in the other cases. For all these cases may be reduced by ordinary distention.

15. Τῶν δὲ ἐμβολέων αἱ μὲν ἐξ ὑπεραιωρήσιος ἐμβάλλονται, αἱ δὲ ἐκ κατατάσιος, αἱ δὲ ἐκ περισφάλσιος αὗται δὲ ἐκ τῶν υπερβολέων τῶν σχημάτων, ἢ τῇ ἢ τῇ, ξὺν τῷ τάχει.

15. With regard to the modes of reduction, some act upon the principle of

carrying the one piece of bone over the other, some by extension, and some by rotation: these last consist in rapidly turning the arm to this side and that.

16. Χειρὸς δὲ ἄρθρον ὀλισθάνει ἢ ἔσω, ἢ ἔξω, ἔσω δὲ τὰ πλεῖστα. Σημεῖα δ' εὖσημα ἦν μὲν ἔσω, ξυγκάμπτειν ὄλως σφῶν τοὺς δακτύλους οὐ δύνανται ἦν δ' ἔξω, ἐκτείνειν. Ἐμβολή δὲ, ὑπὲρ τραπέζης τοὺς δακτύλους ἔχων, τοὺς μὲν τείνειν, τοὺς δ' ἀντιτείνειν, τὸ δὲ ἐξέχον ἢ θέναρι ἢ πτέρνη ἅμα ἀπωθέειν πρόσω καὶ κάτωθεν κατὰ τὸ ἕτερον ὀστέον, ὄγκον τε μαλθακὸν ὑποθεῖς, κῆν μὲν ἄνω, καταστρέψας τὴν χεῖρα, ἦν δὲ κάτω, ὑπτίην. Ἰησις, ὀθονίοισιν.

16. The joint of the hand is dislocated inward or outward, but most frequently inward. The symptoms are easily recognized; if inward, the patient cannot at all bend his fingers, but if outward, he cannot extend them. Reduction:-By placing the fingers above a table, extension and counter-extension are to be made by assistance, while, with the palm of the hand or the heel on the projecting bone, one presses forward, and from behind, upon the other bone, and lays some soft substance on it; and, if the dislocation be above, the hand is to be turned into a state of pronation; or, if backward, into a state of supination. The treatment is to be conducted with bandages.

17. Ὅλη δὲ ἡ χεὶρ ὀλισθάνει ἢ ἔσω ἢ ἔξω, μάλιστα δὲ ἔσω, ἢ ἔνθα ἢ ἔνθα ἔστι δ' ὅτε ἡ ἐπίφυσις ἐκινήθη ἔστι δ' ὅτε τὸ ἕτερον τῶν ὀστέων διέστη. Τουτέοισι κατάτασις ἰσχυρὴ ποιητέη, καὶ τὸ μὲν ἐξέχον ἀπωθέειν, τὸ δ' ἕτερον ἀντωθέειν, δύο εἶδεα ἅμα, καὶ ἐς τοῦπίσω καὶ ἐς τὸ πλάγιον, ἢ χερσὶν ἐπὶ τραπέζης, ἢ πτέρνη. Παλίγκοτα δὲ καὶ ἀσχήμονα, τῷ χρόνῳ δὲ κρατύνεται ἐς χρῆσιν. Ἰησις, ὀθονίοισι ξὺν τῇ χειρὶ καὶ τῷ πῆχεϊ, καὶ νάρθηκας μέχρι δακτύλων τιθέναι ἐν νάρθηξι δὲ τεθέντα ταῦτα πυκνότερον λύειν, ἢ τὰ κατήγματα, καὶ καταχύσει πλέονι χρῆσθαι.

17. The whole hand is dislocated either inward, or outward, but especially inward, or to this side or that. Sometimes the epiphysis is displaced, and sometimes there is displacement ( *diastasis* ) of the one bone from the other. Powerful extension is to be made in this case; and the projecting part is to be pressed upon, and counter-pressure made on the opposite side: both modes being performed at the same time, both backward and laterally, either with the hands on a table, or with the heel. These accidents give rise to serious consequences and deformities; but in time the parts get so strong as to admit of being used. The treatment consists of bandages comprehending the hand and forearm, and splints are to be applied as far as the fingers; when put in splints, they are to be more

frequently loosed than in fractures, and more copious allusions of water are to be used.

18. Ἐκ γενεῆς δὲ, βραχυτέρη ἢ χεὶρ γίνεται, καὶ ἡ μινύθησις σαρκῶν μάλιστα τάναντία, ἢ ὡς τὸ ἔκπτωμα ηὔξημένῳ δὲ τὰ ὀστέα μένει.

18. In congenital dislocations the hand becomes shortened, and the atrophy of the flesh is generally on the side opposite the dislocation. In the adult the bones remain of their proper size.

19. Δακτύλου δὲ ἄρθρον ὀλισθὸν μὲν, εὔσημον, οὐ δεῖ γράφειν. Ἐμβολὴ δὲ αὐτοῦ ἤδη κατατείναντα ἐς ἰθὺ, τὸ μὲν ἐξέχον ἀπωθέειν, τὸ δὲ ἐναντίον ἀντωθέειν. Ἴησις δὲ ἢ προσήκουσα, τοῖσιν ὀθονίοισιν ἐπίδεσις. Μὴ ἐμπεσὸν γὰρ ἐπιπωροῦται ἔξωθεν. Ἐκ γενεῆς δὲ ἢ ἐν αὐξήσει ἐξαρθήσαντα τὰ ὀστέα βραχύνεται κάτω τοῦ ὀλισθήματος καὶ σάρκες μινύθους τάναντία μάλιστα, ἢ ὡς τὸ ἔκπτωμα ηὔξημένῳ δὲ τὰ ὀστέα μένει.

19. The symptoms of dislocation of the finger are obvious, and need not be described. This is the mode of reduction:-By stretching in a straight line, and making pressure on the projecting part, and counter-pressure, at the opposite side, on the other. The proper treatment consists in the application of bandages. When not reduced, the parts unite by callus outside of the joints. In congenital dislocations, and in those which occur during bones below the dislocation are shortened, and the flesh is wasted principally on the side opposite to the dislocation; in the adult the bones remain of their proper size.

20. Μηροῦ ἄρθρον ἐκπίπτει κατὰ τρόπους τέσσαρας ἔσω πλεῖστα, ἔξω δεύτερον, τὰ δ' ἄλλα ὁμοίως. Σημεῖα κοινὸν μὲν τὸ ἕτερον σκέλος ἴδιον δὲ τοῦ μὲν εἶσω παρὰ τὸν περίνεον ψαύεται ἢ κεφαλῇ, ξυγκάμπτουσιν οὐχ ὁμοίως, δοκέει δὲ μακρότερον τὸ σκέλος, καὶ πουλὺ, ἢν μὴ ἐς μέσον ἀμφοτέρα ἄγων παρατείνης καὶ γὰρ οὖν ἔξω ὁ πούς καὶ τὸ γόνυ ῥέπει. Ἦν μὲν οὖν ἐκ γενεῆς ἢ ἐν αὐξήσει ἐκπέση, βραχύτερος ὁ μηρὸς, ἦσσαν δὲ κνήμη, κατὰ λόγον δὲ τᾶλλα μινύθουσι δὲ σάρκες, μάλιστα δὲ ἔξω. Οὗτοι κατοκνεύουσιν ὀρθοῦσθαι, καὶ ειλέονται ἐπὶ τὸ ὑγιές ἢν δὲ ἀναγκάζονται, σκίμπωνι ἐνὶ ἢ δυσὶν ὁδοιπορέουσι, τὸ δὲ σκέλος αἴρουσιν ὅσῳ γὰρ μεῖον, τόσῳ ῥᾶον. Ἦν δ' ηὔξημένοισι, τὰ μὲν ὀστέα μένει, αἱ δὲ σάρκες μινύθουσι, ὡς προεῖρηται ὁδοιπορέουσι δὲ περιστροφάδην ὡς βόες, ἐν δὲ τῷ κενεῶνι καμπύλοι, ἐπὶ τὸ ὑγιές ἐξίσχιοι ἐόντες

τῷ μὲν γὰρ ἀνάγκη ὑποβαίνειν, ὡς ὀχέη, τῷ δ' ἀποβαίνειν οὐ γὰρ δύναται

ὀχέειν, ὡσπερ οἱ ἐν ποδὶ ἔλκος ἔχοντες. Κατὰ δὲ τὸ ὑγιές, πλάγιον ξύλω τῷ σώματι ἀντικοντέουσι, τὸ δὲ σιναρὸν τῇ χειρὶ ὑπὲρ τοῦ γούνατος καταναγκάζουσι, ὡς ὀχέειν ἐν τῇ μεταβάσει τὸ σῶμα. Ἰσχίων κάτωθεν, εἰ χρῆται, κάτωθεν ἦσσον μινύθει καὶ ὀστέα, μᾶλλον δὲ σάρκες.

20. Dislocation at the hip-joint occurs in four modes, inward most frequently, outward next, the others of equal frequency. The symptoms:-The common, a comparison with the sound leg. The peculiar symptoms of dislocations inward; the head of the bone is felt at the perineum; the patient cannot bend his leg as formerly; the limb appears elongated, and to a great extent, unless you bring both limbs into the middle space between them in making a comparison of them; and the foot and the knee are inclined outward. If the dislocation has taken place from birth, or during one's growth, the thigh is shortened, the leg less so, and the others according to the same rule; the fleshy parts are atrophied, especially on the outside. Such persons are afraid to stand erect, and crawl along on the sound limb; or, if compelled, they walk with one or two staves, and bear up the affected limb; and the smaller the limb so much the more do they walk. If the accident happens to adults the bones remain of their proper size, but the flesh is wasted, as formerly described; the patients walk in a wriggling manner, like oxen; they are bent toward the flank, and the buttock on the uninjured side is prominent; for the uninjured limb must necessarily come below that it may support the body, whilst the other must be carried out of the way, as it cannot support the body, like those who have an ulcer in the foot. They poise the body by means of a staff on the sound side, and grasp the affected limb with the hand above the knee so as to carry the body in shifting from one place to another. If the parts below the hip-joint be used, the bones below are less atrophied, but the flesh more.

21. Τοῦ δὲ ἔξω τάναντία καὶ τὰ σημεῖα καὶ αἱ στάσιες καὶ τὸ γόνυ καὶ ὁ πούς ἔσω ῥέπει βραχύ. Τοῖσι δὲ ἐν αὐξήσει ἢ ἐκ γενεῆς παθοῦσιν οὐχ ὁμοίως ξυναύξεται κατὰ τὸν αὐτὸν λόγον

ἰσχίον ἀνωτέρω τινὶ, οὐχ ὁμοίως. Οἷσι δὲ πυκνὰ ἐκπίπτει ἐς τὸ ἔξω ἄνευ φλεγμονῆς, ὑγροτέρῳ τῷ σκέλει χρῶνται ὡσπερ ὁ μέγας τῆς χειρὸς δάκτυλος μάλιστα γὰρ οὗτος ἐκπίπτει φύσει οἷς μὲν ἐκπίπτει μᾶλλον ἢ ἦσσον, καὶ οἷς μὲν ἐκπίπτει χαλεπώτερον ἢ ῥᾶον, καὶ οἷσιν ἐλπίς θᾶσσον ἐμπεσεῖν, καὶ οἷσιν οὐκ, ἄκη τούτου, καὶ οἷσι πολλάκις ἐκπίπτει, ἴησις τούτου. Ἐκ γενεῆς δὲ, ἢ ἐπ' αὐξήσει, ἢ ἐν νούσῳ, μάλιστα γὰρ ἐκ νούσου, ἔστι μὲν οὖν οἷσιν ἐπισφακελίζει τὸ ὀστέον, ἀτὰρ καὶ οἷσι μὴ, πάσχει μὲν πάντα, ἦσσον δὲ ἢ τὸ ἔσω, ἢν χρηστῶς ἐπιμεληθῶσιν, ὥστε, καὶ ὄλω βαίνοντας τῷ ποδὶ, διαρρίπτειν διὰ μελέτης

πλείστης, τοῖσι νηπιωτάτοισιν ἐαθέντα κακοῦται, ἐπιμεληθέντα δὲ ὠφελέεται τοῖσιν ὄλοισιν, ἦσσον δέ τι, μινύθουσιν.

21. The symptoms and attitudes in dislocation outward are the opposite, and the knee and foot incline a little inward. When it is congenital, or occurs during adolescence, the bones do not grow properly; according to the same rule, the bone of the hip-joint is somewhat higher than natural, and does not grow proportionally. In those who have frequent dislocations outward, without inflammation, the limb is of a more humid (flabby?) temperament than natural, like the thumb, for it is the part most frequently dislocated, owing to its configuration; in what persons the dislocation is to a greater or less extent; and in what persons it is more difficultly or easily produced; in what there is reason to hope that it can be speedily reduced, and in what not; and the remedy for this; and in what cases the dislocation frequently happens, and treatment of this. In dislocation outward from birth, or during adolescence, or from disease, (and it happens most frequently from disease, in which case there is sometimes exfoliation of the bone, but even where there is no exfoliation), the patients experience the same symptoms, but to an inferior degree to those in dislocations inward, if properly managed so that in walking they can put the whole foot to the ground and lean to either side. The younger the patient is, the greater care should be bestowed on him; when neglected, the case gets worse; when attended to, it improves; and, although there be atrophy in all parts of the limb, it is to a less extent.

22. Οἷσι δ' ἂν ἀμφοτέρα οὕτως ἐκπέση, τῶν ὀστέων ταῦτ' ἀπαθήματα εὐσαρκοὶ μὲν, πλὴν ἔσωθεν, ἐξεχέγλουτοι, ῥοικοὶ μηροὶ, ἢν μὴ ἐπισφακελίση. Εἰ κυφοὶ τὰ ἄνωθεν ἰσχύων γένοιτο, ὑγιηροὶ μὲν, ἀναυξέες δὲ τὸ σῶμα, πλὴν κεφαλῆς.

22. When there is a dislocation on both sides, the affections of the bones are the same; the flesh is well developed, except within, the nates protrude, the thighs are arched, unless there be sphacelus. If there be curvature of the spine above the hip-joint, the patients enjoy good health, but the body does not grow, with the exception of the head.

23. Οἷσι δὲ ὀπισθεν, σημεῖα, ἔμπροσθεν λαπαρότερον, ὀπισθεν ἐξέχον, πούς ὀρθός, ξυγκάμπτειν οὐ δύναται, εἰ μὴ μετ' ὀδύνης, ἐκτείνειν ἤκιστα τούτοις σκέλος βραχύτερον. Ἄτὰρ οὐδ' ἐκτανύειν δύναται κατ' ἰγνύην ἢ κατὰ βουβῶνα, ἢν μὴ πάνυ αἴρωσιν, οὐδὲ ξυγκάμπτειν. Ἦγεῖται ἐν τοῖσι πλείστοις τὸ ἄνω ἄρθρον τὸ



πρῶτον κοινὸν τοῦτο ἄρθροισι, νεύροισι, μυσίν, ἐντέροισιν, ὑστέρησιν, ἄλλοισιν. Ταύτη τοῦ ἰσχύου τὸ ὀστέον καταφερῆς ἐς τὸν γλουτὸν, διὰ τοῦτο βραχὺ, καὶ ὅτι ἐκτείνειν οὐ δύνανται. Σάρκες παντὸς τοῦ σκέλεος ἐν πᾶσι μινύθουσιν ἐφ' οἷσι δὲ μάλιστα, καὶ οἷ, εἴρηται. Τὰ ἔργα τὰ ἐωυτοῦ ἕκαστον τοῦ σώματος ἐργαζόμενον μὲν ἰσχύει, ἀργέον δὲ κακοῦται, πλὴν κόπου, πυρετοῦ, φλεγμονῆς. Καὶ τὸ ἔξω, ὅτι ἐς σάρκα ὑίκουσιν, βραχύτερον, τὸ δὲ ἔσω, ὅτι ἐπ' ὀστέον προέχον, μακρότερον. Ἦν μὲν οὖν ἠύξημένοισι μὴ ἐμπέση, ἐπὶ βουβῶσι καμπύλοι ὀδοιπορέουσι, καὶ ἡ ἐτέρη ἰγνύη κάμπτεται στήθεσι μόλις ἰκνεῖται χειρὶ τὸ σκέλος καταλαμβάνει, ἄνευ ξύλου, ἢν ἐθέλωσιν ἢν μὲν γὰρ μακρότερον ἦ, οὐ βήσεται ἢν δὲ βαίνῃ, βραχὺ. Μινύθησις δὲ σαρκῶν οἷσι πόνοι, καὶ ἡ ἴξις ἔμπροσθεν, καὶ τῶ ὑγιεῖ κατὰ λόγον. Οἷσι δὲ ἐκ γενεῆς, ἢ αὐξομένοισιν, ἢ ὑπὸ νόσου ἐνόσησε καὶ ἔξαρθρα ἐγένετο ἐν αἷς, εἰρήσεται, οὔτοι μάλιστα κακοῦνται διὰ τὴν τῶν νεύρων καὶ ἄρθρων ἀργίην καὶ τὸ γόνυ διὰ τὰ εἰρημένα ξυγκακοῦνται. Ξυγκεκαμμένον οὔτοι ἔχοντες ὀδοιπορέουσιν ἐπὶ ξύλου ἐνὸς ἢ δύο τὸ δὲ ὑγιῆς, εὔσαρκον διὰ χρῆσιν.

23. The symptoms of dislocation backward are:-The parts before more empty, behind they protrude, the foot straight, flexion impossible, except with pain, extension least of all: in these the limb is shortened. They can neither extend the limb at the ham, nor at the groin, unless it be much raised, nor can they bend it. The uppermost joint, in most cases, takes the lead: this is common in joints, nerves, muscles, intestines, uteri, and other parts. There the bone of the hip-joint is carried backward to the nates, and on that account it is shortened, and because the patient cannot extend it. The flesh of the whole leg is wasted in all cases, in which most, and to what extent, has been already stated. Every part of the body which performs its functional work is strong, but, notwithstanding, if inactive, it gets into a bad condition, unless its inactivity arise from fatigue, fever, or inflammation. And in dislocations outward, the limb is shortened, because the bone is lodged in flesh which yields; but, notwithstanding, in dislocations inward, it is longer, because the bone is lodged on a projecting bone. Adults, then, who have this dislocation unreduced, are bent at the groins in walking, and the other ham is flexed; they scarcely reach the ground with the ball of the foot; they grasp the limb with the hand, and walk without a staff if they choose; if the staff be too long, their foot cannot reach the grounds-if they wish to reach the ground, they must use a short staff. There is wasting of the flesh in cases attended with pain; and the inclination of the leg is forward, and the sound leg in proportion. In congenital cases, or when in adolescence, or from disease, the bone is dislocated (under what circumstances will be explained afterward), the limb is particularly impaired, owing to the nerves and joints not being exercised,

and the knee is impaired for the reasons stated. These persons, keeping the limb bent, walk with one staff or two. But the sound limb is in good flesh from usage.

24. Οἷσι δὲ ἐς τοῦμπροσθεν, σημεῖα τάναντία, ὄπισθεν λαπαρόν, ἔμπροσθεν ἐξέχον, ἥκιστα ξυγκάμπουσιν οὔτοι τὸ σκέλος, μάλιστα δὲ ἐκτείνουσιν ὀρθὸς πούς, σκέλος ἴσον, πτέρνα βραχεῖ ἄκρως ἀνέσταλται. Ἡ πονέουσι μάλιστα οὔτοι αὐτίκα, καὶ οὔρον ἴσχεται μάλιστα

ἐν τούτοισι τοῖσιν ἐξαρθρήμασιν ἐν γὰρ τόνοισιν ἔγκειται τοῖσιν ἐπικαίροισιν. Τὰ ἔμπροσθεν κατατέταται, ἀναυξέα, νοσώδεα, ταχύγηρα τὰ ὄπισθεν στολιδώδεις. Οἷσιν ηὔξημένοισιν, ὀδοιπορέουσιν ὀρθοὶ, πτέρνη μᾶλλον βαίνοντες εἰ δὲ ἠδύναντο μέγα προβαίνειν, κἂν πάνυ σύρουσι δὲ μινύθει δὲ ἥκιστα, τούτοισι δὲ ἡ χρῆσις αἰτία, μάλιστα δὲ ὄπισθεν διὰ παντὸς τοῦ σκέλεος ὀρθότεροι τοῦ μετρίου, ξύλου δέονται κατὰ τὸ σιναρόν. Οἷσι δὲ ἐκ γενεῆς ἢ αὐξανομένοισι, χρηστῶς μὲν ἐπιμεληθεῖσιν ἢ χρῆσις, ὥσπερ τοῖσιν ηὔξημένοισιν ἀμεληθεῖσι δὲ, βραχὺ, ἐκτεταμένον παροῦται γὰρ τούτοισι μάλιστα ἐς ἰθὺ τὰ ἄρθρα. Αἰ δὲ τῶν ὀστέων μειώσεις καὶ αἰ τῶν σαρκῶν μινυθήσις, κατὰ λόγον.

24. In dislocations forward the symptoms are the opposite: a vacuity behind, a protuberance before; of all motions they can least perform flexion, and extension best; the foot is straight, the limb is of the proper length at the heel; at its extremity the foot a little turned up; they are especially pained at first: of all these dislocations retention of urine occurs most frequently in this variety, because the bone is lodged among important nerves. The fore parts are stretched, do not grow, are diseased, and are obnoxious to premature decay; the back parts are wrinkled. In the case of adults, they walk erect, resting merely on the heel, and this they do decidedly if they can take great steps; but they drag it along; the wasting is least of all in this variety of dislocation, owing to their being able to use the limb, but the wasting is most behind. The whole limb being straighter than natural they stand in need of a staff on the affected side. When the dislocation is congenital, or has occurred during adolescence, if properly managed, the patient has the use of the limb as well as adults (otherwise?) have of it. But, if neglected, it is shortened and extended, for in such cases the joint is generally in a straight position. The diminution of the bones, and wasting of the fleshy parts, are analogous.

25. Μηροῦ δὲ κατάτασις μὲν ἰσχυρὴ καὶ ἡ διόρθωσις κοινὴ, ἢ χερσὶν, ἢ σανίδι, ἢ μοχλῶ, τὰ μὲν ἔσω στρογγύλω, τὰ δὲ ἔξω πλατεῖ, μάλιστα δὲ τὰ ἔξω. Καὶ τὰ μὲν ἔσω, ἀσκοῖσιν ἀκεσάμενον, ἐς τὸ ὑπόξηρον τοῦ μηροῦ, κατάτασιος δὲ καὶ

ξυνδέσιος σκελέων κρεμάσαι διαλείποντα σμικρὸν τοὺς πόδας, ἔπειτα πλέξαντα ἐκκρεμασθῆναι τινα, ἐν τῇ διορθώσει ἀμφοτέρω ἅμα ποιεῦντα. Καὶ τῷ ἔμπροσθεν τοῦτο ἰκανὸν καὶ τοῖσιν ἐτέροισιν, ἥκιστα δὲ τῷ ἔξω. Ἡ τοῦ ξύλου ὑπόστασις, ὡσπερ ὤμῳ ὑπὸ τὴν χεῖρα, οἷς ἔσω τοῖσι γὰρ ἄλλοισιν ἦσσον. Καταναγκάσεις δὲ μετὰ διατάσιος, μάλιστα τῶν ἔμπροσθεν ἢ ὀπισθεν, ἢ ποδὶ ἢ χειρὶ ἐφίζεσθαι ἢ σανίδι.

25. In reduction-the extension of the thigh is to be powerful, and the adjustment what is common in all such cases, with the hands, or a board, or a lever, which, in dislocations inward, should be round, and in dislocations outward, flat; but it is mostly applicable in dislocations outward. Dislocations inward are to be remedied by means of bladders, extending to the bare part of the thigh, along with extension and binding together of the limbs. The patient may be suspended, with his feet a little separated from one another, and then a person inserting his arm within the affected limb, is to suspend himself from it, and perform extension and readjustment at the same time; and this method is sufficient in dislocations forward and the others, but least of all in dislocations backward. A board fastened under the limb, like the board fastened below the arm in dislocations at the shoulder, answers in dislocations inward, but less so in the other varieties. Along with extension you will use pressure either with the foot, the hand, or a board, especially in dislocations forward and backward.

26. Γόνυ δὲ εὐηθέστερον ἀγκῶνος, διὰ τὴν εὐσταλίην καὶ εὐφυΐην διὸ καὶ ἐκπίπτει καὶ ἐμπίπτει ῥᾶον. Ἐκπίπτει δὲ πλειστάκις ἔσω, ἀτὰρ καὶ ἔξω, καὶ ὀπισθεν. Ἐμβολαὶ δὲ, ἢ ἐκ τοῦ ξυγκεκάμφθαι, ἢ ἐκλακτίσαι ὀξέως, ἢ ξυνελίξας ταινίης ὄγκον, ἐν ἰγνύῃ θείσ, ἀμφὶ τοῦτον ἐξαίφνης ἐς ὄκλασιν ἀφεῖναι τὸ σῶμα, μάλιστα ἐν τῇ τῶν ὀπισθεν δύναται δὲ καὶ κατατεινόμενα μετρίως, ὡσπερ ἀγκῶν, ἐμπίπτειν τὰ ὀπισθεν. Τὰ δὲ ἔνθα, ἢ ἔνθα, ἐκ τοῦ ξυγκεκάμφθαι, ἢ ἐκλακτίσαι, [ἢ] ἐν καταστάσει, μάλιστα δὲ αὐτὴ τὸ ὀπισθεν ἀτὰρ καὶ ἐκ κατατάσιος μετρίως. Ἡ διόρθωσις ἅπασιν κοινή. Ἦν δὲ μὴ ἐμπέση, τοῖσι μὲν ὀπισθεν ξυγκάμπτειν οὐ δύνανται, ἀτὰρ οὐδὲ τοῖσιν ἄλλοισι πάνυ τι μινύθει δὲ μηροῦ καὶ κνήμης τὸ ἔμπροσθεν. Ἦν δὲ ἐς τὸ ἔσω, βλαισότεροι, μινύθει δὲ τὰ ἔξω. Ἦν δὲ ἐς τὰ ἔξω, γαυσότεροι, χωλοὶ δὲ ἦσσον, κατὰ γὰρ τὸ παχύτερον ὀστέον ὀχέει, μινύθει δὲ τὰ ἔσω. Ἐκ γενεῆς δὲ ἢ ἐν αὐξήσει, κατὰ λόγον τὸν πρόσθεν.

26. Dislocations at the knee are of a milder character than those of the elbow, owing to the compactness and regularity of the joint; and hence it is more readily dislocated and reduced. Dislocation generally takes place inward, but also

outward and backward. The methods of reduction are-by circumflexion, or by rapid excalcitration, or by rolling a fillet into a ball, placing it in the ham, and then letting the patient's body suddenly drop down on his knees: this mode applies best in dislocations backward. Dislocations backward, like those of the elbows, may also be reduced by moderate extension. Lateral dislocations may be reduced by circumflexion or excalcitration, or by extension (but this is most applicable in dislocation backward), but also by moderate extension. The adjustment is what is common in all. If not reduced, in dislocations backward, they cannot bend the leg and thigh upon one another, but neither can they do this in the others except to a small extent; and the fore parts of the thigh and leg are wasted. In dislocations inward they are bandy-legged, and the external parts are atrophied. But, in dislocations outward, they incline more outward, but are less lame, for the body is supported on the thicker bone, and the inner parts are wasted. The consequences of a congenital dislocation, or one occurring during adolescence, are analogous to the rule formerly laid down.

27. Τὰ δὲ κατὰ τὰ σφυρὰ κατατάσιος ἰσχυρῆς δεῖται, ἢ τῆσι χερσὶν ἢ ἄλλοισι τοιούτοισι, κατορθώσιος δὲ ἅμα ἀμφοτέρα ποιεύσης κοινὸν δὲ πᾶσιν.

27. Dislocations at the ankle-joint require strong extension, either with the hands or some such means, and adjustment, which at the same time effects both acts; this is common in all cases.

28. Τὰ δὲ ἐν ποδὶ, ὡς τὰ ἐν χειρὶ, ὑγιῆ.

28. Dislocations of the bones of the foot are to be treated like those of the hand.

29. Τὰ δὲ ἐν τῇ κνήμῃ συγκοινωνέοντα καὶ μὴ ἐμπесόντα, ἐκ γενεῆς καὶ ἐν αὐξήσει ἐξarthρήσαντα, ταῦτα ἅ καὶ ἐν χειρὶ.

29. Dislocations of the bones connected with the leg, if not reduced, whether occurring at birth or during adolescence, are of the same character as those in the hand.

30. Ὅσοι δὲ πηδήσαντες ἄνωθεν ἐστηρίζαντο τῇ πτέρνῃ, ὥστε διαστῆναι τὰ ὀστέα, καὶ φλέβας ἐκχυμωθῆναι, καὶ νεῦρα ἀμφιθλασθῆναι, ὅταν γένηται οἷα τὰ δεινότατα, κίνδυνος μὲν σφακελίσαντα τὸν αἰῶνα πρήγματα παρασχεῖν. Καὶ ροικώδη μὲν τὰ ὀστέα, τὰ δὲ νεῦρα ἀλλήλοισι κοινωνέοντα. Ἐπεὶ καὶ οἷσιν ἂν καταγεῖσιν, ἢ ὑπὸ τρώματος οἷα ἐν κνήμῃ, ἢ μηρῶ, νεύρων ἀπολυθέντων, ἃ κοινωνεῖ τουτέοισιν, ἢ ἐξ ἄλλης κατακλίσιος ἀμελέος ἐμελάνθη ἢ πτέρνῃ, καὶ

τουτέοισι παλίγκοτα ἐκ τοιουτέων. Ἔστιν ὅτε πρὸς σφακελισμῷ γίνονται πυρετοὶ ὑπεροξέες, λυγγώδεες, τρομώδεες, γνώμης ἀπτόμενοι, ταχυθάνατοι, καὶ ἔτι φλεβῶν αἰμορρῶων πελιώσιες, καὶ γαγγραινώσεις. Σημεῖα τῶν παλιγκοτησάντων ἦν τὰ ἐκχυμώματα, καὶ τὰ μελάσματα, καὶ τὰ περὶ ταῦτα ὑπόσκληρα καὶ ὑπέρυθρα ἧ ἦν γὰρ ζὺν σκληρύσματι πελιωθῆ, κίνδυνος μελανθῆναι ἦν δ' ὑποπέλια ἢ καὶ πέλια μάλα, καὶ κεχυμένα, ἢ ὑπόχλωρα καὶ μαλθακὰ, ταῦτα ἐν πᾶσι τοῖσι τοιούτοισιν ἀγαθὰ. Ἰησις δὲ, ἦν μὲν ἀπύρετοι ἔωσιν, ἐλλεβορίζειν ἦν δὲ μὴ, μὴ ἀλλὰ ποτὸν διδόναι ὀξύγλυκυ, εἰ δέοι. Ἐπίδεσις δὲ, ἢ ἄρθρων σύνδεσις ἔτι δὲ ταῦτα μᾶλλον τοῖσι φλάσμασι, καὶ

ὀθονίοισι πλέοσι καὶ μαλθακώτεροισι χρῆσθαι πίεξις ἧσσον ὕδωρ πλέον προσπεριβάλλειν τὰ πλεῖστα τῇ πτέρνῃ. Τὸ σχῆμα, ὅπερ ἢ ἐπίδεσις, ὡς μὴ ἐς τὴν πτέρνῃ ἀποπιέζεται ἀνωτέρω γούνατος ἔστω εὐθετος νάρθηξι μὴ χρήσασθαι.

30. Persons who, in jumping from a height, have pitched on the heel, so as to occasion diastasis (separation) of the bones, ecchymosis of the veins, and contusion of the nerves,-when these symptoms are very violent, there is danger that the parts may sphacelate, and give trouble to the patient during the remainder of his life; for these bones are so constructed as to slip past one another, and the nerves communicate together. And, likewise in cases of fracture, either from an injury in the leg or thigh, or in paralysis of the nerves connected with these parts, or, when in any other case of confinement to bed the heel, from neglect, becomes blackened, in all these cases serious effects result therefrom. Sometimes, in addition to the sphacelus, very acute fevers supervene, attended with hiccup, tumors, aberration of intellect, and speedy death, along with lividity of the large bloodvessels, and gangrene. The symptoms of the exacerbations are these: if the ecchymosis, the blackened parts, and those around them, be somewhat hard and red, and if lividity be combined with the hardness, there is danger of mortification; but, notwithstanding, if the parts are sublivid, or even very livid and diffused, or greenish and soft, these symptoms, in all such cases, are favorable. The treatment consists in the administration of hellebore, if they be free from fever, but otherwise, they are to have *oxyglyky* for drink, if required. Bandaging,-agreeably to the rule in other joints; but this is to be attended to also,-the bandages should be numerous, and softer than usual; compression less; more water than usual to be used in the allusions; to be applied especially to the heel. The same object should be sought after in the position as in the bandaging, namely, that the humors may not be determined to the heel; the limb to be well laid should have the heel higher than the knee. Splints not to be used.

31. Ὄταν δὲ ἐκστῆ ὁ πούς, ἢ μοῦνος, ἢ ξὺν τῇ ἐπιφύσει, ἐκπίπτει μᾶλλον εἰς τὸ ἔσω. Εἰ δὲ μὴ ἐμπέσοι, λεπτύνεται ἀνὰ χρόνον ἰσχίου καὶ μηροῦ καὶ κνήμης τὸ ἀντίον τοῦ ὀλισθήματος. Ἐμβολή, ὡς ἡ καρποῦ, κατάτασις δὲ ἰσχυροτέρη. Ἴησις, νόμος ἄρθρων. Παλιγκοτέει ἤσσον καρποῦ, ἦν ἡσυχάση. Δίαιτα μείων, ἐλινύουσι γάρ. Τὰ δὲ ἐκ γενεῆς μὲν ἢ ἐν αὐξήσει, κατὰ λόγον τὸν πρότερον.

31. When the foot is dislocated, either alone, or with the epiphysis, the displacement is more apt to be inward. If not reduced, in the course of time the parts of the hips, thigh, and leg, opposite the dislocation, become attenuated. Reduction:-As in dislocation at the wrist; but the extension requires to be very powerful. Treatment:-Agreeably to the rule laid down for the other joints. Less apt to be followed by serious consequences than the wrist, if kept quiet. Diet restricted, as being in an inactive state. Those occurring at birth, or during adolescence, observe the rule formerly stated.

32. Ἐπεὶ τὰ σμικρὸν ὀλισθηκότα ἐκ γενεῆς, ἔνια οἷά τε διορθοῦσθαι μάλιστα δὲ ποδὸς κύλλωσις κυλλώσιος γὰρ οὐχ εἷς ἐστὶ τρόπος. Ἡ δὲ ἴησις τουτέου κηροπλαστεῖν κηρωτὴ ῥητινώδης, ὀθόνια συχνὰ, ἢ πέλμα, ἢ μολύβδιον προσεπιθεῖν, μὴ χρωτὶ ἀνάληψις, τὰ τε σχήματα ὁμολογεῖται.

32. With regard to slight congenital dislocations, some of them can be rectified, especially club-foot. There is more than one variety of club-foot. The treatment consists in modeling the foot like a piece of wax; applying resinous cerate, and numerous bandages; or a sole, or a piece of lead is to be bound on, but not upon the bare skin; the adjustment and attitudes to correspond.

33. Ἦν δὲ ἐξαρθρήσαντα ἔλκος ποιησάμενα ἐξίσχη, ἐώμενα ἀμείνω, ὥστε δὴ μὴ ἀπκωρέεσθαι, μηδ' ἀπαναγκάζεσθαι. Ἴησις δὲ, πισσηρῆ, ἢ σπλήνεσιν οἰνηροῖσι θερμοῖσιν ἅπασι γὰρ τουτέοισι τὸ ψυχρὸν κακὸν, καὶ φύλλοισιν χειμῶνος δὲ, εἰρίοισι ῥερυπωμένοισι τῆς σκέπης εἵνεκα μὴ καταπλάσσειν, μηδὲ ἐπιθεῖν δίαιτα λεπτή. Ψῦχος, ἄχθος πουλὺ, πίεξις, ἀνάγκη, σχήματος τάξις εἰδέναι μὲν οὖν ταῦτα πάντα ὀλέθρια. Μετρίως δὲ θεραπευθέντες, χωλοὶ αἰσχυρῶς ἦν γὰρ παρὰ πόδας γένηται, πούς ἀνασπᾶται καὶ ἦν πη ἄλλη, κατὰ λόγον. Ὅστεα οὐ μάλα ἀφίστανται μικρὰ γὰρ ψιλοῦται,

περιωτειλοῦται λεπτῶς. Τουτέων τὰ μέγιστα κινδυνωδέστατα, καὶ τὰ ἀνωτάτω. Ἐλπίς δὲ μούνη σωτηρίας, ἐὰν μὴ ἐμβάλλη, πλὴν τὰ κατὰ δακτύλους, καὶ χεῖρα ἄκρην ταῦτα δὲ, προειπέτω τοὺς κινδύνους ἐγγχειρέειν ἐμβάλλειν ἢ τῇ πρώτῃ, ἢ τῇ δευτέρῃ ἦν δὲ μὴ, πρὸς τὰς δέκα ἡκιστα τεταρταῖα ἐμβολή δὲ, οἱ μοχλίσκοι

ἴησις δὲ, ὡς κεφαλῆς ὀστέων, καὶ θέρμη ἔλλεβόρω δὲ καὶ αὐτίκα ἐπὶ τοῖσιν ἐμβαλλομένοισι βέλτιον χρῆσθαι. Τὰ δ' ἄλλα, εὖ εἰδέναι δεῖ, ὅτι, ἐμβαλλομένων, θάνατοι τὰ μέγιστα καὶ τὰ ἀνωτάτω μάλιστα καὶ τάχιστα. Πούς δὲ ἐκβάς, σπασμὸς, γάγγραινα καὶ ἢν ἐμβληθέντι ἐπιγένηται τι τουτέων, ἐκβάλλοντι ἐλπίς, εἴ τις ἄρα ἐλπίς οὐ γὰρ ἀπὸ τῶν χαλόντων οἱ σπασμοὶ, ἀλλ' ἀπὸ τῶν ἐντεινόντων.

33. If the dislocated bones cause a wound in the skin, and protrude, it is better to let them alone, provided only they are not allowed to hang, nor are compressed. The treatment consists in applying pitched cerate, or compresses dipped in hot wine (for cold is bad in all such cases), and certain leaves; but in winter unwashed wool may be applied as a cover to the part; neither cataplasms nor bandaging; restricted diet. Cold, great weight, compression, violence, restricted position, all such are to be accounted as fatal measures. When treated moderately (they escape), maimed and deformed; for, if the dislocation be at the ankle, the foot is drawn upward, and, if elsewhere, according to the same rule. The bones do not readily exfoliate; for only small portions of them are denuded, and they heal by narrow cicatrices. The danger is greatest in the greatest joints, and those highest up. The only chance of recovery is, if they are not reduced, except at the fingers and hand, and in these cases the danger should be announced beforehand. Attempts at reduction to be made on the first or second day; or, if not accomplished then, on the tenth, by no means on the fourth. Reduction by levers. Treatment:-As in injuries of the bones of the head, and the part is to be kept hot; and it is better to give hellebore immediately after the parts have been reduced. With regard to the other bones, it should be well known, that, if replaced, death will be the consequence; the more surely and expeditiously, the greater the articulation, and the more high its situation. Dislocation of the foot is attended with spasm (tetanus) and gangrene; and if, upon its being replaced, any of these symptoms come on, the chance of recovery, if there be any chance, is in displacing it anew; for spasms do not arise from relaxation, but from tension of the parts.

34. Αἱ δὲ ἀποκοπαὶ ἢ ἐν ἄρθρω, ἢ κατὰ τὰ ὀστέα, μὴ ἄνω, ἀλλ' ἢ παρὰ τῷ ποδὶ, ἢ παρὰ τῇ χειρὶ, ἐγγύς περιγίνονται, ἢν μὴ αὐτίκα μάλα λειποθυμίη ἀπόλωνται. Ἰησις, ὡς κεφαλῆς, θέρμη.

34. Excision, either of articular bones or of pieces of bones, when not high up in the body, but about the foot or the hand, is generally followed by recovery, unless the patient die at once from deliquium animi. Treatment:-As in injuries of

the head; warmth.

35. Ἀποσφακελίσιος μέντοι σαρκῶν, καὶ ἐν τρώμασιν αἱμορροίσι ἀποσφιγχθέν, καὶ ἐν ὀστέων κατήγμασί πιεχθέν, καὶ ἐν δεσμοῖς ἀπομελανθέν. Καὶ οἷσι μηροῦ μέρος ἀποπίπτει καὶ βραχίονος, ὀστέα τε καὶ σάρκες [ἀποπίπτουσι], πολλοὶ περιγίνονται, ὡς τὰ γε ἄλλα εὐφορώτερα. Οἷσι μὲν οὖν καταγέντων ὀστέων, αἱ μὲν περιρρήξιες ταχεῖαι, αἱ δὲ τῶν ὀστέων ἀποπτώσεις, ἧ ἂν τὰ ὅρια τῆς ψιλώσιος ἦ, ταύτη ἀποπίπτουσι, βραδύτερον δέ. Δεῖ δὲ τὰ κατωτέρω

τοῦ τρώματος προσαιφαιρέειν καὶ τοῦ σώματος τοῦ ὑγιέος προθνήσκει γὰρ, φυλασσόμενον ὀδύνην ἅμα γὰρ λειποθυμῆ θνήσκουσιν. Μηροῦ ὀστέον ἀπελύθη ἐκ τοιοῦτου ὀγδοηκοσταῖον, ἡ δὲ κνήμη ἀφηρέθη εἰκοσταίη κνήμης δὲ ὀστέα κατὰ μέσην, ἐξηκοσταῖα ἀπελύθη. Ἐκ τοιούτων ταχὺ καὶ βραδέως, αἱ πῆξιες αἱ ἰητρικαί. Τὰ δ' ἄλλα ὅσα ἠσυχαιῶς, τὰ μὲν ὀστέα οὐκ ἀποπίπτει, οὐδὲ σαρκῶν ψιλοῦται, ἀλλ' ἐπιπολαιότερον. Προσδέχεσθαι ταῦτα χρή τὰ γὰρ πλεῖστα φοβερώτερα ἢ κακίω. Ἡ ἴησις πραεῖα θέρμη, διαίτη ἀκριβεῖ κίνδυνος αἱμορραγιῶν, ψύχεος σχήματα δὲ, ὡς μὲν ἀνάρροπα, ἔπειτα ὑποστάσιος πύου εἵνεκα ἐξ ἴσου ἢ ὅσα ζυμφέρει. Ἐπὶ τοῖσι τοιούτοις καὶ ἐπὶ τοῖσι μελασμοῖσιν, αἱμορραγίαι δυσεντερίαί, περὶ κρίσιν, λαῦροι μὲν, ὀλιγήμεροι δὲ οὐκ ἀπόσιτοι δὲ πάνυ, οὐδὲ πυρετώδεες, οὐδέ τι κενεαγγητέον.

35. Sphacelus of the fleshy parts is produced by the tight compression of bleeding wounds, and by pressure in the fractures of bones, and by blackening, arising from bandages. And in those cases in which a portion of the thigh or arm, both the bones and the flesh drop off, many recover, the case being less dangerous than many others. In cases, then, connected with fracture of the bones, the separation of the flesh quickly takes place, but the separation of the bone, at the boundary of its denuded part, is slower in taking place. But the parts below the seat of the injury, and the sound portion of the body, are to be previously taken away (for they die previously), taking care to avoid producing pain, for *deliquium animi* may occasion death. The bone of the thigh in such a case came away on the eightieth day, but the leg was removed on the twentieth day. The bones of the leg, in a certain case, came away at the middle of the sixtieth day. In these cases the separation is quick or slow, according to the compression applied by the physician. When the compression is gently applied the bones do not drop off at all, neither are they denuded of flesh, but the gangrene is confined in the more superficial parts. The treatment of such cases must be undertaken; for most of them are more formidable in appearance than in reality. The treatment should be mild, but, notwithstanding, with a restricted diet; hemorrhages and cold are



to be dreaded; the position, so as that the limb may be inclined upward, and afterward, on account of the purulent abscess, horizontally, or such as may suit with it. In such cases, and in mortifications, there are usually, about the crisis, hemorrhages and crisis, hemorrhages and violent diarrhoeas, which, however, only last for a few days; the patients do not lose their appetite, neither are they feverish, nor should they be put upon a reduced diet.

36. Υβωσις, ἢ μὲν εἴσω, ἐπιθάνατος, οὔρων σχέσιος, ἀποναρκώσιος τὰ δὲ ἔξω, τουτέων ἀσινέα τὰ πλεῖστα, πουλὸν μᾶλλον, ἢ ὅσα σεισθέντα μὴ ἐξέστη αὐτὰ μὲν ἐνωτοῖσι κρίσιν ποιησάμενα, κεῖνα δὲ ἐπὶ πλέον τῷ σώματι ἐπιδιδόντα, καὶ ἐν ἐπικαίροις ἔοντα. Οἷον πλευραὶ κατεαγεῖσαι μὲν, ὀλίγαι πυρετώδεις, καὶ αἵματος πτύσιος, καὶ σφακελισμοῦ, ἦν τε μία, ἦν τε πλείους, μὴ κατασχισθεῖσαι δὲ καὶ ἴησις φαύλη, μὴ κενεαγγοῦντα, ἦν ἀπύρετος ἔη ἐπίδεις, ὡς νόμος ἢ δὲ πώρωσις, ἐν εἴκοσιν ἡμέρησι, χαῦνον γάρ. Ἦν δ' ἀμφιφλασθῆ, φυματίαι, καὶ βηχώδεις, καὶ ἔμμοτοι,

καὶ πλευρὰς ἐσφακέλισαν παρὰ γὰρ πλευρὴν ἐκάστην, ἀπὸ πάντων τόνοι εἰσίν. Πολλοὶ δὲ καὶ αἷμα ἔπτυσαν, καὶ ἔμμοτοι ἐγένοντο. Ἦ δὲ μελέτη, ἴησις, ἐτίδεις, ὡς νόμος διαίτης τὰ πρῶτα ἀτρεκέως, ἔπειτα ἀπαλύνειν ἡσυχίη, σιγῆ σχήματα, κοιλίη, ἀφροδίσια. Ἀτὰρ οἷς ἄναιμα, ἐπωδυνώτερα τῶν καταγνυμένων, καὶ φιλυποστροφώτερα χρόνου οἷσι δὲ καταλείπεται μυζῶδες, ὑπομιμνήσκει ἐν πόνοισιν. Ἰησις, καῦσις, τοῖσι μὲν ἀπ' ὀστέου, μέχρις ὀστέου, μὴ αὐτὸ δὲ ἦν δὲ μεταξὺ, μὴ πέρην, μηδὲ ἐπιπολῆς. Σφακελισμὸς καὶ τὰ ἔμμοτα πειρᾶσθαι εἰρήσεται ἅπαντα τὰ ἐπεσιόντα. Ὅρατὰ, λόγοις δ' οὐ μὴ, βρώματα, πόματα, θάλπος, ψῦχος, σχῆμα, ὅτι καὶ φάρμακα, τὰ μὲν ξηρὰ, τὰ δὲ ὑγρὰ, τὰ δὲ πυρρὰ, τὰ δὲ μέλανα, τὰ δὲ λευκὰ, τὰ δὲ στρυφνὰ, ἐπὶ ἔλκη, οὕτω καὶ δίαται.

36. Displacement of the spine, if inward, threatens immediate death, attended with retention of urine and loss of sensibility. Outward, the accident is free from most of these bad effects, much more so than where there is merely concussion without displacement; the effects in the former case being confined to the spot affected, whereas in the latter they are further communicated to the whole body, and are of a mortal character. In like manner, when the ribs are fractured, whether one or more, provided there be no splinters, there is rarely fever, spitting of blood, and sphacelus, and ordinary treatment without evacuation will suffice, provided there be no fever;-bandaging, according to rule; and the callus forms in twenty days, the bone being of a porous nature. But in cases of contusion, tubercles form, along with cough, suppurating sores, and sphacelus of the ribs, for nerves from all the parts run along each rib. In many of these cases

haemoptysis and empyema also take place. The management of this case consists in careful treatment, bandaging according to rule, diet at first restricted, but afterward more liberal, quiet, silence, position, bowels, and venereal matters regulated. Even when there is no spitting of blood, these contusions are more painful than fractures, and are more subject in time to relapses; and when any mucous collection is left in the part, it makes itself be felt in disorders of the body. Treatment:-burning, when the bone is affected, down to the bone, but not touching the bone itself; if in the intercostal space, the burning must not extend through it, nor be too superficial. In sphacelus of the ribs, tents are to be tried, all other particulars will be stated afterward: but they should be learned by sight rather than by words, namely, food, drink, heat, cold, attitude; medicines, dry, liquid, red, dark, white, sour, for the ulcers, and so with regard to the diet.

37. Τὰ δ' ἀπὸ καταπτώσιος ἦσσον δύναται ἐξιθύνεσθαι χαλεπώτερα δὲ τὰ ἄνω φρενῶν ἐξιθύνεσθαι. Οἷσι δὲ παισίν, οὐ συναύξεται, ἀλλ' ἢ σκέλη καὶ χεῖρες καὶ κεφαλή. Ἡὕξημένοισιν ὕβωσις, παραχρῆμα μὲν τῆς νόσου ρύεται, ἀνὰ χρόνον δ' ἐπισημαίνεται, δι' ὧνπερ καὶ τοῖσι νεωτέροισιν, ἦσσον δὲ κακοήθως. Εἰσὶ δὲ οἱ εὐφόρως ἤνεγκαν, ὅσιν ἂν ἐς εὐσαρκον καὶ πιμελῶδες τράπηται. Ὀλίγοι δὲ τουτέων περὶ ἐξήκοντα ἔτεα ἐβίωσαν. Ἀτὰρ καὶ ἐς

τὰ πλάγια ιαστρέμματα γίνεται συναίτια δὲ καὶ τὰ σχήματα, ἐν οἷσιν ἂν καακέωνται καὶ ἔχει προγνώσιας.

37. Displacements ( *of the vertebrae* ) from a fall rarely admit of being rectified, and those above the diaphragm are most difficult to rectify. When the accident happens to children, the body does not grow, with the exception of the legs, the arms, and head. Excurvation, in adults, speedily relieves the individual from the disease he is laboring under, but in time it renews its attack, with the same symptoms as in children, but of a less serious nature. Some individuals have borne this affection well, and have turned out to be brawny and fat. But few of them have lived to the age of sixty. Lateral curvatures also occur, the proximate cause of which is the attitudes in which these persons lie. These cases have their prognostics accordingly.

38. Νόμα ἐμβολῆς καὶ διορθώσιος, ὄνος, μοχλὸς, σφηνίσκος, ἵπο ὄνος μὲν ἀπάγειν, μοχλὸς δὲ παράγειν. Τὰ δὲ ἐμβλητέα ἢ δυρθωτέα διαναγκάσαι δεῖ ἐκτείνοντα, ἐν ᾧ ἂν ἕκαστα σχήματι μέλη ὑπεραιωρηθήσεσθαι τὸ δ' ἐκβάν, ὑπὲρ τούτου ὅθεν ἐξέβη τοῦτι δὲ, ἢ χερσίν, ἢ κρεμασμῶ, ἢ ὄνοισιν, ἢ περὶ τι. Χερσὶ μὲν ον ὀρθῶς κατὰ μέρεα καρπὸν δὲ καὶ ἀγκῶνα ἀπόχρη διαναγκάζε, καρπὸν

μὲν ἐς ἰθὺ ἀγκῶνος, ἀγκῶνα δὲ ἐγγώνιον πρὸς βροχίονα ἔχοντα, οἶον παρὰ τῷ βραχίονι τὸ ὑπὸ τὴν χεῖρα ὑποτεινόμεον. Ἐν οἷσι δὲ δακτύλου ποδός, χειρὸς, καρποῦ, ὑβώματος τὸ ἕξω διαναγκάσαι δεῖ καὶ καταναγκάσαι, τὰ μὲν ἄλλα ὑπὸ χειῶν αἱ διαναγκάσεις ἱκαναί, καταναγκάσαι δὲ τὰ ὑπερέχοντα ἔδρην πτέρνη ἢ θέναρι ἐπὶ τινος ὥστε κατὰ μὲν τὸ ἐξέχον ὑπκέεσθαι ὄγκον σύμμετρον μαλθακόν κατὰ δὲ τὸ ἕτερον μὴ στοσαντα χρὴ ὠθέειν ὀπίσω καὶ κάτω, ἦν τε ἔσω, ἦν τε ἔξω ἐκπεπώκη τὰ δ' ἐκ πλαγίων, τὰ μὲν ἀπωθέειν, τὰ δὲ ἀντωθέειν ὀπίσω ἀμφοτέρω κατὰ τὸ ἕτερον. Τὰ δὲ ὑβώματα, τὰ μὲν

ἔσω οὔτε παρμῶ, οὔτε βηχί, οὔτε φύσης ἐνέσει, οὔτε σικύη εἰ δέ τι, ἢ κατάτασις. Ἡ δὲ ἀπάτη, ὅτι οἶονταί ποτε καταγέντων σπονδύλων, καὶ τὰ λορδώματα διὰ τὴν ὀδύνην δοκέει ἔσω ὠλισθηκέναι ταῦτα δὲ ταχύφουα καὶ ῥάδια. Τὰ δὲ ἔξω, κατάσεισις, τὰ μὲν ἄνω ἐπὶ πόδας, τὰ δὲ κάτω τὰναντία κατανάγκασις δὲ σὺν κατατάσει, ἢ ἔδρην, ἢ ποδὶ, ἢ σανίδι. Τὰ δ' ἔνθα ἢ ἔνθα, εἴ τι, ἢ κατάτασις, καὶ ἔτι τὰ σχήματα ἐν τῇ διαίτη. Τὰ ἄρμενα πάντα εἶναι πλατέα, προσηνέα, ἰσχυρά εἰ δὲ μὴ, δεῖ ῥάκεσι προκατειλίχθαι ἐσκευάσθαι πρὶν ἢ ἐν τῆσιν ἀνάγκησι, πάντα συμμεμετρημένως τὰ μήκεα, καὶ ὕψεια, καὶ εὖρεα. Διάτασις οἶον μηροῦ, τὸ παρὰ σφυρὸν δεδέσθαι, καὶ ἄνω τοῦ γούνατος, ταῦτα μὲν ἐς τὸ αὐτὸ τείνοντα παρὰ δ' ἰξυί, καὶ περὶ μασχάλας, καὶ κατὰ περίνεον, καὶ μηρὸν, τὰ μεταξὺ, τῆς ἀρχῆς τὸ μὲν ἐπὶ τὸ στήθος, τὸ δ' ἐπὶ νῶτον τείνοντα, ταῦτα δ' ἐς τὸ αὐτὸ ἅπαντα τείνοντα, προσδεθέντα ἢ πρὸς ὑπεροειδέα, ἢ πρὸς ὄνον. Ἐπὶ μὲν οὖν κλίνης ποιέοντι, τοῦτο μὲν τῶν ποδῶν πρὸς οὐδὸν χρὴ ἐρεῖσαι, πρὸς δὲ τὸ ἕτερον, ξύλον

ἰσχυρὸν πλάγιον παραβεβληῖσθαι, τὰ δὲ ὑπερθεν ὑπεροειδέα πρὸς ταῦτα ἀντιστηρίζοντα διατείνειν, ἢ πλήμνας κατορύξαντα, ἢ κλίμακα διαθέντα, ἀμφοτέρωθεν ὠθέειν. Τὸ δὲ κοινόν, σανὶς ἐξάπηχυς, εὖρος δίπηχυς, πάχος σπιθαμῆς, ἔχουσα ὄνους δύο ταπεινοὺς ἔνθεν καὶ ἔνθεν, ἔχουσα δὲ καὶ κατὰ μέσον στυλίσκους ξυμμέτρους, ἐξ ὧν ὡς κλιμακτήρ ἤρμοσται ἐς τὴν ὑπόστασιν τῷ ξύλῳ, ὥσπερ τῷ κατ' ὦμον καταγλύφους δὲ, ὥσπερ ληνοὺς, λείας ἔχειν, τετραδακτύλους εὖρος καὶ βάθος, καὶ διαλιπεῖν τοσοῦτον, ὅσον αὐτῇ τῇ μοχλεύσει ἐς διόρθωσιν ἐν μέσῳ δὲ τετράγωνον καταγλυφὴν, ὥστε στυλίσκον ἐνεῖναι, ὃς παρὰ περίνεον ἐὼν περιῤῥέπειν τε κωλύσει, ἐὼν τε ὑπογάλαρος ὑπομοχλεύσει. Χρὴ δὲ, τῆς σανίδος [ἢ] ἐν τῷ τοίχῳ [τὸ ἄκρον] καταγεγλυμμένον τι ἐχούσης, τοῦ ξύλου ὧσαι τὸ ἄκρον, ἐπὶ δὲ θάτερα καταναγκάζειν, ὑποτιθέντα μαλθακά τινα σύμμετρα.

38. The rule for the reduction and adjustment:-The axle, the lever, the wedge, pressure above; the axle to separate, the lever to push aside. Reduction and

adjustment are to be accomplished by forcible extension, the parts being placed in such a position as will facilitate the conveying of the displaced bone over the extremity of the bone from which it was displaced: this is to be accomplished either with the hands, or by suspension, or axles, or turned round something. With the hands this is to be effected properly, according to the structure of the parts. In the case of the wrist and elbow, the parts are to be forced asunder, at the wrist in the line of the elbow, and the elbow with the fore-arm at a right angle with the arm, as when it is suspended in a sling. When we want to separate the protruding bones, and force them into place, in the case of the fingers, the toes, or the wrist, the proper separation may be made by hands, while the projecting part is forced into its place by pressing down with the heel or the palm of the hand upon some resisting object, while something moderately soft is laid under the projecting part, but nothing such under the other, and then pressure is to be made backward and downward, whether the dislocation be inward or outward. In lateral displacement, pressure and counter-pressure must be made on the opposite sides. Displacements forward can be reduced neither by sneezing, nor coughing, nor by the injection of air, nor by the cupping-instrument; and if anything can do good in such a case, it is extension. People are deceived in fractures of the spinal processes, the pain of which causing the patient to stoop forward, the case is taken for dislocation inward; these fractures heal speedily and easily. Dislocation outward is to be remedied by succussion, when high up, toward the feet; and when situated low down, in the contrary direction; the part is to be pressed back into its place, either with the foot or a board. Dislocations to either side, if they admit of any remedy, are to be treated by extension, and suitable attitudes, with regimen. The whole apparatus should be broad, soft, and strong; or otherwise, they should be wrapped in rags; before being used, they should all be prepared proportionately to the length, height, and breadth. In applying extension to the thigh, for example, the bands should be fastened at the ankle and above the knee, these stretching in the same direction, another band to be passed by the loins, and around the armpits, and by the perineum and thigh, one end passing up the breast and the other along the back, these all stretching in the same direction and being fastened either to a piece of wood resembling a pestle or to an axle. When this is done on a couch, either of its feet is to be fastened to the threshold, and a strong block of wood is to be laid across the other, and the pieces of wood resembling a pestle are to be raised on these, to make extension and counter-extension; the naves of a wheel are to be fastened in the floor, or a ladder is to be adjusted, so that extension may be made in both directions. The thing commonly used is a bench six cubits long, two cubits broad, one fathom in thickness, having two low axles at this end and that, and

having at its middle two moderate sized pillars, to which is to be adjusted a transverse piece of wood like the step of a ladder, which is to receive the piece of wood tied below the limb, as is done in dislocation at the shoulder; and the bench is to have excavations like trays, smooth, four inches in breadth and depth, and at such an interval as to leave room for the lever used to reduce the limb. In the middle of the bench a square hole is to be scooped out to receive a small pillar, which, being adjusted to the perineum, will obviate the tendency of the body to slip downward, and being rather loose may act somewhat as a lever. In certain occasions a piece of wood is required, which is inserted into a hole scooped out of the wall; the other end of it is then to be pressed down, something moderately soft being placed under it.

39. Οἷσιν ὀστέον ἀπὸ ὑπερώης ἀπῆλθε, μέση ἴζει ἢ ρὶς τουτέοισιν. Οἱ δὲ φλώμενοι κεφαλᾶς ἄνευ ἔλκεος, ἢ πεσόντος, ἢ κατάξαντος, ἢ πιέσαντος, τουτέων ἐνίοισι τὰ δριμύα ἔρχεται ἀπὸ κεφαλῆς κατὰ τὰς φάρυγγας, καὶ ἀπὸ τρώματος ἐν τῇ κεφαλῇ, καὶ ἐς τὸ ἥπαρ, καὶ ἐς τὸν μηρόν.

39. In those cases where the bone of the palate has exfoliated, the nose sinks in its middle. In contusions of the head without a wound, either from a fall, a fracture, or pressure, in certain of these cases acrid humors descend from the head to the throat, and from the wound in the head to the liver and thigh.

40. Ση μεῖα παραλλαγμάτων καὶ ἐκπτώμάτων, καὶ ἦ, καὶ ὄκως,

καὶ ὅσον διαφέρει ταῦτα πρὸς ἄλληλα. Καὶ οἷσιν ἡ κοτύλη παρέαγε, καὶ οἷσι νευρίον ἀπεσπάσθη, καὶ οἷσιν ἐπίφουσις ἀπέαγε, καὶ οἷσι, καὶ ὤς, καὶ ἐν ἡ δύο, ὧν δύο ἐστὶν ἐπὶ τουτέοισι κίνδυνοι, ἐλπίδες, οἷσι κακαὶ, καὶ ὅτε κακώσεις θανάτου, ὑγιείης ἀσφαλείης. Καὶ ἃ ἐμβλητέα, ἢ χειριστέα, καὶ ὅτε, καὶ ἃ οὐ, ἢ ὅτε οὐ ἐπὶ τουτέοισιν ἐλπίδες, κίνδυνοι. Οἷα καὶ ὅτε χειριστέα καὶ τὰ ἐκ γενεῆς ἔξα ῥθρα, τὰ αὐξανόμενα, τὰ ηὔξημένα, καὶ ὅ τι θᾶσσον, καὶ ὅ τι βραδύτερον, καὶ ὅ τι χωλόν, καὶ ὤς, καὶ οὐ καὶ διότι καὶ ὅ τι μινυθήσει, καὶ ἦ, καὶ ὤς, καὶ οἷσιν ἦσσαν. Καὶ ὅτι τὰ καταγέντα θᾶσσον καὶ βραδύτερον φύόμενα, ἦ αἱ διαστροφαι καὶ ἐπιπρώσιες γίνονται, καὶ ἄκη τουτέων. Οἷσιν ἔλκεα αὐτίκα ἢ ὕστερον γίνονται οἷσι καὶ ὀστέα καταγεῖσι, μείω, οἷσιν οὐ οἷσι καταγέντα ἐξέσχεν, καὶ ἦ ἐξίσχει μᾶλλον οἷσιν ἐκβάντα [ἦ] ἄρθρα ἐξίσχει. Ἀπατῶνται,

καὶ δι' ἃ, ἐν οἷσιν ὀρῶσιν, ἐν οἷσι διανοεῦνται ἀμφὶ τὰ παθήματα, ἀμφὶ τὰ θεραπεύματα. Νόμοισι τοῖσι νομίμοισι, περὶ ἐπιδέσιος παρασκευῆ, πάρεξις, κατάτασις, διόρθωσις, ἀνάτριψις, ἐπίδεσις, ἀνάληψις, θέσις, σχῆμα, χρόνοι,

δίαται. Τὰ χαυνότατα τάχιστα φύεται, τὰ δ' ἐναντία ἐναντίως. Διαστροφαι, ἢ κυρτοὶ ἄσαρκοι, ἄνευροι, ἢ τὸ ἐκπεσόν. Τὸ ἐμπεσόν ὡς προσωτάτω ἔσται τοῦ χωρίου, οὗ ἐξέπεσεν. Νεύρων, τὰ μὲν ἐν κινήσει καὶ ἐν πλάδῳ, ἐπιδοτικά τὰ δὲ μὴ, ἦσσον. Ἄριστον, ἢ ἂν ἐκπέση, εἰ ἐμπέσοι τάχιστα. Πυρεταίνοντι μὴ ἐμβάλλειν, μηδὲ τεταρταῖα, πεμπταῖα, ἦκιστα ἀγκῶνα, καὶ τὰ ναρκώδεα πάντα ὡς τάχιστα ἄριστα, τὴν φλεγμονὴν παρέντα. Τὰ ἀποσπώμενα, ἢ νεῦρα, ἢ χόνδρια, ἢ ἐπιφύσεις, ἢ διστάμενα κατὰ συμφύσεις, ἀδύνατα ὁμοιωθῆναι διαπωροῦνται ταχέως τοῖσι πλείστοισιν ἢ δὲ χρῆσις σώζεται. Ἐκβάντων, τὰ ἔσχατα, ῥᾶον. Τὰ ῥᾶστα ἐκπεσόντα ἦκιστα φλεγμαίνει τὰ δὲ ἦκιστα θερμαίνοντα, καὶ μὴ ἐπιθεραπευθέντα, μάλιστα αὐθις ἐκπίπτει. Κατατείνειν ἐν σχήματι τοιουτέῳ, ἐν ᾧ μάλιστα ὑπέραιωρηθήσεται, σκεπτόμενον ἐς τὴν φύσιν καὶ τὸν τόπον. Ἡ ἐξέβη, διόρθωσις ὀπίσω ἐς ὀρθὸν καὶ ἐς πλάγιον παρωθεῖν τὰ δὲ ταχέως

ἀντισπάσαντα ἀντισπάσαι ταχέως ἤδη ἐκ περιαγωγῆς. Τὰ πλειστάκις ἐκπίπτοντα ῥᾶον ἐμπίπτει αἷτιον φύσις, ἢ νεύρων, ἢ ὀστέων, νεύρων μὲν, μῆκος ἢ ἐπίδοσις, ὀστέων δὲ, κοτύλης ὀμαλότης, κεφαλῆς φαλακρότης τὸ ἔθος τρίβον ποιεῖ αἰτίη, καὶ σχέσις, καὶ ἔξις, καὶ ἡλικίη. Τὸ ὑπόμυξον, ἀφλέγμαντον.

40. The symptoms of subluxations and luxations, and where, and how, and how much these differ from one another. And the cases in which the articular cavity has been broke off, and in which the ligament has been torn, and in which the epiphysis has broken in which, and how, when the limb consists of two bones, one or both are broken: in consequence of these the dangers, chances in which bad, and when the injuries will result in death, and when in recovery. What cases are to be reduced or attempted, and when, and which, and when not; the hopes and dangers in these cases. Which and when congenital dislocations are to be undertaken: the parts in a state of growth, the parts fully grown, and why sooner, or slower: and why a part becomes maimed, and how, and how not: and why a certain part is atrophied, and where, and how, and in what cases to a less extent. And why fractured parts unite sooner or slower, how distortions and callosities form, and the remedy for them. In what cases there are external wounds, either at first or afterwards: in what fractures the bones are shortened, and in what not: in what cases the fractured bones protrude, and when they protrude most: in what cases dislocated bones protrude. That physicians are deceived, and by what means, in what they see, and in what they devise, regarding affections, and regarding cures. Established rules with regard to bandaging: preparation, presentation of the part, extension, adjustment, friction, bandaging, suspension and placing of the limb, attitude, seasons, diet. The more porous parts heal

fastest, and vice versa. Distortions, where the bones are crooked. Flesh and tendons wasted on the side of the dislocation. The force used in reduction to be applied at as great a distance as possible from the seat of the displacement. Of nerves ( *ligaments?* ), those which are in motion and in humidity ( *flabby?* ) are of a yielding nature; those that are not, less so. In every dislocation the most speedy reduction is best. Reduction not to be made while the patient is in a febrile state, nor on the fourth or fifth day; and least of all, in those of the elbow, and all cases which induce torpor; the soonest the best, provided the inflammatory stage be avoided. Parts torn asunder, whether nerves, or cartilages, or epiphyses, or parts separated at symphyses, cannot possibly be restored to their former state; but callus is quickly formed in most cases, yet the use of the limb is preserved. Of luxations, those nearest the extremities are least dangerous. Those joints which are most easily dislocated are the least subject to inflammation. Those which have been least inflamed, and have not been subjected to after-treatment, are most liable to be dislocated anew. Extension should be made in the position most calculated to enable the one bone to clear the extremity of the other, attention being paid to configuration and place. Adjustment to be made in the direction of the displacement; to push the displaced limb straight backward and sideways. Parts suddenly drawn aside are to be suddenly drawn back by a rotatory motion. Articulations which have been oftenest dislocated are the most easily reduced; the cause is the conformation of the nerves ( *ligaments?* ) or of the bones; of the ligaments that they are long and yielding; and of the bones, the shallowness of the articular cavity, and roundness of the head [of the bone that enters it]. Usage, by its friction, forms a new socket. The cause-the disposition, and habit, and age. A part somewhat mucous is not subject to inflammation.

41. Οἷσιν ἔλκεα ἐγένετο, ἢ αὐτίκα, ἢ ὀστέων ἐξισχόντων, ἢ ἔπειτα, ἢ κνησμῶν, ἢ τρηχυσμῶν, ταῦτα μὲν ἦν αἰσθῆ, εὐθέως σας, πισσηρὴν ἐπὶ τὸ ἔλκος ἐπιθεῖς, ἐπίδειν ὡς ἐπὶ τὸ ἔλκος πρῶτον τὴν ἀρχὴν βαλλόμενος, καὶ τᾶλλα ὡς οὐ ταύτη τοῦ σίνεος ἐόντος οὕτω γὰρ αὐτό τε ἰσχνότατον, καὶ ἐκπυήσει τάχιστα, καὶ περιρρήξεται, καὶ καθαρθέντα τάχιστα φύσεται νάρθηκας δὲ μήτε κατ' αὐτὸ τοῦτο προσάγειν, μήτε πιέζειν καὶ ὧν ὀστέα μὴ μεγάλα ἄπεισιν, οὕτω ποιέειν ὧν δὲ μεγάλα, οὐ πολλὴ γὰρ ἐμπύσις, καὶ ταῦτ' οὐκ ἔτι οὕτως, ἀλλ' ἀνέψυκται τῶν ὑποστασίων εἵνεκα. Τὰ δὲ τοιαῦτα ὅποσα ἐξέσχε, καὶ, εἴ τε ἐμβληθῆ, εἴ τε μὴ, ἐπίδεισις μὲν οὐκ ἐπιτήδειον, διάτασις δὲ, σφαῖραι ποιηθεῖσαι, οἷαι πέδαις, ἢ μὲν παρὰ σφυρὸν, ἢ δὲ παρὰ γόνυ, ἐς κνήμην πλατεῖαι, προσηνέες, ἰσχυραὶ, κρίκους ἔχουσαι ράβδοι τε σύμμετροι κρανίης καὶ μῆκος καὶ πάχος, ὥστε διατείνειν ἱμάντια δὲ ἐξ ἄκρων ἀμφοτέρωθεν ἔχοντα εἰς τοὺς κρίκους ἐνδεδέσθαι, ὡς τὰ

ἄκρα ἐς τὰς σφαίρας ἐνστηριζόμενα διαναγκάζη. Ἰησις δὲ, πισσηρὴ θερμὴ σχήματα, καὶ ποδὸς. θέσις καὶ ἰσχίου δίαιτα ἀτρεκῆς. Ἐμβάλλειν τὰ ὀστέα τὰ ὑπερίσχοντα αὐθήμερα, ἢ δευτεραῖα, τεταρταῖα δὲ ἢ πεμπταῖα, μὴ, ἀλλ' ἐπὴν ἰσχνὰ ἦ. Ἡ δ' ἐμβολὴ τοῖσι μοχλικοῖσιν ἢ τὸ ἐμβαλλόμενον τοῦ ὀστέου, ἦν μὴ ἔχη ἀποστήριξιν, ἀποπρῖσαι τῶν κωλυόντων. Ἀτὰρ καὶ ὡς τὰ ψιλωθέντα ἀποπεσεῖται, καὶ βραχύτερα τὰ μέλεα.

41. In those cases where there are wounds, either at first, or from protrusion of the bones; or afterwards, from pruritus, or irritation; in the latter case you are immediately to unloose the bandages, and having applied pitched cerate to the wound, bandage the limb, placing the head of the roller upon the wound, and proceeding otherwise as if there were no wound in the case; for thus will the swelling be reduced as much as possible, and the wound will suppurate most quickly, and the diseased parts will separate, and when it becomes clean the wound will most quickly heal. Splints are not to be applied to the place, nor is it to be bound tight. Proceed thus when no large bones exfoliate, but not in the latter case, for then there is great suppuration, and the same treatment is not applicable, but the parts require to be exposed to the air on account of the abscesses. In such cases where the bones protrude, and whether reduced or not, bandaging is not befitting, but distention is to be practiced by means of rolls of cloth, made like those used upon shackles; one of these is to be placed at the ankle, and the other at the knee; they are to be flattened toward the leg, soft, strong, and having rings; and rods made of cornel, and of a proper length and thickness are to be adjusted to them, so as to keep the parts distended; and straps, attached to both extremities, are to be inserted into the rings, so that the extremities being fixed into the rolls, may effect distention. Treatment:-Pitched cerate, in a hot state; the attitudes, position of the foot and hip; regulated diet. The bones which have protruded through the skin are to be replaced the same day, or next; not on the fourth or fifth, but when the swelling has subsided. Reduction is to be performed with levers; when the bone does not present any place upon which the lever can rest, a portion of the part which prevents this is to be sawed off. But the denuded parts will drop off, and the limb become shortened.

42. Τὰ δὲ ἄρθρα, τὰ μὲν πλέον, τὰ δὲ μείον ὀλισθάνει καὶ τὰ μὲν μείον, ἐμβαλεῖν ῥάδιον τὰ δὲ πλέον μέζους ποιεῖ τὰς κακώσιας καὶ ὀστέων, καὶ νεύρων, καὶ ἄρθρων, καὶ σαρκῶν, καὶ σχημάτων. Μηρὸς δὲ καὶ βραχίων ὁμοιότατα ἐκπίπτουσιν.



42. Dislocations at the joints are to a greater and less extent. Those that are to a less extent are the most easily reduced; those that are to a greater extent occasion lesions of the bones, of the ligaments, of the joints, of the fleshy parts, and of the attitudes. The thigh and arm resemble one another very much in their dislocations.

## ON INJURIES OF THE HEAD - Περί τῶν ἐν κεφαλῇ τραυμάτων

1. Τῶν ἀνθρώπων αἱ κεφαλαὶ οὐδὲν ὁμοίως σφίσιν αὐταῖς, οὐδὲ αἱ ῥαφαὶ τῆς κεφαλῆς πάντων κατὰ ταῦτὰ πεφύκασιν. Ἄλλ' ὅστις μὲν ἔχει ἐκ τοῦ ἔμπροσθεν τῆς κεφαλῆς προβολὴν ἢ δὲ προβολή ἐστὶ τὸ τοῦ ὀστέου ἐξέχον στρογγύλον παρὰ τὸ ἄλλο, τουτέου εἰσὶν αἱ ῥαφαὶ πεφυκυῖαι ἐν τῇ κεφαλῇ, ὡς γράμμα τὸ ταῦ, T, γράφεται τὴν μὲν γὰρ βραχυτέραν γραμμὴν ἔχει πρὸ τῆς προβολῆς ἐπικαρσίην πεφυκυῖαν τὴν δ' ἑτέραν γραμμὴν ἔχει διὰ μέσης τῆς κεφαλῆς κατὰ μῆκος πεφυκυῖαν ἐς τὸν τράχηλον αἰεὶ. Ὅστις δ' ὀπισθεν τῆς κεφαλῆς τὴν προβολὴν ἔχει, αἱ ῥαφαὶ τουτέω πεφύκασιν τάναντία ἢ τῷ προτέρω ἢ μὲν γὰρ βραχυτέρη γραμμὴ πρὸ τῆς προβολῆς πέφυκεν ἐπικαρσίη ἢ δὲ μακροτέρα διὰ μέσης τῆς κεφαλῆς πέφυκε κατὰ μῆκος ἐς τὸ μέτωπον αἰεὶ. Ὅστις δὲ ἀμφοτέρωθεν τῆς κεφαλῆς προβολὴν ἔχει, ἐκ τε τοῦ ἔμπροσθεν καὶ

ἐκ τοῦ ὀπισθεν, τουτέω αἱ ῥαφαὶ εἰσὶν ὁμοίως πεφυκυῖαι ὡς γράμμα τὸ ἦτα, , γράφεται πεφύκασιν δὲ τῶν γραμμέων αἱ μὲν μακραι, πρὸ τῆς προβολῆς ἐκατέρης ἐπικάρσιαι πεφυκυῖαι ἢ δὲ βραχεῖη διὰ μέσης τῆς κεφαλῆς κατὰ μῆκος πρὸς ἐκατέρην τελευτῶσα τὴν μακρὴν γραμμὴν. Ὅστις δὲ μὴδ' ἐτέρωθι μηδεμίαν προβολὴν ἔχει, οὗτος ἔχει τὰς ῥαφὰς τῆς κεφαλῆς, ὡς γράμμα τὸ χι, X, γράφεται πεφύκασιν δὲ αἱ γραμμαὶ, ἢ μὲν ἑτέρη ἐπικαρσίη πρὸς τὸν κρόταφον ἀφίκουσα ἢ δὲ ἑτέρη, κατὰ μῆκος διὰ μέσης τῆς κεφαλῆς. Δίπλοον δ' ἐστὶ τὸ ὀστέον κατὰ μέσην τὴν κεφαλὴν σκληρότατον δὲ καὶ πυκνότατον αὐτέου πέφυκεν τὸ τε ἀνώτατον, ἦ ἢ ὁμοχροίη τοῦ ὀστέου ἢ ὑπὸ τῇ σαρκί,

καὶ τὸ κατώτατον τὸ πρὸς τῇ μῆνιγγι, ἦ ἢ ὁμοχροίη τοῦ ὀστέου ἢ κάτω ἀποχωρέον δὲ ἀπὸ τοῦ ἀνωτάτου ὀστέου καὶ τοῦ κατωτάτου, ἀπὸ τῶν σκληροτάτων καὶ πυκνοτάτων ἐπὶ τὸ μαλθακώτερον καὶ ἥσσον πυκνὸν καὶ ἐπικοιλότερον ἐς τὴν διπλὴν αἰεὶ. Ἡ δὲ διπλὴ κοιλότατον καὶ μαλθακώτατον καὶ

μάλιστα σηραγγῶδες ἐστίν. Ἔστι δὲ καὶ πᾶν τὸ ὀστέον τῆς κεφαλῆς, πλὴν κάρτα ὀλίγου τοῦ τε ἀνωτάτου καὶ τοῦ κατωτάτου, σπόγγω ὅμοιον καὶ ἔχει τὸ ὀστέον ἐν ἐωυτῷ ὀκοῖα σαρκία πολλὰ καὶ ὑγρά, καὶ εἴ τις αὐτὰ διατρίβῃ τοῖσι δακτύλοισιν, αἷμα ἂν διαγίγνοιτο ἐξ αὐτέων. Ἐνὶ δ' ἐν τῷ ὀστέῳ καὶ φλέβια λεπτότερα καὶ κοιλότερα, αἵματος πλέα. Σκληρότητος μὲν οὖν καὶ μαλθακότητος καὶ κοιλότητος ὧδε ἔχει.

1. MEN'S heads are by no means all like to one another, nor are the sutures of

the head of all men constructed in the same form. Thus, whoever has a prominence in the anterior part of the head (by prominence is meant the round protuberant part of the bone which projects beyond the rest of it), in him the sutures of the head take the form of the Greek letter *tau* , T; for the head has the shorter line running transverse before the prominence, while the other line runs through the middle of the head, all the way to the neck. But whoever has the prominence in the back part of the head, in him the sutures are constructed in quite the opposite form to the former; for in this case the shorter line runs in front of the prominence, while the longer runs through the middle all along to the forehead. But whoever has a prominence of the head both before and behind, in him the sutures resemble the Greek letter *eta* E; for the long lines of the letter run transverse before each prominence while the short one runs through the middle and terminates in the long lines. But whoever has no prominence on either part he has the sutures of the head resembling the Greek letter chi; for the one line comes transverse to the temple while the other passes along the middle of the head. The bone at the middle of the head is double, the hardest and most compact part being the upper portion, where it is connected with the skin, and the lowest, where it is connected with the meninx (*dura mater*); and from the uppermost and lowermost parts the bone gradually becomes softer and less compact, till you come to the *diploe* . The diploe is the most porous, the softest, and most cavernous part. But the whole bone of the head, with the, exception of a small portion of the uppermost and lowermost portions of it, is like a sponge; and the bone has in it many juicy substances, like caruncles; and if one will rub them with the fingers, some blood will issue from them. There are also in the bone certain very slender and hollow vessels full of blood. So it is with regard to hardness, softness, and porosity.

2. Παχύτητι δὲ καὶ λεπτότητι, ξυμπάσης τῆς κεφαλῆς τὸ ὀστέον λεπτότατόν ἐστιν καὶ ἀσθενέστατον τὸ κατὰ βρέγμα, καὶ σάρκα ὀλιγίστην καὶ λεπτοτάτην ἔχει ἐφ' ἐωυτέω ταύτη τῆς κεφαλῆς τὸ ὀστέον, καὶ ὁ ἐγκέφαλος κατὰ τοῦτο τῆς κεφαλῆς πλεῖστος ὕπεστιν. Καὶ δὴ, ὅτι οὕτω ταῦτα ἔχει, τῶν τε τρωσίων

καὶ τῶν βελέων ἴσων τε ἐόντων κατὰ μεγέθος, καὶ ἐλασσόνων, καὶ ὁμοίως τε τρωθεὶς καὶ ἦσσον, τὸ ὀστέον ταύτη τῆς κεφαλῆς φλᾶται τε μᾶλλον καὶ ῥήγγυται, καὶ ἔσω ἐσφλᾶται, καὶ θανασιμώτερά ἐστι καὶ χαλεπώτερα ἠτρεύεσθαι τε καὶ ἐκφυγγάνειν τὸν θάνατον ταύτη ἥπου ἄλλοθι τῆς κεφαλῆς ἐξίσων τε ἐόντων τῶν τρωμάτων καὶ ἦσσόνων, καὶ ὁμοίως τε τρωθεὶς καὶ ἦσσον, ἀποθνήσκει ὁ ἄνθρωπος, ὅταν καὶ ἄλλως μέλλη ἀποθανεῖσθαι ἐκ τοῦ τρώματος, ἐν ἐλάσσονι χρόνῳ ὁ ταύτη ἔχων τὸ τρῶμα τῆς κεφαλῆς, ἥπου ἄλλοθι. Ὁ γὰρ

ἐγκέφαλος τάχιστα τε καὶ μάλιστα κατὰ τὸ βρέγμα αἰσθάνεται τῶν κακῶν τῶν γιγνομένων ἔν τε τῇ σαρκὶ καὶ τῷ ὀστέῳ ὑπὸ λεπτοτάτῳ γὰρ ὀστέῳ ἐστὶ ταύτη ὁ ἐγκέφαλος καὶ ὀλιγίστη σαρκὶ, καὶ ὁ πλεῖστος ἐγκέφαλος ὑπὸ τῷ βρέγματι κεῖται. Τῶν δὲ ἄλλων τὸ κατὰ τοὺς κροτάφους ἀσθενέστατόν ἐστὶν ξυμβολή τε γὰρ τῆς κάτω γνάθου πρὸς τὸ κρανίον, καὶ κίνησις ἔνεστιν ἐν τῷ κροτάφῳ ἄνω καὶ κάτω ὡσπερ ἄρθρου καὶ ἡ ἀκοὴ πλησίον γίγνεται αὐτέου, καὶ φλὲς διὰ τοῦ κροτάφου τέταται κοίλη τε καὶ ἰσχυρὴ. Ἰσχυρότερον δ' ἐστὶ τῆς κεφαλῆς τὸ ὀστέον ἅπαν τὸ ὀπισθεν τῆς κορυφῆς καὶ τῶν

οὐάτων, ἢ ἅπαν τὸ πρόσθεν, καὶ σάρκα πλέονα καὶ βαθυτέραν ἐφ' ἐωυτέῳ ἔχει τοῦτο τὸ ὀστέον. Καὶ δὴ, τουτέων οὕτως ἐχόντων ὑπὸ τῶν τε τρωσίων καὶ τῶν βελέων ἴσων ἐόντων καὶ ὁμοίων, καὶ μεζόνων, καὶ ὁμοίως τιτρωσκόμενος καὶ μᾶλλον, ταύτη τῆς κεφαλῆς τὸ ὀστέον ἦσσον ρήγνυται καὶ φλᾶται ἔσω κῆν μέλλη ὠνθρωπος ἀποθνήσκειν καὶ ἄλλως ἐκ τοῦ τρώματος, ἐν τῷ ὀπισθεν τῆς κεφαλῆς ἔχων τὸ τρῶμα, ἐν πλέονι χρόνῳ ἀποθανεῖται ἐν πλέονι γὰρ χρόνῳ τὸ ὀστέον ἐμπυῖσκεται τε καὶ διαπυῖσκεται κάτω ἐπὶ τὸν ἐγκέφαλον διὰ τὴν παχύτητα τοῦ ὀστέου, καὶ ἐλάσσων ταύτη τῆς κεφαλῆς ὁ ἐγκέφαλος ὑπεστι, καὶ πλέονες ἐκφυγγάνουσι τὸν θάνατον τῶν ὀπισθεν τιτρωσκομένων τῆς κεφαλῆς ὡς ἐπιτοπολὺ, ἢ τῶν ἐμπροσθεν. Καὶ ἐν χειμῶνι πλέονα χρόνον ζῆ ὠνθρωπος ἢ ἐν θέρει, ὅστις καὶ ἄλλως μέλλει ἀποθανεῖσθαι ἐκ τοῦ τρώματος, ὀκουοῦν τῆς κεφαλῆς ἔχων τὸ τρῶμα.

2. In respect to thickness and thinness; the thinnest and weakest part of the whole head is the part about the bregma; and the bone there has the smallest and thinnest covering of flesh upon it, and the largest proportion of brain is situated in that region of the head. And hence it happens that from similar or even smaller wounds and instruments, when a person is wounded to the same or a less degree, the bone of the head there is more contused, fractured, and depressed; and that injuries there are more deadly and more difficult to cure; and it is more difficult to save one's life in injuries there than in any other part of the head; that from having sustained a similar or even a less wound a man will die, and that, too, in a shorter space of time than from a wound in any other part of the head. For the brain about the bregma feels more quickly and strongly any mischief that may occur to the flesh or the bone; for the brain about the bregma is in largest quantity, and is covered by the thinnest bone and the least flesh. Of the other portions, the weakest is that about the temples; for it is the conjunction of the lower jaw with the cranium, and there is motion there up and down as at a joint; and the organ of hearing is near it; and further, a hollow and important vein runs along the temple. But the whole bone of the head behind the vertex and the ear is

stronger than the whole anterior part, and the bone itself has a larger and deeper covering of flesh upon it. And hence it follows, that when exposed to the same or even greater injuries from instruments of the same or greater size, the bone is less liable to be fractured and depressed than elsewhere; and that in a fatal accident the patient will live longer when the wound is in the posterior part of the head than when elsewhere; and that pus takes longer time to form and penetrate through the bone to the brain, owing to the thickness of the bone; and moreover, as there is less brain in that part of the head, more persons who are wounded in the back part of the head escape than of those who wounded in the anterior part. And in fatal cases, a man will survive longer in winter than in summer, whatever be the part of the head in which the wound is situated.

3. Αἱ δὲ ἔδραι τῶν βελέων τῶν ὀξέων καὶ κουφοτέρων, αὐταὶ

ἐπὶ σφῶν αὐτέων γινόμενα ἐν τῷ ὀστέῳ, ἄνευ ῥωγμῆς τε καὶ φλάσιος, ἢ ἔσω ἐσφλάσιος αὐταὶ δὲ γίνονται ὁμοίως ἐν τε τῷ ἔμπροσθεν τῆς κεφαλῆς, καὶ ἐν τῷ ὀπισθεν, ἐκ τούτων ὁ θάνατος οὐ γίνεται κατὰ γε δίκην, οὐδ' ἦν γένηται. Ῥαφὴ δὲ ἐν ἔλκει φανεῖσα, ὀστέου ψιλωθέντος, πανταχοῦ τῆς κεφαλῆς τοῦ ἔλκεος γενομένου, ἀσθενέστατον γίγνεται τῇ τρώσει καὶ τῷ βέλῃ ἀντέχειν, εἰ τύχοι τὸ βέλος ἐς αὐτὴν τὴν ῥαφὴν στηριχθέν πάντων δὲ μάλιστα ἐν τῷ βρέγματι γενομένου κατὰ τὸ ἀσθενέστατον τῆς κεφαλῆς, καὶ αἱ ῥαφαὶ εἰ τύχοιεν ἐοῦσαι περὶ τὸ ἔλκος, καὶ τὸ βέλος αὐτέων τύχοι τῶν ῥαφῶν.

3. As to the *haedrae* (dints or marks?) of sharp and light weapons, when they take place in the bone without fissure, contusion, or depression inwards (and these take place equally in the anterior and posterior part of the head), death, when it does occur, does not properly result from them. A suture appearing in a wound, when the bone is laid bare, on whatever part of the head the wound may have been inflicted, is the weakest point of the head to resist a blow or a weapon, when the weapon happens to be impinged into the suture itself; but more especially when this occurs in the bregma at the weakest part of the head, and the sutures happen to be situated near the wound, and the weapon has hit the sutures themselves.

4. Τιτρώσκειται δὲ ὀστέον τὸ ἐν τῇ κεφαλῇ τοσοῦσδε τρόπους τῶν δὲ τρόπων ἐκάστου πλέονες ιδέαι γίνονται τοῦ κατήγματος

ἐν τῇ τρώσει. Ὄστέον ῥήγνυται τιτρωσκόμενον, καὶ τῷ περιέχοντι ὀστέῳ τὴν ῥωγμὴν, ἀνάγκη φλάσιν προσγίνεσθαι, ἢ περὶ ῥαφῆ τῶν γὰρ βελέων ὅ τι περ

ρήγνυσι τὸ ὀστέον, τὸ αὐτὸ τοῦτο καὶ φλᾶ τὸ ὀστέον ἢ μᾶλλον, ἢ ἥσσον, αὐτό τε ἐν ᾧπερ καὶ ῥήγνυσι τὴν ῥωγμὴν, καὶ τὰ περιέχοντα ὀστέα τὴν ῥωγμὴν εἰς οὗτος τρόπος. Ἰδέαι δὲ ῥωγμῶν παντοῖαι γίνονται καὶ γὰρ λεπτότεραί τε καὶ λεπταὶ πάνυ, ὥστε οὐ καταφανέες γίνονται ἔστιν αἱ τῶν ῥωγμῶν, οὔτε αὐτίκα μετὰ τὴν τρωσίν, οὔτ' ἐν τῆσιν ἡμέρησιν, ἐν ἧσιν ἂν καὶ πλέον ὄφελος γένοιτο ἐκ

τούτου τῷ ἀνθρώπῳ αἱ δ' αὖ παχύτεραι τε καὶ εὐρύτεραι ῥήγνυνται τῶν ῥωγμῶν ἔναι δὲ καὶ πάνυ εὐρέαι. Ἔστι δὲ αὐτέων καὶ αἱ μὲν ἐπὶ μακρότερον ῥήγνυνται, αἱ δὲ ἐπὶ βραχύτερον. Καὶ αἱ μὲν ἰθύτεραι τε καὶ ἰθεῖαι πάνυ, αἱ δὲ καμπυλώτεραι τε καὶ καμπύλαι καὶ βαθύτεραι τε ἐς τὸ κάτω καὶ διὰ παντὸς τοῦ ὀστέου, καὶ ἥσσον βαθεῖαι ἐς τὸ κάτω, καὶ οὐ διὰ παντὸς τοῦ ὀστέου.

4. The bone in the head is liable to be wounded in the following modes, and there are many varieties in each of these modes of fracture: When a wounded bone breaks, in the bone comprehending the fissure, contusion necessarily takes place where the bone is broken; for an instrument that breaks the bone occasions a contusion thereof more or less, both at the fracture and in the parts of the bone surrounding the fracture. This is the first mode. But there are all possible varieties of fissures; for some of them are fine, and so very fine that they cannot be discovered, either immediately after the injury, or during the period in which it would be of use to the patient if this could be ascertained. And some of these fissures are thicker and wider, certain of them being very wide. And some of them extend to a greater, and some to a smaller, distance. And some are more straight, nay, completely straight; and some are more curved, and that in a remarkable degree. And some are deep, so as to extend downwards and through the whole bone; and some are less so, and do not penetrate through the whole bone.

5. Φλασθείη δ' ἂν τὸ ὀστέον μένον ἐν τῇ ἐωυτοῦ φύσει, καὶ ῥωγμὴ τῇ φλάσει οὐκ ἂν προσγένοιτο ἐν τῷ ὀστέῳ οὐδεμία δεύτερος οὗτος τρόπος. Ἰδέαι δὲ τῆς φλάσιος πλείους γίνονται καὶ γὰρ μᾶλλον τε καὶ ἥσσον φλᾶται, καὶ ἐς βαθύτερόν τε καὶ διὰ παντὸς τοῦ ὀστέου, καὶ ἥσσον ἐς βαθύ, καὶ οὐ διὰ παντὸς τοῦ ὀστέου, καὶ ἐπὶ πλέον τε καὶ ἔλασσον μήκεός τε καὶ πλατύτητος. Ἄλλ' οὐ τουτέων τῶν ἰδεῶν οὐδεμίαν ἔστιν ἰδόντα τοῖσιν ὀφθαλμοῖσι γνῶναι, ὀκοίη τις ἔστι τὴν ἰδέην, καὶ ὀκόση

τις τὸ μέγεθος οὐδὲ γὰρ εἰ πέφλασται, ἢ μὴ πέφλασται, ἐόντων πεφλασμένων καὶ τοῦ κακοῦ γεγενημένου, γίνεταί τοῖσιν ὀφθαλμοῖσι καταφανὲς ἰδεῖν αὐτίκα μετὰ τὴν τρωσίν, ὥσπερ οὐδὲ τῶν ῥωγμῶν ἔναι ἐκάς ἐοῦσαι.

5. But a bone may be contused, and yet remain in its natural condition without any fracture in it; this is the second mode. And there are many varieties of contusion; for they occur to a greater or less degree, and to a greater depth, so as sometimes to extend through the whole bone; or to a less depth, so as not to extend through the whole bone; and to a greater and smaller length and breadth. But it is not possible to recognize any of these varieties by the sight, so as to determine their form and extent; neither, indeed, is it visible to the eyes when any mischief of this kind takes place, and immediately after the injury, whether or not the bone has been actually bruised, as is likewise the case with certain fractures at a distance from the seat of injury.

6. Καὶ ἐρρωγότος τοῦ ὀστέου, ἐσφλᾶται τὸ ὀστέον ἐκ τῆς

φύσιος τῆς ἐωυτοῦ ἔσω σὺν ῥωγμῆσιν ἄλλως γὰρ οὐκ ἂν ἐσφλασθεῖη τὸ γὰρ ἐσφλώμενον, ἀπορρηγνύμενόν τε καὶ καταγνύμενον, ἐσφλᾶται ἔσω ἀπὸ τοῦ ἄλλου ὀστέου μένοντος ἐν τῇ φύσει τῇ ἐωυτοῦ καὶ δὴ οὕτω ῥωγμὴ ἂν προσεῖη τῇ ἐσφλάσει τρίτος οὗτος τρόπος. Ἐσφλᾶται δὲ τὸ ὀστέον πολλὰς ἰδέας καὶ γὰρ ἐπὶ πλεόν τοῦ ὀστέου καὶ ἐπ' ἔλασσον, καὶ μᾶλλον τε καὶ ἐς βαθύτερον κάτω, καὶ ἥσσόν τε καὶ ἐπιπολαιότερον.

6. And the bone being fractured, is sometimes depressed inwards from its natural level along with the fractures, otherwise there would be no depression; for the depressed portion being fractured and broken off, is pushed inwards, while the rest of the bone remains in its natural position; and in this manner a fracture is combined with the depression. This is the third mode. There are many varieties of depression, for it may comprehend a greater and a small extent of bone, and may either be to a greater depth, or less so, and more superficial.

7. Καὶ ἔδρης γενομένης ἐν τῷ ὀστέῳ βέλεος, προσγένειτο ἂν ῥωγμὴ τῇ ἐδραίῃ φλάσιν προσγενέσθαι ἀναγκαῖόν ἐστιν, ἢ

μᾶλλον, ἢ ἥσσον, ἢ ἢπερ καὶ ῥωγμὴ προσγένηται, ἐνθάπερ ἢ ἔδρη ἐγένετο καὶ ἢ ῥωγμὴ, καὶ ἐν τῷ ὀστέῳ τῷ περιέχοντι τὴν τε ἔδρη καὶ τὴν ῥωγμὴν τέταρτος οὗτος τρόπος. Καὶ ἔδρη μὲν ἂν γένοιτο, φλάσιν ἔχουσα τοῦ ὀστέου περὶ αὐτήν, ῥωγμὴ δὲ οὐκ ἂν προσγένειτο

τῇ ἔδρη καὶ τῇ φλάσει ὑπὸ τοῦ βέλεος. Καὶ ἔδρη δὲ τοῦ βέλεος γίνεταί ἐν τῷ ὀστέῳ ἔδρη δὲ καλέεταί, ὅταν, μένον τὸ ὀστέον ἐν τῇ ἐωυτοῦ φύσει, τὸ βέλος στηρίζαν ἐς τὸ ὀστέον δῆλον ποιήσῃ ὅκου ἐστήριξεν. Ἐν δὲ τῷ τρόπῳ ἐκάστῳ

πλέονες ιδέαι γίνονται καὶ περὶ μὲν φλάσιός τε καὶ ῥωγμῆς, ἣν ἄμφω ταῦτα προσγένηται τῇ ἔδρῃ, καὶ ἣν φλάσις μούνη γένηται, ἥδη πέφρασαι, ὅτι πολλαὶ ιδέαι γίνονται καὶ τῆς φλάσιος καὶ τῆς ῥωγμῆς. Ἡ δὲ ἔδρη αὐτὴ ἐφ' ἐωυτῆς γίνεται, μακροτέρη καὶ βραχυτέρη ἐοῦσα, καὶ καμπυλωτέρη, καὶ ἰθυτέρη, καὶ κυκλοτερῆς καὶ πολλαὶ ἄλλαι ιδέαι τοῦ τοιουτέου τρόπου, ὀκοῖον ἂν τι καὶ τὸ σχῆμα τοῦ βέλεος ἢ αὐταὶ δὲ καὶ βαθύτεραι τὸ κάτω καὶ μᾶλλον καὶ ἥσσον, καὶ στενότεραι, καὶ εὐρύτεραι, καὶ πάνυ εὐρέαι. διακέκοπται διακοπὴ δ', ὀκοσητισοῦν γιγνομένη μήκεός τε καὶ εὐρύτητος ἐν τῷ ὀστέῳ, ἔδρη ἐστὶν, ἣν τὰ ἄλλα

ὀστέα τὰ περιέχοντα τὴν διακοπὴν μένη ἐν τῇ φύσει τῇ ἐωυτέων, καὶ μὴ ξυνεσφλᾶται τῇ διακοπῇ ἔσω ἐκ τῆς φύσιος τῆς ἐωυτέων οὔτω δ' ἔσφλασις ἂν εἴη, καὶ οὐκ ἔτι ἔδρη.

7. When a *hedra* , or dint of a weapon, takes place in a bone, there may be a fracture combined with it; and provided there be a fracture, contusion must necessarily be joined, to a greater or less extent, in the seat of the dint and fracture, and in the bone which comprehends them. This is the fourth mode. And there may be a *hedra* , or indentation of the bone, along with contusion of the surrounding bone, but without any fracture either in the *hedra* or in the contusion inflicted by the weapon. But the indentation of a weapon takes place in a bone, and is called *hedra* , when the bone remaining in its natural state, the weapon which struck against the bone leaves its impression on the part which it struck. In each of these modes there are many varieties, with regard to the contusion and fracture, if both these be combined with the *hedra* , or if contusion alone, as it has been already stated that there are many varieties of contusion and fracture. And the *hedra* , or dint, of itself may be longer and shorter, crooked, straight, and circular; and there are many varieties of this mode, according to the shape of the weapon; and they may be more or less deep, and narrower or broader, and extremely broad. When a part is cleft, the cleft or notch which occurs in the bone, to whatever length or breadth, is a *hedra* , if the other bones comprehending the cleft remain in their natural position, and be not driven inwards; for in this case it would be a depression, and no longer a *hedra* .

8. Ὄστέον τιτρώσκεται ἄλλη τῆς κεφαλῆς, ἢ ἢ τὸ ἔλκος ἔχει ὠνθρωπος, καὶ τὸ ὀστέον ἐπιλώθη τῆς σαρκός πέμπτος οὔτος τρόπος. Καὶ ταύτην τὴν ξυμφορῆν, ὅταν γένηται, οὐκ ἂν ἔχοις ὠφελῆσαι οὐδέν. Οὐδὲ γὰρ, εἰ πέπονθε τὸ κακὸν τοῦτο, οὐκ ἔστιν ὀκως χρῆ αὐτὸν ἐξελέγξαντα εἰδέναι εἰ πέπονθε τὸ κακὸν τοῦτο ὠνθρωπος, οὐδ' ὀκοι τῆς κεφαλῆς.



8. A bone may be injured in a different part of the head from that on which the person has received the wound, and the bone has been laid bare. This is the fifth mode. And for this misfortune, when it occurs, there is no remedy; for when this mischief takes place, there is no means of ascertaining by any examination whether or not it has occurred, or on what part of the head.

9. Τούτων τῶν τρόπων τῆς κατήξιος ἐς πρίσιν ἀφήκει, ἢ τε φλάσις ἢ ἀφανῆς ἰδεῖν, καὶ ἦν πως τύχη φανερὴ γενομένη, καὶ ἢ ῥωγμὴ ἢ ἀφανῆς ἰδεῖν, καὶ ἦν φανερὴ ἦ. Καὶ ἦν, ἔδρης γενομένης τοῦ βέλεος ἐν τῷ ὀστέῳ, προσγένηται ῥωγμὴ καὶ φλάσις τῇ ἔδρῃ, καὶ ἦν φλάσις μόνον προσγένηται ἄνευ ῥωγμῆς τῇ ἔδρῃ, καὶ αὕτη ἐς πρίσιν ἀφήκει. Τὸ δ' ἔσω ἐσφλώμενον ὀστέον ἐκ τῆς φύσιος τῆς ἐωυτοῦ, ὀλίγα τῶν πολλῶν πρίσιος προσδεῖται

καὶ τὰ μάλιστα ἐσφλασθέντα καὶ μάλιστα καταρραγέντα, ταῦτα πρίσιος ἤκιστα κέχρηται οὐδὲ ἔδρη αὐτὴ ἐφ' ἐωυτῆς γενομένη ἄτερ ῥωγμῆς καὶ φλάσιος, οὐδὲ αὐτὴ πρίσιος δεῖται οὐδ' ἢ διακοπῆ, ἦν μεγάλη καὶ εὐρέη, οὐδ' αὐτὴ διακοπὴ γὰρ καὶ ἔδρη τωυτόν ἐστιν.

9. Of these modes of fracture, the following require trepanning: the contusion, whether the bone be laid bare or not; and the fissure, whether apparent or not. And if, when an indentation ( *hedra* ) by a weapon takes place in a bone it be attended with fracture and contusion, and even if contusion alone, without fracture, be combined with the indentation, it requires trepanning. A bone depressed from position rarely requires trepanning; and those which are most pressed and broken require trepanning the least; neither does an indentation ( *hedra* ) without fracture and contusion require trepanning; nor does a notch, provided it is large and wide; for a notch and a *hedra* are the same.

10. Πρῶτον δὲ χρὴ τὸν τρωματὴν σποπεῖσθαι, ὅπη ἔχει τὸ τρῶμα τῆς κεφαλῆς, εἴτ' ἐν τοῖσιν ἰσχυροτέροισιν, εἴτ' ἐν τοῖσιν ἀσθενεστέροισιν, καὶ τὰς τρίχας καταμανθάνειν τὰς περὶ τὸ ἔλκος, εἰ διακεκόφεται ὑπὸ τοῦ βέλεος, καὶ εἰ ἔσω ἦσαν ἐς τὸ τρῶμα καὶ ἦν τοῦτο ἦ, φάναι κινδυνεύειν τὸ ὀστέον ψιλὸν εἶναι τῆς σαρκὸς, καὶ ἔχειν τι σίνος τὸ ὀστέον ὑπὸ τοῦ βέλεος. Ταῦτα μὲν οὖν χρὴ ἀπόπροσθεν σκεψάμενον λέξαι, μὴ ἀπτόμενον τοῦ ἀνθρώπου ἀπτόμενον δ' ἤδη πειρᾶσθαι εἰδέναι σάφα, εἴ ἐστι ψιλὸν τὸ ὀστέον τῆς σαρκὸς, ἢ οὐ καὶ ἦν μὲν καταφανὲς ἦ τοῖσιν ὀφθαλμοῖσιν τὸ ὀστέον ψιλόν εἰ δὲ μὴ, τῇ μήλῃ σκέπτεσθαι. Καὶ ἦν μὲν εὐρης

ψιλὸν ἐὸν τὸ ὀστέον τῆς σαρκὸς, καὶ μὴ ὑγιὲς ἀπὸ τοῦ τρώματος, χρὴ τοῦ ἐν τῷ

ὄστέω ἐόντος τὴν διάγνωσιν πρῶτα ποιέεσθαι, ὀρέοντα ὅσον τέ ἐστὶ τὸ κακὸν, καὶ τίνας δεῖται ἔργου. Χρὴ δὲ καὶ ἐρωτᾶν τὸν τετρωμένον, ὅπως ἔπαθε καὶ τίνα τρόπον. Ἦν δὲ μὴ καταφανὲς ἦ τὸ ὀστέον, εἰ ἔχει τι κακὸν ἢ μὴ ἔχει, πολλῶ ἔτι χρὴ μᾶλλον τὴν ἐρώτησιν ποιέεσθαι, ψιλοῦ ἐόντος τοῦ ὀστέου, τὸ τρῶμα ὅπως ἐγένετο, καὶ ὄντινα τρόπον τὰς γὰρ φλάσιαι καὶ τὰς ῥωγμὰς τὰς οὐ φαινομένας ἐν τῷ ὄστέω, ἐνεούσας δὲ, ἐκ τῆς ὑποκρίσιος τοῦ τετρωμένου πρῶτον διαγινώσκειν πειρηθῆσθαι, εἴ τι πέπονθε τουτέων τὸ ὀστέον ἢ οὐ πέπονθεν, ἔπειτα δὲ καὶ λόγῳ καὶ ἔργῳ ἐξελέγχειν πλὴν μὴλωσις. Μήλωσις γὰρ οὐκ ἐξελέγχει, εἰ πέπονθέ τι τουτέων τῶν κακῶν τὸ ὀστέον, καὶ εἴ τι ἔχει ἐν ἐωυτέω, ἢ οὐ πέπονθεν ἀλλ' ἔδρην τε τοῦ βέλεος ἐξελέγχει μὴλωσις, καὶ ἦν ἐμφλασθῆ τὸ ὀστέον ἔσω ἐκ τῆς φύσιος τῆς ἐωυτέου, καὶ ἦν ἰσχυρῶς ῥαγῆ τὸ ὀστέον, ἄπερ καὶ τοῖσιν ὀφθαλμοῖσι καταφανέα ἐστὶν ὀρῶντα γινώσκειν.

10. In the first place, one must examine the wounded person, in what part of the head the wound is situated, whether in the stronger or weaker parts; and ascertain respecting the hairs about the wound, whether they have been cut off by the instrument, and have gone into the wound; and if so, one should declare that the bone runs the risk of being denuded of flesh, and of having sustained some injury from the weapon. These things one should say from a distant inspection, and before laying a hand on the man; but on a close examination one should endeavor to ascertain clearly whether the bone be denuded of flesh or not; and if the denuded bone be visible to the eyes, this will be enough; but otherwise an examination must be made with the sound. And if you find the bone denuded of the flesh, and not safe from the wound, you must first ascertain the state of the bone, and the extent of the mischief, and of what assistance it stands in need. One should also inquire of the wounded person how and in what way he sustained the injury; and if it be not apparent whether the bone has sustained an injury or not, it will be still more necessary, provided the bone be denuded, to make inquiry how the wound occurred, and in what manner; for when contusions and fractures exist in the bone, but are not apparent, we must ascertain, in the first place from the patient's answers, whether or not the bone has sustained any such injuries, and then find out the nature of the case by word and deed, with the exception of sounding. For sounding does not discover to us whether the bone has sustained any of these injuries or not; but sounding discovers to us an indentation inflicted by a weapon, and whether a bone be depressed from its natural position, and whether the bone be strongly fractured; all which may also be ascertained visibly with the eyes.

11. Ῥήγνυται δὲ τὸ ὀστέον τὰς τε ἀφανέας ῥωγμὰς καὶ τὰς φανεράς, καὶ φλᾶται

τάς ἀφανέας φλάσιας, καὶ ἐσφλᾶται ἔσω ἐκ τῆς φύσιος τῆς ἐωυτέου, μάλιστα ὅταν ἕτερος ὑφ' ἑτέρου τιτρωσκόμενος

ἐπίτηδες τρωθῆ, ἢ ὀκόταν, ἐπίτηδες τρῶσαι βουλόμενος ἢ ἀέκων, ἐξ ὑψηλοτέρου γίγνηται ἢ βολῆ ἢ ἢ πληγῆ, ὀκοτέρη ἂν ἦ μᾶλλον, ἢ ὅταν ἐξ ἰσοπέδου τοῦ χωρίου, καὶ ἦν περικρατέη τῆ χειρὶ τὸ βέλος, ἦν τε βάλλη, ἦν τε τύπτῃ, καὶ ἰσχυρότερος ἐὼν ἀσθενέστερον τιτρώσκη. Ὅσοι δὲ πίπτοντες τιτρώσκονται πρὸς τε τὸ ὀστέον καὶ αὐτὸ τὸ ὀστέον, ὁ ἀπὸ ὑψηλοτάτου πίπτων καὶ ἐπὶ σκληρότατον καὶ ἀμβλύτατον, τουτέω κίνδυνος τὸ

ὀστέον ῥαγῆναι καὶ φλασθῆναι, καὶ ἔσω ἐσφλασθῆναι ἐκ τῆς φύσιος τῆς ἐωυτέου τῷ δ' ἐξ ἰσοπέδου μᾶλλον χωρίου πίπτοντι καὶ ἐπὶ μαλθακώτερον, ἦσσαν ταῦτα πάσχει τὸ ὀστέον, ἢ οὐκ ἂν πάθοι. Ὅσα δὲ ἐσπίπτοντα ἐς τὴν κεφαλὴν βέλεα τιτρώσκει πρὸς τὸ ὀστέον καὶ αὐτὸ τὸ ὀστέον, τὸ ἀπὸ ὑψηλοτάτου ἐμπεσὸν καὶ ἦκιστα ἐξ ἰσοπέδου, καὶ σκληρότατόν τε ἅμα καὶ ἀμβλύτατον καὶ βαρύτατον, καὶ ἦκιστα κοῦφον καὶ ἦκιστα ὀξὺ καὶ μαλθακὸν, τοῦτο ἂν ῥήξειε τὸ ὀστέον καὶ φλάσειεν. Καὶ μάλιστα γε ταῦτα πάσχειν τὸ ὀστέον κίνδυνος, ὅταν ταῦτά τε γίνηται, καὶ ἐς ἰθὺ τρωθῆ, καὶ κατ' ἀντίον γένηται τὸ ὀστέον τοῦ βέλεος, ἦν τε πληγῆ ἐκ χειρὸς, ἦν τε βληθῆ, ἦν τε τι ἐμπέση αὐτέω, καὶ ἦν αὐτὸς καταπεσὼν τρωθῆ, καὶ ὀκωσοῦν τρωθεὶς κατ' ἀντίον γενομένου τοῦ ὀστέου τῷ βέλει. Τὰ δ' ἐς πλάγιον τοῦ ὀστέου παρασύραντα βέλεα ἦσσαν καὶ ῥήγνυσι τὸ ὀστέον, καὶ φλᾶ, καὶ ἔσω ἐσφλᾶ, κῆν ψιλωθῆ τὸ ὀστέον τῆς σαρκὸς ἔνια γὰρ τῶν τρωμάτων τῶν οὕτω τρωθέντων οὐδὲ ψιλοῦται τὸ ὀστέον τῆς σαρκὸς. Τῶν δὲ βελέων ῥήγνυσι μάλιστα τὸ ὀστέον τὰς τε φανεράς ῥωγμὰς καὶ

τάς ἀφανέας, καὶ φλᾶται καὶ ἐσφλᾶ ἔσω ἐκ τῆς φύσιος τῆς ἐωυτέου τὸ ὀστέον, τὰ στρογγύλα τε καὶ περιφερέα, καὶ ἀρτίστομα, ἀμβλέα τε ἔοντα καὶ βαρέα καὶ σκληρά καὶ τὴν σάρκα ταῦτα φλᾶται, καὶ πέπειρον ποιέει, καὶ κόπτει καὶ τὰ ἔλκεα γίνεται ὑπὸ τῶν τοιουτέων βελέων, ἔς τε πλάγιον καὶ ἐν κύκλῳ, ὑπόκοιλα, καὶ διάπυά τε μᾶλλον γίγνεται, καὶ ὑγρά ἐστί, καὶ ἐπὶ πλέονα χρόνον καθαίρεται ἀνάγκη γὰρ τὰς σάρκας τὰς φλασθείσας καὶ κοπέισας πῦον γενομένας ἐκτακῆναι. Τὰ δὲ βέλεα τὰ προμήκεα, ἐπιπολὺ λεπτὰ ἔοντα καὶ ὀξέα καὶ κοῦφα, τὴν τε σάρκα διατάμνει μᾶλλον ἢ φλᾶ, καὶ τὸ ὀστέον ὡσαύτως καὶ ἔδρην μὲν ἐμποιέει αὐτὸ καὶ διακόψαν διακοπὴ γὰρ καὶ ἔδρη τωυτόν ἐστί, φλᾶ δὲ οὐ μάλα τὸ ὀστέον τὰ τοιαῦτα βέλεα, οὐδὲ ῥήγνυσιν, οὐδ' ἐκ τῆς φύσιος ἔσω ἐσφλᾶ. Ἄλλὰ χρὴ πρὸς τῆ ὄψει τῆ ἐωυτέου, ὅ τι ἂν σοι φαίνεται ἐν τῷ ὀστέω, καὶ ἐρώτησιν ποιέεσθαι πάντων τουτέων τοῦ γὰρ μᾶλλον τε καὶ ἦσσαν τρωθέντος ταῦτ' ἐστί σημηϊά, καὶ ἦν ὁ τρωθεὶς καρωθῆ, καὶ σκότος περιχυθῆ, καὶ δῖνος ἔχη,

καὶ πέση.

11. And a bone sustains fractures, either so fine as to escape the sight, or such as are apparent, and contusions which are not apparent, and depression from its natural position, especially when one person is intentionally wounded by another, or when, whether intentionally or not, a blow or stroke is received from an elevated place, and if the instrument in the hand, whether used in throwing or striking, be of a powerful nature, and if a stronger person wound a weaker. Of those who are wounded in the parts about the bone, or in the bone itself, by a fall, he who falls from a very high place upon a very hard and blunt object is in most danger of sustaining a fracture and contusion of the bone, and of having it depressed from its natural position; whereas he that falls upon more level ground, and upon a softer object, is likely to suffer less injury in the bone, or it may not be injured at all. Of those instruments which, falling upon the head, wound the parts about the bone, or the bone itself, that which falls from a very high place, and the least on a level with the person struck, and which is at the same time very hard, very blunt, and very heavy, and which is the least light, sharp, and soft, such an instrument would occasion a fracture and contusion of the bone. And there is most danger that the bone may sustain these injuries, under such circumstances, when the wound is direct and perpendicular to the bone, whether struck from the hand or from a throw, or when any object falls upon the person, or when he is wounded by falling, or in whatever way the bone sustains a direct wound from this instrument. Those weapons which graze the bone obliquely are less apt to fracture, contuse, or depress the bone, even when the bone is denuded of flesh; for in some of those wounds thus inflicted the bone is not laid bare of the flesh. Those instruments more especially produce fractures in the bone, whether apparent or not, and contusions, and inward depression of the bone, which are rounded, globular, smooth on all sides, blunt, heavy, and hard; and such weapons bruise, compress, and pound the flesh; and the wounds inflicted by such instruments, whether obliquely or circularly, are round, and are more disposed to suppurate, and to have a discharge, and take longer time to become clean; for the flesh which has been bruised and pounded must necessarily suppurate and slough away. But weapons of an oblong form, being, for the most part, slender, sharp, and light, penetrate the flesh rather than bruise it, and the bone in like manner; and such an instrument may occasion a *hedra* and a cut (for a *hedra* and a cut are same thing); but weapons of this description do not produce contusions, nor fractures, nor depressions inwardly. And in addition the appearances in the bone, which you call detect by the sight, you should make inquiry as to all these particulars (for they are symptoms of a

greater or less injury), whether the wounded person was stunned, and whether darkness was diffused over his eyes, and whether he had vertigo, and fell to the ground.

12. Όταν δὲ τύχη ψιλωθὲν τὸ ὀστέον τῆς σαρκὸς ὑπὸ τοῦ βέλους, καὶ τύχη κατ' αὐτὰς τὰς ραφὰς γενόμενον τὸ ἔλκος, χαλεπὸν γίνεταί καὶ τὴν ἔδρην τοῦ βέλους φράσασθαι τὴν ἐν τῷ ἄλλῳ ὀστέῳ φανερὴν γιγνομένην, εἴτ' ἔνεστιν ἐν τῷ ὀστέῳ, εἴτε μὴ ἔνεστιν, καὶ ἦν τύχη γενομένη ἢ ἔδρη ἐν αὐτέῃσι τῆσι ραφῆσιν. Ξυγκλέπτεται γὰρ αὐτὴ ἢ ραφὴ τρηχυτέρῃ ἐοῦσα τοῦ

ἄλλου ὀστέου, καὶ οὐ διάδηλον ὅ τι τε αὐτοῦ ραφὴ εἶναι, καὶ ὅ τι τοῦ βέλους ἔδρη, ἦν μὴ κάρτα μεγάλη γένηται ἢ ἔδρη. Προσγίνεται δὲ καὶ ῥῆξις τῇ ἔδρῃ ὡς ἐπὶ τὸ πουλύ, τῇ ἐν τῆσι ραφῆσι γιγνομένη, καὶ γίνεται καὶ αὐτὴ ἢ ῥῆξις χαλεπωτέρῃ φράσασθαι, ἐρρωγότεος τοῦ ὀστέου, διὰ τοῦτο, ὅτι κατ' αὐτὴν τὴν ραφὴν ἢ ῥῆξις γίνεται ἢ ρηγνύεται, ὡς ἐπὶ τὸ πουλύ. Ἐτοιμον γὰρ ταύτῃ ρηγνυσθαι τὸ ὀστέον καὶ διαχαλᾶν, διὰ τὴν ἀσθενείην

τῆς φύσιος τοῦ ὀστέου ταύτῃ καὶ διὰ τὴν ἀραιότητα, καὶ δὴ ἄτε τῆς ραφῆς ἐτοιμῆς ἐούσης ρηγνυσθαι καὶ διαχαλᾶν τὰ δ' ἄλλα ὀστέα, τὰ περιέχοντα τὴν ραφὴν, μένει ἀρραγέα, ὅτι ἰσχυρότερα ἐστὶ τῆς ραφῆς. Ἡ δὲ ῥῆξις ἢ κατὰ τὴν ραφὴν γιγνομένη καὶ διαχάλασις ἐστὶ τῆς ραφῆς, καὶ φράσασθαι οὐκ εὐμαρῆς,

οὔτε ἦν ὑπὸ ἔδρης τοῦ βέλους γενομένης ἐν τῇ ραφῇ ραγῆ καὶ διαχαλάσει, οὔτε ἦν, φλασθέντος τοῦ ὀστέου κατὰ τὰς ραφὰς, ραγῆ καὶ διαχαλάσει ἀλλ' ἔτι χαλεπότερον φράσασθαι τὴν ἀπὸ τῆς φλάσιος ῥωγμῆν. Ξυγκλέπτουσι γὰρ τὴν γνώμην καὶ τὴν ὄψιν τοῦ ἰητροῦ αὐταὶ αἱ ραφαὶ ῥωγμοειδέες φαινόμεναι, καὶ τρηχυτέραι ἐοῦσαι τοῦ ἄλλου ὀστέου, ὅτι μὴ ἰσχυρῶς διεκόπη, καὶ διεχάλασεν διακοπὴ δὲ καὶ ἔδρη τούτων ἐστὶν. Ἀλλὰ χρῆ, εἰ κατὰ τὰς ραφὰς τὸ τρωμα γένοιτο καὶ πρὸς γε τὸ ὀστέον καὶ ἐς τὸ ὀστέον στηρίζει τὸ βέλος, προσέχοντα τὸν νόον, ἀνευρίσκειν ὅ τι πέπονθε τὸ ὀστέον. Ἀπὸ γὰρ ἴσων τε βελέων τὸ μέγεθος καὶ ὁμοίων, καὶ πολλὸν ἔλασσόνων, καὶ ὁμοίως τρωθεὶς καὶ πολὺ ἦσσαν, πολλῶ μείζον ἐκτίησατο τὸ κακὸν ἐν τῷ ὀστέῳ ὃ ἐς τὰς ραφὰς δεξάμενος τὸ βέλος, ἢ ὃ μὴ ἐς τὰς ραφὰς δεξάμενος. Καὶ τουτέων τὰ πολλὰ πρίεσθαι δεῖ ἀλλ' οὐ χρῆ αὐτὰς τὰς ραφὰς πρίειν, ἀλλ' ἀποχωρήσαντα ἐν τῷ πλησίον ὀστέῳ τὴν πρίσιν ποιέεσθαι, ἦν πρίης.

12. When the bone happens to be denuded of flesh by the weapon, and when the wound occurs upon the sutures, it is difficult to distinguish the indentation ( *hedra* ) of a weapon which is clearly recognized in other parts of the bone,

whether it exist or not, and especially if the *hedra* be seated in the sutures themselves. For the suture being rougher than the rest of the bone occasions confusion, and it is not clear which is the suture, and which the mark inflicted by the instrument, unless the latter ( *hedra* ) be large. Fracture also for the most part is combined with the indentation when it occurs in the sutures; and this fracture is more difficult to discern when the bone is broken, on this account, that if there be a fracture, it is situated for the most part in the suture. For the bone is liable to be broken and slackened there, owing to the natural weakness of the bone there, and to its porosity, and from the suture being readily ruptured and slackened: but the other bones which surround the suture remain unbroken, because they are stronger than the suture. For the fracture which occurs at the suture is also a slackening of the suture, and it is not easy to detect whether the bone be broken and slackened by the indentation of a weapon occurring in the suture, or from a contusion of the bone at the sutures; but it is still more difficult to detect a fracture connected with contusion. For the sutures, having the appearance of fissures, elude the discernment and sight of the physician, as being rougher than the rest of the bone, unless the bone be strongly cut and slackened (for a cut and a *hedra* are the same thing). But it is necessary, if the wound has occurred at the sutures, and the weapon has impinged on the bone or the parts about it, to pay attention and find out what injury the bone has sustained. For a person wounded to the same, or a much smaller, extent, and by weapons of the same size and quality, and even much less, will sustain a much greater injury, provided he has received the blow at the sutures, than if it was elsewhere. And many of these require trepanning, but you must not apply the trepan to the sutures themselves, but on the adjoining bone.

13. Περὶ δὲ ἰήσιος τρωσίων τῶν ἐν τῇ κεφαλῇ, καὶ ὡς χρὴ ἐξελέγχειν τὰς πάθας τὰς ἐν τῷ ὀστέῳ γινομένας τὰς μὴ φανεράς, ὧδέ μοι δοκεῖ. Ἐλκος ἐν τῇ κεφαλῇ οὐ χρὴ τέγγειν οὐδενί, οὐδὲ οἴνω, ἀλλ' ὡς ἥκιστα οὐδὲ καταπλάσσειν, οὐδὲ μοτῶ τὴν

ἴησιν ποιέεσθαι, οὐδ' ἐπιδεῖν χρὴ ἔλκος ἐν κεφαλῇ, ἢν μὴ ἐν τῷ μετώπῳ ἢ τὸ ἔλκος, ἐν τῷ ψιλῷ τῶν τριχῶν, ἢ περὶ τὴν ὄφρυν καὶ τὸν ὀφθαλμόν. Ἐνταῦθα δὲ γινόμενα τὰ ἔλκεα καταπλάσιος καὶ ἐπιδέσιος μᾶλλον κέχρηται ἢ κου ἄλλοθι τῆς κεφαλῆς τῆς ἄλλης. Περιέχει γὰρ ἡ κεφαλὴ ἢ ἄλλη τὸ μέτωπον πᾶν ἐκ δὲ τῶν περιεχόντων τὰ ἔλκεα, καὶ ἐν ὅτῳ ἂν ἢ τὰ ἔλκεα, φλεγμαίνει καὶ ἐπανοιδίσκεται δι' αἵματος ἐπιρροήν. Χρὴ δὲ οὐδὲ τὰ ἐν τῷ μετώπῳ διὰ παντὸς τοῦ χρόνου καταπλάσσειν καὶ ἐπιδεῖν, ἀλλ' ἐπειδὴν παύσεται φλεγμαίνοντα, καὶ τὸ οἴδημα καταστῆ, παύσασθαι καταπλάσσοντα καὶ ἐπιδέοντα. Ἐν δὲ τῇ ἄλλῃ κεφαλῇ

ἔλκος οὔτε μοτοῦν χρή, οὔτε καταπλάσσειν, οὔτ' ἐπιδεῖν, εἰ μὴ καὶ τομῆς δέοιτο. Τάμνειν δὲ χρή τῶν ἐλκέων τῶν ἐν τῇ κεφαλῇ γινομένων,

καὶ ἐν τῷ μετώπῳ, ὅκου ἂν τὸ μὲν ὀστέον ψιλὸν ἢ τῆς σαρκὸς, καὶ δοκέη τι σίνος ἔχειν ὑπὸ τοῦ βέλεος, τὰ ἔλκεα μὴ ἰκανὰ τὸ μέγεθος τοῦ μήκεος καὶ τῆς εὐρύτητος ἐς τὴν σκέψιν τοῦ ὀστέου, εἴ τι πέπονθεν ὑπὸ τοῦ βέλεος κακὸν, καὶ ὀκοῖόν τι πέπονθε, καὶ ὅσον μὲν ἢ σὰρξ πέφλασται, καὶ τὸ ὀστέον ἔχει τὸ σίνος, καὶ δ' αὖ εἰ ἀσινές τε ἐστὶ τὸ ὀστέον ὑπὸ τοῦ βέλεος, καὶ μηδὲν πέπονθε κακὸν, καὶ ἐς τὴν ἴησιν, ὀκοίης τινὸς δεῖται τό τε ἔλκος, ἢ τε σὰρξ, καὶ ἡ πάθη τοῦ ὀστέου. Τὰ δὴ τοιαῦτα τῶν ἐλκέων τομῆς δεῖται. Καὶ ἂν μὲν τὸ ὀστέον ψιλωθῇ τῆς σαρκὸς, ὑπόκοιλα δὲ ἢ ἐς πλάγιον ἐπιπολῶ, ἐπανατάμνειν τὸ κοῖλον, ὅκου μὴ

εὐχερὲς τῷ φαρμάκῳ ἐφικέσθαι, ὀκοίῳ ἂν τινι χρή καὶ τὰ κυκλοτερέα τῶν ἐλκέων καὶ ὑπόκοιλα ἐπὶ πουλὺ καὶ τὰ τοιαῦτα, ἐπανατάμνων τὸν κύκλον διχῆ κατὰ μήκος, ὡς πέφυκεν ὤνθρωπος, μακρὸν ποιέειν τὸ ἔλκος. Τάμνοντι δὲ κεφαλὴν, τὰ μὲν ἄλλα τῆς κεφαλῆς ἀσφαλείην ἔχει ταμνόμενα ὁ δὲ κρόταφος, καὶ ἄνωθεν ἔτι τοῦ κροτάφου, κατὰ τὴν φλέβα τὴν διὰ τοῦ κροτάφου φερομένην, τοῦτο δὲ τὸ χωρίον μὴ τάμνειν. Σπασμὸς γὰρ ἐπιλαμβάνει τὸν τμηθέντα καὶ ἦν μὲν ἐπ' ἀριστερὰ τμηθῇ κροτάφου, τὰ ἐπὶ δεξιὰ ὁ σπασμὸς ἐπιλαμβάνει ἦν δ' ἐπὶ τὰ δεξιὰ τμηθῇ κροτάφου, τὰ ἐπ' ἀριστερὰ ὁ σπασμὸς ἐπιλαμβάνει.

13. And with regard to the cure of wounds in the head, and the mode of detecting injuries in the bone which are not apparent, the following is my opinion:- In a wound of the head, you must not apply anything liquid, not even wine, but as little as possible, nor a cataplasm, nor conduct the treatment with tents, nor apply a bandage to an ulcer on the head, unless it be situated on the forehead, in the part which is bare of hairs, or about the eyebrow and eye, for wounds occurring there require cataplasms and bandages more than upon any other part of the head. For the rest of the head surrounds the whole forehead, and the wounds wherever situated become inflamed and swelled, owing to an influx of blood from surrounding parts. And neither must you apply cataplasms and bandages to the forehead at all times; but when the inflammation is stopped and the swelling has subsided, you must give up the cataplasms and bandages. A wound in any other part of the head must not be treated with tents, bandages, or cataplasms, unless it also requires incision. You must perform incision on wounds situated on the head and forehead, whenever the bone is denuded of flesh, and appears to have sustained some injury from the blow, but the wound has not sufficient length and breadth for the inspection of the bone, so that it may be seen whether it has received any mischief from the blow, and of what nature the injury is, and

to what extent the flesh has been contused, and whether the bone has sustained any injury, or whether it be uninjured by the blow, and has suffered no mischief; and with regard to the treatment, what the wound, and the flesh, and the injury of the bone stand in need of. Ulcers of this description stand in need of incision; and, if the bone be denuded of the flesh, and if it be hollow, and extend far obliquely, we cut up the cavity wherever the medicine cannot penetrate readily, whatever medicine it may be; and wounds which are more inclined to be circular and hollow, and for the most part others of the like shape, are cut up by making double incision in the circle lengthways, according to the figure of the man, so as to make the wound of a long form. Incisions may be practiced with impunity on other parts of the head, with the exception of the temple and the parts above it, where there is a vein that runs across the temple, in which region an incision is not to be made. For convulsions seize on a person who has been thus treated; and if the incision be on the left temple, the convulsions seize on the right side; and if the incision be on the right side, the convulsions take place on the left side.

14. Ὄταν οὖν τάμνης ἔλκος ἐν κεφαλῇ ὀστέων εἵνεκα τῆς σαρκὸς ἐπιλωμένων, θέλων εἰδέναι εἴ τι ἔχει τὸ ὀστέον κακὸν ὑπὸ τοῦ βέλεος, ἢ καὶ οὐκ ἔχει, τάμνειν χρὴ τὸ μέγεθος τὴν ὠτειλὴν, ὅση ἂν δοκῆ ἀποchrῆναι. Τάμνοντα δὲ χρὴ ἀναστεῖλαι τὴν σάρκα ἀπὸ τοῦ ὀστέου, ἢ πρὸς τῆς μήνιγγι καὶ πρὸς τῷ ὀστέῳ

πέφυκεν ἔπειτα διαμοτῶσαι τὸ ἔλκος πᾶν μοτῶ, ὅστις εὐρύτατον τὸ ἔλκος παρέξει ἐς τὴν ὑστεραίην ζὺν ἐλαχίστῳ πόνῳ μοτῶσαντα δὲ καταπλάσματι χρῆσθαι, ὅσον ἂν χρόνον καὶ τῷ μοτῶ, μάζην ἐκ λεπτῶν ἀλφίτων ἐν ὄξει διαμάσσειν, ἢ ἔψειν καὶ γλίσχρην ποιέειν ὡς μάλιστα. Τῆ δ' ὑστεραίῃ ἡμέρῃ, ἐπειδὴν ἐξέλης τὸν μοτὸν, κατιδὼν τὸ ὀστέον ὅ τι πέπονθεν, ἐὰν μὴ σοι καταφανῆς ἢ ἡ τρῶσις, ὁκοίη τίς ἐστὶν ἐν τῷ ὀστέῳ, μηδὲ διαγινώσκῃς εἴ τί τι ἔχει τὸ ὀστέον κακὸν ἐν ἐωυτέῳ, ἢ καὶ οὐκ ἔχει, τὸ δὲ βέλος δοκῆ ἀφικέσθαι ἐς τὸ ὀστέον καὶ σίνασθαι, ἐπιζύειν χρὴ τῷ ζυστῆρι κατὰ βάθος καὶ κατὰ μῆκος τοῦ ἀνθρώπου ὡς πέφυκε, καὶ αὐθις ἐπικάρσιον τὸ ὀστέον, τῶν ῥηξίων εἵνεκα τῶν ἀφανέων ἰδεῖν, καὶ τῆς φλάσιος εἵνεκα τῆς ἀφανέος, τῆς οὐκ ἐσφλωμένης ἔσω ἐκ τῆς φύσιος τῆς κεφαλῆς τοῦ ἄλλου ὀστέου. Ἐξελέγχει γὰρ ἡ ζύσις μάλα τὸ κακὸν, ἢν μὴ καὶ ἄλλως καταφανέες ἔωσιν αὐταὶ αἱ πάθαι ἐοῦσαι ἐν

τῷ ὀστέῳ. Καὶ ἢν ἔδρην ἴδῃς ἐν τῷ ὀστέῳ τοῦ βέλεος, ἐπιζύειν χρὴ αὐτὴν τε τὴν ἔδρην, καὶ τὰ περιέχοντα αὐτὴν ὀστέα, μὴ πολλάκις τῆ ἔδρῃ προσγένηται ῥῆξις καὶ φλάσις, ἢ μούνη φλάσις, ἔπειτα λανθάνη οὐ καταφανέα ἔοντα. Ἐπειδὴν δὲ ζύσης τὸ ὀστέον τῷ ζυστῆρι, ἢν μὲν δοκῆ ἐς πρίσιν ἀφίκειν ἢ τρῶσις τοῦ ὀστέου, πρίειν χρὴ, καὶ οὐ δεῖ τὰς τρεῖς ἡμέρας μὴ ὑπερβάλλειν ἀπρίωτον, ἀλλ'



έν ταύτησι πρίειν, ἄλλως τε καὶ τῆς θερμῆς ὥρης, ἦν ἐξ ἀρχῆς λαμβάνης τὸ ἴημα. Ἦν δὲ ὑποπτέυσης μὲν τὸ ὀστέον ἐρρωγένοι, ἢ πεφλάσθαι, ἢ ἀμφοτέρα ταῦτα, τεκμαιρόμενος, ὅτι ἰσχυρῶς τέτρωται, ἐκ τῶν λόγων τοῦ τρωματίου, καὶ ὅτι ὑπὸ ἰσχυροτέρου τοῦ τρώσαντος, ἦν ἕτερος ὑφ' ἑτέρου τρωθῆ, καὶ τὸ βέλος ὅτω ἐτρώθη, ὅτι τῶν κακούργων βελέων ἦν, ἔπειτα τὸν ἄνθρωπον ὅτι δῖνός τε ἔλαβε καὶ σκότος, καὶ ἐκαρώθη καὶ κατέπεσεν τούτων δὲ οὕτω γιγνομένων, ἦν μὴ διαγινώσκης εἰ ἐρρωγε τὸ ὀστέον, ἢ πέφλασται, ἢ καὶ ἀμφοτέρα ταῦτα, μήτε ὄλως ὀρᾶν δύνη, δεῖ δὴ,

ἐπὶ τὸ ὀστέον τὸ τηκτὸν τὸ μελάντατον δεύσαντα, τῷ μέλανι φαρμάκῳ τῷ τηκομένῳ στεῖλαι τὸ ἔλκος, ὑποτείναντα ὀθόνιον, ἐλαίῳ τέγξαντα, εἶτα καταπλάσαντα τῇ μάζῃ ἐπιδῆσαι τῇ δ' ὑστεραίῃ, ἀπολύσαντα, ἐκκαθήραντα τὸ ἔλκος, ἐπιζῦσαι. Καὶ ἦν μὴ ἦ ὑγιές, ἀλλ' ἐρρωγή καὶ πεφλασμένον ἦ, τὸ μὲν ἄλλο ἔσται ὀστέον λευκὸν ἐπιζυόμενον ἢ δὲ ῥωγμῇ καὶ ἢ φλάσις, κατατακέντος τοῦ

φαρμάκου, δεξαμένη τὸ φάρμακον ἐς ἐωυτὴν μέλαν ἐὼν, ἔσται μέλαινα ἐν λευκῷ τῷ ὀστέῳ τῷ ἄλλῳ. Ἀλλὰ χρὴ αὖθις τὴν ῥωγμὴν ταύτην φανεῖσαν μέλαιναν ἐπιζέειν κατὰ βάθος καὶ ἦν μὲν ἐπιζύων τὴν ῥωγμὴν ἐξέλης καὶ ἀφανέα ποιήσης, φλάσις μὲν γεγένηται τοῦ ὀστέου ἢ μᾶλλον ἢ ἥσσον, ἥτις περιέρρηξε καὶ τὴν ῥωγμὴν τὴν ἀφανισθεῖσαν ὑπὸ τοῦ ζυστιῆρος ἥσσον δὲ φοβερὸν καὶ ἥσσον ἂν πρῆγμα ἀπ' αὐτέης γένοιτο ἀφανισθείσης τῆς ῥωγμῆς. Ἦν δὲ κατὰ βάθος ἦ καὶ μὴ ἐθέλη ἐξιέναι ἐπιζυομένη, ἀφίκει ἐς πρίσιν ἢ τοιαύτη ζυμφορῇ. Ἀλλὰ χρὴ πρίσαντα τὰ λοιπὰ ἰητρεύειν τὸ ἔλκος.

14. When, then, you lay open a wound in the head on account of the bones having been denuded of the flesh, as wishing to ascertain whether or not the bone has received an injury from the blow, you must make an incision proportionate to the size of the wound, and as much as shall be judged necessary. And in making the incision you must separate the flesh from the bone where it is united to the membrane (*pericranium?*) and to the bone, and then fill the whole wound with a tent, which will expand the wound very wide next day with as little pain as possible; and along with the tents apply a cataplasm, consisting of a mass (*maza*) of fine flour pounded in vinegar, or boiled so as to render it as glutinous as possible. On the next day, when you remove the tent, having examined the bone to see what injury it has sustained, if the wound in the bone be not right seen by you, nor can you discover what mischief the bone itself has sustained, but the instrument seems to have penetrated to the bone so as to have injured it, you must scrape the bone with a raspatory to a depth and length proportionate to the

suture of the patient, and again in a transverse direction, for the sake of the fractures which are not seen, and of the contusions which are not discovered, as not being accompanied with depression of the bone from its natural position. For the scraping discovers the mischief, if the injuries in the bone be not otherwise manifest. And if you perceive an indentation ( *hedra* ) left in the bone by the blow, you must scrape the dint itself and the surrounding bones, lest, as often happens, there should be a fracture and contusion, or a contusion alone, combined with the dint, and escape observation. And when you scrape the bone with the raspatory, and it appears that the wound in the bone requires the operation, you must not postpone it for three days, but do it during this period, more especially if the weather be hot, and you have had the management of the treatment from commencement. If you suspect that the bone is broken or contused, or has sustained both these injuries, having formed your judgement from the severity of the wound, and from the information of the patient, as that the person who inflicted the wound, provided it was done by another person, was remarkably strong, and that the weapon by which he was wounded was of a dangerous description, and then that the man had been seized with vertigo, dimness of vision, and stupor, and fell to the ground,- under these circumstances, if you cannot discover whether the bone be broken, contused, or both the one and the other, nor can see the truth of the matter, you must dissolve the jet-black ointment, and fill the wound with it when this dissolved, and apply a linen rag smeared with oil, and then a cataplasm of the maza with a bandage; and on the next day, having cleaned out the wound, scrape the bone with the raspatory. And if the bone is not sound, but fractured and contused, the rest of it which is scraped will be white; but the fracture and contusion, having imbibed the preparation, will appear black, while the rest of the bone is white. And you must again scrape more deeply the fracture where it appears black; and, if you thus remove the fissure, and cause it to disappear, you may conclude that there has been a contusion of the bone to a greater or less extent, which has occasioned the fracture that has disappeared under the raspatory; but it is less dangerous, and a matter of less consequence, when the fissure has been effaced. But if the fracture extend deep, and do not seem likely to disappear when scraped, such an accident requires trepanning. But having performed this operation, you must apply the other treatment to the wound.

15. Φυλάσσεσθαι δὲ χρῆ, ὅπως μὴ τι κακὸν ἀπολαύσῃ τὸ ὀστέον ἀπὸ τῆς σαρκὸς, ἣν κακῶς ἰητρεύηται. Ὅστεῳ γὰρ καὶ πεπρισμένῳ, καὶ ἄλλως ἐπιλωμένῳ, ὑγιεῖ δὲ ἔόντι, καὶ ἔχοντί τι σίνος ὑπὸ τοῦ βέλεος, δοκέοντι δὲ ὑγιεῖ εἶναι, κίνδυνός ἐστι μᾶλλον ὑπόπυον γενέσθαι ἢν καὶ ἄλλως μὴ μέλλῃ, ἣν καὶ ἡ σὰρξ ἢ

περιέχουσα τὸ ὀστέον κακῶς θεραπεύηται, καὶ φλεγμαίνηται, καὶ περισφίγγηται πυρετῶδες γὰρ γίνεταί, καὶ πολλοῦ φλογμοῦ πλέον. Καὶ δὴ τὸ ὀστέον ἐκ τῶν περιεχουσῶν σαρκέων ἐς ἑωυτὸ θέρμην τε καὶ φλογμὸν καὶ ἄραδον ἐμποιεῖ καὶ σφυγμὸν, καὶ ὅσα περ ἢ σὰρξ ἔχει κακὰ ἐν ἑωυτέῃ, καὶ ἐκ τούτων ὧδε ὑπόπυον γίνεται. Κακὸν δὲ καὶ ὑγρὴν τε εἶναι τὴν σάρκα ἐν τῷ ἔλκει καὶ μυδῶσαν, καὶ ἐπὶ πολλὸν χρόνον καθαίρεσθαι. Ἀλλὰ χρὴ διάπυον μὲν ποιῆσαι τὸ ἔλκος ὡς τάχιστα οὕτω γὰρ ἂν ἤκιστα φλεγμαῖνοι τὰ περιέχοντα

τὸ ἔλκος, καὶ τάχιστα καθαρὸν εἶη ἀνάγκη γὰρ ἔχει τὰς σάρκας τὰς κοπείσας καὶ φλασθείσας ὑπὸ τοῦ βέλεος, ὑποπύους γενομένας, ἐκτακῆναι. Ἐπειδὴν δὲ καθαρῆ, ξηρότερον χρὴ γίνεσθαι τὸ ἔλκος οὕτω γὰρ ἂν τάχιστα ὑγιὲς γένοιτο, ξηρῆς σαρκὸς βλαστουσίης καὶ μὴ ὑγρῆς, καὶ οὕτως οὐκ ἂν ὑπερσαρκήσειε τὸ ἔλκος. Ὁ δ' αὐτὸς λόγος καὶ ὑπὲρ τῆς μήνιγγος τῆς περὶ τὸν ἐγκέφαλον ἦν γὰρ αὐτίκα ἐκπρίσας τὸ ὀστέον καὶ ἀφελὼν ἀπὸ τῆς μήνιγγος ψιλώσης, αὐτὴν καθαρὴν χρὴ ποιῆσαι ὡς τάχιστα καὶ ξηρὴν, ὡς μὴ ἐπὶ πούλυν χρόνον ὑγρὴ εἴουσα μυδῆται τε καὶ ἐξαίρηται τούτων γὰρ οὕτω γιγνομένων, σαπῆναι αὐτὴν κίνδυνος.

15. You must be upon your guard lest the bone sustain any injury from the fleshy parts if not properly treated. When the bone has been sawed and otherwise denuded, whether it be actually sound, or only appears to be so, but has sustained some injury from the blow, there may be danger of its suppurating (although it would not otherwise have done so), if the flesh which surrounds the bone be ill cured, and become inflamed and strangled; for it gets into a febrile state, and becomes much inflamed. For the bone acquires heat and inflammation from the surrounding flesh, along with irritation and throbbing, and the other mischiefs which are in the flesh itself, and from these it gets into a state of suppuration. It is a bad thing for the flesh (*granulations?*) in an ulcer to be moist and mouldy, and to require a long time to become clean. But the wound should be made to suppurate as quickly as possible; for, thus the parts surrounding the wound would be the least disposed to inflammation, and would become the soonest clean; for the flesh which has been chopped and bruised by the blow, must necessarily suppurate and slough away. But when cleaned the wound must be dried, for thus the wound will most speedily become whole, when flesh devoid of humors grows up, and thus there will be no fungous flesh in the sore. The same thing applies to the membrane which surrounds the brain: for when, by sawing the bone, and removing it from the meninx, you lay the latter bare, you must make it clean and dry as quickly as possible, lest being in a moist state for a considerable time, it become soaked therewith and swelled; for

when these things occur, there is danger of its mortifying.

16. Ὅστέον δὲ, ὃ τι δεῖ ἀποσπῆναι ἀπὸ τοῦ ἄλλου ὀστέου, ἔλκεος ἐν κεφαλῇ γενομένου, ἔδρης τε εὐούσης τοῦ βέλεος ἐν τῷ ὀστέῳ, ἢ ἄλλως ἐπὶ πουλὺ ψιλωθέντος τοῦ ὀστέου, ἀφίσταται ἐπὶ πουλὺ ἔξαιμον γινόμενον. Ἀναξηραίνεται γὰρ τὸ αἷμα ἐκ τοῦ ὀστέου ὑπὸ τε τοῦ χρόνου καὶ ὑπὸ φαρμάκων τῶν πλείστων τάχιστα δ' ἂν ἀποσταίῃ, εἴ τις τὸ ἔλκος ὡς τάχιστα καθήρας ξηραῖνοι τὸ λοιπὸν τό τε ἔλκος καὶ τὸ ὀστέον, καὶ τὸ μεῖζον καὶ τὸ ἥσσον. Τὸ γὰρ τάχιστα ἀποξηρανθὲν καὶ ἀποστρακωθὲν τούτῳ μάλιστα ἀφίεται ἀπὸ τοῦ ἄλλου ὀστέου τοῦ ἐναίμου τε καὶ ζῶντος αὐτέου, ἔξαιμόν τε γινόμενον καὶ ξηρὸν τῷ ἐναίμῳ καὶ ζῶντι μάλα ἐφίσταται.

16. A piece of bone that must separate from the rest of the bone, in consequence of a wound in the head, either from the indentation ( *hedra* ) of a blow in the bone, or from the bone being otherwise denuded for a long time, separates mostly by becoming exsanguous. For the bone becomes dried up and loses its blood by time and a multiplicity of medicines which are used; and the separation will take place most quickly, if one having cleaned the wound as quickly as possible will next dry it, and the piece of bone, whether larger or smaller. For a piece of bone which is quickly dried and converted, as it were, into a shell, is most readily separated from the rest of the bone which retains its blood and vitality; for, the part having become exsanguous and dry, more readily drops off from that which retains its blood and is alive.

17. Ὅσα δὲ τῶν ὀστέων ἐσφλᾶται ἔσω ἐκ τῆς φύσιος τῆς ἐωυτῶν, καταρραγέντα ἢ καὶ διακοπέντα πάνυ εὐρέα, ἀκινδυνότερα τὰ τοιαῦτα γίνεται, ἐπὴν ἢ μῆνιγξ ὑγιῆς ἢ καὶ τὰ πλέοσι ῥωγμῆσιν ἐσκαταρραγέντα καὶ εὐρυτέρησιν, ἔτι ἀκινδυνότερα καὶ εὐμαρέστερα ἐς τὴν ἀφαίρεσιν γίνεται. Καὶ οὐ χρὴ πρίειν τῶν τοιούτων οὐδὲν, οὐδὲ κινδυνεύειν τὰ ὀστέα πειρώμενον ἀφαιρέειν, πρὶν ἢ αὐτόματα ἐπανάη, οἶδος πρῶτον χαλάσαντος. Ἐπανάρχεται δὲ τῆς σαρκοῦς

ὑποφυομένης ὑποφύεται δὲ ἐκ τῆς διπλῆς τοῦ ὀστέου καὶ ἐκ τοῦ ὑγιέος, ἢν ἢ ἄνωθεν μοῖρα μούνη σφακελίση. Οὕτω δ' ἂν τάχιστα ἢ τε σὰρξ ὑποφύοιτο καὶ βλαστάνοι, καὶ τὰ ὀστέα ἐπάνοιο, εἴ τις τὸ ἔλκος ὡς τάχιστα διάπυον ποιήσας καθαρὸν ποιήσεται. Καὶ ἢν διὰ παντὸς τοῦ ὀστέου ἄμφω αἱ μοῖραι ἐσφλασθῶσιν ἔσω ἐς τὴν μῆνιγγα, ἢ τε ἄνω μοῖρη τοῦ ὀστέου καὶ ἢ κάτω, ἡτρεῦοντι ὡσαύτως τὸ ἔλκος ὑγιῆς τάχιστα ἔσται, καὶ τὰ ὀστέα τάχιστα ἐπάνεισι, τὰ ἐσφλασθέντα ἔσω.

17. Such pieces of bone as are depressed from their natural position, either being broken off or chopped off to a considerable extent, are attended with less danger, provided the membrane be safe; and bones which are broken by numerous and broader fractures are still less dangerous and more easily extracted. And you must not trepan any of them, nor run any risks in attempting to extract the pieces of bone, until they rise up of their own accord, upon the subsidence of the swelling. They rise up when the flesh (*granulations*) grows below, and it grows from the diploe of the bone, and from the sound portion, provided the upper table alone be in a state of necrosis. And the flesh will shoot up and grow below the more quickly, and the pieces of bone ascend, if one will get the wound to suppurate and make it clean as quickly as possible. And when both the tables of the bone are driven in upon the membrane, I mean the upper and lower, the wound, if treated in the same way, will very soon get well, and the depressed bones will quickly rise up.

18. Τῶν δὲ παιδίων τὰ ὀστέα καὶ λεπτότερα ἐστὶ καὶ μαλθακώτερα διὰ τοῦτο, ὅτι ἐναιμότερά ἐστι, καὶ κοῖλα, καὶ σηραγγώδεα, καὶ οὔτε πυκνὰ, οὔτε στερεά. Καὶ ὑπὸ τῶν βελέων ἴσων τε ἐόντων καὶ ἀσθενεστέρων, καὶ τρωθέντων ὁμοίως τε καὶ ἥσσον, τὸ τοῦ νεωτέρου παιδίου καὶ μᾶλλον καὶ θᾶσσον ὑποπυῖσκειται, ἢ τὸ τοῦ πρεσβυτέρου, καὶ ἐν ἐλάσσονι χρόνῳ καὶ ὅσα ἂν ἄλλως μέλλη ἀποθανεῖσθαι ἐκ τοῦ τρώματος, ὁ νεώτερος τοῦ πρεσβυτέρου θᾶσσον ἀπόλλυται. Ἀλλὰ χρῆ, ἢν ψιλωθῆ τῆς σαρκὸς τὸ ὀστέον, προσέχοντα τὸν νόον, πειρῆσθαι διαγινώσκειν ὅ τι μὴ ἐστὶ τοῖσιν ὀφθαλμοῖσιν ἰδεῖν, καὶ γνῶναι εἰ ἔρρωγε τὸ ὀστέον καὶ εἰ πέφλασται, ἢ μούνον πέφλασται, καὶ εἰ, ἔδρης γενομένης τοῦ βέλεος, πρόσεστι φλάσις, ἢ ῥωγμὴ, ἢ ἄμφω ταῦτα καὶ ἢν τι τούτων πεπόνθη τὸ ὀστέον, ἀφεῖναι τοῦ αἵματος τρυπῶντα τὸ ὀστέον σμικρῶ τρυπάνῳ, φυλασσόμενον ἐπ' ὀλίγον λεπτότερον γὰρ τὸ ὀστέον, καὶ ἐπιπολαιότερον τῶν νέων ἢ τῶν πρεσβυτέρων.

18. The bones of children are thinner and softer, for this reason, that they contain more blood [than those of adults]; and they are porous and spongy, and neither dense nor hard. And when wounded to a similar or inferior degree by weapons of the same or even of an inferior power, the bone of a young person more readily and quickly suppurates, and that in less time than the bone of an older person; and in accidents, which are to prove fatal, the younger person will die sooner than the elder. But if the bone is laid bare of flesh, one must attend and try to find out, what even is not obvious to the sight, and discover whether the bone be broken and contused, or only contused; and if, when there is an indentation in the bone, whether contusion, or fracture, or both be joined to it; and if the bone has sustained any of these injuries, we must give issue to the

blood by perforating the bone with a small trepan, observing the greatest precautions, for the bone of young persons is thinner and more superficial than that of elder persons.

19. Ὅστις δὲ μέλλει ἐκ τρωμάτων ἐν κεφαλῇ ἀποθνήσκειν, καὶ

μὴ δυνατὸν αὐτὸν ὑγιᾶ γενέσθαι, μὴδὲ σωθῆναι, ἐκ τῶνδε τῶν σημείων χρῆ τὴν διάγνωσιν ποιέεσθαι τοῦ μέλλοντος ἀποθνήσκειν, καὶ προλέγειν τὸ μέλλον ἔσεσθαι. Πάσχει γὰρ τάδε ὁκόταν τις ὀστέον κατεηγὸς, ἢ ἐρρωγὸς, ἢ πεφλασμένον, ἢ ὄτῳ γοῦν τρόπῳ κατεηγὸς μὴ ἐννοήσας ἀμάρτη, καὶ μήτε ξύση, μήτε πρίση, δεόμενον, μεθῆ δὲ ὡς ὑγίεος ὄντος τοῦ ὀστέου, πρὸ τῶν τεσσαρεσκαίδεκα ἡμερέων πυρετὸς ἐπιλήψεται ὡς ἐπὶ πούλῳ ἐν χειμῶνι ἐν δὲ τῷ θέρει μετὰ τὰς ἑπτὰ ἡμέρας ὁ πυρετὸς ἐπιλαμβάνει. Καὶ ἐπειδὰν τοῦτο γένηται, τὸ ἔλκος ἄχρουν γίνεται καὶ ἐξ αὐτοῦ ἰχώρ ῥέει σμικρὸς καὶ τὸ φλεγμαῖνον ἐκτέθνηκεν ἐξ αὐτοῦ καὶ γλισχρῶδες γίνεται,

καὶ φαίνεται ὡσπερ τάριχος, χροιοῦν πυρρὸν, ὑποπέλιον καὶ τὸ ὀστέον σφακελίζειν τηνικαῦτα ἄρχεται, καὶ γίνεται περκνὸν, λευκὸν ὄν, τελευταῖον δὲ ἔπωχρον γενόμενον ἢ ἔκλευκον. Ὅταν δ' ἤδη ὑπόπυον ἦ, ἐπὶ τῇ γλώσση φλυκταῖναι γίνονται, καὶ παραφρονέων τελευτᾷ. Καὶ σπασμὸς ἐπιλαμβάνει τοὺς πλείστους τὰ ἐπὶ θάτερα τοῦ σώματος ἢν μὲν ἐν τῷ ἐπ' ἀριστερὰ τῆς κεφαλῆς ἔχη τὸ ἔλκος, τὰ ἐπὶ δεξιὰ τοῦ σώματος ὁ σπασμὸς λαμβάνει ἢν δ' ἐν τῷ ἐπὶ δεξιὰ τῆς κεφαλῆς ἔχη τὸ ἔλκος, τὰ ἐπ' ἀριστερὰ τοῦ σώματος ὁ σπασμὸς ἐπιλαμβάνει. Εἰσὶ δ' οἱ καὶ ἀπόπληκτοι γίνονται. Καὶ οὕτως ἀπόλλυνται πρὸ ἑπτὰ ἡμερέων ἐν θέρει, ἢ τεσσάρων καὶ δέκα ἐν χειμῶνι. Ὅμοίως δὲ τὰ σημεῖα ταῦτα σημαίνει, καὶ ἐν πρεσβυτέρῳ ἐόντι τῷ τρώματι, ἢ καὶ ἐν νεωτέρῳ. Ἀλλὰ χρῆ, εἰ ἐννοοίης τὸν πυρετὸν ἐπιλαμβάνοντα, καὶ τῶν ἄλλων τι σημεῖον τούτῳ προσγενόμενον, μὴ διατρίβειν, ἀλλὰ πρίσαντα τὸ ὀστέον πρὸς τὴν μήνιγγα, ἢ καταξύσαντα τῷ ξυστήρι εὐπριστον δὲ γίνεται καὶ εὐξυστον, ἔπειτα τὰ λοιπὰ οὕτως ἰητρεύειν, ὅκως ἂν δοκέη ξυμφέρειν, πρὸς τὸ γινόμενον ὄρῳν.

19. When a person has sustained a mortal wound on the head, which cannot be cured, nor his life preserved, you may form an opinion of his approaching dissolution, and foretell what is to happen from the following symptoms which such a person experiences. When a bone is broken, or cleft, or contused, or otherwise injured, and when by mistake it has not been discovered, and neither the raspatory nor trepan has been applied as required, but the case has been neglected as if the bone were sound, fever will generally come on if in winter, and in summer the fever usually seizes after seven days. And when this happens,

the wound loses its color, and the inflammation dies in it; and it becomes glutinous, and appears like a pickle, being of a tawny and somewhat livid color; and the bone then begins to sphacelate, and turns black where it was white before, and at last becomes pale and blanched. But when suppuration is fairly established in it, small blisters form on the tongue and he dies delirious. And, for the most part, convulsions seize the other side of the body; for, if the wound be situated on the left side, the convulsions will seize the right side of the body; or if the wound be on the right side of the head, the convulsion attacks the left side of the body. And some become apoplectic. And thus they die before the end of seven days, if in summer; and before fourteen, if in winter. And these symptoms indicate, in the same manner, whether the wound be older or more recent. But if you perceive that fever is coming on, and that any of these symptoms accompany it, you must not put off, but having sawed the bone to the membrane (*meninx*), or scraped it with a raspatory (and it is then easily sawed or scraped), you must apply the other treatment as may seem proper, attention being paid to circumstances.

20. Ὄταν δ' ἐπὶ τρώματι ἐν κεφαλῇ ἀνθρώπου ἢ πεπρωμένου ἢ ἀπριώτου, ἐπιλωμένου δὲ τοῦ ὀστέου, οἴδημα ἐπιγένηται ἐρυθρὸν καὶ ἐρυσιπελατῶδες ἐν τῷ προσώπῳ, καὶ ἐν τοῖσιν ὀφθαλμοῖσιν

ἀμφοτέροισιν, ἢ τῷ ἐτέρῳ, καὶ, εἴ τις ἄπτοιτο τοῦ οἴδηματος, ὀδυνῶτο, καὶ πυρετὸς ἐπιλαμβάνοι καὶ ῥίγος, τὸ δὲ ἔλκος αὐτό τε ἀπὸ τῆς σαρκὸς καλῶς ἔχει ἰδέσθαι, καὶ τὰπὸ τοῦ ὀστέου, καὶ τὰ περιέχοντα τὸ ἔλκος ἔχει καλῶς, πλὴν τοῦ οἴδηματος τοῦ ἐν τῷ προσώπῳ, καὶ ἄλλην ἀμαρτάδα μηδεμίαν ἔχει τὸ οἴδημα τῆς ἄλλης διαίτης, τούτου χρὴ τὴν κάτω κοιλίην ὑποκαθῆραι φαρμάκῳ, ὃ τι χολὴν ἄγει καὶ οὕτω καθαρθέντος, ὃ τε πυρετὸς ἀφήσι, καὶ τὸ οἴδημα καθίσταται, καὶ ὑγιὲς γίνεται. Τὸ δὲ φάρμακον χρὴ διδόναι πρὸς τὴν δύναμιν τοῦ ἀνθρώπου ὀρῶν, ὡς ἂν ἔχη ἰσχύος.

20. When in any wound of the head, whether the man has been trepanned or not, but the bone has been laid bare, a red and erysipelalous swelling supervenes in the face, and in both eyes, or in either of them, and if the swelling be painful to the touch, and if fever and rigor come on, and if the wound look well, whether as regards the flesh or the bone, and if the parts surrounding the wound be well, except the swelling in the face, and if the swelling be not connected with any error in the regimen, you must purge the bowels in such a case with a medicine which will evacuate bile; and when thus purged the fever goes off, the swelling subsides, and the patient gets well. In giving the medicine you must pay

attention to the strength of the patient.

21. Περί δὲ πρίσιος, ὅταν καταλάβῃ ἀνάγκη πρίσαι ἄνθρωπον, ὧδε γινώσκειν ἦν ἐξ ἀρχῆς λαβὼν τὸ ἴημα πρίης, οὐ χρὴ ἐκπρίειν τὸ ὀστέον πρὸς τὴν μήνιγγα αὐτίκα οὐ γὰρ συμφέρει τὴν μήνιγγασιλὴν εἶναι τοῦ ὀστέου ἐπὶ πουλὺν χρόνον κακοπαθοῦσαν, ἀλλὰ τελευτῶσά πη καὶ διεμύδησεν. Ἔστι δὲ καὶ ἕτερος κίνδυνος, ἦν αὐτίκα ἀφαιρέης πρὸς τὴν μήνιγγα ἐκπρίσας τὸ ὀστέον, τρῶσαι ἐν τῷ ἔργῳ τῷ πρίονι τὴν μήνιγγα. Ἄλλὰ χρὴ πρίοντα,

ἐπειδὰν ὀλίγον πάνυ δέη διαπεπρίσθαι, καὶ ἤδη κινέηται τὸ ὀστέον, παύσασθαι πρίοντα, καὶ ἔαν ἐπὶ τὸ αὐτόματον ἀποστῆναι τὸ ὀστέον. Ἐν γὰρ τῷ διαπριωτῷ ὀστέῳ καὶ ἐπιλελειμμένῳ τῆς πρίσιος οὐκ ἂν ἐπιγένοιτο κακὸν οὐδὲν λεπτόν γὰρ τὸ λειπόμενον ἤδη γίνεται. Τὰ δὲ λοιπὰ ἰῆσθαι χρὴ, ὡς ἂν δοκῆ ξυμφέρειν τῷ ἔλκει. Πρίοντα δὲ χρὴ πυκινὰ ἐξαιρέειν τὸν πρίονα τῆς θερμασίης εἵνεκα τοῦ ὀστέου, καὶ ὕδατι ψυχρῷ ἐναποβάπτειν. Θερμαινόμενος γὰρ ὑπὸ τῆς περιόδου ὁ πρίων, καὶ τὸ ὀστέον ἐκθερμαίνων καὶ ἀναξηραίνων, κατακαίει, καὶ μεῖζον ποιεῖ ἀφίστασθαι τὸ ὀστέον τὸ περιέχον τὴν πρίσιν, ἢ ὅσον μέλλει ἀφίστασθαι. Καὶ ἦν αὐτίκα βούλῃ ἐκπρίσαι τὸ πρὸς τὴν μήνιγγα, ἔπειτα ἀφελέειν τὸ ὀστέον, ὡσαύτως χρὴ πυκινὰ τε ἐξαιρέειν τὸν πρίονα, καὶ ἐναποβάπτειν τῷ ὕδατι τῷ ψυχρῷ. Ἦν δὲ μὴ ἐξ ἀρχῆς λαμβάνῃς τὸ ἴημα, ἀλλὰ παρ' ἄλλου παραδέχη ὑστερίζων τῆς ἰήσιος, πρίονι χρὴ χαρακτῷ ἐκπρίειν μὲν αὐτίκα τὸ ὀστέον πρὸς τὴν μήνιγγα, θαμινὰ δὲ ἐξαιρεῦντα τὸν πρίονα σκοπεῖσθαι καὶ ἄλλως καὶ τῇ μήλῃ πέριξ κατὰ τὴν ὁδὸν τοῦ πρίονος. Καὶ γὰρ πουλὺ θᾶσσον διαπρίεται τὸ ὀστέον, ἦν ὑπόπυόν τε ἐῖν ἤδη καὶ διάπυον πρίης, καὶ πολλακίς τυγχάνει ἐπιπόλαιον ἐὼν τὸ ὀστέον, ἄλλως τε καὶ ἦν ταύτη τῆς κεφαλῆς ἢ τὸ τρῶμα, ἢ τυγχάνει λεπτότερον ἐὼν τὸ ὀστέον ἢ παχύτερον. Ἄλλὰ φυλάσσεσθαι χρὴ, ὡς μὴ λάθῃς προσβαλὼν τὸν πρίονα, ἀλλ' ὅπη δοκῆ παχύτατον εἶναι τὸ ὀστέον, ἐς τοῦτο αἰεὶ ἐνστηρίζειν τὸν πρίονα, θαμινὰ σκοπούμενος, καὶ πειρᾶσθαι ἀνακινέων τὸ ὀστέον

ἀναβάλλειν, ἀφελὼν δὲ, τὰ λοιπὰ ἰητρεύειν ὡς ἂν δοκῆ ξυμφέρειν τῷ ἔλκει. Καὶ ἦν, ἐξ ἀρχῆς λαβὼν τὸ ἴημα, αὐτίκα βούλῃ ἐκπρίσας τὸ ὀστέον ἀφελεῖν ἀπὸ τῆς μήνιγγος, ὡσαύτως χρὴ πυκινὰ τε σκοπεῖσθαι τῇ μήλῃ τὴν περίοδον τοῦ πρίονος, καὶ ἐς τὸ παχύτατον αἰεὶ τοῦ ὀστέου τὸν πρίονα ἐνστηρίζειν, καὶ ἀνακινέων βούλεσθαι ἀφελέειν τὸ ὀστέον. Ἦν δὲ τρυπάνῳ χρῆ, πρὸς δὲ τὴν μήνιγγα μὴ ἀφικνέεσθαι, ἦν ἐξ ἀρχῆς λαμβάνων τὸ ἴημα τρυπᾶς, ἀλλ' ἐπιλιπεῖν τοῦ ὀστέου λεπτόν, ὥσπερ καὶ ἐν τῇ πρίσει γέγραπται.

21. With regard to trepanning, when there is a necessity for it, the following



particulars should be known. If you have had the management of the case from the first, you must not at once saw the bone down to the meninx; for it is not proper that the membrane should be laid bare and exposed to injuries for a length of time, as in the end it may become fungous. And there is another danger if you saw the bone down to the meninx and remove it at once, lest in the act of sawing you should wound the meninx. But in trepanning, when only a very little of the bone remains to be sawed through, and the bone can be moved, you must desist from sawing, and leave the bone to fall out of itself. For to a bone not sawed through, and where a portion is left of the sawing, no mischief can happen; for the portion now left is sufficiently thin. In other respects you must conduct the treatment as may appear suitable to the wound. And in trepanning you must frequently remove the trepan, on account of the heat in the bone, and plunge it in cold water. For the trepan being heated by running round, and heating and drying the bone, burns it and makes a larger piece of bone around the sawing to drop off, than would otherwise do. And if you wish to saw at once down to the membrane, and then remove the bone, you must also, in like manner, frequently take out the trepan and dip it in cold water. But if you have not charge of the treatment from the first, but undertake it from another after a time, you must saw the bone at once down to the meninx with a serrated trepan, and in doing so must frequently take out the trepan and examine with a sound (specillum), and otherwise along the tract of the instrument. For the bone is much sooner sawn through, provided there be matter below it and in it, and it often happens that the bone is more superficial, especially if the wound is situated in that part of the head where the bone is rather thinner than in other parts. But you must take care where you apply the trepan, and see that you do so only where it appears to be particularly thick, and having fixed the instrument there, that you frequently make examinations and endeavor by moving the bone to bring it up. Having removed it, you must apply the other suitable remedies to the wound. And if, when you have the management of the treatment from the first, you wish to saw through the bone at once, and remove it from the membrane, you must, in like manner, examine the tract of the instrument frequently with the sound, and see that it is fixed on the thickest part of the bone, and endeavor to remove the bone by moving it about. But if you use a perforator ( *trepan?* ), you must not penetrate to the membrane, if you operate on a case which you have had the charge of from the first, but must leave a thin scale of bone, as described in the process of sawing.

## THE HIPPOCRATIC OATH - Ιπποκράτειος Όρκος

ὄμνυμι Ἀπόλλωνα ἰητρὸν καὶ Ἀσκληπιὸν καὶ Ὑγίαν καὶ Πανάκειαν καὶ θεοὺς πάντας τε καὶ πάσας, ἴστορας ποιούμενος, ἐπιτελέα ποιήσῃν κατὰ δύναμιν καὶ κρίσιν ἐμήν ὄρκον τόνδε καὶ συγγραφὴν τήνδε: ἠγήσεσθαι μὲν τὸν διδάξαντά με τὴν τέχνην ταύτην ἴσα γενέτησιν ἐμοῖς, καὶ βίου κοινώσεσθαι, καὶ χρεῶν χρηρίζοντι μετάδοσιν ποιήσεσθαι, καὶ γένος τὸ ἐξ αὐτοῦ ἀδελφοῖς ἴσον ἐπικρινεῖν ἄρρεσι, καὶ διδάξειν 10. τὴν τέχνην ταύτην, ἣν χρηρίζωσι μανθάνειν, ἄνευ μισθοῦ καὶ συγγραφῆς, παραγγελίης τε καὶ ἀκροήσιος καὶ τῆς λοιπῆς ἀπάσης μαθήσιος μετάδοσιν ποιήσεσθαι υἱοῖς τε ἐμοῖς καὶ τοῖς τοῦ ἐμὲ διδάξαντος, καὶ μαθητῆσι συγγεγραμμένοις τε καὶ ὠρκισμένοις νόμῳ ἰητρικῷ, ἄλλῳ δὲ οὐδενί. διαιτήμασί τε χρήσομαι ἐπ' ὠφελείῃ καμνόντων κατὰ δύναμιν καὶ κρίσιν ἐμήν, ἐπὶ δηλήσει δὲ καὶ ἀδικίῃ εἴρξειν. οὐ δώσω δὲ οὐδὲ φάρμακον οὐδενὶ αἰτηθεὶς θανάσιμον, οὐδὲ ὑψηγήσομαι συμ 20. βουλίην τοιήνδε: ὁμοίως δὲ οὐδὲ γυναικὶ πεσσὸν φθόριον δώσω. ἀγνῶς δὲ καὶ ὀσίως διατηρήσω βίον τὸν ἐμὸν καὶ τέχνην τὴν ἐμήν. οὐ τεμέω δὲ οὐδὲ μὴν λιθιῶντας, ἐκχωρήσω δὲ ἐργάτησιν ἀνδράσι πρήξιος τῆσδε. ἐς οἰκίας δὲ ὀκόσας ἂν ἐσίω, ἐσελεύσομαι ἐπ' ὠφελείῃ καμνόντων, ἐκτὸς ἐὼν πάσης ἀδικίης ἐκουσίης καὶ φθορίας, τῆς τε ἄλλης καὶ ἀφροδισίων ἔργων ἐπὶ τε γυναικείων σωμάτων καὶ ἀνδρῶν, ἐλευθέρων τε καὶ δούλων. ἃ δ' ἂν ἐν θεραπείῃ ἢ ἴδω ἢ ἀκούσω, ἢ καὶ ἄνευ 30. θεραπείης κατὰ βίον ἀνθρώπων, ἃ μὴ χρή ποτε ἐκλαλεῖσθαι ἕξω, σιγήσομαι, ἄρρητα ἠγεύμενος εἶναι τὰ τοιαῦτα. ὄρκον μὲν οὖν μοι τόνδε ἐπιτελέα ποιέοντι, καὶ μὴ συγγέοντι, εἴη ἐπαύρασθαι καὶ βίου καὶ τέχνης δοξαζομένῳ παρὰ πᾶσιν ἀνθρώποις ἐς τὸν αἰεὶ χρόνον: παραβαίνοντι δὲ 36. καὶ ἐπιορκέοντι, τάναντία τούτων.

I SWEAR by Apollo the physician, and Aesculapius, and Health, and All-heal, and all the gods and goddesses, that, according to my ability and judgment, I will keep this Oath and this stipulation- to reckon him who taught me this Art equally dear to me as my parents, to share my substance with him, and relieve his necessities if required; to look upon his offspring in the same footing as my own brothers, and to teach them this art, if they shall wish to learn it, without fee or stipulation; and that by precept, lecture, and every other mode of instruction, I will impart a knowledge of the Art to my own sons, and those of my teachers, and to disciples bound by a stipulation and oath according to the law of medicine, but to none others. I will follow that system of regimen which, according to my ability and judgment, I consider for the benefit of my patients, and abstain from whatever is deleterious and mischievous. I will give no deadly medicine to any one if asked, nor suggest any such counsel; and in like manner I

will not give to a woman a pessary to produce abortion. With purity and with holiness I will pass my life and practice my Art. I will not cut persons laboring under the stone, but will leave this to be done by men who are practitioners of this work. Into whatever houses I enter, I will go into them for the benefit of the sick, and will abstain from every voluntary act of mischief and corruption; and, further from the seduction of females or males, of freemen and slaves. Whatever, in connection with my professional practice or not, in connection with it, I see or hear, in the life of men, which ought not to be spoken of abroad, I will not divulge, as reckoning that all such should be kept secret. While I continue to keep this Oath unviolated, may it be granted to me to enjoy life and the practice of the art, respected by all men, in all times! But should I trespass and violate this Oath, may the reverse be my lot!

## THE LAW - Νομος

1. Ἱητρικὴ τεχνέων μὲν πασέων ἐστὶν ἐπιφανεστάτη. διὰ δὲ ἀμαθίην τῶν τε χρεομένων αὐτῇ, καὶ τῶν εἰκῆ τοὺς τοιούσδε κρινόντων, πολὺ τι πασέων ἤδη τῶν τεχνέων ἀπολείπεται. Ἡ δὲ τῶνδε ἀμαρτὰς τὰ μάλιστά μοι δοκέει ἔχειν αἰτίην τοιήνδε. πρόστιμον γὰρ ἱητρικῆς μούνης ἐν τῆσι πόλεσιν οὐδὲν ὄρισταί, πλὴν ἀδοξίης. αὕτη δὲ οὐ τιτρώσκει τοὺς ἐξ αὐτέης συγκειμένους. Ὁμοίωτατοι γὰρ εἰσιν οἱ τοιοῖδε τοῖσι παρειαγομένοισι προσώποισιν ἐν τῆσι τραγωδίησιν. ὡς γὰρ ἐκεῖνοι σχῆμα μὲν καὶ στολὴν καὶ πρόσωπον ὑποκριτοῦ ἔχουσιν, οὐκ εἰσὶ δὲ ὑποκριταί, οὕτω καὶ ἱητροί, φήμη μὲν πολλοὶ, ἔργῳ δὲ πάγχυ βαιοί.

1. Medicine is of all the Arts the most noble; but, notwithstanding, owing to the ignorance of those who practice it, and of those who, inconsiderately, form a judgment of them, it is at present far behind all the other arts. Their mistake appears to me to arise principally from this, that in the cities there is no punishment connected with the practice of medicine (and with it alone) except disgrace, and that does not hurt those who are familiar with it. Such persons are like the figures which are introduced in tragedies, for as they have the shape, and dress, and personal appearance of an actor, but are not actors, so also physicians are many in title but very few in reality.

2. Χρὴ γὰρ, ὅστις μέλλει ἱητρικῆς ζύνεσιν ἀτρεκέως ἀρμόζεσθαι, τῶνδὲ μιν ἐπήβολον γενέσθαι. φύσιος. διδασκαλίης. τόπου εὐφυέος. παιδομαθίης. φιλοπονίης. χρόνου. Πρῶτον μὲν οὖν πάντων δεῖ φύσιος. φύσιος γὰρ ἀντιπρησσοῦσης, κενεὰ πάντα. φύσιος δὲ ἐς τὸ ἄριστον ὀδηγεοῦσης, διδασκαλίη τέχνης γίνεται. ἦν μετὰ φρονήσιος δεῖ περιποιήσασθαι, παιδομαθέα γενόμενον ἐν τόπῳ, ὁκοῖος εὐφυῆς πρὸς μάθησιν ἔσται. ἔτι δὲ φιλοπονίην προσενέγκασθαι ἐς χρόνον πουλὺν, ὅκως ἢ μάθησις, ἐμφυσιωθεῖσα, δεξιῶς τε καὶ εὐαλδέως τοὺς καρποὺς ἐξενέγκηται.

2. Whoever is to acquire a competent knowledge of medicine, ought to be possessed of the following advantages: a natural disposition; instruction; a favorable position for the study; early tuition; love of labor; leisure. First of all, a natural talent is required; for, when Nature opposes, everything else is in vain; but when Nature leads the way to what is most excellent, instruction in the art takes place, which the student must try to appropriate to himself by reflection, becoming an early pupil in a place well adapted for instruction. He must also bring to the task a love of labor and perseverance, so that the instruction taking

root may bring forth proper and abundant fruits.

3. Ὀκοίη γὰρ τῶν ἐν τῇ γῆ φυομένων [ῆ] θεωρίη, τοιήδε καὶ τῆς ἰητρικῆς ἡ μάθησις. Ἡ μὲν γὰρ φύσις ἡμέων, ὀκοῖον ἡ χώρα. τὰ δὲ δόγματα τῶν διδασκόντων, ὀκοῖον τὰ σπέρματα. ἡ δὲ παιδομαθίη, τὸ καθ' ὥρην αὐτὰ πεσεῖν εἰς τὴν ἄρουραν. ὁ δὲ τόπος ἐν ᾧ ἡ μάθησις, ὀκοῖον ἡ ἐκ τοῦ περιέχοντος ἡέρος τροφή γιγνομένη τοῖσι φυομένοισιν. ἡ δὲ φιλοπονίη, ἐργασίη. ὁ δὲ χρόνος ταῦτα ἐνισχύει πάντα, ὡς τραφῆναι τελέως.

3. Instruction in medicine is like the culture of the productions of the earth. For our natural disposition is, as it were, the soil; the tenets of our teacher are, as it were, the seed; instruction in youth is like the planting of the seed in the ground at the proper season; the place where the instruction is communicated is like the food imparted to vegetables by the atmosphere; diligent study is like the cultivation of the fields; and it is time which imparts strength to all things and brings them to maturity.

4. Ταῦτα ὧν χρῆ ἐς τὴν ἰητρικὴν τέχνην ἐσενεγκαμένους, καὶ ἀτρεκέως αὐτέης γνῶσιν λαβόντας, οὕτως ἀνὰ τὰς πόλιας φοιτεῦντας, μὴ λόγῳ μόνον, ἀλλὰ καὶ ἔργῳ ἰητροῦς νομίζεσθαι. Ἡ δὲ ἀπειρίη, κακὸς θησαυρὸς καὶ κακὸν κειμήλιον τοῖσιν ἔχουσιν αὐτέην, καὶ ὄναρ καὶ ὕπαρ, εὐθυμίας τε καὶ εὐφροσύνης ἄμοιρος, δειλίας τε καὶ θρασύτητος τιθήνη. Δειλίη μὲν γὰρ ἀδυναμίην σημαίνει. θρασύτης δὲ, ἀτεχνίην. Δύο γὰρ, ἐπιστήμη τε καὶ δόξα, ὧν τὸ μὲν ἐπίστασθαι ποιέει, τὸ δὲ ἀγνοεῖν.

4. Having brought all these requisites to the study of medicine, and having acquired a true knowledge of it, we shall thus, in traveling through the cities, be esteemed physicians not only in name but in reality. But inexperience is a bad treasure, and a bad fund to those who possess it, whether in opinion or reality, being devoid of self-reliance and contentedness, and the nurse both of timidity and audacity. For timidity betrays a want of powers, and audacity a want of skill. There are, indeed, two things, knowledge and opinion, of which the one makes its possessor really to know, the other to be ignorant.

5. Τὰ δὲ ἱερὰ ἐόντα πρήγματα ἱεροῖσιν ἀνθρώποισι δείκνυται. βεβήλοισι δὲ, οὐ θέμις, πρὶν ἢ τελεσθῶσιν ὀργίοισιν ἐπιστήμης.

5. Those things which are sacred, are to be imparted only to sacred persons; and it is not lawful to import them to the profane until they have been initiated in the

mysteries of the science.

## THE PHYSICIAN'S ESTABLISHMENT - Κατ' ἰητροῖον

1. Ἡ ὅμοια ἢ ἀνόμοια ἐξ ἀρχῆς ἀπὸ τῶν μεγίστων, ἀπὸ τῶν ρηίστων, ἀπὸ τῶν πάντη πάντως γινωσκομένων. Ἄ καὶ ἰδεῖν, καὶ θιγεῖν, καὶ ἀκοῦσαι ἔστιν ἃ καὶ τῇ ὄψει, καὶ τῇ ἀφῆ, καὶ τῇ ἀκοῇ, καὶ τῇ ῥινί, καὶ τῇ γλώσση, καὶ τῇ γνώμῃ ἔστιν αἰσθέσθαι ἃ, οἷς γινώσκομεν ἅπασιν, ἔστι γινῶναι.

1. It's the business of the physician to know, in the first place, things similar and things dissimilar; those connected with things most important, most easily known, and in anywise known; which are to be seen, touched, and heard; which are to be perceived in the sight, and the touch, and the hearing, and the nose, and the tongue, and the understanding; which are to be known by all the means we know other things.

2. Τὰ δ' ἐς χειρουργίην κατ' ἰητροῖον ὁ ἀσθενέων ὁ δρῶν οἱ

ὑπηρεταὶ τὰ ὄργανα τὸ φῶς ὅκου ὅκως ὅσα ὅκως ὅκου τὸ σῶμα, τὰ ἄρμενα ὁ χρόνος ὁ τρόπος ὁ τόπος.

2. The things relating to surgery, are- the patient; the operator; the assistants; the instruments; the light, where and how; how many things, and how; where the body, and the instruments; the time; the manner; the place.

3. Ὁ δρῶν, ἢ καθήμενος, ἢ ἐστεῶς, ζυμμέτρως πρὸς ἑωυτὸν, πρὸς τὸ χειριζόμενον, πρὸς τὴν αὐγήν. Αὐγῆς μὲν οὖν δύο εἶδεα, τὸ μὲν κοινὸν, τὸ δὲ τεχνητὸν. Τὸ μὲν οὖν κοινὸν οὐκ ἐφ' ἡμῖν τὸ δὲ τεχνητὸν, καὶ ἐφ' ἡμῖν. Ὡν ἑκατέρου δισσαι χρήσιες, ἢ πρὸς αὐγήν, ἢ ὑπ' αὐγήν. Ὑπ' αὐγήν μὲν οὖν ὀλίγη τε ἢ χρῆσις, καταφανῆς τε ἢ μετριότης. Τὰ δὲ πρὸς αὐγήν ἐκ τῶν παρεουσέων, ἐκ τῶν ζυμφερουσέων αὐγέων, πρὸς τὴν λαμπροτάτην τρέπειν τὸ χειριζόμενον πλὴν ὀκόσα λαθεῖν δεῖ, ἢ ὀρην αἰσχροὺν οὕτω δὲ τὸ μὲν χειριζόμενον ἐναντίον τῇ αὐγῇ, τὸν δὲ χειρίζοντα, ἐναντίον τῷ χειριζομένῳ, πλὴν ὥστε μὴ ἐπισκοτάζειν οὕτω

γὰρ ἂν ὁ μὲν δρῶν ὀρώη, τὸ δὲ χειριζόμενον οὐχ ὀρῶτο. Πρὸς ἑωυτὸν δὲ, καθήμενῳ πόδες ἐς τὴν ἄνω ἴξιν κατ' ἰθὺ γούνασιν διάστασιν δὲ, ὀλίγον ζυμβεβῶτες γούνατα δὲ ἀνωτέρω βουβῶνων σμικρὸν, διάστασιν δὲ, ἀγκῶνων θέσει καὶ παραθέσει. Ἰμάτιον, εὐσταλέως, εὐκρινέως, ἴσως, ὁμοίως, ἀγκῶσιν, ὁμοίωσιν. Πρὸς δὲ τὸ χειριζόμενον, τοῦ μὲν πρόσω καὶ ἐγγύς, καὶ τοῦ ἄνω, καὶ τοῦ κάτω, καὶ ἔνθα ἢ ἔνθα, ἢ μέσον. Τοῦ μὲν πρόσω καὶ ἐγγύς ὀριον, ἀγκῶνας ἐς

μὲν τὸ πρόσθεν γούνατα μὴ ἀμείβειν, ἐς δὲ τὸ ὀπισθεν, πλευράς τοῦ δὲ ἄνω, μὴ ἀνωτέρω μαζῶν ἄκρας

χεῖρας ἔχειν τοῦ δὲ κάτω, μὴ κατωτέρω, ἢ ὡς τὸ στῆθος ἐπὶ γούνασιν ἔχοντα, ἔχειν ἄκρας χεῖρας ἐγγωνίους πρὸς βραχίονας τὰ μὲν κατὰ μέσον οὕτως τὰ δὲ ἔνθα, ἢ ἔνθα, μὴ ἔξω τῆς ἔδρης, κατὰ λόγον δὲ τῆς ἐπιτροφῆς προσβαλλόμενον τὸ σῶμα, καὶ τοῦ σώματος τὸ ἐργαζόμενον. Ἐστεῶτα δὲ, ἰδεῖν μὲν ἐπ' ἀμφοτέρων βεβῶτα ἐξ ἴσου τῶν ποδῶν ἄλως, δρῆν δὲ τῷ ἐτέρω ἐπιβεβῶτα, μὴ τῷ κατὰ τὴν δρῶσαν χεῖρα ὕψος γούνατος πρὸς βουβῶνας, ὡς ἐν ἔδρῃ καὶ τὰ ἄλλα ὅρια τὰ αὐτά. Ὁ δὲ χειριζόμενος τῷ χειρίζοντι τῷ ἄλλῳ τοῦ σώματος μέρει ὑπηρετεῖτω, ἢ ἐστεῶς, ἢ καθήμενος, ἢ κείμενος, ὅκως ἂν ῥήϊστα, ὃ δεῖ, σχῆμα ἔχων διατελέη, φυλάσσων ὑπόρρυσιν,

ὑπόστασιν, ἔκτρεψιν, καταντίαν, ὡς ὃ δεῖ, σώζεται καὶ σχῆμα καὶ εἶδος τοῦ χειριζομένου, ἐν παρέξει, ἐν χειρισμῷ, ἐν τῇ ἔπειτα ἔξει.

3. The operator is either sitting or standing, conveniently for himself, for the person operated upon, for the light. There are two kinds of light, the common and the artificial; the common is not at our disposal, the artificial is at our disposal. There are two modes of using each, either to the light, or from the light (to the side?). There is little use of that which is from (*or* oblique to the light), and the degree of it is obvious. As to opposite the light, we must turn the part to be operated upon to that which is most brilliant of present and convenient lights, unless those parts which should be concealed, and which it is a shame to look upon; thus the part that is operated upon should be opposite the light, and the operator opposite the part operated upon, except in so far as he does not stand in his own light; for in this case the operator will indeed see, but the thing operated upon will not be seen. With regard to himself when sitting, his feet should be raised to a direct line with his knees, and nearly in contact with one another; the knees a little higher than the groins, and at some distance from one another, for the elbows to rest upon them. The robe, in a neat and orderly manner, is to be thrown over the elbows and shoulders equally and proportionally. With regard to the part operated upon; we have to consider how far distant, and how near, above, below, on this side on that side, or in the middle. The measure as to distance and proximity is, that the elbows do not press the knees before, nor the sides behind; that the hands be not raised higher than the breasts, nor lower than so as that when the breast reposes on the knees he may have the hands at right angles with the arm: thus it is as regards the medium; but as concerns this side or that, the operator must not be beyond his seat, but in proportion as he may



require turning he must shift the body, or part of the body, that is operated upon. When standing, he must make his inspection, resting firmly and equally on both feet; but he must operate while supporting himself upon either leg, and not the one on the same side with the hand which he makes use of; the knee being raised to the height of the groins as while sitting; and the other measures in like manner. The person operated upon should accommodate the operator with regard to the other parts of his body, either standing, sitting, or lying; so as that he may continue to preserve his figure, avoid sinking down, shrinking from, turning away; and may maintain the figure and position of the part operated upon, during the act of presentation, during the operation, and in the subsequent position.

4. Ὄνυχας μήτε ὑπερέχειν, μήτε ἐλλείπειν δακτύλων κορυφῆσι

χρῆσις ἀσκέειν, δακτύλοισι μὲν ἄκροις, τὰ πλεῖστα λιχανῶ πρὸς μέγαν ὄλη δὲ, καταπρηνεῖ ἀμφοτέρησι δὲ, ἐναντίησιν δακτύλων εὐφυῖα, μέγα τὸ ἐν μέσῳ τῶν δακτύλων, καὶ ἀπεναντίον τὸν μέγαν τῷ λιχανῶ. Νοῦσος δὲ δι' ἣν καὶ βλάπτονται, οἷσιν ἐκ γενεῆς ἢ ἐν τροφῇ εἴθισται ὁ μέγας ὑπὸ τῶν ἄλλων

δακτύλων κατέχεσθαι, δῆλον. Τὰ ἔργα πάντα ἀσκέειν ἕκα τέρη δρῶντα, καὶ ἀμφοτέρησιν ἅμα ὅμοιαι γάρ εἰσιν ἀμφοτέραι, στοχαζόμενον ἀγαθῶς, καλῶς, ταχέως, ἀπόνως, εὐρύθμως, εὐπόρως.

4. The nails should be neither longer nor shorter than the points of the fingers; and the surgeon should practice with the extremities of the fingers, the index-finger being usually turned to the thumb; when using the entire hand, it should be prone; when both hands, they should be opposed to one another. It greatly promotes a dexterous use of the fingers when the space between them is large, and when the thumb is opposed to the index. But it is clearly a disease when the thumb is impaired from birth, or when, from a habit contracted during the time of nursing, it is impeded in its motions by the fingers. One should practice all sorts of work with either of them, and with both together (for they are both alike), endeavouring to do them well, elegantly, quickly, without trouble, neatly, and promptly.

5. Ὅργανα μὲν, καὶ ὅτε, καὶ οἷως, εἰρήσεται ὅκου δεῖ μὴ ἐμποδῶν τῷ ἔργῳ, μηδὲ ἐμποδῶν τῇ ἀναιρέσει, παρὰ τὸ ἐργαζόμενον δὲ τοῦ σώματος ἄλλος δὲ ἦν διδῶ, ἔτοιμος ὀλίγῳ πρότερον ἔστω, ποιείτω δὲ, ὅταν κελεύῃς.

5. The instruments, and when and how they should be prepared, will be treated of

afterwards; so that they may not impede the work, and that there may be no difficulty in taking hold of them, with the part of the body which operates. But if another gives them, he must be ready a little beforehand, and do as you direct.

6. Οἱ δὲ περὶ τὸν ἀσθενέοντα τὸ μὲν χειριζόμενον παρεχόντων, ὡς ἂν δοκῇ τὸ δὲ ἄλλο σῶμα κατεχόντων, ὡς ἂν ἀτρεμέη, σιγῶντες, ἀκούοντες τοῦ ἐφεστεῶτος.

6. Those about the patient must present the part to be operated upon as may seem proper, and they must hold the rest of the body steady, in silence, and listening to the commands of the operator.

7. Ἐπίδεσις δύο εἶδεα, εἰργασμένον, καὶ ἐργαζόμενον. Ἐργαζόμενον μὲν, ταχέως, ἀπόνως, εὐπόρως, εὐρύθμως ταχέως μὲν, ἀνύειν τὰ ἔργα ἀπόνως δὲ, ῥηϊδίως δρῆν εὐπόρως δὲ, ἐς πᾶν ἐτοίμως εὐρύθμως δὲ, ὀρῆσθαι ἠδέως ἅφ' ὧν δὲ ταῦτα ἀσκημάτων, εἴρηται. Εἰργασμένον δὲ ἀγαθῶς, καλῶς καλῶς μὲν, ἀπλῶς, εὐκρινέως ἢ ὅμοια καὶ ἴσα, ἴσως καὶ ὁμοίως ἢ ἄνισα καὶ ἀνόμοια [, ἀνίσως καὶ ἀνομοίως] τὰ δὲ εἶδεα, ἀπλουῶν,

σκέπαρνον, σιμόν, ὀφθαλμός, ῥόμβος, καὶ ἡμίτομον ἀρμόζον τὸ εἶδος τῷ εἶδει καὶ τῷ πάθει τοῦ ἐπιδεομένου.

7. There are two views of bandaging: that which regards it while doing, and that which regards it when done. It should be done quickly, without pain, with ease, and with elegance; quickly, by despatching the work; without pain, by being readily done; with ease, by being prepared for everything; and with elegance, so that it may be agreeable to the sight. By what mode of training these accomplishments are to be acquired has been stated. When done, it should fit well and neatly; it is neatly done when with judgment, and when it is equal and unequal, according as the parts are equal or unequal. The forms of it (the bandage?) are the simple, the slightly winding (called ascia), the sloping (sima), the monocus, the rhombus, and the semi-rhombus. The form of bandage should be suitable to the form and the affection of the part to which it is applied.

8. Ἀγαθὰ δὲ δύο εἶδεα τοῦ ἐπιδεομένου ἰσχύος μὲν,

ἢ πιέξει, ἢ πλήθει ὀθονίων. Τὸ μὲν οὖν, αὕτη ἢ ἐπίδεσις ἰῆται, τὸ δὲ τοῖσιν ἰωμένοισιν ὑπηρετεῖ. Ἐς μὲν οὖν ταῦτα νόμος ἐν δὲ τουτέοισι μέγιστα ἐπίδεσις πίεξις μὲν, ὥστε τὰ ἐπικείμενα μὴ ἀφεστάναι, μηδὲ ἐρηρεῖσθαι κάρτα, ἀλλὰ ἡρμόσθαι μὲν, προσηναγκάσθαι δὲ μὴ, ἥσσον μὲν τὰ ἔσχατα, ἥκιστα δὲ τὰ μέσα. Ἄμμα, καὶ ῥάμμα νεμόμενον

μὴ κάτω, ἀλλ' ἄνω, ἐν παρέξει, καὶ σχέσει, καὶ ἐπιδέσει, καὶ πιέξει. Ἀρχὰς βάλλεσθαι μὴ ἐπὶ τὸ ἔλκος, ἀλλ' ἔνθα τὸ ἄμμα. Τὸ δὲ ἄμμα μήτε ἐν τρίβῳ, μήτε ἐν ἔργῳ,

μήτε ἐκεῖσε, ὅκου ἐνεόν. Ἄμμα δὲ καὶ ῥάμμα μαλθακὸν, οὐ μέγα.

8. There are two useful purposes to be fulfilled by bandaging: (*first* ,) strength, which is imparted by the compression and the number of folds. In one case the bandage effects the cure, and in another it contributes to the cure. For these purposes this is the rule- that the force of the constriction be such as to prevent the adjoining parts from separating, without compressing them much, and so that the parts may be adjusted but not forced together; and that the constriction be small at the extremities, and least of all in the middle. The knot and the thread that is passed through should not be in a downward but in an upward direction, regard being had to the circumstances under which the case is presented; to position, to the bandaging, and to the compression. The commencement of the ligatures is not to be placed at the wound, but where the knot is situated. The knot should not be placed where it will be exposed to friction, nor where it will be in the way, nor where it will be useless. The knot and the thread should be soft, and not large.

9. Εὖ γε μὴν γνόντα, ὅτι ἐς τὰ κατάντη καὶ ἀπόξη φεύγει

πᾶς ἐπίδεσμος, οἶον, κεφαλῆς μὲν τὸ ἄνω, κνήμης δὲ τὸ κάτω. Ἐπιδεῖν δεξιὰ ἐπ' ἀριστερὰ, ἀριστερὰ ἐπὶ δεξιὰ, πλὴν τῆς κεφαλῆς ταύτην δὲ κατ' ἴξιν. Τὰ δ' ὑπεναντία, ἀπὸ δύο ἀρχέων ἦν δὲ ἀπὸ μιῆς, ἐφ' ὅμοιον ἐς τὸ μόνιμον, οἶον τὸ μέσον τῆς κεφαλῆς, ἢ ὅ τι ἄλλο τοιοῦτον. Τὰ δὲ κινεύμενα, οἶον ἄρθρα, ὅπη μὲν ξυγκάμπτεται, ὡς ἦκιστα, καὶ εὐσταλέστατα περιβάλλειν, οἶον ἰγνύη ὅπη δὲ περιτείνεται, ἀπλᾶ τε καὶ πλατέα, οἶον μύλη προσπεριβάλλειν δὲ καταλήψιος μὲν τῶν περὶ ταῦτα εἵνεκα, ἀναλήψιος δὲ τοῦ ξύμπαντος ἐπιδέσμου, ἐν τοῖσιν ἀτρεμέουσι

καὶ λαπαρωτέροισι τοῦ σώματος, οἶον τὸ ἄνω καὶ τὸ κάτω τοῦ γούνατος ὁμολογέει δὲ ὦμου μὲν ἢ περὶ τὴν ἐτέρην μασχάλην περιβολή, βουβῶνος δὲ, ἢ περὶ τὸν ἕτερον ἐνεῶνα, καὶ κνήμης, ἢ ὑπὲρ γαστροκνημίας. Ὀκόσοισι μὲν ἄνω ἢ φυγῆ, κάτωθεν ἢ ἀντίληψις οἷσι δὲ κάτω, τούναντίον οἷσι δὲ μὴ ἔστι, οἶον κεφαλῆ, τουτέων ἐν τῷ ὁμαλωτάτῳ τὰς καταλήψιας ποιέεσθαι, καὶ ἦκιστα λοξῶ τῷ ἐπιδέσμῳ χρέεσθαι, ὡς τὸ μονιμώτατον ὕστατον περιβληθὲν τὰ πλανωδέστατα κατέχη. Ὀκόσοισι δὲ τοῖσιν ὀθονίοισι μὴ εὐκαταλήπτως, μηδὲ

εὐαναλήπτως ἔχει, ῥάμμασι τὰς ἀναλήψιας ποιέεσθαι ἐκ καταβολῆς ἢ ξυρραφῆς.

9. ( *Second.* ) One ought to be well aware that every bandage has a tendency to fall off towards the part that declines or becomes smaller; as, for example, upwards, in the case of the head, and downwards, in the case of the leg. The turns of the bandage should be made from right to left, and from left to right, except on the head, where it should be in a straight direction. When opposite parts are to be bandaged together, we must use a bandage with two heads; or if we make use of a bandage with one head, we must attach it in like manner at some fixed point: such, for example, as the middle of the head; and so in other cases. Those parts which are much exposed to motion, such as the joints, where there is a flexion, should have few and slight bandages applied to them, as at the ham; but where there is much extension, the bandage should be single and broad, as at the kneepan; and for the maintenance of the bandage in its proper place, some turns should be carried to those parts which are not much moved, and are lank, such as the parts above and below the knee. In the case of the shoulder; a fold should be carried round by the other armpit; in that of the groin, by the flanks of the opposite side; and of the leg, to above the calf of the leg. When the bandage has a tendency to escape above, it should be secured below, and *vice versa* ; and where there is no means of doing this, as in the case of the head, the turns are to be made mostly on the most level part of the head, and the folds are to be done with as little obliquity as possible, so that the firmest part being last applied may secure the portions which are more movable. When we cannot secure the bandaging by means of folds of the cloth, nor by suspending them from the opposite side, we must have recourse to stitching it with ligatures, either passed circularly or in the form of a seam.

10. Ἐπιδέσματα καθαρὰ, κοῦφα, μαλθακὰ, λεπτά. Ἐλίσσειν ἀμφοτέρησιν ἄμα, καὶ ἑκατέρη χωρὶς ἀσκέειν. Τῇ πρεπούσῃ δὲ, ἐς τὰ πλάτη καὶ τὰ πάχη τῶν μορίων τεκμαιρόμενον,

χρέεσθαι. Ἐλίξιος κεφαλαὶ σκληραὶ, ὀμαλαὶ, εὐκρινέες. Τὰ δὲ δὴ μέλλοντα ἀποπίπτειν κακίῳ ταχέως ἀποπεσόντων τὰ δὲ, ὡς μήτε πιέζειν, μήτε ἀποπίπτειν.

10. The bandages should be clean, light, soft, and thin. One should practice rolling with both hands together, and with either separately. One should also choose a suitable one, according to the breadth and thickness of the parts. The heads of the bandages should be hard, smooth, and neatly put on. That sort of bandaging is the worst which quickly falls off; but those are bad bandages which

neither compress nor yet come off.

11. Ὡν δὲ ἔχεται ἢ ἐπίδεσις, ἢ ὑπόδεσις, ἢ ἀμφοτέρω ὑπόδεσις μὲν αἰτίη, ὥστε ἢ ἀφαστεῶτα προστεῖλαι, ἢ ἐκπεπταμένα συστεῖλαι, ἢ ζυνεσταλμένα διαστεῖλαι, ἢ διεστραμμένα διορθῶσαι, ἢ τάναντία. Παρασκευάζειν δὲ ὀθόνια κοῦφα, λεπτά, μαλθακά, καθαρὰ, πλατέα, μὴ ἔχοντα ζυρῤαφάς, μηδ' ἐξαστίας, καὶ ὑγιέα, ὥστε τάνυσιν φέρειν, καὶ ὀλίγω κρέσσω, μὴ ξηρὰ, ἀλλ' ἔγχυμα χυμῶ, ᾧ ἕκαστα ζύντροφα. Ἀφαστεῶτα μὲν, ὥστε τὰ μετέωρα τῆς ἔδρης ψαύειν μὲν, πίεζειν δὲ μὴ ἄρχεσθαι δὲ ἐκ τοῦ ὑγίεος, τελευτᾶν δὲ

πρὸς τὸ ἔλκος, ὡς τὸ μὲν ὑπεὸν ἐξαθέληται, ἕτερον δὲ μὴ ἐπιζυλλέγηται ἐπίδειν τὰ μὲν ὀρθὰ ἐς ὀρθόν, τὰ δὲ λοξὰ λοξῶς, ἐν σχήματι ἀπόνω, ἐν ᾧ μήτε ἀπόσφιγξις, μήτε ἀπόστασις ἔσται τις, ἐξ οὗ, ὅταν μεταλλάσση ἢ ἐς ἀνάληψιν ἢ ἐς θέσιν, οὐ μεταλλάξουσιν, ἀλλ' ὅμοια ταῦτα ἔξούσι, μύες, φλέβες, νεῦρα, ὀστέα, ἢ μάλιστα εὐθετα καὶ εὐσχετα ἀναλελάφθαι δὲ, ἢ κέεσθαι ἐν σχήματι ἀπόνω τῷ κατὰ φύσιν ὧν δὲ

ἂν ἀποστῆ, τάναντία. Ὡν δὲ ἐκπεπταμένα ζυστεῖλαι, τὰ μὲν ἄλλα κατὰ τὰ αὐτὰ, ἐκ πολλοῦ δὲ τινος δεῖ τὴν ζυναγωγὴν, καὶ ἐκ προσαγωγῆς τὴν πίεξιν, τὸ πρῶτον ἥκιστα, ἔπειτα ἐπὶ μᾶλλον, ὅριον τοῦ μάλιστα τὸ ζυμψαύειν. Ὡν δὲ ζυνεσταλμένα διαστεῖλαι, ζὺν μὲν φλεγμονῇ τάναντία ἄνευ δὲ ταύτης, παρασκευῆ μὲν τῆ αὐτῆ, ἐπιδέσει δὲ ἐναντίη. Διεστραμμένα δὲ διορθῶσαι, τὰ μὲν ἄλλα κατὰ τὰ αὐτὰ δεῖ δὲ τὰ μὲν ἀπεληλυθότα ἐπαγαγεῖν ὑποδέσει, παρακολλήσει, ἀναλήψει τὰ δὲ ἐναντία, ἐναντίως.

11. The following are the object which the upper bandage, the under bandage, or both aim at: The object of the under bandage is either to bring together parts that are separated, or to compress such as are expanded, or to separate what are contracted, or to restore to shape what are distorted, or the contrary. It is necessary to prepare pieces of linen cloth, which are light, thin, soft, clean, having no seams nor protuberances on them, but sound, and able to bear some stretching, or even a little more than required; not dry, but wetted with a juice suitable to the purpose required. We must deal with parts separated ( *in a sinus?* ) in such wise, that the parts which are raised may touch the bottom without producing pressure; we must begin on the sound part, and terminate at the wound; so that whatever humor is in it may be expelled, and that it may be prevented from collecting more. And straight parts are to be bandaged in a straight direction, and oblique obliquely, in such a position as to create no pain; and so that there may be no constriction nor falling off on a change of position,

either for the purpose of taking hold of anything, or laying the limb; and that muscles, veins, nerves, and bones may be properly placed and adjusted to one another. It should be raised or laid in a natural position, so as not to occasion pain. In those cases in which an abscess is formed, we must act in a contrary way. When our object is to bring together parts which have become expanded, in other respects we must proceed on the same plan; and we must commence the bringing together from some considerable distance; and after their approach, we must apply compression, at first slight, and afterwards stronger, the limit of it being the actual contact of the parts. In order to separate parts which are drawn together, when attended with inflammation, we must proceed on the opposite plan; but when without inflammation, we must use the same preparations, but bandage in the opposite direction. In order to rectify distorted parts, we must proceed otherwise on the same principles; but the parts which are separated must be brought together by an underbandage, by agglutinants, and by suspending it (*the limb?*) in its natural position. And when the deformities are the contrary, this is to be done on the contrary plan.

12. Κατήγμασι δὲ, σπληνῶν μήκεα, πλάτεα, πάχεα, πλήθεα

μῆκος, ὄση ἢ ἐπίδεσις πλάτος τριῶν ἢ τεσσάρων δακτύλων πάχος, τριπτύχους ἢ τετραπτύχους πλήθος, κυκλεῦντας μὴ ὑπερβάλλειν, μηδὲ ἐλλείπειν οἷσι δὲ ἐς διόρθωσιν, μῆκος, κυκλεῦντα πλάτος καὶ πάχος τῇ ἐνδείῃ τεκμαίρεσθαι, μὴ ἀθρόα πληρεῦντα. Τῶν δὲ ὀθονίων ὑποδεσμίδες εἰσὶ δύο τῇ πρώτῃ ἐκ τοῦ σίνεος ἐς τὸ ἄνω τελευτώση, τῇ δὲ δευτέρῃ, ἐκ τοῦ σίνεος ἐς τὸ κάτω, ἐκ τοῦ κάτω ἐς τὸ ἄνω τελευτώση τὰ κατὰ τὸ σίνος πιέζειν μάλιστα, ἤκιστα τὰ ἄκρα, τὰ δὲ ἄλλακατὰ λόγον. Ἡ δὲ ἐπίδεσις πουλὺ τοῦ ὑγιέος προσλαμβάνέτω. Ἐπιδέσμων δὲ πλήθος, μῆκος, πλάτος πλήθος μὲν, μὴ ἡσᾶσθαι τοῦ σίνεος, μηδὲ νάρθηξιν ἐνέρεισιν εἶναι, μηδὲ ἄχθος, μηδὲ περίρρησιν, μηδὲ ἐκθήλυνσιν μῆκος δὲ καὶ πλάτος, τριῶν, ἢ τεσσάρων,

ἢ πέντε, ἢ ἕξ, πήχεων μὲν μῆκος, δακτύλων δὲ πλάτος. Καὶ παραιρήματος περιβολαὶ τοσαῦται, ὥστε μὴ πιέζειν μαλθακὰ δὲ, μὴ παχέα ταῦτα πάντα, ὡς ἐπὶ μήκει καὶ πλάτει καὶ πάχει τοῦ παθόντος. Νάρθηκες δὲ λεῖοι, ὀμαλοὶ, σιμοὶ κατ' ἄκρα, σμικρῶ μείους ἔνθεν καὶ ἔνθεν τῆς ἐπιδέσιος, παχύτατοι δὲ, ἢ ἐξήριπε τὸ κήτηγμα. Ὀκόσα δὲ κυρτὰ καὶ ἄσαρκα φύσει, φυλασσόμενον τῶν ὑπερεχόντων, οἷον κατὰ δακτύλους ἢ σφυρὰ, ἢ τῇ θέσει, ἢ τῇ βραχύτητι. Παραιρήμασι δὲ ἐρμάζειν,

μὴ πιέζειν τὸ πρῶτον. Κηρωτῇ μαλθακῇ, καὶ λείῃ, καὶ καθαρῇ ἐλισσέσθω.

12. In fractures we must attend to the length, breadth, thickness, and number of the compresses. The length should be that of the bandaging; the breadth, three or four fingers; thickness, three or fourfold; number so as to encircle the limb, neither more nor less; those applied for the purpose of rectifying a deformity, should be of such a length as to encircle it; the breadth and thickness being determined by the vacuity, which is not to be filled up at once. The upper bandages are two, the first of which is to be carried from the seat of the injury upwards, and the second from the seat of the injury downwards, and from below upwards; the parts about the seat of the injury being most compressed, the extremities least, and the rest in proportion. The upper bandages should take in a considerable portion of the sound parts. We must attend to the number, length, and breadth of the bandages; the number must be such as not to be inferior to what the injury requires, nor occasion compression with the splints, nor prove cumbersome, nor occasion any slipping of them, nor render them inefficient. As to length and breadth, they should be three, four, five, or six cubits in length, and as many fingers broad. The folds of the strings ( *selvages?* ) should be such as not to occasion pressure; they are to be soft and not thick; and all these things are to be proportionate to the length, breadth, and thickness of the part affected. The splints are to be smooth, even, and rounded at the extremities; somewhat less all along than the upper bandaging, and thickest at the part to which fracture inclines. Those parts where there are tuber-osities, and which are devoid of flesh, such as the ankles or fingers, we must guard from the splints which are placed over them, either by position, or by their shortness. They are to be secured by the strings in such a manner as not to occasion pressure at first. A soft, consistent, and clean cerate should be rubbed into the folds of the bandage.

13. Ὑδατος θερμότης, πλῆθος θερμότης μὲν, κατὰ τῆς ἐωυτοῦ χειρὸς καταχεῖν πλῆθος δὲ, χαλάσαι μὲν καὶ ἰσχνῆναι τὸ

πλεῖστον, ἄριστον, σαρκῶσαι δὲ καὶ ἀπαλῦναι, τὸ μέτριον μέτρον δὲ τῆς καταχύσιος, ἔτι μετεωριζομένου, δεῖ, πρὶν ξυμπίπτειν, παύεσθαι τὸ μὲν γὰρ πρῶτον αἶρεται, ἔπειτα δὲ ἰσχναίνεται.

13. As to the temperature and quantity of the water used, its heat should be just such as the hand can bear, and it ought to be known that a large quantity is best for producing relaxation and attenuation, whereas a moderate quantity is best for incarnating and softening. The limit to the affusion is, to stop when the parts become swelled up, and before the swelling subsides; for the parts swell up at first, and fall afterward.

14. Θέσις δὲ μαλθακὴ, ὁμαλὴ, ἀνάρροπος τοῖσιν ἐξέχουσι τοῦ σώματος, οἷον πτέρνη καὶ ἰσχίῳ, ὡς μήτε ἀνακλᾶται, μήτε ἀποκλᾶται, μήτε ἐκτρέπεται. Σωλῆνα παντὶ τῷ σκέλει, ἢ ἡμίσει ἐς τὸ πάθος δὲ βλέπειν καὶ τᾶλλα ὅσα βλάπτει δῆλα.

14. The object on which to ( *the limb?* ) is laid should be soft, smooth, and sloping upwards toward the protuberant parts of the body, such as the heel or hips, so that there may be no projection, nor bending inwards, nor turning aside. The canal ( *spout or gutter?* ) should rather comprehend the whole limb than the half of it, attention being paid to the injury and to whatever else appears to create inconvenience.

15. Πάρεξις δὲ, καὶ διάτασις, καὶ ἀνάπλασις, καὶ τὰ ἄλλα κατὰ φύσιν. Φύσις δὲ ἐν μὲν ἔργοις, τοῦ ἔργου τῆς πρήξει, ὃ βούλεται, τεκμαρτέον ἐς δὲ ταῦτα, ἐκ τοῦ ἐλινύοντος, ἐκ τοῦ κοινοῦ,

ἐκ τοῦ ἔθεος ἐκ μὲν τοῦ ἐλινύοντος καὶ ἀφειμένου, τὰς ἰθυωρίας σκέπτεσθαι, οἷον τὸ τῆς χειρός ἐκ δὲ τοῦ κοινοῦ, ἔκτασιν, ζύγκαμψιν, οἷον τὸ ἐγγὺς τοῦ ἐγγωνίου πήχεος πρὸς βραχίονα ἐκ δὲ τοῦ ἔθεος, ὅτι οὐκ ἄλλα σχήματα φέρειν δυνατώτερον, οἷον σκέλεα ἔκτασιν ἀπὸ τουτέων γὰρ ῥῆϊστα πλεῖστον χρόνον ἔχοι ἂν μὴ μεταλλάσσοντα. Ἐν δὲ τῆ μεταλλαγῇ ἐκ διατάσιος ὅμοια ταῦτα ἔξουσιν ἐς ἔξιν ἢ θέσιν μύες, φλέβες, νεῦρα, ὅστέα, ἢ μάλιστα εὐθετα καὶ εὐσχετα.

15. The presentation of the injured part to the physician, the extension, the arrangement, and so forth, are to be regulated according to nature. What is nature in these operations is to be determined by the accomplishment of the object which we have in view, and for this purpose we must look to the part in the state of rest, in its middle state, and to habit; in regard to the state of rest and relaxation, as in the arm, that it be in a line with the hand; and with regard to the medium between flexion and extension, that the forearm be at right angles to the arm; and with regard to habit, it should be considered that some limbs bear certain positions preferably, as, for example, the thighs extension; for in such attitudes the parts can best bear to be placed for a considerable time without a change of posture. And in the change from the state of distention, the muscles, veins, nerves, and bones, when properly arranged and secured, will preserve their relations to one another while the limb is raised or placed.

16. Διάτασις μάλιστα, τὰ μέγιστα καὶ πάχιστα, καὶ ὅκου ἀμφοτέρα δεύτερα, ὧν



τὸ ὑποτεταγμένον ἥκιστα, ὧν τὸ ἄνω

μᾶλλον δὲ τοῦ μετρίου, βλάβη, πλὴν παιδίων ἔχειν ἀνάντη σμικρόν. Διορθώσιος παράδειγμα, τὸ ὁμώνυμον, τὸ ὁμόζυγον, τὸ ὅμοιον, τὸ ὑγιές.

16. The extension should be most powerful when the largest and thickest bones, or when both are broken; next when the under-bone, and least of all, when the upper. When immoderate, it is injurious, except in the case of children. The limb should be a little elevated. The model by which we judge if the part be properly set is the sound part of the same name, or the part which is its pair.

17. Ἀνάτριψις δύναται λῦσαι, δῆσαι, σαρκῶσαι, μινυθῆσαι ἢ σκληρῆ, δῆσαι ἢ μαλακῆ, λῦσαι ἢ πολλῆ, μινυθῆσαι ἢ μετρίῃ, παχῦναι.

17. Friction can relax, brace, incarnate, attenuate: hard braces, soft relaxes, much attenuates, and moderate thickens.

18. Ἐπιθεῖν δὲ τὸ πρῶτον ὁ μὲν ἐπιδεδεμένος μάλιστα φάτω πεπιέχθαι κατὰ τὸ σίνος, ἥκιστα τὰ ἄκρα ἠρμάσθαι δὲ, μὴ πεπιέχθαι πλήθει, μὴ ἰσχύϊ τὴν δὲ ἡμέρην ταύτην καὶ νύκτα, ὀλίγῳ μᾶλλον, τὴν δ' ὑστέρην, ἥσσον τρίτη, χαλαρά. Εὐρεθήτω δὲ τῇ μὲν ὑστεραίῃ ἐν ἄκροισιν οἴδημα μαλθακόν τῇ τρίτῃ δὲ τὸ ἐπιθεθὲν λυθὲν, ἰσχνότερον, παρὰ πάσας τὰς

ἐπιδέσιος τοῦτο. Τῇ δὲ ὑστεραίῃ ἐπιδέσει, ἣν δικαίως ἐπιδεδεμένον φανῆ, μαθεῖν δεῖ ἐντεῦθεν δὲ μᾶλλον καὶ ἐπὶ πλέοσι πιεχθήτω τῇ δὲ τρίτῃ ἐπὶ μᾶλλον καὶ ἐπὶ πλέοσιν. Τῇ δὲ ἐβδόμῃ ἀπὸ τῆς πρώτης ἐπιδέσιος λυθέντα, εὐρεθήτω ἰσχνὰ, χαλαρὰ τὰ ὀστέα. Ἐς δὲ νάρθηκας, δεθέντα, ἣν ἰσχνὰ καὶ ἄκνησμα καὶ ἀνέλκεια ἦ, ἔαν μέχρις εἴκοσιν ἡμερῶν ἀπὸ τοῦ σίνεος ἦν δέ τι ὑποπτεύηται, λῦσαι ἐν τῷ μέσῳ νάρθηκας διὰ τρίτης ἐρείδειν.

18. The following should be the state of matters on the first application of the bandage. The person to whom it has been applied should say that he feels the compression particularly at the seat of the injury, but very little at the extremities; the parts should be adjusted but not pressed together, and that rather by the number of the bandages than by the force of the constriction; and the tightness should rather be on the increase during the first day and night; but on the next it should be less, and on the third the bandages should be loose. On the next day a soft swelling should be observed in the extremities; and on the third day, when the bandaging is loosed, the swelling should be found diminished in size, and this should be the case every time the bandages are removed. At the

second application of the bandage, it should be ascertained whether the dressing has been properly done, and then greater compression should be made, and with more bandages; and on the third, still greater, and still more. On the seventh day from the first dressing, when the bandages are loosed, the limb should be found slender and the bones mobile. We must then have recourse to the splints, provided the limb be free of swelling, pruritus, and ulceration, and allow them to remain until twenty days after the accident; but if any suspicions arise, the bandages must be loosed in the interval. The splints should be tightened every third day.

19. Ἡ ἀνάληψις, ἡ θέσις, ἡ ἐπίδεσις, ὡς ἐν τῷ αὐτῷ σχήματι διαφυλάσσειν. Κεφάλαια σχημάτων, ἔθρα, φύσιες ἐκάστου τῶν μελέων τὰ εἶδα, ἐκ τοῦ τρέχειν, ὁδοιπορεῖν, ἐστάναι, κατακεῖσθαι, ἐκ τοῦ ἔργου, ἐκ τοῦ ἀφεῖσθαι.

19. The suspending of a fractured limb in a sling, the disposition of it, and the bandaging, all have for their object to preserve it in position. The principal considerations with regard to the position are the habits and the peculiar nature of each of the limbs: the varieties are shown in running, walking, standing, lying, action, repose.

20. Ὅτι χρῆσις κρατύνει, ἀργίη δὲ τήκει.

20. It should be kept in mind that exercise strengthens, and inactivity wastes.

21. Ἡ πίεξις πλήθει, μὴ ἰσχύϊ.

21. Compression should be produced by the number of bandages, rather than by the force of the constriction.

22. Ὅκοσα δὲ ἐκχυμώματα, ἢ φλάσματα, ἢ σπάσματα, ἢ οἰδήματα ἀφλέγμαντα, ἐξερύεται αἷμα ἐκ τοῦ τρώματος, ἐς μὲν τὸ ἄνω τοῦ σώματος πλεῖστον, βραχὺ δέ τι καὶ ἐς τὸ κάτω μὴ κατάντη τὴν χεῖρα ἔχοντα, ἢ τὸ σκέλος τιθέμενον τὴν ἀρχὴν

κατὰ τὸ τρῶμα, καὶ μάλιστα ἐρείδοντα, ἤκιστα τὰ ἄκρα, μέσως τὰ διὰ μέσου τὸ ἔσχατον πρὸς τὰ ἄνω τοῦ σώματος νεμόμενον ἐπιδέσει, πιέξει ἀτὰρ καὶ ταῦτα, πλήθει μᾶλλον, ἢ ἰσχύϊ μάλιστα δὲ τουτέοισιν ὀθόνια λεπτὰ, κοῦφα, μαλθακὰ, καθαρὰ, πλατέα, ὑγιέα, ὡς ἂν ἄνευ ναρθήκων καὶ καταχύσει χρῆσθαι.

22. In cases of ecchymosis, contusions, sprains, or swellings not attended with inflammations, blood is to be expelled from the wound, in greatest quantity to

the upper part, and in smallest to the inferior; neither the arm nor the leg should be placed in a declining position: the head of the bandage should be placed on the wound, and there the greatest pressure should be made; the least at the extremities, and intermediately in the middle; the last fold of the bandage should be at the upper part of the body. As to binding and compression, these objects are to be attained rather by the number of the bandages than the force of the constriction; and moreover, in these cases the bandages should be thin, light, soft, clean, broad, sound, so that they may effect their purpose, even without splints. And we must use affusions.

23. Τὰ δὲ ἐκπτώματα, ἢ στρέμματα, ἢ διαστήματα, ἢ ἀποσπάσματα, ἢ ἀποκλάσματα, ἢ διαστρέμματα, οἷα τὰ κυλλὰ, τὰ ἑτερόρροπα, ὅθεν μὲν ἐξέστη, ξυνδιδόντα, ὅπη δὲ ξυντείνοντα, ὡς ἐς τάναντία ρέπη, ἐπιδεθέντα, ἢ πρὶν ἐπιδεθῆναι, σμικρῶ μᾶλλον, ἢ ὥστε ἐξ ἴσου εἶναι καὶ τοῖσιν ἐπιδέσμοισι, καὶ τοῖσι σπλήνεσι, καὶ τοῖσιν ἀναλήμμασι, καὶ τοῖσι σχήμασι, κατατάσει, ἀνατρίψει, διορθώσει, ταῦτα καὶ καταχύσει πλείονι.

23. Dislocations, sprains, diastases of bones, violent separation, abruption of the extremities of bones, and distrainings, so as to induce *varus* or *valgus*, in these cases we must apply the bandages so as not to compress the part whence the displacement took place, and that we may render them tight at the side to which the displacement was, and give the limb an inclination in the opposite direction, and that in an excessive degree. We employ bandages, compresses, suspension of the limb in a sling, attitude, extension, friction, rectification; and along with these the affusion of much water.

24. Τὰ δὲ μινυθήματα, πουλὸν προσλαμβάνοντα τοῦ υγιέος, ἐπιδεῖν ὡς ἂν ἐξ ἐπιδρομῆς τὰ ξυντακέντα πλέον ἢ αὐτὰ ἐμινύθει,

ἀλλοίη τῇ ἐπιδέσει παραλλάξαντα, ἐκκλίνειν ἐς τὴν αὔξησιν καὶ ἀνάπλασιν τῶν σαρκῶν ποιήσεται. Βέλτιον δὲ καὶ τὸ ἄνωθεν, οἷον κνήμης, καὶ τὸν ἕτερον μηρὸν, καὶ τὸ σκέλος τὸ υγιές συνεπιδεῖν, ὡς ὁμοιότερον ἦ, καὶ ὁμοίως ἐλινύη, καὶ ὁμοίως τῆς τροφῆς ἀποκλείηται καὶ δέχεται ὀθονίων πλήθει, μὴ πιέξει ἀνιέντα πρῶτον τὸ μάλιστα δεόμενον, καὶ ἀνατρίψει χρώμενον σαρκούση, καὶ καταχύσει ἄνευ ναρθήκων.

24. In treating parts which are atrophied, we must comprehend a considerable part of the sound limb with the bandage, so that by the influx thereby produced, the wasted part may acquire a supply greater than its loss, and may be thus

disposed to growth and restoration of its fleshy parts. It is better also to bandage the parts above, as the thigh in the case of the leg, and also the thigh and leg of the opposite side, so that they may be placed in similar circumstances, and may both equally be deprived of motion; and that the supply of nourishment may be alike curtailed and open to both. The compression should be the effect rather of the number of the bandages than of their tightness. We relax first the part most requiring it, and have recourse to that kind of friction which will promote the growth of flesh, and to affusion. No splints.

25. Τὰ δὲ ἐρμάσματα καὶ ἀποστηρίγματα, οἷον στήθει, πλευρῆσι, κεφαλῇ, καὶ τοῖσιν ἄλλοισιν, ὅσα τοιαῦτα τὰ μὲν, σφυγμῶν ἔνεκεν, ὡς μὴ ἐνσειήται τὰ δὲ, καὶ τῶν διαστασίων τῶν κατὰ τὰς ἀρμονίας ἐν τοῖσι κατὰ τὴν κεφαλὴν ὀστέοισιν, ἐρεισμάτων χάριν ἐπὶ τε βηχέων, ἢ πταρμέων, ἢ ἄλλης κινήσιος, οἷα τὰ κατὰ θώρηκα καὶ κεφαλὴν ἀποστηρίγματα γίνεται. Τουτέων ἀπάντων αἱ αὐταὶ ξυμμετρίαι τῆς ἐπιδέσιος ἢ μὲν γὰρ τὰ σίνη, μάλιστα πιέζει ὑποτιθέναι οὖν μαλθακὸν τι ἀρμόζον τῷ πάθει ἐπιδεῖν δὲ μὴ μᾶλλον πιεζεῦντα, ἢ ὥστε τοὺς σφυγμοὺς μὴ ἐνσειεῖν, μηδὲ μᾶλλον ἢ ὥστε τῶν διεστηκόντων τὰ ἔσχατα τῶν ἀρμονιῶν ψαύειν ἀλλήλων, μηδὲ τὰς

βῆχας καὶ τοὺς πταρμοὺς ὥστε κωλύειν, ἀλλ' ὥστε ἀποστήριγμα εἶναι, ὡς μήτε διαναγκάζεται, μήτε ἐνσειήται.

25. Those things which are for the purpose of giving support and strength to the part, as to the breast, side, head, and so forth, are used in such cases as the following: for pulsations, that there may be no motion in the part; and in separation at the sutures of the skull, in order to give support; and in order to strengthen the chest and head, in coughs, sneezings, and other movements. In all these cases the same measure of bandaging is to be observed, for where the injury is, there the bandage should compress most, and something soft is to be placed below that suits with the complaint; and we must not apply the bandages tighter than just to stop the pulsations from creating disturbance, and that the separated parts at the sutures may be brought into contact, they must not be such as absolutely to stop the coughs and sneezings, but so as to give support, and, without occasioning uneasiness, prevent the parts from being shaken.

## The Biographies



*A mosaic located in Kos' Asklepieion, depicting Hippocrates (left) with Asclepius in the middle*

# GENERAL INTRODUCTION TO HIPPOCRATES by W. H. S. Jones



## 1. Greek Medicine and Hippocrates

WE have learned to associate, almost by instinct, the science of medicine with bacteria, with chemistry, with clinical thermometers, disinfectants, and all the apparatus of careful nursing. All such associations, if we wish even dimly to appreciate the work of Hippocrates and of his predecessors, we must endeavour to break ; we must unthink the greater part of those habits of thought which education has made second nature. The Greek knew that there were certain collections of morbid phenomena which he called diseases ; that these diseases normally ran a certain course ; that their origin was not unconnected with geographical and atmospheric environment ; that the patient, in order to recover his health, must modify his ordinary mode of living. Beyond this he knew, and could know, nothing, and was compelled to fill up the blanks in his knowledge by having recourse to conjecture and hypothesis. In doing so he was obeying a human instinct which assures us that progress requires the use of stop-gaps where complete and accurate knowledge is unattainable, and that a working hypothesis, although wrong, is better than no hypothesis at all. System, an organized scheme, is of greater value than chaos. Yet however healthy such an instinct may be, it has added considerably to the difficulties of the historian in his attempts so to reconstruct the past as to make it intelligible to modern readers.

Primitive man regards everything he cannot explain as the work of a god. To him the abnormal, the unusual, is divine. The uncharted region of mysterious phenomena is the peculiar realm of supernatural forces. "It is the work of heaven" is a sufficient answer when the human intelligence can give no satisfactory explanation.

The fifth century B.C. witnessed the supreme effort of the Greeks to cast aside this incubus in all spheres of thought. They came to realize that to attribute an event to the action of a god leaves us just where we were, and that to call normal phenomena natural and abnormal divine is to introduce an unscientific dualism,

in that what is divine (because mysterious) in one generation may be natural (because understood) in the next, while, on the other hand, however fully we may understand a phenomenon, there must always be a mysterious and unexplained element in it. All phenomena are equally divine and equally natural.

But this realization did not come all at once, and in the science of medicine it was peculiarly slow. There is something arresting in the spread of an epidemic and in the onset of epilepsy or of a pernicious fever. It is hard for most minds, even scientific minds, not to see the working of a god in them. On the other hand, the efficacy of human means to relieve pain is so obvious that even in Homer, our first literary authority for Greek medicine, rational treatment is fully recognized.

As the divine origin of disease was gradually discarded, another element, equally disturbing, and equally opposed to the progress of scientific medicine, asserted itself. Philosophy superseded religion. Greek philosophy sought for uniformity in the multiplicity of phenomena, and the desire to find this uniformity led to guesswork and to neglect of fact in the attempt to frame a comprehensive theory. The same impulse which made Thales declare that all things are water led the writer of a treatise in the Hippocratic *Corpus* to maintain that all diseases are caused by air. As Daremberg says, “ the philosophers tried to explain nature while shutting their eyes.” The first philosophers to take a serious interest in medicine were the Pythagoreans. Alcmaeon of Croton, although perhaps not strictly a Pythagorean, was closely connected with the sect, and appears to have exercised considerable influence upon the Hippocratic school. The founder of empirical psychology and a student of astronomy, he held that health consists of a state of balance between certain “ opposites,” and disease an undue preponderance of one of them. Philolaus, who flourished about 440 B.C., held that bile, blood, and phlegm were the causes of disease. In this case we have a Pythagorean philosopher who tried to include medical theory in his philosophical system. Empedocles, who flourished somewhat earlier than Philolaus, was a “ medicine-man “ rather than a physician, though he is called by Galen the founder of the Italian school of medicine. The medical side of his teaching was partly magic and quackery.

This combination of medicine and philosophy is clearly marked in the Hippocratic collection. There are some treatises which seek to explain medical phenomena by *a priori* assumptions, after the manner of the philosophers with their method of ὑποθέσεις or postulates ; there are others which strongly oppose

this method. The Roman Celsus in his preface asserts that Hippocrates separated medicine from philosophy, and it is a fact that the best works of the Hippocratic school are as free from philosophic assumptions as they are from religious dogma. But before attempting to estimate the work of Hippocrates it is necessary to consider, not only the doctrine of the philosophers, but also the possibly pre-Hippocratic books in the *Corpus*. These are the *Prenotions of Cos* and the *First Prorrhetic*, and perhaps the treatise — in Latin and Arabic, the Greek original having mostly perished — on the number seven (περὶ ἑβδομάδων). The *Prenotions of Cos* and the *First Prorrhetic* (the latter being the earlier, although both are supposed to be earlier than Hippocrates) show that in the medical school of Cos great attention was paid to the natural history of diseases, especially to the probability of a fatal or not fatal issue. The *Treatise on Seven*, with its marked Pythagorean characteristics, proves, if indeed it is as early as Roscher would have us believe, that even before Hippocrates disease was considered due to a disturbance in the balance of the humours, and health to a “coction” of them, while the supposed preponderance of seven doubtless exercised some influence on the later doctrine of critical days. The work may be taken to be typical of the Italian-Sicilian school of medicine, in which *a priori* assumptions of the “philosophic” type were freely admitted. Besides these two schools there was also a famous one at Cnidos, the doctrines of which are criticised in the Hippocratic treatise *Regimen in Acute Diseases*. The defects of this school seem to have been : —

- (1) the use of too few remedies ;
- (2) faulty or imperfect prognosis ;
- (3) over-elaboration in classifying diseases.

We may now attempt to summarize the components of Greek medicine towards the end of the fifth century B.C.

- (1) There was a religious element, which, however, had been generally discarded.
- (2) There was a philosophic element, still very strong, which made free use of unverified postulates in discussing the causes and treatment — especially the former — of diseases.
- (3) There was a rational element, which relied upon accurate observation and



accumulated experience. This rationalism concluded that disease and health depended on environment and on the supposed constituents of the human frame.

Now if we take the Hippocratic collection we find that in no treatise is there any superstition, in many there is much “ philosophy “ with some sophistic rhetoric, and among the others some are merely technical handbooks, while others show signs of a great mind, dignified and reserved with all the severity of the Periclean period, which, without being distinctively original, transformed the best tendencies in Greek medicine into something which has ever since been the admiration of doctors and scientific men. It is with the last only that I am concerned at present.

I shall make no attempt to fix with definite precision which treatises are to be included in this category, and I shall confine myself for the moment to three — *Prognostic*, *Regimen in Acute Diseases*, and *Epidemics I. and III.* These show certain characteristics, which, although there is no internal clue to either date or authorship, impress upon the reader a conviction that they were written by the same man, and at a time before the great period of Greece had passed away. They remind one, in a subtle yet very real way, of Thucydides.

The style of each work is grave and austere. There is no attempt at “ window-dressing.” Language is used to express thought, not to adorn it. Not a word is thrown away. The first two treatises have a literary finish, yet there is no trace in them of sophistic rhetoric. Thought, and the expression of thought, are evenly balanced. Both are clear, dignified — even majestic.

The matter is even more striking than the style. The spirit is truly scientific, in the modern and strictest sense of the word. There is no superstition, and, except perhaps in the doctrine of critical days, no philosophy. Instead, there is close, even minute, observation of symptoms and their sequences, acute remarks on remedies, and recording, without inference, of the atmospheric phenomena, which preceded or accompanied certain “ epidemics.” Especially noteworthy are the clinical histories, admirable for their inclusion of everything that is relevant and their exclusion of all that is not.

The doctrine of these three treatises may be summarised as follows : — (1) Diseases have a natural course, which the physician must know thoroughly, so as to decide whether the issue will be favourable or fatal.

(2) Diseases are caused by a disturbance in the composition of the constituents of the body. This disturbance is connected with atmospheric and climatic conditions.

(3) Nature tries to bring these irregularities to a normal state, apparently by the action of innate heat, which “ concocts “ the “ crude “ humours of the body.

(4) There are “ critical “ days at fixed dates, when the battle between nature and disease reaches a crisis.

(5) Nature may win, in which case the morbid matters in the body are either evacuated or carried off in an ἀπόζιτασις, or the “ coction “ of the morbid elements may not take place, in which case the patient dies.

(6) All the physician can do for the patient is to give nature a chance, to remove by regimen all that may hinder nature in her beneficent work.

It may be urged that this doctrine is as hypothetical as the thesis that all diseases come from air. In a sense it is. All judgments, however simple, attempting to explain sense-perceptions, are hypotheses. But hypotheses may be scientific or philosophic, the latter term being used to denote the character of early Greek philosophy. A scientific hypothesis is a generalization framed to explain the facts of experience ; it is not a foundation, but is in itself a superstructure ; it is constantly being tested by appeals to sense-experience, and is kept, modified or abandoned, according to the support, or want of support, that phenomena give to it. A “philosophic” hypothesis is a generalization framed with a view to unification rather than to accounting for all the facts ; it is a foundation for an unsubstantial superstructure ; no efforts are made to test it by appeals to experience, but its main support is a credulous faith.

Now the doctrine of the *Epidemic* group is certainly not of the philosophic kind. Some of it was undoubtedly derived from early philosophic medicine, but in this group of treatises observed phenomena are constantly appealed to ; nor must it be forgotten that in the then state of knowledge much that would now be styled inference was then considered fact, *e. g.* the “coction” of phlegm in a common cold. Throughout, theory is in the background, observation in the foreground. It is indeed most remarkable that Hippocratic theory is hard to disentangle from the three works on which my argument turns. It is a nebulous framework, implied in the technical phraseology — πέψις, κρίσις, κρᾶσις — and often illustrated

by appeal to *data* , but never obtrusively insisted upon.

In 1836 a French doctor, M. S. Houdart, violently attacked this medical doctrine on the ground that it neglected the physician's prime duty, which is to effect a cure. Diagnosis, he urges, is neglected in the cult of prognosis ; no attempt is made to localize the seat of disease ; the observations in the *Epidemics* are directed towards superficial symptoms without any attempt to trace them to their real cause. The writer is an interested but callous spectator who looks on unmoved while his patient dies.

In this rather rabid criticism there is a morsel of truth. The centre of interest in these treatises is certainly the disease rather than the patient. The writer is a cold observer of morbid phenomena, who has for a moment detached himself from pity for suffering. But this restraint is in reality a virtue ; concentration on the subject under discussion is perhaps the first duty of a scientist. Moreover, we must not suppose that the fatally-stricken patients of the *Epidemics* received no treatment or nursing. Here and there the treatment is mentioned or hinted at, but the writer assumes that the usual methods were followed, and does not mention them because they are irrelevant.

The charge of callousness may be dismissed. More serious is the attack on the fundamental principle of Hippocratic medicine, that " nature " alone can effect a cure, and that the only thing the physician can do is to allow nature a chance to work. Modern medical science has accepted this principle as an ultimate truth, but did the writer of the three treatises under discussion do his best to apply it ? Did he really try to serve nature, and, by so doing, to conquer her ? Houdart says that practically all the author of the *Epidemics* did was " to examine stools, urine, sweats, etc., to look therein for signs of coction, to announce crises and to pronounce sentences of death," in other words that he looked on and did nothing. I have just pointed out that the silence of the *Epidemics* on the subject of treatment must not be taken to mean that no treatment was given, but it remains to be considered whether all was done that could have been done. What remedies were used by the author of *Regimen in Acute Diseases* ? They were : —

(1) Purgatives and, probably, emetics.

(2) Fomentations and baths.

(3) ( *a* ) Barley-water and barley-gruel, in the preparation and administering of

which great care was to be taken.

( *b* ) Wine.

( *c* ) Hydromel, a mixture of honey and water ; and oxymel, a mixture of honey and vinegar. (4) Venesection.

(5) Care was taken not to distress the patient.

If we take into account the scientific knowledge of the time, it is difficult to see what more the physician could have done for the patient. Even nowadays a sufferer from measles or influenza can have no better advice than to keep warm and comfortable in bed, to take a purge, and to adopt a diet of slops. Within the last few years, indeed, chemistry has discovered febrifuges and anaesthetics, the microscope has put within our reach prophylactic vaccines, and the art of nursing has improved out of all recognition, but nearly all these things were as unknown to M. Houdart as they were in the fifth century B.C.

This criticism of Hippocratic medicine has been considered, not because it is in itself worthy of prolonged attention, but because it shows that underlying the three treatises I have mentioned there is a fundamental principle, a unity, a positive characteristic implying either a united school of thought or else a great personality. All antiquity agreed that they were written by the greatest physician of ancient times — Hippocrates. Within the last hundred years, however, doubts have been expressed whether Hippocrates wrote anything. Early in the nineteenth century a doctor of Lille published a thesis intitled *Dubitaciones de Hippocratis vita, patria, genealogia, forsam mythologicis, et de quibusdam eius libris multo antiquioribus quam vulgo creditur*. Wellmann and Wilamowitz hold similar views nowadays. As the Hippocratic writings are all anonymous, such a hypothesis is not difficult to maintain. But it is a matter of merely antiquarian interest whether or not the shadowy “ Hippocrates “ of ancient tradition is really the writer of the *Epidemics*. The salient and important truth is that in the latter half of the fifth century works were written, probably by the same author, embodying a consistent doctrine of medical theory and practice, free from both superstition and philosophy, and setting forth rational empiricism of a strictly scientific character. If in future I call the spirit from which this doctrine emanated “ Hippocrates “ it is for the sake of convenience, and not because I identify the author with the shadowy physician of tradition.

Similar in style and in spirit to the three treatises discussed above are *Aphorisms* and *Airs Waters Places*, along with two surgical works, *Fractures* and *Wounds in the Head*. The severely practical character of the last is particularly noteworthy, and makes the reader wonder to what heights Greek surgery would have risen had antiseptics been known. *Aphorisms* is a compilation, but a great part shows a close relationship to the Hippocratic group. The least scientific of all the seven treatises is *Airs Waters Places*, which, in spite of its sagacity and rejection of the supernatural, shows a tendency to facile and unwarranted generalization.

## 2. The Hippocratic Collection

We are now in a position to attempt a brief analysis of the *Corpus Hippocraticum*. For the moment the external evidence of Galen and other ancient commentators, for or against the authenticity of the various treatises, will be passed over. This evidence is of great importance, but may tend to obscure the issue, which is the mutual affinities of the treatises as shown by their style and content.

In the first place the heterogeneous character of the *Corpus* should be observed. It contains : —

- (1) Text-books for physicians ;
- (2) Text-books for laymen ;
- (3) Pieces of research or collection of material for research.
- (4) Lectures or essays for medical students and novices.
- (5) Essays by philosophers who were perhaps not practising physicians, but laymen interested in medicine and anxious to apply to it the methods of philosophy.
- (6) Note-books or scrap-books.

Even single works often exhibit the most varied characteristics. It is as though loose sheets had been brought together without any attempt at coordination or

redaction. *Epidemics I.* , for instance, jumps with startling abruptness from a “constitution “ of the diseases prevalent at one period in Thasos to the function of the physician in an illness, passing on to a few disjointed remarks on pains in the head and neck. Then follows another “ constitution,” after which comes an elaborate classification of the ordinary fevers, with their periods, paroxysms and crises. At the end come fourteen clinical histories.

I have already mentioned a pre-Hippocratic group and a Hippocratic group, and it has been noticed that the main task of Greek medicine was to free science from superstition and from philosophic hypotheses. The *Corpus* contains two polemical works, *On Epilepsy* and *Ancient Medicine* , which attack respectively the “ divine “ origin of disease and the intrusion into medicine of the hypothetical speculation of philosophers.

There is another group of works which, while they do not display to any marked degree the Hippocratic characteristics, are nevertheless practical handbooks of medicine, physiology or anatomy. The list is a long one, and includes works by different authors and of different schools : —

*The Surgery.*

*The Heart.*

*Places in Man.*

*Glands.*

*Anatomy.*

*Nature of the Bones.*

*Sight.*

*Dentition.*

*Diseases I.*

*Diseases II. and III.*

*Affections.*

*Internal Affections.*

*Sores.*

*Fistulae.*

*Hemorrhoids. Prorrhetic II.*

*The Physician.*

*Crises.*

*Critical Days.*

*Purges.*

*Use of Liquids.*

*Seventh Month Child.*

*Eighth Month Child.*

*Generation.*

*Nature of the Child.*

*Diseases IV.*

*Diseases of Women.*

*Barrenness.*

*Diseases of Girls.*

*Nature of Women.*

*Excision of the Foetus.*

*Superfoetation.*

*Regimen in Health.*

*Regimen II. and III. with Dreams.*

Another most important group of works consists of those in which the philosophic element predominates over the scientific, the writers being anxious, not to advance the practice of medicine, but to bring medicine under the control of philosophic dogma, to achieve in fact the end attacked by the writer of *Ancient Medicine*. These works are *Nutriments*, *Regimen I.* and *Airs*. The first two are Heraclitean ; the last is probably derived from Diogenes of Apollonia. *Regimen I.* , however, while strongly Heraclitean, is eclectic. Animals are said to be composed of two elements, fire and water, fire being a composite of the hot and the dry, water of the cold and the moist. Certain sentences are strikingly reminiscent of Anaxagoras, so much so that it is impossible to regard the resemblances as accidental. Take for instance the following : —

(1) ἀπόλλυται μὲν οὖν οὐδὲν ἀπάντων χορμάτων, οὐδὲ γίνεται ὅτι μὴ καὶ πρόσθεν ἦν. ζυμμισγόμενα δὲ καὶ διακρινόμενα ἀλλοιοῦται. — *Regimen I. IV.*

(2) οὐδὲν γὰρ χρῆμα γίνεται οὐδὲ ἀπόλλυται, ἀλλ' ἀπὸ ἐόντων χρημάτων ζυμμίσγεται τε καὶ διακρίνεται. — Anaxagoras, *fr.* 22 (Schaubach).

To assign exact dates to these works is impossible, but they are probably much later than Heraclitus himself. The interesting fact remains that Heraclitus had followers who kept his doctrine alive, second-rate thinkers, perhaps, and unknown in the history of science, but hearty supporters of a creed, and ready to extend it to embrace all new knowledge as it was discovered. Particularly interesting is the work *Nutriments*. This not only adopts the theory of Heraclitus, but also mimics his sententious and mysterious manner of expression. A few examples may not be out of place.

φύσις ἐξαρκεῖ πάντα πᾶσι. — *Nutriments XV.*

κρατεῖ γὰρ [sc. ὁ θεῖος νόμος] . . . καὶ ἐξαρκεῖ πᾶσι. — Heraclitus *apud* Stob. *Flor.* III. 84.

μία φύσις εἶναι καὶ μὴ εἶναι. — *Nutriments XXIV.*

εἶμέν τε καὶ οὐκ εἶμεν. — Heraclitus *Alleg. Hom.* 24.

ὁδὸς ἄνω κάτω, μία. — *Nutriments XLV.* ὁδὸς ἄνω καὶ κάτω μία καὶ ὡυτή. — Heraclitus *apud* Hippolyt. IX. 10.



πρός2 τι πάντα φλαῦρα καὶ πάντα ἀς1τεῖα. — *Nutrimet XLV.*

θάλας1ς1α ὕδωρ καθαρώτατον καὶ μιαρώτατον, ἰχθύς1ι μὲν πότιμον καὶ  
ς1ωτήριον, ἀνθρώποις2 δὲ ἄποτον καὶ ὀλέθριον. — Heraclitus *apud* Hippolyt.  
IX. 10.

χωρεῖ δὲ πάντα καὶ θεῖα καὶ ἀνθρώπεια, ἄνω καὶ κάτω ἀμειβόμενα. — *Regimen*  
I. V.

Similar to these philosophic treatises are the essays, ἐπιδείξεις2 or displays, which propound theses which are not the ὑποθέσεις2 of philosophers. These are *The Art* , the object of which is to show that there *is* an art of medicine, and *Nature of Man* , which combats the monist philosophers, and sets forth the doctrine of the four humours as the cause of health, by their perfect *crasis* , and of disease, through a disturbance of that *crasis*. To this group we may perhaps add the treatise *Decorum* , which deals (among other things) with bed-side manners, and *Precepts* , a work similar in style and subject.

The last two works are interesting for their introductory remarks. *Decorum* practically identifies medicine and philosophy, which term is used to denote the philosophic spirit, with its moral as well as its intellectual attributes, and recognises the working of an agency not human ; it is in fact typical of the ethical science, practical if occasionally commonplace, which came into vogue towards the end of the fourth century B.C. The introduction to *Precepts* is Epicurean. The first chapter, in fact, is a summary of Epicurean epistemology, and is full of the technical terms of that school. A single quotation will suffice : — ὁ γὰρ λογισ1μὸς2 μνήμη τίς2 ἐς1τι ξυνθετικὴ τῶν μετ' αἰς1θής1ιους2 ληφθέντων: ἐφαντας1ιώθη γὰρ ἐναργέως2 ἢ αἰς1θης1ις2, προπαθῆς2 καὶ ἀναπομπὸς2 ἐοῦς1α εἰς2 διάνοιαν τῶν ὑποκειμένων. — *Precepts* I.

This definition of λογισ1μὸς2 is practically the same as that of the Epicurean πρόληψις2 given in Diogenes Laertius X. 33.

A few of the contents of the *Corpus Hippocraticum* remain unclassified. Of these, by far the most Hippocratic are *Epidemics II., IV. VII.* It is indeed remarkable that in antiquity they were not generally assigned to the “ great “ Hippocrates. The clinical histories are invaluable, although they are not so severely pertinent as those of *Epidemics I. and III.* , betraying sometimes an eye for picturesque but irrelevant detail.

The treatise curiously misnamed *Fleashes* contains, amid a variety of interesting anatomical and physiological detail, traces of Pythagoreanism in the virtue attached to the number seven, and of Heracliteanism in the view put forward that warmth is the spirit that pervades the universe.

*Humours* deals with the relations of humours to the seasons and so on.

*The Oath* and *The Law* are small but interesting documents throwing light on medical education and etiquette.

Finally, the *Epistles* and *Decree*, although merely imaginary essays, show what manner of man Hippocrates was supposed to have been by the Greeks of a later age. The Hippocratic collection is a medley, with no inner bond of union except that all the works are written in the Ionic dialect and are connected more or less closely with medicine or one of its allied sciences. There are the widest possible divergences of style, and the sharpest possible contradictions in doctrine. The questions present themselves, why were they united, and when did the union occur?

Littré's problem, "When was the Hippocratic collection published?" cannot be answered, for it is more than doubtful whether, as a whole, the collection was ever published at all. The publication of a modern work must in no way be compared with the circulation of a book in ancient times. Printing and the law of copyright have created a revolution. As soon as an ancient author let go out of his possession a single copy of his book, it was, to all intents and purposes, "published." Copies might be multiplied without permission, and a popular and useful work was no doubt often circulated in this way. Now at least one hundred, perhaps three hundred, years separate the writing of the earliest work in the *Corpus* from the writing of the latest. Diocles knew the *Aphorisms*, Ctesias probably knew *Articulations*, and Menon certainly knew two or three treatises. Aristotle himself quotes from *Nature of Man*, though he ascribes it to Polybus. It is surely impossible to suppose with Littré that there was anything approaching a publication of the *Corpus* by the Alexandrian librarians. Even if they had published for the first time only a large portion of the collection, such a momentous event would scarcely have passed unnoticed by the long series of commentators culminating in Galen. The librarians of Alexandria could not have done more than establish a canon, and if our present collection represents their work in this direction it was done very badly, as the most superficial critic would not fail to notice that a great part of its contents is neither by Hippocrates himself

nor by his school.

The Hippocratic collection is a library, or rather, the remains of a library. What hypothesis is more probable than that it represents the library of the Hippocratic school at Cos? The ancient biographies of Hippocrates relate a fable that he destroyed the library of the Temple of Health at Cnidos (or, according to another form of the fable, at Cos) in order to enjoy a monopoly of the knowledge it contained. The story shows, at least, that such libraries existed, and indeed a school of medicine, like that which had its home at Cos, could not well have done without one. And what would this library contain? The works of the greatest of the Asclepiads, whether published or not ; valuable works, of various dates and of different schools, bearing on medicine and kindred subjects ; medical records and notes by distinguished professors of the school, for the most part unpublished ; various books, of no great interest or value, presented to the library or acquired by chance.

The Hippocratic collection actually corresponds to this description. This is nearly all the historian is justified in saying. Beyond is mere conjecture. We can only guess when this library ceased to be the property of the Hippocratic school, and how it was transferred to one or other of the great libraries which were collected in Alexandrine times, to be re-copied and perhaps increased by volumes which did not belong to the original collection.

It may be urged that if the Hippocratic *Corpus* were originally a library, it is improbable that all the treatises composing it would be written in Ionic. But it is by no means certain when Ionic ceased to be the normal medium for medical science ; for all we know the dialect may have been in vogue until long after the κοινή established itself throughout the Greek world. Moreover, we do not know what levelling forces were at work among copyists and librarians, inducing them to assimilate the dialects of medical works to a recognized model. We do know, however, that as centuries passed more and more Ionisms, most of them spurious, were thrust upon the Hippocratic texts. The process we can trace in the later history of the text may well have been going on, in a different form, in the fourth and third centuries B.C.

It is because I regard the Hippocratic collection as merely a library that I do not consider it worth while to attempt an elaborate classification, like those of Littré, Greenhill, Ermerins, and Adams. A library is properly catalogued according to subject matter, date, and authorship ; it is of little use to view each separate

volume in its relationship to a particular writer. The Hippocrates of tradition and the Hippocrates of the commentators may well be left buried in obscurity and uncertainty. What we do know, what must be our foundation stone, is that certain treatises in the *Corpus* are impressed with the marks of an outstanding genius, who inherited much but bequeathed much more. He stands for science and against superstition and hypothetical philosophy. The other contents of the *Corpus* are older or later than this nucleus, either in harmony with its doctrines or opposed to them. More than this we cannot hope to know for certain.

### 3. Means of Dating Hippocratic Works

The means of fixing the dates of the treatises composing the Hippocratic collection are twofold — external and internal.

The external evidence consists of the statements of Galen and other ancient authors.

The internal tests are : —

( *a* ) The philosophical tenets stated or implied ;

( *b* ) The medical doctrines ;

( *c* ) The style of the treatise ;

( *d* ) The language and grammar.

( *a* ) When a philosophic doctrine is adopted, or referred to as influential, it is presumptive evidence that the treatise was written before that doctrine grew out of date. We cannot, however, always be sure when a doctrine did grow out of date. It is a mistaken idea to suppose that the rise of a fresh school meant the death of its predecessors. It is certain, for instance, that Heraclitus had followers, after the rise of other schools, who developed his doctrines without altering their essential character.

( *b* ) Medical doctrines also are by no means a certain test. If we could be sure that a knowledge of the pulse was unknown to the writers of the chief Hippocratic treatises, we should be more confident in dating, *e.g.* , the work

called *Nutriments*, which recognizes the existence of a pulse. It is a fact that no use is made of this knowledge in any treatise of the collection, but we must not infer from this that the Hippocratic writers were ignorant of pulses. We can only infer that they were ignorant of their medical importance.

( c ) The style of a treatise is sometimes a sure test and sometimes not. Sophistic rhetoric is of such a marked character in its most pronounced form that a treatise showing it is not likely to be much earlier than 427 B.C., nor much later than 400 B.C., when sophistic extravagances began to be modified under the influence of the Attic orators. But a work moderately sophistic in general style and sentence-structure may be much later.

There is also a subtle quality about writings later than 300 B.C., an unnatural verbosity and tortuousness of expression, a suspicion of the “baboo,” that is as unmistakable as it is impalpable. A few of the Hippocratic treatises display this characteristic.

( d ) In some respects grammar and diction are the surest tests of all. If the negative μή is markedly ousting οὐ it is a sure sign of post-Alexandrine date. A preference for compound words with abstract meaning, in cases where a simple expression would easily have sufficed, is a mark of later Greek prose. If any reader wishes for concrete evidence to support my rather vague generalisations, he has only to read *Epidemics I.*, then *The Art* or *Regimen I.*, and finally *Precepts* or *Decorum*, and try to note the differences.

#### 4. Plato's References to Hippocrates

In the *Protagoras* (311 B) Plato assumes the case of a young man who goes to Ἴπποκράτη τὸν Κῶνον, τὸν τῶν Ἀσκληπιαδῶν, to learn medicine. This passage tells us little except that Hippocrates took pupils for a fee. But in the *Phaedrus* (270 C — E) there is another passage which professes to set forth the true Hippocratic method. It is as follows : —

*Socrates.* Do you think it possible, then, satisfactorily to comprehend the nature of soul apart from the nature of the universe?

ΣΩ. Ψυχῆς οὐκ ἔστιν ἀξίως λόγου κατανοῆσαι οἷον δυνατόν εἶναι ἄνευ τῆς τοῦ ὅλου φύσεως;

*Phaedrus.* Nay, if we are to believe Hippocrates, of the Asclepiad family, we cannot learn even about the body unless we follow this method of procedure.

ΦΑΙ. Εἰ μὲν οὖν Ἴπποκράτει γε τῷ τῶν Ἀσκληπιαδῶν δεῖ τι πείθεσθαι, οὐδὲ περὶ σώματος ἄνευ τῆς μεθόδου ταύτης.

*Socrates.* Yes, my friend, and he is right. Yet besides the doctrine of Hippocrates, we must examine our argument and see if it harmonizes with it.

ΣΩ. Καλῶς γάρ, ὃ ἑταῖρε, λέγει. χρὴ μέντοι πρὸς τῷ Ἴπποκράτει τὸν λόγον ἐξετάζοντα σκόπεῖν εἰ συμφωνεῖ.

*Phaedrus.* Yes.

ΦΑΙ. Φημί.

*Socrates.* Observe, then, what it is that both Hippocrates and correct argument mean by an examination of nature. Surely it is in the following way that we must inquire into the nature of anything. In the first place we must see whether that, in which we shall wish to be craftsmen and to be able to make others so, is simple or complex. In the next place, if it be simple, we must inquire what power nature has given it of acting, and of acting upon what ; what power of being acted upon, and by what. If on the other hand it be complex, we must enumerate its parts, and note in the case of each what we noted in the case of the simple thing, through what natural power it acts, and upon what, or through what it is acted upon, and by what.

ΣΩ. Τὸ τοίνυν περὶ φύσεως σκόπει τί ποτε λέγει Ἴπποκράτης τε καὶ ὁ ἀληθὲς λόγος. ἄρ' οὐχ ὧδε δεῖ διανοεῖσθαι περὶ ὅτου οὖν φύσεως; πρῶτον μὲν, ἀπλοῦν ἢ πολυειδές ἐστίν, οὗ περὶ βουλησόμεθα εἶναι αὐτοὶ τεχνικοὶ καὶ ἄλλον δυνατοὶ ποιεῖν, ἔπειτα δέ, ἐὰν μὲν ἀπλοῦν ᾖ, σκόπεῖν τὴν δύναμιν αὐτοῦ, τίνα πρὸς τί πέφυκεν εἰς τὸ δρᾶν ἔχον ἢ τίνα εἰς τὸ παθεῖν ὑπὸ τοῦ; ἐὰν δὲ

πλείω εἶδη ἔχῃ, ταῦτα ἀριθμησάμενον, ὅπερ ἐφ' ἑνός, τοῦτ' ἰδεῖν ἐφ' ἐκάστου, τῷ τί ποιεῖν αὐτὸ πέφυκεν ἢ τῷ τί παθεῖν ὑπὸ τοῦ; — *Phaedrus* 270 C, D.

It is obvious that if we could find passages in the Hippocratic collection which clearly maintain the doctrine propounded in this part of the *Phaedrus* we should be able to say with confidence that the Hippocrates of history and tradition was the author of such and such a treatise.

Galen maintains that Plato refers to the treatise *Nature of Man*. I believe that few readers of the latter will notice any striking resemblances between this work and the doctrine outlined by Plato. More plausible is the view of Littré, that Plato refers to Chapter XX of *Ancient Medicine*, which contains the following passage : —

ἐπεὶ τοῦτό γε μοι δοκεῖ ἀναγκαῖον εἶναι παντὶ ἰητρῷ περὶ φύσιος εἰδέναί, καὶ πάνυ σπουδάσαι ὡς εἴσεται, εἴπερ τι μέλλει τῶν δεόντων ποιήσασθαι, ὃ τί τέ ἐστιν ἄνθρωπος πρὸς τὰ ἐσθιόμενά τε καὶ πινόμενα, καὶ ὃ τι πρὸς τὰ ἄλλα ἐπιτηδεύματα, καὶ ὃ τι ἀφ' ἐκάστου ἐκάστω συμβήσεται.

Here the resemblance is closer — close enough to show that the author of *Ancient Medicine*, if he be not the Hippocrates of history, at least held views similar to his. And here the question must be left. Few would maintain with Littré that the resemblance between the two passages is so striking that they must be connected ; few again would deny that Plato was thinking of *Ancient Medicine*. Ignorance and uncertainty seem to be the final result of most of the interesting problems presented by the Hippocratic collection.

## 5. THE COMMENTATORS AND OTHER ANCIENT AUTHORITIES.

About the time of Nero a glossary of unusual Hippocratic terms was written by Erotian, which still survives. Erotian was not the first to compose such a work, nor was he the last, the most famous of his successors being Galen. An examination of this glossary, combined with testimony derived from Galen, throws some light on the history of the Hippocratic collection. It will be well to quote a passage from Erotian's introduction, which contains a fairly complete list of commentators.

Παρά ταύτην γέ τοι τὴν αἰτίαν πολλοὶ τῶν ἐλλογίμων οὐκ ἰατρῶν μόνον, ἀλλὰ καὶ γραμματικῶν ἐσιπούδας ἴαν ἐξηγήσασθαι τὸν ἄνδρα καὶ τὰς λέξεις ἐπὶ τὸ κοινότερον τῆς ὁμιλίας ἀγαγεῖν. Ξενόκριτος γὰρ ὁ Κῶος, γραμματικὸς ὢν, ὡς φησὶν ὁ Ταραντῖνος Ἡρακλείδης, πρῶτος ἐπεβάλετο τὰς τοιαύτας ἐξαπλοῦν φωνάς. ὡς δὲ καὶ ὁ Κιτιεὺς Ἀπολλώνιος ἱστορεῖ, καὶ Καλλίμαχος ὁ ἀπὸ τῆς Ἡροφίλου οἰκίας. μεθ' ὃν φασὶ τὸν Ταναγραῖον Βακχεῖον ἐπιβαλεῖν τῇ πραγματείᾳ καὶ διὰ τριῶν συντάξεων πληρῶσαι τὴν προθεσίμιαν, πολλὰς παραθέμενον εἰς τοῦτο μαρτυρίας ποιητῶν, ᾧ δὲ τὸν ἐμπειρικὸν συγχρονήσαντα Φιλῖνον διὰ ἐξαβίβλου πραγματείας ἀντειπεῖν, καίπερ Ἐπικλέους τοῦ Κρητὸς ἐπιτεμομένου τὰς Βακχείου λέξεις διὰ . . . συντάξεων, Ἀπολλωνίου τε τοῦ Ὀφεως ταῦτο ποιήσαντος, καὶ Διοσκορίδου τοῦ Φακᾶ πᾶσι τούτοις ἀντειπόντος δι' ἑπτὰ βιβλίων, Ἀπολλωνίου τε τοῦ Κιτιέως ὀκτωκαίδεκα πρὸς τὰ τοῦ Ταραντίνου τρία πρὸς Βακχεῖον διαγράψαντος, καὶ Γλαυκίου τοῦ ἐμπειρικοῦ δι' ἑνὸς πολυστίχου πάνυ καὶ κατὰ στοιχεῖον πεποιημένου ταῦτο ἐπιτηδεύσαντος πρὸς τε τούτοις Λυσίμαχου τοῦ Κῶου κ' βιβλίων ἐκπονήσαντος πραγματείαν μετὰ τοῦ τρία μὲν γράψαι πρὸς Κυδίαν τὸν Ἡροφίλειον, τρία δὲ πρὸς Δημήτριον. τῶν δὲ γραμματικῶν οὐκ ἔστιν ὅστις ἐλλόγιμος φανεῖς παρήλθε τὸν ἄνδρα. καὶ γὰρ ὁ ἀναδεξάμενος αὐτὸν Ἐυφορίων πᾶσαν ἐσιπούδα λέξιν ἐξηγήσασθαι διὰ βιβλίων σ', περὶ ὧν γεγράφασιν Ἀριστοκλῆς καὶ Ἀριστέας οἱ Πόδιοι. ἔτι δὲ Ἀριστάρχος καὶ μετὰ πάντας Ἀντίγονος καὶ Δίδυμος οἱ Ἀλεξανδρεῖς. — p, 5 (Nachmanson).

A good account of the commentators is given by Littré, vol. I., p foll. Herophilus (about 300 B.C. ) appears to have been the first ; Bacchius his pupil edited *Epidemics III.* , wrote notes on three other Hippocratic works, and compiled a glossary. A great number of short fragments of the works of Bacchius still survive. The most celebrated commentator, a medical man as well as a scholar, was Heraclides of Tarentum, who lived rather later than Bacchius.

Erotian in his introduction gives the following list of Hippocratic works : —

σημειωτικὰ μὲν οὖν ἐστί ταῦτα: Προγνωστικόν, Προρρητικὸν α' καὶ β' (ὡς οὐκ ἔστιν Ἱπποκράτους, ἐν ἄλλοις δείξομεν), Περὶ χυμῶν. αἰτιολογικὰ δὲ καὶ φυσικὰ: Περὶ φυσῶν, Περὶ φύσεως ἀνθρώπου, Περὶ ἱερᾶς νόσου, Περὶ φύσεως παιδίου, Περὶ τόπων καὶ ὥρων. θεραπευτικὰ δέ: τῶν μὲν εἰς χειρουργίαν ἀνηκόντων: Περὶ ἀγμῶν, Περὶ ἄρθρων, Περὶ ἐλκῶν, Περὶ τραυμάτων καὶ βελῶν, Περὶ τῶν ἐν κεφαλῇ τραυμάτων, Κατὰ ἰητρεῖον, Μοχλικόν, Περὶ αἱμορροϊδῶν καὶ συρίγγων. εἰς διαίταν: Περὶ νοσίων α' β',



Περὶ πτις1άνης2, Περὶ τόπων τῶν κατὰ ἄνθρωπον, Γυναικείων ἀ β΄, Περὶ τροφῆς2, Περὶ ἀφόρων, Περὶ ὑδάτων. ἐπίμικτα δέ ἐς1τι ταῦτα: Ἀφορισ1μοί, Ἐπιδημῖαι ζ. τῶν δ΄ εἰς2 τὸν περὶ τέχνης2 τεινόντων λόγον: Ὀρκος2, Νόμος2, Περὶ τέχνης2, Περὶ ἀρχαίας2 ἰατρικῆς2. Πρეს1βευτικὸς2 γὰρ καὶ Ἐπιβώμιος2 φιλόπατριν μᾶλλον ἢ ἰατρὸν ἐμφαίνουσ1ι τὸν ἄνδρα. — (Nachmanson).

The actual glossary, however, refers to more works than these, as will appear from the following table.

## LISTS OF THE HIPPOCRATIC COLLECTION

[Works known to the authors, not necessarily attributed by them to Hippocrates.]

Littré vol.

Name.

Bacchius.

Celsus.

Erotian.

1

περὶ ἀρχαίης ἰητρικῆς2

X

X

2

περὶ ἀέρων ὑδάτων τόπων

X

X

X

“

προγνωστικόν

X

X

X

“

περὶ διαίτησ<sup>2</sup> ὀξέων

X

X

X

“

ἐπιδημῖαι 1

X

X

X

3

ἐπιδημία 3

X

X

X

“

περὶ τῶν ἐν κεφαλῇ τραυμάτων

X

X

X

“

κατ' ἰητροῖον

X

X

X

“

περὶ ἀγμῶν

?

X

X

4

περὶ ἀρθρῶν

X

X

X

“

μοχλικόν

X

X

“

ἀφορισμοί

X

X

X

“

ὄρκος2

X

“

νόμος2

X

5

ἐπιδημία 2

X

X

X

“

” 4

X

“

” 5

X

X

“

” 6

X

X

“

” 7

X

“

περὶ χυμῶν

X

X

X

“

προρρητικὸν 1

X

X

“

Κωακαὶ προγνώσεις<sup>2</sup>

X

6

περὶ τέχνης<sup>2</sup>

X

X

X

“

περὶ φύσιος<sup>2</sup> ἀνθρώπου

X

“

περὶ διαίτης<sup>2</sup> ὑγιεινῆς<sup>2</sup>

X

“

περὶ φυσιῶν

X



X

“

περὶ χρήσιος ἄνθρωπων

X

X

“

περὶ νόσων 1

X

XX

“

περὶ παθῶν

X

“

περὶ τόπων τῶν κατ' ἄνθρωπον

X

X

“

περὶ ἱερῆς<sup>2</sup> νούς<sup>1</sup>ου

X

X

“

περὶ ἐλκῶν

X

“

περὶ αἱμορροΐδων

X

“

περὶ ζυρίγγων

X

X

Littré vol.

Name.

Bacchius.

Colsus.

Erotian.

6

περὶ διαίτης 1

XX

“

” 2

X

XX

“

” 3

XX

“

περὶ ἐνυπνίων

7

περὶ νούσιων 2

X

XX

“

περὶ νοσίων 3

XX

“

περὶ τῶν ἔντος παθῶν

X

XX

“

περὶ γυναικείης φύσιος

“

περι έπταμήνου

“

περι όκταμήνου

“

περι γονής2

XX

“

περι φύς1ιος2 παιδίου

X

X

“

περὶ νούζων 4

8

περὶ γυναικείων 1 and 2

X

“

περὶ ἀφόρων

X

“

περὶ παρθενίων

“

περὶ ἐπικυῆς<sup>1</sup> ἰοῦ<sup>2</sup>

“

περὶ ἐγκατατομῆς<sup>2</sup> ἐμβρύου

“

περὶ ἀνατομῆς<sup>2</sup>



“

περὶ ὀδοντοφυΐης

“

περὶ ἀδένων

“

περὶ ζιάρκων

XX

“

περὶ ἐβδομάδων

XX

9

προρρητικὸν 2

X

X

“

περὶ καρδίας2

?

X

“

περὶ τροφῆς2

X

“

περὶ ὄψιός

“

περὶ ὀστέων φύσιός

X

XX

“

περὶ ἰητροῦ

“

περὶ εὐσεβήτων

“

παραγγέλαι

XX

“

περὶ κριζίμων

“

περὶ κριζίμων

“

ἐπιστολαί

“

πρεσβυτικός2

X

“

ἐπιβώμιος2

X

70

23 ?

25

49

Erotian knew also *περὶ τραυμάτων καὶ βελῶν*, now lost. The double XX means “by quotation, but not in the list.” N.B. — The list of Bacchius is made by noting where in the Hippocratic collection occur the strange words upon which he commented ; that of Celsus by a comparison of similar passages ; that of Erotian from his list, by noting where occur the *γλῶσσι* explained by him, and from fragments in scholia (see E. Nachmanson’s edition, p foll.). Of course the list of Celsus is dubious from its nature, and Bacchius may have known many more treatises than those we are sure he did know.

The recently discovered history of medicine called Menon’s *Iatrica* contains several references to Hippocrates. Diels is of opinion that they are very erroneous.

In V. the writer says that according to Hippocrates diseases are caused by “airs” (*φύσιαι*), a statement which seems to be taken from *περὶ φύσιων*, VI. 98 foll. Littré, and the doctrine is described in V. and VI. In VII. Hippocrates is said to hold doctrines which are taken from *Nature of Man* , VI. 52 foll. Littré. In VIII. occur references to *Places in Man* , VI. 276, 294 Littré, and *Glands* , VIII. 564 Littré. In XIX. occur references to *Nature of Man* , VI. 38 Littré, but the physician named is Polybus.

### *Galen*

Galen is the most important of the ancient commentators on Hippocrates, and of his work a great part has survived. His writings are of value for two reasons : —

(1) They often give us a text superior to that of the MSS. of the *Corpus*. Sometimes this text is actually given in Galen's quotations ; sometimes it is implied in Galen's commentary.

(2) They sometimes throw light upon the interpretation of obscure passages.

Galen's ideal of a commentator is beyond criticism. He prefers ancient readings, even when they are the more difficult, and corrects only when these give no possible sense. In commenting he is of opinion that he should first determine the sense of the text and then see whether it corresponds with the truth.

Unfortunately he is not so successful when he attempts to put his ideal into practice. He is intolerably verbose, and what is worse, he is eager so to interpret Hippocrates as to gain support therefrom for his own theories. A good example of this fault is his misinterpretation of *Epidemics* III. XIV. Littré gives as another fault his neglect of observation and observed fact.

Galen wrote commentaries, which still survive, on the following : —

*Nature of Man.*

*Regimen of People in Health.*

*Regimen in Acute Diseases.*

*Prognostic.*

*Prorrhetic I.*

*Aphorisms.*

One book in ancient times. *Epidemics I., II., III., VI.*

*Fractures.*

*Articulations.*

*Surgery.*

*Humours.*

*Nutriments.*

*Airs, Waters, Places* (only fragments survive).

We also have his *Glossary*.

Commentaries on the following are altogether lost : —

*Sores.*

*Wounds in the Head.*

*Diseases.*

*Affections.*

He also wrote (or promised to write) the following, none of which survive : — *Anatomy of Hippocrates, Characters in Epidemics III., Dialect of Hippocrates, The Genuine Writings of the Physician of Cos.*

Galen also knew : *Coan Prenotions, Epilepsy, Fistulae, Hemorrhoids, Airs, Places in Man, Regimen, Seven Months' Child, Eight Months' Child, Heart, Fleshes, Number Seven, Prorrhetic II., Glands* , and probably *Precepts*.

The most important of the Hippocratic treatises not mentioned by Galen are *Ancient Medicine* and *The Art*.

## 6. LIFE OF HIPPOCRATES.

We possess three ancient biographies of Hippocrates : one by Suidas, one by Tzetzes, and one by Soranus, a late writer of uncertain date. From these we gather that Hippocrates was born in Cos in 460 B.C.; that he belonged to the guild of physicians called Asclepiadae ; that his father was Heraclides, and his teachers were Herodicus and his own father ; that he travelled all over Greece, and was a great friend of Democritus of Abdera ; that his help was sought by Perdicas king of Macedonia and by Artaxerxes king of Persia ; that he stayed the plague at Athens and in other places ; that his life was a long one but of uncertain length, the traditions making him live 85, 90, 104 or 109 years.



In these accounts there is a certain amount of fable, but in the broad outline there is nothing improbable except the staying of the Athenian plague, which is directly contrary to the testimony of Thucydides, who expressly states that medical help was generally unsuccessful.

The *Epistles* in the Hippocratic collection, and the so-called *Decree of the Athenians*, merely give, with fuller picturesqueness of detail, the same sort of information as is contained in the biographies.

Plato refers to Hippocrates in two dialogues — the *Protagoras* and the *Phaedrus*. The former passage tells us that Hippocrates was a Coan, an Asclepiad, and a professional trainer of medical students; the latter states as a fundamental principle of Hippocratic physiology the dogma that an understanding of the body is impossible without an understanding of nature as a whole, in modern language, physiology is inseparable from physics and chemistry.

From Aristotle we learn that Hippocrates was already known as “the Great Hippocrates.”

Such is the ancient account of Hippocrates, a name without writings, as Wilamowitz says. There is no quotation from any treatise in the *Corpus* before Aristotle, and he assigns as the author not Hippocrates but Polybus. The *Phaedrus* passage, indeed, has been recognized by Littré as a reference to *Ancient Medicine*, but Galen is positive that it refers to *Nature of Man*.

In fact the connexion between the great physician and the collection of writings which bears his name cannot with any confidence be carried further back than Ctesias the Cnidian, Diocles of Carystus and Menon, the writer of the recently discovered *Iatrica*. Ctesias and Diocles belong to the earlier half of the fourth century, and Menon was a pupil of Aristotle.

## 7. THE ASCLEPIADAE.

Hippocrates was, according to Plato, an Asclepiad. This raises the very difficult question, who the Asclepiadae were. Its difficulty is typical of several Hippocratic problems. Certainty, even approximate certainty, is impossible owing to the scantiness of the evidence.

The old view, discarded now by the most competent authorities, is that the Asclepiadae were the priests of the temples of Asclepius, combining the functions of priest and physician. This view implied that Hippocratic medicine had its origin in temple practice. For a thorough refutation of it see Dr. E. T. Withington's excursus in my *Malaria and Greek History* and his own book *Medical History from the Earliest Times*.

Another view is that the Asclepiadae were a guild, supposed to have been founded by Asclepius, the members of which were bound by rules and swore the Hippocratic "Oath." Such is the view of Dr. Withington himself. It is one which is free from all intrinsic objections, but it is supported by the scantiest of positive evidence.

It should be noticed that the term "Asclepiadae" means literally "the family of Asclepius," and it is at least possible that the Asclepiads were a clan of hereditary physicians who claimed to be descended from Asclepius. It would be very easy for such a family to develop into something like a guild by the admission, or rather adoption, of favoured outsiders. In this way the term might readily acquire the general meaning of medical practitioner, which it apparently has in *e.g.* Theognis 432 : —

εἰ δ' Ἀσκληπιάδαις τοῦτο γ' ἔδωκε θεός, ἰᾶσθαι κακότητα καὶ ἀτηρᾶς φρένας ἀνδρῶν, πολλοὺς ἂν μισθοὺς καὶ μεγάλους ἔφερον. I do not think that it has been noticed what an interesting parallel is afforded by the term "Homeridae." A family of poets tracing their descent from Homer finally could give their name to any public reciter of the Homeric poems.

## 8. THE DOCTRINE OF HUMOURS.

The doctrine of the humours probably had its origin in superficial deductions from obvious facts of physiology, but it was strongly coloured by philosophic speculation, in particular by the doctrine of opposites. Indeed it is impossible to keep distinct the various influences which acted and reacted upon one another in the spheres of philosophy and medicine; only the main tendencies can be clearly distinguished.

Even the most superficial observer must notice ( *a* ) that the animal body requires air, fluid, and solid food; ( *b* ) that too great heat and cold are fatal to

life, and that very many diseases are attended by fever; ( *c* ) that fluid is a necessary factor in digestion; ( *d* ) that blood is in a peculiar way connected with life and health.

These simple observations were reinforced by the speculations of philosophers, particularly when philosophy took a biological or physiological turn, and became interested in the organs of man and their functions.

The second of the Greek philosophers, Anaximander, taught that creation was made up of “opposites,” though it is not clear how many he conceived these opposites to be. Many later thinkers, working on lines similar to those of Anaximander, made them four in number — the hot, the cold, the moist and the dry. These were the essential qualities of the four elements, fire, air, water, earth.

There was, however, no uniformity among thinkers as to the number of the opposites, and Alcmaeon, a younger contemporary of Pythagoras and a native of Croton, postulated an indefinite number. Alcmaeon was a physician rather than a philosopher, and asserted that health was an ἰσλονομία of these opposites and disease a μοναρχία of one. This doctrine had a strong influence upon the Coan school of medicine, and indeed upon medical theory generally.

But the opposites are not χυμοί: they are only δυνάμεις<sup>2</sup>. The humoral pathology was not fully developed until for δυνάμεις<sup>2</sup> were substituted fluid substances. In tracing this development the historian is much helped by *Ancient Medicine*. It is here insisted that the hot, the cold, the moist and the dry are not substances; they are only “powers,” and, what is more, powers of merely secondary importance. The body, it is maintained, has certain essential χυμοί, which χυμοί have properties or “powers” with greater influence upon health than temperature. The number of the χυμοί is left indefinite. If the body be composed of opposite humours, and if health be the harmonious mixture or blending (κρᾶσις) of them, we shall expect to see one or other “lording it over the others” (μοναρχία ) in a state of disease.

The two commonest complaints in ancient Greece, chest troubles and malaria, suggested as chief of these humours four : phlegm, blood (suggested by hemorrhage in fevers), yellow bile and black bile (suggested by the vomits, etc., in remittent malaria).

That the humours are four is first clearly stated in *Nature of Man* , which

Aristotle assigns to Polybus, though Menon quotes a portion of it as Hippocratic. The passage in question runs : τὸ δὲ σῶμα τοῦ ἀνθρώπου ἔχει ἐν ἑωυτῷ αἷμα καὶ φλέγμα καὶ χολὴν ξανθὴν τε καὶ μέλαιναν, καὶ ταῦτα ἐστὶν αὐτῷ ἢ φύσις . . . ὑγιαίνει μὲν οὖν μάλιστα ὁκόταν μετρίως ἔχη ταῦτα τῆς πρὸς ἄλληλα κρήσιος καὶ δυνάμιος καὶ τοῦ πλήθους, καὶ μάλιστα μεμιγμένα ἢ κ.τ.λ. (Littre VI. 38 and 40).

Some thinkers, belonging to the school of Empedocles, and being more inclined towards philosophy than towards medicine, made the four chief opposites, materialized into fire, air, water and earth, the components of the body, and disease, or at any rate some of the chief diseases, an excess of one or other. We see this doctrine fairly plainly in Menon's account of Philistion, and it is copied by Plato in the *Timaeus*.

The doctrines I have described admitted many variations, and in Menon's *Iatrica*, which is chiefly an account of the origins of disease as given by various physicians, the most diverse views are set forth. Petron of Aegina, while holding that the body is composed of the four opposites, stated that disease was due to faulty diet, and that bile was the result and not the cause of disease. Hippon thought that a suitable quantity of moisture was the cause of health ; Philolaus that disease was due to bile, blood and phlegm ; Thrasymachus of Sardis that blood, differentiated by excess of cold or heat into phlegm, bile, or τὸ σῆξιπός (matter or pus), was the cause ; Menecrates that the body is composed of blood, bile, breath and phlegm, and that health is a harmony of these.

The Hippocratic collection shows similar diversity of opinion. *Diseases* IV. 51, gives as the four humours bile, blood, phlegm and ὑδρῶψ (not water, but a watery humour). *Affections* I. ascribes all diseases to bile and phlegm. *Ancient Medicine* recognizes an indefinite number of humours.

The great Hippocratic group imply the doctrine of humours in its phraseology and outlook on symptoms, but it is in the background, and nowhere are the humours described. It is clear, however, that bile and phlegm are the most prominent, and bilious and phlegmatic temperaments are often mentioned in *Airs Waters Places* and *Epidemics* I. and III. There are signs of subdivision in *πικρόχολοι* and *λευκοφλεγματῖαι*.

Amid all these differences, which by their very variety indicate that they belonged to theory without seriously affecting practice, there is one common

principle — that health is a harmonious mingling of the constituents of the body. What these constituents are is not agreed, nor is it clear what exactly is meant by “mingling.”

The word ἄκρητος, which I have translated “unmixed” or “uncompounded,” is said by Galen to mean “consisting of one humour only.” It is more likely that the word means properly “showing signs that *crasis* has not taken place.”

### *Coction*

The course of our inquiry has brought us to the doctrine of “coction” (πέψις). Familiar as a modern is with the difference between chemical blending and mechanical mixture, it is difficult for him to appreciate fairly theories put forward when this difference was unknown, and the human mind was struggling with phenomena it had not the power to analyse, and trying to express what was really beyond its reach. We must try to see things as the Greek physician saw them.

We have in Chapters XVIII and XIX of *Ancient Medicine* the most complete account of coction as the ancient physician conceived of it. It is really the process which leads to κρᾶσις as its result. It is neither purely mechanical nor yet what we should call chemical; it is the action which so combines the opposing humours that there results a perfect fusion of them all. No one is left in excess so as to cause trouble or pain to the human individual. The writer takes three types of illnesses — the common cold, ophthalmia and pneumonia — and shows that as they grow better the discharges become less acrid and thicker as the result of πέψις.

In one respect the writer of *Ancient Medicine* is not a trustworthy guide to the common conception of πέψις. He attached but little importance to heat, and it can scarcely be doubted that the action of heat upon the digestibility of foods, and the heat which accompanies the process of digestion itself, must have coloured the notion of πέψις as generally held. It is true that we read little about innate heat in the Hippocratic collection, but that is an accident, and it certainly was thought to have a powerful influence upon the bodily functions.

A disease was supposed to result when the equilibrium of the humours, from some “exciting cause” or other (πρόφασις), was disturbed, and then nature, that

is the constitution of the individual (φύσις), made every effort she could through coction to restore the necessary κρᾶσις.

### *Crisis*

The battle between nature and the disease was decided on the day that coction actually took place or failed to take place. The result was recovery, partial or complete, aggravation of the disease, or death. The crisis (κρίσις) is “the determination of the disease as it were by a judicial verdict.”

After a crisis there might, or might not, be a relapse (ὑποσττροφή), which would be followed in due course by another crisis.

The crisis, if favourable, was accompanied by the expulsion of the residue remaining after coction and κρᾶσις of the humours had occurred. This expulsion might take place through any of the ordinary means of evacuation — mouth, bowels, urine, pores — and the evacuated matters were said to be concocted (πέποντα), that is to say, they presented signs that coction had taken place.

But nature was not always able to use the ordinary means of evacuation. In this case there would be an abscession (ἀπόσπασσις). When the morbid residue failed to be normally evacuated, it was gathered together to one part of the body and eliminated, sometimes as an eruption or inflammation, sometimes as a gangrene or tumour, sometimes as a swelling at the joints.

An abscession did not necessarily mean recovery ; it might merely be a change from one disease to another. The Hippocratic writers are not clear about the point, but apparently the abscession might fail to accomplish its purpose, and so the disease continued in an altered form. In other words there was abscession without real crisis.

To trace the course of a disease through its various stages, and to be able to see what is portended by symptoms in different diseases and at different stages of those diseases, was an art upon which Hippocrates laid great stress. He called it πρόγνωσις, and it included at least half of the physician’s work.

## *Critical Days*

Crises took place on what were called critical days. It is a commonplace that a disease tends to reach a crisis on a fixed day from the commencement, although the day is not absolutely fixed, nor is it the same for all diseases. The writer of *Prognostic* and *Epidemics I.* lays it down as a general law that acute diseases have crises on one or more fixed days in a series.

In *Prognostic* Chapter XX the series for fevers is given thus: — 4th day, 7th, 11th, 14th, 17th, 20th, 34th, 40th, 60th.

In *Epidemics I.* XXVI. two series are given: —

( *a* ) diseases which have exacerbations on even days have crises on these even days: 4th, 6th, 8th, 10th, 14th, 20th, 24th, 30th, 40th, 60th, 80th, 120th.

( *b* ) diseases which have exacerbations on odd days have crises on these odd days: 3rd, 5th, 7th, 9th, 11th, 17th, 21st, 27th, 31st.

A crisis on any other than a normal day was supposed to indicate a probably fatal relapse.

Galen thought that Hippocrates was the first to discuss the critical days, and there is no evidence against this view, though it seems more likely that it gradually grew up in the Coan school.

What was the origin of this doctrine? Possibly it may in part be a survival of Pythagorean magic, numbers being supposed to have mystical powers, which affected medicine through the Sicilian-Italian school. But a man so free from superstition as the author of *Epidemics I.* was unlikely to be influenced by mysticism, particularly by a mysticism which left his contemporaries apparently untouched. More probably there is an effort to express a medical truth. In malarious countries, all diseases, and not malaria only, tend to grow more severe periodically ; latent malaria, in fact, colours all other complaints. May it not be that severe exacerbations and normal crises were sometimes confused by Hippocrates, or perhaps a series of malarial exacerbations attracted the crisis to one of the days composing it? The sentence in *Epidemics I.* XXVI. is very definitely to the effect that when exacerbations are on even days, crises are on even days ; when exacerbations are on odd days, crises are on odd days. Evidently the critical days are not entirely independent of the periodicity of

malaria.

## 9. CHIEF DISEASES MENTIONED IN THE HIPPOCRATIC COLLECTION.

Diseases were classified by ancient physicians according to their symptoms ; they are now classified according to the micro-organisms which cause them. Accordingly it often happens that no exact equivalent in Greek corresponds to an English medical term and *vice versa*. The name of a Greek disease denotes merely a syndrome of symptoms.

Perhaps the most remarkable point arising in a discussion of Greek diseases is the apparent absence of most infectious fevers. Plagues, vaguely referred to by the term λοιμός, occurred at intervals, but the medical writings in the Hippocratic collection are occupied almost entirely with endemic disease and do not describe plagues, not even the great plague at Athens. There is no mention of smallpox or measles ; no certain reference occurs to diphtheria, scarlet fever, bubonic plague or syphilis. It is extremely doubtful whether typhoid was present in Greece, for although it is similar to severe cases of καῦσις and φρενίτις, the latter were certainly in most cases pernicious malaria, which is often so like typhoid that only the microscope can distinguish them. It is expressly stated by pseudo-Aristotle that fevers were not infectious, and it is difficult to reconcile this statement with the prevalence of typhoid. The question must be left open, as the evidence is not clear enough to warrant a confident decision.

Colds, “with and without fever,” were common enough in ancient times, but whether influenza prevailed cannot be stated for certain. Its all too frequent result, pneumonia, was indeed well known, but it is puzzling that in the description of epidemic cough at Perinthus, the nearest approach to an influenza wave in the Hippocratic collection, it is expressly stated that relapses into pneumonia were rare.

Consumption (φθίσις) is one of the diseases most frequently mentioned in the *Corpus* , and it is remarkable that in the very passage where we are told that fevers are not infectious it is also stated that consumption is so. To consumption are added “ophthalmias,” which term will therefore include all contagious inflammations of the eyes.



The greatest plague of the Greek and of the ancient world generally was malaria, both mild and malignant, both intermittent and remittent.

The intermittents (διαλείποντες πυρετοί) are : —

ἀμφημερινὸς πυρετός (quotidians)

τριταῖος πυρετός (tertians)

τεταρταῖος πυρετός (quartans)

The remittents (often συνεχεῖς πυρετοί) included : —

καῦσιος, so called because of the intense heat felt by the patient, a remittent tertian often mentioned in the *Corpus*.

φρενίτις, characterized by pain in the hypochondria and by delirium. It generally had a tertian periodicity.

λήθαργος, characterized by irresistible coma. It bore a strong likeness to what is now known as the comatose form of pernicious malaria.

ἡμιτριταῖος, semitertian, was pernicious remittent malaria with tertian periodicity.

τύφος or τίφος, of which five different kinds are mentioned in the Cnidian treatise περὶ τῶν ἐντὸς παθῶν (Littré VII. 260 foll.), was in at least two cases a species of remittent malaria.

In connexion with the question of malaria it should be noticed that malarial cachexia, the symptoms of which are anaemia, weakness, dark complexion and enlarged spleen, is often described in the Hippocratic collection. Especially vivid is the description in *Airs Waters Places*. This is further evidence of the malarious condition of the ancient Greek world.

### μελαγχολία

This word is closely connected both with the doctrine of the humours and with

the prevalence of malaria. It is fully discussed in *Malaria and Greek History* , p-101. Generally it means our “melancholia,” but sometimes merely “biliousness.” In popular speech μελαγχολία and its cognates sometimes approximate in meaning to “nervous breakdown.” Probably the name was given to any condition resembling the prostration, physical and mental, produced by malaria, one form of which (the quartan) was supposed to be caused by “black bile” (μέλαινα χολή).

### έρυσιπέλας

See Foes’ *Oeconomia* , , where quotations are given which enable us to distinguish έρυσιπέλας from φλεγμονή. Both exhibit swelling (όγκος) and heat (θερμασία), but whereas έρυσιπέλας is superficial and yellowish, φλεγμονή is internal also and red.

### διάρροια and δυσλεντερία

The former is local, and causes merely the passing of unhealthy excreta. The latter is accompanied by fever, and is a dangerous disease, in which the bowel is ulcerated, with the passing of blood. See περι παθών 23 and 25 (Littre VI. 234, 235), and more especially περι διαίτης 74 (Littre IV. 616) : —

τοῦτο γάρ (διάρροια) ὀνομάζεται ἕως ἄν ἀντή μόνη σίλαπεισία ἢ τροφή ὑποχωρῆ. ὀκόταν δὲ θερμαινομένου τοῦ σίλωματος κάθαροςίς δριμέα γένηται, τότε ἔντερον ζύεται καὶ ἔλκοῦται καὶ διαχωρεῖται αἱματώδεα, τοῦτο δὲ δυσλεντερία καλεῖται, νόσος χαλεπή καὶ ἐπικίνδυνος.

“Dysentery” would include what is now called by this name and any severe intestinal trouble, perhaps typhoid and paratyphoid if these were diseases of the Greek world, while “diarrhoea” means merely undue laxity of the bowels.

### *Delirium*

The Hippocratic collection is rich in words meaning delirium of various kinds. It

is probable, if not certain, that each of them had its own associations and its own shade of meaning, but these are now to a great extent lost. Only the broad outlines of the differences between them can be discerned by the modern reader. The words fall into two main classes : —

(1) Those in which the mental derangement of delirium is the dominant idea ; *e.g.* παραφέρομαι, παραφρονῶ (the word common in *Prognostic* ), παρανοῶ, παρακρούω (the most common word in *Epidemics I. and III.* ), παρακοπή, ἐκμαίνομαι, μανία.

(2) Those in which stress is laid upon delirious talk; *e.g.* λῆρος, παράληρος, παραληρῶ, παραλέγω, λόγοι πολλοί. It is more difficult to say exactly which words in each class signify the greater degree of delirium. Of class (1) ἐκμαίνομαι is obviously the most vigorous word, meaning “wild raving,” μανία comes next to it, and παρακοπή is apparently slightly stronger than the others. Of class (2) λῆρος or παράληρος seems to be the strongest, then παραλέγω, and finally λόγοι πολλοί.

### *Pain*

There are two common words for pain in the *Corpus* , πόνος and ὀδύνη. They seem practically synonymous. Perhaps πόνος is more commonly used of violent pains, and ὀδύνη of dull, gnawing pains, but I think that no reader would care to pronounce a confident opinion on the matter.

### *Ague*

There are two words commonly used to describe the chilly feeling experienced in fevers, especially in malarial fevers. These are ( *a* ) ῥῖγος and its derivatives, and ( *b* ) φρίχη and its derivatives. The former lays stress upon the chilly feeling, the latter upon the shivering accompanying it. But in this case also it is possible to discriminate too finely; see *e.g.* in *Epidemics III. Case II. (second series)*, φρικώδης is followed by μετὰ τὸ γενόμενον ῥῖγος, referring apparently to the same occasion.

The reader should note the extreme care with which symptoms are described in

the Hippocratic group of treatises. It has been pointed out, for instance, that in *Epidemics I. Case I.*, and *Epidemics III. Case XV.* (second series), there are possibly instances of Cheyne-Stokes breathing. Noticed by the writer of these works, this important symptom was overlooked until the eighteenth century.

### 10. πολὺς AND ὀλίγος IN THE PLURAL.

It is at least curious that one of the translator's greatest difficulties is to decide what are the meanings of πολὺς and ὀλίγος (also of ζιμικρά) when used in the plural. The reader is at first sight inclined to think that ρεύματα πολλά (*Epidemics III. IV.*) means "many fluxes," and so possibly it may. But just above we have ρεῦμα πολὺ, "a copious flux," and so the plural may well mean "copious fluxes." The ambiguity becomes more serious when the words are applied to the excreta. Is frequency or quantity the more dominant idea? It seems impossible to say for certain, but the evidence tends towards the latter view. From *Prognostic Chapter XI* it seems that quantity is the more important thing, and in the same passage πυκνόν is the word used to denote frequency. The usage in *Epidemics I. and III.* bears out this view. "Frequently shivering" is φρικώδεις πυκνά (*Epid. III. XIII.*). In the same chapter occurs the sentence, αἱ δὲ βῆχες ἐνῆσαν μὲν διὰ τέλεος πολλαί, καὶ πολλά ἀνάγουσαι πέπονα, where πολλαί means "many" and πολλά "copious." In *Epid. III. Case II.* (second series) βῆχες ζιυεχέες ὕγραὶ πολλαί means "continued coughing with watery and copious sputa." In Case IX. of the same series "frequent, slight epistaxis" is ἡμορράγει . . . πυκνὰ κατ' ὀλίγον. After long consideration of this difficult question I conclude that πολὺς and ὀλίγος in the plural, when used of excreta, etc., should be translated "copious" or "abundant" unless the context makes the other meaning absolutely necessary.

The case is somewhat similar with the word ζιμικρά. Used adverbially this word means "slightly," "a little," more often than it does "in small quantities." ζιμικρὰ κατενόει is almost certainly "lucid intervals," and ζιμικρὰ ἐκοιμήθη is "snatches of sleep," but I do not feel sure that ζιμικρὰ παρέκρουσε means more than "slight delirium," nor ζιμικρὰ ἐπύρεξε (*Epid. III. XIII.*) more than "slightly feverish."

## 11. THE IONIC DIALECT OF THE HIPPOCRATIC COLLECTION.

The later MSS. of the *Corpus* exhibit a mass of pseudo-ionic forms which are not to be found, or are only rarely found, in the earlier MSS. The uncontracted forms, too, are more common in the later authorities. If we follow closely the earlier MSS. we have a text which is very like Attic, with a mild sprinkling of Ionic forms. These facts seem to show that, when Ionic became the medium of scientific prose, it lost touch gradually with the spoken speech and assimilated itself to the predominant Attic, and later on possibly to the κοινή. It retained just enough Ionic to keep up the tradition and to conform to convention. The later scribes, under the mistaken impression that the texts before them had been atticized, restored what they considered to be the ancient forms, often with disastrous results. Many of their ionisms are sheer monstrosities.

In 1894 A. W. Smyth discussed the dialect of the *Corpus* in his work *The Sounds and Inflections of the Greek Dialects : Ionic*. He pointed out, however, that the labours of Littré had left much to be done in this department of Hippocratic study, and that the material for a sound judgment was not yet available.

The collection of this material is not yet complete, but a good start was made by Kéhlewein, who in Chapter III of the *Prolegomena* to the first volume of the Teubner Hippocrates ( *de dialecto Hippocratica* ) laid down the principles followed in the present edition.

## 12. MANUSCRIPTS.

None of our MSS. are very old, but the oldest are far superior to the later, both in readings and in dialect. There is no regular canon, and no recognized order; each independent MS. seems to represent a different “collection” of Hippocratic works. This fact fits in well with the theory that the nucleus of the *Corpus* was the library (or the remains of it) of the Hippocratic medical school at Cos.

θ Vindobonensis med. IV., tenth century. Our oldest MS., containing : περι τῶν ἔντος παθῶν. περι παθῶν. περι ἱερῆς νοῦς1ου. περι νοῦς1ων. περι νοῦς1ων ?? περι νοῦς1ων ?? . περι διαίτης ?? . περι διαίτης ?? . περι διαίτης ?? (with περι ἐνυπνίων). περι γυναικείων ?? . περι γυναικείων ?? . περι γυναικείης φύς1ιου. Of some books parts are missing.

A Parisinus 2253, eleventh century. It contains: Κωακαὶ προγνώσεις. περὶ τροφῆς. περὶ πτισιάνης. περὶ χυμῶν. περὶ ὑγρῶν χρήσιος. ἐπιβώμιος. περὶ τέχνης. περὶ φύσιος ἀνθρώπων. περὶ φυσιῶν. περὶ τόπων τῶν κατὰ ἄνθρωπον. περὶ ἀρχαίας ἱητρικῆς. ἐπιδημιῶν ??. An excellent MS., the use of which has transformed our Hippocratic text. There are four or five correcting hands.

B Laurentianus 74, 7, eleventh or twelfth century. It contains: κατ' ἱητροῦ. περὶ ἀγμῶν. περὶ ἄρθρων. περὶ τῶν ἐν κεφαλῇ τραυμάτων. Two correcting hands.

V Vaticanus graecus 276, twelfth century. It contains: ὄρκος. νόμος. ἀφορισμοί. προγνωστικόν. περὶ διαίτης ὀξέων. κατ' ἱητροῦ. περὶ ἀγμῶν. περὶ ἄρθρων. περὶ τῶν ἐν κεφαλῇ τραυμάτων. περὶ ἀέρων, ὑδάτων, τόπων. ἐπιδημιῶν ??. περὶ φύσιος ἀνθρώπου. περὶ φύσιος παιδίου. περὶ γονῆς. περὶ ἐπικυήσιος. περὶ ἑπταμήνου. περὶ ὀκταμήνου. περὶ παρθένων. περὶ γυναικείης φύσιος. περὶ ὀδοντοφυΐας. περὶ τόπων τῶν κατὰ ἄνθρωπον. γυναικείων ??. περὶ ἀφόρων. περὶ ἐπικυήσιος (again). περὶ ἐγκατατομῆς παιδίου. περὶ ἱητροῦ. περὶ κρίσιων. περὶ κραδίης. περὶ σιαρκῶν. περὶ ἀδένων οὐλομελίης. περὶ ἀνατομῆς. ἐπιστολαί. δόγμα Ἀθηναίων. ἐπιβώμιος. πρεσβευτικός.

M Marcianus Venetus 269, eleventh century. It contains: ὄρκος. νόμος. περὶ τέχνης. περὶ ἀρχαίας ἱητρικῆς. παραγγελίαι. περὶ εὐσχημοσύνης. περὶ φύσιος ἀνθρώπου. περὶ γονῆς. περὶ φύσιος παιδίου. περὶ ἄρθρων. περὶ χυμῶν. περὶ τροφῆς. περὶ ἐλκῶν. περὶ ἱερῆς νούσιου. περὶ νούσιων ??. περὶ νούσιων ??. περὶ νούσιων ??. περὶ νούσιων ??. περὶ παθῶν. περὶ τῶν ἐντὸς παθῶν. περὶ διαίτης ??. περὶ διαίτης ??. περὶ διαίτης ??. περὶ ἐνυπνίων. περὶ ὄψιος. περὶ κρισίμων. ἀφορισμοί. προγνωστικόν. περὶ διαίτης ὀξέων. περὶ φυσιῶν. μοχλικόν. περὶ ὀσιτέων φύσιος. περὶ ἀγμῶν. κατ' ἱητροῦ. περὶ ἐγκατατομῆς ἐμβρύου. περὶ γυναικείων ??. περὶ γυναικείων β. περὶ ἀφόρων. περὶ ἐπικυήσιος. περὶ ἑπταμήνου. περὶ ὀκταμήνου. περὶ παρθενίων. περὶ γυναικείης φύσιος. Part of ἐπιδημιῶν ??, ἐπιδημιῶν ??. ἐπιδημιῶν ??. ἐπιστολαί. ὁ περὶ μανίης λόγος. δόγμα Ἀθηναίων. πρεσβευτικός (mutilated).

C' Paris 446 suppl. Tenth century.

D Paris 2254

E Paris 2255. Fourteenth century.

F Paris 2144

H Paris 2142. Thirteenth century.

I Paris 2140

J Paris 2143. Fourteenth century.

K Paris 2145

S' Paris 2276

R' Paris 2165. Sixteenth century.

R Barberinus I. 5. Fifteenth century.

### 13. CHIEF EDITIONS AND TRANSLATIONS, ETC., OF THE HIPPOCRATIC CORPUS.

1525 Hippocratis Coi medicorum longe principis octoginta volumina, quibus maxima ex parte annorum circiter duo millia latina caruit lingua, Graeci vero, Arabes et prisci nostri medici, plurimis tamen utilibus praetermissis, scripta sua illustrarunt, nunc tandem per M. Fabium Calvum, Rhavennatem, virum undecumque doctissimum, latinitate donata, Clementi VII pont. max. dicata, ac nunc primum in lucem edita, quo nihil humano generi salubrius fieri potuit.

Romae ex aedibus Francisci Minitii Calvi Novocomensis. 1 vol. fol.

1526 “Απαντα τὰ τοῦ Ἱπποκράτους. Omnia opera Hippocratis. Venetiis in aedibus Aldi et Andreae Ansulani soceri. Fol.

1538 Ἱπποκράτους Κῶου ἱατροῦ παλαιοτάτου πάντων ἄλλων κορινθαίου βιβλία ἅπαντα. Hippocratis Coi medici vetustissimi, et omnium aliorum principis, libri omnes ad vetustos codices summo studio collati et restaurati. Froben, Basileae. Fol.

This edition was edited by Janus Cornarius.

1545 Hippocratis Coi medicorum omnium facile principis opera quae extant omnia. Iano Cornario medico physico interprete. Venet. Oct. Apud I. Gryphium.

1588 Hippocratis Coi opera quae extant, graece et latine veterum codicum

collatione restituta, novo ordine in quatuor classes digesta, interpretationis latinae emendatione et scholiis illustrata ab Hieron. Mercuriali Foroliviensi. Venetiis industria ac sumptibus Juntarum. Fol.

1588 Oeconomia Hippocratis alphabeti serie distincta, Anutio Foesio auctore. Francofurti. Fol.

1595 Τοῦ μεγάλου Ἱπποκράτους πάντων τῶν ἰατρῶν κορυφαίου τὰ εὐρισκόμενα.

Magni Hippocratis medicorum omnium facile principis opera omnia quae extant in VIII sectiones ex Erotiani mente distributa, nunc recens latina interpretatione et annotationibus illustrata, Anutio Foesio Mediomatrico medico auctore. Francofurti apud Andreae Wecheli haeredes. Fol.

Reprinted 1621, 1624, 1645 and at Geneva 1657.

1665 Magni Hippocratis Coi opera omnia graece et latine edita et ad omnes alias editiones accommodata industria et diligentia Joan. Antonidae van der Linden. Lugduno-Batav. 1665. 2 vol. octavo.

1679 Hippocratis Coi et Claudii Galeni Pergameni ἀρχιατρῶν opera. Renatus Charterius Vindocinensis, plurima interpretatus, universa emendavit, instauravit, notavit, auxit . . . Lutetiae Parisiorum, apud Jacobum Villery. 13 vol. fol.

1743 Τὰ Ἱπποκράτους ἅπαντα . . . studio et opera Stephani Mackii. Viennae. 2 vol. fol.

1825 Τοῦ μεγάλου Ἱπποκράτους ἅπαντα. Magni Hippocratis opera omnia. Editionem curavit D. Carolus Gottlob Kéhn. Lipsiae. 3 vol. octavo.

1834 Scholia in Hippocratem et Galenum, F. R. Dietz. 2 vols.

1839-1861 Œuvres complètes d'Hippocrate, traduction nouvelle, avec le texte grec en regard . . . Par. é. Littré. Paris. 10 vol.

1846 Article "Hippocrates" in Smith's *Dictionary of Greek and Roman Biography and Mythology*, by Dr. W. A. Greenhill.

1849 The genuine works of Hippocrates translated from the Greek with a



preliminary Discourse and Annotations by Francis Adams. London. 2 vol.

1859-1864 Hippocratis et aliorum medicorum veterum reliquiae. Edidit Franciscus Zacharias Ermerins. Trajecti ad Rhenum. 3 vol.

1864-1866 Ἱπποκράτης κομιδῆ Car. H. Th. Reinhold. Ἀθηνῶν. 2 vol.

1877, 1878 Chirurgie d'Hippocrate, par J. E. Pétrequin. 2 vols.

1894 Hippocratis opera quae geruntur omnia. Recensuit Hugo Kéhlewein. Prolegomena conscripserunt Ioannes Ilberg et Hugo Kéhlewein.

The second volume appeared in 1902.

1913 Article "Hippokrates (16)" in Pauly-Wissowa *Real-Encyclopédie der classischen Altertumsrvissenschaft*. The early editions are learned but uncritical, being stronger on the medical side than in scholarship. Special mention should be made of the *Oeconomia* of Foes, a perfect mine of medical lore, and it is supplemented by the excellent notes in Foes' edition. Such a work could have appeared only in an age when Hippocrates was a real force in medical practice.

The first scholarly edition was that of Littré, and only those who have seriously studied the works of Hippocrates can appreciate the debt we owe to his diligence, or understand why the task occupied twenty-two years. Unfortunately Littré is diffuse, and not always accurate. His opinions, too, changed during the long period of preparation, and the additional notes in the later volumes must be consulted in order to correct the views expressed in the earlier.

As a textual critic he shows much common sense, but his notes are awkward to read, and his knowledge was practically confined to the Paris MSS.

He is at his best as a medical commentator, and he was the first to explain Hippocratic pathology by proving that the endemic diseases of the Hippocratic writings must be identified, not with the fevers of our climate, but with the remittent forms of malaria common in hot climates. It is not too much to say that without keeping this fact in view we cannot understand a great part of the *Corpus*. It is curious to note that Hippocrates was a medical text-book almost down to the time (about 1840) when malaria ceased to be a real danger to northern Europe.

The most useful critical edition of Hippocrates is that of Ermerins. He was a scholar with a lucid and precise mind, and his critical notes are a pleasure to read. The introductions, too, are stimulating, instructive and interesting, written in a style full of life and charm. As a philologist he was very deficient.

The edition in the Teubner series, edited by Kéhlewein, of which two volumes have appeared, marks a distinct advance. Fresh manuscripts have been collated, and the text has been purged of the pseudo-ionisms which have so long disfigured it.

A word should perhaps be said about Reinhold, whose two volumes of text give us more plausible conjectures than the work of any other scholar.

Of the scholars who have worked at parts of the *Corpus* mention should be made of Gomperz and Wilamowitz, but especial praise is due to the remarkable acuteness of Coray, whose intellect was like a sword. He always instructs and inspires, even when the reader cannot accept his emendations.

Adams' well-known translation is the work of a man of sense, who loved his author and was not without some of the qualifications of a scholar. The translation is literal and generally good, but is occasionally misleading. The medical annotation is far superior to the scholarship displayed in the work.

## HIPPOCRATES by Charles McRae



*From 'Fathers of Biology'*

Owing to the lapse of centuries, very little is known with certainty of the life of Hippocrates, who was called with affectionate veneration by his successors “the divine old man,” and who has been justly known to posterity as “the Father of Medicine.”

He was probably born about 470 B.C., and, according to all accounts, appears to have reached the advanced age of ninety years or more. He must, therefore, have lived during a period of Greek history which was characterized by great intellectual activity; for he had, as his contemporaries, Pericles the famous statesman; the poets Æschylus, Sophocles, Euripides, Aristophanes, and Pindar; the philosopher Socrates, with his disciples Xenophon and Plato; the historians Herodotus and Thucydides; and Phidias the unrivalled sculptor.

In the island of Cos, where he was born, stood one of the most celebrated of the temples of Æsculapius, and in this temple — because he was descended from the Asclepiadæ — Hippocrates inherited from his forefathers an important position. Among the Asclepiads the habit of physical observation, and even manual training in dissection, were imparted traditionally from father to son from the earliest years, thus serving as a preparation for medical practice when there were no written treatises to study.

Although Hippocrates at first studied medicine under his father, he had afterwards for his teachers Gorgias and Democritus, both of classic fame, and Herodicus, who is known as the first person who applied gymnastic exercises to the cure of diseases.

The Asclepions, or temples of health, were erected in various parts of Greece as receptacles for invalids, who were in the habit of resorting to them to seek the assistance of the god. These temples were mostly situated in the neighbourhood of medicinal springs, and each devotee at his entrance was made to undergo a regular course of bathing and purification. Probably his diet was also carefully

attended to, and at the same time his imagination was worked upon by music and religious ceremonies. On his departure, the restored patient usually showed his gratitude by presenting to the temple votive tablets setting forth the circumstances of his peculiar case. The value of these to men about to enter on medical studies can be readily understood; and it was to such treasures of recorded observations — collected during several generations — that Hippocrates had access from the commencement of his career.

Owing to the peculiar constitution of the Asclepians, medical and priestly pursuits had, before the time of Hippocrates, become combined; and, consequently, although rational means were to a certain extent applied to the cure of diseases, the more common practice was to resort chiefly to superstitious modes of working upon the imagination. It is not surprising, therefore, to find that every sickness, especially epidemics and plagues, were attributed to the anger of some offended god, and that penance and supplications often took the place of personal and domestic cleanliness, fresh air, and light.

It was Hippocrates who emancipated medicine from the thralldom of superstition, and in this way wrested the practice of his art from the monopoly of the priests. In his treatise on “The Sacred Disease” (possibly epilepsy), he discusses the controverted question whether or not this disease was an infliction from the gods; and he decidedly maintains that there is no such a thing as a sacred disease, for all diseases arise from natural causes, and no one can be ascribed to the gods more than another. He points out that it is simply because this disease is unlike other diseases that men have come to regard its cause as divine, and yet it is not really more wonderful than the paroxysms of fevers and many other diseases not thought sacred. He exposes the cunning of the impostors who pretend to cure men by purifications and spells; “who give themselves out as being excessively religious, and as knowing more than other people;” and he argues that “whoever is able, by purifications and conjurings, to drive away such an affection, will be able, by other practices, to excite it, and, according to this view, its divine nature is entirely done away with.” “Neither, truly,” he continues, “do I count it a worthy opinion to hold that the body of a man is polluted by the divinity, the most impure by the most holy; for, were it defiled, or did it suffer from any other thing, it would be like to be purified and sanctified rather than polluted by the divinity.” As an additional argument against the cause being divine, he adduces the fact that this disease is hereditary, like other diseases, and that it attacks persons of a peculiar temperament, namely, the phlegmatic, but not the bilious; and “yet if it were really more divine than the

others,” he justly adds, “it ought to befall all alike.”

Again, speaking of a disease common among the Scythians, Hippocrates remarks that the people attributed it to a god, but that “to me it appears that such affections are just as much divine as all others are, and that no one disease is either more divine or more human than another, but that all are alike divine, for that each has its own nature, and that no one arises without a natural cause.”

From this it will be seen that Hippocrates regarded all phenomena as at once divine and scientifically determinable. In this respect it is interesting to compare him with one of his most illustrious contemporaries, namely, with Socrates, who distributed phenomena into two classes: one wherein the connection of antecedent and consequent was invariable and ascertainable by human study, and wherein therefore future results were accessible to a well-instructed foresight; the other, which the gods had reserved for themselves and their unconditional agency, wherein there was no invariable or ascertainable sequence, and where the result could only be foreknown by some omen or prophecy, or other special inspired communication from themselves. Each of these classes was essentially distinct, and required to be looked at and dealt with in a manner radically incompatible with the other. Physics and astronomy, in the opinion of Socrates, belonged to the divine class of phenomena in which human research was insane, fruitless, and impious.

Hippocrates divided the causes of diseases into two classes: the one comprehending the influence of seasons, climates, water, situation, and the like; the other consisting of such causes as the amount and kind of food and exercise in which each individual indulges. He considered that while heat and cold, moisture and dryness, succeeded one another throughout the year, the human body underwent certain analogous changes which influenced the diseases of the period. With regard to the second class of causes producing diseases, he attributed many disorders to a vicious system of diet, for excessive and defective diet he considered to be equally injurious.

In his medical doctrines Hippocrates starts with the axiom that the body is composed of the four elements — air, earth, fire, and water. From these the four fluids or humours (namely, blood, phlegm, yellow bile, and black bile) are formed. Health is the result of a right condition and proper proportion of these humours, disease being due to changes in their quality or distribution. Thus inflammation is regarded as the passing of blood into parts not previously

containing it. In the course of a disorder proceeding favourably, these humours undergo spontaneous changes in quality. This process is spoken of as *coction*, and is the sign of returning health, as preparing the way for the expulsion of the morbid matters — a state described as the *crisis*. These crises have a tendency to occur at certain periods, which are hence called *critical days*. As the critical days answer to the periods of the process of coction, they are to be watched with anxiety, and the actual condition of the patient at these times is to be compared with the state which it was expected he ought to show. From these observations the physician may predict the course which the remainder of the disease will probably take, and derive suggestions as to the practice to be followed in order to assist Nature in her operations.

Hippocrates thus appears to have studied “the natural history of diseases.” As stated above, his practice was to watch the manner in which the humours were undergoing their fermenting coction, the phenomena displayed in the critical days, and the aspect and nature of the critical discharges — not to attempt to check the process going on, but simply to assist the natural operation. His principles and practice were based on the theory of the existence of a restoring essence (or φύσις) penetrating through all creation; the agent which is constantly striving to preserve all things in their natural state, and to restore them when they are preternaturally deranged. In the management of this *vis medicatrix naturæ* the art of the physician consisted. Attention, therefore, to regimen and diet was the principal remedy Hippocrates employed; nevertheless he did not hesitate, when he considered that occasion required, to administer such a powerful drug as hellebore in large doses.

The writings which are extant under the name of Hippocrates cannot all be ascribed to him. Many were doubtless written by his family, his descendants, or his pupils. Others are productions of the Alexandrian school, some of these being considered by critics as wilful forgeries, the high prices paid by the Ptolemies for books of reputation probably having acted as inducements to such fraud. The following works have generally been admitted as genuine: —

- On Airs, Waters, and Places.
- On Ancient Medicine.
- On the Prognostics.

- On the Treatment in Acute Diseases.
- On Epidemics [Books I. and III.].
- On Wounds of the Head.
- On the Articulations.
- On Fractures.
- On the Instruments of Reduction.
- The Aphorisms [Seven Books].
- The Oath.

The works “On Fractures,” “On the Articulations,” “On Injuries to the Head,” and “On the Instruments of Reduction,” deal with anatomical or surgical matters, and exhibit a remarkable knowledge of osteology and anatomy generally. It has sometimes been doubted if Hippocrates could ever have had opportunities of gaining this knowledge from dissections of the human body, for it has been thought that the feeling of the age was diametrically opposed to such a practice, and that Hippocrates would not have dared to violate this feeling. The language used, however, in some passages in the work “On the Articulations,” seems to put the matter beyond doubt. Thus he says in one place, “But if one will strip the point of the shoulder of the fleshy parts, and where the muscle extends, and also lay bare the tendon that goes from the armpit and clavicle to the breast,” etc. And again, further on in the same treatise, “It is evident, then, that such a case could not be reduced either by succussion or by any other method, unless one were to cut open the patient, and then, having introduced the hand into one of the great cavities, were to push outwards from within, which one might do in the dead body, but not at all in the living.”

His descriptions of the vertebræ, with all their processes and ligaments, as well as his account of the general characters of the internal viscera, would not have been as free from error as they are if he had derived all his knowledge from the dissection of the inferior animals. Moreover, it is indisputable that, within less than a hundred years from the death of Hippocrates, the human body was openly dissected in the schools of Alexandria — nay, further, that even the vivisection of condemned criminals was not uncommon. It would be unreasonable to

suppose that such a practice as the former sprang up suddenly under the Ptolemies, and it seems, therefore, highly probable that it was known and tolerated in the time of Hippocrates. It is not surprising, when we remember the rude appliances and methods which then obtained, that in his knowledge of minute anatomy Hippocrates should compare unfavourably with anatomists of the present day. Of histology, and such other subjects as could not be brought within his direct personal observation, the knowledge of Hippocrates was necessarily defective. Thus he wrote of the tissues without distinguishing them; confusing arteries, veins, and nerves, and speaking of muscles vaguely as “flesh.” But with matters within the reach of the Ancient Physician’s own careful observation, the case is very different. This is well shown in his wonderful chapter on the club-foot, in which he not only states correctly the true nature of the malformation, but gives some very sensible directions for rectifying the deformity in early life.

When human strength was not sufficient to restore a displaced limb, he skilfully availed himself of all the mechanical powers which were then known. He does not appear to have been acquainted with the use of pulleys for the purpose, but the axles which he describes as being attached to the bench which bears his name ( *Scamnum Hippocratis* ) must have been quite capable of exercising the force required.

The work called “The Aphorisms,” which was probably written in the old age of Hippocrates, consists of more than four hundred short pithy sentences, setting forth the principles of medicine, physiology, and natural philosophy. A large number of these sentences are evidently taken from the author’s other works, especially those “On Air,” etc., “On Prognostics,” and “On the Articulations.” They embody the result of a vast amount of observation and reflection, and the majority of them have been confirmed by the experience of two thousand years. A proof of the high esteem in which they have always been held is furnished by the fact that they have been translated into all the languages of the civilized world; among others, into Hebrew, Arabic, Greek, English, Dutch, Italian, German, and French. The following are a few examples of these aphorisms: —

“Spontaneous lassitude indicates disease.”

“Old people on the whole have fewer complaints than the young; but those chronic diseases which do befall them generally never leave them.”



“Persons who have sudden and violent attacks of fainting without any obvious cause die suddenly.”

“Of the constitutions of the year, the dry upon the whole are more healthy than the rainy, and attended with less mortality.”

“Phthisis most commonly occurs between the ages of eighteen and thirty-five years.”

“If one give to a person in fever the same food which is given to a person in good health, what is strength to the one is disease to the other.”

“Such food as is most grateful, though not so wholesome, is to be preferred to that which is better, but distasteful.”

“Life is short and the art long; the opportunity fleeting; experience fallacious and judgment difficult. The physician must not only do his duty himself, but must also make the patient, the attendants and the externals, co-operate.”

Hippocrates appears to have travelled a great deal, and to have practised his art in many places far distant from his native island. A few traditions of what he did during his long life remain, but differences of opinion exist as to the truth of these stories.

Thus one story says that when Perdiccas, the King of Macedonia, was supposed to be dying of consumption, Hippocrates discovered the disorder to be love-sickness, and speedily effected a cure. The details of this story scarcely seem to be worthy of credence, more especially as similar legends have been told of entirely different persons belonging to widely different times. There are, however, some reasons for believing that Hippocrates visited the Macedonian court in the exercise of his professional duties, for he mentions in the course of his writings, among places which he had visited, several which were situated in Macedonia; and, further, his son Thessalus appears to have afterwards been court physician to Archelaus, King of Macedonia.

Another story connects the name of Hippocrates with the Great Plague which occurred at Athens in the time of the Peloponnesian war. It is said that Hippocrates advised the lighting of great fires with wood of some aromatic kind, probably some species of pine. These, being kindled all about the city, stayed the progress of the pestilence. Others besides Hippocrates are, however, famous for

having successfully adopted this practice.

A third legend states that the King of Persia, pursuing the plan (which in the two celebrated instances of Themistocles and Pausanias had proved successful) of attracting to his side the most distinguished persons in Greece, wrote to Hippocrates asking him to pay a visit to his court, and that Hippocrates refused to go. Although the story is discarded by many scholars, it is worthy of note that Ctesias, a kinsman and contemporary of Hippocrates, is mentioned by Xenophon in the "Anabasis" as being in the service of the King of Persia. And, with regard to the refusal of the venerable physician to comply with the king's request, one cannot lose sight of the fact that such refusal was the only course consistent with the opinions he professed of a monarchical form of government.

After his various travels Hippocrates, as seems to be pretty generally admitted, spent the latter portion of his life in Thessaly, and died at Larissa at a very advanced age.

It is difficult to speak of the skill and painstaking perseverance of Hippocrates in terms which shall not appear exaggerated and extravagant. His method of cultivating medicine was in the true spirit of the inductive philosophy. His descriptions were all derived from careful observation of its phenomena, and, as a result, the greater number of his deductions have stood unscathed the test of twenty centuries.

Still more difficult is it to speak with moderation of the candour which impelled Hippocrates to confess errors into which in his earlier practice he had fallen; or of that freedom from superstition which entitled him to be spoken of as a man who knew not how to deceive or be deceived ("qui tam fallere quam falli nescit"); or, lastly, of that purity of character and true nobility of soul which are brought so distinctly to light in the words of the oath translated below: —

"I swear by Apollo the Physician and Æsculapius, and I call Hygeia and Panacea and all the gods and goddesses to witness, that to the best of my power and judgment I will keep this oath and this contract; to wit — to hold him, who taught me this Art, equally dear to me as my parents; to share my substance with him; to supply him if he is in need of the necessaries of life; to regard his offspring in the same light as my own brothers, and to teach them this Art, if they shall desire to learn it, without fee or contract; to impart the precepts, the oral teaching, and all the rest of the instruction to my own sons, and to the sons

of my teacher, and to pupils who have been bound to me by contract, and who have been sworn according to the law of medicine.

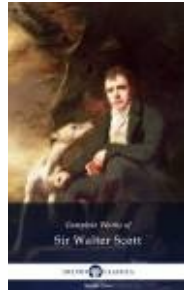
“I will adopt that system of regimen which, according to my ability and judgment, I consider for the benefit of my patients, and will protect them from everything noxious and injurious. I will give no deadly medicine to any one, even if asked, nor will I give any such counsel, and similarly I will not give to a woman the means of procuring an abortion. With purity and with holiness I will pass my life and practise my art.... Into whatever houses I enter I will go into them for the benefit of the sick, keeping myself aloof from every voluntary act of injustice and corruption and lust. Whatever in the course of my professional practice, or outside of it, I see or hear which ought not to be spread abroad, I will not divulge, as reckoning that all such should be kept secret. If I continue to observe this oath and to keep it inviolate, may it be mine to enjoy life and the practice of the Art respected among all men for ever. But should I violate this oath and forswear myself, may the reverse be my lot.”

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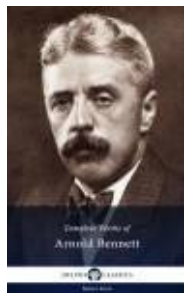
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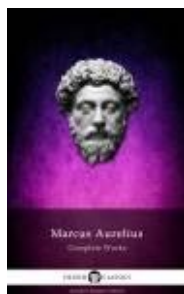
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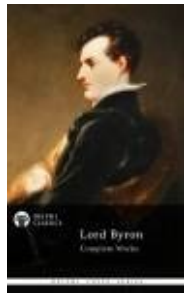




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*The ancient theatre at Larissa, the largest city of Thessaly — Larissa is recorded as being Hippocrates' place of death*