

400 BC
ON REGIMEN IN ACUTE DISEASES

Hippocrates
Translated by Francis Adams

Hippocrates (460-377 BC) - A Greek physician commonly known as the Father of Medicine. Although little is known of his life, he is thought to have been a man of high character and moral standards. His medical ethics survive today as an oath administered to those entering medical practice. Regimen in Acute Diseases (400 BC) - A treatise on the systematic control of acute diseases. One of the writings which comprise what is now referred to as the Hippocratic Collection.

ON REGIMEN IN ACUTE DISEASES

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 uncocted, 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 orthopnoee 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 uncocted, 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 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. Such are the opinions which I entertain respecting the administering of the ptisan; and, as regards drinks, whichever 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 expectoration 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; character; 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 fall 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 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 melanogogue. 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 barleywater, 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 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 Ardent fever (causis) 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 faces 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 cerealium, 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 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 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.

13. In a bilious fever, jaundice coming on with rigor before the seventh day carries off the fever, but if it occur without the fever, and not at the proper time, it is a fatal symptom.

14. When the loins are in a tetanic state, and the spirits in the veins are obstructed by melancholic humors, venesection will afford relief. But when, on the other hand, the anterior tendons are strongly contracted, and if there be sweats about the neck and face, extorted by the violent pain of the parched and dried tendons of the sacral extremity (these are very thick, sustaining the spine, and giving rise to very great ligaments, which terminate in the feet,) in such a case, unless fever and sleep come on, followed by concocted urine and critical sweats, give to drink a strong Cretan wine, and boiled barley-meal for food; anoint and rub with ointments containing wax; bathe the legs and feet in hot water, and then cover them up; and so in like manner the arms, as far as the hands, and the spine, from the neck to the sacrum, are to be wrapped in a skin smeared with wax; this must extend to the parts beyond, and intervals are to be left for applying fomentations, by means of leather bottles filled with hot water, then, wrapping him up in a linen cloth, lay him down in bed. Do not open the bowels, unless by means of a suppository, when they have been long of being moved. If there be any remission of the disease, so far well, but otherwise, pound of the root of bryonia in fragrant wine, and that of the carrot, and give to the patient fasting early in the morning, before using the affusion, and immediately afterwards let him eat boiled barleymeal in a tepid state, and as much as he can take, and in addition let him drink, if he will, wine well diluted. If the disease yield to these means, so much the better, but, if otherwise, you must prognosticate accordingly.

15. All diseases are resolved either by the mouth, the bowels, the bladder, or some other such organ. Sweat is a common form of resolution in all these cases.

16. You should put persons on a course of hellebore who are troubled with a defluxion from the head. But do not administer hellebore to such persons as are laboring under empyema connected with abscesses, haemoptysis, and intemperament, or any other strong cause, for it will do no good; and if any thing unpleasant occur the

hellebore will get the blame of it. But if the body have suddenly lost its powers, or if there be pain in the head, or obstruction of the ears and nose, or ptyalism, or heaviness of the limbs, or an extraordinary swelling of the body, you may administer the hellebore, provided these symptoms be not connected with drinking, nor with immoderate venery; nor with sorrow, vexation, nor insomnolency, for, if any of these causes exist, the treatment must have respect to it.

17. From walking arise pains of the sides, of the back, of the loins, and of the hip-joint, and disorder of the respiration has often been from the same cause, for, after excesses of wine and flatulent food, pains shoot to the loins and hips, accompanied with dysuria. Walking is the cause of such complaints, and also of coryza and hoarseness.

18. Disorders connected with regimen, for the most part, make their attack accordingly as any one has changed his habitual mode of diet. For persons who dine contrary to custom experience much swelling of the stomach, drowsiness, and fullness; and if they take supper over and above, their belly is disordered; such persons will be benefited by sleeping after taking the bath, and by walking slowly for a considerable time after sleep; if, then, the bowels be moved, he may dine and drink a small quantity of wine not much diluted; but if the bowels are not opened, he should get his body rubbed with hot oil, and, if thirsty, drink of some weak and white wine, or a sweet wine, and take repose; if he does not sleep he should repose the longer. In other respects he should observe the regimen laid down for those who have taken a debauch. With regard to the bad effects of drinks, such as are of a watery nature pass more slowly through the body, they regurgitate, as it were, and float about the hypochondria, and do not flow readily by urine; when filled up with such a drink, he should not attempt any violent exertion, requiring either strength or swiftness, but should rest as much as possible until the drink has been digested along with the food; but such drinks as are stronger or more austere, occasion palpitation in the body and throbbing in the head, and in this case the person affected will do well to sleep, and take some hot draught for which he feels disposed; for abstinence is bad in headache and the effects of a surfeit. Those who, contrary to usage, restrict themselves to one meal, feel empty and feeble, and pass hot urine in consequence of the emptiness of their vessels; they have a salt and bitter taste in the mouth; they tremble at any work they attempt; their temples throb; and they cannot digest their supper so well as if they had previously taken their dinner. Such persons should take less supper than they are wont, and a pudding of barley-meal more moist than usual instead of bread, and of potherbs the dock, or mallow, and ptisan, or beets, and along with the food they should take wine in moderation, and diluted with water; after supper they should take a short walk, until the urine descend and be passed; and they may use boiled fish.

Articles of food have generally such effects as the following: Garlic occasions flatulence and heat about the chest, heaviness of the head, and nausea, and any other habitual pain is apt to be exasperated by it; it is diuretic, which, in so far, is a good property which it possesses; but to eat it when one means to drink to excess, or when intoxicated. Cheese produces flatulence and constipation, and heats the other articles of food; and it gives rise to crudities and indigestion, but it is worst of all to eat it along with drink after a full meal. Pulse of all kinds are flatulent, whether raw, boiled, or fried; least so when macerated in water, or in a green state; they should not be used except along with food prepared from the cerealia.

Each of these articles, articles, however, has bad effects peculiar to itself. The vetch, whether raw or boiled, creates flatulence and pain. The lentil is astringent, and disorders the stomach if taken with its hull. The lupine has the fewest bad effects of all these things. The stalk and the juice of silphium (asafoetida), pass through some people's bowels very readily, but in others, not accustomed to them, they engender what is called

dry cholera; this complaint is more especially produced by it if mixed with much cheese, or eaten along with beef. Melancholic diseases are most particularly exacerbated by beef, for it is of an unmanageable nature, and requires no ordinary powers of stomach to digest it; it will agree best with those who use it well boiled and pretty long kept. Goat's flesh has all the bad properties of beef; it is an indigestible, more flatulent and engenders acid eructations and cholera; such as has a fragrant smell, is firm, and sweet to the taste, is the best, when well baked and cooled; but those kinds which are disagreeable to the taste, have a bad smell, and are hard, such are particularly bad, and especially if very fresh; it is best in summer and worst in autumn. The flesh of young pigs is bad, either when it is too raw or when it is over-roasted, for it engenders bile and disorders the bowels. Of all kinds of flesh, pork is the best; it is best when neither very fat, nor, on the other hand, very lean, and the animal had not attained the age of what is reckoned an old victim; it should be eaten without the skin, and in a coldish state.

19. In dry cholera the belly is distended with wind, there is rumbling in the bowels, pain in the sides and loins, no dejections, but, on the contrary, the bowels are constipated. In such a case you should guard against vomiting, but endeavor to get the bowels opened. As quickly as possible give a clyster of hot water with plenty of oil in it, and having rubbed the patient freely with unguents; put him into hot water, laying him down in the basin, and pouring the hot water upon him by degrees; and if, when heated in the bath, the bowels be moved, he will be freed from the complaint. To a person in such a complaint it will do good if he sleep, and drink a thin, old, and strong wine; and you should give him oil, so that he may settle, and have his bowels moved, when he will be relieved. He must abstain from all other kinds of food; but when the pain remits, give him asses milk to drink until he is purged. But if the bowels are loose, with bilious discharges, tormina, vomitings, a feeling of suffocation, and gnawing pains, it is best to enjoin repose, and to drink hydromel, and avoid vomiting.

20. There are two kinds of dropsy, the one anasarca, which, when formed, is incurable; the other is accompanied with emphysema (tympanites?) and requires much good fortune to enable one to triumph over it. Laborious exertion, fomentation, and abstinence (are to be enjoined). The patient should eat dry and acrid things, for thus will he pass the more water, and his strength be kept up. If he labors under difficulty of breathing, if it is the summer season, and if he is in the prime of life, and is strong, blood should be abstracted from the arm, and then he should eat hot pieces of bread, dipped in dark wine and oil, drink very little, and labor much, and live on well-fed pork, boiled with vinegar, so that he may be able to endure hard exercises.

21. Those who have the inferior intestines hot, and who pass acrid and irregular stools of a colliquative nature, if they can bear it, should procure revulsion by vomiting with hellebore; but if not, should get a thick decoction of summer wheat in a cold state, lentil soup, bread cooked with cinders, and fish, which should be taken boiled if they have fever, but roasted if not feverish; and also dark-colored wine if free of fever; but otherwise they should take the water from medlars, myrtles, apples, services, dates, or wild vine. If there be no fever, and if there be tormina, the patient should drink hot asses' milk in small quantity at first, and gradually increase it, and linseed, and wheaten flour, and having removed the bitter part of Egyptian beans, and ground them, sprinkle on the milk and drink; and let him eat eggs half-roasted, and fine flour, and millet, and perl-spelt (chondrus) boiled in milk;- all these things should be eaten cold, and similar articles of food and drink should be administered.

22. The most important point of regimen to observe and be guarded about in protracted diseases, is to pay attention to the exacerbations and remissions of fevers, so as to avoid the times when food should not be given, and to know when it may be

administered without danger; this last season is at the greatest possible distance from the exacerbation.

23. One should be able to recognize those who have headache from gymnastic exercises, or running, or walking or hunting, or any other unseasonable labor, or from immoderate venery; also those who are of a pale color, or troubled with hoarseness; those who have enlarged spleen, those who are in a state of anaemia, those who are suffering from tympanites, those having dry cough and thirst, those who are flatulent, and have the course of the blood in their veins intercepted; those persons whose hypochondria, sides, and back are distended: those having torpor; those laboring under amaurosis, or having noises in their ears; those suffering from incontinence of urine or jaundice, or whose food is passed undigested; those who have discharges of blood from the nose or anus, or who have flatulence and intense pain, and who cannot retain the wind. In these cases you may do mischief, but cannot possibly do any good by purging, but may interrupt the spontaneous remissions and crises of the complaints.

24. If you think it expedient to let blood, see that the bowels be previously settled, and then bleed; enjoin abstinence, and forbid the use of wine; and complete the cure by means of a suitable regimen, and wet fomentations. But if the bowels appear to be constipated, administer a soothing clyster.

25. If you think it necessary to give medicines, you may safely purge upwards by hellebore, but none of those should be purged downwards. The most effectual mode of treatment is by the urine, sweats, and exercise; and use gentle friction so as not to harden the constitution; and if he be confined to bed let others rub him.

When the pain is seated above the diaphragm, place him erect for the most part, and let him be as little reclined as possible; and when he is raised up let him be rubbed for a considerable time with plenty of hot oil. But if the pains be in the lower belly below the diaphragm, it will be useful to lie reclined and make no motion, and to such a person nothing should be administered except the friction.

Those pains which are dissolved by discharges from the bowels, by urine, or moderate sweats, cease spontaneously, if they are slight, but if strong they prove troublesome; for persons so affected either die, or at least do not recover without further mischief, for they terminate in abscesses.

26. A draught for a dropsical person. Take three cantharides, and removing their head, feet, and wings, triturate their bodies in three cupfuls (cyathi) of water, and when the person who has drunk the draught complains of pain, let him have hot fomentations applied. The patient should be first anointed with oil, should take the draught fasting, and eat hot bread with oil.

27. A styptic. Apply the juice of the fig inwardly to the vein; or having moulded biestings into a tent, introduce up the nostril, or push up some chalcitis with the finger, and press the cartilages of the nostrils together; and open the bowels with the boiled milk of asses: or having shaved the head apply cold things to it if in the summer season.

28. The sesamoides purges upwards when pounded in oxymel to the amount of a drachm and a half, and drunk; it is combined with the hellebores, to the amount of the third part, and thus it is less apt to produce suffocation.

29. Trichiasis. Having introduced a thread into the eye of a needle push it through the upper part of the distended eyelid, and do the same at the base of it; having stretched the threads tie a knot on them, and bind up until they drop out: and, if this be sufficient, so far well; but if otherwise, you must do the same thing again. And hemorrhoids, in like manner, you may treat by transfixing them with a needle and tying them with a very thick and large woolen thread; for thus the cure will be more certain. When you have secured them, use a septic application, and do not foment until they drop off, and always leave one behind; and when the patient recovers, let him be put upon a course of

hellebore. Then let him be exercised and sweated; the friction of the gymnasium and wrestling in the morning will be proper; but he must abstain from running, drinking, and all acrid substances, except marjoram; let him take an emetic every seven days, or three times in a month; for thus will he enjoy the best bodily health. Let him take straw-colored, austere, and watery wine, and use little drink.

30. For persons affected with empyema. Having cut some bulbs or squill, boil in water, and when well boiled, throw this away, and having poured in more water, boil until it appear to the touch soft and well-boiled; then triturate finely and mix roasted cumin, and white sesames, and young almonds pounded in honey, form into an electuary and give; and afterwards sweet wine. In draughts, having pounded about a small acetabulum of the white poppy, moisten it with water in which summer wheat has been washed, add honey, and boil. Let him take this frequently during the day. And then taking into account what is to happen, give him supper.

31. For dysentery. A fourth part of a pound of cleaned beans, and twelve shoots of madder having been triturated, are to be mixed together and boiled, and given as a linctus with some fatty substance.

32. For diseases of the eyes. Washed spodium (tutty?) mixed with grease, and not of a thinner consistence than dough, is to be carefully triturated, and moistened with the juice of unripe raisins; and having dried in the sun, moisten until it is of the consistence of an ointment. When it becomes again dry, let it be finely levigated, anoint the eyes with it, and dust it upon the angles of the eyes.

33. For watery eyes. Take one drachm of ebeny and nine oboli of burnt copper, rub them upon a whetstone, add three oboli of saffron; triturate all these things reduced to a fine powder, pour in an Attic hemina of sweet wine, and then place in the sun and cover up; when sufficiently digested, use it.

34. For violent pains of the eyes. Take of chalcitis, and of raisin, of each 1 dr., when digested for two days, strain; and pounding myrrh and saffron, and having mixed must, with these things, digest in the sun; and with this anoint the eyes when in a state of severe pain. Let it be kept in a copper vessel.

35. Mode of distinguishing persons in an hysterical fit. Pinch them with your fingers, and if they feel, it is hysterical; but if not, it is a convulsion.

36. To persons in coma, (dropsy?) give to drink meconium (euphorbia peplus?) to the amount of a round Attic leciskion (small acetabulum).

37. Of squama aeris, as much as three specilla can contain, with the gluten of summer wheat: levigate, pound, form into pills, and give; it purges water downwards.

38. A medicine for opening the bowels. Pour upon figs the juice of spurge, in the proportion of seven to one: then put into a new vessel and lay past when properly mixed. Give before food.

39. Pounding meconium, pouring on it water, and straining, and mixing flour, and baking into a cake, with the addition of boiled honey, give in affections of the anus and in dropsy; and after eating of it, let the patient drink of a sweet watery wine, and diluted hydromel prepared from wax: or collecting meconium, lay it up for medicinal purposes.

THE END