

cannot be complied with or fail of having the desired effect, their intentions may in some measure be answered by the following medicines, viz., the Peruvian bark with other bitters, preparations of steel, assafœtida, elixir of vitriol, infusions of valerian root, pennyroyal, &c. The various ways of preparing and using these have already been pointed out.

CHAPTER XLIV. OF POISONS.

EVERY person ought in some measure to be acquainted with the nature and cure of poisons. They are generally taken unawares, and their effects are often so sudden and violent as not to admit of delay or allow time to procure the assistance of physicians. Happily indeed no great degree of medical knowledge is here necessary; the remedies for most poisons being generally at hand or easily obtained, and nothing but common prudence needful in the application of them.

The vulgar notion that every poison is cured by some counter poison, as a specific, has done much hurt. People believe they can do nothing for the patient unless they know the particular antidote to that kind of poison which he has taken; whereas the cure of all poisons taken into the stomach, without exception, depends chiefly on discharging them as soon as possible.

There is no case wherein the indications of cure are more obvious than in this. Poison is seldom long in the stomach before it occasions sickness, with an inclination to vomit. This shows plainly what ought to be done. Indeed common sense dictates to every man, that, if any thing has been taken into the stomach which endangers life, it ought immediately to be discharged. Were this duly regarded, the danger arising from poisons might generally be avoided. The method of prevention is obvious, and the means are in the hands of every man.

We shall not take up the reader's time with a detail of the ridiculous notions which have prevailed among ignorant people in different ages with regard to poisons; neither shall we mention the boasted antidotes which have been recommended either for preventing or obviating their effects; but shall content ourselves with pointing out the poisons most common in this country, and the means of avoiding their dangerous consequences.

Poisons either belong to the mineral, the vegetable, or the animal kingdom.

Mineral poisons are commonly of an acrid or corrosive quality; as arsenic, cobalt, the corrosive sublimate of mercury, &c.

Those of the vegetable kind are generally of a narcotic or stupefactive quality, as poppy, hemlock, henbane, berries of the deadly nightshade, &c.

Poisonous animals communicate their infection either by the bite or sting. This poison is very different from the former, and only produces its effects when received into the body by a wound.

MINERAL POISONS.—Arsenic is the most common of this class; and, as the whole of them are pretty similar both in their effects and method of cure, what is said with respect to it will be applicable to every other species of corrosive poison.

When a person has taken arsenic, he soon perceives a burning heat and a violent pricking pain in his stomach and bowels, an intolerable thirst, and an inclination to vomit. The tongue and throat feel rough and dry; and, if proper help be not soon administered, the patient is seized with great anxiety, hiccoughing, faintings, and coldness of the extremities. To these succeed black vomits, fetid stools, with a mortification of the stomach and intestines, which are the immediate forerunners of death.

On the first appearance of these symptoms, the patient should drink large quantities of new milk and salad oil till he vomits, or he may drink warm water mixed with oil. Fat broths are likewise proper, provided they can be got ready in time. Where no oil is to be had, fresh butter may be melted and mixed with the milk or water. These things are to be drank as long as the inclination to vomit continues. Some have drank eight or ten English quarts before the

vomiting ceased; and it is never safe to leave off drinking while one particle of the poison remains in the stomach.

These oily or fat substances not only provoke vomiting, but likewise blunt the acrimony of the poison, and prevent its wounding the bowels; but if they should not make the person vomit, half a dram or two scruples of the powder of ipecacuanha must be given, or a few spoonfuls of the oxymel or vinegar of squills may be mixed with the water which he drinks. Vomiting may likewise be excited by tickling the inside of the throat with a feather. Should these methods however fail, half a dram of white vitriol, or five or six grains of emetic tartar, must be administered.

If tormenting pains are felt in the lower belly, and there is reason to fear that the poison has got down to the intestines, clysters of milk and oil must be very frequently thrown up; and the patient must drink emollient decoctions of barley, oatmeal, marsh-mallows, and such like. He must likewise take an infusion of senna and manna, a solution of Glauber's salts, or some other purgative.

After the poison has been evacuated, the patient ought for some time to live upon such things as are of a healing and cooling quality; to abstain from flesh and all strong liquors, and to live upon milk, broth, gruel, light puddings, and other spoon meats of easy digestion. His drink should be barley water, linseed tea, or infusions of any of the mild mucilaginous vegetables.

VEGETABLE POISONS, besides heat and pain of the stomach, commonly occasion some degree of giddiness, and often a kind of stupidity or folly. Persons who have taken these poisons must be treated in the same manner as for the mineral or corrosive.

Though the vegetable poisons, when allowed to remain in the stomach, often prove fatal, yet the danger is generally over as soon as they are discharged. Not being of such a caustic or corrosive nature, they are less apt to wound and inflame the bowels than mineral substances; no time, however, ought to be lost in having them expelled the stomach.

Opium, being frequently taken by mistake, merits particular attention. It is used as a medicine both in a solid and liquid form, which latter commonly goes by the name of laudanum. It is indeed a valuable medicine when taken in proper quantity, but as an over-dose proves a strong poison, we shall point out its common effects, together with the method of cure.

Too great a quantity of opium generally occasions great drowsiness, with stupor and other apoplectic symptoms. Sometimes the person has so great an inclination to sleep that it is almost impossible to keep him awake. Every method must, however, be tried for this purpose. He should be tossed, shook, and moved about; sharp blistering plasters should be applied to his legs or arms, and stimulating medicines, as salts of hartshorn, &c., held under his nose. It will also be proper to let blood. At the same time every method must be taken to make him discharge the poison. This may be done in the manner directed above, viz., by the use of strong vomits, drinking plenty of warm water with oil, &c.

Mead, besides vomits, in this case, recommends acid medicines with lixivial salts. He says that he has often given salt of wormwood mixed with juice of lemon, in repeated doses, with great success.

If the body should remain weak and languid after the poison has been discharged, nourishing diet and cordials will be proper; but when there is reason to fear that the stomach or bowels are inflamed, the greatest circumspection is necessary both with regard to food and medicine.

THE BITES OF POISONOUS ANIMALS.

We shall begin with the bite of a mad dog, as it is both the most common and dangerous animal poison in this country.

The creatures naturally liable to contract this disease are, so far as we yet know, all of the dog kind, viz., foxes, dogs, and wolves. Hence it is called the *rabies canina*, or dog-madness. Of the last we have none in this island; and it so seldom happens that any person is bit by the first, that they scarce deserve to be taken notice of. If such a thing should happen, the method of treatment is precisely the same as for the bite of a mad dog.

The symptoms of madness in a dog are as follow: At first he looks dull, shows an aversion to food and company; he does not bark as usual, but seems to murmur, is peevish, and apt to bite strangers; his ears and tail droop more than usual, and he appears drowsy. After he begins to loll out his tongue and froth at the mouth, his eyes seeming heavy and watery. He now, if not confined, takes off, runs panting along with a kind of dejected air, and endeavors to bite every one he meets.

Other dogs are said to fly from him. Some think this a certain sign of madness, supposing that they know him by the smell; but it is not to be depended on. If he escapes being killed, he seldom runs above two or three days, till he dies, exhausted with heat, hunger, and fatigue.

This disease is most frequent after long, dry, hot seasons; and such dogs as live upon putrid stinking carrion, without having enough of fresh water, are most liable to it.

When any person is bit by a dog, the strictest inquiry ought to be made whether the animal be really mad. Many disagreeable consequences arise from neglecting to ascertain this point. Some people have lived in continual anxiety for many years, because they had been bit by a dog which they believed to be mad; but as he had been killed on the spot, it was impossible to ascertain the fact. This should induce us, instead of killing a dog the moment he has bit any person, to do all in our power to keep him alive, at least till we can be certain whether he be mad or not.

Many circumstances may contribute to make people imagine a dog mad. He loses his master, runs about in quest of him, is set upon by other dogs, and perhaps by men. The creature, thus frightened, beat, and abused, looks wild, and lolls out his tongue as he runs along. Immediately a crowd is after him; while he, finding himself closely pursued, and taking every one he meets for an enemy, naturally attempts to bite him in self-defence. He soon gets knocked on the head, and it passes currently that he was mad, and it is then impossible to prove the contrary.

This being the true history of by far the greater part of those dogs which pass for mad, is it any wonder that numberless whimsical medicines have been extolled for preventing the effects of their bite? This readily accounts for the great variety of infallible remedies for the bite of a mad dog, which are to be met with in almost every family. Though not one in a thousand has any claim to merit, yet they are all supported by numberless vouchers. No wonder that imaginary diseases should be cured by imaginary remedies. In this way, credulous people first impose upon themselves, and then deceive others. The same medicine that was supposed to prevent the effects of the bite, when the dog was not mad, is recommended to a person who has had the misfortune to be bit by a dog that was really mad; he takes it, trusts to it, and is undone.

To these mistakes we must impute the frequent ill success of the medicines used for preventing the effects of the bite of a mad dog. It is not owing so much to a defect in medicine as to wrong applications. I am persuaded if proper medicines were administered immediately after the bite is received, and continued for a sufficient length of time, we should not lose one in a thousand of those who have the misfortune to be bit by a mad dog.

This poison is generally communicated by a wound, which, nevertheless, heals as soon as a common wound; but afterwards it begins to feel painful, and as the pain spreads towards the neighboring parts the person becomes heavy and listless, his sleep is unquiet with frightful dreams, he sighs, looks dull, and loves solitude. These are the forerunners, or rather the first symptoms, of that dreadful disease occasioned by the bite of a mad dog. But as we do not propose to treat the disease itself, but to point out the method of preventing it, we shall not take up time in showing its progress from the first invasion to its commonly fatal end.

The common notion that this poison may lie in the body for many years, and afterwards prove fatal, is both hurtful and ridiculous. It must render such persons as have had the misfortune to be bit very unhappy, and can have no good effects. If the person takes proper medicines for forty days after the time of his being bit, and feels no symptoms of the disease, there is reason to believe him out of danger. Some indeed have gone mad ten or twelve months after they were bit, but I never knew it happen later; and of this I only remember to have seen one instance.

The medicines recommended for preventing the effects of the bite of a mad dog are chiefly such as promote the different secretions, and antispasmodics.

Dr. Mead recommends a preventive medicine, which he says he never knew fail, though in the space of thirty years he had used it a thousand times.

The doctor's prescription is as follows:

"Take ash-colored ground liverwort, cleaned, dried, and powdered, half an ounce, of black pepper powdered a quarter of an ounce; mix these well together, and divide the powder into four doses, one of which must be taken every morning fasting, for four mornings successively, in half an English pint of cow's milk warm.

"After these four doses are taken, the patient must go into

the cold bath, or a cold spring or river, every morning fasting, for a month; he must be dipped all over, but not stay in (with his head above water) longer than half a minute, if the water be very cold. After this he must go in three times a week for a fortnight longer.

"The person must be bled before he begins to use the medicine."

We shall next mention the famous East India specific, as it is called. This medicine is composed of cinnabar and musk. It is esteemed a great antispasmodic, and by many extolled as an infallible remedy for preventing the effects of the bite of a mad dog.

"Take native and factitious cinnabar of each twenty-four grains, musk sixteen grains; let these be made into a fine powder, and taken in a glass of arrack or brandy."

This single dose is said to secure the person for thirty days, at the end of which it must be repeated; but if he has any symptoms of the disease, it must be repeated in three hours.

The following is likewise reckoned a good antispasmodic medicine:

Take of Virginian snakeroot in powder half a dram, gum assafœtida twelve grains, gum camphire seven grains; make these into a bolus with a little syrup of saffron.

Camphire may also be given in the following manner:

Take purified nitre half an ounce, Virginian snakeroot in powder two drams, camphire one dram; rub them together in a mortar, and divide the whole into ten doses.

Mercury is another medicine of great efficacy, both in the prevention and cure of this kind of madness. When used as a preventive, it will be sufficient to rub daily a dram of the ointment into the parts about the wound.

Vinegar is likewise of considerable service, and should be taken freely, either in the patient's food or drink.

These are the principal medicines recommended for preventing the effects of the bite of a mad dog. We would not, however, advise people to trust to any one of them; but from a proper combination of their different powers there is the greatest reason to hope for success.

The great error in the use of these medicines lies in not taking them for a sufficient length of time. They are used more like charms than medicines intended to produce any change in the body. To this, and not to the insufficiency of the medicines, must we impute their frequent want of success.

Dr. Mead says that the virtue of his medicine consists in promoting urine. But how a poison should be expelled by urine, with only three or four doses of any medicine, however powerful, is not easy to conceive. More time is certainly necessary; and here the defect of the doctor's prescription seems to lie.

The East India specific is still more exceptionable on this account.

As these and most other medicines, taken singly, have frequently been found to fail, we shall recommend the following course.

If a person be bit in a fleshy part, where there is no hazard of hurting any large blood-vessel, the parts adjacent to the wound may be cut away. But if this be not done soon after the bite has been received, it will be better to omit it.

The wound may be washed with salt and water or a pickle made of vinegar and salt, and afterwards dressed twice a day with yellow basilicon mixed with some red precipitate of mercury.

The patient should begin to use either Dr. Mead's medicine or some of the others mentioned above. If he takes Mead's medicine, he may use it as the doctor directs for four days successively. Let him then omit it for two or three days, and again repeat the same number of doses as before.

During this course, he must rub into the parts about the wound, daily, one dram of the mercurial ointment. This may be done for ten or twelve days at least.

When this course is over, he may take some doses of physic, and wait a few days, till the effects of the mercury be quite gone off. He must then begin to use the cold bath, into which he must go every morning for five or six weeks. But if the patient should feel cold and chilly for a long time after coming out of the cold bath, it will be better to use a tepid one, or to have the water a little warmed.

In the mean time, we would advise him not to leave off all internal medicines, but to take either one of the boluses of snakeroot, assafœtida and camphire, or one of the powders of nitre, camphire and snakeroot, twice a day. These may be continued for a fortnight or three weeks longer.

If the person has gone through the above course of medicine, and no symptoms of madness appear, he may be reckoned out of danger. It will nevertheless be advisable, for the greater

safety, to take a dose or two of Dr. Mead's medicine, once a fortnight, for the three or four succeeding months.

During the use of the mercurial ointment, the patient must keep within doors, and take nothing cold.

A proper regimen must be observed during the whole course. The patient should abstain from flesh, and all salted and high-seasoned provisions. He must avoid strong liquors, and live mostly upon a light and rather spare diet. His mind should be kept as easy and cheerful as possible, and all excessive heat and violent passions avoided with the utmost care.

I have never seen this course of medicine, with proper regimen, fail to prevent the hydrophobia, and cannot help again observing, that the want of success must generally be owing either to the application of improper medicines, or not using proper ones for a sufficient length of time.

Mankind are extremely fond of every thing that promises a sudden or miraculous cure. By trusting to these they often lose their lives, when a regular course of medicine would have rendered them absolutely safe. This holds remarkably in the present case: numbers of people, for example, believe if they or their cattle be once dipped in the sea, it is sufficient; as if the salt water were a charm against the effects of the bite. This, and such like whims, have proved fatal to many.

It is a common notion, if a person be bit by a dog which is not mad, that if he should go mad afterwards the person would be affected with the disorder at the same time; but this notion is too ridiculous to deserve a serious consideration. It is a good rule, however, to avoid dogs as much as possible, as the disease is often upon them for some time before its violent symptoms appear. The hydrophobia has been occasioned by the bite of a dog which showed no other symptoms of the disease but listlessness and a sullen disposition. It is somewhat surprising that no proper inquiry has ever been made into the truth of the common opinion, that a dog which has been wormed cannot bite after he goes mad. If the fact could be ascertained, and the practice rendered general, it would save both the lives and properties of many.

Though we do not mean to treat fully of the cure of the hydrophobia, yet we are far from reckoning it incurable. The notion that this disease could not be cured has been productive of the most horrid consequences. It was usual either to abandon the unhappy persons, as soon as they were seized with the disease, to their fate, to bleed them to death, or to

suffocate them between mattresses or feather beds, &c. This conduct certainly deserves the severest punishment. We hope, for the honor of human nature, it will never be heard of again.

I have never had an opportunity of treating this disease, and therefore can say nothing of it from my own experience; but the learned Dr. Tissot says it may be cured in the following manner.

1. The patient must be bled to a considerable quantity; and this may be repeated twice, thrice, or even a fourth time, if circumstances require it.

2. The patient should be put, if possible, into a warm bath, and this should be used twice a day.

3. He should every day receive two or even three emollient clysters.

4. The wound, and the parts adjoining to it, should be rubbed with the mercurial ointment twice a day.

5. The whole limb which contains the wound should be rubbed with oil, and be wrapped up in an oily flannel.

6. Every three hours, a dose of Cob's powder should be taken in a cup of the infusion of lime-tree and elder flowers. This powder is made by rubbing together in a mortar, to a very fine powder, of native and factitious cinnabar each twenty-four grains, of musk sixteen grains.

7. The following bolus is to be given every night, and to be repeated in the morning if the patient is not easy, washing it down with the infusion mentioned above. Take one dram of Virginian snakeroot in powder, of camphire and assafetida ten grains each, of opium one grain, and, with a sufficient quantity of conserve or rob of elder, make a bolus.

8. If there be a great nausea at stomach, with a bitterness in the mouth, thirty-five or forty grains of ipecacuanha, in powder, may be taken for a vomit.

9. The patient's food, if he takes any, must be light, as panado, soups made of farinaceous or mealy vegetables, &c.

10. If the patient should long continue weak, and subject to terrors, he may take half a dram of the Peruvian bark thrice a day.

The next poisonous animal which we shall mention is the Viper. The grease of this animal rubbed into the wound is said to cure the bite. Though that is all the viper-catchers generally do when bit, we should not think it sufficient for the bite of an enraged viper. It would surely be more safe

to have the wound well sucked,* and afterwards rubbed with warm salad oil. A poultice of bread and milk, softened with salad oil, should likewise be applied to the wound; and the patient ought to drink freely of vinegar whey, or water gruel with vinegar in it, to make him sweat. Vinegar is one of the best medicines which can be used in any kind of poison, and ought to be taken very liberally. If the patient be sick, he may take a vomit. This course will be sufficient to cure the bite of any of the poisonous animals of this country.

With regard to poisonous insects, as the bee, the wasp, the hornet, &c., their stings are seldom attended with danger, unless when a person happens to be stung by a great number of them at the same time; in which case something should be done to abate the inflammation and swelling. Some, for this purpose, apply honey; others lay pounded parsley to the part. A mixture of vinegar and Venice treacle is likewise recommended; but I have always found rubbing the part with warm salad oil succeed very well. Indeed, when the stings are so numerous as to endanger the patient's life, which is sometimes the case, he must not only have oily poultices applied to the part, but must likewise be bled, and take some cooling medicines, as nitre or cream of tartar, and should drink plentifully of diluting liquors.

It is the happiness of this island to have very few poisonous animals, and those which we have are by no means of the most virulent kind. Nine-tenths of the effects attributed to poison or venom, in this country, are really other diseases, and proceed from quite different causes.

We cannot, however, make the same observation with regard to poisonous vegetables. These abound every where, and prove often fatal to the ignorant and unwary. This indeed is chiefly owing to carelessness. Children ought early to be cautioned against eating any kind of fruit, roots, or ber-

* The practice of sucking out poisons is very ancient; and indeed nothing can be more rational. Where the bite cannot be cut out, this is the most likely way for extracting the poison. There can be no danger in performing this office, as the poison does no harm unless it be taken into the body by a wound. The person who sucks the wound ought however to wash his mouth frequently with salad oil, which will secure him from even the least inconveniency. The Psylli in Africa, and the Marsi in Italy, were famed for curing the bites of poisonous animals by sucking the wound; and we are told that the Indians of North America practise the same at this day.

ries, which they do not know; and all poisonous plants to which they can have access ought, as far as possible, to be destroyed. This would not be so difficult a task as some people may imagine. Poisonous plants have no doubt their use, and ought to be propagated in proper places; but, as they prove often destructive to cattle, they should be rooted out of all pasture-grounds. They ought likewise, for the safety of the human species, to be destroyed in the neighborhood of all towns and villages; which, by the by, are the places where they most commonly abound. I have seen the poisonous hemlock, henbane, wolfs-bane, thorn-apple, and the deadly nightshade, all growing within the environs of a small town, where, though several persons, within the memory of those living in it, had lost their lives by one or other of these plants, yet no method, that I could hear of, had ever been taken to root them out, though this might be done at a very trifling expense.

Seldom a year passes but we have accounts of several persons poisoned by eating hemlock-roots instead of parsnips, or some kinds of fungus which they had gathered for mushrooms. These examples ought to put people upon their guard with respect to the former, and to put the latter entirely out of use. Mushrooms may be a delicate dish, but they are a dangerous one, as they are generally gathered by persons who do not know one kind of fungus from another, and take every thing for a mushroom which has that appearance.

We might here mention many other plants and animals of a poisonous nature which are found in foreign countries, but, as our observations are chiefly intended for this island, we shall pass these over. It may not, however, be amiss to observe, for the behoof of such of our countrymen as go to America, that an effectual remedy is now said to be found for the bite of the rattlesnake. The prescription is as follows: Take of the roots of plantain and hoarhound, in summer roots and branches together, a sufficient quantity; bruise them in a mortar and squeeze out the juice, of which give, as soon as possible, one large spoonful; if the patient be swelled, you must force it down his throat. This generally will cure; but if he finds no relief in an hour after, you may give another spoonful, which never fails. If the roots are dried, they must be moistened with a little water. To the wound may be applied a leaf of good tobacco moistened with rum.

We give this upon the faith of Dr. Brookes, who says it

was the invention of a negro; for the discovery of which he had his freedom purchased, and a hundred pounds *per annum* settled upon him during life, by the General Assembly of Carolina.

It is possible that there may be in nature specific remedies for every kind of poison; but as we have very little faith in any one of those which have yet been discovered, we shall beg leave again to recommend the most strict attention to the following rules, viz.: That when any poisonous substance has been taken into the stomach, it ought, as soon as possible, to be discharged by vomits, clysters, and purges; and, when poison has been received into the body by a wound, that it be expelled by medicines which promote the different secretions, especially those of sweat, urine, and insensible perspiration; to which may be joined antispasmodics, or such medicines as take off tension and irritation; the chief of which are opium, musk, camphire, assafoetida, and such like.

CHAPTER XLV.

DISORDERS OF THE SENSES.

WE do not mean to treat of the nature of our sensations, nor to give a minute description of the various organs by which they are performed; but to point out some of the diseases to which these organs are most liable, and to show how they may be prevented or remedied.

THE EYE.

No organ of the body is more subject to diseases than the eye, nor is there any one of which the diseases are more difficult to cure. More ignorant persons however pretend to cure these than any other class of diseases; but a very superficial acquaintance with the structure of the eye and the nature of vision will be sufficient to convince any one of the danger of trusting to them. These diseases often exceed the skill of the most learned physicians; hence we may easily infer the