

## Health Department.

[A certain space in each number of this Journal will be devoted to questions and answers of correspondents on all subjects pertaining to health and hygiene. This department is now in charge of an experienced Medical Practitioner, and it is believed that it will be found practically useful. Questions under this department should be as brief as possible and clear in expression. They should be addressed to the editor of this Journal and have the words "Health Department" written in the lower left corner on the face of the envelope.—Ed.]

### Poisons and their Antidotes.

Irritant poisons are divisible under two heads—(1) Metallic irritants; (2) Vegetable and animal irritants, the latter two being grouped together. It would, however, appear that none of them act purely as irritants, as the irritant symptoms to which they give rise are likewise usually accompanied by well marked action upon the nervous system. The most serious poison of this class is undoubtedly arsenic. Salts of antimony, zinc, and other metals constitute a variety of other metallic irritants. Of the vegetable irritant poisons, elaterium, various essential oils such as savin, and gamboge, afford examples. Poisoning by arsenic may be either acute or chronic, the acute form being by far most common, following criminal attempts on life. Its effects in some instances may be purely narcotic. The first symptoms of arsenical poisoning, according to Orfila, are sickness and faintness, which arise about fifteen minutes after being taken. An intense burning pain is also felt in the stomach, quickly followed by vomiting, increased on attempting to swallow.

Poisoning by arsenic is distinguished from an ordinary bilious attack by the fact that pain and sickness are not relieved by vomiting, which usually happens in bilious derangements. A feeble and irregular pulse, accompanied by thirst, with clammy hands, are prominent symptoms of arsenical poisoning. The immediate employment of emetics—except tartar emetic—dilutents, and demulcents, has been suggested as perhaps the most serviceable antidotes; but no confidence should be placed in the so called antidotes, ferric hydrate and magnesia, unless a solution of arsenic has been taken. In chronic arsenical poisoning, most frequently engendered accidentally, by inhalation of arsenical vapor in factories, or by arsenical dust, loss of muscular power and failure of appetite are among the most prominent symptoms manifest. Under such circumstances, the cause—which is usually some occupation connected with the manipulation of arsenic—should be promptly sought for and removed—quinine, iron, and change of air being recommended.

Neurotic poisons may be divided into a large category; but in one and all, the symptoms produced from their administration chiefly attack the nervous system. Under this head are embraced pure narcotics, such as morphia, chloral hydrate, strychnia, hyoscyamus, &c. Prussic acid occupies a prominent position, as its effects and termination are very rapid in progress, being one of the most powerful of all poisons. Difficulty of breathing, speedily followed by convulsions, the commencement of which is announced by a loud shriek occasionally, are manifest; subsequently, loss of consciousness and muscular power. Fifteen minutes is the longest time known to elapse between taking this poison and its effects. In some works it is stated that the best mode of treating prussic acid poisoning is by the application of cold affusions before or after the convulsive stage has commenced, and the inhalation of diluted ammonia or chlorine. Stevenson advises an emetic to be administered also. Friction and artificial respiration have been recommended by other authorities.

Opium and its preparation deserve special notice, as the greater number of poisoning cases are due to their action. Although the symptoms of opium poisoning greatly vary, yet they are mostly ushered in by giddiness, listlessness, and drowsiness, followed by stupor, lapsing slowly into complete insensibility. (Opium poisoning is, un-

fortunately, often occasioned by the indiscriminate use of "sleeping draughts" and quack nostrums. In cases of opium poisoning, the immediate use of an emetic (a tablespoonful of mustard mixed with tepid water) has been advocated. The head and face should be dashed with cold water until the stupor is partially removed. The patient should not be permitted to sleep, but should be kept in continual motion. A cup of strong hot coffee ought to be given to him on his recovery.

Our space will not permit of a more minute inquiry into other varieties of neurotic poisons; suffice it to say, that in most instances arising from the administration of any preparation of opium, the antidotes above mentioned are considered the most serviceable.

We must not omit to notice poisoning by copper, which at times has arisen from the employment of copper vessels for cooking purposes, which never should be employed in any household. The first indications of copper poisoning are sudden attacks of gripping pains, aggravated by pressure, often accompanied by sickness and a peculiar sallowness of countenance. According to Ryan, the white of egg is the best antidote for poisonous preparations of copper. Lead poisoning is usually owing to drinking water which has remained for some time in leaden pipes, or by certain avocations in which some preparation of lead is used. Goulard water taken by mistake causes lead poisoning. Lead colic is one of its leading symptoms, which is relieved by pressure. Paralysis of the limbs is another well-marked indication. Sulphate of magnesia has been recommended as an antidote. A dram of sulphate of magnesia, five drops of dilute sulphuric acid, and twenty drops of tincture of hyoscyamus in two tablespoonfuls of camphor-water every two hours till the bowels are relieved, and then thrice daily for five days, is the treatment which some consider most appropriate under the circumstances.

In drawing this article to a close, we desire to impress upon our readers the vital importance, in all cases of poisoning, of being able immediately to administer the antidotes, while the medical man is being summoned. Many a valuable life would undoubtedly be saved, were the precautions before mentioned adopted without a moment's delay.

### Sleeplessness.

We have lately met with a case showing the danger of overworking the brain. It was a lady who had inherited great cerebral activity, her three nearest ancestors having been graduates of Harvard, and men of eminent professional success. Her father had showed the effects of overculture in extremes of feeling, in the eagerness with which he devoured books, in the number of hours spent in his work, rising to it at four in the morning the year round, in his thinness of flesh, and early death.

The child of such an heredity should have been stoutly held back in her intellectual development, she being sure of all desirable attainments from her own impulses and unaided energy. But the father brought to bear the full power of his own mind to stimulate her mind.

One result was an irresistible intellectual momentum, and attainments in range, variety and extent seldom surpassed. But another, a little later, and onward to her death, after years of inexpressible nervous suffering, during which she felt herself on the verge of insanity—was such unconquerable wakefulness that she wrote, "All temporal blessings seem to be expressed by the one word sleep."

We have thus detailed the case as above, that we might emphasize it by the somewhat similar experience of her sister, the author of an intensely interesting and helpful work. As this lady was only six years old at her father's death, she escaped the untimely stimulus to which her sister had been subjected. Moreover, her unbounded joyousness and love of nature was some check to undue mentality. Still, her mental activity was great, and the use of her pen became as natural to her as her breath. Besides her many published works on prose and poetry, other volumes might be added from her unpublished poems and letters.

Moreover, her intense sympathies and yearning for usefulness were exhaustively drawn upon in her position as the wife of a prominent pastor in New York City. Though her beloved summer residence did much toward repairing her nervous exhaustion, yet even here her benevolence filled her house with company, and what is more exhausting?—while her piety prompted her to weekly Bible expositions for the benefit of her neighbors.

Her husband thus speaks of the period within which her published works were written: "that dreadful sleeplessness to which she had been so in bondage for a quarter of a century, whose grasp had become more and more relentless, and the effects of which on her nervous system were such as words can hardly describe. No human being but myself had any conception of her suffering, both physical and mental, from this cause."

### Conduct in the Sick Room.

An invalid who has suffered much—as much, perhaps, from the well-meant but annoying attentions of attendants as from disease—gives the following excellent advice as to conduct in a sick room.

Do not walk on tiptoe, she says, for this, in addition to its unusual elaboration of the gait, invariably causes a certain amount of creaking.

Speak in low tones, but don't whisper; a whisper will often awaken a sleeper who would not be disturbed by ordinary conversation. Let your clothes and foot-covering be of as noiseless and unobtrusive a character as possible, and instead of gliding and tottering about like a rickety ghost, do not hesitate to walk. If you have occasion to say anything in the room, say it so that the patient can hear it if she wishes, and do not let her be aware of your conspiring privately with others, especially at the door.

The door has much to answer for. If it be visible from the bed, people open it cautiously, put their heads in, and slowly withdraw again. If, as is more frequently the case, it is screened, mysterious openings and shuttings are heard, unattended with any ingress or egress, and *sotto voce* colloquies go on outside. When you enter, do so honestly and at once; do not spend five minutes in turning the handle, like a house-breaker, thereby producing a series of irritating little clicks, finally terminating in a big snap, with which the door flies open.

Never stand at the foot of the bed and look at the patient. While talking to her it is better to sit by the side of the bed, and as near the pillow as possible, so that you may converse easily, while your face and body are turned in the same direction as hers. By this means, you can make all necessary observation of her features without enforcing the arrest of her eyes to your own, which is so embarrassing and disagreeable to one lying in bed. Keep her in as comfortable a position as possible, but don't be too demonstrative in smoothing the pillows and little offices of that sort. Fidgety attentions worry and do more harm than down right neglect.

### The Treatment of Scarlet Fever.

As is very well known, the process of desquamation which follows scarlet fever varies very much in different individuals; sometimes it is accomplished by particles so fine as to be hardly perceptible, and these are a very frequent and certain source of contagion by means of clothes and otherwise, much more so than the scales as ordinarily thrown off. It is evident that this being the fact, it must be much more difficult to prevent a contact and contagion with these fine, almost imperceptible scales which are floating in the atmosphere, than where desquamation occurs in large patches of skin. To obviate this danger, Mr. George Smith, of Somerset, England (*Bristol Med. Chirurgical Journal*, Dec., '84), states that he has for several years been in the habit of having his patients well sponged over the surface of their bodies, commencing, as a rule, about a week after the appearance of the eruption, and continuing the process until desquamation is complete, with a mixture of one ounce of oat meal to a pint of boiling water. The solution is made fresh every day, and

used tepid at such a temperature as may be comfortably borne by the back of the finger. His reason for using this particular combination is that the gluten in it sticks the scales to each other and to the surface of the body, thus allowing of their being removed from one sponging to another without the ordinary risk of infecting either atmosphere or clothes, and thus greatly lessening the risk of spreading the disease.

Secondly, the gluten fills up the cracks of the new skin and protects it from cold, as patch after patch of it becomes bare, and it thus, to say the least, greatly lessens the risk of the dropsy which so often follows upon this disease.

### Cramp.

This term is applied to a sudden spasmodic contraction of a single muscle or set of muscles. It most frequently occurs in the calf of the leg. It sometimes extends to the whole body. It is often very painful. In many cases the spasm is preceded by a crawling or tingling sensation, or stiffening of the parts affected.

**Treatment.**—When the cramp is confined to a single muscle, as in cramp of the leg, it may be relieved by simply grasping the muscle and pressing it with considerable force.

A gentleman who was much troubled with this peculiar affection, and to whom we recommended compression as a remedy, had made for the purpose, two straps, furnished with a buckle at each end, which he always carried with him. Whenever he felt the first symptoms of attack, he would apply the straps to the calves of the legs, where the cramp always began, buckling them as tightly as possible. The application of heat and cold to the spine, with fomentations to the affected part, are useful measures. When the cramps extend to various parts of the body a general warm bath will usually afford relief. Some cases are best relieved by application of ice to the spine. Ice may be applied by the ice pack, or by rubbing a piece of ice, inclosed in a piece of muslin, up and down the spine. The patient should be kept as quiet as possible, as the least motion will often induce a return of the spasms after they have ceased. Gentle manipulation of the affected muscles, if very cautiously performed, will sometimes relieve the tendency to spasm.

### Waterproof Clothing.

When once a waterproof is put on to defend the body from wet, it should on no account be taken off until the wearer has not only taken shelter, but is in a position to change his clothes. What a covering of oiled silk does for a wet rag in surgery—namely, convert it into a poultice—the waterproof does for the clothes of its wearer. The insensible perspiration which finds a way of escape through ordinary clothing is kept in by the waterproof, and the clothes are saturated with moisture. A very few minutes will suffice to render the underclothing "damp" under a waterproof, particularly if either the wearer perspires freely or the weather be what is called "muggy" as well as wet.

When, therefore, the wearer of a waterproof take off that article of clothing because it has ceased to rain, he is in the position of a person who has damp clothes on and, if he sits in the saddle, or walks home, or rides in an open trap, he is more likely to take cold than if he had not used the waterproof at all.

If, therefore, a waterproof is once put on, it should on no account be removed until the clothes can be changed or dried by a fire without reduction of bodily temperature.

**THE BLACK DEATH.**—The black death of the fourteenth century, believed by some to have been the Asiatic cholera, although the symptoms, as described by the historians of the day, differ widely, actually desolated the world. It is computed that 13,000,000 perished in China, and elsewhere in the East about 25,000,000 more. Germany lost nearly 1,300,000; Italy nearly half of its entire population; London alone in excess of 100,000. In Europe fully 30,000,000 must have died, and in all quarters of the globe not far from 70,000,000 of people.