

undergoes by oxidation, &c., is next examined, and shown to give rise to carbonic acid, ammonia, sulphuretted hydrogen, and probably other gases. The ammonia generated fortunately from the same sources as the sulphuretted hydrogen materially modifies its influences. The consequences of the varying pressure of the atmosphere have been observed; and it is shown that the exhalations of sewers, &c., are poured out in abundance from every outlet when the barometric pressure is lowered. By collecting the moisture of a crowded room by means of cold glasses and also dew in the open air, it was found that one was thick, oily, and smelling of perspiration, capable of decomposition and of producing animalcules and conserve, but the dew was beautifully clear and limpid. Large quantities of rain water have frequently been collected and examined by Dr. Smith; and he says—I am now satisfied that dust really comes down with the purest rain, and that it is simply coal ashes. No doubt this accounts for the quantity of sulphites and chlorides in the rain, and for the soot, which are the chief ingredients. The rain is also often alkaline, arising probably from the ammonia of the burnt coal, which is no doubt a valuable agent for neutralizing the sulphuric acid so often found. The rain water of Manchester is about 24° of hardness—harder, in fact, than the water from the neighbouring hills which the town intends to use. This can only arise from the ingredients obtained in the town atmosphere. But the most curious point is the fact that organic matter is never absent, although the rain be continued for whole days. The state of the air is closely connected with that of the water; what the air contains the water may absorb; what the water has dissolved or absorbed it may give out to the air. The enormous quantity of impure matter filtering from all parts of a large town into its many natural and artificial outlets, does at first view present us with a terrible picture of our underground sources of water. But when we examine the soil of a town, we do not find the state of matters to present that exaggerated character which we might suppose. The sand at the Chelsea Waterworks contains only 1.43 per cent. of organic matter after being used for weeks. In 1827 Liebig found nitrates in twelve wells in Giessen, but none in wells two or three hundred yards from the town. Dr. Smith has examined thirty wells in Manchester, and he finds nitrates in them all. Many contained a surprising quantity, and were very nauseous. The examination of various wells in the metropolis showed the constant formation of nitric acid; and in many wells an enormous quantity was detected. It was discovered that all organic matter, in filtering through the soil, was very rapidly oxidized. The presence of the nitrates in the London water, prevents the formation of any vegetable matter—no vegetation can be detected in such water by a microscope, even after a long period. The Thames water has been examined from near its source to the metropolis, and an increasing amount of impurity detected. In the summary to his report, Dr. Smith states that the pollution of air in crowded rooms is really owing to organic matter, and not merely to carbonic acid—that all the water of great towns contains organic matter—that water purifies itself from organic matter in various ways, but particularly by converting it into nitrates—that water can never stand long with advantage unless on a large scale, and should be used when collected, or as soon as filtered.—*British Association, Athenæum report.*

On the Utility of Trisnitrate of Bismuth in the Diarrhœa accompanying Phthisis.—By T. THOMPSON, M.D., F.R.S., Physician to the Hospital for Consumption and the Diseases of the Chest.—The author considers the trisnitrate of bismuth to surpass in efficacy and safety our most approved remedies for this complaint. He has taken every opportunity, during the last twelve months, of testing its powers, and has preserved notes of twenty-one of the cases in which it was administered. Of these, eighteen were phthisis in various stages of progress, and three, bronchitis. In fifteen of the patients the diarrhœa was entirely removed; in four, transient benefit was experienced, and the remedy proved useless only in two instances. The dose administered was about five grains daily, usually combined with a little magnesia and gum arabic. Dr. Thompson has referred to various authors who have written respecting the properties of bismuth, without being able to collect from them any evidence of its powers in the phthisical variety of diarrhœa, but he entertains a strong conviction of its peculiar appropriateness to this affection, and has obtained

important confirmation of his experience in a recent communication from Dr. Lombard of Geneva.—*Dublin Medical Press.*

A New Mode of Reclaiming Habitual Brandy Drinkers. By Dr. SCHREIBER.—This plan consists in confining the person treated to one room, and giving him brandy in all his drink, whether water or coffee, and mixing brandy in small quantities with all his food. 139 soldiers were treated by Dr. Ritzous, at Stockholm, under this system. During the first few days, from five to seven, this new regimen pleased the patients much. They were in a state of continual joyous intoxication. The pulse became full and slow; the tongue red and moist. All complained of a sense of burning in the region of the stomach. The stools were regular; the urine red and scanty; the skin moist. The pupils were neither contracted nor dilated. About the end of the fifth or seventh day, the excitement of intoxication ceased; the patient came to himself, but was languid and silent. The sensation of burning in the stomach became more acute, and was accompanied by inextinguishable thirst. The tongue became yellow about the edges; the stomach could take neither food nor drink, but they were immediately rejected by vomiting. The greater number gave up eating. The pulse was small, weak, and trembling. At the end of from two to four days, this state disappeared in its turn, and the patient recommenced eating and drinking. Some were again attacked with intoxication during six or eight days; and when they came to their reason, they always preserved an invincible repugnance for food and drink mingled with brandy. In six of the men, slight delirium, which disappeared of itself, remained after the end of the treatment.

All the persons thus treated were carefully examined by medical men: it was considered important to direct attention to the thoracic and abdominal organs, and to inquire if there existed no disposition to apoplexy and cerebral congestion.

The duration of the treatment varied from six to twelve days; for some it required twenty days, including the time required for the treatment of the convalescence. This consisted in a new regimen—substituted for that with brandy, which had produced such an aversion that even its odour excited nausea. At first, pure water was given in small quantities, then milk, or gruel, and, by and by, other kinds of food were also given, but always in small quantity.

The treatment was suspended in seven individuals: in two owing to convulsions; in three from the vomiting of blood; in one from hæmoptysis; and in another owing to a blow received by the patient on the head.

No other disagreeable results followed the treatment: indeed, those submitted to it appeared to enjoy better health than they had previously. One only was attacked by melancholy, and cured by laxatives.

One man was obliged to suspend the treatment on the sixth day, he being then threatened with cerebral congestion and symptoms of irritation in the abdominal organs. He was cured by cold applications to the head, and purgation with castor oil. When he recovered, he had completely lost his taste for brandy.

Of the whole garrison, 139 men were treated on this plan of Schreiber—128 were completely reclaimed from drunkenness, 4 relapsed, and 7 were obliged to suspend the treatment. The greater number were from 20 to 25 years of age.

In this mode of treatment, strict surveillance on the part of a medical man is necessary. Results so satisfactory as those just recorded cannot be always expected; relapses may take place after apparently the most complete recovery; but it is not less certain that this plan of treating so widely spread and ignoble a vice merits all the attention of the physician.—*L'Union Médicale.*

There is another point which it may be as well to consider in adopting this singular method of treating drunkenness, namely, whether, if death should ensue from it, the practitioner might not have to answer a charge of poisoning by alcohol.—*London Medical Gazette.*

Tar in Cutaneous Diseases.—The notorious intractability of these disorders naturally excites one's attention to any remedy which has proved successful; accordingly, the treatment by tar, especially since the introduction of capsules, has come into very