late. Temperature alone is only one of the advantages to be regarded in this selection of a winter residence. Comparative degrees of *mildness* exist in extensive variety, but I have enumerated more particularly in the preceding chapter, the various qualities it is desirable should be superadded to this property in a climate, and a district may shew a superiority of two or three degrees of temperature, and yet from various other causes be ill-adapted to the exigencies of any particular case."

The chapters on the Natural History of the "Under-cliff" are written in a scientific yet interesting manner, and are well calculated to lead the poor suffering invalid to an examination of those subjects which, by amusing the mind, may tend to prevent its preying on the body, and at the same time by leading to exercise, with an object in view, may invigorate the whole system; whilst the excitement produced by the interest of the pursuit, prevents the ill consequences which might otherwise follow the exposure to the weather, even in so sheltered a situation as that which is here described.

OBSERVATIONS UPON THE SALE OF ARSENIC & THE PREVENTION OF SECRET POISONING.

By JAMES TUNSTALL, M.D., Bath Hospital.

The subject of secret poisoning having been brought before the Association at our late annual meeting by Dr. Toogood, and a committee formed to prepare a petition to Parliament for the "Prevention of the Indiscriminate Sale of Arsenic," in which the views both of that gentleman and myself were embodied, I have, in common with every member, to thank him, that the first petition upon the subject should have emanated from the Provincial Medical and Surgical Association, thus convincing those who question the utility of our annual congresses, that we meet not only for our own benefit and advantage, but for the advancement of the dearest interests of humanity.

The extreme facility with which arsenic may be purchased, calls loudly for the interference of the Legislature; but our task only commences by the presentation of one petition which, although it embodies the wishes of the Association in its collective capacity, should be but the precursor of a number of others from every part of the United Kingdom.

Dr. Sibson, Mr. Fuge, and myself, thought it more desirable to attack the great arsenic evil first, rather than weaken the cause by entering generally upon the sale of poisonous drugs, for it is better to destroy one prominent enemy, than to weaken our forces by attempting to combat many. An anecdote will illustrate our meaning far better than an argument. "You call morphia poison, do you not, Doctor?" said a friend to us the other day. Undoubtedly we do. "Well, suppose I want a small dose when travelling, am I to send two waiters, (the purchaser and witness,) to get me a night draught?" Such a question, if asked in Parliament, would be fatal to the whole cause; but if we ask for a

remedy for a great and increasing evil, and show how it will practically produce benefit, we are certain of success.

Before we bring the matter before Parliament, let us be prepared to shew that the use of *uncombined* arsenic is not required either in medicine, pharmacy, the arts, or agriculture, excluding that employed by the pharmaceutical or practical chemist and the manufacturer; and let us place prominently forward the fact, that the common form of exhibiting the drug, is by Fowler's solution, in which the colourless fluid is mixed with the red tincture of lavender, in order that no mistake may occur in dispensing. As it is, the medicine is unlike any other liquid used in pharmacy—a most important point where facts are required.

And now, with regard to its sale. It is purchased—

- 1st. To poison rats and other vermin.
- 2nd. For sheep dressing.
- 3rd. By the farmer for steeping corn.

The first of these is the most common excuse with the suicide and murderer; and there is no doubt that the mineral is carelessly sold to any *known* customer or his servant, or to any person who produces a witness, *although both parties be strangers to the vendor*. I have only to refer to the reports of the present summer assize to prove my position; while every person knows that other drugs more safe, (if I may use this term in reference to poisons,) may be procured, equally effectual for the destruction of vermin; I therefore assume that arsenic is not required for poisoning rats.

2nd. I am informed by a chemist, on whom I can rely, that in Wiltshire the veterinarians and chemists employ a combination of soft soap, potash, and arsenious acid, for sheep dressing, and apply the dressing themselves; therefore I maintain that, *uncombined*, arsenic need not be sold for sheep dressing.

3rd. For steeping corn I believe, although I want more information on the subject than I have yet obtained, that the sulphate of copper is superseding its use, and is found to answer better. If so, I have no difficulty in arriving at the conclusion, that for this purpose also its sale is unnecessary.

For the two latter purposes arsenic, in the form of a white powder, is extensively sold; and unfortunately, both by *accident* and design, it has been mixed with various articles of food; it has thus produced fatal effects, which would not have been the case had it been combined with "some material, the administration of which, with food, would be at once detected, either by the appearance or taste."

And now, with regard to the manufacturer, I am inclined to carry Dr. Toogood's suggestions in regard to a licence, still further than my worthy friend; not only should the vendor be licensed, but the manufacturer also, thus the licence to sell, and the licence to use, would only be required by those who were compelled to apply for it, in consequence of the large quantity required in their business; by this means its indiscriminate use would be checked; the sale of a "pennurth of arsenic for rat poison" would be prevented, and its use confined within its proper limits by the authority of Parliament.

I now come to the medicinal application of the drug,—to quote Mr. Hunt, “not always cautiously administered,” and venture to suggest that my own plan of administration, where drops are concerned, should be invariably followed,—namely, that the dose should, by the addition of a vehicle, be always a *known*, and not an *uncertain*, quantity. I invariably make a teaspoonful a dose, and where Fowler’s solution is given to a patient I add a small quantity of tincture of aloes, effectually to prevent mistakes. I do not wish to intrude longer upon the columns of the Journal, but having for some time devoted much time and attention to the subject of arsenic, my colleagues, on the “Secret Poisoning Committee,” with the sanction of the President, confided this momentous inquiry to my care. I earnestly crave the assistance of every member of the Association towards its full elucidation, with a view to a practical result, ever anxious to interest ourselves where the public health and welfare is concerned. I trust that our united endeavours may be crowned with success, so that such a mass of facts may be presented to the legislature, that a firm foundation may be laid for an Act of Parliament, having for its philanthropic object the prevention of the indiscriminate sale of arsenic, and the crime of secret murder. To effect this object I will strenuously devote my leisure time, so that I trust soon to lay before the Central Council such a weight of evidence, that the nation at large will, by their own spontaneous feelings, petition for an Act of Parliament upon the subject, and thus enable our Association to claim the honour of having directed the public attention to the greatest blot upon the civilization of the nineteenth century.

Proceedings of Societies.

BIRMINGHAM PATHOLOGICAL SOCIETY.

April 5th, 1849.

Dr. FLETCHER IN THE CHAIR.

Cirrhosis of the left lung; the right enlarged, generally emphysematous, and studded with firm dark nodules, and with miliary tubercles interspersed throughout its structure.

Dr. Fletcher exhibited the preparations, and gave the history of the following case:—

George Drummond, stone-mason, aged 45, admitted March 2nd, 1849, into the Birmingham General Hospital. A tall emaciated man almost bent double; pneumonia of right lung, contraction of left; has had cough and dyspnoea for eighteen months, but was enabled to follow his employment until very recently. In October last he had pain on the left side, and his other symptoms became aggravated. Has never spit blood. He came for some weeks as an out-patient, but was advised to get an in-patient’s note. His face is pale and livid, and he is suffering from extreme dyspnoea, cough very troublesome, expectoration muco-purulent, pretty copious; complains of pains and general sense of oppression about the chest; pulse very weak; decubitus dorsal. The left side is remarkably contracted, the axillary region forming a mere edge, the supra and infra-clavicular

regions excavated; but the side is by no means smooth, the intercostal spaces being developed. This side moves considerably less than the other; the hand placed on the anterior or left side detects very much increased vocal vibration. All over this side, before and behind, but particularly in the front, there is loose mucous rattle almost amounting to gurgling. The breathing and voice are over the same space intensely cavernous. These latter phenomena are more marked in the infra-clavicular and middle axillary regions than elsewhere, the whole left side is dull, but the dullness extends little beyond the left border of the sternum. On the right side, before and behind there is fine crepitation and for the most part puerile respiration. R. Ant. Tart., gr. iij.; Mist. Camph., oz. viij.; Cap. oz. j., tertius horis. Emp. Lytta lateri dextro.

3rd.—Breathing much relieved, expresses himself as better; crepitation on right side much diminished. Takes food. Perstet. Urine acid, no albumen, specific gravity 1026.

Vespere.—Intense dyspnoea; pulse 120, very weak; face livid, is constantly groaning in expiration both asleep and awake. Three glasses of wine. R. Am. Carb., scr. ij.; Spt. Æth. Sulph., oz. ss.; Vin. Ipecac., dr. ij., Decoct. Polygalæ, oz. vijss.; oz. j., quartis horis.

4th.—Much revived this morning but dyspnoea very great; expectoration scanty, thick, and purulent; physical signs as before. Omitte Vinum. Rep. Mist.

Vespere.—Again appears sinking, countenance much distressed; dyspnoea urgent; pulse rapid, a mere thread, extremely compressible. To take two glasses of wine. A few minutes after the report the patient died.

Autopsy next day.—The body emaciated, left side remarkably contracted, left shoulder depressed. *Thorax*: The right lung extended fully to the left border of the sternum and considerably overlapped the heart, it was attached to the costal pleura by a few adhesions at the apex; lower down, the surface was coated by a thin layer of recent lymph. It was generally engorged. To the touch the lung gave the idea of being filled with firm nodular masses, but was universally crepitant. On section it was observed to be of a dark slate colour throughout, and to be dotted with thin grey masses about the size of peppercorns, here and there they were interrupted with small miliary tubercles. The whole lung had a general fibrous aspect. The left lung was most firmly adherent to the side throughout, so that it was impossible to take it out of its cavity without injury to the pulmonary substance. The false membranes were extremely thick and tough. The lung was extremely contracted, being not more than half its natural dimensions. The bronchial tubes were universally dilated, so that the lung when out, gave the appearance of being everywhere traversed by fibrous canals, between which was the nodular and slate-coloured pulmonary substance. The bronchial tubes were laid open in many parts of the lung and traced to the surface; when examined they exhibited the appearance described. The heart was flabby and enlarged to a slight degree, but nothing worthy of note was observed in either of its cavities or orifices. The other organs of the body were examined, but presented nothing abnormal.

This being the first case of this peculiar affection which has been brought before this Society, it must be fairly supposed that it is not very common in this neighbourhood, in proof of which I can say that I have