ON THE
UTILITY OF TRISNITRATE OF BISMUTH,
IN THE
DIARRHŒA ACCOMPANYING PHTHISIS.

By THEOPHILUS THOMPSON, M.D., F.R.S.,
PHYSICIAN TO THE HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.

Received June 1st—Read June 27th, 1848.

AMONG the complications of pulmonary consumption, diarrhœa is one of the most frequent and distressing, materially aggravating the sufferings and accelerating the fatal issue of that disease; and as there is no reason to ascribe to it any compensating advantages, its mitigation or cure is in all cases desirable. The ordinary modes of treatment are, however, by no means satisfactory, milder measures often failing to relieve, and the more active ones to subdue, the disorder. And, even when the diarrhœa yields to their use, the inconveniences of an opposite condition may be induced, or, as in the case of the most powerful of these remedies—acetate of lead—still greater evils may ensue. It is therefore with great satisfaction that I have to record the effects of a remedy which, for the last twelve months, I have been accustomed to employ, without in any one instance observing the least inconvenience from its use. That remedy is the trisnitrate of bismuth. I have preserved notes of twenty-one of the cases in which it was given. Of these, eighteen were phthisis in various stages of progress, and three were 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. In one of the cases in which the bismuth failed, the evacuations were deficient in bile. In the other—a case of phthisis in the last stage—the diarrhœa had continued for two years. In the instances wherein the relief of the symptom was only temporary, the dejections were for the most part dark and offensive. In the fifteen satisfactory cases, the duration of the diarrhœa had varied from six days to three months, and the number of daily evacuations from three to thirteen. Marked benefit was usually experienced after the second dose, and the disorder was almost invariably subdued in less than a week.

In four of the cases in which the remedy sustained its character, the strength of the patients had been rapidly sinking. In the first, the mouth was aphthous. The second patient was an infant aged one year, in whom diarrhœa had lasted for a month, and who died three weeks after this complaint was removed. The third was a child aged three years, in whom diarrhœa of some months' duration was rapidly removed by bismuth, but who died of phthisis about a fortnight afterwards. The fourth, a young woman, aged 19 years, in whose case diarrhœa of a month's duration yielded to the remedy, survived only two months. It may reasonably be presumed that in several cases there was ulceration of the bowels; but, as most of the subjects were out-patients, I was unable to verify this opinion by post-mortem examination.

I administered the remedy to adults, in doses of five grains, usually combined with three of gum-arabic and two of magnesia, and at intervals of four or six hours. Larger doses may be given with safety, and smaller might be effectual, but I consider four or five grains to be the most appropriate dose for the purpose in view.

Trisnitrate of bismuth was, I believe, first introduced about fifty years since, as a remedy in gastralgia, by Odier and De la Roche, of Geneva, who believed it to exert a sedative influence on the nerves of the stomach. The observations of these physicians were confirmed by Baumes, Meglin, Laennec, Guersent, and others, in France, and by

Gumprecht, Reil, Kopp, and Schmidtman, in Germany; but, notwithstanding the recommendations of Bardsley and Clarke, a considerable time elapsed before its usefulness in this affection was appreciated in England.

In the year 1831 Dr. Leo of Warsaw employed bismuth as a remedy for the diarrhœa and vomiting of cholera. His representations led to its employment in various parts of the Continent, but with uncertain results. At Posen, for instance, it was alleged to be useful, but at Dantzic to have failed.

A review by Constant, in the *Gazette Medicale* for 1833, in which two cases of obstinate non-febrile diarrhœa in children are reported to have been successfully treated by Guersent, is the earliest detailed notice with which I am acquainted, of this property of bismuth. It did not however attract special attention, and I should probably have delayed any extensive trial of its virtues but for the opinions expressed to me on the subject by my friend, Dr. Lombard, of Geneva. His favourable experience of its use in the general treatment of relaxation of the bowels determined me to test its efficacy in the diarrhœa accompanying phthisis, and the result of my experiments is a conviction that this is the form of diarrhœa to which bismuth is especially applicable, and that, *both in efficacy and safety, it surpasses our most approved remedies* for that complaint.

By delaying this communication I might have treated the subject more minutely, determined some of the conditions qualifying the use of bismuth, and ventured on speculations respecting its mode of action; but the grounds of my favourable opinion appear sufficiently strong to urge my losing no time in recommending to my professional brethren the trial of a remedy which, if equally successful in their hands as in mine, will prove of peculiar service in a most afflictive malady.