are antidotal. In the early days of administering mercury in the treatment of syphilis, overdoses of the drug possibly accounted for nearly as many deaths as the disease itself. To-day we are wiser; our faith in the antidotal power of mercury is, however, an established fact. If we can establish a like relation between chloral hydrate and tetanus another useful weapon will be added to our equipment.

I am, Sirs, yours faithfully,

JOHN MABERLY, M.R.C.S. Eng., L.R.C.P. Lond.

Woodstock, Cape Colony, June 12th, 1905.

PROLONGED ANÆSTHESIA BY CHLORIDE OF ETHYL IN OPERATIONS ON THE NOSE AND THROAT.

To the Editors of THE LANCET.

SIRS,—I have for some time past been working out a method of maintaining anæsthesia in short operations on the nose and throat by means of the vapour of ethyl chloride administered through a tube. By short operations I mean those lasting a little longer than two minutes which is about the limit of available anæsthesia after an ordinary dose of ethyl chloride administered in the usual way. Last winter I brought the results of my first 20 cases before the Society of Anæsthetists. I have now completed nearly 100 cases by the method which I am about to describe with almost universal success, the partial failures I have had being in subjects, not infrequently met with, who do not take ethyl chloride well in any circumstances. My experience has been that where anæsthesia is easily induced by the ordinary method it is easily maintained by means of my apparatus and *vice versa*.

In order to have a good supply of vapour it was necessary to have a fair bulk of ethyl chloride put up in a suitable chamber, absolutely gas tight, with a suitable tap for the delivery of the vapour through a tube to the patient's mouth or nose. Mr. Paxton, of 93, Dyer's Hall-road, Leytonstone, has made me some in various patterns and sizes and assisted me with much valuable advice as to details. The one which I have finally adopted is a metallic cylinder, holding about 250 grammes, with a screw-down stopper on top which on being partially unscrewed admits the vapour to a tap on its side, whence it passes along a tube to a suitable gag; I use either a Probyn-Williams or a Wingrave with a short metal tube fixed at right angles to the upper blade. The gag must *always* be inserted before commencing this anæsthetic, otherwise there will be difficulty in opening the jaw. Having done this five cubic centimetres of ethyl chloride are administered in the usual way with the ordinary closed apparatus. I generally allow from one to two minutes for the induction getting the patient deeply under, the length of time depending very much on the age and strength of the individual. As soon as the mask is removed the operation commences and I turn on the taps and a little vapour passes down the tube. This would very soon stop owing to the rapid cooling produced by evaporation, but I have at hand a porringer of hot water in which I put the chamber from time to time causing a rapid ebullition. I economise vapour by pinching the tube during expiration with the hand that steadies the gag, and at times for several breaths the tap is turned off altogether lest the anæsthesia get too deep. I generally aim at having a slight corneal reflex, a moderate pupil, and deep regular, but not stertorous, breathing. In this way I have maintained a good anæsthesia in cases lasting from three to 20 minutes at an average expenditure of less than five cubic centimetres of ethyl chloride per minute of available anæsthesia. Except for some special reason I should not advocate the use of this method in operations lasting over ten minutes on account of the expense. In considering the advantages one has to compare with other methods. The only two I know of are gas through a tube or chloroform in a Junker. Of the former I have no practical experience but I am inclined to think that the results would be less certain. The cost would certainly be greater and the weight of cylinders to be carried about is a disadvantage. My ethyl chloride cylinder takes up but little room and when full only weighs 21½ ounces, the contents being sufficient for 50 minutes' anæsthesia or, say, ten cases of five minutes each.

The advantages of this method over chloroform are: (1) Rapidity—a short operation can be finished in less time than it takes to get the patient under chloroform;

(2) safety—especially in the sitting position; (3) slighter after-effects; and (4) greater freedom for the anæsthetist to assist, no hand being required to work a bellows. There are many minor details into which I might enter but I fear I have already trespassed too far on your space. I will only add one word of warning in conclusion. The ethyl chloride used in charging should be guaranteed made from pure alcohol and free from impurities, otherwise the taps would soon become corroded and ruined. I speak from experience.

I am, Sirs, yours faithfully,

G. A. H. BARTON,

Westbourne-park-road, W.

Anæsthetist to Throat Hospital, &c.

LUNACY ACTS AMENDMENT BILL (LONDON) (NO. 2).

To the Editors of THE LANCET.

SIRS,—Since the writing of your very able and exhaustive leading article this Bill has been dropped. You have dealt so completely with the subject that there is very little to add.

That very good work is being done by the metropolitan infirmaries is evidenced by the fact that in 1904 out of a total of 7654 admissions of "alleged lunatics" only 3716 were sent to asylums and 3155 were discharged cured within the period of 14 days, which represents the limit of legal detention in an infirmary or workhouse, and if this period of detention could be extended for another 14 or 28 days a sensible addition would be made to the list of cures. To your formidable array of objections may I point out the hardship which would be inflicted upon the friends of the patient, caused by the necessity for their attendance at the receiving house which must in many cases be some miles from their homes and also that a check upon abuse of enormous value would be abolished. The proposal of the London County Council revolutionised the intention of all previous lunacy legislation which has hitherto regarded it as an essential point that the authority which primarily receives and certifies the cases should not be the same body which has the power of indefinite detention.

Most boards of guardians have during recent years recognised their responsibility and have at considerable expense erected efficient mental wards and are naturally very wroth that their constituents should be called upon to pay an extravagant sum for the realisation of an idea. The party whip has, however, been very vigorously cracked over this matter and many otherwise level-headed administrators have been compelled to "toe the line" sorely against their convictions. The knowledge that we have your support will materially strengthen the position of those who have consistently opposed this proposition since its inception in 1897. I inclose a copy of the report upon this matter, adopted at a recent conference of the medical officers of metropolitan infirmaries and workhouses, called specially to consider this scheme and which unanimously condemned it.

I am, Sirs, yours faithfully,

F. S. TOOGOOD, M.D. Lond.,

Honorary Secretary to the Conference of Metropolitan Poor-law Medical Officers.

Lewisham Infirmary, July 3rd, 1905.

THE RECENT OUTBREAK OF TYPHOID FEVER AT LINCOLN.

To the Editors of THE LANCET.

SIRS,—After the appearance in THE LANCET of July 1st, p. 22, of a "Note on the Recent Outbreak of Typhoid Fever at Lincoln" by Mr. E. Cecil Clements the following additional observations relating to the same outbreak may be of interest. They are based on 138 cases of typhoid fever which occurred in the practice of my friend, Dr. Andrew Burgess of Lincoln, whom I was assisting at the time. In almost every case the skin of the palms of the hands and the soles of the feet was of an intense yellow colour, deepest on the thicker parts of the skin. In some of the severer cases the colouration extended to the skin on the tops of the toes. The hands were affected first—generally at the end of the second week—and the feet soon after. The coloured epithelium next cracked and peeled off in big flakes. One girl shed an abundant crop of warts. The hands were the first to resume their normal appearance. In some cases the skin on the soles of the feet was yellow and peeling freely two months