THE ARMY AND NAVY MALE NURSES' COÖPERATION.

H.R.H. Princess Henry of Battenberg opened a novel sale at the Caxton Hall, Westminster, on May 22nd, which was organised to raise funds for the Army and Navy Male Nurses' Coöperation. The sale was unique of its kind, being the first large jumble sale attempted in London. It lasted two days and the poor flocked from all quarters. There was a large queue assembled outside the doors long before the hours of admission. The keenness of the buyers was so great that by 8 o'clock on the second day every stall was entirely cleared, with the result that a very substantial sum was realised. The Coöperation is in full working order and every month the demand for nurses is becoming greater and the only drawback to the scheme is the want of funds to equip a residential home where the men can lodge in the intervals between their cases. It is for this reason that the committee is earnestly appealing for support. It is hoped that in a short time the Coöperation will be self-supporting, as the men pay a percentage on their earnings, and when the home is started they will pay for their residence there.

THE TERRITORIAL FORCES.

The Earl of Albemarle, in the House of Lords on May 26th, called the attention of the Under Secretary for War to, among other things, the inadequacy of the provision for travelling allowance in respect of officers of the Territorial Forces and of the remuneration of medical officers for examining soldiers for physical fitness. Medical officers were allowed only 1s. a head for examining recruits. Lord Lucas, in reply, said that officers would be entitled to travel first class. With regard to the payment of medical men for examining recruits, in the past many medical officers had examined recruits free. The country was much indebted to them for it and it was hoped that many of them would continue to do so. Where a recruit had to go to a medical man who did not belong to the Territorial Force the charge would probably be more than 1s. The Earl of Albemarle pointed out that to examine a recruit properly took at least a quarter of an hour. As many as 150 recruits might have to be examined and the medical man could not be expected to give so much time for nothing.

INDIAN MEDICAL SERVICE EXAMINATIONS.

Dr. V. H. Rutherford, in the House of Commons on May 26th, asked the Under Secretary for India whether His Majesty's Government would advise the Government of India to hold examinations for the Indian Medical Service in India as well as in England. Mr. Buchanan replied in the negative.

CHOLERA IN INDIA.

The India Office reports six more deaths from cholera in the 1st Battalion Munster Fusiliers.

Correspondence.

"Audi alteram partem."

DEATHS DURING ANÆSTHESIA.

To the Editor of THE LANCET.

SIR,—The correspondence which has been going on since February has given opportunity for the expression of various views more or less directly related with the question of fatalities during anæsthesia. With regard to some of the questions raised, such as the desirability or the opposite of coroners' inquests in these cases of death, no definite result seems possible of attainment as the outcome of correspondence, however valuable and interesting may be the opinions of gentlemen taking part in it. With regard to others, such as what is and what is not the proper method of administering chloroform, it seems to me a pity that your columns should be given over to a question of this kind which is thrashed out in text-books even if your correspondents appear to be oblivious of the fact. Even the happy condition of Scotland, in which country there are apparently not only no inquests but also no deaths in connexion with the administration of anæsthetics, seems to me beside the mark in this discussion, particularly as the methods now recommended by Edinburgh teachers bear a strong resemblance to those which have been taught in London for many years. What does, however, seem to be

worthy of attention and to demand some sort of united action is this fact, that your correspondents, in whatever other ways they disagree, all seem to concur in the opinion that formal recognition of the study of anæsthetics by all examining bodies is highly desirable. It appears, in fact, to be the opinion that for a man to be able to take a good medical degree and never have given an anæsthetic or been instructed how to give one is at the present day an anomalous and highly regrettable state of things. Yet such is the present condition as regards several of the most important examining bodies that are able to grant a qualifying diploma. Well, Sir, the General Medical Council can rectify this defective state of affairs, as has been already pointed out, and I would urge your readers to bring what pressure they individually can upon members of the General Medical Council to take a step which is, I believe, desired without exception by all who take an interest in the teaching or the practical administration of anæsthetics.

I am, Sir, yours faithfully,

Cavendish-place, W., May 23rd, 1908.

J. BLUMFELD.

THE TREATMENT OF SYPHILIS BY MEANS OF ARSENICAL MEDICATION.

To the Editor of THE LANCET.

SIR,—As syphilis is one of those diseases which affect everything in a man's life all means of cure deserve our careful thought and are of great practical interest. We have powerful weapons against this malady and you may ask me, Why should we endeavour to add to therapeutics and introduce new drugs when we already possess the classical treatment of mercury and iodide of potassium which yields the best results? Mercury and iodine often, but not always, cure the disease. All syphilis specialists have seen cases where syphilitic ulcers resist mercurial medication, whatever form it may be, and they have thus often found that by an intensive treatment they subject their patient to accidents without any improvement as to the disease itself. Even strong people are not always unaffected by the mercurial treatment, and how many are there who do not care to stand the least dose of mercury, either internally or in the form of friction? Thus has arisen, then, the idea of dragging out of oblivion a remedy unjustly forsaken—viz., arsenic, which can show to its credit numerous cures of the syphilitic virus.

Bielt had used arsenic against old and degenerated venereal diseases, especially when grave complications and other circumstances had rendered the mercurial treatment useless, and he did so in conjunction with Hoffmann, Horn, Buchner, Girdlestone, and others. Furthermore, it was he who introduced the administration of arsenate of ammonia for cases of syphilis of a dermoid, tuberculous, or squamous character. Donovan, professor of chemistry and pharmaceuticals at Apothecaries' Hall, Dublin, proposed in 1839 against obstinate forms of syphilis the use of iodine and arsenic combined and of iodide of mercury. After having unjustly and almost generally fallen into oblivion this preparation continued to be of service to many practitioners, who used the formula modified by Mr. Astruc and composed as follows: arsenious anhydride, 0.05 gramme; bromide of mercury, 0.40 gramme; iodide of potassium, 4.00 grammes; and water, 120.00 grammes.

At the congress of Bonn Mr. Darvosky read a very interesting communication on the "Liquor Arsenici et Hydrargyri against Syphilis." In 1852 Hunt wrote a highly interesting article "The Comparative Value of Mercurial and Arsenical Preparations and the Treatment of the Secondary Accidents in Syphilis." Three years later Gaskvin reported in the *Medical Times and Gazette* (Vol. VI., p. 211) on two cases of pustular syphilis refractory to mercury and iodine which were cured by the internal use of arsenic. Then an experiment by Nicolas¹ with the use of arsenic in a case of visceral syphilis had given excellent results. In 1891² Henry Smith showed very clearly the effect of arsenic on syphilis. After that, in 1900, under Brocq's influence, the use of arsenic was again resorted to, cacodylate of mercury and salicylarsonate of mercury being tried, and now it is proved that arsenic alone is an agent which, if not superior to iodide of mercury or to mercury, is at least equal to its predecessors,

¹ Journal de Thérapeutique, 1883, Nos. 1 and 2.

² Brit. Med. Jour., vol. ii., p. 1203.

and that in a number of cases it may replace, or be a valuable adjunct to, them. Of all the arsenical preparations the most notable is certainly anhydrous atoxyl, anilide of meta-arsenic acid ($C_6H_5N-HAsO_2$ according to the German chemists), which contains therefore 37.69 per cent. of arsenic; but Mr. Fourneau, the inventor of stovaine, has shown us that its true formula is $C_6H_5NH-AsO\begin{smallmatrix} ONa \\ OH \end{smallmatrix} + 2H_2O$ and that it contains 29 per cent. of arsenic only. After having consecutively studied it in different affections, Paul Salmon has just introduced it with complete success in the treatment of syphilis. It may be administered by the mouth, as in the case of other arsenic preparations, in doses of 0.10 centigramme three times daily in powders, or three doses a day employed hypodermically.

Atoxyl 5 centigrammes.
Water 1 cubic centimetre.
in 1 ampoule;

or else the most concentrated solution possible

Atoxyl 1.50 grammes.
Water 10.00 cubic centimetres.

A cubic centimetre contains 15 centigrammes; 2 cubic centimetres for each injection every two, three, or four days. Paul Salmon proceeds in different ways, according to the cases. Three applications of 0.50 gramme in six days and one of 1 gramme on the tenth day. He injects 0.50 gramme in nine days, 3.30 grammes of atoxyl in nine days, or 2.90 grammes in seven days.

Mr. Mendel makes intravenous injections of 20 cubic centimetres every other day for three weeks. Mr. Salmon, in a note, as lucid as it is precise, clearly puts before us the action of arsenic by the constancy of good results at all periods of syphilis, by the rapidity of action of the remedy and by the rapid modification of the lesions. The series of observations made by Mr. Salmon leaves no doubt on the subject, and he has been able to use over 100 doses exceeding 0.50 gramme without the least inconvenience. To these observations have been added those of Messrs. Hallopeau, Lassar, Balzer, and Portier. And it would be possible to succeed in curing syphilis by such medication if we could continue the treatment long enough. And it is unfortunate we cannot, and medication by atoxyl is attended with objections and even dangers which it is necessary to avoid. Nausea, vomiting, diarrhoea, and cold in the extremities have been observed after the treatment. Lassar noticed temporary albuminuria or cystitis; nevertheless, he has arrived at the following conclusions. "The treatment of syphilis by means of atoxyl causes the external manifestations of syphilis, and particularly of malignant syphilis, to disappear. It proves to be of equal efficiency with the treatment by means of calomel injections. It constitutes a new weapon against syphilis,—a weapon which it is advisable to manipulate with prudence, owing to the noxious secondary effects which its use may involve."

An attempt has been made to put down to anilide the noxious and curative effects of atoxyl. The controversy is now closed, and the works of Grey, of Blumenthal, of Rosenthal³ show that arsenic is the active principle, both curative and noxious, of atoxyl. Therefore, why not use an arsenic medication which is simple and less dangerous? This is what different authorities have done. Mr. Rosenthal subjected his patients to injections of 2 milligrammes of arsenic a day by injections of 1/10 of a Pravaz syringe of a 2 per cent. solution of arsenious acid, increasing by 1/10 of a syringe every other day, and his patients are nearly cured without ever having undergone the least arsenical intoxication; and Mr. Merchiewski of St. Petersburg told me during my recent visit to Russia how well satisfied he was with injections of arsenate of soda in malignant cases of syphilis. It is true that he especially ascribes to them a general action which renders the patients better able to bear the mercurial treatment, and Mr. Milian, acting for Mr. Balzer, effected the cure of syphilis as rapidly by arsenate of soda alone as by means of pills of Dupuytren or of proto-iodide. Mr. Milian had treated 11 cases with doses of 0.005 milligramme to 1.5 centigrammes of arsenate of soda a day, and since he wrote his article the cures have been maintained. Dr. Plateau's observations read at the Société Médicale de l'Elyse on May 6th, 1907, are very striking. He obtained very rapidly by a series of injections of cacodylate of soda,

simply prescribed to improve the general state, the cure of syphilis which could not be obtained by the treatment with grey oil, and upon a second application the cacodylate of soda gave him complete results. With a third series, however, Dr. Secherer of Heilbronn reports good effects with Fowler's solution. To which arsenical salts are we to give the preference? What is the comparative value of the effects of arsenical salts? At the present moment atoxyl appears to be in favour and I myself, in accordance with Mr. Salmon's method, make an injection of 0.50 centigramme every other day, whilst limiting to six the number of injections. Mr. Hallopeau advises two injections of 0.75 centigramme at two days' interval, and repeated four times at intervals of three days injections of 0.50 centigramme. How long should this be continued? Now the problem of the cure of syphilis has again been propounded let us wait before expressing a final opinion, but in any case the number of observations published hitherto shows that the cures are really due to the antisiphilitic properties of the product and not to the natural evolution of the disease. I shall conclude by saying that the arsenical medication is not better than the mercurial cure of syphilis, other things being equal. It is even less efficient, but the arsenical salts without the counter-symptoms of mercury which would constitute a limited use of it might often and with great advantage be substituted for it, and the undesirable symptoms arising from the frequent necessity of varying the specific treatment, when the infection which has resisted any particular variety of mercurial treatment, may be successfully attacked by arsenical preparations. The most active of these arsenical preparations, according to the view of Dr. Pouchet, who is an authority, will be those in which the setting free of its elementary components in the system will be the more easy.

So we must reserve a special place for thermo-arsenical medication. All doctors for syphilis have always sent their patients to watering-places such as La Bourboule, Wiesbaden, Carlsbad, and Uriage in particular, and in La Bourboule we have observed that the internal action of arsenical waters and baths have done wonders in old cases of dry, squamous, papulous, or papulo-tuberculous syphilis which become chronic notwithstanding the mercury. La Bourboule combines, in the highest degree, all the therapeutic properties which arsenical medication possesses. The waters contain in addition to chloride of sodium and bicarbonate of soda, 0.028 gramme of arsenate of soda, 7 milligramme of metallic arsenic per litre. The waters are dispensed in doses of from 200 to 800 grammes a day, according to the enduring power and capabilities of each patient. I obtained excellent and more rapid results by subcutaneous injections of La Bourboule waters at the rate of 50 to 100 grammes every other day, and I think this therapeutic method should be applied whenever nutrition has become altogether defective. By the internal use of waters and all the external medicatory uses of these baths, douches, &c., we shall see, under the influence of this syphilitic treatment, the patients regain their strength, and the disappearance of specific complications coincides with the recovery of their health.

I am, Sir, yours faithfully,

La Bourboule Spa, April 23rd, 1908.

P. FERREYROLLES.

ESTIMATION OF URIC ACID IN THE BLOOD.

To the Editor of THE LANCET.

SIR,—I trust that the maxim, *Audi alteram partem*, applies to mention in a review as well as elsewhere in your valuable pages, as I note that in the issue of May 23rd, p. 1490, a reviewer quotes: "His method—i.e., the one used by Haig—of determining the uric acid in the blood is absolutely useless." This method suggested by Mr. J. Barker Smith¹ consists simply of the addition to a small drop of blood freshly drawn on a microscope slide of a minute quantity first of a 10 per cent. solution of sodii carb. and then of a 20 per cent. solution of ammonii chlor. (a well-known precipitant of uric acid). The mixture of blood and solutions is examined under the microscope after a definite and constant interval (say, 40 minutes) to allow of precipitation, and the ratio of granules to red cells, which is quickly observed, gives the approximate quantity of uric acid in the blood at the time it was drawn.

³ The Medical Society of Berlin, July 1st, 1907.

¹ Medical Times and Hospital Gazette, September, 1896.