India for a further period of one year by H. E. the Commander-in-Chief. Captain H. W. Long has left the London District for a further period of service on the West Coast of Africa. Captain F. J. Stuart has been appointed a Specialist in the Prevention of Disease and placed in charge of the Bacteriological Research Laboratory at Fyzabad. Captain W. Mitchell, from Ambala cantonment, has taken up duty at the Military Hospital, Subathu, Simla District. The following Lieutenants have been selected by the War Office to proceed to India for duty with the Northern Army during the coming trooping season: S. S. Dykes, W. H. O'Riordan, P. S. Tomlinson, F. W. M. Cunningham, A. S. M. Winder, and V. P. Hutchinson.

INDIAN MEDICAL SERVICE.

Colonel G. W. P. Dennys has taken over the appointment of Inspector-General of Civil Hospitals in the Central Provinces. Lieutenant-Colonel A. Buchanan has taken up duty as Civil Surgeon at Amraoti. Lieutenant-Colonel C. F. Fearnside has been appointed by the Home Department of the Government of India for duty in the Madras Presidency. Lieutenant Colonel P. J. Lumsden, agency surgeon in Beluchistan, has been granted seven months' leave of absence home from India. Major J. M. Woolley has been appointed Senior Medical Officer at Port Blair. Major F. N. Windsor has been confirmed in his appointment as Chemical Examiner, Bengal Presidency, and Professor of Chemistry in the Medical College, Calcutta. Major A. T. Gage, superintendent of the Royal Botanic Gardens at Calcutta and of cinchona cultivation in Bengal Presidency, has been granted two and a half months' privilege leave of absence. Major B. H. Deare, civil surgeon at Darjeeling, has been appointed to officiate as First-class Civil Surgeon during the absence on leave of Lieutenant Colonel D. G. Crawford. Captain R. B. S. Sewell has been appointed Surgeon Naturalist to the Marine Survey of India. Captain C. F. Marr, medical officer of the 90th Punjabis, has been selected to officiate as Medical Storekeeper to the Government of Bombay, in succession to Major F. E. Swinton, who has been granted eight months' leave of absence home from India. Captain Denham White has joined the staff of the Presidency General Hospital at Calcutta. Captain J. H. Burgess has been appointed Specialist in Advanced Operative Surgery to the Ninth (Secunderabad) Division.

TERRITORIAL FORCE.

Royal Army Medical Corps.

1st Home Counties Field Ambulance, Royal Army Medical Corps: Lieutenant Arthur T. Falwasser to be Captain (dated June 12th, 1911).

1st Lowland Field Ambulance, Royal Army Medical Corps: Neil MacInnes to be Lieutenant (dated June 19th, 1911).

3rd North Midland Field Ambulance, Royal Army Medical Corps: Lieutenant Philip W. Turnor resigns his commission (dated July 22nd, 1911).

3rd South Midland Field Ambulance, Royal Army Medical Corps: Charles Edward Kynaston Herapath to be Lieutenant (dated April 1st, 1911).

1st Northumbrian Field Ambulance, Royal Army Medical Corps: John Hare (late Cadet Lance-Corporal, Durham University Contingent, Senior Division, Officers Training Corps) to be Lieutenant (to be supernumerary) (dated May 27th, 1911).

Yorkshire Mounted Brigade Field Ambulance, Royal Army Medical Corps: Major William K. Clayton to be Lieutenant-Colonel (dated Jan. 1st, 1911).

2nd West Riding Field Ambulance, Royal Army Medical Corps: Major William McG. Young to be Lieutenant-Colonel (dated April 1st, 1911).

THE ST. JOHN AMBULANCE BRIGADE.

The Duke of Connaught, Grand Prior of the Order of the Hospital of St. John of Jerusalem, inspected on July 22nd the members of the Prince of Wales's Corps (London District) of the St. John Ambulance Brigade in Hyde Park. The total number of all ranks on parade was 1136, including 182 nursing sisters. The Duke of Connaught, in expressing his great satisfaction at the smartness of the brigade, said that the St. John Ambulance Association, which had much increased in numbers since it was first formed, was a great asset to the nation, which owed to the officers, men, and nursing sisters a debt of gratitude for the splendid work which they were doing.

Correspondence.

"Audi alteram partem."

THE POSITION OF THE PRESENT REFORM MOVEMENT IN ANÆSTHETICS.

To the Editor of THE LANCET.

SIR,—With your kind permission I should like to be allowed to make a few remarks on the three letters which have recently appeared in your columns upon the above subject.

The first of these letters, from Dr. J. F. W. Silk, appeared in your issue of July 15th. All I can say in reply to such a letter is that I deeply regret to find that there is anyone of Dr. Silk's position who is so unmindful of the high character and responsibilities of the branch of practice in which he is engaged that he is content to allow that branch of practice to remain in its present unsatisfactory position and to associate himself with those ignorant and unqualified persons who at the present moment are permitted, by defects in our legislature, to render their fellow-beings unconscious by means of highly toxic drugs. None are so blind as those who will not see, and if Dr. Silk prefers to keep his shutters up and miss a sunrise which many of us hope in our declining years to look back upon with pleasure he is perhaps more to be pitied than blamed.

The second letter in your last week's issue is from the pen of my old friend, Dr. George Foy, whose contributions to the subject of anæsthesia are so well known. I mention the fact that Dr. Foy is an old friend of mine because if I do not do so someone will discover the existence of this friendship and will address a special letter to you, Sir, concerning it. Those members of the profession, however, who know Dr. Foy will realise that what he says is dictated by a desire to further a cause in which he is interested, and not by any personal considerations. I have no hesitation whatever in endorsing his contention that any seeming lack of enthusiasm in the reform under consideration is due to the fact that the passing of the measure we desire is a mere matter of time.

The third and last letter follows that of Dr. Foy in your issue of July 22nd, and is written by Mr. H. Nelson Hardy in reply to my letter in THE LANCET of July 1st. I am glad to find that Mr. Nelson Hardy admits that if there is to be legislation at all "it should commence by rendering it illegal for unqualified persons to administer such potent drugs except under the immediate supervision of a qualified medical man." The admission puts the seal, so to speak, upon the main question, for, as pointed out in your annotation of July 8th, it has already been decided by all the leading academic and professional bodies concerned that legislation in regard to anæsthetics is highly desirable in the public interest. The only outstanding difference, therefore, between Mr. Nelson Hardy and myself is in regard to methylated chloroform, and I think, perhaps, I may be able to influence Mr. Nelson Hardy in his opinions as to this particular brand by relating the following episode, particularly as those concerned in it were the very individuals upon whose dicta Mr. Nelson Hardy seems to rely. I happened to be one of those who some years ago were invited to witness (1) the administration of absolutely pure chloroform—i.e., chloroform obtained in a crystalline form by freezing methylated chloroform, and (2) the deadly effects of the resulting mother liquor. An animal—I believe a dog—was obtained, and in order that it might be subsequently subjected to the influence of the dangerous mother liquor it was anæsthetised as a preliminary by the pure chloroform. Unfortunately the animal succumbed under the influence of the pure drug, and it therefore became necessary to anæsthetise another animal. This having been done—I believe with ether—some of the highly toxic mother liquor was introduced into its circulation, in order to demonstrate the fatal results that would immediately follow. Unfortunately, however, for those responsible for the demonstration, it was found impossible to kill the animal with the mother liquor. Knowing as we do the uncertainties of demonstrations in anæsthesia, we must not, of course, attach too much importance to the incident. At the same time it is not without its significance. In the light of recent experiments it is practically certain that the first animal died from a high vapour concentration—such a concentration, in fact, as would kill in

spite of the purest drug being employed. I express no opinion as to the failure of the mother liquor to destroy the second animal. I merely quote the circumstances as observed by me on the occasion in question. In conclusion, I would submit to Mr. Nelson Hardy and to all those who hold strong views as to methylated chloroform being responsible for difficulties and accidents, that if they wish to make out a case they must be prepared to explain the fact that a large number of anæsthetists annually conduct thousands of chloroform administrations with methylated chloroform without accidents. At the same time I should welcome any inquiry that would help to settle this particular point and would gladly coöperate in any such investigation.

I am, Sir, yours faithfully,

London, July 24th, 1911.

FREDERIC HEWITT.

SALVARSAN ("606") AND MERCURY IN THE TREATMENT OF SYPHILIS.

To the Editor of THE LANCET.

SIR,—In THE LANCET of July 8th, 1911, p. 121, there appeared several replies to an article I wrote on the above subject in your issue of June 24th, p. 1691. The writers, being supporters of salvarsan, naturally tried to ignore the patent fact that the article was primarily written to vindicate the utility of mercury in the treatment of syphilis, as well as to show that the alleged superiority of salvarsan had not by any means as yet been demonstrated either on clinical grounds or on pathological tests if we accept a negative Wassermann as our test. Neisser found the test negative in only 10 per cent. of cases after salvarsan. Other workers have had somewhat similar experiences. I also agreed to differ in THE LANCET of Sept. 25th, 1909, and Jan. 8th, 1910, with Dr. Stopford-Taylor and Dr. R. W. Mackenna in supporting the superiority of inunctions over grey oil injections of mercury in the treatment of early syphilis. They now accuse me of unreasonable antipathy to injections of mercury in order to discount the views on injection of salvarsan. I still use grey oil injections, however, for *military convenience* for out-patients, but Dr. Stopford-Taylor and Dr. Mackenna, who formerly extolled mercurial injections to the sky, have abandoned their first love for salvarsan.¹ The unreasonable antipathy to mercurial injections, therefore, would not appear to rest so much with me as with the writers, who no longer use them. I have not "changed my medical politics with my coat."

From a *clinical* standpoint, my views on inunctions were expressed years before the days of Schaudinn's valuable discovery or the Wassermann-Neisser-Bruck reaction. Mr. H. W. Bayly, another of my critics, speaking of Wassermann tests, quite recently informed us "that 82 per cent. of cases treated by inunction and 35 per cent. of cases treated by injection showed some effect of treatment after only three months. As far as I have gone, therefore, my conclusion is that inunction is the best form of administration of mercury, and I gather that Mr. McDonagh's large continental experience leads him also to this opinion. Calomel injection seems much better than pill treatment, but not so good as inunction, as estimated by the Wassermann reaction. Potassium iodide and the arylarsenates have no effect on the Wassermann reaction, as far as three months' treatment is concerned."

Mr. J. E. R. McDonagh (London Lock Hospital), at the meeting of the British Medical Association in 1910, records valuable testimony when he says that a patient "should, before the disease has become generalised, receive the most active and vigorous form of treatment possible. Mercury, in the form of inunctions, is more potent in this respect than when given in any other form. Working at the Wassermann reaction on the continent I found that it was *almost a rule* to obtain a 'negative' reaction after a patient had had a course of *inunctions*, or less frequently injections." As Mr. McDonagh has applied the Wassermann test in over 5000 cases his words carry very great weight. In a series of cases at Malta in 1910 70 per cent. gave a positive reaction after a full course of 2-3 years' mercurial injections. Cases on their second, third, and fourth courses of injection were positive in 80 per cent.

I quoted only a few of the reported cases of optic neuritis

and optic atrophy following the use of salvarsan. The alleged *suggestio falsi* is non-existent in my article, but apparently has originated in the inner consciousness of Dr. Stopford-Taylor and Dr. Mackenna, who, in their zeal for salvarsan, deny these recorded cases. They are vouched for, however, by persons of unimpeachable good faith and experience. The fact that Dr. Stopford-Taylor met with one or two cases of optic neuritis under mercurial treatment, presumably by injections, does not invalidate the fully recognised fact that numerous deaths and other toxic lesions have occurred under salvarsan. These have increased in numbers since I wrote my article, and there are several more deaths, bringing the number to 34 recorded cases in a year.

I think most people will also concur in the general accuracy of my statement—"that syphilis, unlike cancer, sleeping sickness, and kala-azar, is not a fatal disease." I do not think that because I hold this view I necessarily "live in a fool's paradise," as suggested by Dr. Stopford-Taylor and Dr. Mackenna. The inference should be quite clear that the above three *necessarily* fatal diseases might possibly warrant experiment with a dose of a highly poisonous drug, which, according to Dr. Stopford-Taylor and Dr. Mackenna, is capable of killing three adults, and, as in the case of chloroform, the patient commonly signs a book before taking it owing to the risk. Owing to the fact of there being at present only two cases of syphilis in hospital at Malta, and 160 performing full military duty without any signs of the disease, in a garrison of 6800 men, I am perfectly justified on the facts in vindicating to the uttermost the utility of mercury and potassium iodide in common with a vast number of other persons, if we can judge by recorded testimony in medical literature.

In reply to Mr. Bayly, who questions my views and experience on mercury and inorganic arsenic by the mouth, I reported the personally recorded observations of 18 years' specialised clinical experience without a death which enabled me to take a level-headed view of the proposition. As regards salvarsan, I quoted views and experience of other persons, as independent *primâ facie* testimony is necessarily more convincing to unprejudiced minds. I see that at a discussion on the recent position and treatment of syphilis (*Proceedings of the Royal Society of Medicine*, July, 1910), at which both Mr. Bayly and I spoke, he (Mr. Bayly) states "that he does not find Dr. Fleming's technique so reliable as Wassermann's original technique, as *modified* by me."

Mr. Boas recently lays great stress upon the importance of carrying out all Wassermann's reactions in a quantitative manner—a method which is impossible in the case of all the ordinarily suggested *modifications*. Mr. Boas obtained much better results, and stated that the Wassermann reaction has not, and *will not*, obviate the necessity for clinical observation in syphilis, but it must be undertaken by a person well versed in serological technique if the results are to be taken as being beyond reproach. In further reply to Mr. Bayly, Ehrlich insists that after an injection of "606" the patient should stay in hospital to prevent accidents, &c. In the army we ordinarily deal with very early syphilis, but how could cases ever be discharged from hospital in 24 hours, as inferred by Mr. Bayly, with unhealed chancres or contagious lesions? But admitting only 10 per cent. relapses under salvarsan is another indirect way of claiming 90 per cent. beneficial results. I conclusively showed, and others have shown, that as regards relapses the results under mercurial treatment are as good as or better than salvarsan. The small band of English workers who have dared to criticise salvarsan number three according to Mr. Bayly—namely, Mr. Ernest Lane, Mr. C. F. Marshall, and myself.

In conclusion, I will only refer to the valuable papers of Mr. Pusey and Mr. McKenna of Chicago in the *Journal of the American Medical Association*, January and March, 1911, which are instructive. Mr. Pusey states "that Ehrlich's hopes for '606' were based on animal experiments. Ehrlich recognised, as do others, that experiments on syphilised animals with the agent were not conclusive for man, and he turned over the remedy to clinicians for trial in human syphilis." He quotes Fischer, Lesser, Gaucher of Paris, and Finger of Vienna in support of his view "that salvarsan does not cure syphilis, and that we are not justified in holding out to patients any hope of cure by it, but it may prove a useful remedy, with mercury, however, as before, our chief dependence."

Mr. McKenna of Chicago states: "My own experience with

¹ THE LANCET, May 27th, 1911, p. 1412.