advocated by Lord Roberts might have upon the physical condition of the people. Sir Frederick Treves, in the course of his remarks, said that the report of the Commission on Physical Degeneration was not very pleasant. It contained signs and hints of something that was coming, a weakness in our race, which if not paid heed to must lead to that degeneration which most of them feared. In his opinion the most striking feature of the age was the effect on the nervous system of the conditions of our modern life. The best remedy for this was perfect physical health, such as was gained by open-air exercise. That could be obtained by the system of military training suggested by Lord Roberts.

The *Broad Arrow* states that the administration of hospital services hitherto performed by the Royal Engineers has been handed over to the Director of Barrack Construction to whom, or to his representatives, should be addressed all communications respecting hospital buildings and their accessories which have until now been forwarded to the Royal Engineers.

Correspondence.

"Audi alteram partem."

ENTERIC FEVER IN THE ARMY.

To the Editors of THE LANCET.

SIRS,—Although most medical men who saw service at the front in South Africa recognise the impossibility of sterilising all water used either by boiling, filtering, or the addition of chemicals in tablet form (carefully elaborated and prescribed by armchair hygienic authorities on the prevention of enteric fever in a campaign), all will agree that, wherever possible, every opportunity should be taken to assist the men to obtain water which has been boiled. Whilst serving with General Plumer's force I had occasion to remark that the Australians and New Zealanders preferred at each and every halting place to drink tea. When a lime juice ration was served out very often they would not drink it. It was once or twice suggested that a double ration of tea would not only have given greater comfort to the Colonials but also have insured double the quantity of water being boiled. Thus they were always ready to fill their water bottles with tea before trekking. At the end of each day's trek it was a common sight to see them dismantle a farm house to obtain firewood to boil the "billy." Had full advantage been taken of this propensity to drink tea I was convinced the incidence of enteric fever would probably have been less. However, experience showed that this was not so. The worst attack of enteric fever that the New Zealanders and Queenslanders with Plumer had was after a rest of two weeks just outside of Wakkerstroom, where they availed themselves of the opportunity of getting copious supplies of tea from the field force canteen. However, as previous to the fight at Onverwacht, after which we went into Wakkerstroom to refit, we had never spent more than three or four days in a standing camp, we did not have the opportunity of exposing the force to the danger arising from a lengthy residence near its own or another column's excrement. Consequently (unless the epidemic of enteric fever was carried by "the filthy feet of faecal-feeding flies", my idea that it was best for each section of four to boil their own water—and to encourage them to do so we should have given them more tea—was not put out of court by the Wakkerstroom experience.

Speaking of boiled water it is necessary to remember that unless aerated it is very insipid. Also my experience was that the men and even the medical officers when really suffering from thirst (similar to that so graphically described by the late George Steevens in "With Kitchener to Khartum") never hesitated to drink water if nothing else was procurable. Until that thirst was satisfied one never worried about the possible dangers of enteric fever and dysentery. The serving out of Berkefeld filters to each company was an experiment which, with our column, was not a success, owing probably to the fact that we had no special orderlies told off to look after the sanitation of the squadrons. In the later stages of the war, when often 100 troops riding light by night with stripped saddles and no wheeled transport were out on patrol, each man weighted with a rifle and three bandoliers, the only chance of getting a drink of boiled water was from a "billy" (in which

each section of four generally made tea). For large standing camps and troops at the base it has long been known that the best method of treating water is to boil it.

For the benefit of those who seem to claim some originality for the idea I may mention that on the first page of Xenophon's *Anabasis*, Book II., reference is made to the using of the captured wagons, shields, &c., as firewood with which to boil the water for the 10,000. However, for mounted infantry and cavalry out on patrol, night marching, and doing work such as we did in South Africa, it was simply impossible to carry out sterilisation of the water on a large scale. It is worthy of note that in the irregular corps many of the men over thirty suffered less from enteric fever than the young regulars and the more youthful members of their own corps. Speaking for the New Zealanders and Queenslanders, the elder men were also able to withstand the wear and tear of the campaign better. Also their keenness for active service was not one whit less than that of the young bloods. From what I saw in South Africa and have since read I should think that inoculation against enteric fever, the taking of quinine if exposed to malaria or dengue fever (as we were in the Bushveldt and Pongola), the plentiful supply of soap, the frequent fresh issues of underclothing to prevent the miseries caused by body lice, together with instruction by the medical officers on the transports as to simple lines of health, the provision of special sanitary orderlies for each company, an expert sanitary officer attached to the staff to dissuade the chief staff officer from selecting an old camping ground, also to point out the advantage of a frequent change of camp, and the necessity of filling in latrines, would go far to reduce the incidence of enteric fever, dysentery, and other preventable diseases.

I am, Sirs, yours faithfully,

J. S. PURDY, M.D., C.M. Aberd., D.P.H. Cantab.,
F.R.G.S.,

late Surgeon-Captain New Zealand Militia.

Port Said, Jan. 10th, 1906.

THE PREVALENCE OF CONTAGIOUS DISEASE: A SUGGESTED INQUIRY.

To the Editors of THE LANCET.

SIRS,—During the past 20 years I have lived more abroad than in England and have noticed that amongst Americans, Colonials, Germans, and Japanese there is a curious unanimity of opinion that the modern British islander is degenerating. Some well-educated Germans have told me that one of the main causes of the decay of the Spaniards and the Portuguese was the prevalence of "specific" disease and intimated that the same cause is deteriorating the British race. It is all very well to laugh at these thoughtful foreigners and to ascribe their views to envy and prejudice but every year our population becomes more and more urban and a larger proportion thereby come in contact with contagious disease. Is it therefore possible that the British are commencing to show the effects of the *spirochæta pallida*? Permit me to suggest that the medical profession should endeavour to get a return for a period of three months of all cases treated at 12 of the largest hospitals in the kingdom, the direct or indirect cause of which is considered to be contagious disease. A return of this character would not cost much money and could commence on any date convenient to the hospitals; the result might be of national importance and could not fail to be of interest to the medical profession.—I am, Sirs, yours faithfully,

H. N. ROBSON, M.R.C.S. Eng., L.R.C.P. Lond.

Junior Constitutional Club, Piccadilly, W., Jan. 25th, 1906.

THE HEALTH OF MADEIRA.

To the Editors of THE LANCET.

SIRS,—As reports have been disseminated to the effect that either bubonic plague or some other infectious disease is prevalent in Madeira it is advisable that the medical profession should be informed that these rumours are absolutely without foundation. Some six weeks ago several so-called suspicious cases were removed to the "lazareto," a building used for isolating cases liable to spread infection, the persons who had been in contact with these patients being also removed and isolated in a separate part of the same building. Shortly afterwards it began to be said (rightly or wrongly) that these isolated individuals were not receiving that care

and attention which were necessary; the "lazareto" was in consequence stormed by the populace which had always doubted the genuineness of the existence of infectious disease. The inmates were found to be healthy with the exception of five patients who were suffering from more or less trivial ailments, and since this occurrence there have been no further cases of so-called plague. It turns out that the whole affair has been a scare purposely got up by certain interested individuals in Madeira from political motives which need not be considered further.

I write this with the full concurrence of the senior English physician in the island, Dr. M. C. Grabham, and we both wish not only to reassure the friends of visitors at present staying here but to make public the fact that intending visitors need have no fear of running any danger on their arrival.—I am, Sirs, yours faithfully,

J. GEDDES SCOTT, M.R.C.S. Eng., L.R.C.P. Lond.

Funchal, Madeira, Jan. 20th, 1906.

THE DIRECT REPRESENTATION OF SCOTLAND ON THE GENERAL MEDICAL COUNCIL.

To the Editors of THE LANCET.

SIRS,—Rumour has been asserting that I do not intend to be a candidate for the suffrages of Scottish practitioners at the next election in October of this year for the post of their Direct Representative. Will you kindly grant me the kind privilege of saying publicly that statements to that effect are untrue and misleading?—I am, Sirs, yours faithfully,

Dingwall, N.B., Jan. 24th, 1906.

WILLIAM BRUCE.

X RAY DOSAGE.

To the Editors of THE LANCET.

SIRS,—In the interesting article on two cases of leukaemia treated by x rays in THE LANCET of Jan. 27th, p. 211, Dr. W. Ironside Bruce regrets the indefinite manner in which the dosage of the rays is stated. I think, however, that more essential details are there noted than seems customary in the reports of x ray treatment.

For example, in Mr. A. Marmaduke Sheild's case of mammary cancer, recorded in THE LANCET of Nov. 18th, 1905, p. 1464, Dr. H. Lewis Jones in reporting the x ray treatment only tells us that the applications lasted 12 minutes, that the tubes were "soft" or "medium," and that the secondary current was 0.5 to 0.8 milliamperè. No mention is made of the strength of the primary current nor even of the distance of the tube from the diseased tissue. When it is considered that a tube at eight inches from the skin gives it more than twice the irradiation it would do at one foot, it is evident that the exact distance is an important datum. The capacity of the coil, the number of watts in its primary, the rate of interruptions, the particular "break" used, the distance of the tube and its equivalent spark gap, are all such important factors in the production and application of x rays that it seems a pity to omit any of them in reporting the treatment of a case.

As to the value of recording the milliamperage of the tube circuit with the instruments now made for that purpose, opinions seem to differ. From my own observation of the behaviour of an average milliamperemeter under varying conditions, I suspect they do little more than indicate their own eccentricities, and feel convinced that a far more accurate estimate of what the tube is yielding can be made from a consideration of the energy of the primary current in conjunction with the state of the tube and the frequency and efficiency of the interruptions.

I am, Sirs, yours faithfully,

Ballachulish, Jan. 29th, 1906.

W. D. ANDERSON.

PHYSIOLOGICAL TESTS FOR PHARMACEUTICAL PREPARATIONS.

To the Editors of THE LANCET.

SIRS,—May I trespass briefly on your space once more? My letter of Jan. 20th has served its main purpose by eliciting the information I desired, but it appears in part to have conveyed a not wholly correct impression of my attitude

towards this question. I do not think that I under-rate the importance of such pharmacological researches. My contention is simply this—that before accepted standards are officially remodelled we should have evidence as complete and irrefragable as possible that the older methods rightly carried out cannot be trusted to give a reasonable uniformity and I think that the evidence adduced by any investigator loses in weight if he cannot state that the preparation examined has been made under his own supervision from crude drugs which he personally admits to be the best obtainable, and it is because I hold this opinion that I attach great value to the definite statement in Dr. W. E. Dixon's courteous letter that he found a similar variation in preparations of ergot made by himself and Dr. Haynes. Now, if their experience is confirmed by other pharmacologists of equal standing, and if the same principle of procedure—viz., personal identification throughout—is applied to the other drugs in question with a like result, we shall have before us a clearer indication than we yet possess that with our present incomplete knowledge of the chemistry of such drugs further official tests are desirable; and it is quite possible that bio-chemical standardisation may prove to be the best means of securing that approach to constancy in therapeutical activity which is so important.

I am, Sirs, yours faithfully,

WILLIAM MARTIN, M.D. Durh.

Newcastle-upon-Tyne, Jan. 29th, 1906.

THE DOCTOR IN THE DOCK.

To the Editors of THE LANCET.

SIRS,—Under this title a correspondent recently called attention in your columns to the careless manner in which all sorts of miscreants are received by a badly edited press into the ranks of the medical profession. That colossal black-guard Bridgwater, and more recently a bogus Scotch "baron," were both called medical men in many of the voluminous notices of their exploits. A very good example of this is now occurring in the case of a person alleging himself to be a medical practitioner who was charged with a petty theft from a chemist's shop at Charing Cross. This man was described in newspaper after newspaper as a medical practitioner, but the magistrate very properly refused the application for bail made on his behalf by his solicitor when he heard that the accused was not a registered medical man. I am not prejudging this case. The accused is said to possess an American degree, a claim which, though it is made by every impudent quack, may in this case be perfectly sound; but until the man's medical status is proved it is obviously unfair to the medical profession to allude to him as a medical man. The *Times* says of this person that he "described himself as a medical practitioner," and such is evidently the fair method of reporting.

I suggest that the mental confusion of the average journalist upon what constitutes a medical practitioner is out of date. Not long ago every outburst of rowdiness in a restaurant or a music-hall was always attributed to medical students and I do not suppose that the various clerks and commercial employés, with possibly a leaven of legal and theological students, who are responsible for these little outbursts, have, or have ever had, the least intention to father their offences upon other people. It was a badly edited press which, with a mind reminiscent of Bob Sawyer and Joe Muff, felt constrained to attribute to the medical student all mischief done by any group of young men which included students of every sort. But the laborious life of the present medical student is becoming known and taproom émeutes are no longer attributed to him as a matter of course. The stage still suffers to some extent at the hands of the press, inebriated ladies of the pavement being not infrequently alluded to in the course of police reports as actresses; but here, again, the journalist is becoming better informed and the ordinary female "drunk" is now more often described as "alleging herself to be an actress." As justice is being done to our medical students and to our comediennes and tragediennes, is it not time that the press should awake to what gives a man a right to be described as a medical practitioner? A medical practitioner is a registered medical man in practice—not an advertising quack, not a transatlantic adventurer, nor a monger of abortion pills, and not as a rule either a common thief, common rogue, or common vagabond.

I am, Sirs, yours faithfully,

Jan. 29th, 1906.

T. DELORME.