

the medical side of the army. The cost of such a professorship would probably be about £800 a year. In addition to the giving of lectures the professor would no doubt find time to write a valuable work on the medical history of past campaigns, while his studies would include foreign campaigns and methods of foreign organisation. All this would, the writer thinks, immensely add to the efficiency of our Army Medical Service and the practical gain would be more than worth the cost.

#### ARMY MEDICAL REFORM.

"One Who Knows," writing from Bucks to the *Daily Express* on June 16th, says: "The Premier's refusal to appoint a medical officer to accompany the Army Service Corps officer on his tour of inspection among the American tinned meats packing houses is a specimen of the neglect of the Government to utilise, for the prevention of diseases, the medical skill the country possesses in the Royal Army Medical Corps and in the Volunteer medical services. Such neglect, as we know to our cost in the past, has been very expensive; the number of sick from preventable diseases has always greatly exceeded those wounded."

#### THE MAINTENANCE OF DISCHARGED SAILORS AND SOLDIERS.

A circular has been issued from the Local Government Board to boards of guardians giving particulars of the conditions under which pensions are granted to sailors and soldiers. While the Lords of the Admiralty state that they are unable to accept responsibility for the permanent maintenance of men who are invalided from the Navy the Army Council intimates that should there be any discharged soldiers in workhouses who are without pensions, or with small pensions, and who can be shown to be suffering from disabilities directly due to military service, their cases will always receive careful investigation on being brought to the notice of the Secretary, Royal Hospital, Chelsea, S.W.

#### SICK-BERTH AUXILIARY RESERVE.

A party of seven men of the Northamptonshire Branch of the St. John Ambulance Association arrived at the Royal Naval Hospital, Stonehouse, Plymouth, on June 9th, for a week's training in the duties of the sick-berth staff. The detachment should have numbered ten men but three members were detained at home through illness. Ten representatives of the Manchester branch of the same association arrived at the hospital on June 12th for training lasting a similar period.

#### THE "HOSPITAL ASSISTANT."

We have to acknowledge the receipt of some copies of a new Indian monthly medical publication, the first number of which made its appearance in January of the present year. The *Hospital Assistant*, as the new journal is called, is published at Kolhapur city, Bombay Presidency, and owes its existence to the enterprise of its editor and proprietor, hospital assistant Raghunath V. Bapat. The hospital assistants in India form a very numerous, useful, and widely distributed class of medical subordinates who are mainly employed in the Indian Government service. The aim and object of the journal seem to be twofold—namely, to establish a wider community of feeling among the hospital assistant class by representing and advocating their interests and views and, in the second place, by disseminating such medical knowledge and information as may be likely to prove useful to them in their professional work. Seeing that these hospital assistants are, as we have said, widely distributed throughout India and that numbers of them have to serve at small native stations and villages the latter consideration has, or may hereafter have, an important bearing. The hospital assistant class is not in a position to subscribe to the more expensive medical and scientific journals and the price of the present publication consequently had to be as low as possible in order to be kept within their means. We recognise that any attempt to start a journal of this kind in India must be attended with many difficulties and shortcomings which later may, however, be fairly expected to disappear or to be overcome.

As we go to press we learn with deep regret that Lieutenant Forbes Manson Grant Tulloch, R.A.M.C., succumbed on Wednesday at the Queen Alexandra Military Hospital, Millbank, to sleeping sickness contracted while investigating that disease in Uganda for the Colonial Office.

## Correspondence.

"Audi alteram partem."

### THE CAUSATION OF PLAGUE.

To the Editors of THE LANCET.

SIRS,—In *Nature* of April 16th there is a quotation from Dr. Theodore Thomson's report to the Local Government Board to this effect, "The part played by the rat in transmission of plague to man, although real, falls far short of the importance which has generally been attributed to it." As there is not a full report it would be useless for me to say much about Dr. Thomson's report, but this much is certain, medical experts on plague in plague countries are unanimous in blaming the rat and its attendant flea as the only cause of plague transmission.

I have just come from a plague distracted country and whilst there visited probably one of the most interesting scientific research laboratories in existence. I refer to the Plague Institute at Old Government House, Bombay. So far my visit there has been the most instructive and novel experience that has befallen me since travelling in the East. It was made doubly pleasurable by the kind and courteous treatment received at the hands of the medical authorities there who spared themselves not in showing everything connected with their epoch-making discoveries. A full report will be out by-and-by and the medical profession will find that plague depends on flea and rat. The experiments going on there now prove this conclusively and clinical experience backs up the laboratory results of the scientists. Until I paid a visit there I quite thought that Sir Patrick Manson's idea that plague might be got from, say, introduction into the system through walking with bare feet was likely; but the authorities at Bombay say "No," and they give as a reason that if this were the case the glands in the groin would be first affected. Experience, however, teaches that in some places where people walked about barefooted the glands in the arm were first affected, whereas in others, where they walked about shod, the groins were affected first.

Again, into a cage two rats were put; one was surrounded by fine gauze, flea-proof, the other rambled about freely in the cage. Infected fleas from plague rats were put into the cage. The rat left free sickened and died in a few days, the protected rat lived on and was quite well. Clinically, it was found that in certain cases where a person had been known to work through the day and leave about sunset no harm came but when the same person stayed on late into the night or slept on the premises he was known to take plague. This was explained because the flea was a nocturnal biter of man. The medical experts at this institute are therefore firm believers in the rat theory of plague. I was there at 1 P.M. when the carts with the suspected dead rats were brought in. At one table stood a series of dissectors and at another sat a body of microscopists. On asking if there was no danger of the dissectors getting the poison I was told they were all injected with the serum and this was a condition of service with everyone connected with the institution. There they stood cutting up the rats and by the appearance of the glands these microscopists could tell better than the microscopists if the rat had plague or not. There was a friendly competition between the two and at the time of my visit the dissectors had so far the best of it.

In the flea experimenting room I noticed some few guinea-pigs running about loose. These were allowed purposely to do so in case any fleas escaped in order that the fur of the guinea pig would attract the flea instead of the arms or legs of the attendants. The serum prepared here supplies the world and its benefits are only beginning to be realised. It is somewhat disheartening to an institution ready to turn out any amount of serum to find opposition to its operation even in high quarters. In a pamphlet published it was startling to see that in a village with a population of 2000, of every 100 not injected with anti-plague serum 65 took plague and 40 died, whilst out of every 100 inoculated 20 took plague and seven died. Now all this serum is made based on the theory of the rat and rat-flea being the sole cause of plague. The medical experts at Old Government House do not look on the plague as strongly infectious or contagious, their contention being that it requires to be injected into the system

and the creature who does this is the flea who gets the poison from its host, the rat.

I would take up too much space in your valuable columns were I to enumerate to you the whole ingenious process of preparing this plague antitoxin from beginning to end but should any of your readers travel towards Bombay they will miss a great treat should they not have the privilege of seeing how things are manufactured at this life-saving laboratory. Their opinions and results are the summing-up of a vast experience as well as a large number of painstaking experiments. That this is so one has but to look at the Bombay newspapers, where, at the time we were there, the average daily death-rate from plague alone was 150 persons. To realise that no theory is advanced here without numerous painstaking experiments one has only to see their nurseries of healthy guinea pigs; their large rooms filled with boxes of injected guinea-pigs; the room where fleas innumerable are nursed for experimental purposes; and adjoining thereunto the big shed where upon little boards rats are split open and labeled; near by busy microscopists—whose duty it is to find, if possible, the real and tiny cause of all the trouble—superintending, together with enthusiastic scientific medical experts—to see all this will convince the most sceptical observer that the part played by the rat in the transmission of plague to man is real and does *not* fall short of the importance which has been attributed to it. At least, such was the idea impressed upon my mind from a visit paid to the laboratory at Old Government House, Bombay.

I am, Sirs, yours faithfully,

THOMAS PICKTHORN THOMSON, M.B., C.M. Aberd.

C.S. Duplex, Suez, Egypt, June 1st, 1906.

## THE CHARITABLE POSITION OF HOSPITALS.

*To the Editors of THE LANCET.*

SIRS,—Most thoughtful minds in our profession will have pondered long and anxiously over the problem you present to your readers in the leading article in a recent number of THE LANCET.<sup>1</sup> They will agree with you that large numbers of people apply for medical and surgical treatment in hospitals who are able to remunerate the general practitioner adequately for such services as are needed in most of the minor cases which apply. It is proper to bear in mind that these institutions were in their origin founded as charities pure and simple, and endowed and financed to aid the sick and destitute poor unprovided for by parochial agencies. For this purpose the members of our profession most willingly joined in giving the best of their skill and service, free and without stint, both as to quality and time. The most talented and distinguished, our greatest physicians and surgeons and most eminent specialists, eagerly embraced the opportunity and vied with each other in order that they might place all that they knew at the service of the charity; and so noteworthy were the results of their work and so marvellous did their cures appear to all onlookers that a rage set in upon the public mind for all sick people, whether rich or poor, to share alike in the benefits thus provided without any professional fee or reward being required. At the same time, the public highly appreciating the good thus resulting, resolved to make these hospitals and everything connected with them absolutely healthful and sanitary; and all who have been concerned in the erection or renovation of hospitals will recognise with gratitude the great public spirit with which they have been financed in order that they may be brought as near to perfection as possible. This, however, only adds another nail to the coffin of professional income, for when those who *can* pay come to realise how much better off those who *cannot* pay are than themselves, and also that in addition they have to pay considerable fees for what the others get for nothing, it is natural to expect if their sense of conscience is somewhat dull and deadened that it would be likely for them to choose the course which seemed to them good and to excuse themselves on the plea of poverty which they were not morally entitled to raise.

That this has been done to an enormous extent is perfectly clear. In one institution I have heard that the authorities, suspecting considerable abuse, decided

to make an independent inquiry into the circumstances of each applicant for relief, and as a consequence the following year the numbers diminished by over 2000 persons. We have in the medical profession some 30,000 or more practitioners who at great expense either to themselves or their friends or relatives have qualified themselves to administer to the professional needs of the British people; as a body they are not rich but rather poor men who seek by attention to their patients and skill and care to earn a moderate living and to pass their life in the useful practice of a charitable and generous profession. Many of our younger men depend almost for their existence at first upon the opportunities presented by this kind of practice for their being brought into notice in the neighbourhoods where they settle. This is a strong reason for the restriction of the abuse of charity. Can it be thinkable that the public sense of honour and generous feeling should be so debased as really to desire to take advantage of the self-sacrificing traits in the character and life of our profession by either condoning the abuses which abound or otherwise encouraging them? I trow not. But the subject is extremely intricate, has grown out of long-suffered abuses, and possesses in itself conditions which appear to need on all sides reconsideration and adjustment. The mixing-up of charity with pay is eminently undesirable and in this consists the foundation error. Every medical man delights to help forward the charity as a charity and the best in the profession are eager for the work, but money payment, combined with it under the cloak of charity, is calculated to inflict a monstrous injustice on the rank and file of the profession. There is a danger in the present day worthy of consideration. We have seen it exemplified in the teaching profession. The schoolmaster of the past has become municipalised and so may the medical man of the future be unless in time he fights strongly and wisely and with the whole strength of the combined profession for the preservation of his rights and liberty. Keep these hospitals for what they were originally intended and let payment make its own terms independently and unconnected with the charity. A combination for mutual aid might then be made on self-supporting principles which could be organised beneficially to professional interests for all who were willing to give such service. Such arrangements would leave the hospitals free for the treatment of all the more serious cases, operative or otherwise, and for which at the present time the extension of charity is still greatly needed. The hospitals would be relieved of a heavy expenditure and the prospects of the younger practitioners would be brightened. The abuse in regard to out-patients is one comparatively easy to be restrained. If every patient admitted were made the subject of investigation as to his earnings and financial position the swarm of applicants would soon diminish. It ought in every case to be a real investigation. Ordinary infirmary letters are in nine cases out of ten untrustworthy; those who give them know little or nothing about the applicant and accept his statements as to fact without attempt to verify. It would be useless to employ an infirmary official who has to collect the funds for the charity and his inquiries might be expected to be of a very perfunctory character. He would feel that close inquiry would give great offence, cause the loss of many subscriptions, and damage the interests of the hospital. It seems as though an inquiry altogether independent of the hospital was needed to check abuses which undoubtedly prevail, even in the best managed hospital work. Is it altogether unreasonable to hope that in a union of all the hospitals of the United Kingdom may be found a solution of many difficulties in connexion with their management, and, amongst others, the correction of their abuses. A great difficulty has arisen in many hospitals in this connexion, arising from the union of charity with part pay, from the very handsome manner in which these institutions are subsidised by the subscriptions of the working classes, sometimes amounting even to a fourth part of the working expenses of the charity. These good folks, when in work, are generally well paid and well able to remunerate their local practitioner, but very many consider the few shillings they subscribe annually entitle them to claim the gratuitous service of the institution. The outside medical men naturally look upon it as a hardship that they should be deprived of a large source of their living by the gratuitous service of their brethren; were the conditions grave and serious, necessitating operation and treatment in hospital, the case would be different and they would not

<sup>1</sup> THE LANCET, March 17th, 1906, p. 771.