

companies in reference to a family history of tuberculosis. He says: "As soon as an individual applies to insure his life, if there is any consumption in his family he is made to pay a high premium if he be not actually refused; whereas another applicant with a good family history is passed as a first-class life, though he may be daily exposed to infection either at home through his wife and children or at his daily work." This statement requires considerable modification. At some of the large insurance companies, when there is a family history of tuberculosis, before any addition is made to the premium full inquiries are made as regards the possibility of infection, and the physique of the applicant is also duly noted. In other words, the family history is not deemed sufficient cause for an increase unless the incidence of tuberculosis is very marked.

I am, Sir, yours faithfully,
Harley-street, W., May 15th, 1909. F. J. WETHERED.

To the Editor of THE LANCET.

SIR,—No one dissents nowadays from the dogma that tuberculosis is an infective disease, but there must be many who are not prepared to accept Dr. J. G. Emanuel's conclusion that heredity is a negligible factor or to admit that his interpretation of the facts is correct. Let me draw attention to the statement that there can be no sharp distinction between susceptibility and immunity because 1 in 9.5 of all persons dies from tuberculosis. In the six families quoted by him, comprising some 55 persons, 14 died from tuberculosis and some 10 more were suffering from the disease; a probable death-rate of 1 in 2.3 in tuberculous families. In other tuberculous families of which one has knowledge, three out of six, five out of eight, three out of eight, and so on, died from phthisis, showing that the families selected by Dr. Emanuel are not exceptional. On that reckoning there must be a large number of families where there is no death from tuberculosis, or only an occasional and more or less accidental one, and consequently there may be a very sharp line of distinction between susceptibility and immunity.

In order to see clearly the part which heredity plays in this disease it is necessary to differentiate the two main types of tuberculosis. The infantile form is almost entirely alimentary; if we recognise, as we must, that meningitis and general tuberculosis are merely disseminations from a primary lesion we can reckon them in the death-tables with the predominant primary lesion at each epoch. We find, then, that alimentary tuberculosis accounts for 85 per cent. of the deaths during the first five years of life, descending in mortality from the first to the fifth. It may be that heredity plays little or no part here. The second form is adolescent and respiratory. It begins to reach a formidable figure about the fifteenth year when adolescence sets in; and it is to be noted that its ravages begin in girls earlier than in boys in accordance with the earlier onset of adolescence. Now the principal feature at this period is not increased opportunities of infection, but the development of inherited physical characters upon which depends the greater or less power to resist infection. Infection, which involves other considerations beyond a chance inhalation of tubercle bacilli, may occur then or at any time within the next 20 years or so, by which time the susceptible have in great measure died out, and obviously if the chance of infection is equally distributed on the average over these years the mortality will increase from lustrum to lustrum, because the more resistant will live longer and increase the death-rate at a later age.

In adolescent tuberculosis, then, heredity assumes extreme importance; for the physical characters on which susceptibility rests admit of development and strengthening by suitable environment and training. Therefore the advice given by Dr. Emanuel that we should devote our attention to the paths of infection and neglect the predisposition of the individual, appears to me pernicious and detrimental to the individual. The association of inherited physical characters of a tuberculous parent with a proneness to tuberculosis in the offspring has hitherto been generally accepted; but if it were necessary to adduce proof of it no doubt many general practitioners have knowledge of families where for two, three, or even four generations some physical conformation has been associated with phthisis. I have myself met with one striking example extending over three generations, as well as many of parent and child. It is certainly to be hoped that while every effort

is made to destroy the opportunities of infection, the mistake will not be made of holding individual predisposition too cheaply.

I am, Sir, yours faithfully,
Putney, S.W., May 17th, 1909. DONALD F. SHEARER.

PROPOSED LEGISLATION IN REGARD TO THE ADMINISTRATION OF ANÆSTHETICS.

To the Editor of THE LANCET.

SIR,—Several letters have recently appeared not only in your columns but in the lay press relating to a proposed Bill for controlling the administration of anæsthetics. These letters present great divergencies of opinion on the question whether *future* registered dental practitioners should be regarded as fitted to assume the responsibilities of general anæsthesia. In deciding such a question the paramount consideration must be the safety of the patients—viz., the British public.

It is obvious, I think, that he who renders another person surgically unconscious with any anæsthetic so disturbs the vital functions that, for the time being, the life of that person is completely in his hands. The public may therefore reasonably expect that the administrator of a general anæsthetic for a dental operation shall have undergone such general training as will enable him not only to recognise and meet emergencies connected with the anæsthetic but those also which might occur from accidents in the course of the operation—e.g., slipping of a tooth or any other foreign body (such as a blade of forceps or portion of a prop) into the respiratory passages. Is the general medical and surgical training of the dentist such as to fit him to assume these responsibilities and to meet such emergencies?

Personally I am inclined to think that we should be consulting the best interests of the public by placing dental patients in the hands of the medical profession whenever it is necessary to administer a general anæsthetic. By such a line of action the reprehensible and dangerous practice of a single individual simultaneously assuming the functions of anæsthetist and operator would practically cease to exist. Apart, however, from these considerations as to the safety of the public it would, I think, be good policy for the dental profession to support a Bill which, if passed, would undoubtedly greatly restrict unregistered dental practice and might, perhaps, pave the way towards the goal desired by that profession—viz., the prohibition of this form of practice.

Why should not the proposed Bill be modified so as to prohibit the use of dangerous local anæsthetics except by registered medical and registered dental practitioners?

Such a modification would still further limit unregistered dental practice and would, I venture to think, be acceptable to the medical and dental professions.

I am, Sir, yours faithfully,
Stratford-place, W. WILLIAM HERN.

THE QUESTION OF COMPULSORY INSURANCE AGAINST SICKNESS.

To the Editor of THE LANCET.

SIR,—That the present system of medical attendance in this country can no longer be regarded as satisfactory, and that a new departure is imminent, is abundantly clear from the Poor-law Commission report and from the Chancellor of the Exchequer's speech on the Budget. The Poor-law Commission has produced a great amount of evidence to show that not only those in receipt of relief but the poorest of the labouring classes are suffering from the want of a properly organised system of medical attendance. The writers of the Minority Report have painted the picture in still more lurid colours. No attention, they say, is paid by the majority of medical officers under the Poor-law to sanitary surroundings, and practically nothing is done towards the prevention of disease. "In too many unions, it is clear, outdoor medical relief begins and ends with a bottle of medicine." The writers of the Minority Report are probably most intimately acquainted with medical practice in London, but so far as the country and provincial towns are concerned I can testify from long experience in practice in

different parts of the kingdom that the picture is overdrawn. In practically every town and village in England there are Poor-law medical officers and others practising among the poor who have been doing their utmost for the prevention of disease. At the same time, it cannot be denied that in the Minority Report there is much that is true. Nor can it in present circumstances be otherwise. The conditions of medical attendance are such that adequate treatment and attention is practically impossible. Poor-law medical officers are, as a rule, underpaid. The out-patient departments of hospitals are so crowded that but little attention can be given to each individual case. The patients whom the physician or surgeon sees are entire strangers to him. He can know practically nothing of their mode of life, their means of subsistence, or their sanitary surroundings, and can therefore do but little towards the prevention of disease. Nor is it possible for a medical man who charges 6d. or less for advice and medicine to give much attention to individual patients if he is to live by his profession. In some out-lying districts matters are still worse, for there, it appears, about half the people die without even having seen a doctor or got the conventional bottle of medicine. Bad as our system of medical attendance is from the patients' point of view, it is still worse from that of medical men, and if things continue as at present the general practitioner who knows the lives of his patients must soon vanish; and I am old-fashioned enough to believe that if he does, or if his place is taken by mere officialdom, it will be a grievous loss to the community.

While practically all are agreed as to the unsatisfactoriness of our present conditions of medical attendance, there are probably only a few who, like myself, have long urged in season and out of season that the only remedy for the present state of matters lies in direct interference by the State. Various methods have been possible in the past, but since members of the Cabinet, Labour Members of Parliament, and others have been visiting Germany and taking an interest in continental methods it is evident that for some time at least the system of compulsory insurance against sickness, and this, of course, must include medical attendance, will hold the field. In the Majority Report of the Poor-law Commission it is expressly stated that it was only the want of time that prevented them going fully into this matter, and it is quite evident that the proposal to solve this question by the increase of provident dispensaries would be utterly futile if compulsory insurance were not adopted. Besides, now that the Chancellor of the Exchequer has spoken and declared in favour of compulsory insurance, and the present Government is evidently prepared to grapple with it, it can no longer be regarded as a mere foolish dream of faddists. And, certainly, no one who has studied the system of compulsory insurance against sickness in Germany and their methods of medical attendance inaugurated and now in force for a quarter of a century can fail to see how that country has benefited by it. After endless modifications through experience, the method in those towns and districts where it is well carried out is extremely simple. A deduction is made from wages to which are added contributions from the employer and the State. The particulars are entered in a pass-book. When the worker or one of his family takes ill the pass-book is taken to the doctor of his choice, who sees the patient at his surgery or, if necessary, at his house. If the patient has to be removed to the hospital or goes to a convalescent home, payment is made from the compulsory insurance fund, and this has been done without interference with the excellent work carried on by friendly societies. No one can deny that, compared with our methods in our country, this is vastly to the advantage of the patient. But what as to the doctors? One hears over and over again that any system of this sort should be vigorously opposed by medical men, as medical men are so poorly paid in Germany and are so much worse off than in this country. I do not believe it, and statements of this sort made in medical journals I have not found to be supported by an atom of proof. I defy anyone to produce any medical man in Germany who, though he may have many complaints, will not at once admit that he is vastly better off with this system of insurance than he would have been without. It would take too much space to go into particulars, but be it carefully noted that this system applies only to those whose income is less than £100, or in exceptional circumstances £150, a year, and

that those earning more than this sum cannot, as in this country they so often do, obtain treatment through a cheap club or gratuitously. The Chancellor of the Exchequer has said that for settling the details of this matter he has called in the heads of friendly societies. Medical men, who are equally interested, are evidently ignored. This is not as it should be, but I am not surprised, as the great majority of our profession have not shown themselves to be in the least interested. I am, Sir, yours faithfully,

Greenwich, May 10th, 1909.

J. H. KEAY.

THE LATE SIR WILLIAM GAIRDNER.

To the Editor of THE LANCET.

SIR,—In response to the wishes of Lady Gairdner and her family I have undertaken to edit the medical and scientific papers and articles of the late Sir William Tennant Gairdner and to preface the collection with a biography. In order to render the work as worthy as possible of the memory of the late professor I am desirous of enlisting the sympathy and help of his friends. I venture, therefore, to request through your columns that anyone who has in his possession any letters or other literary remains of Sir William Gairdner will be so kind as to communicate with me.

I am, Sir, yours faithfully,

G. A. GIBSON, M.D. Edin.

3, Drumsheugh-gardens, Edinburgh, May 12th, 1909.

THE BUDGET AND MEDICAL PRACTITIONERS.

To the Editor of THE LANCET.

SIR,—Is it not beneath the dignity of the profession to take the ground which many have, and go cap in hand to ask the Chancellor of the Exchequer to grant us concessions in the petrol tax, and to urge each member of the profession to seek the good offices of his Member of Parliament to assist us in the matter? It seems to me not only degrading, but that we have no claim to any special abatement. We should face the expenses of our own profession like every other citizen and should be above asking or accepting doles; but we should have the manliness to fight for our just rights.

It is not in legitimate taxes where the shoe pinches us as a profession. But we do feel, and resent, the injustice we suffer in being coerced, under penalty, to give our work to the State as no other members of the nation are ever asked to do. It is not just to demand from us certificates of death gratis; they are required solely for State purposes. It is unfair to constrain us to notify births without remuneration. It should not be obligatory on resident or visiting members of the staffs of large or small hospitals to make post-mortem examinations and attend the coroner's inquests to give evidence on accidents which die in hospital, without receiving any payment. Surely our free services to hospitals should not be burdened by this gratuitous work for the State. These are a few of the instances where our generosity is trespassed upon, and it is in such cases where we suffer in dignity as well as financially.

We do not wish, and ought not to seek, concessions; but we ought, one and all, to contend for our rights as members of a noble profession and as citizens of this great empire. If we honoured ourselves more we should receive more honour in return. Let us cease asking for alms for the few and claim what is our birthright for all. If we are content to accept concessions in taxation for those of us who happen to be sufficiently well off to be able to keep cars, what will the answer be when we claim as our right just payment for work done for the State?

I am, Sir, yours faithfully,

Rugby, May 15th, 1909.

CLEMENT DUKES.

BOARDS OF GUARDIANS AND PUBLIC VACCINATORS.

To the Editor of THE LANCET.

SIR,—There is a slight inaccuracy in your annotation on p. 1407 of this week's issue of THE LANCET entitled "Boards of Guardians and Public Vaccinators." The converse of your proposition is quite correct and you rightly condemn its inequity; but it is not true to say that if a public vaccinator