British authorities; spasmodic efforts to clean Augean stables; and the clinging to quarantine, as the drowning man to the reed.

I am, Sir, yours truly,

W. J. MOORE, C.I.E.,

Deputy Surgeon-General (late), Presidency Division, Bombay.
United Service Club, July 8th, 1883.

"NOTIFICATION OF INFECTIOUS DISEASE IN EDINBURGH."

To the Editor of THE LANCET.

SIR,—Dr. Carter's reply is no answer to my letter. He now avers that he is in favour of notification, and that he objects to the "creation of a new offence for medical men, and to their complete subordination to medical officers of health." Had he been conversant with the literature of this important subject, he would have known, first, that whatever plan of notification is adopted there must be penalties attached to non-compliance with an Act of Parliament; and, second, that it is only in the Edinburgh plan that medical men are completely emancipated from the interference of sanitary officials, all other plans, whether dual by the householder and medical man, or single by the householder alone, necessarily involving the interference of the sanitary authorities. Again, Dr. Carter manipulates statistics in such a way as to confirm your readers in the well-known saying that by statistics you can prove anything. Because, forsooth, the death-rate of Edinburgh (among the lowest in the country) has not lessened in the same mathematical ratio as that of the United Kingdom, he argues against the success of our system of notification. I might as well argue that because the death-rate of London is so low, notification of infectious diseases could be of little use in the metropolis, although for the last few years small-pox has been epidemic there, and a source of danger to the whole community—no fewer than three or four of our recent outbreaks in Edinburgh having been traced to that source. Dr. Carter is curiously incorrect as to my duties. No one in his senses would dream of instituting "in trivial cases" what is equivalent to the coroner's inquest; and again, he speaks of what undoubtedly would be my duty in extreme cases, involving great public risk, as my usual practice. Now, one great advantage we have obtained from notification in Edinburgh (about which Dr. Carter knows nothing) is that since 1879 medical men and the laity have become so enlightened that by both parties the importance of speedy isolation is recognised, and recourse to compulsion is unknown. The source of Dr. Carter's information on these and other points is well known, and the absurdities he gravely states as facts excite the ridicule of the profession here, who, I venture to think, will bear comparison with their brethren in Bolton, Blackburn, or Warrington. Dr. Carter and his friends have on two occasions issued circulars to medical men in Edinburgh to ascertain their feeling on the matter. Why is it that the result of these plebiscites has never been published? Will Dr. Carter and his friends try their fortune again? Lastly, I can assure Dr. Carter that it was in no sneering spirit I alluded to the high death-rate of Liverpool, and to the alarming outbreak of typhoid; both are matters, in my opinion, of imperial interest, and may become public scandals.

You kindly allowed me to notice a statement in your columns, and Dr. Carter has begun a correspondence. I shall be happy to afford that gentleman and others any information they may wish on sanitation in Edinburgh, but I decline to encroach further on your valuable space.

I am, Sir, yours faithfully,

Edinburgh, July, 1883.

HENRY D. LITTLEJOHN, M.D.

To the Editor of THE LANCET.

SIR,—Dr. Littlejohn, in his letter on the above subject in your issue of the 30th ult., says:—"Dr. Carter's statistics, unfortunately, are as faulty as his quotations. He puts words into my mouth which I did not use, and he avails himself of incorrect statistics, although he and Dr. Hamilton could easily, had they chosen to apply to the proper quarter, have procured the true ones." I presume I am included in the above statement through a paper which I published a few

months ago on the "Compulsory Notification of Infectious Diseases." That paper contained the conclusions I had arrived at from a visit which I, as one of a deputation appointed by the Health Committee of Liverpool to investigate the working of the Notification Acts, paid to several of the towns where they are in force. With regard to Edinburgh I gave certain facts which tended to show that there the results of compulsory notification were the least satisfactory of all. These facts have never been denied, so far as I am aware, by Dr. Littlejohn, but now in an indirect way, if I understand the paragraph aright, he accuses me of availing myself of incorrect statistics. My pencil notes, taken at the time in the Public Health Office, Edinburgh, are these:—"The staff consists of the medical officer of health, his clerk, two inspectors, and one constable. Number of certificates with the 'No' crossed out about one in twenty-five. Every case where immediate attention is indicated the medical officer sends at once to remove the case; sometimes they object, and 'we do not force them.' Unless fumigation, &c., is applied for we do not, as a rule, send the sanitary inspector to do it. It also happens in a small house where there is no removal that they cannot always fumigate. In very many instances of the poor living in flats, or in one room of a flat, fumigation could not be carried out because there was nowhere to remove the people to whilst the process was going on; they could not be left in the passages or landing for so many hours, and the neighbours would not take them in. The sanitary authorities undertake the removal of bedding and clothes to the Blind Asylum, where the disinfection is carried out, but the latter charges for the work, and for conveying the articles home. Present scarlet fever outbreak, there had been 532 notifications of it sent in from July 1st to Sept. 17th, 1882, inclusive, a period of thirteen weeks. The notifications of infectious diseases sent in during the year 1880 were 5705, of these 331 were removed to hospital, and 642 apartments were fumigated. The fees paid to medical men from Nov. 7th, 1879, to June 30th, 1882, amounted to £1787. The last six months—namely, from Jan. to June, 1882—£632 had been paid. One medical man received as much as £28 in the half year."

Now, I think the conclusions which most people would arrive at from the above facts are these:—That the amount of fumigation of infected houses and rooms done by the sanitary authority is small, being only about one in nine reported cases. That there are very many rooms, and these of the worst kind, that are not fumigated because of the practical difficulties in the way. That as only about one in twenty-five of the certificates sent in leads to any investigation or interference on the part of the sanitary authorities, very little check is put by them on the spread of disease. That the staff employed would be totally inadequate for the work devolving upon it, if that work was carried out in all the fulness which the outside public is led to believe it is, including, as that work now does, the removal of infectious cases; the fumigation of houses; the oversight of dairies; the examination of sewers, drains, and all reported sources of infection; the carrying of infected articles to the Blind Asylum, in addition to all the duties of the department which existed before the passing of this Act; that the removal of infected persons is hedged about with difficulties which the authorities do not care to grapple with, and that it is mainly, if not entirely, members of the pauper class or those immediately above them who are removed. This is no more than every town does without the Acts. Liverpool, without them, removes a proportionately much larger number every year to workhouse or hospital than Edinburgh does. In 1882 Liverpool, with a population of 560,377, removed 2502 cases to workhouse or hospital. In the same year Edinburgh, with a population of 232,440, removed only 539 cases. Lastly, the one part of the system which works vigorously is the certificate giving. Venturing to give a natural and common sense explanation of this, we are told by Dr. Littlejohn that this is an estimate of professional honour which is not complimentary. Yet there has been nothing derogatory to the highest standard of professional morality asserted. The Edinburgh medical men have confidence that the understanding come to with Dr. Littlejohn, of "no interference unless they desire it," will be honourably adhered to, and they on their part reciprocate the feeling, and certificates pour in.

In conclusion, I would say that any system of certificate giving, or to give it the name now in use, of compulsory notification, must, in my opinion, be so hedged about with provisos to make it acceptable to the public and the pro-

fession, that it practically becomes useless for the purpose of checking epidemic disease, whilst it entails a heavy expenditure on the ratepayers, and that the Edinburgh scheme of notification strikingly exemplifies the truth of this.

I am, Sir, your obedient servant,
Liverpool, July 7th, 1883. ROBERT HAMILTON.

"UNCERTIFIED DEATHS IN SCOTLAND."

To the Editor of THE LANCET.

SIR,—In the issue of THE LANCET for June 23rd there appears an article on the above subject, in which it is stated that "regarding England we do not err far in stating that the average of uncertified deaths is about 3·3 per cent. of the total." If this calculation is correct as regards English towns, the number of uncertified deaths in this rural district must be considered enormous. In my last annual report to the Hexham Rural Sanitary Authority, a copy of which I now forward to you, it is stated that 13·6 per cent. of total deaths were not certified. At pages 16 and 44 an analysis of all uncertified deaths is given, showing that 8·1 per cent. were not certified in any way; 4·0 per cent. of total deaths were certified by the coroner, having held inquests on them; and 1·3 per cent. were certified by the coroner without having held any inquests at all. It is unnecessary to add, that with the exception of those certified by the coroner after having held inquests—viz., 4·0 per cent.—the death returns professing to give the "cause of death" of the remainder are absolutely valueless. A suggestion is made in the same report, that "all uncertified deaths, whether an inquest has been held or not, should be immediately reported to the medical officer of health, to be investigated by him, instead of, as now, being reported to a non-medical coroner." Even in many of those cases on which inquests have been held no medical evidence has been given, so that these may be placed in the same category as others certified by the coroner without the assistance of an inquest. As an example of the value to be attached to such certificates I may quote a case which occurred in this district a short time ago. A death from typhoid fever having been reported in the usual weekly return I made particular inquiries regarding it. The case was that of a pupil teacher in a school in Allendale, but whose home was at Haydon-bridge, residing at the former place most of the week but returning home on Friday evenings. On Friday evening, May 25th, he walked from Allendale to Haydon-bridge, a distance of seven or eight miles, about 7 P.M. I have said, in answer to inquiries, that he was "very well." On Saturday morning he rose with a headache, and was sick, but walked about all day till half-past two, then went to bed feeling bilious and complaining of pain in his head; had his feet bathed in warm water, and had some brandy. His sister, on account of the pain in his head, remained with him till 1 A.M. on Sunday morning, when he appeared to be going to sleep; he was seen at 6 A.M. and was no worse; at half-past six he was dying. The medical attendant was sent for, but he was dead before his arrival. The above is a case regarding which the coroner (non-medical) did not see any necessity for an inquest, but *certified the death to the local registrar as "typhoid fever,"* which conclusion he arrived at from what he was pleased to call "credible information." From such cases as the above, and considering the great percentages of uncertified deaths which are reported, it is obvious that some very great changes must occur before the registration of causes of death can be of any value whatever.

I am, Sir, yours truly,

J. M'GRIGOR MACLAGAN, M.D.,
Medical Officer of Health, Hexham and Haltwhistle
Rural Sanitary Districts.

June 27th, 1883.

LONG HOURS AND INSUFFICIENT FOOD.

To the Editor of THE LANCET.

SIR,—The attention of the public has only lately been again drawn to the long hours during which railway officials are presumed to be able to work, and to the dangers to which this leads. Engine drivers and guards are, however, not the only people who daily have to perform far too many hours of incessant labour, and in London, were we to examine closely, I am sure we could find many who are being

slowly killed by overwork. I was asked a few days since by a patient of mine to see her sister, who had been compelled to leave her employers owing to severe debility. The history of the case was as follows:—A. B—, aged about eighteen, was in perfect health nine weeks since, when she took a situation as one of the numerous assistants in a well-known retail establishment at the West-end. Her hours of work were from eight in the morning until eight at night, standing all the time, with intervals of twenty minutes for breakfast, half an hour for dinner, a few minutes for tea. The meals were badly served; insufficient in quantity and not sufficiently varied, as the following *menu* will show:—Breakfast: Bread-and-butter (salt). Dinner: Hot meat and potatoes, alternating with cold meat and bread every other day; pudding twice a week, consisting of boiled rice. Tea: Bread-and-butter (salt). Supper: Bread-and-butter (salt). The food was so untempting that as a rule most of the assistants only remained in the room at dinner (?) about ten minutes, and the quantity was not sufficient. Considering this bill of fare, I did not wonder at my patient's weakness; and finding no disease sufficient to account for the symptoms, I prescribed a continued absence from her employer's premises and good food.

Fortunately, in this case there was a good home to fall back upon; but in too many instances girls have no place to go to, and dare not complain or leave their places, as they know that situations, even like these, are not too easily obtained. I find on inquiry that this kind of treatment is by no means peculiar, and that in many other establishments the domestic expenses are cut down as low as possible for economical reasons. Perhaps some day a coroner's inquest may throw more light upon these matters, but, in the meantime, I certainly think that all large institutions employing female labour ought to be, like factories, under Government inspection, and not left to the tender (?) mercies of a housekeeper, whose sole idea is to keep down the weekly bills.

I am, Sir, yours faithfully,
July, 1883. A. GEORGE BATEMAN, M.B.

"ACUTE RHEUMATISM AS A PREMONITORY SYMPTOM OF PHTHISIS."

To the Editor of THE LANCET.

SIR,—I fail to see anything remarkable in the cases of acute rheumatism and phthisis reported by Dr. Austin in THE LANCET of July 7th. Phthisis is a very common disease, and acute rheumatism is not rare, so that we need not be surprised at the two diseases occasionally co-existing in the same individual. The more marked symptoms of phthisis would probably pass into abeyance during the attack of rheumatism, and light up again with increased severity afterwards, when the patient is left weak and exhausted. The same sort of dormancy, but for a longer period, is seen in pregnancy, also followed by a rapid development of phthisis after delivery; but it is not asserted that pregnancy is a "premonitory symptom" of consumption. If, on the other hand, as Dr. Austin seems to suggest, the joint disease was tubercular, then it was not acute rheumatism at all.

I am, Sir, your obedient servant,
Harley-street, W., July 7th, 1883. JULIUS POLLOCK.

To the Editor of THE LANCET.

SIR,—Dr. Austin in THE LANCET of last week sketches the history of four cases of acute rheumatism as premonitory of phthisis. Without doubt, in most instances, acute rheumatism occurring in young subjects undermines the general health, so that if there be any hereditary tendency to consumption pulmonary mischief is apt to follow. Lately, I have had under treatment a lady, aged thirty-five years, who, about this time last year, had an acute attack of rheumatism, which from its duration of two months considerably reduced her strength. Most of the joints were affected; upon subsidence of pain and swelling, cough of an irritable kind set in, and in a short time the lungs began to manifest symptoms of tubercular disease, which quickly led on to vomica; throughout the illness the temperature remained somewhat high. At length diarrhoea set in, and the patient died of exhaustion. The father died many years since from pulmonary affection. I consider in this case the constitutional powers gave way under the prolonged