their beds. Those who have worked in hospitals well know that patients who are suffering from affections which prevent them from doing work, such as severe burns, fractures, inoperable malignant disease, &c., are, after a short stay in a hospital, sent on to one of the infirmaries; in fact, it is well known that the infirmaries are obliged to take in destitute cases which the hospital resident staff do not wish to keep; in other words, the hospitals are not large enough or sufficiently numerous to do the work which they should do; the hospitals, which are supported almost entirely by voluntary contributions, are quite unable to cope with the sick poor, and the infirmaries, supported out of the rates, have to come to their aid. Now the infirmaries have nearly all migrated from the centre to the outskirts of the metropolis. They have receiving-rooms and wards in the midst of the city and large buildings on the outskirts, and they convey their patients from the one to the other just as I have suggested the hospitals will soon have to convey their patients. Surely it is time to amalgamate hospitals and infirmaries. Let us still have our hospitals each keeping to its traditions but rebuilt on a much larger scale in the outskirts of London, and let each receive a certain proportion of the rates from the district of London which it serves. Will the public withhold voluntary contributions because the hospitals have migrated and are aided by the rates? I believe that the public will support them more freely than is the case now when it is realised that their scope has enlarged so greatly. As regards out-patients proper, it has been urged that hospitals have no right to treat those who are destitute and that these people should obtain Poor-law outdoor relief. Many of us know how very inadequate this system of relief is. How much better would it be if all these pauper cases were to receive the necessary medical and surgical treatment at our hospitals aided by the rates as here proposed?

But the matter must be looked at also from the point of view of medical education and it is here that one of the real difficulties in removing the hospitals seems to lie. In the first place, I think that it must be accepted that those who wish to receive a medical education must go to the places where the sick poor are, and not expect the poor to come to them from afar off. The same must be said of the physicians and surgeons who are attached to the hospitals and who have to teach the students. At the present time a student rarely enters the wards or out-patient department until he has passed his second examination—namely, the examination in anatomy and physiology of the university or examining board as the case may be. This being so, each hospital on the outskirts of the city would have a residential college attached to it and here the clerks, dressers, and resident staff would live. Then it would be necessary to have a resident physician and a resident surgeon who would be the two junior members of the staff or, at any rate, the two next to be elected on the honorary staff. The question of the attendance of the members of the honorary staff offers another difficulty. The out-patient staff would attend one day a week and see and demonstrate upon the cases of interest, the others being attended to by the resident officers. Then the in-patient physicians and surgeons would also each devote one afternoon a week to operating and to visiting and leave their cases very much in the hands of the senior resident physician and surgeon respectively. All this, of course, sounds impossible at the present day, but we must realise that with "tubes," light railways, and motor-cars the process of getting out of the city will be quite different from what it is now and we shall be able to get from the centre of London to its outskirts in one-fourth of the time which it is now necessary to expend. The two senior physicians and surgeons would, perhaps, be relieved from hospital work and would give clinical lectures and demonstrations in the receiving-rooms in the city only, and cases for them to lecture upon would be sent up in ambulances, horse or motor.

Perhaps the greatest difficulty of all in the realisation of such a scheme as above presented is the question of money. I would not for one moment suggest that all the hospitals should be under one controlling body or that they should all be managed in exactly the same manner. Each would still have its own committee or board and there should be that same system of rivalry as now exists in each one doing its utmost to excel. Without wholesome rivalry there can be no advance in medical and surgical art and practice. Nor would I suggest, as some have done, that the honorary staff should receive payment for their work. The work which

the visiting physicians and surgeons perform in hospitals could not be adequately paid for, and, of course, partial payment is out of the question. A most strict inquiry system would have to be adopted in each hospital so as to insure that none but patients unable to pay a private medical man were admitted. I only wish that such a system were generally adopted in all the existing general hospitals. A few of them have proved that it can be done, not perfectly perhaps, but nearly so. As our general hospitals are now situated there seems no possibility of preventing the absurdly large amount of double work which is being carried on by the Poor-law infirmaries and by the hospitals, but if the latter were once removed to the outskirts of London—a few wards being kept for casualties in the city—there might be at any rate some hope of combination in the future.

I am, Sirs, yours faithfully,

PEYTON T. B. BEALE, F.R.C.S. Eng.

March 29th, 1902.

SEA-SICKNESS.

To the Editors of THE LANCET.

SIRS,—I have read with interest your notice of the Calliano belt for sea-sickness in *THE LANCET* of Feb. 15th, p. 459, and I am reminded that there is comparatively little published about this distressing and common complaint. During 15 years I have had experience in all sorts and conditions of boats—huge Atlantic liners and small tramp steamers, 30-knot "catchers" and torpedo-boats, and yachts of all degrees, from ocean cruisers to racing machines. On all these designs sea-sickness, like "corroding care," steps aboard and refuses to be left behind.

I do not wish to disparage the Calliano belt—it may in some cases give relief; but I cannot believe in any such mechanical contrivance as being a cure for sea-sickness, the origin of which is a disturbance of the nervous system. Vomiting is by no means its worst symptom—indeed, those who vomit early and without much effort are usually the first to recover—but there are many cases of intense vertigo and giddiness and sometimes alarming syncope where sickness is quite subordinate. In these instances patients will explain that they feel as though the whole earth was sinking away from them and then experience the terrible feeling of falling through space. A Scotsman once put it vividly to me that he would "cling mother-naked to a whin-(gorse-) bush for support."

Many inventions and much money have been brought to bear on the prevention and cure of sea-sickness, but hitherto without any enduring benefit, and unless treatment is directed to the central nervous system I do not think that any is ever likely to accrue. I take it that it is the inability of this system to adapt itself to its surroundings which is the primary cause of the complaint. Vomiting follows from reflex action on the abdominal organs, causing an excessive flow of bile, intestinal, and gastric secretions. But vomiting is only a symptom; more important though less obtrusive symptoms in arriving at the origin of the complaint are coldness of the extremities from diminished peripheral circulation and the faintness and giddiness already referred to which point to an anæmic condition of the brain. Further proof of nervous origin may be found in the effect that strong emotions have on sea-sickness. In this respect intense fear is the emotion brought into play beyond all others. The imminent danger of shipwreck has a most extraordinary effect in arousing the torpid and apparently almost lifeless sufferer to a state of energy that no known medical treatment can compete with. News of great joy it has not until recently been possible to receive at sea, but with Marconi's wireless telegraphy the prostrate passenger with miles of tossing waves still separating him from dry land may now receive a message to inform him of sudden fame or fortune and straightway leave his berth and walk the quarter-deck. Hitherto it has only been my fortune or misfortune to see the results of fear, and this, though generally imaginary, I have frequently seen to arrest suddenly the course of sea-sickness. The writer once experienced this sensation in his own person when he was not as now, from long practice, immune from the nauseating effects of rough seas. After an attack of typhoid fever he was convalescing on a steam yacht in the Mediterranean when phlebitis supervened in the right leg, followed by a blocked femoral vein and possibly external iliac too. After keeping the yacht for a month in harbour he felt so acutely the disappointment of others on board that he

insisted, against his medical attendant's advice, in making a passage to another port. It should only have been about a 12 hours' run, but when about half way to the destination it came on to blow a gale—as it can in the Mediterranean at very short notice—and the little yacht pitched and rolled to such an extent that the unhappy writer was with difficulty kept in his berth. In such weather he had always been sea-sick, but now he fully realised the danger in every movement and strain of a clot being detached and the results thereof. He knew fear as he hopes never to know it again—helpless paralysing fear with every lurch of the yacht; *he was not sick.*

I suppose a belt of any sort is presumed to be beneficial on the theory that sea-sickness is caused by movement or displacement of the viscera, but whatever relief belts may give I don't think that their action on visceral movement has much to do with it. During what we all soon hope to call the late war I saw soldiers accustomed to violent gymnastic exercises, and rough riders whose viscera get a lot of shaking up, quite as sea-sick as anyone else; and a proprietor of a circus in South Africa who takes his company all over the world informed me that his acrobats suffered quite as much at sea as ordinary humanity.

Space will not permit my opening up the wide subject of treatment, but I must say a word about boats. Every man whose business or pleasure takes him continuously backwards and forwards across oceans and seas knows exactly what boats of the lines he travels by have the reputation of being good and comfortable sea-boats; that is, boats that have an easy motion *over* rather than *through* a heavy sea, thereby lessening the shock of impact so trying to the sea-sick—boats also which do not unduly roll with that terrible interval at the extreme angle which sailors express by saying "she feels as if she was never comin' back again." Details as to the behaviour of boats at sea are not to be obtained from the clerk in the company's office from whom the passenger books his berth, and the size of a boat is not by any means a guarantee of her comfort in a sea-way. As to yachts, in their behaviour at sea they vary enormously and therefore in their capabilities of producing sea-sickness. All get their reputation, but if even doubtful they are always described to the would-be purchaser as "the finest sea-boat of her tonnage afloat," and often such a high-sounding title as *Queen of the Ocean* (I hope I am not treading on anyone's toes—I have not Lloyd's latest list) is given when she might be more appropriately christened the *Emetic*.

Parkstone, Dorset.

I am, Sirs, yours faithfully,

HENRY GOODALE.

A QUESTION UNDER THE INFECTIOUS DISEASES NOTIFICATION ACT.

To the Editors of THE LANCET.

SIRS,—I received the inclosed letter from the medical officer of health of my district. I should be glad to know: 1. If a medical man must not notify according to *his (own) opinion*. 2. The fact of no bacillus being found—does this make the case certain, as the swab might be taken too late? 3. Can the district council refuse payment if the notification is sent in good faith?—I am, Sirs, yours faithfully,

Upper Pontnewydd, March 27th, 1902.

A. W. HAYLES.

[INCLOSURE.]

Cwmbran, R.S.O., Monmouthshire, March 25th, 1902.

DEAR SIR,—I received a notification signed by your assistant, Dr. Wilson, on March 14th of a case of diphtheria at Woodside-road, the child's name being Davies. I sent a swab taken from the child's throat to the Jenner Institute of Preventive Medicine for examination and the report says that there was no diphtheria bacillus found. The Llantarnam District Council direct me to write to you to say that under the circumstances you will not be entitled to charge the notification fee of 2s. 6d.

Yours truly,

W. E. C. MURPHY,
Medical Officer of Health.

* * 1. The medical practitioner must act upon the basis of his own judgment.¹ There is no other standard of action contemplated or recognised by the Notification Act. Moreover, the medical officer of health has to bear in mind that the general practitioner's opinion is the only thing which enables a bacteriological examination to be made. 2. The fact that no diphtheria bacillus was found on one occasion does

not, in our view, justify the extreme step which was taken in this case. The swab may have been imperfectly applied or there may have been other factors militating against a correct result. 3. We are not prepared to give a general reply to this query, but we are strongly of opinion that, assuming there to be no question of bad faith, no sanitary authority which properly comprehends its responsibilities should discourage notification in this fashion. It seems to us that the medical officer of health would have been well advised had he invited the coöperation of the notifying practitioner in securing another specimen for bacteriological examination. If the opinion of a medical practitioner is ruthlessly reduced to *nil* as the result of one negative bacteriological examination local sanitary administration will be at a rather low ebb.—ED. L.

CHLOROFORM ANÆSTHESIA DURING SLEEP.

To the Editors of THE LANCET.

SIRS,—In THE LANCET of March 29th, p. 911, you describe an article on Chloroform Anæsthesia during Sleep by Dr. N. Stone Scott of Cleveland, Ohio, in which is discussed the question as to whether such a thing is possible without the patient being awakened. I have on two occasions successfully administered chloroform to patients who were asleep, in one case to a youth aged 16 years, and in the other to a child. In the former case the patient was suffering from paraphimosis. Chloroform was administered slowly at the commencement. No struggling was experienced and circumcision was performed. This took place about 3 P.M. and the patient did not wake until next morning when he was greatly surprised to find that the operation was over. In the case of the child the administration of chloroform was equally successful. Complete anæsthesia was rapidly produced and an operation was performed.

I have had no failures and my experience is limited to these two cases, but "the admitted rarity of such an occurrence" is my reason for bringing them to notice.

I am, Sirs, yours faithfully,

Wolverhampton, April 1st, 1902.

W. R. SOMERSET.

PROFESSIONAL LONGEVITY.

To the Editors of THE LANCET.

SIRS,—*Apropos* of the quotation from the *Star* in THE LANCET of March 22nd (p. 856), I think it may interest your readers to know that Mr. Nathaniel Davidson, to whom I was apprenticed in 1852, will attain the patriarchal age of 97 years on Saturday, March 29th. He became a Licentiate of the Royal College of Surgeons of Edinburgh in 1828 and a Licentiate of the Society of Apothecaries in 1829, and is probably the senior survivor of both institutions. Mr. Davidson, after practising in London for 30 years, became a Licentiate of the Royal College of Physicians in 1861. He is, I am happy to say, in very good health.

I am, Sirs, yours faithfully,

CHRISTOPHER HEATH.

Cavendish-square, W., March 25th, 1902.

THE BATTLE OF THE CLUBS.

To the Editors of THE LANCET.

SIRS,—Ever since I have been in practice—13 years—I have acted as surgeon to the Victory Lodge of Druids, the payment being 4s. per member per annum. In July I wrote asking that my salary should be increased to 6s. on account of the amount of work to be done and owing to the fact that the position of the members warranted my asking for an increase. The secretary on Sept. 17th wrote stating that the lodge could not accede to my request. The same day I gave notice to terminate my appointment on Dec. 17th. Several neighbouring practitioners were nominated as surgeons for the vacancy but not being satisfied with the secretary's statement that I resigned owing to my refusal to attend members at a distance they referred to me, and on hearing that the

¹ The words of the certificate are, "I hereby certify and declare that, in my opinion," &c.