work here, for the town is full of wounded, and I am sure the authorities will avail of their services. I shall see on their arrival to their immediate employment in the most useful manner. I hope Mr. Kennett has sent with them the charpie I asked for; we need it and oiled silk very much. We also need funds, for, though we have some on hand, if we are cut off, it will be difficult to get more, and what we have will not last long."

THE FULHAM HOSPITAL.

WE have received and read with interest the Report by T. C. Fox, M.B., the Medical Superintendent of the Fulham Small-pox Hospital, detailing the work carried on by it, in connexion with the recent epidemic of small-pox. This hospital and the one at Deptford were hastily built by the Metropolitan Asylums Board in view of the rapid extension of the small-pox epidemic at the latter end of 1876, and consequent great pressure on the space and overcrowding of the other hospitals of the Board. The Fulham Hospital stands on about seven acres of ground, and consists of isolated administrative and residential, kitchen and stores, and laundry and engine-house blocks, flanked by ten one-storied pavilions, five on either side, planned to accommodate 300 patients. The whole is connected by open corridors, and a mortuary stands in one corner of the grounds, which are being suitably laid out. The Deptford Hospital is constructed on a similar plan, but has thirteen pavilions, to hold 390 beds. The pavilions in both buildings are designed to afford 2000 cubic feet to each bed, and are constructed of brick piers, with intervening lengths composed of galvanised iron without, wooden panels within, and felt between. Water-closets, sculleries, and bath-rooms are attached. The wards are ventilated after a modification of Mr. Tobin's principle, but although presenting many excellences, we ourselves hardly think the requirements of perfect ward ventilation are met—viz., a perfect supply of fresh air without draughts. Lastly, the hospital is excellently situated both as regards soil and isolation; but the builders, apparently undeterred by the nature of the hospital, are rapidly approaching the gates, as at Stockwell.

Mr. Fox reports that he admitted 326 cases, of which 19 per cent. were unvaccinated, and 16 per cent. had four or more marks of some sort. The total mortality in all classes was 14·72 per cent.—if we mistake not, considerably below the average in this epidemic. This comparatively low rate is explicable on several grounds detailed in the report, but principally by the advantage derived from the absence of overcrowding, and the fine airy wards. The mortality amongst the unvaccinated was 43·54 per cent., amongst the vaccinated 7·6 per cent.; but it is to be remembered that amongst these so-called vaccinated people were many who showed the merest traces of vaccination. No death occurred amongst those having four or more cicatrices, and, indeed, only one death (in a brewer's man from superadded pleurisy) amongst those possessing two or more marks. Tables are appended to the body of the report showing the numbers of children who escape vaccination under the present Acts, and the reason why they escape. We find, also, facts as to the relative frequency of admission and fatality at different ages in the vaccinated and unvaccinated, which also show that the protection afforded by vaccination is in direct proportion to the number of cicatrices, especially when of good quality. The gradual dying out of the protective influence of vaccination with increasing years is likewise illustrated, and the necessity of revaccination at puberty insisted on. An able report is concluded by remarks urging upon the attention of the managers the necessity of further measures before small-pox can be effectively dealt with, such as isolation, accommodation for the non-pauper classes, effectual co-operation on the part of the parishes, compulsory registration of infectious disease, additional powers for compulsory removal of small-pox cases, and vaccination and revaccination by medical men in houses, courts, and districts on the outbreak of the disease. The hospital and its officials have done excellent public service.

THE COVENTRY SEWAGE WORKS.

THE provisions of the Rivers Pollution Prevention Act, which has lately come into operation, have assisted to develop what is called the "Coventry process," under the auspices of the Rivers Purification Association. These works afford a practical demonstration of the fact that town sewage can be, without difficulty and without heavy expense, purified by chemical treatment, so carried on as not to create a nuisance. The process consists in applying a cheap salt of alumina (derived from treating the shale of the coal and ironstone formations with sulphuric acid) combined with lime.

The Association above referred to in May last entered into a contract with the corporation of Coventry to purify the sewage of that city by this process. The river Sherbourne, into which all the sewage flows, is an exceedingly small stream, and in summer would be nearly dry if no water entered it from the sewage works. It is therefore necessary to purify the water to a much higher standard than that required in the case of large rivers. This high standard appears to have been successfully maintained since the works were in operation, and the contract with the corporation makes the Association responsible for any breach of the laws as to the quality of the effluent water.

The sludge produced at the works is stated by Dr. Voelcker to be theoretically worth 16s. 9½d. per ton, but has at present only a market value of 5s. 6d. to 8s. 4d. per ton, because its value is not as yet fully recognised by the farmers of the district. Coventry has a population of 40,000 persons, a water-supply of about 25 gallons per head per day, and 5000 water-closets; and the refuse liquids from a large number of silk-dyeing works, breweries, oil and varnish works, &c., find their way into the sewers. The daily volume of sewage and dry matter amounts to 2,000,000 gallons, or 50 gallons per head per day, which includes, however, the subsoil water that leaks into the sewers. The effluent water, after filtration through land, contains only 0·6 of albuminoid ammonia in a million parts. The cost for chemicals is, comparatively speaking, very small, and 2000 tons of partially dried sludge have been disposed of since the works came into operation. The plan appears to deserve attention at the hands of those interested in the difficult question of sewage disposal.

Correspondence.

"Audi alteram partem."

THE MEDICAL ASPECTS OF TOTAL ABSTINENCE.

To the Editor of THE LANCET.

SIR,—Dr. Braxton Hicks, in his interesting letter on the use of alcohol, in THE LANCET of Nov. 17th, alludes to the position of the systematic water-drinker at convivial meetings as one of possible difficulty. In this sentiment I entirely agree, and I much doubt whether the practice, suggested by a recent writer in a well-known public journal, of having cups of tea, milk, or barley-water handed round by the butler at one of the dinner-parties of our day would promote much cordial and sympathetic good-feeling among the guests. Apart, however, from this view of the matter, I am inclined to think, from observation and experience, that the sensations of one who sits down to a grand dinner in the evening, and takes thereat a few glasses of some one sound wine, will be more agreeable and comforting an hour or two after the repast than those of him who is content to wash down all the mixed and savoury food with cold water or tea. There is an ancient saying that good eating requires good drinking, and the physiological *rationale* of this is well given by that accomplished physiologist and physician, the late Dr. Brinton, at p. 337 of his book on Diseases of the Stomach. The diluted alcohol, taken with

a large and varied meal, "checks alike digestion and decomposition, and enables the canal to void its contents after a very scanty absorption of their nutritious principles into the bloodvessels." I have heard people say that a small glass of brandy taken at a public dinner is a sure preventive of evil consequences, and Brinton's idea gives the explanation of the principle on which this desirable result is attained.

Let the abstainer consider that temperance in drinking should go with temperance in eating, and then the chances are in his favour in the end. For my own part I have not the least belief in any strength-giving power possessed by alcohol. If a man has a good appetite and digestion without taking alcohol, he will do well to abstain from it; on the other hand, if a glass of wine promotes the desire for food and the power of digesting, then it will be well to take it.

Alcohol in the middle of the day is best avoided, and sherry in the forenoon is little better than a slow and insidious poison.

Lately I have had a man in the West London Hospital with rather severe limited pneumonia—a hungry man, always ready for food, and by occupation a ground man, or excavator. The convalescence of this patient went on so much more rapidly than I had expected that I felt sure he must be of temperate habits; and, on inquiry, I found that for ten months he had been an abstainer, as he found he got through his laborious work better without beer than with it.

I am, Sir, yours &c.,

JOHN C. THOROWGOOD, M.D.

Welbeck-street, W., November, 1877.

To the Editor of THE LANCET.

SIR,—May I crave space in your valuable journal to say a few words on the subject of the action of alcohol.

I believe it has been satisfactorily proved that the actual work done by muscular tissue is not at the expense of the tissue itself, but that force for the most part is the result of chemical change wrought through the medium of the living tissues upon the materials supplied by the blood.

Hosts of careful experiments have proved that the *term of life* of a muscle cell or fibril is not much influenced by its degree of activity, any more than man's life, as a whole, is curtailed or increased by active or sedentary habits, provided these are not excessive in degree and so excite disease; indeed, the balance of evidence (as far as longevity is concerned) is in favour of healthy (i.e., considerable) bodily and mental activity.

Now, I can easily believe that many persons may have, lying in store, a large quantity of force-generating material, which, however, the cells are unable to make the best use of, owing, perhaps, to a feeble heart or to imperfect aeration; and, if I understand the action of a dietetic dose of alcohol aright, it is to strengthen the beat of the heart and bring the flow of blood in the capillaries up to perfection (and no further), and thus to lay the *maximum* amount of force-producing store at the service of the living tissues, and thereby enable them to do their *maximum* of healthy work.

Thus, if alcohol serves to place more of this latent power at the service of the engines of the body, surely it may do much good and ward off much evil by preventing the products of imperfect chemical change from accumulating in the blood and thus setting up disease.

I am, Sir, yours truly,

Brighton, Nov. 27, 1877.

J. M. E. SCATLIFF, M.D.

To the Editor of THE LANCET.

SIR,—Those of your readers who, like the writer, are sceptical regarding the dietetic merits of alcohol, must have been interested by the clear and candid letter from Mr. R. B. Carter in your issue for October 27th. But there is one item of information that I am specially wishful to obtain. Did Mr. Carter on the several occasions on which he gave up the use of alcohol take a little more food than he was wont to take, or any change of food, under the impression that he required something to make up for the want of alcohol? This question has suggested itself because all the symptoms of which Mr. Carter makes mention are such

as I should expect to result from taking a little too much food in the circumstances. Were a patient who had been in the way of taking a little alcohol regularly to tell me that he intended to try to do without it, I should say, "You must for a time take more rest and less food, otherwise you will most likely suffer. The organic functions will be less active for the time when stimulation is no longer employed. You will not be able to make good use of the same amount of food; you may digest as much, but it will not be all turned to good account in the way of generating force or building up structure. The system will consequently become overloaded; the blood will become impure, and you may have foul tongue, loaded urine, and drowsiness after dinner (the symptoms from which Mr. Carter suffered). You must, therefore, for two or three weeks, take less food and allow yourself more rest." I might add: "All will come right in a short time after you have got made up for past overdraw, and you may expect then to find that you are better without the alcohol than with it."

I remain, Sir, yours, &c.,

Cluny-hill, Forres, N.B., November, 1877.

A. MUNRO.

THE GOLDEN-SQUARE HOSPITAL.

To the Editor of THE LANCET.

SIR,—I protest emphatically against your statement that I have *elected myself* "the champion of this hospital and its administration." No words could more completely misrepresent my position. I have never been a member of the Committee or taken any part in the administration, over which I have no control, and for the actions of which I am no more responsible than you yourself. My duties and responsibilities alike begin and end with the treatment of my own patients. As already stated, my letter printed in your issue of the 10th inst. was elicited by your own challenge to the members of the staff to break silence. That letter brought about your own admission that you had for three months been in possession of their resolution, and thus that you alone were responsible for their silence after August 4th. Anyone who doubts this has only to refer to your numbers for the 10th and 17th inst.

Having thus disclaimed the honour you would thrust upon me, I pass to the other points raised in your remarks this week. And first as to the Committee of Inquiry and its report. In my first letter a doubt was expressed as to the existence of any such report. Since then I have read in your columns that the report in question was read at the meeting of the Hospital Sunday Fund Committee. From this I conclude that the document cannot concern the staff, since they have not had any communication from its authors. If it reflected on them, surely, in common honesty, they should have seen it before it was circulated. If, however, it does not concern them, why should you call upon them to answer a document they have never seen? If it is of such interest to the profession, why do you not print it? This would be a relief to the staff, as they would then see whether it concerns them or not. Individually, I should be glad to afford you any explanation of anything relating to my own clinic, for which I alone am responsible, and to which medical visitors are always welcome. On the other hand, if that report only concerns the Committee of Management, let them answer it. If, as you seem to think, it condemns them, they have of course received a copy, according to the invariable practice in such cases. It seems strange for THE LANCET to hold a physician to an institution responsible for the acts of its governing body. Are the staff of St. Bartholomew's or St. Thomas's Hospital responsible for the acts of the treasurer? Is a parish doctor responsible for the board of guardians or the relieving officer?

Your remaining remarks I reply to *seriatim*.

First, you say "doubts were entertained regarding the *bona fides* of an inquiry which the staff alleged they had instituted." By whom were these doubts entertained? I did not know that you, or any competent critic, had expressed such doubts. Surely THE LANCET will not be the first thus indiscriminately to slander a body of professional men. You say the staff "attempt to dispel these doubts by holding a second meeting and passing a fresh resolution."