institute. It may be that the authorities are committed to this site; if so it will be well to realise the disadvantages connected with it in order that they may be, as far as possible, counteracted. I am only able to offer an expert opinion as a teacher of anatomy but from that point of view I feel that the distance of the proposed institute from the clinical centres will be a serious handicap. It is only lately that I have realised how largely the dissecting room of a hospital is used by students before their final examinations in surgery and how usual (and often necessary) it is for candidates preparing for the Primary Fellowship to combine a certain amount of clinical work with that preparation. Then it is undoubtedly an advantage to all concerned that the whole of the teaching should not be in the hands of professional anatomists, that some of the demonstrators should be young physicians and surgeons who can give a certain amount of their time to the dissecting room. Again, the nearness of the anatomical department to a post-mortem room is an advantage which is only fully appreciated when anatomy has to be taught in an institution where no post-mortem room is.

Those of us who have many committees to attend at South Kensington know how much time is wasted in the journey there and back from the centre of London and I feel sure that the proposed institute there will be seriously handicapped in competing with others more favourably placed as well as with those hospitals which elect to keep their anatomical and physiological departments as at present. If the University could extend its agreement with the Royal Colleges and use the Embankment premises for teaching as well as for its examinations, it would, from the point of view of anatomy, be much more convenient. Failing this, is it too much to hope that some influential body will come to the help of London medical education and grant a more central site? If the new institute is so remote that the schools cannot concentrate there conveniently the result will be that yet another centre will enter into competition with those already existing (and more favourably placed) and it will need all its proposed endowment in order to survive.

I am, Sirs, yours faithfully,

St. Thomas's Hospital, March 28th, 1905.

F. G. PARSONS.

TYPHOID FEVER IN LINCOLN.

To the Editors of THE LANCET.

SIRS,—In the various papers recently written on attacks of typhoid fever past and present in Lincoln, I have not seen any account of the severe outbreak of typhoid fever that occurred in 1857. In that year I called public attention in the local papers to the sanitary state of Lincoln—there was no main drainage, the sewage ran into cesspools which soaked into the surrounding soil, poisoned the water of the pumps, and caused the most disagreeable smells all over the town. According to the Medical Directory of 1856 the population of Lincoln was 17,536, but the number of cases and the mortality then were proportionately as great as in the present epidemic of typhoid fever of 1904–05. The main drainage was accomplished about 1882; it had an immediate beneficial effect on the health of the inhabitants of the city and the benefit would have been much greater if provision had been made for flushing the sewers. In rainless warm weather, especially if fogs prevail, the sewers become very offensive and the effluvia that escape from the manholes cannot fail to have injurious effects on the inhabitants of the houses situated close by. I think it was an Irish judge who first drew attention to the danger of manholes. He noticed that the people who lived in houses contiguous to a certain manhole in the neighbourhood of his residence were nearly always ill or ailing.

The nose generally gives the warning note of danger, but the mouth is the great open door which admits free trade in all kinds of seeds of epidemics, not always the only one, for sometimes they gain admittance through the back door. I have a sad case of this kind imprinted on my mind. An uncle of a lady who kept a boarding school for young ladies came to pay a visit of a few days to his niece. He was recovering from typhoid fever and in the night was attacked with diarrhoea and the excretions were thrown into the water-closet that was used by the young ladies. In a short time typhoid fever of a most virulent character broke out in the school and five or six of the girls died.

I attributed the outbreak of fever in 1857 to emanations from foul sources, overcrowding of small dwellings, and many other

causes. I caught the fever myself and believed it to be the result of a defective water-closet. The Lincoln water did not seem to have been much blamed in the production of the disease at that time, nevertheless I drew attention in one of my letters to the danger of drinking water into which sewage ran and gave as examples that Dr. J. Barry of Cork stated that such of the inhabitants of that city who drink the water of the river Lee, which receives the contents of the sewers, are subject to a most fatal dysentery and fever and that one out of every three affected dies from it and also that the water of the river Seine at Paris often produces fever and dysentery and as a consequence of this suppurative inflammation of the liver. I may mention that the Lincoln water-supply was formerly in the hands of a company. The company took the water that was close at hand, that is, from the Witham and from pools formed by water that ran off the fields. The two made an unhappy "blend" which has not yet been rectified. When the Romans occupied Lincoln doubtless the Witham was here and so were the pools of water but they very wisely did not take their drinking and cooking water from them but went three miles out of the town for it to the springs at Nettleham and conveyed the water to Lindum Colonia through well-made fayence pipes which were laid in beds of strong cement. The great desideratum with Lincoln now is pure water. The corporation is boring for it and it is to be hoped it may get it but I am afraid that in the end it will have to go for good water to the Wolds. In the meantime for drinking water we have to live on the charity of the benevolent of neighbouring towns.—I am, Sirs, yours faithfully,

WILLIAM O'NEILL, M.D. Aberd., M.R.C.P. Lond., &c.

Lincoln, March 14th, 1905.

SCURVY RICKETS.

To the Editors of THE LANCET.

SIRS,—The milk-supply of metropolitan public institutions is rarely beyond reproach. Managing boards usually accept the lowest tender and unless there is some glaring deficiency of cream or some unusually apparent staleness the difficulty of rejecting an unsatisfactory delivery is very great. Practically all milk is railway borne and consequently is much contaminated by dust and other filth. As delivered there are always a perceptible scum of light dust on the surface and a variable layer of coarser particles of dirt at the bottom of the churn. In such circumstances sterilisation of the milk before issuing it to the children is imperative. Some time ago, owing to the occurrence of some slight cases of scurvy rickets, I suspended the sterilisation by heat and tried the effect of formic aldehyde in varying proportions. I observed that some infants could tolerate the formic aldehyde for a time, even to the extent of ten parts per 100,000, whilst others showed undigested curds in their stools even when so low a proportion as one in 100,000 was used. This evidence of increased difficulty of digestion of the curd necessitated a return to the heat sterilisation, with the addition of the juice of an orange or of a portion of a banana daily, and if this addition be regularly given I believe scurvy rickets will not arise. All the cases I have met with have occurred in children who have been fed exclusively on boiled milk.

The first symptom noticed is the evident pain which movement causes the child; examination shows the existence of brawny swelling of the thighs, upper arms, shins, and forearms, these parts being affected in the order above given. Occasionally hæmorrhages occur in other places. I have seen a case in which the first noticed symptom was a pronounced black eye accompanied by considerable proptosis and external squint. A subsequent necropsy revealed the presence of a large hæmorrhage under the periosteum of the orbital plate of the frontal bone. Complete separation of the epiphyses from the shafts of the long bones is of frequent occurrence and post mortem the periosteum is found to be separated from the shaft of the bone by a blood clot varying in extent and thickness. The immediate substitution of an unboiled milk may save the child. I remember a little girl who had the lower epiphysis of both humeri separated and yet survived. Still, the mortality is very heavy. The point to which I desire to draw special attention is the possibility, and even likelihood, that manifestations of this disease may be attributed to violence. The appearances are very similar. The swelling, the possible ecchymosis, the signs of the broken bone, would certainly suggest the application of undue force to the lay mind and might even deceive the medical attendant, especially if accompanied by a tale of ill-treatment. In

wo of my cases the correct diagnosis of the condition alone prevented a charge of cruelty being brought against perfectly innocent persons, and in these days when members of public bodies apparently possess unlimited and unpunishable powers of irresponsible criticism and accusation, and when societies base their claims for support upon the number of convictions obtained by them, it behoves medical men to bear the symptoms of scurvy rickets well in mind when called upon to examine cases of alleged injury to young children.

I am, Sirs, yours faithfully,

F. S. TOOGOOD, M.D. Lond.,

April 3rd, 1905. Medical Superintendent to Lewisham Infirmary.

PRESSURE STASIS.

To the Editors of THE LANCET.

SIRS,—The interesting case of extreme compression narrated in THE LANCET by Dr. R. Lane Joynt reminds me of a similar case which I treated a few years ago. A party of 30 or 40 excursionists were proceeding in a four-horse break from Manchester to Chester to see the "Chester Cup" run for. A wheel came off, the break over-turned, and everybody toppled upon somebody else or upon the ground. Two women came off especially badly. They were taken into lodgings in Chester (the accident had occurred three or four miles away) and I saw them as soon as they arrived. The one, rather stout, 48 years of age, had a comminuted fracture of the middle of the right humerus and a fracture of the left clavicle; but what struck me most was the extraordinary appearance of her eyes, the whites were bright red, the whole of the conjunctivæ of both eyes being suffused with blood. Her face and forehead, ears, neck, and part of her chest were bright red. There was also a small occipital scalp wound and a little blood had been squeezed out of the right ear. Her friend had a broken leg and some bruises. The subsequent progress of the two patients was (happily) uneventful. The ecchymoses, bruises, &c., passed through the usual colour changes, the fractures united, and the patients were able to go home in a fortnight with their fractures in "plaster." They came to see me at intervals and completely recovered.

I am, Sirs, yours faithfully,

Chester, April 2nd, 1905.

HENRY W. KING.

THE TREATMENT OF EMPYEMA.

To the Editors of THE LANCET.

SIRS,—Daily irrigation as a method of treatment of empyema is an anachronism. I should not have thought that anyone employed it at the present day. Certainly I do not, as Mr. Godlee assumes. The pleura may be washed out at the time of operation with advantage if the pus be foetid or too thick and curdy to be easily evacuated; but if the pleural cavity be once thoroughly cleansed subsequent washing out is rarely required. The only object I had in my paper in referring to washing out at all was to try to dissipate the fear which still appears to haunt the minds of some operators that it involves great risk of fatal collapse. For this purpose it was necessary to speak of my own experience, which happened to be considerable on that point, for when a student at St. Bartholomew's Hospital and subsequently when resident at the Chest Hospital, Victoria-park, frequent washing out was a method of treatment of empyema much in vogue with some of the older physicians. I thus had an opportunity of washing the pleura out and of seeing it done a great many times, probably, as I said, some hundreds of times, but not, as Mr. Godlee makes me say, in some hundreds of cases. I never saw any bad symptoms produced and therefore I consider the risk infinitesimal and one that may be practically disregarded.

To excision of rib my objection is not so much that it adds something to the operation as that it weakens the framework of the chest, especially if a portion of more than one rib be removed. Drainage can often be perfectly provided for without it and therefore I do not consider excision necessary as a routine practice. I quite agree with Mr. Godlee that the drainage-tubes used are often too long, but even a short tube will generally require more shortening before it can be finally removed. As regards the seat of incision which I recommended at the posterior axillary border on the transverse level of the nipple, if the average position of a nipple be taken as the fourth rib or fourth space the incision would be in the seventh or if a little farther forward in the sixth

space, but by no possibility in the fourth, as Mr. Godlee says it might.

The use of the probe in exploring the pleural cavity enables us to ascertain the size, the limits, and the relations of the cavity. In the early days after the operation, if the case is doing well, it is not necessary though it gives interesting information. But when an empyema hangs fire because either the drainage is imperfect or the cavity for some other reason does not close, examination with a probe is the only means at our disposal of ascertaining the exact conditions of things within the thorax and often enables the defect to be remedied without recourse to further operative measures. As careful examination with a probe can do no harm I cannot sympathise with Mr. Godlee's objection to it. I do not think, after all, that Mr. Godlee and I differ seriously in our views of the treatment of empyema and certainly not so gravely as he implies.

I am, Sirs, yours faithfully,

Wimpole-street, W., April 3rd, 1905.

SAMUEL WEST.

LEGISLATION FOR FEMALE CLERKS.

To the Editors of THE LANCET.

SIRS,—Will you kindly grant me a short space in your columns to bring again before the notice of the profession the urgent need for legislating for the protection of the health of the large and increasing number of female clerks employed in London and other centres. The Factory Acts safeguard the interests of women engaged in workshops, but there is absolutely no control over the employers of women engaged in clerical work. Three cases have lately come under my care which I would like to call attention to, as they illustrate the disabilities under which this class of workers suffer. A lady recently consulted me and during the interview she told me that she was engaged as a typist to a well-known solicitor. Ten women are employed by the firm and there was no lavatory accommodation whatever for the women. When they wanted to relieve themselves they went out to a railway station near. I suggested that I should write to her employer on the subject, which was agreed to. I received a very polite note from the gentleman stating that he had not given the subject a thought but promised that the omission would be rectified immediately. In another case a young lady was suffering with a foul ulcerated throat. She told me that she was employed in a newspaper office with two other girls. They worked in a room at the end of a passage with no outside window. Just outside the door, which was constantly being opened and shut, was the men's lavatory, which seems to have been always in a most filthy state. The third case is that of a young woman engaged in a similar occupation whose working hours lasted from 9.30 to 8.30 usually but at certain periods of the year, in all amounting to two months, they were kept until 11 P.M.

If three such cases occur in the experience of one practitioner in a short time, what must be the aggregate amount of suffering of a preventable nature the thousands of women must have to endure who go up to the City every day. I could quote other instances of a similar kind but I consider the above sufficient to call attention to three obvious defects.—I am, Sirs, yours faithfully,

T. E. WHITE, M.D. Durh., D.P.H.

Catford, S.E., April 3rd, 1905.

SHOCK AND COLLAPSE.

To the Editors of THE LANCET.

SIRS,—Mr. C. Powell White in his letter in THE LANCET of April 1st, p. 887, draws attention to my statement that "the blood pressure is maintained within a few degrees of the normal range even under extreme variations in outside pressure" and points out that this is incompatible with the treatment of patients suffering from shock by compressed air. The statement referred to is, of course, only meant to apply to a healthy individual whose vaso-motor system is uninjured. Mr. White has not appreciated the distinction which I drew between the normal physiological condition of the circulation in health and the morbid physiological condition which exists in shock. Directly the vaso-motor system has broken down and become incompetent, as is the case in shock, the statement no longer holds good and the blood pressure tends to follow any variations in outside pressure.

When a patient is suffering from shock increasing the atmospheric pressure will raise the blood pressure. The