best comment upon this is that in America, to which you make reference, glucose is an everyday article on the breakfast-table and tea-table. Nor is it true that the reason for using glucose is its cheapness. The reason for using glucose is to prevent granulation and I am rather curious whether you would prefer the use of cream of tartar or some similar agent. I may also point out that the great cause of cheap jams is that with the exception of the fruit they are manufactured from perfectly wholesome by-products of the confectionery trade. It is not too much to say that the price of jam bears no relation to the market price of sugar. The manufacturing confectioner must choose between obtaining a market for these products and throwing them away.

I should not have trespassed on your space, but bearing in mind that wholesome jam can at present be bought at from 2d. per pound upwards it is important that the poor should not be deprived of a nutritious food, either by misleading, though well-intentioned, advice, or by Acts of Parliament passed under false impressions.

I am, Sirs, yours faithfully,

MORRIS STREIMER.

March 6th, 1906.

* * Mr. Streimer mistakes our contentions *in toto*. We never hinted that "raspberry jam" adulterated with apple or gooseberry is unwholesome. But it should not be called raspberry jam, at any rate without explanation. If Mr. Streimer were to ask for two ounces of tea and he was supplied with one ounce of tea and one ounce of coffee, would he be satisfied? As regards beet sugar, we said nothing about it. With respect to glucose, we know perfectly well that glucose will not crystallise and that this is the reason put forward for its use. But the fact remains that the price of cane sugar is 25s. per cwt. and that of glucose is about 10s. If glucose were the crystallisable substance and cane sugar the non-crystallisable would jam manufacturers use the latter? We have no objection upon sanitary grounds to "raspberry" jam being made of apples or gooseberries or beetroot provided that the fact is announced on the label. In the same way jams made with glucose should be so labelled. Mr. Streimer should have no objection to this course. He says that substitute jams are wholesome and that glucose is better than cane sugar as it does not crystallise. Therefore, let him tell his customers plainly what they are buying. With regard to the statement that the price of jam bears no relation to the price of sugar we remember that when in 1904 the price of sugar went up the jam manufacturers said precisely the opposite.—ED. L.

INFANT FEEDING AND EPIDEMIC DIARRHOEA.

To the Editors of THE LANCET.

SIRS,—I should deem it a very great favour if you would afford me space in your journal to refer very briefly to the leading article in your issue of Feb. 24th, p. 533, in which you discuss a paper written by me for the *Journal of Hygiene* on Epidemic Diarrhoea. In this article you very justly point out that the numbers I dealt with—namely, 139 deaths in infants from diarrhoea—are not sufficient to give a trustworthy indication of the relationship between the diets on which infants are reared and their susceptibility to fatal diarrhoea. I supported my inferences by quoting Dr. A. Newsholme's work on the same subject. My numbers were small because from the information available I only selected cases where there was no suggestion of uncertainty as to the diet on which the infants were being fed immediately prior to their attack of diarrhoea. Doubtful and ambiguous cases I discarded.

In the report on the health of Finsbury for 1905 Dr. G. Newman has tabulated the diets of 371 infants dying from diarrhoea in the years 1902-05. Of these, 303 were fed either on condensed milk or cow's milk in the proportion of 42 to 58. My figures based on smaller numbers and arrived at by my own method in the years 1903-04 give almost identical results for the same borough. Out of 107 artificially fed children dying from diarrhoea I found that 41 per cent. were fed on condensed milk and 59 per cent. on cow's milk. Dr. Newsholme of Brighton has investigated the cases of 71 infants fed on cow's milk or condensed milk and dying from

diarrhoea. Of these he found that 45 per cent. were fed on condensed milk and 55 per cent. on cow's milk.

Both in Finsbury and Brighton the diets of children surviving for the first year of life have been recorded, the Finsbury figures being based on 554 children and the Brighton figures on 608. Of these some 70 per cent. were breast-fed. The following are the results put briefly and as percentages:—

FINSBURY.		Condensed milk.	Cow's milk.
Deaths (107) from diarrhoea, 1903-04	...	41	59 = 100
Deaths (303) " 1902-05	...	42	58 = 100
Survivors (161)...	...	35	65 = 100
BRIGHTON.			
Deaths (71) from diarrhoea...	...	45	55 = 100
Survivors (151) ...	...	27	73 = 100

If the percentages for "survivors" are compared with the percentages for "deaths" immediately above them in the vertical columns it will be seen that a strong case against condensed milk has been made out in both Finsbury and Brighton by entirely independent observers. Similar results have been obtained by the medical officer of health of Croydon. May I express the opinion that there is more in this than coincidence and that when the Finsbury figures amount to thousands, as ultimately they will, it will be found to be a fact, and not a guess from insufficient data, that infants fed on condensed milk are more liable to fatal diarrhoea than infants fed on cow's milk.

I am, Sirs, yours faithfully,

J. E. SANDILANDS.

Launceston-place, Kensington, W., March 6th, 1906.

LOW-TENSION HIGH-FREQUENCY CURRENTS AND ULTRA-VIOLET RAYS.

To the Editors of THE LANCET.

SIRS,—I regret that in my paper on a New Method for the Production of Ultra-violet and Other Rays, published in THE LANCET of March 3rd, an unfortunate, but obvious, error occurs due to a mistake in copying from my original draft. In the second paragraph on p. 588 there is this sentence: "These experiments induced me to have constructed a third machine which would deliver ten ampères at 80 volts with a periodicity of 360,000,000 per second." "Second" should read "minute," as the context clearly indicates.

With respect to your sympathetic references to my article under the head of "Annotations," I note your comment that I do not state how I arrive at my measurements in the claim I put forward of being able to pass from six to seven ampères through the body without any painful or disagreeable sensation. My reply is that what are known as "dead-beat" meters were used and that these had previously been subjected to the most careful and stringent tests by well-known and reliable London makers. Then, too, by short-circuiting the apparatus, with the meter in circuit, corresponding, and at the same time confirmatory, measurements were obtained. I need hardly add that I shall be happy to afford every facility for an independent test being made of the machine and the new ray tube.

I am, Sirs, yours faithfully,

Cardiff, March 6th, 1906.

J. CUNNINGHAM BOWIE.

THE EMPLOYMENT OF CHLORIDE OF ETHYL AS A GENERAL ANÆSTHETIC.

To the Editors of THE LANCET.

SIRS,—Your remarks in THE LANCET of March 3rd, p. 615, upon the use of chloride of ethyl as a general anæsthetic and the inferences which you draw from the sad fatality recently reported seem to call for further comment. Those who have frequent opportunities of administering this anæsthetic are almost unanimous that it is a most valuable and safe agent in suitable cases and in experienced hands, while they are equally agreed that it is certainly not an anæsthetic to be employed by the inexperienced. It is, in fact, the ideal anæsthetic for operations of such a length that gas or gas and oxygen would give too transient an anæsthesia, while ether would give an unnecessarily long one; in other words, for operations requiring an anæsthesia of from 50 to 120

seconds. It is also most valuable as an antecedent to ether or chloroform.

I have had many opportunities of noting that some patients exhibit a very marked idiosyncrasy towards this drug and become anæsthetised by it with almost startling rapidity. In such subjects unless a very close observation is kept by an anæsthetist who from constant experience is thoroughly *au fait* with the signs and symptoms of profound anæsthesia an overdose is very liable to be administered. I have on several occasions anæsthetised patients in as few as three or four inspirations from an apparatus containing five cubic centimetres of the drug and noted signs of profound narcosis so deep that if the administration had not been instantly discontinued it is easy to imagine that a fatality would have resulted. Again, when this drug is used as a preliminary to etherisation anæsthesia from the latter agent is sometimes surprisingly rapid, and it is by no means unusual for the patient to be ready for operation in under two minutes. These peculiarities, while they are decidedly advantageous in the case of a skilled anæsthetist, should make the ordinary practitioner, who perhaps only rarely acts as an anæsthetist, pause before using so powerful an agent, and it is obvious that ethyl chloride should never be used by an unqualified man.

In the list of eight fatal cases which you mention there are included at least two where death was definitely due to "rigidity of the jaws" or "respiratory spasm," while two more, classified as "respiratory failure" and "asphyxia," were very probably due to the same cause. Spasm of the jaws, occurring as a part of general muscular rigidity, is a very common phenomenon in ethyl chloride anæsthesia, and so much is this the case that it should be a constant rule never to commence the administration without inserting a prop between the jaws, so that the tongue may be instantly pulled forwards in case of need. This rule applies with special force to edentulous patients whose mandibles, should spasm occur, overlap the maxillæ and may even press against the nose, rendering it almost impossible to open the mouth, even if a suitable mouth-wedge be at hand. The cases described as fatal from syncope may quite possibly, in my opinion, have been due to an overdose in patients who possessed an unusual susceptibility to the drug, and I venture to think that, if the possibility of this idiosyncrasy had been guarded against, and if a prop had been used in every case, the list of fatalities would have been a very much smaller one. Ethyl chloride is very liable to produce vomiting in patients whose stomachs are not empty and some of the recorded fatalities were due to inhalation of vomited material. This anæsthetic has so many and such great advantages to the operator, to the anæsthetist, and to the patient alike, that it would be a great pity if the undue prominence given to the report of the recent inquest in the lay press, and the comments thereon in THE LANCET, should cause an unmerited distrust of ethyl chloride in the minds of the laity or of the profession.

I am, Sirs, yours faithfully,

ARTHUR S. MORLEY,

Anæsthetist to the Samaritan Free Hospital, &c.
Gower-street, W.C., March 3rd, 1906.

THE SALARIES OF POOR-LAW MEDICAL OFFICERS.

To the Editors of THE LANCET.

SIRS,—It is much to be hoped that the Poor-law Commission may make recommendations with the double object of improving the remuneration for the medical treatment of the poor and also the conditions under which the poor are treated. The whole profession will agree with the former object, but there may be some difference of opinion as to the need of improved conditions. And yet it is impossible for anyone who has seen much of practice among the poor to fail to recognise that the Poor-law medical officer is not generally a popular person. The patients cling to the pay doctor, the club doctor, the dispensary, and the out-patient department, but they seldom welcome the suggestion that the parish doctor should be called in. One may freely admit that this is due to the office and not to the personality of the officer and may even regard it as a sign of grace that the patient shrinks from the stigma of pauperism. But those who are old enough to have seen the changed attitude of the London poor to their workhouse infirmaries must admit that there is less objection to being a

pauper in one of the modern palaces than there was in the days before the infirmaries could be thus described. I understand that in some districts in London when a vacancy has occurred in the Poor-law medical service the authorities have appointed several out-door medical officers, allowing the patients to choose which officer they will call in and dividing the salary amongst the various doctors according to the number of relieving officer's "orders" to which they have attended. It seems to me that in some such way as this the twofold object I have indicated above might be secured. It would be an advance towards the condition laid down by the British Medical Association as desirable in all forms of contract practice. I fear that if a mere demand for increased salary without altered conditions is presented to the commission but little notice will be taken of it. Government salaries of lawyers are looked after in the House of Commons by the large professional element having seats there. Our handful of medical Members of Parliament are quite unable to help us. By combination we must help ourselves.

I am, Sirs, yours faithfully,

March 2nd, 1906.

BETTER PAY.

To the Editors of THE LANCET.

SIRS,—I have read the interesting letter of "M.O." in your issue of Feb. 3rd on this subject and your admirable annotation on the same subject in THE LANCET of Feb. 10th. In my own district, which is much better off than most I know in having a smaller number of people who require attendance from the parish medical officer, the rate of salary works out at much less than the village policeman receives, and the time and attention one has to give to such cases as occur are quite as much as private patients receive provided one tries to do the work conscientiously, as I believe most parish medical officers do.

The present seems a good time to bring forward the question of adequate remuneration to Poor-law medical officers on account of the large number of Labour candidates who have been returned to Parliament and who must necessarily be interested in the medical relief of the poorer classes.

I am, Sirs, yours faithfully,

March 3rd, 1906.

ANOTHER M.O.

THE OPERATION OF APPENDICOSTOMY.

To the Editors of THE LANCET.

SIRS,—In continuation of my note on this subject, published in THE LANCET of March 3rd, p. 596, I should like to add that a third case was brought to my mind after I had despatched my communication to you. This case showed me how valuable the appendix may be when used as a drain in cases of obstruction in the colon. It was one of cancer and I performed, what I now consider to be, the unjustifiable operation of primary excision. The end-to-end anastomosis gave way in spite of very perfect drainage through the appendix which was widely dilated and hypertrophied (from previous continuous back pressure). A drawback in this case was the difficulty of getting the appendix to close.

I am, Sirs, yours faithfully,

H. M. W. GRAY,

Surgeon to Aberdeen Royal Infirmary.

Aberdeen, March 3rd, 1906.

BRADFORD EYE AND EAR HOSPITAL.—The annual report of the Bradford Eye and Ear Hospital for the year ending Dec. 31st, 1905, states that 6786 patients have received treatment during that period, as compared with 6543 in the previous year; 1034 in-patients were admitted; 1030 major operations were performed; and 22,624 attendances were made by out-patients. Of the 6786 patients above mentioned 5517 were ophthalmic cases and 1269 were aural cases. The hospital committee has issued a printed instruction to midwives on the protection of the eyes of newly born children; it is here recommended that immediately after the birth, and before anything else is done, the eyelids and all parts surrounding the eyes should be wiped with a soft dry white rag, that these parts should soon afterwards be washed with clean tepid water before any other part of the body is washed, and that medical advice should be obtained if the eyelids become red or swollen. The financial statement shows that the total receipts were £2675 and the total expenditure £2604. Mr. G. H. Oliver, Dr. J. H. Crawford, Dr. F. W. Eurich, and Dr. J. H. Mason were re-appointed as members of the staff on the expiration of their terms of office.