were not alone but were held, for example, by Bateson and some others (words to this effect). His statement in his letter diverts the issue, for I understood the criticism as a scientific statement *re* Darwin's theory, having nothing to do with Darwin's memory, which we all, of course, respect. Dr. Beard can surely perceive the difference. As for the disputed matters of the science and facts of heredity and quotations of authorities as between Dr. Beard and Dr. Andriezen I have recorded them as an indication that an active discussion did take place.

In concluding my report for THE LANCET the length of the whole amount of space available had to be considered and I, as reporter, could not go far beyond the limits of my instructions as regards space. The most essential and important parts of the speakers' views had been given and the replies (of Dr. Beard as well as of Dr. König) were only referred to in a line because they were answers to questions asked but introduced nothing new in the way of actual argument, except repetition or reiteration of theories or opinions of which the report had already taken notice.

I am, Sirs, yours faithfully,

YOUR REPORTER OF THE SECTION ON
PSYCHOLOGICAL MEDICINE.

London, Sept. 6th, 1904.

To the Editors of THE LANCET.

SIRS,—I have just read Dr. Beard's letter in THE LANCET of August 27th (p. 640), in which he refers to his paper on Heredity read at the recent meeting of the British Medical Association at Oxford. The summary of the paper and of the discussion it called forth which appear in THE LANCET seem to me concise and essentially correct. But it cannot serve as a basis for discussion and I must demur to the precipitate remarks in Dr. Beard's letter. I have not as yet read Dr. Beard's paper in full, nor has he as yet published it in full so far as I am aware. When, however, the paper is published in full I shall give myself the pleasure of dealing with Dr. Beard's criticisms and his theories of heredity.

I am, Sirs, yours faithfully,

W. LLOYD ANDRIEZEN, M.D. Lond.

London, Sept. 2nd, 1904.

THE SECTION OF PSYCHOLOGY AT THE BRITISH MEDICAL ASSOCIATION.

To the Editors of THE LANCET.

SIRS,—Having been travelling I have only just seen THE LANCET of August 27th and note therein that in your report of the discussions at the section of Psychological Medicine at the British Medical Association annual meeting I am stated to have referred to the rarity of dementia præcox "in the class of patients—*feeble-minded children under the London County Council*—with which he had to deal." I did not use the words italicised and have never had the honour to hold an appointment under the London County Council, though I was formerly a medical officer to the School Board for London and still serve under the Metropolitan Asylums Board. My reference was, however, to cases seen in consulting practice over school age. As I am anxious to disclaim pretensions to which I have no right I shall be obliged by your inserting this explanation.

I am, Sirs, yours faithfully,

Richmond Hill, Sept. 3rd, 1904.

G. E. SHUTTLEWORTH.

THE BOILING OF MILK.

To the Editors of THE LANCET.

SIRS,—I am afraid that the questions raised by Mr. R. Bevan in THE LANCET of August 27th, p. 639, are even more complicated than his friend the bacteriologist indicated. His reasons for boiling milk before he listened to the iconoclastic scientist were, he states: (1) to prevent souring and decomposition; (2) to destroy pathogenic germs; (3) because it is said to make the milk more digestible; and (4) if the child has diarrhoea to help to digestate the child.

Now, first as to the effect of boiling on the digestibility of milk. Dr. Robert Hutchison¹ points out that though in a test-tube the clot formed by boiled milk is looser this is merely due to the precipitation of some of the lime salts which are immediately redissolved in the acid gastric juice.

With regard to the rate at which boiled and raw milk leave the stomach the experimental evidence is not unanimous but Dr. Hutchison considers that on the whole boiled milk is probably slightly less digestible than raw. Dr. Emmett Holt² calls attention to the alterations in the phosphates and citrates caused by boiling milk as well as to other changes in the fats, lactose, and lactalbumin, which probably render it less fit for infant feeding. Dr. Clement Dukes in a letter to THE LANCET last year³ did not hesitate to ascribe an increase in infantile scurvy and rickets to the now general practice of boiling milk. It is, however, uncertain to what extent children exclusively fed on boiled milk are in danger of contracting the former disease, which also occasionally occurs in breast-fed infants, and possibly Dr. Dukes has overstated the case.

That the ordinary pathogenic germs are destroyed by boiling is no doubt true. Behring,⁴ however, thinks that this advantage is outweighed by the destruction of the immunising substances present in raw milk. He advocates a 1 in 4000 addition of formalin, but as to the advisability of this procedure a considerable division of opinion exists, as is shown by Dr. T. R. Bradshaw's letter which just precedes the one under consideration. Now as to "souring," there is certainly some evidence to prove that sour milk is rather more rapidly disposed of in the stomach than either raw or boiled milk,⁵ but this only applies to healthy adults; in infants it is more than probable that the non-spore-bearing bacilli and cocci which are destroyed by boiling may cause digestive disturbances. There seems very little doubt, however, that it is to Flüge's "peptonising" bacteria (which are spore-bearing and cannot be eliminated by rapid boiling) that the milk diarrhoea of infants is mainly due.

It has been shown by Robertson and Mair⁶ that the development of the spores can be materially checked if, after boiling, the milk is kept cool. Such milk they found "safe and reliable when kept even for two days below 70° F." It must be noted, however, that the experiments were made with sterilised sealed bottles. This fact should bring some solace to Mr. Bevan. Now as to the last of Mr. Bevan's reasons. Although boiled milk is constipating, given a child with diarrhoea due to the "peptonising" bacteria in its food, it is not reasonable to attempt to check the diarrhoea by which nature seeks to eliminate the toxic substances while at the same time we afford fresh pabulum to the hosts of offending bacteria already present in the intestine. The effects of boiling on milk intended for infants are thus complicated and far-reaching and many of the issues are at present doubtful. Most medical men who have studied the subject will, I think, agree that at present it is the simplest prophylactic measure we possess; but it must be combined with a proper cooling and protection of the milk after it has been heated. The question of preservative chemicals cannot at present be regarded as settled, but both these methods must ultimately be replaced by a system which will insure a clean milk-supply and which will educate the public as to the importance of detail in the handling of milk after it has been delivered to their houses.

I am, Sirs, yours faithfully,

J. M. FORTESCUE-BRICKDALE, M.A., M.D. Oxon.

Clifton, Bristol, August 27th, 1904.

HOT WEATHER AND FOOD PRESERVATIVES.

To the Editors of THE LANCET.

SIRS,—The main point of Dr. T. R. Bradshaw's letter in THE LANCET of August 27th, p. 638, on this subject—namely, that the present high death-rate in Liverpool is a result of the successful campaign against food preservatives—is easily disproved. The increase in mortality is nearly entirely among infants whose main food is milk. Now milk has never been much preservative in Liverpool and the campaign has been directed chiefly against the use of preservatives in other foodstuffs. Consequently their diminished use can have very little, if anything, to do in influencing the present epidemic of diarrhoea in comparison with former years. As regards the general question of their use in milk, it would seem that Dr. Bradshaw thinks his own wisdom and common sense superior

¹ Diseases of Infancy and Childhood, second edition, p. 150.

² THE LANCET, Jan. 31st, 1903, p. 331.

³ Ibid., Feb. 20th, 1904.

⁴ Hutchison, loc. cit.

⁵ Brit. Med. Jour., May 14th, 1904, p. 1123.

⁶ Food and the Principles of Dietetics, second edition, p. 118.

to that of the departmental committee which recommended: "That the use of *any preservative* or colouring matter *whatsoever* in milk offered for sale be constituted an offence under the Sale of Food and Drugs Act."

Although nobody may have thought it worth while to respond to a special invitation from Dr. Bradshaw, and he has not seen or heard of a case of injury from the use of food preservatives which satisfies him, yet there are on record several cases which seem sufficient to the unprejudiced observer. One of these was quoted by Dr. E. W. Hope in his evidence before the Food Preservatives Committee. It is, of course, a difficult matter to prove that any particular illness or symptom is due to preservatives and the diagnosis probably requires more than average clinical acumen. For this reason more satisfactory evidence is obtained from observations on healthy individuals and the researches of the Reichs-Gesundheitsamt in Berlin have clearly shown (in spite of Liebreich's contradictions) that boric acid in small quantities is by no means an indifferent substance.

It is by no means certain that preservatives in small quantities can prevent decomposition. They do stop putrefaction and thus destroy the signs by which decomposition is made evident to the senses. Their effect resembles that of tying down the safety valve of a steam engine. The advocates of food preservatives seem always to ignore, or to be ignorant of, the opportunity afforded and advantage taken of their use for dirty and fraudulent practices. Their use also renders vain all attempts to teach the hygienic value of care and cleanliness to the poorer classes when they find these virtues apparently superfluous.

I am, Sirs, yours faithfully,

Liverpool, August 29th, 1904.

ALBERT S. GRÜNBAUM.

"PARALYSIS FROM LESION OF THE UPPER PART OF THE BRACHIAL PLEXUS."

To the Editors of THE LANCET.

SIRS,—I was much interested in Dr. R. T. Williamson's paper in THE LANCET of August 13th, p. 447, describing his two cases and his subsequent letter. The identity of the paralysis in the two cases is of great interest, though it is difficult to understand the escape of the pectoral and latissimus, when the deltoid, biceps, and supinator longus on the one hand, with the triceps and extensors in the forearm on the other, are paralysed. As I have shown elsewhere,¹ I believe the uncomplicated type of Erb's paralysis of the deltoid, spinati, biceps, brachialis anticus, supinators, and radial extensors of the wrist to be due to a lesion of the fifth cervical nerve alone, and not to a lesion of the combined fifth and sixth nerves, as stated in the text-books. Sometimes there is additional weakness and partial wasting of the pectoral, latissimus, and triceps, as in two cases I have now under observation, which would indicate the additional involvement of the sixth nerve, no doubt due to lesion of the combined fifth and sixth nerves or upper trunk of the plexus. In one of these cases, an infant with Erb-Duchenne birth paralysis, there is also paralysis of the extensors of the fingers in addition to the above-mentioned muscles, which, as Dr. Williamson suggests in his note, probably indicates involvement of the seventh nerve in addition to the fifth and sixth. Dr. Williamson's cases differ from mine in the escape of the pectoral and latissimus—muscles which I should expect to be considerably paralysed in a lesion of the fifth, sixth, and seventh cervical nerves, though it is true that both these muscles are partially supplied by the eighth cervical.

I am, Sirs, yours faithfully,

Queen Anne-street, W., Sept. 5th, 1904.

WILFRED HARRIS.

THE TREATMENT OF THE HERNIÆ OF CHILDREN.

To the Editors of THE LANCET.

SIRS,—I have read with the greatest interest Mr. E. M. Corner's valuable paper on the Treatment of Herniæ in Children. The management by trusses is so troublesome, and as the condition is congenital and can be put right in a

few minutes by a slight operation which removes either the funicular process or divides the prolongation of unclosed peritoneum by a couple of catgut ligatures, as recommended by Professor George Buchanan many years ago, I have strongly advised the above to be carried out. From a month onwards I have regularly done this and have never had any trouble and as there is no weakness of the pillars of the ring there is no recurrence. There is no doubt that a truss cures a certain number of cases but it is a very great trouble to the mother. Circumcision is very useful especially where there is adhesion of the foreskin to the glans and this should always be looked to, but the main cause of hernia in children is a patent funicular process. When operation is done early it is unnecessary to stitch the pillars as the hernia is congenital and not acquired as in most cases in the adult.

I am, Sirs, yours faithfully,

J. CRAWFORD RENTON, M.D.,
Surgeon and Lecturer on Clinical Surgery,
Western Infirmary, Glasgow.

Glasgow, August 24th, 1904.

THE TREATMENT OF HÆMORRHOIDS AND ALLIED CONDITIONS BY OSCILLATORY CURRENTS OF HIGH TENSION.

To the Editors of THE LANCET.

SIRS,—In Mr. T. J. Bokenham's answer to my criticisms upon his paper he does not dispose of the main argument—namely, that the treatment he describes is not an improvement upon existing methods. I think we should always accept with great caution any new method of treatment which is based entirely upon empirical grounds. It has not, I believe, ever been proved that high-frequency currents have any direct healing effect upon the tissues, nor do we understand the physiological action of such currents. High-frequency currents seem now to be advocated for all sorts of diseases quite indiscriminately and without any scientific reason being put forward for their use. There is a certain class of patient who is delighted with any new form of treatment if it necessitates the use of complicated electrical apparatus. But we should, I think, be very cautious about accepting such forms of treatment for diseases the pathology of which is perfectly well known and the treatment of which by the ordinary methods is quite satisfactory and based upon scientific reasoning. And before we allow a purely empirical treatment which we do not understand to displace one based upon surgical experience and pathological reasoning we should require it to be proved that it possesses some very definite advantage over that in ordinary use. Mr. Bokenham has certainly not been able to show any such advantage in the treatment of hæmorrhoids and fissure by high-frequency currents.

I am, Sirs, yours faithfully,

P. LOCKHART MUMMERY.

Cavendish-place, W., Sept. 3rd, 1904.

CHARITY VOTING REFORM.

To the Editors of THE LANCET.

SIRS,—It will be of interest to those of your readers who are supporters of charity voting reform and to a number of the general public to whom the subject is unknown to learn that in the Clergy Orphan Corporation Schools the voting system has been abolished, a step taken with the approval of all the bishops, and since the abandonment the mothers of the children have been spared much trouble and expense in canvassing. In the Railway Benevolent Institution the system has been in abeyance for some years, whilst in the Royal Agricultural Benevolent Institution modifications appear to have been made. In the Royal Institution for the Instruction of Deaf and Dumb Children, though the laws of the institution provide for the election of inmates by the votes of the governors, that system of admission has not been resorted to for at least 15 years. In the National Orphan Home the subscribers place their votes in the hands of the committee which deals with the cases of applicants on their merits. Subscriptions are invited to help carry out the work of charity voting reform.

I am, Sirs, yours faithfully,

W. H. STURGES,

Secretary Charity Voting Reform Association.

36, West-street, Charing Cross-road, W.C.,
Sept. 3rd, 1904.

¹ Journal of Anatomy and Physiology, July, 1904, and Brit. Med. Jour., Oct. 24th, 1903.