

and see if or not the Council is right in its endeavour to save the Association from ruin. The Referendum must go back to the same men who are absolutely antagonistic to the central authority—the men who also wish to do away with the Branches altogether.

It will be well if all the Branches follow our example. I aver that not 20 per cent. of the Association would agree with the attitude of these Representatives.—I am, etc.,
Old Trafford, Oct. 15th. JAS. BRASSEY BRIERLEY.

SIR,—Dr. Rowland Fothergill seems to take it for granted that because the Representative Meeting is so designated, it is, *ipso facto*, "representative" of the profession or of the Divisions, whereas it is only of the Representatives themselves, plus five or ten others, multiplied by the total number of that body. And he goes on to say that if the new areas made up of different Branches do not take action in the way indicated by him in electing a certain number of members of Council, this Representative Meeting will take the matter in hand and elect the whole Council.

Did ever any one read such fallacious reasoning in reference to sound representation? What a Council would be elected in deed and in truth! Some of the members might have been elected by hundreds of votes, and yet, if that did not suit the Representative Body, they would take it in hand, and the Council would be elected by men each of whom might not have been actually voted for by more than twenty members of their respective Divisions. What a muddle such a proceeding would land us in! Yet the draft Charter would allow the Representative Body in twelve months, after it were granted, to vote and decide that it should elect the whole Council!

The election of Council as outlined in the draft Charter, instead of being in the By-laws, ought to be placed in the Ordinances, and fixed for at least three years, if not five. We must try to arrive at some fixity, and not be liable to having our ground shifted any year. It does not seem right or moral to get the Association to consent to the election of the Council as now given, and then to be liable to have it changed and all the power placed in the Representative Body. It savours to me of a kind of hoodwinking, and the more I think of it the more serious does the matter appear, especially after Dr. Fothergill's way of putting it. It is tantamount to saying we will give it you in this form now, to obtain your consent, but we can alter it any time we choose afterwards.

There is another point which should be made universally known before it is too late—individual members of the Association ought to have the right of speech or inquiry at the Annual Meeting. Under the draft Charter this will be entirely abolished. It is said that instead of this method he must make his voice heard through and by his Division. Let us take the case of a Division falling into the hands of an active clique, and the individual member cannot or will not trouble to make his voice heard at its meetings, and suppose this is the case in several Divisions. If these individual members have the right to bring their views before the Annual Meeting it is only what is understood to be the custom in all societies, and is considered as one of the greatest safeguards to the interests of the individual member.

It is rather curious that no steps have been taken to reform the Representative Body itself. This seems to have been understood to be perfect, or as nearly so as possible. It is just possible the cause of this is in the name itself. It is termed "Representative," and most people seem to think that therefore it is so. Would it not be better that a rule were made that each one should have had the actual votes at least of half or two-thirds of the members of his Division?

Whilst we are sifting and analysing everything else in the constitution of the Association the Representative Body ought certainly to have its share of attention, and Dr. Horrocks's letter in the JOURNAL of October 12th deserves the attention of those members who have not already seen it.—I am, etc.,

Manchester, Oct. 12th.

G. H. BROADBENT.

THE BOARD OF EDUCATION AND THE MEDICAL INSPECTION OF SCHOOLS.

SIR,—Dr. Hogarth, in his letter of October 5th, still persists in his "wild and whirling words." For example, he reiterates the assertion that "it is solely as the result

of Dr. Kerr's work in Bradford and London that any efficient system of medical inspection exists in England to day." Is it not the case that we have only, as yet, reached the initiatory stage of debating the best form of such inspection. Again, surely Dr. Hogarth in his zeal for his friend Dr. Kerr ignores the pioneer work of Dr. Warner, and above all the telling facts as to the health of school children so laboriously gathered by Drs. Matthew Hay and Leslie Mackenzie, which indeed were the means, more than any other agency, in forcing this question of medical inspection of schools to the front of public opinion.

Still more, is any man, especially the secretary of a body dealing with this particular subject, entitled to discuss it without referring to the very able work of my friend, Dr. Mackenzie, on *The Medical Inspection of School Children*, where the history of the movement in favour of State interference on behalf of these unprotected units of the population is so clearly set forth? No doubt the author deals with the question chiefly from the point of view of the well-ordering of Scottish education. But has England not much to learn from her sister country both on education and public health, and the best means for encouragement on the paths of progress of these essential elements of civilization?

I may be pardoned in this connexion for referring to my own small efforts in behalf of the cause of hygiene in schools. In my first report—that for 1891—to the county of Ross and Cromarty, it is stated that "a knowledge of the laws of health must begin in the public schools in the county"; and "it is essential that the schoolmaster should be thoroughly acquainted with the laws of health, the working of the different organs (of the body), especially of the brain, the care of the senses such as the eyesight."

Passing on to Dr. Hogarth's second point, I know nothing as to the influences at work which prompted Dr. Newman's selection. Enough has surely been said on so personal a question. And, on his third head, it is only necessary at this time to quote Dr. Leslie Mackenzie's words:

The medical inspection for public health purposes and the medical inspection for educational purposes should be perfectly continuous; no effort should be made to divide the child, as it were, into two, the one part to be examined medically for public health purposes, the other for purposes of education.

So much, Sir, from the standpoint of the public. If your space would allow, it would be interesting to discuss this question from that of the profession at large. How is the medical faculty likely to fare from this process of specialization of function which is going on day by day? Is the door to be slammed in our faces, as a body, at every turn?—I am, etc.,

WILLIAM BRUCE, M.D., LL.D., M.O.H.
Dingwall, N.B., Oct. 14th.

SIR,—For the sake of lucidity I would repeat what I had in mind to say in my previous letter, "that the general practitioner, without special preparation, can hardly consider himself equipped for the work of medical inspection of school children, and that the diplomate in public health (*quâ* his D.P.H.) cannot be regarded as better equipped." Either candidate would require to specialize in order to become an efficient officer in the new field, and that whether or not this field is a part of public health work. If the whole field of public health work does not contain men properly qualified, in spite of their other many and varied attainments, it will become, sooner or later, necessary to devise means of getting such men; in other words, either the scope of the D.P.H. examination will have to be widened so as to include the subject of medical inspection of school children, or a new examination devised on somewhat different lines—if, that is, efficiency and not cheapness is to be aimed at.

Dr. Munro reminds us that "the whole is greater than a part"—a self-evident fact in the sphere of geometry—but in the sphere of health one part may differ from others, and what seems the smaller in magnitude be the greater in importance. As "the body is more than raiment," so is the school child of more importance than the school building. And here we have a new departure, which recognizes this importance of the individual child

for the first time; and from the medical profession, to which much is given in this scheme, much will be required.

I am informed that in the city of Manchester the inspection work is under the Education Committee, and apart from the sanitary work of the city, and yet—though there must be contact—there seems not to be rivalry or clashing between the separate authorities. In this instance at least, then, Dr. Munro's prophecy seems not to have been fulfilled.

My excuse for writing on the subject is that there seems a danger of the medical inspection of school children being treated with less seriousness than its vast and far-reaching importance demands.—I am, etc.,

October 8th.

COMMON SENSE.

THE WARFARE AGAINST QUACKERY.

SIR,—In the *Times* of October 12th is a lengthy summary of the report lately presented to the Australian Government by the Royal Commissioner, Mr. O. C. Beale. This effectively supplements your note headed "Proprietary Remedies" in the *BRITISH MEDICAL JOURNAL* of the same date, in which you refer to the same report, as well as to the new legislation against quackery that has just come into operation in Germany. The views which you did me the honour to criticize so sympathetically in your leader of September 28th obtain such strong justification from Mr. Beale's report and from the action of the German Government, that I am impelled to beg space for a few further remarks.

If one lay Royal Commissioner armed with scanty powers can frame a solid indictment such as Mr. Beale has drawn up, what might not be done by a Commission with full powers, including the power to compel the attendance of witnesses and to examine and cross-examine them on oath. I would suggest that if the Association would direct its energies to the task, and be prepared to spend a few thousands of pounds in carrying it through, it could, even without Government sanction or help, organize an independent inquiry into quackery and prepare a report which would carry hardly less weight or authority than that just drawn up by the Australian Commissioner.

With regard to the new German legislation, if the law be carried out with the zeal which now always characterizes the administration of all measures directed to the preservation of the public health in the Fatherland, an end will be speedily put to the fraudulent drug and apparatus traffic, as well as to the many forms of illicit practice to which, there as here, it serves as a cloak. That which has been successfully begun in Australia and perhaps finally accomplished in Germany ought not to be impossible in these islands.—I am, etc.,

October 12th.

HENRY SEWILL.

THE INHERITANCE OF PULMONARY TUBERCULOSIS.

SIR,—The desire not to trespass unduly upon your space has apparently resulted in diction not fully intelligible to Professor Pearson.

To our first question, as to whether a correction should not be applied to the number of tuberculous offspring of non-tuberculous parents, to allow for those of the offspring who will subsequently be affected, Professor Pearson answers "No." The reason he gives is that (1) "The number of tuberculous offspring [of tuberculous parents?] is obtained from tuberculous patients who are parents"; and (2) "the number of tuberculous offspring of non-tuberculous parents is obtained from the tuberculous offspring who are themselves patients." Now (2) agrees with the original memoir, but (1) does not. In the memoir both the numbers are obtained in precisely the same way—namely, from the records of the parents and brothers and sisters of the Crossley patients. A comparison of the figures in the table at top of page 9 with the figures in the table on page 10 will make this quite plain, allowance, of course, being made for some small differences due either to slips in the arithmetic or to printer's errors. The paragraph on page 11, which Professor Pearson thinks escaped our notice, refers to a corrective factor for the non-tuberculous parents, not offspring.

To our second point the reply is made that we are right in questioning the correctness of a certain procedure, but

that we are wrong in supposing it to have been followed in this case. Now, referring to the original memoir again, we find that the proportions of tuberculous and non-tuberculous offspring of tuberculous parents were obtained from histories of families in all of which one child at least was tuberculous. The 80 families in Thompson's *Family Phthisis* are of this nature, a fact which Professor Pearson has probably overlooked.

Professor Pearson does not find it very surprising that the proportion of deaths due to tuberculosis among the married and widowed population is greater than among the total population. His explanation of this fact is no doubt correct. But what we think should have surprised him is that in his random sample on p. 12, the proportion of deaths due to tuberculosis amongst the married and widowed (1 in 21 for the female pedigrees) is far less than among the total offspring (1 in 10). It was this very surprising state of affairs in the "General Population, Random Sample," which first caused us to look carefully into the assumptions made in its construction.

In this connexion Professor Pearson says: "My tables represent . . . random samples of the adult population." The italics are his own. Surely this is not so. There are 78 of the Crossley cases under 20 years of age, and doubtless a large proportion of the brothers and sisters included in the offspring are under age also. However, if without giving any indication in the memoir that he has done so Professor Pearson has excluded all persons not adult, then the assumption on p. 12 of 1 in 10 affected with tuberculosis is very wide of the mark, being much too low a proportion.

The strictures on the obscurity of one paragraph are doubtless well deserved. What we tried to say was that for non-tuberculous offspring the proportion of tuberculous to non-tuberculous parents was too small. The completed table in the memoir gives 157 to 5,837 for the female pedigrees. Several series, practically "completed," which we have, show that the proportion of tuberculous to non-tuberculous parents of non-tuberculous offspring is not one-eleventh of the proportion of tuberculous to non-tuberculous parents of tuberculous offspring, but more nearly one-fourth or one-half—that is, that where in the table we find 157 tuberculous to 509 non-tuberculous parents of tuberculous offspring (a proportion of, say, 3 to 10) we should expect to find for non-tuberculous offspring a proportion of, say, 3 to 40, or 3 to 20, instead of 157 to 5,837 (say 3 to 100). We are trying to be very conservative and give the benefit of every doubt to Professor Pearson's tables, but a reference to the following articles will show that many investigations have given a much more nearly equal distribution of tuberculosis among the parents of tuberculous and the parents of non-tuberculous offspring: Burkhardt, *Zeitschrift f. Tub.*, 1904, v, 297; Fischer, *Beiträge z. klinik d. Tub.*, 1904, iii, 30.

Why, in this connexion, should Professor Pearson assume that our ratios are "probably based on very incomplete histories"? As a matter of fact, the histories are practically "complete," and it is somewhat galling to have it suggested that we had overlooked so important a point—a point, too, which was so fully emphasized in the memoir under discussion. We have during the past two years studied almost every one of the important and interesting series of Professor Pearson's writings on statistical theory and evolution, beginning with the memoir on the Dissection of Frequency Curves in 1894 down to the Boyle Lecture in the present year, and our criticism of the formation of the random sample at present under discussion is based on considerable time and thought given to the question of the construction of such random samples from a large mass of data in regard to tuberculosis which we have been gathering for a considerable time and hope shortly to publish.

In your issue of May 27th, 1905, Professor Pearson discussed the formation of random samples, and it seems to us that it is his neglect in the present case of the third requisite in that paper which has caused this discussion.

We do not underrate the value of Professor Pearson's memoir, but we feel that the point at present under discussion is of great importance, and we would not venture to criticize Professor Pearson's procedure in this case if we did not feel that we had Professor Pearson to uphold us with his article, On the Inheritance of Insanity, and