BRITISH MEDICAL ASSOCIATION.*

STATE MEDICINE SECTION.

THIS year, instead of having a number of unconnected papers, the organizers of the State Medicine Section have wisely concentrated the energy of the members on three subjects. From the summary of the discussions which ensued it will be seen that the plan adopted was eminently successful.

At the beginning of the sitting, the President of the Section (Mr. SHIRLEY F. MURPHY) made a few introductory remarks on the progress which has taken place in recent years in our knowledge of the manner in which diseases are caused. He referred with approval to the course recently adopted by Dr. Tatham, the Superintendent of Statistics, of publishing in the quarterly reports of the Registrar-General the returns of infectious disease notified in the large towns of England; but he did not state that the adoption of this improvement was due to the initiative of the Society of Medical Officers of Health.

THE RELATION BETWEEN COUNTY AND DISTRICT SANITARY ADMINISTRATIONS.

Dr. FRANCIS T. BOND (Gloucester Combined Districts), in opening the discussion, said that combined districts are the predecessors both in time and development of county areas. These districts, which were formed by the Local Government Board immediately after the passing of the first Public Health Act in 1872, were obviously intended to foreshadow the more definite and better-constructed area of the county which was adopted in the Local Government Act of 1888. Unfortunately, they suffered more or less *ab initio* from two radical defects. The first is the absence, in most cases, of any central authority in the shape of a committee to whom the medical officer could look for guidance and support in his work, and through whom pressure could be brought to bear without undue offence on unprogressive members of the guild. The second defect is the want of permanency in the combinations themselves, which have always been liable to disintegrating influences of various kinds. The procedure necessary for the annual re-election of the medical officer is cumbrous and dilatory, involving an amount of notice-giving and correspondence that occupies six months out of every twelve, and the fact that if he wishes to adopt

* Annual meeting at Cheltenham, July-August, 1901.

any new form, or issue any notice appropriate for the whole district, the medical officer must go through the ordeal of submitting it to, and hearing it discussed and criticised by, the various members of every separate authority in his district, is calculated to deaden enthusiasm for sanitary progress.

The combined district was a praiseworthy effort of the Local Government Board of the day to effect a co-ordination of sanitary authorities for their common advantage, and especially to obtain a medical officer of health for whom a proper remuneration could be provided which would render him independent of medical practice, and therefore better fitted to discharge his duties with efficiency. But whilst the plan had strong recommendations in 1873, whilst it has, on the whole, worked satisfactorily, and whilst it may still be adopted as a general principle, adapted to meet the conditions of small urban or larger rural districts, it cannot be considered a substitute for the appointment of a county medical officer of health.

There can be little difference of opinion amongst those who have had any practical experience of these appointments that, whether large or small, they should in all cases be under the direct control of their respective county councils. This would give those bodies the opportunity of seeing that proper appointments were made, of assuring to those who might be appointed reasonable security of tenure, and of promoting combinations which would facilitate the establishment of a satisfactorily co-ordinated system of county sanitary administration.

Under such circumstances, every county council would be in a position to determine how many medical officers of health were necessary to carry on efficiently the sanitary work of their district. They would also be free to promote two or more combinations in their area, and to make the holder of one of them the chief medical officer of the county, and the others assistants to him; or to appoint a single medical officer for the whole county, without any personal relations with any of the district councils in it. The determination of which of these two courses would be most expedient would depend largely on the size of the county and the facilities existing in it for easy communication between its administrative centre and the rest of the area. To some extent, also, it would depend upon the character of that part of the local administration which had to be discharged by the sanitary inspector. Dr. Bond had no hesitation in expressing his opinion that, where this appointment is filled by thoroughly competent men, a single medical officer of health can superintend efficiently a far larger

district than is possible where, from his being unable to depend on his inspectors, he is obliged to do a good deal of work which they themselves ought to do, or where, from their want of knowledge or independence, they are constantly calling on him to assist them in matters which they ought to be able to manage for themselves. In fact, the possibilities both of efficiency and economy in county sanitary administration rest primarily on the care with which the appointment of sanitary inspectors is made.

County councils should have the same freedom of combination with one another that district councils possess.

Dr. Fosbroke (Worcestershire) reminded the Section that county councils possessed powers under the Rivers Pollution Prevention Acts, which when put in force frequently resulted in considerable internal sanitary improvement of towns and villages, that they had very large powers as to the provision of isolation hospitals, and under the Housing of Working Classes Acts could bring pressure on local authorities to carry out the recommendations of their own district medical officers. He contended that the sanitary powers were larger than some persons were wont to believe.

He then proceeded to explain how his council had established "whole time" lady health missioners out of grants made by the Technical Education Committee, and said he could not speak too highly of the satisfactory results obtained. He alluded to the complete chemical and bacteriological laboratories which his council had equipped at large cost, and which they were maintaining at much larger cost.

Dr. Lloyd Roberts (St. Asaph) said his experience was that the Local Government Board spasmodically and at long intervals wrote to a district council to inquire what action was being taken or had been taken on a certain matter or a certain scheme, and they mostly appeared contented with a courteous and an evasive reply.

County councils might well be endowed with the authority that the Local Government Board had now in the matter of sanctioning schemes and loans for public works, and also for the compulsion which the Board had power to exercise, the Local Government Board holding the county councils responsible and under punitive conditions.

The Legislature should insist on the appointment of county medical officers of health in the first instance. In the second instance county councils might be endowed with the powers of the Local Government Board as indicated above, and by these means would "county and district sanitary administrations be brought into relation" the one to the other.

Dr. EDWARD C. SEATON (County of Surrey) said that in connection with the discussion on the relation between county and district sanitary administration, the question of efficient and economical arrangements for laboratory work could not fail to be of interest. The reports of the large cities and county boroughs issued of late years, especially those which had already appeared for 1900, indicated that laboratory work was entering more than ever into the daily routine of the public health and sanitary departments of most municipalities. In nearly all the counties which could be said to have seriously taken up their sanitary functions, the subject had also been forced on the attention of the Council and their advisers in various ways.

Notwithstanding that a few distinguished men had filled the dual office, as a general rule successful analytical work did not harmonize with that of medical administration. At the same time there was great and obvious advantage in its being carried on in conjunction with the man who was responsible for the efficient sanitary administration of a sufficiently large district.

Dr. JOSEPH GROVES (Isle of Wight) considered that, if it was necessary to divide up the country into poor-law districts, over each of which was placed a poor-law inspector of the Local Government Board, it was far more necessary to divide the country into sanitary districts with a Local Government Board sanitary inspector placed over each. But there was at present one question which was of the greatest possible importance to the interests of the public health and the sanitary well-being of the people which cried for settlement, and that was the question of security of tenure of office of sanitary officers. It mattered not if a medical officer of health had charge of over a thousand or a hundred thousand people: he should have security for doing his best for the health and the lives of those people. He had risen chiefly to move a resolution of approval and thanks to the Council of the Association for their action in promoting a Bill in Parliament the object of which was to obtain this end:

"Having regard to the paramount importance to the interests of the public health of security of tenure of office of sanitary officers, the State Medicine Section beg to express their approval of the action of the Council in promoting a Bill in Parliament to that end, and their thanks for the same."

The resolution was seconded by Dr. SLADE-KING, and carried unanimously.

Mr. HERBERT JONES (Hereford Combined Districts) thought that in large counties it would be impossible for the county medical officers of health to hold district appointments, but in the case of the

smaller counties, where a combined district was in operation, the combination of district and county medical officers of health might well be made. Referring to the notification of non-infectious disease, he thought that sufficient use was not made of the returns of poor-law medical officers to which medical officers of health were entitled. He spoke of the system of notification of disease by the secretaries of friendly societies as in force for some years in Crewe.

Dr. CHALMERS (City of Glasgow) had hoped that Dr. Seaton's paper would have encouraged a discussion of the relative value of the various means by which local authorities should obtain bacteriological assistance. In his own district the Health Committee had founded a laboratory, and the work was done gratuitously and with satisfaction.

Dr. MARTIN (Stroud) and Dr. D. S. DAVIES (Bristol) contended that no charge should be made to medical men for bacteriological examinations.

DISEASES OF OCCUPATIONS.

The growing attention which is being directed to the conditions under which people work was very appropriately brought into prominence at this meeting by a series of papers dealing with the diseases connected with several trades. The discussion was inaugurated by Dr. T. M. LEGGE, H.M. Medical Inspector of Factories. He drew attention first to certain anomalies presented by trade diseases, in that the symptoms produced among workers in poisonous materials were often strikingly different from those produced by their medicinal exhibition, or they might be absent altogether. As examples, he mentioned potassium chromate, arsenic, mercury (in some forms, as hat-furriers' processes), phosphorus. He expressed surprise at the wonderful immunity of workers in horsehair and jute as regards anthrax and tetanus respectively, seeing that "it is unsafe to assume that a single bale of horsehair from China is free from anthrax," and that jute grown in Bengal is extremely rich in tetanus spores. He considered it must be due to a natural immunity, and as regards tetanus, in addition, to the fact that infection will only rarely occur except as the result of a mixed infection. Dr. Legge presented a careful analysis of the cases of illness which had been notified to the Home Office during the last three years. Lead-poisoning was responsible for 1,058 in 1900, phosphorus for 3, arsenic for 22, mercury for 9, anthrax for 37. Some may think it pedantic that cases of lead-poisoning from drinking-water or in house-painters are not notifiable, but he pointed out that the object is to obtain a clue only to those cases occurring in premises under the Factory

Acts over which inspectors of factories can exercise control. (His position, of course, precluded him from also pointing out that the value of such notifications would be greatly enhanced were medical officers of health informed of the occurrence of such cases, and were the officers to make the necessary inquiries. Under the new Factory and Workshop Act medical officers have to report to the Home Office on the conditions affecting the health of the workmen in their district, which they can hardly do in a satisfactory manner if valuable information is withheld from them. Were all matters affecting the public health under one department of Government, there would be no need for the existence of such anomalies as those referred to by Dr. Legge. Even as things are, however, it would be but a small matter to acquaint medical officers of the occurrence of cases of industrial poisoning or illness, and it is to be regretted that the Government refused to accept a clause authorizing this to be done.)

Dr. W. Murray read a communication on chronic brass-poisoning. This was not the brass-founder's ague, which was an acute form of the disease, but a chronic disease which, from the similarity of the symptoms, was often mistaken for phthisis. The cause was probably copper, and possibly zinc. Lead-poisoning was quite different from brass-poisoning. He hoped that brass-poisoning would be added to the list of notifiable diseases.

Dr. D'Arcy Ellis read a paper on glass-polishing, and described the dangerous part of the process—that of handling the putty powder, which was a mixture of lead, tin, antimony, and bismuth. Since the "feeders" had been protected from splashing with the putty powder the cases of lead-poisoning had decreased; the unfortunate part was that hitherto a satisfactory substitute for putty had not been found.

Dr. C. A. Greaves read a short paper on plumbism cases in carriage works, one of the industries in which lead-poisoning does not appear to have decreased.

Dr. Dearden read a paper on the causation of phosphorus necrosis. In his opinion, the use of yellow phosphorus should be entirely prohibited, and a prohibitive duty should be placed upon the "strike anywhere" variety of matches.

Drs. Prosser White and John Hay gave an account of some recent inquiries and researches into the poisonous properties of naphthalene and of the aromatic compounds.

Dr. George Reid read a paper on infant mortality and the employment of married women in factories. He showed how the employment of women led to the increase in the infant mortality,

and how important this was in the face of the general decline in the birth-rate. Dividing the towns in Staffordshire into groups according to the number of women engaged in work, Dr. Reid calculated the infant mortality-rate annually for a period of twenty years, with the result shown in the following table:

Deaths in Children under One Year per 1,000 Births in Three Classes of Artisan Towns in Staffordshire.

	Class I. Many Women engaged in Work.	Class II. Fewer Women engaged in Work.	Class III. Practically no Women engaged in Work.
Population, 1901 Census ...	147,281	198,955	182,864
Ten years, 1881-1890 ...	195	166	152
Ten years, 1891-1900 ...	211	177	167

These figures speak for themselves, and it will be noticed that, while there has been a general increase in the infant death-rate in recent years, practically the same relative proportion has been maintained in the three groups of towns. Dr. Reid advocates the teaching of elementary hygiene in schools, the restriction of the mother from engaging in work for three months after confinement, and the establishment of crèches by local authorities.

FOOD IN FEVER CASES.*

It is universally admitted that the first part of digestion is performed in the mouth, but the investigation of the masticatory process from the experimental side does not appear to have hitherto engaged attention.

The author points out that soft foods, such as raw meat, leave a smaller residuum in the mouth than do those articles of diet such as dry bread and fats, the fragments of which do not readily unite to form a bolus.

Hence in the case of convalescents, as well as in those patients who are suffering from fever, infectious or other, not only should the digestibility of the food be taken into account, but also the fact that a large residuum after mastication is highly undesirable, inasmuch as the latter may cause serious injury to the mucous membrane of the alimentary canal.

The materials that should be avoided are dry bread, fats, the different varieties of cheese, oily fruit, etc.

The results of experiments on dogs are detailed, and they certainly tend to support the views of the author as to the great differences which exist between the residue left in the mouth when different articles of diet are made use of. This residue is clearly of evil influence in typhoid fever and in other conditions, and the author's investigations are both important and interesting.

* La triturazione dei cibi in rapporto all' Igiene." By Professor C. Fermi. *Giornale della Reale Societa Italiana d'Igiene*, February, 1901.