

in their prevention—the *former* is an ever present menace in this country, where so many persons are unprotected by vaccination. Here the danger lies, not so much in the disease itself, but in it not being recognised in time, and nipped in the bud. Our armamentaria are excellent when limited outbreaks occur. If smallpox gets a start, great expense must follow in stamping it out, *therefore*, early recognition and prompt measures are alone to be relied on; the latter have such a hold on our nation, the young manhood, including those in the public services, continue to be incapacitated, so all endeavours should be made to *combat* and prevent them spreading.

Many complaints are now recognised as having been caused by venereal disease, which were formerly thought to have had a different origin, *therefore*, we may boldly proclaim that if these were conquered, a material improvement in the health of the nation would follow.

We, as doctors, should attack venereal diseases as infectious diseases are dealt with and prevented, leaving the religious side of the problem to the clergy, irrespective of our own individual and personal beliefs and views.

There is a great hope that in the years to come, if the existence of our Empire is threatened, as occurred within recent memory, *that* by improved organisation of the whole forces of research, treatment and co-operation, the civil and armed forces will have the benefit of the highest medical skill, and the latest medical scientific successes.

It is in this way that sanitary science and preventive medicine may become active forces in the production of individual fitness, for those called upon to undertake the defence of their country abroad, at home, and at sea.

Discussion was invited, and a good one followed. Among those taking part were:—

Surgeon Rear-Admiral W. Bett, M.V.O., R.N. Hospital, Haslar, Dr. W. A. Lethem, Lieut.-Col. C. W. Holden, D.A.D.H., Southern Area, Lieut.-Col. J. G. McNaught, Dr. R. W. Meller, Major H. St. A. Agate, R.A.M.C. (T.), M.C., Surgeon Captain A. R. Bankart, C.V.O., H.M. Yacht "Victoria and Albert," and Major J. Hingston, R.A.M.C., O/C School of Hygiene, Southern Command.

With the consent of the Richmond (Surrey) Borough Council, Dr. C. S. Brebner, M.O.H., has also been appointed Medical Officer of Health for the adjoining Ham urban district.

## YORKSHIRE MEDICAL OFFICERS OF HEALTH.\*

BY

J. MITCHELL WILSON, M.D., D.P.H., Consulting Medical Officer of Health, East Riding (Yorks) County Council.

The formation of the Association of Yorkshire Medical Officers of Health, which afterwards became the Yorkshire Branch of the Society of Medical Officers of Health, was the suggestion of Dr. North, at that time M.O.H. to the City of York. The first meeting was held in York in September, 1875; 16 medical officers of health were present from all the three Ridings.

It was decided to form an Association for Yorkshire. It is interesting to know that one who was present at that meeting is still on our list of member—I refer to Dr. Hicks of Easingwold. I think the new Association was specially fortunate in securing two exceptionally able and well-qualified men to be President and Secretary, who were well fitted to guide its early progress. Dr. North was a strong personality who could be *saue* or forcible as the occasion required; he made a most excellent Chairman. He was a wise counsellor, and often reminded members that they and the members of the Sanitary Authorities were working for one object, viz., "to promote the health of the community," and, therefore, there ought to be a cordial co-operation in all their work." Under his enthusiastic guidance the Association did its full share in advancing the administration of public health work on wise and progressive lines. Dr. Franklin Parsons was the first Hon. Secretary; he was M.O.H. to the Goole and Selby combined sanitary districts; he was more than an able sanitary official. He soon acquired an extensive knowledge of the geology of Yorkshire, and his several papers on the New Redstone and the Chalk formations as sources of water supplies are still valued as trustworthy guides. But in his ordinary reports to the sanitary authorities or to the Local Government Board, or in papers on some scientific subject, or in his Presidential address to the Microscopical Society, and to the Pathological Societies of London; or in recording the minutes of the Association, the result was always a clear and concise statement of all the essential parts of the subject then being dealt with. Of him we may say truly: "*Nil tetigit sed ornavit.*" He was appointed to the staff of the Local Government

\* Notes of a speech at the Annual Meeting of the Yorkshire Branch, February, 1922.

Board in 1879. Dr. Barry, M.O.H. of the Skipton combined sanitary districts, was made Secretary, but only held that office for a very short time as he was selected as Sanitary Commissioner to the Island of Cyprus. After his appointment to the staff of the Local Government Board, we knew him more intimately through his work in Yorkshire. I need only remind you of his exhaustive report upon the outbreak of Small-pox in Sheffield in 1888, and that on the outbreak of Enteric Fever in the Tees Valley in 1893. Both these men passed away in the midst of their labours; and we are thus reminded of another lost friend and worker for the Society, Dr. Spottiswoode Cameron; in January, 1879, he read a paper on "The Working of the Huddersfield Act of 1876," which provided for the compulsory notification of certain infectious diseases. From that paper we gathered that there was a good deal of opposition among the medical profession and the general public to the Act, but by his usual patience and tact Dr. Cameron was able to overcome that opposition and so the way was paved for several future Acts which quickly followed, ending in compulsory notification everywhere. We knew him more intimately when he came as M.O.H. for Leeds; and we all deeply regretted his long illness and sad death.

There are two others of the old group who are still members I should like to refer to. The one is Dr. Bruce Low. He was Treasurer for some years, he also was called to the Local Government Board, from which post he has only recently resigned. He read several papers in the early years of the Society, which specially dealt with the sanitary requirements of country districts; these papers were very helpful to rural M.O.H. The great need for additional sanitary powers in such districts was strongly felt; at the second meeting of the Association it was determined to petition Parliament, "To give local authorities powers to enforce the provision of water supplies in rural districts." Whether the efforts of the young society were appreciated or not, in 1878 the Public Health (Water) Act was passed.

The other old member I should like to recall is Dr. Wright Mason, of Hull. I sometimes wonder if M.O.'s of Health, and the Sanitary Authorities of Yorkshire do ever sufficiently realise how much they are indebted to him as guardian of the public health at Hull. For it is by his vigilance and perfected system of dealing with actual and suspected cases of infectious disease found on board ships, that epidemics of foreign origin are successfully hindered from obtaining an entrance into this county.

There is one feature of the work of the Association in its early years that may not generally be remembered, that is the frequent meetings with members of other Societies. Such combined meetings with the North-Western Association, and with the Northern Counties Association were frequently held during the years from 1878 to 1882. Would it not be helpful if such meetings were revived?

It has been interesting to look through the first minute book of the Association, and see the subjects discussed at the several meetings. To many of the members the work was comparatively new; yet they apparently were quick to note many conditions which were hindering their efforts in safeguarding the health of the community. First a Committee was appointed "To collect information and to report upon the conditions which were thought to contribute to the high mortality among children." Papers were read "On the evil results which were associated with the privy midden system in towns." "The urgent need for hospitals for the isolation of cases of infectious disease." "On outbreaks of enteric fever traced to contaminated well waters." That was some of their work as pioneers, in preparing the way for their more fortunate successors.

If in all I have said, I have shown the proverbial weakness of those who are not young, by recalling only the doings of the past, I can assure you it is not that I am indifferent or forgetful of the work that has been successfully accomplished in this country in more recent years; but there is not the same need for me to recall the great, almost revolutionary changes that have been brought about during the last 40 years, for the work of every M.O.H. has contributed towards reducing the death rate from 21.4, during the 10 years 1871—1880, to 14.4 during the years 1911 to 1920; and the average infant mortality from 149 per 1,000 births in the earlier ten years, to 100 for the later period. The average yearly number of deaths from typhus fever in the early years was 1,400, in 1919 there was only one such death; from enteric fever, there were nearly 8,000 annually in 1871—80 as compared with 577 in 1919. As to small-pox, it is not quite blotted out, but the real remedy is in the hands of everyone who cares to accept it.

Some other member will at another meeting tell the fuller story of these great results; but there is still much to be done, but may I encourage you with words of Browning: "The best is yet to be." Also with the ideas of a French philosopher of the eighteenth century who with

prophetic vision wrote: "It is clear that conservative or public medicine must in the long run banish transmissible and contagious diseases, as well as maladies due to diet, climate and occupation; nay, the hope of relief may be extended to all other diseases whose remote causes may probably yet be recognised. Now is it absurd to assume that the perfectibility of man will go on indefinitely through endless ages?"

### BOVINE TUBERCULOSIS.

BY

S. LYLE CUMMINS, C.B., C.M.G., etc., David Davies Professor of Tuberculosis, Welsh National School of Medicine, Cardiff.

Bovine tuberculosis is responsible for only about 1.7 per cent. of pulmonary, but for 18 per cent. of tuberculous meningitis, 16 per cent. of general tuberculosis other than meningitis, 21 per cent. of bone and joint, 51 per cent. of abdominal and 50 per cent. of cervical adenitis. Pulmonary tuberculosis, which is practically always human, is responsible for about 80 per cent. of the total death rate from this disease. It is clear from these figures that it is the human type of bacillus that constitutes the gravest part of the problem. Still the amount of morbidity, and indeed the mortality also, due to the bovine type is considerable, and every effort is needed to diminish this morbidity *provided that the effort does not entail worse evils in some other direction*. As to the relative virulence of human and bovine for man, the evidence is not conclusive. We know that the more important factor underlying the varying clinical phenomena resulting from these two types *is the path of entry, and that this makes it difficult to estimate the relative virulence*. It is safe to say that if the human type were habitually swallowed in milk instead of inhaled with the breathed air, it would give rise to a preponderance of abdominal and cervical glandular infections; while if the bovine type were usually inhaled, bovine pulmonary tuberculosis would be common in man. Andrewes reports 25 per cent. of London milk to contain bovine bacilli. This is herd milk, and the bacilli are probably very dilute in most cases. It seems certain that the ingestion of bovine bacilli does lead to a considerable degree of immunity to subsequent infection with the human type, and it is significant that where the cows are relatively free from infection the clinical type of the human disease tends to be acute and severe. But while this relative immunity is something to the good, the wide pre-

valence of tuberculous morbidity due to the bovine strain is all to the bad, and must be dealt with. We cannot at present control the dose of tubercle bacilli in cow's milk with any degree of accuracy, and so our only line of action is to make every possible effort to reduce the degree of infection of our milk supplies. This should be accomplished if possible by some method that does not involve boiling the milk. Better control of the herds, better testing of cattle, better hygiene of dairies, and a much greater mixing of milk are all measures to be advocated, and pasteurization of the milk renders it safe without spoiling it as a food. Any measure tending to unduly raise the price of milk is likely to be more harmful than beneficial, as milk is of such importance as a food that it *must* be brought within the means of the poorer classes. We want well-controlled and extensive experiments as to the value of different types of dried milk as to food value so that the great expense and risk of contamination involved in the transport of this bulky fluid may be reduced if this is found to be possible without loss of nutritive value. A great deal of caution ought to be observed in recommending the boiling of milk for children. This may be justifiable at times of epidemic diarrhoea, but it is not justifiable merely for the limitation of tuberculosis, as there is reason to think that rickets and infantile scurvy may be powerful aids to the development of bony tuberculosis. The soundest plan is to improve the herds, to better the methods of milking, the collection and distribution of milk, and to encourage research on methods of preservation.

### THE RETAIL DISTRIBUTION OF MILK.

BY

L. W. POLE, M.B., D.P.H., M.O.H. for Llanelly.

The retail sale of milk is one of the most important factors in connection with the health of the community. The distribution of food stuffs in general, bread, vegetables, etc., is carried on in a very casual manner with very little regard to ordinary ideas of cleanliness, and this applies very specially to milk. Those individuals, whether shopkeepers or milk vendors who expose for sale, or who are responsible for the distribution of, food and milk, would appear to be in entire ignorance of the dangers to which they are exposing their customers. In the case of milk the risk of

\* Paper read before Welsh Branch, Soc. M.O.H., Carmarthen, 19th November, 1921.