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Editorial.

THE BLACK DEATH.

DURING the past two years an immense agricultural area in Central and Eastern Europe has been used as a cockpit, and those dreadful and inevitable consequences of war—famine and typhus—are claiming thousands of victims. Until there is a cessation of fighting, and until there is peace within Russia, and between Russia and the border peoples on the West, any finally effective measures can only be taken with difficulty. But even as things are at present a great deal is possible in the way of reducing the danger of the westward spread of the disease. The two main facts that concern this country at present are that typhus is a winter disease, and that its path is

westward. This means that the health of Western Europe is in danger.

We all know what the Black Death meant to Europe and to this country in the Middle Ages, but it will be difficult to make people understand that there is now a real danger of a repetition of this horrible scourge. The disease has swept Russia from end to end, and now threatens to spread to Poland. With modern, rapid means of transit its spread further westward may easily be a matter of a few weeks, and it is doubtful whether the most rigid precautions will exclude the disease from this country if a real wave of infection sets in this direction.

The measures now being taken include the prohibition of the landing of aliens from areas where the existence of typhus is suspected, except at scheduled ports, and each is subjected to medical examination. Verminous persons receive special attention, and the medical officer of health of the area to which aliens from suspected areas are proceeding are notified. The recently issued Port Sanitary Authorities (Infectious Diseases) Regulations, 1920, have added considerably to the powers and duties of port and riparian sanitary authorities and their medical officers of health, and have specified the duties of the master of a ship, who is now requested to notify the medical officer of health of the presence of dead rats, or mortality or sickness among rats in his ship.

These powers are necessary and useful, but if our civilisation and our health knowledge are real and practical we should not be satisfied with a futile attempt to shut our doors against the suspected invasion. The health, conscience and common sense of the Western nations of Europe should be able to deal with this danger on the spot, and combined and immediate steps should be taken to stamp out the



pestilence where it is now raging. All our public health experience points to this as the only safe and scientific method of dealing with the situation.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

NOTICES.

Members are asked to give early attention to the Agenda Paper enclosed with this issue.

The Annual Meeting of the Society will commence at 4.30 p.m., on October 22nd, so that the business may be completed in good time for those attending the Dinner.

As already announced the Annual Dinner will be held at the Hotel Cecil, on October 22nd, at 7.30 p.m. The guests will be received by the President and Mrs. Fremantle.

The acceptances include the Lord Chancellor, the Bishop of St. Alban's, the Presidents of the Royal Colleges of Physicians and Surgeons, Sir George Newman, Viscount Astor, Lord Dawson of Penn, Brig.-Gen. W. W. O. Beveridge (Director of Hygiene, War Office), and Sir Arthur Robinson, First Secretary, Ministry of Health.

Members are invited to bring guests, and ladies will be welcome.

Tickets (obtainable from the Executive Secretary) are 12/6 each if applied for before October 15th. After that date the charge must be 15/-. Members are requested to remit payment with their applications, and also to send the names of their guests.

Early in October members will receive a copy of the Roll of the Society, the annual publication of which has been suspended since 1914. The first issue after such a long interval is likely to have some defects which can be avoided in future years, but the Executive Secretary is dependent on the obligation of members to notify changes of address and appointments. Even as it stands, the Roll appears to be the best directory of the Public Health Service at present available, and a limited number of copies have been reserved for members who desire to obtain additional copies for the office purposes of their Local Authority, at 7/6 each. Members will indirectly assist the Society by taking advantage of this offer.

In accordance with the revised Articles of Association, all candidates elected to the Society since October last have ranked as *Members*. The Branches will be asked to submit nominations for elections to the Fellowship of the Society early in November.

School Medical Officers are reminded that a Meeting will be held at the House of the Society on Saturday, October 23rd, at 11 a.m., to constitute a Group to serve their interests within the Society. Those who wish to associate themselves with the Group should communicate with Dr. A. Ashkeny, Town Hall, West Bromwich.

At their meeting on September 24th, the Council sanctioned the formation of a group for whole-time medical officers of health of non-county areas, i.e., municipal boroughs, urban and rural districts, and combined sanitary districts. Members of the Society who wish to be enrolled in this group should apply to Dr. J. M. Clements, Health Department, High Street, Beckenham, Kent.

GLASGOW SMALLPOX EPIDEMIC.

A recent return gives the following particulars:—

Patients admitted to hospital	...	...	446
Children under 15 years (unvaccinated)	91		
" " " (vaccinated)	29		
Deaths of unvaccinated children	...	31	
" vaccinated children	...	...	0

None of the cases aged 15 years and over showed any evidence of successful vaccination since 1901. The relative mortality between vaccinated and unvaccinated is shown in the following table:—

	No. of Cases.	Deaths.	Mortality Rate.
Vaccinated in infancy	342	51	15 per cent.
Unvaccinated...	99	37	"
No definite evidence of vaccination	5	1	20
	446	89	20

The relative excess of mortality among the unvaccinated therefore continues. It may be added that so far no cases have occurred among the medical, nursing or administrative staff engaged in dealing with the patients.

THE MEDICAL PRACTITIONER OF THE FUTURE AND HIS TRAINING IN HYGIENE AND PREVENTIVE MEDICINE.

BY

Professor H. R. KENWOOD, C.M.G.

The aims of the Consultative Council of the Ministry of Health cannot be realised on the preventive side, until, in the words of Sir George Newman, "every medical student, before or after graduating, receives proper instruction in and becomes imbued with the purpose, practice, and spirit of preventive medicine." The aim is to make the general practitioner depart from his narrow outlook of cure and become prominently identified with prevention. In this connection the scheme of the Consultative Council has received a great measure of support from medical men. The near future will test their sincerity; and it will show whether the general profession will rise to the realisation of the fact that its future lies as much in prevention as in cure, and therefore seriously determine upon a national programme to this end. The issue is momentous to the medical profession.

Public opinion is in advance of medical opinion in its recognition of the importance of prevention; but it must be a matter of slow evolution to the period when medical men and the public, by acting and reacting upon each other, will have brought about a new type of medical practice; a type which concerns itself with advice on health and the detection of the earliest signs of (or even the tendency to) disease, with the object of preventing or aborting it. It will be a great thing for humanity and for medicine when this goal is reached, and it can only be reached through the general practitioner further educating the general public.

The problem then is to train the future practitioner to detect unhealthy conditions arising from personal habits and from environment; to act as the guide and adviser to the public in those matters of health which lie within its control; to deal with all disease in the spirit of prevention; and, since it is he who "meets disease in the gate," to closely

co-operate with others in the necessary research upon this. He must be a hygienic apostle and must encourage the seeking of medical advice at the very beginning of all disease. Then, perhaps, in time we may have our adult welfare centres, with good attendances of non-sick men and women, forming a beneficent extension of the principle of our child welfare centres.

The purpose of this article is to offer a few broad suggestions upon how the medical training can best be made to produce these desired results.

How should the greatest difficulty in the way of arriving at our goal, namely, a satisfactory start, be overcome? In the first place it is essential for teachers to realise that no half-hearted and merely formal compliance with any training scheme will suffice; it is only enthusiasm in a real and sincere effort that can achieve success. The past and present apathy of the general practitioner in regard to hygiene and preventive medicine has to be replaced by a real conviction of its importance.

The medical student's five year curriculum is already overcrowded; and to relieve it there are suggestions for requiring instruction at school in elementary chemistry and physics, for the better co-ordination of studies, and for some pruning of superfluous matter. Any proposal to introduce new subjects or to greatly extend the time devoted to old ones, is therefore resented; yet to deal with our subject briefly, in a superficial way, is useless.

The short summer course of about 16 lectures on Hygiene and Public Health was never calculated to usefully impress and instruct medical students in their last strenuous year of work, when the early and obvious results of medical and surgical treatment naturally make a commanding appeal to them. The failure of the short undergraduate course is disclosed by the ignorance of the graduate who embarks upon the earnest special study of these subjects as a D.P.H. worker. The undergraduate teaching of preventive medicine is sterile because it is unreal. Something more than mere lectures by a special lecturer is wanted. The subject needs to be linked up with living material at the hospital and in the home.

If the curriculum were extended to six years (which is the most usual period outside of these islands), there is no branch of medical study that would not receive at the hands of the existing powers-that-be a prior consideration to hygiene and public health in the remodelling of the student's curriculum. My experience leads me to entertain but little hope in this direction.

Obviously the study cannot be post-graduate. To make it so would be to perpetuate the present derogation of the subject. It is knowledge that must be acquired during undergraduate training, for every graduate must possess it before embarking on practice. It must not be treated as a speciality; it is only the post-graduate student who works for the D.P.H. who should be regarded as specialising.

I am disposed to adopt the standpoint that hygiene and preventive medicine should be correlated, as much as possible, with other subjects of medical training. In my judgment it is only in this way that they will receive the respect and consideration they deserve, and by thus permeating the training lead to the endowment of medical men with real convictions on hygiene and prevention. These subjects, mainly dealt with by teachers of what the student regards as really important matters, will thus acquire a real significance and value which they have never yet enjoyed; and by introducing hygiene early (along with physiology), it would enter into the "formative" stage of medical training, with very obvious advantages. Thus it seems to me that the best scheme of training, at least for some years to come, would be to devote a rather more extended specialist teaching and training of the "final" student to the subjects of (a) environment and sociological circumstances in relation to the prevention of disease; (b) public health legislation and local public health administration (more particularly in their reference to the work, responsibilities and duties of general practitioners); (c) the elements of vital statistics. Personal hygiene (including food and exercise), should be correlated to the physiological teaching and training; and preventive medicine, to the teaching and training by the hospital staff. The preventive possibilities of disease, taking

into account the habits, life circumstances and social environment of the people, must be constantly impressed on the student by every member of the hospital staff. The text-books of physiology should set out in future editions the bearings of that science upon the art of personal hygiene, and those of medicine the preventive side to each disease or group of diseases.

Thus would be achieved a logical correlation of the greatest value in the training of the medical student. But the goal of the average medical student is the knowledge necessary to pass his qualifying examinations; and therefore no paper on general medicine, clinical medicine, obstetrics, &c., should be regarded as complete which does not contain a question on the prevention of disease; and no paper should be set on physiology without a question on personal hygiene. Moreover, it should not be possible to obtain any medical qualifications for practice unless a special examination in hygiene and preventive medicine in their sociological and environmental setting has been successfully passed.

This, in the judgment of one who has spent a large part of his career in the training of undergraduates and post-graduates in hygiene and public health, appears to be the most promising course to adopt in solving the problem of the training of the medical undergraduate. But for fruition it awaits the solution of another problem—the imbuing and education of the co-operating medical teachers, upon whose interest and sympathy success will depend. This latter matter, perhaps, presents the more difficult problem, for, as with the general practitioner, matters of diagnosis and cure occupy them to the exclusion of all other considerations. They must make a systematic teaching of preventive medicine permeate medical training, and they must be capable of endowing the student in these respects as well as they at present achieve their aim in respect to the diagnosis and treatment of disease. They will do well to constantly impress the fact upon the student that much of what they successfully treat could have been prevented but for the failure of the profession and the public to realise the real service and mission of medicine.

I recognise that there are certain advantages in dealing with the whole range of hygiene and preventive medicine by special teachers, if this could be done much more comprehensively than in the past, and early as well as late in the student's training. But I have indicated the considerations that prompt me to advocate an alternative scheme, which would, of course, embrace such co-operation and assistance from the special teachers of hygiene and public health as the other teachers may call for.

It is my intention to take advantage of any criticisms or suggestions which readers of this preliminary article may favour me with, in the setting out of a more detailed scheme in a subsequent issue of "Public Health."

POSTSCRIPT.—Since drafting the above lines I have had the advantage of reading Dr. H. K. Brown's address in the September issue of "Public Health." I agree with him, that in the teaching of applied chemistry and physics the application of these subjects to hygiene and sanitation should receive consideration; but I would not unduly labour this. We must not overweight the subject of hygiene to the medical student. The best results will be obtained by keeping it simple but effective. Our great object is to evoke concern and endeavour; if we succeed in this a great deal of good can be achieved without the student being taken beyond the threshold of the chemistry and physics of hygiene and sanitation.

THE King of the Belgians has conferred upon Dr. Francis J. Allan, medical officer of health for Westminster, the "Medaille du Roi Albert" *avec rayure* in recognition of valued services rendered to the Belgian cause during the war.

ON leaving Swindon to take up his new post as medical officer of health for the county of Northumberland, Dr. F. J. W. Whitley has received a number of presentations. The officers and staff of Swindon corporation offered a massive silver salver, and the staff of the health department gave a silver tankard. The presentations were made in the council chamber of the town hall in the presence of a large company.

VENTILATION OF CINEMAS.

BY

W. H. DAVISON, O.B.E., M.B., D.P.H.,
Asst. M.O.H., Birmingham.

In this short paper I propose to deal only with a few practical points in relation to the ventilation of cinemas.

The Medical Research Committee has recently published a monograph by Professor Leonard Hill on the science of ventilation, and I believe there is a further contribution from him in course of publication. He points out that the essence of ventilation is movement of air, and even to stir air about without changing it is a form of ventilation.

In crowded public buildings it is desirable to effect this movement by means of the delivery of a constant supply of heated air, so as to remove excessive moisture, and lessen, by dilution, the possibility of the spread of those diseases which may be conveyed by spray infection.

The feeling of comfort is dependant on temperature and humidity as well as movement of air. The temperature should be maintained between 59 and 65 degrees F., and the relative humidity should not exceed 75 degrees of saturation.

I am of the opinion that a change of air at least three times in the hour should be insisted upon in all cinemas, and, in order that this may be done with comfort, it is necessary to have all incoming air heated. Insufficient or defective heating apparatus causes cold draughts and invariably results in the closing of the fresh air inlets followed by more or less stagnation, and in fact in many cases the ventilation is then determined by the necessity for the removal of the tobacco smoke.

Even a higher standard than three changes per hour is desirable in the larger cinemas having a continuous performance commencing about mid-day.

The cubic space available per person requires consideration, and it is desirable that some guidance should be given in this matter.

While Licencing Authorities have regulations, more or less uniform throughout the country, as to the seating accommodation, the position and width of gangways, and the distance between the front row of seats and the screen, allowing on an average roughly 5 sq. feet of floor surface per person, no regulations appear to exist as to the height of the

ceiling, which may be found in some instances to be as low as 18 feet average height, consequently the space allowed per person in many cinemas is less than 100 cubic feet.

Our object should be to arrive at a reasonable working figure, bearing in mind on the one hand, that in buildings with very low ceilings there is a tendency for short circuiting to occur between outlets and inlets without proper diffusion of incoming air, and greater tendency to draughts, while on the other hand with the increase of cubic space the size and working efficiency of the fans requires to be much increased.

Having regard to all the circumstances it would appear that at least 120 cubic feet should be allowed per person, and the accommodation of buildings based on this measurement. Quite recently the regulations in Birmingham in regard to cinemas have been amended allowing 150 cubic feet per person, and requiring the efficiency of the fans to be such that they will be capable of changing the air four times in the hour.

The methods employed to ventilate cinemas may be classified under three headings:—

(1) The provision of openings in the roof fitted with cowles or Boyle's ventilators for the escape of the heated air, the incoming air being admitted through air bricks in the sides of the building and by the doors. No provision is made for the desirable heating of the incoming air. This type of ventilation is most inefficient, the air being rarely changed twice in the hour.

(2) The provision of one or more extraction fans fitted in ducts in the roof, the incoming air being admitted through special openings at the sides of the building with a radiator placed directly under each opening, or by means of fresh air ducts fitted with hot water pipes. Here the aspirating effect of the fans is relied upon to draw fresh air into the building, but there is a tendency for cold air to enter through the doors and cause draughts.

Unless the fans are kept in good order the results are not very satisfactory. I have visited about 40 cinemas ventilated by this means and found the ventilation unsatisfactory in a considerable number of them.

(3) The provision of extraction fans in the roof, combined with propulsion fans for the delivery of heated air. There is no doubt but that this is the most efficient method of ventilation, and with a proper installation of box blade fans a change of

air five times in the hour can easily be obtained. The supply of the incoming air can be regulated, its temperature and humidity can be controlled, and the fog screen can also be used.

With an adequate system of mechanical ventilation, the provision of agitating fans, to set the air in motion locally, should not be necessary, except, probably, under balconies.

On the efficiency of the heating arrangements depends to a large extent the success or failure of the ventilating plant. The hot pipes or radiators should be placed in such a position as to heat all incoming air.

There is, however, a tendency to lessen working expenses by cutting down the fuel bill, closing fresh air inlets, and depending on the heat of those present to warm the building. Frequently, under these circumstances, the fans are stopped for a time. There is, therefore, a necessity for some supervision to ensure that the heating and ventilating plants are worked efficiently.

Various methods may be employed to determine the amount of change of air in cinemas:—

(1) Leonard Hill uses the cata-thermometer, but his instrument is not yet sufficiently developed to be of practical use in this kind of work, and the readings, when obtained, are of little value until the factors necessary for their interpretation are available.

(2) Anemometer readings are unreliable and difficult to obtain under conditions usually found in cinemas.

(3) One is, therefore, driven to employ the estimation of the CO₂ as being the most simple and reliable method. This can be done in one of three ways:—

1. By the use of Haldane's apparatus, the objection to this being that it requires considerable skill in its use, and in the hands of the inexperienced is liable to grave error.

2. By aspiration through baryta water of known quality and strength, phenolphthaleine being used as indicator, and noting the amount of air required to cause the colour to disappear. This method, while having the advantage of giving the reading on the spot, cannot with confidence be relied upon.

3. By Pettenkoffer's method. This is the one which I recommend. A sample of air is taken by means of aspirating bellows in a five-litre bottle held by an attendant at the breathing level, care being taken not to contaminate the sample. The

neck of the bottle, which is about 2 inches in diameter, is then covered by a rubber cap, as it is difficult, later, to introduce the baryta without losing some of the sample when an ordinary stopper is used. Having found the amount of CO₂ present, and the cubic space allowed per person, it is a simple matter to calculate the change of air.

In testing by this means it is well to select a time when the building has been occupied to its full capacity for at least an hour.

With the minimum standards recommended, that is 120 cubic feet per person, and a change of air three times in the hour, the CO₂ should never exceed 20 parts per 10,000.

PATHOLOGICAL AND PUBLIC HEALTH ASPECTS

Of the Diagnosis of SYPHILIS, ACQUIRED & CONGENITAL, In the First Year of the Disease.

BY

WILLIAM CAMPBELL, M.B., B.Sc.,
Senior Pathologist to the City of Bradford.

The prophylaxis, the early diagnosis, and the efficient treatment of syphilis are all parts of one problem, the effective solution of which is of the greatest public health importance.

In the community syphilis is the cause of more or less serious economic loss. The disease, which, in its secondary stage occasions a certain, if small, loss from temporary invaliding, causes by reason of its later cardiovascular and nervous lesions much economic loss. Thus aortic disease, aneurism, arteriosclerosis, hemiplegia, apoplexy, locomotor ataxia and general paralysis of the insane frequently cut off men in the most productive years of their lives.

Important as acquired syphilis of the adult is, in so far as its later lesions cause many deaths long before the attainment of the natural expectation of life, it is, in these days when we wish to preserve our infant population, of at least equal importance in its relation to the question of the prevention of that part of foetal, and of infantile mortality attributable, directly and indirectly, to pathological states of

syphilitic origin. By reason of the recorded figures of the congenital form of the disease in Bradford, the incidence of syphilis in this town has been regarded as high.

Early Diagnosis. Given a patient with a venereal ulcerative or, as in some cases, a suspicious non-ulcerative lesion consequent on a recent exposure to infection, the medical man should be concerned with the diagnosis of syphilis at the earliest possible moment. The prognosis, which he may give his patient, depends entirely on early efficient treatment. Every effort, therefore, should be made to diagnose the condition before the Wassermann reaction becomes positive, and long before the skin lesions erupt. This can only be done by the demonstration of the spirochaeta pallida in the serous exudate from the suspicious sore, or in the gland juice withdrawn from glands draining the sore. But this is just the stage in which we do not commonly receive patients from the medical practitioners, though we do commonly get cases in the early secondary stage after they have been under observation by their doctors for some weeks. The latter cases are sent to have the diagnosis made by the Wassermann reaction, and in such cases presenting visible signs of active syphilis, the result of the Wassermann reaction is never in doubt. I would only say that too much valuable time is lost by this 'wait and see' policy. Thus patients may wait three months from the time of their exposure to infection to have the diagnosis made.

Now syphilis has been defined as a specific exanthematous fever "diluted by time." It is true that the period of time intervening between the date of contagion and the onset of the eruptive stage is drawn out into weeks, but this is just the period of time in which the diagnosis of syphilis should be made if the best result of treatment is to be attained, viz., cure.

Syphilis is an infection with a motile spirochaete. The biological considerations arising from this fact are not sufficiently clearly realised by the profession. At all events we have reason to believe that the biological aspects of this specific infection have as yet but an inadequate place in practical medical philosophy, otherwise early diagnosis and treatment would be much more common than they are.

There is much force and much practical value in Wassermann's division of syphilis into two biological stages, viz.:

- (1) The pre Wassermann reaction stage.
- (2) The post Wassermann reaction stage.

Thus Wassermann⁽¹⁾ represents the proportion of cures in stage (1) as 100 per cent. In stage (2) cure is possible, but only after much more heroic treatment than is necessary in stage (1). It is important therefore to diagnose and to treat syphilis in stage (1), i.e., before the Wassermann reaction has become positive. This diagnosis, as you are aware, can only be made by a competent pathologist, and his services should be utilised for the detection of spirochaetes at the earliest possible moment in in any suspicious sore. To this end the practitioner must aid the pathological examination by refraining from applying any antiseptic lotion or ointment or powder to the sore in question. The spirochaete is highly vulnerable, and a negative result in a case of syphilis may be the reward of such an application of antiseptic to the sore. If any application has been made, further applications must be interrupted, and the sore dressed with saline or plain boiled water for four days before serous exudate is taken from the sore for transmission to the laboratory for examination or, better still, before the patient is sent to the pathologist, who will take the material himself immediately before he examines it for spirochaetes by the dark ground illuminator.

In the interests of our patients we should realise that it is early diagnosis which is important as, naturally, treatment follows at once, and the prognosis as regards cure is maximal. Yet only too often one has cause to believe that it is but imperfectly understood that between the date of the implantation of the spirochaete and the development of the primary lesion much is happening, and that between the primary stage and the secondary eruptive stage, very much more happens. Thus from the date of contagion the spirochaete multiplies at first as a tissue parasite; the tissues of the host react to its presence; this tissue reaction, which is not at first obvious to the naked eye, proceeds; lymphatic infection takes place very early, and there is some evidence too of a much earlier infection of the

blood stream than is commonly thought to occur.

Mallory⁽²⁾ says, "It is difficult to determine how soon the septicaemia takes place. We know, however, that the treponema spreads very early from the site of primary infection through the lymph vessels to the adjoining lymph nodes. Moreover, experiments have shown that excision of infected skin a few hours after inoculation will not prevent the development of the disease. Judging from the length of time elapsing between the infection and the first appearance of the primary lesion, a general septicaemia exists at least three to four weeks before the secondary lesions appear."

The local tissue reaction proceeds until it becomes obvious to the naked eye, and we then have the early clinical primary lesion. Up to this point the blood has shown little change, and if the patients' blood serum be tested the reaction is negative to Wassermann's test. It is certain, however, that infection of the blood stream has been proceeding apace, and we soon get evidence of this in general constitutional changes as shown by syphilitic fever, etc. Up to this point the Wassermann reaction has remained negative; it will not remain so for long. The blood serum commences to give a faintly positive reaction to Wassermann's test. We have now reached the limit of the pre-Wassermann reaction stage or period. If now we examine the reaction of the blood to Wassermann's test at intervals during the two or three weeks preceding the clinical secondary, eruptive stage, we shall find it grading from faintly positive to weakly positive, and then to positive as we approach more closely that point of time when the skin lesions erupt. We now have the early post-Wassermann reaction stage or period.

What has happened? The spirochaetes have invaded the blood stream. The spirochaetal septicaemia has led to metastatic deposits of spirochaetes in numerous foci far from the original point of inoculation. These spirochaetes have settled and become tissue parasites like most of those at the primary focus of infection. Syphilitic lesions develop slowly; in other words the tissue reaction to the spirochaetes is of slow development. Therefore the

reaction to these secondary deposits of spirochaetes is not apparent at once to the unaided eye. The body tissues in general, however, have so reacted that a detectable alteration in the blood serum is now present, as evidenced by the Wassermann test. The tissue reaction to the secondary deposits of spirochaetes will presently become obvious to the naked eye. And so we find that soon after the Wassermann reaction has become positive the skin lesions erupt. When this happens the clinical secondary state of syphilis has been reached, and the Wassermann reaction of the blood serum is now, in the vast majority of cases, found to be strongly positive—that is the strength of the reaction has passed from positive (+) to positive (+±) or to strongly positive (++). At this point the prognosis for the patient is much worse, and the amount of treatment necessary very much greater than in the pre-Wassermann reaction stage of clinical primary syphilis.

These considerations emphasise the necessity of diagnosing syphilis as soon as possible after the appearance of a suspicious primary sore.

There is too great a tendency on the part of medical men to send a specimen of blood for diagnosis by the Wassermann reaction at that early stage of the disease when the Wassermann test is of little, and the dark ground examination of the exudate for the spirochaetes of every, value. Further, one has seen not a few cases where the patients had been advised, on the strength of a negative Wassermann reaction alone, that they did not have syphilis; such cases, unfortunately, wait for perhaps eight or ten weeks longer, and then present themselves with typical florid secondary syphilis.

Therefore in every case of early suspected syphilis one must

- (1) examine microscopically by dark ground illumination the exudate from the suspected sore.
- (2) repeat the examination should the result of the first search be negative and the clinical suspicion strong.
- (3) in the event of the second examination yielding a negative result and the clinical suspicion remaining, test the blood serum

for the Wassermann reaction each week for several weeks.

The Wassermann Test. The first necessity in connection with this important reaction is a sufficient specimen of blood or of cerebrospinal fluid. Though the diagnosis of syphilis is important, and though blood can always be easily obtained in proper quantity from all cases, there are sent to the laboratory at times useless specimens composed of but little more than the charred remains of a drop of blood in the capillary end of a Wright's tube. The second necessity is a pathologist with serological experience. The really competent pathologist will have clinical experience as well, and his opinion will be of correspondingly greater value. At all times he should work in close conjunction with the Clinical Medical Officer. This facilitates the interpretation of serological results in obscure cases, and in cases where the findings are apparently anomalous as between the serological reaction and the clinical picture.

The Wassermann Test in Diagnosis. Primary Stage. As I have already pointed out, the Wassermann reaction is of comparatively little value in the primary stage in so far as negative reactions do not with any high degree of certainty exclude syphilis.

The Wassermann test commences to be of some value only three weeks after the appearance of the primary lesion, but from the fourth week onwards it has some considerable value.

Negative reactions in the primary stage should never on any pretext be taken as excluding a diagnosis of syphilis.

Secondary Stage. A positive result is obtained in at least 95 per cent. of untreated cases. Treatment interferes with the reaction, and some cases give faintly positive or negative results even when lesions are present; this last however is unusual. In every doubtful case where treatment has been begun before the diagnosis has been reasonably certain, the patient should be given the full benefit of antisyphilitic treatment in spite of a negative reaction to Wassermann's test.

A negative reaction in untreated cases of suspected secondary syphilis is of great value as indicating that the disease is almost certainly not syphilis.

Dr. White tells me that of specimens sent to my laboratory from untreated cases in the secondary stage, all, or 100 per cent., have been returned as positive, or strongly positive. The value of the reaction is thus apparent. A positive reaction is, in this country, a valuable sign of syphilis, and I say this though the Wassermann reaction is not (in the strictest sense of the word "specific") specific for syphilis. Its diagnostic value so far as syphilis is concerned—and apart from the reactions obtainable in cases of yaws, relapsing fever, malaria, trypanosomiasis, and some cases of typhus fever—is enormous. Scarlet fever and typhoid fever may give positive reactions with the test, but no disease apart from these fevers and malaria giving a positive Wassermann reaction is likely to be encountered in this country.

Scarlet fever, typhoid fever, and malaria, which all have special clinical features, are not difficult to diagnose, and are therefore unlikely to be confused with syphilis.

In all cases of skin disease of doubtful origin the Wassermann reaction should be tested as a routine measure.

A fortnight ago I had a case of a man who denied all possibility of infection, and who presented wide spread lesions of what was diagnosed by a competent specialist, seborrhoeic dermatitis. I tested the Wassermann reaction in this case and found it positive. In spite of this result the clinical opinion was still against the diagnosis of syphilis. I repeated the test, and again found it positive. Clinical opinion was still against the diagnosis of syphilis, and I repeated the test for the third time with a similar result. Ten days later the patient's wife was referred to me by the family doctor, who had diagnosed secondary syphilis in the wife. On examination she was found to show condylomata and other lesions of secondary syphilis. Thus we had unexpected confirmation of the truth of the diagnostic reaction in the case of the husband.

Before passing from this subject I should point out that certain cases of malaria are apt to give a positive reaction with Wassermann's test. The reaction, however, quickly becomes negative when the patient is put under efficient treatment with quinine. A positive reaction is

more likely to be obtained in cases of malignant tertian than in the benign tertian malaria. I mention the subject of malaria merely because so many returned soldiers suffer from the disease.

Early Latent Stage. In the early latent stage the cases are actually "syphilis carriers." It follows that they are highly infective, and the diagnosis of these cases is of obvious public health importance. The value of the Wassermann reaction in such cases is very great, although the percentage of positive reactions obtainable is much lower than in the secondary stage of syphilis where definite skin signs are present. Somewhere between 50 per cent. and 60 per cent. of all cases of syphilis in the early latent stage give positive reactions. It may be that of those who give negative reactions some are cured, but this is not true of all. Two things must be remembered. The first is that exceptional cases of syphilis showing definite signs of the disease give negative reactions even when not under treatment. The second is that syphilis is a disease which varies enormously in virulence according to the strain of the infecting spirochaete, individual resistance, and racial idiosyncrasy. For instance, in some cases the disease appears to undergo a relatively rapid and permanent cure. On the other hand, this is not true of the average case of syphilis met with in England. In the Balkans syphilis is a relatively mild disease, but Europeans infected there contract syphilis of by no means a mild type.

Early in 1918 I had referred to me a case who had been infected in 1890. When I saw him he presented a lupoid condition of the face, which I considered had extended too rapidly for the disease to be lupus vulgaris, although it had been diagnosed as such by various people. On enquiring into his history I discovered that he had had a chancre in 1890. The patient was then at Aldershot, where he was told that he was suffering from syphilis. Blackwash had been applied to the sore, but beyond that no treatment was given. In 1893 he married; in 1900 he had what he called "eczema" of the back. On examination his back showed typical well formed scars of gummata. He stated that his health had always been good between the date of infection in 1890, and the time at which I

saw him in 1918. Meanwhile, his wife had had no miscarriages, and he was the father of ten children, who were all healthy and well. At no time did he have any treatment for the disease beyond the initial application of lotio nigra to the primary lesion. I found his Wassermann reaction to be strongly positive. The test was confirmed at another hospital, and in three weeks the patient's condition had cleared up under the administration of salvarsan and potassium iodide.

I instance this case as showing one of the milder types of infection. Though this case apparently did not infect his wife, and while he produced ten of a healthy family, there is every probability of cases of syphilis in the early latent stage of the disease infecting their wives and producing infants with congenital syphilis. The Wassermann test should, therefore, be applied to all cases suspected of being in the early latent stage of syphilis.

I shall now pass to the consideration of certain matters relating to congenital syphilis, which is considered very prevalent in this town of Bradford.

CONGENITAL SYPHILIS.

The clinical picture of congenital syphilis may be typical or atypical.

In certain cases the diagnosis may be clinched by the finding of spirochaeta pallida in material from skin lesions; but in many cases skin lesions are wanting, and in these the Wassermann reaction is of the first importance.

Clinically, several diseases may resemble congenital syphilis in certain respects. For instance, one such disease is rickets. Rickets may, of course, co-exist with syphilis. It should be remembered, however, that many cases of non-syphilitic general disease in children are diagnosed as congenital syphilis.

The subject is full of difficulty. Thus we find in apparently comparable areas observers who place the incidence rate of congenital syphilis at a low figure, while others place it at a very high figure indeed.

It is certain that, so far as the infant population is concerned, the Wassermann reaction should be tested as a routine in all cases of general disease of uncertain origin. By this means only can we hope to obtain reliable

figures of the actual prevalence of congenital syphilis in the community.

The therapeutic test of neosalvarsan as applied by some is of little value, as many conditions in children other than syphilis are notably benefitted by the administration of arsenic.

The Bradford Returns. (A.) Clinical. In her reports the Chief Medical Officer of the Infants' Department states the incidence of congenital syphilis in children examined at the Infant Clinic to be as follows:—

(1) Year 1917:—

(a) Of 2,441 infants under observation during 1917, 832, or 34.08 per cent. showed clinical signs of congenital syphilis.

(b) Of 179 infants who died during 1917, 140, or 78.21 per cent., showed clinical signs of syphilis while under observation, while in 58 of these cases, or 32.41 per cent., the certified cause of death was congenital syphilis.

(2) Year 1918:—

(a) Of 2,172 infants under observation during 1918, 763, or 35.13 per cent., showed clinical signs of congenital syphilis.

(b) Of 148 infants who died during 1918, 120, or 81.08 per cent., showed clinical signs of congenital syphilis, while in 38 of these cases, or 25.69 per cent. the certified cause of death was congenital syphilis.

(B.) Serological. The following figures include all the blood tests done at the City of Bradford Laboratory for the Infants' Department. They include tests from a small number of mothers, and a few fathers of proved, or of presumably syphilitic children. The late pathologist, Dr. F. W. Eurich, was responsible for the tests from 1917 until August 31st, 1919. Dr. Eurich uses No 4 Method of the Wasserman Test as recommended by the Medical Research Committee.

I also give the figures for the tests done by me from Sept. 1st, 1919 until Feb. 26th, 1920—a period of six months. I can speak confidently regarding these reactions as I have tested each serum by No. 4 Method M.R.C., and by Browning's Method; further in practically

every case I have also put up tests with double the quantity of patient's serum usually tested, in order to gain some idea of the strength of doubtful reactions. That I have been able to extend these tests has been due entirely to the fact that the medical officers of the Infants' Department have sent to the laboratory such excellent specimens of blood.

The signs used indicate as follows:—

++ strongly positive.
 + + } positive
 and + }
 + weakly positive
 + faintly positive
 =
 — negative.

For the sake of convenience and clarity positive (+ +) are entered under, and included with, positive (+) results.

Strongly positive (+ +) and positive (+ + and +) reactions are taken as diagnostic of syphilis.

Wasserman Reactions. (1) Year 1917. Total number of cases tested—477. Results:—

++	+	+	+	—	
9	35	8	26	399	Total 477.

Taking strongly positive (+ +) and positive (+) reactions as diagnostic we find that 44 of 477 cases, or 9.2 per cent, gave positive diagnostic reactions.

2. Year 1918. Total number of cases tested = 158. Results:—

++	+	+	+	—	
18	3	2	7	128	Total 158.

Again, taking (+ +) and (+) results as diagnostic we find that 21 of 158 cases, or 13.2 per cent., gave positive diagnostic reactions.

3. Year 1919. (The clinical figures for 1919 are not yet available.) The total number of cases tested = 167. Results:—

++	+	+	+	—	
15	6	6	12	128	Total 167.

Thus we find that 21 of 167 cases tested, or 12.5 per cent., gave positive diagnostic reactions.

4. September 1st, 1919, to February 26th, 1920. (Dr. W. Campbell.) Total number of cases tested = 164. Results:—

++	+	+	+	—	
18	6	6	5	129	Total 164.

Therefore 24 out of 164 cases examined during this period, or 14.6 per cent., gave positive diagnostic reactions.

These are made up as follows:—

	++	+	+	+	—	Totals.	Percentage of Diagnostic Reactions.
Babies	10	0	1	2	52	65	15.4 per cent.
Mothers	6	6	3	3	72	90	13.3 per cent.
Fathers	2	0	2	0	5	9	22.2 per cent.

It will be noted that of the positive diagnostic reactions in the case of babies, all were strongly positive (+ +), and I incline to the view that this is the rule in infants with congenital syphilis. Nevertheless, in view of Bradford's clinical returns for congenital syphilis, I must, in the meantime, until I have made further tests, keep an open mind on the matter. I shall content myself, therefore, with placing the clinical and serological data before you, and asking you to consider them in the light of other work by such people as Browning, Findlay, and others.

Browning³ states that the Wassermann reaction is positive as a rule in untreated cases showing active lesions. This holds up to early childhood. Later on, according to the same writer, and also when the infection is quiescent, a considerable proportion of cases react negatively.

Harrison⁴ in a table showing the combined results obtained in different stages of syphilis by a number of workers gives the following figures:—

Stage.	Number of Cases.	Percent. Positive.
Congenital—with manifest symptoms	394	96.9 p.c.
Congenital—latent	34	82.3 p.c.

Harrison says, in reference to the table, "The percentages of positive reactions shown in the table are probably slightly lower than those which would have been obtained if all had been tested within the past three or four years, since they include numbers of cases which were tested in the early days before the technique had been so finely adjusted as it is

now. Still, the table will serve its present purpose of showing the comparative values of negative results."

Leonard Findlay⁵ quotes Browning as obtaining 95 per cent. of positive reactions in cases of congenital syphilis with lesions.

Consider next the results obtained in 100 mothers of definitely syphilitic children under Findlay's⁶ care. Of these 100 mothers 91 per cent. gave positive Wassermann reactions. Forty-five of the series were mothers of children between 10 days and six months of age, and of the 45, 43, or 95.5 per cent., gave positive re-actions, while of the remaining 55 mothers of children between the ages of six months and nine years, 48, or 87.2 per cent., reacted positively to Wassermann's test. Thus the mothers of syphilitic children, even long after the birth of the infected child, according to Findlay, react positively as frequently as patients presenting secondary manifestations.

The subject is one of interest. It is certainly a subject of great public health importance. Every endeavour, therefore, should be made to determine accurately (1) the actual prevalence of congenital syphilis, and (2) the causes of general disease of non-syphilitic origin in infants and young persons.

REFERENCES.

- (1) Wassermann, A. von, Ueber die Wassermannsche Reaktion und biologische Stadien der Lues in Bezug auf Therapie sowie Bekämpfung der Syphilis. Deutsche med. Wchnschr., Berl. u. Wien, 1918, 44, 897.
- (2) Mallory. The Principles of Pathologic Histology, 1914. Part 1, p. 214.
- (3) Browning & Watson. Handbook of Venereal Diseases, 1919. Ch. 7, p. 107.
- (4) Harrison. Diagnosis and Treatment of Venereal Diseases in General Practice. Second Edition, 1919. Ch. 17, p. 273.
- (5) Leonard Findlay. "Syphilis in Childhood." Oxford Medical Publications, 1919.
- (6) Findlay. Loc. cit.

DR. JOSEPH PRIESTLEY, medical officer of health for Lambeth, has just completed twenty-five years' service as medical officer of health under the late Lambeth Vestry and the present Lambeth Borough Council.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

REPORT OF THE COUNCIL. SESSION 1919-20.

Your Council report:—

(1) That the Session 1919-20 may be recorded as one of the most active in the history of the Society. Over 450 candidates have been nominated for election, and nearly 100 Fellows, whose membership had lapsed during the war period, have been re-instated. The net increase on the Roll of the Society at the opening of the new Session will be 523.

For the first time since 1914 members will receive a printed copy of the Roll, and it should be their endeavour during the coming Session to see that no member of the Public Health Service remains outside the Society.

(2) That the following papers were read at meetings of the Society:

- Dr. George Reid, O.B.E.: "Some pressing Public Health Problems."
 Dr. W. J. Howarth, C.B.E.: "Eugenics in relation to Public Health."
 Dr. John Robertson, C.M.G., O.B.E.: "Slums and their regeneration: a neglected aspect of Town Planning."
 Dr. Halliday Sutherland: "Tuberculosis schemes in being."
 Dr. A. H. Bygott: "The Provision of Expert Medical and Surgical Assistance."
 Dr. J. R. Kaye, "Inconsistencies in Personal and Communal Hygiene."

(3) That the annual provincial meeting of the Society was held at Scarborough, jointly with a meeting of the Yorkshire Branch, on May 14th and 15th, when the members attending were hospitably entertained at luncheon by the President.

(4) That ten meetings of the Council have been held during the Session, including one at Scarborough and one at Birmingham. The proceedings at these meetings have been fully recorded in "Public Health," and have included matters involving the interests of every branch of the Public Health Service.

(5) That they have had official communications with

- (a) the Foreign Office in regard to exchange of publications with the Public Health Departments of countries recently our enemies.

- (b) the Ministry of Health in regard to:
- (i.) the submission of evidence before the Department's Unhealthy Areas Committee;
 - (ii.) the exclusion of Medical Officers from the benefits of Civil Service Bonus Award 101 by many local authorities;
 - (iii.) the communication of departmental Orders, Regulations and Memoranda direct to Medical Officers of Health;
 - (iv.) changes desirable in the method of taking the National Census;
 - (v.) the supply of standardised sera and vaccines for use in isolation hospitals, etc.;
 - (vi.) the submission of evidence before the Departmental Committee on Meat Inspection;
 - (vii.) the payment of Tuberculosis Officers for periodical certification of incapacity in discharged tuberculous soldiers and sailors;
 - (viii.) the revision of the International List of Causes of Death;
 - (ix.) inadequate remuneration advertised by Local Authorities for pending appointments;
 - (x.) the inclusion of office and travelling expenses in salaries advertised by Local Authorities for pending appointments.
- (c) The Board of Education in regard to the communication of Departmental Orders, Regulations, Memoranda, etc., direct to School Medical Officers.
- (d) The Ministry of Pensions in regard to the payment of Tuberculosis Officers for periodical certification of incapacity in discharged tuberculous sailors and soldiers.

(6) That deputations have attended at the Ministry of Health to submit recommendations by the Society in regard to (a) the abolition of privy middens, and (b) the appointment of whole-time veterinary officers for the purposes of the Milk and Dairies (Consolidation) Act, 1915.

(7) That a Special Committee was set up on October 7th, 1919, to consider and report from time to time on the whole question of the remuneration and terms of service of all medical officers of local authorities.

ation and terms of service of all medical officers of local authorities.

(8) That this Special Committee held ten meetings during the Session and two conferences with representatives of the British Medical Association, besides sending a deputation to the Annual Representative Meeting of the British Medical Association at Cambridge.

(9) That a Memorandum setting forth the claims of the Public Health Service and embodying a scale of salaries prepared by this Special Committee was adopted by your Council on November 1st, 1919.

(10) That by request of members of the Society a large number of local authorities have been approached to adjust the salaries of their medical officials in accordance with the recommendation of the Memorandum, with encouraging results.

(11) That other efforts of this Special Committee included (a) the sending of a deputation to the Corporation of Blackburn in regard to the salary of their Medical Officer of Health, and (b) in conjunction with the British Medical Association, securing the co-operation of the Medical Journals in fixing, as a temporary measure, the minimum value of the emoluments of a whole-time medical officer in any branch of the Public Health Service at £500 per annum, advertisements offering less remuneration being refused insertion.

(12) That a joint committee of the British Medical Association and this Society will be set up early in the coming Session to take charge of the case for improvement in the salaries of medical officers in the Public Health Service on the lines indicated in the above Memorandum.

(13) That steps are being taken to secure a full submission of the claims of medical officers of Local Authorities before the Whitley Council, recently set up, for Local Government Officers.

(14) That a Special Committee, appointed from members of the North-Western Branch, was nominated on February 20th, 1920, to report on any changes advisable in the methods hitherto adopted for taking the National Census.

(15) That recommendations based on the report of this Special Committee were forwarded to the Ministry of Health and the Registrar General, and were largely met by subsequent legislation.

(16) That a Special Committee was appointed on June 4th, 1920, to consider the recommendations contained in the Interim Report submitted to the Ministry of Health by the Consultative Council on Medical and Allied Services.

(17) That this Special Committee submitted a draft Memorandum, criticising certain features of the Interim Report, which was circulated to all members of the Society on August 1st, 1920, for their information, pending further consideration by the Council.

(18) That representatives of the Society have been nominated to committees of the British Medical Association, the National Association of Local Government Officers, and numerous other bodies concerned with matters affecting Public Health Officials and administration.

(19) That in accordance with the amended Articles of the Association the formation of four groups has been sanctioned for the promotion of special interests within the Society. The Tuberculosis Group, and the Naval, Military and R.A.F. Hygiene Group, are already in working. The Group of Whole-Time (Non-County) Medical Officers of Health, and the School Medical Service Group are in process of organisation. It is expected that these four groups, and others to be formed later, will play an important part in increasing the strength and influence of the Society, and in promoting harmonious co-operation between the various branches of the Public Health Service.

(20) That they have received from the Home Counties Branch a portrait of Dr. Charles Sanders, and from the West of England Branch a portrait of Lieut.-Col. Herbert Jones, for inclusion in the Gallery of Past-Presidents of the Society.

(21) That the annual exchange of officers involves the retirement from the Council of Prof. A. Bostock Hill, Dr. P. Caldwell Smith, C.B.E., Dr. J. R. Kaye, and Dr. T. Ridley Bailey, to each of whom the Society is indebted for long and valuable services.

(22) That they wish to place on record their appreciation of the exceptional services rendered to the Society during the last two years by the retiring President. Professor Kenwood came into office when the War was drawing to a close, and when it was evident that there must be a re-organisation of the Society. In his inaugural address he outlined the scheme of reconstruction which has since been carried through largely by his own enthusiasm, tact and persistence. On vacating the chair, he leaves the Society a united body, re-inforced in numbers, and re-invigorated for its increased responsibilities as the representative body of the whole Public Health Service.

COUNCIL MEETING.

A meeting of the Council was held at the House of the Society, on Friday, September 24th, 1920. The President (Prof. H. R. Kenwood) was in the chair, and there were present:—Prof. A. Bostock Hill, Drs. E. H. Snell, J. Cates, G. F. Buchan, Charles Porter, P. Caldwell Smith, D. C. Kirkhope, W. J. Howarth, T. Ridley Bailey and C. Sanders.

The Minutes of the last Council Meeting having been read and approved, apologies for absence were read from Dr. J. R. Kaye, Dr. J. A. Hislop, Dr. R. A. Lyster and Dr. Edmund Smith.

Correspondence—(1) From the Ministry of Health in reply to a letter from the Society in reference to the inclusion of office and travelling expenses in the salary advertised for the Medical Officer of Health of the East Kent No. 1 United Districts. The Ministry have informed the Clerk of the Joint Committee of the United Districts that "while they will not refuse sanction to the appointment on the terms proposed, the salary must be regarded as a commencing salary, to be reconsidered at the end of a year, when the Minister would like a report showing the cost to the officer of office accommodation, clerical assistance, stationery travelling and other out-of-pocket expenses."

Regret was expressed that the Ministry had not definitely refused to sanction the appointment in view of the importance of the principle involved, and it was decided to consider the matter further in connection with other appointments, recent and pending, where the salary offered is inclusive of office and travelling expenses.

(2) From the General Council for the National Registration of Plumbers inviting the Society to nominate a delegate to attend a meeting of the General Council at Nottingham, on September 27th. *Resolved*.—That Dr. Philip Boohyer be nominated to represent the Society.

(3) From Dr. J. M. Clements on behalf of the Group of Medical Officers of Health of Municipal Boroughs, Urban and Combined Districts, asking for the recognition of that body as a Group of the Society, in accordance with paragraph 8 of the Articles of Association. *Resolved*.—That the formation of the Group be sanctioned forthwith.

(4) From the Town Clerk of Ealing in reply to a representation from the Society that, in the interests of public health administration, the case of *Copeland v. Orr* should be taken to the Court of Appeal. The Town Clerk intimated the intention of his Council to pursue this course and to

OBITUARY.

DR. J. TUBB-THOMAS.

Everyone who knew Dr. J. Tubb-Thomas at all intimately was certain of one fact, and that was that his forty years of life as a medical man had been a period of strenuous activity and ceaseless work. If it had been his good fortune to have become medical officer to a progressive authority, instead of one of marked reactionary tendencies, he would have made his area a model of public health administration for the country. In spite of his continuous handicap in the way of committees who preferred to listen at times to the opinions of the laity rather than the expert, he succeeded in doing a lot of good work and in breaking new ground in many directions. There is no doubt that the continuous strain involved in having to meet attacks and opposition from within his own authority was the actual cause of Dr. Tubb-Thomas' breakdown, for he was a man who could have stood any amount of straightforward hard work without injury.

That there was strong local feeling in favour of Dr. Tubb-Thomas is shown by the comment by the "Wiltshire News," which said in its issue of October 1st:—

"By death Dr. J. Tubb-Thomas has passed out of the life of the county of Wilts and of Trowbridge, but not out of the memory or the thoughts of those who were his close associates in the medical services of a wide-spread community. The late Medical Officer of Wilts was nothing if not thorough, and it will ever stand to his credit and honour that he served his county well in all that pertained to the maintenance of the public health. The magnitude of his knowledge and of his wisdom was such that any opinion asked for and given could always be regarded as reliable, based as it was upon forty years' experience in things medical. . . . It is, after all, one's life work which matters most, and we doubt not that building, as it will do, upon the foundations laid by its late officer, the County Council of Wilts will in the months and years to follow have occasion to recall and pay testimony to the high efficiency which will ever endure as a monument to the memory of Dr. Tubb-Thomas."

The way in which its hard working and efficient County Medical Officer was treated at the end of 21 years in its service will remain for ever a slur on

the honour of the County Council, while those members who put up such a good fight on his behalf will always have the satisfaction of knowing that they did their best to prevent a mean action that was unworthy of any responsible public body.

The severance of his official ties with the public life of the county which took place in February last was undoubtedly a great blow to him, and he once said, in the course of conversation, that what ailed him was "a broken heart." At all events his retirement appears to have hastened his end, and with inactivity his malady became more and more acute.

Like all big workers Dr. Tubb-Thomas found time for many kinds of activity. He was continuously president of the Wiltshire Branch of the British Medical Association until a year or so ago, and at the time of his death he was still honorary secretary to the West of England Branch of the Society of Medical Officers of Health and a prominent member of the central Council of the Society. A strong personality, he was not afraid to express his opinions forcibly and openly, and he made many staunch friends and a few bitter enemies. It was his delight to afford hospitality to the former and to defeat and circumvent the latter, and right up to the end he retained those sportsmanlike characteristics which must have served him well on the Rugby football field on which he was at one time a notable figure, winning his international cap for both Ireland and Wales.

DR. J. A. PRIDHAM, M.C., has been appointed medical officer of health for the Weymouth rural district.

DR. G. H. DART entered on the duties of his new appointment as medical officer health for the Metropolitan borough of Hackney on October 16th.

THE distinction of Commander of the Roumanian Order of the Crown has been bestowed on Sir Wm. Robert Smith, M.D., ex-Sheriff of the City of London.

DR. F. J. WALDO, J.P., His Majesty's Coroner for the City of London, and formerly medical officer of health for the Inner and Middle Temples, has been elected Master of the Plumbers' Company.

DR. J. S. TEW has lately completed twenty-five years as medical officer of health for the Tonbridge urban district. At their last meeting the council passed a resolution expressing appreciation of Dr. Tew's faithful and valuable services to the town.

PARLIAMENT AND PUBLIC HEALTH.

Being the Presidential Address to the Society of Medical Officers of Health, Friday, October 22nd, 1920.

By LT.-COL. F. E. FREMANTLE, O.B.E., M.P.,
Consulting C.M.O., Herts C.C.

This is the first occasion on which our Society has had for its President a Member of Parliament. We are a body of public servants under Local Government, whose function is to help our Authorities to carry out and promote Acts of Parliament. It may therefore be of interest if we direct our attention this afternoon to the share that we individually and as a body can take in the government of this country with a view to national health. "Fortune brings in some boats that are not steered." My own personal boat with little steering has certainly been brought by fortune into somewhat unique places, and if one may naturally be proud of representing any section of our glorious country in this wonderful epoch of its history one may certainly be no less proud of having had the privilege to train for it by fifteen years' service as a County Medical Officer of Health in closest friendship and co-operation with such professional colleagues.

Others perhaps look on a Member of Parliament as a subject of envy; but when the first flush of success in the election and of temporary fame in the picture papers, and when the novelty of the green benches has passed, the Member finds himself immersed in a net-work of responsibilities and complex relationships which make him often regret the quiet days of professional life. It would be bad enough if one had no imagination and no sense of duty beyond that of attending to urgent claims in his constituency, and of voting loyally and with fair regularity as directed by the Party Whips in the Division Lobby. But no one who has been through the experience of a medical officer of health can fail to realise the unique opportunities that offer themselves in Parliament. No one who has been filled with the national spirit in the late war can fail to appreciate the responsibility for taking advantage of every such opportunity.

In the quiet of our study, we are often tempted to draw out as in a diagram the correct

manner in which the care of the national health should be assured. But in public affairs we are constantly met with the difficulty of achieving the several stages recorded on our diagram. Resource, invention, tact, are essential to get round obstructions in our path, and above all we require that *flair* which, proverbially characteristic of the dashing cavalry officer, or as we should now say of the airman, in war, is no less required in the subtle diplomacy of peace. "There is a tide in the affairs of men, which, taken at the flood, leads on to fortune." It is above all required of man for success in public life—success, I mean, in achieving his ideals—that he should be alive to every opportunity, and when he sees it, should make full use of it. And—

"What though success will not attend on all,
Who bravely dares must sometimes risk a fall."

In political life above all, as in war, a man must not take too long in making up his mind to act. Sir George Savage in his lectures on mental diseases once said that in every action, a man, after considering the *pros* and *cons*, had to make up his mind to act, to cast reason aside and for the moment to be temporarily insane. The only man he had known who on such a definition was never insane would take so long to make up his mind that he never decided anything, and had to be consigned to a lunatic asylum. The net result then, is the usual middle course—by observation and reasoning and instinct to size up quickly for or against any course of action, and then, however imperfect and incomplete we feel our grounds of action to be, no more to hesitate, but to act.

In order then to be of value in political life it is of immense importance to have had a groundwork, not merely of the functions and statistics, but of the habit of mind of a medical officer of health, for in our professional work we are compelled to go through the processes of reconnoitring the ground, as I believe every public man should do. By our medical training we are taught first to observe, secondly to diagnose, thirdly to prescribe or operate, fourthly to supervise the after-care, fifthly to check results and deduce and publish our practical conclusions for future use. But as medical officers of health we have to apply this procedure to the machine of democratic government. We are not who in the

indemnify the defendant in respect of his costs. *Resolved*.—That the thanks of the Society be conveyed to the Town Clerk for this satisfactory intimation.

(5) From Lieut.-Col. Herbert Jones conveying the following resolutions passed at a meeting of whole-time medical officers of health of urban and rural districts:—

(a) That the Council of the Society be asked to take steps to secure the following amendments to the Ministry of Health (Miscellaneous Provisions) Bill now before Parliament.

(i.) A medical officer of health shall be removable by the authority by which he is elected with the consent of the Minister of Health and not otherwise.

(ii.) The insertion of a new clause after clause 18:—

“A local authority shall pay out of such fund or rate as the Minister may direct any expenses incurred by a medical officer of health in travelling to and from meetings of the Authority or of Committees of the Authority and a subsistence allowance to any such officers attending any such meeting subject in either case to regulations made by the Minister and in accordance with a scale approved by him.”

(iii.) That in addition to salary, a Local Authority shall be required to pay all necessary expenses incurred by the medical officer of health in the discharge of his duties.

Resolved: To take the appropriate steps to secure the support to these amendments of the Ministry of Health and of Members of Parliament.

(7) From the Association of County Medical Officers of Health, conveying the following resolutions:—

(a) That members of this Association should support the proposals for superannuation outlined in the memorandum of the British Medical Association published in the British Medical Journal of the 29th May, 1920, by urging their local Members of Parliament to press them forward.

(b) That copies of this resolution be forwarded to the British Medical Association and

the Incorporated Society of Medical Officers of Health.

Resolved: That the Association be thanked for their communication and informed that the B.M.A. Memorandum referred to embodies suggestions and amendments submitted by the Council of the Society on April 23rd, 1920, and that the proposals of the Memorandum will be supported with the full influence of the Society.

(7) From Dr. Harold Kerr, O.B.E., and Dr. W. H. Davison in reference to the voting powers of members at Branch Meetings. *Resolved*: That the correspondence be referred for the consideration of the new Council during the coming session.

(8) From the National Association for the Prevention of Tuberculosis inviting the Society to appoint delegates to the Conference to be held at Liverpool, in October. *Resolved*: That Lieut.-Col. F. E. Fremantle, M.P., Prof. E. W. Hope, O.B.E. and Dr. A. A. Mussen be asked to represent the Society on this occasion.

Sir Arthur Newsholme, K.C.B.—It was proposed by Prof. Kenwood and carried unanimously that the Council should submit the name of Sir Arthur Newsholme to the Annual Meeting for election to the Honorary Fellowship of the Society in recognition of his distinguished services while Principal Medical Officer of the Local Government Board.

Election of a Fellow.—Sir Henry John Gauvain was unanimously elected a Fellow of the Society.

Interim Report of Consultative Council to Ministry of Health.—It was agreed to postpone adoption of the Memorandum submitted by the Special Committee on this Interim Report until the October meeting of the Council.

Financial Position.—The Hon. Treasurer submitted a preliminary report regarding the revenue and expenditure of the Society during the session 1919-20, and was invited to prepare a statement for the information of the Branches and for discussion at the next meeting of the Council.

The Report of the Council for Session 1919-20 (see p. 13) having been adopted unanimously, the meeting adjourned.

DR. E. BERTRAM SMITH, medical officer of health for the North Essex United (Sanitary) Districts, has now resumed his duties after the prolonged absence necessitated by his serious illness last spring.

Public Health

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Editorial.

VACCINATION AGAINST TUBERCULOSIS.

SOME years ago, in a lecture delivered in London at the Royal Society of Medicine, Professor Metchnikoff made the startling suggestion that tuberculous milk, by causing an early infection with tubercle bacilli, probably conferred some degree of immunity upon the individual if recovery followed that early attack. In other words, tuberculous milk in moderation may be regarded as being able to “vaccinate” infants, and to confer upon them immunity against industrial phthisis in later years. Possibly those powerful vested interests which have up to the present so successfully opposed all practical measures for securing a clean

milk supply have had this fact in mind and have been all the time actuated by purely philanthropic motives. Also those in authority who are suggesting the grading of milk, and the selling of it at prices graduated according to its cleanliness and its freedom from tubercle bacilli, have it in their minds that the poor, who are compelled to buy the cheapest milk, will receive compensation in the fact that they may be purchasing with their milk large doses of bacteria which if they do not kill the children who drink it, will probably confer upon them some degree of immunity.

It may be that tuberculous milk has played some part in the production of that degree of immunity towards tuberculosis which is possessed by the race at the present time, but the price paid for it in the way of deaths, distortions, and disease is too terrible for us to sanction its use for one day longer than the end of that period during which Parliament considers it desirable for the powerful milk interests to hold the nation to ransom. Vaccination against consumption is not a matter which can be left to chance in this haphazard way.

Professor Calmette has announced the fact that experimental protection of animals against tuberculous infection has been achieved by means of doses of bacilli of modified or attenuated virulence, and he assures us that the protection of man in this war against bacillary infection must now be regarded as possible. He believes that it is now merely a matter of determining the most surely effective procedure and the duration of its protective effects. These are wonderful discoveries, and may eventually play an important part in the campaign against tuberculosis, but there is at present no reason for us to modify our opinion that the essential factors in the protection of the race against tuberculosis are primarily cheap, abundant and sound food, with freedom from massive or frequent infections, and secondly, hygienic surroundings both at work and at home.

machine; we are but individual cogs on the wheel of our Local Authority. It is our Local Authorities, theoretically at least, representing the people, who transmit the power given to them by the people, directly or through Parliament and Government, to the conditions of the people's life. We have to advise them, we have often to carry out their decisions; but it is for the Local Authorities to decide. We have to help them, therefore, to observe and diagnose, and act, and draw conclusions from the result of their action, just as we ourselves adopt the same procedure.

One of our main difficulties is to bring our observations, so clear to ourselves, clearly before the notice and understanding of our authorities. How often have we not gnashed our teeth over the reports which we have produced with such intense labour, constituting, we feel, an invaluable record and leading to most important conclusions, when we found the members of our authority have not even read them, or if they have read them, have failed to understand them or to give them any proper consideration. They have often been entirely overcome by some petty point—some petty personal point—raised with undue emphasis by some lay member of the committee. Our difficulty is to drive home the facts in such a way as to make our authorities understand and diagnose and act correctly. But still, we must persevere.

"Many strokes, though with a little axe,
Hew down and fell the hardest timber'd oak."

With the wider knowledge due to our professional education and experience we must recognise the partial knowledge of laymen, must give credit to them for high motives, must acknowledge their special responsibility, not only for the ideal which we may feel confident is for the public good, but for giving the people, with their sovereign power under a democracy, what in the end they will require in return for the money which they contribute in rates and taxes. We must go forward, we must persevere, confident in the end that truth and right will prevail. "Beg no question," as Henry George has said, "shrink from no conclusion, but follow truth wherever it may lead."

If we take a strong broad line, imbued with human sympathy, understanding human frailty, and keeping our eyes directed on

broad, generous living ideals, we shall have—as I believe we are already privileged to have—a vast influence for good on the future of our country and our race.

OUTLOOK OF PREVENTION.

Let us consider for a while the new outlook for preventive medicine, for health work, in the light of the wonderful experiences of the war and the discoveries of this century. The earliest laws in the prevention of ill-health are those concerned with the prevention of accidents. We are enlarging our machines for prevention of accidents in industry in every direction. More, I believe, might be done by encouraging the workers, however ill-educated, who are actually engaged in each occupation themselves, to suggest proposals for safeguarding their health in occupation.

From the prevention of accidents a community naturally proceeds to the prevention of gross infections. Our public health service may be said to have started from the fear and facts of epidemics of cholera. From this we proceeded to the prevention of infections of all kinds. Concurrently, and mainly from motives of pity, we have established in this country the system of the Poor Law, which in its indoor and outdoor relief has been of much service to the National Health.

But latterly, through the progress of physiology, through the natural interest in the maintenance of the population and the safeguarding of maternity and infancy, and in the war through the need of maintaining physical health under conditions widely differing from those to which our national physiology has been adapted, we have come to recognise that the failure in bodily health often comes from a faulty physiology and faulty bodily habits. A faulty diet, quite apart from infections, or faulty habits of food and drink may in themselves cause a breakdown. Insufficient rest each night, each week, each year, insufficient or excessive bodily exercise, overstrain or abuse or under-use of any bodily faculty, may upset the balance of function on which the health and efficiency of the body depend. We must turn our attention largely in the near future to the prevention of faulty physiology.

But the war especially has brought into prominence the part played in bodily health by wrong mentality. As in other diseases, so in those of the mind, mental deficiency may usefully be studied, limited, sheltered, short-circuited, so as to allow full use to be made of the other mental and bodily functions. But a very large number of persons incapacitated in their life by mental disabilities owe their trouble to preventable causes. Their disorders have been aroused by faulty mental habits, by a faulty sense of proportion in respect of certain impressions at an impressionable age. They can often be set right. The medical reports of the Seale-Hayne Military Hospital in Devonshire during the war have supplied us with a record of miracles entirely due to a proper understanding of mental physiology, and from logical and effective action based on it. But still more can be done by the prevention of faulty mental habits in the young.

Our branch of the profession is too often identified in the public mind with a doctrine of negatives. Our outlook for the future is becoming ever more positive. We must actively promote healthy habits of life, healthy conditions, healthy instincts, healthy motives, healthy control of feeling, and a healthy will. For, as Shakespeare wrote, "Our bodies are our gardens, of which our wills are gardeners."

This all depends on public habits and opinion. The influence of medical officers of health on public opinion is indirect, subtle, hidden, but very great. In our official work we are not simply culling powers from our authorities for the execution of certain laws and regulations. The tide may flow also in the opposite direction. We are by our reports and conversation spreading information and new ideas through those who represent the people and are in touch with the most influential brains and organs of public opinion and discussion. Our influence must be—and, I would submit, always has been—very great in this direction. We have to correct the general outlook of life. A distinguished and scholarly ecclesiastic, for instance, has recently tried to reconcile the apparent differences of science and religion by recognising what he considered to be scientific fact. It appeared certain to

him that the spirit was a derivative of the mind, the mind of the body; he believed, therefore, in a material origin of the universe. I feel little doubt that our verdict would throw considerable doubt on this conception of the origin of life. For the more we work out our unique experiences in the problems of life in all classes, and under all conditions, the more are we compelled to feel the pre-eminence of the spiritual and the transitory nature of the material. To my own mind it would seem much more reasonable to suggest that the spiritual forces of the universe had crystallised out in material forms, out of which mind had evolved at a later stage. Of this at least I am sure, that great as are the abilities and disabilities of mind and body, it is on the life and spirit that inspire them that men and women depend for their happiness and for their active output in the world's work. It is in order to get a sound conception of our work that I would suggest that we should not forget the pre-eminence of the spiritual and vital forces that activate men's bodies and minds.

It is, however, with their bodies and minds that our public work is concerned; and before passing from this summary of our outlook I would lay stress on the need that requires to be paid to the subject of rest. In an admirable little book of surgical philosophy, Mr. Jacobson and the late Mr. Hilton dealt with the subject of "Rest and Pain," showing how often deformities are due to the strain on certain muscles, and how large a part can be paid in recovery by giving absolute rest to an injured or diseased part. As in actual disease, so in general health. We have to lay stress on the need for rest, and not least at a time when the reaction from war tends to habits by which periods intended for rest are usurped by the fatiguing enterprises and conventions of a restless age. The night's rest, for adults as well as for children, is of first importance, and should be considered a sacred duty. To dance from nine in the evening till five next morning is not fair to the body of the dancer or to the interests of his employer when he returns to work next morning. Once in a way such excursions into irregularity matter little, at least in early life; but they should be the exception and not the rule. Hard work during

the day requires real repose in the evening, with a view to a good night; otherwise mind, body and spirit are living on their capital, which will one day be exhausted. The same applies to week-ends, especially to Sunday; the same applies to the annual holiday. Not that repose need necessarily mean idleness.

"Sweet recreation barr'd, what doth ensue
"But moody and dull melancholy."

True recreation of mind, body and spirit is the only real rest. There must be change of occupation, a use of parts not much used in the daily work, and above all a rest to the spirit from anxiety, strain, energy, where these qualities are entailed in the routine of ordinary working day. Nor must it be forgotten that many in seeking recreation are often unwittingly giving work to others; and any suggestion for the expansion of public amusements and travelling on Sundays must be most carefully limited, out of regard for those who will thereby be employed at the expense of their requisite rest.

GOVERNMENT ACTION.

After this large conception of the requirements of health in the people, no less in the salaried and monied than in the wage-earning classes, let us briefly consider what the Government have done for it in the past, what they can do in the future, what they now propose to do, and how we can through Parliament help them to do it.

The early Victorian attitude in matters of health, and the far-sighted views of some of our leading Statesmen may be illustrated by a delightful reply from Lord Palmerston in 1853 to a correspondent who proposed a proclamation of a national fast on account of the outbreak of cholera in 1853. The letter is from Evelyn Ashley's *Life of the Statesman*. I do not suppose there is a private secretary living nowadays who would dare to write such a reply.

"Whitehall,
19th October, 1853.

Sir,

I am directed by Viscount Palmerston to acknowledge the receipt of your letter of the 15th instant, requesting, on behalf of the Presbytery of Edinburgh, to be informed whether it is proposed to appoint a day of

national fast on account of the visitation of the cholera, and to state that there can be no doubt that manifestations of humble resignation to the Divine Will, and sincere acknowledgments of human unworthiness, are never more appropriate than when it has pleased Providence to afflict mankind with some severe visitation; but it does not appear to Lord Palmerston that a national fast would be suitable to the circumstances of the present moment.

The Maker of the Universe has established certain laws of nature for the planet in which we live, and the weal or woe of mankind depends upon the observance or the neglect of those laws. One of those laws connects health with the absence of those gaseous exhalations which proceed from over-crowded human beings, or from decomposing substances, whether animal or vegetable; and those same laws render sickness the almost inevitable consequence of exposure to those noxious influences. But it has at the same time pleased Providence to place it within the power of man to make such arrangements as will prevent or disperse such exhalations so as to render them harmless, and, it is the duty of man to attend to those laws of nature, and to exert the faculties which Providence has thus given to man for his own welfare.

The recent visitation of cholera, which has for the moment been mercifully checked, is an awful warning given to the people of this realm that they have too much neglected their duty in this respect, and that those persons with whom it rested to purify towns and cities, and to prevent or remove the causes of disease, have not been sufficiently active in regard to such matters. Lord Palmerston would, therefore, suggest that the best course which the people of this country can pursue to deserve that the further progress of the cholera should be stayed, will be to employ the interval that will elapse between the present time and the beginning of next spring in planning and executing measures by which those portions of their towns and cities which are inhabited by the poorest classes, and which, from the nature of things, must most need purification and improvement, may be freed from those sources and causes of contagion which, if allowed to remain, will infallibly breed pestilence and be

fruitful in death, in spite of all prayers and fastings of a united but inactive nation. When man has done his utmost for his own safety, then is the time to invoke the blessing of Heaven to give effect to his exertions.

I am, sir,

Your obedient servant,

(Signed) HENRY FITZROY."

It was in accordance with such far-sighted statesmanship that the Royal Sanitary Commission was appointed in 1869, resulting in the establishment of the Local Government Board in 1872, and the passing of the Public Health Act of 1875. The main measures that ensued were those for the Water Supply in 1878, for Housing in 1890, for Factories in 1891, for Medical Inspection in Schools in 1906, to mention only a few. But the evil of each successive new Act has been the creation in many instances of a new body of officials and Local Authorities under different Government Departments. It was for that reason that the Ministry of Health was created last year, and has now issued a report of its first year's activities, showing that a beginning has been made in the process of concentrating health measures under the one Ministry.

But those of us especially who have served with the Army Medical Service in the war feel that the object to be aimed at by the Ministry must be comparable to that of the Army Medical Service, which is responsible for the whole idea of health and physical efficiency in the nation, under whatever Department it may come, and not merely for the execution of certain Acts. We look to the Ministry of Health to advise the Government on all health matters in which the Board of Education, the Board of Trade, the Ministry of Pensions, the Ministry of Labour, the Home Office are concerned—to co-ordinate the medical work of all Departments, including those of the Fighting Services and the India and Colonial Offices, in order to cover the whole ground. We look to them to inspire and secure co-operation between Local Authorities, as well as to secure unification so far as it may be possible. We look to them also to recognise the function of, and to use and help voluntary bodies, as the War Office and Admiralty recognised and valued the importance of the Red Cross

during the war. For voluntary bodies initiate effort in small areas; they try experiments, and it is not until they have proved their value that the measures they suggest can be incorporated into the State system. In turn they play a most important part in arousing, maintaining, and spreading public enthusiasm for health work—an enthusiasm that is of no less importance in the maintenance of individual and family health as in ensuring a proper carrying out of their duties by the representatives of the people in local and national government. It is the privilege of medical officers of health to give a very great amount of often troublesome and exacting help to these voluntary bodies. Let us not under-rate the value of such help.

What then do the Government propose to do in the near future for the improvement of national health? It is significant that the chief activities of the Ministry of Health at the present time in the public eye are concerned with the housing of the people. Proper housing affects the social and individual habits of the nation even more than it affects their bodily health, and both directly and indirectly it is of primary importance to the national health that the shortage of housing shall be removed at as early a date as possible. But the Government are rightly concerned with the spirit as well as the matter of national life. They maintain that in general private enterprise is more effective and more suitable to the individual needs of the workers than direct production by the State. Our schemes or advice in matters of housing must always take this general desire into account. Housing, like other matters, should in the future, as in the past, be managed by private enterprise. The State should only undertake constructive housing when, where, or in so much as private enterprise fails.

There are many useful measures which the Government propose at an early date to pass into law. The Milk Bill and the Tuberculosis Regulations of the Board of Agriculture are amongst the most important. The tuberculosis measures omitted from the new Insurance Act will be awaited with great and critical eagerness. But here I would especially lay stress on the future relationship between clinical and

preventive medicine, and the measures suggested in the "Interim Report on the Future Provision of Medical and Allied Services," by the Consultative Council, under their Chairman, Lord Dawson.

By some it is imagined that the Clause in the useful "omnibus Bill" of the Ministry of Health now before Parliament allowing County Councils to subscribe to voluntary hospitals, or to maintain hospitals of their own, is intended as a substitute for general action on the problems raised by the Consultative Council. But this is surely a mistake. The voluntary hospitals as they at present stand fulfil a vital need. Some medical provision is immediately required too for the great housing schemes now in progress. The Clause in the Miscellaneous Provisions Bill is surely only a stop-gap proposal to continue the provision of medical aid until the problem can be dealt with as a whole. But in considering the future relations between clinical and preventive medicine, between public and private practice, medical officers of health will look sympathetically upon any scheme which is likely to link up effectively the different branches of medical work. For there is no absolute distinction between curative and preventive practice. We hear much nowadays of specific cure of disease: may we not introduce the term "specific prevention of disease," which arises from the same train of observation and experience? Prevention of disease in the earliest stage, at home, factory and school, in out-patients' departments and in clinics is an essential part of prevention; while on the other hand it is those who visit the homes of the people, whether as sanitary inspectors, nurses, health visitors, midwives or doctors, that can save the hospitals from congestion and secure the comfort and well-being of cases when they return from hospital to their homes.

To the physicians and surgeons, too, of the country, and above all in the medical schools, I would make an appeal. Their diagnosis at the bedside seldom goes further back than the *causa causans* of the malady—generally nowadays a micro-organism—and a very inadequate enquiry into family history. This is not a final diagnosis of the disease to its roots.

In teaching, in examination, in practice, the disease should be followed up by the student to the homes and factories. It is to the conditions of the patient's daily life and habits that the disease is due, quite as much as to the germ. Closer relationship between hospital conditions and home and factory life should be incorporated into the teaching and training of medical students, and into the whole progressive thought and writings of medical science.

We, whose duty it is to look at disease in the mass in the national interest, with a view to its reduction and prevention, have only an infinitesimal share in deciding and giving the proper training to the medical student. In the interest of the State we demand that this anomaly shall be drastically revised. Harley Street knows little of this aspect of medical work. It is not their fault; and they have an immense advantage over us in professional position, and, in general, in academic gifts. Nor can we claim for ourselves the sole right to organise and administer the unified system of medical provision, which the country requires. For, as the war has shown, hospitals and asylums can also provide good administrators with a modern outlook. The ultimate object must be the creation of a type, in civil life as in the Army Medical Service, of men who have an all-round knowledge of clinical as well as of preventive and sanitary medicine, and are trained to administration. Meanwhile the new system must be inaugurated, and we only demand that we shall not be called on to serve under those who have not, at least, a broad-minded comprehension of the main requirements and possibilities of preventive medicine in the mass.

In the same way we feel the gravest disabilities are incurred by the divorce between preventive and clinical practice, between the private practitioner and the medical officer of health. The result is shown, for instance, in the institution of tuberculosis clinics, requiring, but often failing to supply, both the knowledge and methods of the best private practitioner, and the system, organisation and general outlook of the broad-minded medical officer of health. The future rests to my mind neither entirely with the whole-time service

of State officials nor with the system of purely private practice subject to certain statutory obligations, but with an adequate and well thought out policy combining all aspects and systems of bringing help into the intimate life of the people.

Finally, therefore, we have to consider in what way we can assist towards the parliamentary decision of these problems. The Society must, of course, continue its most useful work of direct approach to Government Departments and L.A.G., to ensure a proper appreciation of its experimental views by the officials concerned. But this is quite apart from the influence by the motive power of Parliamentary Government. An individual Member of Parliament obviously carries but little weight under a democratic system. The Ministry is responsible to the whole nation for its action. An individual Member brings forward a proposal, however good, backed by a Society, however important; but the Minister must be assured before he acts upon it that in doing so he will have the support of the bulk of the people when they come to understand it. Medical men in the present House of Commons are eleven in number, and all but the Minister of Health have formed themselves into a Medical Committee, with Captain Elliott, M.C., as their secretary, and Sir Philip Magnus and Sir Henry Craik attached to them as representing University constituencies embodying a considerable block of medical votes. This committee meets monthly, or more often as required. It receives deputations from organisations anxious to bring matters before them. Individually, they undertake to ask questions of Ministers concerned, to speak in debate on matters of importance to public health, to approach Ministers, and, so far as they can, to collect information. Doctor Addison has shown the greatest sympathy with this committee, and we have no difficulty in securing a friendly hearing whenever required. But over and over again his reply has necessarily to be qualified by the limited amount of time and money available for Government measures and the limited proportion allotted to his Department. The same applies to matters affecting the medical services of other Government Departments.

The chief thing required at our back is a strong public opinion throughout the country focussed on the 700 Members of Parliament, on whom Ministers could rely for support in any action they take on our suggestion, and then we should not apply in vain. Without this it is of little value to introduce a Private Member's Bill or a Resolution. But some good has probably been done by conferences to which all members have been invited—one for instance to discuss the problems connected with Venereal Disease, another to hear an admirable account from Sir Walter Fletcher on the work of the Medical Research Committee. In such ways some effect can be produced in arousing members to the importance of health problems to their own constituencies.

But in bringing proposals before the House and in calling for enquires into defects it is necessary to be well briefed. Briefs have in some cases been prepared for us, *e.g.*, by the British Dental Association or by the British Medical Association, whose parliamentary work deserves fullest recognition from this Society. But there is real need of a body on behalf of all concerned, to maintain the constant supervision over all health questions as they come, or may come, before Parliament; to focus medical opinion on such occasions, to give us opportunity for their presentation, and to arrange that each case shall be properly dealt with as it arises, with the strongest possible support behind it. There must be no division of opinion. Ministers love to ride off a difficulty by saying that "doctors differ." We must co-operate heartily with the B.M.A., the R.San.I., the R.I.P.H., and all similar bodies, not forgetting the Q.V.J.I.N., the N.A. for Maternity and Infancy, and other voluntary organisations. The Federation of Medical and Allied Societies has considered the possibility of such an undertaking. The British Medical Association have considerable machinery and have done a good deal already in this direction, especially in questions of the Services, and in general medical organisation. I would submit the suggestion to this Society that the time has now arrived when they should consider in what way their experience and ideals can best be made available for effective

use by their medical and lay sympathisers in Parliament.

Medical officers of health are the firm link between the lives of the people and their Government. The future of the country is now, more than ever, very largely in their hands.

In a stirring address to his fellow citizens at a critical stage in their history, Abraham Lincoln said:

"With malice towards none, with charity for all, with firmness in the right as God gives us to see the right, let us strive. . . to do all which may achieve and cherish a just and lasting peace among ourselves and with all nations."

For the foundation of permanent peace and prosperity in this country, and spreading out from this country to all others, the opportunity now opens before the medical officers of health to go forward in the same spirit, knowing that if we can finish nothing in this life, we can make a beginning, we can exert an influence, we can bequeath a noble example.

MINISTRY OF HEALTH (MISCELLANEOUS PROVISIONS) BILL.

The Council of the Society of Medical Officers of Health having approved the recommendations of the Urban and Rural Groups of the Society regarding amendments desirable to the above Bill, the Group have prepared the following memorandum for the information of Members of Parliament and others interested:—

SUGGESTED AMENDMENTS TO THE MINISTRY OF HEALTH (MISCELLANEOUS PROVISIONS) BILL.

1.—The medical officer of health shall be removable by the Authority by which he is elected, with the consent of the Minister of Health, and not otherwise.

This follows the text of sec. 68 (5) of the Housing, Town Planning, &c., Act, 1909. The object of the amendment is to place all medical officers of health as regards their tenure of office in the same position as that occupied already by all Scottish and Irish medical officers of health, Metropolitan medical officers of health, and County medical officers of health in England and Wales. Dr. Addison and the Ministry of Health are in favour of the principle.

2.—A Local Authority shall pay out of such funds or rate as the Minister may direct any expenses incurred

by a medical officer of health in travelling to and from the meetings of the authority or of committees of the authority, and a subsistence allowance to any such officers attending any such meetings, subject in either case to regulations made by the Minister and in accordance with a scale approved by him.

See clause 17 (c) of the Ministry of Health (Miscellaneous Provisions) Bill.

3.—A Local Authority shall pay, in addition to his salary, all necessary expenses incurred by a medical officer of health in the discharge of his duties.

The object of the two last amendments is to remedy a long-standing grievance of medical officers of health in rural districts, and especially those who are whole-time officials.

There are in England and Wales about 60 medical officers of health of rural districts who are not in private practice. They have under their charge about 130 small urban and 160 rural districts, with an aggregate population of over three-and-a-half million persons. The average population is about 60,000, in six cases it is over 100,000.

The area of the districts is large:—

9 are between 100,000 and 200,000 acres.

10 " " 200,000 " 300,000 "

7 " " 300,000 " 400,000 "

It will be observed that the average population is equal to that of a county borough, while the population of some districts and the area of some is greater than those of the smaller counties.

When many of these appointments were first made the duties of the medical officer of health were mainly of an advisory character, but for at least twenty years past they have become executive, so that in a well-administered rural district or combination of districts there is just as much need for a Public Health Department as there is in a large urban district.

The same method of payment of the medical officer of health is in vogue as in 1875. He is paid an "inclusive" salary, out of which he must pay the expenses of an office, a clerk, in some cases postages, stationery, printing, and telephone, and the cost of getting about his district.

It may be said that the medical officer of health knew when he was appointed that he would have to make these payments out of his salary, therefore he has no grievance. This is true only of quite recent appointments, for of late years additional duties have been placed upon medical officers of health by Departmental Orders or by Parliament, e.g., the Tuberculosis Regulations, 1912, Article XII., and the Housing Acts. The methods adopted in investigating outbreaks of infectious disease have entirely altered in recent years, and in country districts involve a great deal travelling. The Ministry of Health is constantly calling for special reports from the medical officer of health, and in a

large district these mean a considerable cost in motor charges to that official.

There is also the obvious comment that the more zealous a medical officer of health the greater will be his expenses, but so much the less his income.

In one instance all the expenses of the appointment are paid by the local authorities, and in two cases they pay a fixed sum per annum (£400).

Four authorities provide a clerk, and nine medical officers of health pay a clerk out of their salaries. The remainder do their own clerical work, though in many cases they are assisted by members of their household. It is obvious that if a medical officer of health has to spend a day or two each week in writing up registers, keeping records, and preparing periodical returns, his legitimate work must suffer.

In eight instances an office is provided by the authorities, and in 50 cases it is provided by the medical officer of health, usually in his own house, which means that some member of his household must be constantly at hand to take messages, answer the telephone, etc. In this connection 17 medical officers of health state that they cannot carry on their work without the assistance for several hours daily of some member of their household.

Six medical officers of health pay for postages, stationery, printing, and telephones, and sixteen have provided a typewriter. Three state that they have worn out one typewriter and have had to purchase a second.

It may be contended by the Ministry of Health that the salaries of some medical officers of health have been raised recently to an amount sufficient to remove any grievance. These cases, if any, are so few that they are negligible, and in any case can be met by the insertion of qualifying phrases in the amendment.

The present conditions of appointment of medical officers of health are so detrimental to the interests of the public that it is felt every effort should be made to remedy them. Even in the last twelve months the Ministry of Health have tried very hard in several new appointments to secure better terms, but apparently the powers of the Ministry are limited. The Ministry will therefore no doubt welcome this opportunity for securing additional powers.

HERBERT JONES,

Chairman of Group.

The Weetslade Urban District Council have appointed Dr. Theodore Craig their medical officer of health in succession to Dr. Robert Raffle, resigned.

The salary of Dr. Adam White, as medical officer of health for the borough of Newcastle-under-Lyme and the adjoining Wolstanton urban district, has been increased to £750, rising by annual increments to a maximum of £900.

SOCIETY FOR THE PREVENTION OF VENEREAL DISEASES.

At a meeting of the Executive Committee in September, a communication from the Secretary of the National Birth Rate Commission was read, inviting the Society to send two delegates to a special committee appointed by itself to enquire into certain aspects of venereal disease, and also to send one or more witnesses to give evidence from the point of view of the Society. After some discussion it was unanimously resolved that the Hon. Secretary be instructed to send a reply thanking the National Birth Rate Commission for their invitation, but stating that the Society's views and evidence in the matter have already been published widely in the press, and submitted by various members to the Ministry of Health and various responsible bodies, that no good purpose could be served by meeting delegates from the Ministry of Health and National Council for Combating Venereal Disease, and reiterating before them and under the auspices of the National Birth Rate Commission, opinions and evidence of which they were fully aware.

It was further agreed that the annual report and other literature be sent to the Secretary of the National Birth Rate Commission for the information of the proposed committee, and that copies be also sent to all members of the National Birth Rate Commission. The Hon. Secretary was also instructed to inform the Secretary of the National Birth Rate Commission that a work by Sir Archdall Reid, entitled the "Medical Prevention of Venereal Disease," would be published in the course of the next month, and would contain evidence and arguments on which the Society for the Prevention of Venereal Disease base their policy.

INFANT WELFARE IN THE WEST RIDING.

St. Luke's Hall, Sharlston, has been acquired by the West Riding County Council for the purpose of a Maternity and Child Welfare Centre. The centre is admirably situated in this colliery district, and is under the charge of the local health visitor (Nurse Parry), with Dr. Clarke, of Foulby, as medical officer for the centre. The County Council's scheme provides for about 100 centres, and the 40

now established and working are making excellent progress. The School clinics and antenatal clinics are also to be worked in connection with these welfare centres.

At the opening ceremony the County Medical Officer (Dr. J. R. Kaye) said that with these welfare centres they were dealing with results, and not new oracles. Through them they were dealing with the "C3 population" and also the "C3 environment." If we desired the children to become a real national asset, we must teach the mothers. In the past they had dealt with the adult; then there was the school inspection of children and the infants, and now they were going to the father and mother. If they had got so far forward as to influence the father and mother, why should they not go to the prospective bride and bridegroom? (laughter). The medical examination of school children was having good results, in that many trivial ailments were being removed before they could develop into serious defects. These centres were not dispensaries or surgeries, but were simply to give everyday practical advice to the mother. The lesson to be learnt was not to be always looking after the big things, but to look after the little things as well. There was a well-known saying that applied here, and that was, "You have always to go wrong to get right." It was the same with the mother concerning her children as with her daughter at 16 years, to whom she ought to give important advice. Concluding, Dr. Kaye said that a lot depended at these centres on the voluntary workers, and the nurse would always be able to find them plenty of work to do. He did not want any mother to get the impression that the centre was for Church people only, for it was open to mothers of every denomination.

PORTSMOUTH Town Council have increased the salary of Dr. A. Mearns Fraser, M.O.H., from £1,240 to £1,500 per annum rising to a maximum of £1,700.

The annual dinner of the North-Western Branch of the Society of Medical Officers of Health will be held at the Exchange Hotel, Liverpool, on Friday, December 10th. The number of tickets is strictly limited and they will be allotted strictly in order of application. The price of tickets is not yet fixed, but will probably be 15s. Those wishing to attend should give early notice to Dr. G. W. N. Joseph, Public Health Department, Warrington.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

BRANCH ELECTIONS, SESSION 1919-20.

METROPOLITAN BRANCH.

President ...	Dr. W. M. Willoughby.
Vice-Presidents ...	Dr. R. King Brown. Dr. W. J. Howarth.
Hon. Treasurer ...	Dr. T. S. Higgins.
Hon. Auditors... ..	Dr. E. G. Annis. Dr. L. C. Parkes.
Hon. Secretary ...	Dr. C. Porter.

Representatives on Council of the parent Society	Dr. W. J. Howarth. Dr. C. Porter.
Council of the Branch	The above, and Drs. Annis, Bond, Bryett, Duffield, Fenton, Howell, Oates, Parkes, D. L. Thomas and Clark Trotter.

SCOTTISH BRANCH.

President	Professor Matthew Hay.
Vice-Presidents ...	Dr. A. Campbell Munro. Dr. Alexander Robb.
Hon. Secretary and Treasurer	Dr. T. Adam.
Representatives on Council	Dr. A. K. Chalmers and the Secretary.
Branch Council ...	Secretary, Drs. A. K. Chalmers, Macdonald, Maxwell Ross, Pratt Yule, Hamilton, together with the Vice-Presidents and the President (<i>ex-officio</i>).

HOME COUNTIES BRANCH.

President	Dr. J. M. Clements.
Hon. Treasurer ...	Dr. J. Scott Tew.
Hon. Secretary ...	Dr. D. C. Kirkhope.
Representatives on Council of the Society	Dr. Veitch Clark. Dr. D. C. Kirkhope.

YORKSHIRE BRANCH.

President	Dr. E. M. Smith.
Representatives on Council of the Society	Dr. E. M. Smith. Dr. W. B. Hill.
Hon. Sec. and Treasurer	Dr. W. B. Hill.

NORTH-WESTERN BRANCH.

President	Dr. H. E. Corbin.
Hon. Treasurer ...	Dr. H. H. I. Hitchon.
Hon. Secretary ...	Dr. G. W. N. Joseph.
Representatives on Council of the Society	Dr. T. W. N. Barlow, Dr. Joseph Cates, and Dr. Joseph.
Committee	Drs. Daley, Lissant Cox, Morley Mathieson, and Peyton, with the Vice-Presidents and Officers.

WELSH BRANCH.

President	Dr. Edward Walford.
Hon. Secretary ...	Dr. Thomas Evans.
Branch Council ...	Dr. Janet Armstrong, Dr. Howard-Jones, Dr. P. W. Kent and Dr. E. Colston Williams, with President and Hon. Sec. (<i>ex-officio</i>).

Representative on Council of the Society ...	Dr. T. Evans.
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NORTHERN BRANCH.

President	Dr. T. Eustace Hill, O.B.E.
Hon. Sec. and Treasurer	Dr. Harold Kerr, O.B.E.
Branch Council ...	(Elections pending).
Representatives on Council of the Society	Dr. Hill. Dr. Kerr.

WEST OF ENGLAND BRANCH.

President	Dr. B. A. Peters.
Hon. Sec. and Treasurer	Dr. J. F. Blackett.

MIDLAND BRANCH.

President	Dr. C. E. Tangye.
Hon. Secretary ...	Dr. Gibbons Ward.
Hon. Treasurer ...	Dr. T. Ridley Bailey.
Representatives on Council of the Society	Dr. E. H. Snell. Dr. R. W. Stocks. Dr. Gibbons Ward.

EASTERN BRANCH.

President	Dr. T. L. Lack.
Hon. Sec. and Treasurer	Dr. A. N. Stevens.
Representative on Council of the Society	Dr. A. N. Stevens.

SOUTHERN BRANCH.

President	Dr. Bruce Young.
Hon. Sec. and Treasurer	Dr. R. A. Lyster.
Representative on Council of the Society	Dr. R. H. Wilshaw.

ANNUAL GENERAL MEETING.

The Annual General Meeting was held at the house of the Society, on October 22nd. The retiring president (Prof. H. R. Kenwood) took the chair, supported by his successor in office, Lt.-Col. F. E. Fremantle, M.P. There were also present: Drs. J. T. C. Nash, T. W. N. Barlow, Harold Kerr, R. Woolsey Stocks, Charles Porter, C. Sanders, Thomas Evans, H. A. Ellis, J. Wheatley, Joseph, G. F. Buchan, Cates, Wilshaw, Howarth, Ridley Bailey, T. S. Higgins, Guest, Butler, Kay Menzies, R. W. Jameson, Lyster, Ashkeny, R. D. Smedley, Middleton, McMaster, Morley, Mathieson, Muir, Colvin-Smith, J. A. Gibson, R. J. Ewart, Estcourt-Oswald, Hutt, Clements, Kennedy, J. P. Walker, Hutchinson, Wood, Eustace Hill, Oates, Radford, W. G. Willoughby, E. H. Snell, Marion Andrews, Bond, Spaul, Prof. E. W. Hope, Lt.-Col. Herbert Jones, Major R. W. H. Jackson and Lt.-Col. R. Tilbury Brown.

Letters of apology for absence were read from Sir Shirley Murphy, Dr. H. Gibbons Ward, Col. G. S. Elliston, Dr. A. K. Chalmers, Dr. Reginald Duffield, and Dr. H. Cooper Pattison.

The minutes of the last annual general meeting having been approved and signed, Prof. R. H. Kenwood invested Col. Fremantle with the presidential badge and promised him the loyal support of the whole Society during his term of office. The new President then took the chair, and thanked the meeting for the high honour conferred on him by his colleagues. A vote of thanks to the retiring President was moved by Dr. W. G. Willoughby, and seconded by Dr. E. H. Snell, and carried by acclamation. Professor Kenwood briefly replied, thanking all those who had assisted him in his work for the Society.

The annual reports of the Council (*Public Health*, October, 1920, p. 13), the Hon. Editor and the Hon. Treasurer, were then submitted and adopted.

Mr. J. T. Harris, the retiring Auditor, was re-elected for the session 1920-21, and thanked for his past services.

On behalf of the Council Prof. H. R. Kenwood moved that the Honorary Fellowship of the Society be conferred on Sir Arthur Newsholme, K.C.B., M.D., F.R.C.P., in recognition of his distinguished services to public health administration, while Principal Medical Officer of the Local Government.

Board. This proposal was seconded and carried by acclamation.

The following candidates, having been duly nominated, were elected members of the Society: Ainsworth, Ralph Bignell, D.S.O., Lt. Lieut.-Col., R.A.M.C., M.R.C.S., L.R.C.P., D.P.H.; Anderson, Annette Gillies Turnbull, M.B., Ch.B. Glasg.; Anderson, John Allan, Lieut.-Col., R.A.M.C., M.B., Ch.B. Edin., D.P.H., D.T.M.; Barlswell, Noel, M.V.O., M.D., C.M. Ed., F.R.C.P. Lond., F.R.S. Ed.; Belam, Francis Arthur, M.D., Ch.B. Liv., D.P.H.; Biggs, Kenneth, M.C., Flight-Lieut., R.A.F.; Binns, George, M.B., Ch.B. Vict.; Blaker, Percy Stanley, M.R.C.S., L.R.C.P., D.P.H.; Bradbury, Samuel, Surg. Cdr., R.N., M.B., B.Ch., R.U.I., D.P.H.; Burra, Launcelot Toke, M.D., B.Ch. Oxon, M.R.C.S., L.R.C.P.; Carling (Mrs.), Esther Lillie, M.D. Brux., L.S.A.; Carmichael, James Charles Gordon, O.B.E., Major, R.A.M.C., M.B., Ch.B. Edin., D.P.H.; Christopherson, Wilfrid Bayley, M.R.C.S., L.R.C.P.; Clark, Alfred Bernard, Surg. Lieut. Cdr., R.N., M.B., B.S. (Lond. and Sheff.), D.P.H.; Cooke, William Edmund, M.D., Ch.B. Liv., F.R.C.P. Ed., D.P.H.; Dean, Henry Roy, M.A., M.D. Oxon., F.R.C.P.; Dickinson, Thomas Edwin, M.B., Ch.B. Vict., D.P.H.; Douglass, Jas. Henry, O.B.E., Major R.A.M.C., B.A., M.D., B.Ch. Dub., D.P.H.; Elsner, Otto Wm. Alexander, C.B.E., D.S.O., Lieut.-Col., R.A.M.C., L.R.C.P. & S., I., D.P.H.; Epynt-Phillips, Mary E., M.B. Lond.; Fell, Matthew Henry Gregson, C.B., C.M.G., Air Commodore, R.A.F., M.R.C.S., L.R.C.P., D.P.H., D.T.M.; Gains, John Edwin, M.R.C.S., L.R.C.P.; Gibbins, Herbert Bowly, M.D. Lond., M.R.C.S., L.R.C.P., D.P.H.; Given, David Hughes Charles, Surg. Cdr., R.N., M.D., Q.U.I., D.P.H.; Gorrie, Eleanor Amelia, M.B., Ch.B. Edin.; Grant, Andrew, M.B.E., Sqdn. Leader, R.A.F., M.B., Ch.B. Ed., D.P.H.; Gray, Winnifred Margaret, M.A., M.B., Ch.B. Aberd., D.P.H.; Griffiths, John, M.R.C.S., L.R.C.P., D.P.H.; Harvey, Frederick, Lieut.-Col. R.A.M.C., M.R.C.S., L.R.C.P., L.S.A., D.P.H., D.T.M.; Hebert, Godfrey Taunton, M.D., B.Ch. Oxon.; Hill, William Hugh, M.D., C.M. Edin., D.P.H.; Holden, Eric Theodore, M.B., Ch.B. Edin.; Howell, Frederick Duke Gwynne, Lt.-Col., R.A.M.C., D.S.O., M.C., M.R.C.S., L.R.C.P., D.P.H.; Hunter, Ronald Nelson, M.R.C.S., L.R.C.P., D.P.H.; Ingram, John Dougall, M.B., Ch.B. Edin., D.P.H.; Innes, John William, M.A., M.B., B.Ch. Aberd., D.P.H.; Johnston, Wm. Arthur, L.R.C.P. & S.I., L.M.; Johnstone, Geo. Gordon, M.C., M.A., M.D., Ch.B. Cantab., D.P.H.; Jones, David William Fenwick, M.B., B.S.; Keane, Percival Maurice, Sqdn. Ldr., R.A.F., L.R.C.P. and S., L.M., I., D.P.H.; Leake, Jonas William, C.M.G., Lt.-Col., R.A.M.C., M.R.C.S., L.R.C.P., D.P.H.; Leggat, George Leggat, O.B.E., M.B., Ch.B. Edin., D.P.H.; Lelean, Percy Samuel, C.B., Lt.-Col. R.A.M.C., F.R.C.S., L.R.C.P., D.P.H.; Lewis, Edward, L.R.C.P. & S. Edin., L.R.F.P.S. Glasg.; Lister, Louisa Margaret, M.R.C.S., L.R.C.P.; Lothian, Norman Veitch, M.C., Major, R.A.M.C., M.B., Ch.B., B.Sc. Glasg., D.P.H., D.T.M.; Low, Nelson, D.S.O., Major, R.A.M.C., M.R.C.S., L.R.C.P., D.P.H.; MacArthur, Wm. Porter, D.S.O., O.B.E., Lieut.-Col., R.A.M.C., M.D., B.Ch., R.U.I., F.R.C.P., D.P.H., D.T.M.; Macdonald, Murdoch, M.D., Ch.B. Glasg.,

D.P.H.; Mackay, Ian Campbell, M.B., Ch.B. Edin., D.P.H.; MacLaughlin, Arthur Maunsell, C.B.E., Lt.-Col. R.A.M.C., M.B., B.Ch., B.A.O. Dubl., D.P.H.; Madin, Annie Mackenzie, M.B., Ch.B. Edin., D.P.H.; McClure, James Campbell, M.D., C.M. Glasg.; Moore, Benjamin, D.Sc., M.A., M.R.C.S., L.R.C.P., F.R.S.; Peebles, David James, M.B., Ch.B. St. And., D.P.H.; Porteous, Arthur Borland, M.B., B.S. Lond.; Renwick, A. Cameron, M.B., Ch.B. Edin.; Revell, Rowan William, M.B., B.S. Lond., M.R.C.S., L.R.C.P., D.P.H.; Richards, Evan Williams, M.B., Ch.B. Edin.; Riddel, Geo. William, M.C., M.B., Ch.B. Aberd., D.P.H.; Robb, Henry Drummond, M.C., M.D., Ch.B. Edin., D.P.H.; Robertson, Adam Niven, M.D., Ch.B. Ed., M.R.C.P. Lond., D.P.H.; Roche, Jas. Joseph Dillon Knight, Capt., R.A.M.C., B.A., M.B., B.Ch. Dubl., D.P.H.; Rutherford, William, M.C., M.B., Ch.B. Glasg., D.P.H.; Sandiland, Ernest Littleton, M.B., B.S. Lond., M.R.C.S., L.R.C.P., D.P.H.; Sandison, Alexander, B.A., M.B., B.Ch. Cantab., B.Sc., Lond.; Sinclair, Wm. Oxley Forster, M.B., B.S. Durh.; Sparks, John J., M.D., C.M. McGill; Spearman, Barugh, M.A., M.B., B.Ch. Cantab., D.T.M.; Spinks, Archibald Frank Greene, M.D. Brux., L.R.C.P. & S. Ed., L.R.F.P.S.; Straton, Chas. Henry, Lt.-Col. R.A.M.C., M.R.C.S., L.R.C.P., D.P.H.; Walker, Francis John, O.B.E., M.D., L.S.Sc., Durh., M.R.C.S., L.R.C.P., L.S.A., V.D., J.P.; Walters, Fredk. Rufenacht, M.D., B.S. Lond., F.R.C.S., M.R.C.P., L.S.A.; Wanhill, Chas. Frederick, Lt.-Col. R.A.M.C.; Warrack, James Stratton, T.D., Lieut.-Col., R.A.M.C. (T.), M.A., M.D., C.M. Aberd., D.P.H., Barr.-at-Law; Whelan, Joseph Francis, D.S.O., O.B.E., Lt.-Col., R.A.M.C., M.B., B.Ch., B.A.O., R.U.I., D.P.H.; Wingfield, Rodolf Charles, B.A., M.B., B.Ch. Oxon, M.R.C.P.; Wray, William Hamilton, L.R.C.P. & S. Ed., L.R.F.P.S. Glasg.

A long list of nominations for election at the November meeting was read by the Executive Secretary.

Col. Fremantle then delivered his presidential address on "Parliament and the Public Health," (see p. 19).

A hearty vote of thanks to the President for his address, was moved by Prof. E. W. Hope, seconded by Lt.-Col. Herbert Jones, and carried unanimously.

The meeting then adjourned.

ANNUAL DINNER.

The Annual Dinner of the Society was held at the Hotel Cecil on October 22nd. Owing to the coal strike and the threatened reduction of railway services, a number of those who intended to be present were unable to attend. In spite of these industrial troubles, the number of members and guests present was over 140, exceeding all previous records in the annals of the Society. Before dinner the President and Mrs. Fremantle received the company in the ante-room, where the guests were announced with becoming ceremony by the Toast Master.

Among those present were:—The Bishop of St. Alban's, Lord Dawson of Penn, G.C.V.O., Dr. T. W. H. Garstang (Chairman Representative Meetings, B.M.A.), Brig.-Genl. W. W. O. Beveridge, C.B., K.H.P., Sir W. Arthur Robinson, K.C.B. (First Secretary, Ministry of Health), Sir William R. Smith and Lady Smith, Dr. Andrew Balfour, C.B., C.M.G., Alderman F. Dod, J.P. (Mayor of Stoke Newington), W. W. Marks, Esq., Sir Theodore Chambers, K.B.E., Air Commodore M. H. G. Fell, C.B., Sir Anthony Bowlby, K.C.B., P.R.C.S., Sir George Newmar, K.C.B., Mr. J. W. Gilbert (Chairman L.C.C.), Sir Philip Magnus, Bart., M.P., Dr. T. Eustace Hill, O.B.E., Dr. James Wheatley, Dr. W. S. Wolverton, Sir Bruce Bruce-Porter, K.B.E., C.M.G., Dr. Frank B. Skerrett, Dr. J. T. C. Nash, Dr. and Mrs. W. A. Bond, Dr. W. A. Bullough, Mr. J. Stuart, F.R.I.B.A., Dr. Charles Porter, Dr. W. M. Willoughby, Maj.-Genl. Sir W. G. Macpherson, K.C.M.G., C.B., Dr. G. W. N. Joseph, Dr. R. Veitch Clark, Dr. Francis J. Allan, Lt.-Col. P. Caldwell Smith, C.B.E., and Mrs. Caldwell Smith, Dr. F. N. Kay Menzies, Dr. Cuthbert G. Welch, Mr. H. O. Williams, Mr. J. B. Graham, Dr. G. Martin Fox, Dr. G. E. Oates and Mrs. Oates, Dr. J. A. Gibson, Dr. M. E. Delafield, M.C., Major R. W. H. Jackson, Dr. H. A. Ellis, Dr. F. J. C. Blackmore, Mrs. Blackmore, Dr. D. Morley Mathieson, Dr. F. J. H. Coutts and Mrs. Coutts, Dr. and Mrs. William Butler, Miss Butler, Dr. John Tate, Dr. R. T. Herdman, Dr. R. Woolsey Stocks, Dr. Harold Kerr, O.B.E., Col. H. W. Grattan, C.B.E., D.S.O., Lt.-Col. W. Clayton Smales, D.S.O., Dr. W. J. Howarth, C.B.E., Mr. W. Hart Savery, C.C., J.P., Dr. H. Hyslop Thomson, Dr. Keele, Dr. C. W. F. Young, Dr. R. P. Garrow, Dr. P. H. Manson-Bahr, D.S.O., Dr. R. H. Wilshaw, Major A. G. R. Foulerton, O.B.E., Dr. G. F. McCleary, Dr. R. H. Vercoe, Dr. and Mrs. Wm. Johnstone, Dr. J. Sorley, Dr. W. Brander, Dr. R. A. Lyster, Dr. S. Fox Linton, Dr. J. M. Clements, Dr. G. F. Buchan, Dr. Vynne Borland, Dr. Meredith Richards, Dr. T. Ridley Bailey, Prof. H. R. Kenwood, C.M.G., Dr. Joseph Cates, Dr. Alice Stalker, Dr. W. Stewart Stalker, Dr. Armlay Ashkeny, Dr. A. B. McMaster, Dr. and Mrs. D. C. Kirkhope, Dr. W. H. Hamer, Dr. W. F. Corfield, Dr. W. N. W. Kennedy, O.B.E., and Mrs. Kennedy, Dr. and Mrs. Charles Sanders, Capt. and Mrs. E. P. Wheeler, Dr. W. G. Willoughby, Dr. Helena A. Hall, Dr. Effie Brander, Prof. E. W. Hope, O.B.E., Alderman Muirhead, Dr. E. W. Goodall, O.B.E., Dr. and Mrs. F. Goodman Caley, Dr. T. W. Naylor Barlow, O.B.E., Lieut.-Col. Herbert Jones, Dr. P. W. Spaul, Dr. Sidney C. Lawrence, Dr. Agnes Estcourt-Oswald, Dr. R. W. Jameson, Dr. J. Hutchinson Wood, M.C., Dr. P. H. Stirk, Dr. R. C. M. Colvin-Smith and Miss Colvin-Smith, Miss Fuller, Dr. E. H. Snell, Dr. Egbert Morland (*The Lancet*), Dr. N. G. Horner (*British Medical Journal*), Dr. Thomas Carnwath, D.S.O., Dr. R. D. Smedley, Dr. A. W. J. MacFadden, C.B., Dr. Laura G. Powell, Dr. A. J. Shinnie, and Dr. Sidney Spokes.

The Vice-Presidents (Lieut.-Col. Herbert Jones, Dr. James Wheatley and Dr. Charles Sanders), with the Hon. Editor (Dr. R. A. Lyster), and the Hon. Treasurer (Dr. G. F. Buchan), presided at the various tables.

The President having proposed the health of H.M. the King, Prof. H. R. Kenwood followed with the toast of "The Fighting Services." Brig.-General W. W. O. Beveridge, who responded, gave an interesting account of the steps taken to bring the health services of the Navy, Army and R.A.F. into line with the civil administration. Prof. E. W. Hope gave the toast "Parliament and the Public Health," and Sir Philip Magnus, an old and tried friend of the Public Health Service, in reply, referred to the present position of various health measures in the House of Commons, and to such intimate matters as superannuation and security of tenure. The toast of the Society was entrusted to the Bishop of St. Albans, who enlivened the evening with some excellent stories. In response, Col. Fremantle referred to the great growth in the membership and the influence of the Society, and spoke with real eloquence of the aspirations of the Public Health Service. Dr. Eustace Hill gave the final toast in honour of the Visitors, whose claims on the hospitality of the Society he summarised in a happy "Who's Who." The response came from Sir W. Arthur Robinson, who was warmly welcomed on his first visit to the Society as First Secretary of the Ministry of Health; from Sir Anthony Bowlby, President of the Royal College of Surgeons; from the Chairman of the London County Council; from Dr. Garstang, an old member of the Society, who attended to represent his high office in the B.M.A.; and from Lord Dawson of Penn, who displayed all the eloquence and charm of personality which made him such a persuasive chairman of the Consultative Council on Medical Services.

By general agreement the dinner was a great success, though there was some suggestion that in future years the toast list should be shorter to enable the diners to move about and talk with colleagues at other tables. On the present occasion an attempt was made to group together those members who have common interests, and the seating arrangements appeared to give considerable satisfaction. But the cheeriness of the reception before the dinner showed how much members appreciate this rare opportunity of meeting friends from a distance, and the ideal annual dinner would provide more opportunity during the evening to search for old friends and colleagues. Inevitably the reception was quite a brilliant little affair. Mrs. Fremantle made a charming and gracious

hostess, and the shower of civil and military decorations which fell during the war makes the mere man almost as ornamental as the lady guests on these full-dress occasions.

COUNCIL MEETING.

A meeting of the Council was held on October 22nd, 1920, at the house of the Society. The retiring President (Prof. H. R. Kenwood) took the chair, and there was also present Lt.-Col. F. E. Fremantle, Drs. Wilshaw, Cates, Barlow, Snell, Stocks, Kerr, Charles Porter, Sanders, Evans, Kirkhope, Ellis, Wheatley, Joseph, G. F. Buchan, Howarth, Lyster, and Lt.-Col. Herbert Jones.

Apologies for absence were received from Dr. A. K. Chalmers, Dr. Eustace Hill, Dr. H. Gibbons Ward, and Dr. W. Bertram Hill.

In opening the meeting the Chairman asked the Council to stand and record their sorrow at the loss of an old and valued colleague in the person of Dr. J. Tubb-Thomas, whose death had occurred since their last meeting. The Society had been represented at the funeral by Lt.-Col. J. Howard-Jones, and it only remained for the Council to send to Mrs. Tubb-Thomas a fitting expression of sympathy in her great bereavement. It was agreed that the Executive Secretary should write to Mrs. Tubb-Thomas on behalf of the Society.

The minutes of the last meeting were then approved and signed.

Correspondence.—(1) From the Ministry of Health, inviting suggestions from the Society regarding the records and statistics to be supplied by local authorities in connection with maternity and child welfare work.

Resolved: That a special committee, to be nominated by the Midland Branch, be set up forthwith to report on this matter to an early meeting of the Council.

(2) From the Ministry of Labour, reporting the outcome of the conference called by that department on July 26th to discuss certain difficulties in connection with the training of ex-service men as sanitary inspectors. Dr. Charles Porter, who was present at the conference as the representative of the Society, having given a further report of the proceedings, it was

Resolved: That the Ministry of Labour be thanked for their communication.

(3) From the Central Midwives Board, acknowledging receipt of the recommendations of the

Society in regard to the revision of the Board's rules.

Resolved: That the special committee nominated by the North-Western Branch be thanked for compiling these recommendations on behalf of the Council.

(4) From the Welsh Branch of the Society, suggesting that the scale of salaries adopted by the Society should be forwarded for the guidance of the Radnorshire County Council, who are about to appoint a medical officer of health.

Resolved: That the action of the Executive Secretary in acting on this suggestion be approved.

(5) From the British Medical Association, inviting the Society to nominate three representatives to serve on the Medical and Child Welfare Sub-Committee of the Association's Medico-Political Committee.

Resolved: That Drs. Buchan, Joseph and Barlow be nominated.

(6) From Dr. Philip Boobyer, reporting his attendance at the ninth annual general meeting of the General Council for the National Registration of Plumbers, and giving an account of the business transacted.

Resolved: That Dr. Boobyer be thanked for representing the Society on this occasion.

(7) From the Council of Justice to Animals, asking the Society to urge the London County Council to adopt clause 9 of the Model By-Laws (L.G.B.), and so make the use of the humane killer compulsory in slaughter houses in every London borough.

Resolved: That the Executive Secretary should convey to the London County Council the Society's approval of this suggestion.

(8) From the British Medical Association inviting the Society to nominate eight representatives to form, with an equal number appointed by the Association, the Joint Committee on Salaries sanctioned by the B.M.A. Annual Representative Meeting.

Resolved: That Prof. Kenwood, Dr. G. F. Buchan, Dr. W. J. Howarth, Dr. R. A. Lyster, Dr. G. W. N. Joseph, Lieut.-Col. Herbert Jones, Dr. Charles Sanders and Dr. Petgrave Johnson be nominated to represent the Society on this Joint Committee.

(9) From Dr. C. W. Hutt suggesting that the Society should represent to the Ministry of Health the desirability of including anthrax among the diseases compulsorily notifiable to the Medical Officer of Health of the area in which a case occurs.

Resolved: That the Executive Secretary should notify the Ministry of Health that the Society approves the principal of compulsory notification for cases of anthrax.

Elections to the Fellowship.—The Executive Secretary was authorised to invite the Branches to submit 150 nominations for election to the Fellowship of the Society, the nominations to be allotted on a *pro rata* basis, according to the relative number of members in each branch.

The Interim Report of the Consultative Council on Medical and Allied Services.—After slight modifications and amendments suggested by resolutions of the Branches, the Memorandum circulated with the August issue of "Public Health" was formally adopted as embodying the observations and criticisms of the Society in reference to the above report. The Executive Secretary was directed to send copies of the Memorandum to the Government Departments concerned, to the British Medical Association, to all Local Authorities in England and Scotland, and to Members of both Houses of Parliament when matters arising out of the report of the Consultative Council are coming up for consideration by the Lords and Commons. It was decided not to approach Local Authorities in Wales until requested to do so by the Welsh Branch, and consideration of how the Society can assist Irish members in connection with recent proposals for the health administration of Ireland was deferred pending the formation of an Irish Branch.

It was resolved that the special committee appointed to examine the interim report of the Consultative Council, with Dr. W. J. Howarth be asked to submit a further Memorandum offering constructive proposals for the improvement of medical and allied services, the committee to have power to co-opt additional members if they see fit.

Annual Reports.—The Hon. Treasurer and the Hon. Editor submitted their annual reports, which were adopted for submission to the annual general meeting of the Society.

Other matters on the Agenda were adjourned until the November meeting of the Council.

YORKSHIRE BRANCH.

The adjourned Annual Meeting of the above branch was held in the Law Library, Town Hall, Leeds, on Wednesday, September 22nd, 1920. The members present were as follows:—F. J. Burman, T. E. Francis, T. Gibson, W. B. Hill, O. M. Holden, J. J. Jervis, J. R. Kaye (Hon. Sec.), R. Lawrence (visitor), F. W. Martin, H. V. News-holme, G. H. Pearce, W. Scatterty, E. M. Smith, J. M. Wilson, A. Wear, W. Wiltshire (the chair).

The Council Meeting was held prior to the general meeting, when a number of subjects were discussed which appear in the records below. The minutes of the previous meeting were read and adopted, and the following recommendations from the Council were passed as resolutions of the general meeting:—

(1.) Proposed by Dr. Hill and seconded by Dr. Jervis.

"That the central Council be urged to approach the Ministry of Health with a view to laying the question of the remuneration of medical officers of health and conditions of service directly before the Ministry, and that the Minister be asked to receive a deputation from the Society."

(2.) Proposed by Dr. Smith and seconded by Gibson.

"That the subject of remodelling the bye-laws of the branch on the new constitution of the Society be referred to the next meeting of the Council."

With regard to the balance sheet and the annual report, it was now considered advisable that they should be printed and circulated amongst the members, and the Honorary Secretary also promised to provide a synopsis of the movements of the Society during the war period.

Election of Officers.

President: Dr. E. M. Smith, York.

Vice-Presidents: Dr. Mair, Harrogate, and Dr. Wear, Leeds.

Secretary and Treasurer: Dr. Hill, Selby.

Representatives on the Central Council: Dr. Smith, York, and Dr. Hill, Selby (Hon. Sec.).

The Council to consist of Drs. Buchan, Burman, Gibson, Hicks, Jefferson, Mair, Martin, Pearce, Scatterty, Smith, Sutherland, Mitchell, Wilson, Wiltshire, Moore, Wear, Jervis, Kaye, News-holme and Thornley.

Instructions were given to enter in the minutes an appreciation of the services of Dr. J. R. Kaye for his work during the past 26 years as Honorary Secretary.

The President delivered his valedictory address "On some rural problems," and in it he dealt with meat inspection and child welfare work; but the address, it is hoped, will appear in the Journal soon.

The President was thanked by Dr. E. M. Smith (Dr. Gibson supported) for his interesting address.

Dr. Jervis then introduced the consideration of the circular of the Ministry of Health *re* the sanitary conditions of Theatres, Music Halls, Picture Houses, etc., which he said he was pleased to do because of its urgent necessity. He recommended that all plans of new Theatres, Music Halls and Picture Houses should be submitted to the Medical Officer of Health of the Sanitary Authority concerned for approval or otherwise from an hygienic point of view.

Dr. Hill declared that most of these places of public entertainment are erected on wrong lines, and it was generally agreed that means for admission of sunlight should be insisted upon.

Time prevented the other items of the agenda being discussed, and the fixing of the days and dates for future meetings was referred to the next meeting of the Council.

METROPOLITAN BRANCH.

A meeting of this branch was held at the Society's Rooms in London on Friday, 8th Oct., 1920, the President (Dr. W. W. Willoughby), occupying the chair. There were also present:—Drs. Allan, Barnes, Bond, Dudfield, Goodall, Higgins, Howell, Lennane, Oates, Caldwell Smith, Sir William R. Smith, Drs. Spaul, Clark Trotter and Porter (Hon Secretary).

Arising out of the report of the conference between the Branch and the Metropolitan Asylums Board, it was arranged that the following matters should be brought forward at a future meeting of the Branch:—(a) As to arrangements for administering antitoxin to patients in their own homes; (b) As to the reserving of accommodation for measles and whooping cough, and of selecting cases for admission to the infectious hospitals.

The Branch were of the opinion that the Society should take no action on the suggestions contained in the Interim Report of the Consultative Council on Medical and Allied Services.

Dr. Howell, Medical Officer of Health, Hammersmith, related details of a seizure of chocolates which he had made on the ground that a number of them were infested with caterpillars. Other members stated that they had encountered chocolates affected in the same way. It was also noted that in some districts considerable quantities of weevilly flour were being met with.

Dr. Higgins, Medical Officer of Health, St. Pancras, referred to administrative difficulties that might arise in connection with aliens staying in London temporarily whilst en route to or from America.

Dr. Allan drew attention to the special report of the London County Council on the subject, and Dr. Oates stated that a large premises in the East End of London was being prepared for the accommodation of alien immigrants, and that when this was completed supervision in regard to infectious disease and other matters would doubtless be greatly facilitated.

The heartiest congratulations of the Branch were accorded to Drs. Allan, Goodall, Howarth and Willoughby, who had had the *Medaille du Roi Albert avec rayure* conferred upon them by H.M. the King of the Belgians, in recognition of valued services rendered to the Belgian cause during the war.

EASTERN BRANCH.

A meeting of the above branch was held at the Guildhall, Norwich, on July 30th, 1920, when the following business was transacted:—

- (a) The minutes of the last meeting were approved as a true record.
- (b) The Hon. Treasurer's report was read and adopted.
- (c) Dr. T. L. Lack, M.O.H., Forehoe, was elected President for the forthcoming session.
- (d) Dr. A. N. Stevens, M.O.H., Great Yarmouth, was re-elected Hon. Sec. and Treasurer.
- (e) The President-elect announced that he would read a paper at the January meeting.
- (f) A long discussion was held upon the question of salaries. No vote was taken, but there was a general consensus of opinion that the society should urge upon the Ministry of Health an immediate consideration of all the salaries and

conditions of appointment throughout the service, and that further, the growing practice of advertising for a statutory officer, *e.g.*, M.O.H., without mentioning subsidiary appointments, *e.g.*, clinics, mental deficiency, etc., should be considered by the authorities of the medical journals when deciding as to the adequacy of the proposed salary.

NORTH-WESTERN BRANCH.

The opening meeting of the above Branch of the session 1920-21 was held in Manchester on Friday, October 15th, 1920. There were present Dr. W. E. Burton (in the chair), Drs. Cates, Corbin, Middlebrooke, Mathieson, Daley, Hitchon, Whitehead, Dickinson, Fletcher, Stewart, Wood, Barlow, Anderson, Stallybrass, Holroyd, Dunbar Walker, Talent, Brindley, Beckett, Thomson, Hauxwell, Dearden, Kingsford, and Joseph (Hon. Secretary).

Dr. Burton (retiring President) introduced Dr. H. E. Corbin as President for the ensuing session. On the proposition of Dr. Barlow, seconded by Dr. Daley, a hearty vote of thanks was given to the retiring President in appreciation of his efforts on behalf of the Branch during session 1919-20, to which Dr. Burton replied.

Dr. Corbin delivered a most interesting and instructive address on "The Interim Report of the Consultative Council on Medical and Allied Services." For this he was accorded the best thanks of the meeting, on the proposition of Dr. Brindley, seconded by Dr. Cates. The President replied, and invited the members to open a discussion on the subject. As the outcome of the discussion, which was joined in by Drs. Daley, Dearden, Barlow, Hitchon, Cates, Morley Mathieson, and the Hon. Secretary, a resolution on the matter was adopted for submission to the Council.

It was decided to hold the Annual Dinner of the Branch in Liverpool, on Friday, December 10th, and a sub-committee, consisting of Drs. Barlow, Cates and Morley Mathieson, was appointed to make all arrangements.

Colonel Dunbar Walker, from Headquarters of Western Command, Cheshire, expressed the willingness of the military authorities to co-operate with the local authorities in any

measures for the destruction of rats during rat week (November 1st to 6th) in those areas in his command in which barracks or camps are situated.

SCHOOL MEDICAL GROUP.

The School Medical Group of the Society of Medical Officers of Health held its fourth Annual Meeting at the Society's offices on Saturday, 23rd October, when Dr. G. F. Buchan, S.M.O. for Willesden, was elected chairman *pro. tem.* School and assistant school medical officers attended from the North, Midland and South of England, representing the counties, county boroughs and Municipal Boroughs.

The minutes of the last Meeting held in June, 1916, were read and approved. The object of the Group, namely, to obtain official recognition and representation on the Council of the Society of M.O.H., having been obtained by the re-constitution of the Society, new rules and constitution for the Group were considered and adopted unanimously.

The objects of the re-constituted Group are (a) to promote and safeguard the interests of all medical practitioners engaged in connection with the medical inspection and treatment of diseases and defects affecting children of school age and to secure closer co-operation with other departments of Preventive Medicine; (b) to arrange meetings on pathological and administrative problems in connection with the diseases and defects of children, including clinics, special schools, domiciliary and institutional treatment and educational schemes.

A Group Council of twenty-eight, representing school and assistant school medical officers was elected. Two represent the L.C.C., eighteen the County Boroughs (fourteen of whom are devoted entirely to school medical work), five the County Councils; and three the Municipal Boroughs.

The Group Council will arrange Meetings and organise Provincial Sub-Groups having similar objects, for any area, on application of twenty-five members of the Group. Sub-Groups have entire control over their meetings and elect one or more representatives to the Group Council.

Dr. George A. Auden, F.R.C.P., S.M.O. for Birmingham, was elected president and representative of the Group on the Council of the Society of M.O.H., and Dr. A. Ashkenny, Town Hall, West Bromwich, with whom all those interested in the welfare of school children and the school medical service are invited to communicate, was re-elected Hon. Secretary.

TUBERCULOSIS GROUP.

A meeting of the Council of this Group was held at the house of the Society, on September 17th.

1. *Present*: Dr. Ellis in the Chair, Professor Benjamin Moore, Drs. Burra, Caley, Fenton, Campbell, Faill, J. Guy, J. Gilchrist, G. MacDonald, Peyton, Niven, Robertson, Tinker, Sorley.

2. Prof. Moore expressed his great appreciation at being elected President of the Group, and his thanks to the President of the Society for the invitation to give the Presidential Address at the general meeting of the Society to be held next May.

3. *Vice-Presidents*: After discussion it was decided not to elect Vice-Presidents for the ensuing session.

4. *Council*: A letter was read from Dr. H. E. Watson, Talgarth Sanatorium, Wales, stating that he was unable to accept office on the Council owing to difficulty in attending meetings in London.

The Secretary reported that Drs. Fenton and Paterson had intimated their willingness to serve on the Council, and they were unanimously elected. Drs. Perkins and Clive Riviere were unable to stand for election.

5. *Correspondence*: A letter was read from Dr. F. N. Kay Menzies expressing his appreciation at being elected as first honorary member of the group.

A letter was read from the Secretary, North of England Tuberculosis Society, asking for the views of the Group in the relationship of that Society to the Group. It was decided to postpone a decision, and the Secretary was instructed to obtain the views of the North of England Society in the matter.

A letter from Dr. Dickinson was read suggesting that a meeting of the Group be held at Liverpool, at the time of the Conference of the National Association of Tuberculosis in October, and it was agreed to arrange such a meeting in conjunction with the Tuberculosis Society.

6. The question of the Representation of the Group on the Council of the parent society was discussed in detail, and it was resolved that the following resolution be sent to the Executive Secretary with a request that it be brought to the notice of the Council of the Society:—

That the Group Representative or the Council be authorized to press for re-organisation of the Council on a broad democratic basis.

7. It was reported that the following gentlemen had kindly consented to read papers during the session:—Dr. Leonard Hill, "Open Air Treatment and Metabolism"; Dr. Vere Pearson, "Sanatorium Treatment—its present position"; Dr. Edgar Collis, "The Influence of Dust Inhalation upon the incidence of Phthisis"; Dr. Hyslop Thomson, "The Hospital Treatment of acute and advanced Pulmonary Tuberculosis."

8. The fixing of the day and time for the ordinary general meetings was further deferred until all members of the Group had been given an opportunity of stating their views in the matter.

9. The Chairman was authorised to appoint a Committee to investigate and report on the *Classification of Tuberculosis*.

NOTICES.

Members are reminded that subscriptions for Session 1920-21 became due on October 1st. Cheques (£1 1s. 0d.), should be made payable to the Society of Medical Officers of Health, and crossed "& Co." Early payment of subscriptions reduces the labour and expense of collection and leaves the staff free for more congenial duties.

A meeting of the West of England Branch will be held at Ham Green Isolation Hospital, Bristol (nearest station: Pill), at 3.30 p.m. on Wednesday, November 17th. Dr. B. A. Peters, medical officer of the hospital, will give an address upon "Some Points in Isolation Hospital Administration." Members of the Welsh and other branches are especially invited to this meeting. Owing to the lamented death of Dr. J. Tubb-Thomas, Dr. J. F. Blackett, Medical Officer of Health for Bath, is acting as hon. secretary for this Branch.

A few copies of the *Roll of Members* are available (7s. 6d., post free), as a directory for use in the Health Departments of Local Authorities if the order is signed by or for the medical officer.

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Editorial.

SURREY COUNTY M.O.H.

ADVERTISEMENTS have been issued by the Surrey County Council inviting applications for the position of Medical Officer of Health for the County. The salary offered is £1,200 per annum. The issue of this advertisement is in some ways opportune, as it seems to illustrate the urgent need for an educational crusade among some of the great local authorities of the country in connection with the salaries of medical officers of health.

The Society of Medical Officers of Health has now been engaged for several months upon the issue of a scale of salaries for officers

employed in the public medical service, and in July last the scale met with the general approval of the British Medical Association. The Society is at present arranging to submit the scale to the National Whitley Council appointed to determine the salaries of local government officers, and we have every reason to believe that the award will be a favourable one. On this scale the minimum salary to be attached to a position such as that of medical officer of health for the County of Surrey would be £1,800, together with the prevailing civil service war bonus, and so it is reasonable to presume that in the near future the County Council of Surrey will probably feel itself compelled to make very substantial additions to the salary which it is now proposing to pay its new medical officer.

A moment's consideration shows that such a method of procedure is unfair both to the County Council and the public of Surrey on the one hand, and also to the public health service on the other. At the salary now offered the council will obtain a certain number of applicants, and will be able to exercise a certain amount of choice, but if the vacancy were advertised at the scale salary (or something approaching it) the level of the applicants would of course be considerably raised, and the range of choice among experienced medical officers would be vastly extended. Probably the County Council are unaware of the fact that many comparatively small local authorities are paying salaries equal to or greater than that which is now offered by it, and that, if it is desired to obtain such a choice as should naturally be required by a county of such size and importance as Surrey, the salary offered should be fifty per cent. higher than it stands at present. Such an increase is necessary in order to bring the salary on an equality with

the better paid posts in the public health service.

We cannot believe that the County Council has given adequate consideration to the question of salary, and we have every confidence in appealing to it to reconsider the matter. In doing so we are acting in the interests of the whole community. Such an important and wealthy county as Surrey should be able to attract an officer with the widest experience in administration on a large scale, and with first-rate qualifications, and the public of that area have a right to expect that such services should be secured for them. The County Council has not, apparently, realised the fact that in the terms of its advertisement it is offering to an officer who will be its chief public health administrator and medical adviser as well as the recognised county expert in preventive medicine to whom all medical practitioners in the county should naturally refer, a salary which is considerably less than that earned by a panel practitioner who is not by any means fully employed. Such an officer must inevitably suffer in prestige when it is known that his specialist services are so poorly paid.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

NOTICES.

The particular attention of members of the Society is directed to the report of the Council Meeting held on November 19th (p. 45). There will be found an account of the present position of the case for improved remuneration of medical officials of local authorities. The Memorandum enclosed with this issue of "Public Health," gives the statement and minimum scale of salaries which will form the basis of the case to be submitted to the Whitley Council.

On p. 48 is a report of the formation of a School Medical Sub-Group by the North-Western Branch. The meeting was held on October 15th, so this may claim to be the first sub-group formed by school medical officers; indeed the parent Group was not officially constituted until a week later. Dr. Ransford found he would be unable to continue the secretarial duties, so Dr. G. Norman Anderson, Education Offices, Liverpool, has been elected in

his place. Members of the N.W. Branch desiring to join this sub-group should send their names to Dr. Anderson.

Members of the Society engaged in maternity and infant welfare work are proposing to form a group within the Society for the discussion and promotion of their special interests. Those who are prepared to assist in the formation of the group are asked to send their names to Dr. R. Woolsey Stocks, 324, High Street, West Bromwich.

As expected, a number of corrections have been received for entries appearing in the Roll of Members. These are being noted and will be communicated to Branch Secretaries. The more serious call for immediate apologies and such amends as are possible. Three names were omitted, viz.:

- Dr. Robert Proudfoot,
M.O.H., Macclesfield R.D.,
High Street, Macclesfield.
- Dr. J. L. Stewart,
Tuberculosis Officer, Lancs. C.C.,
The Tuberculosis Dispensary,
Warrington Street,
Ashton-under-Lyne; and
- Dr. J. G. Woolham,
Assist. S.M.O., Manchester,
Whitbarrow Lane,
Lymm, Cheshire.

All three are attached to the North-Western Branch. Dr. Proudfoot has been a Fellow since 1912; Dr. Stewart since 1914; Dr. Woolham was elected a Member in July last. The address of Dr. Douglas Martin, deputy M.O.H. and T.O., South Shields, should read 214, Westoe Road, South Shields, and Dr. R. G. Markham, now M.O.H., Nelson, is at 9, Carr Road, Nelson. The name of Dr. E. Porter, deputy M.O.H., Wood Green, is mis-printed "Ponter"; and D. W. Jones, M.R.C.S., etc., should read D. W. Fenwick Jones, M.B., B.S., Lond. The victims of these mistakes are asked to take a lenient view of the offences owing to the extenuating circumstances explained in the foreword to the Roll.

A few copies of the *Roll of Members* are available (7s. 6d., post free), as a directory for use in the Health Departments of Local Authorities if the order is signed by or for the medical officer.

THE CIVIL MEDICAL SERVICES.*

BY H. E. CORBIN, M.R.C.S., B.Sc., D.P.H.,
M.O.H., Stockport.

In our community there is a vast amount of disease causing invalidity, incapacity, and premature death, and the country has periodically awakened to the necessity of inquiring into the health of the people and endeavouring to improve and maintain the physique of the nation.

As the result of the examination of recruits for the Army during the South African War it was found that from 40 to 60 per cent of the men offering themselves for service were so defective as to be unfit for military service, and there was a loud outcry about the "progressive physical degeneration" of the nation, which led to the constitution by the Government of an Inter-Departmental Committee on Physical Degeneration with the following terms of reference:—

- (1) To determine with the aid of such counsel as the medical profession are able to give, the steps that should be taken to furnish the Government and the nation at large with periodical data for an accurate comparative estimate of the health and physique of the people.
- (2) To indicate generally the causes of such physical deterioration as does exist in certain classes, and
- (3) To point out the means by which it can be most effectively diminished.

This Committee reported in 1904, but the report led to very little, because the results obtained by the Recruiting Officers of the Army gave no reliable basis for the conclusion that there was general physical degeneration as the numbers concerned were too small and the recruits who then drifted into the Army were young men without employment drawn from the lowest classes, and who were either unfit, or disinclined, for regular employment.

Again, from the report of the Ministry of National Service published this year, we learn that of nearly 2½ million men examined during the last year of the war, when the machinery for an accurate census was in operation, only 36 per cent were fit, and 40 per cent presented marked physical disabilities relegating them to the C 3 category.

* Presidential Address delivered at opening meeting of N.W. Branch in Manchester, October 15, 1920.

The reports on National Insurance show that 40 per cent of insured persons are incapacitated through illness for some period in each year, giving rise to 14 million weeks of registered sickness per annum among these working-classes—mostly preventable sickness. These figures, together with those obtained from our reports on the Medical Inspection of School Children and also from the Death Returns, especially those relating to the still too high mortality among infants, are alarming evidence that all is not well with the health of the community, and call for more systematic effort on the part of all agencies available for the improvement and maintenance of the public health.

The war more than anything else has forced upon the public a sense of the basic importance of health, and great social reformers—especially the Prime Minister—have leavened the whole country with the stimulus for social reform. For years Medical Officers of Health and others have been advocating that the many isolated, piecemeal, redundant and overlapping medical services should be woven together into one uniform and co-ordinated service. They are no longer the "voice crying in the wilderness." The Great Public has once more realised its greatest asset—Health—and has taken the first great step towards reform in this direction by the establishment of a Ministry of Health. The Act of Parliament which constituted the Ministry of Health made provision for Advisory Councils, and the Minister lost no time in constituting a Consultative Council on Medical and Allied Services "to consider and make recommendations as to the Scheme or Schemes requisite for the systematised provision of such forms of Medical and Allied Services as should in the opinion of the Council be available for the inhabitants of a given area."

In the report of the Consultative Council, Civil Medical Services are classified into Domiciliary as distinct from Institutional, and Individual as distinct from Communal.

Arrangements are also proposed by which provision should be made for such matters as Laboratory Services, Research, Dental Services, etc., in the systematised Scheme.

The report states that work in Preventive Medicine by the General Practitioner would be carried out both in the homes of the patients and in the Primary Health Centre, and the Health Authority should be enabled to make specific payments for such work.

It is because the General Practitioner has hitherto been unable to associate preventive work with his treatment either through lack of special training, lack of time, or disinclination, that such so-called Communal Services as the Medical Inspection of School Children, Antenatal and Child Welfare Work, etc., have been established as *ad hoc* services by the Local Authorities under the aegis of the State.

The large mass of preventible sickness revealed by reports of Medical Inspection, the work of Health Visitors, etc., which has not hitherto come within the scope of the General Practitioner, and which he has not had time to attend to, has necessitated the establishment of these Communal Services and Clinics.

Now although a basic distinction is drawn between Individual and Communal Medical Service, we, as Health Officers, should not recognise such a distinction—the sum of the health of the individuals is the health of the community, and the practice of medicine—whether it be among collective groups between certain ages for all defects, or of all ages for certain specific defects, or whether it be individual medical attendance on the remainder of the community—by far the majority—by the General Practitioner—it should be regarded and undertaken as co-ordinated Communal Practice for the benefit of the community at large. On this account it is essential that the General Practitioner should enlarge the sphere of his activities in the direction of the preventive medicine and become a unit in the administration of communal health. This principle, we are glad to see, is emphasised in the report of the Consultative Council.

The impossibility of dissociating Preventive from Curative Medicine is obvious in communicable disease inasmuch as the process of cure is intimately bound up with the destruction and elimination of the infectious processes—moreover, the idea that only communicable disease can be prevented is exploded, and it is now generally recognised that the majority of non-communicable disease is also preventable. Incipient disease is a matter for searching diagnosis, and the General Practitioner is the only individual who has the opportunity to study the early signs of disease in the majority of the community, and there must be available for his use all the necessary equipment for the most recent methods of diagnosis. Unfortunately the General Practitioner of to-day has had practically no training in the highly specialised field of preven-

tive medicine; his rôle has been to cure established disease, and he has been well-trained for this purpose.

Just in proportion as Preventive and Curative Medicine cannot be divorced from one another, so the training in the preventive aspect should be correlated and carried out simultaneously with diagnosis and treatment of disease throughout the whole of the medical curriculum.

Hygiene, the association of industrial and social conditions with disease, a wider conception of Etiology in disease, antenatal medicine and the prevention of infantile disease, serum therapy and communal responsibility, all these inculcated into the medical student, not as a separate and dissociated department of training for the purpose of an examination paper, but as a living part of the whole of his medical training, will create a new type of Doctor equipped with the knowledge and imbued with the desire to render the greatest service to the community in the prevention of disease and the maintenance of health.

The fact that out of about 24,000 names on the Medical Register for England and Wales nearly 16,000 are engaged in insurance domiciliary practice is sufficient to show that the majority of service to the State must be performed by these practitioners who are now engaged in general practice, but there are upwards of three thousand engaged as Medical Officers of Health, Tuberculosis Officers, Venereal Diseases Officers, Medical Officers for Maternity and Child Welfare, and School Medical Officers, for the most part devoting their whole time to the service of the State.

The report of the Consultative Council states that by the adoption of a whole-time salaried service for all Doctors the public would be serious losers, and the Scheme of the Council requires that the existing communal services should be directed by a General Practitioner practising in the area and paid on a part-time basis for this work, so that with perhaps the exception of the whole-time Medical Officer of Health the Consultative Council practically recommends the supplanting all the whole-time Medical Officers, who are doing excellent and organised work under an efficient and economical administration, by part-time practitioners, and under the directorship of a part-time practitioner. Such a Scheme of part-time service must, in my opinion, be much more costly, less efficient—indeed without the directorship of a whole-time Official, almost

doomed to failure—and a distinctly retrograde recommendation, essentially associated with the individual rather than with the communal outlook and not in accord in any way with the view taken by the majority of those with experience in Public Service.

The report entirely fails to appreciate the work which whole-time Officers are actually doing under the Ministry of Health. It states that those who do not come into personal contact with the sick can with advantage be paid entirely by salary—that a whole-time salaried service would discourage initiative, diminish the sense of responsibility and encourage mediocrity!

The inference is that the whole-time medical practitioner is a wholly soulless creature, while the part-time practitioner is an intensely human individual whose humanitarian instincts are stirred into activity by the fact that he has been chosen by his patient as his or her medical adviser. I am emphatically of opinion that there is no such radical distinction, and that there is the same desire to excel both in skill and helpfulness among salaried Medical Officers now engaged in Communal Service in dealing with their patients as there is among the General Practitioners, and, moreover, the "instinct which demands free choice of doctor" is largely exercised in choosing the whole-time officer when the opportunity occurs quite apart from the question of cost.

The ideal to be aimed at is co-operation instead of competition between the *ad hoc* salaried service and other medical practitioners, and it appears to me that the only way to bring this about is by extending the scheme of National Insurance.

No intention of limiting the benefits of the scheme of the Consultative Council to insured persons is stated in the report. On the contrary Lord Dawson suggests fitting the Insurance Organisation into the larger systematised service.

The time does not appear to have arrived for a complete State Medical Service, but a very important advance can be made in this direction by extending the benefits of the National Insurance Act to the dependants of insured persons and to all poor persons—and further by increasing the income limit to which the Act shall apply so that medical services become available for practically the whole population. This elaborated panel system must be linked up and co-ordinated with pub-

lic and preventive services and also with the Primary and Secondary Centres, or with such hospitals, consulting staffs, nursing and other services as are available until these centres are established. In such a scheme whole-time Medical Officers of Communal Clinics would be regarded as portion of the consulting services. There would have to be a limit to the number of persons under the care of one doctor, varying chiefly according to accessibility, and, inasmuch as the majority of doctors would become virtually whole-time insurance practitioners some new and extended organisation with regard to payment would have to be established by the Ministry and placed under the control of the Local Health Authority.

With regard to hospitals, although the elaborate conceptions of the Consultative Council may ultimately be arrived at, the most urgent need for the time being would appear to be to render available the beds of Poor Law Hospitals for other than poor persons needing hospital treatment. At such hospitals placed under the Local Authority the doctors could attend their own patients and a standard rate of charges might be drawn up for all patients who could pay, based upon income—but these should be inclusive charges, taking in the medical fees as well as maintenance, etc. Voluntary hospitals might continue their heroic struggle for independence side by side with such municipal hospitals, and indeed it seems a pity to sacrifice sixteen million pounds annually contributed by the charitable. These hospitals would probably need some financial assistance from the Local Health Authority and would doubtless in return be willing to submit to some proper form of control or supervision and to submit more complete and standard records of their work.

Should the Ministry of Health decide to change existing boundaries of areas of Local Health Administration it would not be difficult for the officers of counties and county boroughs to make recommendations in regard to areas which would, as the result of existing amenities, form a local unit provided with the necessary services, and one which could be readily administered.

With regard to administration the Consultative Council considers that existing health administration would be unsatisfactory and points out the need for a new Health Authority. The Council appears divided in

opinion as to whether the Authority should consist of a Statutory Committee of an existing Local Authority or of a new and independent ad hoc body established for the administration of health purposes alone.

Clearly under whatever administration there must be complete co-ordination and inter-communication between all the services of the area, but it does not appear necessary that the Health Authority need be composed very largely of experts in health matters, and, indeed, as to three-fifths of its composition, of medical members, in order to secure proper sympathetic and organised team work—rather it appears to me that an entirely lay Committee with business capacity and a view-point unaffected by personal motives and well advised by its principal Medical Officer is much more likely to be able to establish the desirable co-ordination of work and to prevent friction than is a Health Authority composed mainly of professional personnel.

It appears almost obvious to Local Government officers that any body entrusted with the expenditure of public money should be elected by the people—a most excellent democratic principle—and the suggestion of an ad hoc independent authority to administer all health matters is in many ways directly opposed to what it would appear the Consultative Council have set out to establish, i.e., uniformity of administration, and is, moreover, subversive of the ordinary principles of Local Government.

I have not touched on many matters dealt with in the report of the Consultative Council but have confined my remarks to certain portions of the report which appear to encroach on the departments of a Medical Officer of Health, but there is no doubt that before deciding on any broad scheme of reconstruction the Ministry of Health will be advised by their own officers as well as by the Advisory Councils, and I think there is no need to fear that the existing medical services, which have been established by local authorities throughout the country and, I think I may say, fully appreciated by the public, will be supplanted by less satisfactory services.

LAMBETH Borough Council have passed a resolution recording their appreciation of the services rendered by Dr. Joseph Priestley throughout the period of twenty-five years since his appointment as their medical officer of health.

THE DAWSON REPORT.

BY C. E. TANGYE, M.D., D.P.H.,
Medical Officer of Health for Wiltshire.

It has been suggested that legislation will be introduced on the subject of the Report early next spring. If so, there is little enough time for effectual discussion, but it would seem doubtful that a Report so vague on all the most difficult points, can so quickly be reduced to terms of law and finance even if Parliament had not enough on its hands already.

My remarks will be mostly confined to the fate of existing Public Health staffs as far as can be gleaned from the Report, and as expounded by Lord Dawson.

The following quotations summarise the position:—

"The Practitioner must somehow be identified with preventive work."

"The state services should be staffed on a part-time basis by part-time officers, where possible by the local general practitioners."

Pre-natal care, child welfare, medical inspection and treatment of school children, physical culture, examination of suspected cases of tuberculosis and occupational disease, etc., are given as the communal services for which the director is to be a part time officer paid on a time basis, and the actual work will be performed on the same basis by his brother practitioners working under him.

The whole of the work of the clinical staff of the modern public health department is thus to be handed to general practitioners, but a partly whole-time dental service will still exist and will form part of the staff of each primary centre, and this partly whole-time dental service will be under the direction of part-time general practitioners. Curiously enough the remuneration for dental work is to be on a time basis, so that there will be the extraordinary arrangement of whole-time officers being paid on a part-time basis.

This Branch has recently been much exercised over the unsatisfactory position particularly of the junior members of the health service. As far as the School Medical Service and other clinical services are concerned, we need apparently be exercised no longer, Lord Dawson has found a sovereign remedy and simply removes all the Clinical Medical Officer's troubles by removing the Clinical Medical Officer himself.

The fate is to befall him, not because he has done his work badly—indeed the success or otherwise of his work is not taken into account—but for these reasons:—

1. "Each of these *ad hoc* services has lopped something away from general practice, and this interposition suggests that a whole-time state salaried service is coming by instalments and almost by stealth."

"The tendency is for one piece of work after another to be transferred from private practitioners to salaried officials of the state."

2. "If this goes on a man might be doing nothing else but taking out adenoids from the age of thirty to the age of sixty, or doing some such small section of medical work."

3. The Public Health machine is "outworn."

It is possible that there may be blind alley specialist paths in public health, although Lord Dawson's super specialist must be rare who spends the prime of his life removing only adenoids and presumably leaving the tonsils to another specialist. It is doubtful, however, whether specialism in the public health service is more narrow than in private practice, and in any case the existence of these blind-alleys is an argument for reform within the public health service, and not for its wholesale demolition.

Also it seems a little early to speak of the outworn state of the public health machine, particularly in connection with these clinical services, which have only come into existence during recent years.

Not only is the administrative work of the primary centre to be in the hands of a part-time general practitioner, but it seems intended that almost the whole administrative public health staff shall be part-time, up to, but apparently not including the Principal Medical Officer and his immediate Assistants.

Turning now to the purely public health services, we find very little mention of these in the Report apart from an enumeration in paragraph 26, where the context suggests that these too are to be handed over to part-time practitioners.

The Health Visitor is to be an assistant of the general practitioner in the same way as the midwife, the nurse and the chemist. The Sanitary Inspector seems to have been overlooked, but doubtless if he has been remembered he also would have been told off to wait upon the general practitioner. It is significant that Special Committees have been directed to

deal with questions as to pharmacists and nurses, but none with the fate of existing medical officers of health. It is possible that posts will be found for a few chosen individuals under paragraph 64, and they will become whole-time non-clinical consultants connected with the Communal and Preventive services of the Secondary Health Centres. These posts would be for the very few. The ordinary whole-time medical officer of health is not so much as named in the Report except in paragraph 103, where he is mentioned only to have his office taken from him.

The general practitioner is thus to supplant every existing whole-time officer with only the fewest and vaguest exceptions. This is the advice tendered to the Ministry at the Ministry's request by the Consultation Council. If the Ministry accepts the advice it will have to disown the whole policy of the Local Government Board, the Board of Education, and of its own departments even as that policy is being laid down at the present moment.

On the general question of the desirability of employment of general practitioners for purely clinical work, as far as this can be done with efficiency and economy, there can scarcely be two opinions. It is because part-time services are not available in many places, or if available are inefficient or uneconomical, that the so-called *ad hoc* whole-time appointments have been made.

The availability of such part-time services has become less as general practice has improved. Many practitioners to-day refuse at any price to be bound to the definite appointments week by week, which are inseparable from such public services.

Again, the work of a County Tuberculosis Officer or County Oculist would give rise to innumerable difficulties if carried out by an army of part-time workers, with inevitably varying standards and methods and ability.

There are thus many inherent difficulties involved in Lord Dawson's programme for clinical work, but I think these *ad hoc* services will always be readily surrendered to the general practitioner whenever it is found practicable to do so. Indeed this is the case at the present time.

Quite another question is raised when it is proposed that the part-time general practitioner shall be given administrative functions over his confrères and over the ancillary services which are still to be whole-time. Nothing but

dire confusion can be anticipated under these circumstances: and no training in preventive medicine with which the future practitioner may be equipped will alter the case.

Personally I think that the Memorandum of the Society of Medical Officers of Health is not clear enough on this cardinal point, that the function of the practitioner is clinical and that his duties under a comprehensive scheme should still be purely clinical. To my mind this is the most crucial question raised by the Report in connection with Communal services.

This criticism has already been made by a general practitioner in words which are worth quoting to point my moral:—

"Part-time administrative work is almost invariably futile. If the work is purely clinical the scheme can be carried out, but if administrative work is superadded it will be difficult to get men to accept the posts, and harmonious working will be jeopardised."

THE RULES OF THE CENTRAL MIDWIVES BOARD.

The existing Rules of the Central Midwives Board expire on June 30th, 1921, and the Board will shortly commence a revision of the Code.

The Council of the Society of Medical Officers delegated to a special committee, nominated by the North-Western Branch, the task of suggesting such amendments and additions to the Rules as has been found desirable by the medical officers of Local Supervising Authorities. The recommendations of the special committee, have since been approved and adopted by the Council and forwarded to the Central Midwives Board as follows:—

General.—It is suggested that the Board introduce or obtain the necessary powers to introduce regulations making it impossible for a Midwife to take maternity cases into her own home until she has made application to the Local Supervising Authority, and the premises have been certified as suitable.

Further the Board should seek from Parliament powers to extend the provisions of section 8 of the Midwives Act, 1918, so that these provisions may apply to a Midwife whose name was removed previous to the passing of the Midwives Act, 1918, if a Local Supervising Authority should make application in any case.

E. Rules regulating, supervising, etc., the practice of Midwives.—The note preceding Rule 1

on page 20 is virtually of the nature of a rule, and it should, we think, rank as such. This would necessitate the alteration of the words "should" in line 4 and line 5 to "shall." It could then be incorporated as a second part of Rule 1 with this addition . . . "and shall make out a record for medical aid according to Rule 20."

Rule 2.—It should be stated that "while attending to her patients the arms of the Midwife must be bare to the elbow."

Rule 3.—When called to a confinement "and on all subsequent visits."

Rule 4.—On each occasion "scrub her hands and forearms in soap and water, paying special attention to the finger nails," and then disinfect.

Rule 6.—A foot note to Rule 6 should indicate examples of the conditions (a) "supposed to be infectious," and (b) conditions "liable to be a source of infection."

Rule 7.—It is suggested that the Midwife should be compelled to remain with the patient for at least one hour after the expulsion of the placenta and membranes.

Rule 12.—In this rule it should be set out by a foot note or otherwise that the cleanliness and comfort of the patient require, amongst other things, daily bathing and bedmaking. An addition to Rule 12 should make it compulsory for a midwife to notify the Local Supervising Authority in every instance where she continues her attendance after the tenth day, or is called in to re-attend the mother or her child.

Rule 14.—"Entering her attendances and records in a note book or on charts, and forthwith transferring the same to her permanent register."

Rule 21.—Add, "Puffiness of hands, face, or feet."

Section B.—Add, "dimness of vision, previous miscarriage, diminution in quantity of urine, persistent and frequent headaches."

Section 3.—Add, "A breach presentation in a primipara." In the last sentence of this sub-section the word "serious" should be omitted.

Section 5.—Add "prematurity of birth."

Rule 23.—The forms for sending for medical help should bear a consecutive printed number.

The forms prescribed under this rule (sub-section a) might with advantage contain a space within which the midwife could insert, for the information of the Local Supervising Authority, the nature of the assistance rendered by the medical practitioner called in during emergency.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

COUNCIL MEETING.

A meeting of the Council was held at the house of the Society on November 19th, 1920. The President (Lieut.-Col. F. E. Fremantle, M.P.) was in the chair, and there were present: Prof. H. R. Kenwood, Drs. Snell, Wheatley, G. F. Buchan, W. Bertram Hill, Cates, Clements, Kirkhope, Gibbons Ward, Stocks, Ellis, Blackett, Joseph, Lyster, Howarth, Veitch Clark, Barlow, Wilshaw, Sanders, Charles Porter and Lt.-Col. Herbert Jones.

Apologies for absence were received from Dr. A. K. Chalmers, Dr. Edmund Smith, and Dr. Harold Kerr. Prof. Bostock Hill wrote regretting his absence from the meetings of the Society during the next six months while on a visit to Ceylon.

The Minutes of the last meeting were approved and signed.

Correspondence.—(1) From the Ministry of Health enclosing draft proposals with regard to compensation referred to in Interim Report of their Unhealthy Areas Committee: *Resolved*: That the Ministry be thanked for their communication.

(2) From the British Medical Association explaining that as their Public Health Committee is now largely composed of members of the Society of Medical Officers of Health, it had been decided not to co-opt any direct representatives of the Society to the M.O.H. Sub-Committee as in former years. *Resolved*: That the Executive Secretary should inform the Association that without in any way presuming to criticise the composition of the Public Health Committee, the Society hope that in future they may again be asked to nominate members to the M.O.H. Sub-Committee, as they attach great value to the privilege hitherto extended to them of being directly represented on that body.

(3) From Dr. Sidney C. Lawrence reporting the successful issue of his dispute with the Edmonton U.D.C. regarding his removal from office as supervisor of maternity and child welfare work under that local authority, and thanking the Society for their sympathy

and support. *Resolved*: That the Executive Secretary should convey to Dr. Lawrence the congratulation of the Council on securing such a satisfactory settlement of his claim, in which were involved principles of importance to all Medical Officers of Health.

(4) From the School Dentists' Society asking for suggestions regarding the incorporation of that body within the Society of Medical Officers of Health. *Resolved*: That the Executive Secretary should meet the Hon. Sec. and other representatives of the S.D.S. and formulate definite proposals for consideration by the Council.

(5) From the special committee nominated by the Midland Branch, by request of the Council, enclosing a copy of the amendments recommended in the draft Form for Maternity and Child Welfare Returns submitted by the Ministry of Health for the consideration of the Society. *Resolved*: That the Midland Branch be thanked for their report and recommendations, which have since been adopted and forwarded to the Ministry of Health as the representations of the Council of the Society.

Report of Special Committee on Remuneration of Medical Officers of Local Authorities.

Dr. G. F. Buchan submitted the following report:—

November 12th, 1920.

1. In accordance with instructions given at your meeting on the 22nd October 1920, your Salaries Committee met on the 29th October, 1920, and framed a Memorandum on the Remuneration of Medical Officers of Local Authorities for submission to the National Joint Council for Local Authorities' Administrative, Technical and Clerical Services.

2. On the 3rd November, 1920, a Joint meeting took place between your Salaries Committee and representatives of the British Medical Association, this being the Conjoint Committee referred to in Minute 106 of the Annual Representative Meeting of the British Medical Association at Cambridge in 1920, namely:

"That this meeting is of opinion that a substantial addition is needed to all Public Health salaries on the general lines of the scale indicated in items 77 to 882 of the Agenda and that a conjoint Committee of the British Medical Association and the Society of Medical Officers of Health be formed to take charge of the case for improvement in the salaries of Medical Officers in the Public Health Services and to report to the Councils of the British Medical Association and of the Society of Medical Officers of Health as to any steps that may be necessary to this end."

3. At this meeting Dr. T. W. H. Garstang was unanimously elected Chairman of the Conjoint Committee.

4. The meeting resolved itself into a discussion of the desirability of medical men who are Local Government Officers presenting their case to a National Joint Council composed of representatives of Local Government on the one hand and representatives of Local Government Officers on the other rather than to a Joint Council composed of representatives of Local Government on the one hand and representatives of the Medical Profession on the other.

5. After a prolonged discussion the meeting was adjourned till Friday, December 3rd, 1920.

6. Your Salaries Committee met on Friday, 12th November, 1920, and have given very careful consideration to the questions raised at the meeting of the Conjoint Committee on 3rd November, 1920.

7. The National Joint Council for Local Authorities' Administrative, Technical and Clerical Services, which has been formed at the instance of the Ministry of Labour is elected annually and is constituted as follows:

ASSOCIATIONS OF EMPLOYERS:

1. Association of Municipal Corporations	8
2. County Councils' Association	6
3. Urban District Councils' Association	5
4. Rural District Councils' Association	4
5. London County Council	3

ASSOCIATIONS OF EMPLOYED:

1. National Association of Local Govt. Officers	14
2. National Amalgamated Workers' Union	7
3. National Union of Clerks	3
4. Two places left open for the present	2
	26

8. The functions of the National Joint Council include the consideration, inter alia, of the following matters:—(2) The provision of machinery for the regular consideration of remuneration, hours and conditions of service, including superannuation, tenure of office, and other matters affecting the services. (14) The establishment of District and Local Committees on the lines put forward in the Whitely Reports.

9. As to remuneration, certain branches of the Local Government Services have already been dealt with by the National Joint Council. In respect of the remuneration of Medical Officers of Local Authorities the N.A.L.G.O., to which the Society of Medical Officers of Health is affiliated, has pledged itself to support the scale of salaries of the Society of Medical Officers of Health and to do all in its power to secure the best terms for Medical Officers of Local Authorities.

The National Joint Council has also resolved that the Special Salaries Committee shall receive a deputation from the Society of Medical Officers of Health, who will be invited to state their own case.

10. In respect of the other conditions of service, e.g., hours, superannuation, etc., it is difficult to see how the claims of a Medical Officer of a Local Authority can be substantially separated from those of other Local Government Officers.

11. Having regard to these facts your Salaries Committee are of opinion that the Society of Medical Officers of Health would not be acting in the best interests of all their members or of the medical profession generally if they ignored or repudiated this machinery which has been set up by the Government for the settlement of the questions of remuneration, etc., of Local Government Officers, amongst whom are medical practitioners.

12. Your Committee are of opinion, however, that the settlement of the remuneration of Medical Officers of Local Authorities would be best determined by a Special Committee of the National Joint Council appointed as to one half by the Associations of Local Authorities and as to the other half by the Society of Medical Officers of Health.

13. There is no legal enactment at present by which the decisions of the National Joint Council for Local Authorities' Administrative, Technical and Clerical Services may be made obligatory on Local Authorities, but both the N.A.L.G.O. and the National

Joint Council are alive to this defect and are pursuing a policy which has in view the acceptance of the Council's decisions by Local Authorities. In this connection your Salaries Committee are of opinion that indispensable service could be rendered by the Conjoint Committee of the British Medical Association and Society of Medical Officers of Health in taking all steps to secure for Medical Officers of Local Authorities the minimum scales and other conditions of service determined upon by the National Joint Council. This course would not only still further strengthen the union happily existing between the Society of M.O.H. and the B.M.A. but a successful campaign on these lines would greatly enhance the prestige of the B.M.A.

14. Your Committee would welcome the formation of a National Joint Medical Council for the settlement of disputes between the State or Local Authorities or both on the one hand and the Medical Profession on the other, but even if such a Council were formed the Society of Medical Officers of Health are of opinion that their special interests would require to be dealt with by a Special Committee of such a body, composed on the one side of representatives of the State or Local Government and on the other side by representatives of the Society of Medical Officers of Health, in the same way that the special interests of any other section of the profession would require to be determined.

15. In all these circumstances your Salaries Committee are of opinion that the scale of salaries adopted by the Council of the Society of M.O.H. at its meeting on 24th Sept., 1920, should be submitted forthwith to the National Joint Council for Local Authorities' Administrative, Technical and Clerical Services with a recommendation that the scale be submitted to a Special Committee of that body composed of representatives of the Local Government on the one hand and representatives of the Society of M.O.H. on the other.

Your Salaries Committee accordingly recommend:—

- (1) That the Memorandum herewith be forwarded to the National Association of Local Government Officers as requested by them for submission to the National Joint Council for Local Authorities' Administrative, Technical and Clerical Services.
- (2) That the National Association of Local Government Officers and National Joint Council for Local Authorities' Administrative, Technical and Clerical Services be informed that the Society of Medical Officers of Health are of the opinion that a Special Committee of the National Joint Council should be formed consisting of equal numbers of representatives of Local Government on the one hand and representatives of the Society of Medical Officers of Health on the other, to determine minimum salaries for Medical Officers of Local Authorities.
- (3) That a copy of this report be forwarded to the British Medical Association is requested by the Conjoint Committee.

The above report having been received and adopted it was *Resolved*:

- (1) That the Memorandum on the Remuneration of Medical Officers of Local Authorities prepared by the Salaries Committee for submission to the National Joint Council for Local Authorities' Administrative, Technical and Clerical Services be approved and adopted by the Council of the Society of Medical Officers of Health and the Minimum Salaries therein contained which were adopted by the Council of the Society of Medical Officers of Health at their meeting on 24th September, 1920, for submission to the National Joint Council for

Local Authorities' Administrative, Technical and Clerical Services be reaffirmed.

- (2) That the Report of the Salaries Committee dated 12th November, 1920, be approved by the Council of the Society of Medical Officers of Health and the recommendations therein contained adopted.
- (3) That the Salaries Committee be empowered to take all necessary action in connection therewith.

Dr. Buchan stated on behalf of the Salaries Committee that unless some unforeseen emergency should arise, the Salaries Committee would take no action under the foregoing resolutions until after the meeting of the B.M.A. Joint Committee to be held on Dec. 3rd.

By request of Dr. Buchan, the Salaries Committee were authorised to co-opt Group Representatives from the Council to advise on the special interests of their members in regard to remuneration and times of service.

Tuberculosis Work in London.—On behalf of the Tuberculosis Group, Dr. H. A. Ellis submitted a full report on the scheme for Tuberculosis Work in London recently before the London County Council. Although many features of the report apply equally to provincial tuberculosis schemes, the Council were of opinion that it should be submitted in the first instance to the Metropolitan Branch of the Society, for their early consideration, and a resolution was carried to that effect.

The Society's Articles of Association.—After reference to representations received from Branches and Groups, it was resolved that a special committee consisting of the President, Ex-President and Officers of the Society be appointed to confer with representatives of Branches and Groups regarding any revision advisable in the Articles of Association of the Society.

Statistical Returns and Reports.—It was proposed by Dr. G. F. Buchan and carried that the attention of the Ministry of Health and the Board of Education should be drawn to the desirability of fixing a uniform period for annual reports, statistics and grant claims returnable to their Departments. In the opinion of the Council the existing system requiring that such reports and claims should apply to periods terminating variously on Dec. 31st or March 31st, involves much additional labour and makes periodical comparison of statistics and expenditure unnecessarily difficult.

Financial.—The Hon. Treasurer was authorised to draw cheques for Petty Cash purposes up to £30, instead of £20 as hitherto, in view of the increase in the working expenses of the Society.

The meeting then adjourned.

ORDINARY MEETING.

An ordinary meeting was held at the house of the Society on November 19th, when there was a good attendance of members, with the President (Lieut.-Col. F. E. Fremantle) in the chair.

The Minutes of the last Ordinary Meeting having been approved and signed, the following candidates having been duly nominated were elected to the Membership of the Society:—

Batho, Marion Louise, L.R.C.P. & S., L.A.H., I.; Broom, James Prowse, M.B., Ch.B., Glasg., D.P.H.; Brown, Evelyn Dorothy, M.B., Ch. B., Liv.; Cairns, James William, M.D., Ch.B., Edin., D.P.H.; Cowe, Kate Molineaux, M.B., Ch.B., Liv.; Crane, Walter, M.D., B.Ch., Dubl., D.P.H.; Dormer, Percival Atkin, B.A., M.B., B.Ch., Dubl., D.P.H.; Fenton, Wm. James, M.D. Cantab., F.R.C.P.; Fisher, Theodore, M.D., Lond., F.R.C.P.; Forrest, Andrew Walker, M.A., M.D., Ch.B., Edin.; Hague, John, M.R.C.S., L.R.C.P., D.P.H.; Harris, Alfred Edwin, L.R.C.P. & S. Ed., F.C.S.; Hodgson, Albert Ernest, M.D., Ch.B., Edin., D.P.H.; Jackson, William Massingberd Middleton, Capt. R.A.M.C., M.D., Durh., L.R.C.P. & S. Ed., D.P.H.; Jamieson (Mrs.) Elizabeth Mary, M.B., Ch.B., Aberd., D.P.H.; Lawrence, Reginald, M.D., Ch.B., Vict., D.P.H.; Lewis, Richard, L.R.C.P. & S., Edin., L.R.F.P.S., D.P.H.; McCarthy, Eugene Charles, M.B., Ch.B., Vict.; Macfie, James Denniston, M.B., Ch.B., Glasg.; McNaught, Peter Russell, M.B., Ch.B., B.Sc. (Publ. Health), D.P.H.; Macpherson, Sir Wm. Grant, K.C.M.G., C.B., Maj.-Genl., A.M.S., M.A., M.B., C.M., Edin., D.P.H.; Martin, Cecilia Turnbull McEwan, M.B., Ch.B., Glasg.; Martin, Thomas Hartley M.B., Ch.B., Liv.; Miall-Smith, Gladys Mary, M.B., B.S., B.Sc. Lond., M.R.C.S., L.R.C.P.; Nicholl, Thomas John, F.R.C.S., L.R.C.P., I., D.P.H.; Parkinson, George Singleton, D.S.O., Major R.A.M.C., M.R.C.S., L.R.C.P., D.P.H.; Paterson, Marcus Sinclair, M.D., B.S. Durh., M.R.C.S., L.R.C.P.; Peek, John Harold, M.D., Ch.B., Edin., D.P.H.; Poole, Edward Albert Bodenham, M.D. Durh., M.R.C.S., L.R.C.P., D.P.H.; Ritchie, Alex. Brown, M.B., C.M. Edin.; Waldo, Frederick Joseph, M.A., M.D. Cantab., D.P.H.; Barrister-at-Law, J.P.; Ward, Ernest, M.A., M.D., Cantab., F.R.C.S., L.R.C.P.; Whitfield, John David, M.B., Ch.B., Edin., D.P.H.; Young, Wm. Francis, M.B., Ch.B., Liv., D.P.H.

The Executive Secretary then read a long list of nominations of election at the December ordinary meeting.

Dr. C. W. Hutt, Med. Officer of Health for the borough of Richmond, Surrey, then read a paper on "Some Serious Defects in the Present Organisation of Health Services." A discussion followed, amongst those taking part being the President, Dr. Charles Sanders, Prof. Kenwood, Dr. Thos. Orr, Dr. Bygott and Dr. Fenton. The meeting closed with a vote of thanks to Dr. Hutt.

METROPOLITAN BRANCH.

A well-attended Meeting of this Branch was held at the Society's Rooms in London, on Friday, 5th November, 1920, the President (Dr. W. W. Willoughby) occupying the Chair.

"The Port in Relation to other Sanitary Authorities" formed the title of Dr. Willoughby's Presidential Address, which was listened to with the greatest interest. A cordial vote of thanks was unanimously accorded to the President for his excellent paper.

Arising out of the recent Conference between the Metropolitan Asylums Board and the Branch, the question of administering antitoxin to patients in their own homes during periods when there were abnormal demands upon hospital accommodation, was considered. It was pointed out that the matter was beset with many difficulties, including the fact that a large number of medical men in practice did not, for one reason or another, care to administer antitoxin: in this connection it was felt there was need of some system whereby the older practitioners might become cognisant of the more recent methods. It was understood that medical students attending classes at the Infectious Diseases Hospitals of the Metropolitan Asylums Board did, in fact, receive instruction in this subject. A further suggestion offered was that it might be advantageous if payment were made by the Board to the medical practitioner for administering antitoxin, or failing this, that the various hospital staffs should, in times of stress, be in a position to assist medical practitioners by visiting cases to which they might be invited and administering antitoxin. It was decided to communicate with the Asylums Board on the various points raised.

At a meeting of the Council of the Branch held the same day, Drs. Annis and Parkes were elected Hon. Auditors to the branch for the ensuing session.

NORTH-WESTERN BRANCH.

An ordinary meeting of the above branch was held in Manchester, on Friday, November 12th, 1920. There were present the President, Dr. H. E. Corbin (in the chair), Drs. Burton, Daley, Mathieson, Anderson, Kingsford, Whitehead, Dickinson, Dunbar Walker, Jessel, Dearden, Sharp, Hauxwell, Ferguson, and Joseph (hon. secretary).

Owing to the unavoidable absence of Dr. Allan Young, his paper on "Rat Repression" was read by Capt. Potts, D.S.O., the rat executive officer for Manchester. Many interesting facts with regard to preventive and destructive measures against rats were detailed, as well as certain practical points in connection with the administration of the Rat and Mice Destruction Order of 1919. Captain Potts was cordially thanked for his kindness in attending the meeting on the proposition of the President, seconded by Dr. Dearden and supported by Dr. Daley. It is hoped that it will be possible to have the paper published in the Journal at an early date.

The question of nomination of members for election to the Fellowship of the Society was considered, and it was resolved:—

- (1) That in order to enable the maximum number of fellowships to be offered to members of the branch, the six medical officers of health among the members be nominated as fellows.
- (2) That the names of Professor Beattie, Liverpool University, and Professor Dean, Manchester University, be submitted forthwith.
- (3) That the remaining 18 vacancies be apportioned among the members of the various sections of the service in proportion to the number of members in each section at present belonging to the branch, viz.: eight to school medical officers, five to tuberculosis officers, two to members of the services, and one each to maternity and child welfare officers, venereal disease officers, and resident medical officers.
- (4) That the School Medical Officers' Sub-Group be invited to send in nominations before the next meeting of the branch.

The other nominations were dealt with, and will be submitted to the Council in due course.

A Special Meeting of the Branch was held on the evening of October 15th, to which all school medical officers in the area, whether members or not of the Society, were invited, to consider the question of the formation within the area of the Branch of a Special Sub-Group for school medical officers.

There were present Dr. Corbin (President, in the chair), Drs. Beckett, Kingsford, Anderson,

Holroyd, Smyth, Ransford, Mackenzie, Atkinson, Herd, Honeybourne, Middlebrook, Hauxwell, Cates, Morley Mathieson, and Joseph (Hon. Secretary), and Drs. Mackey, Taylor, Batho and Jamieson (visitors).

The President drew attention to the objects of the formation of a Special Sub-Group for school medical officers and stated that the Branch were prepared to find accommodation and to re-pay the expenses of postage and stationery temporarily for such a Sub-Group, providing that not less than twenty-five school medical officers desired its formation. The Sub-Group would conform to any rules and regulations approved by the Council and drawn up by the Central Group of School Medical Officers now in process of formation. After various members had expressed their views on the matter, Dr. Kingsford, seconded by Dr. Ransford, proposed "That a School Medical Officers Sub-Group be formed within the North Western Branch." This was put to the meeting and unanimously carried. The following officers of the Sub-Group were appointed *pro. tem.*:—

Chairman	-	Dr. Kingsford.
Hon. Secretary	-	Dr. Ransford.
Committee	-	Drs. Herd, Atkinson, Hauxwell, Anderson, and Elizabeth Jamieson.

At the conclusion of the meeting this committee met to consider various details with regard to future arrangements.

As a result of the meeting there were several applications for nomination forms for new members.

It is hoped to inaugurate at an early date a Special Sub-Group for tuberculosis officers.

YORKSHIRE BRANCH.

A meeting of the above Branch was held in the Mansion House, Doncaster, on October 15th, when the following members were present:—Dr. Smith (President), Drs. Kaye, Gibson, Pearce, Bertram Hill (Hon. Secretary), Martin, Mitchell Wilson, Scurfield, Frew, Anderson, Coleman, Huey. Several members of the Doncaster Borough Council, and Professor Kenwood of the Metropolitan Branch, were present as visitors.

The minutes of the previous meeting were read and confirmed.

Election of New Members.—Dr. Reginald Lawrence, Asst. M.O.H. West Riding County Council, was elected a member of the Branch.

Dr. A. W. Frew, Specialist in Venereal Diseases, West Riding County Council, read a paper on "Venereal Diseases as a Sociological Problem." An interesting discussion then proceeded, in which members of the Town Council participated.

At the close of the meeting the members were entertained to tea by the Doncaster Borough Council.

RETIRING PRESIDENT'S ADDRESS.

Dr. Wiltshire at the Annual Meeting of the Branch on September 22nd, dealt mainly with problems that occurred to him in the course of his work as a part-time medical officer of health of a large and scattered semi-rural area.

The first of these was a meat inspection and the difficulty of keeping anything like an adequate inspection of the slaughtering in forty odd slaughter houses scattered throughout the area, some in quite inaccessible places.

He pointed out that during the war, when "control" was instituted, that the grouping of slaughter houses markedly improved matters and enabled the inspectors to carry out a much more thorough inspection, and had had very good results. Now that control was taken off he was desirous of continuing the grouped slaughter house as a way out of the difficulty.

Many difficulties and obstacles to carrying this out were mentioned, such as vested interests, compensation, expensive law suits, and getting agreement amongst the butchers concerned. As the chief disease met with was tuberculosis in various stages, he thought much might be done to eliminate this class of carcass by a thorough veterinary inspection at regular intervals of all cattle and the isolation of the infected ones.

The second problem was that of Infant Welfare work and the foundation of Clinics in a large semi-rural area—the difficulty of obtaining the services of the right kind of doctor interested in this kind of work was mentioned as being necessary to rely on the local doctor in the different townships to carry on the clinics. The problem of obtaining satisfactory local committees of ladies to carry on the social side of the work and the difficulty of obtaining proper accommodation were alluded to, instances given of the kind of accommodation such as mission rooms, parish halls, club rooms and schools that had to serve the purpose.

The third problem discussed was the relation of the general practitioner to the medical officer of

health. It was pointed out that in a scattered area the practitioner in the outlying township were the outposts of the Sanitary Authorities Organisation and on them the medical officer of health had to depend, and it was most necessary to have their co-operation and help.

Mention was made that it seemed very difficult to get the average general practitioner to take any interest in preventive medicine, his whole idea apparently being to treat and cure disease as he finds it. It was suggested that possibly the present policy of so much specialisation in public health work was aggravating this state of things, and that it would be far better if the general practitioner was encouraged to take a much greater share in the work of the Public Health Department and so enable him to see more of the preventive side of medicine.

NORTHERN BRANCH.

The Annual Meeting of the Branch Council was held on 29th October, 1920, at the Health Department, Town Hall, Newcastle.

Present:—The President (Dr. J. A. Hislop), Drs. Dickinson, Hill, Kerr, Mostyn, A. Smith, J. W. Smith and Renney.

The minutes of the last meeting (19th December, 1919), were read and confirmed, and were signed by the Chairman.

The Annual Report for the past year of the Secretary and Treasurer was read. Dr. A. Smith moved and Dr. Hill seconded, and it was agreed, that the Report be adopted.

The Secretary submitted a draft of the Report of the Council of the Branch. It was moved by Dr. Hill and seconded by Dr. A. Smith that the draft be adopted and presented to the Annual Meeting of the Branch. This was agreed to, and the report was duly signed by the President.

The Annual General Meeting was held in the Town Hall, Newcastle-upon-Tyne, Friday, 29th October, 1920. There were present, The President (Dr. J. A. Hislop), Dr. T. E. Hill (President Elect), and Drs. C. Bannerman, Mabel Brodie, G. R. Bruce, T. Buckham, A. G. R. Cameron, S. J. Clegg, W. H. Dickinson, J. M. G. Ewing, A. G. Glass, J. M. Glasse, A. M. Jackson, H. Kerr (Hon. Secretary), J. D. Leigh, G. M'Gonigle, W. B. MacGlashan, H. Morrison, S. G. Mostyn, T. N. V. Potts, A. M. Pringle, H. Renney, A. Smith,

J. W. Smith, W. E. R. Saunders, T. W. Wade, W. F. J. Whitley, Allison Wotherspoon, and Allan Wotherspoon.

The Minutes of the last Annual General Meeting (24th October, 1919), were read.

The Minutes of the Summer Meeting held at Carlisle on 9th July, and of the Special Meeting on 10th September, were read and confirmed, and duly signed by the Chairman.

The Secretary read a letter from Dr. H. Glen Davison with reference to the M. & C. W. Group and this was referred to the M. & C.W. Section of the Branch.

Letters from Drs. T. Horne and E. Farquhar Murray regretting inability to attend the meeting were also read.

The President referred to the recent death of Dr. J. P. Elliot, Medical Officer of Health, Bellingham R.D.C., and suggested that a vote of condolence with the relatives be passed. This was agreed to, the members standing.

The annual report of the Branch Council was read by the Secretary, and was adopted on the motion of Dr. A. Smith, seconded by Dr. J. W. Smith. It records a great increase in the membership of the branch, the numbers being almost trebled. The formation of the branch sub-groups for tuberculosis officers, school medical officers, and M. & C.W. medical officers, is also recorded.

The annual report of the Hon. Secretary and Treasurer, together with the statement of accounts duly signed by the auditors, Drs. Mostyn and Renny, was presented. Dr. J. W. Smith moved, and Dr. Clegg seconded, and it was agreed, that the report and statement be adopted.

The retiring President vacated the chair, and after introducing his successor, Dr. T. E. Hill, thanked the members for the support they had accorded him during his term of office. He acknowledged also the great assistance he had received from the Hon. Secretary, and referred to the success which had attended the efforts of the latter to extend the scope of the branch.

Dr. Hill thanked the members for the honour they had conferred upon him in electing him president of the branch, and proposed a vote of thanks to Dr. Hislop for his services during the past two years. This was seconded by Dr. Kerr, and was carried by acclamation.

The President proposed that Dr. Hislop be elected vice-president. There was no other nomination, and Dr. Hislop was elected unanimously.

The President proposed, and Dr. Hislop seconded, that Dr. Kerr be re-elected hon. secretary and treasurer. Carried unanimously.

Council.—The Secretary stated that under the old Bye-laws the Council consisted of the president, vice-president, and hon. secretary, and eight other members. Under the new bye-laws, however, twelve members were required.

Dr. J. W. Smith moved, and Dr. Leigh seconded, that the old members be re-elected.

Dr. Hill nominated, and Dr. Kerr seconded, Dr. J. W. Smith, the retiring vice-president.

The following were also nominated:—

Dr. S. Dodgson, medical superintendent, Wolsingham Sanatorium. Proposed, Dr. Dickinson; seconded, Dr. Leigh.

Dr. A. G. Glass, deputy school medical officer, Durham C.C. Proposed, Dr. Bruce; seconded, Dr. A. Smith.

Dr. A. F. G. Spinks, maternity and child welfare M.O., Newcastle. Proposed, Dr. Leigh; seconded, Dr. Renny.

Dr. Mabel Brodie, assistant, M.C.W.M.O., Durham C.C. Proposed, Dr. Hislop; seconded, Dr. Kerr.

No other nominations were received, and the Council was declared elected as follows:—

Drs. Arthur, Mabel Brodie, Dickinson, Dodgson, Glass, MacLachlan, Mostyn, Renney, A. Smith, J. W. Smith, Spinks, Taylor, together with the President, Vice-President, and Secretary, *ex-officio*.

The following new members were elected:—

Dr. A. F. G. Spinks, M.C.W.M.O., Newcastle.

Dr. Eustace Thorp, asst. M.O.H., Sunderland.

Dr. W. F. J. Whitley, M.O.H., Northumberland C.C.

It was agreed that the Annual Dinner be held in December as usual, at the Station Hotel.

It was left to the President and Secretary to arrange the date, it being understood that the day be a Friday.

The President then delivered his presidential address on "The Inter-relationship of Curative and Preventive Medicine."

MIDLAND BRANCH.

Minutes of Meeting held at The Council House, Birmingham, on Thursday, October 7th, 1920.

Present: Drs. Ridley Bailey (in the Chair), C. E. Tangye, A. Hamilton Wood, A. Hawley, J. Mc G. Williams, R. French, R. J. Cyriax, J. T. Crowe, H. Bracey, J. W. Beazeley, J. T. Hill, E. H. Snell, J. Orton, A. White, A. G. Wilkins, W. H. Davison, D. Dryborough Gold, C. Banks, R. W. Stocks, J. M. Cowie, G. Reid, J. W. Miller, J. A. Watt, Rose Molloy, N. J. S. Rollason and H. Gibbons Ward.

Apologies for absence were received from Drs. John Robertson, G. A. Auden, Middleton Hewat and K. E. Tapper.

Dr. Ridley Bailey inducted Dr. C. E. Tangye into the Chair.

The President proposed a vote of thanks to the retiring President, Dr. G. A. Auden, for his services during the past year, this was seconded and passed unanimously.

The minutes of the last two meetings were read and confirmed.

The Treasurer's Report was submitted by Dr. Ridley Bailey, and was received and adopted.

A letter was read from the Executive Secretary with reference to two recommendations submitted by other Branches to the Council, and referred to all the Branches for consideration.

(1) That the Council of the Society be asked to consider, after reference to the Branches, the desirability of preparing a series of authoritative leaflets of instruction in Maternity and Child Welfare, which can be used by Medical Officers of Health as the basis of leaflets to be distributed from M. and C.W. centres throughout the Country. **RESOLVED** That it is desirable there should be uniformity, and if anything be done, it should be through the Ministry of Health.

(2) Where legislative opportunity occurs Rural District Councils should be required to keep a Register on a Parish basis of all houses within its administrative area, attaching a specific number to each. **RESOLVED** That the Branch support such recommendation.

A letter was read from the Southern Branch containing the following resolution, and asking for the support of the Midland Branch

A Superannuation Scheme for Medical Officers of Health is urgently necessary in the public interest, and should (1) be on a non-contributory basis, (2) include the option of retirement at the age of 55 after 20 years' service, and (3) be administered from a central fund. RESOLVED that this resolution be supported.

The President then delivered his address on the Interim Report of the Consultative Council on Medical and Allied Services.

An interesting discussion followed based on the Draft Memorandum of the Society, in which the following took part, Drs. Snell, Handford, Wilkins, Davison, Banks, Dryborough, Gold, Stocks, Reid, Miller, Watt, Hamilton Wood and Bracey. It was resolved with certain amendments to recommend the Council to publish the Memorandum.

A vote of thanks to the President for his address was proposed, seconded and carried unanimously.

A Meeting of the Branch held at the Council House, Birmingham, on Thursday, November 4th, 1920.

PRESENT, Dr. Snell (in the Chair), Drs. Ridley Bailey, Bell-Ferguson, Goldie, Wilkins, Carruthers, Clendinnen, Hamilton Wood, John Robertson, Ashkeny, Clark, Davison, Hewat, Stocks, Darby, J. T. Hill and Gibbons Ward.

APOLOGIES for non-attendance were received from Dr. C. E. Tangye (President) and Drs. Dryborough Gold, Banks and Galbraith.

It was proposed, seconded and carried that in the absence of the President and President-Elect, Dr. Snell take the Chair.

The MINUTES of the last Meeting were read and confirmed.

The Council reported with respect to the Draft Form for Statistics, as submitted for the consideration of the Branch by the Council of the Society, and the consideration of this form was referred to the Branch Council, with power to act.

Dr. W. L. Goldie then read his Paper on "The Increase of Rent and Mortgage Interest (Restrictions) Act, 1920," and a discussion followed in which the following joined:—Drs. Snell, Robertson, Clendinnen, Middleton, Hewat and Stocks. Dr. Goldie briefly replied to some points raised.

A vote of thanks to the reader of the Paper was proposed, seconded and carried unanimously.

NAVAL, MILITARY AND AIR FORCE HYGIENE GROUP.

The first Annual General Meeting of this Group was held at the house of the Society on September 24th, 1920. There was an excellent attendance of officers and ex-officers of the Services, amongst those present being Lt.-Col. H. R. Kenwood, Maj.-Gen. Sir W. G. Macpherson, Lt.-Col. P. Caldwell Smith, Surg.-Cdr. R. J. MacKeown, R.N., Lt.-Col. W. Clayton Smales, Major Angus Macdonald, Major J. H. Peek, Lt.-Col. E. P. Sewell, Lt.-Col. N. Dunbar Walker, Lt.-Col. J. S. Warrack, Col. H. W. Grattan, Surg.-Cdr. R. St. G. S. Bond, R.N., Lt.-Col. J. A. Anderson, Lt.-Col. R. B. Ainsworth, Lt.-Col. P. S. Lelean, Lt.-Col. R. Tilbury Brown, Sqdn.-Ldr. A. Grant, R.A.F., Sqdn.-Ldr. P. M. Keane, R.A.F., Lt.-Col. G. E. F. Stammers, Lt.-Col. G. T. Cattell, etc., etc. Apologies for absence were received from Lt.-Col. Fremantle, M.P., Dr. J. C. McWalter, Dr. C. W. Hutt, Dr. J. H. Peyton, Major R. H. Jackson, Dr. F. C. Linton, Dr. J. Macmillan, Dr. L. Meredith Davies, Surg.-Cdr. J. G. Wallis, Dr. R. P. McDonnell, Capt. W. M. M. Jackson, Col. G. S. Elliston.

Lt.-Gen. Sir John Goodwin, K.C.B., the Director General of Army Medical Services, honoured the occasion by his presence and occupied the chair at the request of Lt.-Col. Kenwood throughout the proceedings. Sir John Goodwin, on taking the chair, wished the Group a future full of usefulness and success, and emphasized the great benefits which its existence would create by developing and increasing the liaison between officers of the Regular and Territorial Forces and civil medical officers, to the improvement of public health.

After the induction of Lt.-Col. Kenwood as President, Col. Kenwood referred to his long and active connection with the Medical Department of the War Office, and spoke of the great value which must in the future arise as the result of discussion of subjects affecting the common conditions of health in the Services and in civil life.

The following gentlemen were elected office-bearers:—

Vice-Presidents: Major-Gen. Sir W. G. Macpherson, K.C.M.G., C.B.; Brig.-Gen. Sir Wm. Horrocks, K.C.M.G.; Col. Sir G. Sims Woodhead, K.B.E.; Brig.-Gen. W. W. O. Beveridge, C.B., C.B.E., D.S.O.; Air Commodore M. H. G. Fell, C.B., C.M.G.; Surgeon-Com. R. St. G. S. Bond, Colonel G. S. Elliston, C.B., T.D.

The meeting decided to form a council of twelve members, the President and Vice-Presidents being members ex-officio, composed of two members from each of the services and auxiliary forces. Ten members were elected, and power given to the council to appoint two additional members.

Council.—Navy: Surgeon-Com. R. St. G. S. Bond, Surgeon-Com. R. J. MacKeown, O.B.E.

Regular Army: Lieutenant-Colonel W. Clayton Smales, D.S.O.; Lieutenant-Colonel E. P. Sewell, C.M.G., D.S.O.

Air Force: Squadron-Leader A. Grant, M.B.E.; Squadron-leader P. M. Keane.

Territorial Force: Lieut.-Colonel P. Caldwell Smith, C.B.E.; Captain S. H. Daukes, O.B.E.

Temporary Commissions: Captain A. B. McMaster, Major J. H. Peek.

Colonel H. W. Grattan was elected the representative of the group on the Council of the Society and Major W. N. W. Kennedy was elected honorary secretary.

The Secretary then read the following letter from the President-elect of the Society, Lieutenant-Colonel F. E. Fremantle, M.P.; in which he said that many who had served abroad would be glad to revive an interchange of experience. The system and spirit, he added, learnt in the army, by which a man had to prove the practical value not only of his actions but of his actual advice, was of immense value to his work in civil life.

Address.—Brigadier-General W. W. O. Beveridge then gave an address on Disinfection and Disinfestation in the Field, which will appear in an early issue of the Society's Journal.

Discussion.—Lieutenant-Colonel J. S. Warrack, Port of London Sanitary Authority, referring to the extremely efficient manner in which enormous numbers of soldiers, prior to their return to Britain after the armistice, were disinfested at the different French ports, made the statement that on only three of many transports arriving at the Thames were louse-infested men discovered.

Captain C. B. Moss-Blundell, C.M.O., Huntingdon, made reference to the use of pentasulphide of calcium as an efficient cure of scabies.

General Beveridge, in reply, agreed that the chemical was invaluable but under service conditions its use was not by any means a practical proposition. Chemicals are bulky and heavy, and

make a great demand on the transport services, and for these reasons could not be considered.

The President raised the point, in speaking of a new form of portable steam disinfector designed by Colonel Lelean, as to whether there was penetration into the centre of tightly packed kits.

Colonel Lelean assured the meeting that cultures of Shiga's bacillus or Klebs-Loeffler's bacillus placed in the centre of the kits were sterilised after the passage of steam. The malic acid test was also used with success. A temperature of 102 C was recorded by means of the thermo-electric couple.

Sir John Goodwin thanked Brigadier-General Beveridge for his address and the President formally proposed a vote of thanks to the Chairman.

The first meeting of the Council of this Group was held at the house of the Society on Friday, October 29th, at 4 p.m. There were present: Professor Kenwood (in the chair), Surgeon-Commander Bond, Surgeon-Commander MacKeown, Squadron-Leader Grant, Lieut.-Col. Caldwell Smith, Major Peek, Colonel Grattan, Lieut.-Col. Sewell, Squadron-Leader Keane, Captain Daukes, Captain McMaster and Major Kennedy.

2. *Correspondence: Vice-Presidents.*—A letter was read from Dr. John Robertson, C.M.G., O.B.E., intimating his willingness to accept office as a Vice-President.

A letter was read from Sir John Goodwin, the Director-General of Army Medical Services, in which he wished the Group all possible success. He felt that the Group's inception was a really important step in the right direction. The necessity for collaboration was one of the important lessons of the war, and one which prevented "watertight compartments," which were bound to tend towards inefficiency.

The Secretary was instructed to express the sincere thanks of the Council to the Director-General.

A letter was read from Major-General Sir William MacPherson, K.C.M.G., C.B., intimating his pleasure at being elected a Vice-President.

A letter from Sir German Woodhead was read, conveying his appreciation at being elected a Vice-President, and assuring the Group of his help and advice. The Secretary was instructed to acknowledge the letter, and to thank Sir German for his support.

2. *Other Correspondence.* A letter was read from Dr. R. Percy McDonnell, of the Irish Board of Health, urging the formation of an Irish section of the Group, and stating that in his belief such a section would be beneficial, and would be warmly taken up in Ireland.

The Secretary was directed to enquire if it would be possible to enlist the sympathies of a useful number of eligible members, and to state, firstly, that the Council of the Group would be glad to arrange, in the event of a branch being formed, for the representation on the Group's Council, and secondly, that all members of such a branch would require, in the first instance, to be members of the Society.

A letter was read from Major R. W. H. Jackson, offering his services as a translator of French and German. The Secretary was directed to assure Major Jackson that the Group will be glad of his assistance.

3. The Council, in accordance with its powers, proceeded to elect two additional members:—

Dr. C. W. Hutt, Richmond; and
Dr. E. J. Steegman, O.B.E., Ministry of Health.

Both were unanimously elected to fill the vacancies.

4. The Council considered and adopted the Bye-laws of the Group.

The Secretary was directed to forward a copy of the suggested Bye-laws to each member of the Group, before the next meeting of the Group.

5. The programme for session 1920-1921 was discussed. Surgeon-Commander Bond promised to read a paper in January, 1921.

Professor Kenwood, who, at the invitation of the President of the Society, will give his presidential address as President of the Group before an ordinary meeting of the Society on December 17th, expressed his intention of dealing on that occasion with the policy, aims and activities of the Group, and thereby affording an opportunity for discussion on the subsequent formation of definite lines of action. The Council thereupon agreed to defer the consideration of a programme until after the presidential address.

6. Fridays, at 4 p.m., were considered to be the most convenient day and hour for Council meetings.

TUBERCULOSIS GROUP.

The first ordinary general meeting of the Tuberculosis Group was held on the 23rd October, at the National Institute of Medical Research, Mount Vernon, when Dr. Leonard Hill gave an address on open-air treatment and metabolism.

There was a good attendance of members, and Dr. Henry A. Ellis presided. The lecturer dealt with his subject in a most interesting and instructive manner, showing the important influence which cool, fresh air exerted on the skin and through it on the body metabolism, there being a marked correlation between the two. He described and exhibited the kata-thermometer, an instrument which has proven its value in registering the cooling power of the air, and which it bound in the near future to come into general use in schools and factories to determine the optimum conditions under which both mental and manual work should be carried on. Realising that the present form of the apparatus is too delicate for use by the inexpert, Dr. Hill has devised an automatic form of it which consists of a simple metal container, heated by an 8 candle-power lamp, into the short chimney of which is inserted the bulb of a dry kata-thermometer, from which continuous readings may be taken of the cooling power of the air under all conditions. The reading should be in the neighbourhood of 30 to obtain the optimum conditions for work. During the delivery of the lecture, which took place in the laboratory indoors, two of the assistants had been sitting for some time in the fog and taking observations on the expired air, an analysis of which was afterwards made by them in the presence of the group. Incidentally the lecturer paid a merited tribute to the work of his assistants in the cause of experimental science, the justness of which the group was quite in a position to estimate from the demonstration they had just been given. An interesting discussion followed the lecture, when Dr. Ellis, in moving a vote of thanks to Dr. Hill, emphasised the importance of the skin in the production of antibodies in tuberculosis, while Dr. Marcus Paterson, who seconded, referred to the beneficial effect on the appetite of patients in the Sanatorium during the cool days, and Dr. F. R. Walters discussed the incidence of night-sweats. In acknowledging the vote of thanks, Dr. Hill referred to forthcoming experiments on pigmentation of the skin in the

treatment of tuberculosis and to new methods, one of which he illustrated by an experiment on himself, for the estimation of the sugar content of the blood, and to the possible ill effects which the substitution of sugar for alcohol under prohibition might be expected to produce.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

REPORT OF HONORARY EDITOR.

To the Society of Medical Officers of Health.

Gentlemen,—Last year I reported that a new contract for printing had been arranged and that expenditure upon the Journal had been cut down drastically by reducing its size, and by curtailing editorial expenditure to a small fraction of what it was a few years ago.

These economies have been continued during the year, but so long as it is necessary to retain them it will be difficult to carry out various plans which have been made for making the Journal more useful and attractive. If the same proportion of the total income of the Society could be expended upon the Journal as was formerly considered necessary it would be possible to make considerable extensions and improvements at once.

The increased revenue from advertisements justified some additional expenditure during the session. The familiar cover which had been dispensed with as a war economy was restored, and the number of editorial pages was increased by 48 on the previous year. In present circumstances the size of the journal must continue to depend very much on the income received from advertisements.

ROBT. A. LYSTER,

Oct. 20th, 1920.

Hon. Editor.

REPORT OF THE HON. TREASURER.

To the Society of Medical Officers of Health.

Gentlemen,—I beg to submit my Annual Report for the year ended 30th September, 1920.

During the year every possible economy has been observed by your office staff; and it is with regret that I report a deficit on the year's working of £69 16s. 2d. This is due to various causes, but in the main to an extraordinary expenditure of £175 3s. 1d. on repairs and redecorations in connection with the Society's premises.

It is gratifying to note certain features in connection with the Society's Revenue Account, namely:—

Subscriptions.—The receipts from this source amount to £1,268 10s. 10d., or £110 5s. 3d. in excess of last year's record, when over £400 arrears were collected. Having regard to the large increase in membership it is unlikely that the income from this source in future years will be diminished.

Advertising.—The revenue from this source has been £386 19s. 3d., against £183 4s. 2d. last year.

On the other hand it has to be observed that expenditure has increased.

Repairs.—£175 3s. 1d.—This is an item of extraordinary expenditure.

Salaries.—The salary of the Executive Secretary for the current year has been £282 as compared with £126 10s. paid to the Executive Secretary last year for a period of 7 months.

Wages.—The caretaker's wages were increased by 12s. per week in December, 1919, equal to £27 6s. 6d. for the year under review.

Journal Account.—The expenditure on the Journal account has increased from £465 9s. 0d. in the year 1918-1919 to £592 12s. 5d. in the year 1919-1920, or an increase of £127 3s. 5d.

General Printing, Stationery, Postages.—These items all show the upward tendency created by rise of prices and increased membership to the extent of £64 7s. 2d., for the year under review.

General.

Taking one consideration with another the Revenue Account shews that the Society is just paying its way, but that there are no funds for contingencies or for any development of the Society's work, e.g., Propaganda, a larger Journal, Payment of Editor or Contributors or grants to Groups. In addition the Society is faced with increased expenditure due to the rise of prices, especially under such headings as Rates, Fuel, Lighting, Postages, Printing and Travelling Expenses.

The activities of the Society depend largely on its funds, and having regard to the above facts and also that the Society is embarked upon a campaign to improve the salaries and conditions of service of its members, it would appear necessary to increase the subscription which has remained at the level of £1 1s. 0d. since the foundation of the Society. In addition it should be remembered that those members who are appointed to the Council of the

Society are not paid their travelling expenses until the year succeeding that in which they are incurred. This is not satisfactory, and the true financial position of the Society is never really stated at the end of its financial year.

I propose to submit to the Council, for reference to the Branches of the Society, during the course of the year 1920-21 propositions for improving the financial position of the Society.

I desire to record my indebtedness to the Executive Secretary for the help he has always readily accorded me during the year.

GEORGE F. BUCHAN,
20th October, 1920. Treasurer.

PUBLIC HEALTH AND SMOKELESS HOUSING.

To the Editor of PUBLIC HEALTH.

Sir,—Will you allow me to use your columns for the campaign against the Coal-smoke Curse, on which I determined when I "discovered" in New York last year an absolutely smokeless city? The argument resolved itself into a protest against the general and unquestioned intention to reproduce in our new houses those arrangements for heating and cooking which have blackened and defiled our cities, our clothes, and our lung cells for generations, and which can be defended only by those who naturally feel most at home in an infernal environment.

Early this year the Minister of Health, doubtless realising at length that pure light and clean air must not be outraged by the new houses for which anyone with so noble a title as his is responsible, appointed an Air Pollution Committee of his Department, which has since been engaged in what I have elsewhere termed a "Race for Light" with the Housing Department, of the same Ministry — by which there had already been sanctioned plans for several scores of thousands of new houses, perfectly designed to perpetuate the age of Dirty Waste in which we still live. That Committee, as you are aware, has now published an interim report directed with all convenient speed to the particular question of the open coal fire and the kitchen range against which I protest in the name of the first and most obvious laws of life.

All the essential contentions which have been submitted to the public during the past year and in my evidence before the Committee are emphatically

endorsed in this document. The Committee recommend that sanction to housing schemes submitted by Local Housing Authorities or Public Utility Societies should be conditional upon the provision of smokeless methods of heating. . . . We are satisfied that means which produce little or no smoke are available and practicable for cooking, heating water, and warming rooms. . . . We think that wherever a supply of gas is available a gascooker should be installed in lieu of a coal range.

It is evident that every house designed to smoke, for which the plans were passed before these pronouncements, should now have such plans revised by those responsible for them.

I ask for your help now, Sir, because with very few exceptions the lay press has entirely failed to realise the public interest and value of this report, and so, it would appear, has everyone else hitherto. For, so far as I am aware, I have been the only commentator on the fact that whilst the nation is asked to find a large sum of money to save Westminster Abbey from the London "Air," this report proves that we are daily destroying the Abbey by the acids in London smoke. It seems very little use to try either to learn or to teach if, in such a matter as this, no one will put two and two together. We who stand for science and hygiene must occupy the breach in the national front where "pluck, luck and muddle-through," admirable though they be, leave immense openings for attack.

But *if* this report is acted upon, I herald now the coming end of cruel drudgery for very many of our women; I hail the dawn of day at last in our cities. We had been wiser had we remembered that not at the end but "In the beginning . . . God said, 'Let there be Light'.

I am, Sir, your obedient Servant,
C. W. SALEEBY.

Royal Institution.

THE congress of the Royal Institute of Public Health in 1921, which will be of an international character, will take place in the University of Geneva from Tuesday, May 10th, to Monday, May 16th. The League of Nations, the International Committee of the Red Cross and the League of Red Cross Societies have promised their co-operation.

DR. F. W. WADE, medical officer of health for Wallsend, has been appointed by Dr. Addison to the Welsh branch of the Ministry of Health.

Public Health

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Editorial.

THE MINISTRY OF HEALTH (MISCELLANEOUS PROVISIONS) BILL.

THE Ministry of Health was created as the result of a widely expressed opinion that the time had arrived for the bringing together under one department and under one head the central administration of the medical services of the country and, although the completed Ministry fell short of this aim in many respects, the step taken represented important improvements in central administration. The proposal met with little or no opposition and had the approval of the local authorities on the one hand and of the medical profession on the other. The press, both lay and medical, agreed as to the necessity for the change,

and the smoothness with which it was accomplished reflects the greatest credit upon those officials who were responsible for it. Not only was the ordinary routine of the departments concerned carried on with uniform regularity, but problems loudly calling for solution were thrust upon the Ministry in the very earliest days of its existence, such as an improved medical service for the insured portion of the population and additional housing accommodation for the working classes. No one can appreciate more than medical officers of health the difficulties with which the Minister of Health was met in connexion with the latter. The high cost of labour and of materials, the apathy, and in some cases even the open opposition of local authorities, particularly the smaller urban and rural bodies, were enough to dishearten and discourage the stoutest heart, but Dr. Addison's optimism and faculty for taking a long view has carried him through so far and we trust will serve him to the end.

The rejection by the House of Lords of the Ministry of Health (Miscellaneous Provisions) Bill on December 14th, by a majority of 16 in a house consisting of 98 members is very much to be deplored and we have no desire to minimise its significance. At the same time its importance must not be magnified. Let us consider it in its true perspective. It is a blow, but it is by no means a staggering blow. The defeat of the measure was brought about by means of an organised press campaign aimed not so much at the Bill or the principles of its provisions, not at the Ministry, but at Dr. Addison and at the Chief Medical Officer of the Ministry, Sir George Newman. We cannot sufficiently express our indignation at the reiteration of the attacks upon a responsible permanent official who is precluded by the rules of the service from making any reply. The offence is all the more to be deplored because the offender is apparently a member of our own profession whose

contributions are made to a reputable journal. This association would appear to give to the attacks more authority than they would otherwise possess, and we daresay that in some quarters they have the effect intended. We have reason to believe, however, that their very persistency is causing them to receive but scant consideration from those they are intended to influence, and in this way they are defeating their object. As Lord Derby has recently said, "No one can object to criticism but it must be fair criticism." What a pity it is that some critics cannot understand that while unfair criticism may at first appear to be successful, yet in the long run it is a boomerang which may return and slay the critic.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

NOTICES.

On or about Jan. 15th a notice will be sent to all members of the Society who have not paid their dues for the Session 1920-21. Every subscription received before that date will mean a saving in clerical work and postal charges, so it is hoped that many members will at once remit their payments on reading this notice. Cheques should be made payable to the Society and crossed "& Co."

On p. 73 will be found the recommendations of the Hon. Treasurer in reference to the growing expenditure of the Society. The proposal that the annual subscription should be increased for certain classes of members has been referred by the Council to the Branches for their consideration, and Branch Secretaries are asked to put this subject on the Agenda for an early meeting.

With this issue of "Public Health" is enclosed a Form to be filled up by Medical Officers of Health for the information of the Special Committee on the Remuneration of Medical Officers of Local Authorities. The Scale of Salaries adopted by the Society has been forwarded for submission to the Whitley Council, and it is essential that those responsible for stating the case should have all the information asked for on the form. It is especially important that medical officers on the staffs of Public Health departments should be classified according to the categories defined in the Committees' Memorandum on Salaries.

In those areas where the School Medical or Tuberculosis Departments are separately organised, the chief medical officer concerned is asked to make the necessary return.

Members are asked to make a combined effort to secure the inclusion of every colleague in the Public Health Service within the ranks of the Society. When approaching the Whitley Council and Local Authorities, the Society should be able to speak on behalf of every medical official eligible for membership, and any who remain outside are a source of weakness. The *Roll of Members* should be searched by members for the names of their friends, and any absentees should be asked to accept nomination at once. Apart from actual members of the Public Health Service, it is very desirable that every medical man with a degree or diploma in Public Health should be invited to join the Society. By a concerted effort several hundred new members could be enrolled before the close of the current Session.

For the convenience of Branch Secretaries and others who desire to keep their *Roll of Members* up-to-date during the Session, the nomination lists on the monthly Agenda Paper will henceforth be printed in a width convenient for cutting out and pasting into the *Roll*. With the proposer and seconder omitted, the entries will be found to fit the pages of the *Roll*.

It is intended that the next meeting of the West of England Branch shall be held in conjunction with the Royal Sanitary Institute at Exeter on January 28th and 29th. There will be a meeting during the afternoon, and another in the evening, on the Friday; and on Saturday a short excursion followed by lunch. The subjects to be discussed are Housing and Tuberculosis. Dr. Stirk, the Medical Officer of Health for Exeter, is kindly making most of the arrangements on behalf of the Society. Details of these will be sent in due course to all members of the Branch; members of other Branches are cordially invited to attend, and will receive notices if application is made to Dr. Blackett, Guildhall, Bath.

A few copies of the *Roll of Members* are available (7s. 6d., post free), as a directory for use in the Health Departments of Local Authorities if the order is signed by or for the medical officer.

AN ADDRESS ON DISINFECTION AND DISINFESTATION IN THE FIELD.

Delivered at the Inaugural Meeting of the Section of Military Hygiene of the Society of Medical Officers of Health.

BY W. W. O. BEVERIDGE, C.B., D.S.O.,
K.I.P., M.B., M.Ch., D.P.H., Brigadier-
General, A.M.S.

Mr. President and Gentlemen,

I have chosen the subject of disinfection and disinfestation in the field for my address to you this evening, mainly because I look upon it as one of the most important problems confronting us in future operations in the field, and one well worthy of our serious consideration. I have formed this opinion from past experience in the late War. It is not too much to say that at least 50 per cent of the total sick admissions among troops in the field can primarily be attributed to lack of personal cleanliness and to the presence of vermin. In the Second Army in France, Colonel Soltau reported that the total sick wastage for the period March to October, 1917, amounted to 60,000, of which 20,000 were cases of skin disease almost all due to vermin, dirt or sepsis aggravated by dirt. It was also stated that 12,000 cases of trench fever occurred in addition. Any statements with regard to the incidence of trench fever up to June, 1918, when the disease became notifiable must be accepted with some reserve. It was remarkable how quickly the incidence fell when notification was established. Colonel Gray, the consulting dermatologist, Army Zone, France, has stated that in his opinion at least three-quarters of all cases of skin diseases coming under his notice were due to vermin—whether lice or acari—the remainder being cases of sepsis due to slight abrasions, but aggravated by dirty skin and clothing.

INCIDENCE OF LICE AND RESULTANT WASTAGE.

The prevalence of lice and the resultant temporary wastage depends largely on the conditions under which men have to exist in the field. Colonel Gray considers that under favourable conditions of bathing, change of clothing, etc., the incidence is under ten cases per division per week.

In rest billets behind the lines during the war in France the incidence varied between ten to thirty cases per division per week. When

troops are in the line or on the move however, the incidence in an average division may rise to seventy cases per week, or an annual temporary wastage of about twenty-six per cent. However good our arrangements for prevention can be made, it is unreasonable to anticipate that complete freedom from lice can be obtained in the field, owing principally to the fact that a very considerable proportion of civil populations harbours lice even in normal times. The introduction of lice into the Army on mobilisation is very difficult to avoid. In spite of the fact that the Expeditionary Force in 1914 was completely free from vermin, lice very soon made their appearance, having been introduced by reservists on joining the Colours. There is no doubt in my mind, however, that with properly organised arrangements an Army in the field can be maintained comparatively free from dirt and vermin, and that a repetition of the great temporary wastage which occurred in the past may be avoided in the future.

LACK OF EFFECTIVE, CHEMICAL MEANS OF PREVENTION.

I do not propose here to enumerate the general measures of prevention, which are rather outside the subject with which we are now concerned. Experiments and actual experience in the field has shown that up to the present no chemical preparation can easily be applied to the whole body or clothes which will effectually rid men of vermin. I consider that any attempt in this direction in the field is worse than useless, and tends to give a false sense of security. Much valuable time is wasted which otherwise could be devoted to measures which we know and can demonstrate to be effectual.

The whole question of chemical deterrents and insecticides was fully discussed at various meetings of the Allied Sanitary Conference in Paris, and although at first they were specially advocated by the Italian, French and other delegates, eventually the consensus of opinion inclined to prevention in the form of regular bathing, change of clothing, and disinfestation of effects to the exclusion of all other methods.

A NEW SCHEME UNDER CONSIDERATION: DEFINITION OF TERMS.

I may mention, however, that a scheme of organisation for future needs of an army in the field is being considered somewhat on the following lines:

1. A cleansing unit.
 - (a) Movable laundries to work in advance of rail heads.
 - (b) Mobile baths and disinfestors, so organised that they can accompany a brigade group and work in a brigade area, or be assembled in one place on a divisional basis.
2. A special department to be formed for the purpose of supervising and co-ordinating arrangements for disinfestation, bathing, etc.

For military purposes we have now, I think, to consider under what was formerly termed disinfection, two distinct processes:

- (a) Disinfection proper, in which we aim at destroying pathogenic bacteria, including any spores which may be present, and
- (b) Disinfestation which implies the destruction of body vermin only.

From a practical point of view the term "disinfestation" or "to disinfest" was employed during the War, to differentiate the two processes, for although methods of mechanical disinfection can generally be relied upon to kill vermin as well as bacteria at one and the same time, those of disinfestation are simpler. Disinfestation can be undertaken with far less costly and complicated apparatus than can disinfection, and the required apparatus is more readily supplied and more easily and economically worked—matters of great practical importance in the field. When heat is employed, a lower temperature also suffices. Hot air at 60 degrees C. will destroy lice and their ova in ten minutes but could not be relied upon effectually to disinfect blankets or mattresses for instance, and certainly would not destroy spores in the case of anthrax, tetanus or gangrene. On the other hand, chemical disinfectants which are effective in the case of bacteria, would in the strength used, very frequently not kill vermin, or in every case their ova. The French for similar reasons coined the word "disinsector," which, though not correct, is equally convenient and perhaps even more descriptive. The word "delouser" is crude and from an æsthetic point of view objectionable. The use of sundry large and prominent notices posted up in camps and by the wayside in France, such as "This way to the delouser," and "Corps delousing station" appeared to indicate to all beholders that the British Army was in a particularly verminous

condition which was not necessarily the case.

In 1917, the Director of Works, after consultation with me, issued a circular clearly defining for practical purposes the processes of disinfection and disinfestation, and laid down the types of apparatus and allotment to camps and other units on the lines of communication. This was a movement in the right direction, as the arrangements agreed upon established uniformity between, and fulfilled the requirements of, the Royal Engineers and the Medical Service.

1. DISINFECTION.

The principles of disinfection in the field differ in no way from those required in ordinary every-day life, but their application presents some variety and is often attended with considerable difficulty. The recognised forms of apparatus are frequently unsuitable for the front line or for troops in movement, or they cannot be supplied in sufficient numbers, and extemporary apparatus, or "*appareil à fortune*," as the French term it, has therefore to be brought into operation to suit varying needs. Owing to the weight and lack of mobility, many of the best forms of steam disinfectors cannot be used, and a relatively large fuel consumption has also to be considered. To meet the former difficulty both the allies and we ourselves devised special forms of portable steam disinfectors that were able to follow the movement of troops or could be used over large areas, when troops were resting.

MOBILE STEAM DISINFECTORS.

In our Army Thresh current steam disinfectors mounted on Foden wagons were supplied to every division and also to corps headquarters. With the growth of the Army and the increased movement of the troops in 1918, it was found that this allotment was insufficient, and more disinfectors were therefore asked for on a basis of two per division. Sir W. Horrocks has designed a very efficient portable form of steam disinfecter or disinfestor in the form of two chambers on a trailer. Steam is supplied from a Merryweather boiler, and drying is arranged for by means of heated coils. The apparatus can be worked either with steam or hot air, and its disinfesting capacity is considerably greater than that of the Foden Thresh. This type will, we hope, form part of the equipment of an army in the field in the future. Experience quickly showed that horse-drawn vehicles were unsuitable for field requirements; movement was far too slow and

sometimes there was a difficulty in procuring the necessary horses. The ordinary portable form of two-wheeled disinfecter, though excellent as regards working requirements, failed from a mobile point of view, and it was quite a common occurrence to see one lying by the roadside minus a wheel or with broken shafts or chimney. For use in the field disinfectors must undoubtedly be mechanically propelled. The Italians and French used current mobile steam disinfectors which differed from ours only in matters of structural arrangement. Various forms of steam disinfectors were improvised, especially by sanitary sections, which showed special aptitude for constructing in the field at short notice any form of sanitary apparatus, and the results obtained were really marvellous. Such forms comprised the modification of the well-known Serbian barrel—first used during the epidemic of typhus in Serbia in 1915—steam chambers, oil-drum steam disinfectors, and the like, too numerous to describe in the time at my disposal.

The method of adapting railway wagons for disinfecting purposes, the necessary steam being supplied from an engine, is a good one, but not new. I saw some excellent extemporisation in this way carried out by the Belgians early in 1915. The method, however, was quite impracticable in a large area and with such large forces as were operating in France, and it would have been quite impossible to acquire either the engines or wagons, as these were far too valuable and urgently required for their legitimate purpose. As carried out in the armies in France, disinfection was largely concerned with the clothes and effects of cases of infectious disease either in the field, in advanced hospitals, or in infectious and other hospitals on the lines of communication.

I am bound to say there was no lack of energy displayed in this direction—indeed the energy was often in excess of requirements. The disinfection of excreta, either by burning or by means of chemicals, was resorted to from the beginning of the war. Disinfection was required in the case of wells in villages taken from the enemy, which were often purposely grossly polluted, and also in billets, laundries, trains, troopships and barges.

The steam disinfectors also served another useful purpose in the treatment of clothing and other effects which had been in contact with mustard gas. Moist heat at a temperature of

eighty degrees C. was considered to be effective. It will interest you to know that all blankets, bedding, bed linen and clothing has been disinfected before being transported home from the war areas, and therefore any risk there might have been of spreading disease by this means was reduced to a minimum.

When the Expeditionary Force took the field in 1914, each hospital on the lines of communication was supplied with portable Thresh disinfectors (steam). Doubt was at one time thrown on their power of effectually destroying lice and their ova, but from experiments carried out for me by several competent bacteriologists, it was demonstrated that both lice and their ova were destroyed in blankets and clothing when exposed for at least forty-five minutes to the action of steam.

When one recalls the number of wounded lice and their ova were destroyed in blankets continually arriving at the hospitals, and the fact that immediately upon being discarded every article of clothing and as much of the equipment as was necessary was put through the disinfecter, in addition to all hospital linen and blankets, it is not to be wondered at that very soon, and with the increasing size of general and stationary hospitals on the lines of communication, the necessity for greater facilities for disinfection became urgent.

STATIONARY STEAM DISINFECTORS.

The need for disinfection by means of reliable apparatus which would insure the destruction of spores, really needs no comment. The men's clothes were covered in mud, often blood stained, nearly always verminous and likely to contain, from contact with the heavily manured soil of France, spores of tetanus, gas gangrene and even anthrax. We therefore decided to provide all hospitals with high pressure steam disinfectors, and it is gratifying to think that every hospital from an early period of the war was supplied with the best up-to-date form of disinfecting apparatus. General hospitals were then furnished with either one L.O. or two M.O. Alliot and Paton high-pressure stoves. (In general the two M.O.'s were more popular, as only one of the two M.O.'s needed to be worked, which meant a saving of labour and fuel.) Stationary and infectious hospitals were also supplied with high pressure steam disinfectors.

Large central disinfecting stations, comprising baths and high-pressure steam plants, were

established at all the bases on the lines of communication and at the advanced base. In addition to routine local work, blankets and clothing of men passing through were also dealt with, and many of the camps sent in their clothing and blankets at regular intervals.

All convalescent camps were supplied with disinfectors; as a rule three Thresh machines were allotted to each camp and proved sufficient. To meet the increasing demands in the later stages of the war, when constructional work and means of transport had become difficult, we had to resort to certain forms of improvised steam disinfection. These consisted chiefly of steam chambers made either of wood, asbestos-lined, or of cement, into which steam was admitted at the top and into coils of piping in the roof and walls. For drying purposes the steam, after being extracted from the chamber by a fan, was allowed to remain in the coils. The clothes were hung on trolleys which travelled on rails into and out of the chambers. This method of hanging clothes is of the greatest value, and far in advance of the usual plan of packing them into a cradle, I attach great importance to it whether steam or dry heat is used. The whole surface of the garments can be fully exposed, the necessity the creasing and shrinkage of the clothes which for rapid penetration is done away with and takes place when steam is employed, are to some extent prevented. This method also prevents the overloading of the chambers, which often occurred through anxiety to carry out the work with the least possible delay, and had constantly to be watched and checked as otherwise disinfection or disinfestation naturally failed. The latter is an instance of the unfailing care and attention to detail which had to be exercised in order that efficiency might be maintained in all matters connected with hygiene and sanitation.

I may here mention that all clothes sent for washing and repair, to the area laundries—laundries so extensive that their output amounted to 5,000 pieces an hour—were passed through steam chamber disinfectors before being dealt with. The clothes were sent down from the line in special impervious canvas sacks, fitted with tightly closing mouths so that escape of vermin in transit was rendered impossible.

In addition to steam, disinfection by means of sulphur dioxide was also employed. One Clayton apparatus was supplied to each corps

headquarters and several were in use at the base ports on the lines of communication, notably at Marseilles, where infectious disease was constantly imported by means of transports coming from the East.

In order to ensure success, it is necessary that the working of the plant is entrusted to well-trained attendants, and that the greatest care and attention is observed—matters of difficulty in the field. We issued a small pamphlet describing the working in detail, both for the machine and the motor engine, and appointed a skilled inspector to visit the installation periodically. At the base ports the method worked well and was appreciated. Incoming infected transports at ports such as Marseilles, Brest and Cherbourg were disinfected by means of Clayton sulphur dioxide disinfectors, which were brought alongside in special barges by the port sanitary authority.

GERMAN SYSTEM OF DISINFECTION.

The system of disinfection adopted in the German army was similar in many respects to our own, and hot air disinfectors were largely used by them on the Western front. In order to prevent the introduction of infectious disease into Germany from army fronts, the Supreme Command issued very stringent regulations by virtue of which all officers and men before entraining were required to proceed to a disinfection centre, where they were inspected, bathed, and had all clothes and baggage submitted to disinfection. The time allowed for disinfection from the time of arrival of a train until departure of a "clean" train was limited to eight hours; all intercourse between the disinfected and those not disinfected was prohibited, and men were kept under medical observation for the remainder of the journey.

CHEMICAL DISINFECTANTS USED IN FRANCE.

With regard to the use of chemical disinfectants, it is noteworthy to observe how few are really necessary in war-time, given that their efficiency has been proved beyond doubt. It is well that this is so, for chemicals at all times are difficult to transport, requiring special packing, and many are also costly. In France disinfectants were sent up the line from base points daily with the divisional pack, i.e., the train carrying the daily rations, and found their way with the food to the divisional areas and to the trenches themselves. It may be noted that we relied upon three disinfectants

only—cresol, formaldehyde and chloride of lime or bleach.

Cresol, or the liquor cresoli saponatus, is probably the most valuable disinfectant that we have at the present time for general use in the field; it has many advantages in addition to the ordinary use as a disinfectant. In hot solution it could be relied upon to kill lice and their ova. It proved a valuable deodorant and was also efficacious under certain conditions for the destruction of flies and their larvæ; I have even seen it used for staining floors and bedside tables with excellent effect.

Cresol for use in the field was contained in drums, which drums served many useful purposes and were eagerly sought by sanitary sections. I really do not know how we should have managed had it not been for the oil drums, kerosene tins, and biscuit and tea boxes which found their way to the sanitary section workshops and reappeared as sanitary appliances far too numerous to describe at present, I think a very instructive and useful thesis could be written on the uses and advantages of the oil drum and kerosene tin during the war.

The use of formaldehyde was chiefly confined to the spraying of infected premises, and for the destruction of flies either by spraying or in solution in saucers placed in all kitchens and dining halls. I know no more useful deodorant than formaldehyde in the case of decaying animal matter. At one period of the war great discomfort and even injury to health was caused among the men engaged in sorting and checking pay books sent down from the battle field; these books were often soaked in blood and other discharges and consequently were very objectionable to deal with. My advice was sought, and in addition to improvement of the ventilation of the rooms in which the men worked, and other general measures, I had the pay books submitted to the action of formaldehyde, generated in a simply made chamber by means of potassium permanganate and formaline, with the result that all objectionable smell was completely removed and the men worked in comfort. This effect is due to the action of formaldehyde on protein matter, and is one well worth remembering. The only disadvantages which can be attributed to formaldehyde are its irritating effects and its relatively high cost, but throughout the war the supply was sufficient to meet all demands.

The third disinfectant, chloride of lime, was invaluable, and I should be afraid to say how

much of it was used during the period of the war in France alone, but fortunately it is cheap and easily obtainable. It is necessary, however, that it be well protected from light, heat and moisture, or it quickly fails in its effect through loss of the available chlorine on which its disinfecting properties depend. As you are well aware, from the commencement of the war, all water supplies were disinfected by means of bleach or chlorine gas, and it was necessary that only the purest bleach should be used for this purpose. Two grades were supplied, one for general disinfecting purposes, not necessarily of the purest, and the other put up in small tins for water purification, containing, according to specification, not less than thirty per cent of available chlorine. We have recently arranged that bleach for the sterilisation of water will be packed in four ounce earthenware jars, containing a measure and fitted with a special air-tight cover. This bleach was constantly examined at the mobile and base hygiene laboratories, and it is gratifying to state that on the whole the amount of available chlorine came well within the specification. Bleach is unsuitable for use in hot climates and in Mesopotamia had to be replaced by another halogen. The custom of sprinkling chloride of lime on the ground in unsavoury places dies hard, but we managed to kill it in France. If there is necessity to use a deodorant for such a purpose, then it is evident that sanitation has failed, and little is gained by hiding one smell by another. Chloride of lime was also invaluable for disinfecting and removing from effluents from ablution benches and laundries the soap which would otherwise have choked the soakage pits into which they were discharged.

THE HYGIENE OF THE PRISONER OF WAR.

By J. C. McWALTER, M.A., M.D., Litt.D., LL.D., M.R.I.A., F.I.S., some time Sanitary Specialist Officer, R.A.M.C.

The ordinary difficulties of promoting sanitation amongst large bodies of men assembled together are notably aggravated in the case of prisoners of war. This is more especially true of semi-civilised prisoners—as the Turks may be considered—and when they come under tropical or semi-tropical conditions—such as prevailed in Egypt.

The Geneva Convention, insisting on the proper and humane treatment of prisoners of war, assumes that the adversaries on each side are civilised, well informed, well disposed—at least—towards their own side, and only requiring reasonable faculties and supplies in order to treat their own imprisoned compatriots with due humanity.

I found very different conditions prevailing amongst the Turkish prisoners at Tel-el-Kebir. Here some 25,000 prisoners of war were confined in a desert place. They could scarcely be called civilised—a great proportion of them were Arabs. Ophthalmia and dysentery were rife—but they sought to be infected with eye trouble in order to get the better treatment of the hospitals. When they came under hospital care they had no wish ever to get better—natural fatalism and present experience of pleasanter surroundings alike induced them to oppose any methods intended to get them well and back to their compounds. Their own Army doctors had often but little sympathy with British methods, and some of them exhibited little tenderness towards their lowlier compatriots. Discipline was regarded as cruelty, and even ordinary and proper methods of medical or surgical treatment—if they involved much pain—were looked on as torture inflicted by an implacable enemy. One found also, that the Oriental, if indifferent to death, is, by no means tolerant of pain. Thus, even with care, a large number lost their sight from ophthalmia—at one time about fifty were under my care. This disease was, of course, preventable, for amongst the British troops exposed to the same conditions of sun and sand and flies and infection I did not find a single case, and even the mildest cases of conjunctivitis were present to the extent of only about half per cent amongst our troops.

The Turk, as is well known, sleeps with a towel around his head and face. He induces by this means a mild form of carbonic oxide narcotism which he finds rather pleasant when he has nothing to do but kill time between meals. This indulgence in carbonic acid intoxication makes him intolerant of much air, and he carefully excludes, as far as he can, every particle from the tent or marquee. The practice also makes him anæmic, and little fit to withstand infection. The more active spirits get barbed wire disease, the more lethargic ophthalmia or dysentery.

It is recorded that in Napoleon's campaigns

in Egypt about 50 per cent of his troops were affected with ophthalmia. The average proportion of infection in the British troops in Egypt was less than one per cent. This was due to ordinary preventive methods of hygiene—cleanliness, mosquito nets, prompt attention to slight attacks of conjunctivitis, prompt isolation of the more serious cases.

That even at the present day eye diseases may become dangerously prevalent in Egypt in armies where a proper desire for prevention does not prevail, and where prophylactic methods are not heartily availed of, was proved by my own investigations at Tel-el-Kebir amongst the Turkish prisoners of war.

Of these we had some 25,000, but, of this number about 500 cases of eye disease came under my care. They were practically all preventible and contagious—trachoma, gonorrhœal ophthalmia, corneal ulcers, iritis, and the like. Out of the 500, 50 had been cases of such virulence—gonoroccus or morax bacillus—that they had gone blind. About 270 other cases were trachoma. Many were corneal ulcers with perforation; some were ordinary pannus, others opacities of serious degree. Simple cases of conjunctivitis were not taken. We only admitted those of a more acute or graver stage.

We proved then that ophthalmia could be reduced amongst the troops in Egypt to less than one per cent. We also found that quite a new problem in prophylaxis is prevalent amongst prisoners of war—who do not desire to observe the necessary precautions against eye disease—because the reward of contagion is hospital treatment. This is seen amongst prisoners like the Turkish, who habitually sleep with a towel round their eyes, and who would think any attempt to deprive them of their accustomed and hereditary towel was sheer cruelty and brutality.

The problem of location is also a pressing one in the case of prisoners of war. Any military camp should, of course, be in as healthy a place as possible—but even as considerations of military necessities make an army pitch its tent in a place not desirable from the merely hygienic aspect, so also other considerations than these of hygiene must determine the position of prisoners' camps. The sandy deserts of Egypt are not ideal resorts, especially for eye cases, but we found it impossible to get any other place not open to grave objection when 25,000 prisoners had to be kept in safety and provided for in the midst of a population

of doubtful and variable friendliness. I found, however, that although a hot sandy desert is naturally inimical to eye troubles, yet its definite effect in spreading conjunctivitis was comparatively little and could be overcome with care. In the entire hospital staff at Tel-el-Kebir, constantly although the sick, including many infectious eye cases, we had not one case of severe eye disorder out of 250 men, and were often even without a trivial case. Only a few wore smoked glasses, but they were careful to report even slight cases of conjunctivitis, and they observed the ordinary rules of tropical hospital hygiene.

The mosquito is, of course, the real and formidable danger of the East, and even the inconvenience of living in a desert place like Tel-el-Kebir weighs little against the comparative freedom from mosquitoes which such desert places afford. We were not, indeed, free from them—I had to search my tent every night and seldom found it free from at least a culex, which often made its way beneath the mosquito net—but, on the whole, it was freer from mosquitoes than Alexandria or even Malta, and we saw fewer relapses amongst malaria patients, whilst the disease seldom, if ever, originated there.

One knows that those delightful pictures of wooded verdure which exist in some tropical climates, and which seem to call out for occupation as a camp by wearied soldiers, are usually haunted by mosquitoes, and the most arid desert spot, if only water is available, one found by experience to be a more healthy and suitable site.

A camp must, of course, be near a rail head or a river. Transport of food and stores is the chief difficulty, camels can seldom be got in sufficient number, and the feeding of beasts of burden involves a terrible addition to the weight which has to be carried.

The chief plagues of prisoners, typhus, dysentery, cholera, can be fairly well dealt with in the desert. Isolation is, of course, our most reliable remedy in dealing with those desperate diseases, but, we found that when all we needed for perfect isolation was to put a prisoner in a bell tent a quarter of a mile away from his nearest companions, but still inside the barbed wire and sentry ring—then there was only a question of bringing him some food and drink and sanitary help each day. With some watchfulness then any epidemic disease could well be checked at its beginning.

When weather conditions permit there is an immense advantage in keeping hospital cases in marquees or tents, rather than in huts or houses. A peculiar souring takes place where ground has been occupied as a camp for some months. This is evidently due to the saturation of the ground with urinary decomposition products and with bacillus coli. Under these conditions camp jaundice, dysentery and other infectious diseases quickly spread. I found that when the patients were treated in Indian pattern tents or marquees this did not take place. Ordinary ambulance stretchers make the handiest form of bed in these cases, they are quickly laid down and can be quickly taken up each morning. The constant turning keeps them sweet. They take up only about 24 superficial feet of floor space and are sufficiently high from the ground to allow a current of air to pass around the patient. Cases of dysentery will require a more comfortable form of bed, but for the ordinary sick cases of prisoners' camps the stretchers are excellent and portable. Being part of the ordinary hospital equipment, they are easily disposed of when the camp is broken up.

One finds the ordinary camp boards too hard for a sick man. On the other hand, an orthodox hospital bed involves too much transport and washing. Crate-like beds made of plaited osier twigs are easily obtained in Egypt and are light and cheap.

One of the questions in which experiments were made was that of providing suitable meat for hospital patients. In a hot climate they did not mind much, and Turkish or Arabic prisoners are accustomed to but little. We found that horse flesh suited fairly well; even in the raw state it is not easily distinguished from beef, and it makes a satisfactory broth. Orthodox Mahomedans will not eat horse flesh, and none of them under our care would touch it when it was known to be from the horse, but, finally, it was sent from the Army Service Stores cut up in such fashion that its identity was destroyed, and they ate it with an easy conscience.

German prisoners are usually well conducted. We never experienced trouble with them. Many of these were skilled craftsmen, and contented to work for about ten shillings a week, which they were allowed to spend in extra food.

The approved dietary for prisoners was naturally not fashioned on a lavish scale—about 2,500 calories per man per day in England and

not much more than 2,200 for Egypt. There was nothing of satiety in this dietary, in fact, except where the men were allowed to supplement their dietary by purchasing bread or margarine at the canteen with the money they earned—they were in a state of chronic hunger. I did not, however, see any definite effects of mal-nutrition or signs of starvation amongst any of the prisoners under my care, whether Germans, Austrians, Bulgarians, Turks or Arabs.

Where certain articles of food are rationed, as butter and margarine were in 1917 and 1918, the prisoners who worked were permitted to purchase margarine in the canteens. This they invariably did, with much wisdom, but I found that thus they were able to get more than 4 ozs. per head weekly, when the ration for ordinary citizens was only 2 oz.

Ordinary sanitary rules are fairly easily imposed on prisoners of war, because rigid discipline can be easily enforced, but in spite of a high degree of hygienic conditions we found dysentery very difficult to control.

Amongst men kept in confinement for over three years, with no intellectual recreation, with hope deferred month after month, with a dietary that scarcely lends itself to physical exultation, with intensely depressing surroundings and outlook, I found dysentery rather a hopeless disease. We were able to check its epidemic outbreak, but the individual cases were too often fatal. The post-mortem showings in these cases were often very slight, the degree of bowel destruction comparatively slight, the other organs usually healthy, but still the patients died.

My experience with German and with other prisoners showed the great hygienic importance of work. The Germans, partly from natural taste and adaptability for work, and partly because we needed them for making roads, aerodromes, and the like, were generally in good health and seldom subject to dysentery. The Turks, on the other hand, who with mostly no desire to work, and who were not in places where their labour could profitably be availed of, were entirely depressed, gloomy, prone to epidemics, and very prone to die when attacked by various diseases.

This problem of providing work, when the prisoners are neither skilled nor willing nor well disciplined, is a very difficult one. The Germans were skilled in various crafts, their non-commissioned officers were of a technically

well instructed class, fitted to direct and accustomed to be obeyed. They liked work, they did it well and satisfactorily, they spent their money on food which preserved their health.

The Turks were scarcely more than a rabble. Many of their number were really Arabs with still less idea of discipline or wish for labour. Their sergeants were little better than themselves. They were fitted only for the cruder forms of work. What money they gained thereby they saved, or gambled with, or their companions stole from them.

A difficulty often arises from the conflicting ideas of hygiene which prevail amongst civilised people. Thus, the ordinary rules for prisoners' camp sanitation provide that all windows must be left open for a large number of hours every day and many of them during the night, and that the sides of tents and marquees must be rolled up for purposes of ventilation; generally speaking a most admirable and necessary rule. But I was directed on one occasion to visit a certain camp where about 300 German officers were interned and report whether this rule ought to be enforced. The officers complained that they suffered from constant catarrhs and bronchitis on account of the opened windows. They looked on our insistence on the practice as mere ignorant brutality, stimulated by a desire to kill them, they stated that they were quite unaccustomed to such methods, which were not approved by their sanitarians, who recommended simply the opening of the windows for a couple of hours each day.

It is obvious that the rules of hygiene must be enforced according to the views of the persons who will be held responsible for the health of a camp, and therefore we should have been quite entitled to insist on the British rather than the German ideals, but, as there was definite evidence of bronchitis amongst these officers, and as some of their own Medical Officers present amongst them insisted that our methods of perfilation were too drastic and thorough for their safety, I ordered that the constant opening of the windows need not be insisted on in the circumstances of the case.

Those rooms remained perfectly closed for over eight hours at a time. They were kept fairly clean, but the inhabitants constantly smoked. They gave about 500 cubic feet (for officers) and 300 to 400 for men. The recognised square feet floor space was 30 feet superficial, and the average hereby calculated is 10 feet, though in the officers' rooms it was more.

It was proved then that it is possible to live without injury to health, in 500 feet of air, unchanged for eight hours. There were, of course, some minor points at which air could enter or emerge as under the doors or windows, but these were generally carefully padded to exclude the air. The prisoners' detention cells at Holyport camp served as an experiment on the question of air supply. They were built of solid stone, eight feet square. The window was twelve feet above the floor. A man was therefore in a well of air of about 600 cubic feet for eight hours, but the prisoner emerged in the morning bright and well, although I formally condemned the cells on theoretical grounds.

I found that 30 feet of superficial floor space was sufficient for the ordinary needs of prisoners of war, housed in huts in cold climates.

THE ROLE OF THE MATERNITY HOSPITAL IN PUBLIC HEALTH WORK.*

By EDMUND M. SMITH, M.D., D.P.H.,
Medical Officer of Health for the City of York.

The problem of preventing dead births and infant mortality in the first months of life is inseparable from that of maternal mortality and disease. In 1916, in England and Wales, one mother was lost for every 243 births (a total of 1,239 for the year); 148 mothers out of every 100,000 were lost through septicæmia; and 239 per 100,000 died from non-septic causes; whilst a proportion of the births, varying from 3 to 8 per 1,000, were dead-births, 50 per cent. of which, by the way, were due to syphilis.

A tremendous amount of maternal mortality and of maternal illness and disablement, is preventable. An eminent surgeon has said that 40 per cent of his work in respect of diseases of women was of chronic suffering following child-bearing. The puerperal fever death-rate has declined over 25 per cent since 1906. This progress is undoubtedly due to the improved midwifery service started by the Midwives' Act of 1902, and to institutional treatment, especially in London, where good institutions are numerous, and where all kinds of maternal mortality have diminished more than in the provinces.

*Paper read before the Yorkshire Branch of the Society at Scarborough, May 14th, 1920.

The life and health-saving value of a maternity home or hospital (with its rest and quiet, its aseptic cleanliness, and its skilled attention) cannot be exaggerated. The Ante-natal Clinic, when it has become fully appreciated, is also bound to reduce the amount of abnormal pregnancy and parturition; so also the longer training of midwives, and a more organised and efficient midwifery service.

Since the issue of the L.G.B. Circulars of 1914 to 1916, and the promise of grants in aid of all the various forms of maternity and child welfare work therein promoted, the sphere of a maternity home or hospital in the circle of that work has been to provide attendance upon necessitous maternity cases at home; skilled treatment in hospital for complicated cases of pregnancy, for complicated cases of parturition, and for very feeble babies, the reception of indoor maternity cases from very poor, or insanitary, or otherwise unsatisfactory homes, and the training of midwives.

The extreme housing shortage which has developed during the war and the location in most districts of large numbers of temporary residents, married men in various forms of military service, munition workers, etc., etc., living mostly in lodgings—are among the causes which have led to a very large and unprecedented demand upon the accommodation of our limited number of maternity hospitals, so that now quite commonly cases are also received from homes where there are numerous children or more than one family, where the mother can have no real rest, and mothers from lodgings where child-birth cannot take place with comfort, or where accommodation for that event is actually refused by the landlady. In this connection, the following table is interesting:—

Maternity Cases, etc., Treated in York Maternity Hospital.

Year.	Normal Confinements.	Abnormal Confinements.	Antenatal Cases.	Cases referred under M. and C.W. scheme.	Unmarried Mothers.	Feeble Infants.	Total Cases admitted.
1916	64	79	—	20	—	14	143
1917	72	74	42	81	15	15	146
1918	112	87	44	26	19	14	199
1919	201	38	27	27	17	21	239

What are the results of this unprecedented demand of recent years? The mothers have realised the value of the peacefulness and the skilled attention of a maternity hospital, and the general opinion now, therefore, is that such a home or hospital as we know it to-day, "has

come to stay." Many existing hospitals have recently been, or are about to be, enlarged, and districts where such places do not exist are now considering their establishment. These facts appear to have appealed to the Government, for, in paragraph 27 of Circular M. and C.W. 4, and in paragraphs in Circular M. and C.W. 5 (both dated August, 1918), the Local Government Board stated that "they are satisfied that in many areas additional lying-in accommodation is required for *normal as well as for abnormal confinements*, and they have therefore obtained power to make a grant to encourage the provision of such accommodation. The grant for this service will, as a rule, be paid only to a Local Authority, as the Board look to the Local Authority to provide or arrange for the provision of the accommodation required. The grant will also be available for the maintenance of the mother in the Home for a period prior to the confinement where there is a medical certificate that this is necessary in the interests of the infant."

In this quotation, two things are noteworthy, viz.:—

- (1) "The Board look to the Local Authority to provide or arrange the accommodation"; mark the public health aspect there emphasised.
- (2) The Board's grants stimulate provision of accommodation for pre-maternity.
- (1) WHY should a Local Authority be expected to provide maternity home or hospital accommodation?
 - (a) Because of the prevention of maternal and infant mortality and of maternal invalidism, consequent upon the quiet and hygienic environment and the skilled attention received;
 - (b) Because of the removal of the patient from overcrowded or insanitary home conditions;
 - (c) Because of the superior pre-maternity preparations and amenities—a clean bed and every comfort, and removal or mitigation of disease or other inimical disadvantages;
 - (d) Premature and delicate infants have a better chance of surviving.

The value of such accommodation for women who would otherwise be confined in small, or overcrowded and noisy, or even unhealthy homes cannot be over-estimated, and the demands for such accommodation in the York Maternity Hospital, even at a considerable weekly charge, have been increasing rapidly, especially during the past three or four years.

But the total accommodation in York and elsewhere at present is very inadequate, and hospitals cannot undertake to receive pre-natal cases, septic cases, venereal cases, or delicate babies, either at all or to the extent so very much required.

May we not cite another advantage to the community, viz.:—that the possibility of restful and comfortable maternity, with or without "twilight sleep," in a clean and pleasant institution, with the best of skill at hand, is conducive to an increased birth-rate? With skill and comfort all round, there need be no fear, little or nothing to dread? Will that not appeal, to the more nervous mothers at any rate—the class who at present tend to succumb to the seductions of the preventative and the abortifacient?

But there are other very definite public health rôles for the maternity hospital, viz.:—

(e) The septic case—whether it be the occasional case (? gonorrhœal) which occurs among the mothers who have been confined in the hospital, or the case which occurs in her own home, insanitary it may be or otherwise. Special and adequate isolation provision for such cases should exist in every maternity hospital. In their recent Memo. on Maternity Hospitals the Ministry of Health state that the practice of nursing puerperal fever in ordinary isolation hospitals is not one to be altogether commended, as skilled obstetrical treatment is needed, and midwives should observe the course and conduct of the septic, as well as normal, cases.

(f) The L.G.B. Circular, V.D. 9, dated February, 1918, also urged the provision of accommodation for the treatment of the fairly numerous cases of venereal disease as it occurs in advanced pregnancy and after parturition, but it has so far been impossible to make any organised arrangements for such very needy cases in most maternity hospitals.

Out of 17 such hospitals, about which I have made recent inquiries, only 7 are prepared to receive V.D. patients in whom the disease is known to exist before admission. Yet every such hospital must be obliged to treat unexpected cases which have been received. And

"Every woman should have the opportunity of giving birth to her child under the best conditions possible, as an inalienable right. As every living being has come into this world in one way only, a way of suffering and some danger to every mother, and of some risk to every infant, it is therefore a communal duty to provide all things needful to secure the safety of the mother and the infant. Any scheme run by the community should be available for, and designed for, the community as a whole."

the treatment of such cases in such a hospital, especially if well in advance of parturition, must tend to save numerous cases of premature birth, dead birth, septicæmia, uterine and other pelvic disease, ophthalmia neonatorum, congenital syphilis, etc.

I have had a strong suspicion, for years past, that more cases of puerperal septicæmia are due to the absorption of gonorrhœal products by the parturient tract than we have hitherto realised, and I have heard of the brute (? drunken) who insisted upon intercourse within a few days after parturition.

The provision of more adequate special accommodation for cases of venereal disease in advanced pregnancy is one of the most urgent needs of our maternity and child welfare work.

(g) Need I say much in favour of provision also for the decent unmarried mother—for the girl who has lapsed for the first time, not improbably through lack of knowledge or of moral home training, or through housing conditions at home conducive to immodesty or animalism. At present she is liable to be turned out of even such a home as that, she suffers the degradation of having to go into the Union Infirmary, and her child undeservedly, but for ever, bears the social stigma of birth in that institution. Whereas the child-birth, even in a special "unmarried" ward of a pleasant maternity hospital, tends to save the girl socially and morally by saving her self-respect, and it tends to save not only the reputation of the child, but, indirectly, also, its very life and health and physique. The girl who is a "rotter" and succumbs to temptation time after time may "deserve the Union," but even the welfare of her child is an important public health consideration. A maternity hospital may, therefore, do much to reduce illegitimate infant mortality.

Mr. Hayes Fisher, when President of the Local Government Board, said that "his view was that maternity and child welfare schemes should be available equally for married and unmarried mothers, and for legitimate and illegitimate children, and that in matters of health there should be no distinction."

From a public health point of view, therefore, a public health committee is now concerned with the provision for:—Normal and abnormal maternity cases; complicated cases of pregnancy or other pre-maternity cases, and post-maternity cases; cases of venereal disease

in advanced pregnancy and parturition; septic cases when they occur; unmarried cases; feeble infants; and the training of midwives.

(2) *Re Pre-Maternity and Post-Maternity cases*:—

Government support is wisely extended to arrangements made to receive expectant mothers who require some weeks' rest before their confinement, or prolonged rest after their confinement. Thousands of such cases in the past have had to manage without such rest, with consequent permanent disablement or chronic suffering of incalculable amount.

Our experiences in general practice have taught us to appreciate the great value of a maternity home or hospital in receiving these cases. (a) We have realised many a time that if the woman who is tired-out with the struggle of cooking and washing for a large, and perhaps noisy, family or household, and in keeping her house clean, could have a week or two's absolute rest before her confinement, that event would be so much more likely to take place normally and without damage to herself and her child. (b) The need is still greater in the case of the woman living in an overcrowded house, or in a congested area, where she gets little or no fresh air, and no exercise in pleasant surroundings. Such a rest would make all the difference to many a worried or neurotic mother. (c) There is no need to dilate upon the value of such accommodation for cases of nervous debility, deformed pelvis, albuminuria, eclampsia, persistent vomiting, hæmorrhage, varicose veins, and threatened abortion. (d) Again we have met with cases which needed prolongation of puerperal rest, either in order to promote the complete restoration of the uterus, perineum, or to prevent displacement of the uterus, or to allow venous congestion more completely to subside, or to establish breast-feeding.

And these classes of cases absolutely need such hospital accommodation if there is venereal disease which requires skilled treatment.

Hospital provision for Infants:—

According to paragraphs 25 and 29 of L.G.B. Circular M. and C.W. 4, this provision can be made in one or both of two ways:—

- (1) The Board is willing to approve of the experimental provision of cots as part of the equipment of an Infant Welfare Centre, in not more than two wards, with four cots in each, with separate day-nurse and night-nurse. It would appear that these cots are intended for

feeble infants or infants not progressing favourably, and provision may be made to take in both mother and infant when breast-feeding tends to fail. These cots are not to receive acute cases of illness or cases of infectious disease.

By this means many deaths of infants from marasmus and debility could be saved.

(2) Grant is now to be extended to hospital treatment of children up to five years of age, but payable as a rule only to the Local Authority—payable also for cases of ophthalmia neonatorum and of epidemic diarrhoea, but not for any other infectious disease.

General infirmaries are not very suitable places for infant patients of the kind referred to in the above paragraph (1), and the smaller towns do not possess children's hospitals.

For moderate-sized towns the maternity hospital seems to be the most suitable place for feeble and ailing infants who are having a struggle in the first months of life, for there the infant patients can be "mothered" by the nurses and pupils; in that way we should avoid the disastrous results of leaving babies laid flat in cots, with but little "mothering," and the practical work involved would be helpful training for the pupil-midwives, who would in that way be able to "follow up" infant life for a longer period than is usual in a maternity hospital.

A separate wing of the maternity hospital is desirable so that crying babies do not disturb the lying-in mothers.

In order, then, to meet present-day requirements, a *Maternity Hospital should now be prepared to treat*:—

Normal cases who have no fixed home, or who have large families, or other home difficulties or unsatisfactory home conditions.

Abnormal cases, *before, at or after* confinement;

Cases complicated by venereal disease, which disease should also be treated in such hospitals during the advanced stage of pregnancy, under suitable conditions, such as separate ward and lavatory. (L.G.B. special 75 per cent grant);

Unmarried mothers (selected cases at least);

Such a hospital should have a few pre-maternity and post-maternity beds, a

special ward for septic cases, and two or three small wards of cots for feeble or ailing infants;

In addition to staff and administrative quarters, there should be two or three adequate labour rooms, a large garden and garden-balconies, for airing and recreation for the pre- and post-maternity cases especially.

And there is much to be said in favour of maternity homes receiving some cases which may be attended there by their own doctors, although this is secondary to the need for providing for normal and abnormal cases among the poorer classes.

The demand for maternity home accommodation among the more opulent classes during the last two or three years has been very remarkable, and that demand does not diminish, I believe.

I have made enquiries about the chief facts concerning such provincial maternity hospitals as I could get to know of, and I have summarised some of the results in an appendix attached to this paper. I have been very much astonished how comparatively few maternity hospitals there are in the provinces, and how difficult it is to get to know anything about them, along the lines required.

Some of the voluntary institutions have been in existence for many years, and still run pretty much upon the old lines, and depend upon voluntary support, but some of these have an excellent reputation, and do very extensive general work amongst women and children, as well as obstetrical work.

So far as I know there are only 13 maternity hospitals in provincial England and Wales which are managed and financed entirely by the municipality, and these are nearly all small and badly needing extension on the lines indicated.

In advocating the above advantages of maternity hospitals, I imagine someone asking—"What about the practice of the certified midwives, who have spent time and money to qualify themselves in order to earn an income? I think they need have no fear, for the following reasons:—

(1) The majority of mothers do not need and will not desire maternity hospital accommodation. They will still prefer their own homes.

(2) There is no one more likely to appreciate the advantages of a maternity hospital in her district than the well-qualified midwife—for

she will appreciate the advantages of a hospital for the worn-out mother or the abnormal case, and she will feel very glad to be relieved of the fearsome responsibilities which such a case involves.

(3) The larger the maternity hospital becomes the more well-trained midwives will they require on their staff.

(4) I am not aware at the present time of any rush into the midwifery service—or into any other nursing service for that matter.

In order that the maternity hospitals may not actually rival or under-cut the certified midwives from the commercial point of view, it is, however, all the more desirable—if not essential—that patients who are admitted to maternity hospitals should pay the maximum reasonable sum for their maintenance therein.

A *scale of charges* should be fixed for the use of the lying-in home, but the charge may be reduced or remitted in individual cases where the circumstances justify the adoption of this course. (*Vide* L.G.B. Memos.)

Such an institution should be self-supporting as far as possible, maintenance fees being payable by mothers according to their means and the accommodation provided; e.g., the whole or larger part of the insurance maternity benefit should be claimed by the hospital. How far these hospitals will be self-supporting in the future, in view of the present economic outlook, is, however, a doubtful question.

Representatives of the workers among the people have said that they "do not want charity." We must hope that, in their own interests, and as a matter of equity, they will carry that principle out in practice, and make the maternity hospitals as nearly self-supporting as possible.

APPENDIX.

DATA *re* MUNICIPAL AND VOLUNTARY MATERNITY HOSPITALS AND THEIR CHARGES, 1919.

The following Maternity Homes or Hospitals are run entirely at the cost of the municipality, and most of them are managed by the M. and C.W. Committees. They have all been established, on the present scale, during 1918 and 1919, and their accommodation so far is limited, but some of them are meditating early extensions already.

During 1919 the total revenue of the York Maternity Hospital, received from patients in varying amounts, according to ability to contribute to the cost of maintenance, was £594.

The average cost of treatment and maintenance per head per week at present at the York Maternity Hospital is £3 3s.

ited, but some of them are meditating early extensions already.

MUNICIPAL MATERNITY HOSPITALS:—

Bermondsey.	Lewisham.
Blackpool.	Morley.
Carlisle.	Rochdale.
Hammersmith.	Stockton-on-Tees.
Hull.	Sunderland.
Ilford.	Tynemouth.
Leicester (new).	Willesden.

Municipal hospital schemes on foot or in contemplation:—At Brighton, Burnley, Greenwich, Newcastle, Norwich, Portsmouth.

In all, or nearly all, of these, the buildings are rented or leased, and the Corporations expect or have received 50 per cent grants from the Ministry on the cost of equipment and furnishing.

At Morley and Stockton the premises were presented to the Corporation; at Hammersmith the premises are lent by the Mayor and Mayoress; the Hull Hospital was originally a gift.

In Bermondsey Metropolitan Borough a maternity hospital has been opened, per gift of £2,000 from American Red Cross, to adapt premises and to cover first year's costs, after which the Borough Council, plus Government grants, will finance the hospital.

These hospitals make charges to patients ranging from one guinea to three guineas for the period of confinement.

Owing to their recent establishment it is not yet possible to get adequate information about the cost of maintenance per bed.

To the Voluntary Maternity Hospitals most Corporations now contribute either a lump sum grant or fee per case admitted through recommendation of Infant Welfare Centres, etc., e.g.:—

At Birmingham the Corporation gives £2,000 per annum;

At Leeds the Corporation pays for the maintenance of half the beds;

At Newcastle the Corporation pays £1,000 per annum; and

At Croydon the Corporation pays £1,500 per annum.

Charges in these hospitals vary from 15s. to 45s. per confinement, or from 15s. to £3 3s. per week.

Bedminster Maternity Hospital (6 beds) proposes to charge a guinea per week, per case, for the three weeks of confinement, and 15s. per week, per case, for pre- and post-maternity cases.

Some of the Committees have co-opted two or more members of the Corporation as members of the Committee.

Some of these hospitals, as well as some of the Municipal Maternity Hospitals, appear, so far, to admit abnormal cases only.

Most of the above-mentioned Municipal and Voluntary Hospitals receive unmarried mothers, and not quite half of them receive venereal disease cases and septic cases.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

COUNCIL MEETING.

A Meeting of the Council was held at the house of the Society on Friday, Dec. 17th. The President (Lt.-Col. F. E. Fremantle, M.P.) was in the chair, and there were present Drs. Sanders, Snell, G. F. Buchan, Kirkhope, Cates, Clements, Auden, Gibbons Ward, T. Evans, Barlow, Wilshaw, Prof. H. R. Kenwood and Lt.-Col. Herbert Jones.

The minutes of the last meeting having been approved and signed, letters of apology were read from Drs. Lyster, Kerr, Stocks, Edmund Smith, Joseph, Howarth, Chalmers, Blackett, and Bertram Hill.

Correspondence.—(1) From the Ministry of Health advising the Society of the recognition of the Sanitary Inspectors' Association as an additional body entitled to elect two representatives to be members of the Sanitary Inspectors' Examination Board, and stating that the Ministry would be willing to sanction the addition to the Board of a second representative of the Society of Medical Officers of Health if the Board see fit to recommend such addition. *Resolved:* That Dr. Reginald Dudfield, the representative of the Society on the Sanitary Inspectors' Examination Board, be asked to recommend the Board to apply for additional representatives of the Society of Medical Officers of Health on that body.

(2) From the Crediton Urban District Council stating that they had received a grave warning from their Medical Officer of Health regarding the increasing neglect of vaccination, and asking whether, if this experience was general in other areas, the Society would take steps to educate public opinion in this matter. *Resolved:* That the letter be referred to a Committee consisting of the President and Officers

of the Society for consideration and any action considered advisable.

(3) From the College of Nursing asking the assistance of the Society in securing that only fully-trained nurses should be appointed to the public health nursing service. *Resolved:* That the letter be referred to the Committee on the Training of Health Visitors.

(4) From the Scottish Branch of the Society in reference to fees for the examination of Service Pensioners by Tuberculosis Officers. *Resolved:* That the Executive Secretary should inform the Branch of the action already taken by the Council in this matter after reference to the Tuberculosis Group.

(5) From the Bread and Food Reform League asking the Society to sign a manifesto urging the need of propaganda by the Ministry of Health regarding food values. *Resolved:* That while recognising the excellent purpose of the Bread and Food Reform League, it should be left to members of the Society to support such movements in their individual capacities.

(6) From Prof. R. Stenhouse Williams, of the Research Institute in Dairying, University College, Reading, asking the Society to make a pronouncement regarding the infectivity of Bovine Tuberculosis to man, especially in view of recent correspondence in the medical journals. *Resolved:* That the letter be referred to the Tuberculosis Group for report and recommendations.

(7) From members regarding the inadequate salary proposed for the pending appointment of a Medical Officer of Health for the Metropolitan Borough of Holborn. *Resolved:* That pending the consideration of the Society's Scale of Salaries by the Whitley Council, the Society should confine its action in such cases to a strong letter of protest, stating the salary which the Society is endeavouring to secure for the appointment in question.

Diplomas in Public Health.—It was reported that a committee of the General Council on Medical Education is about to recommend revision of the Regulations for Diplomas in Public Health. *Resolved:* That the President, Prof. Kenwood, Drs. Porter, Auden, Kirkhope and Herbert Jones be appointed as a committee to give any information that may be required by the General Medical Council regarding the views of the Public Health Service in this connection.

Federation of Medical and Allied Societies.—The President reported that Col. Howard Mummery, general secretary, would appreciate an opportunity of addressing the Council on the work of this Federation. *Resolved:* That the Executive Secretary should request Col. Mummery to attend the next meeting of the Council.

Urban and Rural M.O.H. Group.—Lt.-Col. Herbert Jones submitted the following resolution sent up by the Urban and Rural M.O.H. Group: "That this Group views with apprehension the statement made by Dr. Addison on Nov. 18th in the House of Commons in reply to a question by General Sir Ivor Phillips to the effect that the Ministry of Health were considering in connection with the future Health Services of the country the question of the supervision of the work of district Medical Officers of Health by county Medical Officers of Health." The Group asked the Society to take such steps as might be considered necessary to maintain the principles set forth in the Memorandum of the Group forwarded to the Council on June 16th last. *Resolved:* That consideration of this matter be deferred pending the proposals of the Consultative Council in regard to sanitary areas and their administration.

The Group also drew attention to a communication from a County Medical Officer of Health apparently addressed to each medical practitioner within his county, asking for information relating to the prevalence of jaundice. The communication was evidently sent at the instigation of the Ministry of Health without reference to district Medical Officers of Health. *Resolved:* That a letter be addressed to the Ministry pointing out that such procedure might be regarded as detracting from the responsibility and influence of the district Medical Officer of Health within his area.

Amendment of By-Laws.—Consequent on the revision of the Society's Articles of Association it was resolved to amend By-Law 1, regulating meetings of the Council to read as follows: "At all meetings of the Council the President shall take the chair; in his absence the Ex-President; in his absence a Vice-President; and in the absence of the President, Ex-President and the Vice-Presidents the Fellows shall elect a chairman." It was further resolved that "Executive Secretary" should be substituted wherever "Honorary Secretaries"

are mentioned in the By-Laws of the Society and the Council.

Nominations to the Fellowship.—Nominations to the Fellowship were received from the Northern, North-Western, Welsh and West of England Branches. All the nominees were declared elected, and a complete list will be published when the other Branches have submitted the names of their candidates.

Proposed Increase of Annual Subscription.—The Hon. Treasurer (Dr. G. F. Buchan) submitted the following report and recommendations:—

At the 30th September, 1914, the Society had an accumulated balance of £823.

At the 30th September, 1920, this accumulated balance had fallen to £410.

The following table shows the total expenditure and income of the Society during the 5 pre-war years ended 30th September, 1914:—

	£	£
1910	1786	1812
1911	1819	1792
1912	1759	1789
1913	2252	2272
1914	1944	1919
Total—5 years	£9560	£9614
Annual average	£1912	£1925

During the year ended 30th September, 1920, the first complete year of post-war conditions, the total expenditure of the Society was £2,042 and the total income £1,972, showing a deficit of £70 on the year's working.

During the whole War period the expenditure has been reduced to a minimum, and the Journal, "Public Health," has suffered most in this direction. During the 5 years ended 30th September, 1914, the average amount spent per annum on the Journal was £898. During the 4 War years ended 30th September, 1918, the average amount spent per annum on the Journal was £576, and during the years ended 30th September, 1919, and 30th September, 1920, the amounts spent on "Public Health" have been £465 and £593 respectively. Having regard to these figures and to the depreciation in the value of money it will be seen that it is necessary, if a good Magazine is to be produced, to spend at least £1,000 per annum on the publication.

In addition to improvement of the Journal and having regard to the new constitution of the Society it is necessary to find funds for the following among other matters:

- (1) Grants to Groups. (Already Tuberculosis, School Medical Service, Navy, Army and R.A.F. Hygiene, and Whole-time Non-County Medical Officers' Groups have been formed and others are in course of formation);
- (2) Propaganda work. (For example, for the improvement of the salaries and conditions of service of members);

- (3) The payment of travelling expenses of Members of the Council up to date, as it is unfair for Members of the Council to be kept waiting for over a year for the payment of their expenses as at present.

Estimated Normal Annual Expenditure.

Taking all these facts into account I estimate that the expenditure of the Society in a normal year will be as follows:—

	£
House Account	350
Salaries and Wages	500
Journal Account	1000
General Printing	100
Central Office	100
Travelling Expenses	175
Grants to Branches	150
Grants to Groups	50
Propaganda Work	50
Miscellaneous	100
TOTAL	£2525

The total of £2525 represents an increase of 32 per cent over the pre-war annual average for the 5 years ended 30th September, 1914....

Estimated Normal Annual Income.

Income to meet this expenditure is estimated as follows:—

	£
Subscriptions	1350
Journal Account, Sales, Advertising, &c.	800
Income from Investments	100
Miscellaneous	50
TOTAL	£2300

Recommendations.

From the above figures it will be seen that there is an estimated excess of expenditure over income of £225 per annum, and that it consequently becomes necessary to increase the income of the Society. I am of opinion that the only practical means by which this can be done is by increasing the annual subscription in certain cases, and I accordingly recommend the Council to refer to the Branches for consideration the following motions:—

- (a) That the Annual Subscription be raised from £1 1s. to £1 11s. 6d. as from 1st October, 1921, in respect of the following Fellows and Members:—
- (1) Acting Whole-time Medical Officers of Health;
 - (2) Acting Medical Officers and Inspectors of Government Departments in the British Isles and dependencies or elsewhere;
 - (3) Acting Medical Officers (Sanitary) of the Navy and Army (at home or abroad);
 - (4) Whole-time Assistant Medical Officers of Health;
 - (5) Whole-time Medical Officers holding specialist or clinical appointments in connection with any branch of Public Health.
- (b) That the Annual Subscription remain at £1 1s. per annum in respect of the following Fellows and Members:—
- (1) Acting Part-time Medical Officers of Health;
 - (2) Retired Medical Officers of Health whether in the British Isles or dependencies or elsewhere;
 - (3) Retired Medical Officers and Inspectors of the Government Departments in the British Isles and dependencies or elsewhere;

- (4) Retired Medical Officers (Sanitary) of the Navy and Army (at home or abroad);
 - (5) Registered Medical Practitioners holding a Diploma in Sanitary Science, Public Health, or State Medicine, under Section 21 of the Medical Act, 1886;
 - (6) Part-time Medical Officers holding specialist or clinical appointments in connection with any branch of Public Health.
- (c) That the Annual Subscription of Associates remain as at present, namely:—
- Associates elected prior to the 1st day of October, 1908, to pay an Annual Subscription of 10/6 each, and those elected subsequent to the aforesaid date an Annual Subscription of 21/- each.

The effect of the above Resolutions would be to increase the revenue of the Society by approximately £250 to £300 per annum. This estimated additional annual sum will meet the estimated annual deficit of £225, give a surplus by which the activities of the Society may be increased in the interests of Members as from time to time may be necessary or desirable, and place the Society in a sound financial position. Additional help would be given to the Society and its funds if every member of the Society did his best to secure additional members.

*Resolved:—*That the report and recommendation of the Hon Treasurer be referred to the Branches for their early consideration and report.

NORTH-WESTERN BRANCH.

A meeting of this Branch was held at the offices of the Medical Officer of Health, Birkenhead, on Friday, the 10th December. There were present Dr. Meredith Young (who was voted to the Chair in the unavoidable absence of the President—Dr. Corbin), and 19 Members.

An excellent paper on the "Functions and Status of Medical Officers" was given by Dr. Morley Mathieson.

On the proposition of Dr. Meredith Young, seconded by Dr. Wheatley and supported by Drs. Daley, Wynne and Stallybrass, a hearty vote of thanks was accorded to Dr. Mathieson.

Nominations for the Fellowship of the Society were considered, and the Hon. Secretary was instructed to submit certain names to the Council for election.

After the Meeting, tea was kindly provided for the Members present by Dr. Morley Mathieson.

The Annual Dinner of the Branch was held the same evening at the Exchange Station Hotel, Liverpool. Among those present were: The Lord Mayor of Liverpool (Alderman E. Russell Taylor, J.P.), Henry Fildes, Esq., M.P., James Sexton, Esq., M.P., the Mayor of Stockport (Alderman Charles Royle, J.P.), Alderman Muirhead, J.P. (Chairman, Liverpool

Health Committee), Alderman Mason, J.P. (Birkenhead), Alderman H. B. Bates, J.P. (St. Helens), Stuart Deacon, Esq., J.P. (Stipendiary Magistrate, Liverpool), James Laithwood, Esq., F.R.C.V.S. (Veterinary Surgeon, Cheshire C.C.), Capt. G. S. Elliston, W. H. Roberts, Esq. (City Analyst, Liverpool), Major H. E. Corbin (President, N.-W. Branch), Drs. E. W. Hope, O.B.E., A. A. Mussen, T. W. N. Barlow, O.B.E., W. A. Daley, Morley Mathieson, F. E. Wynne, A. Aziz, W. E. Burton, H. H. I. Hitchon, W. Hanna, C. O. Stallybrass, G. W. N. Joseph, James Wheatley, J. Cates, W. Hauxwell, A. A. Turner, Col. Dunbar Walker, Major N. V. Lothian, M.C., Drs. F. T. H. Wood, G. W. Anderson, F. A. Belam, and W. A. Muir.

The Toast of the "North Western Branch of the Society of Medical Officers of Health" was proposed by Mr. Henry Fildes, M.P. for Stockport, who mentioned that "Municipal Service is the most important service in the Country and the most inadequately remunerated." Whenever the time came that the financial affairs of this country were adjusted on a normal basis, municipal servants, and Medical Officers in particular, must have the first claim on the financial resources of the country.

The President (Major H. E. Corbin) in replying to the "Toast" pointed out that the Society was increasing in importance and now had 1,500 members.

Dr. Barlow, who in a humorous speech proposed the toast of "The Guests," took the opportunity of drawing attention to the fact that Medical Officers of Health were the only whole-time medical servants in the country without superannuation; they had it in the Army, Asylums and Poor Law Systems.

The Lord Mayor of Liverpool, Mr. James Sexton, M.P., Mr. Stuart Deacon, the Mayor of Stockport and Alderman H. B. Bates replied.

MIDLAND BRANCH.

A meeting of this Branch was held at The Council House, Birmingham, on Thursday, Dec. 2nd, at 3.30 p.m. There were present, Dr. C. E. Tangye (in the Chair) and 25 members.

Apologies for non-attendance were received, and the minutes of the last meeting were read and confirmed.

The Council reported with respect to the nomination of Fellows, and the following recommendations were accepted and confirmed:

That the ten Medical Officers of Health not yet elected Fellows, should be nominated, as by this means it would be possible to nominate 20 others for the Fellowship, and that a postal vote should be taken as soon as possible with respect to the other 20 nominations.

Dr. Middleton Hewat then read his paper on "Some Problems regarding Diphtheria Carriers," a prolonged and interesting debate followed in which the following took part: Drs. Stocks, Dryborough, Gold, Banks, Goldie, Wilkins, Andrews, Cowie, Hamilton Wood, Harries, Tangye and Gibbons Ward.

The President proposed a vote of thanks to the reader of the paper, this was seconded and passed unanimously. Dr. Middleton Hewat briefly replied.

[Other reports from Branches and Groups are unavoidably held over until next month.—
ED. P.H.]

CORRESPONDENCE.

The Editor does not accept responsibility for the opinions of correspondence.

LAWRENCE V. EDMONTON COUNCIL.

To the Editor of PUBLIC HEALTH.

Sir,—It may interest you to know how the matter of Supervisor of the Maternity and Child Welfare Centre at Edmonton has been at last settled between its M.O.H. and his council.

The terms are:—

- (1) The deletion from the minutes of the resolution of 24 June, 1919.
- (2) My reinstatement in office as supervisor from that date at a salary of £100 a year and bonus.
- (3) The payment of all arrears from June 24, 1919.
- (4) The payment of all my legal expenses, as between solicitor and client.

Of course, no money can compensate me for the worry and mental strain endured for sixteen months or more owing to the arbitrary and illegal act of my council. You perhaps know that in February last a nervous breakdown obliged me to take three months' sick leave, and even now I have not fully regained my health.

Throughout this long struggle I have been fortified, by the hearty sympathy and support

of my local medical practitioners, the Society of Medical Officers of Health, the British Medical Association and its North Middlesex branch, the National Association of Local Government Officers and its Edmonton branch, and the Society of M.R.C.S. (Eng.), etc. Many of my professional brethren have added their individual efforts by endeavouring to obtain for me justice and fair play. To one and all I am deeply grateful. To them, as to myself, the victory, though long postponed, must be most gratifying, and we can hope that it will be a stern warning to other local authorities that there are limits—legal, if no other—to the inconsiderate and oftentimes brutal treatment of their medical officer of health.

I am, Sir,

Yours faithfully,

SIDNEY C. LAWRENCE,

M.O.H. Edmonton U.D.

November 9th, 1920.

PREVENTION OF VENEREAL DISEASE.

To the Editor of PUBLIC HEALTH.

Sir,—In view of the evasive and illogical attitude taken by the Ministry of Health in its first annual Report, and in its refusal to assist the policy of the Society for the Prevention of Venereal Disease as evidenced by the Minister of Health's reply to our Deputation, we feel that it is our duty to lay a plain statement of the facts before the public, who we hope will demand an enquiry by an impartial and competent body as to the strict truth of such statements.

We definitely affirm and are prepared to bring conclusive evidence as to:—

- (1) The efficacy of immediate self-disinfection in the male as a prevention against venereal infection and the possibility of almost eradicating these diseases by this means.
- (2) The biased nature of the composition and report of Lord Astor's Interdepartmental Committee, the high authority of which the Minister of Health strongly emphasised in his speech at the Deputation.
- (3) The gross inaccuracy of the statistics supplied by the War Office.
- (4) The failure of the Government, the War Office, the Admiralty and the Ministry of

Health, to organise public education on this subject or carry out any thorough scheme for testing the efficiency of immediate self-disinfection as a preventive of venereal disease either during the war, or since the Armistice.

- (5) The increase in venereal disease since the armistice, and its necessary effect on innocent women and children, by increasing sterility, miscarriages, and the production of diseased children.
- (6) The very large amount of popular support for a campaign of education in the principles and practice of the prevention of infection by venereal disease by means of immediate self-disinfection that is given by organised labour, the medical profession, and practically all those who have had personal experience in the prevention of venereal disease by such methods.
- (7) The great financial burden that venereal disease is to the nation.

We also wish to call attention to the very large number of young persons of both sexes (but especially young men), who persist in voluntary exposure to risk, and to the fact emphasised by the late Sir William Osler and many others that infection may be conveyed to the innocent by a cup, glass, bath, towel, razor, and many things in common use.

As we are receiving no financial help from the Government we are entirely dependent on the support of the public, to whom we appeal for financial assistance to carry on our educational campaign.

Donations will be received by the Hon. Secretary, Society for the Prevention of Venereal Disease, 143, Harley Street, W.1.

(Signed by) Lord Willoughby de Broke (President).

Sir Bryan Donkin, Vice-Chairman of Executive Committee.

Sir Wm. Arbuthnot Lanc, Treasurer.

Sir James Crichton Browne, Treasurer.

Lady Askwith.

Dr. Jane Lorimer Hawthorne.

Dr. R. A. Lyster.

Sir Frederick Mott.

Dr. Eric Pritchard.

Sir G. Archdall Reid.

Dr. C. W. Saleeby.

Dr. J. H. Sequeira.

Mr. H. Wansey Bayly (Hon. Sec.).

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Editorial.

THE PRACTITIONER IN STATE SERVICES.

THE vague and unsatisfactory references to the State Medical Services and their relationship to the general practitioner in the Report of the Consultative Committee on Medical and Allied Services seem, as might have been expected, to be likely to lead to serious difficulties in the medico-political world. Both before and after the publication of the report it was fashionable for various leaders of medical thought to make vague statements and to express pious opinions to the effect that it was desirable for the general practitioner to take an active part in preventive medicine.

Such expressions of opinion on the part of prominent people led naturally to a belief that the general practitioner was able and willing to play a prominent part in preventive medicine, and that all that was necessary was a brief medico-political campaign in order that all the established State Medical Services might be dissolved and the general practitioner come into his own.

Natural corollaries to the expression of such opinions and the issue of the report have been the vicious personal attacks in *The Times* upon the Ministry of Health, which is the centre of all the existing State Medical Services, and also the issue by the British Medical Association of an exhaustive set of questions addressed to its Divisions upon the various points which arise from the scheme outlined in the report. The great majority of these questions are of a pronounced "leading" character, and are practically guaranteed to elicit replies satisfactory to the majority of members of the B.M.A. Committee which has framed them. Moreover, we have no doubt that if any of the answers should yield unsatisfactory replies they will be redrafted and submitted again to the Divisions, and that eventually a set of answers will be tabulated to show a considerable majority in favour of the scheme so vaguely outlined in the report.

Unfortunately, the questions refer hardly at all to the obvious defects of the published scheme, and no attempt is being made by the British Medical Association to give any guidance as to how the general practitioner is, in practice, to give part-time State Medical Services, and whether he is able or willing to do it. No practical advance is made by sending down to the Divisions to ask them whether they like the idea of the general practitioner taking over the whole of the "communal medical

services" unless such a question is accompanied by a clear description of what such a plan involves.

We doubt very much whether the general practitioner will be found to be much enamoured of a part-time State Medical Service. In a certain large area some years ago a serious attempt was made by the medical officer of health to induce the local practitioners to join in the elaboration of a scheme whereby part-time services could be secured for the maternity and infant welfare centres about to be established. The matter received the serious consideration of the local medical committee, who decided against the scheme.

When local bodies of practitioners decide matters in this way against the wishes of central committees, it is usual to explain their action by saying that they (the practitioners) "need education in such matters." We do not believe this. We believe that the average practitioner knows his business fairly well, and is capable of realising that a combination of general practice with part-time official work never has been, and is never likely to be, a success.

The average practitioner at the present time is the product of a system of medical education which, especially in the English schools, gives no systematic or adequate instruction in preventive medicine. If he is ever to be part of a State Medical Service, the practitioner must be properly trained in preventive medicine, and for this purpose the medical curriculum must be revised. At present he is trained only to diagnose and to treat diseased conditions, and he regards prevention with a suspicion and contempt which is invariably the concomitant of entire ignorance. Those who desire to alter this state of affairs should concentrate upon the medical schools.

SMALLPOX.

The Scottish Board of Health have issued further notices to various authorities in regard to the outbreak of smallpox.

They have informed local authorities and their medical officers that they can now supply local authorities with calf vaccine lymph free of cost, and they have asked local authorities to give a

reasonable supply of the lymph, on request, to any insurance service practitioner for his panel patients.

They have also asked education authorities to co-operate with the public health authorities in the vaccination of school children; and have suggested to the medical superintendents of infirmaries and hospitals the advisability of keeping a close watch on out-patients and persons admitted to the institutions, and of isolating suspicious cases pending instructions from the medical officer of health.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

NOTICES.

In the hope that every member of the Society will secure at least one recruit in the near future, a Nomination Form is enclosed with this copy of "Public Health." Some of the forms used for this purpose were printed last year, and the list of officers, etc., is therefore out-of-date. This is not an oversight, it is an economy.

The Index and Title Page for Vol. xxxiii. of "Public Health" are now ready. Members and subscribers who bind their volumes should notify the Executive Secretary and copies will be forwarded.

The correspondence addressed to officers of the society has increased so much during the past year that communications are not always answered at once. Members are asked to accept the assurance that there is no delay in taking necessary action, although less urgent matters are sometimes postponed and polite formalities omitted.

A meeting of the School Medical Group will be held at the house of the Society, 1, Upper Montague Street, W.C., on Saturday, Feb. 19th, at 11.30 a.m., following a meeting of the Group Council at 11 a.m. The S.M. Sub-Group of the Midland Branch meets at the School Clinic, Great Charles Street, Birmingham, on February 3rd, at 6 p.m. Sub-Groups have also been formed in the Northern and North-Western Branches.

A few copies of the *Roll of Members* are available (7s. 6d., post free), as a directory for use in the Health Departments of Local Authorities if the order is signed by or for the medical officer.

THE RELATION OF THE PORT TO OTHER SANITARY AUTHORITIES.

BY

W. M. WILLOUGHBY, M.D., B.C., D.P.H.
Medical Officer of Health, Port of London
Sanitary Authority.

Since I have been honoured by election to the chair in your deliberations, it has been brought home to me how anomalous is the position of a port medical officer among medical officers. The reason for this anomalous position, this fish among flesh, so to speak, is seen in the comparison of the houses and populations under our respective examinations and treatments.

For instance, drainage problems on a ship are as small as the drains are short. It can only be "for the purpose of the Act" that ships are houses, buildings or peradventure land, while the population must be in every sense a floating population.

Yet the same principles which dominate the practice of public health ashore must of necessity be applied on ships. Ingest, whether food or water, must be rigidly kept separated from excreta and must be of good origin and preservation, twice breathed air avoided, the beneficent actions of light secured, overcrowding checked, cleanliness inculcated and the segregation of sick persons insisted on.

In the application of these and such principles of Public Health the Medical Officer of a Port is by law and practice in a different position to that of the shore Medical Officer.

The houses under your control are always within reach of the centre of your district, those of the port travel far. Your populations are so fixed that an offender can be watched and generally found when wanted; the legal occupier of a ship on sighting shore has but one breezy anticipation, namely, that of leaving his occupation to which he returns only a few hours before his ship leaves for beyond the international limit. Your owner and occupier often have clashing interests in sanitation in which you decide, the occupier of a house in port is only too often in the possession of his owner.

You have a word in the planning of your houses, the Medical Officer of a port sees a blue print after the ship is in being and further after she has been passed by a non-medical authority as fit to accommodate her complement.

Thus it is satisfactory that your housing plans are already made and will need no suggestion from me as to whether your rooms should be more than 5-ft. 6-in. in height clear of the beams and whether 15 sq. feet of floor space is sufficient for your denizens each to live, move, eat, and have his being and bath upon. These and such points are settled for the Medical Officer of a port, and he can make the best of a bad job.

The close confinement of men concerns us all in that vastly important side of Public Health comprised in the term infectious disease. The inhabitator of a ship's fore-castle is completely at the mercy of his fellow occupant as regards infection. Consider in a ship's fore-castle a co-operation in attack between Pfeiffer's bacillus and the hæmolytic streptococcus or B. pneumonia, or both, such as occurred in 1918. At such short range as the conditions, imply every expletive became a deadly bomb where the disease could even whisper itself from man to man. Or consider a case of open tubercle, or of enteritis of any kind. The board is cleared for refection, the patient having no appetite does not rise from his berth, one or more of his companions slides past him, even leans against him during the meal.

And if this ready exchange of sputal elements and intestinal flora, what of the exchange of that insect life which now dominates the etiological pictures in some of the more striking ship-borne diseases and of the possibility of avoidance of the desquamation cloud associated with smallpox?

I have not overdrawn the sketch of the conditions under which infection occurs in the fore-castle. The progress toward betterment is slow. The best possible line for advance seems to be in the provision of segregation quarters for sick men, the hospital quarters for the little community on board, and in the education of all in a code of cleanliness. Though an effective sufficiency of air space and a consequent dilution of infection according to land standards will never be reached on ship-board, provision of separate messing, washing and sleeping places can well be arranged as amenities of life, and would have their effect on checking the spread of infectious disease.

In meeting infectious arrivals in a port, the prodigious hurry and bustle on a ship necessitate expedition. Tides wait for no man, and

time is money in the majority of instances. One diagnoses the case chicken pox and takes the risk of putting petrol on an antivaccinal fire: one diagnoses the case smallpox and puts a necessarily costly machine in motion. Here is no room for misdiagnosis. Similarly with the buboes of every description and causation: the valuable cargo and its costly detention and treatment hangs on the diagnosis. None of the many plague infections arriving in the Port of London have been apart from rat infection; this is naturally so.

And when the diagnosis has been made arises the question where amongst the rambling block of dwellings are the infected foci and inhabitants, a matter for nice discrimination where too much or too little may be done by way of precaution against infection. It is satisfactory that the outside boundary of the infection is coincident with the external water line and the whole complement of the ship, and that in the ancient fumigant, sulphur, and as ancient disinfectant, water, with or without "Izal" in it, we have two remedies which can be more effectively and freely used than would be the case ashore. I have been especially struck with the universality of application to the problems of ship disinfection of sulphur fumes for disinfection of spaces emptied of their textile contents: of course the Washington Lyon's or equivalent apparatus must be used on infected textiles.

The focus of infection in plague on ships has been a matter of close study to me; the points with regard to rat plague and its communication on ships are:

- (1) That the rat must loose its fleas where these have access to man.
- (2) That this is most likely to take place in the food stores on a ship.
- (3) That the issuer of the stores is the most likely first victim.
- (4) Conversely that if the store keeper or his assistants furnish a plague case the rats on the ships are infected.

Last year these principles were tested as follows:—

I boarded a ship, with the sole knowledge that some cases of plague among lascars had occurred in a forecastle, that one was dead and one dying. On these facts the following conversation took place with the captain.

"You have plague in your forecastle."

"Your doctor says it is plague."

"It is in the starboard forecastle."

"No, in the port."

"That is unusual to have lascars in the port forecastle. Then your native food stores opens by a trap in the port forecastle."

(The master intrigued): "By G—, it does."

"That man you put overboard on the way up channel: what was his job? Did he issue the stores?"

(Resigned to the inexplicable): "He did."

"What did the man now dying have to do with the stores?—He was assistant to the store keeper."

"You have dead rats in your food store?"
—"No!"

But there were dead rats in his food store with fly pupæ on them to demonstrate a time of demise just precedent to the human infection.

You would perhaps be more interested in the possibility of infection of the passengers of whom you from time to time receive notification. In Ainsworth's "Old Saint Paul's," in order to keep out the plague the city grocer barred and bolted his house upon himself within, and held no converse with his friends. He took the plague more inevitably than his fellow store keepers on ships who are not constantly shut in to associate with their ratty food stuffs. Passengers are not, as a rule, brought into intimate contact with a ship's rat population, **though in view** of a rat's nest taken from within the saloon piano, one must not consider them immune, and you will therefore continue to receive notifications from rat-infected ships; I have never yet found a person infected where a more direct association with rat runs to food and water than is usually the case in passenger quarters does not exist.

You will also be interested in the proximity of a rat infection to your various districts. There is a possibility that the black rat will become the rat problem in towns (already in one port town, as I am informed, he exists in the proportion of eleven to one of the brown), and that with twisting the rat's tail over his nose he will be found more universally established than is generally supposed. The brown drove out the black. The whirligig of time brings in his revenges. The black rat with his domestic habits and plaguey association

with humanity will get his chance now that the drains and sewers are so well attended to as to exclude the brown from competition. In the upper docks of the Thames, where the conditions are those of domesticity as opposed to the wildness in the environment of the lower docks, I have for many years known the frequency of the black rat and suspected its predominance, though the black and brown feed side by side in the non-competitive atmosphere of plenty afforded by conditions under which food is everywhere stored. I can only hope that under the rats and mice destruction act the receptiveness of the districts about the port being diminished, one may have less anxiety, though exercising no less care, as to the possibility of rat exchanges between ship and shore. Those exchanges will from time to time occur. The eight human infections on ships dealt with in recent years suggest that more have had infected rats on board on arrival at our coast, but this infection has not been known. I hold this to be the explanation of casual instances of infection found from time to time in the docks in the absence of any large mortality.

The reputation of the port abroad may be a matter for as much concern as the danger to health of plague transmission at home. An unclean bill of health from a port such as London would cause vast difficulty and expense to the shipping which forms one of our greatest national assets.

I will not traverse the range of diseases known as ship borne, but just point one or two of the important matters in connection with them. First, that the knowledge of ætiology has increased by such leaps and bounds, and the preventive measures to be taken have so been indicated as a consequence of this increase that cholera has lost its terrors and yellow fever we can snap our fingers at in these latitudes, while, on the other hand, smallpox and typhus fever assume in our minds their proper importance as imminent or more remote menaces.

Smallpox is my bugbear in the relations of our several authorities. Last year two ships reached London and actually landed cases within a day or two of the examination of the ship at the port's mouth. That ships from so far afield as Oporto and Naples arrive at our shores within the incubation period of the disease is a condition against which a port is powerless. For London this means that we

are open to the infection from the whole of Europe and North Africa. I once boarded a ship from Rotterdam and was casually looking at the customs procedure: a lady in gloves and veil was almost the last passenger to leave the ship: she left for Denton Hospital, because there was that on her face which caused the examination of her hands, and there in the palms were the proofs and present infection of smallpox. Such a casual detection was more cause for realisation of the possibilities than for congratulation, and those possibilities are not to be met by any procedure at present in use or that I know of in the ports.

Where infection is known to be on board a ship, one has been forced to realise this concrete fact, that smallpox infection remains long, and therefore the disinfection cannot be too wide or stringent. It is a hopeful feature that there is less and less anti-vaccination bias to be found amongst contacts with the disease.

Of foods and of shel' fish, of canal boats and further, of crews' quarters, I would speak at great length, but hesitate to touch either of the subjects as superficially even as I have that of our relationships in infectious disease.

In any of these or other matters in which this society is interested, and in which my experiences could in any way be of service, it is my duty and pleasure to adopt amongst you and from this chair the great motto, "Ich dien."

NOTES ON THE EPIDEMIOLOGY OF BACILLARY DYSENTERY.

BY

GEORGE MACLEOD, M.C., M.A., M.D., D.P.H.
Medical Officer of Health, Clevedon Urban District.

Since demobilisation I have watched with interest the Registrar General's returns of infectious diseases, particularly the reports of cases of dysentery among the civil population, and I think it may be of interest to place on record the following observations on the epidemiology of this disease which were embodied in a thesis for M.D. in March, 1919, but were not then published. These observations are based upon work done and experience gained with units in the fighting line in France and Flanders; in a mobile bacteriological laboratory; and in a base hospital for infectious diseases. The number of cases

which are from time to time reported lead one to think that in dysentery we have, for the present at least, a disease established endemically in this country on which the resources of preventive medicine can and should be successfully concentrated before it assumes anything approaching epidemic proportions. Observation, investigation and control of mild diarrhoeal outbreaks is not the least important measure in this direction, care being taken that doubtful cases or carriers have nothing to do with the preparation or handling of food.

Bacillary dysentery is a contagious disease and is communicated from the sick to the healthy by direct or indirect contact. The virus contained in the dejecta from the infected person gains access to the next host in a number of ways, the route of infection being always the same, viz., by the mouth to the gastro-intestinal tract.

Epidemics, which occur from time to time among communities where the disease is endemic, are attributable to defective sanitation, using that term in its widest sense, individual and communal. Where, as in the armies, improvised latrines are used by large numbers of men, it is easily seen how the disease spreads by direct contact. The healthy subject who uses the same seat as an infected case in its early stage, gets his hands soiled and as an elaborate toilet is a luxury unknown under the conditions of active warfare, these hands convey infection directly to his mouth, or indirectly by means of his cigarette or his food. And in the trenches, where, with all the best efforts at prevention, and co-operation by all concerned, the soil is probably heavily infected, infection can the more readily spread in the same way.

Probably the most important agent in the direct or indirect spread of the disease is the mild ambulant case, which is so frequently regarded as a simple diarrhoea, and, if a soldier remains at duty with his unit, or if a civilian continues at his daily avocation. Some statistical support is given to this view by the following figures for part of the 1918 epidemic in the Somme area. When, at the height of the epidemic, the admissions to hospital became so great that bacteriological examination of all cases was impossible, it was decided to evacuate all cases with definite clinical evidence of the disease, and to concentrate on the examination of doubtful cases and the so-called diarrhoeas. Specimens

taken by means of a rectal swab were examined from 1,513 cases of this category, three examinations on successive days being made in each case and by this means the presence of 298 cases or 19 per cent of bacillary dysentery was discovered in this group. It is interesting to note here that of these 298 positive findings, 15 were due to Shiga's bacillus, which has not been common among cases in France, and which is usually regarded as causing the more severe form of the disease. Spread of infection in a unit usually occurs in the following manner: with the advent of warm weather in May or June, sporadic cases of diarrhoea, mild in type and regarded as seasonal, appear among the troops. These usually respond to simple medical treatment, make a speedy recovery and return to duty. But the number of such cases increases daily and among them—frequently in the young men who have been recently drafted into a fighting unit—occur some cases of a more severe nature, which are necessarily evacuated and shortly afterwards reported as true bacillary dysentery. In the meantime the disease has established itself endemically, at least in that unit, and it will continue to be a fruitful source of trouble for the rest of that season and liable at any time to assume epidemic proportions. In all big epidemics of dysentery in armies, diarrhoeal diseases of a mild nature are concurrently increased and if they are investigated, a large proportion of them will be found to be true dysentery. These cases are important because they are so often overlooked and they are so potent of evil because they are so mobile.

Where the disease is not endemic, however, the survival of the infecting bacillary agents, from one epidemic period to the next, has to be sought elsewhere. Carriers are immediately suggested as the most likely solution and the work of several investigators has given presumptive support to this view, though epidemics have not been definitely traced to carriers in the same conclusive way as they have been in the case of enteric fever. But the dysentery carrier differs from the typhoid carrier in that in the former disease it is unusual to find the bacilli in large numbers in the stools for any length of time after the acute phase of the illness and it is more probable that in dysentery the bacilli are excreted in large numbers only during or immediately after a mild diarrhoeal attack in a subject who

has previously had the disease. The bacilli penetrate deeply into the wall of the colon and have been recovered post mortem in the course of this work from the subserous coat of the intestine and also from the inflamed mesenteric glands in cases from which no dysentery bacilli were recovered before death. It seems reasonable to suppose that a dietetic derangement would serve to light up temporarily an old quiescent infection of this nature, which would prove to be the focus for the epidemic spread of the disease. This has been borne out by experience in the field with a unit which, having sustained dysentery in France, was transferred immediately afterwards to the Italian front in the winter of 1917, the effective strength having been made up by the early return from hospital of several cases of bacillary dysentery, most of whom, under the rigours of a cold climate and a restricted dietary which gave rise to gastro-intestinal derangement, developed a recurrent diarrhoea of short duration and with typical stools which were again found to contain the dysentery bacilli. The literature on the subject of carriers in dysentery is very fully summarised by Ledingham and Arkwright, who record the finding by Simon in 1910, from the stools of men who were known to have had the disease, of dysentery bacilli up to a maximum of 618 days from the date of the original attack. Mayer has also described the occurrence in a regiment infected with dysentery, of healthy carriers who, though harbouring the bacilli for a short time, were not themselves affected by the disease at that time or subsequently. Ledingham, while looking for typhoid carriers in England, discovered genuine dysentery bacilli in subjects who had never been abroad and during the war Glynn has reported two positive findings among 504 healthy recruits and the presence of Shiga's bacillus in an old woman who suffered from chronic diarrhoea. There has been little need to seek for carriers to explain the survival of infection in the army from one period to the next, as sporadic cases have continued to occur during the winter months and indeed in some units the disease has prevailed in epidemic form during the coldest months of the year. During the course of this work bacilli of the Flexner-Y group have been recovered from subjects of the disease up to a maximum of six weeks from the commencement of the illness but work among convalescents did not come

within the scope of this investigation. Rajchman and Western, however, have reported the finding of *B. Dysenteriae Shiga* up to twenty-four weeks after the onset of the disease in convalescents from the Mediterranean.

Vincent has recorded two interesting epidemics in the French army, one in 1890, at Chalons, which is attributed to the pitching of tents over the cesspits of the previous year's camp, in which dysentery had been epidemic; the other in a camp near Algiers, where dysentery had prevailed the previous year, and to which a battery of artillery were sent in 1894; a violent sandstorm, which lasted for a week, coincided with the arrival of these troops, who complained that sand and dust were present in all their food and drink—an epidemic affecting 15 per cent of their effectives immediately followed.

Though they are not common, explosive outbreaks, which cannot be explained by infection from a carrier, do occur from time to time, suggesting an infected food or water supply. Umber records such an outbreak among his hospital staff for the spread of which some common article of food was suspected though not proven to be the direct cause, and the following epidemic, which I have experienced, suggested an infected water supply, not a common or generally accepted occurrence. A unit which had been engaged from 1st October to 11th November in the fighting for the Passchendaele Ridge in 1917, was withdrawn from the line and after a few days' rest moved by rail to a village near the coast. A few cases of dysentery had been observed during the interval between the trench warfare and the transference by rail, but these were promptly evacuated, and the diarrhoea rate in the unit reduced to nil. Two to four days after arrival in the new area some 15 per cent of the unit were affected with diarrhoea, and a number evacuated and found to be genuine bacillary dysentery. Some common cause was sought for as a carrier could hardly account for such an explosive outbreak. Rations were wholesome and the cookhouse staff suffered as severely and at the same time as the rest of the unit. It was found that the approved water supply which was duly labelled was recommended to be drawn from an open stream where it crossed the main road. The village had just been vacated by a unit notorious for its dysentery and recent gross human pollution of the banks of the stream

above the filling point were not far to seek. The small amount of chlorine recommended for use in the water carts was quite insufficient to meet the well-known fluctuating requirements in wet weather of an open running stream which was invaded by ducks, etc.; and as the cookhouse stood practically on the banks of the stream, the washing of cooking utensils in untreated water was a moral certainty. All cases were immediately segregated, and treated, the water supply had already been condemned and a satisfactory supply inaugurated at the source of the stream, and the whole epidemic was over in a week. The weather was cold—there were no flies in evidence—the men were much more comfortable and better fed than they had been for weeks, the surroundings of the stream were low and damp, conditions which according to Vincent render the survival of the bacillus possible for 20-30 days! dysentery or diarrhoea had not been prevalent in the unit; they had had three to five days in which to incubate an infection obtained elsewhere (the incubation period is probably less than five days); the explosive nature of the outbreak and its immediate cessation when a pure water supply was obtained all point to the probability that the epidemic was waterborne.

Shell hole water has frequently been incriminated and though dysentery bacilli have not been recovered from this source there is usually ample possibility for its pollution and the relation of gastroenteritis and diarrhoea to the drinking of shell hole water is undoubted. An explosive outbreak of gastroenteritis and diarrhoea occurred in one company of a battalion to which I was attached while they were holding the front line trenches, the other companies being unaffected. The weather was very hot at the time, early summer of 1915, the men, newly arrived from England, had not realised what water discipline meant and, their own supplies exhausted, they soon found water by digging down a few feet in the clay of French Flanders. Many of the men had acute vomiting, all of them had diarrhoea, and I found they had all drunk water from a surface "well" sunk within a few feet of the graves of British and German troops! It is not suggested that these were cases of true bacillary dysentery as all but two of them quickly recovered and no bacteriological examination was made, but I have come across two cases of genuine bacillary dysentery—one in an officer,

the other in a man, who related the sudden and acute onset of the disease within thirty-six hours of their drinking shell hole water during hot summer weather.

Wherever sanitation is in any way defective, there flies abound in the warmer weather and they are generally accepted as instrumental in the indirect spread of the disease, carrying the bacilli from infected faecal deposits to the food to which they are always attracted. The summit of the epidemic curve of bacillary dysentery is reached in the months of August and September, when flies are most abundant, but the disease also prevails in epidemic form in cold weather, as, for instance, during the coldest weather in the Crimean War; and I have had experience of a similar epidemic among German prisoners during the winter, 1918-1919, while keen frost prevailed and snow lay on the ground.

Langstein, Somerfeld and Baginsky emphasise the importance of children in the spread of this disease as in the case of enteric fever. The mild cases are again the source of trouble: 60-70 per cent of the children under two years of age who were admitted to Langstein's wards were found to be suffering from bacillary dysentery.

Domestic animals have also been incriminated for the spread of the disease—the dog has been known to have it, Firth induced it experimentally in a monkey and it is known to affect this animal in nature.

Infection by contact, probably as the result of the neglect of precautionary measures of toilet, occurs from time to time, and I have seen cases occur among medical officers, nursing orderlies, and a padre in hospitals where dysentery was treated; and also two cases of infection among laboratory attendants.

And as the introduction of dysentery into Germany as an endemic disease has been attributed to the return of infected armies from the Franco-Prussian War of 1870, when the disease was very prevalent, so it is possible and even highly probable that we shall have to reckon with the appearance of this disease in something approaching epidemic proportions among the civil population at home, introduced by the infected soldier who returns to civil life. And in this connection it were well that special attention should be paid to the investigation of summer diarrhoea in children who may contract true bacillary dysentery from their soldier parent.

AN ADDRESS ON DISENFECTION AND DISINFESTATION IN THE FIELD.

Delivered at the Inaugural Meeting of the Section of Military Hygiene of the Society of Medical Officers of Health.

By W. W. O. BEVERIDGE, C.B., D.S.O.
K.H.P., M.B., M.Ch., D.P.H., Brigadier-General, A.M.S.

(Concluded from page 63.)

II.—DISINFESTATION.

Early in the war efforts were made to provide divisional baths, where the men on return from the trenches could take hot baths, be supplied with clean underclothing and at the same time have all their clothing disinfested. One of the first of these baths was installed at Nieppe by Colonel O'Callaghan in some dye works, the vats being used as baths. Unfortunately the Germans got wind of them, and they were destroyed by shell fire, the men engaged in bathing at the time escaping without their clothes. Other divisions quickly provided themselves with baths, situated either in factories or similar buildings, or special accommodation erected by the Royal Engineers.

Disinfestation of clothing was carried out either by steam, or by pressing the seams of the outer clothing with hot irons. It was quickly recognised that steam disinfection had many disadvantages and attempts were made to replace steam by hot air. The disadvantages of steam are that unless it is available as in laundries, special boilers are required, and the necessary fuel is at times not forthcoming. Secondly, clothes—especially outer clothing—are liable to shrink and crease when compressed in the chambers. Drying in special machines takes time, and in extemporised apparatus more especially in wet weather, immediate thorough drying is almost an impossibility.

HOT AIR DISINFECTORS.

The high standard of efficiency which is necessary in the case of regular steam disinfectors to destroy bacteria and their spores is not required to destroy vermin, and therefore the simpler and less costly hot air disinfectors, working at a lower temperature, are more suitable for the destruction of vermin in the field. From the point of view of louse destruction alone, it was apparent that if the difficulties attending the circulation of hot air in the chamber could be overcome so that all parts of the clothing would be exposed to an equal temperature, then hot air disinfestation would

prove the better method, for the following reasons:—

1. The necessary lethal temperature is easily obtained by means of any available fuel such as coke or wood. In France we relied upon a temperature of from 75-80° C., maintained for twenty minutes with perfect success by means of burning coke.

2. No shrinkage or creasing of the clothing occurs. Clothes are not spoilt in any way as long as the temperature does not exceed 110° C., and buttons and badges are not tarnished.

3. No drying of the clothing is required, and men are issued with dry warm clothing, which is a real comfort in the field.

4. Perfect efficiency. No risk whatsoever of lice and their ova not being destroyed in well constructed plants.

5. The process is much more rapid than that of steam, as no after-drying is necessary.

6. Any article of clothing can be dealt with, including riding breeches, leather, gum boots and other articles of clothing and equipment which are liable to be injuriously affected by steam.

7. The cost of construction and expense of working is considerably less than when steam is employed.

8. Most of the types can readily be made from material available, such as corrugated iron, rails, etc.

MAJOR ORR'S DISINFECTOR.

To Major Orr of the Canadian Medical Service belongs the credit of having designed a plant which fulfilled all these requirements, and in which sufficient means were arranged for circulating the air and so conveying a uniform temperature throughout the chamber. This type of apparatus was extensively used in the First Army area and also in various camps and bases, with excellent results. Lice and their nits were baked as hard as biscuits within the space of twenty minutes. It was also the type used in connection with bathing establishments for men on demobilisation. Major Orr's hot-air disinfectant can briefly be described as follows:—

The disinfecting chamber, which measures fifteen feet long, eight feet wide, and six feet high inside, is constructed over a pit with sloping sides measuring seven feet by fourteen feet at the top and five feet by ten feet at the bottom; a stairway at one side leads to the entrance of the pit, which is closed by a tightly-fitting metal door. Two special constructed

braziers twenty-four inches in diameter, each capable of holding 120-125 lbs. of coke, are placed in the pit. Air is supplied to the braziers by two four-inch pipes which enter the chamber at each side of the door, and open directly beneath the braziers. The floor of the chamber over the pit consists of corrugated iron perforated with 126 openings, each three inches by six inches. Three four-inch right angle air outlet pipes extend through each of the side walls close to the ceiling. These outlet pipes in conjunction with the air inlet pipes beneath the braziers provide for the circulation of hot air and gases through the chamber. The front of the chamber consists of two double tightly-fitting doors, made of wood insulated with asbestos or metal, or of metal alone. The clothing for disinfection is hung on specially constructed trucks or trolleys which can be moved into and out of the chamber on light railway lines. Each truck carries 128 articles of clothing or blankets. The fuel consumption amounts to about 200 lbs per day, and the braziers after starting require no further attention, except sometimes the addition of a little coke at noon.

Disinfection is completed when the clothing has been exposed to a temperature of 75°C. for twenty minutes. It was found by experiment that as the temperature beneath the folds of the garments was from 10-15° below that of the surrounding air of the chamber; it was therefore necessary to expose the articles for twenty minutes to a temperature above 75°C. (as indicated by a I. thermometer supplied and fixed to the chamber) to ensure certainty of disinfection.

RUSSIAN PIT DISINFECTOR.

This very serviceable and efficient form of hot air disinfector, simple to construct and easy to work, was brought to my notice by General Sir William Macpherson. This form was extensively used in the Fourth Army, and in many labour and prisoner of war camps.

It consists of a chamber eight feet long, six feet wide, and seven feet deep, dug in the ground and roofed in with corrugated iron, suitably supported. A layer of earth is spread over the roof. Access to the chamber is gained by an entrance two feet wide extending from the roof to the floor at the middle of the longer side of the chamber, closed by a corrugated iron door fitted in grooves. Two simple stoves made out of oil drums placed in each of the far corners of the chamber supply the heat.

These are stoked from above, through the flues, which leads upwards through the roof to about two feet above the layer of earth. Clothes after being turned inside out are suspended on wires strung across the chamber. Disinfection is completed in from thirty to sixty minutes, and a temperature of 90°C. can be obtained in the centre of the chamber. Air is best supplied by means of ducts carried from the well of the entrance under the floor of the chamber and opening directly beneath the stoves. About 200 blankets or 100 kits can be dealt with at one time. This type of disinfector was however, not suitable where the ground water approached the surface, as in the Ypres salient.

CONCLUSION: SCHEME FOR GENERAL DEMOBILISATION.

In conclusion, I should like to say a few words concerning the arrangements for cleansing the men and for disinfecting their clothing on demobilisation at base ports immediately before they embarked for England. The necessity for such a procedure is obvious. In the interests of the civilian population at home, as well as of the men themselves, it was imperative that the men should leave France clean and free from vermin. I was asked to draw up plans for cleansing establishments to include bathing and disinfection arrangements for 3,000 men per diem at each port of embarkation at least eighteen months before the armistice. The plans were approved, but owing to the favourable opinion I had formed of the hot air disinfector designed by Major Orr, the latter was substituted for the steam type of apparatus originally proposed. The uninterrupted success of the hot air system justified my action, and doubtless the problem of disinfection in the field can now be said to have been solved.

Owing to the large number of men to be dealt with in a limited time on general demobilisation, it was considered advisable that sanitary precautions as to cleansing and disinfection of clothing should be carried out on a comprehensive scale at each centre of demobilisation, immediately prior to embarkation. Centres for demobilisation were arranged in connection with the various ports of embarkation. These camps received the numbers of men allotted to embark on any one day; they were divided into "a dirty section" and "a clean section," between which cleansing stations were interposed. The men on arrival

proceeded to the dirty section, and after being bathed and then disinfected at the cleansing station moved into the clean section, where they remained until they embarked for England. Each complete cleansing installation was designed to provide for the bathing and disinfection of the clothes of 3,000 men in from 10 to 11 hours. These installations were provided on a basis for dealing with 50 per cent more men than the camp accommodated to allow for breakdowns and overlapping. The bathing arrangements included dressing rooms, hot sprays (24 per 3,000 men per day), and drying rooms, with accessories such as towel rooms, dirty underclothing and clean underclothing stores. Bathing and disinfection could be carried out simultaneously throughout the day.

For disinfection the hot-air disinfector designed by Major Orr, of the Canadian Army Medical Service, was adopted. This type of disinfector was highly efficient and satisfactory in working owing to the continual passage of a current of hot air through the chambers. On account of the low specific heat of air a rapid circulation of hot air is necessary to raise the temperature of the clothing to the lethal temperature within a reasonable time. The articles to be disinfected for each man were: (1) tunic, (2) trousers, (3) shirt, (4) vest, (5) greatcoat. The men were supplied with clean underclothing, of which a stock of 12,000 pieces was kept at the cleansing station. The underclothes worn by the men on arrival at the baths, such as shirts, undervests and pants, were despatched to area laundries, where they were disinfected in steam chambers, washed, and returned to the cleansing station for re-issue.

The men brought down their blankets with them, and these were disinfected and re-issued to the camps. The blankets used in the dirty section of the camps were disinfected at least once a week, or oftener, if in the opinion of the Medical Officer it was considered necessary. In the clean section, the blankets were also disinfected weekly. Facilities for disinfecting the blankets were afforded by working the hot air disinfectors during the night hours. At any one installation, 3,000 blankets could be disinfected in 3 to 4 hours, allowing at least half an hour in the disinfecting chambers. Medical inspection was carried out as the men passed through the baths by a medical officer, and cases of scabies or other diseases were sent to

a hospital specially allotted to receive men from camps of demobilisation. As the stay in camp was liable to be tedious, sports, games and other recreations and entertainments were organised.

THE REFRACTORIES INDUSTRIES (SILICOSIS) SCHEME, 1919.

BY CHAS. L. SUTHERLAND, M.B., D.P.H., District Tuberculosis Officer, Yorks, West Riding.

The Refractories Industries (Silicosis) Scheme was brought into force under the Workmen's Compensation (Silicosis) Act, 1919. At present it provides for compensation in one class of workers only, that of miners in ganister and workers in silica brick works. As there is a likelihood of this or some similar scheme being extended to other workers exposed to dust-diseases, it may interest your readers to go over some of the points in connection with the present scheme. I do not propose to go into the clinical aspects of the question.

The finance of the Scheme is dealt with by a limited company called the "Fund," which is supported by contributions from the employers, each employer paying on the basis of a percentage of the wages earned by the employees covered. All those firms who deal with material containing 80 per cent of silica are brought within the Scheme.

It is to be noted that the Scheme is the first attempt to avoid the County Courts in compensation cases. The compensation is fixed by a committee composed of equal numbers of workmen and employers under a neutral chairman. To this committee the "Appointed Medical Officer" sends the certificates of disability, and these certificates are final in that they cannot be challenged and the matter taken to court.

Work under the Scheme falls upon the Tuberculosis Officer of the area, who becomes the appointed medical officer. His duties during the first year of the operation of the Scheme have been to examine all workers in the industries, to examine all new workers, and to examine all claimants for compensation. The medical officer has to suspend any worker whom he believes to be suffering from silicosis to a degree that would be dangerous if he continued at the work. To assist him on this point he may make use of the X-ray, and if still in

doubt he may refer the case to a "Medical Advisory Committee."

To protect workers who have spent over twenty years in this kind of work, there is a clause which states that they may not be examined unless they present a written request to be examined.

The examination of all workers and especially of new workers involves the examination of a large number of people who can have had no possible chance of developing silicosis. Still if a case of silicosis did turn up the worker would be suspended in the ordinary way, but the statement on the certificate that the condition was not contracted in the industries clears the "Fund" of responsibility. In this connection it may be mentioned that the medical officer has no power to deal with a case of tuberculosis unless silicosis is present. Indeed the writer has met with cases of tubercle who have "come out to an open-air job."

The examinations are conducted at the work and employers have very definite instructions as to the accommodation to be provided. The results of each examination are noted on a special form; and a note of any action taken, made in two copies of a book called the "Workers' Register." One of these is kept by the employer, the other by the man as his evidence that he comes within the scope of the Scheme, should he wish to claim compensation at any time.

Much attention has been drawn to diseases caused by dust inhalation, and it is to be hoped that the results of the examinations made under this Scheme may elucidate some of the problems presented by the condition. The exact relationship of silicosis and tuberculosis, for instance, has not yet been settled.

WE much regret to record the death of Dr. Philip William Gowlett Nunn, for upwards of forty years medical officer of health for Bournemouth, until his retirement in 1911.

AT their last meeting, the Holborn Borough Council considered a letter from the Ministry of Health, suggesting that a salary of £800 per annum, proposed to be paid the new medical officer of health, was not sufficient remuneration for a whole time officer. A similar communication had been received from the Society of Medical Officers of Health. The Council decided to fix the salary at £1,000, inclusive of bonus.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

COUNCIL MEETING.

A meeting of the Council was held at the house of the Society on Friday, January 21st. Dr. Charles Sanders (Vice-President) was in the chair, and there were present: Drs. Wheatley, Auden, Clements, G. F. Buchan, Kirkhope, Wilshaw, Howarth, Blackett, Ellis, Stocks, Gibbons Ward, Edmund Smith, Veitch Clark, Joseph, and Barlow.

Apologies for absence were received from Lieut.-Col. Herbert Jones, Drs. Chalmers, Cates, Kerr, Lyster, Snell, and Kenwood. The Executive Secretary was directed to send a message of sympathy to the President, who was unable to be present owing to illness.

The minutes of the last meeting having been approved and signed, Dr. James Wheatley asked permission to refer to the decision of the Council on December 17th, 1920, regarding propaganda work in reference to dietary and food values. He suggested that the Council should not leave it to individual members to support such important movements, and he proposed to take an early opportunity of asking the Society to make a corporate pronouncement in this connection.

Correspondence.—(1) From the Central Council for District Nursing in London asking the Society to appoint four representatives to serve on that body for the year from July 1st, 1921. *Resolved:* That Prof. H. R. Kenwood, Dr. William Butler, Dr. Charles Porter, and Dr. Joseph Priestley be re-elected as representatives of the Society on the Central Council for District Nursing in London. (2) From the British Dental Association, asking for the co-operation of the Society in securing the adoption of a scale of salaries for Dental Officers by Local Authorities. *Resolved:* That the communication of the B.D.A. be referred to the Salaries Committee for early consideration. (3) From the Medical Defence Union, inviting the Society to take action in regard to the claim of a medical officer who had been refused a bonus by his local authority. *Resolved:* That as the claimant has apparently no legal claim against the local authority, intervention by the Society could serve no useful purpose. (4) From the Home Counties'

Branch suggesting that the Ministry of Health should be asked to encourage, or require, local authorities to reserve a certain proportion of the houses erected under their schemes for the accommodation of phthisical families. After considerable discussion, consideration of this proposal was deferred until the next meeting of the Council. (5) From a part-time medical officer of health, complaining that after twenty-three years' service he had been asked to resign his appointment without reasonable notice, and without any offer of superannuation or compensation. *Resolved:* That the Ministry of Health be asked (a) to consider sympathetically the claims of this medical officer of health to compensation for loss of office after many years of good service, and (b) to sanction no readjustment or amalgamation of sanitary areas unless adequate compensation is provided for medical officers of health who lose their appointments under such schemes. (6) From the Incorporated Vermin Repression Society asking the Society to nominate a representative on its Executive Committee. *Resolved:* That the Society is sufficiently represented by individual members already on the Council of the I.V.R.S.

Endowment of an Annual Prize.—The Council accepted with grateful thanks the offer of Dr. J. T. Neech, Medical Officer of Health for the county borough of Halifax, to endow an annual prize for the most valuable contribution to the transactions of the Society. It was referred to the President and Officers of the Society, with Dr. R. Veitch Clark, to draft the rules governing the award of the prize, for submission to Dr. Neech.

International Conference of Health Officials.—On the proposal of Dr. W. J. Howarth, it was agreed unanimously that, subject to certain preliminary requirements, the Society should convene an International Conference of Health Officials to assemble in London during the year 1923. Drs. Howarth, Barlow, Auden, Ellis and Kennedy, with the Executive Secretary, were appointed as a special committee to report on the organisation of the scheme.

The Federation of Medical and Allied Societies.—Lieut.-Col. N. Howard Mummery, General Secretary, attended to address the Council on the aims and purposes of this

Federation, with which he suggested the Society of Medical Officers of Health should become allied. Col. Mummery having answered a number of questions, he was cordially thanked for his address, which would be the subject of discussion at the next meeting of the Council.—The meeting then adjourned.

ORDINARY MEETINGS.

An Ordinary Meeting of the Society was held on Friday, Dec. 17th, 1920. The President (Lt.-Col. F. E. Fremantle, M.P.) presided, and the large attendance included Maj.-Gen. Sir W. G. Macpherson, Prof. John Robertson, Air-Commodore M. H. G. Fell, Mr. William Whitaker, F.R.S., and many officers holding health appointments of the Navy, Army and Royal Air Force.

The minutes of the last meeting having been approved and signed, the following candidates for membership were duly elected:—

Blair, Dorothy Olga Sutherland, M.B., B.S. Durh.; Bryson, Samuel, M.B., Ch.B., Glasg.; Chambers, Gladys Eileen, M.B., B.Ch., B.A.O., Belf.; Court, Charles, M.B., C.M., Glasg.; Cox, Arthur Neville, M.D., B.S., Lond., M.R.C.P.; Dent, Helen Patricia, M.B., B.S., Lond.; Dudley, Sheldon Francis, O.B.E., Surg. Lt.-Cdr., R.N., M.D., B.S., Lond., M.R.C.S., L.R.C.P., D.P.H.; Glover, Bertram Thos. Johnson, M.B., Ch.B., Liv., D.P.H.; Haines, John Finch, M.D., M.Ch., M.A.O., R.U.I.; Hall, Ethel Margaret Eades, L.M.S., S.A.; Hardie, John, M.B., C.M., Glasg.; Harding, Daniel Litton, D.S.O., Major, R.A.M.C.; Hawthorne, Jane Lorimer, M.B., Ch.B., Glasg.; Henry, Sydney Alexander, M.A., M.D., Ch.B., Cantab., M.R.C.S., L.R.C.P., D.P.H., D.T.M.; Hewitt, Dorothea Ellen, M.B., Ch.B., B.Sc., Liv.; Howie, Mary Evelyn, M.B., B.S., Durh.; Knowles, Reginald Herbert, Sqdn. Ldr., R.A.F., M.D., Ch.B., Liv., D.P.H.; Laird, Chas. William, B.A., M.D., B.Ch., Dubl., D.P.H.; Leney, Lydia, M.D., Brux., L.R.C.P. & S., Ed. L.R.F.P.S.; McCarthy, Chas. Joseph, M.B., B.Ch., N.U.I., D.P.H.; McClellan, James, M.D., Ch.B., Liv., F.R.C.S., Ed.; Moos, Framroz Nanabhoy, M.B., B.S., Bombay, D.P.H., D.T.M.; Neill, Balfour, M.D., Brux., M.R.C.S., L.R.C.P.; Pirret, Mary Janet, M.D., Ch.B., Glasg., D.P.H.; Pithie, Alex. Drimmie, L.R.C.P. & S. Ed., L.R.F.P.S.; Radford, Maitland, M.B., B.S., Lond., M.R.C.S., L.R.C.P., D.P.H.; Ramsbottom, James, M.B., Ch.B., Manch., D.P.H.; Smart, Blanch Mary Zillah, M.B., Ch.B., Edin., D.P.H.; Sutcliffe, Wm. Henry, M.C., M.D., Dubl., D.P.H.; Watts, Alex. Minter, M.D., B.S., Durh., M.R.C.S., L.R.C.P., D.P.H.; Williams, Geoffrey, Commeline, B.A., Cantab., M.R.C.S., L.R.C.P.

The Executive Secretary submitted a number of nominations for election at the January

meeting of the Society. Lt.-Col. H. R. Kenwood then delivered his address as President of the Navy, Army, and R.A.F. Hygiene Group, taking as his subject the purposes of the Group within the Society. An excellent discussion followed, amongst those taking part being Lt.-Col. John Robertson, Surg.-Cdr. R. St. G. S. Bond, R.N., General Sir William Macpherson, Capt. G. A. Auden, Squad.-Ldr. Andrew Grant, R.A.F., Col. Lclean, Lt.-Col. Herbert Jones, Capt. Slowan, Major J. Hutchinson Wood, and Dr. Charles Sanders.

The proceedings closed with a vote of thanks to Col. Kenwood.

An Ordinary Meeting of the Society was held on Friday, January 21st. In the absence of the President, owing to illness, Dr. Charles Sanders (Vice-President), occupied the chair. Upwards of forty members were in attendance.

The minutes of the last meeting having been approved and signed, the following candidates for membership was duly elected:—

Alexander, Janet Margaret, M.B., Ch.B., Glasg.; Basset-Smith, Percy William, C.B., C.M.G., Surg. Rear-Admiral, R.N. (ret.), F.R.C.P., F.R.C.S., D.T.M. and H.; Challis, Constance M., M.B., Ch.B., B.Sc.; Foster, Francis Gregory, M.A., M.B., Ch.B., Ed., D.P.H.; Grant, William, M.B., Ch.B., Ed., B.Hy., Durh., D.P.H.; Harper, John Maurice, V.D., M.R.C.S., D.P.H.; Hird, Robt. Beatson Dennis, M.D., Ch.B., Birm., F.R.C.S. Ed., L.R.C.P. Lond.; Howell, Howell Tylford, M.R.C.S., L.R.C.P.; Lovell, Edward Richardson, M.R.C.S., L.R.C.P., D.P.H.; Morton, Edwin, M.A., Oxon., M.D., C.M., Edin., D.P.H.; Ramsbottom, Edgar Nelson, M.A., M.D., Lond., B.Sc., M.R.C.S., D.P.H.; Scott, Sidney, M.C., M.B., B.S., B.Hy., Durh., D.P.H.; Sykes, Walter, L.R.C.P. and S., Edin., L.R.F.P.S., Glasg.; Thomas, Robert Evans, M.D., B.S., Lond., M.R.C.S., L.R.C.P., D.P.H.; Towers, Arthur Kinsey, M.B., Ch.B., Edin., L.R.C.P. and S. Edin., L.R.F.P.S., Glasg., D.P.H.; Walters, Ethelwyn Mary, M.B., Ch.B., Glasg.; Way, Leslie Ferguson Kennedy, D.S.O., Capt. R.A.M.C., M.R.C.S., L.R.C.P.

The Executive Secretary submitted a number of nominations for election at the February meeting of the Society.

Dr. G. E. Oates then read a paper on "Slum Areas in Central London," illustrated by some instructive maps, plans and diagrams. An excellent discussion followed, amongst those taking part being Dr. W. J. Howarth, Prof. Kenwood, Dr. T. Shadick Higgins, Dr. Charles Sanders and Dr. F. J. Allan.

The meeting closed with a vote of thanks to Dr. Oates for his paper.

METROPOLITAN BRANCH.

A meeting of this Branch was held at the Society's Rooms in London, on Friday, 10th December, 1920, the President (Dr. W. M. Willoughby) occupying the Chair. There were twenty-three members present.

Sir William R. Smith drew attention to the fact that the Ministry of Health had issued an instrument altering the Constitution of the Sanitary Inspectors' Examination Board so as to include two representatives of the Sanitary Inspectors' Association. The Board had protested to the Ministry that there was no need for such representation, and further, to meet the circumstances that would be created, had suggested that it would be advisable to increase the representation of the Society of Medical Officers of Health from one member to two members. The Branch decided to await a communication from the Sanitary Inspectors' Examination Board on the subject, and to refer it to the Council of the Society.

The report of the Tuberculosis Group on Dr. Menzies' Report to the London County Council on Tuberculosis Work in London was fully discussed and certain amendments suggested. It was decided to submit these to the Tuberculosis Group for consideration, and thereafter to send a copy of the amended report to the Ministry of Health, the London County Council, and to arrange, if possible, for its publication in "Public Health."

It was stated that the Holborn Borough Council proposed advertising for a Medical Officer of Health at an inclusive salary of £800 per annum. This was considered totally inadequate, and the Branch gave instructions for the matter to be brought before the Council of the Society.

The Branch decided, in conjunction with the Home Counties Branch, to present to the Society a portrait of Dr. H. R. Kenwood, on his completing two years as President of the Society.

NORTH-WESTERN BRANCH.

A meeting of the above branch was held at Manchester, on Friday, January 14th, 1921. There were present Dr. H. E. Corbin (President), in the chair, and 20 members.

An interesting and instructive paper on "Encephalitis Lethargica" was read by Dr. C. S. Thomson (Medical Officer of Health, Hyde). This led to a good discussion, in which

the President and Drs. Wilkinson, Talent Wynne, Stallybrass, McClure and Dickinson joined. Dr. Thomson received a hearty vote of thanks on the proposition of Dr. Wilkinson, seconded by Dr. Talent.

Attention was drawn to the report of the Hon. Treasurer of the Society, regarding the necessity for an increased annual subscription. The matter was deferred for further consideration at the next ordinary meeting of the branch to be held on the 11th February.

SCOTTISH BRANCH.

A meeting of the Scottish Branch was held in the Municipal Buildings, Glasgow, on Saturday, 11th December.—Present: Dr. Campbell Munro (in the chair), and 14 members.

The constitution and rules of the school medical groups as approved by the parent Society were submitted, when it was agreed to enquire of the Association of School Medical Officers of Scotland whether they would be willing to merge themselves in such a group if it were formed, and that the secretary in writing to the association should direct their attention to the advantages of membership of the Society.

The branch had under consideration a circular from Dr. Struthers Stewart, of Murtle Sanatorium, with reference to the proposed formation of a Tuberculosis Society for Scotland. The branch resolved to form a Tuberculosis group and instructed the secretary to ascertain the names of those who would be willing to join such a group, and the secretary was instructed to inform Dr. Struthers Stewart of the decision of the branch, and to suggest that the promoters of the proposed society should reconsider their decision, and to point out the advantages of the membership of the branch, the importance of joint meetings of Tuberculosis Officers concerned with the diagnosis and treatment of out-patients with institutional medical officers dealing with the same problems among in-patients, and the impossibility of dissociating the clinical problems of tuberculosis from the social aspects of the subject, and pointing out that all medical officers engaged in dealing with tuberculosis either in out-patient departments, sanatoria, or hospitals, are eligible for membership of the Society.

NORTHERN BRANCH.

General Meeting in Tea Room, Town Hall, Newcastle-upon-Tyne, 10th December, 1920.

Present.—The President (Dr. T. Eustace Hill), and 34 members.

Minutes.—As the minutes of the Annual General Meeting on 29th of October had already appeared in full in "Public Health" they were taken as read, and were confirmed and duly signed by the President.

Correspondence.—The Secretary read letters of apology for non-attendance from Drs. McIntosh, Glass, Gibson, and Taylor, the latter on account of illness. It was agreed that the Secretary convey to Dr. Taylor the regrets of the meeting and an expression of its hope for his speedy recovery.

A letter from Dr. James Arthur was submitted, stating that he had retired from his position as medical officer of health and that he was resigning his membership of the Society, after a close connection lasting 29 years. On the suggestion of the Secretary it was unanimously agreed that Dr. Arthur, although no longer a member of the Society, be elected an Honorary Member of the branch.

The Secretary stated that he had invited the President (Lt.-Col. F. E. Fremantle) and the Executive Secretary (Mr. G. S. Elliston) to attend the meeting and the branch dinner afterwards. Unfortunately, owing to prior engagements neither was able to be present.

Salaries.—The Secretary reported on the action taken by the Society in this matter, and gave an account of the progress to date.

Dr. Foggin said that he had intended to raise the question at this meeting, but in view of the Secretary's explanation he moved that consideration of the matter be adjourned until next meeting.

Dr. Cameron seconded, and the motion was agreed to.

Capt. W. N. Jackson, R.A.M.C., Special Sanitary Officer, Northumbrian Area, was unanimously elected a member of the branch.

Fellowship of the Society.—The Secretary reported that under the new constitution the Council of the Society had decided that all the medical officers of health not already fellows were to be elected as such forthwith. The Articles of Association allow the election to the fellowship of one non-medical officer of health for every two medical officers of health, and the vacancies to be

filled had been allotted to the branches *pro rata*, according to strength of membership.

The Northern Branch had 22 medical officers of health members, and under the above arrangement these should now become fellows.

The Branch Secretary submitted a list of non-medical officer of health members in the different sections, as under, and he suggested that a proportion from each, as shown, be nominated for fellowship:—

	No.	No. for nomination for Fellowship.
Assistant Medical Officers of Health	4	1
School Medical Officers	15	6
Tuberculosis Medical Officers ...	12	6
Venereal Disease Medical Officers...	7	3
Maternity and Child Welfare Medical Officers	10	4
Specialist and others	4	—

It was agreed that the suggestion of the Secretary be adopted, and the following were formally nominated:—

1 Assistant Medical Officer of Health.

Dr. M. S. Fraser, Cumberland C.C.

6 School Medical Officers.

Dr. D. Allan, Sunderland.

„ G. Foggin, Newcastle.

„ A. G. Glass, Durham C.C.

„ R. F. Lunn, Newcastle.

„ M. Gonigle, G.C.M., Durham C.C.

„ Pringle, A.M., Newcastle.

6 Tuberculosis Medical Officers.

Dr. T. M. Allison, Stanington Sanatorium.

„ J. G. W. Boleyn, Durham C.C.

„ F. J. Henry, Middlesbrough.

„ K. B. Macglashan, Tynemouth.

„ D. F. Macrae, Durham C.C.

„ S. K. Young, „

3 Venereal Disease Medical Officers.

Dr. Mary Raw, Newcastle R.V.I.

„ N. F. Rowstron, Sunderland.

„ Chas. Franks, Durham.

4 Maternity and Child Welfare Medical Officers.

Dr. M. Brodie, Durham C.C.

„ H. G. Davidson, Newcastle.

„ R. P. R. Lyle.

„ A. F. G. Spinks, Newcastle.

Some discussion took place as to the position of medical officers of health with regard to the National Association of Local Government Officers,

which had recently become a trade union, and so was liable to be involved in a strike. It was requested that the Council of the Society give some guidance as to what might be considered appropriate action in the circumstances, as at present it was left to the individual member to decide for himself.

It transpired that the President and the Secretary of the Branch, acting quite independently of one another, had resigned their membership of their local Municipal Officers' Associations. The Secretary had communicated with headquarters, but had not been able to obtain any very definite opinion.

The Secretary was instructed to endeavour to obtain some indication from headquarters as to what action should be taken by members in the matter.

Dr. A. Smith opened a discussion on the Presidential Address upon the inter-relationship of Curative and Preventive Medicine, in which a number of members took part. Among the speakers was Dr. R. A. Bolam, a co-member with the President, of the Consultative Council, and he gave valuable and reassuring information upon the spirit and intention behind the interim report.

An adjournment was made subsequently to the Central Station Hotel, where thirty-two of the members, including four of the ladies, dined together. This annual function is a strictly informal one, and is greatly appreciated for the somewhat unique opportunity it affords of promoting friendly relations between the guests. The present occasion was only exceptional in that in addition to the usual loyal toast, proposed by the President, Dr. A. G. R. Cameron gave the health of the lady members, who had honoured the dinner for the first time, and this was responded to by Dr. Mable Brodie.

DR. A. T. NANKIVELL has been appointed medical officer of health for the Borough of Hornsey.

THE Minister of Health has made the following appointments on the staff of the Welsh Board of Health: Medical officer, Dr. M. B. Arnold, one of the medical officers of the Ministry, who has been seconded for temporary service in Wales; assistant secretary, Mr. Lewis Evans, Welsh Board of Health, appointed in place of Mr. A. M. Leveaux, who retired on 31st August, 1920, on reaching the retiring age.

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Editorial.

ENCEPHALITIS LETHARGICA.

IN view of the vague character of the disease known as encephalitis lethargica, and also on account of the publicity given in the Press to the cases, the issue of a memorandum on the subject by the Ministry of Health will be generally welcomed. An excellent summary of all the known facts about the disease is given, and the suggestions made as to administrative measures will be useful in co-ordinating the activities of the sanitary authorities on this subject.

The provision of medical assistance (including nursing) to the poorer inhabitants is sanctioned, and the treatment in hospitals is recommended. The isolation hospitals of local authorities should,

it is stated, be available for cases, but the memorandum discreetly ignores the district with no isolation hospital. Advice as to isolation of the case and the treatment of contacts is given, and the exclusion from school in the case of school children contacts is recommended. Other measures referred to include the use of gargles and sprays for disinfecting the throats and noses of contacts, and the subsequent disinfection of the sick room.

These appear to be sane precautions, and will be adopted by all medical officers of health as reasonable and necessary. There is reason to believe that encephalitis lethargica resembles in its incidence the two kindred diseases—cerebro-spinal fever and acute poliomyelitis—in the fact that there are probably enormous numbers of mild unrecognised cases to every recognised case. This fact explains why it is so rarely that any obvious "spread" of these diseases can be reported. The chances are probably at least a hundred to one that any case among the contacts will be so mild as to be unrecognisable, but these mild cases are just as liable as the more severe ones to give rise to a fatal infection.

Unfortunately, "The Lancet," in a recent issue, has taken a stand on the side of official apathy and non-interference. This, as every medical officer of health knows only too well, is the characteristic attitude of the "clinician," but the public interest would be badly served if medical officers of health adopted the happy-go-lucky methods of our contemporary, which says:—

"For most notifiable diseases there is a routine procedure—isolation of the patient, removal to hospital, and disinfection of the house. In the case of encephalitis lethargica, those who have had experience do not hesitate to treat patients in a general hospital. Nor can we see that it is justifiable, in view of the apparently non-infectious nature of the disease, to exclude 'contacts' from school or work. Education is already much

interfered with by diseases known to be infectious and we ought not to add another disease to the list without any evidence of its infectivity and simply because it is as yet a mystery. The tendency is rather to regard a mysterious disease as infectious, . . . There is already too great a tendency on the part of the half-informed to create scares about new diseases and we must not pander to that tendency. Notification has its value no doubt as a means of putting the medical practitioner on the alert when he meets with obscure ailments resembling encephalitis lethargica, and of thus facilitating the patient investigation of its cause, but it cannot be said that, in the present state of our knowledge, notification enables the sanitary authority to take any practical steps for the prevention of encephalitis lethargica."

THE CARRIER PROBLEM.

For many years the carrier has been one of the difficulties in the way of a medical officer of health, and the Scottish Board of Health is to be congratulated in solving the problem for its area.

In a circular letter issued to Local Authorities it is explained that "carriers" are persons who, while not showing any other sign or symptom of a particular infectious disease have within themselves the germs or other infective virus of that disease, and are liable to pass on the infection in an acute form to other persons. To provide against the spread of infectious disease from this cause the Board of Health have drawn up regulations which come into operation on 1st March, and which give the Local Authority power to deal with a person adjudged to be a carrier of an infectious disease in the same manner as if he actually suffered from the disease. Before a person is to be deemed a carrier, however, he must be certified as such by a medical officer of health and also by another registered medical practitioner, such certification to have effect for a period not exceeding three months. Further examinations may be made at any time after the date of a certificate, and the carrier may demand to be re-examined during the currency of a certificate.

The Board have also under their consideration the question of special treatment which it may be possible to afford in the case of different classes of carriers, with a view to removing the danger, or so modifying it as to render restraint of the carrier unnecessary. They are in communication with the

Medical Research Council as regards the need for special research into the problem of enteric carriers. A further communication on the subject will be issued as soon as practicable, but in the meantime the above powers are extremely useful. How long will English medical officers have to wait for similar powers?

A REACTIONARY TRIUMPH.

The "economy" circular just issued by the Ministry of Health will be hailed with delight by all the reactionary elements of local authorities who dislike, above all things, to spend money on public health. We believe that the circular has been issued by the Ministry only under the severest political pressure, and this impression is confirmed by Dr. Addison's excellent article in a recent issue of "The Observer," in which he points out "in the outcry which has been raised on the subject of economy few criticisms have been more out of proportion than those which have been directed against the Ministry of Health and the services for which it is responsible." Dr. Addison goes on to demonstrate two things, (1) that the amount spent on public health is an extremely small fraction of the total public expenditure, and (2) that wonderful results are being obtained for such expenditure.

There is no doubt at all that the circular now issued can and will be used by every slack authority as an excuse for postponing all efforts to raise itself to the level of the more progressive ones; in fact the circular will in many cases be the direct cause of decreasing the amount of health work done by many councils all over the country, in addition to the arrest of practically all progress. The real need, on the other hand, was, we venture to suggest, the issue of a circular endorsing the general need for economy, but urging upon the local authorities the importance to human life and happiness of the relatively insignificant amount now being spent on public health, and suggesting that such expenditure should be the last of all to be cut down.

Another part of the circular to which the strongest exception will be taken by the great majority of medical officers of health is the further recommendation of voluntary agencies for public health work. For some mysterious reason the Ministry continues to regard with increasing

favour the activities of voluntary workers and societies, and the new and extraordinary policy has been adopted of direct subsidy from the Ministry to local voluntary societies without any reference to the public authority of the area. In this way, undoubtedly, a large sum of money is being expended without adequate public control, and without corresponding public advantages. Public health work based on voluntary workers and societies is usually of a make-believe character, and has other unsatisfactory features which are recognised by most medical officers of experience, and the expenditure of the same amount of public money in the usual official channels usually produces infinitely better results. The recommendation of the voluntary agency, however, has a suitable place in this "economy" circular, as such agencies have always been beloved by the less progressive local authorities.

LEICESTERSHIRE COUNTY ISOLATION HOSPITAL SCHEME.

An order has been issued by the Leicestershire County Council, under the Isolation Hospitals Acts, 1893 and 1901, constituting the Administrative County of Leicester a hospital District. This order forms the whole of the the urban and rural districts, and the one borough of the county into one isolation hospital district for the isolation of all diseases except small-pox.

The same combination of districts was made for the isolation of small-pox some 20 years ago, with a differently constituted committee.

There is little doubt that a similar arrangement in practically all county areas would result in a great improvement in the isolation provision. By pooling all the present isolation hospital accommodation in this way, considerable economy can be effected, and a uniformity of administration can be attained which is possible in no other way. Probably all county medical officers would be interested to read the order issued by the Leicestershire County Council.

In the next column we publish an article on the present position of the salaries question, written at the special request of the Council by Dr. Buchan, Chairman of the Salaries Sub-Committee of the Council, which will be of interest to every medical officer.

SALARIES IN THE PUBLIC HEALTH SERVICE.

The Special Committee of the Society on the Remuneration of Medical Officers of Local Authorities is still in constant session, and hopes soon to be able to report that everything is in order for launching the campaign for the improvement of salaries of Medical Officers of Local Authorities. The work is arduous and takes time, but those who are anxious to achieve results quickly may be assured that every member of the Special Committee, individually and collectively, are doing all that can be done to hasten forward the work.

The Salary Scales adopted by the Council of the Society on the 24th September, 1920, for submission to the National Joint Council for Local Authorities' Administrative, Technical and Clerical Services were subsequently approved by the Conjoint Committee of the Society and British Medical Association and the representatives of the British Medical Association further undertook to give any support within the power of the Association to the Society of Medical Officers of Health in putting forward their claim through the National Association of Local Government Officers to the National Joint Council for Local Authorities' Administrative, Technical and Clerical Services for the scale approved by the Council of the Society on the 24th September, 1920. The scale has now been submitted to the National Association of Local Government Officers which body is in process of co-ordinating the scales of salaries of all Local Government Officers so that they may be presented to the National Joint Council on a uniform basis. The Chairman of the Special Committee of the Society is on this Co-ordination Committee and reports that the committee is making good progress with their work, which, having regard to the number and variety of officers employed by local authorities is not easy. The rate at which progress towards decisions might be made is further reduced because the whole question of Whitleyism as applied to the Local Government Services is on trial and local authorities are doing their best to back out of the National Joint Council for Local Authorities' Administrative, Technical and Clerical Services, which was set up originally at the instance of the Ministry of Labour. This is not because of any fault that local authorities have to find with the principles of Whitleyism, but simply because they are faced with an unanswerable case from Local

Government Officers which can only be met by an increase of salaries which they are taking every means in their power to avert.

All Medical Officers of Local Authorities should remember that the bigger the Society of Medical Officers of Health, which will be responsible for stating the case before the National Joint Council, the greater will be the consideration shown their cause and the greater the likelihood of getting the best awards. It is therefore to be hoped that every medical officer employed by a local authority will at once join the Society. Responsible medical officers who have not yet filled up the schedule stating present day salaries, bonus, etc., which was issued with the January number of "Public Health" will greatly aid the Special Committee if they will return the same to the Executive Secretary forthwith.

The Special Committee on the Remuneration of Medical Officers of Local Authorities desire to assure fellows and members that no stone is being left unturned to make the case a sound one, to present it in its best possible form with the greatest amount of concerted action on the part of all associations concerned, and to achieve the best possible results for all medical officers of local authorities.

THE MINISTRY OF HEALTH BILL.

The following letter has been addressed to the Minister of Health by the Chairman of the Executive Council of the County Councils Association (Sir Ryland Adkins), and the Vice-Chairman of the Council (Sir Arthur W. Chapman), on behalf of the County Councils Association:

Sir,—The rejection of the Ministry of Health (Miscellaneous Provisions) Bill in the House of Lords, and the criticism in the public press on its provisions for housing and for hospitals, have tended to conceal a fact of some importance, namely, that the Bill, both as introduced into the House of Commons and as sent up to the House of Lords, contained provisions of much importance in the interests of economical local administration. The following are instances:

Clause 6 would enable local authorities, with the consent of the Minister of Health and the Treasury, to secure on advances and expenses made and recoverable by them under certain

existing Acts a rate of interest corresponding with the market rate at the present day, whereas they are now able to secure such rate of interest only as was usual in pre-war times. This would involve a direct saving to the rates of any such authority.

Clause 7, empowering a local authority to supply water beyond its own district or an adjoining one, was intended and adapted to prevent the far greater expense of launching new water undertakings.

Clause 11 enables existing officials to be made use of as inspectors of food instead of necessitating the appointment of new officials, a provision both economical and, it would appear, anti-bureaucratic.

Clause 14 enables sanitary authorities to be saved the expense of providing separate buildings for post-mortem examinations.

Clause 15, sub-clause (3) would enable local authorities to use unapplied balances of loans raised before the war at a low rate of interest (which, as the law now stands, would have to be applied in reduction of debt) for purposes which otherwise would involve raising or borrowing new money at the far higher rate of interest now current.

Clause 19 enables local authorities to lend premises, if they choose, to Government departments, and so to obviate the totally unnecessary hiring or other provision of premises by Government departments or local authorities.

These various clauses, to say nothing of other provisions in the Bill, directly assist public economy, and, apart from that, would have little meaning. Without in any way desiring to convey approval of hasty legislation or to minimise the very proper objection taken on that ground to the Bill as a whole, we, as representing a body which is greatly concerned in endeavouring to promote economy in local administration, may perhaps be allowed, in the interests of fairness in controversy and clearness of vision as to what was meant by this measure, to call attention to the above facts. Not for the first, nor, we fear, the last time in Parliamentary history have useful but uninteresting provisions suffered by being conjoined with other matters which excite feeling and can be used for political purposes.

THE INFLUENCE OF DUST INHALATION UPON THE INCIDENCE OF PHTHISIS.*

BY

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Predisposition is to-day the key note to the tuberculosis problem. Eradication of the infecting agent, the tubercle bacillus, is not a practical proposition in the same way that the infective agent of yellow fever or of malaria may be eradicated by destruction of mosquitoes, that of typhus by war upon the body louse, or that of enteric fever by ensuring a pure water supply. Further, even if eradication could be ensured, the question would arise as to how great the final benefit to the community would be, since tuberculosis is for the most part an index disease, that is it is closely correlated with the death-rate from all other causes, and its prevalence is a direct indication of the prevalence of sub-normal health in the community. Greater benefit must follow from increasing the resisting power of the nation, so that not only tuberculosis but other forms of disease as well, are held at arm's length. There is definite evidence that just as typhus has gone from this country and typhoid is rapidly disappearing, so, although we are uncertain as to the reason, phthisis also is diminishing, while simultaneously the general death-rate has been falling.

TABLE I.
COMPARATIVE MORTALITY OF ENGLAND AND
WALES SINCE 1851.

Period.	MALES.		FEMALES.	
	Phthisis.	All Causes.	Phthisis.	All Causes.
1851-60 ..	100 ..	100 ..	106 ..	91 ..
1861-70 ..	97 ..	102 ..	96 ..	91 ..
1871-80 ..	88 ..	99 ..	79 ..	85 ..
1881-90 ..	73 ..	90 ..	62 ..	78 ..
1891-1900 ..	61 ..	88 ..	46 ..	75 ..
1901-10 ..	50 ..	75 ..	35 ..	62 ..
Fall in 50 years	50% ..	25% ..	67% ..	32% ..

N.B.—The death rates are expressed as percentages of the male rate for 1851-60 which was for All Causes 22.1 per 1,000, and for Phthisis 2.6 per 1,000.

The figures given in the table show how phthisis continues to be a pointer to influences which lower resistance to disease. Among these influences the condition of the atmosphere stands probably first. That it does influence general health is indicated by analysis of mortality data

* A paper read before the Tuberculosis Group of the Society of Medical Officers of Health, on January 14th, 1921.

such as that made by Brend (1), who concluded that excess of infantile mortality is due to some factor or factors in industrial towns, the centres of large cities, and mining areas, of which possibly the most important is the polluted state of the atmosphere. Similar conclusions as to the influence of atmospheric conditions follow from analysis of adult mortality data. But the influence of the atmosphere on general health, and particularly on the incidence of tuberculosis, is a large subject upon which I am not embarking. My intention is only to refer to the influence of dust particles which may be inhaled.

Some apology might be needed from me in venturing to deal again with this aspect of tuberculosis. But there seems to be still some lack of appreciation as to where we stand to-day in relation to the matter, and also there is some new evidence to report. Hence I venture to return again to the subject.

Particulate matter which may be inhaled is as various in its composition as that of matter in general. It may be composed of (a) viable cells, i.e., micro-organisms; (b) dead animal or vegetable substances, or (c) inorganic material. Each group, from the point of view of inhalation, is important.

Viable Particles.—The only member of this group is the tubercle bacillus itself. Some authorities, I am aware, favour the intestinal tract as the main portal of entry, and hold that pulmonary tuberculosis results from alimentary infection which may have taken place years before. I may personally be prejudiced against this view since I recall (1) how industrial lead poisoning used to be ascribed in the main to material which was swallowed, until Goadby showed that poisoning followed upon inhalation of one hundredth part of the dose necessary if administered by mouth; and (2) how Calmette at one time claimed that dust found in the lungs did not get there through direct inhalation, but only *via* the digestive tract.

Certainly there stands the undoubted fact that animals can be infected aurally. Until proof to the contrary is forthcoming I incline to the view that adult phthisis as seen in industries is a new infection, probably air borne. For the moment I am content to lay stress on the fact that, other things being equal, phthisis among adults is more prevalent in crowded communities, where exposure to direct infection is more possible. The theory of adult infection may be held to receive support

from the unusual mortality from phthisis experienced in sedentary or semi-sedentary occupations, such as shoe-making, printing, and tailoring, wherein aggregation of individuals seems to be one factor distinguishing the conditions from those of other occupations.

A number of other possible factors have been considered (2):—fatigue, hereditary predisposition, poverty and consequent malnutrition, alcoholism, housing, infection from materials used, legal overcrowding, cramped position at work, and sedentary character of work; only to be rejected when these industries are compared with other occupations with lower mortality from phthisis. Thus to take two only:—the claim that phthisis is here a *pestis pauperum* fails, for the shoemaker certainly receives no less a wage than operatives employed in the manufacture of hosiery. While the physical attributes of the atmosphere are not more unfavourable than in textile industries where the incidence of phthisis is not abnormal, but where individuals are further separated. In the three industries named in the preceding paragraph phthisis is the only great cause of death markedly in excess, so that difficulty arises in accepting the view that the excess is due to general lowering of resistance to disease. When general resistance is lowered, as by alcohol, every cause of death should, on theory, be found in excess, and indeed this is found to occur among innkeepers and publicans. (See Table 2). When general resistance is increased as by outdoor life, every cause of death should be found diminished, and this is found to occur among agricultural labourers.

TABLE II
COMPARATIVE MORTALITY IN CERTAIN
OCCUPATIONS, 1900-02.*

Class	Phthisis	Diseases of the Nervous Circulatory Respiratory Systems.			All Causes.
ALL MALES ..	186	105	144	174	1,000
Labourer in Agricultural Districts ..	75	52	102	80	567
Coal Miner (Lancashire) ..	98	77	121	261	939
Wool, Worsted operative ..	161	92	150	155	917
Hosiery opera- tive ..	200	93	129	142	862
Cotton opera- tive ..	214	100	140	199	1,010
Innkeeper, Publican ..	232	178	209	250	1,709
Tailor ..	243	89	123	145	950
Shoemaker ..	247	83	136	140	916
Potter ..	291	98	199	425	1,372
Printer ..	323	71	107	110	903
Cutler ..	506	105	206	300	1,468
Tin Miner ..	851	77	161	735	2,160

* Figures above the standard set by All Males are printed in heavy type.

When local resistance is lowered as in the case of the cotton operative by cotton dust, of the cutler, potter and tin miner by silica dust, and of the coal miner by rock dust, the effect is to increase the incidence of diseases which attack the locality concerned, in this case the respiratory organs. (3) But if we postulate merely increased exposure to a definite infection, the only result to be anticipated is increase of the disease caused by the infecting organism; and the mortality data of shoemakers, printers and tailors appear to present instances where this exposure to an undue amount of infection with tubercle bacilli exists.

I have previously referred (4) and shall refer again later to this method of statistical differential diagnosis; for the moment I ask for consideration of the evidence it appears to give in support of direct personal infection with tubercle bacilli, probably air borne.

Dead Animal and Vegetable Substances.—

This group is promising to be one of great interest. Evidence is gradually accumulating to show that so far as phthisis is concerned, dusts belonging to this group fall into two classes, one including dusts which are innocuous, and the other including dusts which may be positively beneficial.

As long ago as 1913 when dealing (5) with the effect of dusts in producing diseases of the lungs, I suggested that dusts appear to be more injurious as their chemical composition differs from that of the human body, or from the elements of which the body is composed. The chemical composition of this group of dusts is closely allied to that of the body. And the evidence before us is that no class of persons exposed to the inhalation of this group of dusts is known which experiences a high incidence of phthisis, unless that incidence can reasonably be ascribed to other influences.

The possibility of dusts belonging to this group acting as carriers of tubercle bacilli cannot be neglected when considering either this group or indeed any other group of dusts. Theoretically any form of dust may thus assist in the dissemination of tubercle,* but I know of no definite evidence bearing on the question. Consideration of this carrier possibility belongs rather to the question as to whether pulmonary tuberculosis arises from aerial infection. If we accept this possibility then we may reasonably accept that infected dust particles, as well as isolated bacilli, may give rise to infection.

The evidence that some organic dusts may be beneficial rests on the prevalence of phthisis in two industries (i.) coal-mining, and (ii.) the manufacture of ganister bricks.

Coal-mining.—The low death rates from phthisis experienced by coal miners on every coal-field (see Table 3), not only in this country, but also abroad, compel us to admit that coal dust exerts a definite inhibitory influence upon the prevalence of phthisis. I shall consider later variations in phthisis mortality which occur on the different fields. For the moment I wish to point to the fact that coal dust appears to exert a favourable influence. So much is this accepted that the proposal has been made to dust the galleries of gold-mines with coal dust to prevent miner's silicosis.

TABLE III.

MORTALITY FROM PHTHISIS AMONG COAL MINERS.

Coal-field.	Total No. of deaths.	Comparative mortality figure.	Median age at death.
1900-02.			
Nottinghamshire and Derbyshire ..	160	64	34
Staffordshire ..	119	66	35
Durham and Northum- berland ..	450	84	31 to 32
Yorkshire ..	255	88	37 to 38
Monmouthshire and South Wales ..	434	93	34 to 35
Lancashire ..	269	96	38
Occupied and Retired Males ..	64,097	187	38 to 39
1910-12.			
Nottinghamshire ..	79	53	29 to 30
Derbyshire ..	144	70	34
Durham and Northum- berland ..	541	70	31 to 32
Monmouthshire and South Wales ..	476	70	37
Staffordshire ..	155	74	34 to 35
Yorkshire ..	404	81	36 to 37
Lancashire ..	365	107	40
Occupied and Retired Males ..	58,492	142	38 to 39

While the possibility of coal dust exerting a favourable influence requires to be carefully looked into, sight must not be lost of the way in which miners work. Both underground and on the surface they work far apart; there is but little personal contact, but little possibility of passing on infection.

Recent investigation in the iron and steel industry (6) has brought to light a similarly low phthisis mortality among furnace men which is associated with an abnormally high mortality from

respiratory diseases, ascribed in this instance to exposure to climatic conditions. These men also work far apart.

This view of the case would place adult phthisis alongside whooping cough, measles, and scarlet fever among the diseases directly communicable from person to person.

TABLE IV.

MORTALITY FROM PNEUMONIA AMONG COAL MINERS.

Coal field.	Total No. of deaths.	Comparative mortality figure.	Median age at death.
1901-02.			
Nottinghamshire and Derbyshire ..	114	52	46 to 47
Durham and Northum- berland ..	228	54	49 to 50
Yorkshire ..	195	71	44 to 45
Staffordshire ..	117	71	51
Monmouthshire and South Wales ..	456	108	42 to 43
Lancashire ..	370	149	43 to 44
Occupied and Retired Males ..	35,517	92	49 to 50
1910-12.			
Derbyshire ..	77	34	49 to 50
Nottinghamshire ..	67	40	47 to 48
Durham and Northum- berland ..	379	54	51
Yorkshire ..	317	69	48 to 49
Monmouthshire and South Wales ..	457	69	45 to 46
Staffordshire ..	137	70	48 to 49
Lancashire ..	366	100	48
Occupied and Retired Males ..	32,628	67	51 to 52

Ganister Bricks.—Ganister is a quartzite rock, i.e., it is a form of pure silica, and those who inhale ganister dust suffer from an excessive mortality from tubercular silicosis; but if this stone is mixed with fireclay as it is in making second grade bricks, the dust loses its pernicious character (See Table 6). All clays do not have this effect, only fireclays; certainly pottery clay does not render flint dust harmless to potters.

Fireclays are grouped here because their influence probably depends on their containing certain organic constituents. This matter will be referred to again later.

Two little is known to-day of the possibility of other dusts in this group, exerting a favourable influence. The subject is worth close attention. Ten years ago all forms of dust were condemned as dangerous. Then attention was drawn by me to the particularly pernicious nature of silica dust, and to the fact that so far as phthisis is concerned, no other dust appeared to be similarly injurious.

A further advance is now being made through recognising that some dusts of organic origin may have a favourable influence.

INORGANIC DUST.

This group also has two sub-divisions: (i.) inert dusts, (ii.) injurious dusts.

Inert Dusts.—The majority of inorganic dusts, although most of them undoubtedly predispose to such respiratory diseases as asthma, pneumonia and bronchitis, are inert so far as phthisis is concerned. Dusts of limestone, oxide of iron, plaster of Paris, alabaster, and plastic clays are examples of inorganic dusts which appear to exercise no influence upon any form of pulmonary disease.

Basic slag, emery and glass are examples of inorganic dusts which predispose to pneumonia and bronchitis, but not to phthisis.

Harmful Dusts.—This group, so far as evidence goes to-day, is entirely made up of the various forms of silica dust. We do not know of the occurrence of that form of fibrosis which predisposes to tuberculosis, resulting from dust inhalation, among any group of persons except those exposed to the inhalation of silica dust (8). The silica must be free in the form of flint, quartz, or quartzite, and not in the form of a salt, i.e., as a silicate. Geologically I should remind you that silica is considered an acid. Chemically, it belongs to the same group as carbon, and it possesses a similar capacity to carbon for forming colloidal compounds.

The case, so far then, is that there are (a) some dusts of organic origin which exert a favourable influence upon the incidence of phthisis, (b) some dusts, mostly inorganic, which are neutral, and (c) others, composed of silica, which are definitely harmful.

The next question is to consider what occurs when harmful and favourable dusts are mixed. I have already alluded to two instances, and must now deal with them in greater detail.

Coal Mining.—Coal miners are exposed not merely to coal dust, but to dust arising from the rocks among which coal is found. These rocks undoubtedly contain much free silica; yet the coal miner does not succumb to tubercular silicosis. Mine dust, nevertheless, does not affect all miners alike. Some men, the colliers, get coal, while others rip away the rock; the latter get more rock dust. On some coal fields, of which Lancashire is an instance, owing to the lie of the coal, more rock ripping is done than on others. On these coal

fields the incidence of phthisis (although absolutely low), when compared with that of other fields, is high (*see Table 3*).

The figures here given also show that on these fields the incidence of pneumonia and bronchitis is much above the normal. (*See Tables 1 and 5*).

TABLE V.
MORTALITY FROM BRONCHITIS AMONG COAL MINERS.

Coal-field.	Total No. of deaths.	Comparative Mortality Figure.	Median age at death.
1900-02			
Durham and Northumberland ..	256	41	64 to 65
Nottinghamshire and Derbyshire ..	170	49	67 to 68
Yorkshire ..	221	67	62 to 63
Staffordshire ..	252	104	64 to 65
Monmouthshire and South Wales ..	435	104	61 to 62
Lancashire ..	296	113	58 to 59
Occupied and Retired Males ..	40,292	58	66 to 67
1910-12.			
Nottinghamshire ..	87	25	71
Durham and Northumberland ..	414	33	67 to 68
Derbyshire ..	144	39	67 to 68
Yorkshire ..	330	45	66 to 67
Staffordshire ..	244	61	67 to 68
Monmouthshire and South Wales ..	538	66	64 to 65
Lancashire ..	462	88	64 to 65
Occupied and Retired Males ..	37,648	38	67 to 68

There is a further point:—the data presented indicate that the less the amount of phthisis, the younger are its victims. This varying median age at death has its importance in view of Dr. John Brownlee's conclusion (9) that there are different types of phthisis, one of which he calls "old age" phthisis. Concerning this type he writes: "The only association which has been made out quite definitely and beyond dispute is that it is especially common among miners, coal, iron, lead, etc., and also among the workers in the Welsh slate quarries. The cause of this association is at present quite unknown." The presence of an undue amount of this type of phthisis in any group of miners would raise the median age at death from phthisis among the group.

Reference has already been made to the importance statistically of the prevalence of other respiratory diseases such as pneumonia and bronchitis, when the relation to phthisis of dust inhalation is under consideration. The incidence

of these diseases among coal miners is important. No suggestion has been put forward that coal dust in any way checks the incidence of these diseases.

Pneumonia among Coal Miners.—The mortality from pneumonia on the different fields is found to vary within wider limits than that of phthisis. Moreover, for certain fields it exceeds the standard given for occupied and retired males. In both decennial periods the same three fields are at the bottom of the list, with Lancashire maintaining its unenviable last place. The miner on the Lancashire field in 1900-02 stood among the twenty-six occupational groups with the highest mortality from pneumonia; a position shared in 1890-02 by the miner of Monmouthshire and South Wales. Derbyshire, Nottinghamshire, Durham and Northumberland are at the top for both decennial periods, and they appeared in 1900-02 among the twenty-seven occupations with the lowest mortality from pneumonia. In the case of this disease (in contradistinction to phthisis) the tendency is for the median age at death to be lower than normal in those fields where the mortality is high. If we accept that the disease is influenced by dust inhalation lowering the pulmonary resistance this tendency is what might be expected.

Bronchitis among Coal Miners.—The mortality from bronchitis on the different fields varies within wider limits than in the case of pneumonia. Here again the standard is sometimes exceeded and to a greater extent and by more fields. The same three fields, found at the bottom for the pneumonia mortality, are again at the bottom for both decennial periods; and again Lancashire is easily last. Nottinghamshire, Derbyshire, Durham and Northumberland, are again found top in both periods. There is the same tendency as in the case of pneumonia for the median age at death to be lower than normal in those fields where the mortality is higher.

The position appears to be as follows:—On some coalfields there is exposure to injurious dust containing silica, which causes bronchitis and pneumonia and would cause an excess of phthisis were it not for the coal-dust; but the effect of silica in causing phthisis is in some way interfered with by coal-dust. On other coalfields where the exposure to silica dust is less, bronchitis and pneumonia are less prevalent, and the favourable influence of coal-dust is more clearly manifested.

Ganister bricks.—This industry (10) is even more interesting. Good ganister contains upwards of 98 per cent. of silica; it is a valuable refractory material, used for the manufacture of bricks, employed for lining steel furnaces. Lime is used to hold the material together in making first grade bricks. The men who make these bricks are exposed to silica dust and suffer a heavy mortality from tubercular silicosis (*see Table 6*).

The data given in Table 6 express this mortality as a percentage, 76 per cent. of deaths from All Causes. In one district, where a mortality per 1,000 living could be roughly calculated for the ganister brick makers, it was found to be somewhere about 37 per 1,000 per annum, as contrasted with 1'3 for the town where they worked, 1'0 for makers of ordinary house bricks and plain tiles, and 2'0 for All Males. In this district the deaths from other respiratory diseases among the silica-brick makers amounted to somewhere about 16 per 1,000 per annum as contrasted with 2'1 for ordinary brick makers and 2'8 for All Males. Probably the percentage of deaths due to other respiratory diseases stated in Table 6 for first grade silica-brick makers underestimates the prevalence of this cause of death, owing to the large percentage of deaths due to phthisis overwhelming the percentages due to other causes.

Poor ganister contains some fireclay in addition to some 87 per cent. of silica; this clay is used to hold the material together for making a second

TABLE VI.
GANISTER-BRICKMAKERS.—DEATHS AT ALL AGES.

Cause of death.	Number.		Per Cent.			Median age at death.		
	Makers of silica bricks.		Makers of silica bricks.		All males.	Makers of silica bricks.		All Males.
	First grade.	Second grade.	First grade.	Second grade.		First grade.	Second grade.	
Phthisis	103	2	76.3	4.6	12.8	39 to 40	...	38-39
Other respiratory diseases	14	12	10.4	27.2	17.8	40	...	60-61
All Causes	135	44	100.0	100.0	100.0	40 to 41	48 to 49	57-58

Constructed from Report on the Manufacture of Silica Bricks. W. S. Smith and E. L. Collis.

quality of bricks. The men who make these bricks, although exposed to dust like the other men, have not been found to suffer from tubercular silicosis. Fireclay, which I would remind you is a coal measure rock found beneath the coal, in some way seems to counteract the influence of silica. The position here seems to be somewhat as follows:—An acid material, silica, when it reaches the lungs in fine particles sets up a reaction which results in the formation of fibrous tissue, now known pathologically as silicosis. Lungs so damaged fall a ready prey to the tubercle bacillus. Silicon like carbon forms colloidal compounds. Silica in fine particles can also do this. But the power of silicon compounds to become colloidal is interfered with by the presence of acids.

Fireclays, which are silicates mixed with some free silica, when first brought to the surface will not work satisfactorily; they are not sufficiently plastic; the custom in the trade is to leave them to "weather" for years, after which they become more plastic, *i.e.*, more colloidal. To-day, "weathering" is thought to consist in the washing away of certain organic acids, which have been carried down into these clays from the overlying coal measures. After "weathering," fireclay becomes colloidal; and potters' clay, which is prepared by carefully washing, so that even if it originally held any organic acids, it is freed from them, exerts no inhibitory effect upon the action of free silica.

SPECULATION.

The suggestion may, therefore, be tentatively made that when silica dust is inhaled with raw fireclay dust, the organic acids in the latter prevent the silica particles from becoming colloidal before they are removed by phagocytic action.

The next suggestion is that fine silica dust not so prevented from becoming colloidal, may enter into the colloidal carbon compound, the protoplasmic tissue of the lungs, with the formation of a silica-carbon compound, which we know as silicotic fibrosis; and that this tissue of low metabolic activity, falls an easy prey to tubercle bacilli.

You will recall how, in the first chapter of his text book on Physiological Chemistry, Bunge wrote:—"Silicic acid and carbonic acid are 'the two great powers in the construction of the earth,' and are always at war with each other, with alternate victory and defeat on each side." In the cold and in the presence of water, carbonic acid is in the ascendent; but at higher tempera-

tures silicic acid is the more powerful. This chemical rivalry in the external world surely does not cease within the living body where chemical processes take place at lower temperatures than are needed in the laboratory; theory rather suggests that when silica is introduced into the body some definite chemical reaction should occur. This theoretical reaction may be likened to that proposed by Llewellyn (12) in relation to the formation of gout tophi, which he holds is determined by the precipitation of crystalloids held in concentration at the surface of colloid elements; these elements in their turn acting as determinants of precipitation when crystalloids are in excess. In this instance inorganic biurate of sodium is deposited in an organic framework, but in the case of silicosis the theory postulates the formation of carbon-silicon tissue of low vitality.

I would remind you when venturing on this suggestion that carbon and silicon are both tetravalent elements belonging to the same group; and chemistry teaches that when two such elements are in solution together they always share in the chemical combination present. There is, therefore, no chemical objection to this theory.

Those of you who are acquainted with the interesting work done by Haldane and Mavrogordato will recognise that the theory above outlined, while it is in no way in opposition to the adsorption theory put forward by them, attempts an explanation of the formation of fibrous silicosis.

We have to face in silicosis the formation of tissue as new and as out of place as a gouty tophus. The most recent work on gout, already alluded to, demands the interposition of one or more infective micro-organisms to determine the precipitation of biurate of sodium. Only lately Watkins-Pitchford in South Africa has pointed out that latent silicosis is precipitated by tubercular infection (13).

Personally I have long leaned to the view that the explanation of silicosis will be found to be intrinsically a bio-chemical one. The mechanical explanation that it depends on the sharpness and hardness of the particles does not seem to me to suffice. Particles of emery and of glass are as sharp and as hard as those of silica, yet those exposed to their inhalation while suffering in excess from bronchitis and pneumonia, do not suffer from any pronounced excess of phthisis, nor have their lungs been found to exhibit either the clinical signs of fibrosis or the mottling typical of fibrous silicosis

when submitted to radiography. Further the mechanical explanation loses sight of the minuteness of the particles concerned and their slow rate of movement in the alveolar air which must entirely neutralise any possible abrasive properties. These particles can only be imagined as just floating into the alveoli on deep inspiration, and as being moved from thence either by phagocytosis or by the gentle pressure of respiratory movements.

To-day the theory put forward may be little more than a speculation. Nevertheless it suggests interesting problems for bio-chemical investigation.

Probably the chain which determines tuberculosis, like the chain of other pathological disturbances, has at least three links. The first is the link of latent capacity, inherited predisposition if you will—the capacity living matter possesses of having its normal metabolic changes disturbed—a capacity which varies with races, individuals and occasions. The second link represents the conversion of this latent capacity into a real capacity, whether through trauma or other interferences with normal metabolism. The third represents infection which in the case of tuberculosis is accepted to be a particular bacillus, although, in the case of other disease entities, such as pneumonia, one or more micro-organisms, non-pathogenic possibly in the absence of the second link, may by the precipitating cause.

There is to day but little probability of establishing control of the first link which represents eugenics; or of the third link which would mean eradication of the bacillus. The second link remains, the link of bio-chemistry; here the phenomena associated with silicosis may give help. The first problem is to ascertain what influence fine silica particles alone exert on the tissues; and second to ascertain whether this influence is affected by the presence of fireclay. Then, starting backwards from the last link, to ascertain what influence coal dust exerts on the tubercle bacillus; and what is the relation between fibrous tissue and the tubercle bacillus.

Trauma is accepted to be a starting point for fibrous tissue and for localising tuberculosis, yet the relation of the bacillus to fibrous tissue has not, so far as I am aware, been worked out. Certainly the ash of silicotic fibrous tissue has been found in South Africa to contain a fair amount of phosphorus as well as of silica. The origin of this phosphorus may be nuclein, which contains 7 to

8 per cent. phosphorus, but attention may be drawn to the presence of phosphorus in most specimens of silica. The amount, though not large, has been enough to give rise to poisoning when phosphor-ettted hydrogen is evolved from ferro-silicon. These points gain interest from consideration of the chemical composition of the ash of tubercle bacillus which has been stated (14) to be:—

	Per Cent.
Sodium	13'62 ... 9'18
Potassium	6'35 ... 26'55
Calcium	12'64 ... 2'17
Magnesium	11'55 ... 3'22
Silica	0'57 ... 0'19
Phosphoric acid ...	55.23 ... 51.15
Chlorine	? ... 6'60
Sulphuric acid ...	? ... 0'84

I should, however, point out that knowledge concerning the chemical composition of the ash of micro-organisms is not extensive, and considerable search has failed to discover any other analyses for comparison with these for the tubercle bacillus. Even these are too diverse for reliance to be placed on them. Further, I can find no chemical analyses of ordinary fibrous tissue.

The utmost for the moment which can be said is that silicotic fibrous tissue seems to provide the food required by the bacillus.

Even should further investigation show some affinity between the tubercle bacillus and fibrous tissue, still no explanation is afforded of why the coal miner experiences an unusually low mortality from phthisis. Here for the present I am content to recognise the fact and to avoid further speculation.

BIBLIOGRAPHY.

1. Brend, W. A. "The Mortalities of Birth Infancy and Childhood." *Medical Research Committee. Special Report, Series No. 10*, 1917.
2. "The Boot and Shoe Industry." *Special Report Series, No. 1. Medical Research Committee*, 1915.
3. Collis, E. L. "The House in Relation to Tuberculosis, considered with regard to the conditions of Factory Life." *Trans. Sixth Ann. Confer. Nat. Assoc. Prev. Consum. Leeds*, 1914.
4. Collis, E. L. "The Effect of Occupation upon the Incidence of Pulmonary Tuberculosis." *Tubercle*, 1919.
5. Collis, E. L. "The Effects of Dust in Producing Diseases of the Lungs." *Proc. XVII. International Congress of Medicine*, 1913.
6. Vernon, H. M. "Fatigue and Efficiency in the Iron and Steel Industry." *Industrial Fatigue Research Board. Report No. 5*. H.M. Stationery Office, 1920.
7. Collis, E. L. *Industrial Pneumonocoeloses, Milroy Lectures (1915)*. H.M. Stationery Office, 1919.

8. *Second Report of Royal Commission on Metalliferous Mines and Quarries*. pp. 133-135. (Cd. 7476). 1914.
9. Brownlee, J. "An Investigation into the Epidemiology of Phthisis in Great Britain and Ireland." *Medical Research Committee, Report No. 18*, 1918. *Report No. 46*, 1920. H.M. Stationery Office.
10. Smith, W. S. and Collis, E. L. "Manufacture of Silica Bricks." *Home Office Report*. H.M. Stationery Office, 1917.
11. Bunge, G. *Physiological and Pathological Chemistry*. Translated. Kegan, Paul, Trench, Trubner and Co. 1902.
12. Jewell, L. J. *Gout*. William Heinemann, 1920.
13. *Annual Report of Miners' Phthisis Board*. Union of South Africa, Capetown. 1920.
14. Calmette, A. *L'Infection Bacillaire et la Tuberculose*. Masson et Cie, Paris. 1920.

RAT REPRESSION IN THE CITY OF MANCHESTER.*

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The reason this subject was selected was that, apart from the stress laid upon this work by the Ministry of Agriculture and the impetus given to it by recent Rat Weeks, it was thought that we should be able to learn from the discussion something of the different methods adopted and of the work done in different localities, and so be of assistance to one another.

Occasional complaints of damage caused by rats have been received and dealt with by the Public Health Department in previous years, but no special effort was made to deal with the rat problem until the responsibility of carrying out the duties of the Rats Order of 1918 was placed on Local Authorities by the further Order known as "The Local Authorities (Food Control) Order (No. 5), 1918."

The administration of the Order in Manchester was at first undertaken by the Local Foodstuffs Committee, who, after making certain investigations as to the nature and extent of rat infestation in the city, passed a resolution on June 25th, 1919, suggesting that the work should be carried out by the Public Health Committee. This was arranged in September, 1919, and the work has since been carried out under the direction of the Medical Officer of Health.

* Paper read at a Meeting of the N.W. Branch held in Manchester, on Friday, November 12th, 1920.

Preparations were made for the National Rat Week, which was held in October, 1919. Handbills, large posters, and press notices were issued, impressing upon owners and occupiers of infested premises the necessity for taking concerted action for the destruction of rats.

Infested premises were visited by Sanitary Inspectors, pamphlets were left dealing with methods of destruction which could be adopted and subsequent visits were paid to ascertain results.

From the information obtained as a result of the above measures, it was evident that certain parts of Manchester were badly infested, and it was decided that for a successful and continued campaign against rats it would be necessary to appoint a whole time Rat Executive Officer.

This Officer was appointed in March, 1920. Rat weeks were held in Manchester in January and March this year.

These rat weeks were a means of stirring up the public to the necessity for concerted action, and the complaints, which came in as a result of the advertisements, afforded useful information as to the parts of the city which were infested.

The type of rat found in the city is the brown rat (*rattus norvegicus*). It is sometimes called the sewer rat, and is found in sewers, drains, basements of buildings, stables, and in burrows on canal and river banks. It is a great burrower, and very often finds entrance to buildings through defects in the drainage system. Certain vacant plots of land adjoining warehouses in the city have been found to harbour many rats; their runs have been traced to defective basement windows, doors and ventilators. The black rat (*rattus rattus*) is found in small numbers in the docks at Manchester and frequently in ships in the port. They are also stated to have been found in one or two warehouses in the Trafford Park District of Stretford.

DAMAGE DONE BY RATS.

No attempt has been made to estimate the amount of damage done by rats in the city, but it must be very great. In addition to the food consumed, the amount which is destroyed is considerable, especially in premises where grain, meat, sugar, etc., is stored in sacks. Recently a large part of a consignment of fresh tomatoes which was stored in the basement of an old building, was destroyed during one

night. Apart from the food consumed and damaged, the destruction of goods stored in warehouses is very great, especially in places where the goods provide suitable materials in which to nest. Further, the damage caused to buildings by rats gnawing through doors, floors, walls, lead pipes, etc., is of an extensive nature.

SPREAD OF DISEASE.

Rats also are an important factor in the spread of disease. It has been definitely proved that rats suffering from plague play a very important part in the propagation of this disease, and that the rat flea carries the germ from rat to man. With the pig as intermediary host, rats assist in the spread of trichinosis (*trichina spiralis*), and certain tape worms. Recently it has been shown by Japanese observers that the parasites of the two protozoal diseases "spirochaetosis icterohaemorrhagica" and "rat bite fever" are found in rats and probably conveyed to man by means of fleas and lice. When it is remembered how the rat may bring together the bacterial flora of the sewer and the cold meat dishes, the cases of food poisoning which have been attributed to this cause, and in which there was no other means of contamination, appear simple. In the interests of Public Health, therefore, as well as from an economical point of view, it is important that active measures be taken to diminish the rat population and keep it as small as possible.

PARTS OF THE CITY CHIEFLY INFESTED.

While certain parts of the city appear to show signs of greater infestation than others, no area is without some evidence of rats more or less marked. So far, investigation has shown that the districts mainly affected are in the neighbourhood of the Produce Markets and the older business parts of the city, namely, in the Central district. The presence of rats in great numbers in this part of the city is not surprising when the type of buildings, and the amount and nature of the foodstuffs stored therein, are considered in conjunction with the fact that here also are found underground water courses and many old, and in some cases, disused, drainage systems. The majority of the buildings are old with defective floors, walls and basements, which have been altered or rebuilt to suit the changing requirements of their occupiers. Frequently it has been found that the old drainage systems have not been effectively cut off from the buildings, so that

direct communication by this means is available from one block of buildings to another and to the sewers. The Rivers Tib and Irk and other smaller water courses are to be found in the neighbourhood, and being culverted, they are a great attraction to rats. The extensive provision trade of Manchester is centred in this part of the city, and great stocks of bacon, ham, lard, cheese, sugar, and other general provisions are stored in the basements of many of these old buildings.

The fish and vegetable markets at Shudehill also, no doubt, play a part in encouraging the presence of rats here.

TYPE OF PREMISES MOST INFESTED.

Rats will naturally seek out quarters where they find suitable accommodation for breeding in safety, and from which they can easily get at an ample supply of food and water. Old buildings generally provide rats with excellent cover, permitting easy access to and from the premises and freedom of movement inside. Any building with structural defects which will permit of the above condition will continue to be rat infested so long as the food supply lasts, and the degree of infestation will depend on the amount of food available. Provision merchants, bone and manure works, granaries, piggeries, stables and other businesses where an abundant supply of food is available, are amongst the type of premises chiefly infested. The methods of construction adopted in modern buildings render them comparatively rat proof, but even in these cases holes are occasionally left in the walls when electric light cables, gas and water mains are taken inside.

PREVENTIVE MEASURES.

(a) *Rat proofing*. When investigating complaints it was found that much money had been spent on the various methods of rat destruction, such as poisons, traps and rat catchers, without resulting in any great diminution in the number of rats. It appeared, therefore, that unless the buildings were made rat proof much of this was useless, and more attention had to be paid to the means of prevention. The following points must receive attention when an attempt is made to render a building rat proof:—

(1) The drainage system must be thoroughly examined, and any defects that may be found made good. All old drains ought to be removed and the openings at the sewer end sealed up with cement.

(2) External walls. All accidental holes must be sealed up with a mixture of cement and broken bricks or glass, care being taken that no openings are left where the electric light cables, water and gas mains enter the building. Inlets to fans and all ventilator openings must be protected by strong wire guards. Any spaces between the top of the walls and the roof must be filled up with cement.

(3) All external doors must be made to fit properly, and if necessary the foot of the doors and frames protected with sheet iron. Basement windows must be protected with $\frac{1}{2}$ -in. galvanised wire netting.

(4) Basement and cellar floors must be laid in cement concrete or squared flags jointed with cement, and where drain inlets are necessary in the cellar, these must be protected by heavy iron grids.

(5) Lath and plaster ceilings ought to be removed, thereby doing away with the space between the ceiling and the floor above. Where ceilings are essential expanded metal of small mesh may be used in place of the ordinary laths, care being taken to see that the expanded metal is taken close up to the bricks or stones of the walls.

(6) All woodwork lining internal walls and forming cavities must be removed and the walls exposed.

(7) Where steam and water pipes pass through walls and floors the spaces round the pipes should be plugged up with wire netting, which can be easily withdrawn if the pipes have at any time to be repaired, and replaced when the repairs have been completed. In at least one large restaurant pipes passing from the basement to the floors above were found to be used by the rats in order to reach the kitchen which was on the upper floor.

(8) All goods which may be kept for any length of time, ought to be stored on stillage boards, so that cats or ferrets may be able to get under any part of the stock. In one or two business premises the stock is frequently moved about in the store rooms, and this has been found to prevent the rats nesting in the goods stored.

(b) Removal and Destruction of Refuse.

All refuse must be placed in metal bins with close fitting lids. The refuse thus stored ought to be frequently and regularly removed for destruction. In premises such as butchers'

shops, slaughter houses, knacker yards, bone and manure works, all offal must be similarly protected from rats, and the floors, walls and yards kept clean and free from all accumulations.

Refuse tips and waste lands where refuse is disposed of, are fruitful sources of rat infestation, mainly because of the animal and vegetable matter which is deposited among the refuse. An effort ought to be made to keep these places as free from animal and vegetable matter as possible.

Fish and vegetable markets are also liable to become centres of attraction to rats unless great care is taken to have all fish and vegetable refuse collected and placed in galvanised iron bins and removed regularly—daily if necessary—to the destructor, or, in the case of fish refuse, to the manure works.

(c) Protection of Food.

All food should be kept in rat proof receptacles and store rooms. The need for these receptacles has been demonstrated when visiting the kitchens of large hotels, restaurants and large business premises. If food is stored in bulk it ought to be placed in sacks raised off the ground with means of access on all sides, so that each stack can be ferreted separately. Care must also be taken that no food is left about in these premises where the employees are in the habit of taking their meals on the premises.

PROCEDURE ADOPTED IN DEALING WITH INFESTED PREMISES.

The following procedure is followed when an infested building is dealt with, but no uniform scheme can be adopted as each case must be dealt with on its merits.

(1) It is considered advisable to carry out the rat proofing of the external walls and basement as far as possible before any extensive measures of destruction are commenced.

(2) The drains are examined, and any defects which may be found are remedied.

(3) Rat destruction is commenced either by a professional ratcatcher or by a member of the occupier's staff. The various methods which are recommended are described later. A list of men employed as ratcatchers has been drawn up but only one or two of them are prepared to work according to the methods recommended. Efforts are being made to increase this number.

(4) After the destruction of the rats has been completed the internal proofing is carried out.

(5) When the rats are stated to have been destroyed and the proofing completed, the premises are inspected by the Rat Executive Officer and if any defects in the proofing are found they are made good at once.

It is usually arranged that the whole of the cost of rat catching and proofing is not paid by the occupier, until the work has been done to the satisfaction of the Executive Officer. When a ratcatcher working in conjunction with the Rat Executive Officer, undertakes to destroy rats and to rat proof a building, it is generally agreed that he gives the occupier a guarantee that the premises will be free from rats for a period, varying from three to six months, and that if any rats should appear within the time specified he will destroy them without further cost to the occupier.

RECENT LEGISLATION.

On the first of January this year the Rats and Mice (Destruction) Act, 1919, came into force and placed certain responsibilities for rat suppression on the occupiers of premises and on local authorities. The first section of the Act is as follows:

Section 1.

"Any person who shall fail to take such steps as may from time to time be necessary and reasonably practicable for the destruction of rats and mice on or in any land of which he is the occupier or for preventing such land from becoming infested with rats and mice, shall be liable on summary conviction to a fine not exceeding five pounds, or, where he has been served with a notice under this Act requiring him to take such steps, not exceeding twenty pounds.

It will be seen that this Act holds the occupier solely responsible, whereas in the Rats Order of 1918 the responsibility was shared by the owner and occupier. This is hard upon the occupiers of smaller business premises especially if the premises are not on lease, as the occupiers have no guarantee that they will be allowed to remain on the premises after the completion of the work. It is also hard on occupiers of the poorer class of houses because they are, in the majority of cases, unable to bear the cost of rat proofing. Where, in the opinion of the local authority, an occupier of any premises has failed to comply with Section 1 of the Act, a notice requiring him to take the necessary steps within a specified time may be served under

Section 5. If the time has elapsed and nothing has been done, the local authority may, after giving twenty-four hours' notice, enter the premises and take all reasonable measures for rat destruction and rat proofing and recover the cost from the occupier later, or the occupier may be prosecuted for failure to comply with the notice. The latter is probably the better course to take.

A local authority is held responsible for any land of which they may be the occupiers and if they fail in their duties the Board of Agriculture and Fisheries may carry out the work and recover the expense incurred. The Act must be widely advertised by posters which should give directions as to the most effective methods that can be adopted by occupiers, individually and collectively.

In actual practice, when rat infested premises are being dealt with, it is usual, after the inspection of the premises and the examination of the drains have been completed, to send the occupier a letter informing him of the result of the inspection. The letter also details the work required for rat proofing the building and suggests suitable methods for rat destruction.

In the course of a week or two the premises are again visited and if nothing has been done a report is made to the committee concerned, and permission is requested to serve the occupier with a notice. This notice must contain a brief summary of the work to be done.

So far, no legal action has been taken under this Act, but in the near future this step may be taken in order to stimulate certain occupiers to further efforts. Three notices have been served but the work has been carried out without further proceedings being taken.

Since January of this year 296 premises have been visited by the Rat Executive Officer in consequence of complaints received from the public, or as a result of a report made by the district inspectors. In thirty-eight of these places no evidences of rats were found.

Reports on the condition of the drainage systems in eighty-one instances have been requested, and in twenty-two of these cases an examination of the drains has been found necessary.

Rat proofing has been carried out efficiently in nine premises, is in progress at ten more, and about thirty other buildings have been partly proofed. In the premises which have been efficiently proofed, no rats have been reported since the completion of the work.

Old buildings present a problem which is difficult to deal with. In towns any measures which do not include efficient rat proofing offer little hope of success and the proofing of many of the older buildings may easily cost over a hundred pounds.

The average occupier is unwilling to bear this expense, and it is doubtful whether such a course would be deemed reasonably practicable. The owner of the property will not do it, and under this Act he cannot be forced to undertake the work or even part of it. Instances can be given of premises in such a state that to render them efficiently rat proof would involve their demolition and reconstruction. In order to get the owner to assist in remedying the structural defects recourse has to be made to other Acts—general and local—in addition to any action which may be taken under the Rats and Mice (Destruction) Act.

(1) If the drains are defective they are dealt with under the Public Health Acts.

(2) Specifications embodying the work to be done, may be served under the Nuisance Sections of the Public Health Acts in certain cases of nuisance, for example, in stables and piggeries. Premises where food for human consumption is prepared or handled may be similarly dealt with under the Public Health Acts (Section 91).

(3) In the case of a dwelling house the owner may be called upon to carry out general repairs where no structural alterations are necessary, under powers conferred by Section 28 of the Housing and Town Planning Act, 1919.

(4) Again, if in a dwelling house structural alterations are also necessary, the house may be certified as unfit for habitation and dealt with under Section 41 of the Manchester Corporation Waterworks Improvement Act, 1867.

It has been found rather difficult to convince some occupiers, whose premises could reasonably be made rat proof, of the importance of this part of the scheme and of the need for employing someone who can effectively carry out the work, such as a Building Contractor.

METHODS OF DESTRUCTION.

(a) In premises where there are only a few rats or where they have only recently gained entrance, the simplest method is to instal one or two good ratting cats. They ought to be full grown and from a known ratting strain. Such cats can be found. These cats ought to have two meals a day, porridge and milk should be

given in the morning, and in the afternoon a little raw meat, liver, etc., and they should have nothing more. A liberal supply of clean water should be available for them. Fondling or petting of these animals should not be permitted, they must be treated as wild animals and not as domestic pets.

(b) Where poisons are used inside buildings there is always the possibility of the rats dying under the floors and in the walls. When this occurs in situations which are not well ventilated, and especially if close to hot pipes or fireplaces, serious nuisance is liable to follow. The fact that a large number of poison baits were laid in Manchester during the past year, and the fact that only two such complaints have been received, would tend to show that this objection is over-estimated; nevertheless many occupiers strongly object to the use of poisons on their premises on this account.

The poisons recommended in Manchester are preparations of barium carbonate and liquid extract of squills. They may be obtained in chemists' shops in all parts of the city, and are usually made up as a paste which is easily smeared on dry bread. Recipes for preparing poisonous baits are also available on application to the Rat Executive Officer.

A common practice is to lay bread baited with a barium paste one night, and the following night to put down a freshly prepared mixture of squills and milk (1 in 2), placed in a shallow receptacle.

In our experience, both poisons have been used with success, but after a time it is necessary to change the recipe. Baits containing phosphorus have received great praise from several occupiers, but owing to the dangerous nature of this poison, their uses are restricted.

Strychnine is too deadly to recommend for general use, although preparations containing it may be used in sewers without much risk. Whenever poison is used, the number and position of the baits laid should be noted; after 24 or 48 hours the number taken should be counted and the remainder collected and destroyed.

(c) The use of a bacterial virus.

The use of viruses is not recommended.

According to reports the results obtained by virus have frequently been disappointing, due no doubt to the fact that an immunity is produced in those rats which have not died as a result of the disease caused by the virus when it was first laid down. The danger of contaminating human food cannot be overlooked when

it is remembered that certain outbreaks of enteritis have been attributed to infection from viruses used.

(d) Varnish trap.

The varnish trap recommended by Dr. Howarth, of the City of London, has proved successful for the first few nights in several places in the city where the ordinary traps had failed to act. It is a useful trap to use after a few nights' trapping with the gin or nipper trap. The trap consists of sheets of cardboard 12-in. by 18-in. smeared with lithographic varnish of a certain consistency, with a space in the centre for the bait. These sheets may be placed near the rat runs, but it has been found advisable to tack one corner down to the floor or shelf. This rat catching varnish may be obtained among other places from:—

- (1) Messrs. John Kidd and Co., Ltd., 11 Wine Office Court, Fleet Street, London.
- (2) Messrs. Dane and Co., 91 and 92 Shoe Lane, London, E.C.
- (3) Messrs. B. Winstone and Son, Ltd., 100 and 101 Shoe Lane, E.C.

(e) Trapping.

There are many different kinds of traps in use, and the results obtained by them vary considerably. In the city the number of rats caught by this means is comparatively small, partly because of the abundance of other food-stuffs, but mainly owing to the manner in which the traps are set.

(1) Steel Gin Trap.

The trap is laid unbaited in runs and in the hands of a good trapper gives excellent results. In one butcher's shop this type of trap has been used daily with success for a considerable time. After it is set, sawdust is sprinkled over the traps so that they blend with the floor surfaces; a few of the others are covered with meat cloths of very thin material. A rat has been found in each of the six traps set on more than one occasion.

(2) The Nipper Trap.

Of the many forms of breakback traps now available the "Nipper" is one of the best. It is of a small size and can be set in places where the large cage traps would be inconvenient. It is cheap and effective, when the bait which is most attractive in the particular premises has been found. In all traps which require a bait it is essential to offer the rats some food which is known to be attractive to them, and which

cannot otherwise be obtained near the premises. Baits which appear to be the most attractive are:—

- (1) Bread smeared with tallow fat.
- (2) Fish heads or small pieces of smoked herrings.
- (3) A mixture of oatmeal, or flaked oats and fish meal made into a thin paste with milled dripping and sweetened with sugar and treacle.

(3) Wire Cage Traps.

On the whole the results obtained by the use of cage traps have been poor. On one of the Corporation premises a cage trap has succeeded in capturing 74 rats within a period of 6 weeks, as many as 9 young rats being found in the trap at one time. The trap in question is called the "Ellpot" or "Wonder" trap, and consists of two compartments. The entrance of rats to the second chamber, where the bait is placed, is fitted with a weighted platform, which, after precipitating the rat into the end compartment, automatically closes.

(f) Ratcatchers.

A number of firms in the city employ professional rat catchers by yearly contracts; the premises are visited regularly and a certain number of rats are caught or killed. This system, while it reduces the number of rats from time to time, has no lasting effect, and the premises remain breeding places from which the rats invade other buildings. The majority of the rat catchers are reluctant to carry out proofing to the extent which would be effective, but on the whole this work of destruction has given satisfaction to the firms. A few who were prepared to carry out the work of destruction and proofing under our supervision have done very good work, and are now being recommended to occupiers who wish the services of a reliable rat catcher. No responsibility, however, is accepted by the Corporation for the work of these men, and it is advisable, if a rat catcher is to work in any premises during the night, to suggest to the occupier that a member of his staff should remain with him to lock up, etc., when the work is finished for the night. As the work of the Rat Executive Officer increases, more rat catchers will become known, and it is hoped to increase the number who will work in conjunction with him.

(g) The use of poison gases.

Fumigation, with sulphur dioxide gas, produced in a portable Clayton Machine, has

proved effective in several places in the city, where it was found possible to use gas. Vacant lands, canal and river banks, knackers' yards, stables, piggeries and outhouses, generally offer the most likely situations where gassing may be employed with a reasonable prospect of success. Before gassing commences, a thorough survey of the premises ought to be made, and all the openings to the burrow or burrows marked and preferably covered with ring or purse nets. One opening is selected into which the tube of the machine is inserted, the space between the tube and the walls of the opening packed with puddled clay or wet cloths. Gas is then pumped into the run, and as it travels along it begins to escape from the nearest holes. Rats may be bolted at this stage or they may be driven into the further sections of the run. After the gas has been allowed to escape from the nearer holes for five or ten minutes, these holes are blocked up, and the machine started again. If there is direct communication with the other holes, in half an hour or so some evidence of the gas will be noticed. If not, it is probable the burrow has no connection with them and that the gas is being driven down into deeper runs. The gassing is continued for 30 minutes more, when the plugs are removed from the holes and the nets replaced. Rats which have been driven by the gas into the deeper runs and into the dead ends appear to take this opportunity to struggle into the open, and are easily dispatched. After an interval of fifteen minutes, all the holes are again blocked up, and the burrows subjected to another dose of gas for fifteen or twenty minutes. By this means the young rats and any of the older inhabitants which refuse to be bolted are destroyed. The remaining holes are treated in a similar manner, till all the openings have shown evidence that the gas has reached them. No suitable opportunity has yet arisen which would afford a fair test of this method of rat destruction inside buildings.

(h) *Hunting with dogs and ferrets.*

Many of the rat catchers possess ferrets but use them in the open chiefly, for example, in yards, vacant lands, canal banks and refuse tips. Although the country offers many opportunities for hunting with dogs and ferrets, in towns this method can only be adopted on refuse tips, public parks, and on the few farms in the suburban districts; very little hunting is done in this city.

(i) *The Rodier system applied to rat destruction.*

It is claimed that by killing off all females captured and liberating all males the sex relationship is so upset that the propagation of the species will be thoroughly interfered with. Mr. George Jennison, of the Belle Vue Zoological Gardens, Manchester, is a strong supporter of this view, and he has adopted this procedure in the Gardens for the last few years. The experiment has not been carried out on a large scale, and even in the limited case mentioned it is rather soon to expect any definite results.

(j) *The mongoose as a rat catcher.*

In Manchester we have no personal experience of the success or otherwise of employing a mongoose as a means of ridding premises of rats. The Indian mongoose, which is a little larger than the average brown rat, has been used by many occupiers of rat-infested buildings in the city. In many instances the mongoose has been liberated at once in one of the rooms and left to hunt on its own accord—milk and water being put down each night in the hope that it will remain in the building. Another method recommended, is to keep the animal in a warm part of the warehouse for a week, feeding it on fresh fruit and a little raw meat. At the end of this time open the door and leave it to move freely about the building. Invariably within a few months the mongoose has disappeared, and in nearly every instance the rats have also gone, to return again later in gradually increasing numbers; in one case efficient rat proofing carried out after the rats had been driven away by a mongoose resulted in almost complete riddance of the pests.

In conclusion, the following points might be emphasised:—

(1) In addition to the systematic destruction of rats, the question of rat proofing will have to receive much more attention in future if the number of rats is to be appreciably diminished and any lasting effect on the rat population of the city of Manchester produced. This applies with equal force to individual buildings as well as to the city as a whole.

(2) The natural cunning and the suspicious nature of the rat make it necessary to constantly vary the methods of destruction employed.

(3) Efforts should be made to deal with all the premises in one building or block of buildings at the same time.

(4) A steady and permanent campaign ought to be waged against the rat. Rat weeks may be useful for reminding occupiers of property and the public generally of their responsibilities in connection with rat repression, but these spasmodic attacks must never take the place of sustained effort.

(5) The use of the more deadly poisons and viruses should not be permitted in premises where food is prepared or handled.

(6) It would help materially all concerned with the problem, if the larger firms, whose premises and class of business favour the presence of rats, had one of their staff trained for the work of rat catching and rat proofing and would be responsible to the firm for this work. Recently, as a result of a circular letter issued to Railway Companies by the Board of Agriculture and Fisheries, the Lancashire and Yorkshire Railway Company have appointed a Rat Officer, and for the purpose of rat destruction their railway system has been divided into sections. Each section will in future be dealt with by a trained rat catcher, who will work under the direction of the Company's Rat Officer.

(7) Any evidence of disease noticed among rats should be reported at once to the Medical Officer of Health, and the Rat Executive Officer ought always to ascertain from the occupiers of premises visited, and from any rat catcher he may meet, whether any dead rats have been found in premises where poisons are not used. The reporting of such conditions is necessary so that these rats may be examined for plague. Before the carcass of a rat which has been found dead, is handled, it must be sprayed or soaked in petroleum or some strong disinfectant such as cresol, crude carbolic or sheep dip, in order to kill any fleas which may be on the body.

(8) An effective campaign against rats implies not only the protection of all foods against the access of rats, but lays upon tradesmen whose business is concerned with the production or sale of meat, greengrocery, or other materials consumed by rats (as well as upon the departments of Public Authorities concerned with the deposit and sale of such materials) the duty of seeing that no waste deposits are left lying over night so that rats can have access to them, and of seeing that no dumps of such waste matters are placed or permitted to be placed on any waste ground, tip, or other surface to which rats have access. From the experience gained in Manchester this

side of the question would appear to be the most important of all preventive measures.

I wish to thank Mr. Alderman Jackson, Chairman of the Public Health Committee, and Dr. Niven, the Medical Officer of Health of Manchester, for allowing me to make use of official records, etc.

I should also like to thank Mr. John Potts, D.S.O., Rat Executive Officer, for his assistance in the preparation of this paper.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

COUNCIL MEETING.

A meeting of the Council was held at the house of the Society on Friday, February 18th, 1921. Lt.-Col. F. E. Fremantle, M.P. (president), was in the chair, and there were present Prof. H. R. Kenwood, Lt.-Col. Herbert Jones, Drs. Veitch Clark, Cates, Ellis, Stocks, Snell, Clements, Barlow, Joseph, Wheatley, Howarth, Kirkhope, Blackett, Auden, Lyster, Sanders, Kerr, Gibbons Ward, Eustace Hill, Wilshaw and G. F. Buchan.

The minutes of the last meeting having been approved and signed, apologies for absence were read from Dr. Edmund Smith and Dr. Bertram Hill.

Correspondence.—(1) From the Board of Trade, asking the Society to nominate a representative to give evidence before their Carbon Monoxide Committee. *Resolved:* That Mr. A. G. R. Foulerton, O.B.E., F.R.C.S., D.P.H., be asked to attend before the Committee on behalf of the Society. (2) From the Ministry of Health, inviting the Society to submit a memorandum regarding post-graduate medical education in London, and to nominate a witness to give further evidence in the same connection. *Resolved:* That the matter be referred to the special D.P.H. Committee with power to act. (3) From the American Public Health Association, inviting the President and other members of the Society to attend the 50th annual meeting of the Association at New York, November 14th to 18th, 1921. *Resolved:* That the Association be thanked for their invitation, and that the Executive Secretary should ascertain which members would be able to attend as representatives of the Society. (4) From the National Association of Local

Government Officers, asking the Society to send four representatives to their annual conference to be held at Edinburgh at Whitsuntide. *Resolved*: That representatives be nominated in due course. (5) From the Northern Branch, asking for a definite statement of the position of the Society in regard to Trade Unionism, as affected by affiliation with the N.A.L.G.O. *Resolved*: That the Hon. Treasurer be asked to send the Branch a copy of counsel's opinion defining the position of affiliated societies in this connection. (6) From the West of England Branch, pointing out that the undertaking of the Ministry of Health that copies of documents of any importance in reference to health administration should be sent simultaneously to the medical officer of health and clerks of local authorities is not being observed. *Resolved*: That this representation be brought to the notice of the Ministry. (7) From the Royal Sanitary Institute, asking the Society to nominate delegates to attend their conference at Folkestone, June 20th to 25th, 1921. *Resolved*: That representatives be nominated in due course. (8) From the Northern Branch, asking the Council to send a representative to attend before the Newcastle-upon-Tyne Education Committee, with a joint deputation of the Branch and the local division of the B.M.A. The Council was anxious to comply with this report, and asked Dr. G. F. Buchan, Chairman of the Salaries Committee, to attend on their behalf. Dr. Buchan pointed out that, though he would gladly give any assistance he could to the Northern Branch, it was doubtful if isolated action was advisable at the present moment. Negotiations for the submission of an inclusive schedule of salaries for all professional officers of local authorities to the Whitley Council were well advanced, and even if it meant some further delay he believed that action would be more effective when based on such a schedule. Meanwhile he was willing to publish a statement in *Public Health*, showing the present position of the salaries question, and if the Northern Branch still thought it desirable to approach the Newcastle-on-Tyne Education Committee at once, he would attend provided that he was not prevented by official engagements. (9) From the North-Western

Branch, referring to the refusal of the Income Tax authorities at Manchester to allow school medical officers abatement in respect of expenditure for subscriptions to medical societies and libraries, books and periodicals, on the ground that such charges were recoverable from the local education authority, a supposition that does not correspond to facts. *Resolved*: That this matter be brought to the notice of the Commissioners of Inland Revenue, with the claim that the medical officials of local authorities should be treated not less favourably than other medical practitioners in respect to abatement for such expenses. (10) From a medical officer of health, referring to the proposals of his local authority: (a) that all correspondence for the health department should be opened, registered and filed in the Town Clerk's department; (b) that the Town Clerk should exercise supervisory authority over all departments, and (c) that all communications with Government Departments must be through the Town Clerk. *Resolved*: That the Ministry of Health should be asked to discuss these proposals with representatives of the Society.

International Congress.—The provisional committee appointed to consider the proposal that the Society should convene an International Congress of Medical Officials of State and Municipal Health Departments, reported that they had ascertained that such a scheme would probably receive the approval of the Ministry of Health and the sanction of the Foreign Office. The committee were asked to submit a further report on the financial aspects of the proposal.

Articles of the Society.—The committee appointed to consider representations from Branches, Groups, and individual members regarding suggested defects in the constitution of the Society, reported that in their opinion the working the Articles of Association which came into force on October 1st, 1920, should be watched for a period of three years from that date and that a committee might then be appointed, to decide if revision was desirable. Several members of the council expressed the opinion that the matter was too urgent for postponement and it was agreed to refer back the recommendation of the Committee for further consideration.

Nominations for the Presidency, 1921-22.—By Northern Branch: Dr. Eustace Hill, O.B.E. By Metropolitan and Home Counties Branches: Dr. W. J. Howarth, C.B.E. By North-Western Branch: Dr. W. J. Howarth, if Lt.-Col. F. E. Fremantle declines nomination for a second period of office. The other Branches have not yet submitted nominations.

Tuberculosis Work in London.—Dr. H. A. Ellis submitted the Memorandum prepared by the tuberculosis officers of the metropolitan boroughs on tuberculosis work in London and reported that it had been approved by the Metropolitan Branch of the Society.

Age Limits for Appointments.—Arising out of a representation from the Home Counties Branch, it was *resolved*: "That having regard to the multiplicity of duties now required to be performed by medical officers of local authorities, and in justice to those who have served in the war, it is inexpedient to limit appointments to these posts to applicants of specified age, unless full allowance is made for any period of absence on war duty. It was agreed that this resolution should be forwarded to the Ministry of Health."

Annual Reports.—On the proposal of Dr. G. F. Buchan it was decided to bring to the notice of the Ministry of Health the excessive time and labour expended by medical officers of health on the preparation of their annual reports, with the suggestion that the department should be satisfied with the publication of annual statistical tables followed by a detailed report for the period intervening between each census.

Housing Accommodation for Phthisical Families.—On the suggestion of the Home Counties Branch it was *resolved* "That the Ministry of Health be asked to require that a certain proportion of the houses to be erected by local authorities under their schemes be reserved for phthisical families."

Tuberculosis: After-Care.—On the proposal of Dr. H. A. Ellis it was agreed to submit proposals to the Ministry of Health regarding financial provision for after-care administration in connection with tuberculosis.

Federation of Medical and Allied Societies.—The Executive Secretary was instructed to inform this body that it was not considered

advisable for the Society to accept affiliation to the Federation.

Central Midwives Board.—The Ministry of Health having notified the Society that they were entitled to elect a member of the C.M.B. under the Central Midwives Board (Constitution) Order, 1920, it was *resolved*: "That Dr. R. A. Lyster be appointed a member of the C.M.B. on the nomination of this Society."

Central Representative Medical Committee.—It was decided to accept an invitation from the British Medical Association to assist in the formation of a body representative of the medical profession as a whole to consult with the Minister of Health on questions of policy affecting the profession.

Conference with Ministry of Health.—The following were appointed to attend at the Ministry of Health for the discussion of various matters referred to above: Prof. H. R. Kenwood, Dr. Cates, Dr. G. F. Buchan, Dr. R. A. Lyster, Dr. R. Veitch Clark and Dr. H. A. Ellis.

The meeting then adjourned.

ORDINARY MEETING.

An ordinary meeting was held at the house of the Society on Friday, February 18th, 1921, with the President, Lieut.-Col. F. E. Fremantle, M.P., in the chair. Over fifty members were present, with several visitors. The minutes of the last meeting having been approved and signed, the following candidates for membership were duly elected:—

Adam, Daniel Colville, M.B., Ch.B., Edin., D.P.H.; Barrow, Harold Percy Waller, C.M.G., D.S.O., O.B.E., Lt.-Col., R.A.M.C., M.R.C.S., L.R.C.P., D.P.H., D.T.M.; Bernfeld, Agnes, L.S.A., Lond., D.P.H.; Blackmore, Herbert Stuart, O.B.E., Capt. R.A.M.C., M.R.C.S., L.R.C.P., L.D.S., D.P.H.; Clark, Richard Foster, Surg.-Cdr., R.N., M.R.C.S., L.R.C.P., D.P.H.; Colquhoun, Florence, M.B., B.Ch., Dubl., D.P.H.; David, Mary Lunsdaine, M.A., M.B., Ch.B., St. And., D.P.H.; Fraser, James William, M.D., C.M., Edin., M.R.C.S. Eng.; Grogan, Amelia Gertrude, B.A., M.B., B.Ch., R.U.I.; Heffernan, Patrick, B.A., M.B., B.Ch., R.U.I., Major (retd.), I.M.S.; Horne, Robt. John Maule, M.A., M.B., Ch.B., B.Sc., Edin., D.P.H.; Ironside, Arthur Edmund, M.C., M.R.C.S., L.R.C.P., L.D.S.; Mackenzie, Melville Douglas, M.D., B.S., Lond. D.T.M.; Morrison, Alexander, L.R.C.P. & S. Ed., L.R.F.P.S., Glasg.; Newman, Frieda, M.B., B.S., Durh.; Nicholson, Balfour Stewart, M.B., Ch.B., Glasg. D.P.H.; Paterson, Albert Rutherford, M.B., Ch.B., Glasg. D.P.H.; Picard, Arthur Wm. Kirkpatrick, M.D., Lond. M.R.C.S., L.R.C.P.; Ryles, Charles, O.B.E., Major, R.A.M.C., M.B., Ch.B., Edin.; Sparrow, Lancelot,

William, M.B., Ch.B., Vict.; Thompson, George Kenworthy, M.B., Ch.B., Vict., D.P.H.; Turabull, Nettie Bell, M.B., Ch.B., Edin.; Williamson, Edith Short, M.B., B.Sc., Durh.; Wilson, William James, M.D., R.U.I., D.Sc. Belf., D.P.H., Bt. Major, R.A.M.C. (T.F.).

Upwards of forty candidates were nominated for election at the next meeting.

Dr. W. M. Willoughby, President of the Metropolitan Branch, and Dr. J. M. Clements, President of the Home Counties Branch, on behalf of their respective branches presented the Society with a portrait of Prof. H. R. Kenwood, C.M.G., for inclusion in the gallery of Past Presidents. They referred in eulogistic terms to the great services rendered to the Society by Dr. Kenwood during his double period of office (1918-20), more especially in connection with the reconstruction scheme carried through largely by his efforts. Col. Fremantle, in accepting the portrait, said that it would always be valued by the Society as commemorating a most popular and efficient President, and the commencement of a new epoch in the history of the Society.

Dr. G. S. Buchanan, C.B., then read a paper on "International Organisation and Public Health." A discussion followed, in which Dr. T. H. C. Stevenson, C.B.E. (Superintendent of Statistics, General Register Office), Dr. W. Perrin Norris (Chief Medical Officer, Australian Commonwealth Medical Bureau), Dr. W. M. Willoughby and Dr. A. H. Bygott took part.

A hearty vote of thanks to Dr. Buchanan was passed on the proposal of the President, seconded by Dr. Charles Sanders.

METROPOLITAN BRANCH.

A meeting of this Branch was held at the Society's Rooms in London, on Friday, 14th January, 1921, the President (Dr. W. M. Willoughby) occupying the chair. There was a large attendance.

Fifteen members were nominated for election to the Fellowship of the Society.

The Hon. Secretary was directed to submit suggestions with regard to the revision of the Branch By-laws with a view to bringing them more into conformity with the new Constitution of the Society.

In connection with the appointment of medical officer of health of Holborn, it was stated that the salary to be offered had been increased from £800 to £1,000 per annum, this amount to include bonus.

Sir William Smith stated that the Minister of Health had agreed to receive a deputation from the Sanitary Inspectors' Examination Board on the subject of the constitution of the Board.

The Branch considered the amended Report of the Tuberculosis Group of the Society, which showed that the alterations suggested at the last Branch meeting had been incorporated. It was decided to send copies to the Ministry of Health and the London County Council, and if possible to have the report published in "Public Health."

Reports by Dr. Hamer, Medical Officer of Health, London County Council, on (a) Measles and (b) Verminous Conditions in London, which had been prepared for submission to the Conference proposed to be held between the London County Council and the Metropolitan Borough Councils, were considered. The Branch agreed that the suggestions offered by Dr. Hamer in his report were such as might be supported at the Conference.

A meeting of the Branch was held at the Society's Rooms in London, on Friday, 11th February, 1921. Dr. W. J. Howarth occupied the chair, and fourteen members were present. Dr. E. P. Manby, Ministry of Health, also attended.

The Branch unanimously nominated Dr. W. J. Howarth, Medical Officer of Health, City of London, for the Presidency of the Society for the ensuing session.

Arising out of the Conference between the Branch and the Metropolitan Asylums Board, the question of reserving accommodation for measles and whooping cough and of selecting cases for admission to the infectious hospitals of the Board, was fully discussed. It was agreed that there was, particularly during epidemics, marked necessity for isolation in a number of cases, especially where the home conditions were unsatisfactory. With regard to the method of obtaining an adequate amount of accommodation, it was felt that the Branch

could co-operate with the Board in formulating a scheme which would work easily, especially having regard to the fact that it commonly happens that epidemics of measles and whooping cough occur at such times as scarlet fever and diphtheria cases are less numerous, and when there is therefore less pressure on the hospitals. In connection with the selection of cases for admission to hospital the opinion was expressed that the medical officer of health should be mainly, if not entirely, concerned in this, and that the reference now made to relieving officers was unnecessary and should be discontinued. The Secretary was instructed to convey these views to the Metropolitan Asylums Board.

A brief discussion took place on some provisions of the Rent Act, 1920, and many members expressed surprise at the small number of applications received for sanitary certificates under Section 2.

The Branch agreed with the Hon. Treasurer of the Society that an increase in the subscriptions (*see pp. 73-74*) was justified.

YORKSHIRE BRANCH.

A meeting of the above Branch was held in the Town Hall, Leeds, on 27th January, when thirteen members were present. In the absence of the President, Dr. E. M. Smith, Dr. Moon took the chair. The minutes of the previous meeting were read and confirmed.

Election of New Members.—Eighteen candidates were elected to the membership of the Branch.

It was decided that during the present session the Branch should meet monthly—on the last Thursday in the month, and that the meetings should be held in Leeds, with the exception of three, one of which should be in either York or in the East and North Ridings.

The Branch agreed to the proposals of the Honorary Treasurer of the Society, relating to the proposed increase in the subscription to the Society.

Dr. H. P. Newsholme read a paper on "Some Administrative Problems in the Control of Public Health." The discussion on this paper was postponed until the next meeting.

Eleven members of the Branch, being medical officers of health, were nominated to

the Fellowship of the Society; and nine members of the Branch being non M.O.H., were also nominated.

Lieut.-Col. Wanhill, R.A.M.C., also addressed the meeting on "Closer Co-operation between the Military and Civil Health Officers."

TUBERCULOSIS GROUP.

A final meeting of the London Tuberculosis Officers was held on the 14th January at 3.45 p.m., to draft their report on the Report to the London County Council for improving the Tuberculous Scheme for London. The improvements in the report suggested by the Metropolitan Branch were incorporated and the report, as finally amended, was brought up at the meeting of the Metropolitan Branch, held the same afternoon.

An Ordinary General Meeting of the Group was held on 14th January, at 4.45 p.m. Professor Benjamin Moore, President of the Group, was in the chair, and there was a good attendance.

A most interesting paper was read by Dr. Edgar L. Collis, Mansel Talbot Professor of Preventive Medicine in the Welsh National School of Medicine, on "The Influence of Dust Inhalation upon the Incidence of Phthisis." (The paper is published in full in this issue.) The paper was followed by a good discussion, and the President brought out several points of special interest bearing on the subject.

NAVAL, MILITARY AND AIR FORCE HYGIENE GROUP.

An ordinary meeting of this Group was held at the house of the Society on Friday, February 4th, 1921, the President, Lieut.-Col. Kenwood, being in the chair.

Amongst those present were Sir Robert Hill and Sir John Goodwin, Director Generals of the Naval Medicine Department and Army Medical Service respectively; Brig.-General Beveridge, Director of Hygiene, War Office; and Surgeon Rear-Admiral Bassett-Smith.

Lieut.-Col. John Robertson, C.M.G., O.B.E., was elected a Vice-President.

Bye-laws for the Group were adopted.

Surgeon-Commander Bond read a paper on "Some Recent Improvements in R.N. Hygiene," which will be published in an early issue of the journal along with an account of the discussion on

"of the nature, substance and quality" of the article demanded by the purchaser. In other words the purchaser is not considered by the learned judges to be prejudiced if he obtains manure in his milk.

Voluntary organisations have done something to interest the public in these subjects, but it is doubtful whether they can take the matter any further. There is need for official intervention, and nothing could be more appropriate than for the Society of Medical Officers of Health to lead the way.

THE MILK AMENDMENT BILL.

The Milk and Dairies Act of 1915 gives the Minister of Health power to authorise the use in connection with the sale of milk of the designation "Certified Milk," to prescribe the conditions subject to which milk may be sold under such designation. The Act is not yet in operation, but the Food Controller, under the Defence of the Realm Act, has forbidden in past and existing Milk Orders the use of the designations "Grade A Certified Milk" and "Grade A Milk" except under licence. In both cases the milk must be produced under particularly clean conditions by herds that contain no animal that reacts to the tuberculin test. "Grade A Certified Milk" must be bottled on the farm where it is produced, and it must not contain more than 30,000 bacteria per cubic centimetre at any time before reaching the consumer. There are at present no bacterial requirements in regard to "Grade A Milk," but this must be bottled before leaving the retail distributor's premises.

The Milk Amendment Bill gives the Minister of Health power to authorise or require the use of such designations in connection with the sale of milk as he may prescribe in addition to authorising the use of the designation "Certified Milk." Under the terms of the Bill an Order issued requiring classification might be "general" in its application throughout England and Wales or might be a "special order" dealing with the area of one or more Local Authorities.

The grading of milk is naturally being accepted by the trade with complacency, but from a public health point of view it has most serious defects, as it merely adds another terror to poverty. The child of the rich and the wealthy invalid may be

able, as the result of "grading," to purchase milk absolutely above suspicion, but the poor will, unfortunately, be compelled always to buy the cheapest grade, which in this case will be particularly and peculiarly "cheap and nasty." If the Ministry of Health is to live and act up to its name it will decide that the only way to protect the poor is to make it an offence to sell milk that may reasonably be regarded as dangerous to health.

The production of milk is a profitable industry, and those interested in the trade very naturally view it from a trade standpoint, and are anxious to lead the Ministry to agree to a grading of milk which will allow the highest grades to be sold at an extra profit. The only satisfactory method from a public health point of view would be the general compulsory levelling up of the standard of milk by such simple legislation as may be necessary in order to extend Section 6 of the Sale of Food and Drugs Act, so as to include bacterial and manurial contamination as an ingredient which is "to the prejudice of the purchaser."

DR. H. E. HARRIS, M.O.H., ISLINGTON.

After 29 years' of untiring work as Medical Officer of Health for the Borough of Islington, Dr. H. E. Harris is being compulsorily retired at the age of seventy. We understand that Dr. Harris has no wish to resign his post, and that he addressed a lengthy communication to each member of the Council setting out his reasons for not resigning. There is, moreover, a strong feeling locally that the retirement is unnecessary.

There are, of course, obvious arguments for and against compulsory retirement at a fixed age, and we believe that the public interest is, on the whole, best served by compulsory retirement coupled with a generous scale of superannuation. Dr. Harris considers that under the Superannuation (Metropolis) Act, 1866, he is entitled to a pension of £706 per annum, but the Council desire to cast him off with £400 a year. We cannot believe that the Ministry of Health will agree to this unfair decision which, if allowed, will serve to bring the public health service into further disrepute among those who are about to decide which branch of the profession they should join. Already the enormously increased incomes obtainable in private practice are adversely affecting both the quality and quantity of those who are seeking a public health

career, and we rely, with confidence, upon the Ministry to prevent local councils acting unjustly to their officers either in the matter of pension, or war bonus, or salary. Unless the Ministry acts, and acts vigorously, in these matters the service will degenerate into the Cinderella of the profession.

FOOD POISONING.

A practical and useful guide on the subject of food poisoning has been issued by the Ministry of Health. It is pointed out that the Ministry should receive the earliest information possible of all cases of suspected food poisoning, and that such information should not be dependent on casual sources such as newspaper reports. All medical officers of health, whenever they have reason to suspect that any death or outbreak of illness in their district is due to food poisoning, are enjoined to notify the Ministry of Health immediately. This precaution is important both because the Ministry are frequently in a position to offer useful assistance in regard to the immediate measures to be taken, and also because of the opportunities so afforded them for elucidating points in the causation of food contamination which are at present obscure. Even where the medical officer of health is only aware of a few cases of illness the early notification of the matter to the Ministry is desirable, as it may be that other cases are occurring elsewhere from similar causes.

THE EALING HEALTH VISITOR CASE

We offer our congratulations to Dr. Thomas Orr, Medical Officer of Health for Ealing, upon the satisfactory result of his appeal against the verdict of the jury in the King's Bench Division in July last, which awarded £25 damages to a former lady sanitary inspector as damages for libel, the libel consisting of an adverse report to the council.

Lord Justice Bankes, giving judgment, said the amount of damages awarded was very small, but the principle underlying the verdict was very important, because were the verdict allowed to stand the impression might be produced that if any person did not get on well with a superior officer, and was necessarily taken to task by that officer for not performing his or her duties to the officer's satisfaction, and if, further, the officer felt compelled to make a report on the matter, the evidence was to be taken as evidence that he had acted maliciously

in making the report. In this case there was really no evidence fit to be submitted to the jury that Dr. Orr acted maliciously on what was admitted to be a privileged occasion, or that he had been animated by ill-will at all. In his Lordship's opinion the appeal must be allowed, the judgment below set aside, and judgment entered for the appellant (Dr. Orr) with costs in the Court of Appeal and below. Lords Justices Warrington and Atkin concurred; the latter added that in his opinion everything that took place was consistent with the appellant doing his duty. Even if there had been any feeling of hostility before the report was communicated it did not justify the finding of express malice.

NEW TUBERCULOSIS BILL.

The object of the Bill is to secure that there shall be no break in the provision made for the treatment of tuberculosis when sanatorium benefit ceases on April 30th.

The Bill proposes to transfer to the county and county borough councils the obligation for providing institutional treatment for tuberculosis, which, under the provisions of the National Health Insurance Act of last year, is to be taken from the insurance committees so far as insured persons are concerned. The large majority of the county and county borough councils have already made arrangements for the institutional treatment of tuberculosis within their areas, and the Bill imposes no fresh obligation on these councils so long as their schemes remain in operation. A very small proportion of the total number of councils have not yet made sufficient provision for the treatment of tuberculosis, and the Bill provides that, if any of these councils fail to make adequate arrangements, the Minister of Health may himself make such arrangements as may be necessary for the purpose and recover the costs from the councils in question.

The remaining provisions of the Bill are designed to facilitate the co-operation between councils in the exercise of their power for the treatment of tuberculosis, and to enable them to co-opt on their tuberculosis committees or sub-committees persons, including members of insurance committees, who are not members of the councils. It is proposed that the councils should receive the same financial assistance in aid of this service as they have received in the past under the old arrangement.

HYGIENE IN SHIPS.

The Town Council of Newport, acting as the Port Sanitary Authority of Newport, have adopted the special report of the Sub-Committee appointed to consider statements of the medical officer of health and to submit recommendations thereon. The Sub-Committee have reported that after careful consideration they had arrived at the conclusion that the Regulations relating to the provision of accommodation for crews in the British Mercantile Service are still very unsatisfactory.

The standard of requirements are generally too low and require radical revision. Many of the instructions laid down for the guidance of shipbuilders and surveyors are merely suggestions, and, therefore, cannot be enforced, whilst in many respects they are inferior both as regards cubic space and structural details to those insisted upon by many foreign countries and British Colonies in both new and old vessels registered under their flags.

The greatly excessive sickness and death-rates among seamen from diseases incident to occupation and generally associated with insanitary conditions of living, compared with occupied and retired males generally is, undoubtedly, closely related to the unfavourable conditions of living at sea. Although many of the leading British Shipowners have provided greatly improved accommodation of recent years, others have lamentably failed to do so.

Shipbuilding has been proceeding to an intensive rate during the last three years, and many of the defects in hygiene which have been drawn attention to in the past have during these years been perpetrated without interference by the Government of this country. Valuable opportunities for effecting much needed improvements in a large number of new vessels have therefore been lost, and cannot be remedied without the expenditure of large sums of money, which could be avoided if the present demands for improved quarters had been anticipated by those responsible for the housing of British Seamen.

In view of the possible adoption of a 48 hour week for Seamen by some foreign countries, the question of a corresponding reduction of the hours of labour in British vessels is only a matter of time. This will necessitate the provision of extra accommodation for the additional hands required,

consequently the present evils will be intensified unless the matter is considered immediately by the Government.

In view of the above statements, the Newport Port Sanitary Authority has adopted the following:—

1. That the time has arrived for the immediate revision of the British Regulations for the Hygiene of crews' spaces, etc.
2. That the matter should be considered by a Joint Committee representing the Board of Trade, Ministry of Health, Shipowners, Shipbuilders, the officers and men of the Merchant Service, Port Sanitary Authorities, and the Admiralty.
3. That in view of the International nature of the question of Marine Hygiene, the Government should make every endeavour to have the above subject dealt with by an International Board, such as the League of Nations, with the object of establishing a minimum International Standard for the Mercantile Marine of the leading nations of the world.

ASSOCIATION OF SCHOOL MEDICAL OFFICERS OF SCOTLAND.

A Conference, arranged by the Association, will be held in the Provincial Training College, Edinburgh, on April 7th, 8th and 9th. An attractive programme has been arranged, including papers by Drs. F. C. Shrubsall, Norman Walker, and A. MacGillwray, a Joint Meeting with the Scottish League of Organisers and Teachers of Physical Training, and Demonstrations.

Any medical man can obtain admission tickets on application to the Hon. Secretary, Dr. John Hunter, 8, Abercromby Place, Edinburgh.

The Society of Medical Officers of Health (Scotland) have nominated Dr. A. CAMPBELL MUNRO, consulting medical officer of health for Renfrewshire, as their representative on the Central Midwives' Board for Scotland.

MR. ALFRED BALL, M.D. (Lond.), D.P.H., medical officer of health for the borough of Middleton, has been appointed medical officer of health for the combined Romford urban and rural districts.

THE TYPHOID EPIDEMIC IN FLANDERS.

BY

JOHN RAWLINGS REES, M.A., M.D., D.P.H.,
(Late Capt. R.A.M.C.)

It is by this time a matter of common knowledge among the Medical Profession that a very considerable epidemic of enteric fever occurred in Flanders during the latter months of 1914, and the Spring of 1915.

Although there was little mention of it in the newspapers, this fact has yet emerged in the many articles dealing with the clinical and pathological aspects of typhoid and paratyphoid fever. The greater number of these articles have dealt with the disease as seen among the British troops, and careful statistics have been given as to the extent of the spread. It must not be supposed, however, that this represents the whole of the epidemic. On the contrary, thanks to efficient prophylactic measures, our Army was barely touched by the great epidemic which attacked the armies of our Allies and the civil population of the N.E. corner of France and the uninvaded territory of Belgium.

It is likely that the full extent of the disease among the civilian refugee population will never be known accurately, so great was the disorganisation at one time, and so numerous the cases which must have died undiagnosed.

The purpose of this article is to record some of the facts about the epidemic as it affected the civilians, and the methods which were adopted to combat it. Little will be said of the clinical aspects of the work, as much has already been published which covers that ground, but practically nothing has been written from an epidemiological standpoint.

At this time I was a Medical Officer of the "Friends' Ambulance Unit,"* a voluntary unit of the British Red Cross Society, which, working under the Director of Medical Services of the Second Army and in conjunction with the R.A.M.C., was to a considerable extent responsible for the stamping out of the epidemic. I propose to set down this record, not necessarily because the methods employed were new, though some of them arose "de novo," but mainly with the hope that a connected account may prove of some value in suppressing future epidemics of the same type.

*Leishman, Col. Sir Wm., Proc. Roy. Soc. Med., Vol. 9, No. 2, p. 19. 1915.

Predisposing Causes of the Epidemic.

The literature of Public Health records the fact that enteric fever is endemic in the southern part of Belgium, and this statement has been confirmed by all the Flemish medical men in that area whom I have interrogated. In Poperinghe, a small town with a peace-time population of 7,000, one of the three local doctors said that he usually treated twenty to thirty cases each winter.

It may be said that there are five main causes for this:—

1. Faulty sanitary conditions.
2. Impure water supply.
3. Lack of personal cleanliness.
4. Faulty nursing.
5. Absence of Public Health regulations, e.g., notification.

During the recent campaign all the above were greatly accentuated, and to them there was added another very important factor, viz., the poor physical condition of the persons attacked: overcrowding and malnutrition played a large part in the spread of the disease.

These predisposing causes must be dealt with rather more fully:

Sanitary Conditions.

It is well known that the sanitary habit is not as well developed in Southern Belgium as it is in this country, and consequently defaecation and micturition take place indiscriminately in almost any and every public place. The latrine accommodation even of large modern houses is wholly inadequate, and where it exists is faulty: the seats are often soiled and the pans filthy, a water carriage system being practically unknown. The usual plan is for the excreta to pass directly into a large cesspool, imperfectly bricked and plastered, which is emptied usually once a year. The emptying of these cesspools in itself constitutes a danger to the public health. In the towns it is sometimes carried out by steam "vidanges," which are large metal tanks into which the contents of the cesspool are drawn by suction, but more often the process is carried out by hand, the contents being baled out in buckets and emptied into large wooden barrels on small three-wheeled carts: a considerable amount is spilt, the ground around the cesspool is soiled and the track of the cart through the streets is marked by the leakings from the barrel, and the consequent odour.

This material, often a source of typhoid infection, is emptied on to cultivated land, or even directly over existing vegetable crops, which are the staple article of diet for the peasant population.

The supervision of the disposal of garbage is inefficient, and its greater accumulation during war time became a very real source of danger—especially as a breeding ground for flies. The manure heaps situated always in the centre of farm buildings are even more to be held responsible for the fly pest. In the case of this epidemic, however, flies played no direct part, for their larvae rarely appear before June.*

The impervious nature of the soil of Flanders, and the fact that nowhere is subsoil drainage provided, as is the case in nearly every British village, must also be taken into account as a sanitary disability.

Water Supply.

Except in the larger towns, a central water supply system is unknown. Each house or collection of small cottages has its own well, which is sufficient for its needs in all but the driest seasons. A few dairies and other businesses have artesian wells, but apart from these all the wells are shallow and are frequently contaminated with sewage.

In an astonishing number of instances the well has been placed within a few yards, or even a few feet of the cesspool, so that, as someone has said, "as long as one is full the other is never empty."

When, as under the conditions of this campaign, there was a great call on the supply of the wells, they became more and more contaminated.

Uncleanliness.

Lack of personal cleanliness must undoubtedly be a factor in the spread of disease, and in this campaign it tended to be greatly increased among the civilians owing to the overcrowding and the abnormal conditions under which they were living.

Faulty Nursing.

Outside Brussels trained professional nurses are practically unknown: the whole work is undertaken by nuns or nursing sisters, some of whom are fairly well trained, others most indifferently so.

In nursing cases of enteric fever, lack of cleanliness and skill, and the absence of proper facilities for disposal of excreta play a

considerable part in the transmission of the disease. In the fever ward of the Poperinghe Civil Hospital, owing to the overwork and understaffing resulting from war conditions, the nuns wore no aprons and slept in their clothes. The patients were most imperfectly washed and also slept in their clothes, and no means of sterilising utensils were available. The number of sisters who contracted the disease themselves was considerable.

Public Health Precautions.

Before the war these were practically unknown. There existed no system of notification of infectious diseases, compulsory or otherwise, and those patients who could afford to pay the doctor's fees were never removed to hospital. No regulations as to disinfection were in force, and there were no facilities for tracing carriers.

No laws existed regulating the position and treatment of manure heaps, and no efforts seem to have been made to deal with the fly problem. Naturally all these conditions would determine the annual recurrence of the disease.*

Lastly, among the predisposing causes of the epidemic must be mentioned those special factors due to war conditions—viz., the overcrowding, malnutrition and consequent physical exhaustion of the civilian population.

It was not until the middle of May, 1915, that the last civilians left Ypres itself. Most of the richer inhabitants had fled when the bombardment began in October, 1914, but there was a number varying between four and five thousand left in the town to the last. These people were trading and working during the day, while their nights and the times of heaviest bombardment were spent in cellars without light or air, or in the "casements," caves in the city walls, where there was a serious state of overcrowding and filth. Many cases of enteric fever were removed which had been lying for days untreated in these places among a crowd of men, women and children.

Much the same condition of affairs was to be found over the whole uninvaded area of Belgium. Refugees had swarmed from the German area and crowded into the villages and isolated farms, with the result that the normal population for a particular area was more than doubled notwithstanding the numbers that had been evacuated to France and England. This

*Hewitt, "Houseflies" (Camb. Univ.), p. 20.

*Hewitt, "Houseflies," ch. viii.

congestion was particularly marked in Poperinghe and the villages on the Belgian side of the frontier, to cross which the people had a deep-rooted objection both on the grounds of commerce and of sentiment.

The supply of food was limited and transport for civilian purposes was difficult to obtain: at this time the surplus rations of the Allied armies played a very considerable part in keeping alive the refugee population.

Considering all these things together it would be hard to imagine conditions of lowered resistance and faulty arrangement which favoured an epidemic so much as those obtaining in Flanders at the end of 1914 and the beginning of 1915.

During the month of November, 1914, a hospital was started in Ypres by the unit referred to above, for the treatment of civilians. They were wounded in large numbers by the bombardment of that city and its environs, which followed the First Battle of Ypres: and for them no local medical help of any kind was available. Here it was noticed that during December a steadily increasing number of persons was treated, both as in-patients and out-patients, suffering from a form of enteritis.

The early symptoms were abdominal discomfort, followed by diarrhoea and vomiting, the temperature often running up to 103° during the first 24 hours of illness. In some instances the fever was maintained and considerable prostration followed, but in most cases the routine treatment of rest, castor oil and starvation brought about a rapid recovery. The Medical Staff and the Orderlies were attacked by the same trouble. The Mobile Laboratory of the R.A.M.C. stationed at Poperinghe reported that every specimen examined, not only of water but also of the local beer, proved to be contaminated by *B. Sporogenes Enteritidis*, and consequently it was assumed that this was the organism responsible.

This disease was often recurrent, and among the civilians, suffering from the disabilities outlined above, the attacks grew in severity. The onset of the disease was always, however, characteristically sudden in contradistinction to that of enteric fever, which is usually gradual.

Towards the end of December a few cases came under treatment which showed all the characteristic symptoms and signs of typhoid fever, and as blood from these cases examined by our own laboratory at Dunkirk and by the

Mobile Laboratory gave positive Widal reactions, we became aware of the beginning of an epidemic of enteric fever, the more severe and the more to be feared because it followed so closely the widespread epidemic of enteritis. It would seem clear that the severity of symptoms which was noticed throughout, and the very high mortality—25 per cent., were due to this previous weakening of resistance in those attacked.

In the early part of January, 1915, the number of cases grew so rapidly, that the F.A.U. decided to open a second hospital of 150 beds—in conjunction with a Belgian lady, the Comtesse Van den Steen—in a Chateau at Poperinghe, which was devoted entirely to enteric cases. The only other hospital accommodation available was one ward of 15 beds, into which over 40 patients were crowded, at the Poperinghe Civilian Hospital, and one small ward in the also inconceivably overcrowded "Hospice" at Bailleul. How many cases passed through these, and with what mortality I do not know, and it is doubtful whether the figures will ever be available, though it is certain that the numbers were large. The Poperinghe Civil Hospital was destroyed by shell-fire some two or three months later, with many casualties among the patients and the devoted nuns who looked after them.

Patients now began to come in from all parts of the uninvaded area of Belgium, some acting on their own initiative, others directed by the few remaining local doctors, and many, from Army billets, sent in by Medical Officers of the R.A.M.C. serving with Battalions and Field Ambulances: so that it soon became evident that such widespread disease in the area where our troops were billeted, and into which a constant stream of reinforcements was pouring, must be dealt with by large and wise measures.

Working in conjunction with the Director of Medical Services and the Sanitary Officer of the Second Army, a scheme was evolved, and as described below, was carried out with the most satisfactory results.

The main points in this scheme were as follows:—

1. The establishment of a central Bureau for dealing with all information regarding the epidemic, and to co-ordinate all departments of the work undertaken.
2. Compulsory notification of all cases.

3. Systematic tracing of all suspected cases and investigation of suspicious attacks of diarrhoea.
4. Removal of cases and disinfection of houses.
5. Investigation and correction of insanitary conditions.
6. Prophylactic measures.
7. Provision of a pure water supply.
8. Relief work.
9. Provision of hospitals.

Some explanation of the methods employed to attain these ends may be of interest.

1. *Central Bureau.*

This was established in the Hospital building at Poperinghe. A large scale map was prepared (10 ft. by 8 ft.), showing the whole area, as marked in the sketch map above, and detailing every isolated farm or house. Still larger scale maps were prepared of each of the towns and villages, showing all rows of houses. Small coloured flags were used to mark the distribution of cases upon these maps:—

Yellow for enteric fever;

Red for scarlet fever;

Black for cerebro-spinal fever;

In this way the spread of the epidemic could be seen at a glance, and, as a result of this evidence of centres of infection, the authorities were able to take action, and prohibit the billeting of troops in various areas.

These maps were also of great use, in that tracings were taken from them for members of the parties who made the house to house search which will be described later. As reports were received that infected houses had been disinfected, the flags marking them were given a distinguishing sign in order to show clearly the cleaning-up of billeting areas. All notifications of cases were received here, and a type-written record kept showing in columns:—

Name, age and sex of patient.

Address.

Medical diagnosis.

Details as to contacts and their subsequent inoculation.

Sanitary state of house.

Details as to return of patient, etc.

Every notification of civilian cases made by Army Medical Officers to the Director of Medical Services was forwarded to this office, and similarly all notifications from other sources direct to the Bureau were passed to him, that so the incidence of cases among our troops

might be judged in connection with the civilian epidemic.

The other branches of the work described below were all directed from this same centre, so that the greatest degree of co-ordination possible was obtained in the work of stamping out the epidemic.

2. *Notification.*

As has been mentioned above, there existed in Belgium no system of notification of infectious diseases, and this was at first a great difficulty. Naturally, any cases coming under the notice of R.A.M.C. Officers or of our own men were notified at once: but a great number of cases, particularly among the more wealthy people, were never by any chance notified. A campaign of instruction was therefore organised. The half-dozen or so remaining civilian doctors were interviewed and persuaded: the all-powerful Curés, the Burgomasters and the gendarmerie in all the villages were instructed and urged to co-operate.

These efforts did not meet with unqualified success, and finally on representation of the situation, the Belgian Government issued an order for compulsory notification, and gave to us the power of removal and evacuation of cases and suspect persons. This power had to be used in certain cases.

3. *Tracing Cases.*

So many instances were found of persons with enteric fever lying ill in their houses with no medical attention, and even dying without anyone responsible knowing they had the disease, that it was decided to make a house to house visitation throughout the whole of the area. Search parties were arranged, two men and a Flemish interpreter, often a curé or a nun, working together, and by using large scale maps the area was covered systematically. A card was made out on which was a number of questions to be answered for each house—giving particulars of illness of the inmates, and describing the sanitary state of the premises. Working with every four or five of these groups was a medical man who investigated any suspicious cases of illness and authorised their removal if necessary. Particulars of the insanitary conditions found were passed on to the Sanitary Officer of the R.A.M.C., whose squads followed closely behind the search party.

All infected houses were marked by means of a cross in yellow paint over the door, as a warning to officers billeting troops, and as soon

as satisfactory disinfection had been carried out, that cross was surrounded by a circle, when the house could once more be used.

A very large number of cases were brought to light by means of this search. In one instance a farm was found around which a battalion was bivouacking, while in the farm were 11 cases of enteric fever. That is merely one instance of the excellent results which this rather laborious search accomplished.

The questions asked were printed on a card with space left for the answers, and were as follows:

STREET No.
NAME

1. *Personne malade*
diarrhée
mal à la tête
2. *Malade, guéri, ou mort auparavant*
époque de la maladie
nature de la maladie
docteur
3. *Si 1 ou 2 affirmativement:*
lait
beurre
bière
- Soldats logés:*
combien
régiment
compagnie
4. *En tout cas:*
eau
sanitation
vaccination } faite
 } promise
5. *En cas de détresse:*
genre d'assistance nécessaire
combien d'enfants
femme enceinte

6. *CLASSIFICATION.*

This search lasted roughly from February to May, 1915. After that time, the main epidemic having been stamped out, similar search parties went over the whole ground again, looking for sporadic cases and for persons with suspicious medical histories, who might possibly prove to be carriers. This work was all done in connection with the Mobile Laboratories—whose figures will presumably be published in the Medical History of the War.

In order, however, to illustrate the importance of this work, it may be said here that up

to the end of 1915 one Laboratory had examined 667 such civilian cases and had found:—

7 cases of typhoid fever.

2 cases of paratyphoid a.

10 cases of paratyphoid b.

and also 19 carriers of over six months' duration; while another laboratory had examined 304 cases and found:—

6 cases of typhoid.

1 case of paratyphoid a.

14 cases of paratyphoid b.

and 4 carriers.

It may be noted in passing that all these carriers were intestinal, and that ninety per cent of them were over forty years of age.

4. *Removal of Cases.*

The congestion of the whole district made this precautionary measure a matter of necessity for the safety of the rest of the population. The fear that they would be evacuated to France, and later be unable to return to their native country, made these patients very unwilling to go to hospital. When cases had been removed by ambulance, such disinfection as was possible was carried out. Rooms were washed, and in some cases the walls white-washed; mattresses and blankets which were soiled were burnt and advice given as to simple precautions to be observed by other occupants of the houses.

5. *Sanitary Work.*

This was carried out by R.A.M.C. Sanitary squads, and a certain number of civilians of the locality. Following up the search parties, they dealt with insanitary conditions pointed out by the latter, emptying cesspools, cleaning, or causing to be cleaned, the latrines, directing the disposal of refuse and disinfecting after the removal of cases. In this they were assisted by the gendarmerie—a most helpful body of men, to whom in a number of instances were entrusted stocks of chloride of lime and other antiseptics for use in these cases.

Some attempts were made to cope with the problem presented by the huge manure heaps found in the centre of practically all farm buildings. As during the early summer months these form a perfect breeding ground for flies, preventive measures were necessary. In some cases permission was obtained to heap them together and cover the surface with a two-inch layer of earth, beaten down, but the great majority of farmers objected so violently to their valuable stock of manure being touched

at all, that little progress was made in this direction.

6. Prophylactic Measures.

In the months of March and April, a campaign of anti-typhoid inoculation was carried out. In Ypres and Poperinghe, and in every one of the villages, were established inoculation centres. Compulsion was impracticable, but the whole influence of the Curés and the Burgomasters was brought to bear on the populace. Placards in French and Flemish were posted everywhere, and handbills calling attention to the benefits of inoculation were distributed to every house, with the result that about 15,000 persons received their double inoculation of the ordinary anti-typhoid vaccine supplied by the R.A.M.C. In every case the two doses were injected subcutaneously above the nipple, and in no case were troublesome sequelæ reported. It is not possible to say definitely what caused the very sudden cessation of the epidemic which took place at the beginning of May. Weather, improved conditions, and the scattering of the civilian population in certain areas by the bombardments of the Second Battle of Ypres, probably all played some part, but it must be attributed in a great measure to this wholesale protective inoculation.

One incidental result of the formation of these inoculation centres was that civilians began to come and ask for treatment for minor ailments, and this proved to be the beginning of a series of dispensaries which met a real need and led to the earlier discovery and treatment of much disease.

It may be recorded here that among the seventy or so members of the Unit (F.A.U.) who were employed on this epidemic work, all of whom had been previously inoculated, only two slight cases of infection occurred.

7. Water Supply.

Something has been said already about the general condition of the water supply. The unparalleled strain put on the wells of the district soon exhausted all the comparatively pure water: the odour of the hospital well in Ypres was indescribable. The troops as well as a large part of the civil population were in the habit of taking drinking water from the Yperlee, the stream which runs through the foundations of the city. As a very large number of the closets of the place open direct into this stream, the dangers of infection are easily realised. Measures were therefore taken early

in 1915 to provide pure water. For the troops a special reservoir was constructed out of the swimming bath in the city moat. This was done by civilian labour under the direction of an engineer, and a practically inexhaustible supply of chlorinated water was thereby made available for the water carts. To meet civilian needs, "water stations" were provided throughout the city with barrels in which water was chlorinated and allowed to stand. Over each of these supplies a sentry was posted to guard them against fresh contamination and against waste. Within a few days after their installation, the whole population was drawing water from them. In the villages around, much the same state of affairs prevailed, as none of the excellent water storage schemes which were afterwards in working had then been begun. Various experiments were tried for purifying sufficient water. Boiling and filtration proved impracticable, and the use of chloride of lime became general. Here again posters and handbills pointing out the dangers of unchlorinated water served their purpose well. Supplies of chloride of lime were distributed widely to isolated houses and to the villages. Small metal spoons were issued for a measure of the quantity needed for one bucketful of water, in the proportion of 1 drachm to 40 gallons. To these was attached a label with full printed directions in French and Flemish. I quote these below (in French only).

Indications pour l'emploi de la poudre désinfective.

1. Avec le petit cuiller attaché à une carte mesurez une bonne cuillerée de poudre et mélangez la avec 15 litres d'eau.
2. Laissez reposer l'eau une demi-heure avant de s'en servir.
3. Cette poudre, spécialement préparée, étant très forte, une demi cuillerée suffit tout-à-fait pour un sceau ou un grand pot. N'employez que le petit cuiller attaché.

La poudre doit être conservée dans une boîte hermétiquement fermée.

Il est très dangereux de boire de l'eau ou de s'en servir pour laver la vaisselle sans la désinfecter selon ces indications.

8. Relief Work.

As an indirect means of combating the epidemic, the Relief Section of the Unit at this time did important work. The feeding, clothing and housing which was done, in as far as

they helped to improve the general condition of health of a large number of persons, gave a greatly increased resistance to infection. In those cases where disinfection of houses had necessitated the burning of mattresses and blankets, the relief section followed on and was able to provide others in their place.

A work of some importance undertaken in the spring was the provision of pure milk—more especially for the children. The machinery of a dairy at Poperinghe was put into use, and a regular supply of pure milk was distributed in sealed bottles, procured from Paris, to the whole area covered by the Dispensaries which have been referred to above.

The importance of this Relief Work, quite apart from the humanitarian point of view, was fully recognised by the Military Authorities, who gave it every facility.

9. Hospital Work.

At an early stage of the epidemic it became evident that the two hospitals at Ypres and Poperinghe and the limited accommodation of the Civilian Hospital at Poperinghe would be insufficient for the number of cases to be treated. It was also thought wise to move as many cases as possible out of the area. The R.A.M.C. therefore started a Civilian Typhoid Hospital of 800 beds some 20 miles back, and to this all cases were removed by motor ambulance convoy as soon as they could safely travel. The idea was that these hospitals near the firing line were to act solely as collecting stations for these cases. Naturally they would also have to return those convalescent cases which had been examined and proved not to be carriers, to their homes.

In practice it was found that many cases on admission were too ill to be moved, and it was decided that only those cases in the first or fourth weeks of the disease were to be evacuated. In one or two instances where patients between these stages of the disease had to be moved because no other accommodation could be found for them, serious complications resulted.

Before their return to Belgium all these patients passed through a large Convalescent Hospital, with accommodation for 1,500, which the Belgian Authorities started near the French coast.

It is not the purpose of this article to deal with the clinical side of the work, but it may be mentioned here that approximately one half

of the cases were paratyphoid a. and b., as proved by the serum reactions and the cultivation of bacilli from the blood. The same complications occurred in the cases infected by each of the three bacilli, and it was found to be absolutely impossible to differentiate clinically between typhoid and paratyphoid fever. Where normal healthy people become infected, I believe that there is rarely any serious difficulty in the differential diagnosis.

A report on such of these cases as reached the Stationary R.A.M.C. hospital has already been published.*

One or two further points of interest are worth mention in connection with the hospital work. The disposal of excreta constituted a difficult problem. The local method of dealing with sewage has been sketched above, and it will therefore be evident that excreta had to be either disposed of entirely in some safe way under constant supervision, or else rendered innocuous before being handed over to the local farmers who remove sewage for disposal on their land.

The latter course was considered to be the easier, and therefore excreta boilers were installed at each of our hospitals of sufficient size to deal with the whole excreta of the hospital every twelve hours. The apparatus, of which a diagram is shown, was the invention of an engineer member of the Unit, Mr. Allen R. Baker, and was made in Dunkirk by an ironfounder, at a cost of about £20. A number were subsequently ordered for the French Army hospitals. The special features of this boiler were:—

- (1) The hinged lid when clamped down after the fashion of an Autoclave, had a rim fitting in a water bath which effectually prevented any escape of vapour.
- (2) The fumes were led off by a metal pipe from the top of the boiler which passed down the side and into the brick furnace beneath, where they were burned, being thus got rid of, while at the same time proving a slight additional source of heat.
- (3) After boiling for an hour, the material was run off through a 6-in. pipe, opened by a sluice. No stoppage was possible, and the innocuous material passed direct to the cesspool, from which it was removed by vidange.

* Clarke, C. Journ. R.A.M.C., vol. 25, p. 333, 1915.

With a 10-ft. chimney, and the exercise of a little care in filling this boiler, there was no smell, and the working was in every way satisfactory.

The disinfectant used throughout for cleansing purposes was a solution of Creosol. The floors were washed with it, and the bedpans and urinals were cleansed and left to stand in it. All the soiled linen was put to soak in large tubs full of the solution for twelve hours before being boiled and washed.

The absence of a Thresh disinfector made the treatment of mattresses a difficult problem. This was overcome by the use of palliasses, filled with chopped straw. These were quite comfortable, although they made nursing a little more difficult. The great advantage, however, was, that when they got soiled, as they frequently did, the straw could be burnt and the palliasse boiled. Indeed this was done after each patient left.

Conclusions.

Looking back on this epidemic, there are certain points which stand out as being especially worthy of note.

1. The importance of caring for the civilians in the zone of the armies. In all wars this principle has found a certain recognition, but I should doubt if it has ever been better illustrated than in this campaign.
2. The history of the epidemic will stand as a great testimony to the value of efficient sanitation, private and municipal, the absence of which was the foundation of all the mischief.

Without the vigorous prosecution of public health measures the ravages of the disease would have been far greater than they were.

3. The value of inoculation received one more proof, were any needed. The immunity of our inoculated army as compared with our Allies and the civilians is overpowering evidence of this.
4. One point is noteworthy through the whole history of this epidemic, and that is, that though guided to an extent by medical men, the great bulk of the work was done by laymen. The administration of the hospitals, the search for disease, and the whole scheme for the purification of water, were carried out by ordinary members of the private life these men were for the most part in business and the professions. This

meant a great economy in the use of doctors—a point of some importance.

Of the epidemic as it attacked the armies, nothing has been said. So far as the civilian part of it was concerned, it practically died out in May, 1915, and the impression left on one's mind is that its limitation and final suppression were due to the vigorous prosecution of the methods outlined above.

I should like to acknowledge the great assistance given me in the compilation of this account by the late P.M.O., Capt. H. Nockolds, D.S.O., R.A.M.C., and other officers of the Friends' Ambulance Unit.

PRESIDENTIAL ADDRESS, SCHOOL MEDICAL OFFICER GROUP, SOCIETY MEDICAL OFFICERS OF HEALTH.

G. A. AUDEN, M.D., M.A. Cantab., F.R.C.P.
Lond., D.P.H. Cambs.

The year that is now so near its close has seen a notable change in the history of the Society of Medical Officers of Health, for the formation of groups of those whose work is of a specialised character under the ægis of the parent society is an event of paramount importance. At the outset I may perhaps be pardoned a personal note in giving expression to my sincere appreciation of the confidence you have imposed upon me in selecting me to occupy the position of first president of the School Medical Officer Group. Our responsibility at the present juncture is indeed great, for the school service, after a vigorous and healthy childhood, has reached its adolescence, but if cabined and confined through lack of vision must fail to attain the development of full maturity. Indeed the School Medical Service is becoming more and more the most vital of all the branches of preventive medicine. The child has become more and more the centre of interest, and his well-being the end and aim of sanitary reform. In one of his earlier reports as Chief Medical Officer to the Board of Education, Sir George Newman has voiced this new point of view in the following words:—

"It is clear that in the three age-periods of childhood after infancy we reap a harvest of

disease for which we have sown during the infancy period. First, we get many of the actual diseases of infancy continued into the late periods of childhood; secondly, we get the sequelæ of those diseases in the survivors; thirdly, we get a continuance, varying in degree and extent, of those causes and conditions which in infancy yield our high infant mortality rate and in the long run bring about a degeneration of race. If in this way we take a long view of the matter, we shall see that an improved physical condition of the children of the nation depends upon our grappling with the problem not only from the beginning, or in other words, with infant mortality at its root, but grappling with it as one problem. It is idle to attempt to purify a stream of water if its source be a polluted one, except by purifying the source. It is idle to patch up children at school age if we first make them pass under damaging and devitalising conditions at the beginning of their lives. As it has been well said, 'The greatest effect upon the life capital of the population is produced by the infant mortality.'

Yet can we say that under the existing circumstances we have gone far along the road of achievement in this direction? What constructive work has medical inspection in schools so far performed, and how far has the preventive aspect of the question been grasped? Too often the educationists, so-called, "cannot see the wood for the trees," and fail to understand how great an advantage could accrue to the children concerned by seizing the opportunities which lie ready to hand. The Health Committee of the local authority, appointed as it is for the sole object of supervising matters of health, has the prestige of nearly 50 years of notable service. It is very different with the Education Committee. Selected with a view to the administration of education within the area of their jurisdiction, the members find themselves confronted with problems of preventive medicine which at first sight seem to have but a distant relation to education. They, therefore, find it difficult not to regard school hygiene as a mere side-issue which makes an ever increasing demand upon the financial resources at their command, or they tend to fall under the tyranny of numbers and to estimate the success of their work by the mere numbers of children examined or treated. There is thus no little danger lest the true preventive aspect of the work of the

School Medical Service should be obscured, and that it should degenerate into being little more than a rate-aided and state-aided rival to the voluntary Hospitals or the general practitioner in the treatment of trivial ailments. But there is a more serious danger still. A Health Committee from the nature of the duties imposed upon it must recognise the expert advice given to it by its Medical Officer. The Education Committee, on the other hand, looks to its Educational adviser for advice upon all those matters upon which it requires expert knowledge, with the result that the School Medical Service tends to be placed more and more in a subordinate position and under lay domination. Hence the advice which the S.M.O. is competent to give on the more general questions of school hygiene, such as the lighting and planning of schools, seating, etc., modifications of curriculum, value of physical exercises and special investigations into the main problems that centre round education is but rarely invited, and still more rarely followed. I fully admit that there are notable exceptions to this generalisation, but such exceptions prove the rule, and show to what advantage the expert advice of a medical officer can be utilised. The so-called "Staffordshire type" and "Derbyshire type" of elementary schools, for example, are the direct result of the recognition of the expert advice of the County Medical Officers concerned.

Even when the importance of particular developments of school hygiene is recognised, Local Education Authorities are frequently not prepared to carry out this recognition to a logical conclusion. Take, for example, the provision of open-air teaching. The advantages of such a curriculum for the debilitated and anæmic children who form so large a proportion of our slum school population is clear and definite. No further proof is now needed that without some such provision we cannot hope to place these children on such a plane of health as will enable them to become efficient citizens. Yet what is the provision to meet such a need? A few Education Authorities have established a single open-air school apiece, but these can do no more than serve as object lessons of what might be. We tend to mistake blossom for fruit. Yet the provision of open-air sanatoria for consumptives is now deemed one of the ordinary functions of a Health Committee.

Thus, in spite of all the accumulation of knowledge and statistics of the incidence of disease amongst children of school age, it is still the fact that but little investigation into the cause and prevention of such diseases has been carried out. Let us take as an example the question of the incidence of heart affections amongst children. In Birmingham in the years 1917-19 there were 104 deaths of children from rheumatic heart infections, yet the figures give but a faint echo of the enormous amount of disablement that occurs in early life from this one cause, and the life-long physical inefficiency which results from infection during childhood in the later periods of adult life. Thus, in the Registrar-General's returns for England and Wales, 1917, the deaths from organic heart disease numbered 52,692, or 105.6 per 1,000 deaths from all causes.* Again, what is the relation of chorea to acute rheumatism in children? Dr. Poynton, in a recent paper on the cases of acute rheumatism in children under 12 in one year, July, 1919-June, 1920, at Great Ormond Street Hospital, gives some interesting details. Cases 172. Deaths 22. Chronic invalids 30. Compensated heart disease 58 (30 per cent). Recoveries 62. Thus in a single year of observations 13 per cent had died, and over 17 per cent had become complete invalids, while 30 per cent had developed organic heart disease. Further, of 84 first attacks, 33 came under notice for chorea, and altogether in 104 cases, i.e., 69 per cent of the cases under observation, there was chorea, while in 37 of the 104 cases the chorea was the sole manifestation of a rheumatic condition. Now we have reason to believe that one, and possibly the most important route of infection in these cases is through the tonsils. How far therefore can these morbid conditions be correlated? Is tonsillar and adenoid enlargement a reaction to an infection? If so, how is this infection transmitted? Is it by overcrowding in the schools under ill-ventilated conditions? Is it an infectious process from person to person? These are but a few aspects of the single problem, and there are hosts of others of equal interest and importance to the community which the School Medical Service can help to solve. The problems lie ready to our hand, and the members of the School Medical Service would welcome any opportunity or

encouragement in an attempt at their solution, apart from the welcome respite which such an investigation would offer from the humdrum round of routine medical inspection. But with few exceptions Education Committees fail to see their significance or importance, and are tempted to look askance at a suggestion of this kind, and scientific ardour is soon damped. The result of the disillusionment which follows was long ago expressed by Lord Bacon in his "Advancement of Learning": "And what, I pray yee, followes? Even this that Physitians say to themselves, as Solomon expresseth it upon a higher occasion, 'If it befalls to me, as it befalls to the foole, why should I labour to be more wise . . . for they find that mediocrity and excellency in their art maketh no difference in profit or reputation towards their persons or fortunes.'"

The opportunities for research into the disabling conditions of later childhood and adolescence have been largely increased by extension of the scope of medical inspection to secondary and continuation schools, and are likely to be still further extended by the inclusion of such schools as receive monetary grants from the Local Education Authorities, e.g., Grammar Schools and similar foundations. Thus practically the whole of the children and adolescents of the nation will ere long be brought within the purview of the School Medical Officer. It will be mere waste of money and energy if this wide network of activities is to degenerate into a mere routine collection of statistics of doubtful accuracy and the palliation of defects the *origin* of which can be, and should be, known and attacked. This can only be done if there is a general recognition of the tremendous opportunities which await us. Too often the defects are to a large extent the product of the conditions under which the children attend school, e.g., scoliosis, the result of unsuitable desks, eye-strain, due to deficient illumination, etc.

There is another cognate question which arises in connection with the incidence of ill-health amongst children and their attendance at school. There is a general complaint amongst general medical practitioners that pressure is too frequently brought to bear by School Attendance Officers upon parents of delicate or ailing children to send them into schools. On the relation of the S.M.O. to this question of school attendance there is often

some confusion of thought. In school attendance as such the School Medical Officer is not directly interested. This is a function of the School Attendance Committee which is laid upon it by Statute, viz., the Elementary Education Act of 1876. He is, however, very much concerned to know the real nature of any alleged sickness and whether any individual child can or cannot attend school without risk to itself or to its fellows, and is receiving adequate treatment for its condition. Such information can best be obtained through the agency of one of his own staff properly trained and equipped, i.e., a school nurse or health visitor. Thus in Birmingham, where the School Medical Service is entirely distinct from that of the M.O.H., in 1919 45.6 per cent of the work of the Health Visitors was in connection with children of school age, totalling 23,653 provisory visits to the homes. It must be remembered that under existing circumstances the financial grants are paid upon average attendance, and that therefore Local Education authorities must be excused if they look askance at any movement which may tend to reduce the percentage of attendance. There is no doubt, however, that the staff of *ad hoc* appointed School Attendance Officers could be largely reduced, and many of the duties at present performed by them could be transferred to the staff of the School Medical Officer, with a proportional saving of overlapping and cost. At the present time 75 to 80 per cent of all absences from school are on alleged medical grounds, and accordingly the investigation of the validity of these as an excuse for non-attendance is a matter of real importance, for the total educational loss on this account is enormous. In Birmingham in the first six months of the present year, 50,621 medical certificates for exemption from school were received. These can be subdivided as follows:

Exclusion by School Medical Dept., (including verminous children) . . .	12,813
Exclusion by Health Dept.	13,418
Medical Mission	139
Certificates of Unfitness by Private Practitioners	24,251
Total exclusions	50,621

It must be borne in mind that these figures do not include the large number of children who are treated at the Hospitals and General

Dispensary, whose notes are stamped "not to attend school." Of these no figures are available, but they run into many thousands annually.

But it is only when we analyse further the medical certificates given by general practitioners that the unsatisfactory and chaotic condition is seen. Thus the certificates for the six months involved 17,417 individual children. Of these:

51.9 per cent made no statement of the length of exclusion suggested.

24.8 per cent made no statement of the nature of the alleged complaint.

2.3 per cent made no statement of either of these points.

Thus only 21 per cent of the medical certificates afforded any real and adequate guidance to the School Medical Department.

Moreover, it is the experience of every School Medical Officer that many certificates are obtained by parents who wilfully withhold salient facts. Some are given without due consideration of the case, or even without personal inspection of the child. A few are flagrantly and deliberately inaccurate. These cases are especially frequent when the children are reaching the limit of their school attendance, especially since the Education Act, 1918, has compelled attendance until the end of the term following their fourteenth birthday. Again and again we find that a child who, on medical grounds, has been excluded for months from school, on reaching the age-limit for attendance has at once proceeded to work, and has been passed by the Certifying Factory Surgeon.

Apart from the general apathy and lack of interest in educational problems, one great cause of this unsatisfactory state of affairs is the widespread but erroneous view that medical certificates, if demanded by the Local Education Authority, should be paid for by that authority. The truth, of course, is that it is the parent and not the Educational Authority in whose interest the medical certificate is given as a proof of the reasonableness of the child's absence from school. The onus of proof that the child is absent from school on reasonable grounds lies with the parent. The remedy must lie in a tactful representation to the medical profession as a whole of the economic and educational importance of the question, and a

*Reg. Gen. 1919, organic heart disease deaths, 51,530; 102 per 1,000 deaths of all ages.

sharp reminder to those practitioners whose certificates are carelessly given.

This question of certificates for exemption from school on medical grounds is in the highest degree unsatisfactory at the present time. The truth is that hitherto the whole training and experience of the general practitioner has tended towards an individualist attitude and in a direction away from team-work. He is therefore often unable to take a long view of the problems of preventive medicine, and is unduly suspicious of State or municipal action, which, after all, is a development of team-work. This attitude of mind is likely to prove one of the great disabilities of a part-time system of public "service," such as appears to be the basis of the Interim Report of the Consultative Council on Medical and Allied Services. It is worthy of remark that not one member of the Consultative Council is directly associated with the practical side of the School Medical Service: to this cause may doubtless be attributed the fact that school clinics receive no mention whatever in the report, nor do the facilities for treatment, operative and otherwise, which they offer, nor the possibility of linking them up in the general scheme of health sources receive even passing mention. Yet in 1919 there were about 700 school clinics in the country, and any national scheme of preventive medicine must take these into consideration. We cannot deny that there is some truth in the contention that school clinics, dealing for the most part with trivial ailments, only touch the fringe of the morbid disabilities of childhood, which, for effective treatment, must be attacked in the homes or in hospitals with beds at their disposal. But although the activities of school clinics are necessarily restricted, the fact that the medical service is to a large extent swamped by the bulk of the work which flows to the clinics is a proof of the hold they have gained upon the people who make use of them. The interim report has been described by some as a mere *ballon d'essai*, the realisation of which is not within the domain of practical politics. It has, however, the prestige which attaches to the considered opinion of an important body of representative persons and the fact that the report has taken this form indicates the direction of attack which may be made upon the position already won. The omission of mention is an omen which the school medical service cannot afford to neglect.

It behoves us therefore to be prepared, remembering the truth of the saying of Quintilian: "*Dum deliberamus quando incipendum, incipere jam serum fit.*"

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

COUNCIL MEETING.

A meeting of the Council was held at the house of the Society, on Friday, March 18th. The President (Lt.-Col. F. E. Fremantle, M.P.) was in the chair, and there were present Prof. H. R. Kenwood, Col. Grattan, Lt.-Col. Herbert Jones, Drs. Wilshaw, Wheatley, Thos. Evans, Lyster, Gibbons Ward, Blackett, Howarth, Ellis, G. F. Buchan, Cates, Kirkhope, Sanders and Snell.

The minutes of the last meeting having been approved and signed, letters of apology for absence were read from Dr. Eustace Hill, Dr. Charles Porter, Dr. Barlow, Dr. Auden, Dr. Joseph, Dr. Stocks, and Dr. Edmund Smith.

Correspondence.—(1) From the Ministry of Health referring to the complaint of the Society that orders, memoranda, and other communications relating to Health matters were not being sent direct to medical officers of health in accordance with the undertaking given by the Ministry in their letter dated March 10th, 1920. If in any instance this course has not been followed it has been due to inadvertence, and the Ministry will continue to send such communications direct to medical officers of health. (2) From the Medico-Political Union asking for information regarding the Society's scale of salaries, and suggesting a conference to discuss co-operation between the two bodies. *Resolved*: That the Council are willing to hear a statement from representatives of the M.P.U. on the aims, objects and methods of that body. (3) From Dr. John Guy, assistant medical officer of health and tuberculosis officer for Edinburgh, accepting nomination as the representative of the Society at the annual Congress of the National Association of Local Government Officers to be held. (4) From the North-Western Branch, forwarding a letter from Dr. E. W. Rees-Jones in regard to the training regulations of the Fever Nurses' Association. *Resolved*: That the F.N.A. be invited to consider the criticisms and suggestions of Dr. Rees-Jones and to submit any observations they may have to offer for the information

of the Council. (5) From the Hon. Organising Secretary of the Children's Dental Campaign asking the Society to support their work in connection with school children. *Resolved*: That this application be referred to the School Medical Group for consideration and report. (6) From a medical officer of health enclosing a resolution of his L.A. requiring him to act as medical referee for municipal employees without extra remuneration, such work having formerly been done by a general practitioner. *Resolved*: That necessary action in this matter be taken in co-operation with the B.M.A. (7) From a division of the B.M.A. reporting the appointment of a local medical practitioner as medical officer of health for an urban district of 25,000 population without advertisement of the vacancy, such practitioner having no qualification in Public Health though three other practitioners in the town hold the D.P.H. *Resolved*: That the Ministry of Health be asked to withhold their sanction of this appointment, in accordance with the terms of Article III. of the Sanitary Officers (Outside London) Order, 1910. (8) From a medical officer of health who has been asked to resign on an inadequate pension after nearly thirty years' service. *Resolved*: That the Ministry of Health be urged to secure for this official compensation under Section 309 of the Public Health Act, 1875, in accordance with the scale laid down by the Lords Commissioners of his Majesty's Treasury with regard to the abolition of office in the Civil Service.

Nominations for the Presidency, 1921-22.—

By the Midland Branch: Dr. Philip Boobhyer.
By the Southern Branch: Dr. R. A. Lyster.

Election of Fellows.—The following members were elected to the Fellowship of the Society in recognition of their standing in their respective services: Rear-Adml. Sir Robert Hill, Director-General, R.N. Medical Department; Lt.-Genl. Sir T. H. J. C. Goodwin, Director-General, A.M.S.; Air Commodore M. H. G. Fell, D.M.S., Air Ministry; Surg. Rear Adml. P. W. Basset-Smith; Maj.-Genl. Sir W. G. Macpherson; Col. P. S. Lelean, Professor of Hygiene, R.A.M. College; Lt.-Col. H. P. Waller Barlow, Director of Hygiene, A.H.Q., India; and Dr. R. P. McDonnell, Local Government Board for Ireland.

The American Public Health Association.—It was resolved that Sir Arthur Newsholme and Dr.

Sidney Barwise, County Medical Officer of Health for Derbyshire, be nominated to represent the Society at the 50th Annual Meeting of the A.P.H.A. to be held at New York, in November next, and that Major R. W. H. Jackson, Dr. P. H. Bryce, Dr. C. A. Hodgetts, C.M.G., also be asked to attend as delegates from the Society.

Food Problems in Relation to Public Health.—

On the proposal of Dr. James Wheatley, seconded by Dr. W. J. Howarth, it was agreed unanimously that a special committee should be appointed for the consideration of food problems (other than those covered by the existing powers of Sanitary Authorities) and for suggesting appropriate action thereon. The following were nominated to the Committee: Drs. Wheatley, Howarth, Charles Porter, Niven, Thos. Orr, Ellis, Prof. John Robertson, and Prof. H. R. Kenwood, other members to be elected by the Council or co-opted by the Committee from time to time as may seem desirable.

War Memorial.—It was referred to the committee of officers of the Society, to consider a representation from the Home Counties' Branch that a memorial should be placed in the house of the Society in memory of members who lost their lives in the War. The Executive Secretary was directed to thank Dr. C. W. Hutt for much valuable information in regard to suitable memorials collected by him for the consideration of the Council.

Non-County Group.—Lt.-Col. Herbert Jones submitted the following recommendations on behalf of the Non-County Group:—

- (a) That in view of the statement made by Dr. Addison on 18th November, 1920, that the Ministry of Health were considering, in connection with the future health services of the country, the question of the county M.O.H. supervising, and being responsible for, the work of the district M.O.H., the views held by the Non-County Group be placed before Sir George Newman.
- (b) That the attention of the Ministry of Health be drawn to the requisition made by a county medical officer of health to the district medical officers of health in his county to supply him with an annual report in tabular form, in addition to the annual report required by the Ministry.

under their Order of December 10th, 1910, and their ruling asked as to whether this addition to the clerical duties of the M.O.H. of a District is necessary or desirable, especially in view of the fact that with a few rare exceptions the clerical work of these medical officers of health has to be done by themselves.

After some discussion it was *Resolved*: That the recommendations be included in the Agenda for the next meeting of the Council.

Elections to the Fellowship.—It was proposed by Dr. Howarth, and carried unanimously, that direct elections to the Fellowship by the Council should not be made without previous notice on the agenda paper.

Proposed International Congress.—Dr. W. J. Howarth made a statement on behalf of the committee appointed to consider the proposal that the Society should convene an international congress of public health medical officers to meet in England in 1923. The committee had ascertained that such a Congress would be approved and sanctioned by the Government Departments concerned and that there were no insuperable difficulties to be overcome in regard to organization and finance. At the same time the Society might think it advisable to await the completion of the International Health Organization, now in process of formation under the League of Nations at Geneva, and convene a Congress later under the *aegis* of, or in co-operation with, that body. In the course of the subsequent discussion it was suggested that during the present universal call for economy it was doubtful if governments and municipalities would accept invitations to send their medical officials to international meetings, and it was *Resolved*: That further consideration of the proposal for an International Congress of Public Health Medical Officials be deferred until next year.

Articles of Association.—The Committee of Officers of the Society reported that they had given further consideration to representations from the branches and groups suggesting revision of the the Society's Articles of Association. They had had the advantage of an interview with Dr. Gibbons Ward and Dr. W. H. Davison, of the Midland Branch, who pointed out that many members resented the ruling based on Para. iii., Article 6, by which *members* had been denied the right to

vote at the election of branch officers and representatives. The committee agreed that this interpretation of Article 6 was wrong, that all members were entitled to vote at branch meetings, and that each branch had entire control of branch business subject to the reservation set out in the article. Dr. Gibbons Ward and Dr. Davison, in view of this decision, agreed that there was no urgent reason for immediate revision of the existing Articles of Association until further experience had been acquired of their working. The committee were of opinion that this decision should also remove any dissatisfaction felt by the Groups, as in addition to electing Group representatives on the Council, their members would also share in the election of branch representatives. In the discussion on the report, Dr. H. A. Ellis stated that in his opinion the Groups would not be satisfied with the representation indicated by the committee, and he asked that representatives of the Groups should be invited to place their case before the committee. This suggestion was accepted, and the report referred back to the Committee for confirmation or revision after hearing the representatives of the Groups.

The meeting then adjourned.

ORDINARY MEETING.

An Ordinary Meeting of the Society was held on Friday, March 18th, 1921. The President (Lieut.-Col. F. E. Fremantle, M.P.), was in the chair, and there was a large attendance of members and visitors.

The minutes of the last meeting having been approved and signed, apologies for absence were read from Professor Sheridan Delépine, Sir W. M. Fletcher, Dr. Thomas Orr, Dr. W. G. Savage, Col. Lelean, Prof. Kenwood, and Col. R. J. Reece, C.B.

The following candidates were elected to membership of the Society:—

Addison, Mrs. O. L., M.B., B.S., Lond.; Bartlett, Bertram, M.C., M.R.C.S., L.R.C.P.; Brooks, James, M.R.C.S., L.R.C.P.; Chadwick, John William, M.R.C.S., L.R.C.P.; Clapham, George Percy Parker, L.R.C.P. & S., Edin., L.R.F.P.S., Glasg., L.D.S.; Crossley, Leonard, M.D., Ch.B., Edin.; Dunne, Arthur Briggs, B.A., M.B. B.Ch., Cantab., M.R.C.S., L.R.C.P., L.S.A., D.P.H.; Barrister-at-Law, J.P.; Ewing, Alex. James, M.A., M.B., Ch.B., Ed., D.P.H.; Fernandez, Zacharias Peter, M.D., Ch.B., Leeds; Gabriel, William Lawson Mabson, M.B., Ch.B., Leeds; Goodwin, Ernest St. George Sagar, Surg. Lt.-Cdr., R.N., M.A., M.B., B.Ch., Cantab., M.R.C.S.,

L.R.C.P., D.P.H.; Goodwin, Sir T. H. John, Lieut.-Gen., K.C.B., C.M.G., D.S.O., F.R.C.S., L.R.C.P.; Hodgson, Amy, M.D., Ch.B., Liv., D.P.H.; Holmes, Joseph, L.R.C.P. and S., L.M.Edin.; Johnston, Graham Shaw, M.B., Ch.B., Edin.; Kilkelly, Ethel Rose, M.B., B.Ch., N.U.I., D.P.H.; King, Ralph de Veil, M.R.C.S., L.R.C.P., D.P.H.; Lightbody, John Henry, M.D., Ch.B., Vict., M.R.C.S., L.R.C.P., L.S.A.; Lyall, Chas. Robert, M.B., C.M., Aberd.; Lyon, Douglas, M.B., Ch.B., Aberd., D.P.H.; Macdonald, Angus Graham, O.B.E., M.D., C.M., Edin., D.P.H., D.T.M., Major, R.A.M.C. (T.); McElwee, Alice, M.B., Ch.B., Glasg.; Mackenzie, Eric Francis Wallace, O.B.E., M.C., Capt. R.A.M.C., M.B., Ch.B., Edin.; McGillivray, Donald Mackay, M.B., Ch.B., St. And.; Mason, Charles Arthur, M.B., Ch.B., Edin., D.P.H.; Meldrum, May Isabella Turner (Mrs.), M.B., Ch.B., Glasg., D.P.H.; O'Hea, John, Surg.-Cdr., R.N., M.R.C.S., L.R.C.P., Lond.; Park, John Robert Summers, L.R.C.P. and S., Edin., L.R.F.P.S., Glasg.; Paterson, Elizabeth Park Young, M.B., Ch.B., Glasg.; Pickup, John Clegg, M.B., Ch.B., Glasg., L.R.C.P. and S.Ed., L.R.F.P.S., Glasg.; Pinkerton, Norah Dorothy (Mrs.), M.B., B.S., Lond., B.Sc., Wales, M.R.C.S., L.R.C.P.; Rutledge, Thos. Wilson, M.B., B.Ch., R.U.I., D.P.H.; Shiskin, Cecelia, M.B., Ch.B., Glasg.; Simpson, Anne, M.B., Ch.B., Aberd., D.P.H.; Smith, Jessie, M.B., Ch.B., Leeds; Stewart, George, M.B., Ch.B., B.Sc. (P.H.), Edin.; Stockwell, G. E. St. Clair, B.A., M.B., B.Ch., Cantab.; Tattersall, Norman, M.D., B.S., Lond., M.B., Ch.B., Vict.; Todd, Wm. Alexander, M.B., Ch.B., Edin.; Towers, Arthur Henry, M.B., Ch.B., Edin., B.Hy., Durh., D.P.H.; Williams, Cecil Leonard, B.Sc., Lond., M.R.C.S., L.R.C.P., D.P.H.

A number of candidates were nominated for election at the next meeting.

Dr. A. T. Nankivell then opened a discussion with a short paper on "The relation of the Laboratory to Preventive Medicine." The speakers who followed included Dr. Constant Ponder, Dr. J. A. Watt, Lt.-Col. J. Anderson (Asst. Professor of Hygiene, R.A.M. College), Dr. E. W. Goodall, of Hygiene, R.A.M. College), Dr. E. W. Goodall, Rear-Admiral P. W. Bassett-Smith, C.B., Dr. R. Veitch-Clark, Lt.-Col. F. Harvey (Deputy-Director of Pathology, A.M.D.), Dr. Monckton Copeman, F.R.S., Dr. T. Shadick Higgins, Lt.-Col. Herbert Jones and Dr. Thomas Evans.

On the proposal of the President a hearty vote of thanks was accorded to Dr. Nankivell.

NORTH-WESTERN BRANCH.

A meeting of the above Branch was held at Manchester, on Friday, February 11th, 1921. There were present Dr. Corbin (President), and 16 members.

A letter from Dr. Herd *re* Income Tax Rebate in respect of expenses of medical

officers for subscriptions to societies, etc., was considered, and it was resolved that it be referred to the Council with a recommendation that the matter should be taken up on behalf of Public Health officials.

The President announced that the death of Dr. Wm. Hamilton, J.P., of Eccles, an old member of the Branch, occurred early in the week, and reported that Dr. Dearden and Dr. Hitchon attended the funeral on behalf of the Branch.

A resolution of regret was passed and the Honorary Secretary was instructed to send a message of condolence to the widow and relatives.

Recommendations from the Committee *re* nominations for the Presidency were considered, and it was unanimously resolved:—

"That in view of the fact that Dr. James Wheatley on being invited to allow himself to be nominated by the North-Western Branch was unable to accept on the grounds of pressure of work and for reasons of health, that Lt.-Col. Fremantle, M.P., be asked if he will continue in the office of President for another session and if he cannot do so that Dr. Howarth, C.B.E. (City of London), be nominated by the North-Western Branch for Session 1921-22, and further that attention be drawn to the fact that the Branch is of opinion that Dr. Barlow, O.B.E. (Wallasey) should be nominated for the next vacancy.

It was resolved that the congratulations of the Branch be given to Dr. Cates on his appointment to the County of Surrey and to Dr. Wynne on his appointment to Sheffield.

The report of the Hon. Treasurer of the Society on the necessity for raising the Annual Subscription (see "Public Health," Jan., 1921), was considered and it was resolved:—

- (1) That some increase in the subscription is necessary.
- (2) That in the opinion of the North-Western Branch any increase in the subscription should apply to *Fellows* and not to *Members*.

- (3) That the subscriptions recommended be:—
For Fellows £2 2s. per annum.
For Members £1 1s. per annum.
And for Associates as at present.
- (4) That the Society should endeavour to increase the usefulness of its Journal.

Receipt was reported of Circular 2004 Ministry of Pensions and Circular 179 Ministry of Health, which authorises payment of fees to Tuberculosis Officers for furnishing certificates to Pensions Committees, etc., of incapacity for work of tuberculous ex-service men (a question which had been brought to the notice of the Ministry of Health by the Society).

MIDLAND BRANCH.

A meeting of the above Branch was held at the Council House, Birmingham, on Thursday, February 3rd, 1921. Twenty-five members were present, with the President, Dr. C. E. Tangye, in the chair.

The Council reported:—

- (1) With respect to the Postal Vote with reference to the election of Fellows, and it was resolved to recommend to the Council of the Society that the following be elected: Drs. Dixon, Delmege, Wilkins, Clarke, Crowe, Wray, Muriset, Sutcliffe, Peter Lowe, Dormer, Soutter, Andrews, Molloy, Cole, Elliott, Rowland, Cairns, Allan, Cyriax and Henry.
- (2) With reference to the Report of the Treasurer of the Society, published in "Public Health" for January, and it was resolved that in the opinion of the Branch that an increased subscription is necessary, but that it should be £2 2s. for Fellows, and £1 1s. for Members and part-time Fellows. Associates to pay as laid down in the report of the Honorary Treasurer.
- (3) Regarding a letter received from the North-Western Branch referring to nominations for the Presidency for the year 1921-22, the Secretary was instructed to reply on the lines indicated.

The Secretary was also instructed to approach two of the members of the Branch with a view to the nomination of one of them.

Dr. Cyriax then read his paper on "Some problems in the treatment and control of tuberculosis." The paper was of great interest and was followed by a discussion, in which the following took part: Drs. Davison, Snell, Drybrough Gold, Banks, Hewat, Crowe, Wilkins, Bell Ferguson, and the President. A vote of thanks to Dr. Cyriax was passed unanimously.

Dr. Carruthers, by permission of the meeting, moved the following resolution: That this meeting of the Midland Branch considers (1) That in the interest both of the Society and the public health service, the distinction between Fellows and Members should disappear. (2) That the present position of the members is a source of much weakness to the Society, and if not speedily rectified may result in considerable thinning of our ranks at a time when unity and strength are more than ever desirable.

These resolutions were seconded by Dr. Wilkins, and supported by Drs. Davison and Delmege, they were passed unanimously, and the Secretary was instructed to forward them to the Council and other Branches for their support, and also to "Public Health," for publication.

A Meeting of the above Branch was held at the Council House, Birmingham, on March 3rd. Dr. C. E. Tangye presided over an attendance of twenty members. Apologies for non-attendance were received from Drs. Bracey, Snell, Ridley Bailey, Tapper, Williams and Petgrave Johnson.

The Minutes of the last meeting were read and confirmed.

Correspondence.—Letters in respect to the Presidency of the Society, for the session 1921-1922, were read from the Northern, Yorkshire, Metropolitan and Home Counties Branches. The Secretary was instructed to reply as indicated.

A letter was read from Dr. Boobbyer, accepting the nomination of the Branch for the Presidency of the Society, during the session 1921-1922, and the Secretary was instructed to inform the Executive Secretary of the Branch's

decision to nominate Dr. Boobbyer, also to seek the support of the other Branches.

Several letters in respect to the Resolutions in reference to the Fellowship of the Society, passed at the last meeting, were read, and it was proposed by Dr. Stocks, seconded by Dr. Clendinnen, that Drs. Davison and the Honorary Secretary should represent to the Committee, considering this question, the feeling of the Branch.

Paper.—In the unavoidable absence of Dr. Bracey, his paper on "Two Problems in Malnutrition" was read by the Secretary, a lengthy discussion followed, in which the following took part. Drs. Robertson, Hamilton Wood, Newton, Wilkins, Ashkenny, Spencer Badger and the President. A vote of thanks to Dr. Bracey was proposed by the President, and passed unanimously.

Dr. Wilkins asked for the experience of the Members, with respect to the recent circular of the Board of Education *re* "Provision of Meals and Medical Treatment—Parents' Payments." The request was complied with by several members present.

NORTHERN BRANCH.

A Meeting of the above Branch was held at the Medical Institute, Newcastle-upon-Tyne, on February 11th. Twenty-one members were present. In the absence of the President (Dr. T. Eustace Hill), Dr. Hislop, Vice-President, took the Chair.

The minutes of the last meeting, held December 10th, 1920, were read and confirmed, and duly signed by the Chairman.

Correspondence.—The Secretary read letters of apology for absence from the President of the Branch (Dr. T. Eustace Hill), the President of the Society (Lt.-Col. Fremantle), and Drs. Morison (Carlisle), Lyons, Adams, and Rowstron. A communication from Mrs. Elliott was read, thanking the members of the Branch for their expression of sympathy on the death of Dr. Elliott. The Secretary submitted a letter from Dr. Arthur, thanking the members for the honour they had done him in electing him an honorary member of the Branch.

A letter from Dr. A. G. Glass was read, resigning his membership of the Branch owing to his removal from the district. The Secretary read a letter from Dr. Rowstron, Sunderland, suggesting that if the day of the meeting were varied from time to time it would enable members to attend meetings who were unable to

do so on a Friday. No action was taken in the matter, as it was felt that Friday was the most convenient day.

The Secretary submitted a letter from the North Western Branch stating that that Branch had decided to recommend that Lt.-Col. Fremantle be invited to continue as President of the Society for another year. Failing him, however, the North Western Branch proposed to nominate Dr. W. J. Howarth, of the City of London, for the Presidency, and as an alternative Dr. W. T. N. Barlow. The Northern Branch was asked to support this action.

The Secretary stated further that the Home Counties Branch was also nominating Dr. Howarth. Discussion showed that there was a strong feeling that the Northern Branch should re-nominate Dr. Eustace Hill and press his candidature, and it was finally agreed that the Secretary inform the North Western Branch that it was proposed to nominate Dr. Hill, and endeavour to obtain the support of that Branch.

The Secretary submitted the following resolution from the Midland Branch:—

"That this meeting of the Midland Branch considers

"(1) That in the interest both of the Society and the Public Health Service, the distinction between Fellows and Members should disappear.

"(2) That the present position of the Members is a source of much weakness to the Society and if not speedily rectified may result in considerable thinning of our ranks at a time when unity and strength are more than ever desirable."

The support of the Northern Branch was asked.

It was pointed out that the constitution of the Northern Branch already covered the point raised, and the Secretary was instructed to suggest to the Midland Branch that the constitution of the latter be so amended as to remove the anomaly.

Five new members were elected. Attention was directed to the fact that two of the candidates were described as Assistant Medical Officers of Health, and it was asked if this designation complied with the definition of the Society on the point. The Secretary was instructed to ascertain the status of the two members referred to, and to make inquiry as to any similar cases which might arise in future.

Increase of Subscription.—The Secretary stated that the present income of the Society

was insufficient to meet expenses. It was proposed, therefore, in the case of certain sections of the membership only, to increase the present subscription of one guinea to one and a half guineas. This, presumably, would bring in an increased grant to the Branches.

It was decided that the Secretary obtain further information on the matter, and that in the meantime consideration be deferred.

Place of Meeting. The Secretary stated that the Branch meetings had hitherto been held in the Town Hall, but the accommodation there was inconvenient and precarious. The Branch was indebted to the Committee of the Medical Institute for permission to hold its meeting in the Institute on this occasion, and though it would probably entail a slight expense, he suggested that the Branch meetings be held in future at the Institute. The expenses of the Branch were becoming heavier, but on the present basis a small balance might be reckoned upon this year. If this was not sufficient to cover the cost of the room, perhaps a small special levy might be made towards that object.

The proposal was agreed to, and very warm appreciation was expressed by the meeting of the munificence and generosity of Dr. J. W. Smith, one of the oldest members of the Branch, in presenting so fine a home and rendezvous to the medical profession of the North of England.

N.A.L.G.O. The Secretary read a letter from the Executive Secretary of the Society, in which it was stated that the affiliation of the Society to N.A.L.G.O. in no way committed the members of the Society to membership of a Trade Union. In order that there might be no misunderstanding on the point, the subscriptions of affiliated Societies are earmarked for the Benevolent Fund of the N.A.L.G.O. Any member of the Society of M.O.H. who, as an individual, also became a member of the N.A.L.G.O., definitely submitted himself to the rules and regulations of a Trade Union, and that was a matter entirely for his private judgment.

The meeting felt, however, that even more definite assurance was desirable of the non-commitment of members of the Society to Trade Unionism following upon the affiliation between the Society and the N.A.L.G.O., and the Secretary was requested to endeavour to ob-

tain further information, e.g., as to any local decision upon the point.

Salaries.—Dr. Foggin raised the question of the salaries of the School Medical Officers of the Newcastle Education Committee. He stated that with the exception of these officers the entire official staff of the Council, including that of the Education Committee, had been granted the latest Civil Service Award. He suggested that a deputation from the Branch wait upon the Education Committee and put the case of their Medical Officers before it.

After some discussion Dr. Foggin moved: "That a deputation consisting of representatives of the Society, the Northern Branch, and the local Division of the British Medical Association, be sent to interview the Newcastle Education Committee, with a view to bringing formally to the notice of the latter the scale of salaries approved by the Society of Medical Officers of Health and asking the Committee seriously to consider it." Dr. Bruce seconded. Dr. Whitley moved that negotiations be opened in the first place by means of a letter drawing attention to the scale. This was not seconded. Dr. McConnell moved that the Sunderland Education Committee be included in the resolution. This also was not seconded.

Dr. Foggin's motion was then put to the meeting and was carried, and the Secretary was instructed to arrange for the deputation.

WEST OF ENGLAND BRANCH.

At a Meeting held on November 17th, 1920, at the Bristol City Fever Hospital, Ham Green, references were made by several members to the great loss the Branch had sustained by the death of Dr. Tubb Thomas, late County Medical Officer of Health for Wilts. A resolution of deep sympathy with Mrs. Tubb Thomas was passed.

Dr. B. A. Peters, Superintendent of the Fever Hospital, was elected President for the year, and Dr. J. F. Blackett Hon. Secretary. Dr. Rhind, the retiring President, was heartily thanked for his services.

After the Business Meeting, Dr. Peters read a paper on "Some Points in Fever Hospital Administration." Visitors included members of the Bristol Health Committee, by whom the Society was subsequently entertained to tea.

Before the Meeting Dr. Peters conducted members through some Army Huts which were being adapted for use in the treatment of Tuberculosis.

On January 28th and 29th joint meetings with the Royal Sanitary Institute were held at Exeter.

On the 28th a short business meeting was followed at 4.30 p.m. by a joint session, at which, after Professor Kenwood had made some interesting introductory remarks, the Chair was taken by Dr. Peters. Dr. E. Ward, County Tuberculosis Officer for Devon, opened a discussion on "The Sanatorium Question," and compared the results of Sanatorium treatment with those obtained in a similar series of cases where the patients had not had such treatment. The paper was felt to be a valuable contribution to a very difficult subject. There was a lively discussion, in which Drs. Pedley, Herbert Jones, Peters, Blackett, Adkins, Date, and others took part.

On Saturday, the 29th, a short discussion on "Housing," opened by Dr. Adkins, County Medical Officer of Health for Devon, and Mr. A. E. Bonham, Chief Sanitary Inspector for Exeter, was followed by a visit to new houses and insanitary areas.

Sympathetic references were made to the Medical Officer of Health for Exeter, Dr. Stirk, who was prevented by illness from attending the Meetings.

YORKSHIRE BRANCH.

A Meeting of the above Branch was held in the Education Offices, Leeds, on Thursday, February 24th.

There were present Drs. I. Buchan, R. Thornley, Ch. Williams, Henderson Weir, Lt.-Col. Wanhil, R.A.M.C., Jolly, Martin, Fernandez, and Bertram Hill (Hon. Sec.).

In the absence of Dr. Smith, the President, the Chair was taken by Dr. Buchan.

Bye-laws for the conduct of the Branch were formally approved by the Meeting.

Letters of apology for their absence, were then read from Dr. Smith (President), Dr. Pearce, Dr. Newsholme, Dr. Moor, Dr. Beech.

It was unanimously decided that the nomination of Dr. Eustace Hill by the Northern Branch for the position of President of the Society for the session 1921-22 should be supported, and the Hon. Sec. was instructed to write to all Provincial Branches asking them to support the nomination, and to urge upon them the desirability of appointing a President from among the Provincial Branches.

A communication was read from the Midland Branch to the effect that the present in-

vidious distinction between Members and Fellows should cease to exist—and the Branch unanimously resolved to support the recommendation.

A discussion then took place on Dr. Newsholme's paper, "Some Administrative Problems in the Control of Pulmonary Tuberculosis," which had been read at the previous meeting of the Branch, in which all the members present took part.

SCHOOL MEDICAL GROUP.

The eleventh meeting of the School Medical Group of the Society of M.O.H. was held at the Society's offices in London on Saturday, 18th December, 1920, with Dr. G. A. Auden, M.A., M.D., D.P.H., the President, in the chair. There was a good attendance, but numerous apologies for absence were received, on account of a threatened railway strike.

The Group considered and passed model rules for Sub-Groups, which must form the basis for their official constitution within the Group. Applications from members for the formation of a Northern, North-Western, and Midland Sub-Group were considered, and these were officially constituted.

A discussion followed on the financial position of the Group and Sub-Groups, when it was stated that the present financial position of the Society did not permit of grants being made to Groups as well as Branches. Dr. G. F. Buchan, Hon. Treasurer of the Society, expressed a hope that with the proposed increase of subscription to the Society, some grant may be made to Groups. In the meantime out-of-pocket expenses for postage and stationery will be granted.

Dr. Auden, the President, then delivered a highly interesting presidential address on "Some points in Medical Inspection, and the difficulties of school medical officers in investigating the origin and development of diseases in childhood in relation to their prevention in adult life."

High appreciation and a hearty vote of thanks was expressed by the meeting for the address which is appearing in April "Public Health."

The twelfth meeting of the School Medical Group of the Society of Medical Officers of Health was held at the Society's Offices in London on Saturday, 19th February, at 11.30 a.m.

There were present members and representative from the Midland and Southern parts of England

and apologies for absence were received from Yorkshire, Northern, and North-Western members.

The Midland Sub-Group reported a meeting in Birmingham, on 2nd December, at which officers and a committee were elected, and rules adopted. Dr. A. G. Wilkins, Senior School Medical Officer, Staffs C.C., was elected chairman.

The Northern Sub-Group reported a meeting in Newcastle on 3rd February, at which Dr. Geo. Foggan gave a lecture on "Certification of Mentally Defective," with special reference to Schedule "F." Visits were made to local institutions, a Cripples' Home, and Blind School. A feeling was expressed that the Society should take strong action *re* scale of salaries to bring local authorities to scratch.

The North-Western Sub-Group reported a meeting in Manchester, on 11th February, at which Dr. Kingsford, of Liverpool, presided. Drs. Ritchie (of Manchester) and Mathieson (of Birkenhead), were elected representatives to the Group Council for 1921-22 Session. A resolution was adopted that "The North-Western Sub-Group respectfully draw the attention to the fact that owing to the arrangements for holding every Group-Council meeting in London it is inconvenient for the provincial members of the Council and the Sub-Group, and suggest that one or more central Group-Council Meetings be held in the Midlands." An Eastern for Manchester and South-Western for Liverpool, Sections, were formed.

In considering the North-Western resolution, it was proposed by Dr. Burpitt, seconded by Dr. Sloman, that the next Group Meeting be held in Birmingham, the date being left to the President and the Secretary.

The Northern Sub-Group's suggestion *re* scale of salaries was considered, and after hearing the action already being taken by a Special Salaries Sub-Committee, further consideration was postponed.

Superannuation and security of tenure for all medical officers of local authorities was considered. Dr. Buchan proposed, and Dr. Stocks seconded, and it was unanimously resolved, "That medical officers of local education authorities be given superannuation, and that they shall not be dismissed by their local education authorities without the consent of the Minister of Health," and that this resolution be sent to the Council of the Society of Medical Officers of Health.

Uniformity of Medical Inspection Cards and Schedules was then considered. Members present referred to a long circular sent to some school medical officers by the Chief Medical Inspector of the Board of Education suggesting the adoption of eleven cards in an envelope in connection with medical inspection and treatment, and inviting comment thereon. A discussion followed, showing that those present considered uniformity not only of cards but of notations used thereon, was of great importance. Such information, however, it was considered, was best obtained not from individual school medical officers, but by a committee or conference of representatives of the Government Department and of such a body as the Society of Medical Officers of Health.

Dr. Stocks proposed, and Dr. Hutt seconded, and the resolution was passed, "That a sub-committee be formed to deal with this subject," and "That this be a reference to the Midland Sub-Group, to report to the Group Council.

It was also resolved, "That the Group recommends that the Society of Medical Officers of Health communicate with the Minister of Health suggesting that such matters as the unification of medical inspection cards and schedules and of notations used thereon could be more conveniently done through the School Medical Group of the Society than by individual school medical officers, and inform him that this matter is being considered by the School Medical Group of the Society."

THE SHAVING-BRUSH PERIL.

There is reason to believe that there still remain in the hands of retailers in this country large numbers of Japanese shaving brushes, which may be infected with anthrax. In a circular issued by the Ministry of Health to medical officers of health it is suggested that they should communicate with all retail chemists and other dealers in shaving brushes and warn them of the serious results which might follow from the distribution of any Japanese shaving brushes which they may still have in stock.

DR. C. E. GODDARD, O.B.E., for many years medical officer of health for the Wembley urban district, which he also represents on the Middlesex county council, has accepted the additional appointment of medical officer of health for the urban district of Harrow-on-the-Hill.

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Editorial.

THE MINISTRY OF HEALTH.

THE fact that Dr. Addison has been superseded as Minister of Health means, presumably, that his administration at the Ministry is not considered in political circles to have been an entire success. The lack of popularity of the Ministry at the present time is due mainly to two reasons—the failure of the housing campaign as a political crusade, and the large increase in the staff of the Ministry which has enabled it to try to deal with minutiae of administration instead of dealing with principles only.

The relative failure of the housing campaign has been due largely to the fact that Dr. Addison has, apparently, tried to apply his administrative experience at the Ministry of Munitions to the solution of this entirely different problem. The task of the Ministry of

Munitions was to produce munitions in the minimum time, regardless of cost, and in continually increasing quantities. In order to do this the Minister appointed enormous staffs which covered the country and which either dealt directly with the actual manufacturer or were in practice the manufacturers. To apply this method to the production of houses was to court failure. If Dr. Addison had built his housing scheme on the basis of the county and county borough (and large urban) councils, without detailed supervision and interference from the housing departments of the Ministry, his chances of success would have been much more favourable, but his failure was certain when he attempted to deal directly with every urban and rural district council in the country.

The efforts of the Ministry to supervise the minutiae of administration have irritated all local authorities, and are rapidly becoming intolerable. It is not the function of a government department to deal with details, which are best left in the more efficient hands of local officials, while the broad principles can easily be retained and controlled by the central body.

In spite of Dr. Addison's obvious suitability for the post, and his hard work, often under most difficult conditions, the adverse factors have proved too strong for him, and the Ministry is to-day, politically speaking, out of favour, and is overwhelmed by the powerful wave of reaction which has set in against all public health work. The Ministry could probably have survived such attacks if it had established itself on sound relationships with local authorities, but its policy of petty interference had entirely alienated those who would, in the ordinary course of events, have regarded themselves as its natural defenders.

At present Dr. Addison is judged mainly by the failures of the Ministry, but at some future time it will be realised that in spite of enormous difficulties he succeeded in many directions in laying the foundations of schemes

which will affect public health progress in the future. It is a significant fact that the medical members of the House of Commons have formed the highest opinion of his work, and have passed the following resolution:

"That the medical members of the House of Commons express a cordial appreciation of the services of the Right Hon. Christopher Addison, M.P., as Minister of Health, and congratulate him on the excellent work he has done in the face of many difficulties. They wish to place on record their admiration for his zeal and devotion to duty, and his untiring work in the interests of public health."

SALE OF MILK.

In connection with the subject of milk the Ministry of Health seems to share with the Ministry of Food and the Board of Agriculture a peculiar faculty for thinking out all the unlikely ways in which the public may be defrauded, and for dealing with them by means of orders, and at the same time leaving untouched the widespread and obvious fraud which is being perpetrated upon the public all over the country. As the law stands at present the legal definition of milk is anything that can be squeezed from the udder of a cow, with or without the addition of dirt and manurial matter, the addition of which does not cause the sale to be "to the prejudice of the purchaser." So far the only way in which the Ministry of Health appears to be dealing with such a scandalous state of affairs is by attempting to persuade the powerful milk interests of the country to cater for the wealthier members of the community by producing "graded milk," under licence, at even higher prices than are being extorted from the public by the combined powers of the Ministry of Food and the "milk rings."

The Milk Order dated March 22nd, made by the Food Controller, and the Local Authorities (Milk) Order, dated March 24th, made by the Minister of Health, serve to continue in force the provisions already contained in the orders of the Food Controller with regard to graded milk, the addition of colouring matter and water to milk, and the reconstitution of milk. The sale of "Grade A (Certified)" milk or "Grade A" milk is forbidden except under licence granted by or under the authority of the Minister of Health, and a similar licence is required for the sale, as milk, of milk reconsti-

tuted from dried milk or condensed milk.

The local authority authorised to execute and enforce the provisions of the order is the one now administering the Sale of Food and Drugs Acts, and for their benefit, apparently, a part of the order makes it illegal "knowingly" to sell or expose for sale any milk or cream to which any colouring matter or water has been added. In the circular accompanying these orders it is gravely suggested that these provisions "form a useful supplement to the powers of the authority under the Sale of Foods and Drugs Acts, and may conveniently be exercised in connection therewith." It is disheartening to find such nonsense and such entire lack of appreciation of administrative difficulties in an official circular of the Ministry of Health.

SECURITY OF TENURE.

An order, entitled The Sanitary Officers' (Tenure of Office) Order, 1921, dated April 12th, 1921, has been made by the Minister of Health. This order amends the Sanitary Officers' (Outside London) Order, 1910, and the Sanitary Officers' (Ports) Order, 1910, and applies to Medical Officers of Health and Inspectors of Nuisances appointed by the Councils of County Boroughs and County Districts and by Port Sanitary Authorities, one-half of whose salary is intended to be payable under Section 24 of the Local Government Act, 1888.

The order provides that every such Medical Officer of Health and Inspector of Nuisances who is appointed after 1st May, 1921, to give his whole time to public offices, shall hold office without limit of time under the terms of Article IX of the Sanitary Officers' (Outside London) Order, 1910, and of the Sanitary Officers' (Ports) Order, 1910, with a proviso that for the first twelve months of his appointment he shall be deemed to be on probation, and his appointment shall expire unless confirmed by the Minister. Before deciding whether he will confirm such an appointment, the Minister will take into consideration any communication which the Local Authority may make with regard to it, and he will communicate with the Local Authority on any question which arises as to the confirmation or otherwise of the appointment.

Every actual or impending vacancy in the office of Medical Officer of Health or Inspector

of Nuisances must be reported to the Minister with the cause of the vacancy.

The above order refers only to future appointments. The position of existing Medical Officers of Health is being dealt with by Sir Philip Magnus, veteran representative of the London University, who has introduced the Public Health (Officers No. 2) Bill to amend the law relating to the appointment and tenure of office of medical officers of health, sanitary inspectors and inspectors of nuisances. The object of this bill is to give all medical officers of health and sanitary inspectors security in their tenure of office, similar to that enjoyed by Poor Law medical officers, Metropolitan medical officers of health and medical officers of health appointed by county councils. In London the sanitary inspector is so called by law, but outside London the law names him "Inspector of Nuisances." It is proposed that the London name shall be universally used. All the medical M.P.'s have backed the Bill.

OFFICIAL SALARIES.

We publish in this issue an extract from the official organ of the National Association of Local Government Officers. It is not pleasant reading but it describes a situation that must be faced. A large number of the members of the Society of Medical Officers of Health are anxious to force the pace with regard to the salary question, but this is not a matter upon which an issue can be forced without adequate machinery. In other words we cannot press for a settlement unless we have the obvious means whereby some threat can be made and carried out if necessary.

With the active and powerful help of the government departments concerned two great bodies of public servants have been able to effect, within the last year or two, a complete revolution in their standing and remuneration. The police, with the active support of the Home Office, and the teachers, with similar aid from the Board of Education, have obtained terms of service and superannuation far beyond the wildest dreams of their most optimistic members a few years ago, and the sole reason for these wonderful successes is the fact that they were able to threaten a successful strike. The Society of Medical Officers of Health will only be able to command the attention of government departments and public bodies when it

can claim the power to hold up the public health service unless its members are treated fairly. If this could be claimed to-day our scale salaries and adequate superannuation would be granted within the next few months.

We are not advocating the forging or the use of such a weapon, we are merely stating an obvious fact when we say that this is the only safe and quick way to a realisation of our aims. The alternative is a long process, which includes a tedious education of public opinion, the begging of support from a government department which, although it has secured war bonuses and revised salaries for its own officers, has never yet shown any disposition actively to lead public opinion in favour of medical officers of health, and a recourse to Whitley Councils, which may or may not be repudiated by local authorities—a long and dreary road which may lead to an improvement at some far distant date.

THE ATTACK ON SALARIES AND WAGES.

The Municipal Employees' Association has issued some interesting notes on the misrepresentations by the press which have led members of the public to believe that salaries and wages paid by local authorities have risen out of all proportion to the increased cost of living. The facts are that while the cost of living has increased by 154 per cent, the rise in rates in county boroughs has been 95 per cent, in urban areas 96 per cent, and in rural areas 116 per cent, and even in those areas where the Whitley Council scale is in force a clerical staff pre-war salary of £200, or a manual wage of that amount, had been increased only by 109 per cent, and larger salaries still less. As a matter of fact, the Whitley Council scale has not been adopted at all by one-half of the local authorities.

Out of nearly 1,200 Authorities (excluding Rural Districts) over 700 have never recognised Whitley Council Awards, and in these areas, so far as can be ascertained, the increases to employees consequent upon increased cost of living average less than 70 per cent, while in rural areas the average increase is barely 35 per cent. So that lumping all areas together not only is the average increase in rates more than 50 per cent below the average increase in

prices, but the average increase in salaries and wages is even lower still.

Already a large number of Authorities have re-opened the question of reduction of salaries and wages, as well as reduction of staff. In one County Borough it is even proposed that *all bonuses given on account of the increased cost of living shall cease as from 30th April, 1921*, and in another County Borough a bonus added to a very inadequate post-war consolidated scale of salaries has already been taken off, and the reduction perforce accepted, by the local Municipal Officers' Association, whereas a proposal for a similar reduction to the Manual Workers was successfully resisted. *In this case the Manual Workers are Members of the Municipal Employees' Association, but the Officers and Clerks are not.*

POST GRADUATE COURSE ON TUBERCULOSIS IN PARIS.

The North of England Tuberculosis Society, which is the name of the Tuberculosis Section of the Northern Branch of the Medical Officers of Health Society, has arranged with Dr. E. Rist a ten days' advanced course on Tuberculosis in Paris for the latter part of May, and the subjects to be treated will be some of those to which special attention has been paid by French workers in recent years, e.g.:—Artificial pneumothorax, experimental re-infection, the extent to which X ray work has affected our ideas regarding the pathology and diagnosis of lung tubercle, etc. The lectures and demonstrations will be in English and the fee has been provisionally fixed at 200 francs.

One day will be spent at the Marine Hospital for Surgical Tuberculosis, at Bercy sur-Mer and a visit has been arranged to Bligny Sanatorium. Special visits will also be paid to the Rockefeller Dispensaries, Pasteur Institute (of which Prof. Calmette is Assistant Director), Laennec Hospital and other institutions. The party leaves Victoria at 8.45 a.m. on Whit-Tuesday, May 17th, and the course concludes on Wednesday, May 25th.

All Tuberculosis Officers, Sanatorium Physicians and others specially interested in tuberculosis are invited to participate. Further particulars can be had from:—Dr. W. H. Dickinson, 91, New Bridge Street, Newcastle-upon-Tyne.

OBITUARY.

SIR CHARLES A. CAMERON, C.B., M.D.,
M.O.H., DUBLIN.

Medical officers of health are not, as a class, distinguished for their longevity, and it is most unusual to be able to record the death on February 28th of a veteran of 91 years, with a record of over half a century of continuous official work in a great city.

With the death of Sir Charles A. Cameron, C.B., a notable figure has passed from the social and professional life of Dublin. He had passed man's allotted span of life by more than a score of years, but up to the last his mind retained the full vigour of early manhood, and only a few weeks ago he was at the City Hall in the active discharge of his duties as medical officer of health. It will be hard to fill his place as a public servant. Few have the same rich stores of experience on which to draw for guidance, and few men have studied the problems relating to public health so deeply as he had studied them. He was always abreast of the times. He was recognised as one of the world's greatest authorities on this subject, and municipal bodies, not only in the United Kingdom, but on the Continent, we went to look to him for advice.

Besides being a diligent student, he was a prolific writer, and some of the fruits of his industry and learning are preserved in a series of volumes from his pen. The gap which his death creates in the social sphere cannot be filled; he held a unique place in the life of Dublin. With a genius for friendship, his wit, his learning, and his generosity endeared him to a very wide circle.

Sir Charles Cameron was a man of extraordinary energy and activity, but as he always worked in a most methodical manner he never seemed hurried. He found recreation in a change of occupation, and the holidays he allowed himself were spent chiefly in attending medical and other congresses. He held high office in Irish Freemasonry, and he was the founder of the Corinthian Club, a well-known social club in Dublin.

DR. J. MIDDLETON MARTIN, medical officer of health for Gloucestershire, and Dr. Charles Sanders, medical officer of health for the county borough of West Ham, have been elected to the Fellowship of the Royal Sanitary Institute.

SLUM AREAS IN CENTRAL LONDON.*

By G. E. OATES, M.D.

Medical Officer of Health, Metropolitan Boro' of Bethnal Green.

We as health officers must approach housing problems in a scientific spirit free from sentiment, but we are dependent upon a variable factor, namely, public opinion, and must to some extent rely upon it as a guide. Now to those of us who have in mind the transformation of a large part of London by schemes of slum-clearance, a strong public opinion would be a great asset, and we may enquire to what extent this opinion is present or likely to develop. It is notorious that the average London resident takes little interest in the details of local government in his borough, and the doubt is often expressed whether the slum-dwellers themselves have any desire for improved housing conditions. It is one of the tragedies of social reconstruction that the persons who are to benefit from social reforms often hinder and oppose such reforms. It becomes necessary therefore to ascertain and have regard to the somewhat inarticulate wishes of the slum-dweller. The first consideration is that he is attached to his locality and has a strong objection to moving elsewhere. His instinct tells him, and it is not far wrong, that he will lose time and money in travelling and have more rent to pay. He will leave his friends and relatives who live close at hand, and it is likely that members of his family may have regular and remunerative work in the neighbourhood. The credit which is accorded by shop-keepers to old residents is an important consideration too in working-class families.

So far as ex-service men in slum areas are concerned, there is no doubt that many of them returned from military service imbued with higher ideals of living. They realized that they had come back to ignoble surroundings and they felt that their houses were cramped and overcrowded, and that after the perils they had undergone they had a right to something better.

The Government sympathised with these feelings, and whilst much of the recent enthusiasm for housing was prompted by a genuine desire to promote the health and morality of the working-classes, there was also a real fear that the lack of

housing accommodation would lead to widespread discontent with a possible danger to the State.

However this may be, the ex-service man has by this time settled down and assimilated himself to his often squalid environment. It is true that in many instances he may be sharing a house or occupying a tenement, but his grievance now is, not with his surroundings, but with his inability to get a house to himself, whatever may be its condition.

Before discussing several types of slum-area in London, I would say a word as to the size of the areas concerned. In pre-war times a standard of ten houses was usually adopted, this standard being suggested by implication in section 72 of the 1890 Housing Act. Anything over this number would lead the medical officers of health to represent the area to the County Council for treatment under Part I. of the 1890 Housing Act. If the area contained ten houses or less it would be reported to the Borough Council by the medical officer of health for treatment under Part II. of the same Act. It appears that the Ministry of Health is now inclined to sanction a more extended use by Borough Councils of their Part II. powers.

It is evidently considered that the London County Council is likely to be pre-occupied with the larger clearance schemes and the building of new houses, and that the Borough Councils may be left to deal with the smaller schemes. I do not think that any definite ruling has been given as to the maximum number of houses in the areas which a Borough Council should be permitted to take in hand, but a figure of 150 would appear to me to be reasonable.

A few special types of slum-area may now be briefly discussed.* One finds here and there in London a row of cottages, six to a dozen or more in number, and wedged in between other houses. Such a site, if cleared, could not possibly rehouse any displaced inhabitants, because the erection of any new buildings would mean an infringement of the Building Act. Such small areas are not only congested in themselves but obstructive and prejudicial to the neighbouring houses. They are eminently suited for treatment under Part II. of the 1890 Housing Act by the Metropolitan Borough Councils. But although small in number and in extent, these areas present the greatest practical

Abstract of paper read before the Society, on January 21st, 1921.

*At the reading of the paper, large-scale plans were shown and briefly discussed.

difficulty. Since the sites have to be cleared, and must remain cleared, the rehousing of the displaced persons must take place elsewhere, and in London this "elsewhere" may be far away on the borders of Greater London. So far as the rehousing question is concerned, such schemes are dead waste. And worse than this, we know from past experience that the displaced families invariably settle in neighbouring houses and accentuate the already desperate overcrowding.

Another type of unhealthy area is that of the obstructed area. The buildings here would not be unhealthy if they stood isolated, but owing to the nearness of adjacent buildings, light and air are prevented from circulating.

There are scattered through London groups of flats which are mutually obstructive in this way. No doubt some of these were considered model dwellings when they were erected; nowadays, one's mind rather dwells upon the rickets, tuberculosis, and other diseases which are likely to result from the dark, confined existence of the dwellers in these flats. Medical officers of health will naturally feel reluctant to condemn such areas, which often comprise costly and densely populated blocks of tenements, which may be individually dry and substantially built, and only lacking in certain vital and essential elements, namely, light and air. Nevertheless, the reconstruction of such areas will have to be faced before long, and a partial clearance scheme such as will give access of light and air is frequently the most practical method of development. There is, alternatively, the method of dealing with an obstructive building by the special procedure laid down in the Housing Acts. This latter procedure is, however, only suited for individual or small groups of houses. In the case of the larger obstructed areas, a clearance scheme is much more practicable, and is certainly less costly to the local authority. For in this connection it appears that the purchase and demolition of obstructive buildings does not rank for a Treasury grant, and the cost will fall entirely on the local rates.

A type of area which deserves special consideration is that which is unhealthy without being congested. Such areas may originally have been congested and have been the subject of preliminary treatment by way of closing and demolition of individual houses. Or it may be that a number of large gardens are attached to the houses. The

particular interest of these areas is that owing to the vacant spaces present, a certain amount of rebuilding can proceed without preliminary demolition, and it may be possible to rehouse the inhabitants displaced as demolition proceeds without there being any need to utilise spare accommodation outside the area. As I shall emphasize later, this may be an important consideration in determining the fate of a proposed clearance scheme.

I will say no more about the natural history of unhealthy areas, but will proceed to discuss certain topics arising out of actual clearance schemes.

The question of compensation is an important one. The Government Committee on Unhealthy Areas in their Interim Report make a comparison between the procedure under section 9 and section 13 of the 1919 Housing Act. The local authority, after passing a resolution following the representation of the medical officer of health that the area is an unhealthy one, may then proceed by agreement under section 13 to purchase the lands and house property thereon. The committee is of opinion that in view of the powers in connection with the new by-laws under the 1919 Act, together with those enabling the local authority to compel landlords to carry out repairs, the purchase price will not prove excessive, whilst if any owner elected to hold out for an unreasonable figure he could be dealt with under the compulsory powers when the clearance comes to be effected.

Mr. R. C. Maxwell, of the Ministry of Health, and a member of the Committee, in an important note of reservation to the interim report, expresses the opinion that section 13 of the 1919 Act will have only a very limited application, and I myself am also of this opinion.

We have to bear in mind that Parliament has laid down very definite principles as to the basis of compensation to the owners of unhealthy areas. In face of this clear lead, can we expect the Ministry of Health to consent to any scheme of compensation, whether compulsory or voluntary, which treats the owner much more generously? For the Ministry to do so would be a retrograde step, and we should soon find ourselves back in the old times when clearance schemes were hampered by the excessive cost of purchase.

It is when considering partial clearance schemes that the question of compensation becomes of particular interest. By a partial clearance scheme, I mean a scheme where the provision of new

buildings goes hand in hand with the reconstruction and repair of old buildings.

Now, although in theory compensation is fixed at a statutory maximum laid down in section 9 of the 1919 Act, and the local authority may feel easy as regards the ultimate cost, seeing that no improvement scheme, if sanctioned by the Ministry of Health, can involve the authority in more than a penny rate, yet the amount of compensation to be paid may be none the less the chief factor in inducing an authority to abandon a proposed scheme.

In the first place I must say a few words as to the new basis of compensation to the owner introduced for the first time in the 1919 Act. Under the earlier Housing Acts the area had to be purchased either by negotiation or else compulsorily. In each case, and with certain reservations, the slum property had to be bought out at its full value as a slum. As might be expected such a procedure whilst more than fair to the owner rendered prohibitive the cost of any clearance scheme.

I do not think that many authorities, after meeting the huge bill of costs for one clearance scheme, had the energy or the means to embark upon a second scheme.

It was this which led Parliament in its outburst of enthusiasm for housing to alter the basis of compensation in a most drastic fashion.

Section 9 of the 1919 Housing Act enacts that when land included in any scheme is acquired compulsorily, the compensation to be paid for the land and buildings shall be the value of the land as a site cleared of buildings and available for development in accordance with the requirements of the local building by-laws. This, in itself, would not be so bad from the owner's point of view, inasmuch as the value of the cleared land as a site for factories or offices might often go a long way to making good the total loss of the slum buildings.

But section 9 goes further than this, it enacts that if in the opinion of the Ministry of Health some or all of the cleared land should be used for re-housing persons of the working classes or be laid out as an open space, the compensation to be paid is to be reduced proportionally to the reduction of value of the site as used for this purpose.

It will be evident from this that the owner may be deprived of a great source of potential profit when this reduced scale of compensation comes to be applied.

I have for instance represented in Bethnal Green unhealthy areas within only a little distance of the City of London boundary. In one case an area lies adjacent to the Great Eastern Railway and to a large brewery, both of which concerns would no doubt give a high price for the cleared site. In another case I have in mind an area lying in the midst of the cabinet-making district where there is a great demand for additional workshops. Yet in both these cases there would be a pressing need for rehousing the displaced inhabitants on the site, such re-housing bringing into force of course the reduced scale of compensation.

We must also consider the course of events when a partial clearance scheme is propounded, the local authority having purchased a slum area at its bare value as a housing site, will clear away certain houses here and there and improve and reconstruct others. It may turn out that the local authority will be able to finance such a scheme without very much loss by the expedient of recovering increased rents from those houses on the site which have been improved or reconstructed and not demolished.

One can imagine that the owner who is about to be dispossessed on these terms will not be slow in bringing forward a grievance which he will be in a position to present in a very plausible form, and it may be forgotten that the local authority is only proposing to carry out what it was the owner's moral duty to have carried out long before.

In cases such as I have just mentioned, which are typical of areas in Central London, I foresee that there may be a reluctance on the part of local authorities to embark on schemes which appear to involve the owner concerned in such a heavy loss.

It will be argued that such clearance schemes will be not only unfair to the owner who, as we know, is not always a person of large means, but unfair to the community as a whole by diverting to residential purposes land which is naturally suited for development on commercial or industrial lines.

The next topic I will discuss is the difficulty in proceeding with clearance schemes in London when it is proposed to re-house all the displaced inhabitants on the cleared site. It may, of course, happen that the unhealthy area will allow of the erection of some new buildings before any great part is demolished. But in any case there will almost surely be found need for spare accommodation for some thirty or forty families. This will serve to

accommodate those families whose houses are demolished first of all, and after a portion of the cleared site has been built on, these same families are moved in and make way for other displaced families as the process of demolition proceeds. This spare accommodation, which may be termed "the working margin," may appear to be of small moment, but it is astonishing how important it becomes in a very congested borough such as Bethnal Green is. In central London at the present time, this factor alone, and apart from the difficulties of finance and site-planning, has led to several schemes being postponed in localities where there is no vacant land or empty buildings available.

If we accept the conclusion that slum-clearance in London is likely to proceed slowly for some years, the method of treatment of unhealthy areas which are not ripe for demolition calls for careful consideration, and local authorities must determine in outline the policy they will adopt, whether by pressure on the owners to effect repairs under the nuisance clauses of the Public Health Acts, by the making of closing orders, by action under sect. 28 of the 1919 Housing Act, or by the alternative method of purchase to be followed by partial clearance and reconstruction. This is going to be a difficult matter on which health officers will be called upon to advise their Councils and which I therefore propose to discuss.

It will be admitted, I think, that no local authority can remain passive when confronted with these unhealthy areas but will wish to effect improvement in the deplorable conditions so often prevailing. But a clear statement of intention, besides a general resolve to do something, is called for at the present juncture, both for the convenience and protection of property-owners and for the guidance of housing staffs. A property-owner with the threat of a clearance scheme hanging over his head cannot reasonably be expected to engage voluntarily in any expensive reconstruction work, when the fruits of his labours are liable to be swept away at any time without compensation. On the other hand had he some assurance that the clearance scheme would not take effect within say seven or ten years, he would probably be willing to co-operate with the local authority in carrying out reconstruction work, as for instance the rendering up and damp-proof-coursing of damp walls, slating or tiling, or the resetting of doors and windows. In this connection it must be remembered also that

unless one can prove the existence of a nuisance there is no way of compelling an owner to carry out reconstruction works. After action under sect. 28 of the 1919 Act to enforce reconstruction works the owner may elect to close the house and a closing order thereupon becomes operative. As we all know closing orders are not of much help to us at the present moment, since public opinion would not support a local authority in putting them into operation.

The future course of action will also affect the housing staff of the local authority. The methods of dealing with defects in property which is scheduled for early demolition are different from those adopted in the case of property that has many years of life before it. In the one case only the most urgent repairs need be done, in the other it may be found necessary to insist on elaborate works to remove dampness or to provide ventilation.

Any uncertainty as to the future is the more undesirable in any part of the County of London, where there are two housing authorities, the L.C.C. dealing with the larger clearance schemes and perhaps viewing its duties from a wider and more national outlook, and the Metropolitan Borough Councils dealing with the small clearance schemes and inclined to view their duties more in relation to purely local needs. The position in most London Boroughs at present is that the medical officers of health have represented a number of the larger areas to the L.C.C., and have also reported a few of the small areas to the Borough Councils as suitable for reconstruction schemes under Part II. of the 1890 Housing Act. Now as regards the larger areas the Borough Councils are in a position of some uncertainty. The question arises, will the County Council deal with some or all of these areas, and if so, will it be quite soon or after the lapse of some time?

I think it will be universally admitted that, given sufficient financial backing and adequate staff, the L.C.C. would act up to its past traditions and would enter on the task of demolishing the sixty or so unhealthy areas which have, I believe, been represented to it. Unfortunately, we are now living in peculiar times, and money becomes more and more difficult to obtain for works of public utility. I think we may safely surmise that for many years the L.C.C. will have its hands full with the few clearance schemes which are in active preparation.

The position is much the same with the Borough Councils, who are responsible for the smaller clearance schemes. Small as these may be they will none the less be a great tax on the resources of the congested boroughs of London, more particularly as to the rehousing of the displaced population, and however anxious to proceed with these schemes the boroughs may be, progress is likely to be slow. I think I have made it clear that uncertainty as to the future, whilst perhaps unavoidable at present, should be removed as soon as possible.

I therefore think that the time may be appropriate for the L.C.C. and the Borough Councils to collaborate with the Ministry of Health in some kind of plan for dealing with the unhealthy areas of London in the future. The areas, both large and small, which have been represented or reported by the medical officers of health should be surveyed with a view to some kind of grouping in order of urgency, and there would be an understanding that areas which came early on the list would be dealt with in priority to areas later on the list. I consider that it would be difficult at present to indicate any period of time within which any particular area would be dealt with, except in most general terms. Nevertheless, I am sanguine enough to hope that it will be possible in the near future to put into operation some sort of time-scheme.

I now come to closing orders, which prior to the war were most useful in getting works carried out. It was not often necessary to bring them into operation: the existence of the power to close a house was a potent weapon of persuasion. Things are different nowadays. There were always sentimental objections to closing orders, especially if an ejection followed. These objections are of far greater force to-day, when tenants value their security of tenure so much, and have it guaranteed to them by special legislation. No Borough Council would have the temerity to pursue any number of closing orders to their logical conclusion. Public opinion would be solid against such measures. Closing orders have therefore ceased to be of much value and a refractory owner can laugh at the threat of a closing order. It will be remembered that under section 28 of the 1919 Housing Act, an owner may give notice of his intention to close a house rather than carry out the necessary repairs. He can avail himself of this privilege only if the house is not

capable, without reconstruction, of being rendered fit for human habitation. Now it can well be imagined that owners, faced with a demand from the local authority to carry out works requiring reconstruction, will elect to close houses, well knowing that the local authority will not dare to enforce the order even though it may be operative. We have here an example of how a useful section of an Act of Parliament may fail in its effects owing to certain peculiar social conditions prevailing.

We may enquire whether the other provisions of section 28 are of utility. In this connection certain information was recently circulated amongst London medical officers as to the extent to which Metropolitan Borough Councils had exercised their powers under this section.

In about 18 of the 29 Metropolitan Boroughs, little or no action had been taken. Some nine or ten had made use of the section so far as the service of notices, and in three of these works had been carried out by the Councils in default of the owners. So far as my information goes, the expenditure of the local authority had only reached four figures in the cases of three Boroughs, and I believe I am right in saying that very little money so far has been recovered from the owners. The Borough Council for which I am medical officer of health happens to be one that has not so far made use of section 28, but I am confident that we are as active in remedial work and as successful in getting it done as any other borough in London.

Whilst it must be admitted that the provisions of section 28 of the 1919 Housing Act are an improvement on the provisions of section 15 of the 1909 Act, it is important to ascertain the reasons why section 28 has not been found of much use in dealing with slum areas. I cannot speak with personal experience in this matter as I have never worked under an authority which made much use of this section or its precursors. I have met only few medical officers who had any enthusiasm for the section, and town clerks generally view the section with suspicion and consider that authorities undertaking works under the provisions of the section are likely to be involved in considerable expenditure with a remote chance of recovering such expenditure, especially from the worn-out houses of the London slum areas. Furthermore, such expenditure is likely to be cumulative, for so soon as a local authority have carried out

certain works when other defects may become evident, necessitating further expenditure. It is, however, too early to express an opinion on the section, and we must profit from the experience of those boroughs that are giving the section a practical trial.

I now come to the method of enforcing the performance of remedial work by action under the nuisance sections of the Public Health Acts, and this method is the one adopted by most local authorities in London with great success. By the terms of section 2 of the Public Health (London) Act, 1891, any premises are liable to be dealt with if they are in such a state as to be either a nuisance or injurious to health, or dangerous to health. It will be seen that the definition is a wide one, and it is fortunate that it is so.

County benches sometimes take a rather restricted view as to what conditions come under the definition of nuisance, but the stipendiary magistrates who deal with the London statute seem to be ready to include a very comprehensive list of sanitary defects within the definition. I myself think that the term is strained in meaning at times, and that it is not reasonable to say that such conditions as wall-paper stained with smoke or grease, or a window with a broken sash-cord are nuisances.

However this may be, it is the court which decides what condition is a nuisance, and if a nuisance is proved to exist it becomes easy to effect a remedy, and our powers are speedy and drastic. In my experience almost all the structural and environmental defects that require removing in the individual houses of an unhealthy area can be dealt with under the nuisance clauses of the Public Health Acts. In the event of non-compliance with a statutory notice of a local authority there is the power to obtain from the court an abatement order, a prohibition order, or a closing order. No owner can hold out for long against a nuisance order, since the penalty for non-compliance is a cumulative one day by day. Furthermore, any expense incurred by the local authority in executing the work themselves can be recovered from the owner.

If an owner is to be called upon to execute costly remedial work in respect of conditions found to be a nuisance, it seems to be only equitable that he should be permitted to close the house rather than carry out the work. For instance, the owner

of a small cottage called upon to carry out damp-proof-coursing and re-drainage might reasonably prefer to close and demolish such a cottage, on the grounds that the repairs will cost more than the cottage is worth. However, as the law stands, he is in an awkward position, being at the present time unable to eject the tenant and unable to obtain a closing order except by the consent of the Court. Several such cases have come to my notice, and local authorities must act with discretion in such cases, so as to avoid injustice to the owner.

THE HOSPITAL TREATMENT OF PULMONARY TUBERCULOSIS.*

By H. HYSLOP THOMSON, M.D., D.P.H.,
Medical Officer of Health for Hertfordshire.

The problem of the control and prevention of tuberculosis may be approached and considered from two distinct standpoints. Calmette and other scientific investigators focus their attention on the soil and concentrate their activities on the finding of some specific cure of existing cases of the disease and on securing some method of immunising the human subject against infection. Other investigators give chief attention to the seed and aim at the elucidation and prevention of those conditions of life which are responsible for the existence in our midst of the tubercle bacillus as an active disease producing organism. The hospital treatment of pulmonary tuberculosis is one unit in a wide scheme which aims at eliminating the tubercle bacillus as a pathogenic organism from our midst.

It is not proposed to discuss this question of the Hospital treatment of pulmonary tuberculosis in any narrow empirical sense, but to consider it in all its broad relationship to the great problem of tuberculosis. The more closely we consider the incidence and epidemiology of pulmonary tuberculosis and the more carefully we study its aetiological factors and its various clinical manifestations, the more impressed do we become by the limitations of our knowledge with regard to this disease.

As an introduction to the consideration of this subject, it is necessary to refer briefly to certain facts and possibilities with regard to the aetiology

* A paper read before the Tubercle Group of the Society of Medical Officers of Health.

of tuberculosis, as one of the chief aims of hospital treatment is to secure the segregation and the control of individuals with advanced disease who are expelling virulent tubercle bacilli in large numbers.

Tuberculosis of the lungs is due to the entrance into the human body through various channels of a specific pathogenic organism. Whence does this organism come and why should the tubercle bacillus be a constant and prominent feature in the bacterial flora of civilised communities? Were we possessed of microscopic eyes and could we visualise the bacterial world around us we should no doubt see the tubercle bacillus in the air, dust, soil, food and water.

There are two possible sources of origin of the tubercle bacillus as a pathogenic organism. It may come from a pre-existing case of human or animal tuberculosis being expelled through the medium of the sputum, discharge, secretion or excreta, or it may originate by a process of evolution or transmutation from an innocuous non-pathogenic type of organism. This latter possibility is one which calls for careful investigation. Sir William J. Collins¹ states "it is reasonable to believe that in organisms whose cycle may be less than an hour and whose rate of propagation is incalculable evolution must be powerfully at work eventuating in the survival of those most fitted to their environment." In his well known work Dr. Dixon² states "there is no reason to doubt and abundant evidence to support the opinion that in this field of life, as in others, the force of natural selection and the survival of the fittest has been at work and has resulted in the course of ages in the evolution and differentiation of the various types of bacteria which we recognise and distinguish to-day."

Our knowledge of the life history of the tubercle bacillus is for the most part limited to its parasitic phase when it attacks the human or animal host. One important fact has, however, been conclusively proved, namely, that the tubercle bacillus as a pathogenic organism is unknown under natural conditions of life, and that the pathogenicity of this organism, both as regards animal and man, is directly due to certain conditions arising from a stationary communal system of life. This subject has recently been fully discussed by Professor Cummins in a paper on "Tuberculosis in Primitive Tribes,"³ in which he points out that in certain parts of the world the tubercle bacillus as a

disease producing organism is absent, and that the primitive people from such districts are very susceptible to tuberculosis when brought into contact with civilised communities. Dr. Sorley, in an article on "Infection in Tuberculosis,"⁴ discusses the views of Cobbett and Ferran on spontaneous tuberculosis in animals, and emphasises the need for further investigation into the possible relationship between excretal contamination and the implantation of the tubercle bacillus in the human and animal body. The fact has long been known that men and animals in the primitive or wandering conditions of life are not attacked by the tubercle bacillus, and the explanation would appear to be that as a result of stationary life and insanitary conditions we have the transmutation of a non-pathogenic organism into a virulent disease producing organism in consequence of the existence of some favourable influences probably arising from respiratory impurities, skin emanations, or excretal pollutions.

But what is the exact relationship between this fascinating, if obscure, problem and the hospital treatment of pulmonary tuberculosis? The relationship is an obvious and important one:—If the chief source of origin of virulent tubercle bacilli is the sputum of existing cases of tuberculosis, then the provision of adequate hospital accommodation and the segregation and control of advanced cases of the disease will eventually lead to the practical elimination of the tubercle bacillus as a pathogenic organism, but if the supply can be replenished by a process of transmutation from a non-virulent form induced by existing conditions of life then the adequate provision of hospital accommodation will not secure the elimination of the tubercle bacillus unless we are able at the same time to alter or modify these conditions. A suggestive sidelight is shed on the problem of tuberculosis by the history of leprosy, a disease which in many respects is closely allied to tuberculosis. The disappearance of leprosy from Europe in the Middle Ages was no doubt due to the provision of adequate laazaretto accommodation and compulsory segregation, although we must not overlook the possibility that altered conditions of life had attenuated the virulence of the bacillus. If the structural changes induced by the tubercle bacillus in the human body were visible to the naked eye, compulsory segregation of tuberculous patients would have been in operation centuries ago.

In the past considerable attention and energy have been concentrated on various forms of institutional treatment for pulmonary tuberculosis, such as the sanatorium, the colony and the village settlements, and too little attention has been given to the hospital, to its value, its requirements or its standard of treatment. The hospital treatment of pulmonary tuberculosis should constitute the foundation of the institutional treatment of this disease. In the current literature on the subject of tuberculosis comparatively little reference to the importance of the hospital as a unit in schemes of treatment is to be found. Sir George Newman⁵ in referring to future national policy with regard to tuberculosis, states that hospital provision for advanced cases requires expansion, but he is of opinion that this should not take the form of homes for the dying, as advanced cases are not always hopeless or dying. Fishberg⁶ strongly advocates the conversion of sanatoria into hospitals so that patients who suffer from acute exacerbations during the long chronic course of the disease could be cared for. In a critical review on the sociological aspect of tuberculosis⁷, the following statement occurred, "the hospital beds are used mainly for observation and acute cases, there are, therefore, many chronic advanced and dying patients for whom provision can rarely be made under the Act and whose only course is to enter a Poor Law Infirmary."

The aim of the hospital treatment of pulmonary tuberculosis is fourfold: (1) to secure the segregation of advanced open cases of the disease so as to control the output of the tubercle bacillus at its main source of origin; (2) to provide conservative and curative treatment for those acute cases of recent onset which are unsuitable for the sanatorium; (3) to provide accommodation for the diagnosis of doubtful cases; and (4) to provide palliative measures for advanced and incurable cases so as to alleviate pain and suffering.

It is generally accepted by all who have studied the problem of tuberculosis that adequate provision for the segregation, more especially of the advanced pulmonary cases occurring in over-crowded and over-housed Urban districts, with compulsory powers of removal if necessary, is essential if the control and abolition of the disease is finally to be secured. And yet even to-day this fact is not sufficiently realised. The importance of the hospital is lost sight of in the insistent cry for other forms of treatment. And it is not because

pulmonary tuberculosis is a highly infectious disease in the true sense of that term that the segregation of advanced cases is essential, but because such cases, expelling as they do large quantities of germ laden sputum, are, so far as we at present know, the *fons et origo* of the virulent pathogenic organism found in large towns and cities. During the closing phases of the disease it becomes increasingly difficult for the patient to expel the sputum cleanly owing to failing muscular powers, and in consequence of this the clothes, bedclothes, hands and face are liable to become contaminated by sputum; it is only in the hospital under skilled and careful nursing that the setting free of the bacillus from such cases can be prevented. Koch held the view, though this is not generally accepted, that the fall in the death rate from tuberculosis in England during several decades was due to the segregation of advanced cases in Poor Law institutions.

The value of hospital treatment as a curative measure in certain types of the disease is also of importance. Pulmonary tuberculosis is a disease which shews considerable variation in type and in its character of onset. Not infrequently the onset is acute with severe constitutional disturbance. In such cases immediate hospital treatment with absolute rest is essential if the progress of the disease is to be arrested. The importance of rest in bed in controlling and checking auto-inoculation is now or should be universally recognised: it is only in a well equipped hospital with an efficient and adequate medical and nursing staff that the status of continued rest can be secured. Certain specific measures can also be carried out most efficiently in the hospital. The induction of artificial pneumothorax, antiseptic treatment, the local treatment of laryngeal tuberculosis and other forms of special and symptomatic treatment require certain facilities which are only to be found in an up-to-date hospital.

Included in the hospital, provision must be made for separate accommodation for observation cases so as to secure facilities for cases of doubtful diagnosis. The necessity of such observation beds has been increasingly emphasised during the last few years. Many cases have been accepted as tuberculous in which the diagnosis has not been confirmed and in which the subsequent history has clearly proved that the disease was not present. The percentage of such cases is high, as has been shewn by Dr. Bardswell in a recent

article on "The Diagnosis of Pulmonary Tuberculosis."⁸ It does not fall within the scope of this paper to discuss the diagnosis of pulmonary tuberculosis, but it is necessary to refer to the following points. It is unfortunate that owing to existing conditions the line of least resistance in a doubtful case of pulmonary tuberculosis in a discharged soldier is for the Tuberculosis Officer to make a positive diagnosis. The cardinal points to remember in examining a doubtful case is to use a straight wooden stethoscope, to listen for crepitations, to gauge the air entry and never to base a diagnosis on altered breath sounds alone; after the stethoscope comes the frequent examination of the sputum. It is the frequency with which we are asked to subscribe a definite opinion in such doubtful cases that makes the provision of adequate observation accommodation imperatively necessary.

The hospital also includes facilities for the palliative treatment of incurable cases of the disease. To those who are familiar with the lot of the advanced tuberculous patient living at home under over-crowded and insanitary conditions, the value of palliative treatment in hospital will be readily appreciated. The contrast between the patient in his home and the patient in the hospital, with an efficient medical and nursing service, is such as to make one an ardent advocate of the hospital on humanitarian grounds alone.

Reference has previously been made to the various types of the disease for which hospital provision is essential. There are also borderland cases, regarding which it is sometimes difficult to decide which form of institutional treatment should be recommended. If doubt exists with regard to the best form of treatment to be carried out, the patient should be admitted to the hospital, where he can be kept under continuous observation, and where the status of absolute and continued rest can be more easily secured. But the most difficult case to deal with is the chronic advanced ambulant type, in which there is a varying degree of fibrosis. Such patients are more or less incapacitated for work and usually expel sputum, containing tubercle bacilli, in considerable quantity. If such cases are admitted to hospital for an indefinite period they will make serious demands on the accommodation to the exclusion of more acute and more urgent cases of the disease. Even with compulsory powers of removal it would be quite impossible to retain the chronic incapacitated tuberculous patient in hospital

during the whole period in which he is a carrier and active ejector of the tubercle bacillus, but the difficulty can be partially overcome by admitting such cases to the hospital at stated intervals for a period of rest and treatment.

It is now necessary to consider the system or method to be adopted to provide necessary hospital accommodation for the various types of pulmonary tuberculosis to which reference has been made. This subject is one regarding which no doubt there will be some difference of opinion, but whichever system is advocated and adopted three points must always be borne in mind: (a) the necessity for efficient treatment; (b) the need for economy in structure and administration, and (c) the necessity of giving reasoned consideration to the psychology of the tuberculous patient.

The provision of hospital accommodation may be made in one of three ways: (1) in a separate institution constituting an up-to-date tuberculosis hospital; (2) in a special hospital block in connection with the sanatorium; (3) in a small district hospital or home either distinct from or in connection with isolation hospitals. Of these three methods only (1) and (2) call for serious consideration, as the third method is unsatisfactory, for the reason that it would eventually prove costly in structure and administration and would quite fail to provide a sustained standard of efficient treatment.

The provision of hospital accommodation by means of one or more special tuberculosis institutions according to the population is the ideal method for large urban districts. By such means, and by such means only, will it be possible to provide in large urban districts efficient up-to-date treatment, adequate medical and nursing services and facilities for special instruction and scientific investigation. The removal of the tuberculous patient to a home or institution with an indifferent nursing staff and a non-resident medical staff is not our conception of hospital treatment. The individual suffering from acute or advanced pulmonary tuberculosis is now excluded from admission to general hospitals, but surely he is at least entitled to a standard of treatment equal to that available to those suffering from other forms of disease. This can only be secured by the provision of tuberculosis hospitals which, designed and administered on up-to-date hospital lines, have an adequate and efficient medical and nursing staff.

In small urban and rural districts the question of hospital accommodation presents a more difficult problem. The standard of hospital treatment which we regard as essential can only be attained in these districts in one way, and that is by the erection of a special block in connection with the sanatorium for the district, which, if a little foresight has been exercised, will no doubt occupy a fairly central position. The suggestion that acute and advanced cases should be admitted to a special hospital block in connection with a sanatorium has been criticised on various grounds, chief of which are the distance which some of the hospital cases must necessarily be removed from their friends, and the depressing effect upon the sanatorium patients of the deaths which must inevitably occur from time to time. While these may be slight drawbacks they are by no means insurmountable difficulties. The provision of a special hospital in the sanatorium grounds with a resident staff will secure a standard of treatment which cannot possibly be reached in small district hospitals or homes with no resident medical staff. The view that the deaths which must necessarily occur among the advanced cases in a separate hospital block will adversely influence the well being of patients in the sanatorium is quite groundless; on the other hand, it has been my experience that the occurrence of a death in the sanatorium invariably exercises a restraining influence on patients who take exception to certain restrictions. The distance of the hospital from the patients' homes can easily be covered by motor ambulance, while arrangements can be made to facilitate the visitation of friends. In the absence of compulsory powers of removal we are frequently faced with the difficulty that patients with advanced disease absolutely decline to leave home and enter the hospital. This difficulty will be greatly lessened in county districts if the hospital accommodation is provided in connection with the sanatorium. At the same time it is essential that there should be compulsory powers of removal if the hospital is to be of any real and permanent value in the control and abolition of tuberculosis. The two great advantages of combining hospital provision with the sanatorium in county districts are economy of structure and administration, and a higher standard of treatment.

Provision for observation beds for diagnostic cases must be made in two small separate wards in the hospital. The number of such beds required will be larger in urban than in rural districts.

Generally speaking, a proportion of five observation beds per 50,000 of population will be necessary to meet the requirements of this type of case in urban districts. In a well-equipped hospital in a large urban district it is desirable to classify the accommodation and to make an effort to reserve a certain number of beds for the following four distinct types of cases:—(a) cases of doubtful diagnosis, (b) borderland cases or doubtful sanatorium cases, (c) acute cases of recent onset, and (d) cases of active or chronic advanced disease.

But even when adequate hospital accommodation has been provided there still remains an urgent need for greater uniformity with regard to the actual therapeutic measures carried out. I have already referred to the importance of rest in the treatment of pulmonary tuberculosis, and absolute rest in bed must be regarded as the foundation of hospital treatment. We are familiar with the results obtained by prolonged rest in the treatment of tuberculosis of bones and joints. The necessity for absolute rest in the treatment of tuberculosis of the lungs has been frequently emphasised. Dr. Marcus Paterson⁹ recommends complete immobilisation in the treatment of cases of auto-inoculation: he states that patients should not only be sent to bed but should be treated in every way with the exception of diet like a typhoid patient. J. H. Pratt, of Boston, in a suggestive article on "The Importance of prolonged rest in the treatment of Pulmonary Tuberculosis"¹⁰ also advocates complete immobilisation not only in febrile cases but also for a definite period in a non-febrile case. My experience of the hospital treatment of pulmonary tuberculosis during the last few years is that absolute rest in bed is indicated in all cases in which the mouth temperature reaches 99 F., even if only occasionally, or in which the pulse rate at rest is persistently up to 90 or higher. There is one significant fact which has occasionally come under my observation, namely, that certain patients who have steadily improved under hospital treatment have relapsed under sanatorium treatment when transferred from one institution to the other. The cause of this is no doubt due to auto-inoculation following a too rapid introduction to walking exercise. We are all familiar with Hilton's classical work "Rest and Pain": there is need for some inspired author to write a somewhat similar work on "Rest and Fever."

The influence of rest in the treatment of pulmonary tuberculosis emphasises the importance

role of the hospital in schemes of treatment. It is possible that some specific method of successfully treating tuberculosis by vaccine or serum may be discovered, but even then the hospital will have its definite, useful purpose to serve. From the point of view of prevention and successful treatment the well equipped up-to-date hospital must be regarded as the most important unit in the institutional scheme of treatment, and the basis of the successful hospital treatment of pulmonary tuberculosis must be rest; absolute rest in bed.

REFERENCES.

- ¹ Specificity and Evolution in Disease. *Lancet*, May 13th, 1920.
- ² Transmutation of Bacteria.
- ³ *International Journal of Public Health*. Vol. I. No. 2.
- ⁴ *Medical Officer*. 4th December, 1920.
- ⁵ Report of Inter-Departmental Committee, Appendix 2.
- ⁶ Pulmonary Tuberculosis.
- ⁷ *Tubercle*, December, 1919.
- ⁸ *Tubercle*, March, 1921.
- ⁹ Auto-inoculation in Pulmonary Tuberculosis.
- ¹⁰ *American Review of Tuberculosis*, 1918.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

COUNCIL MEETING.

A meeting of the Council was held at the house of the Society on Friday, April 15th, 1921. In the absence of the President, detained by Parliamentary duties, Dr. E. H. Snell was voted to the chair. There were present Prof. H. R. Kenwood, Drs. Clements, G. F. Buchan, Charles Porter, Cates, Blackett, Ellis, Lyster, Wilshaw, Sanders, Kirkhope, Auden, Veitch Clark, and Howarth.

The minutes of the last meeting having been approved and signed, letters of apology were read from Lt.-Col. Herbert Jones, Drs. H. Kerr, Thomas Evans, Joseph, Wheatley, Edmund Smith and Gibbons Ward.

The late Dr. Wynter Blyth.—It was moved by Prof. Kenwood and seconded by Dr. Charles Sanders that a message of sincere sympathy be sent to the family of Mr. Wynter Blyth, whose death removes one of the oldest members of the Society. For some years Editor of "Public Health" and President in 1901, Mr. Wynter Blyth was still a Trustee of the Society at the time of his death. The resolution expressing appreciation of his services, and regret at the loss of a respected colleague was carried unanimously, the members of the Council upstanding.

Correspondence.—(1) From the Post-Graduate Medical Committee of the Ministry of Health inviting one or two representatives of the Society

to give evidence on the needs of medical practitioners for further education in medicine in London, on April 19th or 22nd. After some discussion it was agreed that in regard to post-graduate training in Preventive Medicine the questions involved were of such magnitude that no considered recommendations could be submitted as embodying the views of the Society without prolonged consideration, and that individual members of the Society giving evidence before the Committee could only offer their personal suggestions.

(2) From the Royal Institute of British Architects asking the Council to receive a deputation of their body to discuss proposals for increasing the heights of buildings under the London Building Acts, and more especially the effect of higher buildings in relation to health conditions. *Resolved*: That as this matter especially refers to London, the R.I.B.A. be advised in the first instance to confer with the Metropolitan Branch of the Society.

(3) From the Yorkshire Branch, suggesting that the Council should not address circulars, memoranda, etc., to local authorities except through the medical officer of health for the area. The Executive Secretary was instructed to explain to the Branch (a) that the Council as the executive of the Society has always been regarded as the proper channel for communicating the views of the Society as a whole to local authorities, and (b) that the memorandum especially referred to had been submitted to the Branches before adoption and circulation. In view of these facts the Council hope the Branch will reconsider their attitude in this matter and approve the action of the Council.

(4) From the National Association of Local Government Officers offering assistance in connection with the Public Health (Officers) (No. 2) Bill, read for the second time in the House of Commons on April 14th. *Resolved*: That the N.A.L.G.O. be informed that the Bill in question was drafted by the British Medical Association on lines suggested by the Society, and that support for the measure in Parliament will be much appreciated.

(5) From the Home Counties Branch, asking the Council to support the candidature of Irwin John McGhie for election to Epsom College. *Resolved*: That this application be brought to the notice of Branch Secretaries.

(6) From the British Medical Association, asking for a representative of the Society to give evidence

before their Medico-Sociological Committee on "The Value of Maternity and Child Welfare Work in relation to the reduction of Infant Mortality." In view of the constitution of the committee, the Council were of opinion that some pronouncement might be expected on the relative merits of municipal and voluntary schemes, or schemes partly municipal and partly voluntary. As the Society has as yet arrived at no corporate decisions in these matters it was *Resolved*: That medical officers of health giving evidence before the Medico-Sociological Committee of the British Medical Association could only do so in their individual capacity and not as representatives of the Society of Medical Officers of Health.

(7) From the North-Western Branch drawing attention to Circular 190 of the Ministry of Health (March 31st, 1921), in reference to the remunerations of Tuberculosis Officers for reporting on cases for the Ministry of Pensions. *Resolved*: That the attention of the Ministry of Health be drawn to previous letters from the Society in the same connection and asking for consideration of the points raised by the N.W. Branch.

(8) From Dr. G. C. Barnes (Medical Officer of Health, Southport) in reference to proceedings under the Sale of Food and Drugs Acts in reference to articles of food (e.g., Custard Powder) manufactured on a large scale for sale throughout the country and not for merely local consumption. *Resolved*: That this letter be referred to the Committee on Food Problems in relation to Public Health, for their observations.

(9) From Dr. T. E. Francis suggesting action by the Society to secure the more frequent revision of Ordnance Maps for areas where there is great activity in building. It was agreed that this proposal would involve heavy expenditure at a time when economy is essential, but that Dr. Francis be asked to bring a specific case to the notice of the Ordnance Survey authorities for their consideration.

Infant Life Protection.—Arising out of a representation from the Home Counties Branch it was *resolved* unanimously: "That the time has arrived when the authority at present responsible for the administration of the Maternity and Child Welfare Regulations of the Ministry of Health should be made the Statutory Authority for the Infant Life Protection Section of the Children's Act, 1908, and that the Council of this Society should approach the Ministry of Health in order

that this arrangement may be effected as soon as possible."

Superannuation and Security of Tenure.—Embodying a representation from the School Medical Group, it was *resolved* unanimously: "That all medical officers of local authorities should be entitled to superannuation and that they should not be dismissed without the consent of the Ministry of Health."

Standardisation of School Medical Inspection Schedules.—After discussion of a representation from the School Medical Group, it was *resolved* unanimously: "That it be submitted to the Ministry of Health that such matters as the standardisation of medical inspection cards and schedules, and of notations used thereon, could be best effected through the Society of Medical Officers of Health with its constituent Groups representative of school medical officers and others concerned with various aspects of the considerations involved, rather than by consultation with individual medical officials."

Annual Provincial Meeting.—It was agreed, if possible, to fix June 17th for this meeting, in the hope that provincial members on their way to the Folkestone Congress may find it possible to attend. The programme includes a visit to Hatfield House (by invitation of Lord Salisbury) and lunch at Welwyn Garden City, as guests of the President. Mrs. Fremantle will afterwards entertain the party at tea at Bedwell Park.

Heating of Lecture Room.—On the proposal of Prof. Kenwood it was agreed that the Executive Secretary should have the heating appliances in the lecture room thoroughly overhauled before the opening of the new session.

The Council then adjourned.

ORDINARY MEETING.

An Ordinary Meeting was held at the house of the Society on Friday, April 15th, 1921. Prof. H. R. Kenwood (Ex-president) took the chair.

The minutes of the last meeting having been approved and signed, the following were elected to membership of the Society:—

Acheson, Johnstone Hamilton, M.B., C.M. Edin., D.P.H., Fleet-Surg., R.N. (ret.); Cassie (Mrs.), Ethel, M.B., Ch.B. Edin., D.P.H.; Cushing, Robt. Jones Whitla Alexander, M.A., M.B., B.Ch. Oxon.; Davies, Purser, M.C., M.B., Ch.B. Edin.; Jefferson (Mrs.), Gertrude, M.R.C.S., L.R.C.P.

A number of candidates were nominated for election at the next meeting.

The meeting was then adjourned, and members proceeded to the Wellcome Bureau Museum of Tropical Medicine and Hygiene, where they were received and entertained at tea by Lt.-Col. G. E. F. Stammers, O.B.E., deputy director of the Bureau, in the absence of the director—Dr. Andrew Balfour—who is abroad. Upwards of forty members were present when the curator, Dr. S. H. Daukes, O.B.E., described the scope of the Museum and the scheme of its arrangement.

Before leaving, the President (Lt.-Col. F. E. Fremantle, M.P.), proposed a vote of thanks to Colonel Stammers and Dr. Daukes, and expressed the great interest of the members in the admirable Museum that had been so ably demonstrated to them.

NORTH-WESTERN BRANCH.

Meeting held in Manchester, on Friday, 8th April, 1921. Dr. H. E. Corbin (President) presided, and 17 members were present.

The following recommendation of the Special Committee *re* Remuneration of Tuberculosis Officers for work for the Pensions Ministry were reported and approved, and the Hon. Secretary was instructed to forward copies for the consideration of the Council:—"That the attention of the Council be drawn to circular 190, issued by the Ministry of Health dated March 31st, 1921, in which it is left to Local Authorities to decide whether the payments to be made for the services of Tuberculosis Officers should pass to these officers or not without any suggestion from the Ministry that these sums should be so allocated."

"That the Council should take steps to endeavour to obtain adequate remuneration for all Tuberculosis Officers for the extra work involved in reporting upon cases for the Pensions Ministry. That attention be drawn to the fact that the lump sum (£6,650), proposed to be paid to Local Authorities for the service of Tuberculosis Officers for the next seven months is inadequate payment for such services based on the amount of work required in this connection in the past, and on that indicated as now necessary in memorandum 30.T., 31st March, 1921."

A very interesting paper was given by Dr. Langley of the Pathological Department, Manchester University, on "Some results of the Wasserman Reaction." He stated that he was of opinion that employment of the original Wasserman tech-

nique alone is trustworthy. His investigations covered more than 24,500 cases of all classes of patient. The proportion of syphilitic suspects showing a positive Wasserman reaction was after two years mercurial treatment 58 per cent., after 6 intravenous injections of Salvarsan Substitutes 41 per cent., after inadequate treatment 48 per cent., and after no treatment 49 per cent.

He pointed out the limitations of the test as to what might be and what might not be determined by it. He considered that no case should be diagnosed as congenital syphilis unless there was a positive Wasserman reaction. After replying to various questions raised by the members present, Dr. Langley was cordially thanked for his valuable paper on the proposition of Dr. Talent, seconded by Dr. Buckley.

YORKSHIRE BRANCH.

A meeting of the above branch was held in Leeds, at the Education Offices, on Thursday, March 31st, at 2.30, when there were present Dr. Smith (president) and six members. The minutes of the last meeting were read and confirmed.

The Hon. Secretary was instructed to communicate with the Executive Secretary requesting to be informed whether there was anything in the Articles of Association of the Society which permitted the Central Council to circularise local authorities on matters of public health policy direct, without in any way consulting the medical officers of health of the authority. The matter arose out of the action of the Central Council in sending copies of their memorandum on Lord Dawson's report direct to the clerks of the various local authorities.

It was decided to hold a branch luncheon in May at Harrogate.

Dr. Buchan delivered a most interesting address on "Consultative Councils," as arising out of the Dawson report. A discussion then followed.

THE WRECKERS.

The following editorial comments appear in "The Local Government Service" for February, and serve to illustrate clearly the difficulties now being encountered by the Whitley Council appointed to deal with the salaries of local government officers.

"The Whitley Council has been established for little more than a year. Only a few short months

ago civic dignitaries vied with each other in pronouncing solemn and oracular benedictions on it. It was to introduce a new era of administrative harmony, and provide a Magna Charter for the Local Government Officer. These sentiments were heard on every side, and the unanimity was wonderful. No dissentient voice was heard, and the prospects of the Whitley scheme were of the rosiest hue.

"But as soon as the machinery of Whitleyism was set in motion the horizon darkened, and the voice of the wrecker was heard in the land. Only two months ago the County Councils' Association withdrew from the deliberations of the National Council, and now other secessions are threatened, and the Association of Municipal Corporations holds a pistol at the head of the National Council. We do not believe, and cannot believe, that municipal councillors, the great majority of whom are honourable, fair-minded men, desire to wreck this system which has been so laboriously built up at great trouble and expense, and has not yet had a fair trial. They know that Whitleyism is the one great barrier against administrative anarchy and chaos. They know that their employees have, despite grave provocations, steadily pursued a policy of studied moderation, that their loyalty has been, and is, unquestioned, and that they have set their hearts on the Whitley system as a means of settling outstanding questions. But there is a small minority of employers who heed none of these considerations, and are blind to the signs of the times. To these gentry it may be an amusing pastime to wander about the gunpowder chamber with a lighted torch, but the Local Government Officer will not for long tolerate such criminal folly. We desire with all respect to address a word of warning to members of local authorities. If the Whitley scheme is abandoned, the employers, and they alone, must bear the responsibility for the consequences. Already large numbers of our members are losing faith in the scheme, and are watching the course of events with cynical contempt. There is a growing view that Whitleyism is Government dope for workers, brain and manual, to tide employers over bad times. If the local authorities are going to wreck the only feasible conciliatory machinery, they must not be surprised if their officials adopt methods which at one time were used only by manual workers. If public officers are pushed into this position by the local

authorities, future generations will condemn the folly of those responsible for such a policy.

"We believe the majority of local authorities constituting the majority of the A.M.C. desire to make Whitleyism a success, only a few representatives on the Council are responsible for this bombshell.

Are the wreckers to have their way?"

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

NOTICES.

By permission of the Commandant of the Royal Army Medical College, a meeting of the *Naval, Military and Air Force Hygiene Group* will be held at the College (Grosvenor Road, S.W. 1), on Friday, May 6th. Tea will be served at the R.A.M.C. Mess at 4 p.m., and afterwards there will be a demonstration of Sanitary Appliances and Methods. All members of the Society who are or have been connected with the Services are invited to attend.

A meeting of the *School Medical Group* will be held at the School Clinic, Great Charles Street, Birmingham, on Saturday, May 28th, at 2.30 p.m., after a meeting of the Group Council at 2.15 p.m. All members of the Society interested in school medical work are invited to attend and the Hon. Sec., Dr. A. Ashkenny (Health Department, West Bromwich, will be glad to receive suggestions of subjects suitable for discussion.

The *Annual Provincial Meeting* of the Society will be held on Saturday, June 11th, as arrangements could not be made for the following week as at first intended. Members will assemble at the house of the Society at 10.30 a.m., and proceed by motor char-a-bancs to Hatfield House, which will be visited by invitation of Lord Salisbury. Thence the party will go on to Welwyn Garden City, where they will be entertained at luncheon by the President. After an inspection of the Welwyn housing schemes, Mrs. Fremantle has invited members to a garden party at Bedwell Park. The party will arrive back in London about 7 p.m. Any modifications of the above programme will be announced in the next issue of "Public Health." Meanwhile the Executive Secretary would be obliged if members would notify him of their intention to attend, stating if they will be accompanied by ladies. A remittance of 10s. 6d. should be enclosed for each passenger by the motor char-a-bancs.

DR. EDWARD WALFORD has resigned his appointment as Medical Officer of Health for the City of Cardiff, after thirty-three years' service. He retires on a pension of £500 per annum, granted by the City Council under the Cardiff Corporation Act, 1920.

Public Health

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Editorial.

HEALTH SERVICES.

THE reactionary wave that began a short time ago by holding up all kinds of health services all over the country continues to sweep everything before it, and strenuous efforts are being made to convert the national life-saving departments—centrally and locally—into penny-saving departments. In this ridiculous crusade nothing is too antique or moth-eaten to resurrect, and the old fallacy of "the survival of the fittest" has been revived as a reason for the abandonment of all state measures to promote the health of the nation. "Such schemes," say these gentlemen who hate to see advances in state control, "tend to lower instead of to raise the power of the community, to resist dis-

case." The fact that the returns of deaths and diseases for 1920 constitute a triumphant vindication of the health services of the country will make no impression on these people because they are just the kind of folk who do not understand statistical evidence, and who, in fact, glory in their ignorance in this and many other matters. Their sole aim is to arrest the tendency towards the state control of services of any kind.

Leading the reactionaries is "The Times," which masks its intentions under a cover of personal antagonism towards Sir George Newman, combined with opposition against what it calls "medical socialism." Its present avowed policy is one of personal hostility towards the Chief Medical Officer of the Ministry of Health and the public is being asked to believe that something called the "Newman policy" has been introduced in some underhand and mysterious way at the Ministry, and that such a policy has been repudiated by a medical profession aroused to a sense of its responsibility by the medical correspondent of "The Times," and that finally this Machiavellian scheme of "medical socialism" has now been abandoned by the Ministry. The latest effort of our contemporary appears to be to persuade Lord Dawson that he has "a policy" which "is a very different thing from the Newman policy." We believe that Lord Dawson will resent this attempt to drag him into a controversy on the side of the reactionaries, and we shall be surprised if he allows himself to be used as a pawn in the political game which is being played.

We hold no brief for the Ministry, and we have never hesitated to criticise its policy or its methods when these have appeared to us to be against the public interest, by preventing the proper development of a complete system of preventive medicine for the country, but the attacks of "The Times" reveal an ignorance of the case which would be astonishing were it

not for the fairly obvious fact that the whole campaign is a political one. "The Times" instances as illustrations of this dreaded "medical socialism" at the Ministry the "record card inquisition" and the recent appointment of a large number of "regional medical officers" in connection with medical work under the Insurance Act. If the medical correspondent of "The Times" had made himself acquainted with the actual facts of the case he would have learned that these two acts were final and despairing efforts of the Insurance Act part of the Ministry to bolster up the rotten panel system against which there is so much criticism and resentment among those who receive its alleged benefits. No administrator of the ability and experience of Sir George Newman would expect any success to follow these experiments. The panel system is doomed, and so far as attacks of "The Times" and others tend towards its destruction, they are to be welcomed, but to pretend that it is part of the "Newman policy" to bolster up such an unstatesmanlike machine is mere nonsense.

Sir George Newman stands for all the ideals of the public health service of the country and the real "Newman policy" represents the considered opinions of all experienced administrators in preventive medicine. He has incurred the wrath of the reactionaries owing to the fact that he has recently crystallised these opinions in a series of documents of great imaginative force in which he has indicated in an irresistible manner the lines on which our national health services may be made one of the most powerful instruments of wise social evolution and of far-reaching economies. Sir George Newman would be the last to claim the authorship of these ideals and opinions: his position is that of a brilliant exponent who is at the same time an official with opportunities which he has used with magnificent success, in order to put them into practice.

We have entire faith in the future. It is immaterial whether the attacks of "The Times" succeed or fail. Things have gone too far for personalities at the Ministry to do more than accelerate or retard the pace. The inevitable result is a complete national scheme of prevention of disease, and this will be achieved in spite of all the obstacles which may be put in the way as the result of political intrigue, jealousy, stupidity and inertia. An entire change of personnel at the Ministry could only hold up matters for a time, because any new

men who may be put there will, sooner or later, learn their work, and as soon as they do this they will, whatever may be the political complexion of the present or any other government—Tory or Communist—carry on the "Newman policy."

TREATMENT OF TUBERCULOSIS— CESSATION OF "SANATORIUM BENEFIT."

After two false alarms the Ministry of Health decided that sanatorium benefit should cease as from the 30th April, 1921, and on the following day the responsibilities of Insurance Committees in respect of the provision of treatment for tuberculous insured persons and ex-service men will be transferred to the Councils of Counties and County Boroughs. The documents issued by the Ministry announcing this decision are strongly reminiscent of the circulars emanating from the offices of the Insurance Commissioners: that is to say, enormous numbers of words are used to set out quite a small number of facts, the memorandum dealing with the treatment of ex-service men occupying no less than 19 pages of closely printed matter. The perusal of these circulars, etc., is a wearisome task, and it is unfortunate that the Minister of Health cannot see his way to have the essential facts plainly set out without circumlocution in ordinary everyday language. In spite of the voluminous character of the circulars, etc., it cannot be said that the transfer of responsibility will effect any radical change. Hitherto in most areas the work has in practice been carried out by the County Council or County Borough Council, and although in some areas a considerable amount of clerical work has been performed in the offices of Insurance Committees, this has not brought about a corresponding reduction in the work in the Medical Officer's Department, but has in practice represented neither more nor less than unnecessary labour. In those Counties in which from the inception of sanatorium benefit the work has been carried out, to the largest possible extent, in the Medical Officer's Department, the alteration will practically not be noticeable.

Agreements between Insurance Committees and Councils were determined on the 30th April, and after that date payments will be made direct to the Council, and not through the Committee. These payments will be in respect of

(a) the actual cost of the treatment of certain ex-service men (regulations with regard to these are very complicated); (b) certificates issued by tuberculosis officers; (c) block grants corresponding to the amount received in respect of the year 1920 from the Insurance Committees for the treatment of insured persons; and (d) for the treatment of seamen of the Mercantile Marine. In addition to the above payments, which may be described roughly as payments in full for services rendered, the Ministry will continue to distribute the Annual Exchequer grant in aid of the cost of schemes equivalent to 50 per cent of the net approved expenditure, after deduction of the amounts payable as set forth above, and of any receipts of the Council from any other source in respect of their scheme. This grant will also be available in respect of payments made to the Council for the provision of extra nourishment. Hitherto extra nourishment has been available for insured persons only, and the sums at the disposal of the Insurance Committee have been strictly limited. In future the Council may provide extra nourishment on the recommendation of the Tuberculosis Officer, to insured and uninsured alike up to a total annual expenditure of £2 per thousand of the population dealt with. Although, as has been said, the sums hitherto available for use in this way by the Insurance Committee have been strictly limited, the maximum of £2 per thousand fixed by the now-issued regulations, will proportionally reduce the expenditure, and it is much to be regretted that the Ministry have not seen their way to give Councils a freer hand in dealing with this side of the problem. It is not uncommon for Medical Officers of Health to find that the expenditure of a small sum in extra nourishment would prevent the necessity of sending a patient to a Sanatorium, and would thus result in a very considerable saving of public money.

The provision of extra nourishment for ex-service men will continue to be administered by the Local War Pensions Committees. It has also been decided to continue periodical reports of insurance practitioners upon insured persons, and these will now go direct from the practitioner to the "Regional Medical Officer" appointed by the Minister under the provisions of the National Health Insurance (Medical Benefit) Regulations, 1920, for the district in which the practitioner carries on insurance practice, and will be forwarded by the Medical Officer to the appropriate Tuberculosis Officer. No

explanation is afforded as to the object of this round-about way of securing a report, but the matter is probably not of much consequence, the usefulness of these reports in the past not having been apparent.

The various documents indicate that their authors have been at some pains in taking such steps as they considered necessary to secure co-ordination between various bodies in providing treatment at the earliest possible moment, particularly for ex-Service men, and undoubtedly their efforts in this direction will be appreciated and practically sympathised with, by every Medical Officer, but it is notable that in these circulars the Tuberculosis Officer appears to be regarded to a very large extent as independent of the Medical Officer of Health, and perusal of the circulars might very well lead one to the opinion that the want of co-ordination between these two officers brought about by the efforts of the Ministry to make the Tuberculosis Officer independent, has resulted in an unfortunate position. For example, it is pointed out that the Tuberculosis Officer, in considering the advisability of recommending an ex-Service patient for institutional treatment, should, without regard to the question whether a bed is available, use his "unfettered medical judgment." In those areas in which the Tuberculosis Officer has, with the best of results, occupied the position which he can usefully fill as a cog in the wheel of preventive medicine, he has never had occasion to fetter his medical judgment.

Perhaps as useful a comment as any is that which is contained at the end of the following extract from the "National Insurance Gazette."

"The treatment of discharged soldiers and sailors will also cease to be arranged for by Insurance Committees and will become the care of Local Authorities as well as that of cases where continued treatment and training is given. The many complex, if not profound, formalities and forms which have been required in making arrangements for these classes of men will be gladly relinquished by those who have been responsible for them. No section of an Insurance Committee's work has been more taxing in great attention to small matters than in this."

THE SPIRIT OF CO-OPERATION.

In these days of general dissension it is gratifying to be able to record that within the

Society there is to be found an increasing tendency to confer with other bodies whenever a subject for discussion presents some ground of common interest. Following upon the conference between representatives of the Metropolitan Branch and of the Metropolitan Asylums Board, on the subject of hospital accommodation and treatment of cases of infectious disease, comes a suggestion that a deputation from the Building Act Committee of the Royal Institute of British Architects should be received. This Committee at the moment is investigating various aspects of the London Building Acts, more particularly with regard to proposals for increasing the heights of buildings, and it is felt that the work of the Committee would be materially assisted if a joint discussion took place on the question of higher buildings in their relation to health. A special meeting of the Council of the Metropolitan Branch is to be held to receive the deputation, and it is hoped to induce the attendance of many, if not all, of the medical officers of health of the central districts in London to take part in what should prove to be an exceedingly interesting and helpful discussion.

MEALS FOR MOTHERS.

The Labour members of the Glasgow Town Council have been the means of carrying through an important decision which would otherwise have been shelved. The Health Committee sent in a unanimous recommendation to the effect that meals should be provided, in cases of necessity, for nursing and expectant mothers and for young children. But for the firm action of the Labour members, the opposition on the Council would have succeeded in their refusal to discuss the subject; public opinion, however, was so strongly in support of the Labour attitude that the opposition was eventually withdrawn, and the Council has adopted the resolution.

NEWS FROM BRANCHES AND GROUPS.

This month it has been possible to make a start with a project which has been previously held up for want of space. Every branch and group of the Society has been requested to appoint a correspondent who will each month forward to the Editor such items of local news as he considers would be of general interest

to all members of the Society. We hope in future issues to publish contributions from each branch and group, and we believe that such items will serve to stimulate the work of these units. Correspondents are reminded that their contribution should reach the Editor *not later* than the 15th of each month.

DR. ALFRED HILL.

The congratulations of every member of the M.O.H. Society will be offered to Dr. Alfred Hill, who has just been elected a Honorary Fellow. Dr. Hill was President of the Society in 1886 and 1887, and, now in his ninety-sixth year, he has for many years enjoyed his well earned retirement in the Isle of Wight.

ARMY SCHOOLS OF HYGIENE.

The arrangements for the establishment of Schools of Hygiene in the different Army Commands, made last December, have been modified, and the schools, which are permanent centres of instruction for staff and regimental officers and for regimental sanitary personnel in the principles on which hygiene is based, will now be located at Aldershot (when the transfer of the School at Blackpool is effected); Netley, Hants; Strensall Camp, near York; and Carrickfergus.

OBITUARY.

DR. A. WYNTER BLYTH.

Dr. Wynter Blyth's death, which took place suddenly while he was at work in his laboratory, on March 30, removes a well-known figure in the public health and scientific world. An ex-President of the Society of Medical Officers of Health, member of many learned societies, and formerly M.O.H. to the Metropolitan Borough of St. Marylebone for twenty-five years, he was at the time of his death in his seventy-seventh year, public analyst for that borough and still active in work, in study and in recreation.

DR. F. J. BURMAN.

We regret to record the tragic death of Dr. F. J. Burman, medical officer of health for the Bolton-on-Deane urban district, who was recently knocked down by a motor car and died from the effects a few hours later. Born at Wath-on-Deane, he had seen his native place change from a picturesque country town to a busy industrial centre, and his interests had extended to everything which could promote its welfare.

*SOME RECENT IMPROVEMENTS IN THE HYGIENE OF THE ROYAL NAVY.

BY

SURG.-COMMANDER R. ST. G. S. BOND,
M.B. Ed., F.R.C.S. Ed., M.R.C.P. Lond., D.P.H.

Hitherto, I think I may safely say, the "credited silence of the Navy" has been well carried out in the improvements that have taken place in recent years, in naval hygiene, but the time has come when the public demand information on naval matters generally, I suppose from the feeling among others, that they have the right to learn all about what they have paid for and are paying for. My reference to this does not imply that the members of this group, or of the hygiene world generally, are so actuated, but I feel sure they must be actuated from the point of view, that by learning the problems that beset us in Naval Hygiene, they will be able to aid us in our efforts to overcome the health evils that are a part of ship life.

It is for this reason that I particularly welcome the formation of this group of our society—my hope being that we shall be able to air the difficulties in our own little world of hygiene from time to time, and receive the criticism of our methods and the suggestions for their improvement from other members whose wide experience in the Military and Civil Health problems greatly qualifies them to offer.

Not one branch of H.M. Forces can say it has no experience of the difficulties of the other. The Army has its transports, with all their difficulties in ventilation and accommodation. The Navy has its barracks, camps and coast-guard stations. The Air Force has its ships, both of the air and of the sea, and in speaking of the latter one of the most difficult problems now existing is to plan a suitable aeroplane-carrying ship from the hygienic standpoint. The Colonial Medical Force will appreciate our difficulties equally, many of them being port medical officers of health. Finally, to complete the circle, we expect and welcome all support that I am sure is forthcoming from the civilian health service. Without some such co-operation, and if we all work in our own watertight compartment, no real hygienic good will result.

Before leaving this question of co-operation I would like to offer a suggestion to this group, which is that a representative, one or more, from the medical officers of the Mercantile

Marine who are conversant with the health problems in mercantile ships, should be invited to join this Society and this particular group. In this way we could obtain their views and learn their difficulties, and vice versa. I need hardly say that during and since the war, the Royal Navy has become more and more amalgamated with the Mercantile Navy, and we have learnt the fact that never again can they be considered entities, but that both are a whole working to one end, viz., for safety of our country and its trading prosperity.

I should like to put before you this evening some of the steps that have been taken within quite recent years in the Royal Navy to obtain this much-needed general co-operation and to improve our health conditions.

As regards co-operation in hygienic matters up to 1918, it may be said this was practically non-existent, either between our own medical officers individually or between them and outside medical officers of health—each one was almost a closed box to himself, and the naval medical service as a whole was a closed box to the outside world. This obviously was an impossible situation if any real good was to be obtained in attempting improvements; and as regards ourselves it may be said that good came out of the war in that it brought about this co-operation which now exists in a nuclear form.

Up to 1918, then, there was no special health service in the Navy, corresponding to that well-organised one in the Army. The need of it was felt at once during the war, when the problems of hygiene rose up tenfold—each Naval Medical Officer was his own medical officer of health whether he was specially qualified or not. This perhaps had its good side, as he was put on his mettle in this respect—it is true that each Naval Medical Officer received both in the course on entry and that for promotion, instruction in *general* hygiene at the Naval Medical School, R.N. College, Greenwich, and at the R.N. Hospital, Haslar, in Naval Hygiene, but there was no inducement and very little facility offered to him to obtain a special qualification in Public Health, such as a Diploma.

Since the opening of the Naval Medical School at Greenwich in 1912, the School has been affiliated to the University of London; and the General Medical Council has recognised the courses there, as well as the course in Naval Hygiene at Haslar, as qualifying in part time for the Diploma in Public Health,

and at recent meetings of the Public Health Committee of the General Medical Council this has been ratified. The Board of Admiralty has also sanctioned the granting of extra time over and above the usual three months' course of study allowed to Senior Medical Officers, i.e., to certain of these officers, who wish to take the Diploma in Public Health and who are selected by the Medical Director General. By these means it is hoped that in the immediate future a considerable number of Naval Medical Officers will possess this valuable Diploma. Indeed these additional facilities and inducements have already resulted in a considerable increase in the number of officers possessing the Diploma.

The greatest inducement for taking this Diploma has been made by the establishment in 1918 of a definite hygiene branch of our service. During this year (1918) three medical officers specially qualified in hygiene and possessing the diploma were appointed on the staff of the Commanders-in-Chief at Portsmouth, Plymouth and Chatham, and in 1920 another was appointed similarly at Rosyth, for the Scottish Naval Command. It is hoped to extend these appointments to the Irish Command and to some of the foreign commands such as the Mediterranean, China, etc., in the near future. A brief description of the status and duties of these officers will perhaps be of value to the members of this group in any future dealings they may have with the hygiene section of the Naval Medical Service. The official title of these officers is "The Naval Health Officer" and their addresses are—Commander-in-Chief's Office, Portsmouth, Plymouth, Chatham and Rosyth, as the case may be. The appointments are shore ones, and each has an office entitled "Naval Health Office." It is intended that they shall hold the rank of Surgeon Commander (equivalent to Lieut-Colonel, R.A.M.C.). As before stated, they are on the staff of the Naval C.-in-C. of the particular command, and in this way are in a similar position to the A.D.M.S. in an Army Command and directly answerable to the C.-in-C., though referring all special matters for information and decision to the Medical Director-General of the Royal Navy and to the Principal Medical Officer of the Port, who is the Surgeon Rear-Admiral in command of the R.N. Hospital at the three large ports. The duties of the Naval Health Officer are very widespread; they may be said in a civilian comparison to

combine those of a port medical officer of health, a county medical officer of health, and the medical officer of health of a borough, though of course in relation only to the naval population and its areas of distribution.

They act, each in their own area or command, as liaison officers of health connecting up with the military and civil health officers of the ports and districts. Each issues a weekly report of infectious diseases' incidence arising in his port and command, and each receives a similar report from the military and civil authorities—similarly he issues and receives reports of immediate occurrences and interest, so that matters can be dealt with at once; the naval health officers are of course in immediate and weekly communication between themselves, and receive the weekly reports from the Ministry of Health, and the Scottish and Irish Boards of Health.

They refer matters of importance to the central health office in the department of the Medical Director-General—at the Admiralty.

In this department there is an assistant to the Medical Director-General for hygiene duties, while the chief adviser in health matters is the Professor of Hygiene at the Royal Naval Medical School, R.N. College, Greenwich, who acts in conjunction with the Professor of Bacteriology there for consultation. The Medical Department of the Admiralty, of course, works in conjunction with the Health Departments of the War Office, Ministry of Agriculture, Ministry of Transport and Shipping, etc., issuing to and receiving from these bodies reports on matters of interest in hygiene—reports are received in the Department from medical officers of health, of London areas, giving information as to naval ranks and ratings who may be suffering from an infectious disease or who are contacts of infectious disease. These are very valuable, and it is hoped that all medical officers of health will so recognise the advantage to the naval service, irrespective of whether the disease is notifiable by law or not.

A form for notification of infectious disease has been recently added to the naval service, copies of which I pass round for information. These are sent in from medical officers of ships and establishments to the Naval Health Officers for purposes of compiling a register of these diseases, each in their own area, while those outside these areas are notified on these forms to the Medical Director-General.

The duties of the Naval Health Officers do not end here—under their supervision and acting in consultation with their Medical Officers and the civil engineers, come all the civil naval establishments, such as Dockyards, Victualling Yards, Ordnance Depots, Hospitals, etc. We have our large Naval Barracks, built for about 5,000 men each, Royal Marine Barracks with 1,000 or more strong, and some Naval and Marine Camps, and numerous Coastguard Stations, mostly in out-of-the-way places and difficult to control from a sanitary aspect.

It will be seen then from this short description that their duties are so manifold as to necessitate help which can only be met by appointments of assistants, specially qualified in health matters who can undertake the more routine duties of inspection, a proposition in which I feel sure this meeting will agree—one can only regard the present arrangements as the nucleus of a future larger formation—the chief point now being that it has been started in the right direction, and we hope that better times will come, which, in other words, means when more money and more specially qualified men are available. Of great importance in the health and sanitary arrangements in the Royal Navy generally is the department of Civil Engineers in the Service. This is a body which is highly qualified in all the technical work, necessary in building ships and naval establishments. They may be said to correspond almost exactly to the position the corps of Royal Engineers holds to the Army Medical Service. There is a departmental head at the Admiralty under the Civil Engineer-in-Chief, and every Naval Port at home and abroad has its staff of Civil Engineers. It is obvious for the working of our scheme that harmony should exist between the Naval Health Officers and the Civil Engineers, as indeed it must also exist with other branches of the Service with which he has dealings.

I will now pass on to a less recent improvement in our health conditions dating back to 1912. In this year a committee was appointed by the Admiralty to investigate and report on the best methods of ventilating modern warships. This committee finally consisted of (in July, 1913) Professor W. J. R. Simpson, Dr. J. L. Haldane, Surgeon Commander R. C. Munday, R.N., and Mr. E. N. Mooney, Royal Naval Constructor, with Rear-Admiral H. P. Williams as Chairman. Their difficulties were very

great and easily understood when one remembers that fighting efficiency is the main object of the ship, such efficiency depending on the integrity of armoured sides, decks and bulkheads, and that the main watertight bulkheads must not be pierced below the main deck, whilst ventilation inlets and outlets on and above the upper deck must not interfere with the working or firing of the guns, nor be situated so far within the area of their blast as to be liable to damage. It must also be remembered that our ships may be sent to parts of the world where there are extremes of temperatures, arctic or tropical. These difficulties the Committee recognised as inherent in Naval Service. What are the essentials of good ventilation in a ship?, they do not differ from the ordinary hygienic maxims in life ashore. They are:—

(1) The circulation of a sufficiency of fresh air.

(2) The distribution of such air without creating draught.

(3) The maintenance of a suitable temperature;

and to attain these essentials one must have organised supervision, control, and care of the means adopted.

It must be remembered that the conditions in a modern iron ship are like those in a bottle, through the neck of which fresh air has to come in and foul air escape—an apt simile made by an American writer on Naval Hygiene (Dr. Pryor)—there is no perflation, and all natural means of ventilation may have to be closed, while even when these are open, they are too variable, owing to alterations in the ship's course and other factors, to be of any permanent value.

It may be remarked here, that when a ship is in action, the whole problem of ventilation is greatly increased, as, in the supply of fresh air by artificial means, poisonous gases may be supplied instead. This matter is for further and urgent consideration.

Artificial ventilation in warships is carried out by three methods:—

(1) The Plenum system.

(2) The Exhaust system.

(3) The combined Plenum and Exhaust.

The first is used for living spaces trusting to natural exhaust. Fresh air is drawn in from upper deck by powerful electric fans, situated on the decks below, care being taken that the

inlets or cowls are placed well away from positions where foul air is escaping and that the cowls shall be water-excluding. The air is drawn down from these cowls and then propelled through steel trunks to the spaces requiring ventilation, and is evenly distributed throughout the whole compartment by a series of gratings or louvres in the trunks, which are made of expanded steel and left permanently open, the size of the grating being 18 by 6 in., with $\frac{3}{8}$ in. mesh, and the direction of the mesh being so placed as to deflect the air at right angles to the air trunk.

The object aimed at is to supply fresh air at the rate of 50 cubic feet per minute per man, or 3,000 cubic feet per hour.

To avoid draughts, an ingenious device by Mr. Gibson, of Messrs. Davidson & Co., Belfast, has been fitted—this is the placing of metal deflectors in the trunks opposite each grating, which by adjustment give a limited flow through each grating.

The deflectors are straight—and when being fitted in a new ship are first adjusted according to formula, so that a limited flow of air is directed to each outlet grating, and no unpleasant draught is perceptible at more than a foot away, even when 100 cubic feet of air per minute are issuing from the grating. These deflectors cause practically no resistance. The rate at each outlet is tested, and when found satisfactory, the deflector is fixed in this position—deflectors remote from the fan, where velocity and pressure of air in the duct are small, require, of course, to be much more widely open than those close to the fan.

This method had been found to give the first two essentials mentioned. The third, namely, the maintenance of a suitable temperature, is obtained by passing the cold air over thermo-tanks, which are merely tanks containing tubes through which steam passes under low pressure, which both warms and dries the air. A by-pass is fitted to allow of cold air in certain proportions being mixed with the heated air, adjustment of required temperature being controlled by a lever which opens the by-pass in varying degrees, so that part of the supplied air passes between the hot tubes and the remainder through the by-pass, the cold and warmed air mixing at the end of the heater. A suitable temperature is regarded as from 55° F. to 60° F. It will be at once seen that this method of warming air requires very careful supervision.

No attempt has been made to supply cooled air in tropical climates.

Passing on now to the exhaust system, it has been found best to apply this exclusively to such places where great heat and vapour, foul odours or dangerous gases are generated.

The combined plenum and exhaust system is used for such spaces as medical dressing stations and operating rooms.

Having given this sketch of the means adopted to supply fresh air, it remains only to state what is done to organise and supervise the working of the method and to test results.

There is, firstly, a medical officer on the staff of the Medical Director-General at the Admiralty, borne for Hygiene duties, among which is that of inspecting the ventilation of ships under construction, and further to co-operate with officials of other Departments when dealing with proposed alterations and improvements.

This officer, unfortunately, inspects only on completion of the ship, when often any recommendation made by him cannot be carried out owing to structural difficulties. It is really necessary that he should sit on the Board of Construction even before the keel of the ship is laid. More locally at the larger ports the Naval Health Officers are used to give expert advice in ventilation in ships under refit or re-conditioning. Then on board every ship, there is a commissioned officer responsible to the commanding officer for the general supervision of ventilation and heating, assisted by a suitably organised ventilation party.

The medical officer of the ship is responsible with the executive officer for taking regular observations on readings of wet and dry bulb thermometer in living spaces, these observations being taken at times when most vitiation of air is obtained, as, for example, when men are turned in and asleep. In addition to this, samples of air are collected from time to time, and when any deficient ventilation is observed. These samples are taken in small bottles and forwarded to the R.N. Laboratory at Greenwich for analysis as to CO₂ content, in cases of ships at home, and to naval hospitals or other convenient laboratories when abroad. It is considered that any degree of CO₂ found on analysis, from 12 parts per 10,000 upwards indicates faulty ventilation, and steps are then taken to remedy the matter. This method adopted is open to some objections, but if the

instructions are carefully carried out when taking the samples, it has been found a very fair method of determining deficient ventilation.

Closely connected with ventilation is the question of accommodation. It is obvious one cannot aim so high on board ship as in our barracks or other institutions. As you know, 600 cubic feet air space and 60 feet floor space are insisted on in barracks, while the allowance drops to 300 cubic feet in common lodging houses only occupied during the night. In the Royal Navy it has been fixed at 200 cubic feet. No special floor or deck space allowance is fixed, but the spacing between hammock hooks is fixed at 20 inches; formerly it was 16 inches, which meant much overcrowding.

Recently in an enquiry by the War Office into accommodation on board H.M. Transports, following the serious results from overcrowding in them during the influenza epidemics, it was pointed out by General Beveridge, that the spacing between the hammocks, then at 16 inches, was far too little, and that the floor or deck space was insufficient. An arrangement was made with the concurrence of the Admiralty, War Office, Ministry of Transport and Shipping to increase the space between hammocks to 27 inches, but this entailed that 25 per cent. of the troops embarked would not have hammock billets, it being considered that this number would be employed on various duties and would not be asleep. This arrangement is for long voyages only.

The evils of overcrowding and consequent deficient air space were only too well illustrated during the war, especially in the influenza outbreak, and this period marks a great increase in the chief diseases which we have to fight in the Navy—which are, speaking generally, respiratory diseases. Looking back to the old navy, the diseases most prevalent were Scurvy, Smallpox and Dysentery. These have been overcome by appropriate methods, and may be said to be almost non-existent. Unfortunately, this is not so with respiratory diseases, and modern conditions in a man-of-war may be said to increase the liability—therefore we find at the present day our scourge in diseases incidental to ship life is Tuberculosis—and the question may be asked why this is so, considering especially the improvements and efforts that have been made in ventilation and accommodation. We must all agree that the common cold or catarrh and such diseases as

influenza are the common precursors or predisposing causes in lighting up a tuberculous affection of the lungs. We are all supposed to have tuberculous foci in our lungs. I cannot bring before you any very reliable statistics in these diseases, especially as the years of war defeated any continuity in them, owing to the altered conditions of recruiting and to the perhaps unavoidable overcrowding that occurred in our ships and barracks. But I think one can say there is a lessening in the Tuberculosis incidence.

A short description of further preventive measures against Tuberculosis and our methods of dealing with cases will perhaps be of interest as concluding my paper. From the year 1910, energetic steps have been taken to prevent the incidence of Tuberculosis in the Navy, yet it remains high, and is the highest cause of invaliding out of the Service.

The following is a table of incidence with ratio per 1,000.

Year.	Number of Cases.	Ratio per 1,000
1909	320	2.83
1910	261	2.29
1911	286	2.44
1912	278	2.32
1913	245	1.93
1914	336	2.12
1915	522	2.15
1916	772	2.55
1917	740	2.12
1918	989	2.77
1919	336	2.48

This table shows one pleasant feature—that up to the period of war there was a steady decline.

The war period of course gives us little value, as during this time recruiting tests were not so severe, and large numbers of pensioners and even previously invalided men rejoined the Service. I think it may be said that careful physical examination on entry and early diagnosis of the disease are among the main preventive measures.

The system is now adopted of weighing all men in ships once a quarter—this list is brought before the medical officer, who notes any men deficient in weight or losing weight, and subjects them to careful examination; any suspected cases, especially those with chronic cough, are sent to the larger hospitals, where every facility for diagnosis, such as X-ray, bacteriological, tuberculin test, etc., is at hand.

In these hospitals there are observation wards set aside for these cases, and when diagnosed as definitely tuberculous they are transferred to the huts in the grounds of the hospital, which are run on the lines of an open-air sanatorium. They are not kept long, but are invalided out of the service on full disability for a period of treatment in the sanatorium, local to their district, if they wish for this. These cases are immediately notified to the Ministry of Health. A form for this purpose is used, which I pass round for your notation. As long as the National Health Insurance is in existence a form is also used for this purpose, both being filled in from the invaliding hospital. The cases are re-surveyed at intervals afterwards and their disability re-assessed.

One important improvement in the after conditions of life of these cases that the war has brought about, is that in nearly all cases the disease is now found attributable to the Service.

Formerly this was very rarely the case.

One cannot help thinking that if sanatorium treatment is still to be reckoned the best, it would be good to have a combined service sanatorium, as many as may be required, where the cases could be rendered fit to engage in the business of life subsequent to their service. It is not considered advisable to take tuberculosis cases back into the Service after invaliding. From what has been stated in this paper I think that the Navy can claim that it is not behind other health bodies in its efforts to eradicate this disease, especially considering the condition under which we live.

I hope, Mr. President and Gentlemen, that what I have said, will help to show those present here who are not familiar with our difficulties, what some of these problems are. There are many others, which I hope will be laid before you from time to time by other Naval Medical Officers.

THE date of the postponed census has now been fixed for Sunday, 19th June.

DR. MONTAGU TRAVERS MORGAN, M.C., county medical officer of health for Pembrokeshire, has been appointed to the medical staff of the Board of Education.

SHEFFIELD city council have sanctioned the acceptance by Dr. F. E. Wynne, M.O.H., of the Professorship of Public Health in Sheffield University.

ENCEPHALITIS LETHARGICA.*

BY

CHAS. S. THOMSON, M.D., GLASG., B.Hy.,
D.P.H., Med. Officer of Health, Borough of
Hyde.

Within the last month three cases of the disease now generally known as encephalitis lethargica have occurred in Hyde.

I had never seen a case before, accordingly I have been reading up the literature on the subject. A perusal of the medical journals for the last three years serves to prove that interest in the subject is growing, and cases are now being steadily reported. There is at least one textbook, written by Tilney and Howe¹ of Columbia University. They do not regard encephalitis lethargica and influenza as one disease, nor do they accept the *Diplostreptococcus* of Wiesner² as the causative germ.

The designation or name "encephalitis lethargica" is deplored by some. Economo³ directed attention to some cases in Vienna in the spring of 1917, and he is responsible for the name "encephalitis lethargica." The Local Government Board adopted this name at a later date. Professor Hall⁴ of Sheffield advocated the term "sleeping palsy," and some newspaper reporters seem determined to stick to the name "sleeping sickness."

Edwin Bramwell⁵ considers that in the present state of our knowledge, no attempt should be made to supercede the current nomenclature.

Netter of Paris said that 75 per cent of the cases presented lethargy.

Most medical officers, therefore, will probably accept the name "encephalitis lethargica" for the present and await the issue of the battle of the clinicians and pathologists before altering the title upon the particular questionnaire sheets which we all keep in our offices. E. Farquhar Buzzard⁶ regretted the name encephalitis lethargica, in that it *presumed* one of the many symptoms which any form of encephalitis might give rise to.

F. G. Crookshank⁷ said: "the fact is that not one single specific clinical, experimental, pathological or epidemiological criterion can now be alleged in distinction between so called encephalitis lethargica and poliomyelitis, polioencephalitis, or any other of the many forms of encephalitis, myelitis and neuritis that are epidemic during influenza periods."

*Paper read before the North Western Branch of the Society of Medical Officers of Health at Manchester, on January 14th, 1921.

This opinion can certainly be challenged.

Let me now describe the two cases of the disease I have seen. On December 13, I admitted a lad of seventeen years to a side ward in the infectious diseases hospital.

I did so because it was not clear that the disease is not contagious, and the fatal issues in many cases suggest that it is wiser to take no risks as regards infection. This lad is employed as an assistant in the Maypole Dairy Co. On Saturday night, December 4, when he came home from work, he complained to his sister that he was very tired. On Sunday he said that he saw double; his sister noticed a slight squint in his left eye. He lay down and mentioned a headache, there was no vomiting at any time.

On Monday, December 6, he walked a mile to see his doctor and asked for treatment for the squint and double vision.

He was referred to an oculist, who wrote back "Paresis in int rectus and slight ptosis; no paralysis of accommodation; fundi normal; probably cause migraine."

On December 7, patient lay down at home with his eyes closed. He was drowsy, and it was noticed that his hands trembled when he held them out for a cup of tea which his sister brought to him.

The drowsiness increased and his people became anxious when it was noticed that an effort was required to rouse him.

Normally he breathed through his nose, but now he kept his mouth opened.

The family doctor was called in and diagnosed encephalitis lethargica straightway. I saw the patient at once at the hospital.

He lay like a log on his back with his eyes closed and head motionless. He presented the appearance of an effigy on a tomb described by A. J. Hall, Sheffield, as occurring in some of his cases.

When asked his name, the patient opened his eyes after a perceptible delay and gave me the name in a somewhat slurring voice—the two words ran into each other.

He was quite conscious though drowsy. I thought he seemed irritated when questioned. He said he had had buzzing in the right ear and dizziness up to the last day before admission to hospital. The pupils were medium sized and reacted to light and on accommodation; I could not find either squint or nystagmus.

Ptosis was present but no facial paralysis.

There was no head retraction, he bent his head forward when asked to do so.

In both legs a partial Kernig's sign was present. The knee jerks and epigastric reflex were increased. Urine had to be drawn off with a catheter and an enema was necessary for an action of the bowels. Twenty hours after admission to hospital he seemed stuporous but could be roused, only, however, to "fall over" again quickly. Lumbar puncture was performed without an anæsthetic, the patient showing no displeasure when punctured.

Clear cerebro-spinal fluid flowed out under fair pressure, two test tubes being well filled. Less than five minutes afterwards, the patient opened his eyes and spoke intelligently. Professor Delepine found nothing of note in the C.S. fluid, urine, facæ and blood which were sent to him. The lad's convalescence was uneventful except for the development of unilateral subacute conjunctivitis.

The second case was a male, age eighteen, a medical student.

At the onset he complained of dizziness and told me he had to steady himself as he walked, lest he should fall. He began to see double, suffered from general malaise, then went to bed. Buzzing appeared in one ear and he complained of tenderness on pressure over the left temporo-parietal region.

Drowsiness followed and difficulty was experienced in rousing him. Fortunately this cleared after the lapse of two days, but he then presented a slight squint. No other manifestation of the disease could be found except that he had difficulty with his bladder and bowels. This case cleared up normally.

There is a danger that people who, like myself, have very little experience of encephalitis lethargica, are liable to think that lethargy must be present before a diagnosis can be made. We are still seeking information re encephalitis lethargica—though Crookshank tells us that epidemics have occurred during the past 450 years, and this despite the fact that Economo called it the "new disease." Harris,⁸ in pointing out that lethargy was not always present, said the disease might be ushered in with quiet delirium and delusions. In one case brought to his consulting room, the patient's friends stated that the doctor previously consulted had said it was a mental case and the patient should be sent to an institution. Another case had been treated for nervous breakdown, the patient complaining that

his brain was not right. He had been seen talking to himself; his bladder troubled him and one day he told his doctor he had 37.0 in his bladder which he wished to pass. All this time the patient was walking about, but with the development of the mask-like face resembling paralysis agitans, and with a pulse of 90 and hand tremor, he was diagnosed as encephalitis lethargica.

Quite a number of cases were described by Dr. Melland,⁹ of Manchester, which again show how readily we may overlook encephalitis lethargica if we expect patients to be people lying lethargically on their backs; indeed, quite a number of Dr. Melland's cases were out-patients at the Manchester Royal Infirmary.

The fact seems to be that any of us might be consulted, say in the school clinic, by a girl or boy bothered with headache or something wrong with the eye; if not careful we might miss a case of encephalitis lethargica.

In Melland's case, a girl of twelve had had a headache four days, "turning" of the eyes three days and sickness once. Carefully examined, she was found to have paralysis of sixth cranial; optic neuritis; pain in arm and back; slight facial paralysis and constipation.

A boy of thirteen, *only* had paralysis rt. face, with a little local pain and discomfort. People are now asking whether the old-fashioned facial paralysis is not uncommonly a form of encephalitis lethargica.

Another case which sought sanctuary in the out-patients' department of the Manchester Royal was a man whose medical attendant suspected him to be an early disseminated sclerosis case. He had diplopia and rt. facial paralysis; later on ptosis and curtailment of vision developed. A watchful eye, therefore, is necessary lest we miss a case.

The more serious cases of encephalitis lethargica require us to bear in mind the symptoms and signs of botulism and acute poliomyelitis.

I shall deal with the differential diagnosis of these three in a few minutes.

Take now a serious case of encephalitis lethargica. Dr. B. was called to see a woman age twenty-eight. She had suffered from symptoms suggestive of influenza, temp. 100° F. Headache and drowsiness came on in two days.

Pulse rose to 120, insensibility came on with death in a few days.

Take note that writers are alarmed as to the prognosis when a pulse rises close to 120 in a

case presenting drowsiness. We know that many are asking the relationship of influenza to encephalitis lethargica.

J. B. Alexander¹⁰ states that in the "flu" epidemic of 1918-19, some "flu" cases presented drowsiness, delirium, melancholia and rarely mania. Some of these had transient paresis of groups of muscles.

Crookshank says that in the 1918 cases in London there was an initial stage clinically indistinguishable from "flu." There were three types of onset. In the first, an early "flu" is followed at variable intervals by "nervous" symptoms.

In the second, the "flu" runs into the nervous symptoms.

In the third type, there are nervous symptoms without precedent illness.

Laborde said the same thing happened fifty years ago in infantile paralysis. Edwin Bramwell does not think that encephalitis lethargica is due to the same virus as influenza.

In a paper of this size it is not possible to go into all the symptoms of encephalitis lethargica.

A few early symptoms may be mentioned not already given in this paper. A feeling of light-headedness; some loss of emotional control and severe peripheral pains simulating a localised neuritis.

As regards onset, a person may wake up in the morning presenting well marked manifestations. In a few cases the first sign was when the patient fell down unconscious in the street—the so-called apoplectiform type. Again some are very restless and betray mental excitement at the onset.

Some later symptoms which may be met with are:—Disorientation, monotonous intonation, nystagmus, unequal pupils, loss of corneal reflex, aphasia, coated tongue, paralysis of soft palate, tache cerebrale; a Rotheln-like rash; sweating, wasting, great weakness in or paresis of limbs; spasmodic twitchings of muscles; a moderate degree of neck rigidity, absence or exaggeration of knee jerks, Kernig's sign, Babinski's and Brudzinski's signs.

Symptoms which were noticed in Findlay's¹¹ twenty-three cases amongst children were:—cranial nerve palsies, lethargy, choreiform movements, muttering, arranging bed clothes and preparing their toilet. M. W. Bulman's¹² description of a pathetic case in a child aged eight is: "The whole body was in ceaseless

motion, the patient aimlessly running round in circles, or, if he was laid on a couch, he would lie in an attitude of general flexion for a few seconds and then rise on all fours or kneel, but still maintained the ceaseless aimless motion."

Edwin Bramwell gives four groups illustrating four different modes of onset.

(a) An asthenic or somnolent group to which the great majority belong. (b) A meningitic group to which A. J. Hall has drawn attention. (c) An apoplectiform type; (d) A neuralgic type which is characterised by very severe pain referred to one or more extremities or to the head.

Treatment.—Sedatives. Syrup of chloral, the bromides chloralamide and even morphia.

In an annotation, the B.M.J.¹³ mentions the treatment given by S. Crawshaw, of Ashton-under-Lyne.¹⁴

In this case, a girl aged twelve years, 45 grains of hexamine in 10 c.c. saline were given by the median basilic route on five occasions at intervals of about two days. As Crawshaw himself says, "it is easy to draw extravagant conclusions from one successful result."

We may agree that his experience with hexamine should lead us to give it a trial in similar cases. Lumbar puncture seems indicated in severe headache and deepening lethargy.

The French mode of treatment is by fixation abscess.

In convalescence; iron, arsenic, strychnine, cod liver oil.

Prognosis.—Always guarded; symptoms often last longer than expected, relapses may occur.

Differential Diagnosis.—Encephalitis lethargica is liable to be confused with botulism.

Van Ermengen in his classical paper on the outbreak of botulism in Ellezelles, says that in the absence of a history of food poisoning, one cannot, with certainty, tell botulism from bulbar paralysis (Erb's syndrome), subacute poli-encephalo-myelitis, and certain ophthalmoplegias.

Botulism occurs after eating infected raw ham or perhaps infected tinned beans. The symptoms appear rapidly, from 12 to 36 hours.

Botulism is a group infection; we look for more cases than one in the same household, or for cases supplied with the infected food from the same source of supply. The symptoms are thirst, dry constricted throat, paralysis of accommodation, dilated pupils, diplopia, ptosis, prostration.

In worse cases, there occur: dysphagia, aphonia, retention of urine and constipation. If the case proceeds to a fatal issue, we find loss of consciousness, gradual failure of respiration and heart, because of progressive bulbar paralysis. Where recovery ensues, it takes weeks or months for ocular paralysis and general weakness to recover.

In differentiating between botulism and encephalitis lethargica, it is stated that in botulism there is no fever, no psychical change, no sleepiness or coma. Then again we have the urgency of botulism, the gastro-intestinal symptoms—an early clamant condition, as it were, whereas encephalitis lethargica is ingravescens frequently—it takes a time to do its deadly work.

In encephalitis lethargica, there is no great thirst, no loss of accommodation, in fact, the pupils are not dilated as a rule, and lastly there is no throat constriction.

Acute Poliomyelitis.—Edwin Bramwell states that he has never met with a case of encephalitis lethargica which presents a localised flaccid palsy such as is found in poliomyelitis. The age incidence he says is somewhat different. Poliomyelitis occurs in children and young adults. Encephalitis lethargica is more frequent in adult age.

Personally, from what I have read, I am not particularly struck with this last argument, bearing in mind Findlay's twenty-three cases of encephalitis lethargica in children; true, encephalitis lethargica, rather than poliomyelitis, occurs amongst grown-up people. Encephalitis lethargica occurs in the colder months and poliomyelitis in late summer and autumn. Reece stated that poliomyelitis showed no increase in England and Wales during the first three months of 1919, though encephalitis lethargica was prevalent.

But, gentlemen, we have already heard that F. G. Crookshank denies that encephalitis lethargica can be distinguished from poliomyelitis.

As one with practically no experience of encephalitis lethargica, though for certain reasons, deeply interested in the subject of poliomyelitis, I feel somewhat lost when I read the different views of eminent clinicians. What are we to believe?

I am mindful of a caricature of that provoking genius, gifted playwright and wit, George Bernard Shaw. An artist, anxious to portray

the mental attitude of the beloved Shaw to a waiting world, drew a nice picture of G. B. S. standing on his head and waving his feet gleefully in the air.

That, gentlemen, may be the attitude of humble people who stand waiting for the verdict of the pathologists.

Of the pathology of the disease, I have nothing to say; here again Dr. Crookshank is a Job's comforter.

In conclusion, Mr. President and gentlemen, I regret that I have not had more time to comment further on the literature of the disease. Especially is this so with respect to the Report to the Local Government Board of October, 1918, in which the good work of A. S. McNulty and James and others has been appreciated by us all.

BIBLIOGRAPHY.

1. Tilney and Howe. "Lancet," Nov. 18th, 1920.
2. Wiesner. "Wien Klin," Wehnschr.
3. Economo. "Wien Klin," Wehnschr.
4. A. J. Hall. Oct. 26th, 1918.
5. E. Bramwell. "Lancet," 29th May, 1920.
6. E. Farquhar Buzzard. "B. M. J.," Nov. 20th, 1920.
7. F. G. Crookshank. Dec. 11th, 1920.
8. Harris. "Lancet," April 20th, 1918.
9. Melland. "B. M. J.," 18th and 25th May, 1918.
10. J. B. Alexander. "B. M. J.," 28th June, 1919.
11. Findlay. "B. M. J.," 27th Nov., 1920.
12. M. W. Bulman. "Lancet," Nov. 27th, 1920.
13. Annotation. "B. M. J.," Nov. 27th, 1920.
14. S. Crawshaw. "B. M. J.," Oct. 23rd, 1920.
15. L. G. Broad. New Series, 121, Oct., 1918.

THE DISCUSSION.

The President, Dr. Corbin, thanked Dr. Thomson for his paper, asked him the mortality rate, and called upon Dr. Wilkinson to move a vote of thanks. This was seconded by Dr. Talent.

Dr. Stalybrass produced a map showing the disposition of the cases which occurred in Liverpool in 1920. He said there were four cardinal points about this specific disease, encephalitis lethargica.

- (1) There is a temperature.
- (2) Diplopia occurs very early.
- (3) There is lucidity even during the lethargy.
- (4) Fixity of the pupils.

Dr. McClure said that the name encephalitis lethargica was a misnomer, as many cases had no lethargy—a better name would be epidemic encephalitis. The Manchester mortality had been 50 per cent., as the cases were bad.

Forty-four cases had been notified in Manchester in 1920, and the diagnosis was upheld in 27 cases. Confusion was apt to occur between encephalitis lethargica and cerebral apoplexy, tumour or abscess.

In reply, Dr. Thomson agreed that diplopia occurred early, but was surprised to hear Dr. Stalybrass say that the pupils had been fixed in the Liverpool cases. He had understood from the literature of the disease that the pupils were certainly not dilated but responsive to light and accommodation.

Reference to Dr. Corbin's question *re* the mortality rate, this seemed to depend on the prevalent type; in Liverpool the possibly milder type gave a death rate of about 12 per cent., whereas Dr. McClure spoke of a rate of 50 per cent. It was a serious disease on the whole, and he was glad that all believed in disinfection.

A SERIES OF 14 CASES OF PARATYPHOID FEVER "B" TRACED TO A CARRIER.

BY

J. E. LINNELL, B.A., M.B., B.C. Cantab., D.P.H. Medical Officer of Health to the Sheringham Urban and Erpingham Rural District Councils

There had been no notified case of typhoid or paratyphoid fever in the districts for which I am medical officer of health for two years, when in August, 1918, the first of a series of cases was notified.

First case, August, 1918.

The first case occurred in a child, the daughter of a school master in charge of House "A" of a public school in the district, a sister suffering from an apparently similar infection gave a negative blood reaction.

The cause could not be traced and it was thought it was possibly due to accidental contamination of food by a carrier. The district was crowded with soldiers and it was certain that among them were men who had suffered from paratyphoid fever when abroad on service, and quite possibly a carrier of the disease.

Cases 2, 3 and 4, December, 1918.

In December, 1918, this school house-master informed me that a boy on returning home for the holidays from his house had developed paratyphoid fever confirmed by the blood test, that a second had developed a somewhat similar illness not confirmed by the blood test, and that a third boy had suffered from "ptomaine poisoning" on his return from school.

The evidence so far pointed to a cause originating in this school house, but the investigation of the cause was made to embrace all causes thought possible.

The milk was supplied to two other houses in the school, to a sanatorium for tuberculosis, and to a large number of households, including my own, in the district.

The dairy and cowsheds were found to be in excellent order and the farm water supply good. The dairy staff I was informed had milked for several years unchanged, there was no suspicion that any of them had suffered from typhoid fever in the past and no discharged or demobilised soldier had been employed on the farm.

The school water was known to be of excellent quality, and bacteriological examination for B. Coli and Streptococci not only proved that these pathogenic organisms were absent but that the water was practically sterile. A Berkefeld Filter which was in use at the School House "A" and had not been cleaned as frequently as necessary was also examined, the candle proved to be practically sterile.

Remained the food. The kitchen staff was exonerated after enquiry, on the grounds of long service and intimate knowledge of its history.

The child who had had paratyphoid in August was known to be bacteriologically free. It was brought to my notice that the house was infested with rats and mice and, for want of better, a hypothesis was formulated that the rodents had infected food consumed by the sufferers, the rodents being infected by the excreta of an unknown carrier or carriers among the soldiers billeted all round the School House "A." Specimens of mice, a rat could not be caught, sent up for examination proved to be free from mouse typhoid (due to a bacillus of the paratyphoid group) though B. Coli could be cultivated from their feet and mouths.

Extermination of the rodents seemed to solve the problem, as no further cases occurred in this

house and none in the school until six months later.

Case 5, January, 1919.

In January, 1919, a case of paratyphoid in an invalided officer occurred in the district. The 14 days prior to the outset of the attack he had spent in London which suggested that he had been infected there; enquiry elicited the fact that he had been associated while in London with an officer who had recently had paratyphoid fever and who had not been proved free bacteriologically. As these two cases had used the same lavatory it seemed reasonable to assume that the infections were related.

Cases 6 and 7, June, 1919.

No further cases occurred at the public school during the Lent Term, 1919, and none in the neighbourhood until June, 1919, when two cases were notified from this school from House "B." Assisted by the school doctor we investigated every probable and even possible cause for the cases. The milk and water supply were the same supplied to the School House "A." The cases previously notified had been proved not to be carriers before they returned to school. We agreed that a carrier was the probable cause, and the school doctor, who had special training in public health, suggested that the infection might have been conveyed by means of the water of the swimming bath. No further cases occurred in this school during the term.

Case 8, June, 1919.

During June, 1919, a case in the district was notified in the child of an officer who had taken a furnished house. Upon investigation it was found that the tenant who had vacated the house shortly before it was let to this family was a chronic invalid with an appendicostomy used to irrigate the large bowel which was known to be infected with the organisms of paratyphoid. This man was not notified and had not suffered from clinical paratyphoid fever, he was suffering from colitis and was being treated by lavage, hence the appendicostomy, and by a vaccine, the paratyphoid infection had been discovered almost accidentally in the course of the routine investigation of the cause of the colitis. He also was a visitor to the district and to him was attributed the notified case. The milk was supplied from the same farm as supplied the School Houses "A" and "B," but as this dairy did a large business in the district and no other cases

had occurred and had been previously ruled out as the cause it was thought by me that the colitis case was probably responsible.

Case 9, August, 1919.

On August 14th, 1919, a further case was notified by the School Doctor in a boy who attended the school as a day boy, the milk supply being from the same farm.

Cases 10, 11 and 12, August and September, 1919.

The School Doctor informed me in September of three other cases which had occurred in the holidays, one being from School House "C," which also took milk from the same farm.

Cases 13 and 14, August and September, 1919.

On August 28th and September 7th, 1919, I received two notifications of paratyphoid occurring in the domestic staff of the sanatorium for tuberculosis which also had milk from the farm which supplied all the other cases.

It was now clear that the milk supplied by this farm was in all probability carrying the infection, as it alone provided a factor common to all the cases, including the two cases 5 and 8, which there was evidence to show might have been infected by other means. Here I will state that case 5, the invalided officer supposed to have been infected in London was the tenant of the farm and owner of of the milk business in question in conjunction with his brother. He of course consumed his own milk.

The question then arose as to the best means of fixing the responsibility upon an individual, someone connected with the milking business, either milker, dairy hand or distributor. I decided the best method would be to take specimens of the blood of all milkers, dairy hands and distributors and have them tested against the organisms of typhoid fever and paratyphoid fever A-B.

By visiting the farm on two different days I managed to get specimens of all the bloods and the reports were interesting.

The blood of one milker was reported as positive to typhoid and to both paratyphoid A and B, while the blood of a particularly healthy looking boy of 16 was reported as giving a partial reaction to paratyphoid B.

It looked as if the first was the culprit, but on interviewing his employer, he informed me that

this man had only been milking since March, 1919, and he therefore could not have caused the cases which occurred prior to that date. Further enquiry elicited the fact that he had been in the Army where he had never had a day's illness, but he of course had been inoculated, which would account for his blood giving positive reactions to the three organisms of which the Army vaccine is composed.

There remained the boy whose blood gave the partial reaction to paratyphoid B, the organism responsible for all the cases that had been notified to me.

In order to make quite certain I induced this boy to go to the County Hospital and arranged with the bacteriologist to examine his stools. After a long delay, owing to the bacteriologist suffering from influenza, he reported on December 8th, 1919, as follows:—"Several examinations were made of the stools. On the first two occasions I obtained an organism of the paratyphoid group, but on subsequent occasions I got organisms which, though not true coli, were not true paratyphoid either. However, to make sure, I have re-tested the organisms isolated in the first instance and I find they give the paratyphoid reaction. I have no doubt he is a carrier of paratyphoid bacilli."

Prior to this the boy had been discharged from hospital without my being informed. Upon receipt of the above he was at once excluded from all part in the milk business. Further enquiry elicited the fact that though he had worked on the farm for two years he had only commenced milking in July, 1918, a month before the first case occurred, and in November, 1917, he was ill for six weeks with "severe influenza," no doubt this was paratyphoid fever.

The next problem was how to deal with the carrier, it is a constantly recurring difficulty to medical officers of health owing to the inadequate powers conferred by the law. It has been held in the Law Courts that a "carrier" is not suffering from the disease he carries and therefore section 126 of the Public Health Act, 1875, which prescribes penalties on persons suffering from any dangerous infectious disorder exposing themselves in any public place, etc., does not apply.

By means of his employer, pressure was brought to bear and on January 18th, 1919, the lad approached me with the view of being treated. I at once wrote to the County Hospital, who replied through the bacteriologist that in-patient treatment

was unlikely to do much good and suggested a vaccine which, when prepared, the boy was to have received as an out-patient, but three subsequent examinations of the stools proving negative this was abandoned. His urine was always negative.

This series of cases provided an interesting study in epidemiology, it involved a good deal of work and careful thinking. Personally I feel fairly confident that the correct solution of the problem was arrived at and that the proved carrier was the cause of all the cases. Critics may argue that the two cases numbers 5 and 8 were quite possibly infected by other carriers and strengthen their argument by comment on the small number of cases occurring on a large milk round. It is also difficult to account for the long intervals between the groups of cases, e.g., August to December, 1918; January to June, 1919; June to August, 1919. It must be that the carrier only excreted the organisms at intervals, or that he only infected the milk at intervals, or that he was not the donor of the infection.

Admitting that he was the cause it is difficult to understand why the milk when infective did not infect more boys at one time and why for so long the cases were confined to one house in the school when two other houses were supplied.

As regards the sanatorium wholly supplied by this milk, the patients at this time were almost entirely ex-service men protected by the Army vaccine and it is significant that the two notified cases from this institution were on the female domestic staff.

It is probable that the fact that the carrier excreted bacilli by the bowel alone and not by the urine, as is more commonly the case, resulted in comparatively sparse and infrequent contaminations of the milk and hence the intervals and small numbers infected.

The cases were all mild in character and all made an uninterrupted recovery.

No further notification of paratyphoid fever has been received from the neighbourhood affected by the above cases since September 7th, 1919.

DR. J. JOHNSTONE JERVIS, medical officer of health for the city of Leeds, has been appointed a member of the Central Midwives Board on the nomination of the Association of Municipal Corporations.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

NEWS FROM BRANCHES.

NORTH WESTERN BRANCH.

Superannuation, Borough of Salford.—A Special Committee has been appointed to consider the establishment of a superannuation scheme for all Corporation employees.

War Bonuses, Borough of Wallasey.—The Borough Council at its meeting in April last adopted a resolution that all war bonus payable under previous resolutions of the Council cease as from July 28 next.

That such resolutions be and are hereby rescinded as from such date and that the Finance and General Purposes Committee be empowered to consider the question of salaries and wages of all persons in the employ of the Corporation and make recommendations to the Council thereon.

Humane Slaughtering of Animals.—At present about thirty-five authorities (including Portsmouth, Torquay, Deal, Lambeth, Battersea, Wandsworth, West Ham, etc.) have adopted Model Bye-law G.B., making it compulsory that the "humane killer" should be used in the slaughter of animals. This question was recently considered by the Warrington Health Committee, and after a conference with the local butchers it was decided to adopt Bye-law G.A., making it compulsory that all animals should be stunned before slaughter, but leaving it optional as to whether the automatic killer should be used or not for the purpose. A case was reported last week from Portsmouth in which a butcher while using the special weapon for killing sheep was wounded in the leg.

War Bonuses at Southport.

Southport Corporation is considering the reduction of war bonuses of officials and other employees.

A scheme is recommended for the gradual elimination of the "floating" bonus in the case of officials—representing about £7,000, or a 3d. rate—and in regard to employees the reduction suggested is 1s. a month, so that by the end of the year a weekly wage of £3 8s. 11d. would be reduced to £3.

WEST OF ENGLAND BRANCH.

Exeter M.O.H.—Many members of the West of England Branch who have known of the prolonged illness of Dr. P. H. Stirk, the Medical Officer of Health for Exeter, will be very glad

to hear that he is now a great deal better and hopes soon to be able to resume his full duties. Dr. Stirk was President of the branch in 1918-19.

Branch Meeting at Winsley. The coal strike is responsible for the postponement till later in the summer of a meeting of the West of England Branch which Dr. Pedley, the Senior Resident Medical Officer at Winsley, had very kindly arranged should take place at the Sanatorium during April. It is hoped that the next meeting of the branch may be a joint one with the Royal Sanitary Institute at Gloucester about June the 9th. Full particulars will be sent to members in due course.

Exeter Health Staff. Recent changes in the City Medical Staff at Exeter include the following: Dr. Wm. Macewen, assistant Medical Officer of Health and School Medical Officer, has gone to a similar post at Birkenhead. His successor is not yet appointed. Dr. H. M. Rees, assistant Tuberculosis Officer and assistant Medical Officer of Health, has been appointed as superintendent of the Preston Hall Tuberculosis Colony and is succeeded by Dr. Acheson. Dr. Rees and Dr. Acheson were both in the Navy and both came to Exeter direct from resident appointments at Winsley Sanatorium. The latter's successor at Winsley is Dr. M. E. Willcock.

A Bristol Record.—It has been suggested recently that Cardiff, having had only two Medical Officers of Health since first the office was constituted, has probably established a record in that respect. Dr. D. S. Davies pointed out that the same might be said of Bristol, though the appointment there dates back only to 1865 instead of 1847 as at Cardiff. He did not mention, however, what is a very interesting fact, that the two holders of the office in Bristol were father and son. Is this a record for a large city? In rural or urban areas with part time officials it could doubtless be paralleled, but one hardly imagines that it could elsewhere.

Fish Prosecution at Bath.—Several points not without interest to medical officers of health might arise out of a recent prosecution by the Fishmongers' Company at Bath. A retailer was summoned and convicted for having in his possession for sale between the 3rd of September and the 1st of February (on Jan. 26th) four salmon caught by

rod and line. This is contrary to Section 19 of the Salmon Fishery Act, 1873.

A consignment addressed to Bath was noticed by a "fish-meter" in Ireland and a written request sent to the Chief Inspector of Nuisances in Bath to seize it on arrival. The close season indicated above appears to be necessary partly to prevent interference with breeding, and partly because the fish is actually unfit for human consumption during the breeding season. Section 3 of the Salmon and Freshwater Fisheries Act of 1892 says, *inter alia*, that a consignment "may" be opened by "any officer of a market authority within the area of his jurisdiction" or any officer appointed in writing by the Fishmongers' Company.

Questions which suggest themselves are (a) Was it the duty of the Inspector to open or to seize the consignment? (b) Is either the Inspector or the M.O.H. an officer of a market authority? (c) If so what is the area of his jurisdiction in this connection, and (d) in any case is it the duty of either officer to look for and take steps with regard to salmon exposed for sale during the close season because, *ipso facto*, it is unfit for food?

The position is probably clear to those conversant with all the Acts concerned. There are probably some health officers who, like the writer, would be glad to be enlightened on the matter since it is evident that certain rather difficult situations might occasionally arise.

NORTH-WESTERN BRANCH.

A meeting of the above branch was held in Manchester on Friday, March 11, 1921.

Dr. Corbin (president) was in the chair, and thirty-one members were present.

The question of the adequate remuneration of tuberculosis officers for work in connection with tuberculosis ex-service men was discussed and it was resolved that the following sub-committee be formed to consider the matter and if necessary to make recommendations: the president, Drs. Barlow, Thomson, Peyton, Jessel, Stewart and the hon. secretary.

An invitation from the N. W. Tuberculosis Society was received, asking that a deputation from the branch should be sent to the meeting of that society to be held on Thursday, May 26th. It was resolved that the following be asked to attend on behalf of the branch: the president, Drs. Niven, Barlow, Daley, Mathieson and the hon. secretary.

Dr. Herd gave a short demonstration on two children of the "Stanford revision of the Binet Simon intelligence tests," as described in Terman's "Measurement of Intelligence." In a few prefatory remarks he referred to the difficulties encountered by medical officers in their earlier examinations of defective children—difficulties accounted for by the fact that the medical curriculum in the past has contained little or no provision for instruction in normal psychology. The diagnosis of mental deficiency, he pointed out, is primarily not medical but psychological, but while he claimed that the results of the Stanford tests give a fairly accurate picture of the intelligence of the child, he deprecated reliance upon the score as the "Intelligence Quotient" for the purposes of a complete diagnosis, emphasising the necessity for consideration of the home environment, the physical health and especially the element of character and conduct. The tests were followed with the utmost interest by the members present, and after Dr. Herd had replied to various questions a hearty vote of thanks was accorded him for the excellent demonstration on the proposition of Dr. Wilkinson, seconded by Dr. Beard and supported by Dr. Barlow.

NORTHERN BRANCH.

A meeting of the above branch was held at the Medical Institute, Newcastle, on April 22nd, 1921. The president (Dr. T. Eustace Hill) was in the chair, and there was an attendance of twenty-one members.

The minutes of the last meeting, held 11th February, were read and confirmed and duly signed by the chairman.

Increase of Annual Subscription. The secretary stated that the proposals of the council of the society for increasing the subscription for certain grades only of the membership had been drafted in that way with a view to obviating the possible loss of a large number of part-time officers who were Fellows of the society.

N.A.L.G.O. The secretary reported that he had made further inquiry as to the position of members with regard to N.A.L.G.O., and submitted the following letter from Dr. G. F. Buchan, treasurer of the society, on the matter:

7th March, 1921.

Dear Dr. Kerr,
Society of Medical Officers of Health
and Trade Union.

The position with regard to the Society and N.A.L.G.O. relative to the above will be found stated

in the October, 1920, issue of the Local Government Service (the official organ of the National Association of Local Government Officers and Service) Journal, page 120, as follows:

"Since the N.A.L.G.O. became a bona fide Trade Union, many members have made inquiries on one point or another. Two points repeatedly raised have been submitted for the opinion of the Legal Advisory Committee of the Labour Research Department. The questions and answers may be summarised as follows:

Professional Officers.—It is the opinion of the Committee that a Professional Officer (lawyer, doctor, engineer, etc.), is not prejudiced in any way by being a member of a Trade Union.

Contracts and Strikes.—In the event of any branch deciding upon a strike, the members of the branch would have to give the notice required by their agreements, and if they ceased work without proper notice they would be liable to an action for damages.

Affiliated Sectional and Professional Societies.—A member of an affiliated Sectional and Professional Society which is incorporated under the Companies Acts could object to the payment of the affiliation fees under the present rule of the Association, on the grounds that the N.A.L.G.O. is a Trade Union, in view of the fact that the subscriptions form part of the general funds of the N.A.L.G.O.

To remove any doubt on the question, the Association was advised to place the affiliation fees from Sectional and Professional Societies in a separate fund, which fund should not be used for Trade Union purposes.

Yours truly,

GEORGE F. BUCHAN.

Salaries. Dr. Foggin's resolution of 11th February. The secretary reported that the position of the salaries question was very fully dealt with in the March issue of "Public Health." Dr. Foggin had decided that it would be unwise to go on with the matter of the deputation to the Newcastle Education Committee on account of the storm of criticism in the press at present. The deputation had therefore been allowed to stand over.

The secretary further stated that the matter of fees to tuberculosis medical officers was referred to in the "B. M. J." of March 5th (Current Notes). The Public Health Committee of the B.M.A. and the council of the society were endeavouring to ensure that the fees should be payable direct to the officers and not to municipal funds.

President of the Society. The secretary stated that the Yorkshire branch was supporting Dr. Hill's candidature. Other branches were nominating candidates of their own. It was probable, however, that the present president would remain in office for another year. Dr. Hill thanked the members for the honour

they had conferred upon him in nominating him for the presidency of the society.

The secretary read letters of apology for absence from Drs. J. W. Smith, A. G. R. Cameron and W. F. J. Whitley.

A letter from the editor of "Public Health," was submitted, stating that the journal would be greatly improved if reports on public health matters of interest occurring in the areas of the different branches could be collected and forwarded to him for publication. Dr. G. R. Bruce (M.O.H., Jarrow) volunteered to take up the duty of correspondent for the Northern Branch, and it was left to him and the secretary to arrange details.

Epsom College. The secretary submitted a letter from the Home Counties Branch asking for the support of the Northern Branch to the candidature of Irwin J. McGhie for election to Epsom College. Members who had votes were asked to exercise them in this candidate's favour.

The secretary submitted correspondence with Dr. J. M. Glasse, M.O.H., Haltwhistle R.D.C. Dr. Glasse had made application to his council for an increase of salary, which was refused. He therefore resigned his appointment, and asked that the branch should take action in the matter. The secretary stated that he had drawn the attention of head-quarters to the case, and the council had brought the matter before the B.M.A. The Hexham division of the association had agreed to support Dr. Glasse, and had requested another practitioner in the district not to apply for the post. The B.M.A. was considering what further steps should be taken.

Security of Tenure. The secretary drew attention to Circular No. 153, and accompanying order of the Ministry of Health, which conferred a higher degree of protection to M.O.H.'s and inspectors than had hitherto obtained. The president, however, expressed the hope that the society would still press for the Tenure of Office (Officers) Bill, which was shortly to be introduced into the House of Commons.

Seven new members were elected to the branch.

Summer Meeting. Dr. Taylor moved, and Dr. Dickinson seconded, that it be left to the president and secretary to arrange the date of, and place for, the summer meeting. This was agreed to, Saturday being suggested as the most suitable day.

A discussion on "After Care in relation to Preventive Work" was opened by Dr. F. J. Henry (tuberculosis), Dr. S. Thompson (venereal disease), Dr. Mabel Brodie (maternity and child welfare), and Dr. H. I. I. Rutter (insurance practice).

The president suggested, in view of the importance of the subject, that a special meeting be held to discuss it.

HOME COUNTIES BRANCH.

The above branch held its April meeting on the 8th instant, when W. McIntosh gave a paper on the question "Is it possible to obtain a clean milk supply." The paper gave rise to a lively discussion. This will be the last of this session's meetings. The Annual Meeting, of which due notice will be sent to the members, is likely to be held in July.

The Branch Dinner was held at the Criterion Restaurant, Piccadilly Circus, on March 18th, and it was a successful function. The guests of the evening included, the President of the Society, and Mrs. Fremantle and the Executive Secretary, Captain Elliston. Vocal and instrumental items contributed to the evening's enjoyment.

The branch's members number 182, and there are two associates. It behoves all medical officers engaged in every branch of Public Health work to seek membership without delay, having regard to the important issues now being deliberated upon, and that will affect vitally the future position of all medical officers. It should not be a very difficult task to increase the membership of this branch to 225, the number that will enable it to send an additional representative to the Council.

[It is necessary to hold over other Branch reports to our next issue.—Ed. P.H.]

THE death took place recently of Dr. George Blundell Longstaff, F.R.C.P., who represented Wandsworth on the London County Council from 1889 to 1903. Dr. Longstaff was born in 1849, and educated at Rugby, New College, Oxford, where he won a scholarship and took a first class in natural science, and at St. Thomas's Hospital. He devoted much time to municipal and philanthropic work, and while on the county council, as chairman of the Building Act Committee, took a principal part in drafting and getting through Parliament the London Building Act of 1894. He was a Fellow of the Society of Medical Officers of Health for many years, and had been vice-president of the Royal Statistical and Entomological Societies.

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Editorial.

PREVENTING PREVENTION.

IN his speech on the Vote in connection with the Ministry of Health, as reported in *The Times* of May 13th, Sir A. Mond, referring to the matter of venereal diseases, and especially to the question of their prevention by medical means, said that the moral and social side of the question should not be overlooked. With this opinion everyone will agree; and it is certain that this side has not been overlooked by the advocates of medical prevention as an essential measure any more than by their opponents. But he said, further, that "whilst prepared to assist in the protection of the health of the nation against this dangerous disease,

he was not prepared to accede to the demand of those who regarded the question merely from the medical point of view."

Sir A. Mond, in speaking so, is of course repeating what is told him by his advisers, and the incident is illustrative of the extraordinary misrepresentation of the case which, unfortunately, is so prevalent at the Ministry and elsewhere. We know of no body and no individual who regards the question "merely from the medical point of view." The whole of the present trouble and turmoil is due to the fact that certain bodies and individuals are straining every effort to prevent the real scientific facts about prevention becoming public property, and have, up to the present, succeeded in erecting obstructive barriers against any possibility of a wide and effective use of preventive measures. In other words, the facts are exactly opposite to those stated by Sir A. Mond, as all parties agree upon the moral and social sides of the problem, but there is a bitter prejudice against real prevention being tried at all.

The history of the Ministry's association with this controversy is not likely to add to its prestige. In January, 1919, an Inter-departmental Committee on Infectious Diseases in connection with Demobilisation was appointed. This Committee, from its title, was apparently given a wide reference, and it is a curious fact that it has produced only one public document—a note issued by the Chairman, Lord Astor, in August, 1919, on the subject of prophylaxis against venereal disease. This report gives a prejudiced view of the case, and its mistakes and inaccuracies make it entirely unworthy of a government department. Following its publication there was a demand in Parliament for statistics about the results of prevention in a certain military area, and the figures supplied by the Ministry were inaccurate and had to be withdrawn later.

Resisting all appeals for prevention to be given a fair trial, the Ministry has

concentrated upon a moral and social crusade and a huge scheme for treatment. The moral crusade has been carried out by the National Council for Combating Venereal Diseases, with the help of large grants of public money from the Ministry. According to a return made by Dr. Addison on March 23rd last, this society has received about £42,000 from the public funds during the past three years, and, large as this sum is, it does not include the considerable total sums contributed by local authorities to local branches of the National Council. This amount might usefully be elicited by further parliamentary questions, as it is important for the public to know how much of its rates and taxes is being spent in this way. In addition to the above sums the Ministry of Health granted £7,995 to the National Council for the purpose of sending missions to the Dominions and Colonies in the endeavour to prevent venereal disease by moral propaganda.

In contradistinction from this lavish expenditure of public money upon the social and moral side of the question, as carried out by the N.C.C.V.D., no grant at all has been made to the Society for the Prevention of Venereal Disease to assist it in its efforts to apply practical preventive measures of proved efficiency to the extermination of these diseases. In view of these facts, Sir A. Mond's statements that he was "not prepared to accede to the demand of those who regarded the question merely from the medical point of view," and that "the moral and social side of the question should not be overlooked," surely need revision. There cannot be any danger of "overlooking" any side upon which something between £50,000 and £100,000 of the public funds have already been spent, and it is obvious that if Sir A. Mond is anxious for fair play he will see that both sides get equal treatment from the Ministry. Sir A. Mond has a great reputation as a level-headed business man, and we believe that as soon as he investigates this matter for himself he will deal fairly with both sides.

The Ministry's huge scheme of treatment is still more costly to the nation. The estimates for the current year anticipate that £420,000 will be spent by the Ministry, representing a total expenditure from public funds of no less than £560,000. There is little doubt that when this expenditure is properly appreciated there will be a public demand for a revision of the present policy, especially when the fact is real-

ized that there is no reason to believe that any headway is being made against the disease.

The report on the Prevention of Venereal Disease drawn up by a special committee of the Birth-rate Commission, raised hopes in February last that the subject would at long last be treated sensibly, scientifically and courageously by the Ministry. The thanks of the nation are due to the Bishop of Birmingham and his colleagues on that committee for putting an end, once and for all, to the insinuations and charges that preventing venereal diseases would encourage immorality. To a certain section of the public, whose thoughts appear to be obsessed by sex, the word morality has come to be equivalent to sexual continence alone, and their moral code is often found to be insufficiently wide to include truthfulness and honesty and other elementary moral qualities. To such people the committee's statement that "to prevent disease is itself a moral obligation" must have come as a surprise, while the whole hearted support of "immediate self-disinfection" by the committee must have given them, as well as the Ministry, a severe jar. When a committee composed of distinguished doctors, clergymen, and other public men and women, after patient investigation and the hearing of all shades of opinion, decide that no difficulty should be placed either in the way of the spread of knowledge as to the use and value of disinfectants or the purchase of such disinfectants from chemists or other sources, it is time for even the Ministry to sink its prejudices and to act in the public interest.

The rapid development of public opinion upon the subject which followed upon the publication of the Bishop of Birmingham's report has led, after some three months interval, to the issue by the Ministry of a curious document in the form of a circular to the local authorities concerned. This circular is composed mainly of platitudes, the recital of which leaves the subject just where it was, but it contains two statements which are worthy of attention and which must be read together. The first statement is that "It is the duty of all individuals who have incurred or think they have incurred risk of an infecting disease to clean themselves thoroughly and immediately and thereby diminish the risk." Now this

sentence cannot be read in any other way except as a complete admission of the principles and value of the policy of immediate self-disinfection. There is no other way which educated people can possibly look at it, for to cleanse thoroughly means to cleanse scientifically, and that involves the intelligent use of disinfectants, and it also involves the dissemination of knowledge among the general public, as to what disinfectants should be asked for, and how they should apply them.

The second statement is to the effect that a chemist can sell any substance for which he is asked, "so long as the substances are not sold accompanied by any written or printed recommendations or instructions as to use." Further comment is surely unnecessary. These two statements together constitute an entirely suitable climax to the record of the Ministry in this subject.

"In a thousand years men will study us as we study savages. We are like the savages who pray for rain and then go out and shoot poisoned arrows at the thunder and lightning which brings the rain. We, too, fight the lightnings and slay the thunder. We fear new thoughts and murder them. We are afraid of prophets, and stone them. We dread the truth and sandbag it. That is why our civilisation is only a higher form of savagery. If we were true to the truth as far as we see it we should provide less food for the amusement of posterity."

The Society of Medical Officers of Health in its corporate capacity has expressed no opinion for or against prophylaxis against venereal disease. There are members of the Society holding strong views in both camps, and the columns of this journal are open to advocates on either side. We have no desire to support any one society as against another, and we regret that supporters of the N.C.C.V.D. leave the arguments of their opponents almost unanswered. But "Public Health" is the journal of a Society which has for its chief aim the prevention of disease, and as such it must never refuse to submit for the judgment of its readers any honestly conceived scheme for the protection of the health of the community.

INNOCENT VICTIMS.

NEW VENEREAL DISEASE CENTRE.

Lord Dewar, as president, in an appeal for funds for St. Paul's Hospital, which has been selected by the Ministry of Health as a centre for the free secret treatment of venereal diseases, says:—

"It is tragic to see the sufferers—men, women, and even little children—innocent little mites knowing not from what they suffer or why they should. It is thought by many that venereal disease is a sign of guilt, but large numbers of our patients are innocent victims.

"It was found impossible to do justice to the ever-increasing work in the present hospital at Red Lion Square, and the committee has obtained larger accommodation in Endell Street, where twenty-eight beds for in-patients and accommodation capable of dealing with 100,000 visits of out-patients per annum will be provided. It will cost £50,000 to complete, purchase, rebuild and equip the new hospital."

THE REAL ISSUE.

The Sanitary Record and Municipal Engineering, in a recent issue, says:—

"We do not think that more thought-provoking and arresting letters have ever appeared in our columns than the one from Sir G. Archdall Reid last week and that from Miss Ettie M. Rout which is printed in the present issue. They are statements of stern facts which cannot be ignored. For generations we in this country have pursued a policy of suppression so far as the public discussion of venereal disease is concerned. Its very name was anathema in any public print. But that day is passed for ever. Statesmen and reformers have elected to enter upon a warfare against it, as sanitary reformers have been doing with regard to all other preventive diseases during the last two or three generations. If the problem is to be seriously tackled, preventive as well as curative measures must be recognised as essential to a successful issue. This has been the plan of campaign in fighting zymotic disease, and must be in all others. Far be it from our desire to lower in any degree the highest moral standard. Chastity alone is the sure preventive, the real guarantee of freedom from this dread disease. Yet we have to deal with stern facts, and if we can prevent the further

spread of venereal disease, there will be a greater possibility of stamping it out. This is the real issue. Old notions may have to be parted with, but if the desired goal is gained, then the sacrifice of these will not have been made in vain."

In another issue our contemporary says:—

"We have more faith in the advice and counsel of medical men, whose one aim is to secure a healthy people, and particularly to spare women and children from indescribable suffering, than we have those who set themselves up as the arbiters of public morals. A sane discussion of the whole problem must lead to the benefit of humanity as a whole."

FREE MILK.

The "Women's Leader and Common Cause" comments as follows on the revised regulations about the supply of milk to infants and mothers.

Dr. Addison, in a last despairing effort to economise before he left the Ministry of Health, revoked the Milk Order of 1919, and the Local Authorities Milk Order, 1919. He came to the conclusion that the expenditure on free milk incurred by local authorities has been excessive, and so, in future, they must obtain the sanction of the Minister to their schemes. This cumbersome arrangement will no doubt cause a great many delays, and a great deal of irritation, but it will certainly have the desired effect of restricting the expenditure. Not only is this bureaucratic obstacle erected, the grounds of sanction also are changed, and they will now only be given in necessitous cases. This is a considerable reduction of the old scheme. Under the 1919 Order the distribution of free milk, or milk below cost price, was originally restricted to necessitous cases, but in deference to a certain section of public opinion to whom the word "necessitous" conjured up visions of humiliating questionnaires and undue interference in the lives of the needy, this restriction was revoked. The new arrangement carries us back beyond even the first intention of the Order, and will effect a saving at the cost of suffering—as most savings do.

DR. E. G. ANNIS, medical officer of health for Greenwich, was last week called to the bar at Lincoln's Inn.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

NOTICES.

The Editors of the *Medical Directory* have issued the usual notice asking practitioners to revise their entries for the next issue. It is desirable that all members of the Society of Medical Officers of Health should record in the Directory their connection with the Society.

A Meeting of *Tuberculosis Officers* in the area of the Midland Branch will be held at the Central Tuberculosis Dispensary, Broad Street, Birmingham, on Saturday, July 9th, at 3 p.m., to consider the advisability of forming a Midland Sub-Group of the Tuberculosis Group of the Society. All Medical Officers of Health engaged in tuberculosis work, whether members of the Society or not, are invited to attend. Communications in connection with this meeting should be addressed to Dr. A. Ashkeny, 2, Lodge Road, West Bromwich.

A few members have not yet remitted their *subscriptions for the current session*. As the capitation grants to branches, which are based on their membership strength, are now due, it is hoped that all outstanding subscriptions will be paid at once. Cheques should be made payable to the Society, and crossed "& Co."

Members of the Society are asked to note the date of the *Second International Congress for Child Welfare*, to be held at Brussels, on July 18th, and three following days. An influential attendance is expected, and the organizers will be much disappointed if Great Britain is not fully represented. Those who wish to be present should remit the fee of f.25 to M. Henri Verge, 27, Rue de Turin, Brussels.

The *Roll of Members* for the Session 1921-1922 is now in preparation. Those who have not notified the Executive Secretary of any necessary amendments should do so at once. Too often members send a change of address without stating their new appointment.

A design is being prepared for the *Memorial Tablet* to those members of the Society who met their deaths on active service during the Great War. In order that the Memorial may be complete, members are asked to notify the Executive Secretary of any of their friends whose names should appear.

THE CASE FOR PREVENTION.

BY

EX-V.D. OFFICER, R.A.M.C.

Evidently a plain statement of the case for prevention is necessary on account of the extraordinary mis-statements and misrepresentation that are commonly made. For instance, at a recent public conference on the subject a well-known member of the medical profession made an impressive announcement that "self-disinfection" was "a delusion and a snare," and proceeded to astonish his audience by stating in support of his opinion the undoubted facts that (1) surgeons find it necessary to go through an elaborate ritual in order to secure sterilization of the skin before operations, and (2) that in cases of gonorrhœa the whole of the urethra and its connecting glands are infected and that it would be quite impossible to disinfect this area. The application of a small amount of elementary bacteriological knowledge and a little common sense would enable that gentleman to understand more fully the claims of those who advocate self-disinfection as a preventive measure in connection with venereal disease. He should not find it difficult to learn the bacteriological fact that the germs of syphilis and gonorrhœa are two of the most easily killed of all known germs, while the surgeon, in his process of sterilization, has to kill all germs and all spores on the surface of the skin—an entirely different proposition. By the application of a little common sense also he will be able to convince himself that for some hours after exposure to infection none of the germs in question have obtained access to the urethra, and still less so to the connecting glands.

In order to put the case clearly with some degree of continuity, it is necessary to outline the facts upon which the case for prophylaxis is based. Of course, some of these facts are extremely simple and elementary, and well-known to all. The first is that the germs that cause the two common venereal diseases are probably the most easily killed of all pathological germs; that is, there is no germ giving rise to a known human disease that has more difficulty in growing apart from the human body. The second fact is that for some hours after exposure to infection these germs are on the surface of the body and are very vulnerable in that position, and by very simple procedures can be exterminated and the individual freed

from all possibility of infection, with practical certainty, if the proper procedures are followed. The third point is that when these germs have got an entrance into the body, and the disease has commenced, then we have probably the most difficult of all diseases to cure. They pass into chronic conditions, conditions spread over a great number of years, and then can only be attacked with a moderate amount of success. That applies to both gonorrhœa and syphilis, in spite of the fact that we have an alleged cure for syphilis in salvarsan; it is becoming more and more admitted that, although the clearing up at the earlier stages of syphilis is notable, we cannot say definitely the disease is entirely eliminated. These are the facts upon which we really base our case.

In spite of these known scientific facts—the ease with which the germs can be killed, and the great difficulty of curing the disease when established—there are enormous sums of public money spent in attempting to cure after the disease has been started, and practically no public money is being devoted to practical preventive measures to kill the germs while still outside the body. There is one other fact that must be emphasized, and that is, infection from these diseases is quite common apart from the question of immorality. These diseases are no selectors of persons. They are ready to attack anyone and everyone. Anyone might be exposed during the next twenty-four hours quite innocently to such infection. We may be the most moral people in the world but the germ will have the same effect upon us as upon the most immoral individual. During the war every military Venereal Disease Officer discovered a constant stream of men coming back from leave who had been infected with this disease from their wives. Hundreds of them were infected in that way. Then there are, of course, quite commonly accidental cases. Those cases illustrate the fact that these diseases are a public danger. They are not necessarily associated with immorality at all; in fact, their incidence has nothing essentially to do with immorality. Moral intercourse may be followed by these diseases. There is no certainty either way.

The theory of prophylaxis is based upon the researches of Metchnikoff and Roux, two of the best scientific pathologists the world has ever known. Metchnikoff and Roux spent some years working on this subject at the Pasteur Institute in Paris, and there was a series

of Reports issued from the Pasteur Institute in 1905-6-7, which were issued in the interests of humanity and public health. The first series of experiments were made with the monkey tribe, as being the most like to man, although, as a matter of fact, any animal susceptible to syphilis would have done quite well, because it is not a matter of experimenting with the disease, it is a matter of experimenting in the prevention of the disease on a susceptible individual. In the first series of experiments made with monkeys and baboons every one was successful. These were inoculated time after time with syphilitic virus from patients in a virulent stage of infection, and when anything about 25 per cent. of calomel ointment was rubbed on to the site of inoculation within an hour there was not a single case of infection.

Perfect as these results were, they were criticized: some people stupidly said, "You cannot infer from experiments on monkeys what will happen in the case of men." If these experiments were about *the course of disease* I would agree they are not crucial, but in preventing the disease in a susceptible individual it must be the same for humanity. But these two experimenters were willing to take any challenge, and directly that criticism was launched they asked for volunteers for the test. They selected a man, and he was inoculated severely in February, 1906, with syphilis in two places; he was inoculated to a far greater degree than could possibly take place in the ordinary way, that is, with a scarifying instrument, so as to make sure that the material was getting access through the skin. The material was obtained from two virulent cases, and the inoculation was made infinitely more thorough than is possible under natural conditions. It was given an hour's start, and one hour later calomel ointment of over 25 per cent. was rubbed into the two places. The man was kept under constant observation, but no syphilis developed. The scientific accuracy of the preceding numerous experiments in the case of the monkeys was proved up to the hilt. You may say, "the material might have been bad." So said these investigators; they did not leave things to chance. They took four monkeys and with the same material inoculated them to see whether or not it was virulent stuff. Two of the monkeys had no subsequent treatment, and they both developed syphilis at the end of the ordinary incubation period for the monkey tribe. One of the other two was treated after

twenty hours; that was an effort to see how far this preventive treatment would go, and even at twenty hours it had an effect. That monkey developed mild syphilis after an interval equal to about twice the ordinary incubation period, and the disease occurred in a modified form. The fourth monkey was treated just like the man, an hour after inoculation, and he remained free from infection.

So much for the laboratory evidence. It would be difficult to find anything more convincing than that. The scientific evidence on which the absolute certainty of a possibility of prevention of venereal disease rests is infinitely greater than the scientific evidence upon which rested the original inoculation of the troops for enteric. We inoculated troops for enteric in our South African campaign when we had no such evidence as this with regard to reliability. The inoculation of the public now is being advocated with regard to influenza. We have no laboratory proof in reference to this disease that can compare with what I have just described. Our inoculation for influenza is an experiment, and those who believe in it cannot give any proofs.

A White Paper, the Report of the Inter-Departmental Committee on Prophylaxis, has been issued by the Ministry of Health. The arguments and alleged statistical evidence produced in that document are unworthy of a responsible Government Department. The Report adopts just the same method of giving statistics as was adopted in the campaign against the Contagious Diseases Acts. Those who possess an open mind and a knowledge of statistical evidence should examine the real statistics of the working of these Acts which were abandoned because the figures relating to the whole Army and the whole Navy were used, while the Contagious Diseases Acts were only applicable to a small percentage of those men. Just the same device is adopted in the above Report against prophylaxis. The Army and Navy as a whole have never had any real general system of prophylaxis as it is now understood: it has never had the chance of success in either Service. No one can say when it was tried and when it was not, but what the White Paper does say is that on a certain date early treatment centres were established in the Army. They were established, but never used. The regulations were such as to prevent the men knowing anything about them. Not one man in ten knew there were such places. Then it

goes on to say, "In spite of these being established there was no fall in venereal diseases." Fortunately there were one or two enthusiastic and energetic medical officers who did something. Captain Walker, for instance, the Medical Officer of the Canadian Medical Service, gives this evidence: In August and September, 1917, there were 5,000 troops on leave in Paris, and during those two months out of those 5,000 troops there were over 1,000 cases of venereal disease; over 20 per cent. of the men on leave were infected. That was sufficient for the army authorities; they put Paris out of bounds so far as the men on leave were concerned. In November, the same year, the leave was resumed, but a Report Centre was opened, and every man going to Paris on leave was presented with preventives; it rested with the man whether he liked to use them or not, but disinfectants and instructions were handed to him. As I have said, in August and September 20 per cent. were infected; in November, when prophylaxis was given a trial, the proportion infected was 3 per cent. You thus get an immediate and definite result. Captain Walker also goes on to give some interesting evidence. Another important fact is that only five cases of venereal disease were traced to licensed houses during the whole of 1917. During the first quarter of 1918 there was no case in Paris traced to licensed houses. Licensed houses, however, were put out of bounds. In the Paris streets there were two round-ups by the police. In one evening they detained 100 women from the streets, and 91 out of the 100 were found to be infected with venereal disease. On another night 71 women from the streets were examined, and 55 were found infected. And yet, owing to agitation, unscientific and ill-balanced, the licensed houses which were producing no venereal disease were put out of bounds, and the streets, which must have been hotbeds of venereal disease, were in bounds.

Sir Archdall Reid's evidence is that he had 40,000 troops under his care in lots of 2,000 during four years at Portsmouth, and he found during the first few months that he was getting an enormous number of V.D. cases. He determined to put an end to it in spite of the Army opposition with which every Army medical officer had to contend, and he taught his men these very simple methods of prevention. V.D. vanished at once. He had no case for five months after he started. Up to the end of the war he had seven cases; two of these men were infected

by their wives when home on leave; three had taken no precautions at all, they had not followed his advice, and two forgot to take the material with them and delayed disinfection until they returned to barracks, when they developed the disease. There is a great mass of similar evidence, direct, overwhelming evidence, that as soon as these practices are put into force you get V.D. vanishing. My own experience as a V.D. Officer is absolutely in accordance with that. I was thwarted in every possible way by army regulations; although these V.D. centres were established we were not expected in practice to talk plainly to the men about them. We were sent an official lecture on V.D., and there was not a word in the lecture about prevention. "On a certain date prophylaxis was introduced into the Army," that is what you are told in the White Paper. It has never been done. In 1919 the authorities became alarmed at the overwhelming number of cases occurring. Armies were down with the disease: the full numbers have never been disclosed. It was absolutely hushed up and kept in the dark until 1919, when the Army authorities at last grew desperate, and threw over the moral fanatics, and sent round to its medical officers saying that these early treatment centres were no good. They said, "We must now take the men individually and teach them the simple methods of prevention. We must lecture them day in and day out; we must stop venereal disease." Very soon venereal disease had vanished from those areas where the medical officers gave the men plain and practical advice about prophylaxis, and saw that they were supplied with potassium permanganate solution and calomel ointment. I want to emphasize that prophylaxis has never had a chance in the Army as a *general* measure. You must take separate localities; you must get evidence whether it was taught practically, or whether it was simply a moral lecture, and also whether it was pushed by a man who was enthusiastic and meant to put an end to V.D. To those who are able to approach this subject with an open mind, the evidence in favour of prophylaxis, both for the Naval and Military Services and for the civil population, is overwhelming. It is not advisable to restrict such measures to the Services, as such a procedure would merely tend to perpetuate these diseases on a smaller scale. The campaign must be a general one, on every front.

Unfortunately, the movement in favour of prophylaxis is hampered and hindered by

moral fanaticism and religious bigotry, which, if it were candid, would confess that it desires to maintain venereal diseases as deterrent influences against immorality. These people, unfortunately, refuse to face the clear issue, and persistently drag in all kinds of extraneous matters. Most of their favourite arguments are met by the following statements:—

(1) It has never been suggested that prophylactic packets should be issued by the civilian authorities and no one proposes to give every civilian a prophylactic outfit, but everybody should have the benefit of the wonderful discoveries of Metchnikoff and Roux, and the advantages of the army experience, by being taught the scientific fact that risk of infection can be eliminated by the use of simple chemicals. The details of the use of these chemicals could be left to be elucidated by a set of directions enclosed in an outfit which should be on sale through the usual channels, and the materials in which should be of guaranteed strength and purity.

(2) While the results of the process of disinfection must, of course, depend on the degree of personal efficiency, yet it has been conclusively proved that the average individual is fully capable of understanding and carrying out the simple instructions sufficiently well to remove almost all danger of infection.

(3) There is not the slightest evidence in support of the statement (commonly made by opponents of prophylaxis) that "the use of self-disinfection packets encourages exposure to infection." The belief of many experienced army V.D. officers is that instruction in prophylaxis decreases exposure to infection by impressing upon the individual the fact that such exposure must mean possible contact with an unclean and infected person.

(4) The chance of these substances being used for *treatment* by an individual who has purchased an outfit for the purposes of *prevention* is very remote. The instructions which told him about prevention would, of course, remind him that these substances are useless for treatment. It is true that in their curious opposition to the word "prevention" the army authorities labelled everything "early treatment," and so may have led some men reasonably to regard the material as good for treatment.

(5) Prophylaxis is available for women, and the Society for the Prevention of Venereal Diseases have issued special instructions for women on this subject. Even if prophylaxis

were "not applicable to women," as stated by the opponents of prophylaxis, it may occur eventually to those people that the best safeguard for women is to keep the men free from disease.

(6) Detailed instruction of boys in methods of prophylaxis is neither necessary nor desirable, although it is surprising to learn that those advanced moralists who advocate full sexual instruction for all boys and girls yet take objection to it. All details as to use would of course be obtainable only by persons buying the outfit.

(7) Those who recommend prophylactic advocate abstinence from promiscuous sexual intercourse, but realize that in the present state of the community it is necessary for scientific measures to be used to prevent the spread of these easily preventable diseases.

V.D. INFECTIONS AMONG THE RHINE ARMY.

BY

MISS ETTIE A. ROUT (of New Zealand).

The main reasons for the present high rate of venereal infection in the English Army on the Rhine, may be summarised under fourteen heads. I have been through the different Areas of Occupation—French, Belgian, American and English, and the statements I am making are the results of my own personal observation and experience:—

1. The direction of the Rhine Army Prophylactic System from London is weak and timid; the methods are undeveloped; and the prophylactic outfit itself is entirely out-of-date and fails to embody the results of several years' practical research work among the Overseas and American Armies and of the British Navy.

2. There is great laxity and half-heartedness among many of the field officers on the Rhine, and the enthusiasm and courage of responsible and experienced officers is continually being damped and undermined by religious opposition and political interference: the result is that instead of effective action we have creeping paralysis.

3. Officers who permit a high rate of venereal infection to arise and continue in their units are not demobilised or disgraced, or otherwise made to feel personally and officially responsible for the maintenance of the sexual sanitation of the men under their command.

4. The present system is unsatisfactory in that the soldier runs whatever risks he chooses and the public pays all the costs and loses the soldier's services into the bargain.

5. The Blue-Light depots in Cologne and elsewhere are not sufficiently well known and advertised. The staffs are not always adequate and not always on duty in some cases, and they are practically never given encouragement in their peculiarly irksome and monotonous work. The provision of skilled treatment for venereal prophylaxis in suitable depots is efficiently described on paper and inefficiently administered, and always has been, *e.g.*, in Brussels when the town was full of troops after the armistice, we had one single prophylactic station in charge of a young corporal. I have known prophylactic stations to be locked up when the man in charge was away on leave—and he had taken the key with him. The general practice among Australian medical orderlies was to empty out all the disinfectants when they took over an English prophylactic station because they were valueless. I have known an English medical orderly go on filling up a disinfecting tank for weeks with water without renewing the supply of disinfectants. This is a comment I got from the G.O.C. of Paris in 1919:—

"I notice a point in your letter," he says, "which I have already kicked up a row about, namely a slackness at the Blue-Light depot."

The fact is there is no regular, courageous and inspiring inspection of the depots in the English Rhine Army, and without this slackness is inevitable.

6. The sexual condition of the Army is not really known either to the officers or the men because V.D. parades are not held regularly by thoroughly competent medical officers. Dress parades are considered much more important. Until the soldiers are taught to keep their sexual organs clean with the same enthusiasm as they are taught to keep their buttons or their boots polished, and are paraded with the same efficiency and discipline, the Army fails in its duty to itself and to the nation.

7. The disinfecting tube should form part of the soldiers' field dressing, and it does not do so at present. This matter was thoroughly tested in Paris in 1917-1918, and we found that when tubes were issued as a matter of routine, on the average only one man per thousand refused to carry them, although they

were given the option of refusal. The system in the Rhine Army is to make the tubes available to the men, as it is termed, by having supplies in the E.T. depots. Frequently there are no supplies there, and sometimes soldiers take handfuls. It was proved on enquiry in 1919 that some soldiers had thirty to forty tubes in their pockets; others none at all. This system of distribution is of almost perfect inefficiency. It was designed by Colonel Harrison, and rejected by all the Colonial medical services.

8. The Army disinfectants are being given away (or sold) to the Germans by the Rhine soldiers. It is a common practice for soldiers to give the Army prophylactic outfit to German women in exchange for sexual intercourse, but if the women are already diseased they don't use the disinfectants; then the soldier becomes infected, and the wicked packets are blamed.

9. Large numbers of diseased and immoral women come from other areas to the British area, where there is less medical and police supervision and control. The American policy is to return vagrant women to the places they name as their homes. Between Dec. 13, 1920, and April 15, 1921, inclusive, 654 women were sent away from the American area, of whom 119 were sent to Cologne and 41 to other places in the British area. In addition, all women who fear arrest because of disease or immorality tend to leave the American and other areas voluntarily and enter the English area, which they regard as a haven of refuge: there they spread contamination at their own sweet will.

10. The English soldiers are continually told to use calomel ointment only AFTER connection—instead of both before and after, whereas the American soldiers are given these directions:—

"The use of an ointment or cream as a protective and lubricant before intercourse has been insisted upon by us for some time," said an American Medical Officer to me recently. "The printed directions which are securely pasted to the container in which all individual prophylactics are issued are specific on this point. It is without doubt a preventive measure of great value. The principle has been made use of by mechanics in the preliminary preparation of their hands with soap before work. The soap fills the pores of the skin, thus preventing grease and dirt from penetrating,

while subsequent cleansing is greatly facilitated."

11. The method of stating the Rhine Army v.d. statistics in Parliament is designed to conceal rather than to reveal the actual facts, and is thus most mischievous: it damps down rather than inspires effort by destroying the realisation of the need for activity. The rate should be calculated per 1,000 per annum, and published regularly in the daily newspapers. The present political dodge is to calculate the rates in quarterly terms when they are bad, and in monthly terms when they are worse, or give percentages when the complete delusion of the public is a matter of political urgency. Recently we were told the rate was "*only 2.6 per cent*": that is higher than the rate for the Overseas Troops in England early in the war, and nearly three times as bad as the present American Rhine Army rate.

12. The costs of v.d. treatment should also be published. Judging by the Overseas costs, the cost all told of treating the infected men in the Rhine Army would probably be at least £500 per day in cash, to say nothing of the toll levied on the health and happiness of the Army and the Nation.

13. The Padres and social workers in the English Rhine Army are not co-operating with the Medical Officers in the medical prevention of v.d. in the same way as the American Red Cross, American Y.M.C.A., and other social workers with the American Forces in Germany.

14. Some months ago I offered to go to the Rhine with Colonel George Raffan, of the Australian Medical Service, now in London—whom I know to be an exceedingly capable and experienced M.O., and by co-operating with the many earnest and experienced English Field Officers on the Rhine, and securing the goodwill of the soldiers themselves, I am positive we could bring down the present v.d. rates enormously, in, say, three months, and the cost would be a mere nothing compared with the saving effected.

DR. J. M. MACPHERSON has been appointed medical officer of health for the Swansea rural district.

Dr. W. A. BOND has been presented with a silver salver by the members and officials of the Holborn Council as a mark of esteem on his retirement from the post of medical officer of health for the borough.

V.D. AND THE MINISTRY.

The Latest Pronouncement of the Ministry of Health on the prevention of Venereal Disease, issued to Local Health Authorities on May 31, 1921.

BY

SIR H. BRYAN DONKIN.

(1) In this document the Minister states that he is "not empowered to give an authoritative interpretation of the provisions of any Act of Parliament." But in spite of this, and of the evidence given at another place and time, by an official of his Ministry, to the effect that there is no reason why a municipality should not do as it likes in the matter of prevention of venereal disease, the Minister of Health now informs the municipalities that a chemist does not commit an offence by selling any substances for which he is asked, merely because these substances are capable of being used as disinfectants against venereal diseases, *so long as the substances are not sold accompanied by any written or printed recommendations or instructions as to use.*

This information amounts practically to a personal edict to local authorities by a Minister of State, cautioning them that chemists *must not sell preventive medicaments accompanied by written or printed instructions as to use*, with the implication that chemists *may* give, verbally, any instructions they please to applicants!! It is needless to do more than point the moral of this edict. It removes none of the obstacles to the spread of knowledge to the public concerning the proper use of disinfectants, or facilities for obtaining them; and is clearly intended to prevent such spread, or, in other words, to keep the public in ignorance.

(2) Some possible twinge of conscience may possibly have dictated the following remarkable piece of moral advice, which finds place in this document now distributed to the local authorities responsible for the care of the public health:—"It is the duty of all individuals who have incurred, or think they have incurred, the risk of contracting disease, to cleanse themselves thoroughly and immediately and thereby diminish the risk." At first sight, this reads like a palinode, dictated in a moment of insight or temporary illumination; but, accompanied, as it is, by the studied obscurity of its wording and the disabling edict set forth above, the most generous reader can but infer a deplorable disharmony between the

Minister's intellection and action. The questions remain:—What did the Minister mean to say? What more, if anything, does he mean to do? And, lastly, what will Parliament do?

ANTI-VENEREAL DISEASE CAMPAIGN IN PORTSMOUTH.

BY

A. MEARNS FRASER, M.D., Medical Officer of Health, Portsmouth.

The first step in the campaign against venereal diseases in Portsmouth was the provision of a well-equipped treatment centre at the Royal Portsmouth Hospital, in February, 1917; under the able management of the medical officer, Dr. A. Campbell, this has become an extremely valuable and successful institution. The problem, however, which must always be the first concern of medical officers of health is the prevention, and not the treatment, of disease, accordingly, I conceived it to be my duty to represent to my Health Committee that an endeavour should be made to instruct the inhabitants of their district in the best available methods by means of which they could protect themselves against venereal diseases. The methods which I suggested were those which have received the almost unanimous approval of the medical profession; which in practice have proved effective; and which depend for success on the immediate disinfection of the person after exposure to the risk of disease.

The advice which I tendered the Health Committee was embodied in a special report, and after full discussion this was adopted by the Committee and forwarded to the Town Council for confirmation. There was an interval of over six weeks before the Council met, in the meantime my report had become public and was the subject of a voluminous correspondence and discussion in the daily local press. So extended was the correspondence and so great was the interest aroused in the subject that a request was made to the Mayor to convene a public meeting in order that the members of the Council, before they met to confirm or disapprove of the recommendation of the Health Committee, might have an opportunity of ascertaining the opinion of the public upon the proposal. A conference was accordingly arranged, and invitations asking for six representatives were sent to every religious body, to the Guardians, the Local Insurance

Committee, the medical profession, to every organised society engaged in moral or social work, to women's societies, welfare associations, trade unions, co-operative societies—in a word, to every association which might from any point of view be interested in the subject. The result was a large meeting thoroughly representative of all shades of thought in the Borough, where, as reported in the (Portsmouth) "Evening News":—"For over three hours a conference of the public men of Portsmouth and representatives of local organisations argued the merits or demerits of Dr. Mearns Fraser's report on venereal diseases. From every angle of vision the subject was approached, and the keynote of all the speeches was their sincerity."

It may be of service to fellow medical officers who may desire to forward similar proposals in their own districts, if I mention here that the arguments advanced against issuing instructions in the methods of self-disinfection were almost entirely based on the assumption that such a procedure is an immoral one because it would tend to an increase of vice. This opposition undoubtedly receives more support than would otherwise be the case because the public are profoundly ignorant of the far reaching after-effects of venereal diseases, they realise that the disease is loathsome, but they do not appreciate those remote effects in later life which are only now beginning to be fully realised even by members of the medical profession. Whenever any proposal to prevent venereal diseases by teaching self-disinfection is brought forward, my experience has been that there is no argument of any weight advanced in opposition except those urged from a moral standpoint. It is this attitude which makes the position of a medical officer a very difficult one.

In the conference referred to the main opposition was of the above nature, but after the whole subject had been clearly explained; after the effects of venereal diseases on the nation, and especially upon innocent women and children, had been appreciated; after it had been pointed out that the proposed campaign was purely educational, to lift the appalling ignorance that has hitherto obscured and fostered venereal disease; and, above all, after it has been shown that the moral side of the question would not be ignored, and that any leaflets or notices issued in connection with the prevention of venereal disease would also insist

on the importance of chastity and of leading a clean life—then the opposition was largely withdrawn, and the meeting, which at the onset has been undoubtedly hostile to the proposals, became satisfied that the objections from a moral standpoint could not weigh against the necessity for endeavouring to control the terrible ravages of venereal diseases. The proposals of the Health Committee were endorsed by the meeting, which was undoubtedly influenced in its attitude by the fact that amongst the strongest supporters of the proposals were the leading local clergymen and the chairman of the Free Church Council. The effect of this conference was that the recommendation of the Health Committee to instruct the men of the town in the methods of self-disinfection was adopted by the Town Council by a large majority. Since that date, March, 1920, a campaign for the prevention of venereal diseases on the above lines has been carried out in Portsmouth, and, although the period during which the policy has been put into effect is too short to allow one to form any definite opinion, there is already evidence, in the decline in the number of acute cases of venereal disease which present themselves for treatment at the venereal diseases treatment centre, that our efforts are achieving some success. It is interesting to note that after prolonged and exhaustive enquiry the Special Committee of the National Birth Rate Commission, comprised of individuals whose personal character would render ridiculous any suggestion that it was in any way indifferent to the moral welfare of the community, has reported strongly in favour of a policy identical with that adopted by the Portsmouth Town Council.

In conclusion may I add that to many of us health officers, who, in carrying out what we believe to be our duty to the community, have dared to run the most serious risks, the recent faint-hearted pronouncement of the Ministry of Health (Circular 202) has been a keen disappointment. By what curious process of reasoning the Minister of Health can reconcile the statement in one paragraph of the Circular, that he "cannot give official support to self-disinfection as a policy," with the statement, in a later paragraph, that all persons who have run a risk of contracting venereal disease should "cleanse themselves thoroughly and immediately and thereby diminish the risk," is surely beyond the comprehension of any clear-

thinking individual. If cleansing, presumably with water, an inert substance, is necessary, how much more necessary must it be to cleanse with a disinfectant which has a directly destructive action upon the germs of the disease!

The vacillating character of the Circular is still further illustrated in its last paragraph in which the Minister, in spite of the fact that he "cannot support" a policy of self-disinfection, "considers it desirable to state that a chemist does not commit an offence" against the Venereal Disease Act, 1917, by selling substances capable of being used as disinfectants against venereal diseases. Unless the Minister of Health holds the private opinion, as distinguished from his official opinion, that the use of disinfectants is likely to prove beneficial it is difficult to understand why he should have gone out of his way to add a paragraph directly encouraging the sale of substances for immediate disinfection.

PREVENTION OF VENEREAL DISEASES.*

BY

W. A. BOND, M.A., M.D., D.P.H., M.R.C.P.,
M.O.H., Borough of Holborn.

Venereal diseases cause untold misery, suffering, and early decay and death. Still worse, they cause lifelong suffering to innocent wives who are frequently made either childless, or have dead, diseased, blind, deaf, deformed or imbecile children. Prudery, prejudice, ignorance, hypocrisy and cant have for too long kept these as hidden diseases.

Although the methods of treatment of these diseases have been improved, their permanent cure is still very frequently not effected, because of the difficulty of keeping patients under observation and treatment long enough to render them innocuous to other people. These treatment centres are also very costly.

The most effective method of preventing infectious disease is to attack the chain of infection at its weakest link. The weakest link is when the germs are on the surface of the male organ before they have had time to penetrate into the tissues of the body. The germs of these diseases have been scientifically proved to be easily destroyed by disinfectants. *Therefore the most effective way of preventing these diseases is by immediate self-disinfection.*

*From Annual Report for 1920.

I was therefore very glad that the Society for the Prevention of Venereal Diseases was formed in the latter part of 1919, and on account of my known adherence to the above most effective method of prevention, I was invited to become a Member of the Grand Committee. The S.P.V.D., while advocating that no moral measures should be neglected, recognises the plain unsavoury fact that a large proportion of the adult population (notwithstanding all these measures) has practised irregular sexual intercourse, and it therefore recommends the teaching of simple but efficient methods of self-disinfection; also that the prevention of disease by all practicable methods is the paramount duty of Sanitary Authorities.

The older Society, the National Council for Combating Venereal Diseases, while advocating principally only moral measures which have obviously been ineffective, has, however, recommended the use of disinfectants at so-called early treatment centres, which are really *delayed* disinfecting centres. In addition to the great cost of such centres there are also grave reasons rendering their provision by Sanitary Authorities impracticable.

I am therefore glad that the Holborn Council has adopted not only the most efficient but the most inexpensive system, namely, education by means of posters and leaflets placed in men's underground conveniences. 50,000 of the leaflets are supplied at a cost of about £19, that is, less than 1d. for 10. For æsthetic reasons also a man is much more likely to adopt *self-disinfection* than to go to a centre for disinfection by a skilled attendant. I congratulate the Holborn Council on having the moral courage to be the first of the London Cities and Boroughs to adopt this policy.

The Holborn leaflet gives concise information—"What Every Man Should Know"—respecting the terrible ravages caused by these diseases; that the only safe, right, and manly course is to exercise self-control; that prevention is infinitely better than cure; and that it is therefore the bounden duty of any man who will indulge in promiscuous sexual intercourse to adopt this disinfection in order to avoid disease, which he may pass on to innocent people. The poster has the same wording. On the back of the leaflet are simple directions respecting (1) immediate self-disinfection, (2) delayed self-disinfection, and the advice (3) if any symptoms of disease arise immediately

to consult a doctor, or attend one of the special clinics at a hospital. Posters respecting (3) are also exhibited.

Although any fairly intelligent youth or man can very easily carry out the simple directions, human machinery, like other machinery, is not fool-proof. Much venereal disease is the sequel of foolish indulgence in alcoholic beverages, and if a man will so render himself temporarily idiotic or imbecile he probably then would be unable to carry out efficiently direction (1), therefore the directions (2) and (3) are also given.

At a very largely attended meeting of the S.P.V.D. at the Mansion House, the Lord Mayor of London in the chair, on February 5th, 1920, resolutions recommending the above methods were carried unanimously.

A Special Enquiry by a Committee of the National Birth Rate Commission, consisting of 20 eminent men and women, with the Bishop of Birmingham as chairman, took place last year, and in a recent Report recommended action similar to that already taken by the Holborn Council. I had the honour last December of giving evidence at this Enquiry.

PREVENTION OF VENEREAL DISEASE. CONFERENCE OF PUBLIC HEALTH AUTHORITIES.

An important Conference, under the chairmanship of Lord Askwith, took place at Lord Askwith's residence on the 1st of March. Lord Askwith, in his opening address, said that he felt it was a wicked thing that ignorance should be the forcing bed of infection.

Dr. Mearns Fraser, Medical Officer of Health for Portsmouth, proposed the following resolution: "That, in view of the terrible effects of venereal diseases on the health of the nation, and especially because of their effects upon women and children, there is urgent need for health authorities to institute active measures to protect the inhabitants of their districts against these diseases. Of these measures, by far the most important is education of the public as to the dangers of venereal diseases, as to the manner in which they are spread, and, above all, education in the methods of immediate self-disinfection, by which venereal diseases can be largely prevented."

In supporting the resolution, he said that the Society for the Prevention of Venereal Disease

was anxious to induce local authorities to make known the methods of self-disinfection to the public, and stated that he had never heard any valid arguments against disinfection. He said that the Health Committee of Portsmouth passed a resolution that it was the duty of the Council to take measures to instruct the men of Portsmouth in the principles of self-disinfection, so that they might protect themselves.

The resolution was seconded by Dr. Charles Saunders, Medical Officer of Health for West Ham, who said that there were resolutions on the minutes of the West Ham Council approving of the education of the people in immediate self-disinfection. He said that, among the 300,000 inhabitants of the Borough, there were more than 1,000 new known cases of venereal disease every year.

Dr. Hope, Medical Officer of Health for Liverpool, stated that he was heartily in accord with the views expressed by the mover of the resolution, and gathered that, when emphasising this aspect of the question, that other aspects would not be lost sight of. He thought that those who raise objections from the moral standpoint seem to forget that we are placing no obstacles in their way.

The Mayor of Portsmouth stated that he considered it a privilege to be able to support the Society for the Prevention of Venereal Disease, and the Medical Officer of Health for Portsmouth. He said that those people who used to crowd the Portsmouth platforms, and say that self-disinfection could not be proceeded with because it encourages vice, have all come round now, and the inhabitants of Portsmouth have to-day absolutely all come round to Dr. Fraser's way of thinking, and he has had all the support which any medical officer of health could wish for on this subject.

Dr. Bond, Medical Officer of Health of Holborn, reminded the Conference that Holborn was the first London Borough which had adopted the method advocated by the Society for the Prevention of Venereal Disease: he considered this method of education was exceedingly simple, and very inexpensive.

Dr. Holroyd, Medical Officer of Health for Chatham, said that when he brought the question of education and immediate self-disinfection before his Health Committee, that it was unanimously supported by them, and there was not a single dissident, nor were any dissident opinions expressed in the town. On the contrary, after the resolution had been passed

by the Council, he received letters from the clergy, and ministers of Free Churches, congratulating him on the results obtained and on the course they were going to take.

Mr. Thompson, Chairman of the Health Committee, Liverpool, said that during the past year they had had 78,000 attendances at the Liverpool Venereal Clinics, and emphasised the necessity for continuity of treatment.

Mr. Whitworth, Chairman of the Bedfordshire Venereal Committee, considered that it was necessary to amend the Venereal Disease Act, 1917, so as to enable anyone to go to a chemist and ask for what they wanted, and he asked: "Why should a sensible man be prevented from getting these remedies, because a fool may make bad use of them?"

Dr. J. B. Howell, Medical Officer of Health for Hammersmith, said that if we could prevent the spread of scarlet fever and other diseases by means of self-disinfection, how readily would we utilise the means, while here with venereal disease we have the means at hand, and some people hesitate to use that means.

Dr. Veitch Clark, Medical Officer of Health for Croydon, appreciated all that Dr. Fraser had said, and said that he would recommend similar proceedings in his district.

Lord Askwith, the Chairman, then put the resolution to the meeting, and said that he considered education in immediate self-disinfection, as a practical suggestion for immediate use. The Report of the Special Committee on Venereal Disease of the Birth Rate Commission, recalled to his mind the experience of the Mayor of Portsmouth, and of Dr. Fraser: there were some persons who came to that Committee to curse the question of education or of prevention, but they seemed to have remained to bless.

He recommended everyone to get a copy of this Report, where could be seen sentence after sentence in which they say they have come to the conclusion that moral preaching and saying, "Do be a good boy," is really not having much effect on the country, and that it is much better to give them some education about it, so that really, in effect, the words that he used in opening this meeting, have been borne out, that ignorance should not be the forcing house of infection.

The Chairman then put the resolution with the following addendum: "Resolved further that this resolution and opinion be forwarded to health authorities throughout the United

Kingdom, with the request that they take the subject at once into consideration." The resolution was then put to the Meeting and carried unanimously.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

NOTES FROM BRANCHES.

I.—FROM THE NORTHERN BRANCH. OPENING OF A COUNTY MATERNITY HOME AT BISHOP AUCKLAND.

In view of the present tendency to curtail health schemes it is refreshing to note that the County of Durham recently opened its first Maternity Home at Bishop Auckland on April 27th. Dr. Janet Campbell, Chief Medical Officer, Maternity and Child Welfare Department, attended from the Ministry of Health. In the course of her remarks, Dr. Campbell stated that there was great need great need of small maternity homes, that the Treasury had realised this need and had permitted the Ministry of Health to spend money in this direction when it refused grants for other Maternity and Child Welfare Schemes.

The Home, which has been converted from a large three-storied house, contains accommodation for seventeen mothers and babies, a resident nursing staff of matron, deputy matron, ward sisters, night nurses, two staff nurses, probationers, and a domestic staff numbering four.

In addition to the ordinary wards for lying in cases, a labour ward, an examination room, a separation ward, and a ward containing four beds for complications of pregnancy have been provided. The sanitary annexes, sterilising apparatus and general equipment are adequate and up-to-date.

Particular attention has been devoted to the comfortable housing of the staff, the domestic side being provided with exactly the same type of furniture and appointments as the nurses.

Ordinary labours will be conducted by the matron or the private doctor, there being a roster of local practitioners for emergencies and complications. The general management rests with the County Council and the County Nursing Association. One of the Welfare Medical Officers will undertake the lectures to midwives as soon as the Home is approved as a training school.

The Home is worked on the basis of a weekly fee of £3 3s., this being remitted altogether or

reduced in necessitous cases, in accordance with the Ministry of Health's scale.

PUBLIC HEALTH PROGRESS IN THE COUNTY OF DURHAM.

Dr. T. Eustace Hill, the County Medical Officer of Health, has recently issued an interesting resumé of present health activities in the County of Durham together with a survey of the vital statistics for the past thirty years, the commencement of this period practically coinciding with the inauguration of the County Health Department.

The population of the administrative County in 1891, 721,391, is estimated as 1,024,540 in 1921. The general death rate has fallen steadily each quinquennial period from 19 per 1,000 living for the period 1891-95 to 13.9 for the period 1916-20. Dr. Hill estimates the latter figure would have been 13, if deaths due to the influenza epidemic were deducted. The saving in life represented by the reduction is estimated at 4,909 lives each year during the last quinquennial period.

In analysing the various factors concerned with this improvement, Dr. Hill has given the figures relating to infantile mortality, diarrhoea, pulmonary tuberculosis and enteric fever.

The infantile mortality has fallen mainly during the past fifteen years, the figures for the six quinquennial periods being 163, 167, 159, 139, 134, 113. The annual saving in infant lives, which the average rate of 113 per 1,000 births between 1916-1920 represents, is estimated as 1220. Concurrently with the fall in infantile mortality the death rate from diarrhoeal diseases in infants has declined considerably from .79 to .39 per 1000.

The average death rate from enteric fever, at that time epidemic in many parts of the country, has fallen from .37 per 1000 in the period 1891-1895 to the very low figure of .03 per 1000 for the period 1916-1920.

The death rate from pulmonary tuberculosis has been reduced considerably, mainly in the first three quinquennia, the figures being 1.45, 1.27, 1.07, .95, .93, and .92.

The county now maintains in its various health departments administrative, tuberculosis, school medical service, maternity and child welfare and venereal diseases, a staff of twenty-nine full time and seven part time medical men and women, with eighty health visitors and nurses full time, and six part time

health visitors, twenty-two salaried midwives, and an adequate clerical staff.

The various health activities now in operation and staffed by the county include eleven tuberculosis dispensaries, two general and one special school clinics, six venereal clinics, and twenty-three maternity and child welfare centres. During the past two years considerable extensions have been carried out in the County Sanatorium and the various tuberculosis hospitals wholly maintained or subsidised by the county. A scheme for a residential sanatorium for 200 children is well on its way to inception.

In addition to the welfare centres, the county has opened one maternity home, while a second is proposed, as also a convalescent home for mothers and children.

Arrangements have been made with various maternity hospitals in Newcastle, Sunderland and Blackhill for the admission of maternity cases, and at Bishop Auckland for unmarried mothers.

The above represents a portion only of the health activities, either in actual operation or contemplated, of the County of Durham. In view of the very substantial saving in human lives, undoubtedly effected largely by their operation, Dr. Hill proves very clearly that the end justifies the means.

MUNICIPAL RETRENCHMENT AT NEWCASTLE.

Newcastle Health Department, like many others, has recently been passing through a period of severe retrenchment.

Among the reductions enforced has been the somewhat extraordinary one of closure of half of the pavilions at the Fever Hospital. This is a comparatively easy thing to do during the summer, but it will be interesting to watch how long it will be possible to continue it during the winter months.

Of the other items of reduction the most serious has undoubtedly been the curtailment of the Maternity and Child Welfare staff. Eight Health Visitors out of twenty have been dismissed and considerable reduction has been effected in the employment of part-time Medical Officers at the Welfare Centres.

The Maternity and Child Welfare Section, which had undergone considerable development and had really become an effective and practical unit in the Department, appears to suffer from the same unpopularity among the present ruling faction as does the Ministry of

Health generally with "Our Special Medical Correspondent" in the "Times." It will take the Department long to recover from this particular mutilation.

A particularly venomous complaint against Municipal salaries generally has been carried on in the local press, and though not directed specifically to the Health Department, which, strange to say, has hardly even been referred to, the members of that staff are suffering with the rest a considerable and rapid reduction of the recently granted bonuses.

ACQUISITION OF BARRASFORD SANATORIUM, BY NEWCASTLE CORPORATION.

The Newcastle and Northumberland Sanatorium, Barrasford, was taken over by the Newcastle Corporation as from the 18th of February. The Institution contains accommodation for ninety-three patients, and hitherto beds have been leased by various authorities in the North Eastern Area. It is intended to continue this arrangement, since the Newcastle Corporation does not propose to increase its own holding.

Various improvements are being carried out by the new owners, including the augmentation of the somewhat fluctuating private water supply by means of a branch from the Newcastle and Gateshead Water Co.'s main pipe line, which passes close to the boundary of the estate. A new Sewage Disposal Scheme is also in course of construction.

The Medical Superintendent is Dr. C. G. R. Goodwin, who has returned to his old appointment there from the Birmingham Health Department. He was in charge at Barrasford during the most difficult period of the war.

II.—FROM THE WEST OF ENGLAND BRANCH.

MEETINGS AT GLOUCESTER.

Very enjoyable joint meetings with the Royal Sanitary Institute were held at Gloucester on June the 9th and 10th. On the first day Dr. Middleton Martin (C.M.O.) read a most interesting paper on "Public Health Development in Gloucestershire." This led to a valuable discussion on the well-known "Scheme of Medical Services," which, whatever may be its subsequent developments, will always be recognised as a bold and statesmanlike attempt to solve a difficult problem. Professor Kenwood, Dr. Peters, Dr. Herbert Jones, Dr. Rhind, Dr. Blackett, and others

took part. The business meeting of the Branch then took place under the chairmanship of the President, Dr. Peters. Several matters of importance were discussed, some reference to which will be made on another occasion.

In the afternoon a visit was paid to the City Isolation Hospital. A much appreciated open-air tea was provided under ideal weather conditions and in delightful surroundings. This was followed by a char-a-banc trip to Cheltenham, and visits to the town destructor, sewage and water works.

Arrangements for the 10th included a paper by the City Surveyor on "The Collection and Disposal of House Refuse," and a river trip to Tewkesbury, where tea was kindly provided by the Mayor of Gloucester. The Branch is under a deep obligation to Dr. Bibby, the M.O.H. of Gloucester, for organising a series of interesting and delightful meetings and excursions.

ORTHOPÆDIC WARDS FOR CHILDREN.

Plans for orthopædic wards for children in connection with the Bath Royal United Hospital are being considered by the Ministry of Health. It is hoped to arrange, in the first place, for about fifty patients on lines which have proved so effective at Baschurch, Headington (Oxford), Leasowe and elsewhere. The site is a delightful one about two miles from the city. All types of crippling defects, tuberculous and non-tuberculous, will be dealt with, and a scheme submitted to the Board of Education asking for recognition as a Special School. At least two large Authorities are already making provisional application for beds, and others will no doubt follow. It is understood that the general arrangements have been discussed with Sir Robert Jones, and that his cordial approval and active interest have been secured.

V.D. HOSTELS.

Probably no one would deny the great value of "Hostel" treatment in properly selected cases of women and girls suffering from venereal disease. And yet in several places where an institution has been established for the purpose the demand for beds has been found to be much less than might reasonably have been anticipated. This appears to have happened at the Plas Trevor Hostel, near Cheltenham, which is under the administrative charge of the County Medical Officer for Gloucester-

shire. Dr. Middleton Martin has therefore suggested to various Local Authorities in the West of England that it would help to put the matter on a sound basis if they would each become responsible for one or more beds at a cost which, when the government grant has been deducted, is extraordinarily reasonable from the Authority's point of view. It is very desirable that the necessary support shall be forthcoming, since the somewhat limited scope of the activities of the Hostel is very far from being a measure of its ultimate value to the community. The Hostel is not at present confined to patients from any particular locality, and there is no doubt that it is well situated, well equipped, and well managed.

APPOINTMENT.

Dr. G. C. Williams, until recently Assistant Medical Officer at the Bristol City Fever Hospital, Ham Green, has been appointed Assistant Medical Officer of Health and School Medical Officer for the City of Oxford.

III.—FROM THE METROPOLITAN BRANCH.

PERIODICAL REPORTS.

Although it was very common at one time for Metropolitan Medical Officers of Health to circulate periodical—monthly and quarterly—reports—a practice apparently introduced by the late Dr. Wynter Blyth, whose "Sanitary Chronicles of Saint Marylebone" were quite famous for over a quarter of a century, the custom was gradually dropped, and for a few years before the war only the City of London and Kensington kept it up. During the war even these authorities ceased to circulate printed copies. Within the last few months, however, the practice has been re-introduced, and copies of monthly reports from the two districts named are now regularly received. In the City report for the period ended 12th March, 1921, Dr. Howarth publishes a report on an investigation into an outbreak of food poisoning which took place towards the end of January amongst members of the staff of a large trading concern, in whose dining room some 600 lunches are served daily. Forty-four persons complained of having suffered from diarrhoea and sickness after partaking of a meal in which roast veal formed the principal item. An inspection showed that the premises and arrangements for the preparation of food

presented conditions considerably above the average. The place was clean and well ventilated and the food kept in a cold store. Portions of the roast veal believed to have been the cause of the outbreak were submitted to bacteriological examination, together with portions of other food. In addition, the blood of two men, and the stool of another—all three having been sufferers—and also a rat and a mouse caught on the premises, were examined. Two mice fed on the cooked veal were found dead on the fourth day; mice fed on other food remained unaffected. The examination carried out in connection with the three men and the rat and mouse revealed little to assist in the forming of a conclusion as to the source of the trouble. The bacteriologist's general observations, however, suggest that the roast veal was at fault, and that it was reasonably certain that the outbreak was not one of infection with any of the usual food poisoning bacilli, but was more probably due to poisoning by some chemical substance in the meat or the gravy. Dr. Howarth adds that the outbreak is probably characteristic of many minor outbreaks which are constantly arising, and is to be regarded rather as due to chemical substances than to the commoner method of bacterial infection. In this instance most of the patients were better after twenty-four hours' illness, and no further cases were reported.

LECTURES ON PUBLIC HEALTH.

Dr. Charles Porter, Medical Officer of Health of St. Marylebone, and Lecturer on Public Health at the Middlesex Hospital, delivered during the early part of June, at University College, a course of four lectures on "Recent Developments in Legislation for the Prevention of Disease." He treated the subject more or less from a historical point of view, choosing for the lectures the following titles:—I., Introductory and Historical; II., Legislation Directly Preventive; III., Legislation Indirectly Preventive; IV., Legislation of the Future. The course was very fully taken advantage of, particularly by those studying in London for the Diploma in Public Health.

IV.—FROM THE NORTH WESTERN BRANCH.

A HANDSOME DONATION.

The Lancashire Insurance Committee have decided to hand over a surplus of £18,000 in the sanatorium benefit fund to the County

Council, despite the Health Ministry's decision that surpluses must be pooled to meet the deficiencies of other Committees.

ORTHOPÆDICS AT WALLASEY.

An orthopaedic surgeon has been appointed to examine periodically all crippled children in the elementary schools in order to ensure that proper appliances and after treatment are available for every case. The children receive treatment in one or other of the Liverpool Hospitals or at Leasowe, and go back to their homes. Unless very carefully watched, parents are unwilling to keep in touch with the Hospital, the result being that cases drift back. One reason for the lack of attention by parents to this matter may be the distance to the institutions, and the idea is that as the children are not being brought to the specialist, the specialist's supervision should be brought to them.

OBITUARY.

We have to record with regret the death of R. E. Harcourt, M.D., F.R.C.S. (Eng.), late Ophthalmic Surgeon to the Bootle Education Committee, and a member of the North Western Branch of the Society of Medical Officers of Health, at his residence in Anfield, Liverpool, on May 19th.

A TUBERCULOSIS SUB-GROUP.

A special deputation from the North Western Branch of the Society was to attend a meeting of the North West Tuberculosis Society in Manchester on Thursday, June 9th, to discuss the possibility of this Society forming a Sub-Group within the Society of Medical Officers of Health.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

COUNCIL MEETING.

A meeting of the Council was held at the House of the Society, on Friday, May 20th, 1921. Lt. Col. F. E. Fremantle, M.P. (President) was in the chair, and there were present Drs. Snell, Stocks, Kirkhope, Veitch Clark, Charles Porter, Ellis, Wheatley, G. F. Buchan, Barlow, R. H. Wilshaw, Col. H. W. Grattan and Lt. Col. Herbert Jones.

Messages of apology for absence were received from Drs. Eustace Hill, Lyster, Cates, Blackett, and Kerr.

Correspondence.—(1) From the Ministry of Health regarding the involuntary retirement

of a part-time medical officer of health owing to the combination of his area with an adjoining district (see Minutes of Council, *Public Health*, February, 1921, p. 89, col. 1). The Ministry pointed out that the medical officer of health in question "holds office under Article X of the *General Order* of the 13th December, 1910, and that under the terms of that Article it was open to the District Council to determine his appointment on the 31st July of any year by giving him three months' notice to expire on that date." The Ministry add that the question of the terms on which a part-time medical officer of health can be dispensed with in order that a whole-time medical officer of health may be appointed depends on the terms of the appointment of the part-time medical officer of health.

(2) From the Ministry of Health stating that the resolution of the Society urging that the authority at present responsible for the administration of the Maternity and Child Welfare Regulations of the Ministry should be made the statutory authority for the Infant Life Protection section of the Children's Act, 1908, had been noted for consideration in connection with any amendment of the Act (see Minutes of Council, *Public Health*, May, 1921, p. 156, col. 1).

(3) From the Tuberculosis Group of the Society, regarding Memo 30 A/T of the Ministry of Health, and decisions relating to the length of treatment of tuberculous ex-service men in the County of London. The letter was referred to the Metropolitan Branch of the Society.

(4) From the Ken Wood Preservation Council inviting the Society to appoint a representative on the Council which has been formed to secure the preservation of Ken Wood, Hampstead, for the enjoyment of the public. The letter was referred to the Metropolitan Branch of the Society.

(5) From the Tuberculosis Group pointing out that copies of important circulars and memoranda by central authorities in regard to tuberculosis are frequently not sent to tuberculosis officers, and asking the Council to make representations that duplicate copies of such communications should be sent to the medical officer of health to be passed on to the tuberculosis officer. *Resolved:* That the Ministry of Health and other central authorities be asked to send sufficient copies of circulars, memoranda, etc., to the medical officer of

health for distribution to other medical officers in his department engaged in the special branch of work referred to, e.g., tuberculosis, maternity and child welfare, venereal diseases, etc.

(6) From the Tuberculosis Group drawing attention to Ministry of Health Circular 194, dealing with the termination of Sanatorium Benefit under the National Health Insurance Acts, and other allied matters. The Group asked the Council of the Society to take up the matter of fees payable by the Ministry of Pensions to tuberculosis officers, so that payments for reports carried out on behalf of the Ministry by tuberculosis officers should be allocated to the officer who makes the examinations, as recommended in Circular 194. The Executive Secretary was directed to inform the group of the correspondence which has passed between the Society and the Ministry on this matter (see Council Minutes, *Public Health*, May, 1921, p. 156, col. 1).

Dr. Alfred Hill.—It was proposed by the President and resolved unanimously that Dr. Alfred Hill, on the occasion of his ninety-fifth birthday (May 19th, 1921) should be recommended for election as an Honorary Fellow of the Society, in recognition of his long and valuable services to preventive medicine and public health administration.

Special Food Committee.—Dr. James Wheatley brought up recommendations from this committee as follows:—

- (1) *Dental Caries:* That in view of the profound influence dental caries has upon the health of the community, a thorough enquiry should be made by the Government into its causation, and this enquiry should be followed by a definite pronouncement and propaganda.
- (2) *Pasteurised and Sterilised Milk:* (a) That in view of the importance at the present time of arriving at a satisfactory conclusion as to the effect of sterilisation and pasteurisation of milk on its hygienic value, the Government be asked to consider the question carefully so that a statement may be issued for the guidance of the public, and (b) that if the results obtained indicate the desirability of encouraging, or even permitting, the sale of milk so treated, that the process and processes should be accurately defined and powers given to secure that such are observed, and further that milk submitted to such treatment should be sold in such manner as will render it, at the time of sale, readily distinguishable from fresh milk.

After some discussion it was agreed that points involved in these recommendations required careful consideration, and it was decided that they should appear on the agenda paper for the next meeting of the Council.

The Non-County Group.—On behalf of this group, Lt. Col. Herbert Jones moved:—

"That in view of the statement made by Dr. Addison on 18th November, 1920, that the Ministry of Health were considering in connection with the future health services of the country, the question of the county medical officer of health supervising, and being responsible for, the work of the district medical officer of health, the views held by the non-county group be placed before Sir George Newman."

In the course of the discussion it was pointed out that the Council had decided (see Council Minutes, *Public Health*, February, 1920, p. 79, col. 2, and March, 1920, p. 95, col. 2) to await the report of the Consultative Council appointed by the Ministry of Health, before making any representation regarding the unit for health administration purposes. It was therefore agreed that the above resolution should not be officially conveyed to the Ministry, but that it should be reported to Sir George Newman at his next informal conference with representatives of the Council.

Lt. Col. Herbert Jones also moved:—

"That the attention of the Ministry of Health be drawn to the requisition made by a county medical officer of health to the district medical officers of health to supply him with an annual report in tabular form, in addition to the annual report required by the Ministry under their Order of 10th December, 1910, and their ruling asked as to whether this addition to the clerical duties of the medical officer of health of a district is necessary or desirable, especially in view of the fact that with a few rare exceptions the clerical work of these medical officers of health has to be done by themselves."

Resolved: That the above resolution be forwarded to the Ministry of Health.

Nomination of President.—The Executive Secretary reported that Dr. W. J. Howarth, Dr. Eustace Hill, Dr. Philip Boobbyer and Dr. R. A. Lyster, had been recommended by Branches for nomination to the Presidency. Dr. R. A. Lyster wrote asking to be allowed to withdraw his name. After the preliminary vote, it was resolved unanimously that Dr. W. J. Howarth be nominated for election as President of the Society for the Session 1921-22.

Election of Officers.—Dr. G. F. Buchan and Dr. R. A. Lyster were unanimously re-elected as Hon. Treasurer and Hon. Editor respectively for the Session 1921-22. After a vote the following were declared to be elected as Vice-Presidents for the Session: Lt.-Col. Herbert Jones, Dr. R. Veitch Clark and Dr. James Wheatley.

War Memorial.—The committee of officers of the Society were authorised to commission a mural tablet for the house of the Society to commemorate those members who died on active service in the Great War: the cost of such memorial (not exceeding £100) to be defrayed

by contributions from branches based on their strength of membership.

The Training of Health Visitors.—In the absence of Dr. Lyster (chairman), Dr. Veitch Clark submitted the report of the Special Committee on the Training and Duties of Health Visitors. It was agreed that the report could not be adopted until after full consideration, and that Sir George Newman should be asked to advise the Society if the matter was of such urgency as to call for a special meeting of the Council before the opening of the new Session in the autumn. The Executive Secretary was directed to circulate the report to members of the Council before the meeting appointed for its discussion.

The Annual Subscription.—After a statement by the Hon. Treasurer, it was agreed unanimously that the annual subscription to the Society for whole-time medical officials should be increased as from October 1st, 1921, to £1 11s. 6d. The Executive Secretary was directed to send an official notification to those members of the Society affected by the change before the opening of the new Session. (See Council Minutes, *Public Health*, January, 1921, p. 73, col. 2.)

Medico-Political Union.—Dr. Gregg and Dr. A. Welply attended as a deputation before the Council to explain the aims of this Union and to invite the support of the Society for its activities. On the proposal of the President they were cordially thanked for their attendance.

The Council then adjourned.

ORDINARY MEETING.

An Ordinary Meeting was held at the house of the Society, on Friday, May 20th, 1921. The President (Lt.-Col. F. E. Fremantle, M.P.) took the chair.

The minutes of the last meeting having been approved and signed the following candidates were elected to the society:

As Members:

Churchill (Mrs.), Stella, M.R.C.S., L.R.C.P., D.P.H.; McIntyre, James, M.B., B.Ch., B.Sc.Edin., D.P.H.; MacLaren, Jessie Alexandra, M.B., Ch.B. Edin., D.P.H.; Ruxton, Irene Tomina Joan, M.B., Ch.B.Aberd.

As Associates:

Aitkin, F. W., L.D.S.Eng.; Anderson, C. N., R.C.S.P.I., L.D.S.I.; Andrew, P. N., L.D.S.Eng.; Bailey, J. J., L.D.S.Eng.; Baker, A. E., M.R.C.S., L.R.C.S., L.D.S.Eng.; Ball, L. C., L.D.S.Eng.; Ballingall, T. M., L.D.S.Eng.; Bampton, H. E., L.D.S.Eng.; Barlow, E. W., L.D.S.Eng.; Bartle, Percy, L.D.S.Eng.; Bates, G. L., M.R.C.S., L.R.C.P., L.D.S.Eng.; Bennett, Norman G., M.A., M.B., B.C.

Cantab., M.R.C.S., L.R.C.P., L.D.S.Eng.; Bett, D. Wilson, L.D.S.Eng.; Booth, W. R. W., L.D.S.Glas.; Bloomer, A. C., L.D.S.Bham; Bendix, F. E., M.R.C.S., L.R.C.P., L.D.S.Eng.; Breese, F., L.D.S.Eng.; Breese, H. W., M.R.C.S., L.R.C.P., L.D.S.Eng.; Brooks, H. R. F., J.P., L.D.S.Eng.; Glasg. and Ireland; Broughton Head, L. C., M.B., Ch.B. Glasg., L.D.S.Eng.; Byrne, F., L.D.S.Glasg.; D.M.D.Haw.; Butler, H. R. C., L.D.S.Eng.; Campbell, H. Gordon, L.R.C.P. and S. Edin., L.D.S.Eng.; Campbell, W. Graham, M.B., C.M., L.D.S.Eng.; Carden, A. G., L.D.S.Eng.; Carter, C. E., L.D.S.Eng.; Chandler, Percy, L.D.S.Eng.; Cohen, I., L.D.S.Eng.; Common, R. Keith, L.D.S.Eng.; Cowell, H. G. H., L.D.S.Eng.; Cotterell, Graham, L.D.S.Eng.; Cumine, R. H., L.D.S.I.; Cutts, F. E., L.D.S.Eng.; Davies, Harry, L.D.S.Glas.; Davies, T. W. V., L.D.S.Glas.; Denne, F. Vincent, M.D.(Brux.), M.R.C.S., L.R.C.P., L.S.A., L.D.S.Eng.; Dinnis, Alfred, M.R.C.S., L.R.C.P., L.D.S.Eng.; Dinnis, Leonard, L.D.S.Eng.; Donald, W. H., O.B.E., L.D.S.Glas.; Drake, Harry, L.D.S.Eng.; Duguid, John, L.D.S.Glas.; Dunn, S., L.D.S.Eng.; Edmondson, T. A., L.D.S.Eng.; Elliott, W. T., L.D.S.I. and Edin., D.D.S.Toronto, F.Z.S.; Emery, E. A., L.D.S.Eng.; Erby, W. H., L.D.S.Glas.; Finigan, Percy O'C., L.D.S., D.D.S.Mich.; Fisk, William, L.D.S.Eng.; Flintan, P. R., L.D.S.Eng.; Forbes, V. W. Russell, L.D.S.Eng.; Fuller, A. Wardlaw, L.D.S.Eng.

The executive secretary submitted a long list of nominations for election at the next meeting.

Honorary Fellow.—The President reported the recommendation of the council that Dr. Alfred Hill, president of the society in 1886 and 1887, who had entered his ninety-sixth year the previous day, should be elected an Hon. Fellow of the society "in recognition of his long and distinguished services to preventive medicine and public health administration." The proposal was carried with acclamation.

Election of President.—The President reported that the council wished to nominate Dr. William James Howarth, C.B.E., medical officer of health for the City of London, as president of the society for the session 1921-2. Dr. Howarth was elected forthwith by acclamation.

Dr. H. A. Ellis then opened a discussion on "Tuberculosis in Relation to Public Health Administration." Others who spoke included Dr. W. G. Willoughby, Dr. George Jessel, Dr. Blackmore, Dr. Fenton and Dr. Wilshaw. At the close, the president thanked Dr. Ellis for directing the discussion into such interesting channels, and for drawing attention to aspects of the tuberculosis problem which would require very careful consideration.

The meeting then adjourned.

ANNUAL PROVINCIAL MEETING.

The annual provincial meeting was held under most favourable conditions on Saturday, June 11th. Eighty members and ladies were in attendance, the majority proceeding by

motor coach from the house of the society, the remainder journeying in their own cars. The first objective was Hatfield House, where the state rooms and galleries were visited by invitation of Lord Salisbury. The party then went on to Welwyn Garden City and enjoyed luncheon as the guests of the president. After the health of the host had been proposed by Prof. Kenwood and honoured with enthusiasm, Sir Theodore Chambers, K.B.E., gave a very interesting account of the origin and development of the Welwyn Garden City. A short business meeting was then held, the following candidates being duly elected:

As Members:

Adams, Mary Irene, M.B., B.Ch., B.Sc.Belf.; Bell, Whiteford John Edward, D.S.O., Major R.A.M.C., M.B., Ch.B. Edin., D.P.H.; Binks, Horace Burcham, M.B., B.Ch. Edin.; Dunkerton, Norman Edwin, D.S.O., Major R.A.M.C., M.R.C.S., L.R.C.P., D.P.H.; Elford, Wm. Philp, M.A., M.D., B.Ch. (Dubl.); Emerson, Henry Horace Andrews, D.S.O., Major R.A.M.C., M.B., B.Ch. Dubl., D.P.H.; Hanafin, John Berchmans, C.I.E., Major I.M.S., F.R.C.S., L.R.C.P. I., D.P.H.; Jones, Mary S. Share, B.A. Lond., M.B., Ch.B., LL.B. Liv.; Kempthorne, Gerald Ainslie, D.S.O., Major R.A.M.C., B.A., Cantab., M.R.C.S., L.R.C.P., D.P.H.; Macmillan, Ada Johanna, M.D., Ch.B. Edin.; Richardson, Samuel Robert, M.B., B.Ch. Dublin; Sharpley, Christopher Wilfred, M.R.C.S., L.R.C.P.; Simpson, James Victor Alexander, M.B., B.S. Lond., M.R.C.S., L.R.C.P., D.P.H.; Stansfeld, Elsie, M.B., B.S. Lond., M.R.C.S., L.R.C.P.; Steward, Sidney John, D.S.O., M.D., B.C. Cantab., M.R.C.S., L.R.C.P., D.P.H.; Thompson, Ashley Geo. Gyton, Capt. R.A.M.C., M.B., B.C. Cantab., D.P.H.; Watson, Douglas Percival, D.S.O., Major R.A.M.C., M.B. Cantab., M.R.C.S., L.R.C.P., D.P.H.

As Associates:

Gabell, Wilfred W., L.D.S.Eng.; Gabell, A. H., L.D.S.I.; Gibbons, J. W., L.D.S.Eng.; Gibson, Arnold, Captain, L.D.S.(Vict.); Gibson, E. B., L.D.S.(Manch.); Glassington, Chas. W., M.R.C.S., L.D.S.Eng.; Goddard, J. W., L.D.S.Eng.; Grandison, W. B., L.D.S.Eng.; Griffin, R. W., L.D.S.Eng.; Griffin, J. H., L.D.S.Eng.; Grove, H. N., L.D.S.I.; Hankinson, G. R. D., L.D.S.(Manch.); Hadley, Miss E. R., L.D.S.Eng.; Hall, T. S. Musprat, L.D.S.I.; Harding, W. E., L.D.S.Eng.; Harrison, Walter, L.D.S.Eng., D.M.D.(Harvard); Harris, G. W., L.D.S.Glas.; Hayden, C. M., L.D.S.Eng.; Heath, R. H., L.D.S.Eng., D.D.S. Penn.; Hower, A. G., L.D.S.; Hogan, J. E., L.D.S.I.; Humphrey, H., L.D.S.Eng., A.D.S., F.S.M.C.; Hudson, A. G., L.D.S.I.; Jackson, T., L.D.S.Eng.; Jones, H. C., L.D.S.Eng.; Jones, W. H., L.D.S.Eng.; Kay, Val., L.D.S. Glas.; Kelsey, G., M.D.S. Bristol, L.D.S.Glas.; Knowles, J. L.D.S.Eng.; Lakeman, W. S., L.D.S.Eng.; Lafferty, C. S., L.D.S.I.; Law, J., L.D.S.

Edin. and Glasg.; Leigh, Percival T., L.D.S.Edin. and Glasg.; Lonnon, F., M.R.C.S., L.R.C.P., L.D.S. Eng.; Lord, C. H., L.D.S.Edin.; Littleton, F. C., L.D.S.Liverpool; Love, Hugh, L.D.S.Eng.; Lindsay, R., L.D.S.Edin.; Lovitt, R. J., L.D.S.Eng.; Luya, C. J., L.D.S.Liverpool; Macfarlane, J., L.D.S.Eng.; Macdonald, A. K., M.A.(Cantab.), M.A.(Dub.), M.Dent.Sc.Dub., L.D.S.I.; Mackenzie, A. B., L.D.S. Edin.; Matthews, Geo., L.D.S.Eng.; Maurice, H., L.D.S.Eng.; Magraw, E. C., L.D.S.Eng.; Machin, L., L.D.S.Eng.; Martin, J. J., L.D.S.Eng.; Miliaressis, M., L.D.S.Eng.; Miller, W. S., L.D.S.Edin.; Moxley, C. F., L.D.S.Edin.; Morrell, H. V., L.D.S. Glas.; Morgan, W., L.D.S.Glas.; Montuschi, J., M.D. (Bologna), L.D.S.Eng.; Musgrove, E. H., L.D.S. Eng.; Newton, S. B., L.D.S.Eng. (Hon. Capt.); Nicholls, R. E., L.D.S.Eng.; North, Benjamin, L.D.S. Eng.; Padgeti, F. J., L.D.S.Eng.; Parkinson, E. G., L.D.S.Eng.; Payton, R., L.D.S.Eng.; Percy, L. K., L.D.S.Eng.; Phelps, Peyton; Raymond, J. M., L.D.S. Eng.; Ramsden, Miss J., L.D.S.(Vict.); Raeside, M., L.D.S.Glas.; Riches, C. J. H., L.D.S.Eng.; Ritchie, F. C., L.D.S.Eng.; Roe, S. H., L.D.S.Eng.; Rose, S. F., L.R.C.P., M.R.C.S.; L.D.S.Eng.; Round, Harold, M.D.S.(Birm.), L.D.S.Eng.; Routledge, C. L., L.D.S.Edin.; Shennan, L. S., D.D.S.(Penn.), L.D.S. Edin.; Scanlan, Miss E. M. S., L.D.S.Glas.; Shevlin, J. J., L.D.S.I.; Shipway, W. H., L.D.S.Eng. and Bristol; Shoesmith, H. P., L.D.S.Leeds; Shorrock, J. L., L.D.S.Eng.; Sloan, Miss E. R., L.D.S.Glas.; Smith, Fred., L.D.S.Eng.; Smith, Grantley, H.D.D. Edin., L.D.S.Eng. (Hon. Capt.); Smith, H., L.D.S. Eng.; Smith, S. J., L.D.S.Edin. (Hon. Capt.); Soper, G. E., L.D.S.Eng.; Sprawson, E. C., M.C., M.R.C.S., L.R.C.P., L.D.S.Eng. (Hon. Capt.); Stevens, W. S., L.D.S.Eng.; Stewart, Norman Y., L.D.S.I., D.D.S. Penn.; Stewart, Mrs. N. R., L.D.S.Glasg.; Strangways, L., L.D.S.Eng.; Sumpter, A. A., L.D.S.Edin.; Sutcliffe, C. E., J.P., L.D.S.I.; Taylor, Claud, L.D.S. Eng.; Taylor, H. H., L.D.S.Eng.; Taylor, L., L.D.S. Eng.; Taylor, W. R., L.D.S.Glas.; Thomas, C. E., L.D.S.Eng.; Thomson, Geo., L.D.S.Eng.; Townend, B. R., L.D.S.Liverpool (Hon. Capt.); Townend, J. R.; Trotter, A. C., L.D.S.Edin.; Vernon, T., L.D.S. Eng.; Wakley, P. J., L.D.S.Eng.; Wallis, C. Doswell, L.D.S.Eng.; Wallis, C. E., M.R.C.S., L.R.C.P., L.D.S.Eng.; Wallis, F. R., L.D.S.Eng.; Wallis, H. W., L.D.S.Eng.; Walmsley, H., L.D.S.(Manchester); Watson, F. E., L.D.S.Eng.; Weir, R., L.D.S.Edin.; White, E. E., L.D.S.I.; Wilmore, W., L.D.S.Eng.; Wilson-Smith, — L.D.S.Glas.; Wood, Bryan J., L.D.S.Eng.; Woolford, G., L.D.S.Eng.; Wren, B. F., L.D.S.Eng.; Wylie, J. A., L.D.S.Glas.

The Executive Secretary having submitted nominations for election at the next meeting, the business meeting was adjourned. A visit was then paid to houses already in occupation on the estate, until the time arrived to move on to Bedwell Park where Mrs. Fremantle had invited the party to take tea. The park and gardens

were looking at their best in the glory of a perfect summer afternoon, and the guests much enjoyed wandering through the beautiful house with its wealth of artistic treasures to which Col. Fremantle is the fortunate successor. At six o'clock it was time to return to London, and the general feeling was that the day had hardly been long enough for a programme with so many attractions.

METROPOLITAN BRANCH.

A meeting of this branch was held at the society's rooms in London, on Friday, 22nd April, 1921, Dr. W. M. Willoughby (president) occupying the chair. There were eighteen members present.

The branch decided to support resolutions of the Midland Branch on the question of the distinction between Fellows and members within the society.

A number of points in connection with the hospital accommodation of cases of measles and whooping cough, referred to in a letter from the Metropolitan Asylums Board, were discussed. It was considered that the best course to be adopted would be to deal with any epidemic on its merits, and to decide at the time whether or not, and to what extent, there should be interference with the removal of scarlet fever and diphtheria cases. In the selection of cases for isolation in hospital the decision of the medical officer of health would be based on preventive grounds, and so far as treatment is concerned, full consideration would have to be given to the opinion of the medical man in attendance upon the patient.

The board expressed a desire that a further conference with the branch be held, and instructions were given for the representatives of the branch to attend when necessary.

The circular of the Ministry of Health, with accompanying memoranda, with regard to the treatment of tuberculosis, was considered by the branch, and an objection was raised in connection with the concluding sentence of para. 7 of Circular 194, wherein it is stated that reports will be forwarded by the regional medical officer to the appropriate tuberculosis officer. It was felt particularly that the position and influence of the tuberculosis officer in relation, more especially perhaps, to the panel practitioners in his district, would be threatened by the proposed procedure, and it was decided to refer the matter to the tuberculosis group of the society.

The branch received and noted the circular of the Ministry of Health, and accompanying orders, with regard to the supply of milk for expectant and nursing mothers and for infants.

It was decided to call a meeting of the council of the branch to receive a deputation from the Building Act Committee of the Royal Institute of British Architects on the question of higher buildings in their relation to health.

NORTH WESTERN BRANCH.

A visit was paid to Wallasey by the members of the branch on Friday, May 13th. Unfortunately owing to the restricted train service the attendance was small, apologies for inability to attend were received from no less than 53 members.

There were present the President (Dr. Corbin) and nine members, and a short business meeting was held in the Town Hall.

A letter was received from Dr. Jessel stating that the Meeting of the N.W. Tuberculosis Society, to which a deputation from the branch had been invited, would be postponed from the 26th May to the 9th June. Dr. Gilmour wrote suggesting the institution of an Annual Golf Tournament for members of the branch, and the matter was referred to the committee for further consideration.

Dr. T. W. N. Barlow, O.B.E., read a short paper entitled "Inadequate relief granted by the Guardians." After referring to the effects of insufficient food and clothing in handicapping our efforts to produce a healthy nation he dealt with the economic side of the question, giving many striking instances of false economy.

A hearty vote of thanks on the proposition of the President (Dr. Corbin), seconded by Dr. Daley, was accorded Dr. Barlow for his interesting paper.

After the meeting, by the kindness of the Mayor (Alderman C. Hewetson Nelson, J.P.), a motor char-a-banc was provided to take the members for a drive to enable them to obtain a bird's eye view of the district. Accompanied by the Chairman of the Maternity and Child Welfare Committee (Alderman J. Urmson), they proceeded to New Brighton, along the Promenade, and back to the Town Hall via old Wallasey Village, visits being paid on the way to the new Municipal Maternity Home (to be opened shortly), and to the Child Welfare Centre. On returning to the Town Hall an excellent tea was ready, at which the Chairman of the Health Committee (Councillor Dr. John

McMillan), presided. An inspection of the magnificent new Town Hall followed, before the members finally dispersed, after a very enjoyable day's proceedings, for which Dr. Barlow and the Mayor and Corporation of Wallasey were cordially thanked by the President.

[Owing to pressure on our space, it is necessary to hold over several reports of Branch and Group Meetings.—ED. P.H.]

Books Received.

1. *Prevention of Venereal Disease*, by Sir G. Archdall Reid. William Heinemann, Ltd., London. 15s. net.

This remarkable book gives a full and fair statement of the present position, and also of the history of the controversy about the prevention of venereal diseases. No medical officer of health can claim any intimate acquaintance with the subject until he has mastered its contents. It is absorbingly interesting, and the story which is unfolded will startle many who have up to the present been satisfied with listening to expressions of pious opinions on the subject. To those few medical officers of health who, during the war, served as "V.D. Officers," Sir Archdall Reid's description of the official boycotting of all efforts towards scientific prevention will recall nothing new, but to the great majority of the members of the public health service the complete history of this boycott and obstruction, as well as the subsequent crusade of misrepresentation and calumny, will come as a revelation.

2. *Venereal Disease: Its Prevention, Symptoms and Treatment*. By Hugh Wansley Bayly. J. and A. Churchill. 10s. 6d

From a student's point of view this forms an attractive textbook on the subject, the matter being well arranged, clearly written and adequately illustrated with black and white sketches. The practitioner will appreciate the concise and clear way in which the symptoms and treatment are outlined, and will find the book both stimulating and useful in this respect. Of special excellence however is the part

devoted to the measures for dealing with venereal diseases from a sociological point of view, a section which should be read carefully by students, practitioners, medical officers of health, and members of all public bodies. The scientific facts are clearly set out, and the way in which logical conclusions are drawn will appeal irresistibly to all open minds. An original and uncommonly good book.

3. *Venereal Diseases. Their Clinical Aspect and Treatment.* By J. E. R. McDonagh. William Heinemann. £3 3s. net.

Mr. McDonagh's writings are always refreshing to read. His independence of thought, his originality and his refusal to follow the beaten tracks make any book written by him both interesting and stimulating. In this publication he has drawn lavishly from his stores of clinical material, and it is largely the clinical aspect of venereal diseases that is dealt with, but of course Mr. McDonagh's special views and theories inevitably crop up from time to time. The book is a mine of information and suggestion to everyone engaged in clinical work in connection with venereal diseases, and it is magnificently illustrated. Of special value is the section relating to examination of the candidate for marriage, but in all parts of the book the author should in future editions differentiate between ingenious speculations and established facts.

4. *A Manual of Venereal Diseases for Students.* By L. W. Harrison. H. Frowde. 16s. net.

This book is apparently a boil-down of the author's larger textbook, but the condensation has resulted in a distinct improvement. From a clinical point of view the book is first rate, and the appendices on complement fixation tests, staining methods and treatment formulæ, have considerable practical value. The chapter on the prevention of venereal disease obviously incomplete, and the author does not appear to be acquainted with the scientific basis of modern preventive measures. The statistics which are supposed to show the results of prophylactic measures in the army during the war are misleading because no system of prophylaxes has ever been tried generally in the army. In localities where active prophylactic measures were undertaken the results were striking and conclusive.

CORRESPONDENCE.

The Editor does not accept responsibility for the opinions of correspondents.

To the Editor, PUBLIC HEALTH.

HOME COUNTIES' BRANCH.

Sir,—It was not anticipated that the influx of new members and associates would be so rapid that this branch would be in a position to claim an additional representative on the council so soon. But whereas in the June issue of "Public Health" it was stated that the number on the roll was 184, there are now 225, the number requisite for additional representation. There is, however, room on the roll for another seventy-five, which would secure a further representative on the council. The secretary will be pleased to forward forms of application for membership to any likely candidates, and all who are engaged in the public health service must have realised by this time the paramount necessity of belonging to the society which so closely identifies itself with their interests.

It would be of great assistance if members who propose to read papers during the ensuing session, would submit their names and the titles of their papers to the secretary as early as possible. If it is possible to do so, a detailed programme of the proceedings for the session will be printed and circulated, so that members may know what days they ought to reserve for branch meetings.

Yours faithfully,

DAVID KIRKHOPE,

Hon. Sec., Home Counties' Branch.

Town Hall,
Tottenham, N.15.
June 13th, 1921.

DR. HENRY MALET, on his retirement, has been appointed consulting medical officer of health for Wolverhampton for a period of five years at a salary of £250 per annum.

A VALUABLE SOAP FOR PEDICULOSIS. — We have received from Messrs. Sapon Soaps, Ltd. (King William Street, E.C. 4), samples of their "Derbac" shampoo soap for the quick destruction of vermin and nits. We have heard from several reliable sources that remarkable results have been obtained with "Derbac" soap, and the high claims made for it would appear to be fully justified. The makers are anxious that school medical officers should give "Derbac" a fair trial, and they will gladly send samples on application. This soap was awarded a Bronze Medal at recent exhibition held by the Royal Sanitary Institute at Folkestone.

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Editorial.

POSTGRADUATE EDUCATION.

THE constitution of the Postgraduate Medical Committee raised high hopes that the subject would be dealt with satisfactorily, and these hopes have been realised in the admirable report which has been issued. The report is clear, concise, well arranged and entirely readable, and it presents a scheme which must be carried out at once if this country is to take its proper position in the medical world. Postgraduate teaching here is in an unsatisfactory condition not only as regards any provision for the graduate who desires to extend his studies or to proceed for a higher degree, but also in

connection with the instruction available for medical men from other countries. During the past two or three years the Fellowship of Medicine and Postgraduate Medical Association has made a valiant attempt to make some such provision but has failed, and has proved conclusively that nothing short of a scheme such as the one proposed by the Postgraduate Medical Committee is capable of dealing with such a problem.

The proposals of the Committee include (1) The conversion by London University of one of the existing schools which possess a large hospital into a postgraduate centre. Such a school would be the centre of a great teaching organisation in which the special hospitals of London, the Poor Law infirmaries, and the medical schools with their clinical units and research departments would all find their places. (2) The establishment of a postgraduate central office to co-ordinate the whole system, arrange courses and time tables, deal with all applicants, and provide social amenities, hostel, restaurant, etc. (3) The provision, as part of the University of London, of an Institute of State Medicine in which all the instruction in the subjects of Public Health, Forensic Medicine, Toxicology, Industrial Medicine and Medical Ethics and Economics would be provided. It is in this last proposal that we are particularly interested, as the establishment of such an Institute is of the greatest importance and urgency not only as regards the public health service but also the development of an increasingly important branch of medicine throughout the Empire.

The existing medical curriculum is out of date and ill prepares the graduate for his future work. Medical work at the present time does not consist solely of clinical medicine, surgery, and midwifery, although the instruction given in the medical schools consists almost entirely of these subjects. The result of the present medical training is to turn out graduates with little or no

knowledge of State Medicine, and their lack of knowledge in these matters causes such graduates to regard with suspicion and hostility all measures of development in preventive work. In the London schools in particular State Medicine receives inadequate attention, the average being greater in the provincial schools and highest in the Scottish. Postgraduate teaching at first therefore will necessarily be of a rather elementary character, but when the curriculum is adjusted more in accordance with modern requirements it will be possible to organise the courses on a higher level.

Unfortunately in some quarters there seems to be a theory that preventive medicine can conveniently be tacked on to existing courses of instruction. In other words it is assumed that modern requirements can be met by issuing directions to those eminent surgeons and physicians who have charge of the medical, surgical, and midwifery units on the medical schools to add on to their courses a few words and ideas about prevention. Surely such a suggestion will not be entertained seriously. A clinician who has spent all his professional life in acquiring special skill in diagnosis and treatment will rarely possess any real interest in prevention, and any instruction given by him as an addition to his ordinary course will be of a most perfunctory character. Attempts on such lines will not effect any improvement, and it should be realised that State Medicine (which of course includes preventive medicine), if fully and properly taught, would be of far more practical and every day use to the ordinary practitioner than many parts of the existing curriculum, and would, moreover, turn out generations of medical men with accurate and sympathetic ideas about the relationship between the State and the profession. The whole of the past, as well as the existing, difficulties in the way of development of State ideals and responsibilities in connection with health and disease have been caused by the lack of sympathy on the part of the average practitioner due almost entirely to the present medical curriculum and the teaching of the medical schools. All future schemes are likely to be misunderstood and to encounter all kinds of difficulties until the point of view of the medical student is adjusted in accordance with modern conditions, and this change can only be achieved by an alteration of the curriculum and the establishment of adequate teaching. We have no doubt that this matter will be considered by the General Medical Council at an early

date in connection with the revision of the requirements for the Diploma in Public Health.

In the meantime every effort should be made to press forward the establishment by the University of London of the proposed Institute of State Medicine as the most urgent of the proposals of the Postgraduate Medical Committee. The future of the public health service of the Empire is intimately concerned with this development, and we hope to hear shortly that a Committee has been appointed by the University of London to develop a scheme on the lines of the Report. In the meantime all helpful suggestions should receive serious attention, and the importance of the subject is so obvious that it should be unnecessary to suggest that it should receive early consideration by the Society of Medical Officers of Health.

SECURITY OF TENURE

The Bill drafted by the British Medical Association was introduced in the House of Commons by Sir Philip Magnus, on April 12th, and has achieved a rapid passage, being read for the third time on July 5th.

It is to be regretted that the bill as drafted by the Public Health Committee of the Association had to be amended in several important particulars in its passage through Parliament. The Committee desired that security of tenure should be given to all medical officers of health and sanitary inspectors, but had not foreseen opposition from unexpected quarters which had to be met. The appropriate clauses referred to "a medical officer of health" and "a sanitary inspector"; amendments altered "a" to "the" in both cases, and introduced a clause distinctly stating that the provisions of the bill applied only to one sanitary inspector in a district. This is much to be deplored, for there are some districts in which, though there are several inspectors, there is no one of them who is senior to the others. However, those to whom the care of the bill had been entrusted felt that it would be the best policy to take a part of what was sought rather than to imperil the bill by demanding the whole. Another amendment which had to be agreed to in order not to endanger the passage of the bill includes those districts in which a contribution from Exchequer grants towards the salary of a medical officer of health or sanitary inspector is not received.

The passing of this bill is a distinct triumph for the British Medical Association. It was drafted by the Association, and the arrangements for its introduction in the House of Commons were made by the Association officials.

The thanks of the public health service are due to those members of Parliament who backed the Association's bill—Sir Henry Craik, Lieut.-Colonel Raw, Sir James Remnant, Mr. Myers, and Captain Walter Elliot, whose names indicate clearly that the measure was supported by members of all political parties.

Congratulations and thanks are more especially due to two persons. Dr. Herbert Jones, Medical Officer of Health of the Herefordshire combined districts, as a member and for some years chairman of the Public Health Committee, made this matter peculiarly his own. His keenness, assiduity, and diplomacy have at last received the reward which has often seemed to be within reach but has always hitherto been withheld. Sir Philip Magnus's services in the parliamentary sphere has been no less devoted and prolonged, and his help has always been given in such a way as to suggest that it was given *con amore*. He now has the satisfaction of having placed to his credit a solid parliamentary achievement for which its constituents, the public health service, and the medical profession, are very grateful.

"ECONOMY" IN HEALTH.

The present Minister appears determined to reverse the policy of his predecessor at the Ministry of Health in other important matters besides housing. The Bristol Health Committee have had a surprising illustration of this, and one which evoked from the chairman a caustic comment on the vacillating action of this Department. The Ministry in its crusade in the interests of public health called upon local authorities to make provision for cases of tuberculosis, and the Bristol Committee formulated plans accordingly. The Government, when issuing its fiat, promised to pay a substantial part of the cost; on the other hand local bodies which hesitated to face the responsibility were told that the Government would take action and charge them with the expense. Part of the local scheme involved sending thirty children to a hospital at Alton for special treatment. The Ministry has now announced that this proposal, which it had previously sanctioned, cannot

receive assistance owing to the need for national economy. Judging from the statement made at a recent meeting local plans for tuberculosis cases have been reduced by 120 or 130 beds.

DISEASE "CARRIERS" IN SOUTH AFRICA.

NOTIFICATION AND CONTROL.

It is interesting to observe that in South Africa regulations are being framed to ensure the notification and surveillance of "carriers," who are scheduled as persons who, though not at the time suffering from a notifiable infectious disease, are, as proved by laboratory examination and investigation, harbouring the infection of, and consequently liable to cause the spread of, such disease.

The Ministry of Health is arranging with the various municipal councils for the enforcement of the regulations, which propose complete powers for dealing with the "carrier" menace.

In the first place, any person believed or suspected on reasonable grounds by the medical officer of health of the local authority, or by a health officer or medical officer of the Government, to be a "carrier" must afford to such officer every facility for obtaining specimens of blood, excreta, discharges, or other material required for examination and investigation, and must take any medicine prescribed by such officer for that purpose.

Where it is certified that a person is believed or suspected on reasonable grounds to be a "carrier," and that the necessary examination and investigation cannot be properly carried out at the person's home, a magistrate may make an order requiring the person to proceed, or be removed, to a hospital or other suitable place for the purpose of examination, and to remain or be detained there, for such reasonable period as may be required for that purpose.

Every "carrier" must at all times observe and give effect to all reasonably practicable instructions given in regard to the disposal of his excreta, the cleansing of articles used by him, or other precautions for preventing the spread of infection.

Every "carrier" must inform the local authority of his intention to change his place of residence or work and of his intended new place of residence or work. This information must, when possible, be furnished not less than seven days before the change, and, if the new place of residence or work

is within the district of another local authority, the facts of the case must be notified to that authority.

Where on the certificate of the medical officer of health of the local authority, or of a health officer or medical officer of the Government, it appears to a magistrate that a person is a "carrier," the magistrate, on the application of such officer and after due enquiry, may, having regard to the nature of the infection and any material assistance which the local authority or the Government is prepared to give to mitigate hardship to the individual or his dependants, make, and may from time to time modify, alter, extend or rescind an order or orders requiring such person:—

(a) to proceed or be removed to and to remain or be detained for a period to be specified in such order in a hospital or other suitable place for the purpose of medical treatment; or/and

(b) to attend regularly for medical treatment or examination at times and places specified in such order; or/and

(c) to proceed to and remain in a specified locality or area under medical surveillance for a period specified in such order, and (if considered necessary) to attend or report himself at times and places specified in such order; or/and

(d) not to handle or otherwise come in contact with food or vessels or articles containing or used to contain or which come in contact with food intended for consumption by others, or to engage in any occupation entailing the handling or coming in contact with such food, vessels or articles; or/and

(e) to comply with such other requirements specified in such order as the magistrate, on the application of such medical officer of health or medical officer, may deem necessary for safeguarding the public health.

The parents or guardians of a child believed to be a "carrier" must assist in carrying out these regulations or any orders made in respect of the child.

The duty is imposed on all medical officers and magistrates of ensuring that the regulations are carried out systematically and without more hardship to any person than is necessary and unavoidable in the public interest.

Persons found guilty of contravention of, or failure to comply with, these or other regulations, or failure to assist in their enforcement, are liable to penalties "provided by law."

OUTSPOKEN CRITICISM.

The Ministry of Health is strongly criticised by Dr. Rolleston, the Medical Officer of Health for the Soke of Peterborough, in his annual report. He says:—"Since my last report was published, the inhabitants of this county have had the expensive privilege of living under the Ministry of Health. . . . To put it bluntly, no section of the community is satisfied with the work of the Ministry. Organs of public opinion varying as widely as "The Times" and "The Labour Leader" express the same unstinted blame.

"The friends of the Ministry declare this to be a malevolent personal attack upon the Minister and his officials. The reasons of distrust are not of this nature, but depend partly upon unavoidable causes, such as the terrible epidemic of influenza, but chiefly upon the failure of the Ministry's housing scheme, upon its failure to adopt a sound and courageous policy in regard to the prevention of venereal disease, its insistence upon schemes for infant welfare, and its comparative neglect of the all-important question of dentistry and sick nursing. It has also undertaken with an enormously augmented staff the work previously carried out by the Insurance Commissioners, which might well have been allowed to remain in the hands of the former administrators, who have already proved to their own satisfaction (if not to that of the taxpayers), that the only real beneficiaries under the scheme were bureaucrats.

"Lastly, the policy now adopted by the Ministry's Officers of interfering in every trifling detail of local administration leads to great waste of time and bad feeling. Thus a correspondence between one Local Authority and the Ministry went on for over a year on the weighty point as to whether children's eyes should be dilated with atropine ointment or with tabloids of the same substance. Finally drops were adopted, and both sides retired with the olive crown of victory.

"It has been said that every country has the government it deserves. Let us hope that the medical officers of health of England do not deserve the Ministry."

DR. JOSEPH CATES was the recipient of some handsome presentations prior to his departure from St. Helens to become County Medical Officer of Health for Surrey. The officials of St. Helens also entertained Dr. Cates at a farewell dinner.

SOME PROBLEMS IN THE TREATMENT AND CONTROL OF TUBERCULOSIS.*

BY

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Assistant Tuberculosis Officer, Warwickshire
and Coventry.

The tuberculosis problem is more urgent at the present moment than it has been for some years, owing partly to the adverse effect upon the health of the community caused by the losses, strain and anxieties of more than four years of war, partly owing to the present house shortage and resulting overcrowding. Present conditions are thus in some respects not unfavourable to dissemination of the disease, and have not been counterbalanced by advances in wages and the relatively increased prosperity of the working class. And as they cannot be very materially improved in the immediate future, the problem of the prevention and treatment of tuberculosis will remain a particularly pressing one for some years at least.

It is unnecessary to deal with the question of the well-to-do patient, for comparatively few difficulties arise in his case. The real problem centres, as it always has centred, round the phthisical working-man, and is especially insistent at present, for it is his class which is principally affected by the overcrowding that appears to be almost universal. It is difficult to gauge the precise extent of the evil, but there appears to be no doubt that it is very general. Phthisical patients, when urged to have their own beds in their own rooms, have replied in numerous instances that they cannot do so owing to lack of accommodation. Quite recently I came across a family of ten persons who lived in a house containing three rooms. The two bedrooms were quite small, and each possessed one window. Seven children slept in one, and the parents and the baby in the other. This may be an extreme case, but it appears to be symptomatic of what, it is to be hoped in a lesser degree, is going on everywhere.

Unfortunately, present conditions render the solution of the problem more difficult than ever. All are agreed concerning the lines along which the campaign must be conducted—more sanatoria for early cases, shorter hours of

work, additional accommodation for advanced cases, after-care colonies, improved housing conditions, clean (non-tuberculous) milk, etc. The Milk and Dairies Order, 1915, might be put into force at once, but to carry out all these other measures on a scale sufficiently comprehensive to solve the tuberculosis problem would require prodigious sums of money and is not practical politics. I do not know what the cost would be even to provide the additional hospital and sanatorium accommodation that is necessary, but it is gravely open to doubt whether a tithe of the necessary funds is likely to be forthcoming in the near future. It would doubtless be cheaper in the end to spend the money now, but even if it could be found it is questionable whether the electors would give their consent. The one insistent demand of the moment is for the most rigid economy in any and every department. I do not wish in any way to belittle the utility, nay the necessity, of the measures which have just been enumerated, still less to suggest that efforts to obtain them should be relaxed—my sole object is to point out that there appears to be little chance of their being called into existence on a really large scale in the near future.

But even if there exists but a remote chance of obtaining all that is really needed for a long time to come, it must be borne in mind that nothing ever will be accomplished without the whole-hearted co-operation of the public. Public opinion is the final court of appeal. The electors, in the end, always get what they want, in other words, what they deserve. If they absolutely insisted upon spending large sums of money upon measures designed to improve the public health, and were willing to make the necessary sacrifices, financial and other, one of the principal difficulties of the moment would be swept away. The tuberculosis problem in particular is a social one—economic rather than medical—and if it is to be solved at all, it will not be by means of the official machinery only, but by the public itself, guided by those who are qualified to speak with authority upon the measures that are really necessary.

It seems, therefore, that education of the general public regarding health questions of all kinds is not only a pressing need, but the first step towards solution of the tuberculosis problem, so that public opinion may ultimately not only be on the side of progress, but

*A paper read before the Midland Branch of the Society on February 3rd, 1921.

absolutely insist upon it, be the cost what it may. Much has certainly been accomplished, but more remains to be done. The bulk of the people derive their information from the newspapers, and the latter are not always well-informed. That the danger from this quarter is a very real one was pointed out in an article entitled "The Public Press and the Public Health," which appeared in the *British Medical Journal* of December 4th last. It was stated therein:—" . . . the columns of some of our leading lay contemporaries have been opened to the expression of opinions and the enunciation of criticisms which we are compelled to conclude have been biased by considerations having as their basis political predilections rather than a sincere desire for the advancement of public health and social welfare." And a little lower down it said:—"The assertions that have recently appeared with regard to, for instance, sanatorium treatment, the appointment by the Ministry of Health of referees, the size of insurance practices, and hospitals are misleading, and in some cases are so wide of the truth that they can only be termed ill-informed and irresponsible."

The importance of educating the less informed sections of the public concerning the real facts of the case, cannot therefore be overestimated. This applies not only to tuberculosis in particular, but to public health in general. It is, however, not so easy to decide exactly what measures are necessary, especially if they must be taken in the face of misrepresentation from part of the lay press. At the same time, I hope to offend no one if I express the opinion that, apart from the Ministry of Health, there is no body more competent to conduct the campaign than this Society.

Turning now to existing facilities for the treatment of phthisis, it is admitted that open-air, that is to say, sanatorium treatment, holds out better prospects, as a rule, than any other form of therapeutics. Unfortunately, however, it often proves of comparatively little advantage to the working-class patient. He may, and very often does, improve markedly while he is there, but he frequently tends to go downhill soon after he has left, and there are few things more depressing than to follow cases of this kind in dispensaries and out-patient departments after their discharge. Indeed, unless the disease is in a very early stage, it is almost useless to send a working-man to a sanatorium in the hope of permanently arrest-

ing the disease. This, however, is not the fault of sanatorium treatment, but of the surroundings and conditions to which he returns. The bare statement, often made, that sanatorium treatment is a failure, therefore requires considerable qualification. The truth is that the conditions of which a sanatorium is only one—necessary for the successful treatment of phthisis have hitherto not been forthcoming on a scale sufficiently large to enable a final opinion to be formed. Until they have been given a fair trial and found wanting, it is premature to speak of failure. The importance of establishing after-care colonies and similar institutions need not therefore be insisted upon.

The generally accepted rule is that cases with few and early signs are suitable for sanatoria, that those with many and advanced signs are unsuitable, but the facts remain, that many cases of the former type go downhill rapidly after admission, in spite of everything that can be done, and that many of the latter are very stable and do remarkably well under the most adverse home conditions. To recommend domiciliary treatment is, however, equivalent to admitting in the majority of cases that the resources of civilisation are exhausted, and hence in a doubtful case, there is a natural tendency to give the patient the benefit of the doubt. Even with strictly early cases, the difficulties of prognosis are well-nigh insuperable, for there seems to be no method by means of which early cases which will do well can be differentiated from those which are equally early regarding extent of disease, but will soon end fatally. Hence, a number of cases are admitted which prove to be unsuitable. In fact, to send a patient to a sanatorium is always an experiment, the outcome of which cannot be foreseen.

If the number of available beds were unlimited, this would be a matter of small moment. But the supply is restricted. The ratio between the number of beds and the number of cases of phthisis in this country is, in all probability, approximately as 1.10. This means, in round numbers, that for every patient in a sanatorium, nine patients remain outside.

Nevertheless, if sanatorium treatment fails to arrest the disease in many cases, it is of invaluable benefit in so far as it teaches a patient how to live. A patient who has been in a sanatorium even for a short time, is far easier and more satisfactory to treat under dispensary and domiciliary conditions than one who

has not. He knows what to do and how to do it, having been equipped with the training and knowledge necessary to enable him to do the best for himself and those around him. Tuberculous patients are, as a rule, singularly responsive to tactful training of this kind. The personal factor is of course a most important one, for some patients will do absolutely nothing for themselves and are mentally incapable of making the necessary effort. But these cases are relatively few. The practice of holding periodical lectures to the patients in sanatoria thus appears to be in every way desirable.

Open-air treatment, even if it does not arrest the disease, is thus a most important asset from the point of view of prevention. A single instance of its efficacy will suffice. Trained patients, that is to say, those who have been in a sanatorium, rarely cough promiscuously about the dispensary, at all events under the eye of the Medical Officer, whereas those who have not been, do so freely and quite openly. For some months past I have tried the experiment of keeping a supply of paper handkerchiefs at the dispensaries for patients to hold in front of their mouths when asked to cough during auscultation. The object lesson is valuable, and the result has been interesting and instructive. Untrained patients with tuberculous disease even of long standing, have, as a rule, no idea what to do with the handkerchief at all. When told, they either hold it twelve inches away from their mouths, or use it as a sputum flask. When they leave the room, they often as not throw it in the paper-basket, deposit it on the mantelpiece, or carefully leave it on my table. Trained patients, on the other hand, rarely need to be given a handkerchief, for they usually have their own ready. If they do need to be given one, they almost invariably drop it in the fire when they go. I do not suggest, of course, that coughing without holding anything in front of the mouth is the sole or even most important manner in which the disease is spread by open cases—the crucial factor in infection appears to be individual susceptibility—but that it ought to be avoided as far as possible is beyond question.

If the value of sanatorium treatment, from the point of view of prevention, be admitted, it necessarily follows that the present system of utilising the available accommodation is not well adapted to the same end, and this most

seriously complicates the problem. Other things being equal, the untrained patient with advanced disease is, generally speaking, far more dangerous than the untrained one with relatively early mischief. But the comparatively innocuous early case receives the benefit of sanatorium treatment and consequent training; the advanced case is recommended domiciliary treatment, and gets no institutional treatment at all if he is seen for the first time when the disease has reached the third stage. As long as the number of available beds for tuberculosis cases is restricted, the claims of treatment on the one hand, and prevention on the other are therefore diametrically opposed. If successful treatment is the sole consideration, the beds should be used only for very early cases which can probably be permanently arrested. But if prevention is to be the paramount object there is no alternative but to rush to the opposite extreme, discharge every early case forthwith, and fill up the beds with advanced cases. That this is the real function of a sanatorium is seriously upheld in some medical quarters. At all events, a letter from a medical practitioner is occasionally sent up with an advanced case to a dispensary, requesting the patient's admission to a sanatorium on the ground that he ought to be segregated.

The ideal remedy is obvious enough—the provision of hospitals for advanced cases. That this is an urgent need is admitted; whether it will finally dispose of the problem remains to be seen. If these hospitals acquire the reputation of being homes for the dying, few patients will consent to enter them. This difficulty, as has been pointed out by Dr. Hyslop Thomson, could be surmounted by making the patient realise that the hospitals are part of the tuberculosis scheme, and that cases will be transferred to a sanatorium when they become quiescent. But patients generally know when they are doing badly; to die at home is the final ambition of the majority, and short of compulsory powers, it would be impossible to prevent them leaving. These, however, are quite minor objections, which must not be allowed to cloud the main issue.

Unfortunately, the tuberculosis schemes of many committees were in an early stage when the war broke out, and it will take a long time to complete them. In the meantime, we must accept the situation, however reluctantly, and it behoves us, therefore, carefully to scrutinise

existing facilities in order to make certain that we are utilizing them to the best possible advantage. What then, is the best policy to adopt at the present moment?

In the first place it must be frankly confessed that the most pressing problem of all, that of the bed-ridden patient in a slum, appears to be insoluble. These cases are a perpetual problem and a puzzle: they cannot be adequately looked after in many instances at home; they refuse to enter the infirmary, and they are serious potential sources of infection. It has been suggested to set apart wards in general hospitals, to build special hospitals, and so on, but it is a matter of relative indifference where the beds are situated provided they are in some institution to which patients will consent to go. The need is so urgent that it may well claim precedence over all other measures comprised in a tuberculosis scheme.

In the second place, it seems very desirable that, in allocating the houses now being built, preference be given as far as possible to families which include cases of tuberculosis, especially open cases. Much has been accomplished in this direction, but its extension would be welcome.

In the third, serious consideration should be given to the suggestion which was put forward by the medical officers to the Warwickshire and Coventry Joint Committee for Tuberculosis in their report to the After-Care Committee in October, 1918. The suggestion was to restrict sanatorium treatment to those cases in which it is reasonably likely that a permanent return to efficient health may be expected, that is to say, to admit few cases but to extend the time of stay. The cases admitted under a scheme of this kind would be, generally speaking, those who had not passed beyond stage one of the Turban-Gerhardt classification. From the point of view of successful treatment, the plan has everything to commend it. It would, however, involve discharging all patients who proved to be unsuitable, and, furthermore domiciliary or dispensary treatment both for these and for all other cases which probably can be arrested only temporarily, with the additional disadvantage that these cases would receive no sanatorium training. It is impossible to train a patient at a dispensary as adequately as at an institution—distributing leaflets and telling him what to do is a poor substitute for sending him where he is compelled to do it. It seems, therefore, worthy

of consideration whether it would not be practicable to set aside a certain number of beds for the purpose of giving these cases a course of intensive training in how to live and how to take precautions, to follow this up at the dispensaries, and, finally, to extend very considerably the provision of shelters.

The number of patients which could be admitted would be comparatively small, but if only ten beds were set aside for the purpose and each patient were admitted for about a month, one hundred or one hundred and twenty could be admitted in a year. The test for admission under a scheme of this kind would be home conditions, the cases to select being open cases who were living in surroundings such as overcrowded dwellings, in which the need of precautions was greatest. Prevention under a scheme of this kind would be furthered more than treatment, but the cases admitted would be those which could be arrested only temporarily, if at all, and if they cannot be cured the next best thing is to teach them how to do the best for themselves and to avoid infecting others. Not all adult patients—sending children would be useless—could be admitted, so it would in any case be desirable to utilise the dispensaries as far as possible for a similar purpose.

Regarding the latter, the most practicable proposition appears to be the adoption of the so-called "class" method which is being carried out by the Royal Edward Institution at Montreal. Its introduction into England in a modified form was advocated by Dr. J. G. Adami at the recent Liverpool Conference. Under conditions obtaining here, it could probably be worked best in connection with the tuberculosis dispensaries, and would be merely an expansion of dispensary treatment, comprising the holding of meetings at fixed times, the discussion of difficulties in the way of treatment, lecturing the patients, and the provision of shelters. It has been found in Montreal that meetings of this kind stimulate the patients to carry out their instructions and to try to get well.

Depending upon the pattern and quality selected, shelters are now quoted at £14 to £20. The cost, however, might be reduced by having them made at sanatoria by those patients who are sufficiently well for the work. Not every patient has the accommodation for a shelter, and in crowded cities shelters would probably prove of little advantage, but in small towns

their provision could perhaps be extended with benefit. There is no necessity for a patient to have his shelter in the back-garden, and waste land in the vicinity might be used for the purpose. By this means it would be possible to relieve over-crowding very considerably and thus serve the double function of prevention and treatment.

Under present circumstances, it seems then that it is necessary, more than ever, to rely on the patients themselves both for treatment and prevention, and in the meantime to trust to public opinion to secure not only the greatly increased accommodation which is desirable, but also such reforms as shorter hours of work, and so on. In conclusion, I need scarcely point out that I have attempted to discuss the situation, not as all hope that it will be in the future, but only as it actually stands at the present moment.

PREVENTING THE PREVENTION OF V.D.

By

ETTIE A. ROUT (late Hon. Sec. New Zealand Volunteer Sisters).

The Venereal Disease Act, 1917, Section 2 (2) provides that: "*A person shall not hold out or recommend to the Public by any notice or advertisement, or by any written or printed papers or handbills, or by any label or words written or printed, affixed to or delivered with . . . medicaments for the prevention, cure, or relief of any venereal disease: provided that nothing in this Section shall apply to any advertisement, notification, announcement, recommendation, or holding out, made or published by any local or public authority,*" etc.

This Section is headed "*Restriction on Advertisements, etc.*"; the preceding Sections are headed "*Prevention of the Treatment of Venereal Disease otherwise than by Duly Qualified Persons*" (medical practitioners), and are obviously and honestly intended to prevent quackery. Section 2 (2) is neither obvious nor honest, nor intended to be. Its main purpose is to "put the wind up" the chemists. At first some of them thought they must not sell calomel tubes, e.g., because these were used for the prevention of syphilis; others thought they could sell calomel tubes provided the customer came and asked for calomel tubes specifically without saying what he intended to do with them; many chemists were convinced they were

forbidden by this law to tell an enquiring customer that calomel ointment was useful as a preventive of syphilis, and then sell it to him. These are some of the unsettled questions arising under Section 2 (2):—

(1) Is it an offence for a person—

- (a) To sell disinfectants as requested by customers for the prevention of venereal infection?
- (b) To recommend verbally to customers suitable disinfectants specifically as a protection against these diseases?
- (c) To give verbal directions as to the proper application of disinfectants as a protection against these diseases?
- (d) To hold out or recommend *Separately from the Disinfectants* printed directions such as those now issued by the S.P.V.D.?
- (e) To hold out or recommend printed directions made and published by any local authority, such as those issued at Portsmouth and elsewhere, accompanied by the disinfectants?

- (2) Is it lawful for any local or public authority to authorise the sale of calomel ointment tubes, etc.: (a) with printed directions, (b) without printed directions, affixed to or delivered with the tubes, etc.?
- (3) If a chemist has obtained the consent of a municipal or local authority to sell authorised disinfectants accompanied by authorised directions, can that chemist then be prosecuted under Section 2 (2)?

These questions were recently submitted to the Attorney-General for a ruling. The ruling was refused in the following letter:—

"6th June, 1921.

Dear Sir,

I am desired by the Attorney-General to acknowledge the receipt of your letter dated 1st inst., and to say that he fears it is not within his province to advise your committee upon questions of law.

Yours very truly,

(Signed) EDWARD HALL.

H. Wansey Bayly, Esq., M.C., M.A."

(Hon. Sec. S.P.V.D.)

Last year a sample of the military directions and disinfectants issued for the prevention of v.d. was submitted by me to the Minister of Health for approval and authorisation for civilian use. The Minister replied that he had

"No authority to decide whether any particular Notice, Advertisement, Label, etc., infringes the provisions of the V.D. Act, 1917."

This matter came up for discussion when I was giving evidence before the Select Committee (Criminal Law Amendments) in the House of Lords last October. The G.O.C. of N.Z.H.Q. had handed over to me some 10,000 disinfecting packets for sale to civilians for the benefit of the S.P.V.D., I explained, and when I tried to sell these disinfectants in conformity with the legal machinery set up by the V.D. Act, 1917, the Ministry of Health put a chock into the wheels of that machinery to prevent it going at all. The following is an extract from my evidence (under examination by Lord Muir Mackenzie):—

(1876) "What do you desire?—I want the directions kept in as they are, because the packet will be misused otherwise. . . . The Ministry of Health would not give authority to sell them when we applied for it."

(1877) "You propose that we should put in words into the Bill that would practically over-rule the decision of the Ministry of Health?—No. The Act of Parliament should be carried out. I think the Ministry of Health is overruling Parliament."

(1878) "I do not see that?—Parliament has set up certain machinery which says that no medicaments shall be sold for the prevention, etc., but provided that authority is given that may be done. From whom is that authority to come? Presumably from the Ministry of Health, but when we go to the Ministry of Health they refuse authority, and therefore the Act becomes null and void."

(1879) "I do not see that at all?—Well, my Lord, it becomes inoperative."

(1880) "Authority is given to the Ministry of Health to decide on the question, and if they decide one way it does not follow that the Act of Parliament is rendered null and void?—But, my Lord, they did not decide at all."

The Ministerial denial of "authority to decide" was then produced wherein the Minister claimed that "This question would be one for decision by a court of law if the matter were brought before them," and later Lord Muir Mackenzie suggested tentatively that the

Committee should "so . . . alter the Act as to make it quite clear that they (the Ministry of Health) had the authority." But actually what the Committee did unanimously was shelve the responsibility by referring the matter of prevention back to Parliament. And what has Parliament done? Given it a miss in baulk! So at a given signal the machine has remained exactly where it was! So far 1917-1921.

The following extracts from evidence publicly given by the N.C.C.V.D., the S.P.V.D., the National Birth-Rate Commission, and the Ministry of Health, may be usefully studied here:—

1. *National Council*: Before Joint Select Committee on Criminal Law Amendment Bills (House of Lords, 1920):

By the President (Lord Gorell):

(2638) "I am not in favour of giving them (prophylactics) to the general public to make use of them as they please."

(2645) "Would you prevent a chemist or any other person from supplying a drug the effect of which would be to prevent venereal disease?—Certainly not."

(2646) "I think that the whole point is not the prevention of the sale of the drug, but the holding out of or recommending by advertisement or public notice."

By the Secretary (Mrs. Gotto):

(650) "Is your Council opposed to the sale of 'packets'?—Not to their sale, but to the public advertisement, because that would confuse the general public."

(651) "Supposing a man went to a chemist's shop and said: 'What is a good thing to prevent my having venereal disease?' Would you prevent the chemist saying, 'Permanganate of potash'?—That is allowed now. We do not suggest it should be altered. It is advertisement which brings in the whole quack difficulty at once."

2. *S.P.V.D.*: At the first Annual Meeting of this Society, the President said:

"I went the other day to a very well-known chemist in the West end of London and asked him whether he could supply me with some Calomel Cream Ointment, 33 per cent, and a solution of 1/1000 pot. permang., and he said, 'Yes.' I said 'Supposing I had come into the shop and said I was going to ask for these things with a view to averting venereal disease, or supposing I had

asked for anything that would destroy the micro-organisms of venereal disease - - ?' He said then that he could not legally supply me with them."

Later a deputation waited upon the Minister of Health to present a motion passed by this meeting calling upon

"The Ministry of Health and upon Local Authorities to instruct all qualified chemists to sell such means of immediate self-disinfection against V.D. as may be approved from time to time by the Ministry of Health or by medical officers of Health."

The Ministry of Health refused to act on this motion, on the ground that the public "would suggest that the Government was really encouraging vice."

Before the Select Committee and elsewhere representatives of the S.P.V.D. have contended that disinfectants accompanied by directions should be on sale, and the National Birth-Rate Commission in their Finding made the following references to this evidence:—

"the onus of keeping free from infection should fall on the individual who exposes himself to risk by promiscuous intercourse,"

and held also

"that any administrative or legal difficulty that may at present prevent individuals from purchasing disinfectants on their own initiative, as a protection against venereal disease, should be removed, and that the Section of the Act dealing with the matter should be rendered more explicit and amended if necessary."

3. *Ministry of Health*: Mr. A. B. MacLachlan (with Colonel L. W. Harrison present) gave the following evidence before the Joint Select Committee:—

(For the sake of convenience this evidence has been condensed a little in one or two places, but the witness's exact words have been quoted as indicated.)

(400) "You do not think that the provisions of this section would apply to the campaign which is associated with the name of Lord Willoughby de Broke?—I think it is extraordinarily difficult to express any opinion upon that point."

(401) "Whether it would or not?—Yes. I think the question could only arise really in a practical form as regards the

instructions which I understand that Society are circulating for personal disinfection. . ."

(402) "With the approval of your Ministry?—No."

(404) "In connection with any proper advertisements of this kind there is always a loophole that the sanction of the Ministry may be applied for," said this witness.

(Note: It was applied for by me in 1920 and refused on the ground that the Minister had "no authority to decide," and Mr. MacLachlan himself signed this refusal!)

(413) "I certainly think that speeches or lectures by competent and responsible people should be safeguarded if there is any danger of speeches or lectures of that kind coming within the prohibition."

(415) "What do you call a competent or responsible person?—It is no doubt difficult to say."

(416) "But you cannot define what you mean by that?—No, my own personal opinion is that the clause should be left as it is."

(418) . . . "we want your view?—I am afraid I cannot carry it beyond that. I should be very sorry to have to draft the proviso."

This same official gave evidence before the National Birth-Rate Commission as follows:—

"There is no reason why a municipality should not do as it likes. The approval of the Ministry of Health is only necessary when it is asked to pay part of the expense (p. 216-217 of V.D. Prevention Report) . . . I think it desirable to make it quite clear that the Ministry of Health is not a Department which does these things itself (!). It is not comparable to the War Office. It has to act through the local authorities, and it is necessary to obtain the co-operation of local authorities in any scheme of that kind" (p. 218).

In Question (401), quoted above, the Ministry of Health representative raises the matter of the S.P.V.D. printed Directions which have been published and circulated for over eighteen months. They begin as follows:—

"PREVENTION OF VENEREAL DISEASE BY IMMEDIATE SELF-DISINFECTION."

"It is obvious that the best way of avoiding Venereal Disease is to abstain from promiscuous sexual intercourse. Venereal Disease can be prevented with almost complete certainty if the right precautions be taken in time. At first the microbes which cause the disease are all on the surface, and can be destroyed if immediate action be taken. The means, however, are useless unless carefully and correctly carried out."

Then follow detailed directions as to "Materials Required," and "Methods of Application." There are Directions for Men and Directions for Women, both of which do exactly what the Act forbids, viz., they

"Hold out or recommend to the Public by any Notice or Advertisement Medicaments for the prevention of any Venereal Disease."

But neither the National Council nor the Ministry of Health have dared to prosecute the S.P.V.D. for failing to join the conspiracy of suppression, although when the Directions were first issued dire threats were breathed: in fact, the S.P.V.D. was told definitely that the Ministry would prosecute, and replied: "Let them, That is just what we want."

Into this sea of doubt the Ministry of Health plunged some months ago, and at last, on May 31st, 1921, came gasping to the surface with the following "explanation" in their mouth:—

"It is understood that questions have arisen as to the precise effect of Section 2 (2) of the Venereal Disease Act, 1917, and the Minister considers it desirable to state that, although he is not empowered to give an authoritative interpretation (*who is?*) of the provisions of any Act of Parliament, he is advised that a chemist does not commit an offence by selling any substances *for which he is asked*, merely because those substances are capable of being used as disinfectants against venereal diseases, *so long as the substances are not sold accompanied by any written or printed recommendations or instructions as to use.*"*

*Presumably "any substances" may be sold accompanied by any verbal recommendations or instructions as to use, no matter how inaccurate or misleading! Wont the quacks be glad—there will be no documentary evidence against them at all! And what would really happen if chemists advertised "Calomel Ointment" or "Sanitary Packets" without advertising their blood-relationship to the Gonococcus and the Spirochaete!

And yet this amazing document, Public Health 13a, contains the statement that:—

"It is the duty of all individuals who have incurred, or think they have incurred, the risk of contracting disease, to cleanse themselves thoroughly and immediately, *and thereby diminish the risk.*"

Then we have the National Council's officially approved memo, which says that "definite and personal tuition" is the essential thing. Individual instruction may be best, but that does not obliterate the desirability and necessity of the written word *in addition*. The objections raised to issuing printed directions, viz., that this would appear to "encourage vice" or "confuse the general public"—are not the real objections at all. No responsible man or woman seriously supposes that "immorality" will be "encouraged" by telling the people verbally or literally how dangerous it is, and how careful must be the precautions taken to prevent disease; and it is of course fantastic to suggest that either calomel ointment or floor polish will be better applied if sold to the public without suitable printed directions. No; persons who put up these vain arguments are not trying to ensure cleanliness or induce clarity of thought: they are simply trying to dodge an unpleasant responsibility, this dodging due partly to moral cowardice and partly to mental confusion: they want to prevent sin, but they don't want to prevent the poisoning of the sinner. They have failed to realise that syphilis and gonorrhoea are not "immoral" diseases, but simply "dirt" diseases, which contaminate the innocent and the guilty alike, just as any other contagious disease—which indeed often hit the innocent and miss the guilty. The public is beginning to realise this, and is demanding protection, but that protection is refused by the Ministry of Health and by its Publicity Bureau (the National Council), and only the Society for the Prevention of Venereal Disease has had the courage to defy the hidden and illegal attempt so to subvert Section 2 (2) of the V.D. Act as to deprive the general public of disinfectants with directions for the prevention of disease.

Now this therefore is the position at present in the Year of Grace 1921 in the Capital City of the Empire on which the Sun Never Sets:—

(1) It has been officially declared "that a chemist does not commit an offence by selling any substances for which he is

- asked" merely because they are to be used for preventing infection;
- (2) It has been officially left in doubt whether a chemist may tell an enquiring customer what he ought to buy for preventing infection;
- (3) It has been officially declared to be an offence if the disinfectants are sold "accompanied by written or printed recommendations or instructions as to use";
- (4) It has been officially left in doubt whether a person or body of persons will be prosecuted for printing or publishing or holding out directions for the prevention of venereal infection separately from the medicaments recommended in those directions.

But the Society for the Prevention of Venereal Disease feel that the public should be informed officially what disinfectants are suitable for preventing venereal infection: that it is both dangerous and unscientific for the Ministry of Health to tell chemists they may sell "any substances" for the prevention of venereal infection, and they are therefore going to present to the Ministry of Health the following motion passed at the 2nd Annual Meeting held on June 6th:—

"That the S.P.V.D. take immediate steps to apply formally to the Ministry of Health for their sanction under the V.D. Act, 1917, for the preparation and sale, under the supervision and control of the S.P.V.D., of the materials for Immediate Self-Disinfection recommended by them."

Thus the functions of the Ministry of Health, so far as V.D. Prevention is concerned, would be taken over by the S.P.V.D., because: "*The Ministry of Health is not a department which does these things itself!*"

But is it any use consulting a Department that is in such a continual state of indecent panic and furious irresponsibility? A Department that knows enough about disinfection to be dangerous and not enough to be sanitary—that admits disinfectants will "diminish the risk" of disease, but won't name the right disinfectants nor issue any instructions? You can't do anything with men who rush to the deepest dug-out, or scale for the horizon, directly you suggest going over the top! But there is no use quarrelling perpetually with them: I am quite willing to bury my hatchet—in the head of those who are trying to prevent

the prevention of disease! The thing to do now is to get some local authority to endorse formally the Directions already published by the S.P.V.D., and to approve formally of the Materials and Modes of Application set forth therein, and then get the S.P.V.D. (and the Society of Medical Officers of Health as well) to inform chemists that these materials and these directions can be sold together as well as separately. As a beginning, I am prepared to sell such disinfectants with such directions and to challenge a prosecution by the Ministry of Health. After that there should be an end to argufying: let us all get on to the job of sexual sanitation—and stop on it!

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

NEWS FROM THE BRANCHES.

NORTH WESTERN BRANCH.

A TUBERCULOSIS SUB-GROUP.

The North Western Tuberculosis Society (with a membership of 61, of whom about half are members of the Society of Medical Officers of Health and the other half of its members are private consultants and medical practitioners who are either ineligible or unwilling to join the Society of Medical Officers of Health) has been approached as to the desirability of becoming a Sub-Group for Tuberculosis Officers within the North Western Branch. As a result of correspondence on the matter a deputation consisting of Dr. H. E. Corbin (President), Drs. Niven, Allen Daley, Morley Mathieson and Joseph was invited to attend a meeting of the Society held in Manchester, on June 8th, to discuss the proposal.

After Dr. Corbin had opened the discussion, Dr. Peyton stated his views on the policy of tuberculosis officers. Dr. Morley Mathieson drew attention to the fact that these views were largely shared by members of the deputation and pointed out that the policy of the tuberculosis officers could be furthered much more easily from within the Society of Medical Officers of Health than from without.

Dr. Jessel (Hon. Secretary N.W. Tuberculosis Society) stated that the new society was becoming a very successful organisation that

catered for the needs of a number of practitioners interested in the clinical aspect of Tuberculosis, and many of whom were not eligible for membership of the Society of Medical Officers of Health.

His main objection to the scheme was that this group of practitioners would suffer if the Tuberculosis Society went out of existence. Dr. Daley, however, mentioned that many of these clinical workers were now eligible for membership of the Society, and further that as a sub-group had entire control of its own meetings there was nothing to prevent them co-opting or inviting to their clinical discussions anyone they chose.

Dr. Niven expressed the opinion that unity of all branches of Public Health was very important and that there was scope for both clinical and administrative workers in tuberculosis, but thought that the highest posts in the Public Health Service should be open to the most able man whatever branch of the work he came from. Dr. Sutherland (President N.W. Tuberculosis Society) considered that the Society of Medical Officers of Health could always refer matters to his Society if they wanted its views, and the fact that two bodies were voicing the opinions of tuberculosis officers did not necessarily weaken the position of either.

In conclusion, Dr. Corbin reiterated the advantages to be gained by such a fusion, and the essential need for unity at the present time, and asked that the Society should seriously consider the matter and notify the branch of their decision as soon as possible.

Since the meeting a communication has been sent asking the Committee of the branch to receive a deputation of members of the Committee of the North West Tuberculosis Society with a view to clearing up certain ambiguous points and if possible of finding a solution that would be mutually satisfactory. This conference will be arranged early in the autumn.

WEST OF ENGLAND BRANCH.

I.—THE PRESIDENT-ELECT.

At the last meeting of the Branch, held at Gloucester, a very cordial invitation was given to Dr. Thomas Dunlop to become President of the Branch for 1921-22. Dr. Dunlop has been

Medical Officer of Health and School Medical Officer at Torquay for some years, and was previously Medical Officer of Health to the Aldershot Urban District Council. He is a graduate of the University of Edinburgh and is the author of papers on water supply and on the bacteriology of diphtheria.

It was also reported that Dr. Walford, of Cardiff, who had been asked earlier in the year to allow the Branch to nominate him for the Presidency of the Society had felt unable to accede to the request on this occasion.

II.—THE FORMATION OF GROUPS.

On the same occasion the question of forming groups or sub-groups within the Branch was discussed at some length. The decision arrived at was that the present moment is inopportune for taking any action in the matter. In these days difficulties of locomotion press heavily on a Branch covering a relatively thinly populated area extending from Hereford to Penzance. Meetings inevitably tend to become sectional in a geographical rather than a professional sense, and further subdivision might make them too small to be profitable. It is intended, however, to raise the point again in due course. If any members have suggestions to make will they please communicate with the Hon. Secretary.

III.—THE COST OF MATERNITY HOMES.

In these times of financial stress it may be of interest to give a few figures relating to a City Maternity Home in the West of England. The Home is worked by the District Nursing Association, but the whole of the expenses are borne by the Local Authority, including cost of administration, salaries, rent, food, and so forth. There are nominally five beds, for a population of 70,000. During the year ending 31st March, 1921, the number of days' treatment given was 1828 as compared with 1427 in the previous twelve months. The total cost (excluding medical attendance which has to be provided either by the patient or under Section 14 of the Midwives Act of 1918) was £918, instead of £724. Receipts from patients, however, were £460 as compared with £316. The total cost per patient per week in 1920-21 was £3 10s. 4d., or slightly less than in 1919-20, when it was £3 11s. 1d.; but the portion recovered from

patients had increased from £1 10s. 5d. to £1 15s. 3d. After making allowance for a 50% government grant the net cost to the Authority was equivalent to a rate of rather less than one sixth of a penny.

IV.—FUTURE MEETINGS.

It is hoped that the next meeting of the Branch will be at Winsley Sanatorium in September. This is a delightfully situated Institution on the borders of Wiltshire and Somerset, with about 120 beds. The grounds and buildings will be open to inspection, and Dr. C. E. S. Flemming has promised to introduce for discussion the subject of the "Dawson Report." Full particulars will be sent to members in due course. The first meeting of the 1921-22 session will probably be held in South Devon in October.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

COUNCIL MEETING.

A meeting of the Council was held at the house of the Society on Friday, June 15th, 1921. The President (Lt.-Col. F. E. Fremantle, M.P.), was in the chair, and there were present Drs. G. F. Buchan, Charles Porter, E. H. Snell, H. Gibbons Ward, H. Kerr, J. Cates, D. C. Kirkhope, H. A. Ellis, R. W. Stocks, R. H. Wilshaw, W. J. Howarth, C. Sanders and Prof. H. R. Kenwood.

The minutes of the last meeting having been approved and signed, letters of apology were received from Drs. Wheatley, Herbert Jones, Blackett, Lyster, Chalmers, Clements, Barlow and W. B. Hill.

Correspondence.—(1) From the Ministry of Health sanctioning the appointment of an additional representative of the Society on the Sanitary Inspectors' Examination Board. *Resolved*: That the Metropolitan Branch of the Society be invited to submit the name of a fit representative for nomination by the Council.

(2) From Sir George Newman asking the Council to send a deputation of medical officers of health serving in various types of areas for further discussion of the proposals in regard to annual reports submitted to him by representatives of the Society on March 11th, 1921. *Resolved*: That the following form the

deputation: Dr. R. A. Lyster (Counties); Dr. R. Veitch Clark (County Boroughs); Dr. G. F. Buchan (Urban Districts); Dr. Herbert Jones (Combined Districts); Prof. H. R. Kenwood (Metropolitan Boroughs); Dr. T. Ridley Bailey (Part-time Urban Districts), and Dr. Dr. H. E. May (Part-time Rural Districts).

(3) From the West of England Branch drawing attention to an advertisement for an assistant R.M.O. at a Tuberculosis Sanatorium, offering a salary of £250, with apartments, board and lodging. *Resolved*: That the matter should be referred to the Salaries Committee.

(4) From the British Medical Association, submitting the report of their Medico-Sociological Committee on the Value of Maternity and Child Welfare Work in Relation to the Reduction of Infant Mortality. *Resolved*: That the B.M.A. be thanked for this useful report, with the suggestion that the Society would welcome any opportunity of nominating direct representatives to Committees of the Association engaged in the investigation of matters where the special experience of the Public Health Service might be of value.

(5) From the School Medical Group conveying the following resolution: "That where practicable all school medical officers and assistant school medical officers shall have the usual school holidays, and in any case shall have a minimum of four weeks' holiday." The resolution was referred to the Salaries Committee for consideration when drafting the terms and conditions of employment to be included in the schedule for submission to the Whitley Council.

(6) From the Home Office inviting the Society to give evidence before the Departmental Committee on Street Trading in the Metropolitan. Referred to the Metropolitan Branch.

(7) From the Ministry of Health in reply to representations from the Society relative to Section (5) of Circular 190, as follows:—

As the Tuberculosis Officers are officers of the Councils, their remuneration is primarily a matter for those Councils, and the Minister is not in a position to lay down a requirement that the remuneration of Tuberculosis Officers should be increased by the amount of the payments referred to in your letter irrespective of the amount of the remuneration at present received by the particular Tuberculosis Officer from the Council which has engaged his time. It is for each Council to consider what salary constitutes

an adequate remuneration for the total services to be performed by the Tuberculosis Officer.

(8) From the Ministry of Health stating that the proposal of the Society regarding sufficient supplies of copies of circulars, memoranda, etc., for distribution by medical officers of health to the members of their staffs concerned with the subject in question, was found to be impracticable. (See Council Report, *Public Health*, July, 1921, p. 197, col. 1.) After some discussion it was agreed that further suggestions in this connection should be conveyed to Sir George Newman on the occasion of his next conference with representatives of the Council.

(9) From the National Council for Combating Venereal Diseases, asking the support of the Society in securing parliamentary time for the passing of certain amendments to the Merchant Shipping Act during the present session. *Resolved*: That the following resolutions be sent to the Prime Minister, the President of the Board of Trade and the Minister of Health, viz:—(a) The Society of Medical Officers of Health urge the Government to give Parliamentary time this Session to enable Clause 34 of the Merchant Shipping Act to be amended in the interests of Public Health. (b) In view of the penalties imposed on British seafarers suffering from venereal diseases at the present time, the Society of Medical Officers of Health urge that the Merchant Shipping Act, 1906, Clause 34, be amended, and in future those suffering from these diseases shall not be penalised.

(10) From Sir George Newman stating that the Ministry of Health and the Board of Education would gladly avail themselves of the assistance of the Society if it was decided to make any substantial modifications in school medical inspection cards and schedules.

Representations by Groups.—Dr. Cates moved: "That when Groups of the Society desire the Council to bring matters to the notice of Government Departments or public bodies, the Council shall forward such representations (a) as embodying the opinions of the Society, or (b) as expressing the opinions of the Group only, or (c) with a definite statement that the views expressed would not be endorsed by the Society as a whole." The motion was seconded, but after discussion Dr. Cates withdrew his proposal and it was *resolved*: That when the Council feel it is undesirable to bring representations of Groups to the notice of Gov-

ernment Departments or public bodies, the matter should be the subject of a conference between representatives of the Council and the Group concerned.

Sessional Programme, 1921-22.—It was decided that the President-Elect and the Officers of the Society should arrange the sessional programme for 1921-22.

Annual Dinner.—The President-Elect, Dr. F. J. Allen, and the Executive Secretary were appointed as the committee to make all arrangements for the annual dinner, to be held on Friday, October 21st.

The Training and Duties of Health Visitors.—After discussion of the report submitted by the special Committee appointed to consider this subject, the Committee were asked to reconsider their recommendations after consultation with representatives of the Royal Sanitary Institute. Dr. Harold Kerr was co-opted a member of the committee.

Representation of Groups on the Council.—Dr. G. F. Buchan submitted proposals for increasing the representation of Groups on the Council. Dr. Ward, on behalf of the Midland Branch, reported that members were not satisfied with their status under the articles of association. It was agreed that the matter should be further considered by the committee of officers of the Society, with Dr. Gibbons Ward and Dr. H. A. Ellis added, it being desired to secure due representation of members in accordance with the intention of the Council when the articles were last under revision.

Association of Medical Officers of Maternity and Child Welfare Centres.—Dr. Stocks reported that this body had appointed representatives to discuss the advisability of becoming a Group of the Society. It was agreed that such a proposal should be welcomed, and the committee of officers of the Society, with Dr. Stocks, were appointed to meet representatives of the Association if invited to do so.

"Public Health."—Dr. Kirkhope gave notice that at the next meeting of the Council he would draw attention to the attitude of the journal of the Society in relation to the controversy regarding Prophylaxis in venereal diseases. The matter was referred to the Journal Committee appointed on November 21st, 1919.

Institute of State Medicine.—The President having referred to the proposals of the Post-Graduate Medical Committee of the Ministry of Health for the creation of an Institute of State Medicine in London, it was agreed that the Society should offer the Ministry cordial co-operation in the organisation of such a scheme. It was left to the President and the Executive Secretary to convey this intimation to the Ministry.

The Summer Time Act.—The President reported an enquiry from the National Farmers' Union regarding the effect of the Summer Time Act on the health of infants, young persons and adults. It was agreed that there was not yet sufficient evidence available to justify the Society in expressing an opinion on this matter.

The Parliamentary Medical Committee.—The President reported proposals he had made to Dr. Cox, Medical Secretary of the B.M.A., in connection with the committee of medical members of the House of Commons. It was desirable that medical M.P.'s should have full advantage of the valuable work done by the Medico-Political Committee of the B.M.A. He (the President) also felt that the Medico-Political Committee should be in liaison with the S.M.O.H., as members of the Public Health Services were necessarily alert in regard to proposed legislation. He suggested that the B.M.A. might be willing to co-opt members directly nominated by the Council of the S.M.O.H. for service on the Medico-Political Committee. Periodical conferences should then be arranged between the enlarged Committee and the medical M.P.'s. These proposals met with general acceptance, and the Executive Secretary was directed to convey them to the B.M.A.

The Council then adjourned.

NORTHERN BRANCH.

A meeting of the above branch was held in the Medical Institute, Newcastle-upon-Tyne, on 27th May, 1921. In the absence of the President (Dr. T. Eustace Hill), Dr. Hislop occupied the chair.

The minutes of the last meeting on 22nd April, were read and confirmed, and duly signed by the Chairman.

Summer Meeting. It was decided that alternative proposals be sent out to the members,

with a request that they vote, so that a consensus of opinion might be obtained as to the form the meeting should take. It was further suggested that the party might return to Newcastle in time to have supper together after the outing.

Correspondence. Letters of apology for absence from the President (Dr. Hill) and Drs. F. H. Morison and W. H. Dickinson were read. The Secretary announced that Dr. H. E. Armstrong had sent a message of regret that he was unable to attend. The Secretary read a letter from Dr. Stainthorpe stating that he (Dr. Stainthorpe) was now unable to attend the meetings of the branch owing to his removal to the south. Dr. Stainthorpe further stated that his sight was rapidly failing, and that he might be unable to read at all shortly. The Secretary was instructed to convey to Dr. Stainthorpe the regrets and sympathy of the members of the Branch in his disability.

Two new members having been elected, the discussion on "After Care in relation to Preventive Work," adjourned from the previous meeting, was then continued. A report will appear in the next issue of "Public Health."

SPECIAL FOOD COMMITTEE.

A meeting of this Committee was held at the Hotel Majestic, Folkestone, on June 22nd, 1921, at 6 p.m., and adjourned until later in the evening at the Hotel Metropole. There were present:—Drs. Wheatley (in the chair), J. Robertson, C. Porter, Daley and Howarth. Letters of apology were read from Drs. Orr, Kenwood, Niven and Ellis.

The minutes of the last meeting were read and confirmed.

Arising out of the minutes there was a long discussion on the advisability of sending forward the resolution on dental caries, particularly without any explanatory memorandum. It was finally decided that the Chairman should draw up a memorandum dealing with the reasons why a resolution on the subject should be sent to the Government, and submit the memorandum to each member of the Committee; also that if unanimity as regards this memorandum could not be obtained, it be submitted to a future meeting of the Committee; and finally that if a memorandum be agreed upon it be submitted to the Council of the Society along with the

resolution on dental caries forwarded at the previous meeting.

The question of an enquiry by Dr. Daley into the diet of certain sections of the population for the purpose of determining its sufficiency or insufficiency in the light of our modern knowledge was then discussed and the outlines of a scheme submitted by Dr. Orr was considered. Dr. Daley was asked to prepare a scheme for submission to a future meeting. Dr. Robertson undertook to submit the scheme to Professor Gowland Hopkins and Dr. Orr had said that he would get the observations of Professor Cathcart.

After much discussion the resolution asking the Government to make Food Propaganda a duty of Sanitary Authorities was postponed until the next meeting.

SCHOOL MEDICAL GROUP.

The Annual Meeting of this Group was held in Birmingham on Saturday, 28th May, 1921. The President, Dr. G. A. Auden took the chair. There were also present:—Drs. C. J. Thomas, of the London County Council; L. Kingsford, of Liverpool; H. Herd, of Manchester; A. G. Wilkins, of Stafford C.C.; W. S. Badger, of Wolverhampton; W. H. Jones, of Stafford C.C.; H. Bracey, of Warwickshire; M. B. Andrews, of Worcester; M. Burt, of Birmingham; Eliz. J. Moffett, of Birmingham; B. B. Challis, of Coventry; J. J. Stook, of Birmingham; B. R. Lloyd, of Birmingham; A. Gilmour, of Hindley; and the Hon. Secretary, Army Ashkenny.

Apologies for absence, mainly on account of the prolonged coal strike, were received from the President of the Society, Lt.-Col. F. E. Fremantle, M.P., and fourteen other Members of the Group.

The minutes of the last Group Meeting were read and approved.

Correspondence was read and considered:

- (1) From the Council of the Society of Medical Officers of Health, approving the following resolutions passed by a previous Meeting of the Group.

- (a) "That all medical officers of local authorities should be entitled to superannuation, and they shall not be dismissed without the consent of the Ministry of Health."
- "That it be submitted to the Ministry of Health that such matters as the stand-

ardisation of medical inspection cards and schedules and notations used thereon could best be effected through the Society of Medical Officers of Health with its constituent groups representative of school medical officers and others concerned with various aspects of the considerations involved, rather than by consultation with individual medical officials."

- (2) From Northern School Medical Sub-Group, reporting a Meeting held at Newcastle, on April 21st, when Dr. J. W. McIntosh read an interesting paper on "Rickets in School Children." Dr. Geo. Foggin presided over 12 members.

- (3) From Dr. H. R. Burpitt, school medical officer of Newport, Monmouthshire, reporting the formation of a Welsh School Medical Sub-Group which elected him Hon. Secretary. This has now been approved by the Group Council.

- (4) From the British Medical Association enquiring the policy of the Group as to recognised holidays for School Medical Inspectors. After very careful consideration the following resolution was passed.

"That where practicable all school medical officers and assistant school medical officers shall have the usual school holidays, and in any case shall have a minimum of four weeks holiday."

It was pointed out that in most towns medical inspectors had the usual school holidays, and that this was found beneficial for the efficiency of the nursing and medical staffs, especially as it is found in practice the attendance of children is too low to warrant retaining their services.

- (5) From the "Children's Dental Campaign" for the encouragement of dental hygiene. It was resolved to submit the correspondence to the newly formed Dental Group of the Society.

- (6) Complete set of forms with explanations as used in connection with medical inspection and treatment of children of school age were received from:—The London County Council, Counties of Essex, Notts, Stafford, Durham, Lancashire, the County Boroughs of Birmingham, Liverpool, Manchester,

Portsmouth, Bristol, Bradford, Sheffield, Leeds, Hull, Newcastle, Blackburn, Bath, Cambridge, Coventry, Wolverhampton, Worcester, Newport, Stockton, Lincoln.

Uniformity of medical inspection cards and schedules and notations used thereon was then considered. The necessity for doing so was strongly advocated by all present, although it was recognised a simpler system should be sufficient for a small county borough. The subject was admitted a difficult one, and some time must elapse before a final report can be prepared. In the meantime it was considered advisable that the sub-groups should have an opportunity of considering and reporting on same.

At the election of officers, Dr. Bracey proposed, and Dr. Kingsford seconded, and it was unanimously resolved that Dr. G. A. Auden, M.A., M.D., D.P.H., be elected president and group representative on the Council of the Society of Medical Officers of Health for a second year, 1921 to 1922, and Dr. A. Ashkenny was re-elected Honorary Secretary and Treasurer.

Dr. Gilmore then proposed, and Dr. Kingsford seconded, and it was resolved,

"That an annual subscription of two shillings and sixpence be made from all members for group expenses."

Some of the items on the agenda were referred to the sub-groups and others were deferred to a subsequent meeting.

The President then read a paper on "The Destruction of *Pediculus Capitis*," which was highly appreciated as it involved considerable experimentation.

During an interval tea was served, which gave those present a rare opportunity of discussing matters of mutual interest.

TUBERCULOSIS GROUP.

An ordinary General Meeting of the above Group was held at the house of the Society, 1, Upper Montague Street, Russell Square, on May 6th, Dr. H. A. Ellis in the chair.

Circular 194 from the Ministry of Health dealing with the termination of sanatorium benefit under the National Health Insurance Acts was discussed in detail.

After much discussion into the administrative changes necessary on transference to the London County Council of duties hitherto carried out by

the Insurance Committee, with regard to Institutional treatment, the meeting instructed the Secretary to write to the Medical Officer of Health of the London County Council as to the following matters:—

- (a) Whether insured persons recommended for institutional treatment will now be assessed by the Care Committee as to their ability to pay towards their treatment, in the same way as hitherto carried out for the non-insured.
- (b) Whether it will be necessary or advisable for an insured person to send in particulars as to his Society and to specify his willingness or otherwise to enter an institution.
- (c) On what forms recommendations for insured persons should be made.

A letter was read from the Secretary of the Metropolitan Branch calling attention to paragraph 7 of the Circular which requires that practitioners should transmit domiciliary reports on their patients to the regional medical officer, who will forward them to the tuberculosis officer. This requirement appeared to the branch to be objectionable particularly because it seemed to threaten the position of the tuberculosis officer in relation to practitioners but the branch did not feel competent to take action in the matter, but would rather refer the matter to the Group.

The meeting decided not to take any action in the matter, and the Secretary was instructed to inform the Metropolitan Branch to that effect.

The matter of fees payable by the Ministry of Pensions for examinations and reports made on their behalf was discussed in detail, and it was unanimously decided to ask the Council of the Society to take up the matter, with a view to ensuring that reports carried out on behalf of the Ministry by tuberculosis officers should be allocated to the officer who makes the examinations, as recommended in the circular under discussion.

Memo. 30/T dealing with the special arrangements to be made for ex-service men, and Memo. 36(a)/T applying these arrangements to London were discussed.

According to these memoranda, the tuberculosis officer will have a determining voice in the length of stay in an institution, and in London, this duty will devolve on the medical officers of the County Council. As the meeting felt that the matter was one for the local tuberculosis officer to deal with,

he alone being fully cognisant of the home and personal conditions of patients, it was decided to ask the Council of the Society to make representation to this effect to the proper authority, and to point out that the Group had already expressed this view in their report on the Tuberculosis Scheme for London.

Several members having intimated that they experienced difficulty in obtaining copies of important circulars, similar to those already discussed, it was decided to ask the Council of the Society to use their influence with a view to having such documents sent in duplicate to the medical officer of health so that copies could be passed on to the tuberculosis officer and filed by him.

The Secretary was instructed to communicate on these matters with the London County Council and the Executive Secretary of the Society.

TUBERCULOSIS GROUP.

A meeting of the Council of the above Group was held at the house of the Society, 1, Upper Montague Street, Russell Square, W.C., at 8 p.m., Dr. H. A. Ellis in the chair.

It was agreed that the Council of the Group should in future be known as the Committee of the Group.

It was decided to hold the Annual General Meeting at Margaret Street Hospital, Oxford Circus, on Friday, 29th July, at 5.30 p.m., and to hold a meeting of the Committee afterwards.

A letter was read from the National Association for the Prevention of Tuberculosis asking for the names of the Group's representatives at the International Conference to be held in London, on 26th July, 1921. The Chairman undertook to obtain names of representatives.

The matter of occasional Conferences between those engaged in tuberculosis work in London was discussed and the Chairman undertook to see Dr. Menzies, London County Council, in the matter.

It was agreed that it would be advisable to hold such a Conference early in the new session and to invite all London medical officers of health and tuberculosis officers to attend it.

The Secretary was instructed to apply to Dr. Hamer, for a copy of Dr. Bardswell's report on extra nourishment, recently submitted to the London County Council.

MIDLAND TUBERCULOSIS SUB-GROUP.

A meeting of Midland Tuberculosis and Assist. Tuberculosis Officers, convened by Dr. A. Ashkenny, T.O., West Bromwich, was held in Birmingham, on the 9th July, 1921. Eighteen members were present. Dr. G. B. Dixon, Tuberculosis Officer, Birmingham, was elected to the chair. The Chairman having explained the object of the meeting, the following resolution was adopted unanimously:—

"That this Meeting of Midland Tuberculosis Officers and others interested in tuberculosis hereby resolve to form themselves into a Midland Tuberculosis Sub-Group of the Tuberculosis Group of the Society of Medical Officers of Health."

The election of Officers of the Sub-Group was next considered. Dr. G. B. Dixon was elected temporary President, and it was further resolved "That a temporary Committee of five members be formed of those employed exclusively in clinical tuberculosis work to assist the President until the next meeting of the Sub-Group in October." The following Members were elected to this Committee:—T. R. E. Elliott, T.O., Shropshire; A. G. Campbell, Assistant T.O., Birmingham; J. A. M. Clark, T.O., Walsall; D. J. Peebles, Medical Superintendent, Grange Sanatorium, Cheltenham; H. Gorden-Smith, T.O., Worcestershire. The following were co-opted to assist the committee: N. A. Coward, Senior T.O., Leicestershire; Dr. Edwards, T.O., Nottingham, C.B.

SUMMER TIME ACT—EFFECT ON HEALTH OF CHILDREN.

A circular has been addressed by Sir George Newman to all Local Education Authorities requesting that an endeavour should be made to ascertain through the staff of the School Medical Service and the teachers what has been the effect of the Summer Time Act during the current year on the health of the school children (including their proper attention to school work). It is requested that the result of such inquiries be communicated to the Board of Education not later than the 1st October.

DR. E. H. T. NASH, formerly medical officer of health for Wimbledon, has been appointed medical officer of health for the Heston and Isleworth urban district.

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Editorial.

CONSCIENTIOUS OBJECTION.

THE outbreak of smallpox at Nottingham appears, at present, to be kept within bounds by the incessant vigilance and activity of the medical staff. Of the first 46 cases reported no less than 36 were unvaccinated, and the majority of the remaining 10 had been vaccinated too long ago for immunity. And so, doubtless, the story will continue. The trouble is that Nottingham has been for years a hunting-ground of "anti" people, and it is

quite possible that it may suffer the fate of Gloucester, where 279 unvaccinated children died of smallpox in 1895-96.

The Glasgow epidemic of last year taught the same lesson. Between the years 1902 and 1918 the number of successful vaccinations in Glasgow had fallen from 84.2 per cent. of the children to 54.4 per cent., while the number of declarations of conscientious objection rose from 407 in 1907 to 7,580 in 1914. During the outbreak of 1920 there were 578 cases, with 125 deaths. The mortality among the vaccinated was 16.1, but among the unvaccinated it was 36.7—more than double. It is the old story: the general neglect of vaccination in childhood is bringing about a reversion to the original habits of the disease. Smallpox has a preference for children under ten years of age, and new, thanks to the conscientious objector, it is getting them. Enormous sums are being spent by local and central authorities every year in dealing with a disease which can be prevented, absolutely, by scientific means, which are opposed by a number of cranks on sentimental grounds. The present position in this country may be illustrated by the fact that according to a recent return the percentage of vaccinated babies during 1920 fell to 9.6.

The number of unvaccinated persons in the country is a disgrace to the intelligence of the people of England, and shows how difficult the governing authorities find it to resist a persistent and mischievous clamour. For a country which has just witnessed the triumphant proof of the principle of inoculation, as shown by the statistics of enteric fever during the war, to continue to allow itself to be ruled by the sentimental fanatic in a purely technical matter is inconceivable. The prejudice against inoculation was just as strong as that against vaccination, and is exactly on the same plane as the prejudice of the people of Bombay in regard to preventive measures against plague.

when it is raging in their midst and slaying them by thousands.

The power of the sentimental fanatic in obstructing progress in the prevention of disease is one of the most discouraging features of the present day. His success is due to his fanaticism, which influences the great body of people who do not trouble to think for themselves, but we must hope that eventually the numbers of these easily swayed people will be reduced by better education. Perhaps the most encouraging piece of news about the Nottingham outbreak is the fact that proprietors of seaside boarding houses and lodgings are refusing to admit Nottingham visitors to their premises. This sound and sensible precaution will help to bring home to the Nottingham citizen who has escaped actual infection the fact that he has occasionally to pay in more ways than one for being persuaded by the sentimental fanatic.

The time has now come when the citizen who realises his duty to himself and the community must ask himself how far the scruples of individuals in a matter vital to the public health should be allowed to over-ride the safety of the rest. If the smallpox scourge is to be killed in England, we must have universal application of the remedy which science offers, and sentimental fanaticism must not be allowed to imperil the lives and safety of innocent and helpless members of the community.

OTHER CONSCIENTIOUS OBJECTORS.

A correspondent has drawn our attention to the striking similarity that exists between the difficulties in applying scientific prevention to smallpox, on one hand, and to greatpox (and other venereal diseases) on the other. "In the prevention of smallpox," he writes, "there are certain factors upon which all are agreed, namely, isolation and treatment of cases, isolation of contacts, sanitation, housing, and the general improvement in public health. These are all advocated by the 'anti-vaccinist,' who, quite correctly, claims that he is in favour of 'combating' smallpox. It is, however, upon the essential and vital factor in prevention, namely, vaccination, that there is hopeless disagreement, the anti-vaccinist objecting to the process upon sentimental grounds, while the advocates of vaccination base their case upon

sure and certain proved facts. Similarly, in the prevention of venereal disease, there are agreed and obvious factors, namely, the inculcation of morality, general education concerning these diseases, improvements in housing, and the treatment of cases, but upon the essential and practical method of prevention (i.e., the awakening of the public to the simple fact that there are effective preventives, together with the necessary arrangement for such preventives to be on sale, with clear directions for use) there is hopeless disagreement, the opposition to the essential preventive being based entirely on sentimental grounds."

"It would not be surprising, therefore," our correspondent concludes, "if the Anti-vaccination Society should decide to alter its name to 'The National Council for Combating Smallpox,' as being more in accordance with modern conditions."

On the subject of venereal disease prevention we have received numerous personal communications, most of them congratulating us on the July issue, with a few severely critical, but only three communications have been sent us for publication, and these must be postponed until the next issue.

THE DIARRHŒA CIRCULAR.

The Ministry of Health has issued a circular on epidemic diarrhœa. Its issue is timely but its character is likely to cause considerable irritation among medical officers of health. In the case of the great majority of local authorities no reminder of any kind is necessary, as the local medical officer of health is just as alive to the needs of the moment as the staff of the Ministry, but it must be admitted that in some areas a circular from the Ministry would not be out of place. At all events the situation would be very fully met by reminding local authorities of the need for action in connection with this subject, leaving it to the medical officer of health to advise his council as to the administrative measures that may be desirable. Instead of this, every authority has been presented solemnly with an elementary disquisition on the subject of summer diarrhœa which reads very much like an extract from an elementary textbook of public health.

We hope that the issue of such circulars will not be continued in the future, and that the

Ministry will not consider it necessary to instruct medical officers of health in the elements of their trade.

In one particular this circular seems to be directly misleading. It refers to the provision of nursing facilities as a practicable expedient, whereas the Ministry are in practice forbidding any extension of nursing services. At the present time a dispute is going on between the Ministry and the Southwark Borough Council with regard to the employment of extra nurses which the Ministry have refused to sanction.

SUMMER TIME.

If one may judge from previous experience there seems to be a necessity for an active defence of "summer time" to be inaugurated. The "agricultural interest" of the country has always been opposed to it, and this body has in the past shown itself to be one of the greatest of political forces. Possibly the recent circular asking for information as to the effects of summer time upon school children may have been issued in the hope that damaging information would be forthcoming, but we doubt whether there will be any scientific evidence against the daylight saving movement. The arrangement has undoubtedly been of the greatest benefit to the public generally, and the statement that it has resulted in a decreased amount of sleep for children must be received with the utmost caution. Such statements have originated almost entirely from rural areas, where the agricultural interest is extremely hostile to the Act. In fact, it is a curious coincidence that it is in those areas which are most intensely hostile to education in general that the opposition to summer time is greatest.

It would be a public calamity if the activity of the prejudiced few were allowed to interfere with a measure which is so obviously a public boon, and so evidently in the interests of the public health.

THE CHOLERA MENACE.

Articles in the lay press indicate that a certain amount of apprehension exists as to the possibility of a spread of cholera from Russia to this country. While it is, of course, always possible for single cases to reach these shores

and to spread the disease to some extent, there is no reason to believe that such spread could possibly attain to the dimensions of an epidemic. Cholera, our experience tells us, is essentially a disease spread by contaminated water supplies, and this fact should effectually dispose of the cholera bogey here. At the same time, every effort should be made to prevent the invasion by the sporadic case, as such invasions are very costly to deal with and are very alarming to the public. The safest way to deal with such possibilities is to act at a distance, and it would be a wise investment on the part of all the Western European nations to send medical relief forces to the cholera areas to fight the disease on the spot. The port sanitary authorities of the country can be relied upon to do their utmost to prevent the entry of diseased persons, but the presence in Eastern Europe of large numbers of cholera victims is a menace which is best dealt with on the spot by close international co-operation.

SIR GEORGE NEWMAN AS A LITTERATEUR.

The Chief Medical Officer of the Ministry is best known to the public and the health service of the country by his illuminating official reports, which demonstrate clearly a culture and a breadth of view which are particularly valuable, but not common official characteristics. His unofficial productions are rare but very welcome, and the admirable study of "John Keats as Apothecary and Poet" which he has just published, enrols him as a member of that famous band of medical litterateurs which includes Sir Thomas Browne, of Norwich, Dr. Garth, Smollett, Keats, Oliver Wendell Holmes and Francis Thompson.

Much has been written about Keats, but we doubt whether that poet has ever been dealt with so sympathetically as he has been by Sir George Newman, who traces in a most interesting manner the direct influence of Keats the apothecary upon Keats the poet, and shows that his medical studies taught him "the larger exercise of compassion toward human suffering and love of mankind." The whole study makes delightful reading for anyone, but particularly for medical men, and few will be able to read it without being struck with obvious

points of similarity between the apothecary, poet and medical officer idealist who has so ably interpreted him.

THE HALIFAX VACANCY.

In July the Health Committee of the Halifax Corporation recommended the Town Council to advertise the post of Medical Officer of Health, at a salary of £1,000 per annum. Even this inadequate salary was opposed, and an amendment was moved and carried, substituting £800 as the salary, at which figure the position was duly advertised. The majority of the Town Council are apparently unaware that such a salary is considerably below that paid to *assistants* on the staff of many local authorities, and that if they are to secure well qualified and experienced officers they will have to pay adequate salaries.

There were said to be fourteen applicants for the post at £800, but at the August meeting of the Council it was decided to reopen the question and to offer an increased salary of £900. The Halifax Town Council may rest assured that skilled medical services are not in the market at this paltry figure, and possibly the obvious improvement in the standard of the applications produced by increasing the salary will convince some of the councillors that it would have been in the best interests of the town for the Council to have offered an obviously adequate salary for such a responsible and important position.

THE NEECH PRIZE.

The Council of the Society of Medical Officers of Health recently accepted a generous offer from Dr. J. T. Neech, to endow a prize for the best paper read at a branch meeting of the Society in each year. The deed of settlement has now been completed, and Dr. Neech has transferred to the trustees of the Society a holding in £5 per cent.

War Stock (1929-1947), the interest on which will be awarded as the annual prize.

The conditions of the award, as embodied in the deed of settlement, are as follows:—

1. The prize shall be called the Neech prize.
2. It shall be awarded annually for the best paper contributed to the Branch Meetings of the Society in the United Kingdom during the year—the year being Medical Officers of Health Society's year, *i.e.*, October to September.

3. No such paper shall be eligible for award unless two typewritten copies are formally sent to the Executive Secretary of the Society.

4. The amount or value of the prize shall be the annual interest arising from the investments for the time being and if in any one year no prize shall be awarded the amount shall be added to the next year.

5. The paper must have reference to Public Health subjects, and originality and research shall be taken into consideration. No consideration of seniority of membership or professional standing shall influence the award of the prize which shall be open to all members of the Society.

6. The assessors shall be the president and editor of the Society for the time being, with two members of the Council—the latter to be elected annually by the Council at the first Council Meeting of the year. Dr. James Thomas Neech shall be entitled to nominate a fifth assessor if and when he thinks fit.

7. The decision of the assessors shall be final.

8. It shall be within the power of the assessors to delegate one or more of their number the duty of perusing and making a list of the papers from which shall finally be selected the winner of the prize, such selection being made at a full meeting of the assessors.

9. The award shall be made known within a period of three months of the close of the Society's year.

10. The successful paper shall be offered for publication to the *International Journal of Public Health* or such other representative journal as may be decided by the Council from time to time and such Journal shall have free right of publishing the paper.

*SCHOOL DENTISTRY IN ENGLAND.

BY

ANDREW J. LAIRD, M.D., D.P.H., Medical Officer of Health, Cambridge.

The commonest defect revealed by routine medical inspection of school children would appear to be dental caries, and of the seriousness of the condition of the mouths of school children in England there can scarcely be any doubt. Sir Geo. Newman in his report for 1919 estimates that about 50 per cent. of the six million children in the public elementary schools are in need of some form of dental treatment, and from what we know from other sources I think we may take this as a very modest estimate.

It is generally admitted also that dental caries and oral sepsis have a profound effect upon general health, indeed the final conclusion of the Departmental Committee on the Dentists' Act is that "the State cannot afford to allow the health of the workers of the nation to be continuously undermined by dental neglect."

This being the position, it is natural to enquire after about twelve years of school medical work, what is being done to cope with such a serious state of affairs.

The dental clinic which was established in Cambridge in 1907 has now been in operation long enough to show what can be done for school children where circumstances are favourable, and this part of the problem may be considered as satisfactorily solved so far as Cambridge is concerned. The number of children on the rolls in Cambridge is, almost exactly, 8,000, and experience has shown that two whole-time dentists can perform all the inspections and treatment required for that number of children. The experience gained here should serve a useful purpose, and it is with this object that I have endeavoured to obtain and collate evidence as to the position in a large number of districts throughout the country.

In the 1919 report of Sir Geo. Newman (p. 84), it is shown that there are 84 areas in England employing 124 whole-time dentists, and 130 areas employing 242 part-time dentists, and the total number of dental clinics in the country is given as 437.

*Read at the Home Counties Branch of the Society of Medical Officers of Health on March 5th, 1921.

It is unnecessary to go any further into this particular point. It is discussed in the "Recommendations and Suggestions to Education Authorities" of the British Dental Association dated November 1st, 1920.

A questionnaire was sent out to 85 towns with a school population of 2,390,780 and to 43 counties with a school population of over 2½ millions. My enquiries thus cover 5,000,000 of the total 6,000,000 school children in our public elementary schools. Perhaps it would not be out of place here to express my appreciation of the great kindness of the medical officers who have supplied me with the information desired. The schedule was a somewhat lengthy one, and must have been the source of a good deal of trouble to many.

In collating the information obtained it was found necessary to distinguish first between the towns and counties, while in analysing the returns, the districts concerned were found to fall into six groups according to the completeness or otherwise of their dental schemes.

Those groups are:—

1. Thirty-one towns and six counties with a complete year's work analysed.
2. Sixteen towns and eighteen counties whose commencement or resumption of schemes is too recent to allow of details being given for a whole year, or which for other reasons have not supplied the necessary details.
3. Eight towns and three counties whose change of scheme, *e.g.*, employment of additional dentists, etc., does not allow of analysis for purposes of comparison.
4. Sixteen towns and six counties where no distinction is made between permanent and temporary dentitions in their reports or returns, the statistics given being therefore useless for my purpose.
5. Three towns and one county which have not given a complete year's figures with no reason stated.
6. Twelve towns and nine counties which have no scheme at all.

The areas included in the first group with details for a complete year have a total school population in the towns of 1,178,496, and in the counties of 406,738.

It should be remembered, of course, that some schemes do not, as yet, cover the total school population of their areas.

Staff Employed and Work Done.

These 31 urban areas employ 43 whole-time dentists and 22 part (practically half) time dentists, or, say, an equivalent of 54 whole-time dentists for 1,178,496 children, or 21,824 children per dentist. If we take 4,000 as the number that one dentist can look after in the year, the number in these areas should be not 55 but 275 dentists.

In the six county areas the whole-time dentists number 15, and part-time 4, or the equivalent of 17 whole-time dentists at 23,925 children per dentist. With the same standard as in urban areas the total number required would be roughly six times or 102 dentists.

A matter of interest and importance in connection with the number of dentists engaged is the actual work accomplished.

Firstly, with regard to the number of children examined, the information is given for 28 of the 31 urban districts, and stated per dental officer is as follows:—

Whole-time dentists.	Part-time dentists.
Brighton ... 623	Acton ... 770
Bradford ... (?)750	Bootle ... 2338
Bootle ... 2338	Cardiff ... 4839
Darlington ... 2200	Carlisle... 2602
Huddersfield ... 1496	Gillingham ... 2842
Hull ... 2000	Halifax... 3161
Leeds ... 6400	Liverpool ... 2700
Leicester ... 2700	Reading ... 1065
Manchester (appr.) 2000	Walsall... 1990
Northampton ... 3828	W. Hartlepool ... 979
Preston ... 1939	
Norwich ... 4432	
Salford ... 1329	
Sheffield ... 3020	
Warrington ... 6918	
W. Bromwich ... 4330	
Willesden ... 2560	
Wimbledon ... 1364	

For Cambridge the figure for 1919 is 3,473 per dentist.

In the six counties the figures for examinations only, per dentist, are (approx.):—

Devonshire ... 5700	Surrey ... 3290
Leicester ... 1112	Somerset ... 2500
Middlesex ... 1150	Yorks (W.R.) ... 2240

A more important test of the value of the work done is the number of permanent teeth saved (i.e., "filled").

Taking the number per dentist again, the following is the result:—

Fillings of permanent teeth per whole-time dentist.	Fillings of permanent teeth per part-time dentist.
Birmingham ... 1800	Aberdare ... 111
Brighton ... 623	Acton ... 316
Bradford ... 1460	Bootle ... 653
Cambridge ... 2090	Cardiff ... 323
Exeter ... 1096	Carlisle... 894
Huddersfield ... 1331	Darlington ... 256
Hull ... 160	Gillingham ... 490
Leeds ... 1970	Halifax... 530
Leicester ... 1282	Liverpool ... 404
Manchester ... 606	Reading ... 212
Northampton ... 1077	Walsall ... 938
Preston... 1976	W. Hartlepool 115
Norwich ... 809	
Portsmouth ... (?)863	
Salford ... 558	
Sheffield ... 675	
Warrington ... 539	
W. Bromwich ... 371	
Willesden ... 1138	
Wimbledon ... 414	
Devonshire ... 477	
Leicestershire ... 472	
Middlesex ... 215	
Surrey ... 1449	
(including also temporary teeth)	
Somerset ... 1087	
Yorks (W.R.) ... 920	

Assuming in every case that every permanent tooth requiring to be filled was done, the most useful index figure as a guide to the value of the work done is probably the number of fillings (in permanent teeth) per child treated. In Cambridge in 1919 this figure was 1.8 fillings per child treated, but in the early years of the clinic it was 3.6, the lower figure being the result of previous treatment.

The information I have, however, does not show this for other areas, and I have therefore taken the number of fillings of permanent teeth only, per 100 children examined.

Acton ... 40.8	Norwich ... 18.2
Bradford ... 221.1	Portsmouth ... 7.8
Brighton ... 99.9	Reading ... 19.9
Bootle... 27.8	Salford ... 42
Cardiff ... 6.6	Sheffield ... 22.3
Cambridge ... 60.18	Walsall ... 47.1
Carlisle ... 55.8	Warrington ... 7.7
Darlington ... 23.3	W. Hartlepool 11.7
Gillingham ... 17.2	Willesden ... 44.1
Halifax ... 16.7	Wimbledon ... 30.3
Huddersfield... 88.9	
Hull ... 8.3	Devonshire ... 14.6
Leeds ... 32.1	Leicester ... 42.8
Leicester ... 46.1	Middlesex ... 18.7
Liverpool ... 15.7	Surrey ... 10.9*
Manchester ... 30.3	Somerset ... 43.2
Northampton 28.1	Yorks ... 41.2
Preston ... 101.9	

* Includes an unstated number of temporary teeth.

For each permanent tooth extracted (lost) the number of permanent teeth filled (saved) was:—

Aberdare ... 2	Reading... 1.6
Acton ... 6.8	Salford ... 0.5
Birmingham ... 1.8	Walsall ... 3.9
Brighton ... 5.6	Warrington ... 1.6
Bradford ... 49	West Hartlepool 0.5
Bootle ... 65	Willesden ... 1.6
Cambridge ... 39.8	Wimbledon ... 1.3
Cardiff ... 3.8	
Darlington ... 1.8	Devonshire ... 4.5
Exeter ... 4	Leicestershire—
Gillingham ... 5	no extractions of
Halifax ... 3.7	permanent teeth
Huddersfield ... 6	Middlesex ... 8
Hull ... 0.5	Surrey—
Leeds ... 2.6	rather more ex-
Leicester ... 2.8	tractions than
Liverpool ... 9	fillings (perma-
Manchester ... 2.3	nent & temporary
Northampton ... 1.5	together)
Preston ... 4	Somerset ... 25
Norwich... 3.2	W.R. Yorkshire 4.2
Portsmouth ... 4.7	

Some of this disproportion, but certainly not all of it, is the natural result of attempting treatment for the older children whose teeth are generally hopeless from previous neglect.

It is obvious, therefore, that taken as a whole the work that is being done falls very far short of what is really necessary.

To this general conclusion there are undoubtedly notable exceptions where the field is adequately covered and good work is being done, but in the majority of those areas it is largely a waste of time and money—except possibly in so far as it may be regarded as a beginning and educational in character. There is no doubt that Local Authorities, just as much as parents, are in need of instruction as to the beneficial results to be obtained from conservative dentistry. Admitting this, however, there is no doubt that the staff employed must be increased many times to cope with the work—as much as from five to six times.

Conditions of Service.

The dental profession is generally acknowledged to be a lucrative one, the return for outlay on education being usually distinctly in excess of that of the general practitioner of medicine. One would naturally expect therefore that the remuneration of public dental officers would at least be on a level with that of medical officers in public positions.

Below are given typical examples of the salaries paid to whole-time dentists taken from some of the returns I have received.

Typical Whole-Time Salaries.

Population of District.	Salaries.
900,000 ...	£350 to £500
131,237 ...	£479 and £400
295,000 ...	Senior £750
	Others £585
66,729 ...	£450
80,000 ...	£350
112,301 ...	£450
278,024 ...	£450 to £500
217,537 ...	£600 and £500

The part-time officers are paid either £1 1s. or £1 10s. per session, or a fixed annual sum which varies from £150 to £300.

Is there any wonder that these posts are not generally much sought after, or that they should be held only for short periods? There is much need for improvement in this respect, and if more men are to take up public dentistry it is greatly to be hoped that some reasonable scale of salaries such as that drawn up by the B.D.A. will be adopted.

As an essential condition of service also, the dentist, although attached to the department of the medical officer, should have as complete professional responsibility and independence, as a dentist, as the Tuberculosis Officer, or any other specialist officer of the Health Department.

The dentist should also make his own inspections of children, and select those that require treatment. I have seen a suggestion that this might be left to school nurses who have been trained to use probe and mirror. With this suggestion I have no sympathy. The amount of time actually spent in inspection is small, and an examination by a school nurse would simply result in the dentist having to spend the time in making an examination for himself when the child comes to the clinic. I shall refer again to this point later.

Fillings of Temporary Teeth.

Of the 31 urban and 6 county areas, 17 have been engaged in the filling of temporary teeth. In view of the very small staffs employed, and the enormous amount of work requiring to be done, this can only be regarded as a waste of time which might far more profitably have been devoted to the saving of permanent teeth. It is true that some areas have spent very little time on this work, but in most it is quite a large item in the year's work, and in several areas the number of temporary teeth filled actually exceeds the number of permanent teeth filled. All the treatment necessary for both dentitions

cannot be done. Something must be sacrificed and it should certainly not be permanent teeth.

It may be mentioned here that a remarkable feature of very many of the reports received is the failure to discriminate at all between permanent and temporary teeth. This is most unfortunate, as it makes it impossible to place any proper valuation upon the work, and what is even more serious it almost points to a failure on the part of the responsible officer to appreciate the real position.

This raises the question of the value and use of charts for recording the results of inspections and also the methods of inspection.

Inspections and Charting.

In many districts the results of inspection are not fully charted at the time, but are restricted to charting only teeth requiring treatment, with no other details. In one large town no chart is made out until the child attends for treatment, while in one county there is stated to be no preliminary inspection. As the whole of the work rests upon inspection and charting as a foundation, it follows that this work should be accurate, thorough and reliable, and that it should be done by dentists, and dentists only, well trained in the use of probe and mirror, and capable in the short time allotted to each child, of forming a sound judgment as to the proper line of treatment to be followed. Accurate and reliable charting allows the operating dentist to arrange his appointments according to the work requiring to be done. It dispenses with the need for any second inspection while the patient is in the operating chair, and it enables the dentist to bring the children in for treatment in the most satisfactory order, so that difficult operations or refractory children can be left to the last, when a scene is not likely to alarm others.

This part of the work requires probably more skill and judgment than treatment, and consequently should be performed by the most experienced people. I make a special point of this, as there appears to be a decided tendency to ignore it, inspection and charting being regarded as a secondary matter and capable of being carried out by people who are not dentists at all. It is not merely a question of recording findings, but also of indicating the nature of the treatment required—and this requires more than a mere training in the use of probe and mirror, which is all dental dressers, nurses or medical inspectors could

get. It requires the experience of previous fillings for children, since the varying degrees of caries must be instantly recognised. These considerations are even more important when one turns to the question of oral sepsis. The only person who can be relied upon, in the short time occupied in an inspection, to discover septic conditions and fistulas of the gums, the most general dental malady found in young children, is the experienced school dentist. To leave the decision as to what treatment must be done until the dentist sees his patient in the operating room is simply to have wasted time on the preliminary inspections. This immediate decision should be made at the time of inspection, and to arrive at accurate and reliable conclusions requires not only a qualified dentist but considerable experience. The whole future of the child's denture may indeed depend upon this. Mr. Anderson, School Dentist for Northampton, in his annual report for 1919 states the position very fairly when he says "a proper decision as to what should be done or left undone in a child is much more difficult than in an adult whose teeth have all erupted. In the case of the child, only a few of the permanent teeth have erupted, and it is necessary to foresee what the condition of affairs will be when all are in place, and to ensure that the best result will be attained."

Selection of Children for Examination.

With regard to the ages of the children examined, in 17 towns out of the 31, six years is the earliest age, one begins at three years, ten begin at five, two do not state the age, and one town deals apparently only with eight-year old children.

Several areas are said to cover the ages five-fourteen, although it is perfectly clear from the numbers examined in one year that all children five-fourteen cannot possibly be included.

Another town examines children five-nine and then from eleven-thirteen years, while another in addition to seeing the five-seven year-olds also sees the "leavers."

In the county areas only seven begin at five years, the majority begin at six, but one does chiefly children eight-nine years old.

We may say therefore that with some exceptions, dental work is begun with the six-year-old children, and although I am well aware that this age has the approval of the Board of

Education, if it is not actually recommended by them, I must entirely disagree.

If we assume that the children in any area are examined once a year, it will follow that the six-year-olds seen toward the end of the year will be nearly seven, and some, it may be a large proportion, may actually be seven before they can be treated.

An examination of the Annual Reports which I have received shows that dentists generally are now agreed upon this. Thus the three dental officers to the Acton School Clinic state that "the earlier treatment of the children is a matter of extreme urgency. Often at the age of six years, there is much caries." The School Dentist for Northampton writes: "The six to eight routine age is much too late for the first inspection, as the so-called six-year molar is often in place before five years of age, and at six is sometimes hopelessly decayed. A great amount of subsequent decay, and consequently of dental work, could be avoided by treating children, mainly by nitrate of silver paintings, on entering school, when the decay is usually of the surface variety."

The School Dentist for Devon County writes: "Another question is the advisability of extending the age group downwards to include the children of five years. There is no doubt that the earlier a child can be brought under dental supervision the better." There is much more to the same effect in other reports, but all the evidence supports the position taken up in Cambridge from the beginning that inspection and treatment should begin not later than five years of age.

The Annual Report of the Chief Medical Officer of the Board of Education for 1919 states (p. 89) that "the Board were advised by dentists that at the initiation of school dental work, the period six-eight years was probably best, and experience has proved the wisdom of the advice," while on p. 94 it is laid down as a condition of a satisfactory dental scheme that "attention should be concentrated in the first instances on the group of children from five to seven years."

Experience has shown that the advice given to the Board is not justified, and the statement on p. 94 quoted is sufficient evidence in support of the earlier age for commencing. Where schemes have sufficiently developed to embrace the whole of school-life natural extension will lead to the inclusion of children under school age and also to the treatment of expectant

and nursing mothers, but for schemes just being inaugurated there can be no doubt that work should commence with the five-year-old children.

Before leaving this point it may be noted that in many areas it is the practice for school medical inspectors and others to send children to the clinic for treatment by the dentist. Where a proper scheme of inspection and treatment is in operation, this is a practice which should be avoided as much as possible, as it is likely to interrupt and upset the regular working of the clinic.

The Use of Anæsthetics.

In 85 towns and 43 counties, 75 use anæsthetics. 30 areas give figures only without any mention of the kind of anæsthetic, 19 use local anæsthetics only, 26 use both general and local anæsthetics, and 8 areas state definitely that they do not use any anæsthetic at all, and to this number must be added Cambridge.

On this subject we have an authoritative expression of opinion from Mr. Norman Bennett, who reported to the Board of Education "that general or local anæsthetics should practically always be used for extractions of permanent teeth; that for temporary teeth it is not generally necessary, unless several are to be extracted, when a general anæsthetic is desirable; that local spray or other application is very useful for the extraction of loose or insignificant temporary teeth or roots. I regard the infliction of unnecessary pain as scientifically obsolete and as a chief deterrent of further treatment."

It is a rather curious comment upon the figures given for other districts and on Mr. Bennett's statement that in Cambridge, where a clinic has been working since 1907, and where all the elementary school children are dealt with, no anæsthetic, local or general, has ever been used. I feel scarcely qualified to express a personal opinion upon this point, although one's own experience of dental operations would incline one to warmly echo Mr. Bennett's words. I am, however, here merely concerned with the facts. It is not that no teeth, permanent or temporary, are ever extracted in Cambridge, they are, although the number is comparatively small.

The Extraction of Permanent Teeth.

The whole object of school dentistry being to ensure that every child shall leave school

not only free from caries, but with every permanent tooth that has erupted actually present, it follows that the figure indicating the numbers of permanent teeth lost by extraction form a most useful index of the value of the work being carried on. The theoretically ideal scheme would be one in which this figure would be zero, and the nearer the figure approached zero the better the scheme.

The harm done by the loss of permanent teeth does not end with its immediate effect, but every tooth throws out of use its opposing tooth, while it also affects the development of the jaws and dental arches and their adaptation to one another, and ends in irregularities and displacements, and further liability to caries.

The following figures show the numbers examined, and numbers of permanent teeth filled and extracted in a number of areas for which the information is available:—

Permanent teeth only.

District.	No. of children examined.	Filled.	Extracted.
Aberdare ...	6-8 years	111	55
Acton ...	3,102	1,267	187
Birmingham ...	5 years up	10,932	6,078
Bradford ...	3,740	7,320	148
Brighton ...	1,247	1,246	221
Bootle ...	2,338	653	10
Cambridge ...	6,947	4,181	105
Cardiff ...	4,839	323	85
Carlisle ...	1,602	894	226
Darlington ...	2,200	513	273
Exeter ...	?	1,096	273
Gillingham ...	2,842	490	97
Halifax ...	3,161	530	142
Huddersfield ...	1,496	1,331	205
Hull ...	3,968	330	666
Leeds ...	38,731	11,833	4,433
Leicester ...	5,553	2,565	886
Liverpool ...	13,481	2,118	232
Manchester ...	8,044	2,439	1,039
Northampton ...	3,828	1,077	684
Preston ...	1,939	1,976	497
Norwich ...	4,432	809	251
Portsmouth ...	11,024	863	182
Reading ...	1,065	212	130
Salford ...	2,658	1,117	2,251
Sheffield ...	9,060	2,025	1,711
Walsall ...	1,990	938	236
Warrington ...	6,918	539	328
West Hartlepool ...	979	115	208
Willesden ...	5,136	2,277	1,391
Wimbledon ...	1,364	414	315
Devonshire ...	9,786	1,432	319
Leicestershire ...	2,224	944	—
Middlesex ...	2,300	430	53
Surrey ...	13,185	1,449	*1,993
Somerset ...	5,024	2,175	83
Yorks (W.R.) ...	8,971	3,690	864

* Includes an unstated number of temporary teeth.

Part-time v. Whole-time Dentists.

68 authorities employ whole-time men only, 26 authorities employ part-time men only, 15 authorities employ both whole and part-time dentists, and 18 authorities do not employ any dentists.

In view of the existing shortage local authorities carrying on school dentistry will no doubt continue to employ part-time men, but looked at from a purely business point of view, there can be little doubt that the more desirable method for any authority is to employ only whole-timers. This is taking into consideration the question of salary and work done. An example will probably explain the position more clearly. One local authority pays its part-time dentist £300 per annum. The number of permanent teeth filled in the year is just over a hundred. For £600 a whole-time dentist could be obtained who would be able to save many times that number of permanent teeth. Another way to state the case is this: this part-time dentist puts in ten hours per week, or say four sessions for £300. A whole-time dentist at just double the cost would put in at least ten sessions.

Payment of Fees.

It must be admitted that the need for dental examinations and treatment is not realised by the public, and consequently one finds that only an insignificant proportion in the elementary schools ever receives treatment privately (except for extractions). Even among those of a higher social standing the position is very much the same. When the higher grade schools of Cambridge were first included in our scheme in 1914, out of 1,243 children examined only 7 per cent. had had adequate treatment previously. This was not because they did not require treatment as much as the elementary school children, for 391 were found with a total of 808 unsavable permanent teeth, to say nothing of 204 permanent teeth which had already been lost by extraction, or an average loss altogether of nearly three permanent teeth per child. Treatment was offered to all the higher grade children requiring it, and was accepted by only a very small number, the real reason being the very small fee which was charged. That this was the reason was proved by the fact that as soon as the fee was abolished treatment was accepted as freely as in the ordinary elementary schools. A similar refusal of treatment when fees are charged, no

matter how trifling, has been found elsewhere, the most recent example being in the annual report for 1920 of the School Medical Officer of a neighbouring authority. Here 2,622 children were examined, and 80 per cent. were found to require treatment. The maximum charge was 2/6, but less than 10 per cent. appeared for treatment.

In any case the charge for treatment is so small as not to be worth all the trouble and expense of collecting.

In Cambridge, treatment (with the exception of the higher grade schools for a year or so) has been free to all, and our experience shows that the imposition of fees, no matter how small, is certain to seriously affect, if not entirely to prevent the success of any scheme.

Conclusions.

1. In spite of the fact that dental caries is so wide spread and its prevention so important to health, and in spite of the fact that dental clinics were first established in England nearly fourteen years ago, there is a disappointing failure on the part of the country generally to tackle the matter.

The cause of this failure does not lie solely with the Local Authorities. An important reason is the small number of men and women on the dental roll, while another reason why dentists do not take up public work is the lack of sufficient inducement. This is apparently tending to the employment in dental work of a new grade of unqualified worker, the dental dresser, a most unfortunate and a retrograde step.

Central supervision and control is lamentably lacking, and is indicated by the totally inadequate character of many schemes, fundamental errors in organisation, e.g., the commencing age, unsatisfactory methods of inspection and treatment, and of recording conditions found and treatment carried out. There are several, but not many notable exceptions to this.

The majority of the authorities are not getting the full benefit of the schemes they have set up, and the majority of the children are not receiving the full benefit of the work done.

Too much time is expended on attending to the filling of temporary teeth at the expense of the permanent dentitions.

In these days of anti-waste campaigns it is probably too much to hope for any immediate remedy but much more might be done with existing arrangements than is being done.

The committee appointed by the British Dental Association to report upon "Dental Treatment and National Health," arrived at practically similar conclusions (vide pars. 2, 3, 4, 5, 7, 31 and 32 of the Report of November 1, 1920).

There is much that remains to be said on the subject, but I have endeavoured to limit my notes to the matters which have emerged more or less directly from my enquiries into the actual position of school dentistry in England. In all I have said I would ask you to believe that I have approached the matter as an interested enquirer and not in any critical spirit. I have no desire or intention to belittle what is being done. My enquiries were begun for my own personal benefit, but our Secretary has induced me to bring the matter before you for your information and I trust also for your benefit.

I would again tender my sincere thanks to all who have so kindly answered my enquiries. I fear at a considerable amount of trouble.

TÁRSADALMI MÚZEUM
(MUSEUM OF SOCIAL SCIENCE).

BY

JAMES W. MCINTOSH, M.B., B.Sc. (P.H.), ED.,
F.R.C.S., ED.

I visited the above museum in Budapest a year ago when engaged in the work of the British Food Mission in Budapest. Mr. Izanto — the present director — founded the museum many years ago, and it was eventually taken over by the Government and became a national institution. The object of the Museum is to act as a training centre for all those who are engaged in public health work, e.g., midwives, sanitary inspectors, inspectors of mines and factories, school teachers, welfare workers, etc. It is also a central office where all facts relating to public health are collected. Lectures, illustrated with lantern slides and maps and diagrams, are prepared by the museum authorities. These are packed in suitable boxes and sent all over the country. It is thus possible for a doctor or teacher in a remote village in Hungary to take the schoolroom of the village and deliver a lecture on the latest discoveries in public health.

fully illustrated with suitable slides and charts which have been prepared in the museum and sent to him with the lecture typed and ready to be delivered. It does not require much imagination to realise what a powerful means of inculcating ideas on public health this method must be. The whole usefulness of the Institution depends, of course, upon the personality of its director and his assistants, and it is fortunate in having at its head Mr. Izanto, who is an enthusiast in this work. Ignorance on the part of the public of the most elementary ideas of hygiene is not confined to Hungary, and it seemed to me that a similar method might well be introduced into this country. I heard one of the lectures prepared by the Museum delivered to an audience of school girls of 14 to 16 years of age. The subject was "Cleanliness," and the lecture was delivered in a cinema hall by the school doctor. It was quite possible to follow and understand most of it from the slides alone, which were most excellent. So far as I could judge the girls seemed greatly interested, and I think they quite understood what the lecturer was trying to tell them. I can well believe that many of the facts thus brought home to them at an impressionable age would remain in their minds for the remainder of their lives. Mr. Izanto acts on the motto that "Education is more important than Legislation." I think that most public health authorities would subscribe to that doctrine. I made the following short notes of the various departments of the Museum as I was shown round it.

- I. Complete outfit required by a midwife.
- II. Statistics of breast-fed and bottle-fed babies; care of the eyes of babies.
- III. Models showing diseases of the breast and how to prevent them.
- IV. Models showing diseases of the Umbilicus.
- V. Specimens of feeding bottles.
- VI. Methods of sterilising milk and apparatus used.
- VII. Hygiene of the cow. Directions for keeping stable clean; washing the udders; proper milk pans, etc.
- VIII. Dentition with order of eruption of the teeth.
- IX. Infant mortality in the different classes of society.
- X. Exhibit showing proper clothes for a baby, and directions for open-air treatment of infants.
- XI. How to dress the baby.

- XII. Children's boots (proper shape).
- XIII. Child's perambulator (proper shape).
- XIV. Children's toys—no poisonous dyes; proper shape of toys so that no accident occurs.
- XV. How to hold baby; how to bathe baby; how to kiss baby.
- XVI. Playing cage for a young child, covered with a clean sheet. Child should not play on the floor.
- XVII. Proper tooth picks and tooth brushes.
- XVIII. Coloured models and pictures of common skin diseases.
- XIX. Models showing dangers of flies. Infantile mortality statistics.
- XX. Vaccination, with suitable charts, models, etc.
- XXI. Models and charts, showing how disease can be caused by dirt—in milk, in carpets, the floor, etc.
- XXII. Pictures and models, illustrating the common infectious diseases.
- XXIII. Pictures and models, illustrating rickets and its causes.
- XXIV. Pictures and models of tuberculosis of bones, e.g., Pott's curvature.
- XXV. Model children's hospital.
- XXVI. " " asylum.
- XXVII. " " dwellings.
- XXVIII. " school with desks; washing arrangements, proper lighting, ventilation and heating, etc.
- XXIX. Dangers of alcohol and diseases caused by alcohol.
- XXX. Models of common parasites and the diseases caused by them.
- XXXI. Diseases of soldiers and military sanitation.
- XXXII. Methods of preventing infection from patients with consumption.
- XXXIII. Hygiene of factories with model factory.
- XXXIV. Occupation diseases; models, pictures and charts, etc.
- XXXV. Hygiene of meat, with models.
- XXXVI. Venereal disease.

[The Roman numerals used above for convenience do not correspond to the numbers of the exhibits in the museum.]

I have given merely the outlines of the museum which appealed to me as designed to meet a very real need in the training of those engaged in public health work, and as a means of spreading modern ideas of sanitation.

Sir Thomas Oliver visited the museum before the war and wrote a short but appreciative account of it, which was published in the *British Medical Journal* for 18th April, 1914. He has kindly read this article.

I may add that I have a copy of the lecture on "cleanliness" translated into English with the accompanying slides. This I hope to deliver to the pupils in one of the Secondary Schools in Durham at an early date in April.

The Társadalmi Múzeum, of Budá Pest, is fulfilling a most useful function. It deserves to be better known in our own and other countries, for it affords an excellent illustration of how problems of public health can be readily brought within the range of the people generally.

PUBLIC HEALTH WORK UNDER THE LEAGUE OF NATIONS.

BY

G. S. BUCHANAN, C.B., M.D., Senior Medical Officer, Ministry of Health.

(Summary of paper read at the Meeting of the M.O.H. Society on Feb. 18, 1921.)

Dr. Buchanan laid stress on the practical importance of the work which was waiting to be done by the International Health Organisation, now being established under the League of Nations following the resolution of the Assembly at Geneva. This new organisation, he said, would not be in competition with other international bodies such as the Red Cross or the Rockefeller Foundation, nor would it replace unofficial international medical congresses and international journals. Its special sphere lay in bringing about official agreements between different nations on health matters and facilitating their observance. Such agreements in many cases were overdue.

In the present new conditions of political geography and in face of the epidemics of Eastern Europe, common lines of action were required at land frontiers in regard to the disinfection of trains, and also in dealing with refugees. The present Sanitary Convention, which was concerned with cholera, yellow fever and plague only, was in several respects out of date. It took eight years for the last Convention to be ratified. The League of Nations scheme would provide an office whose business it would be to secure that such delays were

avoided and agreements completed or amended by simple machinery and in reasonable time. The same considerations applied to the international understandings which were necessary to secure the disinfection of wool and hair which carried anthrax, and the result of the use of imported anthrax-infected shaving brushes was alluded to as an illustration.

International vital statistics at present were very unsatisfactory in view of the absence of any common understanding regarding the certifying of causes of death, and, although there existed an international nomenclature, it required a much more efficient machinery for its periodical revision. Various matters connected with the health of seamen also required international agreement and progress could not be made without some such agreement. The lines of an international agreement to provide satisfactory treatment at ports for sailors suffering from venereal disease had been studied at the Ministry of Health, and it was hoped that it would be among the first of the subjects taken up by the new body. Definite responsibilities for co-ordinating action by different countries were likely to be transferred to the League of Nations in the future, as, for example, the protection against the spread of infection by the Mecca pilgrimage.

Finally, the League of Nations had already made a most valuable start in co-ordinating measures against the spread of typhus and other infections from Eastern Europe. Dr. Buchanan considered one of the great advantages of the scheme to be the incorporation of the Office International d'Hygiène Publique, established under the Rome Convention of 1907. The international health work and agreements could not be carried out through a central medical bureaucracy, however able. It must be effected as the result of consultation and agreement with representatives of the public health services of all the countries concerned and the acceptance by the League of the Office International as the basis of its health organisation secured this consultation not only from countries which were members of the League, but from other important countries signatory to the Rome Convention.

CHESHIRE COUNTY COUNCIL.—SALARIES.—The salary of the County Medical Officer has been increased to £1,400, and that of the County Surveyor to £1,200.

Dr. Lawrence read a short paper giving an account of an break out of Enteric Fever.

Reference was made to the death of Dr. Burman, M.O.H., Wath Urban Council, which occurred on the 16th April as the result of a motor-car accident. Dr. Burman was a past-President of the Branch and his loss will be felt by all members of the Branch.

NORTHERN BRANCH.

The Northern Branch held its Annual Summer Meeting on Saturday, 2nd July, 1921, at the Children's Sanatorium, Stannington, Northumberland. There were present:—Dr. T. E. Hill (President) in the chair and fifteen members. The minutes of the last meeting were taken as read and approved.

Letters of apology for absence were received from:—The President of the Society (Lt.-Col. F. E. Fremantle), Drs. A. G. R. Cameron, H. M. Cargin, S. J. Clegg, C. R. Gibson and J. E. Spence.

The following were elected Associate Members of the Branch:—G. E. Soper, L.D.S., C. E. Sutcliffe, J.P., L.D.S.I., A. C. Trotter, L.D.S.

On the motion of Dr. Kerr, seconded by Dr. J. W. Smith, Dr. T. Eustace Hill was re-elected, *nemine contradicente*, President for the Session 1921-1922, and on a motion from the Chair, Dr. Kerr was re-elected Secretary and Treasurer. Dr. T. Eustace Hill was re-elected representative of the Branch, with the Honorary Secretary, on the Council of the Society.

Correspondence with an Assistant Medical Secretary of the British Medical Association regarding a recent advertisement for a School Dentist at Newcastle-upon-Tyne was read.

This appointment for a School Dentist had been advertised by the Newcastle-upon-Tyne Education Committee at £450, and was declined by the "British Medical Journal" on the ground that the minimum salary recognised by the B.M.A. for a senior appointment was £500, and that only an appointment as Assistant Dentist could be accepted at the salary stated in the advertisement. There was a prompt reply to this from the Director of Education of Newcastle-upon-Tyne that the appointment was an "Assistant" one in the department of the School Medical Officer, and the advertise-

ment was thereupon inserted with the prefix of the word "Assistant."

The Honorary Secretary was instructed to write to the B.M.A., and to the Executive Secretary of the Society of Medical Officers of Health, asking whether dentists are being given equal status with doctors, and pointing out that this particular appointment is a senior one, and is not an "Assistancy," since the appointment is an independent one so far, at least, as regards any supervision by another dentist.

Correspondence was read with the present (part time) Medical Officer of Health for Blyth, regarding the terms offered for the whole time appointment that has been advertised recently for that town, viz:—£800-£1,000. It was suggested that the Northern Branch take action in the matter. After considerable discussion, in which it was pointed out that the terms of this particular appointment are much superior to those of many other whole time ones within the Northern Branch, it was resolved that no action be taken by the Branch.

The members were conducted round the institution by Dr. T. M. Allison, Visiting Physician and Founder of the Children's Sanatorium. It is the first Children's Sanatorium established in England, being opened in 1908, and now contains 250 beds in permanent and temporary buildings. It is ideally situated, and has charming surroundings. The Institution is almost entirely self supporting, in regard to provisions, from the produce of its own farm.

The visitors were entertained to tea and to dinner; at the latter hearty thanks were offered to Dr. Allison and the Matron for their hospitality and for the excellent arrangements made for the visit. A most enjoyable and profitable day was spent.

NORTHERN BRANCH.

Discussion on "After Care in Relation to Preventive Work."

Synopsis of Openers' Remarks.—Dr. F. J. Henry (Tuberculosis); Dr. S. Thompson (Venereal Disease); Dr. Mabel Brodie (Maternity and Child Welfare); and Dr. H. L. Rutter (Insurance Practice).

Dr. Henry said it was evident from the discussion on the second reading of the Tuberculosis Bill that much importance was attached

to the rôle of after care in the treatment of tuberculosis. He thought that organisations for the purpose were useful. Funds, however, in the case of voluntary societies, were likely to be a difficulty, but perhaps such authorities as Boards of Guardians, Borough Councils and Insurance Committees might subscribe. It was not yet clear how far the 50 per cent. grant of the Ministry of Health for the provision of extra nourishment for tuberculosis cases could be delegated to an After Care Committee, but such financial assistance would be very useful. The objects of an After Care Committee for Tuberculosis may be summarised as follows:—

1. Granting suitable extra nourishment.
2. Improving living conditions of patients and their dependants.
3. Financial assistance to cases (a) incapable of normal employment, (b) of reduced earning capacity.
4. Assistance and advice to patients in obtaining suitable employment.
5. Assistance in any other way which may seem desirable.

It might be found, however, that the function of the committee would extend to supplying nursing requisites (bed rests, bed pans, etc.), sometimes bedding, and to maintaining some provision in the way of a country holiday for cases at work, but who had become run down or showed a tendency to recurrence of the disease. The difficulties in the provision of housing accommodation were obvious at the present time. The work should be preventive as well as ameliorative. He suggested the formation in all areas of health committees on voluntary lines, with sub-committees to deal with separate health problems according to the knowledge or special opportunities of its members for various types of diseases under the guidance of the medical profession.

Dr. Thompson said the after care of venereal disease might be placed under two heads:

1. Surveillance during the necessarily prolonged period of treatment.
2. Periodical review of the patient's condition when once treatment is completed.

With regard to (1) education of the public is urgently needed, so that it may recognise the necessity for continued and regular attendance at the clinic beyond the period necessary to remove urgent symptoms, but drastic measures of coercion, or too persistent following

up tended to destroy the secrecy of the treatment, and confidence is shaken. During a period of six months, out of 1,959 letters of inquiry sent from his clinic to defaulters, 1,292 remained unanswered, a most unsatisfactory state of affairs.

So far as the second point is concerned, it was now recognised that repeated clinical survey of every case is required, in addition to the blood serum test. Experience showed that except in cases which come under treatment at the beginning of the disease, it is of the greatest importance to keep in touch with the patient over a term of years.

Dr. Mabel Brodie. Following up in Maternity and Child Welfare Work.

- (a) *Central Control*—i.e., a well-organised M. and C.W. Department, with adequate medical, health visiting, and clinical staff.
- (b) 1. *District Work*. Effectiveness of home visiting very important.
2. *Centre Work*—mainly educational and preventive. Centres should be "sifting out" places for various types, e.g., tuberculosis to dispensaries. Complete co-operation and co-ordination of all branches, and all M. and C.W. work should be under one medical officer.
3. *Co-operation*. Every agency dealing with social and welfare work to be linked up and overlapping avoided.
4. *Institutional Treatment*. Observation wards, hospital, convalescent homes, rest homes for mothers, home visiting centres.

After care includes:—

1. *After care of notified birth*, to which only one visit is paid by a health visitor, may be undertaken by district nurse; general practitioners; *competent voluntary worker*; in co-operation with health visitor; Welfare M.O. at Centre (incomplete without home visiting); competent municipal or county midwife.

2. *Still-births*.—Mother should be referred to centre. If venereal disease suspected, Wassermann both of father and mother. Not enough supervision of still-births. General practitioner or midwife could do much. Stay in rest home, gynaecological treatment, obstetric interference, and always encouragement, observation and help during pregnancy.

3. *Ante-natal*.—After care may be carried out by own doctor, medical officer at centre,

Hospital on Friday, July 29th, at 6. p.m. Dr. H. A. Ellis in the chair.

1. The minutes of the Committee Meeting held on 15th June, 1921, were read and approved.

2. *Election of Chairman of Committee.*—Dr. T. H. Peyton, Chief Tuberculosis Officer for Cheshire, was unanimously elected Chairman for the year.

3. *Election of Representative of the Group on the Council of the Society.*—Dr. T. H. Peyton was elected.

4. *Election of Representative of the Group on the Council of the Metropolitan Branch.*—A letter was read from the Secretary of the Metropolitan Branch asking the Group to nominate one of its members to serve on the Council of the Branch. Dr. Horace R. Wilson, Tuberculosis Officer and Assistant Medical Officer of Health, Southwark, was elected to serve in this capacity.

Dr. Wilson was then elected a member of the Committee of the Group.

SPECIAL FOOD COMMITTEE.

A meeting of this Committee was held at No. 1, Upper Montague Street, on Wednesday, July 27th, at 4 p.m.

Present.—Dr. Wheatley (in the chair), Dr. T. Orr, Professor Kenwood and Professor Robertson.

Letters of apology were read from Drs. Barlow and Daley.

The minutes of the last meeting were confirmed.

A memorandum on dental caries to accompany a resolution previously passed was considered. The memorandum was adopted with the substitution of the word "conditions" in place of "surroundings" in the third paragraph on page 2 and with the addition of the following words to paragraph 4:—"and moreover there is some evidence of decrease of dental caries owing to educational propaganda and altered conditions."

The outlines of a scheme of inquiry into the diet of certain sections of the population submitted by Dr. Daley was then considered. Dr. Daley's scheme was generally approved. The following suggestions were made: (1) that families in which any of the children were wage earners should be excluded; (2) that where any articles such as meat or milk are reserved for any particular member of the household this should be stated; (3) that it is

very desirable that the weights as well as the number of articles such as lettuce and cabbages should be stated; (4) that owing to the difficulty of estimating the amount of food in meals at restaurants, etc., families should be excluded if any of the members habitually get their meals out.

The question of making food propaganda a duty of Sanitary Authorities was then considered and the following resolution finally adopted:—

"That the Ministry of Health be asked to place the duty of spreading knowledge on questions relating to the food and feeding of the people on every sanitary authority, with a view to improving the general health of the people."

The Council of the Society is recommended to forward the two resolutions to the Ministry of Health and is asked to state that the Food Committee would welcome an opportunity of personally supporting these resolutions.

NEWS FROM BRANCHES.

NORTH WESTERN BRANCH.

NOTICE TO MEMBERS.

The Hon. Secretary would be glad to receive at once the names of any members of the N.W. Branch, who would be willing to read papers or open discussions during next session. Alternatively he would appreciate suggestions for subjects, demonstrations, or visits likely to be of general interest to the Branch.

CLEAN MILK.

The imperative necessity of a pure milk supply was emphasised yesterday afternoon at Blackburn by Mr. Wilfred Buckley, of the National Clean Milk Association, first to a gathering of farmers and interested persons in the Prince's Theatre, Blackburn, and finally to a popular audience in the People's Mission, King Street, while sandwiched in between the two was a demonstration at the Guardians' Farm at the Workhouse of the latest hygienic principles in the milking of cows. These gatherings were held under the auspices of the Publicity Committee, and at the Prince's Theatre Dr. Aitken, J.P., presided, and commented on the present unsatisfactory manner in which milk was delivered to the general public.

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