# THE IRISH JOURNAL OF MEDICAL SCIENCE

THE OFFICIAL JOURNAL OF THE ROYAL ACADEMY OF MEDICINE IN IRELAND

SIXTH SERIES.

No. 265.

JANUARY, 1948.

## THE ORIGIN AND DEVELOPMENT OF PUBLIC HEALTH SERVICES IN IRELAND.

By Morgan Crowe.

MONG the minutes of the Council of the Royal College of Surgeons in Ireland, kindly unearthed for me after much search by Professor Widdess, is one dated Monday, October 11th, 1841:

"The following resolution, moved by Mr. White, was put and agreed to:

'Resolved, that a Professor be appointed by the College to deliver lectures on the provisions required for the preservation of the health of the public and the precautions to be adopted for preventing the extension of disease.'"

On December 13th, 1841, Henry Maunsell was appointed Professor of Hygiene or Political Medicine at the R.C.S.I.

This appointment is of interest because it was the first of its kind in this country. Though the title has changed, this Chair is held to the present day under the designation "Preventative Medicine and Medical Jurisprudence". The initial title must have been associated with an address delivered by Maunsell before the Royal College of Surgeons in 1839, entitled "Political Medicine".

In this discourse, Maunsell explains "Political Medicine" as abandoning the service of individuals for the higher object of protecting public health and providing for the physical well-being of the human race. He considers as among the most important objects of political medicine, vaccination, health of seamen, prison conditions, epidemic and endemic diseases, quarantine measures, etc. He describes as a most important branch of political medicine the provision of suitable aid in sickness for the public generally, especially the poorer classes, a measure which in every well-ordered community should be recognised as one of the main objects of civil government. Had there been, according to him, but a small knowledge of political medicine in the national councils, they would not have to dread the working out of that recent and most unhappy system the Irish Poor Law. He stresses the association between endemic diseases and dirty, overcrowded houses without privies or drains, large open ditches containing stagnant liquid filth, heaps of refuse, etc. For the existence of these conditions Maunsell blamed those members of the profession who failed to use the position which success had achieved for them by engaging in public duties. "Had they not (he said) by the fear "of losing a single guinea throughout their lives been deterred from coming forward and manfully engaging in public questions which lay within their province, the public and the medical professions would not now labour under many of the grievances to which I have already alluded, and we should not now have non-medical Poor Law Commissioners endeavouring to constitute themselves into a permanent Sanitary Board."

While these words were spoken with vision over a hundred years ago, it is only within recent years that political, or to call it by its modern title, social medicine has become a matter of general concern. It is certainly a subject of increasing interest nowadays, forming a medium for discussion, not only at medical meetings and in medical journals, but also at political gatherings and in the daily Press.

It is becoming increasingly clear that besides providing every care for those who are ill, more must be done to keep the people well. It is realised nowadays by doctors and politicians alike that this is a problem extending beyond the confines of consulting-room or surgery: that it is a question of the environment in which we live, the houses we inhabit, the food we eat, the conditions in which we work, the facilities for healthy recreation, and, most of all, the principles of hygiene inculcated into us at school.

These are factors which, while they vitally and intimately affect the health and domestic life of the individual, are also integral features of the nation's economic structure. To raise and maintain a healthy race, therefore, presents an objective bristling with economic and political difficulties, a task national in scope and importance, and clearly too much for doctors to tackle as individuals.

Actually, responsibilities were undertaken by the State in this matter when, under the Medical Charities Act, 1851, it founded the dispensary system to provide medical attention for the sick poor, and under the Poor Relief (Ireland) Act, 1867, it permitted their treatment in workhouse infirmaries. Public health obligations were later undertaken in this country when the Public Health Act, 1878, set up local administrative authorities and empowered them to deal with these conditions of everyday life, which, if neglected, might react unfavourably on the health of the community.

Briefly, this Act divided Ireland into urban and rural districts and made their elective councils urban or rural sanitary authorities. The main object of the Act was to maintain a healthy environment, and it placed obligations on sanitary authorities in regard to pure water supplies, sewage disposal, refuse collection, food inspection, etc. It defined public health nuisances, and laid down the procedure for abating any sanitary evils discovered by sanitary personnel during routine district inspection. The Act further made provision for communicable disease control, and permitted sanitary authorities to build or arrange hospital accommodation, general as well as fever, other than that offered to the sick poor through the Poor Law. To carry out the provisions of this Act, sanitary authorities were empowered to appoint medical officers of health, sanitary inspectors and, some years later, veterinary inspectors.

With the march of time the scope of public health legislation has con-

siderably widened. Thus it was soon found that lack of knowledge as to occurrence of infectious disease hampered the sanitary authority in quickly applying preventative measures, so the Infectious Diseases Notification Act, imposing on doctors the duty of notifying the presence of declared notifiable diseases, was passed in 1899, and further powers for disinfection, detention in hospital and prompt burial were given in the Infectious Disease Prevention Act, 1890. The Housing Act, 1890, and the Public Health Acts, 1890 and 1907, extended responsibility for housing, drainage, refuse disposal, and further tightened up practice in regard to infectious diseases. The Public Health (Regulations as to Food) Act, 1907, empowered the Minister for Local Government and Public Health to make regulations to prevent danger from food, and the Dairies Order, 1908, imposed the duty of exercising supervision over milk.

At first the activities of the local administrative authorities were impersonal. True, they catered for those with infectious diseases, but mainly with the object of preventing spread from the sick to the healthy. The Tuberculosis Act, 1908, and the Venereal Diseases Regulations, 1917, subsequently gave elaborate powers to help persons affected with these diseases. The Notification of Births Act, 1915, and the Medical Treatment of Children Act, 1919, enabled local authorities to attend to the health of expectant and nursing mothers and children. The benefits of these latter enactments are not confined to poor persons, nor are they activated with the motive of preventing disease spread. On the contrary, they seem intended to help those persons who otherwise might lose time in getting medical care if left to their own resources, and are really the first manifestation of State concern that personal health, as distinct from public health, should be maintained.

Unfortunately, local authorities were slow to organise public health services. They showed little initiative in implementing their powers and many even refused to apply in their districts those Acts, the adoption of which was optional. Looking back now, the question may well be asked why the British Government left to the petty manœuvrings of district councillors any option about adopting the Infectious Disease Act, 1899, and the Public Health Acts, 1890 and 1907, when their adoption was made mandatory in England.

Indeed, at the beginning of the nineteen-twenties only three local authorities, the County Boroughs of Dublin, Belfast and Derry, had availed of their powers to appoint full-time Medical Officers of Health, the others being satisfied to discharge such minimal public health duties as they had to, through the medium of part-time officials. In this latter instance, the Medical Officers were the local dispensary doctors, already fully occupied by their practices, and the Sanitary Inspectors were untrained persons, most of whom carried on a business or held some other position in the locality. The Medical and Sanitary Officers were, therefore, very dependent on the goodwill of the people in the neighbouring town or village and for the miserably small salaries they were paid as Sanitary Officials one could hardly expect them to jeopardise their popularity by energetically enforcing Public Health Acts possibly leading to court action. The appointment of Veterinary Inspectors, pro-

vided for specially in Sanitary Order, 1909, to supervise milk production, was just not done at all.

When the first native Government came into office, responsibility for environmental sanitation rested with numerous small unco-ordinated councils, jealous of their prestige, with no common policy, and few controlling adequate financial resources to properly implement their obligations. Sanitary conditions were, therefore, primitive, many towns being without piped water supplies, sewerage systems, or planned refuse disposal. Little effort had been made to enforce the Milk and Dairies Order. Particularly striking were the terrible housing conditions under which city working-class families had to live. From an educational standpoint, the objects of the public health movement were unknown or unappreciated throughout the country.

Whereas up to the 1920's public health measures had developed along the same lines throughout the whole country, from now on the approach differs in each part of the country, and this paper does not cover the subsequent progress in the six north-eastern Ulster counties outside the jurisdiction of the Irish Government.

In the Irish Free State, the situation was soon tackled, the first effort of consequence being the centralisation of administration effected by the Local Government Act, 1925. This Act abolished the numerous rural councils and replaced them by County Boards of Health, each of which was made the sanitary authority for the county. This Act also made mandatory on the sanitary authorities those Acts the adoption of which had hitherto been discretionary. The appointment of whole-time Medical Officers of Health and veterinary surgeons was insisted upon in each county, and a significant departure from precedent was created by transferring the right of making these and similar appointments, which hitherto had been enjoyed by the local body, to the newly-formed Governmental organisation, the Local Appointments Commission. Subsequently, the County Managerial Act, 1940, abolished the Boards of Health and made the county councils the Sanitary Authorities.

Within about ten years, public health departments, staffed by full-time Medical Officers of Health, dental, nursing, veterinary and sanitary personnel, had come into being. In addition, many have full-time assistant Medical Officers of Health or Tuberculosis Officers. Unfortunately, the sanitary inspectors are not yet all full-time, nor indeed trained, but full-time trained personnel is the target for each county. It is equally unfortunate that the veterinary inspectors are employed only in a part-time capacity and depend for their livelihood very much on the private work they obtain in the neighbourhood. Their hesitancy in seeking to apply rigidly the terms of the Milk and Dairies Act, 1935, to farmers on whom they also rely for private practice must be obvious to all, and the only alternative is full-time posts.

During the past 20 years, these newly-created public health departments have closely applied themselves to establishing a more impressive standard of environmental services throughout the country, and the Boards of Health, having more ample financial resources at their disposal, have been able to finance many costly projects. Thus, there are now 490 piped water supplies and 289 water-borne sewerage schemes operating throughout the

country; of these, the vast majority have been completed with this period. Further, whereas between the passing of the Housing of the Working Class Act, 1890, up to 1922, there were 9,765 urban houses erected, during the past 25 years this number has been increased to 51,000 urban dwellings. This number does not include many thousands of houses erected by public utility societies under State grant, nor thousands of labourers' cottages built here and there throughout the country. These ample data express better than any words the efforts which have been made and the success obtained in this sphere.

Despite the fact that some 20,000 working-class dwellings have been built in Dublin during the past 25 years, insanitary living conditions remain the acutest of the city's health problems. The most pathetic example is the tenement house with its single room tenancies. The typical tenement is a four-storeyed building with eight or more rooms. Originally designed for a single family, it has a common hallway, staircase and yard for possibly eight families now living therein. In the yard is situated what is usually the only water and sanitary accommodation. When water is required for cleansing, it must be carried up many flights of stairs, and, needless to say, when water is procured with such difficulty, washing is at a minimum. Living conditions such as these produce a vicious circle, because the mother gradually wearies in her struggle for cleanliness and becomes dirty herself. In consequence, children and food become dirty, and so conditions producing fatal diseases in infancy are created.

The tenement produces every sort of evil besides high infantile death rates. In such squalor, and without privacy, the home can have little attraction, and for the elders the comforts and warmth of publichouse or cinema are preferred. Home life as such is never developed and children are permitted to run about the streets when they should be in bed. Upbringing in such an environment is inconsistent with contentment and does not make for good citizenship.

In Dublin at the moment there are over 1,000 families, with six or more members in the family, each family living in a single tenement room and awaiting a Corporation dwelling. There are also 400 families, with a tuberculous member, living in single rooms and awaiting a Corporation dwelling.

There are other factors which must, however, be considered before rehousing can be taken as, of itself, solving the housing problem. Particularly bearing on this point are the observations of McGonigle, late M.O.H. for Stockton-on-Tees, described in the Medical Officer of June, 1933. McGonigle made methodical observations of a slum group, half of whom were transferred to a new housing estate, the other half remaining in their slum quarters while awaiting rehousing. During five years the death rate in the rehoused population was very much greater than among those remaining in the slum area. The rehoused families were, however, paying 9/- a week on rent as against 4/8 in the slum area. It was further calculated that the rehoused families, because of the increased rents, were spending on food 1/- per man per week less than in the slum area. McGonigle therefore concluded that the increased mortality was associated with inferior food intake.

In Dublin, new Corporation houses cost 10/- to 12/- per week, whereas families before transfer there paid about 5/- per week for their tenement room. It is very probable then that in Dublin, as in Stockton-on-Tees, transfer to a new house is followed by inferior food intake. Incidentally, it may be mentioned that the economic rent to the Corporation of new houses is about 23/- a week, the difference between the economic rent and that charged to the tenant being made up by the State and municipal subsidy. The economic and financial aspects of major building programmes in Dublin are thus apparent.

Besides attacking environmental causes of infection, the sanitary authorities take positive steps to block channels for spread of the more lethal communicable diseases. Thus, free institutional treatment is arranged in order to treat and render non-infectious the patient, disinfection is carried out, movement of contacts is restricted, and, in certain instances, susceptibles are afforded specific protection.

It is the kernel of communicable disease control that potential sources of infection be ascertained and, according to the Infectious Diseases Regulations, 1941, the M.O.H. is obliged to maintain a register of enteric, dysentery, and diphtheria carriers so that their movements and occupations can be checked.

The investigation of household contacts affords fertile ground for unearthing sources of infection previously unknown. For instance, isolated cases of enteric or dysentery are unlikely to have acquired disease from a common source as, if so, illness would hardly be confined to individuals. In such instances it is more likely that infection originated from someone in the home. The methods of investigation will probably vary in different areas, but in Dublin serological testing of contacts is done, and where these are in any way suggestive, bacteriological examination of excreta is carried out. A difficulty about field work of this nature is that, while blood specimens are obtained direct and there is no doubt as to their genuineness, there is always the possibility that individuals may send wrong specimens of fæces or urine, especially if their future employment may be in any way affected by their examination.

The ratio of sporadic cases to carriers unearthed is a sensitive index of the thoroughness with which field work is pursued. For example, in New York in 1929, the ratio of sporadic cases of typhoid to carriers found was 22-1; in 1935, with more thorough field work, this ratio was reduced to 8-1. In Dublin, during the past few months 13 contacts of 3 residual cases of enteric fever were investigated, but in no instance was a carrier brought to light. Routine swabbing of household contacts of diphtheria is also employed here, but, rather unexpectedly perhaps, among 270 contacts of 37 cases of diphtheria, only one carrier has been found.

To limit the spread of infection, it is further desirable, having isolated the patient, to restrict the movements of those contacts who, though apparently innocuous, might be incubating the disease and thus propagate the causative organisms. Thus, child contacts are generally kept from school or from mixing with groups of children, but, in the ordinary way, it is not practical to restrict the movements of adults. An exception is, however, made in the case of adults working with food, and the Infectious Disease Regulations, 1941, empowers an M.O.H. to prohibit

persons working with food when there is a risk of spreading enteric, diphtheria, or (in the case of milk) scarlet fever. Persons so affected can receive compensation from the sanitary authority. Also, the sale of milk, to which persons infected with the above diseases, with tuberculosis or poliomyelitis, have had access, is forbidden by the Milk and Dairies Act, 1935.

In this respect, however, the recent work of Pearson and Rendtorff during an outbreak of poliomyelitis in a Michigan (U.S.A.) town is revealing. During this epidemic, these workers made a most comprehensive study of the inhabitants of the town, as a result of which the virus of poliomyelitis was found in members of 6 of 8 households where a case had occurred, in 8 of 45 households with contact only outside the house, and in 2 of 127 households with no known contact. The positive bacteriological findings were frequently found in adults with no evidence of ill-health. It will thus be seen that, while this virus is present very often in household contacts, it may also be present among those with more remote, or even with no known, contact.

Pearson and Rendtorff's work strikingly illustrates how desirable is the control of poliomyelitis contacts. While such contacts may harbour the virus without suffering any apparent indisposition, it is reasonable to assume they can transmit it to others, of whom those with no special immunity may themselves fall victims to the disease. It would thus seem a wise move, in the interests of community health, to knock off work for a few weeks those contacts who mingle daily with throngs of people, e.g., cinema usherettes, workers in large indoor concerns, etc.

Sanitary authorities may also provide for raising community resistance. Vaccination against smallpox has been obligatory here for many years. In Dublin there are special immunisation facilities against diphtheria available at child welfare clinics or in the schools, but, unfortunately, difficulties as to remuneration have interfered with this form of immunisation throughout the country. Inoculation with T.A.B. is available as required, and it now seems highly probable that B.C.G. vaccination against tuberculosis will soon be practised here. In Dublin also, serum is given prophylactically to child contacts of diphtheria, while arrangements to make gamma globulin available to doctors for measles contacts of susceptibles age groups are being pursued. We must consider also the rôle of vaccination against pertussis.

In recent years, reports from Canada and U.S.A. suggest that these countries have a vaccine which is efficacious in preventing pertussis, or at any rate in greatly ameliorating it should it occur. In North America, anti-pertussis vaccination is considered to be a valuable public health procedure and indeed since 1945 is compulsory by state law in North Carolina for children under one year.

There have, of course, during the past thirty years been numerous claims for successful vaccinations against pertussis, but these were generally based on enthusiastic personal opinions unaccompanied by properly planned controls. During 1942-44, under the direction of the Medical Research Council, a carefully planned investigation was carried out on children in British residential nurseries using a vaccine prepared in England. The results did not, however, substantiate American

experience, as vaccination influenced neither attack rate nor severity when compared with a series of controls. A further investigation is at present under way in England, but, this time, vaccines found successful in America, and obtained direct from there, are being used.

In America, bacteriological methods, such as cough plates and nasopharyngeal swabbing, are extensively employed for early diagnosis, and intradermal skin and complement fixation tests are used to determine immunity. Hyperimmune serum—human or rabbit—has also been found of value in America in protecting susceptible contacts from developing the disease. The result of the present investigation, now being carried out in England, will be of very definite interest here. If the American claims are substantiated, the way is clear for sanitary authorities to introduce comprehensive programmes of whooping-cough control.

While sanitary authorities can do much of a positive nature to check the spread of the well defined acute infectious diseases by controlling patients and contacts, their powers for dealing preventatively with aircarried and food-borne infections are very limited.

While the actual incidence of air-borne sickness cannot be estimated, it is known that, apart from the broncho-pneumonias so fatal to young and aged, absenteeism among factory personnel, due to even relatively mild inflammations of the respiratory tract, creates quite an economic problem.

The association of air-borne infection with overcrowding and poor ventilation has been demonstrated. In Britain, it is laid down that a room under 70 square feet is overcrowded if used by an adult for sleeping purposes, and the use of such a room for this purpose is forbidden. In this country we have no such regulations applicable to private houses, and therefore it is customary to see, even in elaborately built new houses, an apartment hardly 50 square feet earmarked for the unfortunate maid. Moreover, nearly a fifth of the city's population sleep in the polluted atmosphere of tenement rooms, and as well as this there are congested and ill-ventilated schools, cinemas, dance halls, the habituees of which are constantly exposed to the inhalation of myriads of pathogenic organisms.

While the sanitary authorities at the moment go to great pains to provide a safe water supply, they have no means at their disposal to procure a pure air supply in such premises. It is possible, of course, that some way of purifying the air of much-frequented buildings, either by ultra-violet light or chemical methods, will be realised in the future.

Food poisoning is not notifiable and therefore its incidence cannot be estimated. Sanitary authorities are empowered by the Public Health Act, 1878, to examine food exposed or deposited for sale and intended for human consumption. They may seize any item that appears unwholesome and bring it before a magistrate, who, if he concurs, may order its condemnation.

Food which appears unwholesome is not so much a public health menace, because its deteriorated condition will not escape the housewife. Moreover, foodstuffs contaminated with pathogenic organisms may betray no sign of unwholesomeness to naked eye inspection by even a

trained inspector. It is evident, therefore, that even if sanitary authorities possessed staffs of trained personnel sufficient to maintain constant supervision over food shops, something more than naked eye inspection is necessary to prevent infected food from reaching consumers.

Measures of food supervision should include steps of a preventative nature. Among such steps would be routine ante- and post-mortem inspection by veterinary personnel of animals about to be killed and after killing, but in the absence of suitable abattoirs, private slaughter-houses exist in which even carcasses do not undergo post-mortem examination. Wrapping of food items such as bread, hygienic transportation and protection of meat when set out for sale would be an advance.

The increasing tendency to patronise public eating-houses nowadays also creates health hazards. Thus, kitchen hygiene, washing of cutlery and crockery, etc., are subject to no outside supervision, and, in times of rush it is certain that cups and plates are used by different customers with only a token cleansing in between. Storage arrangements are left to proprietors, there being no insistence that food be maintained in refrigerators. The employment of food handlers, even their re-employment after illness, is a matter between employer and employee.

In this respect, Hutchinson's bacteriological investigation of restaurant utensils in use in an English town is significant. Swabbing of cups, spoons, etc., ready for use, showed a large number were contaminated with staphylococcus aureus, hæmolytic streptococci, and even fæcal organisms. Moreover, the dish-water in which these utensils had been washed was highly polluted. There is little doubt that equally disconcerting and repugnant results would be obtained from a similar survey here.

Regulations establishing standards for the different aspects of food handling are, therefore, highly desirable, and actually power to make such regulations is granted under the Public Health (Regulations as to Food) Act, 1907. There are indications now that the new Health Act will be availed of to establish some such code.

The much-discussed question of safe milk has been settled in that the Tribunal specially appointed by the Government to examine this question has recommended the pasteurisation of raw milk in Dublin city. It is to be hoped that no considerable number of years will be allowed to elapse before this recommendation is given practical effect.

#### Tuberculosis.

Under the Tuberculosis Act, 1908, councils of counties and county boroughs are empowered to provide dispensaries and institutions for treatment. Following this Act, doctors supposed to have special training in tuberculosis, and called Tuberculosis Officers, were appointed, and dispensaries established in every county to investigate and care for persons thought to be suffering from tuberculosis.

Any doctor can refer to these dispensaries persons he desires to have further investigated and on whom he would like the advice of the Tuberculosis Officer. However, in the early years after their establishment, these clinics were not much used by practitioners probably because in those days diagnosis was largely a matter of stethoscopic examination, at which the general practitioner considered himself as good as anyone else.

Of recent years, the importance of special diagnostic clinics in the antituberculosis campaign has been emphasised. Since the advent of collapse therapy, patients, on entering a sanatorium, anxiously enquire what form of treatment they are to receive. As the application of the more dramatic active measures is governed by the stage to which the disease has progressed, a premium is now placed on early diagnosis. Indeed patients or their relatives may criticise a doctor for any apparent delay in coming to the correct diagnosis.

Bitter experience emphasises that recognition of tuberculosis, especially in its early stages, is no simple matter and may require, over and above stethoscopic examination, a series of tests, such as blood sedimentation, tuberculin, x-ray and bacteriological. On the other hand, there are undoubtedly many cases in this country labelled tuberculous because of abnormal sounds in the chest, but never confirmed by finding tubercle bacilli, who are really suffering from other conditions. In this respect, it may be mentioned that in Denmark pulmonary tuberculosis is not officially diagnosed unless bacteriologically confirmed, but in that country gastric lavage is widely used in municipal clinics, and in this way tubercle bacilli are frequently demonstrated even in those with no sputum. Mass radiography also discloses many persons with x-ray shadows the exact significance of which involves deep consideration and mature judgment. These are matters of prime importance in this country where the attitude to this disease is such that grave harm, perhaps financial loss or ruination of marriage prospects, may befall a family one of whose members has been improperly labelled as tuberculous.

When a case occurs in a large family, the periodical x-ray examination of many contacts, because of the expense entailed, may not be carried out if the family are left to their own resources. It is well to be aware then that routine investigations of this nature can be obtained free in every county through the Tuberculosis Services.

Unfortunately, our Tuberculosis Services have not yet recovered from a very bad start and have not been developed with regard to modern requirements. Thus, their diagnostic clinics are housed in unsuitable premises and are inadequately equipped. Then the official schemes, while in recent years making provision for food and clothing, do not yet include family allowances to a bread-winner forced to stop work, nor any programme of rehabilitation. However, it is the delay in getting a patient into a sanatorium that testifies better than any words the extent of failure to implement the spirit of the 1908 Act.

The omission of family allowances is a major defect. Since the introduction of mass radiography in Dublin, there is hardly a large business concern done but one or two persons, working away, are found with tuberculosis. The predicament of a man, perhaps the sole breadwinner for a houseful of children, found by mass radiography to have tuberculosis and advised to stop work and go into a sanatorium, can well be imagined. He is earning, say, £7 a week, but while in the sanatorium his sole income will be a weekly 22/6 insurance (for a limited period). If he is able to carry on at all, is it surprising if he gambles away his

prospect of recovery and remains at work until hæmoptysis or progressive decline force him to give up, but not before his chance of recovery has vanished.

The major defects in our tuberculosis programmes are not the lack of skilled doctors or their inability to provide the right treatment; they are the lack of sanatorium accommodation, lack of financial aid, and lack of suitable houses, all conditions which enlightened legislators would not have allowed to occur. The fault for the poor showing our anti-tuberculosis efforts have made is not a medical one: it lies with these lay administrators, local and central, who had the implementing of the 1908 Act in their hands. Although efforts to rectify these defects are now being made, local authorities (although they have little power in the matter now) the Local Government Department, and indeed successive Governments themselves must take the blame for the magnitude of the tuberculosis problem now with us.

#### Venereal Disease.

Under the Public Health (Venereal Disease) Regulation, 1917, councils of counties and county boroughs are obliged to provide free facilities for diagnosis and treatment of venereal disease. Full advantage of this power has not been taken, some eight counties having no scheme running at all.

Anti-venereal schemes, in those counties where operative, consist of treatment clinics and the furnishing of private practitioners with laboratory facilities and supplies of arsenical compounds. Hospital care is arranged in city institutions.

The scope of venereal schemes here is restricted to investigation and treatment of those attending centres. Even in Dublin, where it is most highly developed, no arrangements exist for case-finding or rounding up defaulters from treatment. This is unfortunate, because it is becoming increasingly clear that proper control of venereal disease requires more than the setting up of clinics for examination and treatment. In addition, methodical efforts should be made to trace all persons whom the patient may have infected. In the case of venereal disease, spread almost entirely in one way, this should be ever so much easier for trained workers to accomplish than in the case of, say, air-borne infections.

Case-finding by contact tracing obtained a great stimulus from the introduction of Regulation 33B into Britain during the war years. According to this regulation, the doctor endeavours to get from the patient the identity of the contact or person suspected to be the cause of the trouble. When one contact is named by two patients, he or she can be compelled to undergo examination and submit to any necessary treatment. In the six months following the introduction of these regulations, 110 contacts were named in this way. However, even those contacts named but once were also visited by trained field workers who, by tact and discretion, persuaded many, otherwise immune from 33B, to attend voluntarily at a clinic.

Specially trained health visitors or almoners should be associated with every treatment centre to get contacts to attend, and also to round up defaulters from treatment. One such specially trained almoner was,

in fact, appointed to the St. Margaret of Cortona (former Westmoreland Lock) Hospital over a year ago.

Methods of case-finding adopted in other countries are notification and compulsory treatment, pre-marital and pre-natal blood-testing.

In many of the American States, a marriage licence can only be obtained if both applicants produce certificates of freedom from venereal disease. In Connecticut in 1937, 60 cases of syphilis, in the communicable stage, were unearthed in this way and the marriage licences refused pending a satisfactory response to treatment.

Pre-natal blood-testing by attendant doctors is compulsory in many American States, e.g., New York, Illinois, etc., and, on a voluntary basis, is carried out extensively in England at ante-natal clinics. In Dublin, routine blood-testing of those attending Rotunda and Holles Street Hospitals in 1945 showed 3 per cent. and 2 per cent. respectively, with syphilis. As some 12,000 women are delivered annually in the city maternity hospitals, these findings might be taken as suggesting that there are 300 expectant mothers, and almost that number of babies, requiring anti-syphilitic treatment each year.

Perhaps the most exacting attempt at case-finding was passed by the Alabama State Assembly in 1943. This law required all citizens domiciled in Alabama, and between the ages of 14 and 50 years, to have a blood-test for syphilis. During the first year of this programme, blood specimens from 69,000 persons were examined; of these, 11 per cent. were positive. Alabama, which is the only American State to have passed such legislation, has a large negro population and amongst these the percentage of positives was much higher than among the whites.

Consequent upon an intensive case-finding programme, competent medical care must also be provided, the aim being to hold infectious patients under treatment till they are no longer a menace to society, to their unborn child, or to themselves. In this respect, it is important that medical officers undertaking the treatment of this disease should have special training, and it should be noted that the British Local Government (Qualifications of Medical Officers and Health Visitors) Regulations, 1930 and 1933, require that, before a doctor can obtain an appointment as a venereal disease officer, he must submit evidence of special experience. This is particularly necessary nowadays because, while the sulphonamides and penicillin may effect dramatic disappearance of symptoms, very thorough tests for cure must be applied before it can be taken that such persons are no longer dangerous to others.

The results of routine blood-testing in our city maternity hospitals suggest that some 300 expectant mothers and infants should get antisyphilitic treatment each year. Actually, it seems that less than half this number are, in fact, treated. This is hardly surprising because women are loth to wander with their infants from clinic to clinic.

It would be an advance, therefore, if the municipal service could run treatment clinics in maternity hospitals and child welfare centres. In this way the expectant mother, found during ante-natal examination to have venereal disease, could receive treatment conveniently and subsequently have this continued for herself and her child at the child welfare centre.

Finally, there is the question of preventative measures. While even conservative Britain has been persuaded to use the press, cinema and radio to educate the public on this matter, a hush-hush policy is still tolerated here. More active steps against all those who profit by the business of prostitution could be envisaged. Many prostitutes could be reformed if better facilities for their rehabilitation existed. It should, however, be borne in mind that, in the dissemination of venereal disease, the promiscuous amateur, not only in the period before treatment, but even during treatment, may be as much a hazard as the commercial prostitute.

### Child Care.

Under the Notifications of Births Act, 1915, councils of counties and towns are empowered to make any arrangements they think fit for attending to the health of expectant mothers and children under five years.

This Act, which envisaged State participation on a large scale, was the outcome of public concern at excessive infantile mortality despite the wholehearted efforts of voluntary personnel.

The infantile mortality rate is the number of deaths under one year per 1,000 live births. This calculation is in no way dependent on accurate diagnosis, nor is it based on personal opinion. It is a simple statement of fact and leaves no room for error.

Comparison with most other countries shows that the trend of the infantile mortality has been very unfavourable here. Of special significance is the progressive improvement in the English rate from a position at the beginning of this century much worse than ours, to its present level compared with which we are now far behind. The extent to which we have fallen behind can be more clearly expressed by stating that had we effected the trend experienced in England during the past five years, we would have saved 1,500 babies annually.

It will be observed that this Act gave most liberal powers to County and Town Councils, and one would expect to see elaborate maternal and child welfare schemes functioning in each county. Actually, up to the present, little advantage has been taken of it outside the cities. Antenatal, post-natal, and infant welfare clinics are functioning in very few counties, and specialised obstetrical and pædiatric help is not ordinarily to hand throughout the country even in those hospitals responsible for the difficult midwifery of the counties in which they are situated.

However, the State has now declared its intention of dealing with this matter and we are promised that an elaborate programme of mother and child care will be forthcoming in the near future.

The foundation of the organised care of mother and child is attention to the expectant mother. Attention to the expectant mother includes, in addition to physical and obstetrical checks, blood-testing and, if in any way indicated, chest x-ray. These routine checks could be done at ante-natal clinics conveniently situated throughout the country. It has been stated that routine Wassermann tests at ante-natal clinics in Dublin showed 2 per cent.-3 per cent. positive. In Dublin also, the maternity hospitals refer their expectant mothers to the Corporation x-ray Department for miniature x-ray, and among 500 done during the past six

months 6 active cases of pulmonary tuberculosis and 19 cases requiring observation have been discovered.

Obstetricians should be more evenly distributed throughout the country—at the moment, like specialists of all kinds, they are mainly confined to the cities—to do midwifery and gynæcology in county hospitals and to assist practitioners with emergency domiciliary midwifery.

Efforts to reduce infantile mortality begin with the prevention of premature births, and in this way many still-births and neo-natal deaths are avoided. Thorough ante-natal care of the expectant mother would go far to achieve this. The prognosis for babies, especially prematures, has improved enormously in recent years, but is directly dependent on the specialised skill at hand. A pædiatrician should, therefore, be readily accessible to each county hospital, which should contain proper facilities for dealing with children, including prematures. Further, specially equipped and heated ambulances should be available to bring premature or distressed babies to hospital, while nursing personnel, clothes, utensils, electric blankets, etc., should be at hand when required for treatment in the home.

The subsequent care of the infant should be supervised at child welfare centres and by the domiciliary visits of health visitors. The health visitor, when able to give individual attention to the families under her care, exerts real influence on the mother and becomes a pillar of the public health organisation. In Dublin, the 30 health visitors have now started tuberculin testing all infants between 6 and 12 months. It is felt that a positive reaction in such an infant will give a most sensitive index as to the presence of tuberculosis in the home. Where positives are obtained in this age-group all household members are brought for miniature x-ray.

In Dublin, in addition to the child welfare organisation, there has also been formed, at the instigation of the Department of Health, a Gastro-Enteritis Control Section consisting of doctors and health visitors, to devote their particular attention to gastro-enteritis in children.

No branch of public health can achieve so much, at so little cost, as maternity and child welfare. Provision for the welfare of mothers and infants illustrates better than anything else the variety of factors, of which medicine is only one, which go to maintain a good standard of health. Thus, experience has shown that the chances of infant survival are adversely affected by slums, overcrowding, poverty, etc., and infantile mortality rates have been used to compare living conditions in different countries. In this respect, it was interesting to hear many speakers at the Rotunda Congress attribute the improvement in cross-Channel stillbirth and neo-natal death rates to the rationing system employed during the war years, ensuring a better balanced food supply for the poor. In this country, there has been introduced the laudable policy of ameliorating the poverty-creating effect of a large young family by provision of family allowances. These comprise weekly allowances of 2/6 for the third and each subsequent child. Peculiarly, however, children's benefits do not, in practice, operate evenly between the different classes. Thus, a man with two children on an annual salary of £500 is allowed £20 off

income-tax liability because of his two children. In practice, this is the equivalent of a weekly allowance of 3/10 for each of his two children. On the other hand, a man with two children and such a low income as not to reach the taxable level gets no equivalent of the financial relief afforded the higher-salaried class. The poor man must therefore await the birth of a third child before the State gives him any financial benefit.

The Public Health (Medical Treatment of Children) (Ireland) Act, 1919, places on councils of counties and county boroughs the duty of arranging medical inspection and treatment of children attending elementary schools. This Act is in force in every county, thousands of children being examined every year. Treatment is, however, restricted to defects of eyes, ears, teeth, and extraction of tonsils. It is unfortunate that the provisions of this Act do not apply to secondary schools.

Through the medium of schools a fruitful field for unearthing disabilities among children could be developed. Teachers, for example, have numerous children under their care for such long and continuous periods that they have unrivalled opportunities for observing squints, irritable-eyes, deafness, speech disorders, etc. In addition, if the gramophone audiometer were systematically used for group-testing in schools, a procedure now obligatory in some American States, more children with deafness would be discovered.

The joint efforts of teachers and school medical officers would certainly go a long way to discovering those children with some form of disability. However, discovering the children will not bring much advantage, and indeed is apt to degenerate into a mere collection of statistics, unless it is possible to give them thorough and up-to-date treatment.

At the moment, the School Medical Service provides for visits of ophthalmic surgeons and oculists to every county, and so gives excellent opportunities for rectifying eye disorders. Strangely enough, similar arrangements are not made for ear conditions. The school service does include extraction of tonsils, but it should arrange visits by otolaryngologists to assess ear disorders, sinuses, etc., and, where necessary, advise appropriate hearing aids. Similarly, an orthopædic surgeon should be available.

A casual attitude is sometimes adopted by parents towards minor disorders, such as speech defects, partial deafness, etc., not associated with apparent bodily illness. Such neglect may have unfortunate sequelæ. because what appears in childhood to be insignificant afflictions may progress in later life and, at any rate, may restrict the scope for future employment. Team-work between teacher, school medical officer and appropriate specialist could, however, result in disabled children getting the benefit of modern medicine. For many, a front position in the schoolroom, or the fitting of hearing aids will suffice. Others will require tuition in lip-reading or vocational training suitable to their state of These and similar facilities should be available for afflicted children, not through the Poor Law, but without any stigma as a community health service. In this way, many defective children would not only be prevented from becoming liabilities on the State, but actually prepared to play a useful part in adult life.

In the same way as the school could be made to serve physically, it can also serve nutritionally, sub-normal children. Since 1914, the Education (Provision of Meals) (Ireland) Act has empowered town councils to give school meals. It will be noted that this Act does not apply to rural schools, to which children travel many miles daily. Subsequently, the Irish Government applied these provisions to Gaeltacht schools, but not to other rural areas.

The meal usually consists of milk or cocoa with bread, butter or jam. In Dublin City it is somewhat more elaborate, consisting of milk and a cheese or meat sandwich. This is an appreciable contribution, and has been calculated as supplying some 20 per cent. of the 2,000 calories which the average child requires daily. It is a pity that it could not be further elaborated to consist of a hot midday meal, which could be constructed to furnish 1,000 calories, and the provision of which would yield ample dividends by diminishing the sickness rate among the undernourished in the capital city.

There is a different approach in this country and in Great Britain to the care of schoolchildren.

In Great Britain, the central education authority, the Ministry of Education, and the local education authority, the Education Committee of town or county council, carry the responsibility for maintaining healthy school conditions, as well as promoting learning. The local education authority has its own medical staff, and medical examination, provision of school meals and recreational facilities, are all carried out as part of the educational programme, in all aspects of which teachers must lend a hand. The school medical officer reports to the local education authority adverse school conditions, and the latter bears unequivocal responsibility for acting, or sleeping, on the recommendation.

In this country, the position is not so clear. Here, there is a central education authority, the Department of Education, but there is no local education authority as such, the latter's rôle being apparently filled by managers. At the same time, school managers do not accept the responsibilities undertaken by cross-Channel local education authorities regarding medical inspection or healthy upkeep of school buildings. School inspection must, therefore, be carried out by the Public Health Department. This arrangement is bad in that it allows education authorities to divest themselves of responsibility for the physical welfare of children. As well as this, the Public Health Department, not having control of schools, can do little to correct the unhealthy conditions so frequently found therein. Their reports, of course, come to the Department of Education, but from the lack of practical results, one can almost picture their indulgent smiles at unwanted efforts to get their house in order.

It is abundantly clear, however, that children are forced by law to spend many years of life in a school environment which adversely affects their health. It is surely time that responsibility for ensuring healthy school conditions should be clearly defined, and that commitments undertaken be honestly discharged.

Our present public health system does not provide for general practitioner attention. Local authorities are "public health"—rather than "health"—minded, and are mainly concerned with preventing spread

of disease through the community. The unfortunate individual suffering with, shall we say, a purely personal complaint such as diabetes, is left to his own resources. From the viewpoint of preventative medicine, this is a drawback because it is the general practitioner who first comes across persons with infectious disease, tuberculosis or venereal disease, and it is upon his foresight in dealing with them that the whole public health machine depends. Moreover, general practitioner attention must be the foundation on which the more specialised schemes, discussed here, depends.

There is, of course, the dispensary system providing treatment for the sick poor, and established by the Medical Charities Act, 1851. This does not come under the control of the public health department: instead, it is conducted under Poor Law ideas and is confined to those getting relief tickets from the Relieving Officer.

It is peculiar to have Public Health and Poor Law activities, both having much in common, run without regard for each other. We find, for example, in every county on the one hand various public health services assembled under the Medical Officer of Health, and on the other hand dispensary doctors, a general hospital and perhaps a fever hospital, all centred on promoting community well-being, but yet completely divorced both in approach and management. Indeed, when it is realised that each organisation is financed from the same source, it seems ludicrous. The anomaly is at its worst in Dublin where we have the Gastro-Enteritis Control Section working as a unit of the Corporation Public Health Department, but having no official association with St. Clare's Gastro-Enteritis Hospital, because the latter is not under Corporation management.

There is also the problem of that section of the community, those just outside the level of eligibility for the dispensary doctor, whose health needs attention, but who cannot afford to pay the fees of private practice. While this stratum often avails of extern hospital departments, many individuals solve their immediate problems by carrying on without medical aid until in extreme need.

It is most unfortunate for this group that the country was deprived of the medical benefits provided by contract under the National Health Insurance Act, 1911, in return for contributions from State, employer and employee. This panel system provides general practitioner attention, not as a compliment or charity, but as a right.

The absence in this country of an equivalent to the panel system has resulted in uncontrolled attendance at extern hospital departments. In fact, extern departments have been divorced from their real function of maintaining an advisory and consultant programme for practising doctors to a series of dispensary sessions. It is doubtful if the efforts of large hospitals in any other city have been so misdirected, and this state of affairs is directly due to the absence of the family doctor-specialist relationship. For a similar reason, the proper development of the specialised local authority services have been impeded.

We have just witnessed in this country the birth of a new Department of Health. There has also been passed a new Health Act (as distinct from Public Health Acts). This Act will do much to rectify some of

the anomalies at present existing, and will co-ordinate public health and public assistance into a single system of care. It also provides for general practitioner attention to mothers and children, a provision which will be of inestimable benefit to this group. The Act itself does not, however, provide medical attention for any other group except through public assistance.

There is a contrast, then, between our position under our new Act and that of Great Britain in that we afford medical benefits to mothers and children, groups excluded from the British National Health Insurance Act, 1911. At the same time, these excluded groups had access to the very well-developed maternity and child welfare and school medical services operating in Britain. Our Act, however (and here I am not taking account of suggestions outlined in the White Paper, which I feel to be very long-term planning) does not include medical attention to wage-earners, a benefit enjoyed in Britain since 1911 and now about to give way to a much more comprehensive scheme.

The maintenance and treatment of persons in general hospitals has not been brought within the scope of the public health services, although by the Public Health Act, 1878, sanitary authorities were empowered to build hospitals, convalescent homes, etc. Of late, however, increasing financial commitments have been undertaken by local authorities in regard to persons receiving intern treatment in voluntary hospitals. In Britain, on the other hand, the Local Government Act, 1929, unified under the Health Departments of local authorities, hospital and institutional accommodation for the sick, chronic sick, aged and infirm, up to that time administered under the Poor Law.

The various county hospitals throughout the country are administered under the Public Assistance Code and carry a responsibility to the local They have usually the services of an experienced surgeon, but not of specialists in the various branches of medicine. It cannot be said, therefore, that they provide locally for the various laboratory, radiological, electrocardiographic and other facilities essential for the thorough investigation of vague conditions. In Dublin, St. Kevin's also carries a definite responsibility to the poor, and dispensary doctors speak highly of the prompt and ready manner in which they get patients admitted On the other hand, although now in receipt of large financial subsidies from the Corporation, the voluntary hospitals have no specific commitments to Dublin people. Thus, while perhaps up to 25 per cent. of their patients are from outside Dublin, city doctors meet the frustrating experience of refusals by voluntary hospitals to admit even acutely ill Dublin patients. In the city hospitals there is, of course, available the whole gamut of specialised care and attention that must be associated with such a long-established teaching centre.

Finally, it may be of interest to mention the gradual change in relationship between local authority and Department of Local Government and Public Health and its successor, the Department of Health. Up to 1926, local authorities had widespread powers, including appointment of medical officers and other technical staff. Following the Local Authorities (Officers and Employees) Act, 1926, this power of appointing such officers was taken from them and vested in a governmental organisation,

the Local Appointments Commission. This gave the central authority increased power at the expense of the local authority.

Since the appointment of County Managers, the powers of the local authority in health matters have been taken from them and centred in the County Manager. This gave the central authority greatly increased powers, again at the expense of the local authority. The true position now is, perhaps, not fully realised, and statements made from departmental sources blaming the local authority for not doing this or that only serve to further confuse the issue. In health matters now the local authority is nothing more than the County Manager, and he is unlikely to maintain an attitude displeasing to the Department: in practice, he functions as an agent of the Department for the purpose of registering their views.

With the shift in power, has come a change of approach on the part of the central authority. In previous years it had contented itself with approving or rejecting proposals submitted to them by local authorities. This procedure is necessary because the latter get recouped 50 per cent. of all approved expenditure on tuberculosis, child welfare and school medical services. It involves a minute and continuous control of details of affairs properly a matter of local concern, and really means that a County Council could not allow a Tuberculosis Officer a junior clerk without Departmental sanction-sanction which may not be forthcoming. It may be mentioned, indeed, that in their Local Government Act, 1929, the British Government dispensed with this system of percentage grants to local authorities and substituted a block grant based on rateable value of area. In recent years, however, the Department has taken the initiative in initiating health programmes, and nowadays even in regard to hospitals or clinics it has the final say in matters of size, layout and equipment of institutions which will be financed from local rates and run by local personnel. Where there are many unco-ordinated public bodies, there is much to be said for such central direction, and the condition of the health services in the country justifies some such approach. On the other hand, central direction tends to damp, or even deaden, local initiative in health matters and further increases the responsibilities of headquarters to "deliver the goods".

In conclusion, then, it is to be hoped that the new health programme being fashioned for this country by the Department of Health will be consistent with the principles of political medicine, using the word "political" not in its present meaning, but in the nobler sense described with such vision by Maunsell, the first Professor of Preventative Medicine in the country, to this College, perhaps in this very room, well over 100 years ago.