

Encephalitis Lethargica.

There has been a progressive decline in the reported incidence of this disease since the peak year of 1924. The figure for 1927 was 143. The ratio of deaths to reported attacks continues high, and if one adds the deaths following the chronic effects of this disease, even in patients who may originally have been classed as "recovered," it appears that encephalitis lethargica eventually contributes to the death of 35 to 40 per cent. of known cases. The sequelae of encephalitis lethargica continue to present serious problems in the administrative care of its victims; 45 to 50 per cent. of all cases show various degrees of permanent disability. About half of these develop Parkinsonism, which, sooner or later, in the great majority, proves fatal. Mental impairment is almost invariable, especially in young children, and in 25 per cent. of patients who do not recover completely from the acute attacks this impairment is a serious problem. Probably 50 to 60 per cent. of patients suffering from the sequelae of encephalitis lethargica require special after-care and treatment—either close observation and control on account of their mental or moral disability, or nursing and after-care on account of their physical infirmities. The first group includes some who appear likely to profit from remedial and re-educative measures. The "encephalitis unit" at Winchmore Hill is an attempt to deal with the administrative problem of post-encephalitis lethargica. It not only provides treatment and after-care, but functions as an observation centre and clearing house, where cases are grouped according to their after-care necessities and, so far as possible, are allocated accordingly. The adolescent case, subject to serious conduct changes and requiring observation and control, has not yet been adequately dealt with. It is suggested that large cities might combine on a regional basis to provide institutional resources for encephalitis units dealing with all post-encephalitic patients, including those who might be unsuitable or ineligible for other institutions.

Tuberculosis.

The number of deaths from all forms of tuberculosis was 38,173, as compared with 37,525 in 1926. These figures, though they show an increase over those of 1926 (in which year there was an unexplained sudden drop), are lower than those of 1925; and in general the downward trend in this death rate is maintained. Notification returns are still unsatisfactory, and in some areas the number of notifications is only about 70 per cent. of the new cases that come to the knowledge of the local authorities. Moreover, in some areas very little attempt is made to persuade contacts of newly notified cases to attend for examination. Where attention has been given to this point a considerable number of contacts have been found suffering from tuberculosis at the stage of their malady which gives the best chance of a successful issue to treatment. There is occasionally an unfortunate tendency to keep patients attending the tuberculosis dispensaries without coming to a clear decision on the diagnosis. Throughout the country, however, the diagnosis of 92.9 per cent. of dispensary cases is completed within three months. The importance of repeated sputum examinations for diagnosis, prognosis, and selection of cases for institutional treatment is strongly emphasized. Many patients are classed as T.B. negative, not because the bacillus is shown to be absent, but because sputum examination has been neglected, a fact which robs statistical studies of much of their value. England is far behind America and a number of other countries in the use of x rays for confirmatory diagnosis. Local authorities which have failed to consider sympathetically the requirements of tuberculosis officers in this matter are largely responsible. It must be made clear that expenditure that helps to achieve accurate and early diagnosis of tuberculosis is not only justifiable, but is probably a real measure of economy. Cases undergoing sanatorium treatment may be classified as early, intermediate, and advanced. Many of the intermediate type are kept in sanatoriums for six months or longer, though, it is suggested, they would probably do better with shorter periods of treatment, repeated when relapses occur or are imminent. The need for prolonged treatment in early cases offering real hope of arrest, and in advanced dangerously infective cases, is stressed.

Methods of Treatment of Tuberculosis.

Under this heading a review is made of the immediate and end-results of treating tuberculosis by artificial pneumothorax and other surgical procedures, by sanocrysin, and by tuberculin; and an account is given of B.C.G. immunization. The information given in the annual report for 1925 as to the late results of treatment by artificial pneumothorax is supplemented by a report of an investigation into the after-histories of 111 patients so treated during the past ten years. The results have continued to be extremely encouraging. Sanocrysin is still under investigation, with a slight balance of evidence in favour of its use in carefully selected cases. Dr. Burrell considers that the acute bilateral case in which the worse lung can be treated by artificial pneumothorax, and the type of case in which the tubercle bacillus persists in the sputum in spite of prolonged treatment and improvement in other respects, are particularly suited to sanocrysin treatment. Tuberculin is still out of favour, but more information about Professor Calmette's B.C.G. is required before a definite view as to its value can be arrived at. According to Calmette a comparison of the mortality of vaccinated and unvaccinated children in contact with tuberculous mothers shows that the rate for the former was 6.6 per cent., and for the latter 24 per cent. A close analysis of these figures by A. Woolgren shows the need for more detailed information, especially as to the mortality rates of vaccinated children brought up in contact with tuberculous mothers, before Calmette's claims can be fully accepted.

Mortality in Pulmonary Tuberculosis.

A study of mortality curves suggests that there are at least two independent influences affecting the mortality from pulmonary tuberculosis in adult life. The first, to which females appear to be more sensitive, produces its maximum effect in early adult life—in the 20 to 25 age period. The second exerts its maximum effect between the ages of 40 and 50 in the case of males, and somewhat earlier among females. It is suggested that pulmonary tuberculosis exerts its maximum biological effect in early adult life, and that urbanization is responsible for the high mortality in middle life.

THE GENERAL PRACTITIONER AND PREVENTIVE MEDICINE.

PRESIDENTIAL ADDRESS TO THE SOCIETY OF MEDICAL OFFICERS OF HEALTH.

The annual general meeting of the Society of Medical Officers of Health was held on October 19th, when Dr. JOHN HOWARD-JONES, medical officer of health for the county borough and port of Newport, Monmouthshire, was installed as president of the society, and delivered an address on "The role of the general practitioner and specialist in preventive medicine."

Dr. Howard-Jones began by recalling the extent to which knowledge of disease had been effective in reducing the death rate and infantile mortality in recent years; while public health efforts had been practically confined to the removal of the more obvious causes of sickness and death, a stage had now been reached when, beyond routine work, attention could only be devoted to the individual and the application of the laws of physiology to the prevention of disease. Each individual must realize his responsibility for the preservation of his own health and that of those under his care. In the public health service there was a relatively small percentage of those engaged in the practice of clinical medicine; he thought they must agree with Sir Arthur Newsholme that complete success would not be achieved "until means are discovered for training and enlisting every medical practitioner as a medical officer of health in the circle of his private or public practice, and of securing his services not only in the early and prompt detection of disease, but also in the systematic supervision during health of the families under his care, and in advising them as to habits or methods of life which are inimical to health." Dr. Howard-Jones called attention to the statement in the evidence given by the British

Medical Association before the recent Royal Commission on National Health Insurance: "The alleviation or cure of morbid conditions when once they have arisen is, relatively to other matters, a minor part in the campaign for public health." He proceeded to show how the participation of the general practitioner in preventive medicine was being advocated from all quarters and in most countries, and to discuss those particular problems which fell outside the routine work of the medical officer of health.

Maternal Mortality.

It was a deplorable fact that maternal mortality in this country had been practically stationary for nearly twenty years, in spite of the gradual substitution of the old untrained midwives by partially trained women, and the provision of medical help in cases of emergency before, during, and after childbirth. Unfortunately, however, more attention was paid to the treatment of symptoms than to the prevention of disease, and this in many towns led to unnecessary instrumental intervention, which was now recognized to be prejudicial to mother and infant. The time had come to reconsider the whole subject. As regards the national insurance maternity benefits no conditions were laid down as to how the recipients should spend the money; it was generally felt, therefore, that the administration of these should be co-ordinated with the maternity and child welfare service. The more recent records of some of the most enlightened midwifery departments of the great hospitals afforded gratifying evidence of the value of adopting preventive principles in the practice of midwifery. Dr. Howard-Jones next reviewed the proposals of the British Medical Association and others. It was urged that provision should be made for the attendance of a doctor and a midwife at every confinement, and that, while the midwife should usually conduct the normal delivery, the doctor would be responsible for ante-natal examination and supervision. He would attend at the confinement if difficulty arose, and also during the puerperal period as the case required. There should be consultant and specialist services for difficult cases, and local authorities should provide accommodation in institutions under the maternity and child welfare scheme. Such a plan would ensure a definite place in the maternity scheme for the medical practitioner; it was most desirable that he should play a definite part in a well-organized maternity scheme, since after supervising the ante-natal care of a patient he ought to continue in charge until she was restored to normal condition, if possible.

Teaching of Midwifery.

The organization of a systematic study of the woman during pregnancy was a recent development at the medical training schools; as an element in the training of the medical student and the pupil midwife, ante-natal work had hitherto been entirely fortuitous instead of being systematized and compulsory. Individual general practitioners throughout the country had, however, acquired for themselves the necessary knowledge, and had devised admirable schemes for the women under their charge.

Discussing the causes of foetal and neo-natal mortality, Dr. Howard-Jones quoted various authorities to illustrate the need for, and the value of, ante-natal care and preventive work. The public needed education in regard to the advantages of preventive midwifery over the present popular but largely unnecessary delivery by instruments—with its greater danger of sepsis and trauma to mother and infant. It had been repeatedly stated in official reports that the teaching of obstetrics and gynaecology in most of, if not all, the medical schools in Great Britain left much to be desired. The new curriculum in midwifery included a certain amount of training in midwifery; in view of the fact that the deaths from premature birth and diseases of early infancy exceeded 25,000 per annum, this provision could not be regarded as premature. Midwifery was primarily physiological, and if conducted on preventive principles the pathological aspect of the work would be reduced to a minimum. Some midwifery teachers were doing great service by emphasizing the importance of ante-natal supervision and of dealing with

labour on physiological lines. Referring to the tendency to curtail the number of children in each family, the speaker said that from the parents' point of view the necessity for skilled ante-natal and natal care was assuming serious importance. There would be an increased proportion of first births, and these required greater supervision. Midwifery in industrial practice was generally underpaid; if they were to secure ante-natal and post-natal treatment the question of remuneration would have to be reconsidered. The public would have to be educated up to paying for preventive midwifery, and the State and the local authorities would have to revise their present policies.

Co-ordination of Health Services.

The Poor Law service included some 4,000 part-time or whole-time medical practitioners; this medical service was never based on preventive principles. Up to the present time it had not been co-ordinated with preventive medicine—to the great disadvantage of the public health. Opportunities would soon be available for remedying this state of affairs, but success would depend upon the spirit in which the central and local authorities undertook the necessary reforms. The aggregation of Poor Law medical relief, maternity and child welfare schemes, school medical services, mental hospitals, mental deficiency services, pensions medical work, public health services, and national health insurance amounted to a partial State medical service. Some of these branches were based on the ideals of preventive medicine, but the more costly were not. According to its preamble, the National Insurance Act was to "provide for insurance against loss of health and for the prevention and cure of disease." Prevention was given priority over cure, but it could not be denied that the Act continued the old-established idea of medical treatment by a visit and a bottle of medicine for a third of the population. The great fault in the present system was that medical advice was only obtained after disease had actually attacked the patient. Fees would have to be increased and the size of "panels" reduced to enable the general practitioner to practise preventive medicine among his patients. Referring to the need for the teaching of medicine on physiological and hygienic lines, Dr. Howard-Jones said that those teachers who were impregnated with the old "pathological" principles would probably not help much in this direction; consequently, it would take many years before much real progress would be made. He understood that post-graduate courses which would enable practitioners to prepare themselves for more active participation in this preventive medical work were not available in this country. Unless something were done in this connexion the general public would not participate in the benefits to be derived from the great advances which had been made in physiology, biochemistry, and dietetics by those engaged in research work.

Health Propaganda.

Public opinion was ripe for instruction in matters pertaining to the care of health; health propaganda was becoming increasingly popular. Much of this work was undertaken by men who had had no medical training and was of the nature of "stunts," a great deal consisting of thinly veiled advertisements. There was, therefore, a danger of reaction on the part of the public unless the work was performed by disinterested propagandists trained in the laws of preventive medicine; this could only be done by the enlightened medical practitioner. The most effective educational work was individual instruction given at the psychological moment, and not class teaching; this could best be given by the private or "family" doctor. His opportunities for service were undoubtedly great, not only in guiding the patients in the intricate paths of health, but also in assisting the present activities of public health authorities, as in the case of tuberculosis. There was much work to be done in educating the public as to the true value of drugs in the cure of disease.

Dr. Howard-Jones then paid a tribute to specialists and research workers for what they had done in advancing the knowledge of preventive medicine and in educating the public. He added that the principle of periodical

medical inspection had long been established in the navy and army, and had been extended to the younger members of the civil population. Its further extension to the general community should naturally follow. It had been recognized by some of the leading American insurance companies that it was cheaper to maintain health than to cure sickness, and there was a growing realization of the importance of health propaganda among British companies. The general public was also beginning to appreciate medical supervision.

INTERNATIONAL SOCIETY OF MEDICAL HYDROLOGY.

ANNUAL MEETING IN ENGLAND.

(Concluded from page 718.)

AFTER two days' conference in London, which constituted the first part of the annual meeting, a party of 105, consisting mainly of members of the International Society of Medical Hydrology from seventeen different countries, accompanied by wives and daughters, started on a tour of the more important English spas.

Visit to Harrogate.

The first spa they visited was Harrogate on October 12th. After an address by Dr. EDGECOMBE on the waters of Harrogate they inspected the baths, and were much interested in the various hydrological measures, as well as in the melted paraffin wax baths for chronic joint diseases. The morning session, held on October 13th at the Royal Bath Hospital, was devoted to the treatment of children by waters and baths. Among the papers were the following.

Dr. A. KELLER described the work done at the Children's Hospital at Rheinfelden (Switzerland), which has 115 beds. The cases treated are mainly the more chronic forms of tuberculosis, lymphatism, and conditions of malnutrition and debility. Good results were obtained from brine baths, which were given two or three times a week for four weeks at a temperature of 97° F.; the strength of the baths varied from 1/2 per cent. for the more debilitated to 4 per cent. for the more robust; it was in general observed that the weaker baths had a more immediate effect, while with the stronger the effect might be delayed to a later stage in the course of treatment.

Professor GROEDEL stated that it had been found at the two children's institutions at Nauheim, in which 30 per cent. of the patients were suffering from heart disease, that treatment with saline baths of gradually increasing strengths was less fatiguing when combined with CO₂ effervescence.

Dr. SIGMUND WASSERMANN (Franzensbad and Vienna) summarized the fashions through which iron medication had passed, and quoted recent work done by Starkenstein and others which showed that the only therapeutically active form was the unstable ferrous iron, thus accounting for the empirical observation that ferruginous waters should be drunk fresh from the springs. Since the metabolism of iron was more easily deranged in children than in adults, he considered that the use of chalybeate waters in anaemic conditions in children might with advantage be further developed. The author had also found good results from ferrous waters in gastro-intestinal catarrh.

Professor STANLEY (Birmingham) described the use of hydrotherapeutic measures as a sedative, and stated that he had found them particularly useful in chorea, either in the form of hot packs at 100° F. lasting about twenty minutes in such children as were not frightened by this treatment, or hot baths at 98° F. As a gauge of the improvement obtained he made every child write its name and the date in ink on the case sheet daily; the variations in muscular co-ordination could thus be seen at a glance, and improvement became evident in many cases after one or two packs daily for four or five successive days. Though there could be no doubt that hot packs were often effective when drugs failed, a child occasionally became more irrit-

able after a hot pack; it was, however, difficult to compare the results of pack treatment with those obtained from the various drugs which had been used. In discussing the mode of action of the pack in these cases he pointed out that chorea in children was one of the few conditions in which a subnormal temperature might continue for weeks in conjunction with a rapid pulse, indicating a disturbance of the heat-regulating mechanism. It seemed probable, from recent work on the heat-regulating functions of the suprarenal glands, that both the subnormal temperatures of chorea and the hyperpyrexia of other forms of acute rheumatism might be due to derangement of the heat-controlling functions of the thyroid and suprarenals by rheumatic infection.

Professor CATTANEO described the uses of alkaline and chloro-iodide waters, "pulverized" by the passage of compressed air, in the treatment of catarrhal and other conditions in children. Dr. HIRSCH mentioned, among the difficulties of applying spa treatment to children, the fact that there were no suitable institutions for treating small paying patients away from their fussing mothers comparable with those belonging to charitable organizations. A paper was read also by Dr. ANGLADA (La Bourboule) on arsenical waters. In the brief discussion which followed the papers Dr. POULTON, referring to Professor Groedel's remarks, suggested that light might be thrown on the problem of CO₂ absorption through the skin in CO₂ baths by estimating the CO₂ content of the urine secreted during and immediately after the bath.

Dr. J. A. THOMSON (Harrogate) next demonstrated a series of nearly fifty radiograms of cases of osteo-arthritis to illustrate his thesis that the typical and diagnostic lesion of this disease is a cyst-like focus of bone destruction surrounded by a ring of osteo-sclerosis. He had found that these foci were so small in early cases as to be scarcely distinguishable, that they gradually increased in size or number, and that the individual foci were subject to alternating activity and subsidence, thus accounting for alternating periods of exacerbation and relief of symptoms. He maintained that the clinical symptoms depended more on the position of the active focus in relation to a weight-bearing or friction-bearing surface than on the condition of the joint as a whole.

Cases of various types of chronic joint disease were demonstrated by the physicians of the hospital, and parties were shown round the wards and baths. It was noted with interest that here, as also in the Devonshire Hospital at Buxton, considerable space is allotted to recreation rooms for the patients, as the importance of this aspect of hospital treatment has not in general received much attention hitherto.

In the afternoon the members of the society visited Fountains Abbey under the guidance of Dr. Moody, the organist of Ripon Cathedral.

Buxton.

On October 14th three charabancs took the party to Buxton, where, after a short paper by Dr. BUCKLEY on the physical and chemical properties of the waters, visitors were shown round the Thermal Baths and the Natural Mineral Water Baths. The visitors thoroughly investigated the baths, which have been recently rebuilt, and were much interested in the aerated flowing bath, the swimming pools of blue water characteristic of this spa, and the white marble drinking fountain where the glass is dipped and filled fresh from the flowing source.

At a reception given by the Buxton Medical Society Mr. HARRY PLATT discussed co-operation in the treatment of chronic rheumatic diseases between the spa hospitals, the universities, the medical schools, and the treatment clinics which were being started.

On the following day members of the staff of the Devonshire Hospital demonstrated cases of gout, osteo-arthritis, and rheumatoid arthritis, and described the method used to estimate the radium emanation in the water.

A permanent international society for the study of rheumatism was constituted by delegates from the national committees and societies.