protein molecule, and as protein seemed to be the essential basis of protoplasm this knowledge was valuable to the bicchemist seeking to determine the mechanism of protein synthesis in the living cell. A fascinating field for the study of protein synthesis had been opened by the discovery of crystalline virus proteins. These were able to multiply automatically inside plant tissues and probably represented the most elementary process of growth yet known.

Growth Stimulants

Many substances had now been discovered which might be classified as growth stimulants. Some, like certain of the vitamins, the growth hormone of the anterior pituitary gland, and the growth-promoting substance present in embryonic tissues, had a general effect. So far as could be seen at the present time they played the part of catalysts in promoting the synthesis of new living material, though it was possible that some of them might be essential components of protoplasm. Other growth stimulants were more specific and appeared to act only on certain types of cell. In this category came those sex hormones which were responsible for the development of secondary sex characters and for changes in the sex organs occurring during oestrus and pregnancy. The action of these substances was allied to that which took place in the differentiation of the embryo. It seemed likely that this action was truly catalytic because it could be imitated, in some instances almost exactly, by synthetic chemical agents which were not allied in structure to the naturally occurring hormones.

The fact that many bacteria would grow and multiply in an inorganic medium if a suitable source of carbon was supplied suggested at first sight that growth promoters were not essential to them. What was more likely, however, was that such organisms were able to synthesize all they required from the elementary substances supplied, and these included growth stimulants because it had been shown conclusively that bacteria which would not grow in such media grew well if certain substances were provided in small amount. The addenda required comprised vitamins (particularly of the B group), unknown substances present in animal tissues, and certain amino-acids.

The study of plant growth had also received a new impetus from the discovery of auxins, which might be styled plant growth hormones. These were present at growing points in the plant and were probably growth catalysts, since their action might be largely imitated by synthetic organic compounds of quite a different nature. A survey of the various fields of study in which the biochemical aspects of growth were being investigated gave good grounds for the expectation that in the coming years a much clearer understanding of the process would emerge.

SOME ASPECTS OF HEREDITY

At the opening meeting of the session of the West London Medico-Chirurgical Society, held at the De Vere Hotel, Kensington, on October 7, the new president, Dr. MAURICE SHAW, gave an address from the chair, taking as his subject "Heredity." He gave a careful exposition of the laws of Mendelism, and followed this with an exposition of the work of T. H. Morgan of Columbia University, only second in importance, he said, to that of Mendel in build-ing up the theory of the "gene." Dr. Shaw appealed for greater interest on the part of the medical profession as a whole in the science of eugenics. This was the more important because orthodox medicine tended to be dysgenic in its action. The profession was largely responsible for perpetuating dominant defects which, but for its "misguided efforts," would probably die out. The insulin treatment of diabetes was probably the most obvious example. It was known that diabetes might be hereditary, although its exact mode of inheritance was uncertain. If untreated, a very large number of young diebetics would

never survive to marriageable age. The introduction of insulin had entirely altered the picture, and a majority of this type of diabetic might now be expected to marry, ensuring a steady increase in the incidence of the disease in the next few generations. Tuberculosis was another example if the hereditary predisposition, which was denied by some quite competent observers, were accepted; though inasmuch as tuberculosis required an environmental as well as a hereditary factor, there was more chance that the disease might ultimately be eliminated.

Ought not the medical profession, by interesting themselves in eugenic theory and practice, to try to counteract a little of the harm they inflicted upon the race by their wanton interference with Nature's principle of natural This was scientifically possible, for it merely selection? meant the application of the principles of stockbreeding to human affairs. There were several lines along which the problem could be tackled, one of the most obvious being that of sterilizing all individuals who might distribute a harmful gene among the general population. A difficulty in the approach to eugenics along the path of sterilization, however, was that mutations, whereby all harmful genes must originally have arisen, could not be prevented from occurring. In conclusion, Dr. Shaw discussed some purely medical aspects of heredity, especially the inheritance of blood groups. A vote of thanks to him was accorded on the proposition of Dr. JULIUS BURNFORD, seconded by Mr. A. E. ROCHE.

The 843rd ordinary meeting of the Brighton and Sussex Medico-Chirurgical Society was held at the Royal Pavilion, Brighton, on October 6, when the president for the year, Dr. J. G. Hayes, gave his presidential address, entitled "Thirty Years of General Practice," and several members then related their own experiences during a similar number of years.

Local News

ENGLAND AND WALES

New Laboratories of the Metropolitan Water Board

The new laboratories of the Metropolitan Water Board -a three-story building containing some fifty laboratories and supplementary rooms with the most modern equipment for water examination-were opened by the Minister of Health (Dr. Walter Elliot) on October 17. The building has been erected at Clerkenwell, adjacent to the head offices of the Board, on the very spot where, in 1613, Hugh Myddelton brought the "sweet waters" of Hertfordshire to what was then the confines of London. The key with which Dr. Elliot performed the opening ceremony was contained in a box made of the oak used by Myddelton in constructing the "round pond" which formed New River Head. The Metropolitan Water Board has had its offices at this site ever since, in 1904, it took over the water undertakings of London, but its laboratories have been in Nottingham Place, Marylebone, in houses built for other uses. There for a third of a century "the watch on the water" has been maintained day after day, a vast routine examination of samples has been carried out. together with a great deal of original research. During last year, for example, the number of bacteriological samples taken was over 22,000, of chemical samples nearly 6,000, and of biological samples over 3,000. One remarkable piece of work carried out for many years at Nottingham Place has been the routine photomicrography of the algal content of the water from all the Board's storage systems. Some 22,000 such photographs are now bound in albums. The work of the laboratories, however, has suffered from restricted space in not quite suitable

premises, and now it is to be transferred to Clerkenwell, where the new laboratories are worthy of the leading water authority in the world and the pioneer of purification processes. Unfortunately, neither of the two men whose names will always be associated with this work lived to see its completion. Sir Alexander Houston was for twentyeight years director of water examination, and on his death in 1933 Lieutenant-Colonel C. H. H. Harold was appointed to succeed him. Harold's sudden death in July last cast a shadow over the new enterprise which owed so much to his initiative and imagination. He had visited more than twenty cities in the United States and Canada to ensure that the choice of services and equipment for the new laboratories was in line with the most modern practice.

The main function of the new laboratories will be to organize mass performance of special water tests supported by highly technical examinations. The tests fall into three sections to which, roughly speaking, the three floors of the laboratory correspond-namely, biological on the ground floor, bacteriological on the first floor, and chemical on the top floor-and the administrative department includes the arrangements for the collection of samples and their interpretation and statistical recording. The laboratories are disposed on a chain principle so that the work proceeds as far as possible from one room to the next. The bacteriological section is of particular interest. It has been so designed that cleansed sterilized receptacles receive their quota of media and are plugged and sterilized before arriving at the media stockroom. From thence they travel to the main general laboratory, and after the samples have been put up they are trolleyed into the controlled temperature rooms, which operate respectively at 22°, 37°, 42°, and 45° C. After incubation the tubes are sorted in the sorting-room and the positive tubes pass on to the subculture room for further study. A dark countingroom adjoins for the performance of special counts and the reading of agglutination results. One feature to which special attention was drawn was that rooms are being used instead of a number of box incubators, a departure which permits of enormous expansion in the future. The arrangements in the 22° C. room are also of interest, as this is a difficult temperature to maintain. The temperatures of all the rooms are thermostatically controlled and recorded, and the amount of air current regulated in accordance with humidity readings. Special ventilation is also employed to minimize condensation in view of the large amount of fluid being incubated.

London Medical Exhibition

To the London Medical Exhibition, which has been held during the past week at the Royal Horticultural Hall, Westminster, about 120 firms contributed, and the stands as usual were filled with a varied display of products. So varied, indeed, that one visitor at least wished that exhibitors, having learned many of the arts of display, might emulate the economy of the West End milliner who devotes her whole window space to a single bonnet. It was quite refreshing to come upon a stand which concentrated on a single article-rubber gloves and nothing else, or a brand of mustard, or a medicated wadding. When it comes to medicinal and food preparations-and more than half the stands were of that character-the variety almost took one's breath away. Quite a dozen firms showed sulphanilamide under some name or other. There was also what Sir Henry Dale at Guy's Hospital the other day described as a "bewildering and redundant profusion of symptomatic remedies." Surgical instruments were less conspicuous, and in view of the place which physical medicine now occupies there did not seem to be quite an adequate representation in that field. On the other hand, there were several exhibits of great interest to the ophthalmologist; hearing aids also were more in evidence than ever before. A number of bookstands, in-cluding that of the British Medical Association, gave a pleasant relief. More than one stand was devoted solely to contraceptive appliances, one of them announcing that seven of its products were on the approved list. An instrument to which a good deal of attention was paid

was an electrical stethoscope in which the incorporation of a frequency range selector made it possible for the operator to emphasize sounds of one particular tone; it was also provided with a second set of auricles, enabling two physicians to participate simultaneously in an examination. Another device was a portable resuscitator for respiratory emergencies—drowning, carbon monoxide poisoning, anaesthesia, shock, and war gases. Equipment for oxygen therapy was demonstrated, including the installation of pipe-lines in hospitals and nursing homes for the supply of gas from a central cylinder to various points in the wards.

Central Midwives Board

It was reported at a meeting of the Central Midwives Board for England and Wales on October 6 that, acting on the powers conferred upon him by Minute 40 of the meeting of July 7, 1938, the chairman had approved as lecturers: C. M. Gwillim, M.D., F.R.C.S., A. L. Gunn, M.D., F.R.C.S., W. C. W. Nixon, M.D., F.R.C.S., J. Sakula, M.D., R. Christie Brown, M.S., F.R.C.S., Albert Davis, M.D., F.R.C.S., and R. L. Dodds, M.B., F.R.C.S. Approval as lecturers was also granted to Mary Florence Bignold, M.B., Ch.B., Samuel Davidson, F.R.C.S.Ed., and Robert Newton, M.D. The chairman reported that acting under his vacation powers he had decided to grant applications for the inclusion of Radcliffe Infirmary, Oxford, and the Sussex Maternity and Women's Hospital in the list of institutions approved for the special instruction (required by the Board's ruling on the administration of nitrous oxide and air by midwives) in the essentials of obstetric analgesia and in the use of a recognized apparatus.

IRELAND

Some Vital Statistics for Northern Ireland

The report of the Registrar-General for Northern Ireland, which has just been issued, records an increase in the death rate and a reduction in the marriage and birth The number of births registered was 25,412, a rates. rate of 19.8 per 1,000 of the estimated population; this decline finds a parallel in England and Wales, though in the latter area it is more steep and the rate is lower. The general death rate was 15.1 per 1,000 of the estimated population, being slightly higher than last year, but in common with the experience in England and Wales demonstrating a general downward trend over the past twenty-two years. A severe epidemic of influenza in the first quarter of the year accounted for an unduly large number of deaths, while deaths from diphtheria, scarlet fever, and diarrhoeal diseases in children showed marked decreases. The number of deaths from influenza was 1,148, giving a rate of 0.9 per 1,000 of the population, compared with 0.21 in 1936. The general downward trend in the death rate from tuberculosis continued, the rate being 0.98 per 1,000 of the population, a figure somewhat higher than that for Scotland and England and Wales, but lower than that for Eire. It is noted that almost one-half of the deaths from all forms of tuberculosis during 1937 occurred between the ages of 15 and 35 years. The cancer death rate was 1.3 per 1,000 of the population, maintaining a fairly steady rate. The most frequent sites of fatal cancer among males were: stomach, 216; intes-tines, 114; rectum, 65; prostate, 47; and liver and gallbladder, 35. Among females the stomach was affected in 188 cases; intestines in 127; breast in 115; uterus in 108; rectum in 42; and the liver and gall-bladder in 50. The death rate from diseases of pregnancy and childbirth showed a welcome decrease from the figure of 1936, the rate having fallen from 6.06 per 1,000 births to 5, this figure being just a little above the previous lowest figure (that of 4.8 in 1927). Infant mortality continued to take its toll, the figure being 1,969, representing a rate

of 77 per 1,000 births registered, the same as for 1936. The rates during 1937 and 1936 (respectively) were: in England and Wales, 58 and 59 per 1,000 births; Scotland, 80 and 82; and Eire, 73 and 74. The infant mortality for the county borough of Belfast was 94 in 1937, as compared with 109 (1932), 101 (1933), 81 (1934), 112 (1935), and 101 (1936).

Royal Maternity Hospital, Belfast

The Registrar of the Royal Maternity Hospital, Belfast, has issued his annual report, in which is recorded a highly successful year's work in the hospital. Full clinical details of the twenty deaths out of 1,729 admissions (mortality rate of 1.15) are given; in 1936 the rate was 1.24, and in 1935 1.6. Of the total admissions 396 were emergencies, and no fewer than eleven of the twenty deaths occurred among these patients. The maternal morbidity rate was 6.7 per cent., as compared with 8.2 in 1936 and 4.9 in 1935. No maternal deaths occurred in the cases of eclampsia, and there was only one fatality in the thirty-two patients with heart disease, of whom twenty-four were suffering from mitral stenosis. Multiple pregnancy occurred in twenty-one cases; there were eightyfive deliveries as breech and twenty-one as persistent occipito-posterior presentations. Caesarean section was performed on fifty-seven occasions, in the majority of the cases on account of contracted pelvis or disproportion; the lower segment operation was the method chosen in forty-two instances. Other tables give full records of forceps deliveries, accidental haemorrhage, and the induction of abortion or premature labour. Valuable features of this report are the details and tables relating to foetal mortality and premature infants. The information concerning premature infants is not included in all maternity hospital reports, and is a practice which might be more widely adopted.

Dublin Fever Hospital Board

The annual report of the medical superintendent of Cork Street Hospital, Dublin, appears this year as part of the first report of the Dublin Fever Hospital Board since the change from voluntary to municipal control. A brief glance at the statistics given by Dr. McSweeney for the year 1937 reveals a general improvement on the corresponding figures for the previous year. The general mortality rate was 6.66 per cent., as against 8.39 for 1936 and 8.71 for 1935. There was a sharp increase in the incidence of scarlet fever at the end of 1935, which continued through 1936; this incidence fell in 1937, the number of cases treated being 624, as Compared with 976 the previous year. While diphtheria continued to be of a high degree of virulence and accounted for some 40 per cent. of the total deaths in the institution, the case mortality of 9.1 per cent. shows an improvement on the 1936 figure of 12.57. Of the fifty-nine fatal cases thirtyfive were moribund on admission. Dr. McSweeney comments that "it is a matter for regret that cases do not receive medical aid at an early stage of the disease. . It is still not uncommon in Dublin for patients to be admitted to hospital who have been ill with diphtheria nearly a week." Some form of diphtheritic paralysis was exhibited by fifty-eight patients; nine with respiratory paralysis were treated in the Bragg-Paul pulsator and recovered. There were two deaths among these fiftyeight cases. An investigation into the problem of diphtheria in Dublin with particular reference to ascertaining the prevailing types of organism has been in progress in the hospital under the auspices of the Irish Medical Research Council since October, 1937. Fifty-eight cases of meningitis were dealt with during the year, of which thirty-five were of the meningococcal variety. The mortality among these thirty-five cases was 60 per cent., as compared with 78.2 per cent. in 1936. The better results, the report states, were partly due to the use of American sera and to the employment of chemotherapeutic

remedies as an adjuvant to serum. Several unusual forms of meningitis were encountered during the year: one case of paratyphoid B infection of the meninges is believed to be the first to be recorded in the literature. On the subject of chemotherapy Dr. McSweeney says that some cases of puerperal septicaemia, due to the haemolytic streptococcus, were found to be quite resistant to this form of treatment, but that the sulphanilamide group of preparations was proving a specific remedy for erysipelas and had replaced serum therapy in the practice of the hospital.

Correspondence

R.M.B.F. Christmas Gifts

SIR,—Each year for nearly thirty years Christmas gifts have been sent, in the spirit of good cheer, through the agency of the Royal Medical Benevolent Fund, to members of medical families whose poverty and distress, often coupled with infirmity, illness, and loneliness, have made their ageing days a pitiful existence. Those who have received the gifts are old medical practitioners or their widows and daughters, who are debarred from any luxury or lighter pleasures in life. What luxury or extra pleasure can be enjoyed on an income of £90 a year, which has to meet all the necessities of life?

Will you help us again in making this appeal known to your readers? The Committee has felt that this is a matter which always appeals to the warm and generous hearts of medical men and women, and that no broadcast appeal should ever be made to the general public. "The family" to whom our gifts are sent is a very large one, and we need over £1,000 if each one of our beneficiaries is to receive the customary Christmas gift of 30s. This can be done only if we receive the same generous response as last year. I know that the present days are difficult, but everyone could spare a small contribution to add to the pleasure of those whose lives are sad at Christmas time. Please send donations, large or small, to the honorary treasurer, Royal Medical Benevolent Fund, 11, Chandos Street, Cavendish Square, London, W.1.

I thank all for their help and co-operation in past years in our Christmas gift scheme, and shall be deeply grateful for a generous response to this appeal.—I am, etc.,

> THOS. BARLOW, President.

Civil Medical Organization in War

SIR,-In common with most, if not indeed all, of your readers, I have been greatly interested in your leading article (October 8, p. 749) and the correspondence arising therefrom in your issue of October 15 (p. 810). Since the year 1930 I have been a member of five committees. which have met under the aegis of three Government Departments. Each one of these committees was appointed to consider the provision to be made, by hospital beds. ambulance services, etc., for casualties arising from air raids upon London. The first four of these committees expired without any indication as to why our work was terminated and without having produced any definite scheme. We certainly accumulated an enormous mass of valuable information, but, so far as I am aware, it was not translated into any practicable scheme. Moreover,

from 1913 to 1918, and representative in 1919, 1920, and 1921. He was a member of the Irish Committee from 1923 to 1934.

Dr. Power had a great love of country life and its occupations and pastimes—farming, shooting, fishing—and his knowledge of botany and the wild life of the fields made him a delightful companion on a country walk. He was widely read in general literature, and his comments on men and affairs were shrewd and entertaining. An upright and honourable man, and a good friend, he was trusted and respected both by his fellow-practitioners and by his patients, and to both he performed his duty in full measure. He is survived by his wife, three daughters, and two sons, of whom one is a member of the medical profession.

J. STODDART BARR, M.B., F.R.A.C.S.

Dr. John Stoddart Barr, who had only comparatively recently returned to Scotland after long residence in Hobart, Tasmania, died suddenly at Troon, Ayrshire, on September 14. He was born in Glasgow in 1878, the second son of the eminent aurist, Dr. Thomas Barr-a former lecturer in otology at the University-and began his medical studies at Glasgow University in 1896. In 1901 he graduated M.B., Ch.B., and became housephysician to Dr. James Finlayson, and, later, housesurgeon to Sir Hector C. Cameron in the Western Infirmary, Glasgow. He had decided, early in his career, to devote himself to the practice of diseases of the ear, nose, and throat, and with that end in view spent a year in postgraduate work in Vienna, afterwards studying in Zürich and London, and with Sir William Milligan in Manchester. In 1905 he was appointed assistant surgeon to the Glasgow Ear, Nose, and Throat Hospital, and in 1908 assistant dispensary surgeon for diseases of the ear to the Western Infirmary, Glasgow. In 1912 he developed a grave illness, which resulted in the following year in the loss of a lower limb and subsequent minor operations. His long convalescence was spent in the South of France and Cornwall. Finally, he decided for health's sake to make his home in Hobart.

Before leaving for Tasmania a high medical authority had strongly counselled him never again to engage in practice. Barr, however, was built in heroic mould and was not one to yield to the buffetings of fate without a struggle; soon after settling in Hobart he resumed his work and built up a considerable practice. In 1927 he became a Fellow of the Royal Australasian College of Surgeons. At the Annual Meeting of the British Medical Association in Belfast in 1909 he was Secretary of the Section of Laryngology, and a Vice-President of that Section at the Annual Meeting in Melbourne in 1935. When on a visit to this country he was the bearer of the mallet from the Tasmanian Branch when the new B.M.A. House, Tavistock Square, was opened in 1925. He was joint-author of the sections on diseases of the ear and throat in Choyce's System of Surgery (1913), and of the Manual of Diseases of the Ear (fourth edition, 1909). For a short time he held the rank of captain in the R.A.M.C.T. His death came as a surprise and great shock to his family and friends; indeed, he had intended to leave shortly for Cyprus, with the possibility of residing there.

A former colleague writes:

Barr's tragic ordeal, occurring in his early and such vital years, cruelly restricted his career. He was a skilful and confident operator, the outcome of natural endowments of a high order coupled with careful and assiduous

training. Investigation appealed to him. I well remember associating with him at the outset of his career when he made certain experimental researches on the cadaver. It is not improbable that he would have engaged in further research but for the incidence of his grave illness. For one of Barr's athletic tendency-he had been a golfer, tennis-player, swimmer, and skater-his affliction must have been extremely hard to bear, yet I never once heard him complain. He was a man of fine feelings, eminently sympathetic to the poor and oppressed, a wholehearted champion of liberty, a staunch and loyal friend; possessed of a singular charm of manner with a keen sense of humour, he radiated good fellowship and shone in the social circle. Barr did not neglect the cultural side of life; he was interested in zoology, and was a lover of pictures, exceptionally fond of verse, and the possessor of a well-trained baritone voice. To his intimate circle he has left a heroic example of unshakable optimism, stout endurance, and persistent endeavour in the face of a tragic happening which none but one possessed of the finest qualities of heart and mind could hope to bequeath.

THE LATE ALEXANDER MACPHAIL

Sir Weldon Dalrymple-Champneys, Bt., writes:

May I be permitted as an old friend and colleague of the late Professor Alexander Macphail to add a short appreciation to the obituary notice in your issue of September 10. I first met Macphail in 1912, when he had just become lecturer in anatomy at St. Bartholomew's Hospital and I had not yet begun studying medicine, but it was not until 1929 that I came to know him well. In that year I began to share a room with him in the Ministry of Health, and continued to do so until his death. A more delightful colleague and companion cannot be imagined. In him I found that rare combination of refinement and gentleness with moral courage and on occasion righteous indignation, the whole illumined by a strong sense of humour. His religion was real and deep but never obtrusive, and it was impossible to imagine him doing anything which savoured in the least of meanness or self-seeking. From his father, the well-known Gaelic poet of Mull, he had inherited a love of nature and artistic talents, which showed themselves chiefly in the delightful watercolours, some of which he showed every year at the Ministry of Health's Art Exhibition. For some years he had suffered greatly from attacks of bronchitis, which became more and more frequent, necessitating weary periods in bed, but he was always cheerful and uncomplaining and far more interested in other people's troubles than in his own. His death leaves a real gap in the lives of all who knew him well and to whom he was the personification of a Christian gentleman.

Universities and Colleges

UNIVERSITY OF OXFORD

The following medical degrees were conferred at a Congregation held on October 13:

D.M.—H. S. Brodribb. B.M.—A. W. Frankland.

The Nuffield Foundation

A year ago Lord Nuffield, in addition to his previous endowment of two millions for the widening of the scope of the medical school at Oxford, gave a further £200,000 for the erection of buildings at hospitals associated with the medical research scheme. In his oration (which was a valedictory, after three years of office) in Convocation on October 5 the retiring Vice-Chancellor, Mr. A. D. Lindsay, stated that out of this fund there had so far been expended some £75,000 on buildings completed or in construction—principally new surgical and gynaecological wards at Radcliffe Infirmary and maternity home extensions, which absorbed over $\pm 60,000$, also on an extension of the pay-bed block and x-ray theatre.

The last of the four basic clinical professorships in the Nuffield medical school, as already announced, has been filled by the appointment of Professor L. J. Witts as professor of clinical medicine, and the Vice-Chancellor stated that all the clinical professors are now working full time in their departments. He warned any who might cherish such an expectation that it must not be supposed that sensational discoveries would rapidly ensue or, indeed, should be sought. The vast machine of research must first be welded into a unity. This process, he said, was going apace, and had been helped during the year by the creation of a fluid research fund from which would be financed those promising research projects which emerged from time to time, now in one department and now in another. Such projects, born of happy inspiration or lucky accident, could not be foreseen or provided for in the routine departmental budgets, and so the fund would be open equally to all departments of the school.

Another Oxford development, again made possible by Lord Nuffield, is the foundation of three clinical assistantships tenable in the clinical departments of the medical school and three demonstratorships in the pre-clinical departments by graduates of universities in Australia, New Zealand, and South The tenure of each post is three years, after which Africa. the holders will be expected to return to teaching or research posts in the Dominions. The idea is that Dominions remote from the great centres of research will be enabled to participate in the work of the Oxford school. Provision is also made for the appointment at frequent intervals of a visiting professor to tour the Dominions with a view to giving and receiving information.

A tribute was paid by the Vice-Chancellor to Dr. Simon Flexner, whose appointment as George Eastman Visiting Professor has just terminated. His presence in Oxford, said Mr. Lindsay, had been of incalculable advantage to the medical school. His accessibility and his powers of lucid exposition endowed the new school at its birth with the benefits of the experience of a lifetime devoted to similar research.

New Physiology Laboratory

Among other developments at Oxford mentioned by the Vice-Chancellor is the planning of a new physiology laboratory to replace the present building, which was erected more than fifty years ago. Hitherto the state of overcrowding in a building intended to accommodate forty students and having to provide for four or five times that number has entailed the repetition of many lectures and demonstrations. The new laboratory will include library and common rooms to be shared by the department of biochemistry, and will-cost $\pounds 120,000$.

A second May readership in medicine has been established on a temporary basis for three years, and has been filled by the appointment of a reader who will help to bridge the gap in the teaching of physiology and clinical medicine by conducting an extended course in general pathology. The tenure of Dr. A. M. Cooke, who was appointed May reader in 1933, has been extended for a similar period, and when the two readerships become vacant simultaneously in 1941 the whole position will be reconsidered.

UNIVERSITY OF CAMBRIDGE

At a Congregation on October 15 the following medical degrees were conferred:

M.D.—*C. G. Parsons, *H. Smith. M.B., B.CHIR.—*C. W. Hutt, *K. W. Donald, T. A. W. Edwards, W. E. D. Moore, J. S. Heller, G. M. Little, J. P. Henry, E. A. Evans, A. G. Marshall. M.B.—J. A. Falk. B.CHIR.—C. H. M. Gimlette. * By proxy.

Pinsent-Darwin Studentship in Mental Pathology

The managers give notice that an election to the above studentship will be made in January, 1939. The studentship is of the annual value of not less than £225, and is tenable for three years. The student must engage in original research into any problem having a bearing on mental defects, diseases, or disorders, but may carry on educational or other work concurrently. Applications for appointment to the studentconcurrently. Applications for appointment to the student-ship should be sent before December 1 to the secretary, Pinsent-Darwin Studentship, Psychological Laboratory, Cambridge. Applicants should state their age and qualifications and the general nature of the research that they wish to undertake. No testimonials are required, but applicants should give the names of not more than three referees.

The following candidates have been approved at the examination indicated:

DIPLOMA IN MEDICAL RADIOLOGY AND ELECTROLOGY.-Part II: G. Q. Chance, W. J. Craig, T. Fichardt, R. L. Mansi, A. M. Mansour, C. G. Talwalkar.

UNIVERSITY OF SHEFFIELD

The following candidates have been approved at the examination indicated:

FINAL M.B., CH.B.—Parts II and III: J. Beech, E. G. Crookes, N. W. Jones, J. S. Lindsay, W. J. Wilson.

UNIVERSITY OF GLASGOW

At a Congregation held on October 15 the following degrees were conferred:

At a Congregation held on October 15 the following degrees were conferred:
M.D.-*J. I. Russell, †C. Glen, †I. MacKay.
M.B., CH.B.-J. Walker, †N. G. B. McLetchie, †A. Brown, †Elizabeth B. S. Scobbie, †T. Gibson, †Janet R. Mowat, †R. T. S. Gunn, †A. Macfarlane, W. C. Alford, H. M. Archibald, G. W. Armour, W. Auld, W. Bain, Margaret R. Barr, G. D. S. Beechey, A. M. Brannan, J. Brown, Margaret A. F. Burton, D. C. Caldwell, C. Cameron, D. Christison, J. Y. Clark, Marion A. Crawford, R. C. Cunningham, Margaret M. B. Curley, Ellen Cush, I. MacK. Davidson, J. S. Dawson, E. C. Easson, Jay Fairweather, W. Ferguson, J. D. Frame, J. R. Gallie, J. Garden, J. L. Gilloran, J. Gien, M. Goldin, R. Good, T. T. Graham, A. Granat, Helen W. Greenlees, G. A. Guthrie, A. J. Haddow, A. R. Harper, L. G. Harper, A. W. Harrington, T. Hart, F. J. Hebbert, I. B. Hopkins, F. Iskander, A. S. Johnston, E. de C. Kite, Mary MacT. Leitch, J. B. McCallum, I. M. McCully, D. Macdonald, A. McDougall, J. D. McFadyen, Jean M. McGill, A. W. McHaffie, I. McIndewar, J. R. Macintyre, I. C. K. Mackenzie, H. McKeown, W. MacK. McLennan, Julia M. Middleton, W. Mullen, R. L. Orchardson, G. D. Park, Mary R. Paterson, D. Paton, R. Provan, A. J. G. Russell, G. H. Scoular, M. Shaw, D. R. Sloan, James Smith, John Smith, L. Steingold, J. H. Stirrat, W. B. Summers, Anna J. Sutherland, J. A. Sutherland, A. M. Tait, R. D. Taylor, Barbara S. Thomson, K. R. Thornton, W. V. Wallace, N. Watters, J. Wishart, Shanna B. Wright, D. Yellowlees, A. Young, I. M. Young. B.Sc. (Pure Science).--Etheldreda Cadas, M.B., Ch.B.

* With high commendation. † With commendation. ‡ With honours.

James Walker gained the Brunton Memorial Prize, awarded to the most distinguished graduate in medicine for the year 1938.

The West of Scotland R.A.M.C. Memorial Prize was awarded to Janet R. Mowat and John F. B. Wyper (equal) as the candidates who obtained the highest aggregate marks in surgery, medicine, and midwifery in the final M.B., Ch.B. examinations held during 1938.

The Macewen Medal in Surgery was awarded to Alexander Macfarlane as the candidate who obtained the highest aggregate marks in surgery at the final M.B., Ch.B. examinations held during 1938.

The Stockman Medal was awarded to Elizabeth B. S. Scobbie as the candidate who obtained the highest aggregate of marks in the professional examinations in materia medica and therapeutics and medicine (written, oral, and clinical), excluding paediatrics, in 1938.

The Captain H. S. Ranken, V.C., Memorial Prize was awarded to James W. Chambers as the candidate who obtained the highest marks in pathology in the professional examinations in 1938.

ROYAL COLLEGE OF PHYSICIANS OF LONDON

Professor J. B. S. Haldane, F.R.S., will deliver the 1938 Lloyd Roberts Lecture, on "Some Problems of Human Con-genital Disease," at the College, Pall Mall East, S.W., on Thursday, November 17, at 5 p.m.

ROYAL COLLEGE OF SURGEONS OF ENGLAND

A meeting of the Council of the Royal College of Surgeons of England was held on October 13 with the President, Mr. Hugh Lett, in the chair.

Mr. Frank Batley was admitted as a Macloghlin Scholar.

Sir Alfred Webb-Johnson stated that he had been æsked by an anonymous donor to offer the College a gift of five hundred guineas for the completion of some special work. The Council accepted this munificent gift with very grateful thanks. The Council stated that it was prepared to hold a Primary

Examination for the Fellowship in Australasia every three years, the next examination to be in February, 1941.

The general annual report and the scientific report of the Council were approved.

It was reported that the office and secretariat of the Imperial Cancer Research Fund were now established at the College.

Counsel's opinion stating that the existing charters do not give the College power to grant a higher diploma in dental surgery was before the Council.

The Council accepted with grateful thanks a bust of John Whitaker Hulke, President in 1893 and 1894, presented by the Middlesex Hospital, and a bust of Thomas Wormald, President in 1865, presented by the Wormald family.

Diplomas

A Diploma of Fellowship was granted to Robert Officer.

Diplomas of Membership were granted to Phoebe Charlton, Abraham Caplin, and Hugh Stott.

Diplomas in Child Health were granted, jointly with the Royal College of Physicians of London, to the following candidates:

Khairunnisa B. Ahmed, A. M. Clark, J. H. Colebatch, S. D. M. Court, A. G. Denison, M. L. Edwards, Irene K. Falk, Mima M. Gemmell, S. M. Ghosal, K. N. Gour, Alice M. Headwards, R. S. Illingworth, F. D. M. Livingstone, S. Mackenzie, N. S. Mair, Queenie I. E. May, A. B. Milligan, Anasuya Mundle, Margaret I. Neal, M. N. Pai, Helen J. L. Robertson, A. T. Roden, A. V. S. Sarma, S. S. Sawaf, M. Seraj-ul-Haque, Florence Stephen, Shirley M. Taylor, Achamma Thomas. Mary A. Thomas, M. Trivedi, F. Walt, C. B. M. Warren, R. G. Wilbond, Elsa P. Woodrow. The following hearling the second for the circ months?

The following hospital was recognized for the six months' surgical practice required for the Final Fellowship:

Harrogate and District General Hospital, house-surgeon, till July 31, 1939.

EPIDEMIOLOGICAL NOTES*

Acute Poliomyelitis

The progressive reduction in the incidence of acute poliomyelitis observed during the previous three weeks in England and Wales has not been maintained during the week under review, the notifications having risen from 56 to 65, and in London from 3 to 6. In Scotland notifications rose from 5 to 8. The counties mainly affected were: Essex 9 (4), Carmarthen 6 (4), Lancashire 5 (0), and 3 each in Kent (1), Sussex East (0), Sussex (4), Warwickshire (2), and Yorkshire East Riding (3). More than one case was reported from the following centres: London 6 (3)-in Battersea, Chelsea, Fulham, Greenwich, Kensington, and Stepney-Llandilo 4 (0), Tendring (Essex) 3 (0), and 2 each in Marple (0), Halstead (0), Lanbrook (0), Tamworth Urban (0), Tamworth Rural (0), Cuckfield (0), Llanelly (1), Swansea (0). In the two counties chiefly affected, Essex and Carmarthen, cases were notified in: Tendring 3, Halstead 2, and 1 each in Barking, Harwich, Ilford, and Dunmow; and in Carmarthen-Llandilo 4 and Llanelly 2. In the week under review, 1 (4) case was notified at Horsham.

The epidemic of acute poliomyelitis in Germany continues to decline: for the week ended September 24, 275 cases were recorded in the whole country, as against 386 in the previous week; the areas chiefly affected were: Cologne district 44 (88), Wiesbaden 23 (27), Düsseldorf 18 (19), Bavaria 55 (50), Württemberg 58 (55), Baden 17 (16), Saxony 33 (33), Austria 21 (18). On the other hand, an increase was noted in Holland for the week ended October 1, the notifications having risen to 44 (30). In the Province of South Holland there were 18 (8) cases, and 6 cases in the Province of North Holland. In Sweden during the first fortnight of September the numbers reported increased from 167 to 230, of which 85 were nonparalytic; the districts chiefly affected were: Jämtlands Rural 94, Jämtlands Urban 25, Kristianstads Province 23. During the same period there were 84 cases of acute poliomyelitis in Finland, of which 18 occurred at Helsinki.

Primary and Influenzal Pneumonia

Slight increases in the notifications of primary and influenzal pneumonia were observed in England and Wales and in London; an increased number of deaths were recorded for the same period—22 (16) and 2 (0) respectively. The counties with the greatest increases were: Derby 12 (8), Leicester 12 (8),

London 47 (33), Staffordshire 33 (24), Warwickshire 35 (21). At the time of going to press reports have been received of an increasing spread, especially of influenzal pneumonia, in Durham and Birmingham districts.

Diphtheria and Scarlet Fever

There was a drop in the notifications of diphtheria in England and Wales during the week—1,166, compared with 1,209 in the previous week—and in London—125, compared with 129. In Scotland an increase was recorded: Glasgow 71 (70), Aberdeen 9 (6), Fife County 15 (3), Perth 5 (0). Of the 28 deaths in the 126 Great Towns of England and Wales 3 occurred in Birmingham, and 2 each in London, Bradford, Liverpool, South Shields, Wallasey, Stoke-on-Trent, Newport. Four deaths from diphtheria were recorded in Glasgow and 1 each in Ayr and Paisley.

Notifications of scarlet fever in England and Wales fell during the week under review—1,734, compared with 1,776 in the previous week; but in London there was an increase —180 (155)—and in Scotland, where 389 (380) cases were notified. The areas chiefly affected were: Aberdeen 13 (11), Ayr 7 (2), Fife 30 (22), Dunfermline 9 (4), Glasgow 97 (82), Paisley 14 (11). There were no deaths from scarlet fever recorded in the British Isles during the week.

Measles and Whooping-cough

There was only one death from measles (at Rhondda) in the 126 Great Towns of England and Wales during the week. The first notifications of measles and whooping-cough since these diseases were made notifiable in the administrative county of London are available for publication in this week's issue. As stated in these columns on October 8, page 770, all cases of measles and whooping-cough occurring in a household at an interval of two months from any previous cases must be notified to the borough medical officer of health. Of the 24 cases of measles notified the chief were in Southwark 5, Stepney 4, and Battersea and Wandsworth 3 each. In Scotland the notifications rose from 13 to 17 in the week under review, the centres affected being Glasgow 13 (6), and 1 each in Dunfermline (0), Lanark County (2), Greenock (1), and Paisley (1). Of the 8 deaths from whooping-cough in the 126 Great Towns 2 occurred in Walthamstow and 1 each in Hendon, Twickenham, Luton, Portsmouth, Leeds, Salford. In London 43 cases were notified, distributed mainly as follows: 5 each in Islington, Bethnal Green, and Lambeth, 4 each in Bermondsey and Stepney, and 3 each in Hackney, Southwark, Wandsworth, and Lewisham. In Scotland there was a decided increase in the notifications of whooping-cough during the week -109 (94)-chiefly in: Glasgow 84 (79), Paisley 12 (2), Edinburgh 6 (2). Two deaths were recorded, both in Glasgow,

Cholera : Plague

During the week under review there were 280 (237) cases of cholera and 135 (122) deaths in the United Provinces of India and 1,670 (3,463) cases and 743 (1,526) deaths in the Central Provinces. During the four weeks ended October 8 the incidence of cholera declined in most of the provinces, with the exception of those of the lower Ganges valley (Bihar and Bengal), and Assam. In the Central Provinces the number of cases declined during the four weeks ended September 10 from 30,948 to 15,048; in the same period the number fell in the United Provinces from 1,410 to 999, and in Bombay Presidency from 2,062 to 1,147. In Assam 1,102 cases were notified in the four-week period September 4 to October 1, compared with 522 during the previous four-week period. During the week ended October 8, 95 (113) cases and 33 (38) deaths were recorded in Shanghai, and in Hong Kong 9 (7) cases and 6 (5) deaths. From the reports of the two anti-epidemic units of the League of Nations in China, it appears that the cholera situation in the provinces of Central China is well in hand and the spread of the disease westwards has been checked.

In India during the week under review there were 46 (166) cases of plague reported in the Central Provinces and 4 (7) deaths, 37 (37) cases and 31 (27) deaths in Burma, 23 (35) cases and 12 (15) deaths in Madras Presidency, and 12 (21) cases and 8 (20) deaths in Bombay Presidency.

^{*} Except where otherwise mentioned, figures in parentheses refer to the week preceding the one under review.

The Services

DEATHS IN THE SERVICES

Lieutenant-Colonel ERNEST EDWIN WATERS, Bengal Medical Service (ret.), died at Camberley on September 20, aged 66. He was born on July 21, 1872, and was educated at St. Bartholomew's Hospital and at Edinburgh University, where he graduated M.B., C.M. in 1893, proceeded M.D. in 1903, and subsequently took the M.R.C.P.Lond. in 1911. He gained the Maclean Prize in Military Medicine at Netley, and entered the Indian Medical Service as surgeon lieutenant on July 29. 1895, became lieutenant-colonel on January 29, 1915, and retired on July 19, 1927. He served in the Tirah campaign on the North-West Frontier of India in 1897-8, where he took part in the actions on the Malakand and also those of Dargai, the Sampagha and Arhanga passes, and the Bazar Valley, receiving the frontier medal with two clasps. Most of his service was spent in Bengal in civil employ, which he entered in May, 1899, serving as superintendent of the Presidency General Hospital, Calcutta, as deputy sanitary commissioner, and as resident physician of the Medical College Hospital. Later in his service he held several of the most important medical appointments in Bengal, the civil surgeoncies of Cuttack, Murshidabad, and Howrah successively, and the post of surgeon-superintendent of the Presidency European General Hospital, Calcutta. He was the author of a work on Diabetes, its Causation and Treatment, with Special Reference to the Tropics (1927). He had been for many years a member of the British Medical Association, was a representative at the Annual Meetings, 1934-8, and chairman of the Guildford Division, 1935-7.

Lieutenant-Colonel JOHN GREGORY JORDAN, Bengal Medical Service (ret.), died in London on October 5, aged 78. He was born on December 6, 1859, and was educated at Edinburgh University, where he graduated M.B., C.M. in 1883. He entered the Indian Medical Service as surgeon on September 30, 1886, became lieutenant-colonel after twenty years' service, and retired on April 18, 1918. He served on the North-West Frontier of India in the Mirarzai campaign of 1891, receiving the frontier medal with a clasp. Most of his service was passed in Bengal in civil employ, which he entered in 1892. On the partition of Bengal in 1911 he was elected for service in Bihar and Orissa. During the war he reverted to military duty in April, 1916, and remained on military duty in India until his retirement.

Medical News

The William Blair-Bell Memorial Lecture will be given by Mr. T. N. A. Jeffcoate, M.D., F.R.C.S.Ed., M.C.O.G., on "Uterine Inertia," at the British College of Obstetricians and Gynaecologists, 58, Queen Anne Street, W., on Friday, October 28, at 2.30 p.m. All medical practitioners are invited to attend.

Dr. G. Jessel will deliver his presidential address on "Serial Skiagraphy in Pulmonary Disease" before the North-Western Tuberculosis Society at the Tuberculosis Offices, 352, Oxford Road, Manchester, on Thursday, October 27, at 3.15 p.m.

At the Royal Society of Arts on Wednesday, November 2, at 8.30 p.m., Lord Amulree will give an address on "Industrial Holidays." Tickets may be had from the secretary of the society, John Street, Adelphi, W.C.2.

Viscount Samuel will give the fourth Clarke Hall Lecture, "Is the Criminal to be Blamed—or Society?" in the Hall of Gray's Inn on Thursday, October 27, at 4.30 p.m., with the Home Secretary, Sir Samuel Hoare, in the chair.

The Kensington Division of the British Medical Association has arranged a meeting, to which all members of the medical profession are invited, at B.M.A. House, Tavistock Square, W.C., on Wednesday, November 16, at 9 p.m., when addresses on "The Place of the Doctor in Air Raid Precautions" will be given by Wing Commander E. J. Hodsoll, Inspector-General of Air Raid Precautions, and Dr. Norman Hammer, Medical Adviser to the Home Office Air Raid Department. Professor Henry Cohen will deliver his presidential address on "The Medical Knowledge of William Shakespeare" before the London Jewish Hospital Medical Society at the Anglo-Palestinian Club, 43, Great Windmill Street, W., on Sunday, October 23, at 8.30 p.m.

A special meeting of the Institution of Heating and Ventilating Engineers will be held at the Institution of Mechanical Engineers, Storey's Gate, Westminster, S.W., on Wednesday, November 2, at 7 p.m., when Mr. L. W. J. Henton will give an address on "Air-conditioning Requirements of Cinemas."

A meeting of the Association of Industrial Medical Officers will be held at the London School of Hygiene and Tropical Medicine, Keppel Street, W.C., on Friday, October 28. At 5 p.m. there will be a business meeting, and at 6 p.m. Professor E. P. Cathcart will open a discussion on "The Feet of the Industrial Worker." Mr. C. Lambrinudi will show a film on "The Action of the Muscles of the Foot." Other speakers will include Mr. W. S. Creer, Dr. W. Blood, and Mr. Eric Gill. On Saturday, October 29, there will be a visit to Messrs. J. Lyons and Co., Ltd., Cadby Hall, W.

A meeting of the Medico-Legal Society will be held at 26. Portland Place, W., on Thursday, October 27, at 8.30 p.m., when a paper will be read by Sir Bernard Spilsbury on "The Medico-Legal Significance of Wounds."

A further wing of the Manor House Hospital, Golders Green, N.W., will be opened by Queen Mary on Monday, October 24, at 3 p.m. Invitations to the ceremony have been sent out by the president, chairman, and trustees of the Industrial Orthopaedic Society.

The 1938–9 programme of the West Kent Medico-Chirurgical Society is as follows: November 11, Dr. Macdonald Critchley, "Migraine." December 9, Purvis Oration by Sir Crisp English, "On Taking Stock." January 13, Clinical evening. February 10, Mr. Alistair L. Gunn, "Some Recent Advances in Midwifery." March 10, Mr. John G. Sandrey, "Genito-urinary Emergencies." April 14, Debate: "That Voluntary Euthanasia should be Legalized." Proposer, Dr. C. Killick Millard; seconder, Dr. Wm. A. MacIlrath; mover of negative, Dr. C. O. Hawthorne; seconder of negative, Mr. Stephen Power. May 12, President's address. Meetings are held at the Miller General Hospital, Greenwich, S.E., on Fridays at 8.45 p.m.

The North London Medical and Chirurgical Society has arranged the following programme for 1938-9: November 16, Medical clinical evening. December 14, Demonstration by Dr. Yeo and members of the staff of the x-ray department of the Royal Northern Hospital. January 18, Mr. W. B. Gabriel, "The Diagnosis and Treatment of Some Common Rectal Diseases." February 15, Surgical clinical evening. March 15, Mr. T. Anthony Green, "Treatment of Disease by Radiotherapy." April 19, Medical clinical evening. May 17, President's address and annual general meeting. All the meetings will be held at the Royal Northern Hospital, Holloway Road, N., on Wednesdays at 9 p.m.

The twenty-sixth French Congress of Medicine, which was to have been held at Marseilles on September 26, has been postponed until November 10 to 13. The following congresses which were to have been held this month have been indefinitely postponed: the twenty-fifth French Congress of Hygiene, the fourth annual Congress of French-speaking Electroradiologists, and the Franco-Yugoslav Medical Congress. The next congress of the Latin Medical Press, which was to have been held at Lisbon this year, has been postponed until the end of next summer.

L'Union Internationale contre le Cancer is arranging an "International Cancer Week" from November 23 to 30, which is to include an international conference to commemorate the discovery of radium, electrons, x rays, and Hertzian waves; papers will be read by experts of various nationalities. The opening meeting will take place at the Sorbonne on November 23, when the President of the French Republic and other distinguished people will be present. Further information can be obtained from the secretary-general, 18, Rue Soufflot, Paris Ve.