

knew everyone in the Institute from the humblest cleaner upwards, and had a kindly greeting for all. He was familiar with the progress of all the numerous workers in the Institute, and could instantly grasp their problems and help elucidate their difficulties whenever they came to him for assistance.

As editor of the *Journal of Experimental Medicine*, Flexner exerted a keen critical and literary control, and woe betide any paper that was sent to him which was not up to the high standards which he set for that journal. His blue pencil, however, was constructive and taught many lessons. Outside his work he was a most charming host with an encyclopædic knowledge of many subjects and of different parts of the world. He leaves kindly memories with all those who were associated with him.

J. E. McCARTNEY

WE regret to announce the following deaths :

Dr. M. Epstein, editor of "The Statesman's Year-book" and "The Annual Register", on June 23, aged sixty-six.

Prof. T. H. Laby, F.R.S., during 1915-44 professor of natural philosophy in the University of Melbourne, aged sixty-six.

Prof. William Peddie, during 1907-42 Harris professor of physics in University College, Dundee (University of St. Andrews), on June 2, aged eighty-five.

Dr. A. W. Rogers, F.R.S., formerly director of the Geological Survey of South Africa, aged seventy-four.

Dr. H. E. Wood, for many years Union astronomer and director of the Union Observatory, Johannesburg, on February 27, aged sixty-five.

NEWS and VIEWS

Prof. C. L. Fortescue

PROF. C. L. FORTESCUE, who is retiring at the end of the present academic year from the chair of electrical engineering in the Imperial College of Science and Technology, went to the City and Guilds (Engineering) College, a constituent body of the Imperial College, in 1922 with a background of electrical engineering, radio and teaching experience obtained largely with the Admiralty and at the Royal Naval College, Greenwich. In addition to maintaining the traditions of the City and Guilds College in the general field of electrical engineering, Prof. Fortescue has successfully developed the radio and general communications sections, the foundations of which were laid by the pioneer work of Duddell, Howe and Marchant. During the past twenty years or so, this provision of adequate education and fundamental training in the lighter side of electrical engineering has coincided with the rapid and widespread application of radio and audio-frequency techniques to communication, broadcasting, cinemas, radar and navigational aids. A surprisingly large proportion of the radio and sound engineers now working in industrial and other types of establishments in Great Britain and elsewhere owe their initial instruction and training in these fields to Prof. Fortescue and his colleagues at the Imperial College.

In addition to orienting a portion of the College syllabus towards telecommunications, Prof. Fortescue has been very active in the radio research field, with particular reference to the use of thermionic valves and measuring technique at increasingly higher frequencies. This work started during his service with the Admiralty before and during the First World War, and has been continued at the Imperial College, both as a personal effort and in association with a series of post-graduate students, who have thus been provided with unusual opportunities for securing training in research under a very able leader and adviser. The results of much of this research work have been published in a series of papers, notably in the *Journal of the Institution of Electrical Engineers*: this Institution has recognized Prof. Fortescue and his achievements by electing him chairman of the Radio (then Wireless) Section in 1926 and president of the Institution in 1942. He has also served on the council of the Physical Society and been associated from time to time with the Radio Research Board of the Department of Scientific and Industrial Research.

Prof. Willis Jackson

PROF. WILLIS JACKSON, who has recently been appointed to succeed Prof. C. L. Fortescue as head of the Electrical Engineering Department at the Imperial College of Science and Technology, has occupied the chair of electrotechnics at the University of Manchester since 1938. He graduated there in 1925, and after a period at Bradford Technical College joined the Metropolitan-Vickers Electrical Co., Ltd., and afterwards Prof. Miles Walker's staff at the College of Technology, Manchester. During 1933-36 he worked with Dr. E. B. Moullin in the Engineering Laboratory, Oxford, and then spent a period as personal assistant to Sir Arthur Fleming in the research department of Messrs. Metropolitan-Vickers. He served as a member of council of the Institution of Electrical Engineers during 1939-42, was re-elected in 1945, and is now chairman-elect of its Radio Section. He is also a member of the Radio Research Board (Department of Scientific and Industrial Research). His research work prior to the War, and during it on behalf of the Ministry of Supply, was concerned mainly with the behaviour of dielectric materials, to which subject, as also in the field of very high-frequency measurements for radar purposes, he has made important contributions. He has also published several papers dealing with the education and training of engineers, and his interest in general, as well as technical, education has been recognized by the Ministry of Education in appointing him a member of its Central Advisory Council for England.

U.S. National Academy of Sciences

THE following have been elected members of the U.S. National Academy of Sciences: Dr. Samuel K. Allison, director, Institute for Nuclear Studies, University of Chicago; Dr. Rudolph J. Anderson, Department of Chemistry, Yale University; Dr. Ernest B. Babcock, Department of Genetics, University of California, Berkeley; Dr. Kenneth T. Bainbridge, Department of Physics, Harvard University; Dr. Elmer K. Bolton, director, Chemical Department, E. I. duPont de Nemours and Company, Wilmington, Delaware; Dr. Wilmot H. Bradley, chief geologist, United States Geological Survey; Dr. Perry Byerly, Department of Seismology, University of California, Berkeley; Dr. Paul R. Cannon, Department of Pathology, University of Chicago; Dr. Milislav

Demerec, director, Department of Genetics, Carnegie Institution of Washington, Cold Spring Harbor; Dr. Jesse Douglas, Department of Mathematics, Brooklyn College; Dr. Clarence H. Graham, Department of Psychology, Columbia University; Dr. Morris S. Kharasch, Department of Chemistry, University of Chicago; Dr. Karl Paul Link, professor of biochemistry, Agricultural Experiment Station, University of Wisconsin; Dr. Robert F. Loeb, College of Physicians and Surgeons, Columbia University; Dr. Esmond R. Long, Henry Phipps Institute, 7th and Lombard Streets, Philadelphia, Pa.; Dr. Joseph E. Mayer, Department of Chemistry, Columbia University; Dr. Charles S. Piggot, Geophysical Laboratory, Carnegie Institution of Washington; Dr. Marcus M. Rhoades, Department of Botany, Columbia University; Dr. George Scatchard, Department of Chemistry, Massachusetts Institute of Technology; Dr. Tracy M. Sonneborn, Department of Zoology, Indiana University; Dr. Leslie Spier, P.O. Box 880, Santa Cruz, California; Dr. S. Smith Stevens, Department of Psychology, Harvard University; Dr. Chauncey G. Suits, director of the Research Laboratory, General Electric Company, Schenectady, New York; Dr. Frederick E. Terman, dean of the School of Engineering, Stanford University; Dr. Merle A. Tuve, director of the Department of Terrestrial Magnetism, Carnegie Institution of Washington; Dr. Chester H. Werkman, head of the Department of Bacteriology, Iowa State College; Dr. Roger J. Williams, director of the Biochemical Institute, University of Texas; Dr. Frank C. Whitmore, dean of the School of Chemistry and Physics, Pennsylvania State College; Dr. Wendell P. Woodring, principal geologist, United States Geological Survey.

The following have been elected foreign associates of the National Academy of Sciences: Prof. Sydney Chapman, Sedleian professor of natural philosophy, University of Oxford; Dr. Peter Kapitza, director of the Institute for Physical Problems, Academy of Sciences of U.S.S.R.

National Research Council of Canada: Medical Fellowships

POST-GRADUATE medical fellowships have been awarded for 1946-47 by the National Research Council of Canada for the first time. Three junior awards (1,200 dollars a year) and five intermediate awards (1,800 dollars a year) have been announced: provision has also been made for senior awards (2,400 dollars a year). Junior fellowships are open to graduates in medicine who have already completed one year of post-graduate study; intermediate fellowships to applicants who have had experience in research work in a medical science for at least one year following graduation; senior fellowships are for applicants who have given evidence of capacity to conduct independent research in medical science. The awards for 1946-47 are as follows: *Junior Fellowships*: Dr. M. Hendelman (McGill), at the Royal Victoria Hospital, Montreal (obstetrics and gynaecology); Dr. Levitan (McGill), at McGill University (physiology); Dr. D. L. Wilson (Queen's), at the University of Toronto (biochemistry). *Intermediate Fellowships*: Dr. P. Dontigny (Laval and Montreal), at the Institute of Experimental Medicine and Surgery, Montreal (endocrinology); Dr. A. Gold (McGill), at McGill University (endocrinology); Dr. J. Leger (Montreal), at the Institute of Experimental Medicine and Surgery, Montreal (endocrinology and allergy); Dr. K. R. Mackenzie (McGill), at the University Clinic, Royal Victoria Hospital, Montreal (experimental medicine); Dr. G. C. McMillan (McGill), at the Pathological Institute, McGill University (pathology).

Indian Statistical Institute

At the fourteenth annual general meeting of the Indian Statistical Institute, held on April 27 in Calcutta, the following officers were elected for the session 1946-47: *President*, Sir C. D. Deshmukh; *Hon. Vice-Presidents* (having filled the office of president), Sir Badridas Goenka, Mr. N. R. Sarker; *Vice-Presidents*, Dr. P. N. Banerjea, Sir A. H. Ghuznavi, Sir T. E. Gregory, Dr. S. P. Mookerjee, Sir C. W. B. Normand, Mr. Chandmull Rajgharia, Sir Shri Ram, Sir C. V. Raman, the Hon. Justice T. J. Y. Roxburgh, the Hon. H. S. Suhrawardy; *Treasurer*, Dr. Satya Churn Law; *Secretary*, Prof. P. C. Mahalanobis (on leave), Prof. S. N. Bose (to act in his place); *Joint Secretaries*, Prof. K. N. Chakravorti, Kumar Bimal Chandra Sinha.

As in previous years, the Indian Statistical Institute has continued during the past year its usual activity along various lines of theoretical and applied research. It undertook and carried out various types of statistical surveys, among which may be mentioned a comprehensive crop survey in Bengal covering jute, Aus paddy, and Aman paddy, population forecasts, and inquiries relating to the economics and statistics of road development projects, the economic condition of agricultural labour in Bengal, rural indebtedness, and the family budget of middle class employees in Bengal. A sample survey of the after-effects of the Bengal famine of 1943 undertaken by the Institute in collaboration with Prof. K. P. Chattopadhyaya of the University of Calcutta mainly from the point of view of rehabilitation culminated in a comprehensive paper on the subject recently published. Government servants from many parts of India and students from various universities received training at the Institute. A special course in industrial statistics was also instituted last year and was largely attended. Prof. P. C. Mahalanobis, honorary secretary of the Institute, has recently been carrying out work in New York for the United Nations Organisation and is now taking part in the Royal Society Empire Scientific Conference being held in Great Britain.

Radiobiological Research

A RECENT number of the *British Medical Bulletin* (Vol. 4, No. 1, 1946. 7s.) is entitled "Radiobiology, Experimental and Applied". This volume is the second of a series concerned with the applications of physics in medicine and contains twelve reviews. The subjects include most of the problems of contemporary interest in relation to the scientific basis of radiotherapeutics. The introductory article by Dr. F. G. Spear summarizes the whole field of radiobiological research and includes an instructive plate illustrating the relationship between cell division and cell differentiation in normal tissues. Dr. L. H. Gray contributes a valuable review of the influence of 'linear ion density' (specific ionization) on the relative biological efficiency per ion pair. The genetic effects of radiations are lucidly summarized by Dr. D. G. Catcheside. The article by Dr. D. E. Lea on the action of radiation on viruses and bacteria is an only too brief survey of a subject to which he has so largely contributed. Radiotherapists will be especially