the forthcoming conference a special attempt will be made to secure authoritative reports upon the present state of bibliographical work in such fields of learning as archeology, archive work, economics, history and linguistic studies, in addition to the natural seiences and their applications.

The program will include visits to some of the many interesting places in the neighborhood, together with other social functions. The total cost, exclusive of reports and visits, will not exceed £1 a day.

## THE LEVERHULME FELLOWSHIPS

THE Advisory Committee for the Leverhulme Research Fellowships have recommended, and the trustees have approved, the following awards in scientific subjects tenable for varying periods up to two years:

W. Cule Davies, Ph.D., D.Sc., lecturer in chemistry, University College, Cardiff.—Studies of the organic compounds of nitrogen, phosphorus and arsenic.

Mrs. K. A. Esdaile, research worker, London.—A dictionary of English sculptors.

S. Goldstein, M.A., Ph.D., Stokes lecturer in mathematics, University of Cambridge.—The turbulent motion of fluids.

F. C. Happold, Ph.D., D.Sc., senior lecturer in biochemistry, University of Leeds.—The nutrition of the three types of *C. diphtheriae* in its relation to toxin production.

Miss M. W. Jepps, M.A., D.Sc., lecturer in zoology, University of Glasgow.—Studies in the structure and life cycles of certain marine protozoa.

- A. King, M.Sc., D.I.C., assistant lecturer, Imperial College of Science and Technology, London.—Leader of expedition to carry out a biological, geological and physical examination of Jan Mayen Island in the Greenland Sea.
- D. A. O'Duffy, B.Sc., research and development assistant, Bahrein Petroleum Company.—Lubrication problems at high pressures and temperatures.
- O. A. Oeser, M.Sc., D.Phil., Ph.D., lecturer (head of department) in experimental psychology, St. Andrews University.—The "Combined" method in the social sciences.
- G. B. B. M. Sutherland, M.A., Ph.D., fellow, lecturer and director of studies in natural sciences, Pembroke College, Cambridge.—The application of infra-red spectra to structural problems in chemistry and physics.

W. Taylor, D.Sc., lecturer in chemistry, the Polytechnic, London.—Substitution mechanisms in aliphatic compounds.

W. H. Thorpe, M.A., Ph.D., fellow and tutor, Jesus College, Cambridge.—The physiology of African Tropical Homoptera.

R. Wilson, M.A., senior lecturer in pure and applied mathematics, University College, Swansea.—The nature and position of the singularities of a function in relation to the coefficient theory of its Taylor series.

## SIR RICHARD GREGORY'S LECTURE BEFORE THE CARNEGIE INSTI-TUTION OF WASHINGTON

THE Carnegie Institution of Washington announces that Sir Richard Gregory, distinguished English sci-

entist, has accepted an invitation to deliver the next Elihu Root lecture at the institution's auditorium, Washington, D. C., on the evening of December 8.

The Elihu Root lecture series, of which this will be the fifth, was established by Carnegie Institution in honor of Mr. Root, who from the founding of the institution to his death in 1937 was a member of the board of trustees and its chairman during the last twenty-four years of his life.

Dedicated as these lectures are to a distinguished scholar widely known for his support of research, they focus attention on the influence of science upon human thought and in shaping attitudes towards life. The most eminent thinkers of the present day, particularly in fields of science, wherever situated, are invited, as opportunity presents, to take place on the roster of speakers.

Sir Richard Gregory has come into position of prominence and of great influence through the books he has written, the addresses he has delivered, and most of all through his brilliant editorship of *Nature*, an English journal which has become an international clearing house for preliminary announcement of scientific researches and results. For forty-five years he has served this journal, first, as assistant editor and, since 1919, as editor. During the period he has contributed to the journal literally thousands of columns of vigorous editorial comment and observation.

In recognition of his public and scientific services Sir Richard was knighted in 1919; in 1931 the hereditary rank of baronet was bestowed upon him. Among the many academic honors accorded him, he was elected a fellow of the Royal Society of London, in 1933, under a special statute reserved for those who "either have rendered conspicuous services to the cause of science, or are such that their election would be of benefit to the Society." Only ten other living fellows of the Royal Society, including Prime Ministers and peers of the realm, have been elected under this provision.

In the forthcoming institution lecture, Sir Richard will discuss "Cultural Contacts of Science." In this address he expects to deal chiefly with the influence that science exerts upon cultural values rather than with the services rendered to modern communities by the utilitarian uses to which scientific knowledge is put.

In the promotion of closer relationship between science and social problems and the progress and use of scientific knowledge in the service of the world of man, Sir Richard sees such contacts contributing not only to the development of social ethics but also to the evolving of spiritual convictions. He regrets that, in general, art and literature have not had their emotions aroused by the achievements of science which represent, he holds, the most wonderful works of man.

The message of science, he declares, is this: that not only the development of man's physical form but also of his ethical standards depends upon himself. He adds: "Man has the power to make the world a celestial dwelling place if he wishes or to reduce it to dust and ashes. He can promote the survival of any type he pleases—poet, philosopher, priest, or pugilist."

Carnegie Institution will publish Sir Richard's lecture in full so that all may obtain a copy who desire to do so.

Frank F. Bunker

## RECENT DEATHS AND MEMORIALS

Dr. Otto Hilgard Tittmann, connected with the U. S. Coast and Geodetic Survey since 1867, from 1900 to 1915 as superintendent, died on August 21 at the age of eighty-eight years.

Dr. John Martin Wheeler, professor of ophthalmology at Columbia University and director of the Eye Institute of the Columbia-Presbyterian Medical Center in New York City, died on August 22 at the age of fifty-eight years.

Dr. George Edmund de Schweinitz, professor emeritus of ophthalmology at the Graduate School of Medicine of the University of Pennsylvania, of which he was a trustee, died on August 22 at the age of seventy-nine years.

DARWIN M. ANDREWS, horticulturist of Boulder, Colorado, died on August 14 in his sixty-ninth year. Mr. Andrews was known for his work in the cultivation, selection and improvement of the native plant species of Colorado.

AT a meeting of the Osler Club of London on July 12 in honor of the eighty-ninth anniversary of the birth of Sir William Osler, Dr. Archibald Malloch delivered the eleventh Oslerian oration on "Osler." Among those who spoke were Dr. Harvey Cushing and Dr. Charles Singer.

A MEMORIAL to the late Professor Hideyo Noguchi and the late Dr. William Alexander Young was formally unveiled by Sir Arnold Hodson, K.C.M.G., on the second of April, 1938, at Accra, Gold Coast, Africa. A representative gathering of the people of Accra was present at the ceremony. Before the memorial was unveiled Dr. David Duff, director of medical services for the Gold Coast, gave a short account of the lives and work of Professor Noguchi and Dr. Young. In his address he stated that, in addition to the memorial, a brass plate, suitably inscribed, would shortly be placed in the room of the Medical Research Institute at Accra, where Noguchi and Young conducted their yellow fever studies.

## SCIENTIFIC NOTES AND NEWS

SIR ARTHUR EDDINGTON was elected president of the International Astronomical Union at the sixth triennial meeting held at Stockholm from August 3 to 10. He succeeds Professor Ernest Esclangon, director of the Paris and Meudon Observatories. The next meeting of the union will be held in Switzerland in 1941.

The election of honorary members of the Royal Society of Edinburgh included, in addition to Dr. Henry Norris Russell, announced in Science last week, Sir Thomas Lewis, physician-in-charge of the department of clinical research, University College Hospital, London, and Professor G. I. Taylor, Yarrow research professor of the Royal Society, fellow of Trinity College, Cambridge.

The gold medal of the Royal Society of Medicine has been awarded to Dr. Wilfred Trotter, director of the Surgical Unit at University College Hospital, London. This was the seventh award of the medal, which is given triennially to a "scientist, man or woman, who has made valuable contributions to the science and art of medicine."

THE diploma of honor and medal of scientific merit of the Academy of Sciences and Arts of Rio de Janeiro has been conferred on Dr. B. N. Singh, Kapurthala professor of plant physiology and agricultural botany at the Benares Hindu University; on Dr. B. C. Guha, professor of applied chemistry at the University of Calcutta and honorary director of the department of biochemistry and nutrition of the Indian Institute for Medical Research, Calcutta, and on Dr. H. N. Mukherjee, of the department of biochemistry of Carmichael Medical College. Dr. Guha is known for his researches on vitamins and related subjects and Dr. Mukherjee for his work on insulin and allied themes.

Dr. James B. Murphy, of the Rockefeller Institute for Medical Research, has received the degree of doctor of science from Oglethorpe University, Atlanta.

THE honorary doctorate of the University of Cologne has been conferred on Dr. W. L. Bragg, Cavendish professor of experimental physics at the University of Cambridge, formerly director of the National Physical Laboratory.

At a convocation of the University of Oxford on August 11, the vice-chancellor presiding, the honorary degree of doctor of science was conferred on Dr. Charles Gustave Jung, professor of psychology in the University of Zurich. Dr. Jung presided over the