

University College, London. Studies in the principles of angiospermous morphology and in the history of botany.

S. J. DULY, M.A., Camb., head of department for the scientific study of commercial products, City of London College. The carriage of goods by sea.

F. FAIRBROTHER, D.Sc., Manc., senior lecturer in chemistry, Manchester University. The study of electrolytic dissociation process and the mechanism of chemical reactions by the use of induced radioactivity.

C. P. FITZGERALD, author. Sociology of the non-Chinese tribes of Yunnan, S. W. China.

S. D. GARRETT, B.A., Camb., formerly assistant plant pathologist, Waite Agricultural Research Institute, University of Adelaide, South Australia. The biological antagonism of the soil microflora towards root disease fungi or crop plants. (Renewal of present fellowship.)

J. DE GRAAF HUNTER, F.R.S., C.I.E., M.A., Sc.D., Camb., late director, Survey of India. Planning and execution of geodetic triangulation of great extent.

MRS. K. LONSDALE, D.Sc., Lond., research worker, Royal Institution, London. Relation between structure and physical properties of organic molecules. (Renewal of present fellowship.)

E. P. MUMFORD, M.Sc., Manc., M.A., Cardiff, late director, Pacific Entomological Survey, Honolulu. Terrestrial and fresh-water biota of the Marquesas Islands. (Renewal of present fellowship.)

F. R. PERRY, M.Sc., Manc., member of research department, Metropolitan-Vickers Electrical Co., Ltd., Manchester. Study of overvoltages due to lightning on transmission lines. (Renewal of present fellowship.)

A. L. REIMANN, Ph.D., Berlin, D.Sc., Adelaide, research physicist, General Electric Company, Ltd., Wembley, Middlesex. Electronic conduction phenomena in solid insulators and semi-conductors.

W. E. WILLIAMS, D.Sc., Lond., M.Sc., Manc., lecturer in physics, King's College, London. The determination of the vacuum wave-lengths and the structures of spectral lines by means of his reflection echelon.

Grants in aid of research have been made to the following:

A. E. BOYCOTT, F.R.S., M.A., D.M., D.Sc., Oxon., late Graham professor of pathology, University of London. The oecology and genetics of British non-marine mollusca.

H. J. FLEURE, F.R.S., M.A., Mach., D.Sc., Wales, professor of geography, Manchester University. Physical (racial) characteristics of the peoples of Wales.

J. W. HESLOP HARRISON, F.R.S., D.Sc., Durham, professor of botany, Armstrong College, Newcastle-on-Tyne. Researches on evolution and heredity. (Renewal of present grant.)

T. N. HOBLYN, statistician, East Malling Research Station, Kent. A study of technical problems in the layout and conduct of horticultural field experiments under tropical and sub-tropical conditions.

W. H. PEARSALL, D.Sc., Manc., reader in botany, University of Leeds. The growth of algae.

O. W. RICHARDS, M.A., D.Sc., Oxon., lecturer in entomology, Imperial College of Science and Technology, London.

The study of the habits of South American bees and wasps.

C. W. VALENTINE, M.A., Lond., D.Phil., St. Andrews, professor of education, Birmingham University. The psychology of early childhood.

The following has been awarded a Leverhulme Traveling Fellowship:

A. RUSCOE CLARKE, M.B., Lond., F.R.C.S., Eng., on nomination of the Medical Research Council.

STANDARD BRANDS FELLOWSHIPS

STANDARD BRANDS, INCORPORATED, producers of Fleischmann's Yeast, Chase and Sanborn's Dated Coffee and other products, has distributed ten annual fellowships among investigators in American universities. Six of the awards have been made to enable the continuance of previous fellowship work. Four recipients were granted awards for the first time. These fellows are undertaking specialized research along the following lines:

Dr. R. O. Bengis is continuing his work at Yale University, on the chemistry of coffee and the changes that take place when coffee grows stale.

Dr. Olaf Bergeim, at the University of Illinois, Chicago, is making a study of yeast vitamins set free in the intestinal tract and their utilization in the human system.

Dr. Virginia Fisher is collaborating this year with Dr. Lloyd Arnold at the University of Illinois, where they are making a complete survey of fungi normally occurring in or on the human body.

Dr. Walter H. Eddy, of Columbia University, New York City, is proceeding with his work on the isolation of vitamin B from yeast.

Dr. R. H. Cheney is working at Long Island University, Brooklyn, on the physiological action of fresh and stale coffee and caffeine.

Dr. R. J. Williams, at the University of Oregon, is investigating pantothenic acid, the growth stimulant that he discovered.

Dr. U. Lash Miller and his colleagues are extending their research on yeast bios at the University of Toronto.

Dr. S. I. Bechdel, at Pennsylvania State College, is engaged in studying the use of irradiated dry yeast for treating rickets in calves.

Dr. John A. Killian, at the Killian Research Laboratories, New York City, is undertaking research on the value of bread in the diet.

ARTHUR A. NOYES

DR. ROBERT A. MILLIKAN, chairman of the executive council of the California Institute of Technology, concluded his commencement address with the following words concerning Arthur A. Noyes:

The last great act of his life was altogether typical of the man. Two months ago he asked me to come over

to his sick room, and said, "The next great step in the development of the California Institute is to get Max Mason, who has resigned his position as president of the Rockefeller Foundation, to come out here and join the staff of the California Institute of Technology as vice-chairman of the Observatory Council to take over a large share of the responsibility of this enormous enterprise of the 200-inch telescope and some other related undertakings which the institute must assume. I understand full well the difficulties which we are having at present to keep our budget balanced, but I know a way to handle that situation. I am getting a larger salary than I need, and I want you to take what it costs to get Mason here out of my present income."

As a result of that act I may announce to-day that beginning next October Dr. Max Mason joins the permanent staff of the California Institute of Technology, and takes his place upon its Executive Council. All this in the face of the fact that Dr. Noyes's personal life-long devo-

tion was to his chosen field of chemistry, the depth of that devotion and interest being attested by the fact that when we opened his will the day after his death we found that (save for some minor bequests) he had left all that he had, some \$150,000, to the California Institute to be devoted exclusively to research work in pure chemistry by men who had already obtained the doctorate in chemistry or had received the equivalent training. Do you wonder that I feel that the atmosphere of mutual assistance and self-forgetting cooperation toward a great ideal which has been created here and which is to-day the most priceless asset of this institution is largely the legacy of the mind and the soul of Arthur A. Noyes? We can not pay the debt which we owe to him by any words of eulogy or praise. "It is rather for us to be here dedicated to the great task remaining before us," that the spirit and ideals and accomplishments of Arthur A. Noyes shall not perish from the earth.

SCIENTIFIC NOTES AND NEWS

THE honorary degree of the University of Paris was conferred on August 12 on Dr. George David Birkhoff, Perkins professor of mathematics and dean of the faculty of arts and sciences at Harvard University.

THE *Bulletin* of the American Mathematical Society calls attention to the fact that Professor Oskar Bolza, of the University of Freiburg, who taught for twelve years at the Johns Hopkins University, Clark University and the University of Chicago, took his doctor's degree at the University of Göttingen on June 28, 1886, fifty years ago. Congratulations were forwarded to him by the Deutsche Mathematiker-Vereinigung and the American Mathematical Society.

DR. HARRY H. LAUGHLIN, of the Carnegie Institution, Cold Spring Harbor, N. Y., was among those awarded an honorary doctorate in medicine on the occasion of the celebration of the five hundred and fiftieth anniversary of the University of Heidelberg.

THE University of Wales has conferred the honorary doctorate of science on Dr. A. A. Read, emeritus professor of metallurgy, University College, Cardiff.

ON the occasion of the retirement of M. Marcellin Boule as director of the Institute of Human Paleontology and professor of paleontology in the Museum of Natural History, Paris, a medal, the work of A. de Jaeger, will be presented to him by his colleagues and students.

DR. JEAN SABRAZÈS, professor of pathological anatomy and clinical microscopy in the University of Bordeaux, has been elected correspondent of the Section of Medicine and Surgery of the Paris Academy of Sciences, in succession to the late Professor Léon Frédéricq.

WE learn from *Nature* that Dr. Emil Abderhalden, professor of physiology and director of the Physiological Institute of the University at Halle, has been elected an honorary member of the Society of Biological Chemists at Bangalore.

DR. W. R. DODSON, formerly dean of the College of Agriculture of the Louisiana State University and more recently connected with the Federal Experiment Station at Jeanerette, will join the faculty of the department of agronomy at the university. The honorary degree of doctor of science was conferred on Dr. Dodson at the commencement ceremonies on August 6, which brought to a close the summer session. In conferring the degree, President James M. Smith stated that it was given in recognition of his "forty years of service to the youth of the State of Louisiana as a teacher and leader in agriculture, as an organizer of the forces for the development of better agricultural conditions in the South, and for launching the movement that resulted in the establishment of the Louisiana State University on its present site."

PROFESSOR R. B. HARVEY, director of the Florida Citrus Research Laboratory at Dunedin, Fla., on sabbatical leave from the University of Minnesota for a year, has been elected president of the American Society of Plant Physiologists for the year 1936-37. Dr. O. F. Curtis, professor of plant physiology, Cornell University, Ithaca, has been elected vice-president.

DR. FRANK H. LAHEY, of Boston, was elected at the recent meeting in Chicago president-elect of the American Society for the Study of Goiter.

DR. MONROE E. FREEMAN, assistant professor of agricultural and biological chemistry in the University of Maine, has become research professor of chemistry