

initiation and maintenance of a system of National Research Fellowships, which are to be awarded by the National Research Council to persons who have demonstrated a high order of ability in research, for the purpose of enabling them to conduct investigations at educational institutions which make adequate provision for effective prosecution of research in physics or chemistry. The plan will include such supplementary features as may promote the broad purpose of the project and increase its efficiency.

Among the important results which are expected to follow from the execution of the plan may be mentioned:

1. Opening of a scientific career to a larger number of able investigators and their more thorough training in research, thus meeting an urgent need of our universities and industries.
2. Increase of knowledge in regard to the fundamental principles of physics and chemistry, upon which the progress of all the sciences and the development of industry depend.
3. Creation of more favorable conditions for research in the educational institutions of this country.

The project will be administered by the research fellowship board of the National Research Council. This board consists of six members appointed for terms of five years and of the chairmen *ex officio* of the Division of Physical Science and the Division of Chemistry and Chemical Technology of the National Research Council. The members of the board are:

- Henry A. Bumstead, professor of physics, Yale University.  
Simon Flexner, director of the Laboratories of the Rockefeller Institute for Medical Research.  
George E. Hale, director of Mount Wilson Observatory.  
Elmer P. Kohler, professor of chemistry, Harvard University.  
Robert A. Millikan, professor of physics, University of Chicago.  
Arthur A. Noyes, director of the Research Laboratory of Physical Chemistry, Massachusetts Institute of Technology.  
Wilder D. Bancroft, professor of physical chemistry, Cornell University, chairman of the Di-

vision of Chemistry and Chemical Technology.  
—— — ———, chairman of the Division of Physical Science.

The appointments of national research fellows will be made only after careful consideration of the scientific attainments of all candidates, not only of those who apply on their own initiative, but also of those who are brought to the attention of the research fellowship board by professors in educational institutions and by other investigators throughout the country.

The research fellowships will for the most part be awarded to persons who have had training at an American university or scientific school equivalent to that represented by the doctor's degree. The salary will ordinarily be \$1,500 for the first year. The research fellowship board will not, however, be bound by rigid rules of procedure. Thus it may offer larger salaries to those of exceptional attainment or wider experience, and may give appointments to competent investigators who have had training other than that represented by the doctor's degree.

The research fellows will be appointed for one year; but they will be eligible for successive reappointments, ordinarily with increases of salary.

It is expected that fifteen to twenty research fellowships will be available during the coming year, and that the number will be increased in subsequent years.

Applications for the fellowships should be made on the form provided for the purpose, and should be sent to the secretary of the research fellowship board, National Research Council, 1023 Sixteenth Street, Washington, D. C. Applications will be received up to September 1, 1919, for fellowships available during the next academic year; but a limited number of appointments will be made on the basis of the applications received before April 20, 1919.

#### SCIENTIFIC NOTES AND NEWS

COLONEL E. LESTER JONES, after service in the Army for about a year in America and France has returned to his duties as head of the Coast and Geodetic Survey.

LIEUTENANT COLONEL WILLIAM McPHERSON, who entered the services of the War Department shortly after the declaration of war by the United States, has secured his discharge and has returned to his former position as head of the department of chemistry at the Ohio State University.

PROFESSOR CLOUGH T. BURNETT, professor of bacteriology in the University of Colorado, has returned from France, where he was the head of the commission for the prevention of tuberculosis.

DR. H. C. TAYLOR, head of the department of agricultural economics in the college of agriculture, University of Wisconsin, has been appointed by the Secretary of Agriculture as chief of the Office of Farm Management. Francis W. Peck, of the University of Minnesota, has been appointed to the position of farm economist in the office.

THE *Proceedings* of the Washington Academy of Sciences state that the following members of the Chemical Warfare Service have joined the staff of the Bureau of Standards since January: Captain J. M. Braham, in the electrochemical laboratory; Lieutenant C. W. Clifford, sugar laboratory; S. C. Langdon, electrochemical laboratory; F. W. Reynolds (formerly at Edgewood Arsenal), laboratory of metallurgical chemistry; P. Wrightsman, gas laboratory. Mr. J. R. Eckman, formerly of the Ordnance Department, has joined the staff of the bureau as chemist in the analytical laboratory; Mr. W. B. Newkirk, formerly with the Oxnard Sugar Company, as sugar technologist, and Mr. A. A. Benedict, formerly of the University of Pittsburgh, as physicist in the sugar laboratory.

PROFESSOR W. B. MELDRUM, formerly head of the department of chemistry at Haverford College and later in the Chemical Warfare Service on duty at the American University Experiment Station, has accepted a temporary position as chemical expert with the Price Section of the War Industries Board.

DR. WILLIAM T. BRIGHAM, Sc.D., in charge of the Bernice Pauahi Bishop Museum, Hono-

lulu, since its foundation, has resigned the directorship and the trustees have conferred upon him the title of director emeritus. Dr. Brigham continues his connection with the museum as curator of anthropology.

THE Adams prize, value £250, has been awarded by the University of Cambridge, to Professor J. W. Nicholson, professor of mathematics at King's College, University of London.

A MEETING of Unionists has been held at Oxford to consider the selection of a candidate to fill the vacancy in the representation in Parliament of the university caused by the elevation of Mr. R. E. Prothero to the peerage. It was decided to invite Mr. David G. Hogarth, fellow of Magdalen College, archeological explorer, geographer and author, to become the candidate. Mr. Hogarth is at present in Egypt.

PROFESSOR ALAN M. BATEMAN, of the department of economic geology, Yale University, has been elected editor of the *Journal of Economic Geology*.

DR. GRAHAM EDGAR, formerly secretary of the Washington office of the Research Information Service, National Research Council, has resigned and is now with the Nitrate Division of the Ordnance Department of the Army. Mr. Gordon S. Fulcher is his successor as secretary of the Information Service.

DR. WALTER M. MITCHELL, recently manager of inspection for the Bureau of Aircraft Production, U. S. War Department, in Rochester, N. Y., has been appointed director of the metallurgical and testing laboratory, Standard Roller Bearing Co., Philadelphia, Pa.

DR. C. S. HUDSON, chief of the carbohydrate laboratory of the Bureau of Chemistry, has resigned to accept a position with the Samuel Heath Company, of Trenton, N. J.

At a joint meeting of the Washington Academy of Sciences and the Philosophical Society of Washington on March 15, Dr. H. D. Curtis, of the Lick Observatory, delivered an address on "Modern theories of spiral nebulae."

LIEUTENANT COLONEL JOHN R. MURLIN, U. S. A., of the Surgeon General's Office, gave an

address on "Food efficiency in the United States Army" before the Washington Academy of Sciences on March 20.

At the annual joint meeting of the Alabama Technical Association (Alabama Sections of the A. S. C. E., A. S. M. E., A. S. E. E. and A. C. S.), held in Birmingham on March 1, Professor Isaac Newton Kugelmass addressed the conference on "The relations of chemistry to modern laundering and its field for research in the economic service of man."

MAJOR R. M. YERKES, of the Office of the Surgeon General of the Army, delivered an illustrated lecture before the District of Columbia Chapter of the Sigma Xi on the subject, "The relationship of the army mental tests to education and vocational guidance" on March 6.

DR. J. McKEEN CATTELL gave, on March 20, the address before the Syracuse University chapter of Phi Kappa Phi, the subject being "Science and civilization."

LECTURES recently given at the Royal Institution, London, include the following: Sir Oliver Lodge on "Ether and Matter"; Captain G. P. Thomson two lectures on "Aeroplanes in the Great War"; Professor H. M. Lefroy two lectures on "Insect Enemies of Our Food Supplies" and on "How Silk is Grown and Made"; Mr. A. T. Hare on "Clock Escapements."

A COMMITTEE has been formed to raise an endowment fund of \$100,000 to perpetuate the method of after care for maternity cases evolved by the late Dr. Edwin Bradford Cragin, of the College of Physicians and Surgeons, Columbia University, in connection with the work of the Sloane Hospital for Women.

DR. HERBERT HUNTINGTON SMITH, curator at the museum of the University of Alabama, was killed on March 22 by a train. Dr. Smith, known for his work in entomology and on mollusca, was born at Manlius, N. Y., in 1851.

ELIZABETH LETSON BRYAN, wife of Professor William Alanson Bryan, of the College of Hawaii, died on February 28, aged forty-four years. Dr. Bryan before her marriage was director of the Museum of the Buffalo Society

of Natural Science and was known for her contributions to conchology.

ON account of the disturbed conditions of transportation, etc., the session of the Twentieth International Congress of Americanists has been postponed until June, 1920.

JOSEPH and John W. Mailliard, prominent business men of San Francisco and well-known students of American birds, have donated their entire ornithological and oological collections to the Museum of the California Academy of Sciences. These collections contain more than 11,000 birds and over 13,000 specimens of nests and eggs, representing nearly 800 species. Joseph Mailliard has accepted the position of honorary curator, department of ornithology, in the museum of the academy.

THE trustees of the British Museum have had presented to them a valuable collection of ancient British coins by Sir Arthur Evans, to whom they were bequeathed by his father, Sir John Evans, the distinguished archeologist. Sir John Evans, in 1864 wrote an important book on "The Coins of Ancient Britain."

THE Puget Sound Biological Station at Friday Harbor, Washington, will open on June 16, 1919, its sixteenth annual session, which is to continue for six weeks. The station will be open to independent workers until October; and as early as June 1, if arrangements are made with the director. The earlier part of the season is the best for embryological work. Tents and research rooms may be reserved by writing the director, T. C. Frye, University of Washington, Seattle.

IN the act making appropriation for the legislative, executive and judicial expenses of the government for the fiscal year ending June 30, 1920, there is provision for increased compensation amounting to \$240 per annum for all employees holding regular appointments in the Bureau of Fisheries now receiving \$2,500 or less. This increase becomes effective on July 1, 1919, and is in lieu of the existing increase of \$120 per annum.

THE following letter addressed by the editor of SCIENCE to M. George Sarton at Wondelgem:

lez-gand, Belgium, on January 22, 1915, was delivered to him at Cambridge, Mass., on March 10, 1919.

You may be interested in a letter which Professor Smith has, at my suggestion, written for SCIENCE. I greatly admire your courage in continuing *Isis* under the lamentable conditions now existing. The journal is of such high standards that its discontinuance would be a serious loss to science. The publication department of *The Popular Science Monthly* has handed me the enclosed letter and the writer has been informed that it will be forwarded to you.

The printing of the letter may serve to call attention to the fact that the publication of *Isis* has now been resumed under the editorship of M. Sarton.

THE National Forest Reservation Commission has approved for purchase 54,744 acres of land for national forests in the White Mountains, Southern Appalachians and Arkansas. The largest tracts purchased are in Georgia, where the resumption of purchase work has been authorized by the commission. An aggregate area of 38,108 acres in Rabun, Union and Townes counties, scattered through thirty-nine tracts, was approved for purchase at an average price of \$7.22 per acre. In Alabama, in Lawrence and Winston counties, 5,159 acres were approved at an average price of \$4.30; in North Carolina, in Macon and Buncombe counties, 1,940 acres were approved at an average price of \$4.30 an acre; in Virginia, in Augusta and Shenandoah counties, 1,381 acres were approved at an average price of \$4.36 an acre in West Virginia, in Hardy county, 40 acres at an average price of \$7 an acre; and in New Hampshire, in Grafton and Coos counties, 9.04 acres at an average price of \$6.68 an acre. In Arkansas, 7,269 acres, located mainly in Polk, Pope, Johnson and Garland counties, were approved for purchase at an average price of \$3.61 per acre. To date the National Forest Reservation Commission has approved for purchase 1,702,534 acres for national forest purposes in the seventeen areas of eastern national forests.

*Nature* states that with the view of meeting the growing demand for technical litera-

ture, the council of the Chemical Society decided early in 1917 to increase the scope of the library of the society by a more liberal provision of suitable technical works and journals. It was also thought that by placing the existing library of 23,000 volumes and the proposed extension at the disposal of members of other societies and associations they might relieve themselves of the necessity of collecting and maintaining the literature relating to their special subjects, and assist in the formation of a representative library of chemical literature, such as would be difficult to obtain by individual effort. A conference of representatives of societies and associations connected with chemical science and industry was held to consider the means by which other societies, etc., might cooperate in this extension, and financial assistance was afterwards offered by the following societies, etc.: Association of British Chemical Manufacturers, Biochemical Society, Faraday Society, Institute of Chemistry, Society of Dyers and Colorists, and Society of Public Analysts. Members of these contributing societies, etc., will be permitted to consult the library and borrow books.

THE Royal Institution, London, arranged a Christmas course of juvenile lectures which were delivered by Professor D'Arcy Thompson on "The Fish of the Sea," beginning on December 31 at 3 o'clock. The following courses of lectures are included in its program: Professor Spenser Wilkinson, "Lessons of the War"; Professor MacGregor-Morris, "Study of Electric Arcs and their Applications"; Captain G. P. Thomson, "The Development of Aeroplanes in the Great War and The Dynamics of Flying"; Professor Hele-Shaw, "Clutches"; Professor Arthur Keith, "British Ethnology: The People of Scotland"; Professor Norman Collie, "Chemical Studies of Oriental Porcelain"; Dr. W. Wilson, "The Movements of the Sun, Earth and Moon"; Professor H. M. Lefroy, "Insect Enemies of our Food Supplies and How Silk is Grown and Made"; Professor C. H. Lees, "Fire Cracks and the Forces Producing Them"; Professor

A. Findlay, "Colloidal Matter and its Properties"; and Sir J. J. Thomson, "Spectrum Analysis and its Application to Atomic Structure." The Faraday discourses began on January 17, when Sir James Dewar gave a lecture on "Liquid Air and the War"; and other discourses were announced by the following gentlement: Lieutenant Colonel A. Balfour, Professor H. H. Turner, Professor J. G. Adami, Professor C. G. Knott, Mr. A. T. Hare, Professor J. A. McClelland, Professor H. C. H. Carpenter, Professor A. Keith, Professor W. W. Watts, Sir John H. A. Macdonald and Sir J. J. Thomson.

THE United States nitrate plants were built with the greatest urgency to meet imperative military necessities. These immediate military demands were extinguished by the signing of the armistice. The problem now is to endow these plants with the maximum peace-time value, while maintaining and enhancing their war efficiency. This involves new questions in the technique of fertilization, and requires not only constructive but creative work. Following a careful study of the situation, it has been decided to establish forthwith a civilian organization, under the interdepartmental control of the Secretaries of War, Navy, Interior, and Agriculture, to be known as the United States Fixed-Nitrogen Administration, and charged with all the government's fixed-nitrogen interests. In due course the nitrate plants and other interests now administered by the Nitrate Division of the Ordnance Department of the Army will be turned over to this new fixed-nitrogen administration. Mr. Arthur Graham Glasgow has been requested to act as first administrator and to be responsible for creating the new organization.

#### UNIVERSITY AND EDUCATIONAL NEWS

THE Oberlin College administration has appointed a special faculty committee to stimulate original research among members of the science division. Hereafter when appointments are made to the teaching staffs of the various science divisions special consideration will be given to candidates who have already

demonstrated some particular degree of fitness in conducting original research.

RECENT demands for men skilled in geology have led to the development of a special course in practical geology which is being instituted at the engineering schools of Columbia University. The course is three years in length and is intended to train men for advisory and professional work in connection with engineering and other operations involving a knowledge of ground structure as well as for special studies of mining prospects and developments and other more formal geological investigations. The course leads to the degree of engineer of mines in geology.

DR. GEORGE NORLIN, professor of Greek in the University of Colorado, has been elected president to succeed President Farrand. Dr. Norlin was elected to the presidency by the regents on the recommendation of a committee of the faculty.

DR. RALPH R. DYKSTRA, for eight years a member of the faculty of the Kansas State Agricultural College, has been appointed head of the department of veterinary medicine.

DR. A. B. DAWSON, Ph.D., (Harvard, 1918), professor of biology in the Mount Allison University, has been appointed assistant professor of microscopical anatomy in the Loyola University School of Medicine.

THE senate of London University has appointed Dr. Reginald R. Gates, M.A. (Mount Allison), D.Sc. (McGill), Ph.D. (Chicago), for three years as from January 1, 1919, to the newly-established university readership in botany tenable at King's College.

#### DISCUSSION AND CORRESPONDENCE

##### GERMAN TERMS IN ANATOMY

THE Anatomical Society of Great Britain and Ireland, at a meeting on March 1, 1918 at King's College, London, received and unanimously adopted a report by its Committee on Nomenclature. It resolved, without a dissentient vote, that the following paragraph of the report should be circulated among the several corporations and other bodies interested in the progress of medical education: