aminer, March 26-28, May 21-23, July 23-25, \$1,500 a year.

Department of Agriculture: Assistant horticulturist, March 18, \$1,800 to \$2,200 a year; superintendent of road construction, March 25, \$150 to \$250 a month; assistant dairy husbandman, March 26, \$1,500 to \$1,740 a year; scientific assistant, April 22-23, \$900 to \$1,800 a year; United States Game Warden, May 7, \$1,500 a year; physical laboratory helper, March 12, April 9, May 7, and June 4, \$600 to \$900 a year.

Department of Commerce: Physical laboratory helper, March 12, April 9, May 7, and June 4, \$600 to \$900 a year; Bureau of Fisheries: Apprentice fish culturist, March 12, April 9, May 7, and June 4, \$600 to \$960 a year. Coast and Geodetic Survey: Marine engineer, April 1, \$100 to \$140 a month.

Interdepartmental Social Hygiene Board: Supervisor, social hygiene (open to women only), March 25, \$2,000 to \$2,500 a year; assistant special agent, social hygiene (open to women only), March 25, \$600 to \$1,000 a year.

National Advisory Committee for Aeronautics: Chief physicist, qualified in aeronautics, March 25, \$3,000 a year; physicist, March 25, \$2,100 a year.

Full information and application blanks may be obtained by addressing the United States Civil Service Commission at Washington, D. C., or the civil-service district secretary at Boston, New York, Philadelphia, Atlanta, Cincinnati, Chicago, St. Paul, St. Louis, New Orleans, Seattle, or San Francisco.

THE COMMITTEE ON GRANTS OF THE AMER-ICAN ASSOCIATION FOR THE ADVANCE-MENT OF SCIENCE

THE Committee on Grants was appointed by the council of the association to distribute the annual appropriation for research. It is intended that encouragement and support be given to investigations in any of the fields covered by the activities of the association. For the current year the sum of \$4,000 has already been assigned, and will be available on April 1. Preference will be given to applications in which definite statement is made of the nature of the problem, the main item of expense, and the probable time for completion of the research. Recipients of grants are expected to agree to the following conditions:

1. The work as outlined will be begun in the near future and efforts will be made to complete it at as early a date as possible.

2. A report will be made to the secretary of the committee on the completion and publication of the work, and in December of each year until the work is completed. The reports will include a financial statement with vouchers for the larger items.

3. In the publication of the results the grant from the Research Fund of the American Association for the Advancement of Science will be acknowledged.

The membership of the committee for the year 1919 is: Henry Crew, chairman; N. L. Britton, W. B. Cannon, J. McK. Cattell, R. T. Chamberlin, L. I. Dublin, G. N. Lewis, G. H. Parker, Joel Stebbins, secretary.

All applications for grants should be received not later than March 15 by the secretary of the committee, who will see that they are properly considered.

JOEL STEBBINS,

Secretary

UNIVERSITY OF ILLINOIS OBSERVATORY, URBANA, ILL.

SCIENTIFIC NOTES AND NEWS

PROFESSOR EDWARD L. NICHOLS, who will reach the age of sixty-five, on September 14, has tendered his resignation of the professorship of physics, at Cornell University, which he has held since 1887.

THE Paris Academy of Sciences has elected Major General Sir David Bruce, F.R.S., to be a foreign correspondent in the section of medicine and surgery.

COLONEL VICTOR C. VAUGHAN, dean of the medical school, of the University of Michigan, will return to the university and resume his duties for the second semester. Colonel Vaughan has been in Washington since the entrance of the United States into the war, serving with the Medical Corps of the U.S. Army.

DR. P. W. BRIDGMAN has returned from the naval experimental station at New London, Connecticut, to his work in the Jefferson Physical Laboratory, Harvard University.

DR. EDGAR BUCKINGHAM, who has been associated with the work of the scientific attaché of the American Embassy in Rome, has returned to Washington.

PROFESSOR MOSES GOMBERG, of the department of chemistry of the University of Michigan, who has been serving in the Ordnance Department since early in the war, has returned to the university to assume his former work. Professor Gomberg, while in the service, held the rank of major.

DR. GEORGE H. A. CLOWES, formerly of the Gratwick Research Laboratory at Buffalo, N. Y., and lately engaged in research at the American University Experiment Station of the Chemical Warfare Service on the physiological effects of war gases, left Washington in January to take up biochemical research at the laboratories of Eli Lilly & Company, of Indianapolis, Indiana.

DR. ASHER F. SHUPP has resigned his position as research chemist on dyestuffs for E. I. duPont de Nemours and Company, and is now working on an industrial fellowship at the Mellon Institute.

MR. SETH S. WALKER, formerly associate chemist of the Florida Agricultural Experiment Station and more recently chemist to the Florida Fruit Products Company, has been appointed soil chemist for the Louisiana Agricultural Experiment Station at Baton Rouge.

HENRY ALLEN GLEASON, associate professor of botany and director of the botanical gardens at the University of Michigan, has accepted a position as first assistant in the New York Botanical Gardens.

PROFESSOR W. W. ROWLEE, of Cornell University, has returned to Ithaca after an absence of several months in Central America. There, as a specialist in timber, he was investigating the growth and availability of certain woods of possible use in airplanes and other implements of war.

DR. WILLIAM H. NICHOLS, president of the American Chemical Society, has announced the appointment of the committee to estimate the cost and outline policies for the proposed National Institute of Drug Research to which reference has already been made in SCIENCE. The committee consists of Dr. John J. Abel, the Johns Hopkins University; Dr. Raymond F. Bacon, director of the Mellon Institute for Industrial Research; Dr. Frank R. Eldred, research chemist; Dr. Charles H. Herty, editor of the Journal of Industrial and Engineering Chemistry, chairman; Dr. Reid Hunt, Harvard University, Dr. Treat B. Johnson, Yale University; Dr. P. A. Levene, Rockefeller Institute, and F. O. Taylor, chairman of the Pharmaceutical Division, American Chemical Society.

APPOINTMENT of a committee to study government records of the influenza epidemic has been announced by the Bureau of the Census. Dr. William H. Davis is chairman, the members including C. S. Sloane, representing the Bureau of Census; Dr. Wade H. Frost and Edgar Sydenstricker, of the Public Health Service; Colonel D. C. Howard, Colonel F. F. Russell, and Lieutenant-Colonel A. G. Love, United States Army; Lieutenant-Commander J. R. Phelps and Surgeon Carroll Fox, United States Navy.

THERE was organized at Washington, D. C., on February 14, an association to be known as the Agricultural History Society. The officers of the society are: Dr. Rodney H. True, Bureau of Plant Industry, Washington, D. C., president; Professor Wm. J. Trimble, Agricultural College, N. Dak., vice-president; Lyman Carrier, Bureau of Plant Industry, Washington, D. C., secretary-treasurer; Professor R. W. Kelsey, Haverford, Penna., and O. C. Stine, Office of Farm Management, Washington, D. C., members of the executive committee. The object of the society is "to stimulate interest, promote study and facilitate publication of researches in agricultural history." Any one interested in this subject, who pays the dues of \$1.00 per year, is eligible for membership and should write to the secretarytreasurer.

WE learn from *Nature* that a course of six public lectures on "Physiology and National Needs," arranged in conjunction with the Imperial Studies Committee of the University of London, is being delivered at King's College, Strand, W. C. The first lecture was by Professor W. D. Halliburton on February 5 on "Physiology and the Food Problem," and succeeding lecturers will be Dr. M. S. Pembrey, Professor F. G. Hopkins, Professor A. Harden, Professor D. Noel Paton, and Professor A. Dendy. On February 4, Professor J. T. Mac-Gregor-Morris delivered the first of a course of two lectures at the Royal Institution on "Study of Electric Arcs and their Applications." On February 6, Dr. W. Wilson gave the first of two lectures on the movements of the sun, earth, and moon, illustrated by a new astronomical model. The Friday evening discourse on February 7 was delivered by Professor J. G. Adami on medical research in its relationship to the war; and on February 14 by Professor Cargill G. Knott on earthquake waves and the interior of the earth.

THE Hunterian Oration was delivered before the Royal College of Surgeons of England, on February 14, by Major General Sir Anthony A. Bowlby.

DR. JOHN WALLACE BAIRD, professor of experimental psychology in Clark University, last year president of the American Psychological Association, died on February 2, at the age of forty-five years.

CAPTAIN THEODORE DE BOOY, the archeologist and explorer, died at his home in Yonkers, on February 18. Captain de Booy was born in Holland, thirty-six years ago, and came to the United States in 1906. He was in charge of the West Indian archeological work of the Museum of the American Indian in New York City.

MR. M. N. STRAUGHN, formerly of the Bureau of Chemistry in Washington, died in Porto Rico on January 9, 1919. THE death of Sir James Sawyer, formerly professor of pathology and medicine at Birmingham, on January 27, in his seventy-fifth year, is announced.

FIGURES are printed to the effect that the 1,200 casualty lists published by the German army and navy contained the names of 1,158 physicians reported slightly wounded, 332 severely wounded, 663 killed, 422 as succumbing to disease, 212 taken prisoner, seventy-two missing and one killed by gas.

THE U. S. Civil Service Commission announces for March 12, an examination for observer and meteorologists, for men only. Vacancies occurring in the Weather Bureau, Department of Agriculture, for duty in Washington, D. C., or in the field, at entrance salaries ranging from \$1,260 to \$1,800 a year, will be filled from this examination.

THE Grasselli Chemical Company, of Cleveland, Ohio, has announced its intention to found a medal to be awarded annually by the New York Section of the Society of Chemical Industry for the thesis presented before the section which shall, in the opinion of the medal committee, offer the most useful suggestions in applied chemistry.

PROFESSOR J. ROTGANS, of Amsterdam, was given a sum of money, collected by subscription, on the recent twenty-fifth anniversary of his entering on the practise of medicine. He has donated this sum as a nucleus of a fund for cancer research in the Netherlands.

THE sum of £3,000 has been given by Mr. G. T. Hawkins, of Northampton, towards the building and equipment of a pathological laboratory at the Northampton General Hospital.

THE Goodrich conservation bill, which has been the center of controversy in two sessions of the Illinois legislature, has been reported favorably out of committee in the house. The bill calls for a bi-partisan commission of four to take over the work of the state geologist, state entomologist, fish and game commission, state board of forestry, and state park board. It also provides for a director who shall have supervision of the work of conservation. The house amended the bill by authorizing the Illinois Academy of Science to suggest candidates for membership on the board.

THE Bellevue Hospital unit, numbering three hundred physicians, nurses and enlisted men, attached to Base Hospital No. 1, at Vichy, near Paris, has received orders to prepare to sail and probably will return at once. Major John H. Wyckoff, secretary of the medical faculty of the New York University and Bellevue Hospital Medical College, who was formerly one of the heads of the American hospital, has received a letter from Lieutenant Colonel Arthur M. Wright, commander of the hospital, in which he said his organization had been relieved and that the hospital had been taken over by an evacuation hospital personnel. The unit is composed of many wellknown New York physicians and nurses from Bellevue Hospital and 200 enlisted men who were recruited at the Medical College for overseas duty. It set sail for France on February 18, 1918, and has since handled a large number of the American Army wounded cases. Base Hospital No. 1 was one of the largest near Paris and received mostly American cases. The organization was prepared for 500 patients but at one time cared for as many as 3.200 cases. The unit includes twenty-six physicians, sixty-five nurses and 200 enlisted men.

UNIVERSITY AND EDUCATIONAL NEWS

At the commemoration day exercises of the Johns Hopkins University on February 22, Dr. William H. Welch, who presided, announced that a sum of approximately \$400,000 had been given anonymously for the erection of a building at the Johns Hopkins Hospital to serve as a woman's clinic.

THE present applied science building of the University of Toronto, which has been condemned, will be removed and in its place will be erected a large engineering building. The chemistry and mining buildings will be enlarged and will accommodate the department of electrical engineering and applied mechanics.

THE farmers of New Jersey, through their representatives at the annual state agricultural convention at the State Capitol at Trenton, have requested the Legislature to provide an appropriation for a horticultural building at the State College of Agriculture at New Brunswick.

THE gift to the University of Caifornia Museum of valuable textiles left by the E. E. Caswell Estate and presented to the university through Regent Phoebe A. Hearst, was acknowledged by the board of regents at the recent monthly meeting in San Francisco. The textiles have been loaned to the Palace of Fine Arts for exhibition.

In the reorganization on the basis of departments at Yale University, Professor B. B. Boltwood has been elected chairman of the university department of chemistry.

PROFESSOR GUY WEST WILSON has been appointed associate botanist and plant pathologist in Clemson College, South Carolina.

FROM Nature we learn that Dr. R. M. Cavan, of the chemistry department of University College, Nottingham, has been appointed principal of the Technical College, Darlington, and Mr. W. H. Watson, of the chemistry department of the Northern Polytechnic Institute, has been appointed vice-principal and head of the chemistry and natural science department of the Municipal College, Portsmouth.

DISCUSSION AND CORRESPONDENCE ELECTRO-THERMO-REGULATOR FOR WATER BATHS

I HAVE read with interest an article entitled "Electro-Thermo-Regulator for Water Baths," by Mr. Charles H. Otis, of the Western Reserve University, which appeared in SCIENCE, of October 25, 1918.

Thermostatic control of temperatures for various scientific and technical purposes has become increasingly important in recent years, and we have, therefore, developed an extremely sensitive bi-metallic metal of homogeneous form adapted to such applications.