SCIENTIFIC NOTES AND NEWS

PROFESSOR EDWARD BARTOW, head of the department of chemistry and chemical engineering in the State University of Iowa, has been elected president of the American Chemical Society for 1936. He will serve as president-elect during 1935. On January 1, Professor Roger Adams, of the University of Illinois, now president-elect, took office as president of the society, succeeding Dr. Charles L. Reese, retired chemical director of E. I. du Pont de Nemours and Company, Inc.

DR. NEVIN M. FENNEMAN, professor of geology and geography at the University of Cincinnati, was elected president of the Geological Society of America at the recent meeting at Rochester, New York.

DR. CLARENCE S. ROSS, geologist of the U. S. Geological Survey, was elected president of the Mineralogical Society of America, and Dr. Charles K. Swartz, who retired in 1931 as collegiate professor of geology at the Johns Hopkins University, was elected president of the Paleontological Society.

DR. K. F. MEYER, professor of bacteriology and director of the Hooper Foundation for Medical Research of the University of California, has been nominated for election to the presidency of the Society of American Bacteriologists.

OFFICERS of the American Society of Tropical Medicine were elected at its thirtieth annual session in San Antonio on November 14, 15 and 16 as follows: Dr. Edward B. Vedder, of the medical research laboratory of the Chemical Warfare Service, Edgewood Arsenal, *president;* Dr. Henry E. Meleney, associate professor of preventive medicine at Vanderbilt University, *president-elect;* Dr. Lewis W. Hackett, assistant director of the International Health Division of the Rockefeller Foundation, *vice-president,* and Dr. Chas. F. Craig, professor of tropical medicine and director of the department, at the School of Medicine, of Tulane University, *editor.* Dr. Alfred C. Reed, of the Pacific Institute of Tropical Medicine at the University of California, is secretary and treasurer of the society. The thirty-first annual meeting will be held in St. Louis, in November, 1935, again in conjunction with the Southern Medical Association.

THE Perkin Medal of the Society of Chemical Industry will be presented to Dr. George O. Curme, Jr., of the Carbide and Carbon Chemicals Corporation, on January 11. Among the speakers at the meeting, at which five national chemical societies will be represented, will be Dr. E. R. Weidlein, director of the Mellon Institute, Pittsburgh; Professor Marston T. Bogert, of Columbia University, past-president of the Society of Chemical Industry, will make the presentation, and Dr. Curme will deliver an address entitled "Industry's Toolmaker," in which he will give an account of his work.

THE twelfth annual American Association prize of one thousand dollars has been awarded to Dr. Vern O. Knudsen, University of California at Los Angeles, for his paper, entitled "The Absorption of Sound in Gases." This paper was delivered at a joint session of the American Physical Society and the Acoustical Society of America, meeting under Section B (Physics) of the American Association.

ON the closing day of the annual congress of the British Institute of Radiology, Sir William Bragg was presented with the Mackenzie Davidson Medal following the delivery of the fifteenth Mackenzie Davidson Memorial Lecture in which he discussed the nature of organic molecules.

Nature reports that the gold medal for 1934 of the Royal Agricultural Society of England has been awarded to Sir Arnold Theiler, formerly director of veterinary research in South Africa, for his work in veterinary pathology, which over a period of more than thirty years "has been of tremendous benefit to mankind in the Union of South Africa and to the Empire as a whole."

THE Déjerine prize of the French Society of Neurology, Paris, has been awarded for 1933 to Dr. Laruelle, of Brussels.

The British Medical Journal states that at a meeting of the French Academy of Medicine on November 6, Dr. Siredey congratulated Dr. Guéniot, of the section of surgery, on his one hundred and second birthday.

DR. ALBERT VON SZENT-GYORGYI, of the University of Szeged, Hungary, will be during February visiting lecturer of physiology at Harvard University.

DR. FREDERICK G. NOVY, professor of bacteriology and dean of the Medical School of the University of Michigan, will retire from active service at the end of the present semester. Dr. Novy has been associated with the university for forty-eight years, becoming assistant in organic chemistry in 1886. He has been professor of bacteriology since 1902 and director of the Hygienic Laboratory since 1909.

DR. THOMAS J. LEBLANC has been promoted from associate professor to professor of preventive medicine in charge of a new department of preventive medicine at the University of Cincinnati College of Medicine.

DR. KENNETH S. RICE, formerly acting head of the department of biology of the University of Maine, has

joined the staff of the department of physiology, of the College of Medicine, University of Tennessee, Memphis.

HELEN F. TUCKER, formerly assistant professor of inorganic and analytical chemistry at Russell Sage College, has been appointed assistant professor of chemistry at Skidmore College, Saratoga Springs, N. Y.

DR. MURIEL ELAINE ADAIR has been elected to a second John Lucas Walker Scholarship at the University of Cambridge. This studentship, valued at £300 a year, was founded in 1807 under the will of the late John Lucas Walker, of Trinity College, for the furtherance of original research in pathology. It is open to persons of either sex, and the student need not necessarily be a member of the university. Mrs. Adair is the wife of G. S. Adair, fellow of King's College.

DR. ERWIN E. NELSON, associate professor of pharmacology at the University of Michigan, was recently appointed principal pharmacologist in charge of the Drug Division of the Food and Drug Administration of the U. S. Department of Agriculture. Dr. Nelson had been retained previously as an occasional consultant on specific questions and as an expert witness in court cases.

E. P. POLUSHKIN, formerly instructor in metallography at the School of Mines, Columbia University, has been appointed associate metallurgist, with particular reference to research and development, with Louis Pitkin, Incorporated, New York, N. Y.

N. K. CHANEY, assistant director of research of the National Carbon Company, Cleveland, Ohio, a member of the staff for eleven years, has resigned to accept a similar position with the United Gas Improvement Company, Philadelphia.

W. S. MANSFIELD, Emmanuel College, has been appointed director of the University Farm of the University of Cambridge.

T. H. C. TAYLOR, entomologist of the Coconut Committee, Fiji, has been appointed assistant entomologist to the Agricultural Department, Uganda.

THE Committee on Scientific Research of the American Medical Association, of which Dr. Ludvig Hektoen is chairman, has granted a sum of money to the Surgical Research Laboratory of the Stanford University School of Medicine for the prosecution of Dr. Frederick Fender's work on the "Effect of Prolonged Electrical Stimulation of Selected Components of the Nervous System in Animals." The committee has also renewed a grant to Dr. John Guttman, assistant professor of otology at the Columbia University Post-Graduate Medical School, for his work on the electric potential produced by sound in the auditory apparatus.

DR. MAURICE N. RICHTER, assistant professor of pathology at Columbia University, is visiting Puerto Rico, where he will give a series of clinico-pathological conferences before the faculty and hospital staff of the School of Tropical Medicine. He will also assist in the work of the department of pathology.

DR. L. H. BAEKELAND, honorary professor of chemical engineering, lectured recently at Columbia University on "Detriments and Stimulants in the Chemical Industry."

DR. WILLIAM E. GALLIE, professor of surgery, University of Toronto Faculty of Medicine, will deliver the 1935 Shattuck Lecture of the Massachusetts Medical Society.

SIR DANIEL HALL, chief scientific adviser to the British Ministry of Agriculture, has been appointed Rede lecturer for 1935. The lecture will be delivered on March 4.

MERVYN O'GORMAN read a paper entitled "Bringing Science into the Road Traffic Problem" before the British Science Guild at the Royal Society of Arts on December 19.

THE American Institute's Christmas Lectures on "The Frontiers of Science" were given in the auditorium of the American Museum of Natural History, New York, on December 26 and 27. Each lecture was attended by about fifteen hundred young people. The lectures were arranged by the institute in recognition of the work in science done by boys and girls in their after school hours. Dr. Harold C. Urey, of Columbia University, gave the first lecture on December 26 on "Heavy Water." He was followed on the same day by Dr. Robert Chambers, research professor of biology at the Washington Square College of New York University. His lecture was entitled "Glimpses into the Mechanics of Cell Life." Jeannette Piccard, pilot and co-explorer with her husband, Dr. Jean Piccard, on their recent trip into the stratosphere, was the first speaker on December 27. Mrs. Piccard explained the scientific significance of their flight in the study of cosmic rays. She was followed by Russell Owen, correspondent of *The New York Times* on the first Byrd Expedition to the South Pole. Mr. Owen spoke on "Exploring the Antarctic." Mr. Robert T. Pollock, trustee of the American Institute, and Dr. Roy Chapman Andrews, vice-director of the American Museum of Natural History in charge of exploration, introduced the speakers. Those who attended the lectures were members of the American Institute's Junior Science Clubs. In addition, honor

students in science were invited from high schools in the suburbs surrounding New York. These students were selected, in each case, by their high-school principal because of the excellence of their work in science. The lectures are patterned on the Christmas Week Lectures held for young people for over a century by the Royal Institution of London.

ACCORDING to *Nature,* the twenty-fifth annual exhibition of scientific instruments and apparatus arranged by the British Physical Society was held on January 1, 2 and 3 at the Imperial College of Science and Technology, London. The leading manufacturers of scientific instruments exhibited their latest products in the trade section. The Research and Experimental Section contained contributions from most of the important research laboratories in Great Britain, and there was a special subsection devoted to experiments of educational interest. In addition the work submitted for the craftsmanship competition by apprentices and learners was on view. Discourses delivered during the meeting were: January 1, Dr. B. Wheeler Robinson, "The Architecture of Molecules"; January 2, Dr. C. V. Drysdale, "The Problem of Ether Drift"; January 3, Dr. H. Spencer Jones, "Giant Telescopes."

THE post-doctorate fellowships in the biological sciences (zoology, botany, anthropology, psychology, agriculture and forestry), available through the National Research Council for the academic year 1935–1936, will be awarded by the Board of National Research Fellowships in the Biological Sciences at a meeting which is to be held the latter part of March. Applications should be filed with the office of the board by February 1. Appointments may be made prior to the conferring of the doctor's degree, to be effective upon the receipt of the degree within six months. Application blanks and statement of conditions will be furnished upon request by the secretary of the Board of National Research Fellowships in the Biological Sciences, National Research Council, Washington, D. C.

EIGHT more of the thirty-three institutions selected four years ago by Calvin Coolidge, Alfred E. Smith and Julius Rosenwald as the proper beneficiaries of the estate of Conrad Hubert, who died in 1928, soon will receive a total amount of $1,000,000. The accounting, covering a period from October 4, 1930, to October 1, 1934, shows that payments of $4,600,000 have been made as previously announced to fifteen institutions also chosen by the committee of three which disposed of the $6,000,000 left for that purpose by Mr. Hubert, who came to this country from Russia as a penniless boy and made a fortune with his invention of the flashlight. The contemplated payments follow: University of Chicago, $250,000; Henry Street Settlement, $100,000; American Foundation for the Blind, Inc., $100,000; Beth Israel Hospital Association, $200,000; Howard University, Washington, $200,000; William and Mary College, Catholic University of America and University of Virginia, $50,000 each.

THE late Dr. Roland B. Dixon, of Harvard University, created in his will trust funds of about $25,000 for the benefit of Harvard University. His books on American archeology and ethnology are left to the Harvard University Library and the Peabody Museum library and a number of his personal effects and other books are bequeathed to the president and fellows of Harvard College for use in the museum. $1,000 is bequeathed to the library of the town of Harvard. From the residue of the estate two trust funds are established at the university. One is to be known as the Roland B. Dixon Fund and the other as the Lewis S. Dixon Fund. The income of these funds is to be used for the purchase of books on anthropology and archeology and particularly of books concerning the American Indians.

AN endowment of $10,000 for an annual award in the interest of the progress of aviation has been provided by Dr. Sylvanus A. Reed, of New York. Fellows of the Institute of the Aeronautical Sciences will select the recipient of the award who will receive a cash prize of $250 and a certificate of merit. The award will be for "the greatest advance in the aeronautical sciences resulting from experimental or theoretical research, the beneficial effect of which on the development of practical aeronautics is apparent." The first award will be made at the annual meeting of the institute at Columbia University on January 30.

JOHN D. ROCKEFELLER, JR., has given to the Rockefeller Institute for Medical Research the block of land bounded by York and First Avenues, Sixty-seventh and Sixty-eighth Streets. Mr. Rockefeller is reported to have assembled the land over a long period originally, it is said, with the intention of using it for the Memorial Hospital, formerly the New York Cancer Hospital.

A COMMITTEE from the medical faculty of the University of Virginia has been appointed to work with architects in drawing detailed plans for the new wing of the University of Virginia Hospital which will be made possible by a recent Public Works Administration grant of $208,500. Dr. James Carroll Flippin, dean of medicine; Dr. Robert V. Funston, professor of orthopedic surgery; Dr. John H. Neff, professor of urology; Dr. Tiffany John Williams, professor of obstetrics and gynecology, and Dr. Carlisle S. Lentz, superintendent of the hospital, form a committee of

the faculty in charge of the construction of the new wing.

THROUGH the help of the Yellowstone Library and Museum Association, the Naturalist Department of Yellowstone National Park has made progress during the past year. The library which has now been catalogued contains 1,442 bound volumes, 1,862 pamphlets and bulletins, and a large number of magazines and periodicals. Gifts received during the year include original sketches made by Dr. W. H. Holmes and Mr. Henry Elliott, of the Hayden Surveys; an unpublished manuscript by Captain G. C. Doane detailing a trip through Yeulowstone and the Grand Tetons in 1876–1877; also a collection of fossils made by the early members of the Hayden and Hague surveys in Yellowstone Park, loaned by the U. S. National Museum to the Yellowstone Museums.

DISCUSSION

REPORT OF THE SCIENCE ADVISORY BOARD

EARLY in the week of December 9 the president released the report of the Science Advisory Board. About fifty preliminary copies of this report were released to the press. The bound copies will be ready for rather wide distribution to libraries, Congress, government officers, members of the National Academy of Sciences and others during the first week in January.

Quite unexpectedly a large section of the press featured practically the only aspect of the activities of the Science Advisory Board which has not been at least partially successful, and an aspect which was included in the report, merely as part of the historic record of the activities of the board. I therefore feel that a brief explanation may be of interest to supplement the official news release from Science Service which has already appeared in SCIENCE.

The publicity referred to centered around the proposal of a "Recovery Program of Science Progress" which had been presented to the Public Works Administrator on September 15, 1933, for his consideration as a means for providing useful employment to the large numbers of scientists who at that time were being dropped by government bureaus, industrial research laboratories and universities. It was definitely a proposal for emergency employment, designed to enable these scientists to find work of a type in which they could make valuable contributions to problems of social value.

It was proposed to expend a total fund of $16,000,000 on a tapering-off basis over a period of six years, on advice of a committee of scientists to be set up under the National Academy of Sciences and the National Research Council. No program of work was submitted since it was felt that the development of such a program should be one of the functions of the proposed advisory committee. There were, however, submitted a dozen or so examples of scientific or engineering problems of unquestioned social value and promise of successful solution, which were intended merely to illustrate the kinds of things which needed to be done and which might be submitted to the advisory committee and the Public Works Administrator if the plan were authorized.

This proposal was sponsored by some thirty-five executive officers of the national engineering and scientific societies, including the Science Advisory Board. It was submitted to the Public Works Administrator in person, by Dr. Alfred D. Flinn, director of the Engineering Foundation, and myself. After a considerable discussion, Mr. Ickes said that he was 99 per cent. convinced that something of the sort should be done, but that there was unfortunately no provision under the law whereby public works funds could be expended for research but only for construction.

The matter was dropped at that point and was included in the report of the Science Advisory Board only as an historic document because the board assisted in the formulation of the proposal.

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BEHAVIOR PATTERN AND BEHAVIOR MORPHOLOGY

THE word *Morphologie* when first coined by Goethe was used in relation to physical structure. The term still carries physical connotations. But the concepts of morphology can be extended to the phenomena of behavior. Morphology is the science of form. Form is the shape of anything, as distinguished from the substance of that thing. Behavior has shape, temporal and spatial. It is never amorphous. It has pattern in the momentary phase; it has pattern in the series of moments that make an episode; it has pattern when regarded in the full perspective of the life cycle.

The form characteristics of behavior pattern can be investigated in their own scientific right. A morphological approach concerns itself chiefly with problems of form—the description and measurement of specific forms; the systematic study of the topographical relations and the correlation of these forms, their ontogenetic progression and involution, their comparative features among individuals and among species. Any psychological theory which is so ab-