Dr. Ellery addressed members and guests at a banquet on "The Urge to Know." He pointed out that what is called form in these days of 1938 is an appreciation and acknowledgment and encouragement on the part of men everywhere of the irrepressible and irresistible urge to know, the eternal characteristic of human intelligence, always and inevitably pushing on into the unknown.

Officers of the newly installed chapter are: Dr. P. H. Senn, *president*; Dr. C. F. Byers, *vice-president*; Dr. R. B. Becker, *secretary*, and Dr. J. E. Hawkins, *treasurer*. The new chapter has 49 petitioners, whose membership in the national society was earned previously in chapters scattered widely over the United States.

TROPICAL MEDICINE

DR. ERNEST CARROLL FAUST, secretary of the American Academy of Tropical Medicine, writes that the fifth annual meeting of the academy was held on November 17 in Oklahoma City in conjunction with the American Society of Tropical Medicine and the Southern Medical Association. At the after-dinner program of the academy, of which Dr. Henry E. Meleney, of Vanderbilt University, acted as toastmaster, the presidential address, "Some of the Unsolved Problems in Research and Disease Control in the Tropics," was delivered by the retiring president, Colonel Joseph F. Siler, Army Medical School, Washington, D. C. Perry Burgess, president of the Leonard Wood Memorial, delivered a "Tribute to Dr. E. B. McKinley." At the business session the following officers were elected for the coming year:

. President, William Walter Cort, the Johns Hopkins University.

Vice-president, Admiral C. S. Butler, Washington, D. C.

Secretary, Ernest Carroll Faust, Tulane University.

Treasurer, Thomas T. Mackie, New York City.

Councillor (5-year term), Herbert C. Clark, Gorgas Memorial Laboratory, Panama.

- Councillor (1-year term), George W. Bachman, School of Tropical Medicine, San Juan, Puerto Rico.
- Representative on the Council of the American Association for the Advancement of Science, Malcolm H. Soule.
- Representative on the American Foundation for Tropical Medicine, Thomas T. Mackie.

The following were elected to active membership in the academy:

- Dr. Justin Andrews, malariologist, Georgia State Board of Health.
- Dr. George Dunham, lieutenant-colonel, U. S. A., Army Medical School, Washington, D. C.
- Dr. Paul Hudson, professor of bacteriology, the Ohio State University.
- Dr. L. L. Williams, senior surgeon in charge of malaria control, U. S. Public Health Service, Washington, D. C.

The American Society of Tropical Medicine met from November 15 to 18. The third Charles Franklin Craig Lecture on tropical medicine on "Progress in the Study of Infections Due to Bartonella and Rickettsia" was given by Dr. Richard P. Strong, and there was a symposium on "Newer Clinical Aspects of Deficiency Diseases," which was a joint session of the society with the Section on Medicine of the Southern Medical Association. The presidential address was delivered by Dr. Mark F. Boyd on "The Malaria Problem: Retrospect and Prospect." Officers elected for the year 1939 were:

President, Dr. Alfred C. Reed, San Francisco.

- President-elect, Dr. L. L. Williams, Jr., Washington, D. C.
- Vice-president, Dr. Sterling S. Cook, Norfolk, Va.
- Secretary-treasurer, Dr. E. Harold Hinman, Wilson Dam, Ala.

Editor, Colonel Charles F. Craig, San Antonio, Texas.

New councilors, who were elected for a term of two years, are Dr. Mark F. Boyd and Dr. L. T. Coggeshall.

SCIENTIFIC NOTES AND NEWS

IN accordance with the recommendations made to the King of England by the Council of the Royal Society, London, Royal Medals have been awarded to Dr. Francis William Aston, F.R.S., in recognition of his discovery of the isotopes of non-radioactive elements, and to Professor Ronald Aylmer Fisher, F.R.S., in recognition of his contributions to the theory and practice of statistical methods.

ACCORDING to the *Bulletin* of the American Society for Testing Materials, L. F. Rader, associate professor of civil engineering at the Polytechnic Institute of Brooklyn, N. Y., has been awarded the prize of Belgium in a competition sponsored by the Permanent International Association of Road Congresses. This prize was founded by the Government of Belgium and is awarded at meetings of the congress to the author of the most striking paper submitted containing suggestions for promoting progress in construction, maintenance and exploitation of roads and for facilitating traffic. Dr. Rader's paper gave the results of investigations of the physical properties of asphalt pavements at low temperature.

THE Roebling Medal of the Mineralogical Society of America will be presented to Dr. Waldemar T. Schaller, of the U. S. Geological Survey, at the annual meeting of the society to be held at the Waldorf-Astoria Hotel in New York City from December 28 to 30. Dr. Schaller is the second recipient of the medal.

DR. F. M. WHITACRE, assistant professor of organic chemistry at the Case School of Applied Science, was awarded the medal of the International College of Anesthetists at the annual meeting held in New York City on October 19. The award, which was made in recognition of his work on the chemical structure of anesthetics, consisted of a medal and a certificate naming Dr. Whitacre as a specialist in anesthesia and a fellow in the International College of Anesthetists.

At the annual meeting of the National Society for the Prevention of Blindness, the Leslie Dana Gold Medal was presented to Dr. Ellice M. Alger, of New York City. This honor is given each year for "outstanding achievements in the prevention of blindness and the conservation of vision." The presentation was made by Dr. John N. Evans, of Brooklyn, on behalf of the Association for Research in Ophthalmology and of the St. Louis Society for the Blind. Dr. Alger and Lewis H. Carries, managing director of the National Society for the Prevention of Blindness, were the principal speakers.

DR. VANNEVAR BUSH, president-elect of the Carnegie Institution of Washington, D. C., will be the guest of honor on January 13 at the "All Engineers Dinner" given at the annual assembly of the American Engineering Council, which will be held in Washington on January 12, 13 and 14.

DR. F. J. SEAVER, of the New York Botanical Garden, has been elected an honorary member of the California Mycological Society.

DR. MORTIMER E. COOLEY, dean emeritus of the Colleges of Engineering and Architecture of the University of Michigan, has been elected a fellow of the Royal Society for the Encouragement of Arts, Manufactures and Commerce.

DONALD B. GILLIES, vice-president of the Republic Steel Corporation, has been elected president of the American Institute of Mining and Metallurgical Engineers. Four new directors have been chosen, as follows: Charles Camsell, Deputy Minister of Mines for Canada, Ottawa; Charles H. Fulton, president of the Southern Phosphate Company, Baltimore; John T. MacKenzie, chairman of the iron and steel division of the American Institute of Mining and Metallurgical Engineers, metallurgist and chief chemist of the American Cast Iron Pipe Company, Birmingham, Ala., and Dr. Francis A. Thompson, president of the Montana School of Mines, Butte, and chairman of the institute's mineral education division. PROFESSOR KIRTLEY F. MATHER, professor of geology at Harvard University, who has been director of the Harvard Summer School since 1934, has been elected president of the Association of Summer School Deans and Directors.

DR. L. J. SPENCER was elected president of the British Mineralogical Society and editor of the *Journal* at the anniversary meeting of the society held on November 3.

DR. WILLIAM D. MERRELL, professor of botany since 1899 and member of the faculty at the University of Rochester, has been granted a year's leave of absence. He will retire from active service and will become emeritus professor in June, 1939.

DR. JOHN H. WHITTEN, of the Chicago Teachers College, has retired after serving for twenty-four years in the department of botany. The vacancy caused by his retirement has been filled by the appointment of Dr. Howard J. Dittmer, recently of the State University of Iowa.

DR. JOSEPH A. FREIBERG, associate professor, will succeed his father, Dr. Albert H. Freiberg, as head of the department of orthopedic surgery of the College of Medicine of the University of Cincinnati. The elder Dr. Freiberg resigned in July after forty years of service. Since then his son has been acting head.

AT the College of Arts and Pure Science of New York University, Dr. William H. Crew, of the United States Naval Academy Post-Graduate School, has been appointed chairman of the department of physics, and Dr. Ernest R. Lilley has been made director of the Geological Museum at University Heights. Dr. Edward R. Maloney, dermatologist, and Dr. Clarence E. de la Chapelle, heart specialist, have been advanced to full professorships in the College of Medicine.

THE following changes have been made in the faculty of chemistry of the Ohio State University: Dr. Albert L. Henne, formerly of the Midgley Foundation, has been elected to an associate professorship. Professor Henne will be associated with Professor C. E. Boord in the supervision and direction of the recently established Pure Hydrocarbon Research project of the American Petroleum Institute. Grant Crane (Dartmouth, '37) and Amos Turk (College of the City of New York, '37) have been elected to fellowships in this work. Through the establishment of a cooperative research plan between the Charles F. Kettering Foundation of Antioch College and the department of chemistry of the Ohio State University, Associate Professor Paul Rothemund, of Antioch College, has been elected non-resident associate professor in the faculty of chemistry of the university. John W. Van Cleve (Antioch College, '37), Amel Menotti (Antioch College, '37) and T. E. Londergan (Antioch College, '36) have been elected to Kettering Foundation fellowships with their research residence at Antioch College.

A CORRESPONDENT writes that the number of Vita Universitaria for October 5 contains a list of a hundred professors in Italy, eighty-five of whom were full professors, who were dismissed from their chairs as of October 16. The list includes: Bologna, Mario Camis; Genoa, Ugo Lombroso, and Milan, Carlo Foa, all professors of human physiology; Padua, Bruno Rossi, professor of experimental physics, and Tullio Terni, past fellow, professor of normal human anatomy; Palermo, Camillo Artom, professor of human physiology, and Emilio Segre, past fellow of experimental physics; Rome, Federigo Enriques, professor of higher geometry, and Tullio Levi Civita, professor of rational mechanics; Turin, Amedeo Herlitzka, professor of human physiology, and Giuseppe Levi, professor of normal human anatomy.

According to the Journal of the American Medical Association a scientific advisory council has been appointed for the Children's Hospital Research Foundation at Cincinnati, Ohio. The council consists of Drs. Oswald T. Avery, of the Rockefeller Institute for Medical Research, New York; Ernest W. Goodpasture, professor of pathology, Vanderbilt University School of Medicine, Nashville, Tenn.; Albert Baird Hastings, professor of biological chemistry, Harvard University Medical School, and Alfred N. Richards, professor of pharmacology, University of Pennsylvania School of Medicine. The Children's Hospital Research Foundation was established in 1929 with funds given by Mr. William Cooper Procter. The hospital and the foundation are affiliated with the University of Cincinnati College of Medicine. Dr. Albert Graeme Mitchell, professor of pediatrics, is director of the medical service of the hospital and of the foundation. Dr. Glenn E. Cullen is director of laboratories.

DR. ARTHUR H. COMPTON, professor of physics at the University of Chicago, was inducted as Protestant co-chairman of the National Conference of Jews and Christians at a dinner of the New York Round Table of the conference on November 28 at the Hotel Astor, New York City. Dr. Compton succeeds the late Newton D. Baker as co-chairman. A bound volume of felicitations from more than three hundred American leaders was presented to him. Speakers at the dinner included: Lieut.-Governor-elect Charles Poletti; President Henry Noble MacCracken, of Vassar College; Matthew Woll, vice-president of the American Federation of Labor; Professor Harold C. Urey, of Columbia University, and Dr. Abraham Flexner, director of the Institute for Advanced Study, Princeton, N. J.

THE U. S. Bureau of Biological Survey has opened

regional headquarters in Boston. Offices have been established in the Park Square Building with S. Barron Locke in charge as regional director. His jurisdiction will cover ten states, including New England, New York, Pennsylvania, New Jersey and Delaware. Bertram G. Smith, formerly in the office at Portland, has been appointed administrative assistant.

DR. PAUL C. BARTON, of Chicago, since 1934 a member of the staff of the Council on Pharmacy and Chemistry, has been appointed director of the Bureau of Investigation of the American Medical Association.

Nature states that Dr. T. S. Wheeler, principal of the Royal Institute of Science, Bombay, has left India and will shortly take up his new appointment as state chemist in Eire.

DR. J. A. VON MONROY, of Berlin, chief forester of Germany, is visiting the United States.

DR. CARL J. WIGGERS, professor of physiology of the School of Medicine of Western Reserve University, who left on September 9 for a lecture trip to South America, has returned to Cleveland. He sailed through the Panama Canal down the West Coast of South America, visiting Callao, Peru, Arica, Valparaiso and Santiago, Chile. Thence he flew over the Andes to Buenos Aires. In Argentina he was the guest of Professor B. A. Houssay, of the University of Buenos Aires, and of Professor Oscar Orias, of Santa Rosa, a former student in Cleveland. Dr. Wiggers delivered a series of lectures in Spanish on "The Applications of Physiology to Medicine" in Buenos Aires, Santa Rosa, Rosario and Cordoba.

A SERIES of Lowell lectures is being given in Boston by Dr. Arthur H. Compton, professor of physics at the University of Chicago, on "The Structure of the Physical World."

DR. W. F. G. SWANN, director of the Bartol Research Foundation, Swarthmore, Pa., spoke at the Industrial Science Banquet of the Iowa State College on November 22. His subject was "The Science of Yesterday, To-day and To-morrow."

DR. FRANK B. JEWETT, president of the Bell Telephone Laboratories, New York City, will speak at Rockford College on February 18 under the auspices of the William Arthur Maddox Foundation.

AT the annual meeting in Washington, D. C., of the American Society of Agronomy, which was held on November 16, 17 and 18, officers were elected for next year as follows: Dr. Ralph J. Garber, Bureau of Plant Industry, *president*; Dr. F. J. Alway, University of Minnesota, *vice-president*; Dr. W. A. Albrecht, University of Missouri, *chairman of the Soils Section*; Dr. F. D. Keim, University of Nebraska, *chairman of* the Crops Section; Professor J. D. Luckett, New York Agricultural Experiment Station, editor; and Dr. G. G. Pohlman, University of West Virginia, secretarytreasurer. Dr. R. J. Garber, Bureau of Plant Industry, and Dr. F. B. Smith, University of Florida, were elected to represent the society on the council of the American Association for the Advancement of Science in 1939. Officers of the Soil Science Society of America elected for next year are: Dr. W. A. Albrecht, University of Missouri, president; Dr. W. H. Pierre, Iowa State College, secretary, and Dr. G. G. Pohlman, University of West Virginia, treasurer.

THE third annual meeting of the Carolina Geological Society was held on November 12 and 13 with thirty-five members and twenty-six visitors in attendance. The meeting was held at the University of South Carolina. On November 12, there was a field trip of some 117 miles with twelve stops to examine the local geology about Columbia, S. C., both in the coastal plain and the Piedmont. The University of South Carolina gave the members a complimentary dinner. On November 13, there was an additional field trip of some 78 miles with five stops including the Haile Gold Mine near Kershaw, where refreshments were served. The field trips were arranged and directed by Professors Taber, Smith and Petty, of the University of South Carolina. The following officers were elected for the coming year: President, Professor L. L. Smith, University of South Carolina: Vice-president, Professor J. H. Watkins, The Citadel, Charleston, S. C.; Secretary and Treasurer, Professor Edward Willard Berry, Duke University; Chairman of Membership Committee, Professor Raymond Binford, Guilford College, N. C.

THE U. S. Civil Service Commission announces that the Department of Agriculture is in need of a number of principal chemists and principal chemical engineers at salaries of \$5,600 a year. It is expected that the number will exceed twenty-five. Dr. Henry G. Knight, chief of the Bureau of Chemistry and Soils, suggests that all persons interested in these examinations communicate at once with the Civil Service Commission, Washington, D. C., in regard to the announcement containing the detailed information concerning the technical qualifications required. He urges all chemists having the technical qualifications to apply for this examination. Applicants will not be required to report for examination but will be rated on education, training and experience as shown on their applications. There is no obligation involved in taking the examination, although in view of the need for qualified persons it is hoped that it will be possible for an applicant to accept a position should one be tendered him. The list of eligibles from these examinations will be used for the appointment of project leaders in the four regional research laboratories being set up by the Department of Agriculture in accordance with an act of the last Congress. Work in the laboratories, each of which has an appropriation of a million dollars a year, will be based on the major farm commodities in the neighborhood of the laboratory.

THE St. Anthony Falls Hydraulic Laboratory of the University of Minnesota was dedicated on November 17. Dr. Guy Stanton Ford, the newly elected president of the university, presided. Among the speakers were Dr. S. C. Lind, dean of the Institute of Technology, and Corrington Gill, assistant administrator of the Works Progress Administration, Washington, D. C.

ADDITIONS to the present facilities of the Engineering Building at Rutgers University will increase the laboratory space available for engineering students by 6,242 square feet or about 57 per cent. The work will be started shortly and will be financed jointly by the university and the Works Progress Administration, which recently approved a grant of \$34,576 for the project. The additions and alterations consist of two parts, one of which will provide for the construction of a new wing in the rear of the present building, and the other for reenforcing the floor over the swimming pool in the present Ballantine Building. This pool is the only unit remaining from the old Ballantine Gymnasium, which was destroyed by fire in 1930. The pool has been used by the department of engineering as a hydraulics laboratory since the present Ballantine Building was completed in 1932.

DISCUSSION

BEAVER-DAMS AS GEOLOGIC AGENTS

IN the mapping of the Schuylerville, Cohoes and Troy quadrangles of the Capital District and more recently of the Catskill quadrangle, the senior author had occasion to observe various broad and flat alluvial plains, affording rich farm-land, that in size are completely out of proportion to the small brooks that drain them at present. A typical case is the long, perfectly leveled valley east of Troy at the foot of the Rensselaer plateau, extending nine miles north and south and onefourth to one-half mile wide. The origin of this partly "dead valley" is undoubtedly from glacial meltwater, as indicated by traces of terraces on the banks; but now it is drained by four different creeks, the Tomhannock, flowing north, the Quackenkill, flowing south, the Poestenkill, crossing it obliquely in the middle, and