

the mathematicians of something that we fear they sometimes forget,—the existence of an outside world. It is equally hoped that they will remind the outside world that mathematics is a going concern,—not a pedantic exercise for the torment of school boys, but a living organism growing larger and stronger each year.

Since this first lecture by Professor Pupin, the following scientific men have accepted the invitation of the society to speak under the auspices of this lectureship:

Robert Henderson: Life Insurance as a Social Service and as a Mathematical Problem.

James Pierpont: Some Modern Views of Space.

H. B. Williams: Mathematics and the Biological Sciences.

E. W. Brown: Resonance in the Solar System.

G. H. Hardy: An Introduction to the Theory of Numbers.

Irving Fisher: The Application of Mathematics to the Social Sciences.

E. B. Wilson: Reminiscences of Gibbs as a Student and Colleague.

P. W. Bridgman: Statistical Mechanics and the Second Law of Thermodynamics.

R. C. Tolman: Thermodynamics and Relativity.

Albert Einstein: An Elementary Proof Concerning the Equivalence of Mass and Energy.

Vannevar Bush: Instrumental Analysis.

H. N. Russell: Model Stars.

C. A. Kraus: The Present Status of the Theory of Electrolytes.

Theodore von Kármán: The Engineer Grappling with Non-linear Problems.

The next lecture will be given by Professor Sewall Wright, of the department of biology of the University of Chicago, at the time of the summer meeting of the society and the Mathematical Association of America to be held at the University of Chicago next September.

SCIENTIFIC NOTES AND NEWS

At the annual dinner of the Geological Society of America to be held in Austin, Texas, on December 27, the Penrose Medal will be presented to Dr. N. H. Darton, consulting geologist, who from 1886 until his retirement in 1936 was geologist of the U. S. Geological Survey.

DR. T. HARPER GOODSPEED, professor of botany and director of the botanical gardens of the University of California, has been elected a foreign correspondent of the Argentine Scientific Society.

G. WALTER DITTMAR, professor emeritus of the College of Dentistry of the University of Illinois, will be the guest of honor at a banquet to be held at the Lake Shore Club of Chicago on February 15. Dr. Dittmar is a past president of the American Dental Association. He retired from active teaching last September.

THE honorary fellowship of the Canadian Public Health Association has been conferred on Dr. E. W. Montgomery, emeritus professor of medicine at the University of Manitoba, formerly Minister of Health and Public Welfare of the Province of Manitoba, and on Dr. J. M. Ulrich, Minister of Public Health and Provincial Secretary of the Province of Saskatchewan.

DR. RICHARD S. WEISS, professor of clinical dermatology of the School of Medicine of Washington University, St. Louis, was elected at the Chicago meeting president of the American Academy of Dermatology and Syphilology.

At the thirty-sixth annual meeting of the American Society of Tropical Medicine, which was held in Louisville, Ky., from November 12 to 15, in conjunction with the annual meeting of the Southern Medical

Association, the following officers were elected: *President*, Thomas T. Mackie, New York City; *President-elect*, Ernest Carroll Faust, New Orleans, Louisiana; *Vice-president*, Fred L. Soper, Rio de Janeiro, Brazil; *Secretary-Treasurer* for three years, E. Harold Hinman, Wilson Dam, Ala.; *Editor* for three years, Colonel Charles F. Craig, San Antonio, Texas; *Councilors* for four years, R. E. Dyer, Washington, D. C., and T. J. LeBlanc, Cincinnati; *Member of the editorial board* for five years, John F. Kessel, Los Angeles, Calif.

R. E. ZIMMERMAN, vice-president of the United States Steel Corporation, was elected president of the American Standards Association at the annual luncheon meeting held on December 11 at the Hotel Astor, New York City. Mr. Zimmerman has served as vice-president of the association since 1938, and has been a member of the Board of Directors since 1937, when he was nominated for membership by the American Iron and Steel Institute. He will succeed Edmund A. Prentis, of the firm of Spencer, White and Prentis, who has served as president of the association for the past two years. R. P. Anderson, of the American Petroleum Institute, was reelected chairman of the council, which is in charge of the technical work of the association.

DR. JAMES L. BRAKEFIELD, professor of biology and head of the department at Howard College, will complete his second term as president of the Alabama Tuberculosis Association at the annual meeting to be held on January 23. During Dr. Brakefield's administration local county and municipal organizations for the study and control of tuberculosis have been formed

in more than sixty of the sixty-seven counties of Alabama.

DR. ERIC T. B. GROSS, formerly lecturer in the School of Electrical Engineering of the Institute of Technology in Vienna and head of the engineering division of the Central Station Department of the Union Electric and Manufacturing Company in Vienna, has been appointed Westinghouse research associate in the School of Electrical Engineering at Cornell University.

DR. W. L. H. DUCKWORTH, master of Jesus College, Cambridge, has retired from the readership in human anatomy after twenty years in that office; Dr. G. S. Graham-Smith has retired from the readership in preventive medicine.

DR. JOHN B. BAKER, for the past six years assistant professor of mechanical engineering at the Drexel Institute of Technology, Philadelphia, has a year's leave of absence to become instructor for the Engineer Organized Reserves. His headquarters will be at the First Military Area, Customs House, Philadelphia, where he will be in charge of the training, assignments, transfer and procurement of engineer reserve officers.

THE Rockefeller Foundation has made a grant to aid a five-year program of research in the genetics of plant growth under the direction of Dr. Donald F. Jones, geneticist at the Agricultural Experiment Station at New Haven.

THE Committee on Scientific Research of the American Medical Association has awarded to Dr. Arthur C. Allen, of the Mount Sinai Hospital, New York City, a grant for the study of the effect of certain drugs on the vegetations of experimental bacterial endocarditis.

THE London *Times* reports that Sir George Chrystal, secretary of the British Ministry of Health, is retiring on reaching the age limit. Sir John Maude, deputy-secretary, has been appointed to succeed him, and A. N. Rueker has been made deputy-secretary. Sir Arthur MacNalty, chief medical officer of the Ministry of Health and of the Board of Education, also is retiring on reaching the age limit. The Minister of Health and the president of the Board of Education have respectively appointed Sir Wilson Jameson to be chief medical officer of the Ministry of the board. Sir Wilson Jameson is relinquishing the post of medical officer to the Secretary of State for the Colonies. He is also relinquishing the post of dean of the London School of Hygiene and Tropical Medicine and professor of public health in the University of London.

THE British Ministry of Food announces that the Flour (Vitaminisation) Advisory Committee, which was recently appointed, will have the assistance in its official capacities of Professor D. S. M. Watson, of the

Scientific Sub-Committee of the Food Policy Committee of the Cabinet; of P. N. R. Butcher, of the Ministry of Health, and of the following officers of the Ministry of Food: Sir Norman Vernon, director of flour milling; Professor J. C. Drummond, scientific adviser; Dr. T. Moran, deputy scientific adviser, and Mr. J. H. Pillman, manager for imported flour.

DR. WALTER L. BIERRING, president, and Dr. J. J. Moore, secretary, of the Alpha Omega Alpha honorary medical fraternity, participated in the installation of a chapter of this fraternity at the Medical College of Virginia on December 4.

DR. NOEL PAUL HUDSON, professor of bacteriology at the Ohio State University College of Medicine, has a year's leave of absence to join the health commission of the Rockefeller Foundation working in France. With other members of the commission Dr. Hudson left late in October. He had previously served with the International Health Division of the Rockefeller Foundation.

DR. PEYTON ROUS, a member of the Rockefeller Institute for Medical Research, on December 6 and 9 delivered the William Henry Welch Lectures at the Blumenthal Auditorium of the Mount Sinai Hospital of New York.

DR. SELIG HECHT, professor of biophysics at Columbia University, lectured on December 6 at a meeting of the Rochester Chapter of Sigma Xi at the University of Rochester on "The Chemistry of Vision."

DR. FIRMAN E. BEAR, head of the department of soils and crops of Rutgers University, spoke at the New York Botanical Garden on December 10 on "Plants and the Course of Civilization."

JAMES STOKLEY, editor in astronomy for Science Service, lectured at the Cosmos Club, Washington, D. C., on December 9. The title of his lecture was "Roaming the Heavens."

THE Huxley Memorial Lecture of the Royal Anthropological Institute, London, was delivered by H. J. E. Peake on November 26. He spoke on "The Study of Prehistoric Times."

AT the December meeting of the American Academy of Arts and Sciences, three papers were presented from the Harvard Astronomical Observatory. Fletcher G. Watson spoke on "The Approaching Comet"; James G. Baker on "Trends in Astronomical Optics," and Donald H. Menzel on "Motions in the Solar Atmosphere," showing moving pictures of the solar prominences as photographed on the Pic du Midi by Dr. Bernard Lyot, of Paris.

AT the annual meeting of the Geological Society of America, to be held at Austin, Texas, on December 26,

27 and 28, the address of the retiring president, Dr. Eliot Blackwelder, professor and head of the department of geology at Stanford University, will be given on the evening of December 26, the title being "Science and Human Prospects." Meeting with the Geological Society of America are the Paleontological Society and the Mineralogical Society of America. The address of the retiring president of the Paleontological Society will be given on the morning of December 26, by Dr. Carl O. Dunbar, professor of paleontology and stratigraphy and curator of the Peabody Museum of Yale University, the title of his address being "The Permian Faunas: A study in Facies." The address of the retiring president of the Mineralogical Society of America by Dr. W. F. Foshag, curator of the U. S. National Museum, will be given on the morning of December 27 on "Problems in the Study of Meteorites."

THE Academy Conference of the American Association for the Advancement of Science will meet at the Bellevue-Stratford Hotel, Philadelphia, at 3 P.M. on December 27. The conference is composed of (a) the representatives of the affiliated academies of science (one from each academy) in the Council of the Association and (b) the members of the Executive Committee. The Academy Conference welcomes the attendance of those interested in the relations between the academies and the association. The program will consist of two principal papers which will be followed by informal discussion: "Methods of Bringing the Academy into Closer Relationships with Other Organizations," by Dr. P. D. Strausbaugh, West Virginia Academy of Science, and "Long Range Planning for the State Academies of Science," by Dr. W. F. Rudd, Virginia Academy of Science. The conference will be followed at 6 P.M. by the annual academy dinner to the members of the conference.

THE council of Scientific Societies of Western New York held its first annual scientific symposium on November 23. A large number of technical papers were presented at the afternoon sessions, and in the evening Dr. C. J. Phillips, of the Corning Glass Company, gave a lecture with demonstrations entitled "Modern Miracles in Glass." The purpose of the council is stated to be "To afford scientists in Western New York an opportunity to meet one another, to

publicly present the results of their original research and to permanently record these results through publication." Officers of the council are *President*, Irving G. Reimann; *First Vice-president*, A. H. Bennett; *Second Vice-president*, Oscar W. Richards; *Secretary-treasurer*, Harold D. Mitchell. Member organizations are the Amateur Telescope Makers and Observers; the Aquarium, Botanical, Conchological, Geological, Microscopical and Mycological and Bryological Sections of the Buffalo Society of Natural Sciences; the Buffalo Ornithological Society; the Buffalo Section of the American Association of Civil Engineers; the Buffalo Zoo; Canisius College Chemistry, Mendel, Strohaber Science, High-school Science, Roosevelt Field, Allegany Field and Trail, and Science Museum Photographic Clubs; the Mathieson Alkali Works, Inc., Niagara Falls, N. Y.; the Nature Sanctuary Society of Western New York; Pratt and Lambert, Inc., and the Spencer Lens Company.

THE Plant Hormone Laboratory at Connecticut College, New London, will be open from June 23 to August 16, 1941, to adequately prepared graduate students and others wishing to carry on plant hormone research. Special arrangements may be made for shorter periods of investigation. The summer program will consist of laboratory research and seminars. Dr. G. S. Avery, Jr., Dr. J. Berger, biochemist, and other members of the staff will be available as consultants. Board and lodging may be obtained at the College Inn, located nearby. Several fellowships of \$100 to \$150 each are available, and investigators holding these fellowships will not be required to pay the \$15 laboratory fee. Application blanks and further information may be obtained by addressing Professor George S. Avery, Jr., of the department of botany. Wherever possible a preliminary plan for the proposed summer's work should be submitted.

THE Donald R. Dickey Collection and Library of Vertebrate Zoology, valued at more than \$100,000, have been given by Mrs. Florence V. V. Dickey, of Ojai, Calif., to the University of California at Los Angeles. The collection contains more than 50,000 specimens of birds and mammals, a library of approximately 10,000 volumes, a small bird egg collection, a photographic collection and miscellaneous items.

DISCUSSION

THE SLEEP OF CANARIES

THESE canaries live uncaged in the laboratory, range in age from six months to nineteen years, and I have considerable opportunity to watch their sleep. Some sleep night after night on the same spot. This spot may be very precise. A blind male during a year and a half roosted seventeen inches from the end of

a cabinet, to reach which he had to fly through a fairly encumbered 20 × 20 room, and accomplished this usually without mishap. He would not land exactly on the spot, but often surprisingly near, then carefully edge toward it, seem restless till he had arrived. When such a spot has been held a long time, in the instance of one bird for seven years, usurpers promptly