

so brilliantly studied by Dr. Schmidt, of Denmark. Bottom deposits will be obtained by sounding-leads, especially in connection with the problems set down for investigation by Sir John Murray.

THE OFFICIAL MAP OF THE UNITED STATES

COMMISSIONER CHARLES C. MOORE, of the General Land Office, has announced the publication of the sixty-fifth official map of the United States. This map, for which Congress appropriated \$15,000, contains the latest information concerning elements required to constitute a complete map. It is detailed to the degree of indicating the position of every surveyed township in the United States. It contains the latest information as to the location of national forests, Indian reservations, national parks, military and all other reservations that are controlled by the Federal Government. It shows the latest changes in railroad routes and, indicated by the type in which their names are printed, the population classification of towns.

The map is used by government departments, government offices throughout the nation and the embassies and consulates of the world. Mounted on cloth and attached to a roller, it is sold by the Superintendent of Documents. The map, which is built on a scale of 37 miles to the inch and is seven feet wide, shows not only continental United States but all its possessions. It is appropriate for use in schools and is so colored as to show the historical development of the United States.

The master plates, engraved some 75 years ago, are still in the General Land Office. For many years a new map was made each year, but of late the practice has been to make one each two years. No sooner is one edition made than work is begun on the subsequent edition. Clarence E. Ruebsam, map engraver, works constantly on the plates, erasing old lines and engraving new developments. In the days when skilled engravers were rare in this country, the government sent to Germany for Adolph M. Maedel, who spent his life on the work. He trained a son, August, to be a map engraver, and he devoted a large part of his life to the Federal Government. Mr. Ruebsam, a descendant, is the fourth generation of the Maedel family that is devoting itself to maintaining the reliability of the map.

REELFOOT LAKE BIOLOGICAL STATION

The executive committee of the Reelfoot Lake Biological Station, under management and control of the Tennessee Academy of Science, announces the following consulting staff for the period 1932-33:

Archeology: Dr. P. E. Cox, state archeologist, Nashville; J. D. Taylor, Bristol.

Bacteriology and Protozoology: Dr. W. S. Leathers,

Vanderbilt University, Nashville; Dr. E. L. Bishop, state commissioner of health, Nashville; Dr. E. W. Goodpasture, Vanderbilt University, Nashville; Dr. L. M. Graves, superintendent, Department of Health, Memphis; Dr. John L. Jelks, Memphis; Dr. L. E. LePrince, U. S. Public Health Service, Memphis; Dr. I. D. Michelson, University of Tennessee, Memphis; Dr. P. W. Allen, University of Tennessee, Knoxville.

Botany: Dr. L. R. Hesler and Dr. H. M. Jennison, University of Tennessee, Knoxville; Dr. A. John Schwarz, University of Tennessee, Memphis; Dr. C. E. Moore, West Tennessee Teachers College, Memphis; Dr. J. B. Lackey, Southwestern University, Memphis; Dr. C. W. Davis, Union University, Jackson; Dr. R. G. Turner, University of Tennessee Junior College, Martin.

Chemistry: Dr. H. W. Robinson, Dr. L. J. Bircher and Dr. John T. McGill, Vanderbilt University, Nashville; Dr. C. O. Hill and Dr. J. H. Robertson, University of Tennessee, Knoxville; Dr. W. A. Webb, George Peabody College, Nashville; Dr. G. H. Hayden, West Tennessee Teachers College, Memphis.

Entomology: Dr. G. M. Bentley and Dr. S. Marcovitch, University of Tennessee, Knoxville.

Forestry: Dr. J. O. Hazard, state forester, Nashville.

Geology: Dr. W. F. Pond, state geologist, Nashville; Dr. L. C. Glenn and Dr. W. B. Jewell, Vanderbilt University, Nashville; Dr. C. H. Gordon and Dr. G. M. Hall, University of Tennessee, Knoxville.

Histology and Embryology: Dr. C. S. Simkins, Dr. D. S. Pankratz and Dr. T. S. Eliot, University of Tennessee, Memphis.

Pharmacology: Dr. P. D. Lamson, Dr. H. A. Wells and Dr. H. S. Wesson, Vanderbilt University, Nashville; Dr. A. Richard Bliss, Jr., University of Tennessee, Memphis.

Physiology: Dr. W. E. Garrey, Dr. R. A. Ashman and Dr. C. E. King, Vanderbilt University, Nashville.

Ornithology: B. B. Coffey, Memphis; A. F. Ganier, Nashville; Dr. C. R. Mayfield, Vanderbilt University, Nashville.

Zoology: Dr. E. E. Reinke, Vanderbilt University, Nashville; Dr. J. M. Shaver, George Peabody College, Nashville; Dr. E. B. Powers and Dr. G. A. Canning, University of Tennessee, Knoxville; Dr. J. B. Lackey, Southwestern University, Memphis.

A. R. BLISS, JR.

Chairman, Executive Committee

SIGMA XI LECTURES AT THE UNIVERSITY OF CALIFORNIA AT LOS ANGELES

FOLLOWING is the complete program of public lectures delivered in the academic year 1931-32 under the auspices of the Sigma Xi Club of the University of California at Los Angeles. The officers of the club for the year were: *President*, Dr. Samuel J. Barnett, chairman of the department of physics, and *Secretary*, Dr. Frederick C. Leonard, chairman of the department of astronomy.

September 30: Dr. Seth B. Nicholson, astronomer, Mt. Wilson Observatory of the Carnegie Institution of Washington, "Sunspots and the Weather" (illustrated).

October 14: Dr. F. L. Ransome, professor of economic

geology in the California Institute of Technology, "The Geology of the Boulder Dam Site" (illustrated).

November 4: Dr. William John Miller, chairman of the department and professor of geology, University of California at Los Angeles, "The Geology of the San Gabriel Mountains" (illustrated).

November 18: Dr. Walter Mosauer, instructor in zoology, University of California at Los Angeles, "The Locomotion of Snakes and its Anatomical Basis" (illustrated).

December 2: Dr. Shepherd Ivory Franz, chairman of the department and professor of psychology, University of California at Los Angeles, "Amnesia, or Lost Identity."

January 5: Dr. Willem de Sitter, professor of astronomy and director of the Observatory, University of Leiden, Holland, "The Origin of the Solar System."

January 6: Dr. Bennet M. Allen, professor of zoology, University of California at Los Angeles, "Some Recent Studies upon the Glands of Internal Secretions" (illustrated).

February 15: Dr. Albert Einstein, professor of theoretical physics in the University of Berlin, "The Geometric Interpretation of the Gravitational and Electric Field." (Dr. Einstein's address was delivered in German, but was translated by Dr. Richard Chase Tolman, professor of physical chemistry and mathematical physics in the California Institute of Technology.)

February 23: Dr. William Frederick Durand, profes-

sor emeritus of mechanical engineering, Stanford University, "Science and Civilization."

March 2: Dr. Joseph Kaplan, assistant professor of physics, University of California at Los Angeles, "The Aurora and its Spectrum" (with demonstrations).

March 18: Dr. Russell Tracy Crawford, professor of astronomy, University of California, "The Orbits of the Planets and Comets."

March 30: Dr. A. O. Leuschner, director of the Students' Observatory, chairman of the Berkeley astronomical department and professor of astronomy, University of California, "The Recently Discovered Delporte Object."

April 6: Dr. E. R. Hedrick, chairman of the department and professor of mathematics, University of California at Los Angeles, "Infinities."

April 20: Dr. Max S. Dunn, associate professor of chemistry, University of California at Los Angeles, "Amino Acids and their Significance" (illustrated).

May 4: Dr. J. A. Anderson, astronomer in the Mt. Wilson Observatory of the Carnegie Institution of Washington and the California Institute of Technology, "The Telescope in Theory and in Practice" (illustrated).

May 18: Dr. Charles K. Edmunds, president of Pomona College, Claremont, California, "Some Physical Aspects of China" (illustrated).

May 25: Dr. Loye Holmes Miller, chairman of the department and professor of biology, University of California at Los Angeles, "The Desert Tortoise of California" (illustrated).

SCIENTIFIC NOTES AND NEWS

DISPATCHES from Berlin to the daily press report that Professor Albert Einstein has accepted a life appointment as a member of the staff of the newly established Institute for Advanced Study at Newark, New Jersey, of which Dr. Abraham Flexner is director. It is stated that Professor Einstein will stay in the United States each year for five months only, spending the rest of the time in Germany.

DR. IRVING LANGMUIR, director of the research laboratory of the General Electric Company, Schenectady; Dr. Louis M. Dennis, professor of inorganic chemistry at Cornell University, and M. Constantin Levaditi, of the Pasteur Institute, Paris, have been elected members of the Academy of Sciences at Halle.

DR. WILLIAM BOWIE, in charge of the division of geodesy of the U. S. Coast and Geodetic Survey, has been elected an honorary member of the State Russian Geographical Society.

THE Priestley medal for distinguished service to chemistry, which was awarded last spring to Dr. Charles Lathrop Parsons, secretary of the American Chemical Society, was presented to him at the recent meeting of the society in Denver. The Priestley medal was awarded first in 1923 to Ira G. Remsen, president

of the Johns Hopkins University. The second award was made in 1926 to Edgar Fahs Smith, provost of the University of Pennsylvania, and the third to Francis P. Garvan, president of the Chemical Foundation.

THE order of the Red Star of the Soviet government, bestowed for "outstanding achievements in defense of the country," has been awarded to Colonel Hugh L. Cooper, of Stamford, Connecticut. The award was made for designing and constructing the Dnieprostroy power development in the southern Ukraine. Six members of Colonel Cooper's staff received the Order of Lenine for "outstanding achievements in socialist construction."

DR. THOMAS GILLMAN MOORHEAD, Dublin, president of the Royal College of Physicians of Ireland and regius professor of physic at Trinity College, University of Dublin, was chosen president-elect of the British Medical Association at the recent annual meeting held in London. He will succeed Lord Dawson of Penn.

EARLY in July last the pharmacologists of Great Britain met in London and founded the British Pharmacological Society. Professor J. A. Gunn, of the University of Oxford, was elected first president of