

film, a razor, a can opener, specimens of our money and so on.

In addition there are samples of the major metals and alloys; textiles, including wool, cotton, silk, linen, rayon, glass fabrics, rubber fabrics, asbestos cloth; materials such as Portland cement, asbestos, synthetic and natural rubber, synthetic plastics; also samples of coal (which may be rare in 5,000 years), seeds of staple food crops, and many other items.

Possibly the most important item packed in the Time Capsule is a carefully prepared microfilm "essay" on our times, taken from books, almanacs, pictures, catalogues, etc., and arranged in logical order to cover all the major activities of human life.

Multi-lingual texts, a dictionary and an idiomatic lexicon will enable future historians readily to translate the texts of the microfilm. All film in the capsule is acetate, specially prepared for permanence. The microfilm essay contains more than 23,000 ordinary book pages, reproducing more than 10,000,000 words, and many hundreds of pictures. A microscope is enclosed to enable "futurians" to read the text. Complete directions in text and picture are given for the construction of a larger reading machine and a motion picture projection machine. For use in this machine is a newsreel enclosed, especially prepared for the people of A.D. 6939, containing nearly a score of historic, typical, or significant scenes of our day with sound.

#### SCIENTIFIC LECTURES OF THE COLLEGE OF PHYSICIANS OF PHILADELPHIA

THE program for 1940-1941 of evening scientific lectures of the College of Physicians of Philadelphia is as follows. In all cases the lectures will open at 8:30 P.M.

September 25. Nathan Lewis Hatfield Lecture XXIV, George W. Corner, director of the department of embryology, the Carnegie Institution, Baltimore. "The Physiological Basis of Corpus Luteum Therapy."

November 6. S. Weir Mitchell Oration VIII, John F. Fulton, Sterling professor of physiology, Yale University. "Neurology and War."

December 4. Thomas Dent Mütter Lecture LIII, Allen O. Whipple, professor of surgery, College of Physicians and Surgeons, Columbia University. "Recent Studies in the Circulation of the Portal Bed of the Spleen in Relation to Splenomegaly."

January 8. James M. Anders Lecture XVI, Thomas Francis, Jr., New York University. "The Problem of Epidemic Influenza."

February 5. Mary Scott Newbold Lecture XLVIII, Thomas T. Mackie, assistant clinical professor of medicine, College of Physicians and Surgeons, Columbia University; attending physician, the Roosevelt Hospital. "Studies in Ulcerative Colitis."

March 5. Alvarenga Prize Lecture, Ernest W. Goodpasture, professor of pathology, Vanderbilt University. "The Cell-Parasite Relationship in Bacterial and Virus Diseases."

April 2. Nathan Lewis Hatfield Lecture XXV, George L. Streeter, Carnegie Embryological Laboratory, the Johns Hopkins University, Baltimore. "New Data on Embryogenesis in Monkey and Man" (illustrated).

May 7. James M. Anders Lecture XVII, Henry F. Vaughan, commissioner of health, Detroit, Michigan. "The Way of Public Health."

#### LECTURES FOR THE GENERAL PUBLIC

November 15. Chevalier Jackson, honorary professor of broncho-esophagology, Temple University School of Medicine. "The Bronchoscope." (Lantern and motion picture demonstration of the instrument, its uses and what it has contributed to medical science and public welfare.)

January 24. Hubley R. Owen, director of public health, Philadelphia. "Activities of the Department of Public Health, with Plans for the Future."

April 18. Richard A. Kern, professor of clinical medicine, University of Pennsylvania Medical School. "Allergy and You."

#### THE AMERICAN ORNITHOLOGICAL UNION

THE fifty-eighth annual meeting of the American Ornithological Union was held at the New England Museum of Natural History in Boston and at the Institute of Geographical Exploration at Harvard University from September 9 to 15 with a registered attendance of three hundred and ten. Thirty-nine scientific papers were read—many illustrated by color slides or films. The three days of program sessions included a like number of evening entertainments, open house at the New England Museum, the annual dinner and business meetings of various sections. On Friday ornithologists in attendance took a field trip to favorable localities along the coast north of Boston. On Saturday and Sunday many visitors traveled to Chatham and Cape Cod, with a beach wagon trip to Monomoy Point to observe pelagic birds.

Officers elected for the new year were: *President*, Dr. James P. Chapin, New York City; *Vice-presidents*, George Willett, Los Angeles, and Dr. J. L. Peters, Cambridge; *Secretary*, Dr. Lawrence E. Hicks, Columbus; *Treasurer*, Rudyerd Boulton, Chicago; *Council*, James Savage, Buffalo, Dr. Josselyn Van Tyne, Ann Arbor, and Dr. Ira N. Gabrielson, Washington, D. C.

The Brewster Medal was awarded to Dr. James L. Peters, of Cambridge, for his four volumes published to date on "The Birds of the World." Two fellows—Stanley G. Jewett, Portland, Ore., and Robert T. Moore, Pasadena, Calif., and one corresponding fellow, Dr. Oliveirio Pinto, of Brazil, were elected.

In addition to 228 new associate members, eight new members were named: Oliver L. Austin, Tuckahoe, N. Y.; Joseph J. Hickey, New York City; George H.

Lowry, Baton Rouge, La.; Eugene E. Murphey, Augusta, Ga.; John R. Pemberton, Altadena, Calif.; Arlie W. Schorger, Madison, Wis.; Milton B. Trautman, Put-in-Bay, Ohio, and Lawrence H. Walkinshaw, Battle Creek, Mich.

The meeting in 1941 will be held in Denver in September.

#### THE AMERICAN MATHEMATICAL SOCIETY

At the joint meeting of the American Mathematical Society and the Mathematical Association of America held at Dartmouth College, Hanover, N. H., from September 9 to 12, the following resolutions were adopted, upon the recommendation of the War Preparedness Committee, Professor Marston Morse, of the Institute for Advanced Study, *chairman*:

1. That all competent students in the secondary schools take the maximum amount of mathematics available in their institutions. In the case of many schools additions to the present curriculum will be necessary in order to furnish an adequate background for the military needs of the country.

2. That the colleges and universities at once make such revisions of their undergraduate courses in mathematics and add such courses to the curriculum as are necessary to prepare students in the elements of mechanics, probability, surveying, navigation and other essentials of military science.

3. That the graduate schools extend their courses in

applied mathematics, such as dynamics, hydrodynamics, elasticity, aeronautics, ballistics, statistics, etc., and that advanced students be urged to become highly qualified in one or more fields of applied mathematics.

This is a first step in the fulfillment by this committee of its dual mission of education and research.

Sub-committees were constituted with chairmen as follows:

*Research*—Professor Dunham Jackson, University of Minnesota.

*Preparation for Research*—Professor M. H. Stone, Harvard University.

*Education for Service*—Professor W. L. Hart, University of Minnesota.

To aid in research, chief consultants were named in the following fields:

*Ballistics*—Professor John von Neumann, Institute for Advanced Study.

*Aeronautics*—Professor Harry Bateman, the California Institute of Technology.

*Mechanical and Electrical Aids to Computation*—Professor Norbert Wiener, the Massachusetts Institute of Technology.

*Industry*—Dr. T. C. Fry, Bell Telephone Laboratories.

*Cryptanalysis*—Professor H. T. Engstrom, Yale University.

*Probability and Statistics*—Professor S. S. Wilks, Princeton University.

## SCIENTIFIC NOTES AND NEWS

THE autumn meeting of the National Academy of Sciences will be held at the University of Pennsylvania on October 28, 29 and 30.

THE autumn general meeting of the American Philosophical Society will be held on November 22 and 23, beginning at 10 A.M., on Friday. On that day recipients of grants from the research funds will present reports of the progress or completion of their projects. On Friday evening there will be a public lecture followed by a reception.

DR. JOHN VAN NOSTRAND DORR, consulting metallurgist, president of the Dorr Company, Inc., New York City, has been awarded the Perkin Medal of the Society of Chemical Industry for 1941. Presentation of the medal will be made at a meeting to be held by the society on January 10 at the Chemists' Club, New York.

DR. JOHN R. MOHLER, chief of the Bureau of Animal Industry, U. S. Department of Agriculture, Washington, has been chosen Kober lecturer for 1941 under the rules governing an endowment fund established by the late Dr. George M. Kober. Dr. Mohler will deliver the lecture on March 28. He will speak

on "Undulant Fever," under the auspices of Georgetown University.

CLOYD M. CHAPMAN was awarded honorary membership in the American Society for Testing Materials at its forty-third annual meeting "in recognition of his work in developing a system of medical x-ray photography, which makes it possible to examine a large number of individuals a day at a very moderate cost."

DR. GERALD WENDT, retiring director of Science and Education at the New York World's Fair, was the guest of honor at a party given at the Television Theater of the RCA Building at the fair on September 25, at 5 P.M. The event was arranged "in recognition of Dr. Wendt's services during his three-year connection with the fair and to present a preview of a collection of three-dimensional pictures recently taken by him of well-known scientific men at work on current research projects in their laboratories."

THE *Journal* of the American Medical Association reports that the Monroe County, Indiana, Medical Society recently held a dinner meeting in honor of