

Columbia and tributary streams since before the construction of the Grand Coulee Dam. These observations were greatly extended this summer, and in addition extensive physiological studies were made of the salmon and other fish passing through the Rock Island traps.

During the latter part of August studies were conducted of glacial waters near Mount Ranier and Mount Shasta, investigations which are closely related to the Sacramento River project and its effect on aquatic life.

THE MEDICOFILM SERVICE OF THE ARMY MEDICAL LIBRARY

ACCORDING to a statement by the librarian of the Medical Corps of the U. S. Army, Colonel Harold W. Jones, under the authority of the Surgeon General of the Army, microfilm copying from the medical collections of the Army Medical Library has been conducted for nearly three years by Bibliofilm Service, a non-profit agency having its headquarters in the library of the U. S. Department of Agriculture. Although this service has rendered valuable aid to many research workers, it is believed that a microfilm copying service operating within the Library itself, and specializing in the field of medicine, will be able to contribute even more to the advancement of medical science.

The new service has been established through the generosity of a group of "Friends of the Army Medical Library." It has been given the designation "Medicofilm Service."

The service described will be conducted on a non-profit basis solely for making the extensive medical literature collections of the Army Medical Library available to research workers who are unable to come in person to consult them. The library cooperates by providing the necessary space for the work and by supplying the publications from which the microfilm copies are made. The only cost to the user is for the actual labor and materials required in making and distributing the microfilm copies.

The photographic copies on moving picture film of the separate articles in the periodicals are made at 30 cents for each complete article not exceeding 30 pages in length and 10 cents for each succeeding 10 pages or fraction thereof. A pamphlet describing the service and also containing the latest list of the approximately 4,000 medical and related periodicals currently received by this Library will be sent to those desiring to avail themselves of this service. In addition to medical periodicals the library also possesses an extensive collection of manuscripts and incunabula of which microfilm copies may be obtained. Requests should be made to: Microfilm Service, Army Medical

Library, 7th St. and Independence Ave., S.W., Washington, D. C.

THE SEALING OF THE TIME CAPSULE

CEREMONIES incident to the final sealing of the Time Capsule of the exhibit of the Westinghouse Electric and Manufacturing Company at the New York World's Fair took place at noon on September 23. The capsule was deposited in the ground outside the exhibit building before the fair was opened on September 23, 1938.

Harvey D. Gibson, chairman of the World's Fair of 1940, welcomed the gathering, and A. P. Craig, Westinghouse Exhibit director, presided. Dr. Clark Wissler, anthropologist of the American Museum of Natural History, and David S. Youngholm, vice-president of the Westinghouse Electric and Manufacturing Company, took part in the sealing of the capsule. Dr. Albert F. Blakeslee, president of the American Association for the Advancement of Science, made an address at a program "Youth Looks toward the Future," held in the afternoon under the auspices of the American Institute of the City of New York.

During the sealing-in ceremonies, 500 pounds of a special mixture of pitch, chlorinated diphenyl and mineral oil was poured around the capsule. This compound, because it resists electrolysis and is impervious to moisture, will provide a first line of defense against the destructive effects of time. It was developed by J. G. Ford as a seal for condenser bushings in circuit breakers.

The compound remains plastic over a 225 degree Fahrenheit temperature range, from 40 degrees below zero to 185 degrees above. This means that it will not crack open to enable the start of electrolysis. Its dielectric strength enables it to resist an electrical discharge up to 40,000 volts. It is one and one fifteenth times as dense as water, so that moisture can not penetrate to start corrosive action. It will adhere tightly to the metal for many hundreds of years through a wider variation in temperatures than that to which the capsule will be subjected. The capsule itself is made of cupaloy. This is an alloy of 99.4 per cent. copper, .5 per cent. chromium and .1 per cent. silver which can be hardened to the temper of mild steel but retains resistance to corrosion equal to pure copper.

David S. Youngholm, vice-president of the company, made a statement in which he said that more than forty articles used every day by people of the present are packed in the capsule.

Among them are a fountain pen and mechanical pencil, a watch, an electric lamp, a tobacco pouch with zipper, tobacco, pipe, cigarettes, cosmetics, a woman's hat, eyeglasses, toothbrush and powder, a miniature camera and

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.