to 1600, include three valuable works of Brequet, the French watchmaker, and a jeweled-enameled timepiece with gold movements made by William Ilbery of England about 1810.

Among the antique American clocks was a tall hall clock made by David Rittenhouse about 1760, believed to be one of the earliest works of this Colonial craftsman. The ornamented brass dial bears both Roman and Arabic figures and indicates seconds, minutes, hours and the days of the month. Another addition is a solar timepiece designed by Theodore Timby, of Baldwinsville, New York. He arranged a terrestrial globe in such relation to a dial plate and index on a clock that the culminating time of the sun and the mean time can be observed simultaneously. It was built about 1870. The globe on the clock was manufactured by Gilman Joslin, of Boston, one of the foremost mapmakers of his time. The Simon Willard clock, one of the new acquisitions, was built as a timepiece to check astronomical observations. It stands in a glass globe 32½ inches high, believed to be the original, and has a center movement, single weight and anchor escapement. The "Regulator Clock" made for and to the specifications of James Sarratt, the inventor of the "Cosmochronotrope," was acquired by the collection last year. It was built by George A. Jones and Company, of New York City, somewhat prior to the "Cosmochronotrope" in about 1875. It has a "dead beat" escapement with a seconds pendulum and has been constructed to allow temperature compensation throughout, particularly between pallet and pendulum. Among the new English pieces is a John Arnold chronometer which bears the number 491, and was built about 1760, in response to the British government's desire for instruments that would keep correct time at sea.

The James Arthur Collection of Clocks and Watches now consists of more than 2,000 objects which present the story of the evolution of timekeeping from the simplest sundial and hour glass to clocks having four dials and complicated mechanism. It was assembled by the late James Arthur, a Brooklyn manufacturer, over a period of forty years at a cost of more than $150,000 and was presented to New York University in 1926. Since that time rare clocks and watches, enough in number and value to constitute an important collection in themselves, have been added to the original gift.

Until his death in 1938 Dr. Daniel Webster Hering, emeritus professor of physics, was curator of the collection. He was succeeded by Dr. Carlos de Zafra, of the department of mechanical engineering.

THE GRAY HERBARIUM OF HARVARD UNIVERSITY

MORE than 39,000 mounted flower specimens from all over the world were added to the Gray Herbarium of Harvard University last year, bringing the collection of flowering plants and ferns to a total number of 1,033,850 sheets, according to the annual report of Professor Merritt L. Fernald, director of the herbarium, as summarized in *The Harvard Alumni Bulletin*.

Noting an "intense activity in botanical exploration at the present time," Professor Fernald reported that among the important gifts of the year were a series of southeastern state orchids, plants from the Atlantic States, Nevada, tropical America, Chile, Alaska, Iceland, Yunnan, California, Transcaucasia, Belgian Congo, Russia and Siberia and the eastern Mediterranean region. More than 16,000 specimens were collected by members of the staff on expeditions to the coastal plains of Virginia, Dominica, North Carolina, South Carolina and other areas.

Dr. Fernald pointed out that because of the war much of the important loan activity between botanists in the United States and Europe must temporarily cease. During the past year more than 12,000 duplicate specimens were sent out to fifty-four institutions and individuals in the United States and to twenty-seven foreign institutions. In addition, loans of over 8,000 specimens were received and loans of more than 12,000 were sent out.

Bequests of over $27,000 were made to the permanent funds of the herbarium. The sum of $1,242 was given by forty-four friends of the institution, and further funds were received from the American Philosophical Society for field work in Virginia and South Carolina. In addition, under the will of the late Earl Willson Bemis, of Worcester, long a member of the Overseers' Committee to Visit the Herbarium, the residue of an estate which is expected to amount to about $85,000 was bequeathed to the herbarium.

During the year 5,310 specimens were received from collectors and students for critical study and identification. Thirty-one investigators from outside the university used the facilities of the herbarium in furthering their researches.

THE ASSOCIATED HOSPITAL SERVICE OF NEW YORK CITY

THE Board of Directors of the Associated Hospital Service of New York City has issued its annual financial statement showing assets of $4,198,220. The growth of the non-profit three-cents-a-day plan has advanced to the position where it is paying about eight million dollars yearly for the hospital care of subscribers. Hospital bills amounting to more than sixteen million dollars have been paid since the plan was established five years ago.

With an enrolment of more than 1,350,000 persons, or one out of six in the New York area, the Associated Hospital Service is the largest of sixty non-profit hospital plans throughout the United States. The number

of subscribers increased more than a quarter of a million during 1939. The financial condition as of December 31, 1939, determined by the New York State Department of Insurance shows that a surplus of $1,651,249 is available for the added protection of subscribers.

The annual certificate of approval has been awarded by the American Hospital Association for evidence of progress, sound administrative policies and procedures and a financial position which protects the interests of subscribers.

As experience in the field has increased, adjustments have been made in the service, which has had the continued cooperation of subscribers, of more than 270 member hospitals and of the medical profession. The report closes with the statement that "The American people have found a way to protect themselves against the costs of hospital care for unexpected sickness or accident. The future of non-profit hospitalization throughout the nation is bright with possibilities for even greater service."

THE THEFT OF RESEARCH MICROSCOPES FROM THE BIOLOGICAL LABORATORY, AMHERST COLLEGE

EARLY in the evening of February 5, two valuable research microscopes were stolen from the Biological Laboratory at Amherst College. One of these was the microscope used by Professor Oscar Schotté. It was taken from his laboratory table. It was a Leitz monobjective binocular. Maker's No. 300473, Amherst College No. die cut on base A C BIOL 53. This instrument was equipped with 4 Leitz apochromat objectives and paired 8x oculars. In addition there was attached to it a Zeiss pancratic condenser for illuminating.

The other microscope was a Zeiss machine being used by Dr. George Child in Professor H. H. Plough's laboratory. Maker's No. 259779, Amherst College No. die cut on base A C BIOL 61. This machine was equipped with a Butukni binocular draw tube, two achromat and one apochromat objectives and paired 10x oculars.

A Spencer rotary microtome Maker's No. 3631, Amherst College No. die cut on base A C BIOL 207, was taken from Dr. Schotté's room at the same time as the microscope.

The instruments were in use up to six o'clock on that day, but their disappearance was not noted until the following day. The laboratory building is ordinarily locked after six o'clock, but because of an evening lecture it was open on that particular evening. Apparently neither of the research rooms was locked, although the door of each was closed. Whoever took the instruments knew what he wanted, since other valuable apparatus, including less valuable microscopes and a calculating machine, were passed over without being disturbed.

The Department of Biology of Amherst College will appreciate any information concerning instruments that are offered for sale that will lead to the recovery of the stolen instruments.

OFFICERS OF THE FEDERATION OF AMERICAN SOCIETIES FOR EXPERIMENTAL BIOLOGY

THE Federation of American Societies for Experimental Biology which is made up of the American Physiological Society, The American Society of Biological Chemists, The American Society for Pharmacology and Experimental Therapeutics and the American Society for Experimental Pathology met at New Orleans on March 13, 14, 15 and 16. Officers elected for the coming year are:

The American Physiological Society: Dr. A. C. Ivy, of Northwestern University, *president;* Dr. Philip Bard, the Johns Hopkins University, *secretary;* Dr. C. J. Wiggers, Western Reserve University, *treasurer,* and Dr. Charles H. Best, University of Toronto, *councillor.*

The American Society of Biological Chemists: Dr. W. C. Rose, University of Illinois, *president;* Dr. R. J. Anderson, Yale University, *vice-president;* Dr. C. G. King, University of Pittsburgh, *secretary;* Dr. A. Baird Hastings, Harvard, *treasurer;* Dr. Edward A. Doisy, St. Louis University, *councillor;* Dr. Henry A. Mattill, University of Iowa, and Dr. Glenn Cullen, University of Cincinnati, *council members.*

The American Society for Pharmacology and Experimental Therapeutics: Dr. E. M. K. Geiling, University of Chicago, *president;* Dr. C. F. Schmidt, University of Pennsylvania, *vice-president;* Dr. G. P. Grabfield, Harvard University, *secretary;* Dr. E. E. Nelson, Tulane University, *treasurer;* Dr. B. H. Robbins, Vanderbilt University, and Dr. C. H. Thienes, University of Southern California, *councillors,* and Dr. H. Gold, *membership committee.*

The American Society for Experimental Pathology: Dr. Shields Warren, of Harvard University, *president;* Dr. Jesse Bollman, of Mayo Clinic, Rochester, Minn., *vice-president;* Dr. Harry P. Smith, University of Iowa, *secretary-treasurer,* and Dr. Paul R. Cannon, University of Chicago, and Dr. Balduin Lucké, University of Pennsylvania, *members of the council.*

Dr. Warren, under the plan of having the heads of the constituent groups serve as chairman of the federation in rotation, assumed that office.

SCIENTIFIC NOTES AND NEWS

DR. FREDERIC JOLIOT and Madame Irene Joliot-Curie, co-workers in the Radium Institute, Paris, have been awarded the 1940 Barnard Gold Medal for "Meritorious Service to Science" bestowed by Columbia University every five years. The medal was established by the will of Frederick A. P. Barnard, presi-