

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