

Council, *chairman*; Lt.-Col. K. S. MacLachlan, acting deputy minister (Naval and Air), Department of National Defence; Colonel H. Des Rosiers, acting deputy minister (Militia), Department of National Defence; W. R. Campbell, chairman, War Supply Board. S. J. Cook, officer-in-charge, Research Plans and Publications Section, the National Research Council, has been named secretary of the board.

The Inventions Board has made all its appointments from among the members of the Public Service in Canada. This has been done partly as a measure of economy, but more particularly because officials of the National Research Council and of the various government departments are well qualified to serve as members of a committee to examine inventions and ideas and to segregate those which offer promise of useful application from those which are technically unsound. The secretary of the board and the members of the examining committee have been chosen from the staff of the National Research Council. The members of the consulting panel, to whom doubtful questions will be referred, include the four directors of the laboratory divisions of the National Research Council, representatives from each of the three Services (Navy, Militia and Air), of the Department of National Defence, and appointees from the staffs of the War Supply Board and the Patent Office.

All proposals received will be considered in the first instance by the examining committee. Those which offer promise will be reviewed by members of the consulting panel, and the proposals which meet with the approval of these two groups will then be considered by the board.

#### EXPEDITION TO THE CARIBBEAN

Two members of the expedition to the Caribbean of the Field Museum—Rudyard Boulton, Jr., curator of birds, and D. Dwight Davis, assistant curator of anatomy and osteology—have returned to Chicago. The expedition was led by Leon Mandel, a Chicago merchant, on his yacht *Buccaneer*.

Since the first of January the *Buccaneer* has been piloted between and around the coral reefs and through remote and tortuous channels, purposely seeking out all the spots which the navigators of most vessels try to avoid.

The places visited—Cuba, Honduras, Mexico and British Honduras, some of them scarcely a square mile in extent—are of great interest biologically. The collections include approximately 150 exotic birds, 350 reptiles and amphibians, 500 specimens of fishes, many of them vari-colored and strange in form and quantities of mollusks, marine invertebrates, microscopic creatures accumulated in masses known as plankton and other minute organisms. In most of these places little or no scientific collecting had been done before.

At Half Moon Cay, British Honduras, after material had been collected for exhibits representing a great colony of red-footed boobies which live there, a storm of hurricane force suddenly struck the *Buccaneer*, causing the breakage and loss of heavy chains and anchors and a hurried departure out to sea for safety.

The most isolated of the islands visited was Swan Island, which consists of two mile-square specks of land belonging to the United States. It lies almost midway between Cuba, Honduras and the Yucatan Peninsula. There the expedition obtained specimens of Nelson's yellow warbler and a species of palm lizard, both of which are hermit-like creatures, inhabiting, so far as is known, no other place. Also collected there were representatives of a nesting colony of brown boobies and various sea birds.

What is perhaps the largest colony of sea birds in the West Indies was found on Mujeres, Cancun and Contoy Islands off the coast of Yucatan. So far as known, no other ornithologists have reached these spots before. There collections were made of pelicans, cormorants, frigate and other birds, including, on Contoy, a specimen of the great white heron.

In the Bay Islands, belonging to the Republic of Honduras, the expedition obtained snakes and lizards by the hundreds. Off Glover's Reef, British Honduras, using a special small motor cruiser carried aboard the larger vessel, the principal fish collections were obtained in the waters over a coral reef, fifteen miles long and five miles wide, which represents the ultimate development of coral reefs to be found in the West Indies. In the clear water, fish could be seen to depths of about 100 feet, swimming among the coral "trees" as much as thirty to forty feet in height.

Other places in which collections were made are Misterioso Bank, Rio Encanada (Enchanted River) in the Zapata Swamp of Cuba and Turneffe Cay. The primary objectives of the expedition were to make an assay of the wild life of these little known places, and to obtain for the museum exhibits and study collections a representation of the faunas of such circumscribed ranges for comparison with other faunas which usually range for thousands of miles.

#### TIMEPIECES OF THE JAMES ARTHUR COLLECTION AT NEW YORK UNIVERSITY

THE James Arthur Collection of Clocks and Watches at New York University, already one of the largest in the world, recently was augmented by the acquisition of 275 antique timepieces, comprising the entire collection of the late John Arthur, of Brooklyn. It has also been increased by the acquisition of a number of rare early American and English clocks, including works of Simon Willard, David Rittenhouse, Theodore R. Timby and John Arnold. The watches, dating back

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