tending the Bloomingdale Academy he decided to become a teacher of science. He continued his education at Earlham College, graduating in 1888. Three years later as a result of summer school work he received an M.S. degree from Indiana University. He continued his work at the University of Chicago for several summer sessions, where he came under the influence of Dr. R. A. Millikan, with whom he worked on a number of special problems.

Professor Morrison held positions as follows: instructor in science at the Pacific Academy at Newberg, Ore., and at Spiceland Academy, Indiana. When the Pacific Academy became a college, he went back as head of the department of science. In 1901 he became head of the department of physics and chemistry of Penn College at Oskaloosa, Iowa, and in 1906 was called to Earlham College, his alma mater, to become head of the department of physics, from which post he moved to Michigan State College in 1919.

In all his teaching he used and promoted the laboratory method, and wherever he went he built up a good laboratory for the teaching of undergraduate physics. He was a member of the American Association for the Advancement of Science, the American Physical Society, the American Association of Physics Teachers, the American Optical Society and the Indiana Academy of Science.

C. W. CHAPMAN
O. L. SNOW

WILFRED AUGUST WELTER

DR. WILFRED AUGUST WELTER, professor of biology and head of the department of biology of Teachers College, Morehead, Ky., died in an automobile collision on December 20. He was born in Creighton, Nebr., on March 29, 1906. In 1911 he moved with his parents to a farm north of Verndale, Minn., where he attended a grade school and the Verndale High School, from which he graduated in 1922. From high school he entered the Teachers College at St. Cloud and graduated in 1924. He obtained the bachelor's degree from the University of Minnesota in 1926 and the master's degree from the Iowa State College in 1927. He taught one year in the Teachers College at St. Cloud and one at the Teachers College in DeKalb, Ill., before he entered Cornell University, from which he received a Ph.D. degree in ornithology in 1932.

The degree was conferred on him while he was very young, and he came to Morehead with an eager step and a boyish smile which endeared him to all. He was a man of unlimited capacity, one who was rapidly climbing professionally. He was the ideal of all students and as head of the department of biology he influenced them to take up graduate work.

Dr. Welter collected specimens and built up a museum of mammals, reptiles and birds. He made a survey of the fish in Kentucky streams and added a large collection of specimens to the museum. He worked with the government in bird feeding and bat banding. He found and classified rare salamanders. He made colored movies of the birds, flowers and animals of this region and was much sought as a lecturer at educational and conservation meetings. He established a wild flower garden on the hill behind the college to preserve rare specimens in their natural habitat. He assisted in training school supervisors to teach nature units. He wrote articles for science magazines, and maintained membership in organizations related to his field.

His favorite pursuits were connected with his professional work—conservation of wild life, fishing, collecting, making colored movies of birds, flowers and animals, studying nature at close range, out-of-doors cooking, field trips, boating, canoeing, travel by motor car and building a museum of wild life for the college.

His passing is a great loss to Morehead College and to the study of science in Kentucky.

A CORRESPONDENT

RECENT DEATHS

DR. JOHN HENRY TANNER, professor emeritus of mathematics at Cornell University, died on March 11 at the age of seventy-nine years.

THE death is announced of Lieut.-Colonel J. A. Amyot, Canadian deputy minister of pensions and national health, formerly professor of hygiene in the University of Toronto, at the age of seventy-two years.

SCIENTIFIC EVENTS

THE INVENTIONS BOARD OF THE CANADIAN GOVERNMENT

AN Inventions Board has been established by the Canadian Government to deal with the growing volume of inventions and suggestions intended to further Canada's war effort which are being received by the various departments of the government, according to an announcement made by the Hon. W. D. Euler, Minister of Trade and Commerce and chairman of the Committee of the Privy Council on Scientific and Industrial Research.

The establishment of the Inventions Board provides a means whereby ideas and inventions submitted by citizens of Canada and abroad can be carefully examined, and promising proposals cleared to the proper authorities.

The board itself is composed of Dean C. J. Mackenzie, acting president of the National Research

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—Rudyerd 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 Misteriosio Bank, Rio Encancada (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