

the branch experiment stations, was killed in an automobile accident on September 14. He was sixty-three years old. Professor Musbach was a member of the American Association for the Advancement of Science and other scientific societies.

DR. CHARLES JASTROW MENDELSON, of the College of the City of New York, cryptographer, known for his work on the mathematics of code-word structure and the theory and structure of the cable codes, died on September 27 at the age of fifty-eight years.

SCIENTIFIC EVENTS

THE ARNOLD ARBORETUM EXPEDITION TO NORTHWESTERN CANADA

THE Arnold Arboretum expedition of 1939 to the Mackenzie basin of northwestern Canada returned to Boston on September 28. It left for the field on May 20, and arrived on June 9 at Fort Simpson on the Mackenzie River. On June 16 a chartered airplane was used for the journey to Brintnell Lake, approximately 200 miles west of Simpson. This lake lies at about 2,600 feet above sea-level and is surrounded by mountains ranging from 6,000 to 9,000 feet above the sea. Its position is in lat. $62^{\circ} 5' N.$, long. $127^{\circ} 35' W.$ The party remained there until August 20, when they returned to Simpson by plane. The boat journey southward was begun on September 8.

Approximately 1,000 field numbers of vascular plants, 620 of lichens and 60 of fungi, altogether about 15,000 herbarium specimens, were collected, mainly at Brintnell Lake and in the vicinity of Fort Simpson. The chief objectives of the trip were collections and notes on local vegetation in the Mackenzie Mountains of the South Nahanni River region, in which Brintnell Lake is situated. The lake is at the margin of the Snyder Range, a group of high mountains about the headwaters of the South Nahanni, and lies in one of the least known regions, biologically speaking, in boreal America. In fact, practically no botanical material from the whole Mackenzie Mountain system had been collected prior to this summer; and it was especially desirable in view of projected plans for a new floristic work on the northern parts of the continent.

The 1939 expedition was supported by the Arnold Arboretum and by liberal grants from the Milton Fund of Harvard University, the American Academy of Arts and Sciences and the National Academy of Science. The National Museum of Canada contributed substantially by the loan of field equipment. The party consisted of Dr. and Mrs. Hugh M. Raup, their two sons and James Soper, of Hamilton, Ontario.

HUGH M. RAUP

THE BISHOP ORNITHOLOGICAL COLLECTION

THE Field Museum of Natural History, Chicago, has recently concluded arrangements to acquire the Bishop collection of more than 50,000 North American birds, one of the largest and most important private collections ever assembled and the last of its kind which had

not passed to a public institution. The negotiations to obtain this collection were recently completed by Dr. Wilfred H. Osgood, chief curator of the department of zoology, on a visit to Dr. Louis B. Bishop at Pasadena, California. Dr. Osgood is an old friend of Dr. Bishop's, and in 1899 they conducted an expedition together to the Yukon and Alaska.

The Field Museum will obtain possession immediately of the major part of the collection, which is now housed at New Haven, Conn. The rest of it will remain in Los Angeles, where Dr. Bishop will continue work towards its improvement. It includes representatives of nearly all known forms of birds found in every section of North America north of Mexico, representing forty years of constant and intensive effort, both on the part of Dr. Bishop and of numerous professional ornithologists who have been associated with him at various times. According to Rudyerd Boulton, curator of birds at the museum, the specimens are distinctly superior to the average in quality of preparation. An important item is the inclusion of thirty type-specimens. Included also are specimens of various birds which are now extinct, such as the Carolina parakeet, the ivory-billed woodpecker, the Eskimo curlew and the passenger pigeon. Many others are of species which have become scarce and difficult to obtain.

Hitherto the principal efforts in ornithological research made by the museum have been devoted to the birds of Central and South America, Africa and other foreign localities. Although it has a collection in the North American field, this has been left largely to other institutions. The acquisition of the Bishop collection now gives to the museum one of the most comprehensive North American bird collections either in this country or abroad. It is estimated that it has cost its owner nearly \$100,000, and it is doubtful if it could be reproduced at this time for double this amount.

THE LALOR FOUNDATION FELLOWSHIP AWARDS

THE Lalor Foundation has announced its fourth series of fellowship awards, authorizing grants of \$20,000 for the academic year 1940-41. The individual awards range between \$1,800 and \$2,500 or according to the special needs of the candidate.

Six fellowships of the 1939-40 series are being ad-