

Fiord. From thence to the main cache, from which the homeward journey will be made.

My Danish companion on these travels will be Mr. C. F. Slott, an engineer who during many years and in many countries has almost exclusively devoted himself to the study of tractors and their practical working. On the sledge-journeys I shall be accompanied by Polar Eskimos.

The cost of the expedition is estimated at 110,000 Danish Kroner, part of which has been guaranteed by the Danish State. The remainder was raised by a committee consisting of:

MR. C. F. WANDEL, former rear-admiral of the Royal Danish Navy, *Chairman*.

MR. A. ERLANDSEN, shipowner, *Treasurer*.

MR. J. DAUGAARD-JENSEN, director of the administration of the colonies in Greenland.

MR. V. GLÜCKSTADT, of the Merchants' Guild, consul general for Italy.

MR. EUGENE WARMING, former professor of the University of Copenhagen.

The state has placed a ship at our disposal in order to take the expedition and its stores to Inglefield Gulf. This ship left Copenhagen on July 15, 1920.

LAUGE KOCH

COPENHAGEN

SCIENTIFIC EVENTS

UNIVERSITY OF TORONTO CONFERENCE ON RECENT ADVANCES IN PHYSICS

WITH a view to stimulating interest in research, the president and the board of governors of the University of Toronto have heartily approved of a proposal made to them to convene, during the present session, a conference on recent advances in physics. This conference will be held in the physics laboratory of the university between January 5 and 26, 1921.

Dr. Ludwik Silberstein, late professor in the University of Rome, and at present mathematical adviser to the Eastman Kodak Co., of Rochester, N. Y., has kindly consented to take the leading part in the conference. Dr. Silberstein is a distinguished mathematician and mathematical physicist and, during the period of the war, served as expert adviser to the im-

portant British optical firm, Messrs. Adam Hilger, Ltd., of London, England. By his training in Europe and by his own contributions to modern science, he is eminently fitted to speak with authority on his chosen themes. Dr. Silberstein will deliver a course of eighteen lectures on the special and generalized theories of relativity and gravitation and on some of the recent advances in spectroscopy and theory of atomic structure. In the latter courses there will be presented the theories put forward by Bohr and by Sommerfeld on the origin of radiations, and by Epstein on the Stark effect, in addition to Dr. Silberstein's own investigations on non-spherical nuclei. From the nature of the subject the treatment will be chiefly from the mathematical standpoint.

Dr. Irving Langmuir, of the research laboratory of the General Electric Co., of Schenectady, N. Y., has also kindly consented to take part in the conference on January 17, 18 and 19. On these days he will deliver a short course of lectures on Theories of atomic structures, and other topics.

Provision has also been made in the conference for a course of sixteen lectures on a more or less popular nature. This course will be given by Professor McLennan. It will deal with various aspects of recent researches on the structure of matter and on the origin and characteristics of radiation. The dominant aim will be to present as simply and as clearly as possible the results of investigations which have been made up to the present on various phases of the subjects treated. The lectures of this course should prove of interest to science workers generally and to those of the public who are especially interested in the philosophical aspect of science or in some of its important applications.

A course of lectures will also be given on the fundamental properties of colloidal solutions. More and more in industry is a knowledge of colloids and their chemical properties becoming essential and it is expected that these lectures will prove interesting and profitable to manufacturers as well as to scientific workers. Professor E. F. Burton, both on account of his investigations in this subject and from

his training is highly qualified to deal with the subjects of colloids from its theoretical standpoint, as well as its practical side.

Arrangements will be made for holding a series of discussions during the conference on the subjects treated in the lectures.

The conference will be opened by Sir Robert Falconer, LL.D., president of the University of Toronto, on Wednesday, January 5, at five o'clock, when Professor McLennan will deliver the opening lecture on "Molecules and atoms."

J. C. McLENNAN,
Professor of Physics

UNIVERSITY OF TORONTO,
November 22, 1920

MEETING OF THE AMERICAN ORNITHOLOGISTS' UNION

THE meeting of the American Ornithologists' Union in Washington, D. C., November 8-11, 1920, was one of the largest in the history of the union. One half of the Fellows and about ten per cent. of the entire membership were in attendance. The business meetings on Monday were held at the Cosmos Club and the other sessions at the U. S. National Museum. The election of Fellows and Members included Robert Cushman Murphy, of Brooklyn, N. Y., as Fellow; E. C. Stuart Baker and Dr. Percy Lowe, of London, Honorary Fellows; 13 Foreign Corresponding Fellows; 5 Members and 307 Associates. The election of officers for 1921 resulted as follows: President, Dr. Witmer Stone, Philadelphia; Vice-president, Dr. George Bird Grinnell and Dr. Jonathan Dwight, New York; Secretary, Dr. T. S. Palmer, 1939 Biltmore St., Washington, D. C.; Treasurer, W. L. McAtee, Biological Survey, Washington, D. C. The single vacancy in the council was filled by the selection of Dr. W. H. Osgood, of Chicago, and the other six members were re-elected. The program of nearly 40 papers, five of which were illustrated by motion pictures, covered a wide range of subjects relating to North American birds and also included papers on the birds of Argentina, Nicaragua, Peru, Europe and Madagascar. In connection with the meeting an exhibition

of drawings, paintings and photographs of birds by American artists, supplemented by a series of prints showing the development of zoological illustration as applied to birds from the earliest times down to date, was arranged in the Division of Prints in the Library of Congress.

T. S. PALMER,
Secretary

THE BULAWAYO MEETING OF THE SOUTH AFRICAN ASSOCIATION

THE eighteenth annual session of the South African Association for the Advancement of Science was held in Bulawayo, Southern Rhodesia, on July 14-17, with Dr. I. B. Pole Evans, as president. From the report in *Nature* we learn that there were the usual receptions and functions, together with visits to the Khami ruins, the Matoppos, the Victoria Falls and Livingstone. A party, after the conclusion of the official meeting, visited the Great Zimbabwe. More than sixty papers were read in the various sections, and the attendance was a large one more than 130 members proceeding by special train from the Transvaal, as well as some from the Cape Peninsula and Natal.

The president Dr. I. B. Pole Evans, chief of the Division of Botany and director of the Botanical Survey of the Union, gave a most interesting address on "The veld: its resources and dangers," the address being illustrated by a series of beautiful lantern-slides. He reviewed recent progress in botanical knowledge, and outlined the notable advance that had been made by the members of the Botanical Survey in respect to systematic ecology, indigenous grasses, fungi and poisonous plants. Mr. H. E. Wood, of the Union Observatory, Johannesburg, as president of Section A, gave an address on "Recent progress in astronomy," noting that the present year was the centenary of the foundation of the Royal Observatory at the Cape. "Geology in relation to mining" was the subject of the presidential address to Section B, given by Mr. F. P. Mennell, who has seen all the later developments in the mining industry of Rhodesia. Dr. T. R. Sim, late government