A little book which should be useful to those who have had limited training in biology but who are interested in outdoor life.

DUKE UNIVERSITY

A. S. Pearse

## SOCIETIES AND MEETINGS

#### THE NEW HAMPSHIRE ACADEMY OF SCIENCE

THE fourteenth annual meeting of the New Hampshire Academy of Science was held from June 2 to 4, 1933, at Glen House, at the eastern base of Mount Washington.

Interest in the meeting centered about the Mount Washington Observatory, which has been maintained since last October on the summit at an elevation of 6,284 feet. The observatory cooperated with the International Polar year and with the Blue Hill Observatory of Harvard University. It was aided by a grant from the academy.

Mr. Joseph B. Dodge, director, spoke on "The Organization of the Observatory." Mr. R. S. Monahan, one of the observers, gave an illustrated talk on "Some Experiences on the Summit," and Professor Charles F. Brooks, of Harvard University, discussed "The Scientific Value of the Mount Washington Observatory." Several members made the trip to the summit and inspected the equipment of the observatory.

Other papers of major interest were "Cosmic Rays," with demonstrations by Professor G. F. Hull, "Bacterial Variations," by Professor K. N. Atkins, and the presidential address on "The Chemistry of the Atom," by Professor N. E. Gilbert, all of Dartmouth College.

The following officers were elected for 1933-34: President, Mr. Samuel P. Hunt, Manchester; Vice-President, Mr. Henry S. Shaw, Exeter; Secretary-Treasurer, Professor George W. White, department of geology, University of New Hampshire; Member of the Executive Council, Professor Norman E. Gilbert, department of physics, Dartmouth College. THOMAS G. PHILLIPS,

Retiring Secretary

### SUMMER MEETING OF THE MINNESOTA ACADEMY OF SCIENCE

WITH an attendance of 125, the reorganized Minnesota Academy of Science held its first annual summer meeting on the farm of Dr. R. B. Harvey, in the St. Croix River Valley near Stillwater, Minnesota.

Following a short business meeting for the election of new members the following papers were presented.

"Anthropology of the St. Croix," R. D. Brown, University of Minnesota.

"Things of Interest in the Geology of Central Minnesota," Professor Geo. A. Thiel, University of Minnesota.

"Animal Life in the St. Croix," Professor Samuel Eddy, University of Minnesota.

"Flora of the St. Croix," Professor A. H. Larson, University of Minnesota.

The afternoon was devoted to field trips of interest to all. Two Indian caves containing remnants of pottery were visited first. Plants and animals encountered were discussed. From the caves, the party visited two Indian burial mounds which had been excavated by members of the academy. Two skeletons, estimated to be from 400 to 500 years old, and a number of fragments of pottery were found. The third excursion was to view a number of well-preserved Indian pictographs on the sandstone bluffs of the St. Croix River.

Much enthusiasm was evidenced by the members and it is planned to make the summer meeting an annual affair, meeting in different sections of the state, where objects of scientific interest are available.

# SCIENTIFIC APPARATUS AND LABORATORY METHODS

#### A MICRO VESSEL FOR GLASS ELECTRODE DETERMINATIONS OF HYDROGEN-ION ACTIVITY OF BIOLOGICAL FLUIDS

INVESTIGATIONS of the hydrogen-ion activity of body fluids of insects during metamorphosis by means of the glass electrode have led to the development of a micro vessel which may be filled by approximately 0.03 cc of fluid and which prevents errors due to the loss or addition of gases such as  $CO_2$ . The vessel is of simple construction and it permits the manipulations to be made easily and quickly. It is used in combination with a glass membrane mounted on a tube according to the method of MacInnes and Dole<sup>1</sup>

<sup>1</sup> D. A. MacInnes and M. Dole. Jour. Am. Chem. Soc., 52: 29, 1930.