

The important subject of cartography was also well represented. The officers for the ensuing year are:

President—W. M. Davis.

First Vice-president—L. A. Bauer.

Second Vice-president—E. R. Johnson.

Secretary—A. P. Brigham.

Treasurer—N. M. Fenneman.

Councilors—Cyrus C. Adams, R. S. Tarr and R. E. Dodge.

The place of the next meeting will be fixed by the council.

The following is a list of papers presented:

"Man, Soil and Climate" (public lecture), by Albrecht Penck.

"Earthquake Forecasts" (president's address), by G. K. Gilbert.

"Round Table Conference on Secondary Geography," by R. E. Dodge.

"Accumulation of Inherited Features in Shorelines of Evolution," by J. W. Goldthwaite.

"On the Elements of the Surface Sculptured by Glaciers," by W. H. Hobbs.

"Existing Glaciers of the Northern Hemisphere," by O. D. Von Engel.

"The Topographic A B C of Land Form," by F. E. Matthes.

"How May the Teaching of Geography in Elementary Schools be Improved?" by C. T. McFarlane.

"Apparatus for Instruction in the Interpretation of Maps," by W. H. Hobbs.

"Some Practical Results of the Ninth International Geographical Congress," by H. G. Bryant.

"Three Gatherings of Geographic Interest," by A. P. Brigham.

"Status of the Magnetic Survey of the Earth," by L. A. Bauer.

"A Reconnaissance in the Arctic Slope of Alaska," by E. D. Leffingwell.

"The Climate of Cuba," by H. Gannett.

"The Temperature at Great Heights above the American Continent," by A. L. Rotch.

"The Climate of the Historic Past," by E. Huntington.

"Origin of Civilization through Intermittency of Climatic Factors," by J. R. Smith.

"The National Forest Policy," by H. A. Smith.

"Some Results of the Recent Census in Cuba," by H. Gannett.

"The Anthropography of Some Great Cities," by Mark Jefferson.

"The Capacity of the United States for Population," by A. P. Brigham.

"Geographical and other Influences affecting

the Pottery Industry of Trenton, N. J.," by R. H. Whitbeck.

"Geographical Influences in the Development of Ohio," by F. Carney.

"Trade Routes in the Economic Geography of Bolivia," by I. Bowman.

"The Influence of the Precious Metals on American Exploration, Discovery, Conquest and Possession," by G. D. Hubbard.

"The Stream Robbery on which the Bell Fourche Reclamation Project is Based," by N. H. Darton.

"A Remarkable Glacial River and its Modern Representative," by F. Taylor.

"Delta Form and Structure of the Thames River Terraces, Connecticut," by F. P. Gulliver.

"The Requisites of a School Wall Map," by J. P. Goode.

A. P. BRIGHAM,
Secretary

THE SOCIETY FOR HORTICULTURAL SCIENCE

At a business meeting of the society held in Baltimore, December 31, 1908, several important questions were discussed. The committee appointed at the Jamestown meeting to interview the Secretary of Agriculture with reference to having the annual reports of the society published by the Department of Agriculture reported that they had interviewed Dr. B. T. Galloway, who represented the Secretary of Agriculture in this matter, and that it was almost certain that the department would publish the reports, provided the following amendments were adopted by the society:

"That the association shall be known as the American Association of Official Horticulturists, the object of which is to promote the science of horticulture, and that any person connected with a state or federal experiment station or with the U. S. Department of Agriculture or its territorial stations, or with any other institution in the United States or Canada, who is engaged in the teaching of horticulture, or in experiments bearing upon it, may become a member of the association and shall be entitled to vote on the conditions which are embodied in the present constitution. Furthermore, that all horticulturists in the United States and in Canada, or in any other country engaged in the teaching or investigation of horticulture, may become associate members of the association under the same conditions that govern the admission of members and shall have all the privileges of members except the right to vote and hold office."

These amendments were discussed and were satisfactory to the members present, but the amendments could not be adopted, since the by-laws require that amendments presented at one meeting can not be adopted before the next annual meeting.

It was the sentiment of the society to affiliate with the National Association for the Advancement of Agricultural Science when the organization of the latter society was sufficiently advanced to make this possible and desirable.

The society voted to fix a price of one dollar per copy for its annual reports to new members and to educational institutions, and a price of two dollars per copy to non-members.

The officers and members of committees for 1908 were reelected for 1909.

C. P. CLOSE,
Secretary-treasurer

SOCIETIES AND ACADEMIES

THE KANSAS ACADEMY OF SCIENCE

THE forty-first annual meeting of the academy was held in Topeka during holiday week, and was of unusual interest both in the quality and number of papers presented for discussion. The retiring president, E. Haworth, chose for the subject of his address "The Life History of a River," and discussed the cause of floods, and the means of controlling these destructive agencies. A. J. Smith told how the city of Emporia is securing a good water supply from the underflow of the Neosho river. The pure food and drugs law called forth several important papers from Professors Bailey, Sayre, Willard, Ziefle and Jackson. The biologists reported additions made in the past year to the lists of birds, mammals and insects. Professor Dyche contributed important notes of his experience in preserving the skins of mammals. Dr. Williston sent a paper on the "Skull Structure of *Diplocaulus*" with restoration, and C. H. Sternberg, the enthusiastic fossil hunter, gave an account of his last summer's finds in the Laramie beds of Wyoming.

One evening was given to memorial exercises in honor of the late Dr. Francis Huntington Snow, one of the founders of this academy, and for more than forty years connected with the University of Kansas, where he held the office of chancellor for twelve years. One of his earliest colleagues, Professor E. Miller, gave a memorial address, and other members spoke of him as a collector, teacher and contributor to scientific discovery. Another evening session, held in Washburn College, was in

part a social occasion, and was otherwise made interesting by Professor Edmondson giving some excellent stereopticon views illustrating an account of his last summer's trip to Tahiti. Professor Parker gave some fine specimens of bird photography, and Professor Sternberg exhibited some good views of the Laramie beds of Wyoming.

The officers elected for the ensuing year were as follows:

President—F. B. Dains, Topeka.

First Vice-president—J. M. McWharf, Ottawa.

Second Vice-president—A. J. Smith, Emporia.

Treasurer—F. W. Bushong, Lawrence.

Secretary—J. T. Lovewell, Topeka.

Ottawa was selected as place for the next annual meeting.

The following papers were presented:

Papers, illustrated by stereopticon:

"Some Glimpses of Tahiti," by C. F. Edmondson.

"Notes on Photography of Wild Birds," by J. B. Parker.

Chemical and Physical Papers

"Resins in Vanilla Extract," by H. L. Jackson.

"An Examination of Apparatus for a Simple Determination of Carbon Dioxid in Air," by E. H. S. Bailey.

"Sulphites as Preservatives," by Edith A. Goodwin and E. H. S. Bailey.

"The Character of the Mid-continent Petroleum," by F. W. Bushong.

"Fluctuations in the Mineral Contents of the Kaw River," by F. W. Bushong and A. J. Weith.

"The Importance of Pharmacological Methods in Drug Assay," by Adolph Ziefle.

"Suggested Legislation in Regard to the Selling of Cocaine," by H. W. Emerson.

"Enameling Steel," by R. D. Landrum.

"The Relation of Manganese to the Corrosion of Iron," by H. P. Cady.

"Progress of Work in Drug Analysis under Pure Food and Drugs Law," by L. E. Sayre.

"Comments on Analysis of Spices," by L. E. Sayre.

"Study of the Cause of Coal-mine Explosions," by E. Haworth and C. M. Young.

"The Medullary Ray as an Element of Strength in Structural Timber," by F. E. Jones.

"On some Methylene Derivatives," by F. B. Dains.

"Recent Investigations of the Properties of Steam," by P. F. Walker.

"Pelton Water-wheel Test made at the University of Wisconsin in the Summer of 1908," by Chas. I. Corp.