

*Weather conditions at total eclipses of the sun predictable; also notes on the corona:* JOHN H. WAYMAN.

*Geographic origin and distribution of the increase of negro population in Pennsylvania:* DEAN DUTCHER.

*Problems concerning the formation of calcareous concretions in streams:* H. JUSTIN RODDY.

*An unusual case of limestone decomposition:* BENJ. L. MILLER.

*The energy of high velocity electrons and the variation of their mass with speed:* MARSH W. WHITE and W. R. HAM.

*Finance and statistic courses administered by the departments of mathematics of Pennsylvania colleges and universities:* H. S. EVERETT.

*A study of helicoids and helices by vectors:* JOSEPH B. REYNOLDS.

*Fossil ivory:* R. W. STONE.

*Observations on peach yellows:* W. A. McCUBBIN and F. L. HOLDRIDGE.

*Aphids in the transmission of raspberry mosaic:* FLOYD F. SMITH.

*The esthetic value of Pennsylvania game birds:* GEO. M. SMITH.

*A new field of educational research; A possible effect and determination of the earth's rotation; The extent of the Ortho and Parhelium schemes:* RICHARD HAVNER.

At the business session a permanent constitution was adopted and the following officers were elected: *President*, B. L. Miller, Lehigh University; *Vice-president*, H. D. Fish, University of Pittsburgh; *Secretary*, T. L. Guyton, State Department of Agriculture; *Assistant Secretary*, F. L. Maxfield, State Department of Education; *Treasurer*, F. D. Kern, Penna. State College; *Editor*, Geo. H. Ashley, State Department of Forest and Waters; *Executive Committee*: N. H. Stewart, Bucknell University; S. H. Derickson, Lebanon Valley College.

T. L. GUYTON,  
*Secretary.*

HARRISBURG, PA.

## UTAH ACADEMY OF SCIENCES

THE eighteenth annual meeting of the Utah Academy of Sciences was held at the University of Utah, April 3 and 4, 1925.

The following officers were elected: *President*, Professor Harold R. Hagan, University of Utah, Salt Lake City; *first vice-president*, Dr. Thomas L. Martin, Brigham Young University, Provo; *second vice-president*, Mr. R. A. Hart, drainage engineer, Salt Lake City; *council*, Dr. Willard Gardner, Utah Agricultural College, Logan; Dr. Bert L. Richards, Utah Agricultural College, Logan; Mr. J. Cecil Alter, U. S. Weather Bureau, Salt Lake City; *permanent secretary*, Mr. C. Arthur Smith, East High School, Salt Lake City.

Dr. Murray O. Hayes, geologist, and Professor Clawson Y. Cannon, of the Brigham Young University, were elected fellows of the academy.

There was a material increase in the membership of the academy by the addition of a number of new members; however, this was offset by the loss of other members due to removal from the state and other causes. The removals are: Dr. W. E. Carroll, Utah Agricultural College, becomes professor of animal husbandry at the University of Illinois; Mr. D. A. Shoemaker, of the U. S. Forest Service, transferred to Washington, D. C.; J. G. Olsen, assistant state bacteriologist and professor of bacteriology at the University of Utah, becomes professor of bacteriology at the University of Illinois; M. M. Justin, U. S. Bureau of Crop Estimates, transferred to a similar position in Indianapolis, Indiana.

The program was of unusual strength and interest and consisted of the following papers:

*President's address.*

*Structural relief in the Wasatch faulting system:* WILLIAM PETERSON.

*Flood and gravel control works:* L. M. WINSOR.

*Educational fundamentals:* H. T. PLUMB.<sup>1</sup>

*Harvesting losses:* AARON F. BRACKEN.

*Protein requirements for dairy cows:* C. Y. CANNON.

*Watershed protection in Utah:* F. S. BAKER.

*The leaching of heavy saline soil:* KARL HARRIS.

*Secular trend in precipitation data:* WILLARD GARDNER.

*The effect of heat treatment of milks on their curd characteristics:* R. L. HILL.

*Scientific discoveries regarding the thyroid gland:* HEBER J. SEARS.

*Thirteen-year-old worms in the human body:* NEWTON MILLER.

*The iron, chlorine and sulphur content of grains, and the influence of irrigation water upon the same:* J. E. GREAVES.

*Some social and economic phases in the village of Escalante in Utah:* LAWREY NELSON.

*The efficiency of the Brighton snow survey:* J. CECIL ALTER.

*Glaciation on the west side of Mt. Timpanogos:* MURRAY O. HAYES.

*The nature of the forces causing the rise of water in plants:* LEON B. LINFORD.

*The vapor pressure of soil as influenced by soil structure:* M. D. THOMAS.

*Some experiments on flotation:* J. F. GATES and L. K. JACOBSON.

*Anomalous behavior of sodium sulfite on being oxidized with free oxygen:* C. E. MAW.

C. ARTHUR SMITH,  
*Secretary*

<sup>1</sup> Mr. Plumb was the invited guest at the convention and his address was a leading feature of the program.