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THE AMERICAN MICROSCOPICAL SOCIETY.

THE twenty-fourth annual meeting of the Society was held in Denver, August 29 to 31. As anticipated, the attendance was not large, yet the strong series of papers presented and the completion of the Spencer-Tolles Fund make the occasion a noteworthy one. At the business session on Thursday there were read reports of the secretary, treasurer and custodian on the condition of the Society, and the usual committees were appointed. Some minor changes in the by-laws of the Society were recommended and subsequently adopted. The report of the Committee on the Spencer-Tolles Fund showed that it had finally been brought to the limit of \$1,200, set at the New York meeting, and recommended that a specific sum be set aside yearly from the income for the encouragement of such definite research of a microscopical character as shall be approved. The committee reported \$50 available for use in the current year, and the final apportionment of the amount was left to the Executive Committee.

The meeting on Thursday evening was

in charge of the Colorado Microscopical Society. After an address of welcome by the president of that organization, Dr. A. M. Holmes, and a response by the retiring president of the American Microscopical Society, Dr. A. M. Bleile, the annual address was read by the incoming president, Dr. C. H. Eigenmann, on 'The Solution of the Eel Question.' The paper was illustrated by both charts and lantern slides and proved of great interest. At the close a most pleasant informal reception was tendered the visiting society and guests by the Colorado organization, to whom most cordial thanks are due for many hospitalities.

The following papers were among those presented at the general sessions of the Society:

'The Early Morphogenesis and Histogenesis of the Liver in the Pig': D. C. HILTON, Chicago, Ill.

'The Histology of the Stigmata and Stomata in the Peritoneum': A. E. HERTZLER, Halstead, Kas.

'A Rearrangement of the Families and Genera of the Conjugatæ': C. E. BESSEY, Lincoln, Neb.

'A New Species of *Crinothrix* (*C. manganifera*)': D. D. JACKSON, New York City.

'The Amount of Dissolved Oxygen and Carbonic Acid in Natural Waters and the Effect of these Gases on the Occurrence of the Microorganism': G. C. WHIPPLE and H. N. PARKER, New York City.

'Notes on Colorado Protozoa, with Description of New Species': A. E. BEARDSLEY, Greeley, Col.

'Notes on Colorado Entomostraca': A. E. BEARDSLEY, Greeley, Col.

'A Review of the American Species of *Cochleophorus* and *Curvipes*': R. H. WOLCOTT, Lincoln, Nebr.

'An Apparently New *Hydra* from Montana': M. J. ELROD, Missoula, Mont.

'Some Histological Features of *Echinorhynchi*' (Illustrated): H. W. GRAYBILL, Lincoln, Neb.

'The Debt of American Microscopy to Spencer and Tolles': W. C. KRAUSS, Buffalo, N. Y.

'Mounting Soft Tissues for Microscopical Examination': M. A. D. JONES, New York City.

'Modification of Some Standard Laboratory Apparatus': S. H. GAGE, Ithaca, N. Y.

'Laboratory Photographic Apparatus': S. H. GAGE, Ithaca, N. Y.

'The Plankton of Lake Maxinkuckee, Ind.': CHAUNCEY JUDAY.

The following officers were elected for the year 1901-02 :

President, Dr. Charles E. Bessey, University of Nebraska, Lincoln, Nebr.

First Vice-President, Dr. E. A. Birge, University of Wisconsin, Madison, Wis.

Second Vice-President, Mr. John Aspinwall, New York City.

Elective Members of the Executive Committee, Dr. A. M. Holmes, Denver, Col.; Dr. V. A. Latham, Chicago, Ill.; Mr. G. C. Whipple, New York.

Secretary, Dr. Henry B. Ward, University of Nebraska, Lincoln, Nebr.

Treasurer, Mr. J. C. Smith, New Orleans, Louisiana.

Custodian, Mr. Magnus Pfaum, Pittsburg, Pa.

Resolutions of regret at the death of ex-President E. W. Claypole, the sad news of which came to the Society as it was in session, were read and ordered spread upon the minutes of the Society.

HENRY B. WARD,
Secretary.

*TOTAL ECLIPSE OF THE SUN.**

AMONG the unsolved problems for the twentieth century are many relating to the central luminary of our system. Many points of scientific interest to students of solar phenomena are still to be discovered, and it is true that when we come to consider what we do not know about the sun, we are rather startled to find our knowledge about the heavenly body which has most interest to us human beings so incomplete. The distance is not known to the accuracy which we wish it, and very little is known of the laws of motion at the surface of the sun or the manner in which light and heat are sent out. The spectroscope tells us what metals are present at the surface of the sun, but, as yet, it has not decided the question of the extent of the different gases, nor the position of the 'reversing layer.' In fact, the very existence of the 'reversing layer' has been disputed. The most beautiful of all natural

phenomena, the corona, is to us an unsolved mystery. Much time has been spent delineating its form, and in late years some connection has been established between the form of the corona and the sun-spot period; but what is the meaning of this connection? and in turn, what is the relation between sun spots and terrestrial magnetism? The spectroscope tells us that 'coronium' forms a constituent of the corona, but what is 'coronium'?

These and many other points are still to be solved by astronomers and physicists. Their solution depends almost entirely on the observations, on the average, of only a few minutes each year, for it is only when the sun is eclipsed that most of these problems can be investigated.

The United States government recognized the importance of these inquiries, and through Congress appropriated money to equip and send out an expedition to observe the eclipse of the sun visible in the island of Sumatra in the East Indies, on May 18, 1901.

This expedition consisted of thirteen, a number which would have caused terror to enter the hearts of people less sensible than astronomers. This is the largest party, we believe, ever sent out by any government for such a purpose.

The thirteen were made up of two separate parties, two members, Professor C. G. Abbot and his assistant, Mr. Draper, representing the Smithsonian Institution, and eleven the Naval Observatory. Six belonged to the staff of the observatory, and consisted of Professor A. N. Skinner, U. S. N.; Professor W. S. Eichelberger, U. S. N.; Professor F. B. Littell, U. S. N.; Mr. L. E. Jewell, Mr. W. W. Dinwiddie and Mr. G. H. Peters. The remainder of the party was made up of Professor E. E. Barnard, Yerkes Observatory; Dr. W. J. Humphreys and Mr. H. D. Curtis, of the University of Virginia; Dr. N. E. Gilbert, of Hobart College, and the writer.

* Read before the New York Academy of Sciences, November 4, 1901.