It is planned to continue the observation of the symptoms and effects of mosaics on the Daturas, with special reference to alkaloidal yield. Inasmuch as a somewhat similar disease has been noted here on *Hyoscyamus niger,* this species also will be subjected to similar investigations if the disease reappears.

E. E. STANFORD
E. D. DAVY
WESTERN RESERVE UNIVERSITY

THE OPTICAL SOCIETY OF AMERICA

THE eighth annual meeting of the Optical Society of America, Dr. L. T. Troland, president, was held at Cleveland, Ohio, Thursday, Friday and Saturday, October 25–27, 1923. Hotel headquarters were at the Hotel Cleveland. All sessions for the reading of papers were held in the Physics Building, Case School of Applied Science.

The meeting was held under the auspices of the following local committee in Cleveland:

Representing the National Lamp Works: Dr. W. E. Forsythe, *chairman;* Mr. L. C. Kent, Mr. C. D. Spencer, Mr. M. Luckiesh, Mr. A. H. Taylor, Dr. A. G. Worthing.

Representing Case School of Applied Science: Professor D. C. Miller.

Representing Western Reserve University: Professor H. W. Mountcastle.

Representing Warner and Swasey: Mr. Warner Seely.

In concluding its sessions the society tendered a most hearty vote of thanks to this committee as well as to the National Lamp Works, Case School of Applied Science, Western Reserve University, Warner and Swasey and the Cleveland Museum of Art for their efforts which resulted in a meeting generally admitted to be the most notable and successful in the history of the society.

About 50 persons attending the convention registered and obtained rooms at the Hotel Cleveland. The *registered* attendance at Case School was 78, of which 57 were from outside of Cleveland. The *actual* attendance was undoubtedly much greater than this. The number present at the sessions varied from about 50 to over 250.

SPECIAL FEATURES OF THE MEETING

The address of the retiring president, Dr. L. T. Troland, October 26, was on "The optics of the nervous system."

Other notable features of the meeting deserve special mention.

(1) Professor A. A. Michelson's paper on "The limit of accuracy in optical measurement" contributed by invitation on October 26: In introducing Professor Michelson, Professor D. C. Miller of Case School recalled in a very happy manner Professor Michelson's early connection with the department of physics at Case, mentioning his work on the velocity of light, the interferometer and the renowned experiment on "ether drift." He also exhibited as mementos of this early work parts of Professor Michelson's original apparatus. Before proceeding with his paper, Professor Michelson also recounted a number of interesting reminiscences of his first measurements of the velocity of light and the development of the interferometer. Over 250 persons heard Professor Michelson speak.

(2) Papers contributed by invitation by Professor E. L. Nichols as follows on October 26: "The spectral structure of the kathodoluminescence of metals in solid solution," by T. Tanaka; "On the spectra of incandescent oxides," by E. L. Nichols and L. J. Boardman.

(3) Visits to the Cleveland Museum of Art: The Cleveland Museum of Art is located in Wade Park only a short distance from Case School. On October 25, the director of the museum, Mr. Frederic Allen Whiting, addressed the meeting by invitation, and explained the work of the museum in a most interesting manner, dwelling particularly on "The optical problems of an art museum." He extended to all members and guests of the society a most cordial invitation to visit the museum. Many availed themselves of this opportunity to visit a museum which is notable and exceptional in many respects, and these visits contributed greatly to the pleasure and profit of attendance at the meeting.

(4) Visit to Nela Park: On the afternoon and evening of October 25th, members of the society were guests of the National Lamp Works at Nela Park. Parties were conducted through the Research Laboratories, the Laboratory of Applied Science and lamp factories and were given exceptional opportunities to observe the actual manufacture of lamp bulbs and lamps. In the evening a complimentary dinner given to the society by the National Lamp Works was followed by a symposium on light and lighting by Professor E. F. Nichols, Mr. Ward Harrison and Mr. M. Luckiesh and a beautiful experimental demonstration of the projection of mobile color patterns by Messrs. M. Luckiesh and A. H. Taylor, of the Nela Laboratory of Applied Science.

(5) Visit to Warner and Swasey: On October 27, the society visited the plant of Warner and Swasey, which is renowned for the construction of the largest astronomical telescope mountings in the world. Members were personally greeted by Mr. Swasey, who showed many objects of interest in his office. The mounting for the giant reflector which is just being completed for the Ohio Wesleyan University was on

exhibit on the floor of the shop and attracted great interest. The circular dividing engine and various pieces of optical interest made in the shop were also exhibited.

(6) Inspection of the laboratories of physics at Case School of Applied Science: On Thursday morning, Professor Miller welcomed the society and mentioned the principal apparatus of especial interest in the Case Physical Laboratories. During recesses of the meeting, many members visited the laboratories and inspected the instruments and apparatus.

(7) Society dinner: The annual dinner, held in the Rose Room of the Hotel Cleveland, on the evening of October 26th was a most enjoyable occasion. President Troland was toastmaster and the following speakers responded: Mr. Charles Brush, Professor A. A. Michelson, Professor D. C. Miller, Professor H. W. Mountcastle, Professor A. D. Cole, Professor Frank Allen, Professor C. A. Skinner, Dr. Hermann Kellner, Dr. Herbert E. Ives.

BUSINESS

The business meeting was held on October 25th.

The results of the election of officers for 1924–25 were declared by the president as follows: *President,* Herbert E. Ives; *vice-president,* W. E. Forsythe; *members of the executive council,* K. T. Compton, Theodore Lyman, P. G. Nutting, Fred E. Wright.

Informal reports of the secretary, the treasurer, the assistant editor and business manager, and the committee on preparing and publishing an English translation of Helmholtz's "Physiologic Optics" were accepted, it being understood that formal reports would be published later at suitable dates.

Brief oral reports of the following progress committees were presented and accepted: Colorimetry, E. A. Weaver, *chairman* (Report presented by Dr. Troland); Pyrometry, C. O. Fairchild, *chairman;* Refractometry, I. C. Gardner, *chairman*; Spectrophotometry, K. S. Gibson, *chairman*; Visual Sensitometry, H. M. Johnson, *chairman.*

PAPERS COMMUNICATED TO THE MEETING

The following is a list of papers contributed to the meeting in addition to papers mentioned specifically above:

The measurement of transmission in optical instruments: G. W. MOFFITT and PAUL B. TAYLOR.

Continuous motion to the dividing engine carriage: WILMER SOUDER.

The "contrast" of developing-out papers: LLOYD A. JONES.

Color correction in image formation: T. TOWNSEND SMITH.

Theory of the optical lever and a new optical lever system: L. B. TUCKERMAN.

Aspherical lens systems: LUDWIK SILBERSTEIN.

Optical collineation, independent of metrics: LUDWIK SILBERSTEIN.

The brightness of the black body at the melting point of platinum: HERBERT E. IVES.

On the verification of the principle of reflex visual sensations: M. S. HOLLENBERG.

On reflex visual sensations and color contrast: FRANK ALLEN.

Color and luminosity: WILLIAM MAYO VENABLE.

Apparatus for the determination of color in terms of dominant wave-length, purity and brightness: IRWIN G. PRIEST.

A comparison of experimental values of dominant wave-length and purity with their values computed from the spectral distribution of the stimulus: IRWIN G. PRIEST, K. S. GIBSON and A. E. O. MUNSELL.

Some tests of the precision and reliability of measurements of spectral transmission by the Koenig-Martens spectrophotometer: IRWIN G. PRIEST, H. J. MCNICHOLAS and M. KATHERINE FREHAFER.

A rational CGS system of photometric units: ENOCH KARRER.

Distortion of photographic film: F. E. ROSS.

Some thermoelectrical properties of molybdenite: W. W. COBLENTZ.

Inner quantum numbers for the neutral helium atom: ARTHUR E. RUARK, PAUL D. FOOTE and F. L. MOHLER.

Regularities in the arc spectrum of iron: F. M. WALTERS, Jr.

The relation between the total thermal emissive power of a metal and its electrical resistivity: C. DAVISSON and J. R. WEEKS.

The effect of heat on the figure of mirrors: EDISON PETTIT.

A thalofide cell pyrometer: RODERICK B. JONES and ARTHUR C. HARDY.

An improved metallurgical microscope: L. V. FOSTER.

A new comparison prism for colorimeters of the Duboscq type: HERMANN KELLNER.

An apparatus for testing strain in glass slabs and finished prisms: HERMANN KELLNER.

A monochromator for mercury light: HERMANN KELLNER.

Camera lenses of large relative aperture for stellar spectrographs: G. W. MOFFITT.

A prism for small broken telescopes: G. W. MOFFITT.

Speed, constancy and accuracy of response to visual stimuli as related to the distribution of brightness: H. M. JOHNSON.

A variable sectored disk without gears and read directly without any auxiliary optical or electrical device: ENOCH KARRER.

The complete proceedings of the meeting including abstracts of the above papers, will appear in the *Journal of the Optical Society of America and Review of Scientific Instruments.*

IRWIN G. PRIEST,
Secretary