

a series of axial sections representing the general structure of the eye in thirty-one species of animals, comprising two crustacea, the squid, three fish, two batrachians, two reptiles, ten birds and eleven animals.

Prof. F. E. Nipher gave an account of the Geissler and Crookes tubes and the radiant phenomena exhibited by each when used in connection with a high tension electrical current of rapid alternation, and detailed the recent discoveries of Prof. Röntgen, showing that certain of the rays so generated are capable of affecting the sensitized photographic plate through objects opaque to luminous rays. Attention was also called to the experiments of Herz and Lodge with discharges of very high tension alternating currents which showed that by the latter certain invisible rays are produced, which like the Röntgen rays, are capable of passing through opaque bodies, such as pitch, but differing in their refrangibility by such media.

One person was elected to active membership.

WILLIAM TRELEASE,
Recording Secretary.

THE WOMAN'S ANTHROPOLOGICAL SOCIETY.

The Woman's Anthropological Society, which under the presidency of Miss Alice C. Fletcher, has greatly enlarged its scope and membership, held its 138th meeting February 1st. After the usual business, the session was given over to Miss A. Tolman Smith, director of the section of psychology.

The paper of the day was by Miss Theodate L. Smith, of Clark University, subject 'The Motor Element in Memory.' The paper described in detail a series of laboratory experiments made by the writer with a view to determine the quantitative value of the motor element in the total act of memory.

Discussion of the subject was deferred to a subsequent meeting, and the remaining time was given to the problem of emotional expression which has occupied the attention of the section for several months. Brief letters were read from Profs. Melville Bell and David Bell, also from the directors of dramatic expression in leading universities of this country, setting forth their views as to the relation between the psychic and the physical agitations that make

up the emotional state. The subject was illustrated from the standpoint of dramatic art by Mrs. J. M. D. Lander, who drew a most subtle and vivid picture of 'dual personality' in the consciousness of the actor.

Miss Wescott, principal of the Western High School, closed the discussion with a summary of tests of emotional disturbance applied by means of the Kymographion under the direction of Dr. Arthur MacDonald.

From a series of graphic records showing the effects of various emotional and mental states upon the breathing, two were selected as typical, one of the nervous, the other of the lymphatic temperament. It was interesting to note that, while in the latter the registration of emotional disturbance was relatively less than in the former case, yet there was the indisputable record of such disturbance in spite of the subject's unconsciousness of the effects. Two inferences seemed justified by the series of experiments: first, that one breathes less during any effort at concentration and under a depressing emotion; second, that one breathes more under the exhilarating influences of pleasure or amusement. Two questions were suggested as the practical outcome of the experiments: First, if the tendency of education is toward repression and self-control, is it not important to supplement courses of study by exercises that foster spontaneity; second, if the child actually breathes less under close application to study, to what degree is our physical culture work correcting this deficiency?

A. CARMAN,
Secretary.

NEW BOOKS.

James Clerk Maxwell and Modern Physics. R. T. GLAZEBROOK. New York, Macmillan & Co. 1896. Pp. vi+224. \$1.25.

Vegetable Culture. ALEXANDER DEAN. London and New York, Macmillan & Co. 1896. Pp. vi+132. 35 cents.

Exercises in Physical Measurement. LOUIS W. AUSTIN, CHARLES B. THWING. Boston, Allyn & Bacon. 1896. Pp. x+198. \$1.50.

The Whence and the Whither of Man. JOHN W. TYLER. New York, Charles Scribner's Sons. 1896. Pp. xv+312. \$1.75.