

Mr. Ashmead read a paper entitled 'Rhopalosomidae, a New Family of Fossorial Wasps.' Mr. Ashmead founds this new family upon *Rhopalosoma poeyi*, a Cuban species described by Cresson, specimens of which have recently turned up in different parts of the United States. Much discussion exists in the literature as to the proper systematic position of this insect, Westwood, Frederick Smith, Cresson, Haliday and Nylander having assigned it variously to the Ichneumonidae, Braconidae, Poneridae, Sphegidae and Vespidae. Mr. Ashmead's studies led him to place the species as the type of a new family of fossorial wasps, which will form a link between the Vespidae and Sapygidae. Discussed by Messrs. Marlatt, Schwarz, Gill and Uhler, mainly in regard to the fact that the insect seems to lack a fossorial facies.

L. O. HOWARD,
Secretary.

NEW YORK ACADEMY OF SCIENCES.

THE Academy met on October 14 with Professor R. S. Woodward, chairman of the Section of Astronomy and Physics, in the chair. 22 persons were present. The secretary presented verbally the minutes of the preceding meeting.

There being no business, the Section of Astronomy and Physics immediately organized, and listened to the first paper of the evening by Professor Harold Jacoby, entitled 'The Reduction of Astro Photographic Plates.' This paper was read by title, and was explained as being a discussion of the best formulæ for the reduction of the photographic plates taken by the International Committee for the Photographic Mapping of the heavens. It will be published as a bulletin of the Committee at Paris. Professor Jacoby then showed some lantern views of apparatus and astrophotographic plates taken at the observatory at the Cape of Good Hope.

The second paper was read by R. S. Woodward: 'Results of Experiments on Metallic Spheres Falling in Water.' Professor Woodward, after detailing various attempts to obtain data upon the law governing the motion of spheres in a liquid, reported the results of a preliminary series of experiments, made at Co-

lumbia College last June. The experiments were performed by dropping spheres of steel, silver, aluminum and platinum in a tube of water sixteen feet long and one foot in diameter. The spheres vary in diameter from one-half inch to two inches. The interesting results of these preliminary tests are that all the spheres acquired a constant velocity inside of the first meter. Newton's law that resistance to motion is proportional to the square of the velocity seemed to be verified. The times of falling were determined with a Hipp chronoscope. More elaborate experiments with the same apparatus will be made later. This paper was discussed by Professor Jacoby and others. W. Hallock reported upon some summer work, explaining the action of the vocal cords in voice production, and described the photographs taken of the cords while in action, illustrative of their operation.

The Academy then adjourned.

WM. HALLOCK,
Secretary of Section.

NEW BOOKS.

An Introduction to General Biology. WILLIAM T. SEDGWICK and EDMUND B. WILSON. 2d Edition. New York, Henry Holt & Co. 1895. Pp. xii+231.

Darwin and After Darwin. II. Post-Darwinian Questions Heredity and Utility. GEORGE JOHN ROMANES. Chicago, Open Court Publishing Co. 1895. Pp. x+344. \$1.50.

Weather and Disease. A Curve History of their Variations in Recent Years. ALEX. B. MACDOWALL. London, The Graphotone Co. 1895. Pp. 82.

Chemical Experiments, Prepared to Accompany Remsen's 'Introduction to the Study of Chemistry.' IRA REMSEN and WYATT W. RANDALL. New York, Henry Holt & Co. 1895. Pp. x+156.

An Atlas of the Fertilization and Karyokinesis of the Ovum. EDMUND B. WILSON and EDWARD LEAMING. New York, Columbia University Press, Macmillan & Co. 1895. 4to. Pp. vi+32. \$4.00.