

the theories which have been advanced to account for them, with the difficulties which are encountered by them. The variations in the barometric pressure as given by the observations were redistributed relatively to the magnetic poles, the components taken, and compared with the deflecting magnetic forces which cause the daily variation of the needle. It was shown that both systems have a belt of transition near latitude 60°, and a displacement of phase by six hours in the polar regions. Other similar features were indicated, suggesting some mutual dependence between these systems.

A second comparison of these deflecting forces with the diurnal components of wind velocities in middle latitudes exhibited a remarkable agreement in their directions and their turning points. Some statement was made regarding the causes of this phenomenon.

E. D. PRESTON,  
*Secretary.*

#### BOSTON SOCIETY OF NATURAL HISTORY.

THE Society met November 16th, with eighty-five persons present.

Professor W. Z. Ripley spoke of the racial characteristics of the Jews. The Jews and the Gypsies, alone of European races, preserve their individuality without territory. The numbers, distribution and origin of the European Jews were given in detail; in Europe they are widely and unevenly scattered; probably one half are to be found in Poland and southwestern Russia. For America, though official data are wanting, there are probably one million. The small size of the Jews is marked and is due to hostile legislation, starvation, oppression and environment. The Jews are essentially a town people, and town life tends to depress stature. The inheritance of their short stature is still questioned. Their chest development is small, but in spite of physical degeneracy statistics show that the Jews live twice as long as Christians. The head variation of European races was noted; in the Jews the head form is not persistent and does not indicate purity. The facial characteristics, form of nose, color of hair and eyes of the Jews were described, and the geographical distribution of the race in Europe, their average stature in European countries

and the types of head form were illustrated by lantern views.

SAMUEL HENSHAW,  
*Secretary.*

#### NEW YORK ACADEMY OF SCIENCES—SECTION OF ASTRONOMY AND PHYSICS.

At the regular monthly meeting of the Section of Astronomy and Physics, held December 5, 1898, Mr. Wallace Goold Levison presented a paper on 'A Classification of the Phosphorescent and Fluorescent Substances,' in which he grouped under the former head all those that give out shorter radiations than they receive, while under the latter he placed those that give out longer radiations than they receive. Each heading was then amplified by sub-headings referring to the manner or circumstances in which a substance phosphoresces or fluoresces.

For instance:

Phosphorescent	Thermo-	Heated or cooled.
	Electro-	{ Statically electrified. Exposed to X-rays.
	Lumino-	
	Tribo-	{ Rubbed. Compressed. Hammered.
	etc.	

In the same way the fluorescent substances were subdivided.

Mr. Levison showed his system by means of lantern slides of tables or charts on which the substances were arranged as above. He exhibited a large number of slides, and received the congratulations of the members present for the painstaking labor that he had spent upon the subject, as well as for the logical arrangement of the same.

R. GORDON,  
*Secretary of Section.*

#### NEW BOOKS.

*Studien über Säugethiere.* MAX WEBER. Jena, Gustav Fischer. 1898. 2d Part. Pp. v+152. 12 Marks.

*Physical Geography.* WILLIAM MORRIS DAVIS, assisted by WILLIAM HENRY SNYDER. Boston and London, Ginn & Co. 1898. Pp. xvii+428.

*Degeneracy: Its Causes, Signs and Results.* EUGENE S. TALBOT. New York, Charles Scribner's Sons; London, Walter Scott, Ltd. 1898. Pp. xvi+372. \$1.50.