Recent Proceedings of Societies.

Academy of natural sciences, Philadelphia.

Nov. 24. — Dr. George A. Koenig reported that he had examined the East Side railway cutting described last week by Mr. Aubrey H. Smith. He had determined, he said, a section agreeing quite closely with that described by Mr. Smith. The extent and succession of the several layers of sand and clay were noted in detail, together with the results of a partial lithological and chemical examination of the blue clay. In the latter a large number of diatoms, probably Pinularia viridis, had been found, thus increasing the probability that this portion of the cutting is of tertiary age. —— Professor Heilprin called attention to a fossil shell from the mouth of the Manatee River, Florida. It belongs to the genus Conorbis, which is restricted to the eocene and oligocene formations. No species of this genus heretofore known exceeds two and a half inches in longitudinal diameter, but the specimen now exhibited is six inches long. The other characters distinguishing it from its nearest ally are also well marked, and the specific name 'princeps' was proposed for it. The specimen was collected from the lowest point in Florida from which fossils have as yet been received, indicating the oligocene formation, which, however, probably extends to the extremity of the peninsula. —— A specimen of so-called coral rock from Eutaw Springs was exhibited to illustrate the fact that there was no trace of coral in it, the peculiar appearance on which the name is founded being probably due to the presence of Polyzoa. —— Attention was called to a specimen received from Miss Walters, illustrating a singular arrangement, in the form of a horn, of the particles of metal thrown off in sawing railroad irons. —— Dr. George H. Horn described a new form of beetle of special interest to entomologists. The specimen, which was collected in the Colorado desert by Mr. Wright, is two inches long, and therefore fully three times the size of its nearest ally. The species is a voracious wood-borer and entirely blind, being the largest species of blind beetle at present known. It belongs to the genus Dinapate, allied to Bostrychus, and differs from all known members of the family to which it belongs, in the possession of dentate tibiae. The specific name Wrightii was proposed for the form. —— Remarks on the peculiarities of the Florida coast, and on the distribution of geological formations on the peninsula, were made by Mr. Joseph Willcox and Professor Heilprin.

Royal meteorological society, London.

Nov. 18. — William Marriott read a paper on the helm-wind of Aug. 19, 1885. This wind is peculiar to the Cross Fell range, Cumberland, and is quite local, but very destructive. The chief features of the phenomenon are the following: On certain occasions, when the wind is from some easterly point, the helm suddenly forms. At first a heavy bank of cloud rests along the Cross Fell range, — at times reaching some distance down the western slopes, and at others hovering about the summit, — then, at a distance of one or two miles from the foot of the fell, there appears a roll of cloud suspended in mid-air, and parallel with the helm-cloud; this is the helm-'bar.' A cold wind rushes down the sides of the fell, and blows violently till it reaches a spot nearly underneath the helm-bar, where it suddenly ceases. The space between the helm-cloud and the bar is usually quite clear, blue sky being visible; at times, however, small portions of thin vaporous clouds are seen travelling from the helm-cloud to the bar. The bar does not appear to extend farther west than the river Eden. The author visited the district in August last, and was fortunate enough to witness a slight helm. He gives a detailed account of what he experienced, and also his observations on the temperature at the summit and base of Cross Fell, the direction and force of the wind, the movement of the clouds, etc. —— Mr. Henry Harries showed by means of daily charts that a typhoon, which originated near the Philippine Islands on Sept. 27, passed over Japan and the Aleutian Archipelago, entering the United States on Oct. 10. Crossing the Rocky Mountain range, it proceeded through the northern states and Canada to Labrador and Davis Strait. In the Atlantic it was joined on the 18th by another disturbance, which had come up from the Atlantic tropics, the junction of the two being followed by a cessation of progressive movement from the 19th to the 25th. During this period the severe gale which passed along our southern counties on the morning of the 24th was formed, its sudden arrival upsetting the meteorological office forecasts of the previous night. Observations are quoted, showing that it would have been impossible for the department to have been aware of its existence before about 3 A.M. of the 24th. Following in the wake of this storm, the parent cyclone reached the French coast on the 27th; its advent being marked, as in Japan and America, by violent gales and extensive floods in western and central Europe and Algeria. The village of Grindelwald was destroyed, and in the Austrian Tyrol the damage caused by floods reached at least two millions sterling. Passing through France and the Netherlands, the disturbance showed signs of exhaustion; and on Nov. 1, in the Baltic, it quietly dispersed after accomplishing a journey of over 16,000 miles in 36 days. This is the first storm which has been followed day by day from the Pacific to Europe. —— J. B. Jordan and F. Gaster explained the principle and working of Jordan's photographic sunshine-recorder. This instrument consists of a cylindrical dark chamber, on the inside of which is placed a prepared slip of photographic paper. The direct ray of sunlight, being admitted into this chamber by small apertures in the side, is received on the sensitized paper, and, travelling over it by reason of the earth's rotation, leaves a distinct trace of chemical action whenever the light is of sufficient intensity to show a definite shadow on a sun-dial. The cylinder is mounted on a stand with adjustments for latitude, etc. The record is fixed by simply immersing it in water for a few minutes. As this instrument records the actinic or chemical rays, it usually shows more sunshine than is obtained by the ordinary 'burning' sunshine-recorder.

Calendar of Societies.

Biological society, Washington.

Nov. 28. — Dr. Theobald Smith, A simple device for storing cover-glass preparations illustrative of bacterial disease; Dr. W. S. Barnard, Environmental digestion; Specimen mount, tube-holders, labels, and stoppers; Dr. C. Hart Merriam, The work of the U.S.