

from under the front-central portion of the head-shield, and project forward. They are jointed and entirely analogous to the antennæ of living crustaceans in structure. In full or in stumps, they have been identified on upwards of fifty individuals, some twenty of which belong to Columbia College. On one specimen, where the cheeks have been broken away, Mr. Matthew has detected comb-like structures, which we suppose to be gills. Leg-like appendages are well preserved, opposite the divisions of the body.

At the posterior end of the pygidium, tetson-like appendages can be distinguished, which are of great interest, and which are regarded as perhaps indicating an ability in the animal to propel itself backwards, as does the lobster, although its ordinary motion would be forwards, by means of its legs. Mr. Matthew brings out some other interesting facts and deductions, which will be illustrated by drawings in the full paper. J. F. KEMP.

Columbia College, May 26.

Cedar Waxwing.

IN view of the articles published in your paper during the past few months regarding the plumage of the cedar waxwing (*Ampelis cedrorum*), it may be of interest to call attention to a paper published in the "Transactions of the Norfolk and Norwich Naturalists' Society," Vol. III., pp. 326-344 (read Nov. 2, 1881), by Henry Stevenson, in which there is a very full discussion of the plumage of the allied Bohemian waxwing (*Ampelis garrulus*).

The presence of the wax-like tips in nestling birds is here recorded, and several captures of young in this plumage are referred to; the first nestling secured with red tips to the wing-feathers seems to have been taken by one of Mr. Wolley's collectors in Finnish Lapland in 1856. WITMER STONE.

Academy of Natural Sciences of Philadelphia.

Native Lead.

It may be of interest to mineralogists to note a new locality for native lead, which occurs near Saric, Sonora, Mexico, about 35 miles south of this place.

The metal occurs in thin scales; and pellets, like small shot, have been reported, but I have not seen them. The scales seem to approach a rectangular form, and have been found nearly an inch long.

The gangue rock is evidently a pyrocene, of pale-green color, streak yellowish. The accompanying minerals are iron oxides, with traces of manganese, and carbonate of lime.

C. W. KEMPTON.

Oro Blanco, Arizona, June 8.

The Ancient Egyptian Language.

It is the growing opinion of scholars that the ancient Egyptian language has more intimate Semitic relationship than has been generally admitted. The grammatical construction of Egyptian is distinctly Semitic; the pronouns, prepositions, and other particles are traceable for the most part to Semitic roots; the Semitic system of pronominal suffixes is often used. Benfey sought to establish this affinity by various considerations, grammatical and lexicographical, and the conclusion to which he came was that the Semites are only one branch of a great family, which includes not only the Egyptian, but also the other languages of Africa. De Rougé, Ebers, and Brugsch have declared their belief in the descent of the Egyptian from the same stock as Semitic. Dr. Fritz Hommel, in his recently-published brochure, "*Der babylonische Ursprung der ägyptischen Kultur*" (Munich, 1892), brings forward many proofs showing the Semitic origin of the Egyptian language and writing. He not only specifies a number of identical words, but shows the grammatical relations of the two languages. He also puts side by side some thirty-five characters which resemble each other in the two languages, both in form and signification, and even in sound. Dr. Hommel maintains that Egyptian culture originated in Babylonia.

In this connection we may mention the interesting fact that the

Egyptian documents recently discovered in Palestine, rigorously transcribed in Hebrew characters, gave almost everywhere the regular Hebrew forms in the Bible, without change or correction.

CHAS. H. S. DAVIS.

Meriden, Conn.

Funnel-Shaped Clouds.

DURING the afternoon of May 17 there appeared not far north-east of Colorado Springs numerous cloud-masses resembling incipient thunder-storms. They were not so large as ordinary thunder-storms. From a cumulus mass depended the fringes that mark the storm-cloud, but they were unusually long as seen in profile at a distance. Only a little rain fell from any of them, and none from most of them. From the centres of several of them also depended funnels or narrow cones. In one case this column reached fully one-fourth of the angular distance to the ground, the others nearly as far. The columns changed their form somewhat, but I could not discover any marked swaying or writhing, perhaps owing to the fact that those observed were at a distance. At the time the surface winds were light and variable, but the following days have been marked by very violent winds. These were nearer the tornado than I ever before saw in Colorado. G. H. STONE.

Colorado Springs, Col.

Glaciers in the United States.

AT this season of the year many scientists are preparing to visit and study the glaciers of Switzerland, that country being the Mecca of geologists who are converts to the glacial theories. I desire to call the attention of the readers of *Science* to the fact, that here in Pierce County, Wash., we have a system of glaciers surrounding Mount Tacoma, beside which those of Mt. Blanc are insignificant, both in area and distribution.

The glaciers of Mount Tacoma are eighteen in number, and are arranged in radial lines from the central dome of the mountain, which is 14,450 feet in altitude. As this mass rises from the sea-level, it is the most conspicuous peak in the United States. The limit of perpetual snow on the spurs is 4,000 feet, while the glaciers and snow-fields that lie in the cradles extend as low as 2,700 feet. With care, the glaciers and spurs are not over-dangerous travelling. The scenery is superb, and well repays the many campers who yearly seek the mountain slopes for health and recreation. About fifty persons have attained the summit, including two ladies. The glacialist may there study moraines, terminal, medial, and lateral, and make observations on the flow of ice to his heart's content.

If any of your readers desire further information upon this subject, it may be obtained gratis by addressing

FRED. G. PLUMMER,

Secretary Washington Alpine Club, Tacoma, Wash.
Tacoma, Wash., June 1.

Binocular Vision.

Professor LeConte's remarks on my note about binocular vision seem to call for a word or two in addition from me. Of course I should not have troubled the readers of *Science* with my ways of looking at things, had I not known that they were unusual, and quite at variance with everything accessible to me on the subject, including Professor LeConte's own excellent little book, to which he makes reference, and had I not also been quite certain of the subjective part of the phenomenon. It is now about ten years since I noticed it first. Though a student of physics, I had not then read enough of physiological optics to have met with any thing on this subject, hence I had not been told what I must expect to see—a fact that I have no doubt is responsible for my unhappy deviation from established rules. Since that time I have tried the experiment under every available set of conditions—almost whenever I have found myself looking at any kind of a pattern. I have tried it with perfectly flat decoration, relief, and actual net-work, such as the bottom of a cane-seated chair, or a coarse wire-cloth, always with the same