

I was unable to procure even a specimen of the salmon, but obtained enough smelts to forward some excellent specimens to Washington.

Very respectfully, your obedient servant,

JAMES G. SWAN.

Prof. SPENCER F. BAIRD,

United States Commissioner Fish and Fisheries,

Smithsonian Institution, Washington, D. C.

P. S.—I omitted to mention that the surf-smelt are common in all the salt water of Puget Sound, but I have not heard of an instance where they run up fresh-water streams to spawn, like the eastern smelt.

J. G. S.

NOTE ON THE OCCURRENCE OF PRODUCTUS GIGANTEUS IN CALIFORNIA.

By C. A. WHITE.

Among a small collection of fossils sent to the National Museum by Mr. Ludwig Kumlien, of the United States Fish Commission, from the valley of McCloud River, Shasta County, California, are three or four large examples of *Productus*, which I am unable to distinguish from *P. giganteus* Martin sp., the well-known type species of the genus as it is extensively known in European strata. They are preserved in a hard, dark-colored, argillaceous rock, which is partly metamorphosed, and they are, therefore, somewhat imperfect; but portions of them show the characteristics of the species very plainly. The largest of these Californian examples was, when perfect, quite equal in size to the larger European examples of *P. giganteus*, having had a transverse diameter near the hinge of not less than 140 millimeters, or 5½ inches.

A small collection of fossils was sent by mail from the same locality in 1877 by Mr. Livingston Stone, the species of which were recognized as of Carboniferous age, but *P. giganteus* was not among them, although the later collections indicate that they occur in the same strata. These associated forms of both collections are too imperfectly preserved for specific determination, but the genera *Fenestella*, *Streptorhynchus*, *Spirigera Camarophoria*, *Allorisma*, and *Euomphalus* are more or less satisfactorily recognized. They all together plainly indicate the Carboniferous age of the strata from which they come, which fact was also previously known through the reports of Trask and Whitney.

This, so far as I am aware, is the first discovery of *P. giganteus* in American strata. It is not a little remarkable that it should be found in the western portion of the continent and not in the middle and eastern portions, where the Carboniferous system is so well developed, and where several European species of Carboniferous brachiopoda are recognized.

Fig. 1, on Plate —, represents one of the examples referred to, the principal portion of the figure showing a natural east of the dorsal valve, with the umbonal portion of the ventral valve. In this figure the full length of the shell from back to front is not shown, but it is represented in the accompanying diagram, Fig. 2.

WASHINGTON, D. C., December 3, 1879.

NOTE ON ACROTHELE.

By C. A. WHITE.

Among the fossils collected from Primordial strata at Antelope Spring, Southern Utah, by Mr. G. K. Gilbert and Mr. E. E. Howell, who were then connected with the explorations and surveys west of the 100th meridian, were a number of examples of a discinoid brachiopod. This form I described and figured* under the name of *Acrotreta? subsidua*, referring it to that genus provisionally. None of the examples were in a condition to show all the generic characters clearly, but certain features in these shells indicated their possession of important differences from any genus then established and led me to suggest that they probably represented a new generic type. In the same year, 1876, Prof. G. Linnarsson, of Stockholm, Sweden, published† a new generic form from the Primordial rocks of Sweden, under the name of *Acrothele*, which plainly includes *Acrotreta? subsidua* White. Professor Linnarsson described two Swedish species under this generic name (*A. coriacea* and *A. granulata*), and in 1879 he published a third species under the name of *A. intermedia*,‡ but *A. subsidua* is at present the only known American species. It is not unlikely, however, that some of the American species heretofore referred to *Discina* will be found to belong to *Acrothele*.

WASHINGTON, D. C., February 1, 1880.

DESCRIPTION OF A NEW CRETACEOUS PINNA FROM NEW MEXICO.

By C. A. WHITE.

Pinna stevensoni.

Shell large, elongate-triangular in marginal outline; valves moderately convex; the convexity being slight and nearly uniform posteriorly, but much greater toward the front, where it amounts to an obtuse median angularity upon each valve, and where a transverse section of the shell has an approximately regular rhombic outline; upper border

* Expl. and Sur. West of the 100th Merid., Vol. IV, p. 34, pl. I, fig. 3, *a*, *b*, *c*, and *d*.

† Bihang till k. Svenska Vet. Akad Handlingar, Band 3, No. 12, p. 20, pl. IV, figs. 44-52.

‡ Sveriges Geologiska Undersökning; Ser. C. Afhand. och Upps. No. 35, p. 25, pl. iii, figs. 40-44.