The anterior uncinigerous processes are somewhat shorter than in *Pista cristata*. The hooks (Pl. XXVIIa. fig. 35) present a small projection above the long posterior process, and the anterior angle is much more produced than in *Pista mirabilis* or *Pista cristata*. The posterior long process is proportionally larger than in *Pista mirabilis*. The posterior projection in these hooks seems to be the heel, the hollow beneath being due to the mode of attachment of the base of the long process. The ventral edge or base of the hook is slightly roughened.

The somewhat coarse sand in the intestine presented a few Diatoms and sponge-spicules. The *Pista intermedia* of Webster and Benedict ¹ is a closely allied form, the hooks, indeed, presenting only slight differences.

Eupista, n. gen.

Eupista darwini, n. sp. (Pl. L. figs. 2, 3; Pl. XXVIIA. figs. 30, 31).

Habitat.—Trawled at Station 298 (off the west coast of America, south of Valparaiso), November 17, 1875; lat. 34° 7′ S., long. 73° 56′ W.; depth, 2225 fathoms; bottom-temperature 35°.6, surface temperature 59°.0; sea-bottom, blue mud.

About the average size of *Pista cristata*. Though considerable care has been exercised, the specimens are somewhat softened, the dense tubes of mud plugged by the animals being unfavourable for the percolation of the spirit.

In the general form of the body this species agrees with Pista. The cephalic lobe is furnished anteriorly with numerous sulcate tentacles. No ocular specks are present. The branchiæ, again, wholly differ in structure, while corresponding in number and position with the foregoing genus. They are simple processes similar to those in the Ampharetidæ, tapering from base to apex, the anterior pair being the larger; moreover, all are barred transversely, a feature which distinguishes them from the family just mentioned, while they resemble the stems of the branchiæ in the ordinary form. In one instance an anterior branchia is evidently in process of reparation, as the base is thick, and the tip abruptly filiform. The posterior pair are furnished with a short filiform tip. The blood of this species is thus satisfactorily aerated at the great depth of 2225 fathoms, without the aid of the minute appendages generally present in the branchiæ. Dorsally no elevated process is found on the third segment at the base of the posterior branchiæ as in Pista cristata; and the anterior border of the fourth segment forms a transverse ridge behind them.

The bristles agree in number with those in Pista, being seventeen pairs, the first occurring on the fourth segment. They differ from those of Pista in the great length

¹ Report U.S. Commissioner of Fish and Fisheries (1881), 1884, p. 733, pl. vi. figs. 75-78.