

*Caudal appendages* with about one-fourth the length of the pedicel of the posterior cirrus with long bristles at the extremity, and with the sides naked.

*Ova*.—Long, oval, and pointed, their length (0.26 mm.) being exactly two and a half times their breadth.

*Penis* clothed with very fine hairs, and bearing a tuft of somewhat stronger ones at the extremity.

*Size*.—The capitulum of the largest specimen 14 mm. long. This specimen was furnished with ovigerous lamellæ.

This species was collected on two different occasions during the cruise of the Challenger:—Station 24, March 25, 1873, off Culebra Island (West Indies); depth, 390 fathoms; bottom, mud. One small specimen. Station 344, April 3, 1876, off Ascension Island (Atlantic Ocean); depth, 420 fathoms; hard ground. Three specimens and two very small ones, attached to a Coralline.

*Pæcilasma gracile*, n. sp. (Pl. II. figs. 2–4).

Valves five; carina terminating downwards, neither truncated nor in an embedded disc, but considerably enlarged and keel-shaped. Tergum with the basal point truncated and almost parallel to the occludent margin. Tergo-lateral margin rounded. Notch behind the stronger spines at the upper side of the maxillæ without spines. Caudal appendages with long spines at the extremity.

*General appearance*.—Capitulum about twice as long as it is broad, compressed. Valves white, distinctly striated.

*Scutum* with the apex pointed, with a distinct ridge running to the umbo; basal margin equalling the breadth of half the carina near its basal extremity. Carino-tergal margin distinctly divided into a carinal and tergal portion. The carinal portion is convex and rounded, the tergal portion straight. The interior structure of the scutum could not be studied, as I wished to keep the capitulum as a whole.

*Tergum* basally truncated, flat, oblong, much like that of *Pæcilasma kaempferi*, Darwin.

*Carina* very narrow and flat at its superior extremity, considerably enlarged downwards and keel-shaped. The dorsal margin runs downwards over the extremity of the peduncle, the base of the carina forming nearly a right angle with the basal margin of the scutum.

*Peduncle* about one-third of the length of the capitulum.

*Mouth*.—*Labrum* (Pl. II. fig. 3) with a row of small teeth on the crest and palpi as in the other species of the genus. The *mandibles* (Pl. II. fig. 4) have four teeth, and the inferior angle terminates in two small points when seen under the microscope. *Maxillæ*