

Station 254, July 17, 1875; Yokohama to Honolulu; lat. $35^{\circ} 13' N.$, long. $154^{\circ} 43' W.$

Habitat.—The type-specimens of this species were obtained by Dall in lat. $37^{\circ} 8' N.$, long. $136^{\circ} 10' W.$ The following localities have also been furnished to me by Mr. W. H. Dall:—Off Santa Barbara Islands (California), about lat. $33^{\circ} 30' N.$, long. $118^{\circ} 45' W.$; off Sitka (Alaska), and near the Kodiak Island, about lat. $58^{\circ} N.$, long. $135^{\circ} W.$

Including the two Challenger localities, this species is therefore distributed throughout the whole north-east Pacific Ocean, and along the west coast of North America, from lat. $58^{\circ} N.$ to lat. $33^{\circ} N.$, and between long. $160^{\circ} E.$ and long. $118^{\circ} E.$

Observation.—This species has not hitherto been figured, but as it was found among the Challenger Pteropoda, I have been able to give good figures of it in this Report.

The description of Dall was not only not accompanied by figures, but like the descriptions of Quoy and Gaimard, and of Rang, it did not indicate any character which might specifically distinguish it. Happily, Mr. Dall had the kindness to send to me some specimens of this species, and after comparison I recognised that the specimens of *Pneumonoderma* from Stations 240 and 254 were identical with them. Having thus identified these specimens with certainty, I have been able to give a description sufficient to distinguish *Pneumonoderma pacificum* from the other species of the same genus, by means of characters drawn from the acetabuliferous appendages (e.g., their form and the form and number of the suckers), from the gills, radula, &c.

*6. *Pneumonoderma souleyeti*, n. sp. (Pl. II. fig. 6).

Body rather short, swollen in its anterior half; neck of moderate length.

Foot as in the foregoing species.

Lateral Gill long.

Posterior Gill with very wide quadrangular crest and very short radiating ones; undulations of the base of the crests hardly developed and indeed almost absent.

Acetabuliferous Appendages as long as the body, with a narrow base, and nearly parallel margins, bearing about seventy-five small suckers of the same shape as those of *Pneumonoderma mediterraneum*, and the size of which regularly decreases from the base to the extremity of the appendage.

Colour.—The single specimen collected by the Challenger Expedition is but little coloured; it shows brown pigment chiefly on the right side.

Length, 4 mm.

Challenger Specimen.—Station 254, July 17, 1875; Yokohama to Honolulu; lat. $35^{\circ} 13' N.$, long. $154^{\circ} 43' W.$