

The sunken actinal system is proportionally larger, the actinal plastron is flatter, and when seen in profile the test is not as distinctly keeled above and below as in *Pourtalesia miranda*.

*Pourtalesia miranda*, *P. laguncula*, *P. jeffreysi*, and *P. hispida*, as well as *P. phiale*, are characterised by an extremely delicate, thin, and more or less transparent test; in these species we have the outline of the test passing from that of an elongate bottle-shape to a rectangular form with round corners and a pointed extremity, then to a triangular flattened test with a prominent anal snout, as in the group to which *Pourtalesia rosea* and *P. ceratopyga* belong, till we come to the typical *Echinocrepis* on the one side, or pass on the other hand through the more globular and cylindrical forms such as *Pourtalesia carinata* to *Spatagocystis* and finally to *Cystechinus*.

The largest specimens collected, judging from some fragments, must have measured 55–60 mm. in length; the smallest about half that length.

Station 147. December 30, 1873. Lat. 46° 16' S., long. 48° 27' E.; 1600 fathoms; bottom temperature, 0·8° C.; globigerina ooze.

Station 156. February 26, 1874. Lat. 62° 26' S., long. 95° 44' E.; 1975 fathoms; diatom ooze.

\**Pourtalesia laguncula* (Pl. XXII.<sup>a</sup> figs. 7–15; Pl. XXXI. figs. 1–11; Pl. XXXIX. fig. 35; Pl. XL. figs. 61, 62; Pl. XLI. fig. 53; Pl. XLIII. figs. 18, 19).

*Pourtalesia laguncula*, A. Agassiz, 1879, Proc. Am. Acad., vol. xiv. p. 205.

This species is closely allied to *Pourtalesia miranda*; it is, however, more bottle-shaped (Pl. XXXI. figs. 1, 2), comparatively broader at the anterior extremity, shorter, with a wide anal snout, and a more vertically truncated anterior extremity (Pl. XXXI. fig. 3), a shorter actinal plastron with larger primary tubercles and a very broad fasciole round the anal snout (Pl. XXII.<sup>a</sup> figs. 7, 9; Pl. XXXI. fig. 4). This fasciole I did not detect in *Pourtalesia miranda*, and as the unique specimen is in the hands of Professor Lovén at this moment of writing, I am unable to give its position, which in the drawing (Revis. Ech., pl. xviii. figs. 6, 7), seems to run more on the abactinal side of the snout towards the anal system than in this species. On the actinal surface (Pl. XXXI. fig. 1) the primary tubercles are few in number, distant, and extend on the sides of the test mainly towards the anterior extremity (Pl. XXXI. fig. 1), from the ambitus to the apical system; there are from two to three to each plate (Pl. XXII.<sup>a</sup> figs. 7, 9). The primary spines are generally slightly curved, cylindrical, tapering very slightly or club-shaped, more thickly crowded in the actinal groove. The whole test is more or less thickly covered by minute club-shaped miliary spines.

The ambulacral tentacles of the odd ambulacrum are large, thick (Pl. XXXI. figs. 2, 6), pointed, and quite prominent from the apex until they pass into the actinal groove.

In nearly all the specimens which were broken, so as to admit of a view of the interior