

species, showing the great elongation of the plates of the test which give it its peculiar appearance. The subanal fasciole is broad, well-marked, and the actinal groove a rather shallow triangularly shaped depression with steep sides (Pl. XXII.^a fig. 2). In general outline it resembles a very elongated *Pourtalesia miranda*, and I was at first inclined to regard it as the young of that species. The young specimens of *Pourtalesia laguncula* collected by the Challenger, seem, however, to leave no doubt regarding the distinct specific characters of this species. Seen endwise, the outline of the test is nearly elliptical (Pl. XXII. figs. 4, 5) from the two prominent actinal and abactinal keels, which project beyond the general level of these surfaces. Seen from the actinal end (Pl. XXII. fig. 4), the actinal groove occupies nearly the whole of the section of the test. As in *Pourtalesia laguncula* the primary spines are irregularly scattered over the test, and are not specially crowded along the abactinal ridge. The apex of this species is posterior (Pl. XXII. fig. 2; XXII.^a fig. 1), and it is remarkable also for its convex actinal surface, so shaped that the greatest convexity is about half-way from the anal snout to the anterior end. Seen from above, the anterior extremity has more the shape of that of such *Pourtalesia* as *Pourtalesia ceratopyga*, but is remarkable for the great size of the actinal groove which forms a huge triangular depression (Pl. XXII.^a fig. 2; Pl. XXII. fig. 1), occupying the whole anterior extremity of the test, on the somewhat flattened actinal surface. The anal snout is also somewhat more flattened than in the other species of *Pourtalesia*, more as we find it in *Pourtalesia rosea*. The outline of the test, when seen from the actinal side is bottle shaped, with deeply convex sides near the anterior extremity (Pl. XXII. fig. 1; Pl. XXII.^a fig. 2), widest about half-way between the anterior extremity and the snout, and gradually sloping towards the posterior extremity. The abactinal surface slopes very gradually from the apex towards the anterior extremity, forming a slightly concave line before reaching the anterior edge. It slopes quite abruptly towards the level of the anal snout (Pl. XXII.^a fig. 1). Both the actinal and abactinal keels of this species are quite prominent (Pl. XXII. figs. 1, 3). The excessive elongation of the odd interambulacral end of the lateral posterior interambulacral and ambulacral areas, gives to this species its greatly elongated shape (Pl. XXII.^a figs. 1, 2).

Pourtalesia phiale seems to be a comparatively small species; the specimen collected by the Challenger measured 18 mm. The test is extremely thin. In alcohol it is of a light yellowish-pink colour, the spines of a darker tint.

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

**Pourtalesia rosea* (Pl. XXII.^a figs. 3-6).

Pourtalesia rosea, A. Agassiz, 1879, Proc. Am. Acad., vol. xiv. p. 206.

Fragments of a delicate pinkish *Pourtalesia* were brought up from Station 272; they must have belonged to a large species closely allied to *Pourtalesia ceratopyga*, and