

adjoining, placed within the trivium and separated from the bivium by the intercalated interambulacral plates (Pl. XXVI.^a fig. 8).

The anal pouch (Pl. XXVI.^a figs. 5, 6) is as in the *Pourtalesia* strengthened by large irregularly-shaped rectangular plates, and is somewhat triangular when seen from above (Pl. XXVI.^a fig. 7); the opening is well covered by rather stouter spines than are found on other parts of the test. Figs. 2, 4, 7, 12 of Plate XXVI.^a show the arrangement of the plates of the actinal surface of the test, and a combination of the figures 8, 9, 15, and 17, that of the abactinal side of the test.

The course of the alimentary canal is easily traced in the view of the interior (Pl. XXVI.^a fig. 1) from the actinal side, and in the profile of Pl. XXVI. fig. 6. The course and the shape of the alimentary canal is similar to that of *Cystechinus*. The anal extremity of the canal is remarkable for its small size (Pl. XXVI.^a fig. 6).

The largest and the smallest specimens collected are figured natural size on Plate XXVI. The collection also included a couple of intermediate sizes.

Station 147. December 30, 1873. Lat. $46^{\circ} 16' S.$, long. $48^{\circ} 27' E.$; 1600 fathoms; bottom temperature, $0.8^{\circ} C.$; globigerina ooze.

Station 157. March 3, 1874. Lat. $53^{\circ} 55' S.$, long. $108^{\circ} 35' E.$; 1950 fathoms; diatom ooze.

**Echinocrepis*.

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

This genus has, like *Pourtalesia*, a sunken actinal groove, but the other features of the test differ entirely from those of the species thus far described in this family. There is no anal snout, the anal system though forming a re-entering pouch much as in *Pourtalesia* is situated on the actinal side as in *Cystechinus*. Seen in profile the test is pyramidal (Pl. XXVII. fig. 3), the apical system is placed about one-third the length of the test from the anterior end; the anterior part of the test forms a regularly inclined surface sloping rapidly from the apex to the ambitus with sharply rounded corners; towards the actinal surface and at the median line of the lateral anterior ambulacrum on the upper part of the test, the actinal groove forms a comparatively slight depression on the actinal surface of the anterior edge of the test, but owing to the gradually sloping sides of the edge of the actinal groove, extending from the flat actinal anterior part of the test (Pl. XXVII. figs. 5, 7), and taken in connection with the flat sloping test of the anterior extremity and its deep re-entering angle when seen from above, it forms, when seen from the anterior extremity, a groove deeply cut out of the test. As seen from above the anal keel forms a slight arch from the apex to the anal extremity. The median line of the anterior lateral ambulacra is slightly re-entering, forming a deep indentation in the anterior outline of the test as seen from above.

The very slight re-entering angle of the median line of the posterior lateral ambu-