Zoology Part IX: Report on the ECHINOIDEA. By Alexander Agassiz, Bound in Volume 3,1881.

probably as large. It differs from that species, however, in having an anal snout (Pl. XXII.ª figs. 3–5) not so well separated from the test as in *Pourtalesia ceratopyga* and other Pourtalesiæ, but much like that of *Pourtalesia phiale*, only the fasciole extends from the anal surface on the edge of the snout towards the anal opening; the snout is angular (Pl. XXII.ª fig. 3), truncated vertically posteriorly, quite flattened laterally. The few primary spines present near the abactinal system were large, curved, cylindrical; the smaller secondary ones somewhat club-shaped. There were fragments of the ovaries which seemed long, slender, branching filaments, like those of *Pourtalesia laguncula*.

This species is also remarkable for not having, as in other species of the genus, its apical system divided by the encroachment of the posterior lateral ambulacra into a bivium and trivium (Pl. XXII.ª fig. 6).

The tuberculation of this species, and the shape of the test, must have been very similar to that of *Pourtalesia ceratopyga*.

Station 272. September 8, 1875. Lat. 3° 48′ S., long. 152° 56′ W.; 2600 fathoms; bottom temperature, 1·0° C.; radiolarian ooze.

**Spatagocystis*.

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

Test ovoid, actinal region flattened, the anteriorly prominent actinal keel extending to form an anal snout, the abactinal region of the test regularly arched, the anterior and posterior extremities rounded, the actinal groove sunken. In the apical system, the genital plates connected, placed in the trivium, separated from the bivium by the intercalated interambulacral plates.

This genus has, like *Pourtalesia* proper, a deeply sunken actinal groove. Its outline recalls, however, when seen from above, the Holasteridæ, and forms the transition between the slightly keeled Holasteridæ, and types with more prominent keels extending into a short and small anal snout, which is so highly developed in *Pourtalesia* proper. The anal groove is sharp, and shows how readily among the Holasteridæ we can pass from a slightly sunken anal system, forming but an unimportant depression on the anal extremity of the test, as in *Toxaster* and some of the Dysasteridæ, to a somewhat more sunken system as in *Cardiaster*, until we pass on the one side to a well-defined anal groove, as we find it in *Metaporhinus*, and on the other side to a similarly clearly defined anal groove, forming a deep re-entering angle in the posterior extremity above the small anal snout, a mere beak as it were, formed by the prolongations of the actinal keel beyond the level of the outline of the test of the posterior extremity. The coronal plates are of a much more uniform size, both in the ambulacral and interambulacral zones, and assume somewhat the regular arrangement so characteristic of *Cystechinus*, in which the Galeritic type of coronal plates is still quite prominent.

In some of the Pourtalesiæ already, such as *Pourtalesia ceratopyga*, and to a certain

http://19thcenturyscience.org/HMSC/HMSC-Reports/Zool-09/README.htm