

packed together (Pl. XXIV. fig. 3). The lateral posterior ambulacra and the odd ambulacrum are covered by minute miliary spines similar to the secondary spines of the abactinal surface.

The subanal fasciole is broad, pentagonal, pointed towards the actinal surface; the anal system is vertically elongate covered by a close granulation, the anal opening is near the abactinal extremity (Pl. XXIV. fig. 6), the intestine leading to this is short and slender (Pl. XXIV. fig. 5).

There is a very narrow thread-like peripetalous fasciole extending across the tip of the lateral petals in the odd posterior interambulacrum and the lateral posterior interambulacra, which becomes lost in the lateral anterior ambulacra (Pl. XXIV. figs. 1, 2).

The abactinal system is compact; the sutures between the genital plates are entirely obliterated; there are four genital openings (Pl. XXIV. fig. 12) leading to four equally developed genital glands, forming short grape-like clusters near the abactinal system (Pl. XXIV. fig. 6). The madreporic body extends between the genital openings, and beyond them in the posterior interambulacrum (Pl. XXIV. fig. 12). Seen from the interior of the test, the calcareous canal forms a couple of loops for the passage of the genital ducts (Pl. XXIV. fig. 7). The actinal opening is pentagonal, pointed anteriorly, slightly labiate posteriorly; the actinal membrane is strengthened by small plates regularly arranged (Pl. XXIV. fig. 11); the actinal tufted tentacles are comparatively small.

The abactinal system of *Homolampas* closely resembles that of *Paleopneustes*; it also agrees with it in having the actinal surface eminently Spatangoid, while the abactinal surface from the presence of rudimentary petals and simple ambulacral pores with comparatively large ambulacral plates, recalls the *Pourtalesia* group proper. The presence of a well-defined subanal fasciole and of a lateral fasciole, as well as the presence of specially developed primary tubercles, also places this genus closer to the normal Spatangoids. The young of this genus, as in *Homolampas fragilis*, shows better than in such large species as *Homolampas fulva* the affinities of the genus to *Palæotropus*; from this genus it mainly differs in the greater specialisation of the ambulacra, and the presence of a peripetalous fasciole and a more labiate actinostome.

In alcohol the test is of a light straw colour.

Station 271. September 6, 1875. Lat. $0^{\circ} 33' S.$, long. $151^{\circ} 34' W.$; 2425 fathoms; bottom temperature, $1.0^{\circ} C.$; globigerina ooze.

Homolampas fragilis.

Lissonotus fragilis, A. Agassiz, 1869, Bull. Mus. Comp. Zool., vol. i.

Homolampas fragilis, A. Agassiz, 1872, Revis. Ech., part 1, p. 137.

Only a fragment of this species was collected by the Challenger, off the coast of Northern Brazil.

Station 122. September 10, 1873. Lat. $9^{\circ} 5' S.$ to $9^{\circ} 10' S.$, long. $34^{\circ} 49' W.$ to $34^{\circ} 53' W.$; 350, 120, 32, and 400 fathoms; mud.