green specimens had a higher test than the violet specimens, which were all much flatter: otherwise no specific differences were noticed. The plates of the anal system all carry a small secondary tubercle, and the anal opening extends into a short conical projection (Pl. XXXV. fig. 3). The actinostome is elongated, transverse, with a well-marked raised posterior labial edge; the actinal membrane is strengthened by a number of small plates arranged in irregular concentric rows; the structure of the actinal plastron is well shown in Plate XXXI. fig. 1. The shape of the test varies considerably in the few specimens collected; the youngest specimens (Pl. XXXI. figs. 20-22) show when seen from above an angular outline, with a comparatively conical outline when seen in profile, and rather In a somewhat older specimen the outline seen from above is nearly circular (Pl. XXXI. figs. 16, 17), the apex with the apical system is posterior (Pl. XXXI. fig. 16). When seen in profile it is high (Pl. XXXI. fig. 19), the test sloping gradually towards the anterior extremity and more suddenly towards the posterior extremity; the anal system is placed high above the ambitus (Pl. XXXI. fig. 18). These young specimens of Genicopatagus would readily pass for the young of a Paleopneustes (allied to the Florida species) were it not for the different structure of the apical system, from their general outline and from the total absence of any fasciole. The more ordinary outline of the test when seen in profile is represented in Plate XXXI. fig. 14, which shows a much more flattened test and a rudimentary, rounded anal keel below the anal system (Pl. XXXI. fig. 15). The anal system is also, in this older specimen, nearer the ambitus than in the specimen of Plate XXXI. figs. 16-19; while in the youngest specimens it is placed immediately above the ambitus (Pl. XXXI. fig. 20). The outline of these older specimens seen from above does not differ materially from that of the younger more conical specimens; the anal extremity is somewhat more pointed (Pl. XXXI. figs. 12, 13).

Station 157. March 3, 1874. Lat 53° 55′ S., long. 108° 35′ E.; 1950 fathoms; diatom ooze.

Homolampas.

Lissonotus, A. Agassiz, 1869, Bull. Mus. Comp. Zool., vol i. (non Schönh). Homolampas, A. Agassiz, 1872, Revis. Ech., part 1, p. 137.

I have already alluded in the Revision of the Echini to the similarity in structure of the abactinal ambulacral region of *Homolampas* to that of *Cardiaster* and *Holaster*. In the large species (*Holaster fulva*) discovered by the Challenger, the close affinity of the genera is still more evident. *Homolampas* has very rudimentary petaloid ambulacra; it has a peripetalous fasciole which corresponds to the lateral fasciole of *Cardiaster*, having, like it, nothing exactly limiting the ambulacra until they nearly reach the ambitus, where its lateral fasciole would occupy homologically the position of a peripetalous fasciole, and pass below the anal system, though in reality it is a lateral fasciole as we understand it among the recent genera. The next