

both De Loriol and Zittel have like Pictet assigned to the group. The characters of the recent genera show a far closer affinity between the Holasteridæ and the Spatangidæ than had been suspected from the study of the fossil species alone, and for similar reasons I should hardly wish to adopt the group *Palæostoma* of De Loriol characterised by the pentagonal actinostome alone, a structural feature which in such genera as *Paleopneustes*, *Aceste*, *Aërope*, and the like, is shown to pass so insensibly into the labiate actinostome of the Spatangoids as scarcely to justify us in adopting it as a character for the distinction of higher groups.

**Argopatagus*.

Argopatagus, A. Agassiz, 1879, Proc. Am. Acad., vol. xiv. p. 209.

This genus is closely allied to *Homolampas*; it has like it a subanal fasciole (Pl. XXXII. figs. 2, 4), but no peripetalous fasciole; the primary tubercles both on the ambulacra and interambulacra are largest and most crowded at the ambitus; they become less numerous towards the abactinal pole, and smaller though numerous towards the actinostome. The odd anterior ambulacrum is not sunken, but like the others flush with the test. The structure of the ambulacra is similar to that of *Homolampas*, but on the abactinal surface the ambulacral plates are larger in comparison with the interambulacral ones than in that genus; they are all more or less hexagonal. The primary tubercles are more numerous in the odd anterior ambulacrum on the abactinal side (Pl. XXXII. fig. 1). The structure of the apical system is like that of *Homolampas*, it is compact (Pl. XXXII. fig. 6).; there are four genital openings enclosing a distinct madreporic body, the sutures of the genital plates are obliterated, the genitals are equally developed. The five or six ambulacral suckers near the abactinal pole are more powerful with small sucking disks, the other suckers rapidly becoming more slender towards the ambitus. These large ambulacral suckers (Pl. XXXII. fig. 6) form a rudimentary petaloid area much as in embryo Spatangoids, but not by any actual petaloid arrangement of the pores.

**Argopatagus vitreus* (Pl. XXXII. figs. 1-6; Pl. XXXVIII. fig. 25; Pl. XXXIX. fig. 18; Pl. XLI. figs. 32-35).

Argopatagus vitreus, A. Agassiz, 1879, Proc. Am. Acad., vol. xiv. p. 209.

In this species the test is greatly flattened, extremely thin, transparent, of a yellowish colour. The large primary spines of the abactinal region are cylindrical, curved, of a silvery lustre, with distant sharp spinules along the shaft. The test is quite flattened (Pl. XXXII. fig. 3), and at first sight reminds one when seen from above somewhat of *Maretia*. There were only very imperfect specimens of this species collected, the actinal plastron was missing in all, but as far as the actinal side was preserved (Pl. XXXII. fig. 2), the primary tubercles of that side were smaller than on the upper side and clustered together near the ambitus, forming elongate triangular patches in the