

generally the case in that family, the actinal keel forming a prominent rounded keel extending from the actinostome to the extremity of the anal snout (Pl. XXIII. figs. 1, 4, 5, 7).

\* *Cionobrissus revinctus* (Pls. XXIII., XXXV.<sup>b</sup> fig. 18; Pl. XXXIX. fig. 22; Pl. XLI. figs. 41-43).

*Cionobrissus revinctus*, A. Agassiz, 1879, Proc. Am. Acad., vol. xiv. p. 206.

The test of this species is ovoid (Pl. XXIII. figs. 1-5), with a moderately sunken anterior ambulacrum (Pl. XXIII. figs. 3, 5, 6, 9); this is flush with the test near the apical system, deepest at the ambitus (Pl. XXXV.<sup>b</sup> fig. 18), and extends to the actinostome. The actinostome is anterior to the centre (Pl. XXIII. fig. 3); the actinal plastron is strongly arched, very prominently defined near the posterior extremity of the actinal surface, where it forms a rounded keel (Pl. XXIII. figs. 1, 7) immediately below the anal snout; this plastron is closely packed with tubercles, diminishing in compactness towards the prominent posterior lip of the actinostome (Pl. XXIII. figs. 1, 9).

Immediately round the actinostome on each side of the actinal plastron the ambulacral areas are broad and bare (Pl. XXIII. fig. 9); the tubercles of the actinal surface are largest next to the ambulacral area, and in the interambulacral zones; they diminish very gradually in size towards the ambitus (Pl. XXIII. fig. 1) and thence again to the peripetalous fasciole. The tubercles are quite uniformly placed on the whole test (Pl. XXIII. figs. 1, 4, 5) with the exception of the space within the peripetalous fasciole, where the primary tubercles of the interambulacral area greatly increase in size (Pl. XXIII. fig. 6), carrying comparatively long curved spines which completely hide the petals (Pl. XXIII. fig. 2); the spines on the actinal surface are similar to those of the primary tubercles within the fasciole but smaller (Pl. XXIII. fig. 3), while the rest of the test is thickly covered by shorter curved spines (Pl. XXIII. figs. 2, 3). In alcohol the test is of a dirty olive colour, with lighter coloured spines.

The peripetalous fasciole is narrow (Pl. XXIII. fig. 6), and with the exception of the re-entering angle it makes before crossing the odd anterior ambulacrum (Pl. XXIII. fig. 5; Pl. XXXV.<sup>b</sup> fig. 18) runs almost an elliptical course round the tips of the petals. The anterior pair of petals are somewhat shorter than the posterior pair (Pl. XXIII. fig. 6), the ambulacral plates being more crowded together; the exterior pore in the paired petals is far larger than the interior one (Pl. XXIII. fig. 6).

The subanal fasciole is broad, vertically elliptical, pointed towards the actinal plastron (Pl. XXIII. figs. 1, 4, 7). The anal system is small, circular (Pl. XXIII. fig. 4), placed well up near the abactinal surface. The structural apex is anterior. There are four genital pores (Pl. XXIII. fig. 6) enclosing a madreporic body, which extends into the odd posterior interambulacral space.

Seen in profile the test is abruptly rounded from the actinostome; at the anterior