deep pit in which the anal system of *Lovenia elongata* is placed. The actinal plastron i quite small, and the primary tubercles with sunken scrobicular areas forming the adjoining pavement, and the outer edge of the bare actinal ambulacral areas are comparatively smaller than in *Lovenia elongata* and more closely packed together (Pl. XXXV.[b] fig. 7).

The large primary tubercles which in *Lovenia elongata* extend from the ambitus to the abactinal region in the anterior interambulacrum, and in the anterior half of the lateral posterior ambulacra, are in *Lovenia subcarinata* limited to two horizontal rows of two and three large primaries (Pl. XXXV.[b] fig. 5) which alone carry stout, long curved spines on the abactinal surface. The rest of the abactinal side of the test is covered by thin, short, slender curved spines, while in *Lovenia elongata* the large curved spines extend over the greater part of the posterior extremity of the test (see pl. xix.[c] Revis. Ech.). The tufts of spines on the two sides of the plastron enclosed by the subanal fasciole consist of somewhat longer spines than those of the abactinal surface, and these tufts consist of much more slender spines than those forming the corresponding tufts of *Lovenia elongata*. The primary spines of the actinal surface are also shorter and comparatively more slender than in *Lovenia elongata*.

This species is also interesting on account of its rudimentary lateral fasciole, which extends close to the ambitus from the anterior ambulacrum to about the median line of the posterior lateral ambulacra. This fasciole is somewhat indistinct, but consists of two to three more or less irregular horizontal lines of small miliary tubercles, differing in no way from the smaller miliaries covering other parts of the test (see Duncan). This seems to show quite conclusively a far closer relationship between *Breynia* and *Lovenia* than had been suspected. In fact, if we are to take *Lovenia elongata* as the typical *Lovenia* and *Breynia australasiæ* as the typical *Breynia*, *Lovenia subcarinata* has, like *Lovenia elongata*, the large primaries with sunken scrobicular areas of the actinal surface, and the same arrangement of the primary tubercles of the anterior part of the abactinal part of the test, while it has the anal system and the whole of the posterior part of the test more like *Breynia australasiæ*, and in addition the rudimentary lateral fasciole, the remnant of the peripetalous fasciole of *Breynia*, which has been considered one of the principal points of difference between it and *Lovenia*.

The existence of a partial lateral fasciole, both in *Lovenia elongata* and in *Lovenia cordiformis*, if we may so call the somewhat irregular band of miliaries extending from the anterior ambulacrum on the abactinal side near the edge of the ambitus towards the posterior extremity, throws considerable light on the origin of the fascioles and plainly shows that they are at first (at least in *Lovenia* and *Maretia* where lateral fascioles had not been observed) more or less irregular bands of miliary spines, which eventually become specialised and limited to distinct areas. The origin and formation of the subanal fascioles, as well as that of the peripetalous fasciole wherever I have traced it, fully sustains this view. This helps to explain the great variation we find in the degree and