in profile, the test slopes regularly from the anterior to the posterior extremity in the adult (Pl. XXX. fig. 2), this posterior extremity is sharply arched over the anal hood then vertically truncated, sloping anteriorly with a rounded corner joining the indistinct actinal keel (Pl. XXIX. figs. 2–4). In younger specimens the anal system is more at the extremity of the narrow end of the test (Pl. XXX. figs. 5, 9, 13), and the actinostome is also somewhat more central (Pl. XXX. figs. 3, 10) than in the older specimens (Pl. XXIX. fig. 3). In the youngest specimens, measuring 14 mm., there is already an indistinct subanal fasciole (Pl. XXX. fig. 19); this fasciole is never very distinct, the miliaries of the band being always more or less disconnected as in the specimen figured on Plate XXX. fig. 19, which measured 24 mm. in length. The anal system consists of numerous small irregularly-shaped plates (Pl. XXX. fig. 18). The indistinct actinal keel of *Urechinus* is scarcely more prominent than in such genera as *Rhynchopygus* and *Cassidulus*. Large trifid long-stemmed pedicellariæ (Pl. XXX. fig. 22) are found in the actinal region near the actinostome; the shorter round-headed pedicellariæ (Pl. XXX. fig. 23) occur on the abactinal surface of the test above the ambitus.

A large number of specimens of this species were collected, showing a great degree of variation in the tuberculation of the abactinal surface of the test (compare Pls. XXX. and XXX.[a]), in the outline of the test not only when seen from above (Pl. XXX. figs. 1, 7), but especially when seen in profile and from the anterior and posterior extremities (compare Pl. XXX. figs. 2, 5, 6, 9, 13, with Pl. XXX.[a] figs. 3, 4, 5, 7, 12–14).

In the specimen figured on Plate XXX.[a] figs. 7–9, we find that it agrees very closely with the young of Plate XXX. figs. 1–3. In another specimen (Pl. XXX.[a] figs. 10–14) the outline in profile is quite different (Pl. XXX.[a] fig. 12), the test is highest posteriorly, and we find a slight tendency to the development of an anal snout. The anal system is more elliptical (Pl. XXX.[a] fig. 10*a*), and the subanal fasciole is quite markedly developed, and the primary tubercles are somewhat more numerous. This specimen also had only three genital pores, while in specimens of the size of fig. 8, Plate XXX.[a] there are usually four. The madreporic body is quite indistinct both in figs. 8 and 11 (see fig. 8*a*). There is in these two specimens (Pl. XXX.[a] figs. 9, 10) quite a marked accumulation of miliaries on the edge of the actinal interambulacral plate, rudimentary bourrelets as it were.

I have also figured on Plate XXX.[a] figs. 1–6, an elongate conical specimen of *Urechinus*, which I refer with some doubt to this species. At first sight it appears totally distinct, but with the exception of the apex of the test there are no structural differences to be noticed in this specimen. The test is comparatively thinner; the striking feature is the great development of the anterior lateral interambulacra near the apical part of the test, forcing the ambulacra towards the posterior extremity (Pl. XXX.[a] figs. 1, 3). It is difficult to make out satisfactorily the plates composing the sharp crest which forms the apex of this specimen (Pl. XXX.[a] figs. 1, 3, 4, 5). We could imagine