

to the genus *Colochirus*, as may be seen from the following description in which the differences are referred to. The oval aperture, when closed, does not present the five prominences characteristic of the genus just named, and the anus, though often slightly turned upwards, is devoid of teeth. The three double rows of ventral pedicels are very distinct, but no marked sole is obvious. Posteriorly, these rows decrease and become almost invisible in the anal portion, which is to be clearly observed in the few specimens which have this portion extended. Even the dorsal ambulacra are provided with pedicels of about the same size and appearance, but they seem to be more scattered and arranged in double rows which are not very distinct; when fully retracted, it is almost impossible to distinguish them from the surrounding smaller pedicels. Only in a very few specimens were they sufficiently extended to allow their position to be determined. Anteriorly, immediately behind the crown of tentacles, one may always clearly observe some pairs of pedicels in connection with each of the five ambulacra. The other kind of pedicel is much smaller, and ought probably to be referred to those ambulacral appendages which are called "papillæ"; they are scattered all over the dorsal surface, and even over the anterior and posterior portions of the ventral surface between the series of larger pedicels. I never saw them extended. Considering the presence of pedicels and papillæ and their arrangement, the resemblance of this species to *Colochirus inornatus* is obvious, though it may be distinguished from it by the dorsal rows of true pedicels. On the other hand it is undoubtedly nearly allied to Semper's *Cucumaria versicolor*.

The calcareous ring (Pl. IV. fig. 5, *a*) is of the usual form, composed of ten simple pieces, without processes posteriorly. A single Polian vesicle and madreporic canal are present. The reproductive organs are composed of numerous narrow, unbranched tubes, and their efferent duct is long and slender. The ampullæ of the pedicels and papillæ are visible from the interior. The retractors are attached at about the middle of the body.

The cruciform bodies (Pl. IV. fig. 5, *f*), which are present in the exterior layer of the perisoma, lie closely though not crowded, and their curved, simple, or more or less dichotomously branched arms are directed outwards; they have a diameter of about 0.05 mm. Beneath these deposits a layer of rather large oval, elongate or rounded, knobbed and perforated buttons are to be found; they have one end rounded, the other on the contrary narrowed, prolonged, and spinous (Pl. IV. figs. 5, *b* and 5, *c*). The prolonged spinous end is always directed outwards, and in the very contracted specimens I examined, the buttons were often standing on their edges and had a fusiform appearance. They reach a length of 0.3 mm. The third kind of deposit (Pl. IV. fig. 5, *d*) consists of small rounded buttons, forming a rich layer beneath the former; they have only a few holes and knobs, and their diameter is about 0.1 mm. A whole series of transitional forms (Pl. IV. fig. 5, *e*), combining the two extremes of buttons, seem to be present.

The larger as well as the smaller pedicels are strengthened by terminal plates, and