

3. *Cithna*, A. Adams, 1863.

This genus was proposed by A. Adams (Proc. Zool. Soc. Lond., 1863, p. 113), as a subgenus of *Conradia*, regarded by him as one of his family Fossaridæ. Its characteristics do not stand out very clearly, for he defines the subgenus as "umbilico carina semilunari extus instructo," but he adds explanatorily that "it resembles *Conradia*, without any ridges or keels on the whorls." Then he describes *Cithna globosa* as "umbilico extus valde carinato," and regarding *Cithna spirata* besides its umbilicus "carina conspicua circumcincto," he says that it has whorls "superne angulatis ultimo ad peripheriam carina transversa instructo," so that there is here a species with three keels, although as a *Cithna* it should have had none.

Dr Gwyn Jeffreys ("Lightning" and "Porcupine" Moll., Proc. Zool. Soc. Lond., 1883, p. 110) has removed this subgenus from its connection with *Conradia*, and put it as a genus (unfortunately without fresh definition) next to *Lacuna*, from which he says "it differs in being destitute of an epidermis, and in having, instead of a flattened and channelled pillar, an obliquely curved umbilical chink, which ends in a small but deep perforation, and is enclosed by a more or less sharp and distinct ridge. The tentacles of the animal are ciliated, as in *Trochus* and *Rissoa*, which is not the case in *Lacuna*."

With few exceptions, and these of a peculiar and limited character, there are probably no shells wholly destitute of epidermis, however caducous that integument may be; it would, therefore, be very interesting to prosecute observations on this point regarding *Cithna*. In his generic diagnosis of *Lacuna* (Brit. Conch., vol. iii. p. 343) Dr Jeffreys does not mention the epidermis.

In the umbilical groove there is a minute difference between *Lacuna* and *Cithna*. In the former a careful examination shows that the furrow (and the axial perforation where it exists), run strictly within the labial edge; in *Cithna*, on the other hand, the groove is external to the lip, and is a true part of the umbilicus. This feature is very distinct in *Lacuna divaricata* (Fabr.), while in *Lacuna pallidula* (Da Costa), it is more doubtfully recognisable. I am not aware what relation this feature of the inner lip and umbilicus has to the economy of the animal's life, but it would seem to be one of some importance, possibly in connection with the eggs, and in that case it is deserving of generic recognition.

The observation of the ciliated tentacles we owe to Dr Jeffreys. Forbes and Hanley (Brit. Moll., vol. iii. p. 66) quote Dr Johnston as saying that *Lacuna vineta* (Mont.) (= *divaricata*, Fabr.), has its "tentacula setaceous," but it would appear that he only meant by setaceous shaped like a bristle, not ciliated, as one might have supposed. It is unfortunate that in the Brit. Conch., vol. iii. pl. viii. fig. 2, the artist has represented *Lacuna* with ciliated tentacles.

## Species.

1. *Cithna tenella*, Jeffr.2. *Cithna margaritifera*, Wats.1. *Cithna tenella* (Jeffreys).*Lacuna tenella*, Gwyn Jeffreys, Brit. Conch., vol. v. p. 204, pl. ci. fig. 7.*Hela tenella*, Gwyn Jeffreys, Mediter. Moll., Ann. and Mag. Nat. Hist., 1870, ser. 4, vol. vi. p. 12.

" " Monterosato, Enumerazione, p. 23.

" " Seguenza, Form. Terz. Calabria, pp. 268, 356.

*Cithna tenella*, Jeffreys, Moll. "Lightning" and "Porcupine," Proc. Zool. Soc. Lond., 1883, p. 110, sp. 1.