

Cristellaria dentata, Karrer (Pl. CXIII. fig. 12, *a. b.*).

- Cristellaria dentata*, Karrer, 1867, Sitzungsab. d. k. Ak. Wiss. Wien, vol. lv. p. 348, pl. i. fig. 1.
 „ *nummulitica*, Hantken, 1875, Mittheil. Jahrb. d. k. ung. geol. Anstalt, vol. iv. p. 51, pl. vi. fig. 4, *a. b.*

There need be no hesitation, I think, in referring the figured specimen (Pl. CXIII. fig. 12) to this species, notwithstanding its somewhat stouter proportions and the nearly even outline of the carina. The irregularly dentate margin represented in Dr. Karrer's drawing is an accidental feature, not unfrequent amongst the carinate species of *Cristellaria* (see Pl. LXX. figs. 7, 8), and of little importance from a zoological point of view. The recent shell is more solidly built, and this is observable not only in the general conformation of the test but also in the greater thickness of the septa.

Morphologically speaking, *Cristellaria dentata* may be regarded as the typical or smooth form of *Cristellaria semiluna*, d'Orbigny (For. Foss. Vien., p. 90, pl. iii. figs. 43, 44) and only differs from that species by the absence of the costate surface-ornament. The figures referred by von Hantken (*loc. cit.*) to *Cristellaria nummulitica* have more in common with the present form than with the specimens figured by Gumbel under that name.

The single recent example of the species was taken off Kandavu, 210 fathoms, a locality wonderfully rich in *Cristellariæ*.

The fossil specimens obtained by Karrer and Hantken were from deposits of Middle Tertiary age in Austria and Hungary.

Cristellaria tricarinella, Reuss (Pl. LXVIII. figs. 3, 4).

- Cristellaria tricarinella*, Reuss, 1862, Sitzungsab. d. k. Ak. Wiss. Wien, vol. xlvi. p. 68, pl. vii. fig. 9, and pl. xii. figs. 2-4.
 „ *protosphæra*, Id. Ibid. p. 68, pl. vii. fig. 8; and pl. xii. fig. 10.
 „ *truncana*, Gumbel, 1868, Abhandl. d. k. bayer. Akad. d. Wiss., II. Cl. vol. x. p. 639, pl. i. fig. 68, *a. b.*

This is a handsome, somewhat elongate species, thin and complanate, with nearly flat sides and limbate sutures, and sometimes showing a narrow but well-defined marginal keel. The peripheral margin is more or less limbate, as well as the septal lines, and the term "*tricarinella*" is not altogether inappropriate for carinate specimens.

The presence or absence of the marginal keel forms the chief distinction between Reuss's *Cristellaria tricarinella* and *Cristellaria protosphæra*, and the two specimens represented in Pl. LXVIII. figs. 3 and 4, would therefore be assigned one to each species were this accepted as a reliable character. But, judging by the recent examples, both the carina and the inflated primordial segment portrayed in some of the original figures are features far too uncertain and variable to have any really distinctive value.