

individual of the same species, and this may be correct, but it differs considerably from any young specimens that have come under my notice.

The test of *Cristellaria italica* is elongate and trihedral; the planospiral segments are few and inconspicuous, whilst those of the body of the shell are superimposed so as to form a curved line. The convex or dorsal margin is sharp but not carinate, and the ventral face is so broad that the transverse section of the shell has the form of a nearly equilateral triangle. The segments are short and obliquely set, dipping at the front more or less towards the initial end, as in *Vaginulina*.

These characters in their fullest development separate *Cristellaria italica* in a striking manner from the helicoid members of the genus, but the connection of the entire group is maintained by an unbroken chain of intermediate varieties. Amongst the numerous broad-fronted passage-forms leading to the present species are *Marginulina triangularis*, d'Orbigny (For. Foss. Vien., p. 71, pl. iii. figs. 22, 23), *Cristellaria arcuata* (Id. Ibid., p. 87, pl. iii. figs. 34-36), *Cristellaria vaginalis*, Reuss (Sitz. d. k. Ak. Wiss. Wien, vol. xlviii. p. 50, pl. iv. fig. 49), and *Cristellaria acutauricularis*, F. and M., sp. (Test. Micr., p. 102, fig. 18, figs. g-i).

Cristellaria italica has been taken at four Stations in the North Atlantic, at depths ranging from 390 fathoms to 725 fathoms, and at four in the South Pacific, 145 fathoms to 410 fathoms. In certain localities, notably off Culebra Island, West Indies, and off Kandavu, Fiji Islands, the specimens attain large dimensions, and are sometimes as much as $\frac{1}{2}$ th inch (5 mm.) in length. It occurs also in the Mediterranean, 90 fathoms, and in the comparatively shallow water of the Adriatic. There is no record of its presence in the South Atlantic, the North Pacific, or the Southern Ocean.

The species has been found in the Cretaceous formations of the north of Ireland (Wright), in the London Clay (Parker and Jones), and in the later Tertiaries of Austria, Italy, and Spain (d'Orbigny, Parker and Jones, Seguenza).

Cristellaria italica, var. *volpicellii*, Costa (Pl. LXVII. fig. 9, a.b.).

Cristellaria volpicellii, Costa, 1855, Mem. Acad. Sci. Napoli, vol. ii. p. 120, pl. i. fig. 4, a.b.

The original drawing of *Cristellaria volpicellii* represents a short variety of *Cristellaria italica*, with carinate dorsal margin and thick, clear, septal lines. The specimen appears to have been somewhat more curved than the recent shell portrayed in Pl. LXVII., but the figures agree perfectly in other respects.

The only habitat at which this carinate variety has been observed is Station 335, South Atlantic, mid-ocean, depth 1425 fathoms.

The type specimens described by Costa were obtained from the Blue Vatican Marl of Rome.