

The adult shell is convex and monticular, and the circumference is deeply lobed or altogether irregular. The chambers are numerous, spirally arranged, long, spreading, broad and round at the outer margin, narrow at the umbilical end and of irregular outline; and their exposed faces are somewhat convex or inflated. The aperture is either a conspicuous rounded opening at the summit of the test, or an erect tubular extension of its apex. The tube when present is long and fragile, and is either simple or branched. In point of texture, the shell is thin, calcareous, hyaline, and finely porous.

Mr. Carter distinguishes this species from *Carpenteria balaniformis* by its comparative simplicity of structure, as evidenced in the absence of any "reticular framework in the substance of the chamber-walls"; and also by the uniform relatively fine perforation of the shell.

The figured specimens of *Carpenteria monticularis* are all from a single locality,—off Zamboanga, Philippine Islands, 102 fathoms. Others, though for the most part of small size and not so well characterised, were obtained at nine Challenger Stations, namely:—off New Hebrides, 125 fathoms; off Ki Islands, 129 fathoms; off Admiralty Islands, 16 to 35 fathoms; off Tahiti, 620 fathoms; off Raine Island, 155 fathoms; Honolulu Reefs, 40 fathoms; north of Falkland Islands, 1035 fathoms; off Ascension Island, 420 fathoms; and off Bermuda, 435 fathoms.

*Carpenteria utricularis*, Carter (Pl. XCIX. figs. 6, 7; Pl. C. figs. 1-4).

*Polytrema utriculare*, Carter, 1876, Ann. and Mag. Nat. Hist., ser. 4, vol. xvii. p. 211, pl. xiii. figs. 11-17.

*Carpenteria utricularis*, Id. 1877, Ibid. vol. xx. p. 176.

The original description of *Carpenteria utricularis* appears to have been founded upon young shells, presenting only a single sessile, inflated chamber with apical mouth. The specimens now figured (Pl. XCIX. and Pl. C.) have been recognised by Mr. Carter as belonging to the same species, and it will be seen from them that the general aspect of the adult shell does not differ materially from that of *Carpenteria monticularis*, either in the shape or disposition of the later segments or in point of size, though distinguishable by the texture and external reticulation of the walls.

The characters of the test in its earlier stages are well illustrated by the drawings (Pl. XCIX. figs. 6, 7, and Pl. C. fig. 1). The latter figure represents two individuals somewhat in the condition described by Mr. Carter,—flask-like chambers with a single terminal aperture. At a subsequent stage the ultimate and penultimate segments sometimes have independent apertures, as seen in figs. 6, 7. The succeeding chambers are larger and are arranged on the normal spiral plan, spreading at the margin so as to impart to the mature test a more or less conical contour. The aperture of the adult shell assumes various forms; it is sometimes a roundish or gaping orifice (fig. 3), sometimes a contracted bilabiate fissure (fig. 2), and sometimes, as described by Mr. Carter,