

a delicate simple or branched tube projecting from the apex. In rare instances several of the segments of the same shell have independent tubular apertures. The walls of the test are thick, and the exterior strongly reticulated; the colour is generally greyish- or yellowish-brown. Fully-grown individuals attain a diameter of  $\frac{1}{4}$ th inch (6 mm.), or more.

The best Challenger specimens of *Carpenteria utricularis* are from the Admiralty Islands, 16 to 35 fathoms; but the species has also been found off Tongatabu, Friendly Islands, 18 fathoms, and off the coast of South America, near Pernambuco, 350 fathoms. Carter states that it is common in the West Indies, and on the shores of the Mauritius.

*Carpenteria proteiformis*, Goës (Pl. XCVII. figs. 8-14).

*Carpenteria balaniformis*, var. *proteiformis*, Goës, 1882, Retic. Rhizop. Caribbean Sea (separate copy), p. 94, pl. vi. figs. 208-214, pl. vii. figs. 215-219.

I am indebted to the kindness of Dr. A. Goës for specimens of the polymorphic organism described by him under the name *Carpenteria balaniformis*, var. *proteiformis*; and their examination leaves little doubt that the form represented in Pl. XCVII. figs. 8-10, of which I had previously written a description under the impression that it was a new modification of the closely allied type *Rupertia*, belongs to the same species. The Challenger collections have afforded but few specimens, and they are for the most part from deeper water than those referred to by Dr. Goës. They are all, like the figures, few-chambered, and of columnar or irregularly cylindrical shape; and they furnish collectively a sort of intermediate group connecting *Carpenteria* and *Rupertia*. Dr. Goës, however, gives a series of examples with tests presenting a much wider diversity of contour and mode of construction,—conical, subglobular or ovate, linear and uniserial, irregular and branched, obscurely biserial, and even with chambers crowded together in an acervuline mass,—and their apertures are similarly variable.

The Challenger specimens have from three to six segments of inflated or subglobular form, often resembling those of a typical *Globigerina*. The aperture is situated in a stout tubular neck at the extremity of the terminal segment, the edge being sometimes neatly rounded, but more frequently broken or irregular. The sectional drawing (fig. 11) represents a specimen cut somewhat diagonally, to show the structure of the walls and the characters of the aperture. The shell is coarsely perforated, and in some cases a certain number of the pores remain open after the thickening of the wall has taken place, as shown in fig. 14; but, as a rule, the perforations are gradually filled up, and the exterior of the adult test is covered with strongly marked pits or punctations, occasionally of large size (figs. 12, 13).

The best examples were procured from the rich dredging off Culebra Island, West Indies, depth 390 fathoms; but the species occurs also at Station 33, off Bermuda, 435 fathoms, and at two points in the Eastern Archipelago, namely, Nares Harbour, Admiralty Islands, 17 fathoms, and off Raine Island, Torres Strait, 155 fathoms.