

condyles, very thin, pointed. In the specimens of this remarkable species, which I first observed in Messina, two opposite equatorial spines had quite free apophyses, not connected with the neighbouring spines; therefore the thin lattice-work of the shell exhibited only thirty-six sutures and twenty meshes (two meshes with six sutures, six meshes with four sutures, and twelve meshes with three sutures). In similar specimens, which I afterwards observed in the Canary Islands, all four equatorial spines were connected in the same manner with the neighbouring spines; therefore they possessed forty sutures and twenty-two meshes, like *Phractaspis prototypus* (Pl. 137, fig. 2). Perhaps the Mediterranean species represents a peculiar genus, *Phractasplenium bipenne*.

Dimensions.—Diameter of the shell 0·1, of the meshes 0·03 to 0·05; breadth of the spines 0·002.

Habitat.—Mediterranean (Messina), Canary Islands (Lanzerote), surface.

Subgenus 2. *Phractaspidium*, Haeckel.

Definition.—Shell with forty to eighty or more meshes, and eighty to one hundred or more sutures. Each spine with six to eight or more branches, its two apophyses being doubly forked or more ramified.

5. *Phractaspis constricta*, n. sp. (Pl. 137, fig. 3).

Radial spines strongly compressed, two-edged, pointed; their outer half twice constricted and somewhat longer than the inner half. Each spine with two opposite forked apophyses, the branches of which are again forked; therefore eight condyles on each spine. The network of the spherical shell with eighty sutures and sixty-two meshes (twenty-two large primary meshes and forty smaller secondary meshes, the latter between the distal fork-branches).

Dimensions.—Diameter of the shell 0·11, of the large meshes 0·04 to 0·05, of the small meshes 0·01; breadth of the spines 0·01.

Habitat.—South Atlantic, Station 348, depth 2450 fathoms.

6. *Phractaspis cataphracta*, Haeckel.

Acanthometra cataphracta, J. Müller, 1858, Abhandl. d. k. Akad. d. Wiss. Berlin, p. 49, Taf. x. figs. 7, 8.

Dorataspis cataphracta, Haeckel, 1862, Monogr. d. Radiol., p. 415.

Radial spines thin, quadrangular; their outer pyramidal part shorter than the inner. Each spine with six to eight condyles, the fork-branches of their two opposite apophyses being (all or partly) again forked. The network with sixty to eighty sutures and meshes: sometimes as regular as in the preceding species, at other times more or less irregular.

Dimensions.—Diameter of the shell 0·1, of the meshes 0·02 to 0·04; breadth of the bars 0·004 to 0·008.

Habitat.—Mediterranean (Cette), Müller (Messina), Haeckel; North Atlantic, Station 353, surface.