network with dimples on the outer surface of the shields. Either all the dimples or only a part of them are pierced by a pore. The forty aspinal pores are united in pairs in twenty larger dimples. The shell is usually very thick-walled and non-transparent.

1. Dictyaspis solidissima, Haeckel.

Doratuspis solidissima, Haeckel, 1862, Monogr. d. Radiol., p. 416, Taf. xxii. figs. 6-9.

Surface of the shell with seventy to eighty funnel-shaped dimples, each of which is perforated at the base by one or two small meshes; twenty larger dimples in the centre of the plates (each with two elliptical aspinal pores), and fifty to sixty smaller sutural dimples between them (each with a single circular pore). All pores of nearly the same size. No blind dimples. Outer conical part of the thick radial spines of the same length as the inner cylindrical part. Radius of the shell four times as large as the thickness of its wall.

Dimensions.—Length of the shell 0.12, breadth 0.1; length of the spines 0.06, basal breadth 0.012.

Habitat.—Mediterranean (Messina), surface.

2. Dictyaspis favosa, n. sp.

Surface of the shell with one hundred and seventy to one hundred and ninety deep funnel-shaped dimples, seventy to eighty of which are perforated, the others blind; among the former each of the fifty to sixty smaller contains a single sutural pore, each of the twenty larger a couple of aspinal pores. All pores of nearly the same size. Outer part of the compressed two-edged spines triangular, half as long as the inner part. Radius of the shell six times as large as the thickness of its wall. (Differs from *Ceriaspis favosa*, Pl. 138, fig. 6, mainly in the ellipsoidal form of the shell and the different size and form of the spines.)

Dimensions.—Length of the shell 0.16, breadth 0.13; length of the spines 0.04, basal breadth 0.025.

Habitat.—Central Pacific, Station 265, surface.

3. Dictyaspis compacta, n. sp.

Surface of the shell with one hundred and seventy to one hundred and ninety deep funnel-shaped dimples, seventy to eighty of which are perforated, the others blind; among the former each of fifty to sixty each contain a single sutural pore, twenty each a couple of aspinal pores. All dimples nearly of the same size, very deep. Outer part of the compressed sword-like spines somewhat longer than the inner part. Radius of the dark shell only twice as large as the thickness of its compact wall.

Dimensions.—Length of the shell 0.18, breadth 0.15; length of the spines 0.12, basal breadth 0.02.

Habitat.—Central Pacific, Station 274, surface.