2. Zonaspis cingulata, n. sp. (Pl. 134, figs. 3, 4).

Radial spines cylindrical in the inner half, with thickened pyramidal bases (fig. 3), conical in the outer half; both halves of equal length. The four meshes of each equatorial plate egg-shaped, four to six times as broad as the bars. By-spines zigzag, half as long as the radius.

Dimensions.—Diameter of the shell 0.15, of the parmal meshes 0.015.

Habitat.—Tropical Pacific (east coast off Philippines), Station 275, surface.

3. Zonaspis æquatorialis, n. sp. (Pl. 135, fig. 5).

Radial spines stout, cylindrical in the shorter inner half, conical in the longer outer half. The four meshes of each equatorial plate circular, only twice as broad as the bars. By-spines zigzag, hearly as long as the radius.

Dimensions.—Diameter of the shell 0.11, of the parmal meshes 0.008.

Habitat.—Equatorial Atlantic, Station 347, surface.

Genus 361. Dodecaspis, n. gen.

Definition.—Dorataspida with twelve plates, each of which is perforated by four crossed aspinal pores; these twelve plates are formed by the united branches of the apophyses of four equatorial and eight polar spines. The branches of the apophyses of the eight tropical spines form no lattice-plates by union. Each condyle bears a by-spine.

The genus *Dodecaspis* differs from all other Dorataspida in the peculiar composition of its shell; twelve spines (four equatorial and eight polar spines) form by union of the branches of their apophyses twelve plates, each of which exhibits four crossed pores, whilst the eight other (tropical) spines form no perforated plates, but simply unite with the neighbouring spines by meeting branches. Some irregularity is often to be found in this genus; instead of four pores in each plate there may be two closed, the other two which are opposite being open. Several times I observed a peculiar "hemihedral" variety: only six spines of one meridian plane (the two equatorial and the four polar spines of the "hydrotomical" plane) exhibited complete shields, whilst the branches of the other fourteen plates remained open. This "hemihedral" form may perhaps represent a peculiar genus, *Hemiaspis*.

1. Dodecaspis tricinata, n. sp. (Pl. 134, fig. 1).

Radial spines thin and long, cylindrical. The four meshes of each equatorial and each polar plate of equal size, pentagonal, about eight times as broad as the bars. By-spines zigzag, nearly as long as the radius. In this species the hemihedral variety, *Hemiaspis*, often occurs.

Dimensions.—Diameter of the shell 0.15, of the parmal pores 0.16.

Habitat.—South-east Pacific (west coast of Patagonia), Station 302, surface.

¹ Dodecaspis = Shell with twelve shields; δώδεκα, doπίς.