

2. *Dodecaspis trizonia*, n. sp.

Radial spines thin, cylindrical in the longer inner half, conical in the shorter outer half. The four meshes of each equatorial and each polar plate of equal size, roundish or nearly circular, five to six times as broad as the bars. By-spines straight, denticulated, scarcely half as long as the radius.

Dimensions.—Diameter of the shell 0·12, of the parmal pores 0·012.

Habitat.—South-west Pacific (east coast of New Zealand), Station 169, surface.

B. Tribe II. *Lychnaspida*, Haeckel, 1881, *Prodromus*, p. 467.

Definition.—*Dorataspid*a with twenty perforated plates or fenestrated shields (each plate at least with four pores), produced by union of the branches of the four crossed apophyses, which arise, opposite in pairs, from each radial spine. The spherical shell is composed of the twenty plates united by sutures (rarely by concrecence).

Genus 362. *Tessaraspis*,¹ Haeckel, 1881, *Prodromus*, p. 468.

Definition.—*Dorataspid*a with twenty plates, which are perforated by eighty aspinal pores (four crossed pores in each plate). Surface smooth, without by-spines.

The genus *Tessaraspis* introduces the series of *Lychnaspida*, which comprise all those *Dorataspid*a in which the shell is composed of twenty plates, each of which is perforated by four primary aspinal pores. In *Tessaraspis* and *Lychnaspis* each plate exhibits only these four primary pores, whilst in *Icosaspis* and *Hylaspis* they become surrounded by a circle of secondary or coronal pores. If in *Stauraspis*, the common ancestral form of the *Tessaraspida*, the four crossed apophyses of each single radial spine became recurved and united together, we should have the typical plate of *Tessaraspis*, in which the piercing radial spine is surrounded by four crossed pores of equal size. The number of sutural pores, between the neighbouring plates, is variable; usually each plate is surrounded by a circle of eight to twelve sutural pores. The sutures between the meeting condyles of the apophyses usually remain open; but in some species they become obliterated (subgenus *Tessarapidium*).

Subgenus 1. *Tessarasparium*, Haeckel.

Definition.—Condyles of the neighbouring plates connected by permanent open sutures; therefore the whole shell is composed of twenty separated pieces of acanthin.

¹ *Tessaraspis* = Shield with four pores; τέσσαρα, ἀκάντις.