Genus 363. Lychnaspis, Haeckel, 1862, Prodromus, p. 468.

Definition.—Dorataspida with twenty plates, which are perforated by eighty aspinal pores (four crossed pores in each plate). Surface covered with numerous by-spines.

The genus Lychnaspis, the largest and most common of all Dorataspida, exhibits the same structure of the shell as its ancestral form Tessaraspis, and differs from it only in the development of by-spines on the sutural condyles. Many species of this genus are very widely distributed, and appear in large numbers, and some of them are amongst the most graceful and elegant of the Radiolaria.

## Subgenus 1. Lychnasparium, Haeckel.

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

## 1. Lychnaspis giltschii, n. sp. (Pl. 95, fig. 3).

Parmal meshes pentagonal, about ten or twelve times as broad as the thin bars, on an average of the same size as the irregular polygonal sutural meshes. By-spines (two hundred to three hundred) very delicate, half as long as the radius, barbed, and zigzag. Radial main-spines very thin and long, straight, cylindrical; their outer part longer than the inner part.

Dimensions.—Diameter of the shell 0.2, of the parmal pores 0.02, sutural pores 0.01 to 0.03, bars 0.002.

Habitat.—Tropical Atlantic, Stations 338 to 348, surface.

## 2. Lychnaspis capillaris, n. sp.

Parmal meshes pentagonal, twenty to thirty times as broad as the very thin thread-like bars, on an average of the same size as the irregular polygonal sutural meshes. By-spines (two hundred to two hundred and fifty) very delicate, zigzag, with very small denticles, one-third as long as the radius. Radial main-spines very thin and long, cylindrical, more or less undulated.

Dimensions.—Diameter of the shell 0.25, parmal pores 0.025, sutural pores 0.02 to 0.04, bars 0.001.

Habitat.—North Pacific, Station 250, surface.

## 3. Lychnaspis maxima, n. sp.

Parmal meshes pentagonal, six to eight times as broad as the thick bars, for the most part larger than the irregular sutural meshes. By-spines (four hundred to five hundred) nearly as

1 Lychnaspis = Lantern-shield; λύχνος, ἀσπίς.