Dimensions.—Diameter of the disk 0·16, of the medullary shell 0·05; length of the marginal spines 0·03, basal breadth 0·002.

Habitat.—Mediterranean (south shore of France), J. Müller.

## 12. Heliodiscus echiniscus, n. sp (Pl. 34, fig. 5).

Disk with spiny surface, three times as broad as the medullary shell. Pores irregular, roundish or polygonal; eight to ten on the radius. Marginal spines thirty to fifty, pyramidal, angular, of very variable size, number, and disposition, gradually passing into the surface-spines; the largest nearly as long as the diameter of the medullary shell.

Dimensions.—Diameter of the disk 0.14, of the medullary shell 0.045; length of the radial spines 0.02 to 0.04, basal breadth 0.006.

Habitat.—Central Pacific, Station 272, depth 2600 fathoms.

## 13. Heliodiscus pertusus, n. sp. (Pl. 35, fig. 1).

Heliosestrum pertusum, Haeckel, 1881, Prodromus et Atlas (pl. xxxv. fig. 1).

Disk with spiny surface, three times as broad as the medullary shell. Pores irregular, circular, hexagonally framed; eight to ten on the radius. Marginal spines ten to thirty, very variable in size and disposition; commonly eight to twelve larger spines, which are pyramidal, about as long as the radius of the disk, and perforated by two to four irregular, longish pores. Between these fenestrated large spines are commonly ten to twenty smaller conical spines, gradually passing into those of the surface.

Dimensions.—Diameter of the disk 0.13 to 0.16, of the medullary shell 0.04 to 0.05; length of the marginal spines 0.04 to 0.08, basal breadth 0.01 to 0.015.

Habitat.—North Pacific, Stations 241 to 244, depths 2300 to 2900 fathoms.

## Subgenus 3. Heliodiscomma, Haeckel.

Definition.—Surface of the disk smooth, without radial spines. Bases of the marginal spines connected by a solid equatorial girdle.

## 14. Heliodiscus cingillum, n. sp. (Pl. 33, fig. 7).

Disk with smooth surface, five times as broad as the medullary shell. Pores regular, circular; twelve to fourteen on the radius. Equatorial girdle about as broad as the medullary shell, in the proximal half radially striped, on the margin with twenty to twenty-four short, flat, triangular spines, which are shorter than the breadth of the girdle.

Dimensions.—Diameter of the disk 0.25, of the medullary shell 0.05; length of the marginal spines 0.02, basal breadth 0.02.

Habitat.—Central Pacific, Station 274, depth 2750 fathoms.