## 8. Heliodiscus polymorphus, n. sp. (Pl. 34, figs. 11, 12).

Disk with smooth surface, four times as broad as the medullary shell. Pores irregular, roundish; ten to twelve on the radius. Marginal spines ten to fifteen, pyramidal, angular, very irregular and variable in size and distribution, the largest nearly as long as the diameter of the disk, as broad at the base as the radius of the medullary shell.

Dimensions.—Diameter of the disk 0·15 to 0·2, of the medullary shell 0·04 to 0·05; length of the radial spines 0·06 to 0·18, basal breadth 0·02 to 0·03.

Habitat.—Central Pacific, Stations 265 to 268, depths 2700 to 2900 fathoms.

# 9. Heliodiscus solaster, n. sp. (Pl. 34, fig. 4).

Disk with smooth surface, three times as broad as the medullary shell. Pores subregular roundish; nine to ten on the radius. Marginal spines fifty to sixty, cylindro-conical, flexuose, very variable in size, the largest nearly as long as the diameter of the disk. The spines lie not only in the equatorial plane (as usual), but also in two to four crowded girdles on both sides of it.

Dimensions.—Diameter of the disk 0·15, of the medullary shell 0·05; length of the radial spines 0·05 to 0·15, basal breadth 0·008.

Habitat. -- Indian Ocean, Madagascar, Rabbe, surface.

### Subgenus 2. Heliodiscilla, Haeckel.

Definition.—Surface of the disk covered with radial spines. Bases of the marginal spines free, without a connecting equatorial girdle.

### 10. Heliodiscus phacodiscus, Haeckel.

Heliodiscus phacodiscus, Haeckel, 1862, Monogr. d. Radiol., p. 437, Taf. xvii. figs. 5-7. Haliomma phacodiscus, Haeckel, 1860, Monatsber. d. k. preuss. Akad. d. Wiss. Berlin, p. 815.

Disk with spiny surface, three times as broad as the medullary shell. Pores regular, circular; six to eight on the radius. Marginal spines twelve to sixteen, conical, as long as the radius of the disk, and one-third as broad as the diameter of the medullary shell.

Dimensions.—Diameter of the disk 0·12 to 0·16, of the medullary shell 0·04 to 0·05; length of the marginal spines 0·06 to 0·08, basal breadth 0·01 to 0·02.

Habitat.—Mediferranean (Messina), Canary Islands (Lanzerote).

### 11. Heliodiscus amphidiscus, Haeckel.

Heliodiscus amphidiscus, Haeckel, 1862, Monogr. d. Radiol., p. 437.
Haliomma amphidiscus, J. Müller, 1858, Abhandl. d. k. Akad. d. Wiss. Berlin, p. 154,
Taf. ii. figs. 3-7.

Disk with spiny surface, three times as broad as the medullary shell. Pores regular, circular; eight to ten on the radius. Marginal spines twelve to fifteen, bristle-shaped, not larger than the surface spines, about as long as the radius of the medullary shell.