Dimensions.—Diameter of the disk 0.15 to 0.2, of the medullary shell 0.05 to 0.06; length of the marginal spines 0.02 to 0.08, basal breadth 0.01 to 0.03.

Habitat.—Cosmopolitan; Atlantic, Pacific, in various depths; also fossil in Barbados and Sicily.

## Subgenus 4. Heliodiscura, Haeckel.

Definition.—Surface of the disk covered with radial spines. Bases of the marginal spines connected by a solid equatorial girdle.

## 19. Heliodiscus apollinis, n. sp.

Disk with spiny or bristly surface, three times as broad as the medullary shell. Pores regular, circular; eleven to twelve on the radius. Equatorial girdle narrow, on the margin with sixteen to twenty broad, flat, triangular teeth, which are half as long and one-fourth as broad as the medullary shell. (Very similar to Astrophacus apollinis, Pl. 32, fig. 2, but with simple medullary shell.)

Dimensions.—Diameter of the disk 0.18, of the medullary shell 0.06; length of the marginal spines 0.03, basal breadth 0.015.

Habitat. - Mediterranean (Corfu), Haeckel, surface.

## 20. Heliodiscus zoroaster, n. sp.

Disk with spiny surface, four times as broad as the medullary shell. Pores subregular, circular; fourteen to sixteen on the radius. Equatorial girdle broad, radially striped, on the margin with ten to twelve pyramidal, deeply sulcated radial spines, which are nearly as long as the radius of the disk, and one-fourth as broad at the base.

Dimensions.—Diameter of the disk 0.24, of the medullary shell 0.06; length of the marginal spines 0.11, basal breadth 0.03.

Habitat.—Indian Ocean, between Aden and Ceylon, Haeckel, surface.

## Genus 194. Heliodrymus, Haeckel, 1881, Prodromus, p. 457.

Definition.—Phacodiscida with simple medullary shell and with numerous (ten to twenty or more) branched radial spines on the margin of the disk (commonly with a variable number and an irregular disposition of the ramified spines).

The genus *Heliodrymus* differs from the nearly allied *Heliodiscus* by the ramification of the marginal spines, a character hitherto observed in no other genus of Phacodiscida. The branching is more or less irregular, either a simple bifurcation or a repeated fissure; the spines and their branches are commonly more or less flexuose.