

Species of *Hemipholis* not herein described.

*Hemipholis cordifera*, Lym. (Pl. XL. figs. 8–12 ; Pl. XLIV. figs. 13–16).

*Hemipholis cordifera*, Lym., Ill. Cat. Mus. Comp. Zool., No. i. p. 137, pl. i. figs. 1–3, 1865.

*Asterias cordifera*, Bosc, Hist. Nat. Vers., vol. ii. p. 138, pl. ii. fig. 3, 1830.

*Ophiura elongata*, Say, Journ. Phil. Acad., vol. v. p. 146, 1825.

*Ophiolepis elongata*, Müll. & Tr., Syst. Ast., p. 95, 1842 ; Stimp., Proc. Bost. Soc. Nat. Hist., vol. iv. p. 225, 1852.

*Ophiolepis uncinata*, Ayres, Proc. Bost. Soc. Nat. Hist., vol. iv. p. 250, 1852.

*Hemipholis elongata*, Agas., MS.

*Amphiura elongata*, Ltk., Addit. ad Hist., part 2, p. 115, 1859.

*Amphiura cordifera* (Bosc), Ltk., Addit. ad Hist., part 2, p. 120, pl. iii. fig. 2, 1859.

West Indies.

*Hemipholis gracilis*, Vll., Trans. Conn. Acad., vol. i., part 2, p. 262, 1867.

*Hemipholis affinis*, Ljn., Oph. Viv. Öf. Kong. Akad., 1866.

Guayaquil.

*Hemipholis microdiscus*, Duncan, Journ. Linn. Soc., vol. xiv. p. 467, pl. x. figs. 20–22, 1879.

Korean Strait ; 51 fathoms.

*Hemipholis wallichii*, Duncan, Journ. Linn. Soc., vol. xv. p. 138, pl. vi., is a very young animal, with a disk not more than .5 mm. in diameter. It is not possible to distinguish either the genus or the species.

*Ophiophragmus*.

*Ophiophragmus*, Lym., Ill. Cat. Mus. Comp. Zool., vol. i., 1865.

Disk small and delicate, furnished with naked radial shields, and fine overlapping scales ; the scales along the edge of the disk are turned up, so as to make a little fence. Teeth. No tooth-papillæ. Mouth angles short and small, bearing six close-set little papillæ. Arms slender, even and more or less flattened. Arm-spines short and regular. Two genital openings in each interbrachial space.

It is in the structure of the mouth frames that this genus, as illustrated in *Ophiophragmus wurdemani* is peculiar. The upper brachial rims of the contiguous halves form an elevated crescent embracing the outer end of the mouth slit ; while the interbrachial rims or wings (Pl. XL. fig. 4, *f*) rise as steep crests whose free side (fig. 7) has deep radiating grooves for the attachment of the external mouth frame muscle. Similar, but not at all so large, grooves are found in *Ophiocoma*, but there is nothing in the character of either genus that seems to call for such a strong attachment. In general build the skeleton is more powerful than that of *Amphiura*. The radial shields are wide and thick ; the genital plates stout and club-headed, while the arm bones are stouter and