

of the mouth of the American Bittern (*Botaurus minor*, Gm.) at the sides of and below the tongue.

The following species, according to V. Linstow's excellent "Compendium," have been found in the cavity of the mouth or in the œsophagus of Ciconiæ:

1. *D. complantaum* ..... œsoph ..... *Ardea cinerea*.
2. *D. heterostomum* ..... sub lingua ..... *A. purpurea*.
3. *D. hians* ..... œsoph ..... *Cic. alba*.
4. *D. dimorphum* ..... " ..... *A. cocoi*.

These forms are closely related; indeed, Dujardin<sup>1</sup> regards the first two as identical with the third, and Diesing<sup>2</sup> seems to suggest that the first and fourth are also related. The separation by Diesing of *D. hians* from these congeners, on account of the relative size of the suckers, may possibly be grounded on a mistake. The anterior end of the worm which I possess resembles closely that of *D. dimorphum* (see Diesing's figure),<sup>3</sup> and it is more than probable that the prominent border which surrounds the mouth in these forms has been taken for the anterior sucker. This it seems to replace functionally in part in my specimens; for during life it undergoes rapid changes in shape, sometimes having a circular sometimes a triangular aperture, and plays an active part in the locomotion of the animal; while the anterior sucker is quite distinct, although small, and is immersed in the papilla which springs from the anterior depression. (See Fig. 1).

The following points in the description of *D. heterostomum* induce me to refer my specimens to it until a comparison can be made: the habitat, size, *two lateral lines*, form of anterior end of body, of neck and of ventral sucker, position of genital organs and apertures.

The details which follow are for the most part taken from dead specimens.

The form of the body is subject to much variation. Fig. 1 represents it at rest. Length, 6.85 mm.; greatest breadth, 1.5 mm. It may, however, lengthen into a much more linear form. The anterior sucker is 0.3 mm. in diameter, its aperture transversely elliptical. The pharynx has thin walls, is still smaller, and gives off the intestinal coeca immediately, which are very conspicuous from the deep brown pigment in their walls. They have the further peculiarity of

<sup>1</sup> Helminthes, p. 399.

<sup>2</sup> System. Helm. I. 354.

<sup>3</sup> Neunzehn Arten Tremat. X. B. Denkschr. d. k. Akad. in Wien., Taf. III., 2 & 3.