

two small longitudinal excavations in the solid tissues of these animals terminating anteriorly in the minute pore in the centre of the head and united by cross excavations in the joints. The heads of the cestodea being so constantly armed with hooklets and sucking discs they must be designed to fasten upon the intestinal mucous membrane and absorb therefrom a portion at least of their nourishment.

Five metamorphoses are observed in this order:—1. The mature or perfect animal (proglottis). 2. The hooked embryos. 3. The resting scolex, appearing, (a) with vesicular appendages; (b) a hand like appendage; (c) no appendage. 4. The active scolex. 5. strobila.

FAMILY I. BOTHRIOCEPHALI.

These animals are furnished with two lateral depressions or sucking discs upon the head, which is more or less tetragonal. The depressions are usually naked. The head is obtusely conical.

The strobila has a dorsal and ventral surface. Four margins are defined on each segment,—the two lateral free,—the anterior and posterior unite the segment to its anterior and posterior neighbors.

The genital pores are situated in the mesian line. It is most common in Russia and Poland. Numerous other members of the family have been described, but as they do not occur in the human body, and their cystic worms have not been discovered, I omit further allusion to them and proceed to the

FAMILY II. TAENIÆ.

This family is a very extensive one, finding its especial habitat in fishes, the perfect animal being most abundant in the predacious ones. It occurs also in piscivorous raptorial birds. Among mammals it occurs to a certain extent when they live on the sea shore at the north. Those living inland are exempt, except man, in whom only is found the *Taenia solium*. He being omnivorous, there is a strong presumption that he introduces along with his marine food the scolices of this parasite.

The experiments of Eschricht seem to prove that a species of ligula is one stage of its development. This ligula is found in large quantities in the flesh of the dorse and other fish inhabiting the northern seas.