bral nerves, and are designed chiefly for the organs of sense located in the head. Those which join the spinal marrow are also in pairs, one pair for each vertebra or joint of the back. The number of pairs varies, therefore, in different classes and families, according to the number of vertebræ. Each nerve is double, in fact, being composed of two threads, which at their junction with the spinal marrow are separate, and afterwards accompany each other throughout their whole course. The anterior thread transmits the commands of the will which induce motion; the other receives and conveys impressions to the brain, to produce sensations.

63. In the Articulated animals, comprising the crabs, barnacles, worms, spiders, insects, and other animals formed of rings, the nervous system consists of a series of small centres or swellings, called ganglions, (Fig. 10,) placed beneath the alimentary canal, on the floor of the general cavity of the body, and connected by threads; and of a more considerable mass placed above the œsophagus or throat, connected with the lower ganglions by threads which form a collar around the alimentary canal. The number of ganglions generally corresponds to the number of rings.

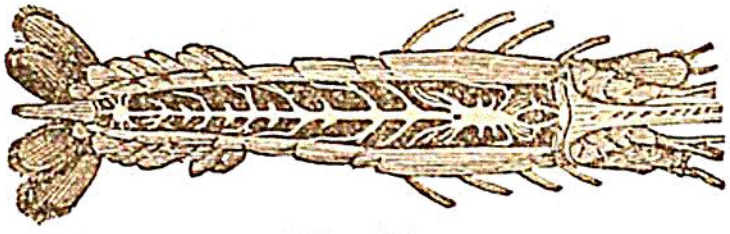

Fig. 10.

64. In the Mollusks, (Fig. 11,) the nervous system consists of a single ganglionic circle, the principal swellings of which are placed symmetrically above and below the œsophagus, and from whence the filaments, which supply the organs in different directions, take their origin.

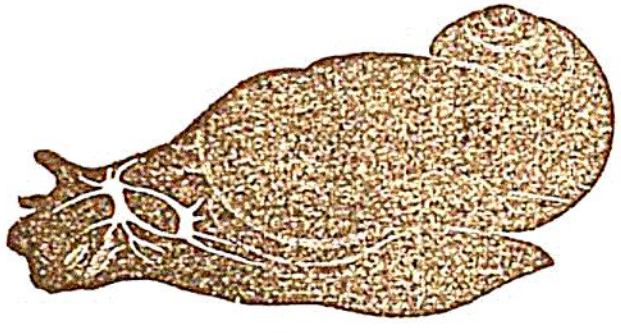

Fig. 11.