

Each vertebra has a solid centre with four branches, two of which ascend and form an arch above, and two descend, forming an arch below the body of the vertebra. The upper arches form a continuous cavity (*a*) along the region of the trunk, which encloses the spinal marrow, and in the head receives the brain, (61.) The lower arches (*b*) form another cavity, similar to the superior one, which contains the organs of nutrition and reproduction; their branches generally meet below, and when disjoined, the deficiency is supplied by fleshy walls. Every part of the skeleton may be reduced to this fundamental type

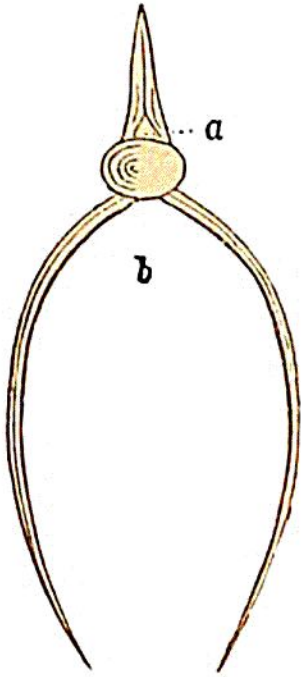


Fig. 28.

the vertebra, as will be shown, when treating specially of the vertebrate animals; so that between the pieces composing the head, the trunk, or the tail, we have only differences in the degree of development of the body of the vertebra, or of its branches, and not in reality different plans of organization.

162. The muscles which move this solid framework of the vertebrata are disposed around the vertebræ, as is

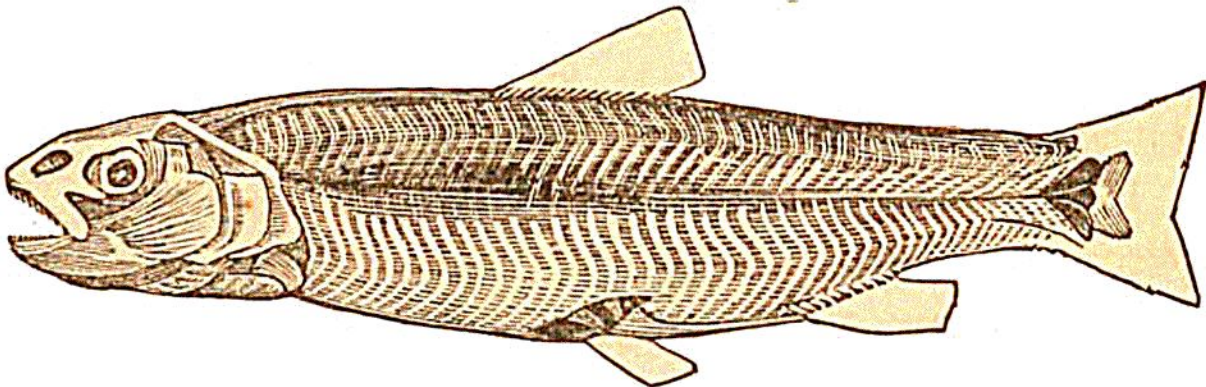


Fig. 29.

well exemplified among the fishes, where there is a band of muscles for each vertebra. In proportion as limbs