FINS OF FISHES.—As the progression of fishes through the water is principally effected by the action of the tail, they have no limbs properly so called. The instruments for balancing the body, and for assisting progression, are the fins, which are composed of numerous rays that support a membranous expansion; and the number and situation of the fins present various modifications in the different orders and genera.

The fins are named according to the situation they occupy; for example, *pectoral*, those on each side the chest, and which correspond to the anterior extremities of other vertebrata; *dorsal*, on the back; *ventral*, on the belly; *caudal*, on the tail. The rays are of two kinds; 1st, the *Spinous* rays; these consist of a single osseous piece, usually dense, and pointed, sometimes flexible and elastic, and divided longitudinally; 2d, *Soft* or *articulated rays*, which are composed of numerous small articulations or joints, dividing into branches at their extremities. Many species of fishes have four fins; others six; some but two; and in certain genera they are altogether wanting. In a fossil state the fins are often beautifully preserved; even the soft rays, in many of the Tertiary marls, and in the Chalk, are found entire, and attached to the body in their natural situation. The large, strong, spinous, rays of the dorsal fins of the cartilaginous fishes, as the *Sharks* and *Rays*, are generally found detached, or connected only with a few vertebræ; but they are