

even-tail (*Ly.* II. p. 99.). In the second modification, the vertebral column, towards its extremity, diverges from a straight line, and rises up, and is prolonged into the upper lobe of the tail; the caudal fin appearing like a rudder, and the lower lobe being proportionably very feeble and small; as in the Shark and Dog-fish (*Ly.* II. p. 99): this form of tail is called *heterocercal*, i. e. unequal-tail. But few of the existing fishes have this condition of the caudal fin, while it is found in all the fossil species that occur in the ancient secondary strata; namely, the Magnesian limestone, and antecedent deposits. The rounded, and equally-bilobed or homocercal tails, are seen in the fishes from the Chalk, *Wond.* p. 334; and the rudder-like, or heterocercal tail, is shown in the fish from the Carboniferous strata, *Wond.* p. 681.

From this brief summary of the essential characters of those durable parts of the organization of fishes, which most frequently occur in a fossil state, we pass to the investigation of some illustrative examples of this class of organic remains. But before describing any entire specimens, it will be expedient to notice the separate fins, and teeth, which abound in many deposits; in some instances occurring in connexion with other parts of the skeleton, but very generally detached, and yielding the only evidence of the existence of numerous extinct species and genera. The greater part belong to the first order—the Placoidians (*Poiss. Foss.* Tom. III.), and