

each other. It is quite certain, therefore, that such large and bulky creatures as the Ichthyosauri, having their vertebræ constructed after the manner of fishes, had they been furnished with legs instead of paddles, could not have moved on land without injury to their backs.*

Ribs.

The ribs were slender, and most of them bifurcated at the top: they were also continuous along the whole vertebral column, from the head to the pelvis, (see Plates 7, 8, 9); and in this respect agree with the structure of modern Lizards. A considerable number of them were united in front across the chest: their mode of articulation may be seen in Pl. 14.

* Sir E. Home has further remarked a peculiarity of the spinal canal, which exists in no other animals; the annular part (Pl. 12, D a. and E a.) being neither consolidated with the body of the vertebra, as in quadrupeds; nor connected by a suture, as in Crocodiles; but remaining always distinct, and articulating by a peculiar joint, resembling a compressed oval ball and socket joint, (D g. and E g.). And Mr. Conybeare adds, that this mode of articulation co-operates with the cup-shaped form of the intervertebral joints, in giving flexibility to the vertebral column, and assisting its vibratory motions; for, had these parts been consolidated, as in quadrupeds, their articulating processes must have locked the whole column together, so as to render such a motion of its parts impossible; but by means of this joint every part yields to that motion. The tubercle by which the transverse apophysis of the head of the rib articulates with the vertebra, is seen at d.