I am aware, that by some very distinguished comparative anatomists, among the rest Professor Owen, the attachment, so common among fishes, of the scapular arch and the fore limbs to the occipital bone, is regarded, not as a displacement, but as a normal and primary condition of the parts. Recognizing in the scapular bones the ribs of the occipital centrum, the anatomists of this school of course consider them, when found articulated to the occiput, as in their proper and original place, and as in a state of natural dislocation when removed, as in all the reptiles, birds, and mammals, farther down. We find Professor Oken borrowing support to his hypothesis from this view. The limbs, he tells us, are simply ribs, that in the course of ages have been set free, and have become by development what they now are. And it is un questionably a curious and interesting fact, that there are certain animals, such as the crocodile, in which every centrum of the vertebral column, and of every vertebra of the head, has its ribs or rib-like appendages, with the exception of the occipital centrum. And it is another equally curious fact, that there is another certain class of animals, such as the osseous horn-covered fishes, with the Sturionidæ, Salamandroidei, and at least one genus among the Placoids, (the Chimæroidei,) in which this occipital centrum bears as its ribs the scapular bones, with their appendages the fore limbs. It is the centrum without ribs that is selected in these animals as the centrum to which the

Wealden, whose tails spread out into broad terminal processes, without homologue in the higher animals; fig. d, those Acanthopterygii of the Chalk that, in addition to the non-homological processes, have both fore limbs and hinder limbs stuck round the head; while fig. e represents the asymmetrical Platessa, of the same period, with one of its eyes in the middle of its head, and the other thrust out to the side.