

chyloused vertebræ, as Professor Owen first demonstrated.*

In the Crocodiles, the four or five vertebræ preceding the sacrum have no ribs attached to them, and are, therefore, termed *lumbar*; in the Lizards, there are but two lumbar vertebræ. A peculiar modification exists in the first caudal vertebra of the adult Gavial and Crocodile; the *centrum* is *convex* both in front and behind. The last of the anchylosed vertebræ forming the sacrum, is concave posteriorly; hence the necessity of an anterior ball in the first joint of the tail (see *Wond.* p. 797, fig. 153.). The last *cervical* vertebra in the Turtles and Tortoises has a similar construction. This mechanism confers freedom of motion without risk of dislocation.†

The *Ribs*, which are regarded as appendages to the vertebræ, are generally slender and round in the Lizards, with a single head, supported on a short convex process or tubercle. But in the Crocodilians, and several fossil reptiles, the head of the rib is double; and the posterior ribs are attached to the elongated transverse processes of the verte-

* Brit. Assoc. Reports for 1841, p. 130 and p. 105.

† The importance of a knowledge of this fact to the collector is too obvious to require remark; the discovery of a doubly convex caudal vertebra in the strata of Tilgate Forest, would, I confess, have been very perplexing before my detection of this peculiarity in the skeleton of a Gavial in the museum of Dr. Grant, the eminent Professor of Comparative Anatomy in University College.