

ally protected from dislocation by the locking in, above and below, of the articular processes, and by the close investment of the capsular ligaments. The direction of the surfaces of these processes, and the shape and length of the spinous processes, are such as to allow of free lateral flexion, but to limit the vertical and longitudinal motions; and whatever degree of freedom of motion may exist between the adjoining vertebræ, that motion being multiplied along the column, the flexibility of the whole becomes very great, and admits of its assuming every degree and variety of curvature. The presence of a sternum, restraining the motions of the ribs, would have impeded all these movements, and would have also been an insurmountable bar to the dilatation of the stomach, which is rendered necessary by the habit of the serpent of gorging its prey entire.

The mode in which the boa exerts a powerful pressure on the bodies of the animals it has seized, and which it has encircled within its folds, required the ribs to be moveable laterally, as well as backwards, in order to yield to the force thus exerted. The broad convex surfaces on which they play give them, in this respect, an advantage which the ordinary mode of articulation would not have afforded. The spinous processes in this tribe of serpents are short and widely separated, so as to allow of flexion in every direction. In the rattle-snake, on the other hand, their length and oblique position are such as to limit the upward bending of the spinal column, although, in other respects, its motion is not restricted. The vertebræ at the end of the tail are furnished with broad transverse processes for the attachment of the first joints of the rattle.

But of whatever variety of flexions we may suppose the lengthened body of a serpent to be capable, it will, at first view, be difficult to conceive how these simple actions can be rendered subservient to the purposes of progression on land: and yet experience teaches us that few animals advance with more celerity on the surface of the ground, or dart upon their prey with greater promptitude and precision.