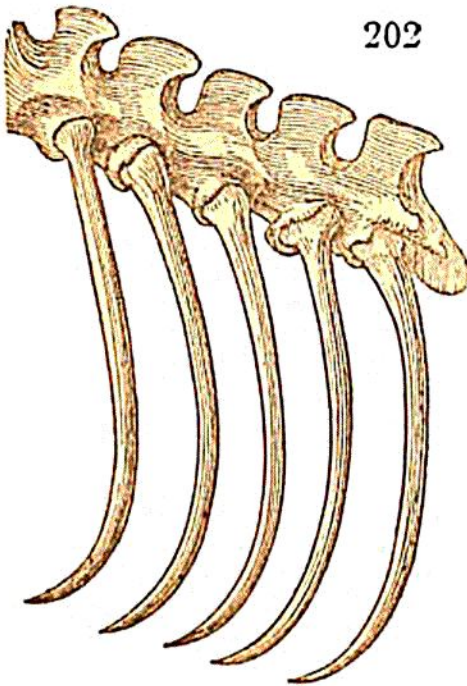


disengaged; and then, by a sudden spring, fastening upon the defenceless object of its attack, and twining round its body, so as to compress its chest, and put a stop to its respiration. Venomous serpents, on the other hand, coil themselves into the smallest possible space, and suddenly darting upon the unsuspecting or fascinated straggler, inflict the quickly fatal wound.

It is evident, from these considerations, that, in the absence of all external instruments of prehension and of progressive motion, it is necessary that the spine should be rendered extremely flexible, so as to adapt itself to a great variety of movements. This extraordinary flexibility is given, first, by the subdivision of the spinal column into a great number of small pieces; secondly, by the great freedom of their articulations; and thirdly, by the peculiar mobility and connexions of the ribs.

Numerous as are the vertebræ of the eel, the spine of which consists of above a hundred pieces, that of serpents is in general formed of a still greater number. In the rattlesnake (*Crotalus horridus*) there are about two hundred vertebræ;



and above three hundred have been counted in the spine of the *Coluber natrix*. These vertebræ are all united by ball and socket joints, as in the adult batrachia; the posterior rounded eminence of each vertebra being received into the anterior surface of the next. Fig. 202 is a view of this portion of the skeleton in the *Boa constrictor*, showing also the articulation of the ribs with the vertebræ.

While provision has thus been made for extent of motion, extraordinary care has at the same time been bestowed upon the security of the joints. Thus, we find them effect-