

animals differ as much from each other in their teeth, bones, and viscera, as the ape differs from the cat, or the elephant from the horse."

The masterly memoir of Cuvier, while confirming all the views of Camper, has restored the individuality of this surprising being, which has since received the name of *Mosasaurus*, that is to say, Saurian or Lizard of the Meuse. It appears, from the researches of Camper and Cuvier, that this reptile of the ancient world formed an intermediate genus between the group of the *Lacertilia*, which comprehends the *Monitors* (represented in Fig. 146), and the ordinary *Lizards*; and the *Lacertilia*, whose palates are armed with teeth, a group which embraces the *Iguana* and the *Anolis*. In respect to the *Crocodiles*, the *Mosasaurus* resembles them in so far as they all belong to the same class of *Reptiles*.

The idea of a lizard, adapted for living and moving with rapidity at the bottom of the water, is not readily conceived; but a careful study of the skeleton of the *Mosasaurus* reveals to us the secret of this anatomical mechanism. The vertebræ of the animal are concave in front and convex behind; they are attached by means of orbicular or arched articulations, which permitted it to execute easily movements of flexion in any direction. From the middle of the back to the extremity of the tail these vertebræ are deficient in the articular processes which support and strengthen the trunk of terrestrial vertebrated animals: they resemble in this respect the vertebræ of the *Dolphins*; an organisation necessary to render swimming easy. The tail, compressed laterally at the same time that it was thick in a vertical direction, constituted a straight rudder, short, solid, and of great power. An arched bone was firmly attached to the body of each caudal vertebra in the same manner as in *Fishes*, for the purpose of

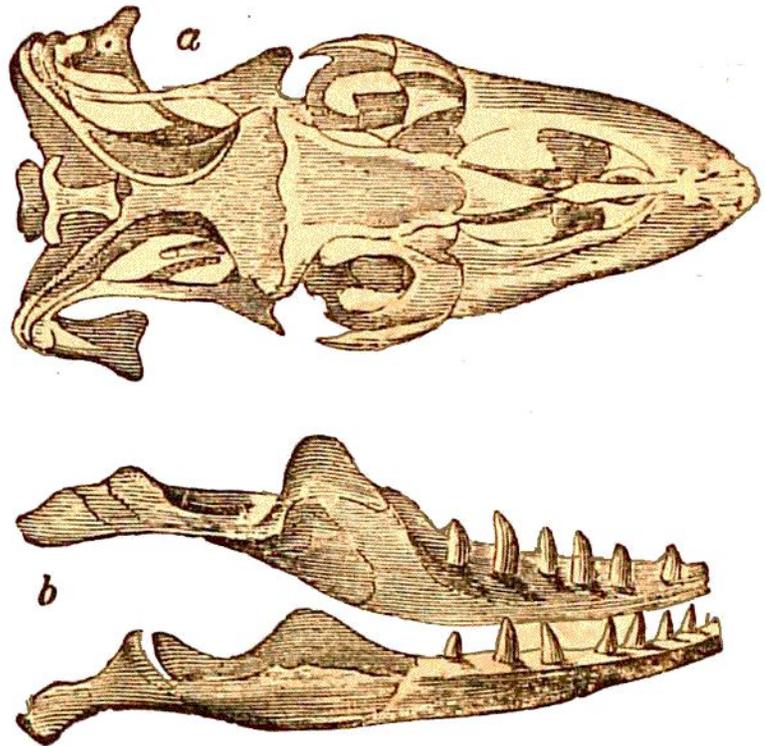


Fig. 145.

*a*, skull of *Monitor Niloticus*; *b*, under-jaw of same.