

Whenever a type of the present period exhibits characteristic features connected with a circumscribed geographical distribution, it is an interesting problem to ascertain whether the fossil representatives of past ages found in the same region belong to the same type or not. The existence of North American fossil Testudinina during the Tertiary period having been ascertained by Dr. Leidy from the beautiful specimens found in Nebraska, I became very anxious to compare them with the living Xerobates, which are the only North American Testudinina. Professor James Hall, whose collection of fossils, from the Mauvaises Terres, exceeds all expectations, has provided me with ample means to make this comparison, and I have satisfied myself that they do differ not only from Xerobates, but even from all living Testudinina, in combining characters which at present exist only in Emydoids with those that are strictly characteristic of Testudinina.

For the sake of comparison, I add a few remarks upon the other genera which I have been able to examine.

CHELONOIDIS, *Filz.* The head is narrower across the temporal muscles, and the region of the eyes, nose, and mouth longer, than in Xerobates; the top of the skull between the eyes descends further forward in this genus. The lower jaw is not as high as in Xerobates, but is more rounded at the symphysis, and spreads less backward; moreover, it does not here spread apart from above downward, but curves out for a little distance below the upper edge, and then turns in to the lower edge. The alveolar surface of the upper jaw is raised under the nose to a large, round, inverted pit, and has no ridge at the symphysis, but a small one on each side of the pit. The ridge around the inner edge of this surface, and the one parallel to it, are both small; the latter is tuberculated. The inner edge of the alveolar surface of the lower jaw rises higher toward the front end, so as to be, for some distance, as high or higher than the outer alveolar edge; this inner ridge is interrupted by a broad depression where the alveolar surface rises steeper to fit into the pit above. To this genus belongs the *Testudo tabulata*, *Auct.*, of which I have been able to examine a number of living specimens, sent to me from Surinam by Mr. C. J. Hering. A close comparison with living specimens of *Xerobates carolinus* shows them to be entirely different, even generically, although Schlegel considers them as identical.¹

MEGALOCHELYS, *Filz.* This type is closely allied to *Chelonoidis*; but I have examined too few specimens to be able to determine whether it is a distinct genus or not. There are some characters which seem to indicate that it is distinct; for example, the inner furrow along the alveolar surface of the upper jaw continues deep to its front end, whereas in *Chelonoidis* it vanishes forward; the

¹ Temm. and Schl. Fauna japon. p. 70.