

## GENERA OF THE SUB-FAMILY OF CINOSTERNOIDÆ PROPER.

I. *CINOSTERNUM*, *Spiz.* The jaws are strong; their horizontal alveolar surfaces are broad, and they seem well fitted for crushing; their strength comes from thickness, and not from height. The head is very broad: the upper maxillaries spread wide apart backward; the sides of the head continue to spread back of them till about midway between the eyes and ears; and thence backward they approach each other. They also spread rapidly apart from above downward, just back of the eyes. The front part of the head over the mouth is low; its roof between the eyes is broad; and the eye-orbits open sidewise and forward, not upward. The nose is short; its sides curve out somewhat from above downward, and its roof reaches as far forward as the jaw under it. The mouth is very short, and, as the upper maxillaries spread so wide apart backward, it is very broad behind. The outer surface of the maxillaries curves outward under the eye, and then turns sharply inward to the alveolar edge; but at the symphysis the jaw is drawn down to a sharp point or a short chisel-edge, and the outer surface at the end slants backward less than it slants inward at the sides. The horizontal alveolar surface is very broad, narrowest at and near the symphysis, and widening fast thence backward to the hind end. The lower jaw is low, but its outer surface curves far backward from the end and inward from the sides, and its alveolar surface is broad; thus it is thick and strong. The alveolar edge is bluntly rounded at the front end, and not drawn out to a sharp point. The alveolar surface is narrowest at the symphysis and on either side of it, but widens fast thence backward, and is broadest at the hind end; at and near the angle it is almost flat from side to side, but its outer edge rises considerably about the front end. The outer surface of the jaw curves outward considerably below the alveolar edge, thus making the jaws shut the closer.

No species of this genus are known to occur within the limits of the United States; but there are several in Central and South America, which have generally been confounded with the *Testudo scorpioides* of Linnæus. Major LeConte was the first to distinguish them carefully.<sup>1</sup> It is true the species from the Brazils

<sup>1</sup> Duméril and Bibron, (Erp. gén. 2 vol. p. 32,) as well as Gray, (Cat. Brit. Mus. 1844, p. 32,) agree in considering Bell's *Cinosternum shavianum*, and Spix's *Cinosternum longicaudatum* and *brevicaudatum*, as synonymes of *Testudo scorpioides*, *Lin.*; but Major LeConte, in his interesting monograph of

the genus *Cinosternum*, (Proc. Acad. Nat. Sc. Phil. 1854, p. 180,) has clearly shown that the Brazilian specimens constitute a distinct species from that of Surinam, which is the old Linnæan species, and that the Mexican is still different. I have myself examined the specimens upon which his descriptions are