

*THYROSTERNUM INTEGRUM*, *Ag.* LeConte's *Cinosternum integrum* from Mexico (Proc. Acad. Nat. Sc. Phil., 1854, p. 183). This species resembles Wagler's *Cinosternum hirtipes*, which belongs also to this genus. Wagler's species is founded upon a single male, preserved in the Museum of Munich, LeConte's upon a single female in his possession. I have examined both. The rough scales in the knee joint of the hind legs of *Th. hirtipes* are a sexual character, found in all the male *Cinosternoids*, and do not by any means constitute a specific distinction. The difference in the outline of the front margin of the carapace and the absence of an odd marginal scale in *Cinosternum hirtipes* may prove specific, though a tendency to such differences is already noticeable among the males and females of *Th. pennsylvanicum*. I have not seen *Cin. Doubledayii*, *Gray*; but I doubt its specific difference from *C. pennsylvanicum*, as well as its Californian origin. Nor have I seen *Cin. leucostomum*, *Dum.* and *Bibr.*; but I have often noticed specimens of *Cin. pennsylvanicum* with a white jaw, especially among the females, and *Duméril* and *Bibron's* species is founded upon a female.

III. *PLATYTHYRA*, *Ag.* The jaws are very weak; the mouth is broad and short. The head is long and low; it is regularly arched, back of the eyes; its sides curve slightly between the eyes and ears; its roof is very narrow between the eyes, and, as the mouth below is broad, the eye-orbits are carried far outward at their lower edges, and therefore open upward as well as forward and sideways. The skull does not rise back of the orbits; indeed, the orbits project above it at their upper edges. The nose is short, much shorter than in *Cinosternum*; its outer surface curves all round it, so that, when the fleshy parts are preserved, it is rounded and pointed; its bony roof does not project forward as far as the jaw projects under it. The outer surface of the jaw slants inward under the eyes, curving out, above the alveolar edge, very little if at all; at the front end it slants backward faster than it slants inward at the sides, and the alveolar edge rises there; but just at the symphysis the jaw is brought down to a small, short point. The upper maxillaries are narrow from above downward, and weak. The vertical alveolar surface is not as high as in *Thyrosternum*; the horizontal alveolar surface is broad, but the bone under it is thin. The lower jaw is also weak, being very thin, especially about the symphysis, and not high, as in *Thyrosternum*. It is drawn out at the symphysis to a slender point. The alveolar surface is narrow all round; in front it is nearly vertical, and it flattens toward the angle, but near the angle the outer edge is raised somewhat more than in the other genera. The outer surface of the sides curves considerably outward for a short distance below the edge near the angle, and the jaws shut close. These jaws are clearly not fitted to tear any strong, fibrous substance; the only food found in the intestines of a specimen examined with that view was a mass of insects. The type of this genus is altogether new to science.