

and from Brownsville, in Texas, through the Smithsonian Institution. There can be no doubt, therefore, that this species extends over the most extraordinary range; which is more difficult to explain than that of any American Emyd. The young are represented Pl. 3, fig. 9-11; the eggs, Pl. 7a, fig. 18 and 19.

*TRACHEMYS RUGOSA*, *Ag.*<sup>1</sup> I mention this species only to state that it differs from its North American representatives by its elongated form, the slight notches of the hind margin, and the very coarse rugosities of the back. There is a light longitudinal band on the side of the neck. Its color varies from a light salmon to a dark gray. I have seen specimens from the Havana, sent by Professor Poey to the Smithsonian Institution.

III. *GRAPTEMYS*, *Ag.* The great width of the smooth and flat horizontal alveolar surface, and the spoon shaped dilatation of the extremity of the lower jaw, chiefly distinguish this genus. There is no notch in the upper jaw. The tessellation of the skin amounts to scales only on the back of the neck; but there are large scales upon the feet, and a row of prominent ones along the outer edge of the fore legs. The young are strongly keeled, and their margin deeply notched, especially behind and on the sides, with a smooth surface, as prevails also in the adults; in old specimens, the concentric lines of growth of the scales are sometimes distinct. The persistence of the keel along the middle line of the back in the adults seems to be a character of inferiority, considering that it disappears in many species which are keeled when young, as, for instance, in *Ptychermys*. Though I had no opportunity of comparing specimens of Gray's *Emys sinensis*, I consider it as the Chinese representative of this genus. May not *Emys Bennettii*, *Gr.*, also belong to this group?

*GRAPTEMYS GEOGRAPHICA*, *Ag.*<sup>2</sup> Common from Pennsylvania and New York to Michigan, Tennessee, and Arkansas. I am indebted for specimens from Michigan to Prof. A. Winchell, of Ann-Arbor; from Quincy, Illinois, to Dr. Watson; from Delphi, Indiana, to Mr. Franklin Hill; from Ohio, to Mr. George Clark, of Toledo, to Mr. Joseph Clark, of Cincinnati, and to Dr. Kirkland, of Rockport; from Pennsylvania, to Prof. Baird, and S. S. Huldeman; from Blount county, Tennessee, to Prof. Baird; and from Arkansas, to Mr. G. Stolley. The young are represented Pl. 2, fig. 7-9; the eggs Pl. 7a, fig. 28-30.

*GRAPTEMYS LESUEURII*, *Ag.*<sup>3</sup> This species is only known in the Western States,

<sup>1</sup> This is the *Emys rugosa* of Gray, but not of Shaw. It is figured by Ramon de la Sagra, Cuba, Rept., pl. 2. Gray's *E. vermiculata* (Cat. Brit. Mus., 1844, p. 25) is the same.

<sup>2</sup> First described by LeSueur under the name of *Testudo geographica*. Dr. Holbrook called it *Emys*

*macrocephala*, in the first edition of the N. Am. Herp. In the second he adopted LeSueur's name (p. 87). *Emys labyrinthica* LeS. is only a variety of this species, remarkable for the numerous meandering lines upon the bridges of the sternum.

<sup>3</sup> This species is commonly called *Emys pseudo-*