

## IV.—TESTUDINOIDEA.

No parietosquamosal arch; a foramen palatinum between palate and maxillary; articular faces between sixth and seventh cervical not plane; nuchal without lower process; two biconvex cervicals; an incomplete series of inframarginals; squamosal not connected with postfronto-orbital.

*Emydidae.*

Quadrate open behind; number of phalanges of second and third toe of hind foot more than two; peripherals of bridge without median processes interlocking with rib-ends; rib-ends in a groove of the peripherals.

*Testudinidae.*

Quadrate closed behind; number of phalanges of second and third toe of hind foot never more than two; peripherals of bridge with median processes interlocking with rib-ends.

—G. BAUR, *University of Chicago.*

**Two New Species of North American Testudinata.—**

The following species of *Graptemys* have been described:

1. *Graptemys geographica*, Les. 1817.
2. *Graptemys pseudogeographica* (Les. MSS.), Holbrook, 1842.
3. *Graptemys oculifera*, Baur, 1890. *Science*, No. 405, pp. 262–263.
4. *Graptemys kohnii*, Baur, 1890. *l. c.*

## GRAPTEMYS PULCHRA spec. nov.

For some years I have been acquainted with two specimens of a *Graptemys* preserved at the Smithsonian Institution. Both specimens were collected by Dr. T. H. Bean in Montgomery, Ala., and bear the number 8808. One of these is mentioned in Yarrow's Catalogue (*Bull. U. S. Nat. Mus.*, No. 24, 1883), as "*Malacoclemmys geographicus*." In 1891 I received a skull and a very large living specimen from Mr. G. Kohn, of New Orleans, La., of the same species.

The coloration of the skull and neck distinguishes this species at once from all the others. The whole space between and behind the orbits is characterized by a continuous yellow figure, which sends backward on each side behind each orbit a strong process of the same color.

The head resembles that of *Graptemys kohnii*, but is more slender. The symphysis of the lower jaw is longer and the nose projecting. In all the skulls examined the jugal is excluded from the orbit, a charac-

ter not seen in the other species of *Graptemys* or *Malaclemmys*. The form of the carapace is very close to *Graptemys kohnii*; the dermal shields are very thin. It is the largest form of *Graptemys*, the shell reaching a length of over 170 mm. in straight line. The color of the shell is light olive with yellow marks on the marginals, the plastron is yellow, with some darker marks. Types: No. 8808. Smithsonian Institution, Washington, D. C. Two not full-grown specimens, collected by Dr. T. H. Bean at Montgomery, Ala.

The genus *Malaclemmys*, with the single species *M. centrata* (Bosc. MSS.) Latreille, 1801, is distinguished from *Graptemys* by the lower jaw; which is pointed and not rounded in front, and also by the condition of the quadratojugal and maxillary. In *Malaclemmys* the quadratojugal is extensively united with the maxillary; in *Graptemys* these elements are separated by the quadratojugal. The peculiar character of the jugal in *Graptemys pulchra* may perhaps justify the creation of a new genus for this species. I have given to the common "Diamond-back" the name *Malaclemmys centrata* (Bosc. MSS.) Latreille, 1801. The name *M. terrapin* Schoepff, 1793, cannot be used. The same name (*Testudo terrapen*) was given by Bonnaterre in 1789 to the *Trachemys rugosa* Shaw, 1802, of Jamaica. Already in the year 1788, however, Gmelin introduced the name *Testudo palustris* for the Jamaica tortoise; I therefore use the name *Trachemys palustris* Gmelin for the Jamaica tortoise, and that of *Malaclemmys centrata* (Bosc. MSS.) Latreille for the "Diamond-back."

KINOSTERNON LOUISIANÆ spec. nov.

Shell much like *K. pensilvanicum*, but more elongated. Skull different; the lateral hook in the middle of the maxillary very much developed and very sharp; median hook on symphysis not so strong; postorbital arch stronger than in *K. pensilvanicum*. Lower jaw very strong, ending in a sharp point; symphysis of lower jaw larger than vertical diameter of orbit. A yellow-orange stripe from snout over upper part of orbit along neck, one from the angle of the mouth. Four barbels, two just behind the symphysis near together and two farther behind more separated. Limbs and neck olive gray; a few yellow spots on top of the posterior part of head; webs more developed than in *K. pensilvanicum*. Lower jaw with greyish-yellow dots and lines. The whole coloration is very much like that in *Aromochelys tristycha* Ag., which is found together with *K. louisianæ*. seen from above these two animals resemble each other very much. They belong to different genera, but have about the same specific characters.

I have received many specimens of this species through the kindness of Mr. Gustave Kohn, of New Orleans, La. This species is the representative of *K. pensilvanicum* in Louisiana. I have never received a specimen of *K. pensilvanicum* from this locality, and believe that all the specimens which have been described as *K. pensilvanicum* from this State belong to *K. louisianæ*. Type specimen, No. 15527, Smithsonian Institution, from New Orleans, La.

—G. BAUR, *University of Chicago*.

**Further Notes on American Box-Tortoises.**—In Science, of April 3, 1891 (Vol. XVII, No. 426), I have given the osteological characters of three of the American Box-Tortoises: *Terrapene major* Ag., *T. carolina* L., and *T. ornata* Ag.

Through the kindness of Mr. Gustave Kohn, of New Orleans, La., I have received lately three living specimens of *T. triunguis* Ag. (*C. cinosternoides* Gray, Boul.) Besides I have received a specimen of *T. mexicana* Gray, for which I have to thank Dr. A. L. Herrera, Director of the National Museum, Mexico. Both these forms proved to be very interesting. I give now osteological characters of all the forms of *Terrapene*.

TERRAPENE MAJOR AG., 1857.

Quadratojugal well-developed, forming a complete zygomatic arch; cervicals long; upper branch of scapula considerably longer than inner branch (endo-scapula); digits with well-developed webs.

Number of phalanges in fore-foot, 2 3 3 3 2; in hind foot, 2 3 3 3 2. Southern States. Locality of type, Mobile, Ala.

TERRAPENE CAROLINA L., 1766.

Quadratojugal rudimentary, only connected with quadrate; cervicals shorter than in *T. major* Ag.; upper branch of scapula somewhat longer than inner branch (endo-scapula), but not so long as in *T. major*; digits slightly webbed.

Number of phalanges in fore-foot, 2 3 3 3 2 or 2 3 3 2 2; in hind foot 2 3 3 3 2.

Eastern States to Indiana.

TERRAPENE MEXICANA GRAY, 1849 (*Onychotria*).

Quadratojugal rudimentary, only connected with quadrate; cervicals probably as in *T. major*; upper branch of scapula as in *T. major*. No web between the digits and only three claws on the hind foot.

Number of phalanges in fore-foot, 2 3 3 2 2; in hind foot, 2 3 3 3 1. Mexico.