

being very short in the females, and extending beyond the rim of the shield in the males of all the species I know. In the Catalogue of the British Museum, J. E. Gray restricts, in 1844, the name of *Trionyx* to the North American species; separates *Trionyx indicus*, *Gray*, as a distinct genus under the name of *Chitra*; changes Fitzinger's *Amyda* to *Dogania*, excluding however from it *Tr. muticus*, which the Austrian herpetologist associated in that genus with *Tr. subplanus*; and calls *Tyrse* a genus embracing *Tr. gangeticus*, *Cuv.*, *javanicus*, *Geoffr.*, *ægyptiacus*, *Geoffr.*, and a few other less known species; and, finally, retains the name *Emyda* for Wagler's *Trionyx*. To these, Dr. W. Peters¹ has added a new genus from Mozambique, in which the absence of bony plates in the marginal rim is combined with a broad hind lobe of the plastron, and which he calls *Cycloderma*. Thus we have not less than thirteen generic names for about the same number of species, some of which are still very imperfectly known.

Under these circumstances a critical revision of the genera of Trionychidæ appears as a great desideratum in herpetology. But the materials for such a task seem to exist nowhere, if I judge from the published catalogues of the great museums in Europe; and I possess myself large numbers of specimens only of the North American species. Yet, from their careful examination I have gathered data which may be of service to a future monographer of this type. Thus I have already satisfied myself that the number of our species is much greater than is generally supposed;² and a careful study of their skeleton has taught me what constitutes generic characters in this family, so that I feel prepared to express an opinion respecting the value of the genera proposed by other writers.³ I hold that the genus *TRIONYX*, as limited by Wagler, is natural; it embraces the species described by Gray under the name of *Emyda*, and by Duméril and Bibron under that of *Cryptopus*. Next to it stands *CYCLODERMA*, *Peters*, also a natural genus. The Indian genus *CHITRA*, *Gray*, is no doubt well founded, and so also, probably, is *DOGANIA*, *Gray*, for which the name *Amyda*, *Fitz.*, might have been adopted by Gray, as this is older. But here ends the list of genera thus far proposed which are at all circumscribed within natural limits, as I can show that *Aspidonectes*, *Wagl.*, *Gymnopus*, *Dum.* and *Bibr.*, *Platypeltis*, *Fitz.*, *Pelodiscus*, *Fitz.*, *Potamochelys*, *Fitz.*, *Trionyx*, *Gray*, and *Tyrse*, *Gray*, either contain species which do not belong

¹ *Monat. Bericht der Akad. d. Wiss. in Berlin*, 1855, p. 216.

² Dr. Holbrook reduces the North American *Trionyx* to two species, and so do Duméril and Bibron, and J. E. Gray. It will be seen hereafter, that the supposition of LeSueur respecting the species occurring in the North-western States of the American

Union, which he considered as distinct from the southern species, was correct.

³ In this connection I would remark, that it is hardly possible to distinguish the Trionychidæ by their external characters, and that nothing short of a careful examination of the jaws, and especially of the skull, will reveal their generic differences.