

without acknowledging these higher divisions, admits five families: Cheloniadæ, Sphargidæ, Trioncidæ, Emydidæ, and Testudinidæ, as does also Bell, though this author divides these families between the two sections first introduced by Oppel, admitting however, for them, the names proposed by Merrem.

Fitzinger<sup>1</sup> has also five families in the order of Chelonians, but these do not exactly agree with those of Gray and Bell, for he unites the Sphargidæ and the Chelonidæ, but he adds another family under the name of Chelydoidea. Ritgen<sup>2</sup> admits, above the genera, three primary sections, Eretmochelones, Phyllopodocheles, and Podocheles; and so does also Wagler,<sup>3</sup> though he changes the names of Ritgen into Oiacopodes, Steganopodes, and Tylopodes, calling them tribes, while the whole order is considered as including a single family. F. Meyer<sup>4</sup> admits the same three subdivisions of his Tylopoda, (Testudinata,) but he gives them again new names. Wiegmann<sup>5</sup> divides the Testudinata into five families, without higher groups, namely, Chelonæ, Chersinæ, Emydæ, Chelydæ, Chilotæ. Swainson<sup>6</sup> admits also five families, but with still different limits. Prince Canino,<sup>7</sup> on the contrary, admits three families and four sub-families, but his three families do not correspond to the three sections or tribes of Wagler, as he unites the land and fresh-water Turtles into one family, while he considers the Trionychidæ as a distinct family, which both Ritgen and Wagler place with the common fresh-water Turtles. The land and fresh-water Turtles are to Canino only sub-families. Duméril and Bibron admit four families, Thalassites, Potamides, Elodites, and Chersites, and two sub-families.<sup>8</sup>

These apparently most discrepant classifications, if we judge them merely by the different names employed by their authors, have in themselves more similarity than would at first appear. For instance, the three genera of Brongniart correspond to the three sections or tribes of Ritgen and of Wagler; the three fami-

Notice that though Gray admits five families in 1831 as in 1825, he limits them differently in the second than in the first Synopsis.

<sup>1</sup> FITZINGER, (L. J.) *Neue Classification der Reptilien*, Wien, 1826, 1 vol., 4to.; see also his *Systema Reptilium*, Vindobonæ, 1843, 1 vol., 8vo.

<sup>2</sup> RITGEN, (F. A.) *Versuch einer natürlichen Eintheilung der Amphibien*, *Nova Acta Nat. Cur.*, 1828, vol. 14.

<sup>3</sup> WAGLER, (J.) *Natürliches System der Amphibien, etc.*, München und Stuttgart, 1830, 1 vol. 8vo. Atlas folio.

<sup>4</sup> MEYER, (FR. I. C.) *System des Thierreichs, etc.*, *Verhandl. Nat. Ver. Rheinl.*, 1849.

<sup>5</sup> WIEGMANN, (A. F. A.) und RUTH, (J.) *Handbuch der Zoologie*, Berlin, 1832, 1 vol., 8vo. The Reptiles are by Wiegmann.

<sup>6</sup> SWAINSON, (W.) *Natural History and Classification of Fishes, Amphibians, and Reptiles*, London, 1838-39, 2 vols., 12mo. These volumes form part of Dr. Lardner's Cabinet Cyclopædia.

<sup>7</sup> BONAPARTE, (C. LUCIAN, PRINCE OF CANINO.) *Saggio di una distribuzione metodica degli Animali Vertebrati*, Roma, 1832, 8vo.; see also his *Cheloniorum Tabula analytica*, Romæ, 1836.

<sup>8</sup> DUMÉRIL, (A. M. C.) et BIBRON, (G.) *Erpétologie générale, ou Histoire naturelle complète des Reptiles*, Paris, 1836, et seq., vol. 1.