

to the development of the disk as being a "teleological modification," and as if it were not an actual fact and a development correlated with radical modifications of all parts of the skeleton at least.

But whatever may be the closest relations of *Echeneis*, or the systematic value of its peculiarities, it is certain that it is not allied to *Elacate* any more than to others of the hosts of Scombroïd, Percoid, and kindred fishes, and that it differs *in toto* from it, notwithstanding the claims that have been made otherwise.* It is true there is a striking resemblance, especially between the young—almost as great, for example, as that between the placental mouse and the marsupial antechinomys—but the likeness is entirely superficial, and the scientific ichthyologist should be no more misled in the case than would the scientific therologist by the likeness of the marsupial and placental mammals.

NOTE ON THE GENUS SPARUS.

BY THEODORE GILL.

Messrs. Jordan and Gilbert propose to restore the Linnæan name *Sparus* to *Sparus boops*, after the example of Swainson (Nat. Hist. and Class. Fishes, etc., v. 2, pp. 171, 221), instead of to the *Sparus aurata*, as I have done. This course is inadmissible, as those naturalists will doubtless recognize when they become conversant with the facts of the case.

Linnæus, after Artedi and the older authors, employed the name for Sparoid and other fishes of diverse kinds, and including *Sparus aurata*, *Sparus boops*, etc. Both Artedi and Linnæus placed the *S. aurata* at the head or as first of the genus.

Bloch and Lacépède variously restricted the genus, but still retained the forms just noted.

Cuvier, in 1817, subdivided the old genus into "tribes" and "genera," distinguishing for the *Sparus boops*, etc., the "second tribe," and the genus "Boops Cuv.," and for the *Sparus aurata* and related forms the "third tribe" and the restricted genus "Sparus Cuv." The "genus" was subdivided into subgenera, viz: "Les Sargues (Sargus. Cuv.)," "les Daurades" (without a latin equivalent), and "les Pagres (Pagrus. Cuv.)."

The name *Sparus* must, therefore, be retained for a section of the genus as restricted by Cuvier.

Risso, in 1827, supplied a Latin name "Aurata" for "les Daurades" of Cuvier.

Cuvier, in 1829, retained the genus *Sparus* with the same limits as in 1817, but with a slightly different subdivision of subgenera, viz: "Les Sargues (Sargus)," "les Daurades (Chrysophris N.)," "les Pagres" (without a Latin name), and "les Pagels (Pagellus Cuv.)."

* This genus [*Echeneis*] is closely allied to the preceding [*Elacate*], from which it differs only by the transformation of the spinous dorsal fin into a sucking organ." (Günther, Int. to Study of Fishes, p. 460, 1860.)

Bonaparte, in 1832, revived the name *Sparus*—"Sparus N. (Aurata *Risso*, *Chrysophrys C.*)," for the *Sparus aurata*.

For the *Sparus aurata* and its relations, the Linnæan name must therefore be retained and the subsequent applications of the name in no wise affect the legitimacy of this application.

Whether the groups designated as *Pagrus* and *Chrysophrys* are, or are not, generically distinct is not a matter for present consideration. It is certain, however, that the group as proposed by Cuvier, and adopted by later writers (*e. g.*, Günther), is artificial and heterogeneous, and doubtless the typical species of *Chrysophrys* and *Pagrus* are more nearly allied to each other than are such types to forms with which they have been associated. For the present, the genus *Sparus* may be retained as distinct from *Pagrus* and with the eliminations required.

SPARUS.

Synonymy.

- <Sparus *Linnaeus*, Syst. Nat., 10. ed., t. 1, p. 277, 1758; 12. ed., t. 1, p. 467, 1766 Gmelin, ed., t. 1. p. 1270.
- <Sparus *Bloch*, Systema Ichthyologiæ, ed. Schneider, p. 269, 1801.
- <Sparus *Lacépède*, Hist. Nat. des Poissons, t. 4, p. 26, 1803.
- <Les Sbares (Sparus Cuv.) *Cuvier*, Règne Animal, t. 2, p. 271 (genus), 1817.
- <Les Daurades *Cuvier*, Règne Animal, t. 2, p. 272 (subgenus of *Sparus*), 1817.
- <Aurata *Risso*, Hist. Nat. de l'Europe Merid., t. 3, p.—, 1827.
- <Les Daurades (Chrysophrys,) *Cuvier*, Règne Animal, 2. ed., t. 2, p. 181, 1829.
- <Sparus *Bonaparte*, Giorn. Acad. di Scienze, t. 52 (Saggio Distrib. Metod. Animali Vertebr. a sangue freddo, p. 33), 1832.
- =Chrysophrys *Swainson*, Nat. Hist. and Class Fishes, etc., v. 2, pp. 171, 221, 1839.

ON THE PROPER NAME OF THE BLUE FISH.

BY THEODORE GILL.

The propriety of the substitution of the name *Pomatomus* in place of *Temnodon* for the blue-fish of the Americans has been questioned by (1) those who contend that a generally accepted name should not be disturbed, and by (2) those who would go to an extreme in the application of the law of priority. A brief history of the nomenclature of the genus seems therefore to be desirable.

The blue-fish had been referred to genera with which it has little affinity (to *Gasterosteus* by Linnæus and *Scomber* by Bloch) till the close of the last century.

In 1802 Lacépède described as a new species, and as the first of a new genus, a form which was evidently identical with the *Gasterosteus saltatrix* of Linnæus and the blue-fish of the United States, but which was obtained by Commerson in the "Océan Équatorial." With this species