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A CLASSIFICATION OF FISHES

Including Families and Genera
as Far as Known

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INTRODUCTORY NOTE

The present paper is a continuation and conclusion to a series of four memoirs issued from 1917 to 1920 under the title of "The Genera of Fishes." In it I have tried to place each genus and subgenus, living and fossil, thus far named or described, whether valid or not, in its proper family and to arrange the families themselves in as natural a sequence as is possible with a linear series which embraces highly divergent lines of evolution. I make no effort to distinguish between valid names, preoccupied names, and synonyms. The multitude of new forms recorded in the last fifty years precludes any such attempt. It will be observed that the number of families I have recognized is, in several groups, greater than accepted by any previous writer. This is due to the fact that analysis must precede synthesis, and it is better to lay a certain stress on aberrant forms than to include them uncritically in expanded groups, the definition of which is impaired or denied by their presence. Investigators who prefer to be more "conservative" can treat these groups as seems best.

In each family I have arranged the genera in the order of time. In most large groups our knowledge is too imperfect to make a detailed natural classification practicable in a compilation like this. In the list, moreover, are many nominal genera, especially among the fossils, in which an arrangement even by families is largely guesswork. As to sequence of orders and families, there is room for wide apparent divergence of opinion. Following recent custom I place the simplest or most ancient forms first, closing with highly specialized types of recent date.

The names of fossil genera are throughout printed in SMALL CAPITALS; those of doubtful eligibility—either because not binomial or else given without type, definition, or explanation—are in *Italics*. In my personal judgment these stillborn names should not enter the system unless later revived in regular form. Names attached to known species (typonyms) I have, however, admitted without question, and I make, of course, no distinction here between genera and subgenera. In each case I add the date of the genus with the page in "The Genera of Fishes," in which it is more fully treated.

In preparing this paper I have been under special obligation to Allan R. McCulloch of the Australian Museum; to my former student, Carl L. Hubbs of the University of Michigan; and to Theodore D. A. Cockerell of the University of Colorado. Each of these has brought errors or omissions to my attention, and Mr. Hubbs has suggested good reasons for certain important changes in sequence.

I may again emphasize the distinction between the ancient and modern periods in animal taxonomy. Beginning with 1758, the date of Linnæus' "Systema Naturæ," for sixty years a genus was usually regarded merely as a convenient pigeon-hole into which species are thrown. With Cuvier's "Règne Animal" (1817) came the conception of arrangement "according to organization" or comparative anatomy. With Darwin's "Origin of Species," forty years later (1859), zoologists began, though slowly at first, to realize that a classification must be more than an inventory; that its basis must be genetic, and the problems involved in a natural grouping are vastly more complex than even great morphologists like Cuvier and Agassiz had realized. To paraphrase a saying of Elliott Coues, genera and species are but larger and smaller twigs of a tree which we try to arrange as nearly as possible in accordance with nature's ramifications. This view applied to taxonomy involves the extensive subdivision of accepted genera, many of which were unnatural in the highest degree, a subdivision in many cases doubtless going too far, but our material must be first analyzed before we can group its parts in natural synthesis. No system of naming can progress beyond the knowledge on which it rests.

I may repeat a warning as old as science itself: that we must not expect a degree of accuracy which the subject in question does not permit.

DAVID STARR JORDAN.

STANFORD UNIVERSITY,
JANUARY 15, 1923

A CLASSIFICATION OF FISHES

Including Families and Genera as Far as Known

Class LEPTOCARDII

(*Myelozoa*)

Order AMPHIOXI

(*Cirrostromi*)

The Lancelets (or *Leptocardii*) are without doubt simplest in organization of all fish-like chordates or vertebrates.

Apparently their lowly structure is primitive but the geological history of the group is unknown and likely to remain so, as these creatures possess no hard parts. Whether the lampreys on the one hand or the lower and not fish-like acranite *Chordata* (*Tunicates* and *Enteropneustans*) are derived from *Leptocardians* can not be known.

Family 1. AMPHIOXIDIDÆ

*Amphioxides*¹ Gill, 1895, 467.

¹ This genus of three species, based on the absence of buccal cirri, the unsymmetrical mouth, and some other anatomical details, is now regarded as probably a larval form of *Asymmetron* rather than as a distinct genus.

Family 2. BRANCHIOSTOMIDÆ (*Amphioxidae*)

(Lancelets)

Branchiostoma Costa, 1834, 180.

*Dolichorhynchus*² Willey, 1901, 495.

Amphioxus Yarrell, 1836, 186.

² Misprinted *Dolichorhamphus* by Hubbs, *Occ. Papers, Univ. Mich.*, 105, p. 13, 1922.

Family 3. EPIGONICHTHYIDÆ

Epigonichthys Peters, 1877, 391.

*Paramphioxus*⁴ Haeckel, 1893, 461.

*Asymmetron*³ Andrews, 1893.

*Heteropleuron*⁴ Kirkaldy, 1895, 469.

³ Studies Johns Hopkins Lab. V, 237; orthotype *Asymmetron lucayanum* Andrews (overlooked in "Genera of Fishes").

⁴ *Paramphioxus* and *Heteropleuron* are synonyms of *Epigonichthys*.

Class MARSIPOBRANCHII

(*Myzontes*; *Cyclostomi*; *Dermopteri*)

The Lampreys and Hag-fishes stand next the Lancelets at the foot of the series. They have no hard parts, teeth excepted, and these have never been found fossil.

The name of CONODONTES has been given to a variety of tooth-like structures found in Devonian rocks in Russia and about Lake Erie. But the chemical composition of these differs from that of lamprey-teeth, and it is more likely that they are appendages of Crustaceans or teeth of snails (or worms) rather than of fishes. Most of the generic names given by Pander in 1856, enumerated on page 409 of the "Genera of Fishes," belong to the Palæozoic group of *Conodontes*; Pander thus classified the Conodonts:

- (a) Simple structures, slender and sharp, DREPANODUS, ACODUS, DISTACODUS, MACHAIRODUS, PALTODUS, SCOLOPODUS, OISTODUS, ACONTIODUS.
- (b) Complex structures, with several cusps. PRIONIODUS, BELODUS, LONCHODUS, CTENOGNATHUS, CORDYLODUS, GNATHODUS, PRIONOGNATHUS, POLYGNATHUS, CENTRODUS (not of Giebel).

Nothing is known of the geological history of Lampreys, nor can any one say whether Sharks or Ostracophores were in the line of descent from them. The two orders of this class diverge widely from each other, and perhaps, as Lankester has contended, each should be regarded as a distinct class.

Order HYPEROTRETA

Family 4. MYXINIDÆ

(Hag-fishes)

Myxine Linnæus, 1758, 406.

Murænoblenna Lacépède, 1803, 68.

Gastrobranchus Bloch, 1797, 53.

Anopsus Rafinesque, 1815, 92.

Family 5. EPTATRETIDÆ

*Eptatretus*⁵ (Duméril) Cloquet, 1819, 106.

Heptatrema Duméril, 1856, 268.

*Homea*⁶ Fleming, 1822.

Polistotrema Gill, 1881, 416.

Bdellostoma Müller, 1835, 182.

Paramyxine Dean, 1904, 506.

Hexabanchus Schultze, 1835, 184.

⁵ This name is often corrected to *Heptatretus*.

⁶ Philos. Zool. II, 374; type *H. banksi* Fleming; omitted in "Genera of Fishes").

Order HYPEROARTIA

Family 6. PETROMYZONIDÆ

(Lampreys)

Petromyzon Linnæus, 1758, 11.
Ammocætus[†] Duméril, 1808, 76.
Lampræda Rafinesque, 1815, 93.
Pricus Rafinesque, 1815, 93.
Lampetra Gray, 1851, 249.
Ichthyomyzon Girard, 1859, 291.
Scolecossoma Girard, 1859, 291.
Entosphenus Gill, 1862, 317.
Bathymyzon Gill, 1883, 424.
Caspiomyzon Berg, 1906, 516.

Agnathomyzon Gracianov, 1906, 518.
Haploglossa Gracianov, 1906, 518.
Oceanomyzon Fowler, 1908, 528.
Eudontomyzon Regan, 1911, 540.
Reighardina^{†a} Creaser (Charles W.)
 and Hubbs, 1922.
Tetrapleurodon^{†b} C. & H., 1922.
Lethenteron^{†c} C. & H., 1922.
Okkelbergia^{†d} C. & H., 1922.

[†] Usually written *Ammocætes*.

^{†a} "A Revision of the Holarctic Lampreys," *Occ. Pap. Mus. Zool. Michigan*, 120: 2; orthotype *Ichthyomyzon fossor* Reighard & Cummins = *Petromyzon unicolor* Dekay.

^{†b} *Loc. cit.*, 3; orthotype *Lampetra spadicea* Bean.

^{†c} *Loc. cit.*, orthotype *Lampetra wilderi* Gage = *Petromyzon appendix* De Kay.

^{†d} *Loc. cit.*, 8; orthotype *Petromyzon lamotteni* Le Sueur = *Ammocætes æpyptera* Abbott.

Family 7. GEOTRIIDÆ^s

(Mordaciidæ)

Geotria Gray, 1851, 249.
Caragola Gray, 1851, 249.
Velasia Gray, 1851, 249.
Mordacia Gray, 1851, 249.
Thysanochilus Philippi, 1857, 276.

Chilopterus Philippi, 1858, 283.
Exomegas Burmeister, 1868, 348.
Yarra Castelnau, 1872, 363.
Neomordacia Castelnau, 1872, 363.
Macrophthalmia Plate, 1897, 478.

^s The name *Mordacia* may not be tenable, as its synonym *Caragola* has line priority.

Class OSTRACOPHORI

(*Aspidoganoidei*; *Ostracodermi*, name preoccupied; *Protocephali*)

In regarding the ostracophores as a distinct class I do not pretend to settle any of the vexing questions as to the origin and relations of the group. It may be that the four orders do not belong together, that the *Antiarcha* are sharks or else *Arthrodires*, that the group itself is a mailed variant of the Lampreys, that it is ancestral to the sharks, that it is derived from primitive sharks or that it is a variant of primitive crustaceans. In the latter case the ancestry of fishes and through them of other vertebrates, should be sought not in worm-like forms, but in marine creatures with hard shells, related to *Limulus* and remotely to existing spiders. In general, however, the outer parts are more often modified by natural selection than internal structures, hence of less value in determining relations. The outside of an animal tells where it has been, the inside what it really is.

In Hæckel's words, there are three ancestral documents in the study of evolution, morphology, embryology, and palæontology. From the first two no decisive answer is given to the question of the origin of the ostracophores. Paleontology shows that several of the great divisions of fishes had appeared in the Devonian. The oldest known fragment of a fish (*Astraspis*) is from the Ordovician in the Trenton horizon at Cañon City, Colorado. With this, however, are other fragments doubtfully referred to a chimæra (*Dictyorhabdus*) and a crossopterygian (*Eriptychius*). If these are correctly identified the differentiation of fishes had proceeded far when the Palæozoic era began.

Most naturalists have traced the hypothetic ancestry of vertebrates through lancelets or enteropneustans back to soft-bodied, worm-like forms which have left no traces in the rocks. Dr. Patten, however, regards *Pteraspis* as descended from primitive arachnids with bony carapace. From *Pteraspis* he derives the other ostracophores, and from these the sharks and other vertebrates appearing progressively later in time. This ingenious theory is developed in the *American Naturalist*, 1904. Patten regards the lateral fold in some sharks as the result of a fusion of the fringing appendages on the sides of the body. This is evident in his restoration of *Cephalaspis*.

Order HETEROSTRACI (*Aspidorhini*)

Family 8. THELODONTIDÆ (*Cælolepidæ*)

Thelodus is identical with *Cælolepis* and should give the name to this family.

THELODUS Agassiz, 1839, 194.	DASYLEPIS, Pander, 1856, 273.
CÆLOLEPIS Pander, 1856, 273.	DICTYOLEPIS Pander, 1856, 273.
NOSTOLEPIS Pander, 1856, 274.	ONISCOLEPIS Pander, 1856, 273.
PACHYLEPIS Pander, 1856, 274.	MELITTOMALEPIS Pander, 1856, 273.
THELOLEPIS Pander, 1856, 274.	PRIONACANTHUS Pander, 1856, 273.
GOMPHODUS Pander, 1856, 274.	SPIRODUS Kade, 1858, 281.
SCHEDIOSTEUS Pander, 1856, 273.	LANARKIA Traquair, 1899, 488.

Family 9. PSAMMOSTEIDÆ

<i>Psammolepis</i> Agassiz, (1844) 1845, 217.	ACANTHOLEPIS Newberry, 1875, 379.
<i>Placosteus</i> Agassiz, (1844) 1845, 217.	GANOSTEUS Rohon, 1902, 500.
PSAMMOSTEUS Agassiz, 1845, 225.	PYCNOSTEUS Preobrazhenskii, 1910, 537.
LOPHOSTEUS Pander, 1856, 274.	DYPTYCHOSTEUS Preobrazhenskii, 1910, 537.
ACANTHASPIS Newberry, 1875, 379.	

Family 10. ASTRASPIDÆ

ASTRASPIDIS¹⁰ Walcott, 1892, 459.

¹⁰ See Eastman, *Proc. U. S. Nat. Mus.*, 52: 237, 1917.

Family 11. DREPANASPIDÆ

DREPANASPIS Schlüter, 1887, 439.

Family 12. CERASPIDÆ

CERASPIS Schlüter, 1887, 439.

Family 13. PTERASPIDÆ

SPHAGODUS ¹¹ Agassiz, 1839, 194.	CYATHASPIS ¹³ Lankester, 1865.
CHIASTOLEPIS ¹² Eichwald, 1844, 220.	KALLOSTRAGON Lankester, 1870, 358.
PTERASPIS Kner, 1847, 232.	HOLASPIS ¹⁴ Lankester, 1873, 370.
ARCHÆOTEUTHIS Roemer, 1855, 264.	PALÆASPIS Claypole, 1884, 427, 430.
PALÆOTEUTHIS Roemer, 1855, 266.	DIPLASPIS Matthew, 1887, 438.
TOLYPELEPIS Pander, 1856, 273.	TOLYPASPIS Schmidt, 1893, 462.
SCAPHASPIS Lankester, 1865, 338.	PHOLIDOSTEUS Jaekel, 1907, 524.

¹¹ A very doubtful genus, the type said to be part of the mouth of an Eurypterid Crustacean, as is also a tooth called AULACODUS.

¹² A very doubtful fragment of armor.

¹³ *Rep. Brit. Assoc. for 1864*, p. 58. Omitted in "Genera of Fishes": type *Pteraspis banksi* Huxley & Salter.

¹⁴ Preoccupied by *Holaspis* Gray, 1863, a reptile.

Order OSTEOSTRACI

Family 14. CEPHALASPIDÆ

CEPHALASPIS Agassiz, 1835, 181.

EUCEPHALASPIS Lankester, 1870, 358.

ZENASPIS Lankester, 1850, 246.

HEMICYLASPIS Lankester, 1870, 358.

STEGANODICTYUM M'Coy, 1851, 249.

Family 15. ATELEASPIDÆ

ATELEASPIS Traquair, 1899, 488.

Family 16. THYESTIDÆ (*Menaspidæ*)

SCLERODUS Agassiz, 1839, 194.

AUCHENASPIS Egerton, 1857, 275.

PLECTRODUS Agassiz, 1839, 194.

DIDYMASPIS Lankester, 1867, 346.

MENASPIS Ewald 1848, 233.

EUKERASPIS Lankester, 1870, 358.

THYESTES Eichwald, 1854, 256.

CEPHALOPTERUS Powrie, 1870, 359.

Family 17. ODONTODONTIDÆ (*Tremataspidæ*)The name *Odontotodus* has priority over *Tremataspis*.

STIGMOLEPIS Pander, 1856, 273.

STROSISPHERUS^{14a} Pander, 1856, 274.

ODONTOTODUS Pander, 1856, 274.

TREMATASPIS¹⁵ Schmidt, 1866, 343.COSCINODUS^{14a} Pander, 1856.ANCISTRODUS^{14a} Rohon, 1893, 462.MONOPLEURODUS^{14a} Pander, 1856, 273.^{14a} The relationship of these forms is apparently quite unknown.¹⁵ The genus *Mycterops* Cope (1886) should be erased. According to Woodward it is based on a shield of an Eurypterid Crustacean.

Family 18. EUPHANEROPIDÆ

EUPHANEROPS Woodward, 1900, 491.

Order ANTIARCHA

(*Placodermi* part; *Placoganoidei*; *Azygostei* part)

It is not yet certain that this order should be retained among the ostracophores. Hay and others place it with the arthrodiros in a subclass *Azygostei* or a superorder *Placodermi*.

Family 19. ASTROLEPIDÆ (*Bothrolepidæ*; *Pterichthyidæ*)

PLEIOPTERUS Agassiz, 1835, 181.

ODONTACANTHUS Agassiz, 1845, 225.

ASTROLEPIS¹⁶ Eichwald, 1840, 206.

NARCODES Agassiz, 1845, 225.

BOTHRIOLEPIS Eichwald, 1840, 206.

ACTINOLEPIS Agassiz, 1845, 225.

PTERICHTHYS Hugh Miller, 1841, 209.

PTERICHTHYODES Bleeker, 1859, 289.

PLACOTHORAX Agassiz, 1844, 218.

MICROBRACHIUM Traquair, 1888, 443.

PAMPHRACTUS Agassiz, 1844, 218.

Glyptosteus Agassiz, (1844) 1891, 217.

HOMOTHORAX Agassiz, 1845, 225.

MILLERICHTHYS S. A. Miller, 1892, 458.

¹⁶ Usually written *Asterolepis*.

Order ANASPIDA

Family 20. LASANIIDÆ

LASANIUS Traquair, 1899, 488.

Family 21. BIRKENIIDÆ

BIRKENIA Traquair, 1899, 488.

CTENOPLEURON Matthew, 1907, 525.

Order CYCLIAE

Family 22. PALÆOSPONDYLIDÆ

I here give the rank of a separate order to the singular little fish-like organism of the Scottish Devonian age known as *Palæospondylus gunni*. In doing so, I do not assume to decide what its relationships may be, whether a minute but specialized primitive lamprey, an offshoot from the arthrodires or the ostracophores or whatever else may be possible. Perhaps, as suggested by Huxley, it may be a "baby *Coccosteus*."

PALÆOSPONDYLUS Traquair, 1890, 453.

Class ARTHRODIRA

Order STEGOPHTHALAMI

Family 23. MACROPETALICHTHYIDÆ

MACROPETALICHTHYS Norwood and Owen, 1846, 229.

Family 24. ASTEROSTEIDÆ

ASTEROSTEUS Newberry, 1875, 379.

Order TEMNOTHORACI

Family 25. CHELONICHTHYIDÆ

ICHTHYOSAURIDES Kutorga, 1837, 189.

HETEROSTEUS Asmuss, 1856, 267.

HOMOSTEUS¹⁷ Asmuss, 1856, 267.

CHELONICHTHYS^{16a} Agassiz, (1842) 1891, 217.

^{16a} Agassiz quotes this name from "Murchison's Report, 1842.

¹⁷ Name misprinted *Homostius*.

Order ARTHROTHORACI

Family 26. COCCOSTEIDÆ

COCCOSTEUS Agassiz, 1844, 218.

LOPHOSTRACON Lankester, 1884, 429.

CHELYOPHORUS Agassiz, 1845, 225.

TITANICHTHYS¹⁸ Dames, 1887, 437.

SIPHONODUS, Fischer von Waldheim, 1852, 250.

GIGANTICHTHYS Dames, 1888, 440.

GLYPTASPIS Newberry, 1889, 447.

PHYSICHTHYS Meyer, 1855, 266.

TRACHOSTEUS Newberry, 1889, 447.

AGASSICHTHYS Newberry, 1857, 276.

PHLYCTÆNIUS Traquair, 1890, 452.

ASPIDOPHORUS Newberry, 1870, 359.

PHLYCTÆNASPIS Traquair, 1890, 453.

ASPIDICHTHYS Newberry, 1873, 371.

ASTEROPLAX Woodward, 1891, 456.

LIPOGNATHUS Newberry, 1873, 371.

PONERICHTHYS Miller, 1892, 458.

BRACHYDIRUS¹⁸ Koenen, 1880, 404.

LISPOGNATHUS Miller, 1892, 458.

ANOMALICHTHYS Koenen, 1883, 424.

¹⁸ The name *Leptodus* was based on a Brachiopod shell and should be erased.

¹⁹ According to Regan, as quoted by Cockerell, *Giganticthys* (*Titanichthys* Dames, not Newberry) is based on a Reptilian tooth.

Family 27. DINICHTHYIDÆ

DINICHTHYS²⁰ Newberry, 1868, 371.

HUSSAKOFIA Cossman, 1910, 535.

GORGONICHTHYS Claypole, 1892, 457.

COPANOGNATHUS Hussakof and Bryant, 1919, 566.

BRONTICHTHYS Claypole, 1894, 464.

PLATYASPIS Koenen, 1895, 469.

MACHÆROGNATHUS Hussakof and Bryant, 1919, 566.

STENOGNATHUS Newberry, 1898, 479, 483.

PHLYCTÆNIUM Zittel, 1900, 491.

PERISSOGNATHUS Hussakof and Bryant, 1919, 566.

PACHYOSTEUS Jaekel, 1903, 503.

BRACHYGNATHUS Hussakof, 1909, 533.

²⁰ *Proc. Amer. Asso. Adv. Sci. for 1867*, 17: 148 (1868).

Family 28. **TITANICHTHYIDÆ**

TITANICHTHYS Newberry, 1885, 433.

PROTITANICHTHYS Eastman, 1907, 521.

HOLOPETALICHTHYS Koenen, 1895, 469.

Family 29. **MYLOSTOMIDÆ**TYPODUS²¹ Meyer, 1847, 232.

DINOMYLOSTOMA Eastman, 1906, 517.

MYLOSTOMA Newberry, 1883, 425.

DINOGNATHUS Hussakof, 1909, 533.

²¹ Misprinted *Tylodus* in "Genera of Fishes," p. 232.Family 30. **SELENOSTEIDÆ**

DIPLOGNATHUS Newberry, 1878, 397.

STENOSTEUS Dean, 1901, 492.

SELENOSTEUS Dean, 1901, 492.

Family 31. **PHYLLOLEPIDÆ**

PHYLLOLEPIS Agassiz, 1844, 219.

PENTAGONOLEPIS Lohest, 1890, 452.

HOLONEMA Newberry, 1889, 447.

Class ELASMOBRANCHII

(*Selachii*; *Plagiostomata*; *Chondropterygii*; *Antacea*)

Subclass SELACHII

(Sharks)

Whatever may have been the origin of sharks, whether from lamprey-like or other soft bodied forms, or through degeneration from more specialized types, I have little doubt that the most primitive form is the order *Pleuropterygii*. It seems to me, as to Dr. Dean, that the pectoral fin of *Cladoselache*, apparently derived or derivable from a lateral fold, comes nearest the primitive condition. It is conceivable that the robust pectoral spine of *Acanthoëssus* is homologous with the fin of *Cladoselache*, the anterior fin-rays being gathered together to be united in a thick spine.

If, however, we regard the pectoral limb as developed from gill-structures, the conception of origin would be changed. The jointed limb of *Orthacanthus* would be the nearest approach to the primitive pectoral limb, and from the ancestors or allies of the *Ichthyotomi* all other sharks and through them all the higher fishes as well as the higher vertebrates would be descended. Whether the pectoral limb or archipterygium of the *Crossopterygii* or the *Dipneusti* is homologous with that of the *Ichthyotomi*, or separately derived is not yet known.

The weight of authority, at present, favors the theory that the paired fins are derived from a fold of skin, and that of the known forms *Cladoselache* of the Devonian is the most primitive. We therefore adopt a sequence in accord with this theory, recognizing at the same time that weight of authority is unimportant when decisive evidence is wanting.

Leaving aside certain ichthyodorulites or detached fin-spines with other fragments of uncertain character the earliest known sharks (*Acanthoëssidæ*) appear in the lower Devonian, while *Orthacanthus* and certain *Heterodontids* occur in the Carboniferous. In the Triassic all the early forms of sharks, *Orodontidæ* excepted, disappear, and all or nearly all the living forms are descended from this *Heterodontid* type. To this statement the *Notidani* with *Chlamydoselachus* may form an exception, for their peculiar traits seem to be primitive, though no specimens are found before the Jurassic.

The chimæras represent a very early divergence from the sharks, being apparently nearly as old geologically as the sharks. If *Dictyorhabdus* from the Ordovician is really a chimæra, which Dr. Dean doubts, these fishes are older than any known sharks.

Order PLEUROPTERYGII

(Cladoselacea)

Family 32. CLADOSELACHIDÆ

CLADOSELACHE²² Dean, 1894.

²² "Contributions to the Morphology of *Cladoselacea*," *Journ. Morphol.*, 9: 87; type *Cladodus fylleri* Newberry. (Omitted in "Genera of Fishes.")

Order ACANTHODEI

This order does not differ widely from the *Pleuropterygii*. If we assume that its fin spines are simply massed rays, as Dr. Dean asserts, the essential structure of the two groups is identical.

Family 33. ACANTHOËSSIDÆ (*Acanthodidæ*)

The name *Acanthoëssus* has priority over *Acanthodes*. Those genera marked *Ich* are known only from *Ichthyodorulites*, fin spines of more or less uncertain relations.

ACANTHOËSSUS Agassiz, 1832, 141.

ACANTHODES Agassiz, 1833, 145, 177.

CHEIRACANTHUS Agassiz, 1835, 181.

HAPLACANTHUS Agassiz, 1845, 225.

HOMACANTHUS Agassiz, 1845, 225, *Ich*.BYSSACANTHUS Agassiz, 1845, 225, *Ich*.

HOLACANTHODES Beyrich, 1848, 233.

PELONECTES Gistel, 1848, 234.

MACHÆRACANTHUS Newberry, 1857, 276

Ich.MACHÆRIUS Rouault, 1858, 284, *Ich*.

ACANTHODOPSIS Hancock and Atthey, 1868, 352.

RHADINACANTHUS Traquair, 1888, 443.

MESACANTHUS Traquair, 1888, 443.

HETERACANTHUS²³ Newberry, 1889, 447
Ich.

TRAQUAIRIA Fritsch, 1893, 460.

PROTACANTHUS Fritsch, 1893, 460.

²³ *Ganiodus* Newberry should be erased. It is a misprint for *Goniodus* Agassiz, 1836.

Family 34. ISCHNACANTHIDÆ (*Ictinocephalidæ*)ISCHNACANTHUS²⁴ Powrie, 1864.*Ictinocephalus* Page, (1859) 1864, 334.

²⁴ *Quart. Journ. Geol.*, 419, 1864; type *Diplacanthus gracilis* Egerton. (Omitted in "Genera of Fishes.")

Family 35. DIPLACANTHIDÆ

DIPLACANTHUS Agassiz, 1842, 210, 225.

PAREXUS Agassiz, 1845, 225.

CLIMATIUS Agassiz, 1845, 225.

BRACHYACANTHUS Egerton, 1860, 295.

EUTHACANTHUS Powrie, 1864, 334.

MARSDENIUS Wellburn, 1902, 501.

Order ICHTHYOTOMI

Family 36. XENACANTHIDÆ (*Pleuracanthidæ*; *Orthacanthidæ*)

The name *Pleuracanthus* is preoccupied (*Coleoptera* Gray, 1832), as is also *Diplodus* Agassiz. The name next oldest, *Orthacanthus*, seems to

belong to a different genus, while *Xenacanthus* appears to be an exact synonym of *Pleuracanthus*.

PLEURACANTHUS Agassiz, 1837, 186.
DIPLODUS Agassiz, 1843, 213.
ORTHACANTHUS Agassiz, 1843, 213.
ACANTHOPLEURUS Agassiz, 1844, 217.
XENACANTHUS Beyrich, 1848, 233.
TRIODUS Jordan, 1849, 243.
COMPSACANTHUS Newberry, 1856, 273.
DITTODUS Owen, 1867, 346.
OCHLODUS Owen, 1867, 347.
AGANODUS Owen, 1867, 347

PTERNODUS Owen, 1867, 347.
THRINACODUS St. John and Worthen,
1875, 380.
PHRICACANTHUS Davis, 1879, 399.
LOPHACANTHUS Stock, 1880, 406.
ANODONTACANTHUS Davis, 1881, 415.
DIDYMODUS Cope, 1883, 422.
DIACRANODUS²⁵ Garman, 1885, 432.
DOLIODUS Traquair, 1892, 459.

²⁵ Misprinted *Dicranodus* in "Genera of Fishes."

Family 37. CLADODONTIDÆ

CLADODUS Agassiz, 1843, 213.
CHILODUS Giebel, 1847, 231.
PHCEBODUS St. John and Worthen, 1875,
380.
LAMBODUS St. John and Worthen, 1875,
380.
BATHYCHEILODUS St. John and Worthen,
1875, 380.

HYBOCLADODUS²⁶ St. John and Worthen,
1875, 380.
PTERNODUS Garman, 1885, 432.
DICENTRODUS Traquair, 1888, 443.
STYPTOBASIS Cope, 1891, 454.
PROTODUS Woodward, 1892, 459.
MONOCLADODUS Claypole, 1893, 460.
SYMMORIUM Cope, 1893, 460.

²⁶ The insertion of *Hybocladodus* Hay, 1899, in the "Genera of Fishes" is an error.

Family 38. CHONDRENCHELYIDÆ

CHONDRENCHELYS Traquair, 1888, 443.

Family 39. GYRACANTHIDÆ

GYRACANTHUS Agassiz, 1837, 186.

MITRODUS Owen, 1867, 347.

Order POLYSPONDYLI

We may here insert the hypothetical order *Polyspondyli*, regarded by Hasse as a primitive type known from fin-spines or Ichthyodorulites only, and these all of uncertain relationship, some of them perhaps *Heterodontid*.

Onchus occurs in the upper Silurian.

Family 40. ONCHIDÆ

ONCHUS Agassiz, 1837, 186.
NAULAS Agassiz, 1845, 225.

LEPTOCHELES M'Coy, 1853, 408.
ARCHÆACANTHUS Kade, 1858, 281.

Order CESTRACIONTES

Suborder JANASSIDES

I here arrange provisionally certain families of sharks, some or all with flattened bodies like the rays, but occurring in Palæozoic time they are probably not genetically connected with the flattened skates and rays of

recent times. Except the genus *Janassa*, the species are mostly known from teeth only, these mostly large and fitted for grinding.

Family 41. JANASSIDÆ (*Petalodontidæ*)

JANASSA Münster, 1832, 176.	PETALODOPSIS Barkas, 1874, 372.
CTENOPTYCHIUS Agassiz, 1838, 190.	LISGODUS St. John & Worthen, 1875, 380.
PETALODUS ²⁷ Owen, 1840, 207.	TANAODUS St. J. & W., 1875, 380.
DICTEA Münster, 1840, 207.	HARPACODUS (Agassiz) St. J. & W., 1875, 380.
BYZENOS Münster, 1843, 216.	CHOLODUS St. J. & W., 1875, 380.
CARCHAROPSIS (Agassiz) Davis, (1843) 1883, 214, 432.	CALOPODUS St. J. & W., 1875, 380.
CLIMAXODUS M'Coy, 1848, 239.	FISSODUS St. J. & W., 1875, 380.
GLOSSODUS M'Coy, 1848, 239.	BATACANTHUS St. J. & W., 1875, 381, 425.
POLYRHIZODUS M'Coy, 1848, 239.	ANTACANTHUS ²⁹ Devalque, 1877.
PLATACANTHUS ²⁸ M'Coy, 1848, 408.	STRIGILINA Cope, 1877, 388.
DICRENODUS Romanovskii, 1853, 254.	SERRATODUS Koninck, 1878, 396.
PRISTICLADODUS M'Coy, 1855, 266.	STICHÆACANTHUS Koninck, 1878, 396.
SICARIUS Leidy, 1856, 272.	CYMATODUS Trautschold, 1879, 401.
XYSTRACANTHUS Leidy, 1859, 292.	GLYPHANODUS Davis, 1883, 422.
CTENOPETALUS (Agassiz) Morris & Roberts (1862) 1881, 320.	PHODERACANTHUS Davis, 1883, 423.
HARPACODUS (Agassiz) M. & R., (1862) 1881, 320, 415.	PETALODOPSIS Davis, 1883, 423.
PETALORHYNCHUS (Agassiz) M. & R., (1862) 1881, 320.	PNIGEACANTHUS St. John & Worthen, 1883, 425.
DACTYLODUS Newberry and Worthen, 1866, 342.	THORACODUS Cope, 1883, 422.
ANTLIODUS N. & W., 1866, 349.	GOMPHACANTHUS Davis, 1884, 427.
AGELEODUS Owen, 1867, 347.	AGANACANTHUS Traquair, 1884, 430.
CYMATODUS N. & W., 1870, 359.	CALLOPRISTODUS Traquair, 1888, 443.
PELTODUS N. & W., 1870, 359.	MESOLOPHODUS Woodward, 1889, 449.
	STETHACANTHUS Newberry, 1889, 447.
	GAMPHACANTHUS Miller, 1892, 458.
	PARACYMATODUS Bogoliubov, 1914, 552.

²⁷ Perhaps a synonym of *Ctenoptychius*.

²⁸ Later amended to *Platyacanthus*.

²⁹ *Ann. Soc. Geol. Belge*, 5: 60; type *A. insignis* Devalque (omitted in "Genera of Fishes").

Family 42. PSAMMODONTIDÆ

PSAMMODUS ³⁰ Agassiz, 1838.	COPODUS (Agassiz) M. & R., (1862), 1883, 320, 422.
APODOMETES Gistel, 1848, 237.	SOLENOBODUS, Trautschold, 1874, 377.
PALÆOBATES Meyer, 1849, 243.	ARCHÆOBATIS Newberry, 1878, 397.
CHARACODUS (Agassiz) Morris & Roberts, 1862, 320, 423.	DIMYLEUS (Agassiz) Davis, 1883, 423.
MYLAX (Agassiz) M. & R., 1862, 320.	MYLACODUS Davis, 1883, 423.
PLEUROGOMPHUS (Agassiz) M. & R., (1862) 1883, 320.	PINACODUS (Agassiz), Davis, 1883, 423.
MESOGOMPHUS (Agassiz) M. & R., (1862) 1883, 320.	HOMALODUS Davis, 1883, 423.
LOBODUS (Agassiz) M. & R., (1862) 1883, 320.	RHYMODUS (Agassiz) Davis, 1883, 423.
	ASTRABODUS Davis, 1884, 427.
	MAZODUS Newberry, 1889, 447.
	LAGARODUS Jackel, 1898, 480.

³⁰ *Poissons Fossiles*, 3: 110; type *P. rugosus* Agassiz (omitted in "Genera of Fishes").

Family 43. PERIPRISTIDÆ (*Pristodontidæ*)

The name *Peripristis* is earlier than *Pristodus* and belongs to the same genus.

PERIPRISTIS³¹ St. John, 1870, 359.

DIODONTOPODUS Davis, 1881, 415.

HOPLODUS³² Etheridge, 1881.

PRISTODUS (Agassiz) Davis, 1883, 424.

³¹ Identical with *Pristodus*, not with *Ctenoptychius* as stated in "Genera of Fishes."

³² R. Etheridge, Jr. *Geol. Mag.* (2) 2: 244, 1825; type *Petalorhynchus benniei* Etheridge (omitted in "Genera of Fishes").

Family 44. COCHLIODONTIDÆ

This family, known only from the teeth, fitted for crushing shells, may be left provisionally with the *Janassides*, although it has much in common with the *Cestraciontes* or *Heterodontidæ*. The species belong mostly to the Carboniferous age.

COCHLIODUS Agassiz, 1838, 191.

VENUSTODUS St. John & Worthen, 1875, 380.

CHOMATODUS Agassiz, 1838, 190.

PERIPLECTRODUS St. J. & W., 1875, 380.

HELODUS Agassiz, 1838, 190.

PLATYODUS Newberry, 1875, 379.

PÆCILODUS M'Coy, 1855, 266.

HELODOPSIS Waagen, 1879, 401.

DICHELODUS Giebel, 1857, 409.

CRANODUS Trautschold, 1879, 401.

PSEPHODUS (Agassiz) Morris & Roberts, (1862) 1883, 320.

OXYTOMODUS Trautschold, 1880, 406.

STREBLODUS (Agassiz) M. & R., (1862) 1883, 320.

VATICINODUS³³ St. J. & W., 1883, 405, 425.

TOMODUS (Agassiz) M. & R., (1862) 1883, 422.

STENOPTERODUS³⁴ St. J. & W., 1883, 405, 425.

XYSTRODUS (Agassiz) M. & R., (1862) 1883, 320.

CHITONODUS³⁵ St. J. & W., 1883, 405, 425.

DELTOPTYCHIUS (Agassiz) M. & R., (1862) 1883, 320.

DELTODOPSIS³⁶ St. J. & W., 1883, 405, 425.

DELTODUS (Agassiz) M. & R., (1862) 1883, 319.

ORTHOPLEURODUS³⁷ St. J. & W., 1880, 405, 425.

LOPHODUS Romanowsky, 1864, 334.

TÆNIODUS St. J. & W., 1883, 425.

TRIGONODUS Newberry & Worthen, 1866, 342.

RHAMPHODUS Davis, 1883, 422.

ASPIDODUS N. & W., 1866, 342.

DIPLACODUS Davis, 1884, 427.

SANDALODUS N. & W., 1866, 342.

CYRTONODUS Davis, 1884, 427.

PLEURODUS Hancock & Atthey, 1872, 366, 213.

PLEUROPLAX Woodward, 1889, 449.

XENODUS Miller, 1892, 458.

ICANODUS Miller, 1892, 458.

PLATYXYSTRODUS Hay, 1899, 486.

³³ Logotype *V. vetustus* St. J. & W. The date of 1880 given in "Genera of Fishes" is an error.

³⁴ Logotype *S. planus* St. J. & W., as fixed by Hay.

³⁵ Logotype *C. springeri* St. J. & W.

³⁶ Orthotype *D. augustus* St. J. & W.

³⁷ Orthotype *O. carbonarius* St. J. & W.

Family 45. **TAMIOBATIDÆ**

This family is known from a single species, from the Devonian of Kentucky, one of the oldest sharks known. It has the depressed form of a ray, probably a matter of analogy only.

TAMIOBATUS Eastman, 1897, 476.

Suborder **PROSARTHRI**Family 46. **ORODONTIDÆ**

The *Orodontidæ*, allies or ancestors of the *Heterodontidæ*, are the only kinds of sharks living in the Triassic, all the earlier types being then extinct.

ORODUS Agassiz, 1838, 190.

ACONDYLACANTHUS St. J. & W., 1875, 380.

CAMPODUS Koninck, 1844, 220.

STEMMATODUS St. J. & W., 1875, 380.

ASTEROPTYCHIIUS Agassiz, 1848, 239.

LEIODUS St. J. & W., 1875, 380.

ADIAPNEUSTES Gistel, 1848, 234.

DESMIODUS St. J. & W., 1875, 380.

PETRODUS M'Coy, 1848, 239.

STEMMATIAS Hay, 1899, 486.

OCTINASPIS Trautschold, 1874, 377.

EOORODUS Branson, 1914, 552.

MESODMODUS St. John & Worthen, 1875, 380.

Family 47. **HETERODONTIDÆ** (*Cestraciontidæ*, *Hybodontidæ*)
(Bull-head Sharks)

To this family, characterized among other features by strong dorsal spines, many of the Ichthyodorulites are supposed to belong. Those genera of very uncertain relations are marked *Ich.*

Cestracion Klein, 1775, 40.

SPHENONCHUS Agassiz, 1843, 213.

Heterodontus Blainville, 1816, 95.

*WODNIKA*⁴¹ Münster, 1843, 216.

Cestracion Cuvier, 1817, 97.

THECTODUS Meyer & Plieninger, 1844, 221.

Centracion Gray, 1831, 138.

CENTRODUS Giebel, 1847, 231.

*TRISTYCHIIUS*³⁸ Agassiz, 1837, 186.

CENTRODUS M'Coy, 1848, 243, 408.

PTYCHACANTHUS Agassiz, 1837, 186.

PHYSONEMUS M'Coy, 1848, 239, *Ich.*

SPHENACANTHUS Agassiz, 1837, 186.

STYRACODUS Germar, 1849, 242.

ASTERACANTHUS Agassiz, 1837, 186.

SELACHIDEA Quenstedt, 1852, 251.

LEIACANTHUS Agassiz, 1837, 186.

PYCNACANTHUS Fischer von Waldheim, 1852, 250, *Ich.*

*HYBODUS*³⁹ Agassiz, 1837, 186.

DESMACANTHUS Quenstedt, 1858, 283, *Ich.*

ACRODUS Agassiz, 1837, 189, 191.

PSILACANTHUS Quenstedt, 1858, 283, *Ich.*

CTENACANTHUS Agassiz, 1837, 186, *Ich.*

XYSTRODUS Plieninger, 1860, 298.

NEMACANTHUS Agassiz, 1837, 186, *Ich.*

STROPHODUS Agassiz, 1838, 191.

LOPHODUS Symonds, 1861, 309.

*Oroptychus*⁴⁰ Agassiz, 1842.

Gyropleurodus Gill, 1862, 317.

MERISTODON Agassiz, 1843, 214.

Tropidodus Gill, 1862, 317.

³⁸ *Tristychius* Portlock should be omitted as an error for *Tristychius* Agassiz.

³⁹ Stensiö (1921) regards *Hybodus reticulatus* Agassiz as the type of this genus.

⁴⁰ A manuscript name, apparently never defined, quoted in the *Nomenclator Zoologicus* from *Misc. Coll.* as one of the "*Cestraciontes*."

⁴¹ The so-called *Wodnika ocoyæ* Jordan, "Fossil Fishes of Southern California," 1919, 69, from California Miocene proves to be not a tooth but a concretion.

- NEMACANTHUS Mackie, 1863, 327.
 CURTODUS Sauvage, 1867, 347.
 LEPRACANTHUS Owen, 1869, 355, Ich.
 LOPHODUS Newberry, 1870, 359.
 PALÆOSPINAX Egerton, 1872, 365.
 DREPANEPHORUS Egerton, 1872, 365.
 AGASSIZODUS St. John & Worthen, 1875, 380.
 AMACANTHUS St. J. & W., 1875, 381, Ich.
 BYTHIACANTHUS St. J. & W., 1875, 381.
 GLYMMATACANTHUS⁴² St. J. & W., 1875, 381, 425, Ich.
 GEISACANTHUS St. J. & W., 1875, 381, Ich.
 HOPLONCHUS Davis, 1876, 385, Ich.
 HYBODOPSIS Barkas, 1878, 392.
 TOMODUS⁴³ Trautschold, 1879.
 CHIASTODUS Trautschold, 1879, 401.
 ARPAGODUS Trautschold, 1879, 401.
 THAUMATACANTHUS Waagen, 1879, 401, Ich.
 OXYTOMODUS⁴⁴ Trautschold, 1880.
 BDELODUS Quenstedt, 1882, 421.
 MERISTODON Sauvage, 1883, 425.
 DICLITODUS Davis, 1883, 422.
 EUNEMACANTHUS St. J. & W., 1883, 425, Ich.
 ACONDYLACANTHUS St. J. & W., 1883, 425, Ich.
 LISPACANTHUS Davis, 1883, 422, Ich.
 CHALAZACANTHUS Davis, 1883, 422, Ich.
 ECHINODUS Davis, 1884, 427.
 SYNECHODUS Woodward, 1888, 444.
 ACRODONCHUS Fraas, 1889, 446.
 POLYACRODUS Jaekel, 1889, 447.
 HYBODONCHUS Fraas, 1889, 446.
 FAYOLIA Renault & Zeiller, 1890, 452.
 RHABDIODUS Rohon, 1893, 462.
 EUPHYACANTHUS Traquair, 1894, 465.
 ORTHYBODUS Jaekel, 1898, 480.
 PARHYBODUS Jaekel, 1898, 480.
 PSEUDACRODUS Ameghino, 1906, 516.

⁴² Misprinted in "Genera of Fishes."

⁴³ *Nouv. Mem. Soc. Imp. Nat. Moscow*, 14: 55; type *T. argutus* Trautschold (omitted in "Genera of Fishes").

⁴⁴ *Bull. Soc. Imp. Nat. Moscow* 2: 140; substitute for *Tomodus*, preoccupied; type *Tomodus argutus* Trautschold. (Omitted in "Genera of Fishes.")

Family 48. EDESTIDÆ

A peculiar type of sharks, known only by singular bony structures now supposed fused symphyseal whorls of teeth of cestraciont sharks.

- EDESTUS Leidy, 1856, 272.
 CYNOPODIUS Traquair, 1881, 417.
 EUCTENIUS Traquair, 1881, 417.
 SPIRAXIS Newberry, 1885, 434, Ich.
 PROSPIRAXIS Williams, 1887, 439.
 PROTOPIRATA Trautschold, 1888, 443.
 SPHENOPHORUS Newberry, 1889, 447.
 CESTOPHORUS Miller, 1892, 458.
 HELICOPRION Karpinskii, 1899, 487.
 CAMPYLOPRION Eastman, 1902, 498.
 LISSOPRION Hay, 1907, 524.
 TOXOPRION Hay, 1910, 536.

Series ICHTHYODORULITES

(Shark-spines)

We place here a number of fin spines belonging perhaps to *Heterodontidae* or to *Chimaeridae*, their relationship not yet determined.

- PRISTACANTHUS Agassiz, 1837, 186, Ich.
*Cricacanthus*⁴⁵ Agassiz, 1843, 213, Ich.
 COSMACANTHUS Agassiz, 1845, 225, Ich.
 DIMERACANTHUS Keyserling, 1846, 229, Ich.
*Gyropristis*⁴⁶ (Agassiz) King, (1843) 1850, 213, Ich.
 RYTIDOLEPIS Pander, 1856, 273, Ich.
 STENACANTHUS Leidy, 1856, 273, Ich.
 MARRACANTHUS St. John & Worthen, 1875, 381, Ich.
 COMPSACANTHUS Davis, 1883, 422, Ich.
 BRACHIACANTHUS Fritsch, 1889, 446, Ich.
 TUBULACANTHUS Fritsch, 1889, 446, Ich.
 PLATYACANTHUS Fritsch, 1889, 446, Ich.
 CALLOGNATHUS Newberry, 1889, 447, Ich.

- PHLYCTÆNACANTHUS Eastman, 1898, 479, Ich. ECZEMATOLEPIS Miller, 1892, 458, Ich.
 EUCENTRURUS Traquair, 1901, 495, Ich. ATOPACANTHUS Hussakof & Bryant,
 EUCTENODOPSIS Wellburn, 1901, 495. 1919, 566, Ich.

⁴⁵ Name only; the species, *C. jonesi* Agassiz, misprinted in "Genera of Fishes," 213.

⁴⁶ Name only; used in 1850 by W. King: "Permian Fossils," *Pal. Soc.* 1850, 222.

Order SELACHOPHIDICHTHYOIDEI

(*Pternodonta*)

This order and the next seem to find place somewhere between the *Cladoselachidae* and the *Heterodontidae*, although so far as geological evidence both groups long preceded them in time.

Family 49. CHLAMYDOSELACHIDÆ

(Frilled Sharks)

Chlamydoselachus Garman, 1884, 428.

Order NOTIDANI

(*Diplospondyli*; *Protoselachii*)

Suborder OPISTHARTHRI

Family 50. HEXANCHIDÆ

(Cow Sharks)

Hexanchus Rafinesque, 1810, 78.

Monopterhinus Blainville, 1816, 95.

Notidanus Cuvier, 1817, 97.

*Holodus*⁴⁸ Agassiz, 1842.

*Heptranchias*⁴⁷ Rafinesque, 1810, 78.

Notorhynchus Ayres, 1855, 262.

NOTIDANION^{48a} Jordan & Hannibal, 1923.

⁴⁷ Sometimes perverted to *Heptanchus*, the original name a condensation of *Heptabanchus*, seven-gilled.

⁴⁸ Apparently a manuscript name never defined, quoted from "Misc. Coll." in the *Nomenclator Zoologicus*, Appendix, p. 3, as equivalent to *Notidanus*.

^{48a} *Notidanion* Jordan & Hannibal, new genus; orthotype *Notidanus primigenius* Agassiz, *Poisson Fossiles*, plate 27, fig. 9: "Lateral teeth with the first cusp very large, the others few and large, 4 to 6 in number; anterior serrations very coarse."

Order EUSELACHII

Suborder GALEI

(*Scyllioides*)

Family 51. HEMISCYLLIIDÆ

The sharks of this family are ovoviviparous, those of the other scyllioid genera have large oblong quadrate leathery egg-cases, with filaments at the corners. Some of the genera enumerated among the *Scylliorhimidae* may prove to belong here.

Hemiscyllium A. Smith, 1837, 190.

Cirrhoscyllium H. M. Smith, 1913, 551.

Chiloscyllium Müller & Henle, 1838, 192.

Family 52. **SCYLLIORHINIDÆ**
(Cat-Sharks)

<i>Catulus</i> Valmont, 1768, 27.	<i>Halælorus</i> Gill, 1861, 306.
<i>Scylliorhinus</i> Blainville, 1816, 95.	<i>PARASCYLLIUM</i> Gill, 1861, 306.
<i>Scyllium</i> Cuvier, 1817, 97.	<i>PALÆOSCYLLIUM</i> von der Marck, 1863, 298.
<i>Catulus</i> Smith, 1837, 190.	<i>MESITEIA</i> Kramberger, 1885, 433.
<i>Poroderma</i> Smith, 1837, 190.	<i>CANTIOSCYLLIUM</i> Woodward, 1889, 449.
<i>Pristiurus</i> Müller & Henle, 1838, 573.	<i>Proscyllium</i> Hilgendorf, 1904, 508.
<i>Pristidurus</i> Bonaparte, 1839, 194.	<i>Parmaturus</i> Garman, 1906, 518.
<i>Pristiurus</i> Bonaparte, 1841, 208.	<i>Haploblepharus</i> Garman, 1913, 548.
<i>THYELLINA</i> Agassiz, 1843, 214.	<i>Apristurus</i> Garman, 1913, 548.
<i>SCYLLIODUS</i> Agassiz, 1843, 214.	<i>Atelomycterus</i> Garman, 1913, 548.
<i>PALÆOSCYLLIUM</i> Wagner, 1857, 276.	<i>Catulus</i> (Valmont) Garman, 1913, 548.
<i>ORTHODON</i> Coquand, 1860, 295.	
<i>Cephaloscyllium</i> Gill, 1861, 306.	

Family 53. **PENTANCHIDÆ**

First dorsal wanting.

<i>Caninoa</i> ⁴⁹ Nardo, 1844, 221.	<i>Thalassokleptes</i> Gistel, 1848, 235.
<i>Caninotus</i> Nardo, 1844, 222.	<i>Pentanchus</i> ⁵⁰ Smith, 1912, 546.

⁴⁹ This genus, which has received three names, is perhaps mythical.

⁵⁰ This genus, distinguished by the absence of the first dorsal, is regarded by Regan as a mutilated scylliorhinoid; this is an error as a second (undescribed) species, of this family, locally known as *Kagurazame*, occurs in Sagami Bay.

Family 54. **ORECTOLOBIDÆ**

<i>Orectolobus</i> Bonaparte, 1837, 187.	<i>Brachælorus</i> Ogilby, 1906, 519.
<i>Stegostoma</i> Müller & Henle, 1837, 192, 573.	<i>Heteroscyllium</i> Regan, 1908, 530.
<i>Crossorhinus</i> M. & H., 1838, 192.	<i>Cirriscyllium</i> Ogilby, 1908, 529.
<i>Synchismus</i> Gill, 1861, 306.	<i>Eucrossorhinus</i> Regan, 1908, 530.
	<i>TOMODON</i> ⁵¹ Leidy, 1865, 338.

⁵¹ *Tomodon* = *Diplotomodon* Leidy, 1868, "Genera of Fishes," 352, is regarded by Dr. Hay as the tooth of a Mosasaur reptile. The name is preoccupied.

Family 55. **GINGLYSTOMIDÆ**

This family is scarcely distinct from the *Orectolobidæ*.

<i>Nebrius</i> Rüppell, 1835, 184.	<i>PLICODUS</i> Winkler, 1874, 377.
<i>Ginglymostoma</i> Müller & Henle, 1837, 190.	<i>ACRODOBATIS</i> Leidy, 1877, 391.
	<i>Nebrodes</i> ⁵² Garman, 1913.

⁵² *Plagiostomia*, 56; type *Nebrius concolor* Rüppell substituted for *Nebrius*, regarded as preoccupied. (Omitted in "Genera of Fishes.")

Family 56. **PSEUDOTRIAKIDÆ**

- Pseudotriakis*⁵³ Capello, 1868, 349.

⁵³ Also written *Pseudotriacis*.

Family 57. **RHINEODONTIDÆ**

*Rhincodon*⁵⁴ Smith, (1849), 174, 244. *Micristodus* Gill, 1865, 337.

⁵⁴ Probably a misprint for *Rhineodon* or *Rhinodon*.

*Series LAMNOIDEI*Family 58. **CARCHARIIDÆ** (*Odontaspidæ*)

(Sand Sharks)

*Carcharias*⁵⁵ Rafinesque, 1810, 77. *Oxytes* Giebel, 1847, 231.
Odontaspis Agassiz, 1836, 184. *Eugomphodus* Gill, 1864, 331.
Triglochis Müller & Henle, 1838, 192. *Xiphodolamia*^{55a} Leidy, 1877, 301.

⁵⁵ The status of the name *Carcharias* as determined by the International Commission of Zoological Nomenclature makes it identical with *Odontaspis*, although the obvious intent of Rafinesque was to apply it to the group called *Carcharhinus*.

^{55a} This genus, having the teeth with bifid roots, the branches closely appressed, can not belong to the *Hexanchidæ*, in which family the teeth all have solid roots.

Family 59. **MITSUKURINIDÆ**

(Goblin Sharks)

Rhinognathus Davis, 1885, 431. *Mitsukurina* Jordan, 1898, 480.
Scapanorhynchus Woodward, 1889, 449.

Family 60. **LAMNIDÆ**

(Mackerel Sharks; Man-Eaters)

Isurus Rafinesque, 1810, 78. *Otodus* Agassiz, 1843, 214.
Lamna Cuvier, 1817, 97. *Exoles* Gistel, 1848, 236.
Lamia Risso, 1826, 119. *Plectrostoma* Gistel, 1848, 237.
Selanonius Fleming, 1828, 122. *Isuropsis* Gill, 1861, 306.
Oxyrhina Agassiz, 1838, 190, 218. *Xenodolamia*^{56a} Leidy, 1877.
Corax Agassiz, 1843, 214. *Orthacodus* Woodward, 1889, 449.
Sphenodus Agassiz, 1843, 214. *Pseudocorax* Priem, 1897, 478.
Carcharodon Müller & Henle, 1838, 190, 192, 574. *Leptostyrax* Williston, 1900, 491.
 *Carcharocles*⁵⁶ Jordan & Hannibal, 1923.

⁵⁶ New genus; orthotype *Carcharodon auriculatus* (Blainville). Similar to *Carcharodon*, but with a strong denticle on each side of the base of the tooth. Teeth narrower and more erect than in *Carcharodon*, their edges finely serrated.

^{56a} *Journ Acad Nat. Sci. Phila.*, 8: 251; logotype *X. pravus* Leidy. (Omitted in "Genera of Fishes.")

Family 61. **ALOPIIDÆ**

Vulpecula Valmont, 1768, 27. *Alopecias* Müller & Henle, 1838, 192.
Alopias Rafinesque, 1810, 78. *Vulpecula* (Valmont) Garman, 1913, 548.

Family 62. **CETORHINIDÆ**

(Basking Sharks)

*Tetroras*⁵⁷ Rafinesque, 1810, 77. *Polyprosopus* Couch, 1862, 313.
Cetorhinus Blainville, 1816, 95. *Hannovera* Van Beneden, 1871, 360.
Selache Cuvier, 1817, 97.

⁵⁷ A name given to a doubtful or perhaps wholly mythical account apparently of the Basking Shark (*Cetorhinus*).

Series *GALEOIDEI*Family 63. *GALEIDÆ* (*Galeorhinidæ*; *Carcharhinidæ*)
(Gray Sharks)

- Galeus* Valmont, 1768, 27.
Mustelus Valmont, 1768, 27.
Galeus Klein, 1775, 37.
Cynocephalus Klein, 1777, 42, 407.
Mustelus Linck, 1790, 49.
*Aodon*⁵⁸ Lacépède, 1798, 55.
*Carcharias*⁵⁹ Rafinesque, 1810, 77.
Galeus Rafinesque, 1810, 78.
Mustelus Leach, 1812, 84.
Mustellus Fischer, 1813, 85.
Carcharhinus Blainville, 1816, 95.
Galeorhinus Blainville, 1816, 95.
Carcharias Cuvier, 1817, 97.
Galeus Cuvier, 1817, 97.
Mustelus Cuvier, 1817, 97.
Leptocarias Smith, 1837, 190.
Scoliodon Müller & Henle, 1837, 190.
Galeocерdo M. & H., 1837, 192, 573.
Leptocharias M. & H., 1837, 193, 573.
*Physodon*⁶⁰ M. & H., 1838.
Aprion M. & H., 1838, 192.
Hypoprion M. & H., 1838, 192.
Triakis M. & H., 1838, 192.
Triænodon M. & H., 1838, 192.
Loxodon M. & H., 1838, 192.
Thalassorhinus M. & H., 1838, 192.
Prionodon M. & H., 1838, 192.
HEMIPRISTIS Agassiz, 1843, 214.
GLYPHIS Agassiz, 1843, 402.
Myrmillo Gistel, 1848, 237.
Prionace Cantor, 1849, 241.
Hemigaleus Bleeker, 1852, 250.
GALEODES Heckel, 1854, 259.
MICRODUS Emmons, 1857, 275.
PROTOGALEUS Molin, 1860, 298.
Platypodon Gill, 1861, 305, 331.
Hypoprionodon Gill, 1861, 306.
Eulamia Gill, 1861, 306.
Isogomphodon Gill, 1861, 306.
Lamiopsis Gill, 1861, 306.
Isoplagiodon Gill, 1861, 306.
Aprionodon Gill, 1861, 303, 306.
Cynocephalus (Klein) Gill, 1861, 306.
Boreogaleus Gill, 1861, 306.
Chænogaleus Gill, 1861, 306.
Rhinotriacis Gill, 1862, 317.
Eugaleus Gill, 1864, 330.
Pleuracromylon Gill, 1864, 330.
*ALOPIOPSIS*⁶¹ Liroy, 1865, 388.
Leptocarcharias (Smith) Günther, 1870, 357.
Dirrhizodon Klunzinger, 1870, 358.
PSEUDOGALEUS Jaekel, 1894, 465.
Scylliogaleus Boulenger, 1902, 497.
*Cynias*⁶² Gill, 1903.
HUNSRUCKIA Traquair, 1903, 506.
GEMUNDINA Traquair, 1903, 506.
CARCHARIOIDES Ameghino, 1906, 516.
Calliscyllium Tanaka, 1912, 546.
CARCHAROIDES Chapman, 1913, 547.
Eridacnis Smith, 1913, 551.
Rhizoprion Ogilby, 1915, 557.
*GYRACE*⁶³ Jordan & Hannibal, 1922.

⁵⁸ Perhaps imaginary.⁵⁹ As "rigidly construed" the name *Carcharias* of Rafinesque must be excluded from this family.⁶⁰ *Plagiostomen*, 30; orthotype *Carcharias mulleri* Müller & Henle. (Omitted in "Genera of Fishes.")⁶¹ Misprinted *Hopiopsis* by Zittel.⁶² *Proc. U. S. Nat. Mus.*, 960, 1903; orthotype *Squalus canis* Mitchill. (Omitted in "Genera of Fishes.")⁶³ *Gyrace* new genus; orthotype *Scymnus occidentalis* Agassiz, California Miocene, allied to *Galeorhinus* but with the longer teeth peculiarly twisted, and coarsely serrated at base.

Family 64. **SPHYRNIDÆ**

(Hammer-head Sharks)

This family is hardly separable from the *Galeidæ*, differing only in the form of the head.

Cestracion Klein, 1775, 40.**Sphyrna** Rafinesque, 1810, 82.**Sphyrnias** Rafinesque, 1815, 92.**Cestrorhinus** Blainville, 1816, 95.**Zygæna** Cuvier, 1817, 97.**Sphyrichthys** Thienemann, 1828, 173.**Platysqualus** Swainson, 1839, 204.**Sphyrna** Van der Hoeven, 1849, 243.**Cestracion** (Klein) Gill, 1861, 306, 303.**Eusphyrna** Gill, 1861, 306.**Reniceps** Gill, 1861, 306.**Cestracion** (Walbaum after Klein)

Ogilby, 1916, 560.

Family 65. **PRISTIOPHORIDÆ**

(Saw Sharks)

Pristiophorus Müller & Henle, 1837, 192, 573.Family 66. **PLIOTREMIDÆ****Pliotrema** Regan, 1906, 520.Order **TECTOSPONDYLI**Suborder **SQUALOIDEI**Family 67. **SQUALIDÆ**

(Dog-fishes)

These sharks which, like the rays, lack the anal fin have also simplified or degenerate vertebræ in which the hard material is arranged in rings without radiation. In the most primitive family, *Squalidæ*, spines are present in each of the two dorsal fins, a character which may indicate descent from allies of the *Heterodontidæ*, in which group (*Cestraciontes*) such spines also occur.

Squalus Linnæus, 1758, 11.**Dalatias** Rafinesque, 1810, 77.*Cerictius*⁶⁴ Rafinesque, 1810, 78.**Etmopterus** Rafinesque, 1810, 78.**Acanthorhinus** Blainville, 1816, 95.**Spinax** Cuvier, 1817, 97.**Acanthias** Risso, 1826, 119.**Centrosyllium** Müller & Henle, 1838, 193.**Centrophorus** M. & H., 1838, 192.**Acanthidium** Lowe, 1839, 195.**Spinax** Bonaparte, 1845, 225.**Lepidorhinus** Bonaparte, 1845, 225.**Acanthias** Bonaparte, 1845, 225.**Carcharias** Gistel, 1848, 234.**CENTROPTERUS** Costa, 1861, 301.**Entoxychirus** Gill, 1862, 317.**Scymnodon** Bocage & Capello, 1864, 329.**Centroscymnus** B. & C., 1864, 329.**Machephilus** Johnson, 1867, 346.**CENTROPHOROIDES** Davis, 1885, 431.**Paracentrosyllium** Alcock, 1889, 444.**Deania** Jordan & Snyder, 1902, 499.**Zameus** Jordan & Fowler, 1903, 504.**Nasisqualus** Smith, 1912, 546.**Centroselachus**⁶⁵ Garman, 1913.**PROTOSPINAX** Woodward, 1918, 565.**Atractophorus** Gilchrist, 1922. (See index.)⁶⁴ Mythical.⁶⁵ *Plagiostomia*, 306; orthotype *Centrophorus crepidater* Bocage and Capello. (Omitted in "Genera of Fishes.")

Family 68. **OXYNOTIDÆ****Oxynotus** Rafinesque, 1810, 82.**Centrina** Cuvier, 1817, 97.Family 69. **SCYMNORHINIDÆ** (*Dalatiidæ*⁶⁶; *Echinorhinidæ*)**Echinorhinus** Blainville, 1816, 95.**Euprotomicrus**⁶⁷ Gill, 1864, 331.**Scymnus** Cuvier, 1817, 97.**Isistius** Gill, 1864, 331.**Goniodus** Agassiz, 1836, 184.**Leius** Kner, 1865, 338.**Scymnorhinus** Bonaparte, 1845, 225.**Cirrhigaleus** Tanaka, 1912, 546.**Borborodes** Gistel, 1848, 237.**Squaliolus** Smith, 1912, 546.

⁶⁶The earliest logotype of *Dalatiæ* Rafinesque was one of the *Squalidæ*, possibly *Centrophorus granulosus*.

⁶⁷This genus and the next two are very aberrant, and each might stand as type of a distinct family. The same is also true of *Echinorhinus*.

Family 70. **SOMNIOSIDÆ**

(Sleeper Sharks)

Somniosus LeSueur, 1818, 107.**Rhinoscyrnus** Gill, 1864, 331.**Læmargus** Müller & Henle, 1838, 192.**Heteroscyrnus** Tanaka, 1912, 546.**Leiodon** Wood, 1847, 232.Suborder **SQUATINOIDEI**Family 71. **SQUATINIDÆ**

(Angel Sharks)

Rhina Klein, 1775, 39.**PHORCYNUS** Thiollière, 1854, 261.**Squatina** Duméril, 1906, 75.**Rhina** (Klein) Gill, 1861, 306.**Rhina** Rafinesque, 1810, 78.**SCALDIA** Le Hon, 1871, 361.**Squalraia** De la Pylaie, 1835, 183.**TRIGONODUS** Winkler, 1878, 398.**THAUMAS** Münster, 1842, 212.Order **BATOIDEI**(*Hypotremata*)Suborder **SARCURA**Family 72. **PRISTIDÆ**

(Saw-fishes)

Pristis Klein, 1775, 41.**AMBLYPRISTIS** Dames, 1888, 440.**Pristis** Linck, 1790, 49.**SCLERORHYNCHUS** Woodward, 1889, 449.**Pristis** Latham, 1794, 52.**Pristiopsis** Fowler, 1905, 512.**Pristibatis** Serville, 1829, 134.**EOPRISTIS** Stromer, 1905, 516.**MYRIOSTEON** Gray, 1864, 332.**ONYCHOPRISTIS**⁶⁸ Stromer, 1918.**PROPRISTIS** Dames, 1883, 422.

⁶⁸*Abhandl. Bayer. Akad.*, 28: 17; orthotype *Gigantichthys numidus* Haug.

Family 73. **RHINIDÆ** (*Rhamphobatidæ*; *Rhynchobatidæ*)**Rhina** Bloch & Schneider, 1801, 59.**Rhamphobatis** Gill, 1861, 306.

Rhynchobatus⁶⁹ Müller & Henle, 1837,
192, 573.

⁶⁹Sometimes spelled *Rhynchobatis*. The above is the original form.

Family 74. RHINOBATIDÆ
(Guitar-fishes)

<i>Rhinobatos</i> Klein, 1775, 40.	EURYARTHRA Agassiz, 1843, 214.
<i>Rhinobatus</i> Linck, 1790, 49.	CYCLARTHURUS Agassiz, 1843, 214.
<i>Rhinobatus</i> Bloch & Schneider, 1801, 59.	<i>Glaucostegus</i> Bonaparte, 1845, 225.
<i>Leiobatus</i> Rafinesque, 1810, 78.	<i>Demiurga</i> Gistel, 1848, 237.
<i>Squatinatoraja</i> Nardo, 1824, 116.	SPATHOBATIS Thiollière, 1849, 244, 261.
ÆLLOPOS Münster, 1836, 185.	<i>Rhynchobatis</i> Philippi, 1857, 276.
<i>Syrrhina</i> Müller & Henle, 1838, 192.	<i>Zapteryx</i> Jordan & Gilbert, 1880, 404.
<i>Trygonorrhina</i> ⁷⁰ M. & H., 1838, 192.	<i>Tarşistes</i> Jordan, 1919, 567.

⁷⁰ This name appears first in *Ann. Mag. Nat. Hist.* (2), 2: 90, 1838, spelled with "rr."

Family 75. ASTERODERMIDÆ

ASTERODERMUS ⁷¹ Agassiz, 1843, 214.	BELEMNOBATIS Thiollière, 1854, 261.
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⁷¹ *Asterodermus* Agassiz, 1843, is perhaps preoccupied by *Astrodermus* Bonelli, 1829.

Family 76. PLATYRHINIDÆ (*Discobatidæ*; *Analithidæ*)

<i>Platyrrhina</i> Müller & Henle, 1838, 193.	<i>Discobatus</i> Garman, 1880, 402.
<i>Analithis</i> Gistel, 1848, 237.	<i>Zanobatus</i> Garman, 1913, 548.
<i>Platyrrhinoidis</i> Garman, 1880, 402.	<i>Arhynchobatis</i> Waite, 1909, 534.

Family 77. RAJIDÆ
(Rays; Skates)

<i>Raja</i> ⁷² Linnæus, 1758, 11.	Uraptera M. & H., 1838, 193.
<i>Leiobatus</i> Klein, 1775, 38.	Hieroptera Fleming, 1841, 209.
<i>Dipturus</i> Rafinesque, 1810, 78.	ACTINOBATIS Agassiz, 1843, 214.
<i>Cephaleutherus</i> Rafinesque, 1810, 83.	<i>Psammobatis</i> Günther, 1870, 357.
<i>Platopterus</i> Rafinesque, 1815, 92.	ONCOBATIS Leidy, 1871, 362.
<i>Læviraja</i> ⁷³ Nardo, 1827, 121.	<i>Leucoraja</i> Malm, 1877, 391.
<i>Propterygia</i> Otto, 1824, 117.	<i>Amblyraja</i> Malm, 1877, 391.
<i>Rajabatis</i> De La Pylaie, 1835, 183.	<i>Malacorhina</i> Garman, 1877, 389.
<i>Batis</i> Bonaparte, 1837, 187.	ACANTHOBATIS Larrazet, 1886, 436.
<i>Læviraja</i> Bonaparte, 1837, 187.	PLATYSPONDYLUS Haug, 1905, 514.
<i>Dasybatus</i> Bonaparte, 1837, 187.	<i>Malacobatis</i> Gracianov, 1907, 523.
<i>Sympterygia</i> Müller & Henle, 1838, 193.	<i>Dactylobatus</i> Bean & Weed, 1909, 531.

⁷² Also spelled *Raia* by authors.

⁷³ Name given in plural form only.

Family 78. ARTHROPTERIDÆ

ARTHROPTERUS Agassiz, 1843, 214.

Suborder NARCACIONTES

Family 79. TORPEDINIDÆ (*Narcaciontidæ*; *Narcobatidæ*)
(Torpedos; Numb-fishes)

<i>Torpedo</i> ⁷⁴ Forskål, 1775, 32.	<i>Torpedo</i> Duméril, 1806, 75.
<i>Narcacion</i> Klein, 1775, 39.	<i>Torpedo</i> Rafinesque, 1810, 82.

- Narcobatus* Blainville, 1816, 95.
Narke Kaup, 1826, 121.
Temera Gray, 1831, 138.
Narcine Henle, 1834, 180.
Astrape Müller & Henle, 1838, 193.
Syrraxis (Jourdan) Bonaparte, 1841, 208.
NARCOPTERUS Agassiz, 1843, 214.
Discopyge Tochudi, 1846, 230.
Hypnos Duméril, 1852, 250.
Narcacion (Klein) Bleeker, 1866, 340.
Gonionarce Gill, 1861, 307.
Cyclonarce Gill, 1861, 307.
*Tetranarce*⁷⁵ Gill, 1861, 307.
Fimbriotorpedo Fritsch, 1886, 435.
Gymnotorpedo Fritsch, 1886, 435.
Benthobatis Alcock, 1898, 478.
Hypnarce Waite, 1902, 501.
Tetronarcine Tanaka, 1908, 531.
Bengalichthys Annandale, 1909, 531.
Typhlonarke Waite, 1909, 534.
Eunarce Fowler, 1910, 535.
Heteronarce^{75a} Regan, 1921.

⁷⁴ In part; the name is used in an oblique case only, and the Electric Ray is confused with the Electric Cat-fish.

⁷⁵ Misprinted *Tetronarce*.

^{75a} Orthotype *H. garmani* Regan.

Suborder MASTICURA (Centrobates)

Family 80. DASYATIDÆ (*Trygonidæ*; *Dasybatidæ*) (Sting-Rays)

- Dasybatus* Klein, 1775, 39.
Dasyatis Rafinesque, 1810, 78.
Uroxis Rafinesque, 1810, 83.
Trygonobatus Blainville, 1816, 94.
Leiobatus Blainville, 1816, 95.
Trygon (Adanson) Cuvier, 1817, 98.
Trygon Isidore Geoffroy St. Hilaire, 1826, 120.
*Pastinaca*⁷⁶ Nardo, 1827, 121.
Pastinachus Rüppell, 1828, 122.
Anacanthus (Ehrenberg) Cuvier, 1829, 131.
Tæniura Müller & Henle, 1837, 189.
Himantura M. & H., 1837, 190.
Gymnura M. & H., 1837, 190.
Urogymnus M. & H., 1837, 190.
Hemitrygon M. & H., 1837, 190.
Pteroplatea M. & H., 1838, 193.
Trygonoptera M. & H., 1838, 193.
Urolophus M. & H., 1838, 193.
Hyplophus M. & H., 1838, 193.
Pastinaca Dekay, 1842, 210.
CYCLOBATIS Egerton, 1844, 220.
Rhachinotus Cantor, 1849, 241.
Pastinaca Gronow, 1854, 258.
Pastinaca Duméril, 1856, 268.
ALEXANDRINUS Molin, 1861, 308.
Urotrygon Gill, 1863, 324.
Neotrygon Castelnau, 1873, 368.
GRYPHODOBATIS Leidy, 1877, 391.
HELIOBATIS Marsh, 1877, 391.
XIPHOTRYGON Cope, 1879, 399.
Dasybatus (Klein) Garman, 1885, 432.
Discobatis Miklukho-Maclay & Macleay, 1886, 436.
Discotrygon Fowler, 1910, 535.
Pteroplatytrygon Fowler, 1910, 535.
HYPOLOPHITES Leriche, 1913, 549.
*Amphotistius*⁷⁷ Garman, 1913.
Urobatis Garman, 1913, 548.
Dasybatus (Klein, Walbaum) Ogilby, 1916, 560.

⁷⁶ Name given in plural form only.

⁷⁷ *Plagiostomia*, 8; type *Trygon sabina* Le Sueur. (Omitted in "Genera of Fishes.")

Family 81. POTAMOTRYGONIDÆ (*Elipesuridæ*)

- Elipesurus* Schomburgk, 1842, 212.
Paratrygon Duméril, 1865, 337.
DYNATOBATIS Larrazet, 1886, 436.
Disceus Garman, 1877, 389.
Potamotrygon Garman, 1877, 389.

Family 82. BRACHIOPTERIDÆ

Brachioptera Gracianov, 1906, 518.

Phanerocephalus⁷⁸ Gracianov, 1906, 518.⁷⁸ Misprinted *Planerocephalus*.

Family 83. PTYCHODONTIDÆ

PTYCHODUS Agassiz, 1839, 194.

HEMIPTYCHODUS Jaekel, 1894, 465.

SPORETODUS Cope, 1874, 375.

Family 84. MYLIOBATIDÆ (*Aëtobatidæ*)

(Eagle Rays)

Aëtobatus⁷⁹ Blainville, 1816, 95.

GONIOBATIS Le Hon, 1871, 361.

Myliobatis (Duméril) Cuvier, 1817, 573.

MESOBATIS Leidy, 1877, 391.

Aëtoplatea Müller & Henle, 1838, 193.

BATES Probst, 1877, 392.

PTYCHOPLEURUS Agassiz, 1838, 190.

APOCOPODON Cope, 1886, 434.

Stoasodon Cantor, 1849, 241.

PROMYLIBATIS Jaekel, 1894, 465.

AULODUS Dixon, 1850, 245.

Aëtomyllæus Garman, 1908, 528.

Goniobatis Agassiz, 1858, 277.

Pteromyllæus Garman, 1913, 548.

Holorhinus Gill, 1862, 317.

HYLÆOBATIS Woodward, 1915, 558.

PLINTHICUS Cope, 1869, 354.

⁷⁹ Also written *Aëtobatis*.

Family 85. RHINOPTERIDÆ

Rhinoptera (Kuhl) Cuvier, 1829, 173.

Mylorhina Gill, 1865, 337.

Zygobatis Agassiz, 1836, 184, 214.

Micromesus Gill, 1865, 337.

Family 86. MOBULIDÆ (*Mantidæ*; *Cephalopteridæ*)

(Devil Rays)

Cephalopterus Risso, 1810, 77.

Ceratoptera Müller & Henle, 1838, 193.

Mobula Rafinesque, 1810, 82.

Pterocephala Swainson, 1839, 204.

Apterurus Rafinesque, 1810, 83.

Brachioptilon Newman, 1849, 244.

Dicerobatus Blainville, 1816, 95.

Diabolichthys Holmes, 1856, 270.

Manta Bancroft, 1829, 174, 573.

Ceratobatis Boulenger, 1897, 476.

Subclass HOLOCEPHALI

Order CHIMAEROIDEI

(*Chismopnea*) (Chimæras)

Family 87. PTYCTODONTIDÆ

AULACOSTEUS Eichwald, 1846 (1860), 295,
229.

RHYNCHODUS Newberry, 1873, 371.

PTYCTODUS Pander, 1858, 283.

RAMPHODUS Jaekel, 1903, 504.

RINODUS Newberry & Worthen, 1866,
342.ACMONIODUS Hussakof & Bryant, 1919,
566.

DEINODUS H. & B., 1919, 566.

Family 88. SQUALORAIDÆ

SQUALORAIA Riley, 1826, 173.

CHALCODUS Zittel, 1887, 439.

SPINACORHINUS Agassiz, 1836, 184.

Family 89. MYRIACANTHIDÆ

CTENACANTHUS⁸⁰ Agassiz, 1836, 186.
 MYRIACANTHUS Agassiz, 1837, 186.
 PHYSONEMUS⁸⁰ M'Coy, 1848, 239.
 XYSTRACANTHUS⁸⁰ Leidy, 1859, 292.
 DREPANACANTHUS⁸⁰ Newberry &
 Worthen, 1866, 342.
 PROGNOTHODUS Egerton, 1872, 365.

BATACANTHUS⁸⁰ St. John & Worthen,
 1883, 425.
 ACONDYLCANTHUS St. J. & W., 1883,
 425.
 METOPACANTHUS Zittel, 1887, 439.
 CHIMÆROPSIS Zittel, 1887, 439.

⁸⁰ Probably all these represent frontal claspers of a chimæroid; see Eastman, *Proc. U. S. Nat. Mus.*, 52: 262, 1917.

Family 90. CHIMÆRIDÆ
(Chimæras or Elephant-fishes)

Chimæra Linnæus, 1758, 11.
 LEPTACANTHUS Agassiz, 1837, 186.
 ORACANTHUS Agassiz, 1837, 186.
 EDAPHODON Buckland, 1838, 191.
 PASSALODON Buckland, 1838, 191.
Ameibodon Buckland, 1838, 191.
 ISCHYODUS Egerton, 1843, 214.
 ELASMODUS Egerton, 1843, 214.
 GANODUS Agassiz, 1843, 214.
 PSITTACODON Agassiz, 1843, 214.
 ERISMACANTHUS⁸¹ M'Coy, 1848, 239.
 DIPRIACANTHUS⁸¹ M'Coy, 1848, 408.
 MYLOGNATHUS Leidy, 1856, 272.
 CHIMÆRACANTHUS Quenstedt, 1858, 283.
Hydrolagus Gill, 1862, 317.
 AULUXACANTHUS Sauvage, 1867, 347.
 LEPTOMYLUS Cope, 1869, 354.
 DIPRISTIS Gervais, 1869, 504.
 SPHAGEPCEA Cope, 1870, 356.
 DIPRISTIS Marsh, 1870, 359.
 EUMYLODUS Leidy, 1873, 370.
 LECRACANTHUS⁸¹ St. John & Worthen,
 1875, 381.
 GAMPSACANTHUS⁸¹ St. J. & W., 1875, 381.

ISOTÆNIA Cope, 1875, 379.
 DIPHRISSA Cope, 1875, 379.
 BRYACTINUS Cope, 1875, 379.
 HEDRONCHUS Cope, 1876, 385.
 MYLEDAPHUS Cope, 1876, 385.
 ELASMOGNATHUS Newton, 1878, 397.
 CLADACANTHUS (Agassiz) Davis, (1842)
 1883, 213, 422.
 HARPACANTHUS Traquair, 1886, 436.
 ELASMODECTES Newton, 1888, 444.
 STETHACANTHUS Newberry, 1889, 447.
 VAILLANTOÖNIA⁸² Meunier, 1891, 455.
*Palæchimæra*⁸³ Walcott, 1891, 456.
 ELASMODECTES Newton, 1891, 456.
 PALÆOMYLUS Woodward, 1891, 456.
 DICTYORHABDUS⁸³ Walcott, 1892, 459.
 PACHYMYLUS Woodward, 1892, 460.
 BRACHYMYLUS Woodward, 1892, 460.
 AMYLODON Storms, 1894, 466.
 BELEMNACANTHUS Eastman, 1898, 479.
Bathyalopex Collett, 1901, 492.
Psychichthys Fowler, 1907, 523.
 ACANTHORHINA Fraas, 1910, 535.

⁸¹ These four nominal genera are regarded by Eastman as identical and based on frontal claspers of male chimæroids.

⁸² Fossil egg-case of a chimæroid.

⁸³ It seems by no means certain that *Dictyorhabdus* (*Palæchimæra*) is really a fish relic. Occurring in the Ordovician, it is far older than any known *Chimæra*. It may be a *Graptolite*. Cockerell informs me that he "has good material showing surface sculpture and is entirely convinced that it is not a vertebrate."

Note on ICHTHYODORULITES: The fin-spines named below may have belonged to species of *Chimæridæ* or of some related family.

CYLINDRACANTHUS Leidy, 1856, 273.	OSTRACACANTHUS Davis, 1879, 399.
RABDACANTHUS Pander, 1856, 274.	EUCTENIUS Traquair, 1881, 417.
BYSSACANTHUS Salter, 1861, 309.	EUACANTHUS Trautschold, 1883, 426.
LISTRACANTHUS Newberry & Worthen, 1870, 359.	GNATHACANTHUS Davis, 1883, 422.
CYRTACANTHUS Newberry, 1873, 371.	APATEACANTHUS Woodward, 1891, 456.
	GLYPTORHYNCHUS Leriche, 1905, 515.

Family 91. RHINOCHIMERIDÆ

Harriotta Goode & Bean, 1894, 464.	Anteliochimæra Tanaka, 1909, 534.
Rhinochimæra Garman, 1901, 493.	

Family 92. CALLORHYNCHIDÆ

Callorhynchus Gronow, 1763, 18.	Callorhynchus (Gronow) Cuv., 1817, 98.
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Class PISCES

(True Fishes)

Subclass CROSSOPTERYGII

The fishes of this group possess a jointed pectoral limb which may be homologous with that of the primitive sharks of the order *Ichthyotomi*. It is not certain, however, that this is not a case of analogy, in which case it does not indicate genetic relationship. The class is certainly very old in geologic time, standing at the base of the series of true fishes, while at the same time holding an ancestral relation to the amphibia and the higher vertebrates. A few species are still extant.

Order RHIPIDISTIA

(*Taxistia*)

Family 93. HOLOPTYCHIDÆ

HOLOPTYCHUS⁸⁴ Agassiz, 1839, 194.

DENDRODUS Owen, 1841, 209.

PLATYGNATHUS Agassiz, 1844, 218.

GLYPTOLEPIS Agassiz, 1844, 218.

SCLEROLEPIS Eichwald, 1844, 220.

LAMNODUS Agassiz, 1845, 225.

APEDODUS Leidy, 1858, 283.

ERIPTYCHIUS⁸⁵ Walcott, 1892, 459.

MAWSONIA Woodward, 1907, 525.

⁸⁴ Usually spelled *Holoptychius*.

⁸⁵ Scales of the Ordovician age, doubtful as to interpretation.

Family 94. MEGALICHTHYIDÆ⁸⁶ (*Rhizodontidæ*)

MEGALICHTHYS Agassiz & Hilbert, 1836, 185.

RHIZODUS Owen, 1840, 207.

CRICODUS Agassiz, 1844, 217.

SAURIPTERIS⁸⁷ Hall, 1843, 214.

COLONODUS M'Coy, 1848, 239.

GYROPTYCHIUS M'Coy, 1848, 239.

RABDIOLEPIS Emmons, 1857, 275.

POLYPLACODUS Pander, 1860, 298.

TRISTICHOPTERUS Egerton, 1861, 301.

STREPSODUS Young, 1866, 344.

RHIZODOPSIS Young, 1866, 344.

DENDROPTYCHIUS (Huxley) Young, 1866, 344.

GASTRODUS Owen, 1867, 347.

CHARACODUS Owen, 1867, 347.

GANOLODUS Owen, 1867, 347.

ARCHICHTHYS Hancock & Atthey, 1870, 358.

LABYRINTHODONTOSAURUS Barkas, 1873, 366.

ORTHOGNATHUS Barkas, 1873, 366.

SIGMODUS^{87a} Waagen, 1879.

EUSTHENOPTERON⁸⁸ Whiteaves, 1881, 418.

CÆLOSTEUS⁸⁹ Newberry, 1887.

DICTYONOSTEUS⁹⁰ Stromer, 1918.

⁸⁶ The name *Megalichthys* has priority over its synonym *Rhizodus*.

⁸⁷ Usually written *Sauripterus*.

^{87a} *Loc. cit.*, 10; orthotype *S. dubius* Waagen. (Omitted in "Genera of Fishes.")

⁸⁸ Misprinted *Eusthenopleuron* in "Genera of Fishes."

⁸⁹ *Trans. N. Y. Ac. Sci.*, 6: 137; type *C. ferox* Newberry. (Omitted in "Genera of Fishes.")

⁹⁰ *Bull. Geol. Soc. Upsala*, 16: 116; orthotype *D. arcticus* Stromer.

Family 95. **OSTEOLEPIDÆ** (*Rhombodipteridæ*)

OSTEOLEPIS Valenciennes, 1829, 134.	SPOROLEPIS Romanowsky, 1864, 334.
DIPLOPTERUS Agassiz, 1835, 181.	PLINTHOLEPIS Romanowsky, 1864, 334.
MEGALICHTHYS Agassiz, 1844, 217.	RHOMBOPTYCHIUS (Huxley) Young, 1866, 344.
GLYPTOPOMUS Agassiz, 1844, 218.	ECTOSTEORHACHIS Cope, 1880, 402, 422.
TRIPTERUS M'Coy, 1848, 239.	THURSIUS Traquair, 1888, 443.
PARABATRACHUS Owen, 1853, 254.	GLYPTOGNATHUS Woodward, 1891, 456.
DIPLOPTERAX M'Coy, 1855, 265.	POROLEPIS Woodward, 1891, 456.
TRIPLOPTERUS, M'Coy, 1855, 266.	GYROPELTUS Rohon, 1893, 462.
GYROLEPIS Kade, 1858, 281.	PALÆOSTEUS Rohon, 1893, 462.
GLYPTOLÆMUS (Huxley) Anderson, 1859, 287.	

Family 96. **ONYCHODONTIDÆ**

- ONYCHODUS Newberry, 1857, 276.

Order **ACTINISTIA**(*Cælacanthini*)Family 97. **CÆLACANTHIDÆ**

UNDINA Münster, 1834, 180.	DIPLURUS Newberry, 1878, 396.
MACROPOMA Agassiz, 1835, 181, 280.	RHABDODERMA Reis, 1888, 443.
LIBYS Münster, 1842, 212.	CÆLACANTHOPSIS Traquair, 1901, 576.
CÆLACANTHUS Agassiz, 1844, 218.	LEIODERMA ⁹² Stensiö, 1918.
HOPLOPYGUS Agassiz, 1844, 217.	WIMANIA ⁹³ Stensiö, 1921.
HEPTANEMA Bellotti, 1857, 274.	SASSENIA ⁹⁴ Stensiö, 1921.
KOKKODERMA ⁹¹ Quenstedt, 1858, 283.	AXELIA ⁹⁵ Stensiö, 1921.
GRAPHIURUS Kner, 1866, 341.	MYLACANTHUS ⁹⁶ Stensiö, 1921.
LOPHOPRIONOLEPIS Steinla, 1868, 350.	SCLERACANTHUS ⁹⁷ Stensiö, 1921.
PEPLORHINA Cope, 1873, 368.	DIPLOCERCIDES ⁹⁸ (Jaekel) Stensiö, 1922.
CONCHIOPSIS Cope, 1873, 368.	

⁹¹ Later corrected to *Coccoderma*.

⁹² Erik A. Son Stensiö, "Zur Kenntniss des Devons und des Kulms an der Klaas, Billenbag Spitzbergen," *Geol. Inst. Bull. Upsala*, 16; orthotype *Leioderma sinuosa* Stensiö; name preoccupied, replaced by *Wimania* Stensiö, 1921.

⁹³ "Triassic Fishes from Spitzbergen," p. 51; orthotype *Leioderma sinuosa* Stensiö.

⁹⁴ *Loc. cit.*, p. 84; orthotype *Sassenia tuberculata* Stensiö.

⁹⁵ *Loc. cit.*, p. 89; orthotype *Axelia robusta* Stensiö.

⁹⁶ *Loc. cit.*, p. 107; orthotype *Mylacanthus lobatus* Stensiö.

⁹⁷ *Loc. cit.*, p. 111; orthotype *Scleracanthus asper* Stensiö.

⁹⁸ Stensiö, "Ueber Zwei Cælacanthiden aus dem Oberdevon von Wildungen," *Palæontologisches Zeitschrift*, 4: 168; orthotype *Holoptychius kayseri* von Koenen.

Family 98. **TARRASIIDÆ**

TARRASIUS Traquair, 1881, 418.	PALÆOPHICHTHYS Eastman, 1908, 527.
CONCHOPOMA Kner, 1868, 352.	

Order CLADISTIA

Family 99. POLYPTERIDÆ

Polypterus St. Hilaire, 1798, 54.

Family 100. CALAMOICHTHYIDÆ

Herpetoichthys (Smith, J. A.) Günther, 1865, 338. *Erpetoichthys* Smith, 1865, 339.
Calamoichthys Smith, 1866, 343.

Subclass DIPNEUSTA

(*Dipnoi*; name preoccupied)

Order CTENODIPTERINI

(*Ctenodipneusta*)

Family 101. DIPTERIDÆ

DIPTERUS Sedgwick & Murchison, 1828, 125	PALÆDAPHUS Van Beneden & De Koninck, 1864, 329.
CATOPTERUS Agassiz, 1833, 177.	GOMPHOLEPIS Barrande, 1872, 362.
POLYPHRACTUS Agassiz, 1844, 218.	GANORHYNCHUS Traquair, 1873, 371.
STAGONOLEPIS Agassiz, 1845, 225.	HELIODUS Newberry, 1875, 379.
OSTEOPLAX M'Coy, 1848, 239.	DIPNOITES Fritsch, 1888, 441.
CONCHODUS M'Coy, 1848, 239.	TYLODUS Rohon, 1893, 462.
CHEIRODUS Pander, 1858, 283.	CHELOMODUS Rohon, 1893, 462.
ARCHÆONECTES ⁹⁹ Von Meyer, 1859.	PENTLANDIA Watson & Day, 1916, 561.

⁹⁹ *Palæontographica*, 7: 12; type *A. pertusus* Von Meyer. (Omitted in "Genera of Fishes.")

Family 102. PHANEROPLEURIDÆ

PHANEROPLEURON (Huxley) Anderson, 1859, 287. SCAUMENACIA Traquair, 1893, 463.

Order SIRENOIDEI

Family 103. CTENODONTIDÆ

CTENODUS Agassiz, 1838, 191.	PTYONODUS Cope, 1877, 388.
RHADAMISTA Gistel, 1848, 235.	MEGAPLEURON Gaudry, 1883, 423.
CAMPYLOPLEURON Huxley, 1867, 346.	GNATHORHIZA ¹⁰⁰ Cope, 1883, 422.
SAGENODUS Owen, 1867, 347.	HEMICTENODUS Jaekel, 1890, 452.

¹⁰⁰ A genus of uncertain relationship.

Family 104. URONEMIDÆ

URONEMUS Agassiz, 1844, 217. GANOPRISTODUS Traquair, 1881, 417.

Family 105. CERATODONTIDÆ

(Lung-fishes)

CERATODUS Agassiz, 1838, 191.	GOSFORDIA Woodward, 1890, 453.
SCROPHA Gistel, 1848, 235.	EPICERATODUS Teller, 1891, 456.
Neoceratodus ¹⁰¹ Castelnau, 1876, 384.	SYNTHETODUS Eastman, 1898, 476.
Ompax ¹⁰¹ Castelnau, 1879, 399.	METACERATODUS Chapman, 1910, 534.

¹⁰¹ Perhaps mythical, in part at least.

Family 106. **LEPIDOSIRENIDÆ**
(Mud Sirens)

Lepidosiren Fitzinger, 1837, 189. **Amphibichthys** Hogg, 1841, 209.

Family 107. **PROTOPTERIDÆ**

Protopterus Owen, 1839, 196. **Rhinocryptis** Peters, 1844, 222.
Protomelus Hogg, 1841, 209.

Subclass ACTINOPTERI

Superorder GANOIDEI

Order CHONDROSTEI

(*Lysopteri; Podopterygia; Lyomeri; Heterocerci; Glaniostomi*)

Family 108. **PALÆONISCIDÆ**

PALÆONISCUM ¹⁰² Blainville, 1818, 108.	SPHÆROLEPIS Fritsch, 1877, 389.
PALÆOTHRISUM Blainville, 1818, 108.	ACENTROPHORUS Traquair, 1877, 392.
ACROLEPIS Agassiz, 1833, 177.	GONATODUS Traquair, 1877, 392.
GYROLEPIS Agassiz, 1833, 177.	COSMOPTYCHIUS Traquair, 1877, 392.
AMBLYPTERUS Agassiz, 1833, 177.	MICROCONODUS Traquair, 1877, 392.
PYGOPTERUS Agassiz, 1833, 177.	RHADINICHTHYS Traquair, 1877, 392.
CHEIROLEPIS Agassiz, 1835, 181.	HOLURUS Traquair, 1881, 418.
COCCOLEPIS Agassiz, 1844, 218.	CRYPHIOLEPIS Traquair, 1881, 418.
MICROLEPIS Eichwald, 1844, 220.	CANOBIUS Traquair, 1881, 418.
ISODUS M'Coy, 1848, 239.	EUPALÆONISCUS Rzehak, 1881, 417.
ELONICHTHYS Giebel, 1848, 233.	ANAGLYPHUS Rzehak, 1881, 417.
UROSTHENES Dana, 1848, 233.	ACTINOPHORUS Newberry, 1889, 447.
TRACHELACANTHUS Fischer von Waldheim, 1850, 246.	ATHERSTONIA Woodward, 1889, 449.
PROPALÆONISCUS Pomel, 1853, 254.	APATEOLEPIS Woodward, 1890, 453.
OXYGNATHUS Egerton, 1855, 264.	DRYDENIUS Traquair, 1890, 453.
MECOLEPIS Newberry, 1856, 273.	MESOPOMA Traquair, 1890, 453.
RHABDOLEPIS Troschel, 1857, 276.	PALÆONISCINOTUS Rohon, 1890, 452.
EURYLEPIS Newberry, 1857, 276.	ÆDUA Sauvage, 1891, 456.
UROLEPIS Bellotti, 1857, 274.	ARCHÆONISCUS Sauvage, 1891, 456.
COSMOLEPIS Egerton, 1858, 280.	TEGEOLEPIS Miller, 1892, 458.
CENTROLEPIS Egerton, 1858, 280.	HAPLOLEPIS Miller, 1892, 458.
THRISSENOTUS (Agassiz), (1844) 1858, 217.	TRISSOLEPIS Fritsch, 1893, 460.
MYRIOLEPIS Egerton, 1864, 330.	GANOLEPIS Woodward, 1893, 463.
CYCLOPTYCHIUS Young, 1866, 344.	PYRITOCEPHALUS Fritsch, 1894, 464.
GANACRODUS Owen, 1867, 347.	SCELEPTOPHORUS Fritsch, 1894, 464.
PLATYSIAGUM Egerton, 1872, 365.	MICROCONODUS Traquair, 1895, 470.
LEIOLEPIS Goldenburg, 1873, 369.	FARNELLIA Traquair, 1898, 484.
NEMATOPTYCHIUS Traquair, 1875, 382.	PSILICHTHYS ¹⁰⁸ Hall, 1900.
HYPTERUS Owen, 1876, 386.	SCHIZOSPONDYLUS Fritsch & Bayer, 1902, 498.
	DIPHYODUS Lambe, 1902, 500.

¹⁰² Written by Agassiz *Palæoniscus*.

¹⁰⁸ Thomas Sergeant Hall, "A New Genus and a New Species of Fish from the Mesozoic Rocks of Victoria," *Mem. Royal Soc. Victoria*, New Series, 12: 121. Triassic, Melbourne.

ELPISOPHOLIS Woodward, 1908, 531.
 HELICHTHYS Broom, 1909, 532.
 HYDROPESSUM Broom, 1909, 532.
 PELICHTHYS Broom, 1913, 547.
 DISICHTHYS Broom, 1913, 547.

CARUICHTHYS Broom, 1913, 546.
 BIRGERIA¹⁰⁴ Stensiö, 1921.
 BOREOSOMUS¹⁰⁵ Stensiö, 1921.
 GLAUCOLEPIS¹⁰⁶ Stensiö, 1921.
 ACRORHABDUS¹⁰⁷ Stensiö, 1921.

¹⁰⁴ "Triassic Fishes, Spitzbergen," p. 151, 1921; orthotype *Saurichthys mougeoti* Agassiz.

¹⁰⁵ *Loc. cit.*, p. 211; orthotype *Acrolepis arcticus* Woodward.

¹⁰⁶ *Loc. cit.*, p. 200; orthotype *Glaucolepis gyrolepidoides* Stensiö.

¹⁰⁷ *Loc. cit.*, p. 220; orthotype *Acrorhabdus berteli* Stensiö.

Family 109. PLATYSOMIDÆ (*Scrotidæ*)

EURYNOTUS Agassiz, 1835, 181.
 PLATYSOMUS Agassiz, 1835, 181.
 GLOBULODUS Münster, 1842, 212.
 CHEIRODUS M'Coy, 1848, 239, 408.
 STROTES Gistel, 1848, 237.
 NOTACMON Gistel, 1848, 236.
 PLECTROLEPIS (Agassiz) Egerton,
 (1835) 1850, 181, 218, 246.
 TURSEODUS Leidy, 1858, 283.
 MESOLEPIS Young, 1866, 344.
 EURYSOMUS¹⁰⁸ Young, 1866, 344.

AMPHICENTRUM Young, 1866, 344.
 WARDICHTHYS Traquair, 1875, 382.
 BENEDENIUS Traquair, 1878, 396.
 PHANEROSTEON Traquair, 1881, 418.
 CHEIRODOPSIS Traquair, 1881, 418.
 HEMICLADODUS Davis, 1884, 427.
 BENEDENICHTHYS Traquair, 1890, 453.
 UROPTERYX (Agassiz) Woodward, 1891,
 457.
 PODODUS Agassiz, 1901, 217.
 ECRINESOMUS Woodward, 1910, 537.

¹⁰⁸ Misprinted *Euryosomus* in "Genera of Fishes."

Family 110. DORYPTERIDÆ

DORYPTERUS Münster, 1842, 212.

Family 111. DICTYOPYGIDÆ (*Catopteridæ*)

CATOPTERUS Redfield, 1837, 190.
 DICTYOPYGE Egerton, 1847, 231.

REDFIELDIUS Hay, 1899, 486.
 PERLEIDUS¹⁰⁹ de Alessandri, 1910.

¹⁰⁹ Gulio de Alessandri, "Studii sui pesci triasici della Lombardia," *Mem. Soc. Ital. Sci. Nat. Mus. Civico Stor. Nat. Milano*, 7: 49; orthotype *Semionotus altolepis* Deecke.

Family 112. ASTERODONTIDÆ (*Colobodontidæ*)

ASTERODON Münster, 1841, 209.
 COLOBODUS Agassiz, 1844, 217.
 THOLODUS Meyer, 1846, 229, 249.
 OMPHALODUS Meyer, 1847, 322.
 CENCHRODUS Meyer, 1847, 407.
 HEMIOPAS Meyer, 1847, 408.
 NEPHROTUS Meyer, 1851, 249.

CHARITODON^{109a} Schmid, 1861.
 EUPLEURODUS Gürich, 1884, 428.
 DACTYLOLEPIS Kunisch, 1885, 433.
 CRENILEPIS Dames, 1888, 440.
 DOLLOPTERUS Abel, 1906, 516.
 MERIDENSIA¹¹⁰ Andersson, 1916.
 PARALEPIDOTUS¹¹¹ Stolley, 1920.

^{109a} *Loc. cit.*, 30; orthotype *C. glabridens* Schmid. (Omitted in "Genera of Fishes.")

¹¹⁰ Erik Andersson, "Ueber Einige Triasfische aus der Cava Trefontane, Tessin," *Bull. Geol. Inst. Upsala*, 15: 25; orthotype *Pholidophorus meridensis* de Alessandri.

¹¹¹ Ernst Stolley, "Beitrage zur Kenntniss des deutschen Muschelkalken," *Palæontographica*, 63: 41; orthotype *Colobodus ornatus* Agassiz.

Family 113. BELONORHYNCHIDÆ

- SAURICHTHYS Agassiz, 1834, 179. GIFFONUS Costa, 1862, 312.
 STYLORHYNCHUS¹¹³ Martin, 1873. BROWNEICHTHYS Woodward, 1889, 449.
 ICTHYORHYNCHUS Bellotti, 1857, 274. SAURORHYNCHUS¹¹³ (Münster) Reis, 1891,
 BELONORHYNCHUS Bronn, 1858, 279. 207.

¹¹³ Carl Martin, "Ein Beitrage zur Kenntniss fossiler Euganoiden," *Zeitsch. Deutsche Geol. Gesellsch.*, 25: 725; type *S. tenuirostris* Martin. (Omitted in "Genera of Fishes.")

¹¹³ Name only in 1840, defined by Reis in 1891; *Teleosaurus*, p. 346, is a genus of reptiles.

Family 114. DIPHYODONTIDÆ

- DIPHYODUS Lambe, 1902, 500. STENOPROPOMA Hay, 1903, 503.

Family 115. CHONDROSTEIDÆ

- CHONDROSTEUS (Agassiz) Egerton, GYROSTEUS (Agassiz) Egerton, (1844),
 (1844) 1858, 217, 280. 1858, 217, 280.

Order GLANIOSTOMI

Family 116. ACIPENSERIDÆ

(Sturgeons)

- Acipenser Linnæus, 1758, 11. Scaphirhynchus Heckel, 1836, 185.
 Ichthyocolla Geoffroy, 1767, 24. Lioniscus H. & F., 1836, 185.
 Sterleta Gùldenstädt, 1772, 168. Sterledus Bonaparte, 1845, 225.
 Sturio Rafinesque, 1810, 82. Ellops Gistel, 1848, 236.
 Dinectus¹¹⁴ Rafinesque, 1818, 108. Scaphirhynchops Gill, 1863, 323.
 Sterletus Rafinesque, 1820, 113. Schipa Brandt, 1869, 354.
 Sterletus Brandt & Ratzeburg, 1833, 178. Kessleria Boghdanov, 1882, 418.
 Helops B. & R., 1833, 178. Pseudoscaphirhynchus Nikolskii, 1900,
 Huso B. & R., 1833, 177. 490.
 Scaphirhynchus Müller, 1835, 182. Parascaphirhynchus Forbes & Richard-
 Sturio Müller, 1835, 182. son, 1905, 512.
 Antaceus Heckel & Fitzinger, 1836, 185. Hemiscaphirhynchus Berg, 1912, 542.

Order SELACHOSTOMI

Family 117. POLYODONTIDÆ

(Paddle-fishes)

- Polyodon Lacépède, 1797, 54. Proceros¹¹⁵ Rafinesque, 1820, 113.
 Polyodon Bloch & Schneider, 1801, 59. CROSSOPHOLIS¹¹⁶ Cope, 1866, 421, 434.
 Spatularia Shaw, 1804, 74. Psephurus Günther, 1873, 369.
 Platirostra Le Sueur, 1818, 107. PHOLIDURUS Woodward, 1889, 449.

¹¹⁴ A mythical sturgeon.

¹¹⁵ Mythical.

¹¹⁶ Misprinted *Crossophilus* in "Genera of Fishes," p. 434.

Order PYCNODONTI

Family 118. PYCNODONTIDÆ

- PALÆOBALISTUM Blainville, 1818, 108.
 PYCNODUS Agassiz, 1833, 177.
 GYRODUS Agassiz, 1833, 177.
 MICRODON Agassiz, 1833, 177.
 SCAPHODUS Agassiz, 1844, 217, 453.
 GYRONCHUS Agassiz, 1844, 217.
 ACROTEMNUS Agassiz, 1844, 217.
 PERIODUS Agassiz, 1844, 217.
 PROSCINETES Gistel, 1848, 237.
 COCCODUS Pictet, 1850, 247.
 MESODON Wagner, 1851, 250.
 ANCISTRODON Derby, 1852, 251.
 GLOSSODUS Costa, 1853, 253.*
 CÆLODUS Heckel, 1856, 270.
 STEMMATODUS Heckel, 1856, 270, 409.
 ANOMIOPHTHALMUS Costa, 1856, 268.
 HADRODUS¹¹⁷ Leidy, 1858, 283.
 TYPODUS¹¹⁸ Quenstedt, 1858, 283.
 MESTURUS Wagner, 1862, 321.
 PHACODUS Cope, 1869, 354.
 CROMMYODUS Cope 1870, 356.
 ELLIPSODUS Cornuel, 1877, 389.
 URANOPLOSUS Sauvage, 1879, 401.
 COSMODUS Sauvage, 1879, 401.
 ATHRODON Sauvage, 1880, 405.
 XENOPHOLIS Davis, 1885, 431.
 ANOMÆODUS Forir, 1887, 437.
 GRYPONDON Hay, 1899, 486.
 POLYPSEPHIS Hay, 1899, 486.
 MACROMESODON Blake, 1905, 576.
 EOMESODON Woodward, 1918, 565.

¹¹⁷ Perhaps the tooth of a reptile.

¹¹⁸ This can not replace the preoccupied name *Mesodon*, as *Typodus* Meyer, 1847, is earlier.

Family 119. SEMIONOTIDÆ (*Lepidotidæ*; *Stylodontidæ*;
Dapediidæ; *Sphæroodontidæ*)

- DAPEDIUM¹¹⁹ Leach, 1822, 115.
 TETRAGONOLEPIS Brown, 1830, 136, 177.
 SEMIONOTUS Agassiz, 1832, 140.
 LEPIDOTES¹²⁰ Agassiz, 1832, 141.
 LEPIDOSAURUS Von Meyer, 1832, 141.
 SPHÆRODUS Agassiz, 1833, 177.
 AMBLYURUS Agassiz, 1836, 184.
 SARGODON Plieninger, 1847, 232.
 ISCHYPTERUS Egerton, 1847, 231.
 PHOLIDOTUS Williamson, 1849, 244.
 PLEUROLEPIS Quenstedt, 1852, 251.
 PRIONOPLEURUS¹²¹ Fischer de Waldheim, 1852.
 SERROLEPIS Quenstedt, 1852, 251.
 ÆCHMODUS Egerton, 1854, 256.
 DIPTERONOTUS Egerton, 1854, 256.
 HETEROSTICHUS Wagner, 1860, 300.
 HOMÆOLEPIS Wagner, 1860, 300.
 UROCOMUS Costa, 1862, 312.
 SCROBODUS Von der Marck, 1863, 327.
 HETEROSTROPHUS Wagner, 1863, 329.
 PLESIODUS Wagner, 1863, 329.
 CLEITHROLEPIS Egerton, 1864, 330.
 EULEPIDOTUS Egerton, 1868, 349.
 OMALOPLEURUS Costa, 1873, 368.
 GYROLEPIDOTUS Rohon, 1889, 448.
 ARCHÆOSEMIONOTUS Deecke, 1889, 445.
 PRISTISOMUS Woodward, 1890, 453.
 DOLICHOPTERUS Compter, 1891, 454.
 LEPIDOPTERUS Pohlig, 1892, 459.
 PROLEPIDOTUS Michael, 1893, 462.
 ÆTHEOLEPIS Woodward, 1895, 470.
 APHNELEPIS Woodward, 1895, 470.
 PARAICHTHYS Ameghino, 1899, 484.
 EOSEMIONOTUS¹²² Stolley, 1920.

¹¹⁹ Written *Dapedius* by Agassiz.

¹²⁰ Afterwards written *Lepidotus*.

¹²¹ *Bull. Sci. Imp. Nat. Moscow*, 25: 171; type *P. bronni* Fischer. (Omitted in "Genera of Fishes.")

¹²² *Op. cit.*, 68; orthotype *Allolepidotus vogelii* Fritsch.

Order HOLOSTEI

Suborder GINGLYMODI

(Lepidostei)

Family 120. ASPIDORHYNCHIDÆ

ASPIDORHYNCHUS Agassiz, 1833, 177.	PLATYCERHYNCHUS Costa, 1864, 330.
BELONOSTOMUS Agassiz, 1834, 180.	HEMIRHYNCHUS Kner, 1867, 346.
DICHELOSPONDYLUS Costa, 1856, 268.	APATEOPHOLIS Woodward, 1890, 453.
OPHIRACHIS Costa, 1856, 268.	VINCTIFER Jordan, 1920, 570.

Family 121. LEPISOSTEIDÆ

(Gar-Pikes)

<i>Acus</i> Catesby, 1771, 31.	Cylindrosteus Rafinesque, 1820, 112.
<i>Psalisostomus</i> Klein, 1781, 44.	Atractosteus Rafinesque, 1820, 112.
Lepisosteus ¹²³ Lacépède, 1803, 66.	PNEUMATOSTEUS Cope, 1870, 356.
Sarchirus Rafinesque, 1818, 109.	CLASTES Cope, 1873, 368.
<i>Litholepis</i> ¹²⁴ Rafinesque, 1818, 109.	

¹²³ Usually corrected to *Lepidosteus*.¹²⁴ Mythical Gar-Pike.

Order HALECOMORPHI

(Cycloganoidei; Protospondyli; Amioidei)

Family 122. PACHYCORMIDÆ

(Pelecopteridæ; Erisichthidæ; Protosphyrenidæ)

SAUROPSIS Agassiz, 1832, 140.	PSEUDOTHRISOPS Sauvage, 1875, 381.
PACHYCORMUS Agassiz, 1833, 177.	HETEROTHRISOPS Sauvage, 1875, 381.
SAUROSTOMUS Agassiz, 1833, 177.	PELECOPTERUS Cope, 1875, 379.
PROTOSPHYRÆNA Leidy, 1856, 273.	AGASSIZIA Vetter, 1881, 418.
PACHYLEPIS Quenstedt, 1858, 283.	DIPLOLEPIS Vetter, 1881, 418.
LYCODUS Quenstedt, 1858, 283.	LEEDSIA Woodward, 1889, 448.
HYPSOCORMUS Wagner, 1860, 300.	LEEDSICHTHYS Woodward, 1889, 449.
EUTHYNOTUS Wagner, 1860, 300.	PARATHRISOPS Sauvage, 1891, 456.
CYCLOSPONDYLUS Quenstedt, 1867, 347.	PROSAUROPSIS Sauvage, 1893, 462.
ERISICHTHE Cope, 1872, 364.	PROTOSAUROPSIS Sauvage, 1894, 465.
CEPHENOPLOSUS Sauvage, 1874, 377.	

Family 123. MACROSEMIIDÆ

NOTAGOGUS Agassiz, 1833, 177.	CALIGNATHUS Costa, 1853, 253.
MACROSEMIUS Agassiz, 1834, 179.	HISTIONOTUS Egerton, 1854, 256.
PROPTERUS Agassiz, 1834, 179.	LEGNONOTUS Egerton, 1854, 256.
OPHIOPSIS Agassiz, 1834, 179.	ORTHURUS Kner, 1866, 341.
DISTICHOLEPIS Thiollière, 1850, 247.	APHANEPYGUS Bassani, 1879, 398.
PETALOPTERYX Pictet, 1850, 247.	EUSEMIUS Vetter, 1881, 418.
BLENNIOMÆUS Costa, 1850, 245.	MACREPISTIUS Cope, 1894, 464.
RHYNCHONCODES Costa, 1850, 245.	ENCHELYOLEPIS Woodward, 1918, 565.

Family 124. **FURIDÆ** (*Eugnathidæ*; *Isopholidæ*)

The name *Eugnathus* is preoccupied. Of the substitute names, *Furo* and *Isopholis*, the former has priority.

URÆUS Agassiz, 1832, 140.	EURYPOMA Huxley, 1866, 341.
PTYCHOLEPIS Agassiz, 1832, 140.	ISOCOLUM Egerton, 1868, 349.
CATURUS Agassiz, 1834, 179.	OSTEORHACHIS Egerton, 1868, 349.
EUGNATHUS Agassiz, 1839, 194.	HETEROLEPIDOTUS Egerton, 1872, 365.
AMBLYSEMIUS Agassiz, 1844, 217.	HARPACTES Egerton, 1876, 385.
<i>Conodus</i> Agassiz, 1844, 217.	HARPACTIRA Egerton, 1876, 385.
FURO Gistel, 1848, 236.	LISSOLEPIS Davis, 1884, 227.
STROBILODUS Wagner, 1851, 250.	ISOPHOLIS Zittel, 1887, 439.
LOPHIOSTOMUS ¹²⁸ Egerton, 1852, 250.	CRENILEPIS Dames, 1888, 440.
ENDACTIS Egerton, 1858, 280.	NEORHOMBOLEPIS Woodward, 1888, 444.
MACROPOMA (Agassiz) Egerton, (1844)	ALLOLEPIDOTUS Deecke, 1889, 445.
1858, 217.	OTOMITLA Felix, 1891, 454.
CALLOPTERUS Thiollière, 1858, 284.	ASTHENOCORMUS Woodward, 1895, 470.
BRACHYICHTHYS Winkler, 1862, 320.	SPANIOLEPIS Kramberger, 1905, 514.
EURYCORMUS Wagner, 1863, 329.	DOLLOPTERUS Abel, 1906, 516.
DITAXIODUS Owen, 1866, 342.	AINIA Jordan, 1919, 567.
THLATTODUS Owen, 1866, 342.	

¹²⁸ Misprinted *Lophistomus* in "Genera of Fishes."

Family 125. **ARCHÆOMÆNIDÆ**

ARCHÆOMÆNE Woodward, 1895, 470.

Family 126. **LIODESMIDÆ**

LIODESMUS Wagner, 1863, 377, 329. LOPHIURUS Vetter, 1881, 418.

Family 127. **AMIIDÆ** (*Amiatidæ*)
(Bow-fins)

Amia Linnæus, 1766, 23.	AMIOPSIS Kner, 1863, 327.
Amiatus Rafinesque, 1815, 91.	PAPPICHTHYS Cope, 1873, 368.
MEGALURUS Agassiz, 1833, 177.	PROTAMIA Leidy, 1873, 370.
CYCLURUS Agassiz, 1844, 218.	HYPAMIA Leidy, 1873, 370.
NOTÆUS Agassiz, 1844, 218.	UROCLES Jordan, 1919, 567.
SYNERGUS Gistel, 1848, 236.	

Superorder TELEOSTEI
(The Bony Fishes)**Order ISOSPONDYLI**
(*Physostomi*; *Malacopterygii*)
(The Soft-rayed Fishes)*Suborder PHOLIDOPHOROIDEI*Family 128. **PHOLIDOPHORIDÆ**

PHOLIDOPHORUS Agassiz, 1832, 140.	CERAMURUS (Egerton) Brodie, 1845, 226.
MICROPS Agassiz, 1833, 177.	PERIERGUS Gistel, 1848, 237.

NOTHOSOMUS¹²⁶ (Agassiz) Egerton,
(1844) 1858, 217, 280.
THORACOPTERUS Bronn, 1858, 279.
PLEUROPHOLIS Egerton, 1858, 280.
PHOLIDOPLEURUS Bronn, 1858, 279.
MEGALOPTERUS Kner, 1866, 341.

PELTOPLEURUS Kner, 1866, 341.
PTERYGOPTERUS Kner, 1867, 346.
PROHAECITES Deecke, 1889, 445.
BALEICHTHYS Rohon, 1890, 452.
GIGANTOPTERUS Abel, 1906, 516.

¹²⁶ Misprinted *Nothosoma* in "Genera of Fishes." *Nothosomus* Bassani, 434, "Genera of Fishes," should be canceled.

Family 129. OLIGOPLEURIDÆ

OLIGOPLEURUS Thiollière, 1850, 247.
IONOSCOPUS¹²⁷ Costa, 1853, 253.
Holochondrus^{127a} Thiollière, 1854.
MACRORHIPIS Wagner, 1863, 329.
ÆNOSCOPUS Costa, 1864, 330.

OPSIGONUS¹²⁸ (Kramberger). Bassani,
1882, 418.
SPATHIURUS Davis, 1887, 431.
AMPHILAPHURUS Davis, 1887, 431.
ATTAKEOPSIS Thiollière, 1858, 284, 366.

¹²⁷ Altered to *Ænoscopus* by authors.

^{127a} Name undefined.

¹²⁸ *Opsigonus*, 1895, "Genera of Fishes," p. 469, should be canceled.

Family 130. LEPTOLEPIDÆ

Ichthyolithus Germar, 1826, 120.
LEPTOLEPIS Agassiz, 1832, 141.
THRISSOPS Agassiz, 1833, 177.
ASCALABOS Münster, 1839, 196.
ÆTHALION Münster, 1842, 212.
MEGASTOMA Costa, 1845, 226.
OXYGONIUS (Agassiz) Brodie, 1845, 226.
THARSIS Giebel, 1848, 233.
LYOPTERA Müller, 1848, 239.

SARGINITES Costa, 1850, 245.
EURYSTETHUS Sauvage, 1877, 392.
CTENOLEPIS (Agassiz) Woodward,
(1844) 1895, 217, 470.
VIDALIA Sauvage, 1903, 506.
THARRHIAS Jordan & Branner, 1908, 528.
CEARANA J. & B., 1908, 528.
PARATHRISSOPS Eastman, 1914, 553.
PACHYTHRISSOPS^{128a} Woodward, 1918.

^{128a} *Monogr. Pal. Soc.*, 1918, 128, orthotype *P. lævis*, Woodward.

Suborder ELOPOIDEA

Family 131. ELOPIDÆ

(Ten-pounders)

This family, of which but one genus is now living, shows much variation in dentition. *Spaniodon*, *Enneles*, and other genera differing widely from the usual type. It should perhaps be further subdivided. With the *Megalopidæ* and *Pachyrhizodontidæ*, the *Elopidæ* agrees with *Amia* in the presence of the gular plate, wanting in all other groups of fishes.

Elops Linnæus, 1766, 23.
Mugilomorus Lacépède, 1803, 67.
Trichonotus Rafinesque, 1815, 90.
RHACOLEPIS¹²⁹ Agassiz, 1841, 208.
CALAMOPLEURUS Agassiz, 1841, 208.

AULOLEPIS Geinitz, 1849, 408.
SAUROPSIDIUM Costa, 1850, 245.
SPANIODON Pictet, 1850, 247.
HISTIALOSA Gervais, 1855, 409.
ELOPOPSIS Heckel, 1856, 270.

¹²⁹ Misprinted *Phacolepis* in the original paper.

- RHABDOLEPIS Von Der Marck, 1863, 327.
 CÆUS¹³⁰ Costa, 1864, 264.
 HYPTIUS Costa, 1864, 330.
 HOLCOLEPIS Von Der Marck, 1865, 339, 352.
 DYPTEROLEPIS (Steinla) Geinitz, 1868, 349.
 MICROPETALOLEPIS (Steinla) Geinitz, 1868, 349.
 PERIGRAMMATOLEPIS (Steinla) Geinitz, 1868, 349.
 ACROGRAMMATOLEPIS (Steinla) Geinitz, 1868, 350.
 LEPTOGRAMMATOLEPIS (Steinla) Geinitz, 1868, 349.
 ANÆDOPOGON Cope, 1871, 360.
 THRISSOPATER Günther, 1872, 365.
 THRISSOPTEROIDES Von der Marck, 1873, 370.
 OSMEROLEPIS Fritsch, 1875, 379.
 HEMIELOPOPSIS Bassani, 1879, 398.
 LEWISIA Davis, 1885, 431.
 PROTELOPS Laube, 1885, 433.
 HYPSPONDYLUS Kramberger, 1885, 433.
 LYROLEPIS Romanovsky, 1886, 436.
 ESOCOLOPS Woodward, 1901, 495.
 ELOPIDES (Ag.) Woodward, 1901, 495, 219.
 NOTELOPS Woodward, 1901, 495.
 EURYGNATHUS (Agassiz) Woodward, (1845) 1901, 224.
 PARELOPS Fritsch & Bayer, 1902, 498.
 DINELOPS Woodward, 1907, 527.
 ENNELES Jordan & Branner, 1908, 528.
 HELMINTHOLEPIS Cockerell, 1919, 565.
 ECTASIS Jordan & Gilbert, 1919, 569.
 ENNELICHTHYS Jordan, 1920, 570.
 BRANNERION Jordan, 1920, 570.

¹³⁰ Misprinted *Cacus*.

Family 132. RAPHIOSAURIDÆ (*Pachyrhizodontidæ*)

- MEGALODON Agassiz, 1835, 181.
 RAPHIOSAURUS Owen, 1842, 212.
 PACHYRHIZODUS (Agassiz) Dixon, 1850, 246.
 CONOSAURUS Gibbes, 1850, 246.
 ONCHOSAURUS¹³¹ Gervais, 1852, 408.
 ISCHYRHIZA¹³¹ Leidy, 1856, 272.
 CONOSAUROPS Leidy, 1868, 352.
 ACRODONTOSAURUS Mason, 1869, 355.
 ANOGMIUS Cope, 1871, 360.
 CYCLOTOMODON Cope, 1876, 385.
 ORICARDINUS, Cope, 1877, 388.

¹³¹ It is likely that both *Onchosaurus* and *Ischyrhiza* are reptilian teeth.

Family 133. MEGALOPIDÆ (Tarpons; Grande-Écailles)

- Amia* Browne, 1789, 46.
Megalops Lacépède, 1803, 66.
Oculeus (Commerson) Lacépède, 1803, 70.
Brisbania Castelnau, 1877, 388.
Tarpon Jordan & Evermann, 1896, 473.

Family 134. GANOLYTIDÆ

- ETRINGUS Jordan, 1907, 525.
 GANOLYTES Jordan, 1919, 568.
 GANOËSSUS Jordan, 1920, 571.

Suborder ALBULOIDEI

Family 135. ALBULIDÆ (Lady-fishes)

- Albula* Gronow, 1763, 20.
Albula Scopoli, 1777, 42.
Albula Bloch & Schneider, 1801, 59.
Butyrinus Lacépède, 1803, 65.
Glossodus Cuvier, 1815, 93.
 PISODUS Agassiz, 1845, 227.
Conorhynchus (Nozemann) Gill, 1861, 303.
 PETALOLEPIS (Steinla) Geinitz, 1868, 350.
 APSOPELIX Cope, 1871, 360.
 CYCLOIDES¹³² Winkler, 1878, 398.
Dixonina Fowler, 1911, 538.

¹³² Very doubtful, perhaps not a fish scale.

Family 136. **THRYPTODONTIDÆ** (*Plethodontidæ*)¹³³

PLETHODUS Dixon, 1850, 245.

THRYPTODUS Loomis, 1900, 490.

ANOGLMIUS Cope, 1877, 388.

PSEUDOTHRYPTODUS Loomis, 1900, 490.

¹³³ The name *Plethodontidæ* is already used for a family of Salamanders.Suborder **CLUPEOIDEI**Family 137. **CHANIDÆ**

Chanos Lacépède, 1803, 67.

Ptycholepis Gray, 1842, 211.

Lutodeira Rüppell, 1828, 122, 184.

PROCHANOS Bassani, 1879, 398.

Scoliostrumus Rüppell, 1828, 122.

CHANOIDES Woodward, 1901, 495.

Family 138. **ANCYLOSTYLIDÆ**A single genus, apparently related to the *Chanidæ*.

Ancylostylos Kramberger, 1895, 469.

Family 139. **CHIROCENTRIDÆ**It is not certain that all of the genera named below belong to one family, or to the same family as the single living genus, *Chirocentrus*.

MONOPTEROS Volta, 1796, 169.

POLYPTEROLEPIS Steinla, 1868, 350.

Chirocentrus Cuvier, 1817, 99.

OÖLEPIS Steinla, 1868, 350.

SAUROCEPHALUS Harlan, 1824, 118.

AGRAMMATOLEPIS Steinla, 1868, 350.

SAURODON Hays, 1830, 136.

CROMMIOLEPIS Steinla, 1868, 350.

PLATINX Agassiz, 1835, 181.

CYCLOLEPIS Geinitz, 1868, 349.

Cælogaster Agassiz, 1835, 181.

HEMICYCLUS Geinitz, 1868, 350.

THRISOPTERUS Heckel, 1856, 270.

PTYCHOLEPIS Steinla, 1868, 350.

ANDREIOPLEURA Costa, 1865, 336.

HELIOLEPIS Steinla, 1868, 350.

HETEROLEPIS Costa, 1865, 336.

MIXOGRAMMATOLEPIS Steinla, 1868, 350.

TELEPHOLIS Marck & Schlüter, 1865, 339.

CHIROMYSTUS Cope, 1886, 434.

CREDEMNOLEPIS Steinla, 1868, 349.

EUBIODECTES Hay, 1903, 503.

Family 140. **ERYTHRINOLEPIDÆ**

ERYTHRINOLEPIS Cockerell, 1919, 566.

Family 141. **PTEROTHRISSIDÆ** (*Bathythrissidæ*)KYMATOPETALEPIS (Steinla) Geinitz,
1868, 349.**Bathythrissa** Günther, 1877, 389.**Pterothrissus** Hilgendorf, 1877, 390.

SYNTEGMODUS Loomis, 1900, 490.

CHICOLEPIS Cockerell, 1919, 565.

Family 142. **ICHTHYODECTIDÆ**

HYPSONDON Agassiz, 1887, 186, 219.

ICHTHYODECTES Cope, 1870, 356.

CHIROCENTRITES Heckel, 1849, 242.

XIPHACTINUS Leidy, 1870, 358.

TOMOGNATHUS Dixon, 1850, 246.

PRYMNETES Cope, 1871, 360.

SPATHODACTYLUS Pictet & Lorient, 1859,
292.

PORTHEUS Cope, 1872, 364.

GILLICUS Hay, 1898, 480.

ANDREIOPLEURA Costa, 1865, 336.

PROPORTHEUS Jackel, 1909, 533.

Family 143. SAURODONTIDÆ

SAUROCEPHALUS Harlan, 1824, 118.

DAPTINUS Cope, 1872, 364.

SAURODON Hays, 1830, 136.

Family 144. GONORHYNCHIDÆ

It is doubtful whether the extinct forms of this group (*Notogoneus*, *Charitostomus*) really belong to the same family as the living *Gonorhynchus*.

Gonorhynchus Gronow, 1763, 19.*Rhynchana* Richardson, 1844, 407.*Gonorhynchus* Scopoli, 1777, 42.

Family 145. NOTOGONEIDÆ

ANORMURUS Blainville, 1818, 171.

NOTOGONEUS¹⁸⁴ Cope, 1885, 430.

SPHENOLEPIS Agassiz, 1844, 218.

PROTOSTOMUS Whitfield, 1890, 453.

SOLENOGNATHUS Pictet, 1866, 342.

GONORHYNCHOPS Cockerell, 1919, 566.

CHARITOSOMUS Marck, 1885, 433.

¹⁸⁴ Cockerell observes, in lit., May 13, 1922: "As to *Notogoneus*, I don't think it could be a characin. If not a gonorhynchid, then the type of a new family, *Notogoneidæ*. I suppose the *Gonorhynchid* type of scales, originating during the Mesozoic, may have persisted in several distinct branches of the original stem, of which our modern *Gonorhynchidæ* constitute one only. One of the other branches would be represented by *Notogoneus*. I think the resemblance is too close for convergence from entirely different stems."

The view expressed above implies that the Cretaceous *Gonorhynchops* and *Charitosomus* are probably not true *Gonorhynchidæ*, in the modern sense, but represent a family ancestral to the modern one. Whether such a family could be defined is another matter.

Family 146. HIODONTIDÆ

(Moon-fishes)

*Hiodon*¹⁸⁵ Le Sueur, 1818, 107.*Clodalus* Rafinesque, 1820, 111.*Glossodon* Rafinesque, 1818, 108.*Glossodon* Heckel, 1842, 211.*Amphiodon* Rafinesque, 1819, 110.*Elattonistius* Gill & Jordan, 1877, 390.

¹⁸⁵ Later more correctly written *Hyodon*.

Family 147. CLUPEIDÆ

(Herrings)

Clupea Linnæus, 1758, 15.*Trichis* (Plumier) Lacépède, 1803, 73.*Harengus* Geoffroy, 1767, 24.*Pristigaster* Cuvier, 1817, 99.*Harengus* Catesby, 1771, 31.*Pomolobus* Rafinesque, 1820, 111.*Harengus* Klein, 1775, 38.*Aloşa*¹⁸⁶ Cuvier, 829, 130.*Alosa* Linck, 1790, 49.*Corica* Hamilton, 1822, 115.*Odontognathus* Lacépède, 1800, 56.*Raconda* Gray, 1831, 138.*Pomatias* Bloch & Schneider, 1801, 60.*Apterygia* Gray, 1833, 179.*Gnathobolus* B. & S., 1801, 60.*Apterogasterus* De La Pylaie, 1835, 184.*Opisotomus* (Commerson) Lacépède, 1803, 70.*Platygaster* Swainson, 1839, 203.*Ilisha* Gray, 1845, 227.

¹⁸⁶ Also written *Alausa*.

- Spratella** Cuvier & Valenciennes, 1847, 231.
Kowala Cuv. & Val., 1847, 231.
Clupeonia Cuv. & Val., 1847, 231.
Rogenia Cuv. & Val., 1847, 231.
Sardinella Cuv. & Val., 1847, 231.
Harengula Cuv. & Val., 1847, 231.
Alausa Cuv. & Val., 1847, 231.
Meletta Cuv. & Val., 1847, 231.
Pellona Cuv. & Val., 1847, 231.
Amblygaster Bleeker, 1849, 240.
HISTIURUS Costa, 1850, 245.
Clupeoides Bleeker, 1851, 247.
Dascillus Gronow, 1854, 259.
Clupeichthys Bleeker, 1855, 263.
Sardinia Poey, 1860, 299.
ALOSINA Wagner, 1860, 300.
Opisthopterus Gill, 1861, 303.
Alausella Gill, 1861, 303.
Opisthonema Gill, 1861, 303.
Brevoortia Gill, 1861, 303.
SCOMBROCLUPEA Kner, 1863, 327.
UROPTERINA Lioy, 1865, 338.
PTERICEPHALINA Lioy, 1865, 339.
PSEUDOBERYX Pictet & Humbert, 1866, 342.
Pellonula Günther, 1868, 351.
Chirocentrodon Günther, 1868, 351.
Paralosa Bleeker, 1872, 362.
SYLLÆMUS Cope, 1875, 379.
Clupeonella Kessler, 1877, 391.
DIPLOMYSTUS Cope, 1877, 388.
CLUPEOPS Sauvage, 1880, 402.
HACQUETIA¹⁸⁷ Szajnocha, 1886, 436.
Hyperlophus Ogilby, 1892, 459.
Lile Jordan & Evermann, 1896, 473.
Potamalosa Ogilby, 1896, 475.
Omochetus Ogilby, 1897, 477.
Odaxothrissa Boulenger, 1899, 485.
LEPTICHTHYS Stewart, 1899, 487.
HISTIOTHRISSE Woodward, 1901, 495.
HALECOPSIS (Agassiz) Woodward, (1844) 1901, 217, 218, 496.
Microthrissa Boulenger, 1902, 496.
LYROLEPIS Romanovskii, 1904, 510.
COPEICHTHYS Dollo, 1904, 507.
Sardina Antipa, 1905, 512.
KNIGHTIA Jordan, 1907, 525.
ELLIPES Jordan, 1910, 536.
DASTILBE Jordan, 1910, 536.
Heringia Fowler, 1911, 539.
Gudusia Fowler, 1911, 539.
Rhinosardinia Eigenmann, 1912, 543.
Clupeonella Berg, 1913, 546.
ELLIMMA Jordan, 1913, 548.
Zunasia Jordan & Metz, 1913, 548.
Caspialosa Berg, 1915, 555.
Paralosa Regan, 1916, 560.
Ethmalosa Regan, 1916, 560.
Hilsa Regan, 1916, 560.
Ethmidium Thompson, 1916, 561.
Pæcilothrissa Regan, 1917, 563.
Potamothrissa Regan, 1917, 563.
Cynothrissa Regan, 1917, 563.
Stolothrissa Regan, 1917, 563.
Limnothrissa Regan, 1917, 563.
IQUIUS Jordan, 1919, 568.
XYNE Jordan & Gilbert, 1919, 568.
ELLIMMICHTHYS Jordan, 1919, 568.
ALISEA J. & G., 1919, 568.
XYRINIUS J. & G., 1919, 569.
QUISQUE Jordan, 1920, 571.

¹⁸⁷ Not identifiable.

Family 148. DUSSUMIERIIDÆ (Round Herrings)

- Stolephorus**¹⁸⁸ Lacépède, 1803, 67.
Dussumieria Cuvier & Valenciennes, 1847, 231.
Spratelloides Bleeker, 1851, 248.
Etrumeus Bleeker, 1853, 253.
Leptogaster Bleeker, 1872, 362.
Perkinsia Eigenmann, Rosa S., 1891, 454.
Jenkinsia Jordan & Evermann, 1896, 473.
RHOMURUS Jordan, 1919, 568.
SMITHITES Jordan & Gilbert, 1919, 568.
QUÆSITA J. & G., 1919, 568.
LYGISMA J. & G., 1919, 568.

¹⁸⁸ This application of this name is still uncertain. It originally included a species of *Dussumieriidæ* and one of *Engraulidæ*.

Family 149. **DOROSOMIDÆ**
(Gizzard Shads)

Clupanodon ¹³⁹ Lacépède, 1803, 68.	Signalosa Evermann & Kendall, 1898, 480.
Thrissa Rafinesque, 1815, 90.	
Dorosoma Rafinesque, 1820, 111.	Konosirus Jordan & Snyder, 1900, 490.
Gomostoma Van Hasselt, 1823, 172.	Nematalosa Regan, 1916, 560.
Chatoëssus Cuvier, 1829, 130.	Gonialosa Regan, 1916, 560.
Anodontostoma Bleeker, 1849, 241.	

¹³⁹ The proper application of this name has been questioned. Apparently it should replace *Konosirus* among the *Dorosomidæ*.

Family 150. **ENGRAULIDÆ**
(Anchovies)

Menidia Browne, 1789, 46.	Stethochætus Gronow, 1854, 259.
Stolephorus ¹⁴⁰ Lacépède, 1803, 67.	Osteoglossum Basilewski, 1855, 262.
Encrasicholus (Commerson) Lacépède, 1803, 71.	Telara Günther, 1868, 351.
Mystus Lacépède, 1803, 67.	Cetengraulis Günther, 1868, 351.
Engraulis Cuvier, 1817, 98.	Pterengraulis Günther, 1868, 351.
Thrissa ¹⁴¹ Cuvier, 1817, 98.	Heterothrissa Günther, 1868, 351.
Encrasicholus Fleming, 1828, 122.	Lycengraulis Günther, 1868, 351.
Coilia Gray, 1831, 138.	Lycothrissa Günther, 1868, 351.
Trichosoma Swainson, 1839, 203.	Anchovia Jordan & Evermann, 1895, 468, 473.
Setipinna Swainson, 1839, 203.	Anchoviella Fowler, 1911, 539.
Chætomus McClelland, 1844, 220.	Thrissocles Jordan, 1917, 562.
Leptonurus Bleeker, 1849, 241.	

¹⁴⁰ This genus is based on two species, belonging to different families. The final disposition of the name awaits decision.

¹⁴¹ Later written *Thryssa* by Cuvier.

Family 151. **ALEPOCEPHALIDÆ**

Triurus Lacépède, 1800, 56.	Narcetes Alcock, 1890, 449.
Pomatias Bloch & Schneider, 1801, 60.	Conocara Goode & Bean, 1895, 467.
Alepocephalus Risso, 1820, 113.	Talismania G. & B., 1895, 467.
Esunculus Kaup, 1856, 272.	Mitchillina Jordan & Evermann, 1896, 473.
Xenodermichthys Günther, 1878, 395.	Ericara Gill & Townsend, 1897, 477.
Bathytroctes Günther, 1878, 395.	Leptochilichthys ¹⁴² Garman, 1899.
Platytröctes Günther, 1878, 395.	Dolichopteryx Brauer, 1901, 492.
Aleposomus ¹⁴² Gill, 1884.	Asquamiceps Zugmayer, 1911, 541.
Leptoderma Vaillant, 1886, 436, 444.	Xenognathus Gilbert, 1915, 556.
Anomalopterus Vaillant, 1886, 436, 444.	Benthosphyraena Cockerell, 1919, 566.
Aulostomatomorpha Alcock, 1890, 449.	Rouleina ¹⁴⁴ Jordan, 1923.
Tauredophidium Alcock, 1890, 449.	

¹⁴² *Amer. Nat.*, 18: 433; type *Aleposomus copei* Gill; regarded as a synonym of *Xenodermichthys*. (Omitted in "Genera of Fishes.")

¹⁴³ "Deep Sea Fish," 284; orthotype *L. agassizii*. (Omitted in "Genera of Fishes.")

¹⁴⁴ New genus; type *Aleposomus güntheri* Alcock, same as *Aleposomus* Roule, not of Gill, which is a synonym of *Xenodermichthys* Günther.

Family 152. **MACRISTIIDÆ****Macristium** Regan, 1903, 505.Family 153. **PHRACTOLÆMIDÆ****Phractolæmus**¹⁴⁶ Boulenger, 1901.¹⁴⁶ Boulenger, *Proc. Zool. Soc. Lond.*, 3, 1901; type *P. ansorgi* Boulenger. (Omitted in "Genera of Fishes.")Family 154. **KNERIIDÆ****Kneria** Steindachner, 1866, 343.**Xenopomatchthys** Boulenger, 1910, 534.Family 155. **CROMERIIDÆ****Cromeria** Boulenger, 1901, 492.*Suborder* **OSTEOGLOSSOIDEA**Family 156. **OSTEOGLOSSIDÆ**

This family and the next two should perhaps be merged into one.

Osteoglossum (Vandelli) Cuvier, 1829, 131. **DAPEDOGLOSSUS** Cope, 1877, 388.*Platops* Owen, 1901, 260.**Ischnosoma** Spix, 1829, 132.**BRYCHÆTUS** (Agassiz) Woodward, 1901,**CLADOCYCLUS**¹⁴⁶ Agassiz, 1841, 208.

224, 495.

Scleropages Günther, 1864, 333.*Pomaphractus* (Agassiz) Woodward,**PHAREODUS**¹⁴⁷ Leidy 1873, 370.

(1845) 1901, 224.

¹⁴⁶ The original species of this genus from Brazil belongs certainly to or near the *Osteoglossidæ*, and is distinguished by the great development of intermuscular bones, attached to the occiput forming a brush three times as long as the head and extending backward along the sides, looking in the fossil example like the wing of a flying fish. Cockerell suggests that it may be an ancestral **characin**.¹⁴⁷ This name seems to me tenable; the description of the genus is included in that of the species, as with *Protamia* and *Hypamia* of the same paper.Family 157. **ARAPAIMIDÆ****Sudis** Cuvier, 1817, 99.**Vastres** Cuvier & Valenciennes, 1846, 228.**Arapaima** Müller, 1843, 216, 229.Family 158. **CLUPISUDIDÆ** (*Heterotidæ*)**Clupisudis** Swainson, 1839, 202.**Helicobranchus** Hyrtl, 1854, 260.**Heterotis** (Ehrenberg) Müller, 1843,

131, 216, 229.

Family 159. **PANTODONTIDÆ****Pantodon** Peters, 1877, 391.*Suborder* **NOTOPTEROIDEI**Family 160. **NOTOPTERIDÆ****Notopterus** Lacépède, 1800, 56.**Xenomystus** Günther, 1868, 351.**Glanis** Gronow, 1854, 259.

Suborder SCYPHOPHORI

Family 161. MORMYRIDÆ

Mormyrus Linnæus, 1758, 15.	Gnathonemus Gill, 1862, 317.
Scrophicephalus Swainson, 1839, 198.	Solenomormyrus Bleeker, 1874, 372.
Mormyrops Müller, 1843, 216.	Campylomormyrus Bleeker, 1874, 372.
Petrocephalus Marcusen, 1854, 334, 260.	Oxymormyrus Bleeker, 1874, 372.
Phagrus Marcusen, 1854, 334.	Stomatorhinus Boulenger, 1898, 478.
Marcusenius Gill, 1862, 314.	Myomyrus Boulenger, 1898, 479.
Mormyrodes Gill, 1862, 314.	Genyomyrus Boulenger, 1898, 479.
Hyperopisus Gill, 1862, 314.	Hippopotamyrus Pappenheim, 1906, 520.
Isichthys Gill, 1862, 317.	

Family 162. GYMNARCHIDÆ

Gymnarchus Cuvier, 1829, 131.

Suborder SALMONOIDEI

Family 163. SALMONIDÆ

(Salmon; Trout)

The next three families are usually and perhaps properly united with *Salmonidæ*.

Salmo Linnæus, 1758, 14.	Salar Cuv. & Val., 1848, 233.
Trutta ¹⁴⁸ Linnæus, 1758, 14.	Umbla Rapp, 1854, 261.
Trutta Geoffroy, 1767, 24.	Oncorhynchus Suckley, 1860, 299.
Trutta Klein, 1775, 37.	Hypsifario Gill, 1862, 317.
Salvelini ¹⁴⁹ Nilsson, 1832, 140.	Hucho Günther, 1866, 340.
Salvelinus Richardson, 1836, 186.	RHABDOFARIO Cope, 1870, 356.
Baione Dekay, 1842, 210.	Cristivomer Gill & Jordan, 1878, 395.
THAUMATURUS Reuss, 1844, 222.	Epitomynis Schulze, 1889, 448.
Fario Cuvier & Valenciennes, 1848, 233.	Phyllogephyra Boulenger, 1898, 479.

¹⁴⁸ This name with *Osmeri*, *Coregoni*, and *Characini* were given in plural form only by Linnæus.

¹⁴⁹ Given originally in plural form only, latinized by Richardson, 1836.

Family 164. PLECOGLOSSIDÆ

(Ayu)

Plecoglossus Temminck & Schlegel, 1846, 230.

Family 165. COREGONIDÆ

(White-fishes; Ciscoes)

Coregoni ¹⁵⁰ Linnæus, 1758, 14.	Leucichthys Dybowski, 1874, 375.
Tripteronotus Lacépède, 1803, 65.	Allosomus ¹⁵¹ Jordan, 1878.
Coregonus Lac., 1803, 66.	Prosopium Milner, 1878, 395.
Stenodus Richardson, 1836, 185.	Cisco Jordan & Evermann, 1911, 539.
Argyrosomus Agassiz, 1850, 245.	Thrissomimus Gill, 1911, 539.
Brachymystax Günther, 1866, 340.	Irillion Jordan, 1919, 567.
Lucioṭrutta Günther, 1866, 340.	LEUCICHTHYOPS Cockerell, 1919, 566.

¹⁵⁰ Given in plural form only, as *Coregoni*.

¹⁵¹ *Man. Vert.*, Ed. 2, 361; type *Coregonus tullibee* Richardson. (Omitted in "Genera of Fishes.")

Family 166. THYMALLIDÆ

(Grayling)

Thymallus Linck, 1790, 49.	CYCLOLEPIS Geinitz, 1868, 349.
Thymallus Cuvier, 1829, 130.	PROTOTHYMALLUS Laube, 1901, 495.
Choregon Minding, 1832, 140.	Thymalloides Berg, 1908, 527.
Orthocolus Gistel, 1848, 237.	Salmothymus Berg, 1908, 527.

Family 167. OSMERIDÆ

(Smelt)

A group scarcely distinct as a family from the *Argentiniidæ*.

Osmeri ¹⁵² Linnæus, 1758, 14.	Mesopus ¹⁵³ Gill, 1862, 313.
Osmerus Lacépède, 1803, 66.	Hypomesus Gill, 1862, 313.
Mallotus Cuvier, 1829, 130.	Spirinchus Jordan & Evermann, 1896, 473.
Eperlanus Gaimard, 1849, 249.	Therobromus Lucas, 1898, 482.
Eperlanus Basilewski, 1855, 262.	Eperlanio Jordan, 1919, 567.
Thaleichthys Girard, 1859, 290.	

¹⁵² In plural form only, as *Osmeri*.¹⁵³ A name left in type through failure to correct proof sheets.

Family 168. ARGENTINIDÆ

Argentina Linnæus, 1758, 15.	Glossanodon Guichenot, 1866, 341.
Silus Reinhardt, 1833, 179.	Leuroglossus Gilbert, 1890, 451.
Acantholepis Kröyer, 1846, 229.	

Family 169. MICROSTOMIDÆ

Microstoma Cuvier, 1817, 99.	Nansenia Jordan & Evermann, 1896, 473.
Halaphya Günther, 1889, 447.	

Family 170. BATHYLAGIDÆ

Bathylagus Günther, 1878, 395.	Bathymacrops Gilchrist, 1922. (See Index.)

Family 171. RETROPINNIDÆ

(New Zealand White-bait)

Retropinna Gill, 1862, 313.	Richardsonia Steindachner, 1866, 343.

Family 172. SALANGIDÆ

(Chinese White-bait)

Albula Osbeck, 1762, 17.	Salangichthys Bleeker, 1860, 293.
Salanx Cuvier, 1817, 99.	Parasalanx Regan, 1908, 530.
Leucosoma Gray, 1831, 139.	Hemisalanx Regan, 1908, 530.

Family 173. GALAXIIDÆ

Galaxias Cuvier, 1817, 99.	Neochanna Günther, 1867, 345.
Mesites Jenyns, 1842, 212.	Austrocobitis Ogilby, 1899, 487.

Family 174. APLOCHITONIDÆ

Aplochiton ¹⁵⁴ Jenyns, 1842, 212.	Prototroctes Günther, 1864, 333.
Farionella Cuvier & Valenciennes, 1849, 242.	Jenynsella Ogilby, 1908, 529.
	Lovettia McCulloch, 1915, 556.

¹⁵⁴ Later spelled *Haplochiton*.

Suborder ENCHODONTOIDEI

Family 175. ENCHODONTIDÆ

Some of the genera named below have been referred, perhaps justly, to the *Dercetidæ*, a family which may be indeed closely related to the *Enchodontidæ*.

HALEC Agassiz, 1834, 180.	ARCHÆOGADUS Marck & Schlüter, 1865, 339.
ENCHODUS Agassiz, 1835, 181.	TETHEODUS Cope, 1874, 375.
ISODUS Heckel, 1849, 243.	TRICHIURIDES Winkler, 1878, 398.
SAURORHAMPHUS Heckel, 1850, 246.	SOLENOTODON Kramberger, 1881, 416.
POMOGNATHUS Dixon, 1850, 245.	HOLCODON Kramberger, 1885, 433.
EURYPHOLIS Pictet, 1850, 247.	PHYLACTOCEPHALUS Davis, 1885, 431.
PHASGANODUS Leidy, 1858, 283.	PANTOPHOLIS Davis, 1885, 431.
ISCHYROCEPHALUS von der Marck, 1858, 283.	EURYGNATHUS Davis, 1885, 431.
PALÆOLYCUS von der Marck, 1863, 327.	DIPNOLEPIS Fritsch, 1893, 461.
PLINTHOPHORUS Günther, 1864, 333.	HALECODON Cockerell, 1919, 566.

Suborder STOMIATIOIDEI

We may apply this term to a group of isospondylous fishes, which for the most part retain the adipose fin and which have the side of the upper jaw formed by the maxillaries, differing in this regard strongly from the *Iniomi*, with which they have been usually associated. Most members of both groups are bathypelagic fishes, degenerate in many regards. The division into families as here accepted must be regarded as provisional.

Family 176. STOMIATIDÆ

Stomias Cuvier, 1817, 99.	Grammatostomias ¹⁵⁵ Goode & Bean, 1895, 468.
Echiostoma Lowe, 1843, 215.	Dactylostomias Garman, 1899, 486.
Stomianodon Bleeker, 1849, 241.	Macrostomias Brauer, 1902, 497.
Stomiasunculus Kaup, 1860, 297.	Melanostomias Brauer, 1902, 497.
Lucifer Döderlein, 1882, 418.	Leptostomias Gilbert, 1905, 513.
Bathyophilus Giglioli, 1883, 423.	Neostomias Gilchrist, 1906, 518.
Hyperchoristus Gill, 1883, 424.	Trichostomias Zugmayer, 1911, 541.
Eustomias Filhol, 1884, 427.	Nematostomias Zugmayer, 1911, 541.
Pachystomias Günther, 1887, 438.	Benthalbella Zugmayer, 1911, 541.
Opostomias Günther, 1887, 438.	Lamprotodus Holt & Byrne, 1913, 548.
Photonectes Günther, 1887, 438.	Aristostomias Zugmayer, 1913, 552.
Eustomias Vaillant, 1888, 444.	Gnathostomias Pappenheim, 1914, 554.
Photostomias Collett, 1889, 444.	Zastomias Gilbert, 1915, 556.
Thaumastomias Alcock, 1890, 449.	

¹⁵⁵ *Grammatostomias* Holt & Byrne, p. 536, should be canceled. *G. flagellibarba* Holt & Byrne is the type of *Lamprotodus*, p. 548.

Family 177. TOMOGNATHIDÆ

TOMOGNATHUS Dixon, 1850, 246.

Family 178. **ASTRONESTHIDÆ***Astronesthes* Richardson, 1844, 222.*Bathylchnus* Brauer, 1902, 497.*Phænodon* Lowe, 1850, 247.*Borostomias* Regan, 1908, 529.Family 179. **STYLOPHTHALMIDÆ***Stylophthalmus* Brauer, 1906, 497, 517.*Stylophthalmoides* Sanzo, 1922. (See Index.)Family 180. **CHAULIODONTIDÆ***Vipera* Catesby, 1771, 32.*Leptodes* Swainson, 1839, 203.*Chauliodus* Bloch & Schneider, 1801, 59.Family 181. **GONOSTOMIDÆ***Gonostoma* Rafinesque, 1810, 83.*Yarrella* G. & B., 1895, 467.*Phosichthys*¹⁵⁶ Hutton & Hector, 1872, 366.*Bonapartia* G. & B., 1895, 467.*Manducus* G. & B., 1895, 468.*Cyclothone* Goode & Bean, 1882, 419.*Zaphotias* G. & B., 1898, 482.*Sigmops* Gill, 1883, 424.*Triplophos* Brauer, 1902, 497.*Neostoma*^{156a} Filhol, 1884, 427, 444.*AZALOIS* Jordan & Gilbert, 1919, 568.¹⁵⁶ Later written *Photichthys*.^{156a} *Neostoma* Vaillant, p. 444, should be canceled.Family 182. **IDIACANTHIDÆ***Idiacanthus* Peters, 1876, 386.*Bathyophis* Günther, 1878, 394.Family 183. **MAUROLICIDÆ***Maurolicus* Cocco, 1838, 191.*Valenciennellus* J. & E., 1895, 468.*Ichthyococcus* Bonaparte, 1840, 141, 206*Zalarges* Jordan & Williams, 1895, 469.*Coccia* Günther, 1864, 333.*Argyripnus* Gilbert & Cramer, 1897, 477.*Diplophos* Günther, 1873, 369.*Lychnopoles* Garman, 1899, 486.*Vinciguerria* Jordan & Evermann, 1895, 468.*Triareus* Waite, 1910, 537.Family 184. **OPISTHOPROCTIDÆ***Opisthoproctus* Vaillant, 1888, 443.*Winteria* Brauer, 1901, 492.Family 185. **STERNOPTYCHIDÆ***Sternoptix*¹⁵⁷ Hermann, 1781, 44.*Polyipnus* Günther, 1887, 438.*Argyropelecus* Cocco, 1829, 133.*Sternoptychides* Ogilby, 1889, 448.*Pleurothyris*¹⁵⁸ Lowe, 1843, 215.*Margrethia*^{158a} Jespersen & Täning, 1919.¹⁵⁷ Usually written *Sternoptyx*.¹⁵⁸ Misprinted *Pleurothysis* by Günther.^{158a} P. Jespersen and A. V. Täning. *Nat. Medd.*, 70: 222; orthotype *M. obtusirostris* J. & T.: Cadiz Bay.Family 186. **ANOPTERIDÆ***Anopterus* Zugmayer, 1911, 541.

Order LYOPOMI

Family 187. HALOSAURIDÆ

- ECHIDNOCEPHALUS von der Marck, 1858, 283. Halosaurichthys Alcock, 1889, 444.
 Halosaurus Johnson, 1863, 327. Aldrovandia Goode & Bean, 1895, 468.
 ENCHELURUS von der Marck, 1863, 328. Halosauropsis Collett, 1896, 471.

Family 188. LIPOGENYIDÆ

- Lipogenys Goode & Bean, 1894, 465.

Order HETEROMI

Family 189. PRNOTACANTHIDÆ

- PRNOTACANTHUS Woodward, 1900, 491.

Family 190. NOTACANTHIDÆ

(Spiny-eels)

- Notacanthus Bloch, 1787, 44. Paradoxichthys Giglioli, 1882, 419.
 Campylodon Fabricius, 1793, 53. Teratichthys Giglioli, 1882, 419.
 Acanthonotus Bloch, 1797, 53. Gigliolia Goode & Bean, 1894, 465.
 Polyacanthonotus Bleeker, 1874, 372. Macdonaldia G. & B., 1894, 465.

Suborder HOPLOPLEURI

(Dercetiformes)

The relations of this extinct group are still obscure. Some have regarded them as allies of the *Enchodonts* among the *Isospondyli*. Others have placed them near the sticklebacks (*Gasterosteidæ*). Cockerell, who has the latest guess, places them with the *Heteromi*.

Family 191. DERCETIDÆ

- DERCETIS Agassiz, 1834, 180. ASPIDOPLEURUS Picket & Humbert, 1866, 342.
 PRIONOLEPIS Egerton, 1850, 245. TRIÆNASPIS Cope, 1878, 394.
 PALIMPHEMUS Heckel, 1862, 319. LEPTECODON Williston, 1899, 488.
 PELARGORHYNCHUS von der Marck, 1858, 283. APATEOPHOLIS Woodward, 1890, 453.
 LEPTOTRACHELUS von der Marck, 1863, 328.

Family 192. STRATODONTIDÆ

- CIMOLICHTHYS Leidy, 1856, 273. EMPO Cope, 1872, 364.
 STRATODUS Cope, 1872, 364.

Family 193. RHINELLIDÆ

- RHINELLUS Agassiz, 1844, 217. ICHTHYOTRINGA Cope, 1878, 394.

Order SYMBRANCHIA

Eel-like fishes of tropical rivers and swamps, having distinct maxillary and premaxillary, the latter forming the border of the jaw; apparently not related to the true eels.

*Suborder ICHTHYOCEPHALI*Family 194. **FLUTIDÆ** (*Monopteridæ*)*Les Monoptères* Lacépède, 1800, 56.*Ophicardia* McClelland, 1844, 220.*Fluta* Bloch & Schneider, 1801, 60.*Apterigia* Basilewski, 1855, 262.*Monopterus* (Lacépède) Duméril 1806, 56.*Suborder HOLOSTOMI*Family 195. **SYNBRANCHIDÆ***Synbranchus*¹⁸⁹ Bloch, 1795, 53.*Ophisternon* McClelland, 1844, 220.*Typhlobranchus* Bloch & Schneider,
1801, 60.*Tetrabanchus* Bleeker, 1851, 248.*Unipertura* Kaup, 1856, 268.*Unibranchapertura* Lacépède, 1803, 68.*Macrotrema* Regan, 1912, 545.¹⁸⁹ Usually corrected to *Symbranchus*.Family 196. **AMPHIPNOIDÆ***Amphipnous* Müller, 1839, 196.*Pneumabanchus* McClelland, 1844, 220.*Ophichthys* Swainson, 1839, 205.*Suborder ALABIFORMES*Family 197. **ALABIDÆ***Alabes* (Cuvier) Oken, 1817, 101.*Cheilobranchus* Richardson, 1844, 223.**Order OPISTHOMI**

Eel-shaped fishes, with dorsal spines and with the shoulder girdle attached behind the occiput as in the *Heteromi*.

Family 198. **CHAUDHURIIDÆ***Chaudhuria* Annandale, 1918, 563.Family 199. **MASTACEMBELIDÆ***Mastacembelus* Gronow, 1763, 21.*Rhynchobdella* Bloch & Schneider, 1801,
59.*Mastacembelus* Scopoli, 1777, 42.*Macrognathus* Lacépède, 1800, 56.*Pararhynchobdella* Bleeker, 1874, 372.**Order APODES***Suborder CARENCHELI*

As these eel-shaped fishes have a distinct maxillary and premaxillary, it is very doubtful whether their place is among or even near the eels.

Family 200. **DERICHTHYIDÆ***Derichthys* Gill, 1884, 428.*Suborder ARCHENCHELI*

Eel-like forms with well developed ventral fins. It is doubtful whether these fishes are really to be placed among the eels.

Family 201. **ANGUILLAVIDÆ***Anguillavus* Hay, 1903, 503.*Suborder ENCHELYCEPHALI**Series ANGUILLOIDEI*

Body with rudimentary scales; eggs minute.

Family 202. **ANGUILLIDÆ**

(True Eels)

Anguilla Shaw, 1803, 73.*Tribranchus* Peters, 1844, 407.Family 203. **SIMENCHELYIDÆ***Simenchelys*¹⁰⁰ (Gill) Goode & Bean,
1879.*Conchognathus* Collett, 1889, 444.*Gymnosimenchelys* Tanaka, 1908, 531.¹⁰⁰ *Bull. Essex Inst.*, 27; orthotype *Simenchelys parasilicus* Gill. (Omitted in "Genera of Fishes.")Family 204. **SYNAPHOBRANCHIDÆ***Synaphobranchus* Johnson, 1862, 319.*Nettophichthys* Holt, 1891, 455.*Histiobranchus* Gill, 1883, 424.Family 205. **ILYOPHIDÆ***Ilyophis* Gilbert, 1891, 454.*Series CONGROIDEI*

Body scaleless; eggs large.

Family 206. **DYSOMMIDÆ***Dysomma* Alcock, 1889, 444.*Dysommopsis* Alcock, 1891, 454.Family 207. **XENOCONGRIDÆ***Xenoconger* Regan, 1912, 545.Family 208. **MYROCONGRIDÆ***Myroconger* Günther, 1870, 357.Family 209. **MURÆNESOCIDÆ***Murænesox* McClelland, 1844, 220.*Brachyconger* Bleeker, 1865, 335.*Cynoponticus* Costa, 1846, 228.*Congresox* Gill, 1890, 451.Family 210. **SAUROMURÆNESOCIDÆ***Sauromurænesox* Alcock, 1889, 444.Family 211. **CONGRIDÆ**¹⁰¹ (*Leptocephalidæ*)

(Conger Eels)

Leptocephalus Gronow, 1763, 22.*Conger* (Cuvier) Oken, 1817, 101.*Conger* Klein, 1775, 37.*Ariosoma* Swainson, 1838, 193, 198.*Leptocephalus* Scopoli, 1777, 41 (22).*Ophisoma* Swainson, 1839, 205.*Oxyurus* Rafinesque, 1810, 79.

Congrus Richardson, 1844, 223.
Helmichthys Costa, 1854, 256.
Leptocephalichthys Bleeker, 1856, 267.
Hyoprorus Klliker, 1853, 254.
Uroconger Kaup, 1856, 272.
Congermurna Kaup, 1856, 272.
Congerodon Kaup, 1856, 271, 237.
Neoconger Girard, 1859, 291.
Hoplunnis Kaup, 1860, 297.
Gnathophis Kaup, 1860, 297.
Isognatha (Dekay) Gill, 1861, 303.
Diaphanichthys Peters, 1864, 334.
Oxyconger Bleeker, 1865, 335.
Pcilongconger Gnther, 1871, 361.
Coloconger Alcock, 1889, 444.
Promyllantor Alcock, 1890, 449.

Xenomystax Gilbert, 1891, 454.
Euleptocephalus Strmman, 1895, 470.
Todarus Grassi & Calandruccio, 1896, 471.
Scolenchelys Ogilby, 1897, 477.
Bathycongrus Ogilby, 1898, 483.
Congrellus Ogilby, 1898, 483.
Atopichthys Garman, 1899, 486.
Congrosoma Garman, 1899, 486.
Veternio Snyder, 1904, 511.
Metopomycter Gilbert, 1905, 513.
Microconger Fowler, 1912, 543.
Mayerina Silvester, 1915, 557.
Pseudophichthys Roule, 1915, 557.
*Rhechias*¹⁶² Jordan, 1921.
Brachyconger^{162a} Regan, 1922.
Endeconger^{162b} Jordan, 1923.

¹⁶¹ Usually called *Congrid*; *Leptocephalus*, an earlier name than *Conger*, is the larval form of *Conger*, but the name has been long used for larval eels in general.

¹⁶² *Proc. U. S. Nat. Mus.*, 59: 644; orthotype *R. armiger* Jordan.

^{162a} Two new fishes from New Britain and Japan: *Ann. Mag. Nat. Hist.* X. 217; orthotype *B. platyrhynchus*, Regan; not of Bleeker, 1865.

^{162b} New name for *Brachyconger*, preoccupied.

Family 212. NETTASTOMID

(Duck-bill Eels)

Nettastoma Rafinesque, 1810, 81.
Chlopsis Rafinesque, 1810, 82.
Saurenehelys Peters, 1864, 334.

Nettastomops Steindachner, 1906, 521.
Nettastomella Facciola, 1914, 353.
Venefica Jordan & Davis, 1892, 458.

Family 213. HETEROCONGRID

Heteroconger Bleeker, 1868, 348.

*Tnicongr*¹⁶³ Herre, 1923.

¹⁶³ Herre, "Preliminary Account of Philippine Eels" (in press); body ribbon-like, the depth eighty-six times in length; pectorals present.

Family 214. ENCHELIID

ENCHELION Hay, 1903, 503.

Family 215. URENCHELYID

URENCHELYS Woodward, 1900, 491.

Family 216. ECHELID (*Myrid*)

Echelus Rafinesque, 1810, 81.
ENCHELYOPUS Agassiz, 1844, 181, 218.
Myrophis Ltken, 1851, 249.
Chilorhinus Ltken, 1851, 249.
Murnichthys Bleeker, 1853, 252.
Myrus Kaup, 1856, 271.
PARANGUILLA Bleeker, 1865, 335.
Paramyrus Gnther, 1870, 357.
Holopterura Cope, 1871, 361.
Bathymyrus Alcock, 1890, 450.

Ahlia Jordan & Davis, 1892, 458.
Verma Jordan & Evermann, 1896, 473.
Myropterura Ogilby, 1897, 477.
EOMYRUS Storms, 1898, 484.
RHYNCHORHINUS (Agassiz) Woodward, 1901, 219, 496.
EOMYRUS (Agassiz) Eastman, 1905, 512.
MYLOMYRUS Woodward, 1910, 537.
Garmannichthys Seale, 1917, 563.

Family 217. **NEMICHTHYIDÆ**
(Thread Eels)

Nemichthys Richardson, 1848, 240.	Gavialiceps Alcock, 1889, 444.
Leptorhynchus Lowe, 1852, 251.	Avocettina Jordan & Davis, 1892, 458.
Belonopsis Brandt, 1854, 256.	Nematoprora Gilbert, 1905, 513.
Labichthys Gill & Ryder, 1883, 424.	Stemonidium Gilbert, 1905, 513.
Spinivomer G. & R., 1883, 424.	Ceromitus Weber, 1913, 551.
Serrivomer G. & R., 1883, 424.	

Family 218. **CYEMIDÆ**

- Cyema** Günther, 1878, 395.

Family 219. **OPHICHTHYIDÆ**
(Snake Eels)

Ophichthus ¹⁶⁴ Ahl, 1787, 45.	Microdonophis Kaup, 1856, 271.
Cæcula Vahl, 1794, 52.	Cæcilophis Kaup, 1856, 271.
Sphagebranchus Bloch, 1795, 53.	Herpetoichthys Kaup, 1856, 271.
Ophisurus Lacépède, 1800, 56.	Elapsopsis Kaup, 1856, 271.
Cæcilia Lacépède, 1800, 56.	Brachysomophis Kaup, 1856, 271.
Colubrina ¹⁶⁵ Lacépède, 1803, 65.	Mystriophis Kaup, 1856, 271.
Apterichthys Duméril, 1806, 75.	Murænopsis ^{166b} Kaup, 1856, 271.
Oxystomus Rafinesque, 1810, 83.	Echiopsis Kaup, 1856, 271, 297.
Dalophis Rafinesque, 1810, 81.	Scytalophis Kaup, 1856, 271.
Cogrus Rafinesque, 1810, 81.	Leptorhinophis Kaup, 1856, 271.
Pterurus Rafinesque, 1810, 82.	Lamnostoma Kaup, 1856, 271.
Helmictis Rafinesque, 1810, 83.	Pisodonophis ¹⁶⁶ Kaup, 1856, 271.
Typhlotes Fischer, 1813, 83.	Ophisurapus Kaup, 1856, 271.
Branderius Rafinesque, 1815, 92.	Cirrhimuræna Kaup, 1856, 271.
Leptognathus Swainson, 1839, 205.	Callechelys Kaup, 1856, 271.
Ophisternon McClelland, 1844, 220.	Anguisurus Kaup, 1856, 271.
Ptyobbranchus McClelland, 1844, 220.	Myrichthys Girard, 1859, 290.
Ophithorax McClelland, 1844, 220.	Crotalopsis ¹⁶⁷ Kaup, 1860, 297.
Leptorhynchus ^{165a} Smith, 1847, 244.	Cryptopterus Kaup, 1860, 297.
Anepistomon Gistel, 1848, 236.	Achirophichthys Bleeker, 1865, 335.
Stethopterus Bleeker, 1853, 252.	Uranichthys Poey, 1867, 347.
Leiuranus Bleeker, 1853, 253.	Macrodonophis Poey, 1867, 347.
Scytallurus Kaup, 1856, 268.	Letharchus Goode & Bean, 1882, 419.
Centrurophis Kaup, 1856, 271.	Bascanichthys Jordan & Davis, 1892, 456.
Pæcilocephalus Kaup, 1856, 271.	Quassiremus J. & D., 1892, 458.
	Scytalichthys J. & D., 1892, 458.

¹⁶⁴ Usually written *Ophichthys*.

¹⁶⁵ Probably fictitious; eel-shaped, long-nosed, with snake-like scales on head; abdominal ventrals, no dorsal; tail forked.

^{165a} *Leptorhynchus* must be prior to its substitute *Anepistomon*.

^{165b} *Murænopsis* as used by Kaup is a simple misprint for *Murænophis*.

¹⁶⁶ Written also *Pisoodontophis*.

¹⁶⁷ Misprinted *Crotalopsis* in "Genera of Fishes."

Xyrias Jordan & Snyder, 1901, 494.
Chlevastes J. & S., 1901, 494.
Jenkinsiella Jordan & Evermann, 1905,
 576.

Hemerorhinus Weber & Beaufort, 1916,
 561.
Omochelys¹⁶⁸ Fowler, 1918.
Syletor Jordan, 1919, 567.
Acanthenchelys^{168a} Regan, 1922.

¹⁶⁸ *Proc. Acad. Nat. Sci. Phila.*, 8, 1818; orthotype *Pisodonophis cruentifer* Goode & Bean. Same as *Syletor* Jordan, 1920; preoccupied in beetles (*Syletor* Tchitcherine, 1899).

^{168a} "A new Eel from Tobago." *Ann. Mag. Nat. Hist.* X. 296; orthotype *A. spinicauda* Regan.

Family 220. NEENCHELYIDÆ

Neenchelys Bamber, 1915, 555.

Family 221. MORINGUIDÆ

Rataboura Gray, 1831, 138.
Moringua Gray, 1831, 138.
Pterurus Swainson, 1839, 205.
Pachyurus Swainson, 1839, 205.
Ptyobranchus McClelland, 1844, 220.
Aphthalmichthys Kaup, 1856, 272.

Pseudomoringua Bleeker, 1865, 335.
Stilbiscus Jordan & Bollman, 1888, 442.
Gordiichthys Jordan & Davis, 1892, 458.
Cryptophthalmus Franz, 1910, 535.
Unagius Jordan, 1919, 567.

Suborder COLOCEPHALI

Family 222. HETERENCHELYIDÆ

Heterenchelys Regan, 1912, 545.

Panturichthys Pellegrin, 1913, 549.

Family 223. MURÆNIDÆ

(Morays)

Muræna Linnæus, 1758, 11.
Echidna Forster, 1777, 42.
Gymnothorax Bloch, 1795, 53.
Murænophis Cuvier, 1798, 54.
Murænophis Lacépède, 1803, 68.
Gymnomuræna Lacépède, 1803, 68.
Megaderus Rafinesque, 1815, 92.
Gymnopsis Rafinesque, 1815, 92.
Haliophis Rüppell, 1828, 122.
Ichthyophis Lesson, 1828, 123.
Uropterygius Rüppell, 1835, 184.
Strophidon McClelland, 1844, 220, 574.
Lycodontis McClelland, 1844, 220.
Thærodontis McClelland, 1844, 220.
Channo-Muræna Richardson, 1844, 223.
*Molari*¹⁶⁹ Richardson, 1844, 223.
Ichthyapus Brisout de Barneville, 1847,
 231.

Enchelynassa Kaup, 1855, 265, 271.
Enchelycotte Kaup, 1856, 268.
Eurymyctera Kaup, 1856, 271.
Siderea Kaup, 1856, 271.
Enchelycore Kaup, 1856, 271.
Thyrsoidea Kaup, 1856, 271.
Limamuræna Kaup, 1856, 271.
Polyuranodon Kaup, 1856, 272.
Pœcilophis Kaup, 1856, 272.
Murænoblenna Kaup, 1856, 272.
Neomuræna Girard, 1859, 291.
Priodonophis Kaup, 1860, 297.
Tæniophis Kaup, 1860, 297.
Pseudomuræna Johnson, 1862, 319.
Pseudechidna Bleeker, 1863, 322.
Pythonichthys Poey, 1867, 347.
Rhinomuræna Garman, 1888, 441.
Rabula Jordan & Davis, 1892, 458.

¹⁶⁹ In plural form only.

Scutica Jordan & Evermann, 1896, 473.
Æmasia Jordan & Snyder, 1901, 494.
Scuticaria J. & S., 1901, 494.
Evenchelys Jordan & Evermann, 1902,
 498.

Anarchias Jordan & Seale, 1906, 519.
Rhabdura Ogilby, 1907, 526.
Rhinechidna Barbour, 1908, 527.
Ahynnodontophis Fowler, 1912, 543.
*DEPRANDUS*¹⁷⁰ Jordan & J. Z. Gilbert, 1921.

¹⁷⁰ "Fish Fauna California Tertiary," 252; orthotype *D. lestes* Jordan & Gilbert.

Suborder LYOMERI

Family 224. SACCOPHARYNGIDÆ (Gulpers)

Saccopharynx Mitchill, 1824, 117. *Ophiognathus* Harwood, 1827, 121.

Family 225. EURYPHARYNGIDÆ (Swallowers)

According to Dr. Roule, the nominal genera of this group are all identical with *Eurypharynx*.

Eurypharynx Vaillant, 1882, 421. *Megalopharynx* Brauer, 1900, 489.
Gastrostomus Gill & Ryder, 1883, 424. *Macropharynx* Brauer, 1902, 497.

Series OSTARIOPHYSI (Plectospondyli)

Order HETEROGNATHI

Family 226. CHARACINIDÆ (*Characidæ*) (Characins)

Some of the genera named below are perhaps referable to other families.

*Characinus*¹⁷¹ Linnaeus, 1758, 14.
Charax Gronow, 1763, 21.
Erythrinus Gronow, 1763, 21.
Charax (Gronow) Scopoli, 1777, 42.
Erythrinus (Gronow) Scopoli, 1777, 42.
*Serrasalmus*¹⁷² Lacépède, 1803, 66.
Characinus Lacépède, 1803, 66.
Tetragonopterus Cuvier, 1815, 93.
Myletes Cuvier, 1815, 93.
Chalceus Cuvier, 1817, 96.
Hydrocyon Cuvier, 1817, 96.
Characinus Cuvier, 1817, 98.
*Piabucus*¹⁷³ (Cuvier) Oken, 1817, 98.
Erythrinus Agassiz, 1829, 173.
Salminus Agassiz, 1829, 132.

Xiphorhynchus Agassiz, 1829, 132.
Schizodon Agassiz, 1829, 132.
*Cynodon*¹⁷⁴ Spix, 1829, 132.
Rhaphiodon Agassiz, 1829, 132.
Erythrichthys Bonaparte, 1833, 175.
Macrodon Müller, 1843, 216.
Myleus Müller & Troschel, 1844, 221.
Alestes M. & T., 1844, 221.
Catoprion M. & T., 1844, 221.
Pygocentrus M. & T., 1844, 221.
Pygopristis M. & T., 1844, 221.
Epicyrthus M. & T., 1844, 221.
Xiphorhamphus M. & T., 1844, 221.
Hydrolycus M. & T., 1844, 221.
Brycon M. & T., 1844, 221.

¹⁷¹ In plural form only, as *Characini*.

¹⁷² Written *Serrasalmo* by Cuvier.

¹⁷³ Written *Piabuca* by authors.

¹⁷⁴ The dates of birth and death of Spix are incorrectly given in "Genera of Fishes," p. 173; read 1781-1826.

- Exodon** M. & T., 1844, 221.
Cnidon M. & T., 1845, 227.
Agoniates M. & T., 1845, 227.
Grundulus Cuvier & Valenciennes, 1846, 228.
Lebiasina Cuv. & Val., 1846, 229.
Pyrrhulina Cuv. & Val., 1846, 229.
Hydropardus Reinhardt, 1849, 244.
Cynopotamus Cuvier & Valenciennes, 1849, 242.
Chalcinus Cuv. & Val., 1849, 242.
Mylesinus Cuv. & Val., 1849, 242.
Tometes Cuv. & Val., 1849, 242.
Piabucina Cuv. & Val., 1849, 242.
Brycinus Cuv. & Val., 1849, 242.
Astyanax Baird & Girard, 1854, 255.
Cheirodon¹⁷⁵ Girard, 1854, 258.
Stewardia Gill, 1858, 281.
Corynopoma Gill, 1858, 281.
Nematopoma Gill, 1858, 281.
Pœcilurichthys Gill, 1858, 281.
Hemigrammus Gill, 1858, 281.
Bryconops Kner, 1859, 292.
Pseudochalceus¹⁷⁶ Kner, 1863, 327.
Chalcinopsis¹⁷⁷ Kner, 1863, 337.
Crenuchus Günther, 1863, 326.
Brachyalestes Günther, 1864, 333.
Hetererythrinus Günther, 1864, 332.
Hemibrycon Günther, 1864, 333.
Scissor Günther, 1864, 333.
Cretochanes Günther, 1864, 333.
Creagrutus Günther, 1864, 333.
Anacyrtus Günther, 1864, 333.
Rœstes Günther, 1864, 333.
Rœboides Günther, 1864, 333.
Hystricodon Günther, 1864, 333.
Sarcodaces Günther, 1864, 333.
Oligosarcus Günther, 1864, 333.
Psalidostoma¹⁷⁸ Kner, 1864, 338.
Piabina Reinhardt, 1866, 343.
Aphyocharax Günther, 1868, 351.
Megalobrycon Günther, 1869, 504.
Holotaxis Cope, 1870, 356.
Odontostilbe Cope, 1870, 356.
Stethaprion Cope, 1870, 356.
Plethodectes Cope, 1870, 356.
Proportheus Cope, 1872, 363.
Triportheus Cope, 1872, 363.
Iguanodectes Cope, 1872, 363.
Bryconæthiops Günther, 1873, 369.
Paragoniates Steindachner, 1876, 387.
Lutkenia Steindachner, 1876, 387.
Metynnis Cope, 1878, 394.
Bramocharax Gill, 1877, 389.
Leptogoniates Boulenger, 1887, 437.
Henochilus Garman, 1890, 451.
Pseudocorynopoma Perugia, 1891, 455.
Chalcinopelecus Holmberg, 1891, 455.
Bergia Steindachner, 1891, 456.
Brachychalcinus Boulenger, 1892, 457.
Asiphonichthys Cope, 1894, 464.
Diapoma Cope, 1894, 464.
Petersius Hilgendorf, 1894, 465.
Myloplus Gill, 1895, 467.
Hoplerythrinus Gill, 1895, 467.
Micralestes Boulenger, 1899, 485.
Neoborus Boulenger, 1899, 485.
Catabasis Eigenmann & Norris, 1900, 489.
Orthomyleus Eigenmann, 1903, 502.
Colossoma Eigenmann, 1903, 502.
Mylossoma Eigenmann, 1903, 502.
Boulengerella Eigenmann, 1903, 502.
Acnodon Eigenmann, 1903, 502.
Myleocollops Eigenmann, 1903, 502.
Gilbertella Eigenmann, 1903, 502.
Evermannella Eigenmann, 1903, 502.
Acestrocephalus Eigenmann, 1903, 502.
Holoshesthes¹⁷⁹ Eigenmann, 1903, 502.
Mœnkhausia Eigenmann, 1903, 502.
Markiana Eigenmann, 1903, 502.
Othonophanes Eigenmann, 1903, 502.
Holoprion Eigenmann, 1903, 502.
Holopristis Eigenmann, 1903, 502.
Stichonodon Eigenmann, 1903, 502.
Bryconodon Eigenmann, 1903, 502.
Acestrorhynchus Eigenmann, 1903, 502.
Piaractus Eigenmann, 1903, 502.

¹⁷⁵ Often corrected to *Chirodon*.

¹⁷⁶ This name first appears in *Sitzb. Acad. Wiss. München*, 226, 1863.

¹⁷⁷ Kner, *Sitzb. Acad. Wiss. München*, 225, 1863.

¹⁷⁸ First published in 1864.

¹⁷⁹ Later written, more correctly, *Holesthes*.

- Acestrorhamphus** Eigenmann, 1903, 502.
Gymnocharacinus Steindachner, 1903, 506.
Hoplias Gill, 1903, 503.
Eucynopotamus Fowler, 1904, 507.
Copeina Fowler, 1906, 518.
Ophiocephalops Fowler, 1906, 518.
Cyphocharax Fowler, 1906, 518.
Steindachnerina Fowler, 1906, 518.
Peltapleura Fowler, 1906, 518.
Phoxinopsis Regan, 1907, 526.
Mimagoniates Regan, 1907, 526.
Ctenocharax Regan, 1907, 526.
EOBRYCON Jordan, 1907, 525.
Pellegrinina Fowler, 1907, 523.
Coscinoxyron Fowler, 1907, 523.
Cynocharax Fowler, 1907, 523.
Cyrtocharax Fowler, 1907, 523.
Sphyrænocharax Fowler, 1907, 523.
Belonocharax Fowler, 1907, 523.
Waiteina Fowler, 1907, 523.
Reganina Fowler, 1907, 523.
Starksina Fowler, 1907, 523.
Sealeina Fowler, 1907, 523.
Bryconamericus Eigenmann, 1907, 522.
Gilbertolus Eigenmann, 1907, 522.
Evermannolus Eigenmann, 1907, 522.
Phenacogrammus Eigenmann, 1907, 522.
Phenacogaster Eigenmann, 1907, 522.
Thayeria Eigenmann, 1907, 527.
Deuterodon Eigenmann, 1907, 522.
Astyacinus Eigenmann, 1907, 522.
Fowlerina Eigenmann, 1907, 522.
Joinvillea Steindachner, 1908, 531.
Pristella Eigenmann, 1908, 528.
Poptella Eigenmann, 1908, 528.
Psellogrammus Eigenmann, 1908, 528.
Thayeria Eigenmann, 1908, 527.
Ctenobrycon Eigenmann, 1908, 527.
Cœlurichthys Ribeiro, 1908, 530.
Gymnocorymbus Eigenmann, 1908, 527.
Brycochandus Eigenmann, 1908, 528.
Hyphessobrycon Eigenmann, 1908, 528.
Champsoborus Boulenger, 1909, 531.
Dermatocheir Durbin, 1909, 532.
Triurobrycon Eigenmann, 1909, 532.
Holobrycon Eigenmann, 1909, 532.
Pterodiscus Eigenmann, 1909, 532.
Pæcilocharax Eigenmann, 1909, 533.
Hollandichthys Eigenmann, 1910, 535.
Rhoadsia Fowler, 1911, 539.
Probolodus Eigenmann, 1911, 538.
Psalidodon Eigenmann, 1911, 538.
Spintherobolus Eigenmann, 1911, 538.
Glandulocauda Eigenmann, 1911, 538.
Vesicatrurus Eigenmann, 1911, 538.
Hysteronotus Eigenmann, 1911, 538.
Nematobrycon Eigenmann, 1911, 538.
Hasemania Ellis, 1911, 538.
Apodastyanax Fowler, 1911, 539.
Knodus Eigenmann, 1911, 538.
Genycharax Eigenmann, 1912, 543.
Gephyrocharax Eigenmann, 1912, 543.
Acanthocharax Eigenmann, 1912, 543.
Heterocharax Eigenmann, 1912, 543.
Aphyodite Eigenmann, 1912, 542.
Tylobranchus Eigenmann, 1912, 542.
Bivibranchia Eigenmann, 1912, 542.
Parastremma Eigenmann, 1912, 543.
Tyttocharax Fowler, 1913, 548.
Apistogramma Regan, 1913, 550.
Xenurocharax Regan, 1913, 550.
Ephippicharax Fowler, 1913, 548.
Gnathocharax Fowler, 1913, 548.
Pterobrycon Eigenmann, 1913, 547.
Prionobrama Fowler, 1913, 548.
Argopleura Eigenmann, 1913, 547.
Microgenys Eigenmann, 1913, 547.
Zygogaster Eigenmann, 1913, 547.
Ceratobranchia Eigenmann, 1914, 553.
Phanagoniates Eigenmann & Henn, 1914, 553.
Landonia E. & H., 1914, 553.
Parecbasis Eigenmann, 1914, 553.
Bleptonema Eigenmann, 1914, 553.
Microbrycon Eigenmann, 1914, 553.
Xiphocharax Fowler, 1914, 553.
Carlia Meek, 1914, 554.
Gastropristis Eigenmann, 1915, 556.
Rooseveltiella Eigenmann, 1915, 556.
Pristobrycon Eigenmann, 1915, 556.
Mixobrycon Eigenmann, 1915, 556.
Compsura Eigenmann, 1915, 556.
Aphyocheiroidon Eigenmann, 1915, 556.
Oligobrycon Eigenmann, 1915, 555.
Microschemobrycon Eigenmann, 1915, 555.
Megalamphodus Eigenmann, 1915, 555.

- Macropsobrycon** Eigenmann, 1915, 555. **Entomolepis** Eigenmann, 1917, 561.
Leptobrycon Eigenmann, 1915, 555. **Bertonolus**¹⁸⁰ Fowler, 1918.
Æquidens Steindachner, 1915, 558. **CHARACILEPIS** Cockerell, 1920, 570.
Pseudocheirodon Meek & Hildebrand, 1916, 559. **Phenacobrycon**¹⁸¹ Eigenmann, 1920.

¹⁸⁰ "A New Characin from Paraguay," *Proc. Acad. Nat. Sci. Phila.*, 141, 1918; orthotype *B. paraguayensis* Fowler.

¹⁸¹ Eigenmann, *Indiana University Studies*, 45: 18; orthotype *Bryconamericus henni* Eigenmann.

Family 227. GASTEROPELECIDÆ

- Gasteropelecus** Gronow, 1763, 22. **Thoracocharax** Fowler, 1907, 523.
Gasteropelecus Pallas, 1769, 22. **Carnegiella** Eigenmann, 1909, 532.

Family 228. XIPHOSTOMIDÆ

- Xiphostoma** Agassiz, 1829, 132. **Luciocharax** Steindachner, 1876, 387.
Ctenolucius Gill, 1861, 302.

Family 229. ANOSTOMIDÆ (*Curimatidæ*: *Anodontidæ*)

- Anostomos** Gronow, 1763, 20. **Curimatopsis** Steindachner, 1876, 387.
Anostomus (Gronow) Scopoli, 1777, 42. **Elopomorphus** Gill, 1878, 394.
Curimata Walbaum, 1792, 50. **Potamorhina** Cope, 1878, 394.
Anostomus (Gronow) Cuvier, 1817, 98. **Psectrogaster** Eigenmann & Eigenmann, 1889, 445.
Curimatus (Cuvier) Oken, 1817, 98. **Curimatella**^{181a} E. & E., 1889, 446.
Leporinus Spix, 1829, 132. **Semitapicis** E. & E., 1889, 446.
Prochilodus Agassiz, 1829, 132. **Schizodontopsis** Garman, 1890, 451.
Pacu Spix, 1829, 132. **Lahiliella** Eigenmann, 1903, 502.
Anodus Spix, 1829, 132. **Pithecocharax** Fowler, 1906, 518.
Mormyrhynchus Swainson, 1839, 203. **Chilomyzon** Fowler, 1906, 518.
Chilodus Müller & Troschel, 1844, 221. **Eigenmannina** Fowler, 1906, 518.
Histiiodromus Gistel, 1848, 234. **Garmanina** Fowler, 1906, 518.
Microdus Kner, 1859, 292. **Abramites** Fowler, 1906, 518.
Rhytioidus Kner, 1859, 292. **Peltapleura** Fowler, 1906, 518.
Cænotropus Günther, 1864, 333. **Anostomoides** Pellegrin, 1908, 529, 533.
Læmolyta Cope, 1872, 363. **Xyrocharax** Fowler, 1913, 547.
Leporellus Lütken, 1874, 376.

^{181a} *Curimatella* Pellegrin is introduced by error on page 533.

Family 230. HEMIODONTIDÆ

- Hemiodus** Müller, 1843, 216, 243. **Anisistia** Eigenmann, 1903, 502.
Parodon Cuvier & Valenciennes, 1849, 242. **Pœcilosomatops** Fowler, 1906, 518.
Centrophorus Kner, 1859, 292. **Hemiodopsis** Fowler, 1906, 518.
Characidium Reinhardt, 1866, 343. **Jobertina** Pellegrin, 1909, 533.
Saccodon¹⁸² Kner, 1863, 327. **Pœcilobrycon** Eigenmann, 1909, 533.
Nannostomus Günther, 1872, 365. **Archicheir** Eigenmann, 1909, 533.
Chorimycterus Cope, 1894, 464. **Microcharax** Eigenmann, 1909, 533.
Nanognathus Boulenger, 1895, 466. **Apareiodon** Eigenmann, 1916, 559.

¹⁸² Kner, *Sitzb. Acad. Wiss. München*, 225, 1863; orthotype *Saccodon wagneri* Kner.

Family 231. CITHARINIDÆ

Citharinus¹⁸³ (Cuvier) Oken, 1817, 98, 243.
Distichodus Müller & Troschel, 1845, 227, 242.
Ichthyoborus¹⁸⁴ Günther, 1864, 333.
Phago Günther, 1865, 337.
Xenocharax Günther, 1867, 345.
Nannocharax Günther, 1867, 345.
Nannæthiops Günther, 1871, 361.
Monostichodus Vaillant, 1900, 491.

Hemistichodus Pellegrin, 1900, 491, 557.
Neolebias Steindachner, 1894, 465.
Eugnathichthys Boulenger, 1898, 479.
Paraphago Boulenger, 1898, 485.
Neoborus Boulenger, 1898, 485.
Mesoborus Pellegrin, 1900, 490.
Citharidium Boulenger, 1902, 497.
Microstomatichthyoborus Nichols & Griscom, 1917, 562.
Paradistichodus¹⁸⁵ Pellegrin, 1922.

¹⁸³ The original spelling, *Cytharinus*, may be a lapse for *Citharinus*, as Cuvier wrote "les Citharines" and Valenciennes "*Citharinus*."

¹⁸⁴ Not *Ichthyoborus* Kaup, 1845, a genus of birds.

¹⁸⁵ "Poissons de l'Oubrandi-Chari," *Bull. Zool. Soc. France*, 47: 70; orthotype *Nannocharax dimidatus* Pellegrin.

Order GYMNONOTI

Family 232. RHAMPHICHTHYIDÆ

Rhamphichthys Müller & Troschel, 1849, 243.
Altona Kaup, 1856, 268.
Hypopomus Gill, 1864, 330.
Brachyrhamphichthys Günther, 1870, 357.

Steatogenys Boulenger, 1898, 479.
Gymnorhamphichthys Eigenmann, 1912, 543.

Family 233. APTERONOTIDÆ (*Sternarchidæ*)

Apteronotus Lacépède, 1800, 56.
Sternarchus Bloch & Schneider, 1801, 59.
Carapus¹⁸⁶ Rafinesque, 1810, 82.
Sternarchorhynchus Castlenau, 1855, 264.
Memarchus Kaup, 1856, 268.
Rhamphosternarchus Günther, 1870, 357.

Sternarchorhamphus Eigenmann & Ward, 1905, 512.
Sternarchella E. & W., 1905, 512.
Sternarchogiton E. & W., 1905, 512.
Porotergus Eigenmann, 1912, 543.
Orthosternarchus Ellis, 1913, 547.
Odontosternarchus Ellis, 1913, 547.

¹⁸⁶ The final disposition of this generic name is open to question. The decision of the International Commission removes it from this group to replace *Fierasfer* Cuvier.

Family 234. GYMNOTIDÆ

(Carapos)

Gymnotus Linnæus, 1758, 12.
Carapus Cuvier, 1817, 101, 243.
Carapo Oken, 1817, 101.
Sternopygus Müller & Troschel, 1849, 243.

Giton Kaup, 1856, 268.
Gymnotes Gill, 1864, 330.
Cryptops Eigenmann, 1894, 464.
Eigenmannia Jordan & Evermann, 1896, 473.

Family 235. ELECTROPHORIDÆ

(Electric Eels)

Gymnotus Linnæus, 1766 (not of 1758). **Electrophorus** Gill, 1864, 330.

Order EVENTOGNATHI

Family 236. CATOSTOMIDÆ

(Suckers ; Buffalo Fishes)

- Catostomus** Le Sueur, 1817, 96.
Hypentelium Rafinesque, 1818, 109.
Cycleptus Rafinesque, 1819, 110.
Ictiobus¹⁸⁷ Rafinesque, 1820, 112.
Carpiodes Rafinesque, 1820, 112.
Moxostoma¹⁸⁸ Rafinesque, 1820, 112.
Decactylus Rafinesque, 1820, 113.
Teretulus Rafinesque, 1820, 113.
Eurystomus¹⁸⁹ Rafinesque, 1820, 113.
Stomocatus Bonaparte, 1840, 206.
Sclerognathus Cuvier & Valenciennes, 1844, 219.
Hylomyzon Agassiz, 1855, 261.
Ptychostomus Agassiz, 1855, 261.
Bubalichthys Agassiz, 1855, 261.
Acomus Girard, 1856, 269.
Minomus Girard, 1856, 269.
Placopharynx Cope, 1870, 356.
AMYZON Cope, 1872, 364.
Pantosteus Cope, 1876, 384.
Erimyzon Jordan, 1876, 386.
Lagochila Jordan & Brayton, 1877, 391.
Myxocyprinus Gill, 1878, 394.
Minytrema Jordan, 1878, 395.
Chasmistes Jordan, 1878, 396.
Quassilabia Jordan & Brayton, 1878, 395.
Lipomyzon Cope, 1881, 415.
Xyrauchen Kirsch, 1888, 443.
Deltistes Seale, 1896, 475.
Megastomatobus Fowler, 1913, 547.
Pithecomyzon Fowler, 1913, 548.
Scartomyzon Fowler, 1913, 548.
Notolepidomyzon Fowler, 1913, 548.
Thoburnia Jordan & Snyder, 1917, 562.

¹⁸⁷ Spelled *Ichthyobus* by authors.¹⁸⁸ Name corrected to *Myxostoma*.¹⁸⁹ Mythical.

Family 237. CYPRINIDÆ

(Carps, Dace, Minnows, Chubs, etc.)

- Cyprinus** Linnæus, 1758, 15.
Leuciscus Klein, 1775, 37.
Brama Klein, 1775, 37.
Mystus Klein, 1775, 38.
Labeo Cuvier, 1817, 99.
Tinca Cuvier, 1817, 99.
Gobio Cuvier, 1817, 99.
Abramis Cuvier, 1817, 99.
Barbus Cuvier, 1817, 99.
Leuciscus Cuvier, 1817, 99.
Cirrhinus¹⁹⁰ (Cuvier) Oken, 1817, 99.
Exoglossum Rafinesque, 1818, 109.
Maxillingua Rafinesque, 1818, 109.
Notropis Rafinesque, 1818, 108.
Notemigonus Rafinesque, 1819, 110.
Hemiplus Rafinesque, 1820, 110.
Minnilus Rafinesque, 1820, 111.
Dobula Rafinesque, 1820, 112.
Phoxinus Rafinesque, 1820, 112.
Alburnus Rafinesque, 1820, 112.
Luxilus Rafinesque, 1820, 112.
Chrosomus Rafinesque, 1820, 112.
Semotilus Rafinesque, 1820, 112.
Rutilus Rafinesque, 1820, 112.
Pimephales Rafinesque, 1820, 112.
Plargyrus Rafinesque, 1820, 112.
Garra Hamilton, 1822, 115.
Morulus Hamilton, 1822, 115.
Cabdio Hamilton, 1822, 115.
Puntius Hamilton, 1822, 115.
Barilius Hamilton, 1822, 115.
Bangana Hamilton, 1822, 115.
Chela Hamilton, 1822, 115.
Danio Hamilton, 1822, 115.
Diplocheilus Van Hasselt, 1823, 172.
Crossocheilus Van Hasselt, 1823, 116.
Lobocheilus Van Hasselt, 1823, 116.
Hampala Van Hasselt, 1823, 116.
Nandina Gray, 1831, 138.
Carassius Nilsson, 1832, 176.
Bengala Gray, 1833, 139, 179.
Tor Gray, 1833, 139, 179.

¹⁹⁰ Spelled *Cirrhina* by authors.

Phoxinus Agassiz, 1835, 180.
Rhodeus Agassiz, 1835, 180.
Chondrostoma Agassiz, 1835, 180.
Aspius Agassiz, 1835, 180.
Pelecus Agassiz, 1835, 180.
Varicorhinus Rüppell, 1836, 186.
Labeobarbus Rüppell, 1836, 186.
Squalius Bonaparte, 1837, 142, 187.
Telestes Bonaparte, 1837, 142, 187.
Scardinius Bonaparte, 1837, 142, 187.
Cyprinopsis Bonaparte, 1837, 142, 187.
Schizothorax Heckel, 1838, 192.
Platycara McClelland, 1839, 195.
Gonorhynchus McClelland, 1839, 195.
Oreinus McClelland, 1839, 195.
Systemus McClelland, 1839, 195.
Perilampus McClelland, 1839, 195.
Opsarius McClelland, 1839, 195.
Esomus Swainson, 1839, 202.
Chedrus Swainson, 1839, 202.
Salmophasia Swainson, 1839, 202.
Salmostoma Swainson, 1839, 198.
Phoxinellus Heckel, 1840, 211, 288.
Aulopyge Heckel, 1841, 209.
Rohtee Sykes, 1841, 210.
Racoma McClelland, 1842, 212.
Stilbe Dekay, 1842, 210.
Capoëta Cuvier & Valenciennes, 1842, 210.
Rohita Cuv. & Val., 1842, 210.
Nuria Cuv. & Val., 1842, 210.
Dangila Cuv. & Val., 1842, 210.
Tylognathus Heckel, 1842, 211.
Discognathus Heckel, 1842, 211.
Luciobarbus Heckel, 1842, 211.
Leucosomus Heckel, 1842, 211.
Argyreus Heckel, 1842, 211.
Pachystomus Heckel, 1842, 211.
Osteobrama Heckel, 1842, 211.
Acanthobrama Heckel, 1842, 211.
Ballerus Heckel, 1842, 211.
Chondrorhynchus Heckel, 1842, 211.
Chondrochilus Heckel, 1842, 211.
Gymnostomus Heckel, 1842, 211.
Scaphiodon Heckel, 1842, 211.
Dillonia Heckel, 1842, 211.
Cyprinion Heckel, 1842, 211.

Gibelion Heckel, 1842, 211.
Soricidens Münster, 1842, 212.
Capitodus Münster, 1842, 212.
Aspidoparia Heckel, 1843, 215.
Schizopyge Heckel, 1843, 215.
Cyrene Heckel, 1843, 215.
Mola Heckel, 1843, 215.
Leucos Heckel, 1843, 215.
Catla Cuvier & Valenciennes, 1844, 219.
Cenisophius Bonaparte, 1845, 226.
Gardonus Bonaparte, 1845, 226.
Pigus Bonaparte, 1845, 226.
Cephalus Bonaparte, 1845, 226.
Microlepis Bonaparte, 1845, 226.
Hegerius Bonaparte, 1845, 226.
Rhinichthys Agassiz, 1848, 232.
Englottogaster Gistel, 1848, 236.
Cheilobarbus Smith, 1849, 244.
Pseudobarbus Smith, 1849, 244.
Abrostomus Smith, 1849, 244.
Hypsolepis¹⁹¹ Baird, 1850, 245, 255.
Gila Baird & Girard, 1853, 252.
Ceraticthys¹⁹² B. & G., 1853, 252, 270.
Pogonichthys Girard, 1854, 257.
Hybopsis Agassiz, 1854, 254.
Cochlognathus Baird & Girard, 1854, 255.
Lavinia Girard, 1854, 257.
Tarsichthys Troschel, 1854, 261.
Cheilonemus Baird, 1855, 266.
Culter Basilewski, 1855, 262.
Nasus Basilewski, 1855, 262.
Cephalus Basilewski, 1855, 262.
Leptocephalus Basilewski, 1855, 262.
Luciosoma Bleeker, 1855, 264.
Epalzeorhynchus Bleeker, 1855, 264.
Schismatorhynchus Bleeker, 1855, 264.
Mylopharodon Ayres, 1855, 262.
Acrocheilus Agassiz, 1855, 261.
Campostoma Agassiz, 1855, 261.
Hyborhynchus Agassiz, 1855, 261.
Hybognathus Agassiz, 1855, 261.
Ptychocheilus Agassiz, 1855, 262.
Mylocheilus Agassiz, 1855, 262.
Opsaridium Peters, 1855, 409.
Agosia Girard, 1856, 269.
Nocomis Girard, 1856, 269.

¹⁹¹ Later written *Hypsilepis*.

¹⁹² Misprinted *Ceraticthys*.

- Cliola* Girard, 1856, 269.
Alburnops Girard, 1856, 270.
Alburnellus Girard, 1856, 269.
Richardsonius Girard, 1856, 270.
Codoma Girard, 1856, 270.
Dionda Girard, 1856, 269.
Orthodon Girard, 1856, 269.
Algoma Girard, 1856, 269.
Algansea Girard, 1856, 269.
Clinostomus Girard, 1856, 270.
Hudsonius Girard, 1856, 270.
Tiaroga Girard, 1856, 270.
Tigoma Girard, 1856, 270.
Siboma Girard, 1856, 270.
Cyprinella Girard, 1856, 270.
Moniana Girard, 1856, 270.
Cheonda Girard, 1856, 270.
Blicca Heckel, 1858, 281.
Carpio Heckel, 1858, 281.
Lepidocephalus Bleeker, 1858, 279.
Idus Heckel, 1858, 281.
Leucaspis Heckel & Kner, 1858, 281.
Balantiocheilos Bleeker, 1859, 287.
Lissorhynchus Bleeker, 1859, 287.
Acanthobrama Bleeker, 1859, 287.
Morara Bleeker, 1859, 287.
Macrochirichthys Bleeker, 1859, 288.
Laubuca Bleeker, 1859, 288.
Pseudophoxinus^{182a} Bleeker, 1859, 288.
Hemibarbus Bleeker, 1859, 288.
Hypselobarbus Bleeker, 1859, 288.
Rohteichthys Bleeker, 1859, 288.
Barbodes Bleeker, 1859, 288.
Anematischthys Bleeker, 1859, 288.
Siaja Bleeker, 1859, 288.
Hemiculter Bleeker, 1859, 288.
Pseudoculter Bleeker, 1859, 288.
Gonoproktopterys Bleeker, 1859, 288.
Pseudogobio Bleeker, 1859, 287.
Smilogaster Bleeker, 1859, 287.
Opistocheilus Bleeker, 1859, 287.
Semiplotus Bleeker, 1859, 287.
Rohitichthys Bleeker, 1859, 287.
Barbichthys Bleeker, 1859, 287.
Discognathichthys Bleeker, 1859, 287.
Diplocheilichthys Bleeker, 1859, 287.
Chanodichthys Bleeker, 1859, 288.
Leptobarbus Bleeker, 1859, 288.
Trinematischthys Bleeker, 1859, 288.
Hypophthalmichthys Bleeker, 1859, 288.
Barbichthys Bleeker, 1859, 287.
Chrysophekadion Bleeker, 1859, 287.
Amblypharyngodon Bleeker, 1859, 288.
Devario Bleeker, 1859, 288.
Tambra Bleeker, 1859, 287.
Mrigala Bleeker, 1859, 287.
Albulichthys Bleeker, 1859, 287.
Acheilognathus Bleeker, 1859, 287.
Amblyrhynchichthys Bleeker, 1859, 287.
Thynnichthys Bleeker, 1859, 288.
Elopichthys Bleeker, 1859, 288.
Shacra Bleeker, 1859, 288.
Bendilisis Bleeker, 1859, 288.
Pseudorasbora Bleeker, 1859, 288.
Rasbora Bleeker, 1859, 288.
Gnathopogon Bleeker, 1859, 288.
Rasborichthys Bleeker, 1859, 288.
Alburnoides Jettles, 1861, 308.
Bungia Keyserling, 1861, 308.
Owsianka Dybowski, 1862, 313.
Brama (Klein) Bleeker, 1862, 312.
Bliccopsis Siebold, 1863, 308.
Leptobarbus Bleeker, 1863, 321.
Acra Bleeker, 1863, 321.
Rohitodes Bleeker, 1863, 321.
Paraschizothorax Bleeker, 1863, 322.
Carpionichthys Bleeker, 1863, 322.
Abramidopsis Siebold, 1863, 328.
Isocephalus Heckel, 1863, 321.
Crossocheilichthys Bleeker, 1863, 321.
Gobionichthys Bleeker, 1863, 321.
Cirrhinichthys Bleeker, 1863, 321.
Opsariichthys Bleeker, 1863, 322.
Paraphoxinus Bleeker, 1863, 322.
Trachybrama Heckel, 1863, 322.
Paracheilognathus Bleeker, 1863, 322.
Pseudoperilampus Bleeker, 1863, 322.
Platygobio Gill, 1863, 323.
Peletrophus Günther, 1864, 333.
Scardiniopsis Jäckel, 1864, 334.
Pseudolaubuca Bleeker, 1865, 335.
Acanthobrama Bleeker, 1865, 335.
Paracanthobrama Bleeker, 1865, 335.
Parabramis Bleeker, 1865, 335.
Paralaubuca Bleeker, 1865, 335.

^{182a} *Pseudophoxinus* "Heckel," page 211, "Genera of Fishes," should be canceled.

- Paradanio** (Bleeker) Day, 1865, 337.
Brachygramma Day, 1865, 337.
Stilbius Gill, 1865, 337.
Ericymba Cope, 1865, 336.
Cyprinopsis Blanchard, 1866, 339.
Pachychilon Steindachner, 1866, 343.
Ctenopharyngodon Steindachner, 1866, 343.
Ptychobarbus Steindachner, 1866, 343.
Diptychus Steindachner, 1866, 343.
Schizopygopsis Steindachner, 1866, 343.
Phenacobius Cope, 1867, 344.
Photogenis Cope, 1867, 344.
Enteromius Cope, 1867, 344.
Graodus Günther, 1868, 351.
Megarasbora Günther, 1868, 351.
Aphyocypris Günther, 1868, 351.
Pteropsarion Günther, 1868, 351.
Mystacoleucus Günther, 1868, 351.
Opsaridium (Peters) Günther, 1868, 351.
Bola Günther, 1868, 351.
Schacra Günther, 1868, 351.
Ochetobius Günther, 1868, 351.
Squaliobarbus Günther, 1868, 351.
Eustira Günther, 1868, 351.
Securicula Günther, 1868, 351.
Cachius Günther, 1868, 351.
Oreonectes Günther, 1868, 351.
Gymnocypris Günther, 1868, 351.
Barynotus Günther, 1868, 351.
Xenocypris Günther, 1868, 351.
Osteochilus Günther, 1868, 351.
Mayoa Day, 1869, 354.
Gobiobarbus Dybowski, 1869, 354.
Micraspius Dybowski, 1869, 354.
Pseudaspius Dybowski, 1869, 354.
Ladislavia Dybowski, 1869, 354.
Sarcocheilichthys Bleeker, 1869, 353.
Acrocheilichthys Bleeker, 1869, 353.
Abramocephalus Steindachner, 1869, 355.
Pseudobrama Bleeker, 1870, 355.
Luciobrama Bleeker, 1870, 355.
Rhinogobio Bleeker, 1870, 355.
Acanthorhodeus Bleeker, 1870, 355.
Saurogobio Bleeker, 1870, 355.
Hemitremia Cope, 1870, 356.
ANCHYBOPSIS Cope, 1870, 356.
MYLOCYPRINUS Leidy, 1870, 359.
LITHICHTHYS Cope, 1870, 356.
DIASTICHUS Cope, 1870, 356.
OLIGOBELUS Cope, 1870, 356.
Protoporus Cope, 1872, 363.
Myloleucus Cope, 1872, 363.
Sarcidium Cope, 1872, 363.
Coliscus Cope, 1872, 363.
Apocope Cope, 1872, 363.
Neocarassius^{182b} Castelnau, 1872, 363.
Gobiosoma Dybowski, 1872, 364.
Onychodon Dybowski, 1872, 364.
Barbodon Dybowski, 1872, 364.
Plagiognathus Dybowski, 1872, 364.
Squalidus Dybowski, 1872, 364.
Megalobrama Dybowski, 1872, 364.
Orfus Fitzinger, 1873, 369.
Zopa Fitzinger, 1873, 368.
Rubellus Fitzinger, 1873, 369.
Vimba Fitzinger, 1873, 368.
Habrolepis Fitzinger, 1873, 369.
Cephalopsis Fitzinger, 1873, 369.
Bathystoma Fitzinger, 1873, 369.
Machærochilus Fitzinger, 1873, 369.
Toxabramis Günther, 1873, 369.
Myloleucus Günther, 1873, 369.
Sinibarbus Sauvage, 1874, 376.
Eritrema Cope, 1876, 384.
Pristiodon Dybowski, 1877, 389.
Episema Cope & Jordan, 1877, 390.
HEMITRICHAS Peters, 1877, 392.
Aturius Dubalen, 1878, 394.
Cosmochilus Sauvage, 1878, 397.
Hydrophlox Jordan, 1878, 395.
Erogala Jordan & Brayton, 1878, 395.
Couesius Jordan, 1878, 395.
Chriope Jordan, 1878, 396.
Symmetrurus Jordan, 1878, 396.
Zophendum Jordan, 1878, 396.
Agenigobio Sauvage, 1878, 397.
Heteroleuciscus Sauvage, 1874, 376.
Megagobio Kessler, 1876, 386.
Lythrurus Jordan, 1876, 386.
Erinemus Jordan, 1876, 386.

^{182b} This nominal genus is no doubt based on an escaped gold fish. There are no *Cyprinidae* in Australia nor in South America.

- HEXAPSEPHUS Günther, 1876, 385.
 BRACHYSPONDYLUS^{192c} von der Marck, 1876.
Aspiorhynchus Kessler, 1879, 400.
 ENOPLOPHTHALMUS Sauvage, 1880, 405.
 PARALEUCISCUS Sauvage, 1880, 406.
Probarbus Sauvage, 1880, 405.
Opsopœodus Hay, 1880, 403.
Semilabeo Peters, 1880, 405.
Mylopharyngodon Peters, 1880, 404.
Distœchodon Peters, 1880, 404.
Paratylognathus Sauvage, 1880, 405.
Stypodon Garman, 1881, 415.
Parachela Steindachner, 1881, 417.
Tiroduon Hay, 1882, 419.
Coccotis Jordan, 1882, 419.
Erimystax Jordan, 1882, 419.
Trycherodon Forbes, 1882, 420.
Pachychilon Steindachner, 1882, 421.
Cosmochilus Sauvage, 1882, 421.
Gymnognathus Sauvage, 1884, 429.
Siphateles Cope, 1883, 421.
Tribolodon Sauvage, 1883, 425.
Hypargyrus Forbes, 1884, 428.
Rhodeoides Thominot, 1884, 430.
Oxygeneum Forbes, 1885, 431.
Luxilinus Jordan, 1885, 432.
Hemiculterella Varpachovskii, 1887, 439.
Miniellus Jordan, 1888, 442.
Platypharodon Herzenstein, 1888, 442.
Chuanchia Herzenstein, 1888, 442.
Acanthonotus (Tickell) Day, 1888, 440.
Metallites Schulze, 1889, 448.
Liparus Schulze, 1889, 448.
Rhynchocypris Günther, 1889, 446.
Parapelecus Günther, 1889, 447.
Scaphiodonichthys Vinciguerra, 1889, 448.
Scombrocypris¹⁹³ Günther, 1889, 446.
Matsya Day, 1889, 445.
Spirlingus Fatio, 1890, 450.
Eucirrichthys Perugia, 1892, 459.
Gymnodiptychus Herzenstein, 1892, 458.
Acanthogobio Herzenstein, 1892, 458.
Pungtungia Herzenstein, 1892, 458.
Oxybarbus Vaillant, 1893, 463.
APHELICHTHYS Cope, 1893, 460.
Engraulicypris Günther, 1893, 461.
Nematabramis Boulenger, 1894, 464.
Neobola Vinciguerra, 1895, 470.
Evarra Woolman, 1895, 470.
Leucogobio Günther, 1896, 471.
Onychostoma Günther, 1896, 471.
Azteca Jordan & Evermann, 1896, 473.
Orcella J. & E., 1896, 473.
Iotichthys J. & E., 1896, 473.
Opsopœa J. & E., 1896, 473.
Yuriria J. & E., 1896, 473.
Apiorhynchus Nikolskii, 1897, 477.
Apiostoma Nikolskii, 1897, 477.
Catlocarpio Boulenger, 1898, 478.
Aztecula Jordan & Evermann, 1898, 482.
Chelæthiops Boulenger, 1899, 485.
Xystrosus Jordan & Snyder, 1899, 487.
Falcula J. & S., 1899, 487.
Xenendum J. & S., 1899, 487.
Oreoleuciscus Varpachovskii, 1899, 488.
Orcula Jordan & Evermann, 1900, 489.
Ischikauia J. & S., 1900, 490.
Otakia J. & S., 1900, 490.
Leptocypris Boulenger, 1900, 488.
Gyrinochilus Vaillant, 1902, 500.
Culticula Abbott, 1901, 491.
Pterocapoëta Günther, 1902, 498.
Zacco Jordan & Evermann, 1902, 498.
Paracrossochilus Popta, 1902, 500.
Zezera Jordan & Fowler, 1903, 505.
Biwia J. & F., 1903, 505.
Abbottina J. & F., 1903, 505.
Falcularius Jordan & Snyder, 1903, 504.
Paracrossocheilus Popta, 1904, 510.
Paranotropis Fowler, 1904, 507.
Luciocyprinus Vaillant, 1904, 511.
Longurio¹⁹⁴ Jordan & Starks, 1905, 514.
Fusania J. & S., 1905, 514.
Coreius J. & S., 1905, 514.
Neogastromyzon Popta, 1905, 515.
Xenopomichthys Pellegrin, 1905, 515.
Pararhodeus Berg, 1907, 521.
Plagiognathops Berg, 1907, 521.

^{192c} *Paleontogr.*, 22: 411; orthotype *B. saropteryx* Marck. (Omitted in "Genera of Fishes.")

¹⁹³ Duplicated under the misprint *Scomberopsis* in "Genera of Fishes," page 447.

¹⁹⁴ The name *Longurio*, a synonym of *Saurogobio*, is preoccupied in *Diptera*.

- Aspiolucius* Berg, 1907, 521.
Paraleucogobio Berg, 1907, 521.
*Pogonocharax*¹⁹⁶ Regan, 1907, 526.
Pararasbora Regan, 1908, 530.
Mearnsella Seale & Bean, 1908, 530.
Coccogenia Cocker II & Callaway, 1909, 532.
Candidia Jordan & Richardson, 1909, 533.
Margariscus Cockerell, 1909, 532.
Macrhybopsis Cockerell & Allison, 1909, 532.
Temeculina Cockerell, 1909, 532.
Acapoëta Cockerell, 1910, 535.
Rhodeops Fowler, 1910, 535.
Hemigrammocypripis Fowler, 1910, 535.
Parabarbus Franz, 1910, 535.
Aspiopsis Zugmayer, 1912, 546.
Hesperoleucus Snyder, 1912, 546.
Ageneiogarra Garman, 1912, 543.
Myloleuciscus Garman, 1912, 543.
Acanthorutilus Berg, 1912, 542.
Coripareius Garman, 1912, 543.
Pararutilus Berg, 1912, 542.
Myloleucops Cockerell, 1913, 547.
Leucalburnus Berg, 1914, 552.
Pseudogobiops Berg, 1914, 552.
Chilogobio Berg, 1914, 552.
Schizocypripis Regan, 1914, 554.
Tanakia Jordan & Thompson, 1914, 553.
Chilogobio Berg, 1915, 555.
Lissochilus Weber & Beaufort, 1916, 561.
Brevigobio Tanaka, 1916, 561.
Brachydanio Weber & Beaufort, 1916, 561.
Capoëtobrama Berg, 1916, 558.
Acanthalburnus Berg, 1916, 558.
Leucalburnus Berg, 1916, 558.
Leucidius Snyder, 1917, 563.
*Sambwa*¹⁹⁸ Annandale, 1918.
*Microrasbora*¹⁹⁷ Annandale, 1918.
*Georgichthys*¹⁹⁸ Nichols, 1918.
Spinibarbus Oshima, 1919, 570.
Phoxiscus Oshima, 1919, 570.
Scaphesthes Oshima, 1919, 570.
Aristichthys Oshima, 1919, 570.
Cultriculus Oshima, 1919, 570.
Formosania Oshima, 1919, 570.
Acrossochilus Oshima, 1919, 570.
Raiamas Jordan, 1919, 567.
Extrarius Jordan, 1919, 567.
Lissocheilichthys Oshima, 1920, 572.
Leucisculus Oshima, 1920, 572.
Rasborinus Oshima, 1920, 572.
Scaphiodontella Oshima, 1920, 572.
*Exoglossops*¹⁹⁹ Fowler & Bean, 1920.
*ALISODON*²⁰⁰ Hay, 1921.

¹⁹⁵ This generic name was based, according to Dr. J. T. Nichols, on an aquarium fish from India wrongly reported from Argentina, a cyprinoid, not a characim. It is a synonym of *Esomus* Swainson, 1839, and of *Nuria* Valenciennes, 1842.

¹⁹⁶ *Records Ind. Mus.*, 14: 48; orthotype *S. resplendens* Annandale.

¹⁹⁷ *Records Ind. Mus.*, 14: 50; logotype *M. rubescens* Annandale.

¹⁹⁸ Nichols, *Proc. Biol. Soc. Wash.*, 31: 17; orthotype *Georgichthys scaphignathus* Nichols.

¹⁹⁹ "Fishes from Soochow, China," *Proc. U. S. Nat. Mus.*, 58: pl. 311; type *E. geei* Fowler & Bean.

²⁰⁰ *Proc. U. S. Nat. Mus.*, 58: 132; orthotype *A. mirus* Hay. (fossil); Pleistocene, Bulverde, Texas.

Family 238. **MEDIDÆ**

- Meda* Girard, 1856, 269.
Lepidomeda Cope, 1874, 375.
Plagopterus Cope, 1874, 375.

Family 239. **COBITIDÆ**

(Loaches)

- Cobitis* Linnæus, 1758, 14.
Barbatula Linck, 1790, 49.
Misgurnus Lacépède, 1803, 65.
Nemacheilus Van Hasselt, 1823, 116.
Acanthopsis Van Hasselt, 1823, 116.
Oxygaster Van Hasselt, 1823, 116.

- Acanthophthalmus** Van Hasselt, 1823, 116.
Botia Gray, 1831, 138.
Pterozygus De la Pylaie, 1835, 183.
Acanthopsis Agassiz, 1835, 180.
Somileptes Swainson, 1839, 204.
Acoura²⁰¹ Swainson, 1839, 204.
Canthophrys Swainson, 1839, 204.
Diacantha Swainson, 1839, 204.
Psilorhynchus McClelland, 1839, 195.
Schistura McClelland, 1839, 195.
Hymenphysa²⁰² McClelland, 1839, 195.
Aperioptus Richardson, 1848, 240.
Cobitichthys Bleeker, 1858, 279.
Syncrossus Blyth, 1860, 294.
Prostheacanthus Blyth, 1860, 294.
Pangio Blyth, 1860, 294.
Apua Blyth, 1860, 294.
Acanthocobitis Peters, 1861, 308.
Paracobitis Bleeker, 1863, 322.
Lepidocephalichthys Bleeker, 1863, 322.
Platacanthus Day, 1865, 367.
Octonema^{202a} Martens, 1868, 352.
Leptobotia Bleeker, 1870, 355.
Oreias Sauvage, 1874, 376.
Diplophysa Kessler, 1874, 376.
Pseudodon Kessler, 1874, 376.
Paramisgurnus Sauvage, 1878, 397.
Crossostoma Sauvage, 1878, 397.
Octonema Herzenstein, 1887, 438.
Lefua Herzenstein, 1888, 442.
Modigliania Perugia, 1893, 462.
Elxis Jordan & Fowler, 1903, 505.
Orthrias J. & F., 1903, 505.
Ussuria Nikolskii, 1904, 510.
Vaillantella Fowler, 1905, 512.
Gobiobotia Kreyenberg, 1911, 540.
Aborichthys Chaudhuri, 1913, 547.

²⁰¹ Spelled also *Acourus* by Swainson.

²⁰² Usually corrected to *Hymenophysa*.

^{202a} This name is apparently not preoccupied and is not identical with *Lefua*.

Family 240. HOMALOPTERIDÆ

- Homaloptera** Van Hasselt, 1823, 116.
Balitora Gray, 1833, 178.
Helgia Vinciguerra, 1889, 448.
Glanioptis Boulenger, 1899, 485.
Ellopostoma Vaillant, 1902, 500.
Parhomaloptera Vaillant, 1902, 500.
Gyrinocheilus Vaillant, 1902, 500.
Homalopteroides Fowler, 1905, 513.
Lepturichthys Regan, 1911, 540.
Hemimyzon Regan, 1911, 540.
Blavania Hora, 1922. (See Index.)

Family 241. ADIPOSIIDÆ

The genus *Adiposia*, with a well-developed adipose fin, approaches the *Nematognathi*, and may stand as a separate family pending investigation. *Adiposia*²⁰³ Annandale & Hora, 1921.

²⁰³ "The Fish of Seistan," *Records of the Indian Museum*, 18: Part IV, pp. 157, 187; type *Nemachilus macmahoni* Chaudhuri.

Order NEMATOGNATHII

Family 242. DIPLOMYSTIDÆ

- Diplomystes** Duméril, 1856, 269.
Diplomystes (Duméril) Bleeker, 1862, 311.

Family 243. ARIIDÆ (*Tachysuridæ*) (Sea Cat-fishes)

The name *Arius* may be provisionally retained in place of *Tachysuras*, known from a drawing only, perhaps intended for some fresh-water form.

- Tachysurus** Lacépède, 1803, 66.
Bagre (Cuvier) Oken, 1817, 100.
Glanis Agassiz, 1829, 131.
Breviceps Swainson, 1838, 194.
Felichthys Swainson, 1839, 203.
Arius Cuvier & Valenciennes, 1840, 206.
Galeichthys Cuv. & Val., 1840, 206.
Batrachocephalus Bleeker, 1847, 233.
Osteogeneiosus Bleeker, 1847, 230.
Ketengus Bleeker, 1847, 230.
Ariodes Müller & Troschel, 1849, 243.
Mystus Gronow, 1854, 259.
Ailurichthys²⁰⁴ Baird & Girard, 1854, 255.
Genidens Castelnau, 1855, 264.
Hexanematchthys Bleeker, 1858, 278.
Selenaspis Bleeker, 1858, 278.
Cephalocassis Bleeker, 1858, 278.
Netuma Bleeker, 1858, 278.
Guiritinga Bleeker, 1858, 278.
Osteogeneiosus Bleeker, 1858, 278.
Batrachocephalus Bleeker, 1858, 278.
Ketengus Bleeker, 1858, 278.
Hemipimelodus Bleeker, 1858, 278.
Ariopsis Gill, 1861, 303.
Parancistrus Bleeker, 1862, 311.
Hemarius Bleeker, 1862, 311.
Pseudarius Bleeker, 1862, 311.
Catastoma (Kuhl & Van Hasselt) Bleeker, 1862, 312.
Leptarius Gill, 1863, 324.
Notarius Gill, 1863, 324.
Paradiplomystes Bleeker, 1863, 312.
RHINEASTES Cope, 1872, 364.
ASTEPHUS Cope, 1873, 368.
Neoarius Castelnau, 1877, 388.
Cathorops Jordan & Gilbert, 1882, 420.
Nedystoma Ogilby, 1898, 483.
Cinetodus Ogilby, 1898, 483.
Aspistor Jordan & Evermann, 1898, 482.
Pachyula Ogilby, 1898, 483.
Ancharius Steindachner, 1880, 406.
Nemapteryx Ogilby, 1908, 529.
Doiichthys Weber, 1913, 551.
Tetranesodon Weber, 1913, 551.

²⁰⁴ Often written *Aelurichthys*.

Family 244. DORADIDÆ

- Cataphractus* Catesby, 1771, 32.
Ageineiosus Lacépède, 1803, 66.
Doras Lacépède, 1803, 65.
Ceratorhynchus Agassiz, 1829, 131.
Centrochir Agassiz, 1829, 132.
Auchenipterus²⁰⁵ Cuvier & Valenciennes, 1840.
Trachelyopterus Cuv. & Val., 1840, 206.
Euanemus Müller, 1843, 216.
Oxydoras Kner, 1855, 265.
Pseudodoras Bleeker, 1858, 278.
Hemidoras Bleeker, 1858, 278.
Davalla Bleeker, 1858, 278.
Trachycorystes Bleeker, 1858, 279.
Asterophysus Kner, 1858, 282.
Centromochlus Kner, 1858, 282.
Platyodoras Bleeker, 1862, 311.
Lithodoras Bleeker, 1862, 311.
Rhinodoras Bleeker, 1862, 311.
Astrodoras Bleeker, 1862, 311.
Pterodoras Bleeker, 1862, 311.
Acanthodoras Bleeker, 1862, 311.
Amblyodoras Bleeker, 1862, 311.
Parauchenipterus Bleeker, 1862, 311.
Trachycorystes Bleeker, 1862, 311.
Pseudauchenipterus Bleeker, 1862, 311.
Auchenipterichthys Bleeker, 1862, 311.
Tetranematchthys Bleeker, 1862, 312.
Pseudogeneiosus Bleeker, 1862, 312.
Trachelyopterichthys Bleeker, 1862, 311.
Dianema Cope, 1872, 363.
Physopyxis Cope, 1872, 363.
Zathorax Cope, 1872, 363.
Glanidium Lütken, 1874, 376.
Wertheimeria Steindachner, 1876, 386.
Epapterus Cope, 1878, 393.
Pseudepapterus Steindachner, 1893. (See Index.)
Leptodoras Boulenger, 1898, 479.
Mormyrostoma Ribeiro, 1912, 545.
Parasturisoma Ribeiro, 1912, 545.
Tatia Ribeiro, 1912, 545.
Tympanopleura Eigenmann, 1912, 542.
Pseudepterus Steindachner, 1915, 558.
Entomocorus Eigenmann, 1917, 562.
Ceratocheilus Ribeiro, 1918, 564.
Tannayia Ribeiro, 1918, 564.

²⁰⁵ *Histoire naturelle des Poissons*, 15: 207; orthotype *Hypophthalmus nuchalis* Spix; later made type of *Euanemus*. (Omitted in "Genera of Fishes.")

Family 245. **PLOTOSIDÆ**

- Plotosus** Lacépède, 1803, 66.
Tandanus Mitchell, 1839, 196.
Deportator Gistel, 1848, 237.
Paraplotosus²⁰⁶ Bleeker, 1862.
Chæroplotosus Kner, 1864, 334.
Copidoglanis^{205a} Günther, 1864, 332.
Cnidoglanis Günther, 1864, 332.
Gastromyzon Günther, 1874, 375.
Neoplotosus Castelnau, 1875, 378.
Neosilurus Castelnau, 1877, 388.
Eumeda Castelnau, 1878, 393.
Cainosilurus Macleay, 1881, 416.
Endorrhis Ogilby, 1898, 483.
Euristhmus Ogilby, 1899, 487.
Anyperistius Ogilby, 1908, 529.
Porochilus Weber, 1913, 551.
Lambertia Perugia, 1894, 465.
Ostophycephalus²⁰⁷ Ogilby, 1899, 487.
Oloplotosus Weber, 1913, 551.
Anodontoglanis Rendahl, 1922 (See Index A).

^{205a} Misprinted *Copidoglanis*.

²⁰⁶ "Systema Silurorum Revisum," 100; orthotype *Plotosus albilabris* Cuvier & Valenciennes. (Omitted in "Genera of Fishes.")

²⁰⁷ Based on a starveling example of *Cnidoglanis*, according to Waite.

Family 246. **SILURIDÆ**
(Sheat-fishes)

- Silurus** Linnæus, 1758, 14.
Ompok Lacépède, 1803, 65.
Callichrous Hamilton, 1822, 114.
Wallago Bleeker, 1851, 247.
Glanis Agassiz, 1856, 267.
Belodontichthys Bleeker, 1858, 279.
Pseudosilurus Bleeker, 1858, 279.
Kryptopterus²⁰⁸ Bleeker, 1858, 279.
Kryptopterichthys Bleeker, 1858, 279.
Micronema Bleeker, 1858, 279.
Phalacronotus Bleeker, 1858, 279.
Hemisilurus Bleeker, 1858, 279.
Silurichthys Bleeker, 1858, 278.
Silurodes Bleeker, 1860, 293, 312.
Pterocryptis Peters, 1861, 308.
Parasilurus Bleeker, 1862, 310.
Silurodon Kner, 1864, 334, 367.
Neosilurus Steindachner, 1867, 348.
Diastatomycter Vaillant, 1891, 456.
Apodoglanis Fowler, 1905, 512.

²⁰⁸ Written *Cryptopterus* by purists.

Family 247. **AMEIURIDÆ**
(Horned Pout; Channel Cats)

- Bagre** Catesby, 1771, 31.
Noturus Rafinesque, 1818, 109.
Pilodictis²⁰⁹ Rafinesque, 1819, 110.
Ictalurus²¹⁰ Rafinesque, 1820, 113.
Elliopterus Rafinesque, 1820, 113.
Leptops Rafinesque, 1820, 112.
Opladelus²¹¹ Rafinesque, 1820, 112.
Ameiurus²¹² Rafinesque, 1820, 112.
Ilictitis Rafinesque, 1820, 112.
Synechoglanis Gill, 1858, 280.
Schilbeodes Bleeker, 1858, 279.
Gronias Cope, 1864, 329.
Rabidus Jordan & Evermann, 1896, 473.
Haustor J. & E., 1896, 473.
Villarius Rutter, 1896, 475.
Istlarius Jordan & Snyder, 1899, 486.
Trogloglanis Eigenmann, 1919, 566.

²⁰⁹ Mythical, the name corrected to *Pelodichthys*.

²¹⁰ Corrected to *Ichthælorus*.

²¹¹ Name corrected to *Hopladelus*.

²¹² Also spelled *Amiurus*.

Family 248. **BAGRIDÆ**

Mystus Gronow, 1763, 21.
Mystus (Gronow) Scopoli, 1777, 42.
Porcus Isidore Geoffroy St. Hilaire, 1818, 107.
BUCKLANDIUM König, 1825, 118.
Bagrus Cuvier & Valenciennes, 1839, 194.
Olyra McClelland, 1842, 212.
GLYPTOCEPHALUS Agassiz, 1844, 217.
Bagroides Bleeker, 1851, 248.
Macrones Duméril, 1856, 269.
Clarotes Kner, 1855, 265.
Pseudobagrus Bleeker, 1858, 278.
Melanodactylus Bleeker, 1858, 278.
Chrysichthys Bleeker, 1858, 278.
Octonemataichthys Bleeker, 1858, 278.
Rita Bleeker, 1858, 278.
Auchenaspis Bleeker, 1858, 278.
Rama Bleeker, 1858, 279.
Leiocassis Bleeker, 1858, 278.
Bagrichthys Bleeker, 1860, 293, 312.
Pseudobagrus Bleeker, 1860, 293.
Hemibagrus Bleeker, 1862, 312.
Pseudobagrichthys Bleeker, 1862, 312.
Aspidobagrus Bleeker, 1862, 312.
Hypselobagrus Bleeker, 1862, 313.

Branchiosteus Gill, 1862, 318.
Heterobagrus Bleeker, 1864, 329.
Auchenoglanis Günther, 1864, 334.
Rhinobagrus Bleeker, 1865, 335.
Pelteobagrus Bleeker, 1865, 335.
Gogrius Day, 1867, 344.
Liobagrus Hilgendorf, 1878, 395.
Cranoglanis Peters, 1880, 405.
Neobagrus Bellotti, 1892, 457.
Chrysobagrus Boulenger, 1899, 485.
Gephyroglanis Boulenger, 1899, 485.
Notoglanidium Günther, 1902, 498.
Leptoglanis Boulenger, 1902, 496.
Fluvidraco Jordan & Fowler, 1903, 505.
FAJUMIA²¹³ Stromer, 1904, 511.
SOCNOPÆA Stromer, 1904, 511.
Phyllonemus Boulenger, 1906, 517.
Parauchenoglanis Boulenger, 1911, 538.
Liauchenoglanis Boulenger, 1916, 558.
Amarginops Nichols & Griscom, 1917, 562.
Gnathobagrus Nichols & Griscom, 1917, 562.
Aoria Jordan, 1919, 567.
Macronoides²¹⁴ Hora, 1921.
Laguvia²¹⁵ Hora, 1921.

²¹³ Stromer compares this genus to *Platystoma*, a Brazilian pimelodid. But it probably belongs with *Socnopæa* to the *Bagridæ*.

²¹⁴ Sunder Lal Hora, "Fish and Fisheries of Manipur," *Rec. Ind. Mus.*, 22: Part III, 179; logotype *Batasio affinis* Blyth.

²¹⁵ "Fishes from the Eastern Himalayas," *Rec. Ind. Mus.*, 22: Part V, 740; logotype *Pimelodus asperus* McClelland.

Family 249. **AMBLYCIPITIDÆ**

Amblyceps Blyth, 1858, 279. **Akysis** Bleeker, 1860, 293.
Acrochordonichthys Bleeker, 1858, 279. **Sosia** Vaillant, 1902, 500.

Family 250. **SISORIDÆ**

Sisor Hamilton, 1822, 115. **Batasio** Blyth, 1860, 294.
Glyptosternon²¹⁶ McClelland, 1842, 212. **Aglyptosternon** Bleeker, 1862, 312.
Erethistes Müller & Troschel, 1849, 243. **Eucliptosternum** Günther, 1864, 332.
Bagarius Bleeker, 1853, 253. **Callomystax** Günther, 1864, 332.
Gagata Bleeker, 1858, 279. **Chiloglanis** Peters, 1868, 353.
Hara Blyth, 1860, 294. **Nanera** Day, 1876, 385.
teinia Steindachner, 1881, 417.
oma Regan, 1905, 515.

²¹⁶ Spelled later *Glyptosternum*.

Family 251. **AMPHILIIDÆ**

Amphilius Günther, 1864, 332.	Andersonia Boulenger, 1900, 488.
Chimarrichthys ²¹⁷ Sauvage, 1874.	Phractura Boulenger, 1900, 488.
Doumea Sauvage, 1879, 401.	Belonoglanis Boulenger, 1902, 496.
Anoplopterus Pfeffer, 1889, 448.	Paraphractura Boulenger, 1902, 496.
Peltura Perugia, 1892, 459.	Trachyglanis Boulenger, 1902, 496.
Chimarrhoglanis Vaillant, 1897, 478.	Paramphilius Pellegrin, 1907, 526.

²¹⁷ Sauvage, *Rev. Zool.* (3) 2: 332; type *C. davidi* Sauvage. (Omitted in "Genera of Fishes.")

Family 252. **LEPIDOGLANIDÆ**

Said to resemble *Chimarrichthys* but to have cycloid scales like a cyprioid, a character hard to explain.

Lepidoglanis Vaillant, 1889, 448.

Family 253. **CHACIDÆ**

Chaca Gray, 1831, 138.

Family 254. **SCHLBEIDÆ**

Schilbe (Cuvier) Oken, 1817, 100.	Lais Bleeker, 1860, 293.
Ailia Gray, 1831, 138.	Eutropiichthys Bleeker, 1862, 310.
Acanthonotus Gray, 1831, 138.	Pseudeutropius Bleeker, 1862, 310.
Silonia Swainson, 1839, 203.	Gymnallabes Günther, 1867, 345.
Clupisoma Swainson, 1839, 204.	Ailichthys Day, 1871, 361.
Pachypterus Swainson, 1839, 204.	Anopleutropius Vaillant, 1893, 463.
Pusichthys Swainson, 1839, 204.	Parailia Boulenger, 1899, 485.
Silundia Cuvier & Valenciennes, 1840, 206.	Physailia Boulenger, 1901, 492.
Eutropius Müller & Troschel, 1849, 243.	Pseudolais Vaillant, 1902, 500.
Schilbeichthys Bleeker, 1858, 279.	Ansorgia Boulenger, 1912, 542.
Siluranodon Bleeker, 1858, 279.	Laides Jordan, 1919, 568.
Helicophagus Bleeker, 1858, 277.	Pareutropius ²¹⁸ Regan, 1920.

²¹⁸ "Three New Fishes from the Tanganyika Territory," *Ann. Mag. Nat. Hist.*, July, 1920, 103; type *P. micristius* Regan.

Family 255. **CLARIIDÆ**

Clarias Gronow, 1763, 20.	Phagorus McClelland, 1844, 220.
Clarias (Gronow) Scopoli, 1777, 42.	Cossyphus McClelland, 1844, 220.
Macropteronotus Lacépède, 1803, 65.	Channalabes Günther, 1873, 369.
Heterobranchus Isidore Geoffroy St. Hilaire, 1818, 107.	Clariallabes Boulenger, 1898, 576.
Heteropneustes Müller, 1839, 196.	Allabenchelys Boulenger, 1902, 497.
Saccobranchus Cuvier & Valenciennes, 1840, 206.	Dinotopterus Boulenger, 1906, 516.

Family 256. **PANGASIIDÆ**

Pangasius Cuvier & Valenciennes, 1840, 206.	Pseudopangasius Bleeker, 1862, 310.
	Neopangasius Popta, 1904, 510.

Family 257. MOCHOKIDÆ

- Synodontis** Cuvier, 1817, 100. **Oxyglanis** Vinciguerra, 1898, 484.
Mochokus²¹⁹ Joannis, 1835, 182. **Euchilichthys** Boulenger, 1900, 488.
Hemisynodontis Bleeker, 1862, 311. **Microsynodontis** Boulenger, 1903, 501.
Pseudosynodontis Bleeker, 1862, 311. **Slatinia** Werner, 1906, 521.
Brachysynodontis Bleeker, 1862, 311. **Acanthocleithron** Nichols & Griscom,
Leiosynodontis Bleeker, 1862, 311. 1917, 562.
Atopochilus Sauvage, 1879, 401.

²¹⁹ Spelled *Mochocus* by Günther.Family 258. MALAPTERURIDÆ (*Torpedinidæ*)
(Electric Cat-Fishes)

- Torpedo*²²⁰ Forskål, 1771, 32. **Torpedo** (Forskål) Gill, 1890.
Malapterurus Lacépède, 1803, 65.

²²⁰ The species examined by Forskål is an electric cat-fish; the synonym is mixed with the electric ray.

Family 259. HELOGENIDÆ

- Helogenes** Günther, 1863, 326.

Family 260. HYPOPTHALMIDÆ

- Hypophthalmus** Spix, 1829, 131. **Pseudohypophthalmus** Bleeker, 1862,
Notophthalmus Hyrtl, 1859, 292. 312.
Davalla Bleeker, 1858, 278.

Family 261. PIMELODIDÆ

- Pimelodus** Lacépède, 1803, 65. **Pimelotropis** Gill, 1859, 291.
Phractocephalus Agassiz, 1829, 131. **Brachyplatystoma** Bleeker, 1862, 312.
Platystoma Agassiz, 1829, 131. **Hemisorubim** Bleeker, 1862, 312.
Sorubim Spix, 1829, 132. **Pseudoplatystoma** Bleeker, 1862, 312.
Pirarara Spix, 1829, 173. **Hemiplatystoma** Bleeker, 1862, 312.
Pteronotus Swainson, 1839, 204. **Sorubimichthys** Bleeker, 1862, 312.
Calophysus Müller, 1843, 216. **Platystomatichthys** Bleeker, 1862, 312.
Abron Gistel, 1848, 237. **Leiarius** Bleeker, 1862, 312.
Sciades Müller & Troschel, 1849, 243. **Pseudariodes** Bleeker, 1862, 312.
Conostome²²¹ Duméril, 1856, 269. **Malacobagrus** Bleeker, 1862, 312.
Conorhynchus Bleeker, 1858, 278. **Parabagrus** Bleeker, 1862, 312.
Zungaro Bleeker, 1858, 278. **Pseudorhamdia** Bleeker, 1862, 310.
Rhamdia Bleeker, 1858, 278. **Pseudopimelodus** Bleeker, 1863, 322.
Pinirampus Bleeker, 1858, 278. **Notoglanis** Günther, 1864, 332.
Sciadeichthys Bleeker, 1858, 278. **Bagropsis** Lütken, 1874, 376.
Heptapterus Bleeker, 1858, 278. **Pimelodina** Steindachner, 1876, 387.
Piratinga Bleeker, 1858, 279. **Lophiosilurus** Steindachner, 1876, 387.
Platynemichthys Bleeker, 1858, 279. **Nannoglanis** Boulenger, 1887, 437.
Piramutana Bleeker, 1858, 279. **Rhamdella** Eigenmann & Eigenmann,
Batrachoglanis Gill, 1858, 281. 1888, 440.
Pimelonotus Gill, 1858, 281. **Luciopimelodus** E. & E., 1888, 440.

²²¹ In French form only.

- Pimelodella* E. & E., 1888, 440.
Duopalatinus E. & E., 1888, 440.
Sciadeoides E. & E., 1888, 440.
Steindachneria E. & E., 1888, 440.
Nemuroglanis E. & E., 1889, 445.
Acentronichthys E. & E., 1889, 445.
Phrenatobius Goeldi, 1898, 480.
Paulicea Ihering, 1898, 480.
Perugia Eigenmann & Norris, 1900, 489.
Iheringichthys E. & N., 1900, 489.
Bergiella E. & N., 1900, 489.
Goeldiella E. & N., 1900, 489.
Imparfinis E. & N., 1900, 489.
Bergiaria E. & N., 1901, 493.
Typhlobagrus Ribeiro, 1907, 526.
Rhamdioglanis Ihering, 1907, 524.
Tænionema Eigenmann & Bean, 1907, 522.
Zungaropsis Steindachner, 1908, 531.
Megalonema Eigenmann, 1910, 535, 542.
Cephalosilurus Haseman, 1911, 539.
Platysilurus Haseman, 1911, 539.
Rhamdiopsis Haseman, 1911, 539.
Microglanis Eigenmann, 1912, 542.
Brachyglanis Eigenmann, 1912, 542.
Leptoglanis Eigenmann, 1912, 542.
Myoglanis Eigenmann, 1912, 542.
Chasmocranus Eigenmann, 1912, 542.
Nannorhamdia Regan, 1913, 550.
Cetopsorhamdia Eigenmann, 1916, 558.
Cheirocerus Eigenmann, 1917, 562.
Leptorhamdia Eigenmann, 1918.
Typhlobagrus Ribeiro, 1918, 564.
Steindachneridion Eigenmann & Eigenmann, 1919, 566.
Laimumena Sauvage, 1884, 430.
Platypogon Starks, 1913, 551.
*Breviglanis*²²² Eigenmann, 1909.
*Chasmocephalus*²²³ Eigenmann, 1909.

²²² "Fresh Water Fish S. A.," 384; type *B. frenata* Eigenmann.

²²³ "Catal. and Bibliogr. S. Am. Fresh Water Fishes," 1909, 384; type *Ch. longior*, Eigenmann. (Omitted in "Genera of Fishes.")

Family 262. BUNOCEPHALIDÆ

- Bunocephalus* Kner, 1855, 265.
Bunocephalichthys Bleeker, 1858, 279.
Dysichthys Cope, 1874, 374.
Xiliphius Eigenmann, 1912, 543.

Family 263. ASPREDINIDÆ

- Aspredo* Gronow, 1763, 20.
Aspredo (Gronow) Scopoli, 1777, 42.
Platystacus Klein, 1779, 168.
Platystacus (Klein) Bloch, 1794, 53.
Platistus Rafinesque, 1815, 171.
Cotylephorus Swainson, 1839, 204.
Aspredinichthys Bleeker, 1858, 279.
Agmus Eigenmann, 1912, 542.
Chamaigenes Eigenmann, 1912, 542.

Family 264. PYGIDIIDÆ

- Eremophilus* Humboldt, 1806, 76.
*Thrycomycterus*²²⁴ Humboldt & Valenciennes, 1811, 170.
Pygidium Meyen, 1835, 182.
Trichomycterus Valenciennes, 1846, 230.
Vandellia Cuvier & Valenciennes, 1846, 407.
Nematogenys Girard, 1854, 258.
*Pareiodon*²²⁵ Kner, 1855, 265.
Stegophilus Reinhardt, 1858, 284.
Astemomycterus Guichenot, 1860, 296.
Trachypoma Giebel, 1870, 357.
Pariolius Cope, 1872, 363.
Tridens Eigenmann & Eigenmann, 1889, 446.
Pseudostegophilus E. & E., 1889, 446.
Miuroglanis E. & E., 1889, 446.
Acanthopoma Lütken, 1891, 455.
Henonemus Eigenmann & Ward, 1907, 522.

²²⁴ Later spelled *Trichomycterus*.

²²⁵ Later spelled *Pariodon*.

Homodiætus E. & W., 1907, 522.
Hatcheria Eigenmann, 1909, 533.
Ochmacanthus Eigenmann, 1912, 542.
Paravandellia Ribeiro, 1912, 545.
Gyrinurus Ribeiro, 1912, 545.

Cobitiglanis Fowler, 1914, 553.
Pleurophysus Ribeiro, 1918, 564.
Urinophilus Eigenmann, 1918, 563.
Branchoica Eigenmann, 1918, 563.
Scleronema Eigenmann, 1918, 563.

Family 265. CETOPSIDÆ

Cetopsis Agassiz, 1829, 131.
Hemicetopsis Bleeker, 1862, 311.
Pseudocetopsis Bleeker, 1862, 311.
Paracetopsis (Guichenot) Bleeker, 1862, 312.

Paracetopsis Eigenmann & Bean, 1907, 522.
*Cetopsogiton*²²⁶ E. & B., 1910.

²²⁶ *Rept. Princeton Univ. Exp. Patagonia*, 111-398, 1910; type *Cetopsis occidentalis* Steindachner. (Omitted in "Zoological Record.") Same as *Paracetopsis* Eigenmann & Bean, preoccupied.

* Family 266. ARGIDÆ

Astroblepus Humboldt, 1806, 76.
Cyclopium Swainson, 1839, 204.
Arges Cuvier & Valenciennes, 1840, 206.

Brontes Cuv. & Val., 1840, 206.
Strephon Gistel, 1848, 235.
Stygogenes Günther, 1864, 332.

Family 267. CALLICHTHYIDÆ

Callichthys Gronow, 1763, 21.
Callichthys (Gronow) Scopoli, 1777, 42.
Cataphractus Bloch, 1793, 51.
Corydoras Lacépède, 1803, 66.
Cordinus Rafinesque, 1815, 91.
Hoplisoma Swainson, 1839, 203.
Hoplosternum Gill, 1858, 281.
Scleromystax Günther, 1864, 332.

Brochis Cope, 1872, 363.
Chænothorax Cope, 1878, 394.
Decapogon^{226a} Eigenmann & Eigenmann, 1888, 440.
Osteogaster Cope, 1894, 464.
Aspidoras Ihering 1907, 524.
Cascadura Ellis, 1913, 547.
Cataphractops Fowler, 1915, 556.

^{226a} *Decapogon* Ribeiro, p. 565, "Genera of Fishes," should be canceled.

Family 268. LORICARIIDÆ

Loricaria Linnæus, 1758, 14.
Plecostomus Gronow, 1763, 21.
Hypostomus Lacépède, 1803, 66.
Acanthicus Spix, 1829, 131.
Rhinelepis Spix, 1829, 131.
Sturisoma Swainson, 1839, 203.
Ancistrus Kner, 1854, 260.
Acestra Kner, 1854, 260.
Hemiodon Kner, 1854, 260.
Acanthodemus Castelnau, 1855, 264.
Pterygoplichthys Gill, 1858, 281.
Hemiancistrus Bleeker, 1862, 311.
Pseudancistrus Bleeker, 1862, 311.
Plecostomus (Gronow) Bleeker, 1862.
Pseudorinelepis Bleeker, 1862, 311.
Hemiloricaria Bleeker, 1862, 311.
Pseudacanthicus Bleeker, 1862, 311.

Parahemiodon Bleeker, 1862, 311.
Pseudoloricaria Bleeker, 1862, 311.
Loricariichthys Bleeker, 1862, 311.
Oxyloricaria Bleeker, 1862, 311.
Rineloricaria Bleeker, 1862, 311.
Pseudohemiodon Bleeker, 1862, 311.
Hemiodontichthys Bleeker, 1862, 311.
Cochliodon Heckel, 1864, 332.
Hypoptopoma Günther, 1868, 351.
Liposarcus Günther, 1864, 332.
Otocinclus Cope, 1872, 363.
Xenomystus Lütken, 1873, 370.
Harttia Steindachner, 1876, 387.
Hassar Eigenmann & Eigenmann, 1888, 440.
Neoplecostomus E. & E., 1888, 440.
Farlowella E. & E., 1889, 445.

- Oxyropsis** E. & E., 1889; 445.
Hisonotus E. & E., 1889, 445.
Parotocinclus E. & E., 1889, 445.
Panaque E. & E., 1889, 446.
Delturus E. & E., 1889, 446.
Hemipsilichthys E. & E., 1889, 446.
Microlepidogaster E. & E., 1889, 445.
Aristommata Holmberg, 1893, 462.
Xenocara Regan, 1904, 510.
Reganella²²⁷ Eigenmann, 1905.
Thysanocara²²⁸ Regan, 1906, 520.
Pogonopoma Regan, 1907, 526.
Kronichthys Ribeiro, 1908, 530.
Corymbophanes Eigenmann, 1909, 532.
Lithogenes Eigenmann, 1909, 532.
Canthopomus²²⁹ Eigenmann, 1909.
Acestridium Haseman, 1911, 539.
Lithoxus Eigenmann, 1912, 542.
Stoniella Fowler, 1914, 553.
Diapaletoplites Fowler, 1915, 556.
Leptoancistrus Meek & Hildebrand, 1916, 559.
Pareiorhaphis²³⁰ Ribeiro, 1918.
Pseudotocinclus Nichols, 1919, 569.
Cheirododus²³¹ Eigenmann, 1921.
²²⁷ Eigenmann, *Science*, 21: 793, May 18, 1905; orthotype *Hemiodon depressus* Kner; substitute for *Hemiodon*; preoccupied in mollusks.
²²⁸ Type *Ancistrus cirrhosa* Kner.
²²⁹ Cat. Fresh Water Fishes S. A. 407; type *Rhinelepis genibarbis* Cuv. & Val. (Omitted in "Genera of Fishes.")
²³⁰ *Rev. Soc. Sci. Rio de Janeiro*, 2: 106; orthotype *Hemipsilichthys calmoni* Ribeiro.
²³¹ Orthotype *Plecostomus hondæ* Regan.

Order INIOMI

The fishes of this order, mostly inhabitants of depths of the sea and thus more or less degenerate structurally, bear a strong external resemblance to the stomiatoid *Isospondyli*, with which they have been usually associated and with which they agree in possessing an adipose dorsal fin, as in the *Salmonidæ*, *Characinidæ*, *Siluridæ*, and *Percopsidæ*. The persistence of this primitive character does not necessarily indicate close relationship among the fishes possessing it. In the *Iniomi*, the premaxillary is well developed, excluding the maxillary from the margin of the upper jaw.

Family 269. CHEIROTHRICIDÆ

- MEGAPUS** Marck & Schlüter, 1865, 339. **EXOCETOIDES** Davis, 1885, 431.
CHEIROTHRIX²³² Pictet & Humbert, 1866, 342. **MEGISTOPUS** Landois, 1894, 465.

²³² Spelled *Chirothrix* by authors.

Family 270. AULOPIDÆ

- Aulopus** Cuvier, 1817, 98. **Scopelosaurus** Bleeker, 1860, 294.
SARDINIOIDES von der Marck, 1858, 283.

Family 271. SYNODONTIDÆ (Lizard Fishes)

- Synodus** Gronow, 1763, 20. **Synodus** (Gronow) Scopoli, 1777, 42.
Saurus Catesby, 1771, 29. **Soarus**²³³ Linck, 1790, 49.

²³³ A misprint for *Saurus*, the genus undescribed and unidentifiable.

Tirus Rafinesque, 1810, 80.	Trachinocephalus Gill, 1861, 303.
Saurus Cuvier, 1817, 98.	Bathysaurus Günther, 1878, 395.
Alpismaris Risso, 1826, 120.	Pelopsia Facciola, 1883, 423.
Laurida Swainson, 1839, 203.	Bathylaco Goode & Bean, 1895, 467.
Triurus Swainson, 1839, 203.	Goodella Ogilby, 1897, 477.
Saurida Cuvier & Valenciennes, 1849, 242.	Xystodus Ogilby, 1910, 536.
Sauridichthys Bleeker, 1858, 278.	

Family 272. **HARPODONTIDÆ**
(Bombay Ducks)

Harpodon Le Sueur, 1825, 172.

Family 273. **CHLOROPHTHALMIDÆ**

Chlorophthalmus Bonaparte, 1840, 142, 206.	Hyphalonedrus ²³⁴ Goode, 1880.
	Bathysauropsis Regan, 1911, 540.

²³⁴ *Proc. U. S. Nat. Mus.*, 111: 183; type *H. chalybeius* Goode. (Omitted in "Genera of Fishes.")

Family 274. **PARALEPIDÆ** (*Sudidæ*)

Sudis Rafinesque, 1810, 80.	Notolepis Dollo, 1908, 527.
Paralepis Cuvier, 1817, 104.	Parasudis Regan, 1911, 540.
Prymnothonus Richardson, 1844, 223.	Lestidiops Hubbs, 1916, 559.
Arctozenus Gill, 1864, 330.	Notosudis Waite, 1916, 561.
ANAPTERUS Sauvage, 1873, 371.	TROSSULUS ²³⁵ Jordan, 1921.
Sympnopterus Cocco, 1885, 430.	LESTICHTHYS ²³⁶ Jordan, 1921.
Lestidium Gilbert, 1905, 513.	

²³⁵ "Fish Fauna Cal. Tertiary," 250; orthotype *Trossulus exoletus* Jordan.

²³⁶ *Loc. cit.*, 250; orthotype *Lesticthys porteousi* Jordan.

Family 275. **EVERMANELLIDÆ** (*Odontostomidæ*; *Scopelarchidæ*)

The members of the small group are not all well known, and may prove incongruous.

Odontostomus Cocco, 1838, 191.	Evermanella Fowler, 1901, 493.
Neosudis Castelnau, 1873, 368.	Dissomma Brauer, 1902, 497.
Scopelarchus Alcock, 1896, 470.	Promacheon Weber, 1913, 551.

Family 276. **BATHYPTEROIDÆ**

Bathypterois Günther, 1878, 395.	Hemipterois Regan, 1911, 540.
Synapteretmus ²³⁷ Goode & Bean, 1895.	Belonopterois Roule, 1916, 560.

²³⁷ "Oceanic Ichthyology," 64; orthotype *Bathypterois quadrifilis* Günther. (Omitted in "Genera of Fishes.")

Family 277. **BENTHOSAURIDÆ**

Benthosaurus Goode & Bean, 1886, 435.

Family 278. **MYCTOPHIDÆ** (*Scopelidæ*)
(Lantern Fishes)

Of the numerous fossil genera mentioned below, several may belong to related families, rather than to *Myctophidæ*.

Myctophum Rafinesque, 1810, 82.	HEMISAURIDA Kner, 1867, 346.
Scopelus Cuvier, 1817, 98.	TYDEUS Sauvage, 1870, 359.
Macrostoma Risso, 1826, 120.	PARASCOPELUS Sauvage, 1873, 371.
Nyctophus Cocco, 1829, 133.	Gymnoscopus Günther, 1873, 369.
Alysia Lowe, 1839, 195.	Neoscopus Castelnau, 1875, 378.
Lampanyctus Bonaparte, 1840, 142, 206.	ICHTHYOTRINGA Cope, 1878, 394.
RHINELLUS Agassiz, 1844, 217.	SCOPELOIDES Wettstein, 1886, 436.
OSMEROIDES Agassiz, 1844, 219.	Nannobranchium Günther, 1887, 438.
HOLOSTEUS Agassiz, 1844, 219.	OMIODON Bassani, 1888, 440.
ACROGNATHUS Agassiz, 1844, 219.	Scopelengys ²³⁹ Alcock, 1890, 449.
Phanerobranchus Cocco, 1846, 574.	Stenobranchius Eigenmann & Eigenmann, 1890, 450.
Cyrtorhynchus Costa, 1855, 574.	Catablemella E. & E., 1890, 450.
RHAMPHORNIMIA Costa, 1857, 275.	Diaphus E. & E., 1891, 454.
SARDINIUS von der Marck, 1858, 283.	Tarletonbeania E. & E., 1891, 454.
PALIMPHEMUS Kner, 1862, 319.	Rhinoscopelus Lütken, 1892, 458.
Neoscopus Johnson, 1863, 575.	Benthosema Goode & Bean, 1895, 467.
LEPTOSOMUS von der Marck, 1863, 328.	Collettia G. & B., 1895, 467.
MICROCÆLIA von der Marck, 1863, 328.	Lampadena G. & B., 1895, 467.
TACHYNECTES von der Marck, 1863, 328.	Aëthoprora G. & B., 1895, 467.
Dasyscopelus Günther, 1864, 333.	Electrona ²⁴⁰ G. & B., 1895, 467.
Notoscopus Günther, 1864, 333.	NEMATONOTUS Woodward, 1899, 488.
BRACHYSPONDYLUS Marck & Schlüter, 1865, 339.	Centrobranchus Fowler, 1904, 507.
DERMATOPTYCHUS M. & S., 1865, 339.	Scopelopsis ²⁴¹ Brauer, 1906.
DACTYLOPOGON M. & S., 1865, 339.	Protoblepharon Steche, 1909, 534.
OPISTHOPTERYX ²³⁸ Pictet & Humbert, 1866, 342.	Nyctimaster ²⁴² Jordan, 1922.

²³⁸ Misprinted *Opisthopteryx*.

²³⁹ Misprinted *Scopelogenys* in *Zoological Record* and in "Genera of Fishes."

²⁴⁰ "Oceanic Ichthyology," 91; orthotype *Scopelus rissoi* Cocco. (Omitted in "Genera of Fishes.")

²⁴¹ "Die Tiefseefische," 146; type *S. multipunctatus* Brauer. (Omitted in "Genera of Fishes.")

²⁴² *Proc. U. S. Nat. Mus.*, 645, 1921; orthotype *Lampanyctus jordani* Gilbert.

Family 279. **IPNOPIDÆ**

Ipnops Günther, 1878, 395.

Family 280. **OMOSUDIDÆ**

Omosudis Günther, 1887, 438.

Family 281. **MALACOSTEIDÆ**

Malacosteus Ayres, 1849, 240.

Bathylchnus Brauer, 1902, 497.

Family 282. **PLAGYODONTIDÆ** (*Alepisauridæ*)
(Hand-saw Fishes)

*Plagyodus*²⁴⁸ (Steller) Pallas, 1811, 84.

Alepisaurus Lowe, 1833, 179.

ISTIEUS Agassiz, 1844, 219.

Caulopus Gill, 1862, 314.

Plagyodus (Steller) Günther, 1867, 345.

APATEODUS Woodward, 1901, 496.

Eugnathosaurus Regan, 1913, 550.

²⁴⁸ This name has been questioned as appearing in an oblique case only, as "*Plagyodontem*."

Suborder **CETUNCULI**
(New suborder)

The two families which follow are quite distinct from the other *Iniomi*, doubtless forming a separate suborder among the deep-sea fishes.

Family 283. **RONDELETIIDÆ**

Rondeletia Goode & Bean, 1894, 465.

Family 284. **CETOMIMIDÆ**

Cetomimus Goode & Bean, 1894, 465.

Cetostoma Zugmayer, 1914, 555.

Pelecinomimus Gilchrist, 1922. (See Index.)

Suborder **CHONDRICHTHYES**

A curious group of very uncertain relationships.

Family 285. **ATELEOPODIDÆ**

Ateleopus Temminck & Schlegel, 1846,
230.

Podateles Boulenger, 1902, 497.

Ijimaia Sauter, 1905, 516.

Parateleopus Smith & Radcliffe, 1912,
544.

Order XENOMI

Family 286. **DALLIIDÆ**
(Alaska Black-fish)

Dallia Bean, 1879, 398.

Order HAPLOMI

The *Haplomi* are nearly related to the *Isospondyli*, although lacking the mesocoracoids characteristic of the latter order and of the *Ostariophysii*. Externally they have much in common with the *Microcyprini* or *Cyprinodontes*, with which most writers have united them. The maxillary, however, continues, as in the *Isospondyli*, to form the side of the upper jaw, but in the *Haplomi*, as in all the families which follow in this linear series, it ceases to bear teeth, and is gradually relegated to a subordinate position. It would appear therefore that the *Haplomi* and *Cyprinodontes* are actually rather closely related, though definable as separate orders or suborders. The *Xenomi* are doubtless near the *Haplomi*, but are quite as distinct from the latter as the *Cyprinodontes*.

The following remarks of Jordan & Evermann ("Fish. N. M. Am.," I, 623) are still pertinent: "While our knowledge of the osteology and embryology of most of the families of fishes is very incomplete, it is evident that the relationships of the groups can not be shown in any linear series, or by any conceivable arrangement of orders and suborders. The living teleost fishes have sprung from many lines of descent, their relationships are extremely diverse, and their differences are of every possible degree of value. The ordinary schemes have magnified the importance of a few common characters, at the same time neglecting other differences of equal importance. No system of arrangement which throws these fishes into large groups can ever be definite or permanent."

Family 287. CROSSOGNATHIDÆ

CROSSOGNATHUS Pictet & Lorient, 1859,
292.

APSOPELIX Cope, 1871, 360.
PELYCORAPIS²⁴⁴ Cope, 1874, 375.

²⁴⁴ Misprinted *Pelecorapis*.

Family 288. ESOCIDÆ (*Luciidae*) (Pikes)

*Esox*²⁴⁵ Linnæus, 1758, 14.
Lucius Geoffroy, 1767, 24.
Lucius Klein, 1775, 40.
Lucius Rafinesque, 1810, 80.

*Picorellus*²⁴⁶ Rafinesque, 1820, 112.
Mascalongus Jordan, 1878, 396.
Kenoza Jordan & Evermann, 1896, 473.

²⁴⁵ This use of *Esox* follows the decision of the International Commission of Zoological Nomenclature. The name has been also employed in place of *Belone*.

²⁴⁶ A mythical pickerel.

Family 289. UMBRIDÆ (Mud Minnows)

Umbra (Kramer) Gronow, 1763, 20.
Umbra (Gronow) Scopoli, 1777, 42.

Melanura Agassiz, 1853, 252.

Order CYPRINODONTES (*Microcyprini*)

The *Microcyprini* or *Cyprinodontes* have been usually placed in one or two families. It seems to us that more should be recognized. These fishes bear considerable resemblance to the *Haplomi*, with which group they have usually been united. But the structure of the mouth is quite different, the premaxillary forming the whole side of the upper jaw, the toothless maxillary lying above it as a sort of secondary bone, as in all the percoid fishes. The posterior insertion of the dorsal fin is characteristic of both groups as well as of most of the *Synentognathi*, far from which they should not be placed in a natural system.

Hitherto the viviparous and oviparous Cyprinodonts have been placed in a single family, but the differences within the group are extensive and if the species were not all of small size they would certainly be assigned to two or more family groups. As here understood, the oviparous species, with the anal fin not modified in the male, constitute the family of *Cyprinodontidae*.

Family 290. **CYPRINODONTIDÆ**
(Killifishes)

The *Fundulina*, with pointed teeth, and the *Cyprinodontina*, with the teeth incisor-like, form a natural family widely diffused in the North Temperate Zone.

Fundulus Lacépède, 1803, 65.
Hydrargira²⁴⁷ Lacépède, 1803, 67.
Cyprinodon Lacépède, 1803, 68.
Prinodon Rafinesque, 1815, 90.
Lebia²⁴⁸ (Cuvier) Oken, 1817, 99.
Aphanius Nardo, 1827, 121.
Aplocheilus²⁴⁹ McClelland, 1839, 195.
Panchax Cuvier & Valenciennes, 1846, 407.
Encrotes Gistel, 1848, 236.
Zygonectes Agassiz, 1853, 252.
Tellia Gervais, 1853, 253.
Fundulichthys Bleeker, 1859, 288.
Adinia Girard, 1859, 290.
Lucania Girard, 1859, 290.
Micromugil Gulia, 1861, 307.
Rivulus Poey, 1860, 299.
Aplocheilichthys Bleeker, 1861, 321.
Lebistes²⁵⁰ de Filippi, 1862.
Micristius Gill, 1865, 337.
Lycocyprinus Peters, 1868, 353.
Nothobranchius Peters, 1868, 353.

PROBLEBIAS Sauvage, 1874, 376.
Pachystetus (Aymard) Sauvage, 1874, 376.
Cynolebias Steindachner, 1876, 387.
Xenisma Jordan, 1877, 390.
Jordanella Goode & Bean, 1879, 399.
Borborys (Broussonet) G. & B., 1885, 432.
GEPHYRURA Cope, 1891, 454.
PROBALLOSTOMUS Cope, 1891, 454.
Neolebias Steindachner, 1894, 465.
Pterolebias Garman, 1895, 467.
Fontinus Jordan & Evermann, 1896, 473.
PACHYLEBIAS Woodward, 1901, 496.
Procatopus Boulenger, 1904, 506.
Oryzias Jordan & Snyder, 1906, 519.
Mohanga Boulenger, 1911, 538.
Lamprichthys Regan, 1911, 540.
Galasaccus Fowler, 1916, 559.
Chriopeops Fowler, 1916, 559.
Oxyzygonectes Fowler, 1916, 559.
PARAFUNDULUS Eastman, 1917, 561.

²⁴⁷ Usually corrected to *Hydrargyra*.

²⁴⁸ Later spelled *Lebias*.

²⁴⁹ Later corrected to *Haplocheilus*.

²⁵⁰ *Archiv. Zool. Anat.*, etc., 1: 69; orthotype *L. pæciloides* de Filippi. (Omitted in "Genera of Fishes.")

Family 291. **ORESTIIDÆ**

This little group comprises allies of *Fundulus*, which have the lower pharyngeals enlarged and provided with molar teeth. The ventral fins are wanting. The family, probably once more widely diffused, is now confined to Lake Titicaca and to the desert streams about Death Valley, Nevada.

Orestias Cuvier & Valenciennes, 1846, 228. **Empetrichthys** Gilbert, 1893, 461.

Family 292. CHARACODONTIDÆ

This family and the next include those viviparous Cyprinodonts in which the first rays of the male are somewhat modified but not transformed into an intromittent organ.

Characodon Günther, 1866, 340.

Zoogoneticus Meek, 1902, 500.

Family 293. GOODEIDÆ

Girardinichthys Bleeker, 1860, 294.

Xenendum Jordan & Snyder, 1899, 487.

Limnurgus Günther, 1866, 340.

Skiffia Meek, 1902, 500.

Goodea Jordan, 1879, 400.

Chapalichthys Meek, 1902, 500.

Family 294. PÆCILIDÆ

(Top Minnows)

This family includes provisionally those viviparous Cyprinodonts having the anal fin modified into an intromittent organ. All the *Pæciliidæ* are confined to warmer parts of America. It is possible that the family should be further subdivided. The *Anablepinæ* with "four eyes" (the eye crossed by a partition) and the *Gambusiinæ* with teeth as in the *Fundulinæ*, may well be detached on account of differences in dentition. In the *Pæciliinæ* the teeth are slender and movable, while in the *Gambusiinæ* they are conic and fixed as in the *Fundulinæ*. The name *Pæciliidæ* is probably sufficiently distinct from *Pæcilidæ*, a family of beetles.

Pæcilia Bloch & Schneider, 1801, 59.

Paragambusia Meek, 1904, 510.

Mollienesia Le Sueur, 1821, 114.

Acanthophaecelus Eigenmann, 1907, 522, 533.

Alazon Gistel, 1848, 237.

Ilyodon Eigenmann, 1907, 522.

Xiphophorus Heckel, 1848, 238.

Phalloptychus Eigenmann, 1907, 522, 559.

Heterandria Agassiz, 1853, 251.

Phalloceros Eigenmann, 1907, 522.

PÆCILOPS Pomel, 1853, 254.

*Petalosoma*²⁵² Regan, 1908, 530.

Limia Poey, 1854, 261.

Tomeurus Eigenmann, 1909, 533.

Gambusia Poey, 1854, 260.

Alfaro Meek, 1912, 544.

*Girardinus*²⁵¹ Poey, 1854, 261.

Cynopæcilus Regan, 1912, 545.

Belonesox Kner, 1859, 292, 298.

Petalurichthys Regan, 1912, 545.

Pseudoxiphophorus Bleeker, 1859, 287.

Gulapinnus Langer, 1913, 549.

Hemixiphophorus Bleeker, 1859, 288.

Priapichthys Regan, 1913, 550.

Trifarcus Poey, 1860, 299.

Pseudopæcilia Regan, 1913, 550.

Limia Poey, 1861, 308.

Priapella Regan, 1913, 550.

Pæcilodes Steindachner, 1863, 328.

Pæcilopsis Regan, 1913, 550.

Platypæcilus Günther, 1866, 341.

Brachyrhaphis Regan, 1913, 550.

Acropæcilia Hilgendorf, 1889, 447.

Leptorhaphis Regan, 1913, 550.

Glaridodon Garman, 1895, 467.

Pamphoria Regan, 1913, 550.

Cnestrodon Garman, 1895, 467.

Pamphorichthys Regan, 1913, 550.

Gambusinus Jordan & Evermann, 1896, 473.

Heterophallus Regan, 1914, 555.

Glaridichthys Garman, 1896, 471.

Diphyacantha Henn, 1916, 559.

Toxus Eigenmann, 1903, 501.

Phallatorhynchus Henn, 1916, 559.

Cynodonichthys Meek, 1904, 510.

Neoheterandria Henn, 1916, 559.

²⁵¹ According to Garman this genus is distinct from *Heterandria*.

²⁵² Misprinted *Palosoma* in Dean's "Bibliography of Fishes."

Family 295. **FITZROYIIDÆ***Fitzroyia* Günther, 1866, 340.*Jenynsia* Günther, 1866, 341.Family 296. **ANABLEPIDÆ**

(Quatro Ojos)

Anableps Gronow, 1763, 20.*Anableps* (Gronow) Bloch & Schneider,*Anableps* (Gronow) Scopoli, 1777, 42.

1801, 59.

Family 297. **PHALLOSTETHIDÆ***Phallostethus* Regan, 1913, 550.*Neostethus* Regan, 1916, 560.Family 298. **AMBLYOPSIDÆ**

(Cave Blind Fishes)

Amblyopsis Dekay, 1842, 210.*Typhlichthys* Girard, 1859, 290.*Chologaster* Agassiz, 1853, 251.*Troglichthys* Eigenmann, 1899, 485.Family 299. **ADRIANICHTHYIDÆ***Adrianichthys* Weber, 1913, 552.*Xenopæcilus* Regan, 1911, 540.Order **SYNENTOGNATHI**Family 300. **FORFICIDÆ***FORFEX* Jordan, 1919, 568.*ZELOTES*²⁵³ Jordan, 1921.²⁵³ "Fossil Fish. S. Cal.," 36; orthotype *Z. alhambra* Jordan.Family 300A. **ROGENIIDÆ***ROGENIO* Jordan, 1907, 525.Family 301. **XENESTHIDÆ**

The genus *Xenesthes* is based on a long and strong premaxillary bone, seven inches in length, armed anteriorly with a row of large teeth. The toothless maxillary is apparently united with this bone. As the *Ichthyodectidæ* have the premaxillary short, forming the front only of the edge of the upper jaw, *Xenesthes* can not be allied to them. It is perhaps near the *Belonidæ*, although the type specimen shows none of the small teeth characteristic of the latter, and the snout could not have been attenuate. It bears also a certain resemblance to *Plagyodus*, but in the latter the bones are soft and smooth, while in *Xenesthes* they are rigid and rough.

XENESTHES Jordan, 1907, 524.Family 302. **BELONIDÆ**

(Hound Fishes; Needle Fishes)

Mastacembelus Klein, 1775, 40.*Tylosurus* Cocco, 1833, 178.*Raphistoma*²⁵⁴ Rafinesque, 1815, 91.*Ramphistoma* Swainson, 1839, 203.*Belone* Cuvier, 1817, 99.*Potamorhaphis* Günther, 1866, 340.*Strongylura*^{254a} Van Hasselt, 1824.*Athlennes* Jordan & Fordice, 1886, 435.²⁵⁴ Written *Ramphistoma* by authors.^{254a} *Bull. Sci. Nat. Ferussac*, 2: 374; orthotype *Strongylura caudimaculata* Van Hasselt = *Belone strongylura* Van Hasselt, 1823. (Omitted in "Genera of Fishes.")

Ablennes J. & F., 1886, 435.
Eurycaulus Ogilby, 1908, 529.
Stenocaulus Ogilby, 1908, 529.
Xenentodon Regan, 1911, 540.

Petalichthys²⁵⁵ Regan, 1911.
Platybelone^{255a} Fowler, 1919.
Tropidocaulus Ogilby, 1919, 569.
BELTION Jordan, 1920, 571.

²⁵⁵ *Ann. Mag. Nat. Hist.*, 332; orthotype *P. capensis* Regan. (Omitted in "Genera of Fishes.")

^{255a} *Proc. Acad. Nat. Sci. Phila.*, 71: 2; orthotype *Belone platyura* Bennett (same as *Tropidocaulus* of slightly later date).

Family 303. **SCOMBERESOCIDÆ**
 (Sauries)

Scomberesox²⁵⁶ Lacépède, 1803, 67.
Sayris Rafinesque, 1810, 81.
Grammiconotus Achille Costa, 1862, 312.

Cololabis Gill, 1896, 473.
SCOMBERESSUS Jordan, 1920, 571.

²⁵⁶ Often written *Scombresox*.

Family 304. **HEMIRAMPHIDÆ**
 (Half-beaks)

Hemi-Ramphus²⁵⁷ Cuvier, 1817, 99.
Dermogenys²⁵⁸ Van Hasselt, 1823, 172.
COBITOPSIS Pomel, 1853, 254.
Hyporhamphus Gill, 1859, 289.
Euleptorhamphus Gill, 1859, 289, 326.
Zenarchopterus Gill, 1863, 326.
Oxyptorhamphus Gill, 1863, 326.
Hemirhamphodon Bleeker, 1866, 340.
Arrhamphus Günther, 1866, 340.
HEMILAMPONITES Geinitz, 1868, 350.

Chriodorus Goode & Bean, 1882, 419.
Hemiexocætus Fowler, 1901, 493.
Labidorhamphus Fowler, 1905, 513.
Eulepidorhamphus Fowler, 1919.
ROGENITES Jordan, 1919, 568.
ZELOSIS Jordan & Gilbert, 1920, 571.
Rhamphodermogenys²⁵⁹ Fowler & Bean, 1922.
Nomarhamphus Weber, 1922 (See Index A).

²⁵⁷ Usually spelled *Hemirhamphus*.

²⁵⁸ Spelled *Dermatogenys* by Bleeker.

^{258a} *Loc. cit.*, 7; orthotype *Hemirhamphus sajori* Schlegel.

²⁵⁹ Fowler & Bean, "Fishes of Formosa and the Philippine Islands," *Proc. U. S. Nat. Mus.*, 152: 17; orthotype *Dermogenys bakeri* Fowler & Bean.

Family 305. **EXOCÆTIDÆ**
 (Flying Fishes)

Exocætus Linnæus, 1758, 15.
Hirundo Catesby, 1771, 30.
Pterichthys (Commerson) Lacépède, 1803, 71.
Cypselurus²⁶⁰ Swainson, 1839, 203.
Cheilopogon Lowe, 1840, 207.
Ptenichthys Müller, 1843, 216.

Halocypselus Weinland, 1858, 284.
Parexocætus Bleeker, 1866, 340.
Fodiator Jordan & Meek, 1885, 433.
Exonautes Jordan & Evermann, 1896, 472.
Evolantia Heller & Snodgrass, 1903, 503.
Ptenonotus Ogilby, 1908, 529, 554.

²⁶⁰ Spelled *Cypsilurus* by misprint, as decided by the International Commission of Nomenclature.

Order ANACANTHINI

This large group, usually associated with the blennies and brotulids on the one hand and the flounders on the other, is quite distinct from both. Its origin and relationship are obscure. The absence of fin spines and the frequent presence of more than five ventral rays indicate its descent from some early type in which the ventral rays have not been reduced to I, 5, the normal number in percomorphous fishes, and no spines have developed in the fins. The anterior position of the ventrals separate these fishes from the forms with a duct to the air bladder, *Physostomi*, *Malacopteri*, *Ostariophysii*, *Isospondyli*, etc. Regan suggests their possible derivation from allies of *Aulopidae* or other primitive *Inioini*.

Family 306. MACROUROIDIDÆ

Macrouroides Smith & Radcliffe, 1912, 544.

Squalogadus Gilbert & Hubbs, 1916, 559.

Family 307. MACROURIDÆ (*Coryphænoididæ*; *Macruridæ*)
(Grenadiers; Rat-tails)

Coryphænoides Gunner, 1761, 16.

*Macrourus*²⁶¹ Bloch, 1786, 44.

*Trachyrincus*²⁶² Giorna, 1805, 74, 407.

Cœlorhynchus Giorna, 1805, 74.

Lepidoleprus Risso, 1810, 77.

Oxycephas Rafinesque, 1810, 79.

Krohnus Cocco, 1844, 219.

Coccolus (Kaup) Bonaparte, 1844, 219, 226, 284.

Lepturus Gronow, 1854, 259.

Malacocephalus Günther, 1862, 318.

Macruronus Günther, 1872, 365.

Macruropus Bleeker, 1874, 372.

Paramacrus Bleeker, 1874, 372.

Oxymacrus Bleeker, 1874, 372.

*Bathygadus*²⁶³ Günther, 1878.

Lepidorhynchus Bleeker, 1879, 398.

*Chalinura*²⁶⁴ Goode & Bean, 1882, 419.

Hymenocephalus Giglioli & Issel, 1884, 575.

Trachonurus Günther, 1887, 437.

Lionurus Günther, 1887, 437.

Mystaconurus Günther, 1887, 437.

Optonurus Günther, 1887, 437.

Nematonurus Günther, 1887, 437.

Cetonurus Günther, 1887, 437.

Lyconus Günther, 1887, 437.

Steindachneria Goode & Bean, 1888, 441.

Abyssicola Goode & Bean, 1895, 468.

Moseleya Goode and Bean, 1895, 468.

Steindachnerella Eigenmann, 1897, 476.

Cœlocephalus Gilbert & Cramer, 1897, 477.

Albatrossia Jordan & Gilbert, 1898, 482.

Bogoslovius J. & E., 1898, 482.

Matæocephalus Berg, 1899, 484.

Dolloa Jordan, 1900, 489.

Gadomus Regan, 1903, 505.

Melanobranchus Regan, 1903, 505.

Nezumia Jordan & Gilbert, 1904, 509.

Regania Jordan & Gilbert, 1904, 509.

Cynomacrus Dollo, 1909, 532.

*Ateleobranchium*²⁶⁵ Gilbert & Burke, 1912, 543.

Echinomacrus Roule, 1916, 560.

Lyconodes Gilchrist, 1922. (See Index.)

²⁶¹ Usually corrected as *Macrurus*.

²⁶² Usually corrected to *Trachyrhynchus*.

²⁶³ *Ann. Mag. Nat. Hist.*, 23; orthotype *Bathygadus cottoides* Günther. (Omitted in "Genera of Fishes.")

²⁶⁴ Written *Chalinurus* by Günther.

²⁶⁵ *Bull. U. S. Bur. Fish.*, 30: 94, 1912. (Erroneously given in "Genera of Fishes.")

Hyomacrurus Gilbert & Hubbs, 1920.
(See Index.)
Hyostomus Gilbert & Hubbs, 1920, 570.
Atherodon G. & H., 1920, 570.
Ventrifossa G. & H., 1920, 570.
Papyrocephalus G. & H., 1920, 570.

Quincuncia G. & H., 1920, 570.
Hymenogadus G. & H., 1920, 570.
Oxygadus G. & H., 1920, 570.
Lucigadus G. & H., 1920, 570.
Lucigadella G. & H., 1920, 570.

Family 308. **BREGMACEROTIDÆ**

Bregmaceros (Cantor) Thompson, 1840,
208.
Calloptilum Richardson, 1844, 222.

Asthenurus Tickell, 1865, 339.
Auchenoceros Günther, 1889, 447.

Family 309. **GAIDROPSARIDÆ**

(Rocklings)

Enchelyopus Bloch & Schneider, 1801, 57.
Gaidropsarus Rafinesque, 1810, 81.
Dropsarus Rafinesque, 1815, 88.
Onos Risso, 1826, 119.
Motella Cuvier, 1829, 131.

Ciliata Couch, 1832, 176.
Couchia Thompson, 1856, 274.
Molvella Kaup, 1858, 281.
Rhinonemus Gill, 1863, 325.

Family 310. **GADIDÆ**

(Cod-fishes)

Gadus Linnæus, 1758, 12.
Callarias Klein, 1777, 42.
Phycis Röse, 1793, 51.
Phycis Bloch & Schneider, 1801, 58.
Phycis Rafinesque, 1810, 79.
Strinsia Rafinesque, 1810, 81.
Eleginus Fischer, 1813, 85.
Trisopterus Rafinesque, 1814, 87.
Morrhua (Cuvier) Oken, 1817, 100.
Merlangus (Cuvier) Oken, 1817, 100.
Raniceps (Cuvier) Oken, 1817, 100.
Lota (Cuvier) Oken, 1817, 100.
Mustela (Cuvier) Oken, 1817, 100.
Brosme²⁰⁶ (Cuvier) Oken, 1817, 100.
Lotta Risso, 1826, 119.
Morua Risso, 1826, 119.
Mora Risso, 1826, 119.
Molva Fleming, 1828, 122.
Brosmus Stark, 1828, 123.
Tilesia Swainson, 1839, 203.
Cephus Swainson, 1839, 203.
Lepidion Swainson, 1839, 203.
Gadella Lowe, 1843, 215.
NEMOPTERYX Agassiz, 1844, 219.
Asellus Valenciennes, 1844, 223.
Merlinus Agassiz, 1845, 224.

Pollachius (Nilsson) Bonaparte, 1845,
226.
Gastronemus Bonaparte, 1845, 226.
Tinimogaster Bonaparte, 1845, 226.
Uraleptus Costa, 1846, 574.
Cerdo Gistel, 1848, 235.
Gadiculus Guichenot, 1850, 246.
Lotella Kaup, 1858, 281.
Physiculus Kaup, 1858, 281.
Uraleptus Costa, 1858, 279.
Pteridium Filippi & Verany, 1859, 289.
PALÆOBROSMIUS Rath, 1859, 292.
PALÆOGADUS Rath, 1859, 292.
Hypsiptera Günther, 1860, 297.
Algoa Castelnau, 1861, 301.
Melanogrammus Gill, 1862, 316.
Brachygadus Gill, 1862, 316.
Læmonema Günther, 1862, 318.
Pseudophycis Günther, 1862, 318.
Halargyreus Günther, 1862, 318.
Boreogadus Günther, 1862, 318.
Haloporphyrus Günther, 1862, 318.
Urophycis Gill, 1863, 325.
Micromesistius Gill, 1863, 325.
Brachygadus Gill, 1863, 325.
Leptogadus Gill, 1863, 325.

²⁰⁶ Later written *Brosmius* by Cuvier.

- Odontogadus** Gill, 1863, 325.
Microgadus Gill, 1863, 325.
Æglefinus Malm, 1877, 391.
Antimora²⁶⁷ Günther, 1878.
Melanonus Günther, 1878, 394.
Pleurogadus Bean, 1885, 433.
Salilota Günther, 1887, 437.
Brosmiculus Vaillant, 1888, 444.
Sympodoichthys Facciola, 1888, 441.
Austrophycis Ogilby, 1897, 477.
Emphycus Jordan & Evermann, 1898, 481.
Theragra Lucas, 1898, 481.
Microlepidium Garman, 1899, 486.
Leptophycis Garman, 1899, 486.
RHINOCEPHALUS (Agassiz) Woodward, 1901, 223.
Tripterophycis Boulenger, 1902, 497.
Melanonosoma Gilchrist, 1902, 498, 501.
Læmonemodus Gilchrist, 1903, 503.
Gargilius²⁶⁸ (Jensen) Schmidt, 1906.
ARNOLDINA Jordan & Gilbert, 1919, 569.
ECLIPES J. & G., 1919, 569.
MERRIAMINA J. & G., 1919, 569.
Verater Jordan, 1919, 567.
ARNOLDITES²⁶⁹ Jordan, 1923.

²⁶⁷ *Ann. Mag. Nat. Hist.*, 2: 18; orthotype *A. rostrata* Günther. (Omitted in "Genera of Fishes.")

²⁶⁸ *Gargilius* (Jensen, Adolf Severien) Schmidt (Ernest Johannes), "Contrib. Life Hist. Eel," 177, 1906; no description and no specific name given; a small deep-water gadoid. (See Holt & Byrne, *Fish. Ireland Invest.*, 5: 58.)

²⁶⁹ A new generic name to replace *Arnoldina*, preoccupied in *Unionidæ* (Hannibal, 1917).

Family 311. MERLUCCIIDÆ

(Hakes)

- Merluccius**²⁷⁰ Rafinesque, 1810, 79.
Onus Rafinesque, 1810, 81.
Merlangus Rafinesque, 1810, 83.
Stomodon Mitchell, 1814, 86.
Hydronus Minding, 1832, 176.
Merlus Guichenot, 1848, 238.
Merlucius Gronow, 1854, 259.
Homalopomus Girard, 1856, 269.
Epicopus Günther, 1860, 296.

²⁷⁰ Often spelled *Merlucius*.

Family 312. MURÆNOLEPIDÆ

Murænolepis Günther, 1880, 403.

Family 313. ERETMOGRAPHIDÆ

Hypsirhynchus Facciola, 1884, 427, 468. **Eretmophorus** Giglioli, 1889, 446.

Order SALMOPERCÆ

Adipose fin present; dorsal fin with spines.

The *Salmopercæ* and *Xenarchi* are detached fragments of a lost fresh water fauna of the Cretaceous or Eocene. They are closely related to each other, but neither has much affinity with other known fishes. The several orders which follow are often spoken of as *transitional* between soft-rayed and spiny-rayed fishes. The word is misleading. More accurately they are diverging offshoots from transitional forms now extinct; no linear series can express their varied relations, their line of evolution in some cases leading distinctly downward, that is, toward less

than ancestral specialization. Some groups as the *Percesoces* that seem to lead upward toward the *Percoidei* may really be declining downward from perch-like ancestry.

In general the forward movement is marked by the development of spines in the fins, the thoracic attachment of the ventral fins, the reduction in the number of ventral rays to six, the first being normally spinous, the loss of the mesocoracoid, the relegation of the maxillary to a subordinate position in the upper jaw, the roughening of the scales, the obliteration of the duct to the air bladder, with a number of minor characters. These transitions do not appear uniformly, and they are sometimes disguised by special traits of degeneration among the varied groups naturally regarded as Acanthopterygians or spiny-rayed. But nowhere in the vast range of variety among fishes is it possible to arrange a linear series which shall express the actual fact. The most one can do is keep up a sort of marching abreast from the *Ganoids*, through the *Isospondyli* and transitional types to the specialized *Acanthopteri* and their peculiar offshoots. In this group and the next, which is closely related, the pneumatic duct is obsolete; dorsal and anal each with a few spines; ventral rays more than five.

Family 314. **PERCOPSIDÆ**

(Sand Rollers; Trout Perch)

Adipose fin present; ventrals subabdominal, without spine.

Percopsis Agassiz, 1848, 232.

Columbia Eigenmann, 1892, 457.

Salmoperca Thompson, 1851, 249.

Order **XENARCHI**

Adipose fin wanting; ventrals subthoracic, with a spine.

Family 315. **APHREDODERIDÆ**

(Pirate Perch)

*Aphredoderus*²¹¹ Cuvier & Valenciennes,
1833, 178.

ERISMATOPTERUS Cope, 1870, 356.

TRICHOPHANES Cope, 1872, 364.

Sternotremia Nelson, 1876, 386.

Asternotremia Nelson, 1877, 390.

AMPHIPLAGA Cope, 1877, 388.

²¹¹ Corrected to *Aphododerus* and *Aphrodedirus* by authors.

Family 316. **ASINEOPIDÆ**

ASINEOPS Cope, 1872, 356.

Order **ALLOTRIOGNATHI**

Suborder **HISTICHTHYES**

Family 317. **VELIFERIDÆ**

Velifer Temminck & Schlegel, 1850, 247.

Family 318. **LOPHOTIDÆ***Lophotes* Giorna, 1805, 74.*Podoleptus* Rafinesque, 1815, 92.*Leptopus* Rafinesque, 1814, 86.*Eumecichthys*²⁷² Regan, 1907.

²⁷² *Proc. Zool. Soc. Lond.*, 638, 1907; orthotype *Lophotes fiskii* Günther. (Omitted in "Genera of Fishes.")

Suborder **TAENIOSOMI**Family 319. **REGALECIDÆ**

(Oar Fishes; Sea Serpents)

Regalecus Brünnich, 1771, 28.*Xypterus* Rafinesque, 1810, 82.*Regalecus* Ascanius, 1788, 45.*Epidesmus* Ranzani, 1818, 107.*Gymnetrus* Bloch, 1788, 45.*Xiphichthys* Swainson, 1839, 201.*Cephalepis* Rafinesque, 1810, 82.Family 320. **TRACHIPTERIDÆ**

(King-of-the-Herring)

*Trachipterus*²⁷³ Gouan, 1770, 28.*Nemochirus* Rafinesque, 1815, 86, 407.*Gymnogaster* Brünnich, 1788, 168.*Nemotherus* Costa, 1834, 180.*Bogmarus* Bloch & Schneider, 1801, 60.*Vogmarus* Reid, 1849, 244.*Argyctius* Rafinesque, 1810, 80.

²⁷³ Usually corrected to *Trachypterus*.

Suborder **ATELAXIA**Family 321. **STYLEPHORIDÆ***Stylephorus* Shaw, 1791, 50.Family 322. **GIGANTURIDÆ***Gigantura* Brauer, 1901, 492.Order **SELENICHTHYES**

Ventrals many-rayed; basal bones of pectoral set horizontally; humeral arch and pelvic bones enormously enlarged; body very deep, compressed.

Family 323. **LAMPRIDÆ**

(Opah; Moon-fish)

Lampris Retzius, 1799, 54.

DIATOMÆCA Jordan & J. Z. Gilbert, 1919,
569.

Chrysotosus Lacépède, 1803, 65.*Echemythes* Gistel, 1848, 235.Family 324. **SEMIOPHORIDÆ***SEMIOPHORUS* Agassiz, 1838, 191.Order **HETEROSOMATA**

(Flounders; Flat Fishes)

Both eyes on the same side of the body.

The flounders and soles, having no spines and the ventral fins thoracic

with an increased number of rays, should not be placed far from the percomorphous series. Boulenger suggests that the group may have close affinities with the *Amphistiidae* and *Zeidae*, constituting with these the order *Zeorhombi*. This view of the case is plausible, but it is far from established.

Family 325. PSETTODIDÆ

Psettodes Bennett, 1830, 174.

Sphagomorus Cope, 1867, 344.

Family 326. BOTHIDE

Solea Catesby, 1771, 31.

Psetta Klein, 1775, 38.

Europus Klein, 1775, 38.

Rhombus Klein, 1775, 38.

Citharus Röse, 1793, 52.

Bothus Rafinesque, 1810, 79.

Scophthalmus Rafinesque, 1810, 82.

Rhombus Cuvier, 1817, 100.

Rhomboides Goldfuss, 1820, 171.

Zeugopterus Gottsche, 1835, 182.

Citharus Reinhardt, 1838, 193.

Psetta Swainson, 1839, 203.

Platophrys Swainson, 1839, 203.

Syacium Ranzani, 1840, 207.

Peloria Cocco, 1844, 219.

Passer Valenciennes, 1855, 266.

Rhomboidichthys Bleeker, 1856, 267.

Lophopsetta Gill, 1861, 303, 331.

Citharus Bleeker, 1862, 310.

Hemirhombus Bleeker, 1862, 310.

Citharichthys Bleeker, 1862, 310.

Arnoglossus Bleeker, 1862, 310.

Orthopsetta Gill, 1862, 317.

Engyprosopon Günther, 1862, 319.

Phrynorhombus Günther, 1862, 319.

Lepidorhombus Günther, 1862, 319.

Metoponops Gill, 1864, 331.

*Bascanius*²⁷⁴ Schiöde, 1868, 353.

Nematops Günther, 1880, 403.

Lophonectes Günther, 1880, 403.

Monolene Goode, 1880, 403.

Thyris Goode, 1880, 403.

Anticitharus Günther, 1880, 403.

Læops Günther, 1880, 403.

Thysanopsetta Günther, 1880, 403.

Lepidopsetta Günther, 1880, 403.

Etropus Jordan & Gilbert, 1881, 416.

Lophorhombus Macleay, 1882, 421.

Delothyris Goode, 1883, 424.

Charybdia Facciola, 1885, 431.

Aramaca Jordan & Goss, 1885, 433.

Cyclopsetta Gill, 1888, 441.

Azevia Jordan & Goss, 1888, 442.

Eucitharus Gill, 1888, 441.

Trichopsetta Gill, 1888, 441.

Engyophrys Jordan & Bollman, 1889, 447.

Psettylis Alcock, 1890, 450.

Scianectes Alcock, 1890, 450.

Caulopsetta Gill, 1893, 461.

Chascanopsetta Alcock, 1894, 463.

Embassichthys Jordan & Evermann, 1896, 475.

Boopsetta Alcock, 1896, 470.

Pelecanichthys Gilbert & Cramer, 1897, 477.

Perissias Jordan & Evermann, 1898, 481.

Apsetta Kyle, 1900, 490.

*Scæops*²⁷⁵ Jordan and Starks, 1904.

Tæniopsetta Gilbert, 1905, 513.

Mancopsetta Gill, 1905, 514.

Lambdopsetta Smith & Pope, 1906, 520.

*Trachypterophrys*²⁷⁶ Franz, 1910.

Plagiopsetta Franz, 1910, 535.

*Laiopteryx*²⁷⁷ Weber, 1913, 551.

²⁷⁴ An undetermined larva.

²⁷⁵ *Scæops* Jordan & Starks, *loc. cit.*, 623; orthotype *Rhombus grandisquama* Temminck & Schlegel.

²⁷⁶ *Op. cit.*, 60; orthotype *P. raptator* Franz; a synonym of *Chascanopsetta* Alcock, according to McCulloch. (Omitted in "Genera of Fishes.")

²⁷⁷ Misprinted *Liopteryx* in "Genera of Fishes."

Pseudocitharichthys²⁷⁸ Weber, 1913.
Lepidoblepharon Weber, 1913, 551.
EOBOTHUS Eastman, 1914, 552.
Læoptichthys Hubbs, 1915, 556.
Citharoides Hubbs, 1915, 556.
Psettina Hubbs, 1915, 556.

Asterorhombus Tanaka, 1915, 558.
Scidorhombus Tanaka, 1915, 558.
ZORORHOMBUS Jordan, 1920, 571.
Paracitharus²⁷⁹ Regan, 1920.
Crossorhombus²⁸⁰ Regan, 1920.
Platotichthys²⁸¹ Nichols, 1921.

²⁷⁸ *Op. cit.* 413; orthotype *P. aureus* Weber. (Omitted in "Genera of Fishes.")

²⁷⁹ "A Review of the Flat Fishes (*Heterosomata*) of Natal," *Ann. Durban Museum*, 2: 209, March 25, 1920; type *Arnoglossus macrolepis* Günther.

²⁸⁰ Regan, *op. cit.*, 211; type *Platophrys dimorphus* Günther.

²⁸¹ "List of Turks Island Fishes," *Bull. Amer. Mus. Nat. Hist.*, 44: 21; orthotype *P. chartes* Nichols.

Family 327. PARALICHTHYIDÆ

(Bastard Halibuts)

To the *Bothidæ* Regan refers all sinistral or "left-handed" flounders. The genera named below, however, seem to me quite as closely related to the *Hippoglossidæ* as to *Bothus* and *Platophrys*. They may be allowed to stand as a separate transitional subfamily or family pending further investigation.

Paralichthys²⁸² Girard, 1859.
Chænopsetta Gill, 1861, 303.
Uropsetta Gill, 1862, 317.
Pseudorhombus Bleeker, 1862, 310.
Tephritis Günther, 1862, 318.
Tephrinectes Günther, 1862, 319.
Ancylosetta Gill, 1864, 331.
Neorhombus Castelnau, 1875, 378.
Hippoglossina Steindachner, 1876, 387.
Teratorhombus Macleay, 1881, 416.

Notosema Goode & Bean, 1882, 419.
Xysteurys Jordan & Gilbert, 1890, 451.
Lioglossina Gilbert, 1890, 451.
Verecundum Jordan, 1890, 452.
Gastropsetta Goode & Bean, 1894, 463.
Ramularia Jordan & Evermann, 1898, 481.
Rhombiscus Jordan & Snyder, 1900, 490.
EVESTHES J. Z. Gilbert, 1905, 536.
Velifracta Jordan, 1907, 524.
Tarphops Jordan & Thompson, 1914, 553.

²⁸² Omitted from No. 657, "Genera of Fishes"; orthotype *Paralichthys maculosus* Girard.

Family 328. HIPPOGLOSSIDÆ

(Halibuts)

Hippoglossus Cuvier, 1817, 100.
Hippoglossoides Gottsche, 1835, 182.
Reinhardtius Gill, 1861, 302.
Drepanopsetta Gill, 1861, 303.
Platysomatichthys Bleeker, 1862, 310.
Pomatopsetta Gill, 1864, 331.
Atheresthes Jordan & Gilbert, 1880, 404.
Eopsetta Jordan & Goss, 1885, 433.
Lyopsetta Jordan & Goss, 1885, 433.

Verasper Jordan & Gilbert, 1898, 481.
Cynopsetta Schmidt, 1903, 506, 519.
Xystrias²⁸³ Jordan & Starks, 1904.
Veræqua J. & S., 1904, 509.
Dexistes J. & S., 1904, 509.
Araias J. & S., 1904, 509.
Cleisthenes J. & S., 1904, 509.
Protopsetta Schmidt, 1904, 511.
Acanthopsetta Schmidt, 1904, 511.

²⁸³ *Loc. cit.*, 623; orthotype *Hippoglossus grigorjewi* Herzenstein. (Omitted in "Genera of Fishes.")

Family 329. **PLEURONECTIDÆ**

<i>Pleuronectes</i> Linnaeus, 1758, 13.	<i>Pseudopleuronectes</i> Bleeker, 1862, 310.
<i>Passer</i> Klein, 1775, 38.	<i>Heteroprosopon</i> Bleeker, 1862, 310.
<i>Platessa</i> Cuvier, 1817, 100.	<i>Brachyprosopon</i> Bleeker, 1862, 310.
<i>Microstomus</i> Gottsche, 1835, 182.	<i>Liopsetta</i> Gill, 1864, 331.
<i>Limanda</i> Gottsche, 1835, 182.	<i>Euchalarodus</i> Gill, 1864, 331.
<i>Glyptocephalus</i> Gottsche, 1835, 182.	<i>Pœcilopsetta</i> Günther, 1880, 403.
<i>Cynioglossus</i> Bonaparte, 1837, 187.	<i>Flesus</i> Moreau, 1881, 416.
<i>Cynoglossa</i> Bonaparte, 1845, 226.	<i>Isopsetta</i> Lockington, 1882, 420.
<i>Platichthys</i> Girard, 1854, 257.	<i>Inopsetta</i> Jordan & Goss, 1885, 433.
<i>Psettichthys</i> Girard, 1854, 257.	<i>Kareius</i> Jordan & Snyder, 1900, 490.
<i>Parophrys</i> Girard, 1854, 257.	<i>Alæops</i> Jordan & Starks, 1904, 509.
<i>Pleuronichthys</i> Girard, 1854, 257.	<i>Limandella</i> Jordan & Starks, 1906, 519.
<i>Hypsopsetta</i> Gill, 1862, 575, 317.	<i>Gareus</i> Hubbs, 1915, 556.
<i>Lepidopsetta</i> Gill, 1862, 575, 317.	<i>Pluviopsetta</i> Tanaka, 1916, 560.
<i>Myzopsetta</i> Gill, 1861, 308, 331.	<i>Tanakius</i> Hubbs, 1918, 564.
<i>Clidoderma</i> Bleeker, 1862, 310.	<i>Errex</i> Jordan, 1919, 567.

Family 230. **SAMARIDÆ** (*Paralichthodidæ*)

<i>Samaris</i> Gray, 1831, 139.	<i>Paralichthodes</i> Gilchrist, 1902, 498.
<i>Brachypleura</i> Günther, 1862, 319.	<i>Samariscus</i> Gilbert, 1905, 513.

Family 331. **RHOMBOSOLEIDÆ**

<i>Psammodiscus</i> Günther, 1862, 319.	<i>Peltorhamphus</i> Günther, 1862, 319.
<i>Rhombosolea</i> Günther, 1862, 319.	<i>Oncopterus</i> Steindachner, 1875, 381.
<i>Ammotretis</i> Günther, 1862, 319.	

Family 332. **ACHIRIDÆ**

Eyes and color dextral. Ventral of the right side continuous along the ridge of the abdomen and joined to the anal; caudal free from dorsal and anal.

<i>Achirus</i> Lacépède, 1803, 65.	<i>Achiropsis</i> Steindachner, 1876, 387.
<i>Trinectes</i> Rafinesque, 1832, 142.	<i>Baiostoma</i> Bean, 1882, 419.
<i>Apionichthys</i> Kaup, 1858, 282.	<i>Amate</i> Jordan & Starks, 1906, 519.
<i>Soleotalpa</i> Günther, 1862, 319.	<i>Soleonasmus</i> Eigenmann, 1912, 543.
<i>Gymnachirus</i> Kaup, 1858, 282.	<i>Pnictes</i> Jordan, 1919, 567.

Family 333. **SOLEIDÆ**

(Soles)

Eyes and color dextral; caudal free from dorsal and anal, as are the ventral fins also.

<i>Solea</i> Klein, 1775, 40.	<i>Leptosoma</i> Nardo, 1827, 121.
<i>Solea</i> Quensel, 1806, 74.	<i>Monochir</i> Cuvier, 1829, 131.
<i>Solea</i> Rafinesque, 1810, 81.	<i>Monochirus</i> Bonaparte, 1837, 141, 187.
<i>Odontolepis</i> Fischer, 1813, 85.	<i>Microchirus</i> Bonaparte, 1837, 187.
<i>Monochirus</i> Rafinesque, 1814, 87.	<i>Spanius</i> Gistel, 1848, 236.
<i>Solea</i> Cuvier, 1817, 100.	<i>Monochirus</i> Kaup, 1858, 282.
<i>Monochirus</i> (Cuvier) Oken, 1817, 100.	<i>Aseraggodes</i> Kaup, 1858, 282.

Heteromycteris Kaup, 1858, 282.
Soleichthys Bleeker, 1860, 294.
Pegusa Günther, 1862, 319.
Microbuglossus Günther, 1862, 319.
Pardachirus Günther, 1862, 319.
Buglossus Günther, 1862, 319.
Liachirus Günther, 1862, 319.

Bowenia Haast, 1873, 369.
Quenselia Jordan, 1888, 442.
Pelotretis Waite, 1911, 541.
Phyllichthys McCulloch, 1916, 559.
Bathysolea Roule, 1916, 560.
*Eusolea*²⁸⁴ Roule, 1919.

²⁸⁴ New name, perhaps not intended as a generic name distinct from *Solea*. *Solea capellonis* Steindachner the only species mentioned.

Family 334. SYNAPTURIDÆ

Eyes dextral; ventrals distinct; dorsal and anal united with caudal.

*Brachirus*²⁸⁵ Swainson, 1839, 203.
Synaptura Cantor, 1849, 241.
Achiroides Bleeker, 1851, 247.
Æsopia Kaup, 1858, 282.
Euryglossa Kaup, 1858, 282.

Eurypleura Kaup, 1858, 282.
Anisochirus Günther, 1862, 319.
Zebrias Jordan & Snyder, 1900, 490.
*Austroglossus*²⁸⁶ Regan, 1920.

²⁸⁵ Not *Brachyrus* Swainson of page 71. The name *Brachirus* is first used by Swainson, 1839, II, page 71, for an ally of *Pterois*, with a brief diagnosis, no species being mentioned. On page 180 the same diagnosis is given without reference to species, the name being changed to *Dendrochirus*. On page 264 the definition is expanded, the word is spelled *Brachyrus* and two species, *zebra* and *brachypterus*, are mentioned. The first of these has been taken by the first reviser, Swain (1882), as type. On page 303 Swainson again uses the name *Brachirus*, this time for a genus of Soles, mentioning five species, *plagiusa*, *orientalis*, *zebra*, *commersoni* (anus) *jerreus*, and *pan*.

Of these, *plagiusa* is a *Symphurus*, not related to the others and not agreeing with the generic diagnosis. In 1849, recognizing that the name *Brachirus*, which he changes to *Brachyrus*, was preoccupied, Cantor offered *Synaptura* as a substitute, at the same time redescribing *commersonianus* and *zebra*. Bleeker next described *commersonianus* as the sole species of *Synaptura*, referring the others to *Brachirus*, a plan inadmissible, as *Synaptura* was a substitute name for *Brachirus*, and thus subject to the same limitations. Kaup (1858) makes *orientalis* type of a new genus (*Euryglossa*) which Günther (1862) recognizes as a subgenus, leaving *zebra*, *commersoniana* and *pan* in *Synaptura*. *Zebra* is the type of *Zebrias* Jordan & Snyder (1900); the two other species are congeneric, *commersonianus*, after Bleeker, presumably serving as Günther's type. Swain, however, definitely named *orientalis* as type as the first species mentioned under *Brachirus* which corresponds to the author's definition. It is, however, more convenient as well as according better to the rules to regard *commersonianus* as type of *Synaptura*.

The name *Brachirus* must go with its first use, for *Pterois zebra*, thus replacing *Dendrochirus*.

²⁸⁶ *Op. cit.*, 217; orthotype *Synaptura pectoralis* Kaup; right pectoral longer than head; dorsal rays in increased number.

Family 335. **CYNOGLOSSIDÆ**

(Tongue-fishes)

Eyes and color sinistral; dorsal and anal joined to the caudal; pectorals wanting; ventrals, if present, free from anal.

Plagusia Browne, 1789, 46.**Symphurus** Rafinesque, 1810, 81.*Plagiusa* Rafinesque, 1815, 88.**Plagusia** (Browne) Cuvier, 1817, 101.**Cynoglossus** Hamilton, 1822, 114.*Plagusia* Swainson, 1839, 203.**Bibronia** Cocco, 1844, 219.*Plagusia* Bonaparte, 1845, 187, 226.**Euporista** Gistel, 1848, 237.**Eupnoea** Gistel, 1848, 238.**Cantoria** Kaup, 1858, 282.**Grammichthys** Kaup, 1858, 282.**Aphoristia** Kaup, 1858, 282.**Icania** Kaup, 1858, 282.**Trulla** Kaup, 1858, 282.**Arelia** Kaup, 1858, 282.**Glossichthys** Gill, 1861, 303.**Ammopleurops** Günther, 1862, 319, 278.**Paraplagusia** Bleeker, 1865, 336.**Rhinoplagusia** Bleeker, 1870, 355.**Acedia** Jordan, 1888, 442.**Usinosita**²⁸⁷ Jordan & Snyder, 1900, 490.**Areliscus** Jordan & Snyder, 1900, 490.**Cynoglossoides** Von Bonde, 1922. (See Index.)²⁸⁷ Misprinted *Usinostia*.*Superorder* **ACANTHOPTERYGII**Order **ZEOIDEI**Family 336. **ZEIDÆ**

(John Dories)

A family of uncertain relations, having perhaps some affinities with the flounders, with the increased number of ventral rays characteristic of the berycoid fishes, and the adnate post-temporal of *Capros* and the chaetodonts.

Zeus Linnæus, 1758, 13.**Oreosoma** Cuvier, 1829, 127.**Cyttus** Günther, 1861, 575.**Cyttopsis** Gill, 1862, 314.**Zenopsis** Gill, 1862, 314.**CYTOIDES** Wettstein, 1886, 436.**Zenion** Jordan & Evermann, 1896, 473.**Rhombocyttus** Gill, 1893, 461.**Capromimus** Gill, 1893, 461.**Cyttosoma** Gilchrist, 1903, 503, 504.**Zen** Jordan, 1903, 504.**Stethopristes** Gilbert, 1905, 513.**Cyttomimus** Gilbert, 1905, 513.**Pseudocyttus** Gilchrist, 1906, 518.**Neocyttus**²⁸⁸ Gilchrist, 1906.**Parazenopsis** Cligny, 1909, 532.**Cyttula** Weber, 1913, 551.**Allocyttus** McCulloch, 1914, 554.²⁸⁸ *Op. cit.*, 4: 153; orthotype *N. rhomboidalis* Gilchrist. (Omitted in "Genera of Fishes.")Family 337. **GRAMMICOLEPIDÆ****Grammicolepis** Poey, 1873, 371.**Vesposus**²⁸⁹ Jordan, 1921.**Xenolepidichthys** Gilchrist, 1922. (See Index.)²⁸⁹ *Proc. U. S. Nat. Mus.*, 70: 649; orthotype *Vesposus egregius* Jordan.Order **XENOBERYCES**Family 338. **STEPHANOBERYCIDÆ****Stephanoberyx** Gill, 1883, 424.**Acanthochænus** Gill, 1884, 428.**Malacosarcus** Günther, 1887, 437.

Family 339. **MELAMPHAIDÆ**

A small group of deep-sea fishes not altogether homogeneous.

Metopias Lowe, 1843, 215.	Plectromus Gill, 1883, 424.
AULOLEPIS Geinitz, 1849, 408.	Scopelogadus Vaillant, 1888, 444.
Anoplogaster Günther, 1859, 291.	Lophocephalus Osorio, 1906, 520.
Melamphaës Günther, 1864, 333.	Scopeloberyx Zugmayer, 1911, 541.
Poromitra Goode & Bean, 1881, 419.	Poromitrella Zugmayer, 1911, 541.
Caulolepis Gill, 1883, 424.	

Order **BERYCOIDEI**Family 340. **POLYMIXIIDÆ**

Polymixia Lowe, 1838, 192.	IMOASTER Costa, 1857, 275.
Nemobrama Valenciennes, 1844, 223.	PLATYCORMUS von der Marck, 1858, 283.
PYCNOTERINX ²⁹⁰ Heckel, 1849, 243.	Dinemus Poey, 1860, 298.

²⁹⁰ Misprinted in "Genera of Fishes." This genus and the two which follow are probably berycoid, but their relations are uncertain.

Family 341. **BERYCOPSIDÆ**

BERYCOPSIS Dixon, 1850, 245.	STENOSTOMA Dixon, 1850, 245.

Family 342. **BERYCIDÆ**

Beryx Cuvier, 1829, 127.	HEMICYCLOLEPIS Steinla, 1868, 350.
PRISTIGENYS Agassiz, 1839, 191, 194.	SPINACITES Fritsch, 1893, 461.
Centroberyx Gill, 1862, 315.	ELECTROLEPIS Fritsch, 1893, 461.
MACROLEPIS von der Marck, 1863, 327, 346.	LOBOPTERUS Kramberger, 1895, 469.
HETEROLEPIS Costa, 1865, 336.	Trachichthodes Gilchrist, 1903, 503.
HEMIGONOLEPIS Steinla, 1868, 350.	BRADYURUS Gill, 1904, 508.
PRIONOLEPIS Steinla 1868, 350.	Austroberyx McCulloch, 1911, 540.
GONIOLEPIS Steinla, 1868, 350.	

Family 343. **HOPLOPTERYGIDÆ**

- HOPLOPTERYX** Agassiz, 1838, 191.

Family 344. **DIRETMIDÆ**

Diretmus Johnson, 1863, 326.	Discus ²⁹¹ Campbell, 1879, 399.

²⁹¹ A synonym of *Diretmus*.

Family 345. **MONOCENTRIDÆ**

(Pine-cone Fishes)

Monocentris Bloch & Schneider, 1801, 58.	Lepicantha Rafinesque, 1815, 89.
Lepisacanthus Lacépède, 1802, 62.	Cleidopus De Vis, 1883, 423.
Ericius Tilesius, 1809, 76.	

Family 346. **ANOMALOPIDÆ**

Heterophthalmus Bleeker, 1856, 267.	Photoblepharon Weber, 1902, 501.
Anomalops Kner, 1868, 352.	

Family 347. **TRACHICHTHYIDÆ****Trachichthys** Shaw, 1799, 55.**Hoplostethus** Cuvier & Valenciennes, 1829, 133.**ACROGASTER** Agassiz, 1838, 191.**SPHENOCEPHALUS** Agassiz, 1838, 191.**AIPICHTHYS** Steindachner, 1859, 293.**ACANTHOPHORIA** Kramberger, 1895, 469.**Paratrachichthys** Waite, 1899, 488.**Gephyroberyx**²⁹² Boulenger, 1902, 497.**Leiogaster** Weber, 1913, 551.²⁹² Misprinted in "Genera of Fishes."Family 348. **HOLOCENTRIDÆ**

(Soldier Fishes)

Holocentrus²⁹³ Gronow, 1763, 19.**Farer** Forskål, 1775, 34.**Holocentrus** (Gronow) Scopoli, 1777, 42.**Erythrinus**²⁹⁴ (Plumier) Lacépède, 1803, 72.**Corniger** Agassiz, 1829, 132.**Myripristis** Cuvier, 1829, 127.**Ostichthys** (Langsdorff) Cuvier & Valenciennes, 1829, 174.**Rhynchichthys** Cuv. & Val., 1831, 137.**HOMONOTUS** Dixon, 1850, 245.**Plectrypops** Gill, 1862, 315.**Rhinoberyx** Gill, 1862, 315.**Rhamphoberyx** Gill, 1863, 324.**Neomyripristis** Castelnau, 1873, 367.**Holotrachys** Günther, 1873, 369.**Neoniphon** Castelnau, 1875, 378.**Harpag** De Vis, 1884, 427.**Ostichthys** (Langsdorff) Jordan & Evermann, 1896, 473.**Flammeo** J. & E., 1898, 482.**Howella** Ogilby, 1898, 483.**TRACHICHTHYOIDES** Woodward, 1902, 501.**Beanea** Steindachner, 1902, 500.**Sargocentron** Fowler, 1904, 507.**Adioryx** Starks, 1908, 531.**CAPROBERYX** Regan, 1911, 540.²⁹³ Often written *Holocentrum*.²⁹⁴ Also written *Eritrinus* by Plumier.Family 349. **DINOPTERYGIDÆ****DINOPTERYX** Woodward, 1901, 496.Family 350. **CTENOTHRISSIDÆ****AULOLEPIS** Agassiz, 1844, 218.**CTENOTHRISSA** Woodward, 1899, 488.Family 351. **CARISTIIDÆ****Caristius** Gill & Smith, 1905, 514.**Platyberyx** Zugmayer, 1911, 541.Order **THORACOSTEI**Suborder **HEMIBRANCHII**

(Phthinobranchii)

Family 352. **GASTEROSTEIDÆ**

(Sticklebacks)

Gasterosteus Linnæus, 1758, 13.**Gasteracanthus** Pallas, 1811, 84.**Spinachia** Cuvier, 1817, 105.**Leiurus** Swainson, 1839, 200.**Polycanthus** Swainson, 1839, 200.**Apeltes** Dekay, 1842, 210.

Pungitius²⁹⁵ Coste, 1846.

Pygosteus (Brevoort) Gill, 1861, 302.

Gastræa Sauvage, 1874, 377.

Gasterosteus Sauvage, 1874, 377.

Eucalia Jordan, 1876, 386.

MERRIAMELLA Jordan, 1907, 525.

²⁹⁵ Coste, P., "Nidification des épinoches et des épinochettes," *Mém. Savants Étrangers*, Paris, 1846, 10: 574-588. Quoted by Gill, "Smithsonian Report for 1905," 505, 1907; type *Gasterosteus pungitius* Linnæus; replaces *Pygosteus* Brevoort. I owe this note to William Converse Kendall, not having seen Coste's paper.

Family 353. **AULORHYNCHIDÆ**

Aulorhynchus Gill, 1861, 305.

Auliscops Peters, 1866, 342.

Aulichthys Brevoort, 1862, 315.

Family 354. **PROTOSYNGNATHIDÆ**

PROTOSYNGNATHUS Von der Marck, 1876,
386.

Suborder **LOPHOBRANCHII**

Family 355. **SOLENOTOMIDÆ**

Solenostomus²⁹⁶ Lacépède, 1803, 67.

Solenichthus²⁹⁷ Bleeker, 1865, 336.

SOLENOTHYNCHUS Heckel, 1854, 259.

²⁹⁶ Written *Solenostoma* by Rafinesque.

²⁹⁷ Later written *Solenostomatichthys* by Bleeker.

Family 356. **SYNGNATHIDÆ** (*Hippocampidæ*) (Pipe Fishes; Sea Horses)

The pipe fishes, elongate, with caudal fin, grade almost imperceptibly into the more specialized sea horses (*Hippocampus*), in which the caudal is wanting and the tail prehensile.

Syngnathus Linnæus, 1758, 16.

Acus P. L. S. Müller, 1767, 24.

Acus Valmont, 1791, 50.

Typhle Rafinesque, 1810, 78.

Siphostoma Rafinesque, 1810, 79.

Hippocampus Rafinesque, 1810, 79.

Nerophis Rafinesque, 1810, 82.

Hippocampus Leach, 1814, 85.

Tiphlinus Rafinesque, 1815, 91.

Hippocampus Cuvier, 1817, 98.

Scyphius Risso, 1826, 119.

Nematosoma Eichwald, 1831, 176.

Acestra Jardine, 1831, 137.

CALAMOSTOMA Agassiz, 1833, 177.

Acus Swainson, 1839, 205.

Solegnathus²⁹⁸ Swainson, 1839, 205.

Phyllopteryx Swainson, 1839, 205.

Hippichthys Bleeker, 1849, 241.

Syngnathoides Bleeker, 1851, 248.

Microphis Kaup, 1853, 254.

Hemimarsupium Kaup, 1853, 254.

Doryichthys Kaup, 1853, 254.

Chæroichthys Kaup, 1853, 254.

Stigmatopora²⁹⁹ Kaup, 1853, 254.

Doryrhamphus Kaup, 1853, 254.

Leptoichthys Kaup, 1853, 254.

Leptonotus Kaup, 1853, 253.

Ichthyocampus Kaup, 1853, 253.

Corythoichthys³⁰⁰ Kaup, 1853, 253.

Trachyrhamphus Kaup, 1853, 253.

Halicampus Kaup, 1853, 253.

Gasterotokeus Heckel, 1853, 253.

²⁹⁸ Later spelled *Solenognathus*.

²⁹⁹ Spelled *Stigmatophora* by error.

³⁰⁰ Spelled *Corythroichthys* by error.

- Acentronura** Kaup, 1853, 253.
Cælonotus Peters, 1855, 266.
Siphonostoma^{300a} Kaup, 1856.
Hemithylacus Kaup, 1856, 272.
Solenognathus Bleeker, 1856, 268.
Haliichthys Gray, 1859.
Dermatostethus Gill, 1862, 317.
Pseudosyngnathus Kner, 1863, 327, 338.
Belonichthys Peters, 1868, 353.
Protocampus Günther, 1870, 357.
Entelurus Duméril, 1870, 357.
Nannocampus Günther, 1870, 357.
Urocampus Günther, 1870, 357.
Hymenolomus Duméril, 1870, 357.
Atelurus Duméril, 1870, 357.
Typhlus (Bibron) Bleeker, 1870, 357.
Osphyolax Cope, 1875, 379.
Penetropteryx Lunel, 1881, 416.
Acmonotus Philippi, 1896, 475.
Phycodurus Gill, 1896, 471.
Yozia Jordan & Snyder, 1901, 495.
Castelnauiina Fowler, 1907, 523.
Macleayina Fowler, 1907, 523.
Acanthognathus Duncker, 1912, 542.
Micrognathus Duncker, 1912, 542.
Apterygocampus Weber, 1913, 551.
Histiogamphelus McCulloch, 1914, 553.
Lissocampus³⁰¹ Waite & Hale, 1921.

^{300a} *Op. cit.*, 46; orthotype *Syngnathus typhle* Linnæus. A synonym of *Typhle*. (Omitted in "Genera of Fishes.")

³⁰¹ *Records South Australian Museum*, 1: 306, Jan. 29, 1921; orthotype *L. caudalis* Waite & Hale.

Order HYPOSTOMIDES

Family 357. PEGASIDÆ

(Sea Moths)

- Pegasus** Linnæus, 1758, 16.
Cataphractus Gronow, 1763, 21.
Eurypegasus Bleeker, 1863, 322.
Parapegasus Bleeker, 1870, 357.
Leptopegasus Bleeker, 1873, 367.
Zalises Jordan & Snyder, 1901, 494.
Acanthopegasus McCulloch, 1915, 556.

Order AULOSTOMI

Family 358. AULOSTOMIDÆ

(Trumpet Fishes)

- Aulostomus**³⁰² Lacépède, 1803, 66.
Polypterichthys Bleeker, 1853, 252.

³⁰² Often written *Aulostoma*.

Family 359. FISTULARIIDÆ

(Cornet Fishes)

- Fistularia** Linnæus, 1758, 14.
Solenostomus Gronow, 1763, 21.
Petimbuabo Catesby, 1771, 31.
Solenostomus Klein, 1778, 43.
Solenostomus Browne, 1789, 46.
Aulus (Commerson) Lacépède, 1803, 70.
Cannorhynchus Cantor, 1849, 241.
Flagellaria³⁰³ Gronow, 1854.
Solenostomus (Gronow) Gill, 1861, 302.
PROTAULOPSIS Woodward, 1901, 496.

³⁰³ Type *F. fistularis* Gronow, *F. tabacaria* Linnæus. (Omitted in "Genera of Fishes.")

Family 360. UROSPHENIDÆ

- UROSPHEN** Agassiz, 1844, 181, 218.

Family 361. RHAMPHOSIDÆ

- RHAMPHOSUS** Agassiz, 1844, 218.

Family 362. **CENTRISCIDÆ** (*Amphisilidæ*)**Centriscus** Linnæus, 1758, 16.*Amphisilen* Klein, 1775, 38.**Amphisile** Cuvier, 1817, 106.**Acentrachme** Gill, 1862, 315.**AULORHAMPHUS** Zigno, 1890, 453.**Æoliscus** Jordan & Starks, 1902, 499.Family 363. **MACRORHAMPHOSIDÆ****Macrorhamphosus** Lacépède, 1803, 66.**Macrognathus** Gronow, 1854, 259.**Orthichthys** Gill, 1862, 315.**Centriscops** Gill, 1862, 315.**Limiculina** Fowler, 1907, 523.**Notopogon** Regan, 1914, 555.**Scolopacichthys** Regan, 1914, 555.Order **LABYRINTHICI**Family 364. **LUCIOCEPHALIDÆ****Diplopterus**³⁰⁴ Gray, 1831, 138.**Luciocephalus** Bleeker, 1851, 247.³⁰⁴ This name is preoccupied; the genus is identical with *Luciocephalus*.Family 365. **OPHICEPHALIDÆ***Channa* Gronow, 1763, 22.**Channa** (Gronow) Scopoli, 1777, 42.**Ophicephalus**³⁰⁵ Bloch, 1794, 53.**Philypnoides** Bleeker, 1849, 241.³⁰⁵ Usually spelled *Ophiocephalus*.Family 366. **HELOSTOMIDÆ****Helostoma** (Kuhl) Cuvier, 1829, 129.**Spirobranchus** Cuvier, 1829, 129.**Sandelia** Castelnau, 1861, 301.Family 367. **POLYACANTHIDÆ****Polyacanthus** (Kuhl) Cuvier, 1829, 129, 173.Family 368. **OSPHRONEMIDÆ****Osphronemus**³⁰⁶ Lacépède, 1801, 61.**Trichogaster** Bloch & Schneider, 1801, 58.**Trichopodus** Lacépède, 1802, 61.**Macropodus**³⁰⁷ Lacépède, 1802, 63.**Platyopopus** Lacépède, 1804, 169.**Trichopus** Shaw, 1804, 73.**Colisa** Cuvier & Valenciennes, 1831, 137.**Ctenops** McClelland, 1845, 227.**Pedites** Gistel, 1848, 236.**Lithulcus** Gistel, 1848, 237.**Betta** Bleeker, 1850, 245.**Trichopsis** Canestrini, 1860, 295.**Sphærichthys** Canestrini, 1860, 295.**Parosphromenus** Bleeker, 1879, 398.**Pseudosphromenus** Bleeker, 1879, 398.**Micracanthus** Sauvage, 1879, 400.**Parophiocephalus**³⁰⁸ Popta, 1905, 515.**Oshimia** Jordan, 1919, 567.³⁰⁶ Written *Osphromenus* by authors.³⁰⁷ Written *Macropus* by authors.³⁰⁸ A synonym of *Betta*.Family 369. **ANABANTIDÆ**

(Climbing Perch)

Anabas Cuvier, 1817, 106.**Coius** Hamilton, 1822, 114.**Ctenopoma** Peters, 1846, 229.

Order PERCOMORPHI

Suborder PERCESOCES

Family 370. NANNATHERINIDÆ

*Nannatherina*³⁰⁹ Regan, 1906.

³⁰⁹ *Ann. Mag. Nat. Hist.*, 17: 451; orthotype *N. ralstoni* Regan. (Omitted in "Genera of Fishes.")

Family 371. BEDOTIIDÆ

Bedotia Regan, 1903, 506.

Family 372. MELANOTÆNIIDÆ

A group of river fishes of the Australian region, closely related to the *Atherinidæ* but showing certain traits which set them off as a distinct subfamily. The number of nominal genera had been inordinately multiplied.

Melanotænia Gill, 1862, 316.

Pseudomugil Kner, 1864, 334.

Strabo Kner & Steindachner, 1866, 341.

Nematocentris Peters, 1870, 356.

Atherinosoma Castelnau, 1872, 363.

Zantecla Castelnau, 1873, 367.

Neoatherina Castelnau, 1875, 378.

Aida Castelnau, 1875, 378.

Aristeus Castelnau, 1879, 393, 399.

*Rhombatractus*³¹⁰ Gill, 1894, 464.

Telmatherina Boulenger, 1897, 476.

Glossolepis Weber, 1907, 527.

Rhombosoma Regan, 1914, 554.

Rhadinocentrus Regan, 1914, 554.

Anisocentrus Regan, 1914, 554.

*Centratherina*³¹¹ Regan, 1914.

Chilatherina Regan, 1914, 554.

³¹⁰ The date 1879 on page 399, "Genera of Fishes," is an error.

³¹¹ Regan, *loc. cit.*; orthotype *Rhombatractus crassispinosus* Weber. (Omitted in "Genera of Fishes.")

Family 373. ATHERINIDÆ

(Silversides; Hardy Heads; Pescados del Rey; Peixerey)

Atherina Linnæus, 1758, 15.

Aphia^{312a} Risso, 1826, 119.

Hepsetia Bonaparte, 1837, 187.

Menidia Bonaparte, 1837, 187.

Membras Bonaparte, 1837, 142, 187.

Chirostoma Swainson, 1839, 200.

Argyrea Dekay, 1842, 210.

RHAMPHOGNATHUS Agassiz, 1844, 219.

MESOGASTER Agassiz, 1844, 219.

Atherinoides Bleeker, 1853, 253.

Atherinichthys Bleeker, 1853, 253.

Heterognathus Girard, 1854, 258.

Basilichthys Girard, 1854, 258.

Atherinopsis Girard, 1854, 257.

Labidesthes Cope, 1870, 356.

Protistius Cope, 1874, 375.

Atherinops Steindachner, 1875, 381.

Atherinella Steindachner, 1875, 381.

Gastropterus Cope, 1878, 394.

Leuresthes Jordan & Gilbert, 1880, 403.

Thyrina Jordan & Culver, 1895, 468.

Tropidostethus Ogilby, 1895, 469.

Lethostole Jordan & Evermann, 1896, 473.

Eurystole J. & E., 1896, 473.

Kirtlandia J. & E., 1896, 473.

Eslopsarum J. & E., 1896, 472.

Tæniomembras Ogilby, 1898, 483.

Pisciregia Abbott, 1899, 484.

Iso Jordan & Starks, 1901, 495.

Atherion J. & S., 1901, 485.

^{312a} These minute translucent fishes were regarded by Cuvier as the young of *Atherina*. But Risso describes their egg-laying, and they may be really a distinct form.

Melaniris Meek, 1902, 500.
Ischnomembras Fowler, 1903, 503.
Atherinomorus Fowler, 1903, 503.
Phoxargyrea Fowler, 1903, 503.
Odontesthes Evermann & Kendall, 1906, 517.
Xenatherina Regan, 1907, 526.
Craterocephalus McCulloch, 1912, 544.
Pseudothyria Ribeiro, 1915, 557.
Kronia Ribeiro, 1915, 557.

Colpichthys Hubbs, 1918, 564.
Austromeniidia Hubbs, 1918, 564.
Thyrinops Hubbs, 1918, 564.
Hubbesia Jordan, 1919, 566.
Rheocles Jordan & Hubbs, 1919, 567.
ZANTECLITES Jordan & J. Z. Gilbert, 1919, 568.
Archomenidia Jordan & Hubbs, 1919, 569.
Melanorhinus³¹² Metzelaar, 1920.

³¹² Metzelaar (Jan), "Over Tropisch Atlantisch Visschen, Amsterdam," 38; type *Melanorhinus boeki* Metzelaar.

Family 374. MUGILIDÆ

(Mulletts)

Mugil Linnæus, 1758, 15.
Albula Catesby, 1771, 30.
Cestreus Klein, 1777, 43.
Chelon Röse, 1793, 52.
Cephalus (Plumier) Lacépède, 1803, 73.
Agonostomus Bennett, 1830, 174.
Nestis Cuvier & Valenciennes, 1836, 185.
Dajaus Cuv. & Val., 1836, 185.
Cestræus Cuv. & Val., 1836, 185.
Arnion Gistel, 1848, 237.
Joturus Poey, 1860, 299.
Myxus Günther, 1861, 307.

Rhinomugil Gill, 1863, 324.
Chænomugil Gill, 1863, 324.
Gonostomyxus Macdonald, 1869, 355.
Neomyxus Steindachner, 1878, 397.
Querimana Jordan & Gilbert, 1882, 420.
Æschrichthys Macleay, 1883, 424.
Liza Jordan & Swain, 1884, 428.
Trachystoma Ogilby, 1887, 438.
Neomugil Vaillant, 1894, 466.
Ædalechilus Fowler, 1903, 502.
Squalomugil Ogilby, 1908, 529.
Xenorhynchichthys Regan, 1908, 530.

Family 375. SPHYRÆNIDÆ

(Barracudas)

Umbla Catesby, 1771, 29.
Sphyræna Klein, 1778, 43.
Sphyræna Röse, 1793, 52.
Sphyræna Bloch & Schneider, 1801, 58.

Acus (Plumier) Lacépède, 1803, 73.
*Sphærina*³¹³ Swainson, 1839.
Agriosphyræna Fowler, 1903, 502.

³¹³ A misprint for *Sphyræna*.

Suborder RHEGNOPTERI

Family 376. POLYNEMIDÆ

(Thread-fins)

Polynemus Linnæus, 1758, 15.
Trichidion Klein, 1775, 40.
Polydactylus Lacépède, 1803, 67.
Galeoides Günther, 1860, 297.
Pentanemus Günther, 1860, 296.

Trichidion (Klein) Gill, 1861, 302.
Polistonemus Gill, 1861, 305.
Eleutheronema Bleeker, 1862, 310.
Eleutherochir Bleeker, 1879, 398.

Series *SCOMBRIFORMES*Family 377. *SCOMBRIDÆ*

(Mackerels)

- Scomber** Linnæus, 1758, 14.
Pelamys Klein, 1775, 37.
Scomberomorus Lacépède, 1802, 62.
Macrorhynchus (Lacépède) Duméril, 1806, 56, 75.
Polipturus Rafinesque, 1815, 89.
Cybius Cuvier, 1829, 129.
Apolectus Bennett, 1831, 173, 175, 284.
Apodontis Bennett, 1831, 173, 284.
XIPHOPTERUS Agassiz, 1835, 181.
DICTYODUS Owen, 1839, 196.
SPHYRÆNODUS (Owen) Agassiz, 1841, 209, 219.
PALIMPHYES Agassiz, 1844, 218, 231.
ISURUS (Egerton) Agassiz, 1844, 189, 218.
Gasteroschisma Richardson, 1845, 227.
ACROPOMA Owen, 1854, 260.
EUCYNODUS Owen, 1854, 260.
Cordylus Gronow, 1854, 259.
Acanthocybius Gill, 1862, 314.
Lepidocybius Gill, 1862, 314.
STEREODUS Owen, 1865, 339.
SCOMBERODON Van Beneden, 1871, 360.
Chriomitra Lockington, 1879, 400.
MEGALOLEPIS Kramberger, 1879, 400.
Pneumatophorus Jordan & Gilbert, 1882, 420.
AMPHODON Storms, 1886, 436.
Lepidothynnus Günther, 1889, 447.
CÆLOPOMA (Agassiz) Woodward, 1901, 224.
SCOMBRINUS (Agassiz) Woodward, 1901, 224, 496.
RHONCHUS (Agassiz) Woodward, 1901, 224, 496.
ISURICHTHYS Woodward, 1901, 496.
EOCÆLOPOMA Woodward, 1901, 496.
SCOMBRAMPHODON Woodward, 1901, 496.
Chenogaster Lahille, 1903, 505.
KRAMBERGÆRIA Simionescu, 1904, 511.
Sierra Fowler, 1905, 512.
PELAMYCYBIUM Toulou, 1905, 516.
NEOCYBIUM Leriche, 1906, 519.
Nesogrammus Evermann & Seale, 1907, 522.
Rastrelliger Jordan & Starks, 1908, 528.
AUXIDES Jordan, 1919, 568.
TUNITA J. & G., 1919, 569.
TURIO J. & G., 1920, 571.
THYRSOCLES J. & G., 1920, 571.
THYRSION Jordan, 1920, 571.
ZAPHLEGES Jordan, 1920, 571.
OCYSTIAS Jordan, 1920, 571.
*XESTIAS*³¹⁴ Jordan, 1921.

³¹⁴ "Fish Fauna, Cal. Tertiary," 270; type *X. iratus* Jordan.Family 378. *THUNNIDÆ*

(Tunnies; Albacores)

"The bonitos and tunnies are quite different from other teleostomous fish in having dark red muscles deeply situated on both sides of the vertebral column."—(K. Kishinouye, *Proc. Pan-Pacific Scientific Conference*, 1: 229, 1921.)

- Thynnus* Browne, 1789, 48.
Thynnus Cuvier, 1817, 105.
Orcynus Cuvier, 1817, 105.
Sarda Cuvier, 1829, 129.
Auxis Cuvier, 1829, 129.
Pelamys Cuvier & Valenciennes, 1831, 573.
Palamita Bonaparte, 1831, 175.
Thunnus South, 1845, 227.
Creotroctes Gistel, 1848, 237.
Orycnus Gill, 1862, 315.
Gymnosarda Gill, 1862, 315.
Orcynopsis³¹⁵ Gill, 1862, 314.
Grammatorcynus³¹⁶ Gill, 1862, 314.

³¹⁵ Misprinted *Orycnopsis*.³¹⁶ Misprinted *Grammatorcynus*.

Orycnus Gill 1862, 315.
Thynnichthys Giglioli, 1880, 402.
Pelamichthys Giglioli, 1880, 402.
Euthynnus (Lütken) Jordan & Gilbert,
 1882, 420.
Germo Jordan, 1888, 442.
Albacora Jordan, 1888, 442.

CÆLOCEPHALUS (Agassiz) Woodward,
 1901, 219.
PHALACRUS (Ag.) Woodward, 1901, 224.
EOTHYNNUS Woodward, 1901, 496.
CARINICEPS (Owen) Woodward, (1854)
 1901, 260, 496.
OZYMANDIAS Jordan, 1919, 569.

Family 379. **GEMPYLIDÆ**

(Snake Mackerels; Escolares)

Acinaces Bory de St. Vincent, 1804, 170.
Macrorhynchus (Lacépède) Duméril,
 1806, 56.
Thyrsites Cuvier, 1829, 129.
Gempylus Cuvier, 1829, 129.
Lemnisoma Lesson, 1830, 140.
Ruvettus Cocco, 1833, 178.
Acanthoderma Cantraine, 1837, 188.
Aplurus Lowe, 1841, 209.
Prometheus Lowe, 1841, 209.
Epinnula Poey, 1854, 260.
Dicrotus Gumber, 1860, 297.
THYRSITOCEPHALUS Rath, 1859, 292.
Thyrsitops Gill, 1862, 314.

Nesiarchus Johnson, 1862, 319.
Nealotus Johnson, 1865, 338.
ACANTHONOTUS Sauvage, 1870, 359.
HEMITHYRSITES Sauvage, 1873, 371.
Gyrionemus Vaillant, 1888, 443.
BATHYSOMA Davis, 1890, 450.
Promethichthys Gill, 1893, 461.
Escolar Jordan & Evermann, 1896, 468.
Bipinnula Jordan & Evermann, 1896, 474.
Machærope Ogilby, 1898, 483.
Xenogramma Waite, 1904, 511.
Jordanidia Snyder, 1911, 541.
Rexia Waite, 1911, 541.

Family 380. **TRICHIURIDÆ** (*Lepidopidæ*)

(Hair-tails)

Trichiurus Linnæus, 1758, 12.
Gymnogaster Gronow, 1767, 22.
Lepidopus Gonau, 1770, 28.
Enchelyopus Klein, 1775, 57.
Vandellia Shaw, 1803, 73.
Scarcina Rafinesque, 1810, 79.
Xiphotheca²¹⁷ Montagu, 1812, 84.
ANENCHELUM Blainville, 1818, 107.
Aphanopus Lowe, 1839, 195.

Zypothyca Swainson, 1839, 200.
LEPIDOPIDES Heckel, 1850, 246.
Lepturus (Artedi) Gill, 1861, 302.
Enchelyopus (Klein) Bleeker, 1862, 310.
Eupleurogrammus Gill, 1862, 314.
Evoxymetopon Poey, 1863, 325.
TRICHIURICHTHYS Sauvage, 1873, 371.
Benthodesmus Goode & Bean, 1882, 419.
Lepturacanthus Fowler, 1905, 512.

²¹⁷ Written *Ziphotheca* by Swainson.

Series **XIPHIIFORMES**

Family 381. **PALÆORHYNCHIDÆ**

PALÆORHYNCHUM Blainville, 1818, 108.
HEMIRHYNCHUS Agassiz, 1844, 219.

HOMALORHYNCHUS Van Beneden, 1873,
 367.

Family 382. **BLOCHIIDÆ**

BLOCHIUS Volta, 1796, 54.
CÆLORHYNCHUS Agassiz, 1844, 219.

GLISCUS Gistel, 1848, 235.

Family 383. **ISTIOPHORIDÆ**

(Sail Fishes; Spear Fishes)

Istiophorus³¹⁸ Lacépède, 1802, 62.**Makaira**³¹⁹ Lacépède, 1803, 65.**Notistium** Herrmann, 1804, 74.**Tetrapturus** Rafinesque, 1810, 80.**Skeponopodus** Nardo, 1833, 179.**Zanclurus** Swainson, 1839, 200.**ENCHEIZIPHIUS** Rütimeyer, 1857, 276.**EMBALORHYNCHUS** Marsh, 1870, 359.**BRACHYRHYNCHUS** Van Beneden, 1871,
360.³¹⁸ Written *Histiophorus* by authors.³¹⁹ Also spelled *Machara* and *Macaria* by authors.Family 384. **XIPHIIDÆ**

(Sword Fishes)

Xiphias Linnæus, 1758, 12.**ACESTRUS** (Agassiz) Woodward, 1901,
221, 496.Family 385. **XIPHIORHYNCHIDÆ****XIPHIORHYNCHUS** Van Beneden, 1871,
360.**OMMATOLAMPES** Fischer von Waldheim,
1850, 246.*Series LUVARIFORMES*Family 386. **LUVARIDÆ****Luvarus** Rafinesque, 1810, 79.**Ausonia** Risso, 1826, 120.**Scrofaria** Gistel, 1848, 235.*Series CORYPHAENIFORMES*Family 387. **CORYPHÆNIDÆ**

(Dolphins; Dorados)

Coryphæna Linnæus, 1758, 12.**Hippurus** Klein, 1779, 43.**Caranxomorus** Lacépède, 1802, 61.**Coryphus** (Commerson) Lacépède, 1802,
70.**Lepimphis** Rafinesque, 1810, 79.**Lampugus** Cuvier & Valenciennes, 1833,
178.**Sarda** Gronow, 1854, 259.*Series BRAMIFORMES*Family 388. **BRAMIDÆ**

(Sea-brems)

The fishes of this family have some traits in common with the *Selenichthyes*, from which they may be derived.

Brama Bloch & Schneider, 1801, 58.**Lepodus** Rafinesque, 1810, 80.**Taractes** Lowe, 1843, 215.**Tylometopon** (Van Bemmelen) Bleeker,
1876, 383.**Argo** Döderlein, 1883, 426.**Collybus** Snyder, 1904, 511.**Eumegistus**³²⁰ Jordan & Jordan, 1923.

³²⁰ Jordan (David Starr) and Jordan (Eric Knight), "Fishes of Hawaii," *Mem. Carnegie Museum*, 35; orthotype *Eumegistus illustris* Jordan & Jordan.

Family 389. **STEINEGERIIDÆ**

Steinegeria Jordan & Evermann, 1886,
435.

Family 390. **DIANIDÆ**

Diana Risso, 1826, 119.

Astrodermus (Bonelli) Cuvier, 1829, 129.

Proctostegus Nardo, 1827, 121.

Family 391. **PTERACLIDÆ**

Pteraclis Gronow, 1763, 22.

Oligopodes (Risso) Cuvier, 1817, 105.

Pteraclis Gronow, 1772, 22.

Oligopus^{320a} Risso, 1826, 105.

Pteridium Scopoli, 1777, 41.

Pterycombus Fries, 1837, 189.

Oligopodus Lacépède, 1800, 57.

Centropholis Hilgendorf, 1878, 395.

Pteraclidus Rafinesque, 1815, 88.

Bentenia Jordan & Snyder, 1901, 494.

^{320a} Type *Oligopus niger* Risso.

Family 392. **ELEPHENORIDÆ**

Elephenor Jordan, 1919, 568.

Series **STROMATEIFORMES**Family 393. **STROMATEIDÆ**

Teeth in the gullet; scales small, mostly silvery; first dorsal more or less rudimentary.

Stromateus Linnæus, 1758, 12.

Poronotus Gill, 1861, 302.

Rhombus Lacépède, 1800, 56.

Psenopsis Gill, 1862, 314.

Lepterus Rafinesque, 1810, 80.

ASPIDOLEPIS Geinitz, 1868, 349.

Fiatola Cuvier, 1817, 106.

Palometa Jordan & Evermann, 1896, 474.

Seserinus (Cuvier) Oken, 1817, 106.

Pterorhombus Fowler, 1906, 517.

Fiatola Risso, 1826, 119.

Eucrotus B. A. Bean, 1912, 541.

Peprilus Cuvier, 1829, 129.

Toledia Ribeiro, 1915, 557.

Family 394. **PAMPIDÆ**

The fishes of this group are closely similar to the *Stromateidæ* in character and appearance, differing, however, in the narrowly restricted gill openings.

Pampus Bonaparte, 1837, 187.

Leptolepis (Van Hasselt) Guichenot,
1867, 345.

Stromateoides Bleeker, 1851, 248.

Pampus (Bonaparte) Fowler, 1905, 513.

Chondroplites Gill, 1862, 314.

Family 395. **CENTROLOPHIDÆ**

This group or family is closely allied to the *Stromateidæ*, differing in the continuous dorsal, larger scales, and much more elongate form.

Centrolophus Lacépède, 1803, 64.

*Leirus*³²¹ Lowe, 1833, 179.

Acentrolophus Nardo, 1827, 121.

Mupus Cocco, 1833, 178.

Schedophilus Cocco, 1829, 133.

Gymnocephalus Cocco, 1838, 191.

³²¹ Usually written *Lirus*.

Pompilus Lowe, 1839, 195.

Palinurus³²² Dekay, 1842, 288.

Crius Valenciennes, 1844, 223.

Palinurichthys Bleeker, 1859, 288.

Palinurichthys Gill, 1860, 295.

Pammelas Günther, 1860, 297.

Hoplocoryphus Gill, 1862, 314.

Icichthys Jordan & Gilbert, 1880, 404.

Ectenias Jordan & Thompson, 1914, 553.

³²² "N. Y. Fauna Fishes," 118; orthotype *P. perciformis* Dekay; name preoccupied. (Omitted in "Genera of Fishes.")

Family 396. **NOMEIDÆ** (*Psenidæ*)

This group is closely allied to the *Stromateidæ*, having, like the latter, teeth in the gullet. It differs in the presence of a well-developed first dorsal fin.

Nomeus Cuvier, 1817, 105.

Psenes Cuvier & Valenciennes, 1833, 142.

Cubiceps Lowe, 1843, 215.

Serirolella Guichenot, 1848, 238.

Atimostoma Smith, 1849, 244.

CARANGODES Heckel, 1856, 270.

Hyperoglyphe Günther, 1859, 291.

Navarchus Filippi & Verany, 1859, 291.

Neptomenus Günther, 1860, 297.

Trachelocirrus Doumet, 1863, 323.

Bathyseriola Alcock, 1890, 449.

Ariomma³²³ Jordan & Snyder, 1904, 508.

Icticus³²⁴ Jordan & Thompson, 1914, 553.

³²³ Probably not distinguishable from *Cubiceps*.

³²⁴ *Icticus*, like *Icichthys*, *Schedophilus*, and *Icosteus*, is pelagic, the body soft and limp like a wet rag. *Icticus* has, however, a distinct spinous dorsal, and *Icosteus* is covered with tough naked skin beset on the lateral line and fin rays with prickles.

Family 397. **TETRAGONURIDÆ**

Allied to the *Stromateidæ*, according to Regan, the species having like-wise teeth in the gullet. The external characters are, however, very different.

Tetragonurus Risso, 1810, 77.

Ctenodax Macleay, 1886, 436.

Series ICOSTEIFORMES

Family 398. **ICOSTEIDÆ** (Rag Fishes)

This family and the next seem related to the *Centrolophidæ*, but the bones are very feeble and the gullet teeth seem to be wanting.

Icosteus³²⁵ Lockington, 1880, 404.

Schedophilopsis Steindachner, 1881, 417.

³²⁵ In *Icosteus* the ventral rays, I, 4; in *Acrotus* the fin is entirely wanting.

Family 399. **ACROTIDÆ**

Acrotus Bean, 1887, 437.

Series CARANGIFORMES

Vertebrae strong, 24 to 26 in number.

Family 400. APOLECTIDÆ

This group, with the general aspect of *Stromateus*, has the vertebræ 10 + 15 as in *Caranx*. The species lack the gullet teeth characteristic of the *Stromateidæ*. The dorsal and anal are without spines, in the adult at least, and the keeled tail is without scutes. The soft dorsal is inserted farther forward than in *Caranx*, in front of middle of body.

Apolectus Cuvier & Valenciennes, 1831,
174, 284.

Parastromateus Bleeker, 1865, 336.

Family 401. CARANGIDÆ
(Cavallas)

These fishes, having much in common with the scombroïd fishes, have nevertheless the vertebræ 10 + 14 = 24, as in typical percoids, toward which they form a gradual transition.

Glaucus Klein, 1775, 38.

Saurus Browne, 1789, 48.

Rhomboida Browne, 1789, 48.

Trachurus (Plumier) Lacépède, 1802, 72.

*Trachinotus*²²⁶ Lacépède, 1802, 61.

Pelamis (Plumier) Lacépède, 1802, 72.

Cæsiomorus Lacépède, 1802, 61.

Caranx Lacépède, 1802, 60.

Scomberoides Lacépède, 1802, 60.

Centronotus Lacépède, 1802, 62.

Acanthinion Lacépède, 1803, 64.

Gallus Lacépède, 1803, 64.

Argyreiosus Lacépède, 1803, 64.

Selene Lacépède, 1803, 64.

Guaperva (Plumier) Lacépède, 1803, 72.

*Hypacantha*²²⁷ Rafinesque, 1810, 80.

Trachurus Rafinesque, 1810, 79.

Tricropterus Rafinesque, 1810, 79.

Hypodis Rafinesque, 1810, 79.

Naucrates Rafinesque, 1810, 80.

Alectis Rafinesque, 1815, 88.

Baillonus Rafinesque, 1815, 89.

Orcynus Rafinesque, 1815, 89.

Seriola Cuvier, 1817, 105.

Citula Cuvier, 1817, 104.

Atropus (Cuvier) Oken, 1817, 105.

Lichia Cuvier, 1817, 105.

Blepharis Cuvier, 1817, 105, 129.

Vomer Cuvier, 1817, 105.

TERATICHTHYS König, 1825, 172.

Micropteryx Agassiz, 1829, 132.

Scyris Cuvier, 1829, 129.

Olistus Cuvier, 1829, 129.

Chorinemus Cuvier & Valenciennes,
1832, 137.

Pompilus Minding, 1832, 140.

Gallichthys Cuvier & Valenciennes, 1833,
178.

Porthmeus Cuv. & Val., 1833, 178.

Naclerus Cuv. & Val., 1833, 178.

Hynnys Cuv. & Val., 1833, 178.

ACANTHONEMUS Agassiz, 1834, 180.

CARANGOPSIS Agassiz, 1835, 181, 218.

Platysomus Swainson, 1839, 201.

Zonichthys Swainson, 1839, 200.

Alepes Swainson, 1839, 200.

Elagatis Bennett, 1840, 206.

Paropsis^{227a} Jenyns, 1842.

DUCTOR Agassiz, 1844, 218.

PLEIONEMUS Agassiz, 1844, 218.

ARCHÆUS Agassiz, 1844, 218.

Xystophorus Richardson, 1844, 223.

*Carangus*²²⁸ Agassiz, 1845.

*Selenia*²²⁹ Bonaparte, 1845, 226.

²²⁶ Often corrected to *Trachynotus*.

²²⁷ Misprinted *Hypacanthus*; corrected in appendix to *Hypacantha*.

^{227a} "Voyage 'Beagle,'" 65; orthotype *P. signata* Jenyns. (Omitted in "Genera of Fishes.")

²²⁸ This is the first use of *Carangus* as a generic name. No explanation is given, merely a reference to Cuvier & Valenciennes. The presumable type is *Scomber carangus* Bloch.

²²⁹ The name *Selenia* is preoccupied; *Uraspis*, with the bucklers hooked forward is a distinct genus.

- Carangoides** Bleeker, 1851, 248.
Selar³³⁰ Bleeker, 1851, 248.
Decapterus Bleeker, 1851, 248.
Gnathanodon Bleeker, 1851, 247.
Leioglossus Bleeker, 1851, 248.
Megalaspis Bleeker, 1851, 248.
Selaroides Bleeker, 1851, 248.
Leptaspis Bleeker, 1852, 250.
Carangichthys Bleeker, 1852, 250.
Seriolichthys Bleeker, 1854, 255.
Thynnus Gronow, 1854, 259.
Trachurus Gronow, 1854, 259.
VOMEROPSIS, Heckel, 1854, 259.
Uraspis Bleeker, 1855, 264.
Bothrolæmus Holbrook, 1855, 265.
AIPICTHYS Steindachner, 1859, 298.
Carangus³³¹ Girard, 1859, 291.
Doliodon Girard, 1859, 291.
Chloroscombrus Girard, 1859, 291.
ARCHÆOIDES Rath, 1859, 292.
Decaptus Poey, 1861, 309.
Blepharichthys Gill, 1861, 302.
Hemicaranx³³² Bleeker, 1862.
Carangops Gill, 1862, 316.
Trachurops Gill, 1862, 315.
Gymnepignathus Gill, 1862, 316.
Eustomatodus Gill, 1862, 316.
Evepigymnus Gill, 1862, 316.
Paratractus Gill, 1862, 317.
Halatractus Gill, 1862, 317.
Naucratopsis Gill, 1862, 317.
Irex Valenciennes, 1862, 320.
Glaucus (Klein) Bleeker, 1863, 321.
Oligoplites Gill, 1863, 324.
Micropus Kner, 1868, 352.
PSEUDOVOMER Sauvage, 1870, 359.
DESMICHTHYS Sauvage, 1877, 392.
ACANTHONEMOPSIS Bosniaski, 1878, 393.
PARQUULA Sauvage, 1880, 406.
Lepidomegas Thominot, 1880, 406.
Hypocaranx Klunzinger, 1884, 429.
Parona Berg, 1895, 466.
Zalocys Jordan & McGregor, 1898, 482.
Campogramma Regan, 1903, 505.
Rastrum Fowler, 1904, 507.
Rhaphiolepis Fowler, 1905, 512.
Vexillicaranx Fowler, 1905, 512.
Elaphotoxon Fowler, 1905, 512.
Eleria Jordan & Seale, 1905, 514.
Glaucus (Klein) Fowler, 1906, 517.
Pampanoa Fowler, 1906, 517.
Ulua Jordan & Snyder, 1908, 528.
Glaucus (Klein) Jordan & Hubbs, 1917, 562.
Orqueta Jordan, 1919, 567.
LOMPOCHITES Jordan, 1920, 571.
Atule³³³ Jordan, 1923.
Longirostrum³³⁴ Wakiya, 1923.
Seriolina^{334a} Wakiya, 1923.

³³⁰ Logotype, by first reviser, *Caranx boops*, hence equivalent to *Trachurops* Gill, which name *Selar* must replace.

³³¹ "*Carangus* Griffith," page 180, "Genera of Fishes," should be suppressed; *Carangues* is merely quoted as a French name.

³³² *Versl. Kong. Akad. Wet.*, 14: 134; orthotype *H. marginatus* Bleeker. (Omitted in "Genera of Fishes.")

³³³ "Fishes of Hawaii," *Carnegie Mus.*, in press; orthotype *Caranx affinis* Rüppell.

³³⁴ Yoshiro Wakiya, "Carangoid Fishes of Japan," Ms., 1923; type *Caranx platessa* Cuvier & Valenciennes.

^{334a} *Loc. cit.*; orthotype *Seriola intermedia* Temminck & Schlegel (gill rakers obsolete).

Family 402. NEMATISTIIDÆ (Peacock Fishes)

Nematistius Gill, 1862, 316.

Seriolophus Guichenot, 1867, 345.

Family 403. MENIDÆ

Vertebræ 10 + 15 = 25.

Mene Lacépède, 1803, 68.

Meneus Rafinesque, 1815, 90.

GASTERONEMUS Agassiz, 1833, 177.

GASTERACANTHUS³³⁵ Agassiz, 1833.

³³⁵ A manuscript name, printed but not adopted by Agassiz, being preoccupied; replaced by *Gastronemus*. *Poissons Fossiles*, 5: 20; orthotype *G. rhomboidalis* Agassiz ms.

Family 404. **POMATOMIDÆ**
(Blue Fishes)

<i>Saltatrix</i> Catesby, 1771, 30.	<i>Sypterus</i> Eichwald, 1841, 208.
<i>Pomatomus</i> Lacépède, 1803, 63.	<i>Chromis</i> Gronow, 1854, 259.
<i>Gonenion</i> Rafinesque, 1810, 80.	<i>Sparactodon</i> Rochebrune, 1880, 405.
<i>Lopharis</i> Rafinesque, 1810, 80.	<i>LOPHAR</i> Jordan & Gilbert, 1919, 569.
<i>Temnodon</i> Cuvier, 1817, 106.	

Family 405. **RACHYCENTRIDÆ**
(Sergeant Fishes)

<i>Rachycentron</i> ³³⁶ Kaup, 1826, 121.	<i>Elacate</i> Cuvier & Valenciennes, 1831, 129.
<i>Spinax</i> (Commerson), Cuvier & Valenciennes, 1831, 175.	<i>Meladerma</i> Swainson, 1839, 200.

³³⁶ Name later corrected to *Rachycentrum*.

Family 406. **LACTARIIDÆ**

<i>Lactarius</i> Cuvier & Valenciennes, 1833, 178.	<i>Platylepes</i> Swainson, 1839, 200.

Family 407. **LEIOGNATHIDÆ**³³⁷

<i>Leiognathus</i> Lacépède, 1803, 64.	<i>Secutor</i> Gistel, 1848, 235.
<i>Halex</i> Commerson, 1803, 71.	<i>Deveximentum</i> Fowler, 1904, 507.
<i>Equula</i> Cuvier, 1817, 105.	<i>Eubleekeria</i> Fowler, 1904, 507.
<i>Gazza</i> Rüppell, 1835, 184.	<i>Equulites</i> Fowler, 1904, 507.
<i>Argyrolepes</i> Swainson, 1839, 200.	<i>Aurigequula</i> ³³⁸ Fowler, 1918.

³³⁷ The resemblance of *Leiognathus* to *Gerres* seems to be superficial, not indicating any special affinity.

³³⁸ *Proc. Acad. Nat. Sci. Phila.*, 70: 17; orthotype *Leiognathus fasciatus* Fowler.

Family 408. **BATHYCLUPEIDÆ**

A deep-water group of uncertain affinities.

Bathyclupea Alcock, 1891, 454.

Series **KURTIFORMES**

Family 409. **KURTIDÆ**

A single genus of uncertain relationships.

*Kurtus*³³⁹ Bloch, 1786, 44.

³³⁹ Corrected to *Cyrtus* and *Curtus* by authors.

Family 410. **PERCIDÆ**
(Perch)

<i>Perca</i> Linnæus, 1758, 13.	<i>Acerina</i> Gùldenstädt, 1774, 32.
<i>Cernua</i> Schäfer, 1761, 16.	<i>Percis</i> Klein, 1775, 39.
<i>Schraitzer</i> Schäfer, 1761, 16.	<i>Asperulus</i> Klein, 1775, 40.
<i>Asperulus</i> Schäfer, 1761, 16.	<i>Gymnocephalus</i> Bloch, 1793, 51.
<i>Asper</i> Schäfer, 1761, 16.	<i>Cephimmus</i> Rafinesque, 1815, 89.

Zingel (Cuvier) Oken, 1817, 104.
Sander (Cuvier) Oken, 1817, 104.
Acerina Cuvier, 1817, 104, 125.
*Pogostoma*³⁴⁰ Rafinesque, 1818, 108.
*Aplocentrus*³⁴⁰ Rafinesque, 1819, 110.
*Leucops*³⁴⁰ Rafinesque, 1819, 110.
*Pomacampus*³⁴⁰ Rafinesque, 1820, 111.
Stizostedion³⁴¹ Rafinesque, 1820, 111.
Sandat Cloquet, 1827, 122.
Cernua Fleming, 1828, 123.
Sandrus Stark, 1828, 123.
Cingla Stark, 1828, 123.
Lucioperca Cuvier & Valenciennes, 1828, 124.
Aspro Cuv. & Val., 1828, 124.
Sandat Bory de St. Vincent, 1828, 124.
Acerina Cuvier, 1820, 129.
Schilus Krynicki, 1832, 176.
PODOCYS Agassiz, 1838, 191.
Percarina Nordmann, 1840, 207.

PACHYGASTER Giebel, 1847, 231.
Peroptera Gistel, 1848, 237.
Gremilla Gistel, 1848, 234.
SANDROSERRUS Gervais, 1852, 251.
Asperulus (Klein) Gill, 1861, 303.
Leptoperca Gill, 1861, 306.
Cynoperca Gill & Jordan, 1877, 390.
Mimoperca Gill & Jordan, 1877, 390.
MIOPLOSUS Cope, 1877, 388.
Epitrachys Schulze, 1889, 448.
Podocephalus (Agassiz) Woodward, (1845) 1901, 224.
BRACHYGNATHUS (Agassiz) Woodward, (1845) 1901, 224.
Cæloperca (Agassiz) Woodward, (1845) 1901, 224.
Percostoma (Agassiz) Woodward, (1845) 1901, 224.
CRISTIGORINA Leriche, 1905, 515.
EOPERCA Jordan, 1919, 568.

³⁴⁰ All these genera of Rafinesque appear to be mythical, an opinion derived from drawings in his private notebook preserved in the Smithsonian Institution.

³⁴¹ Name corrected to *Stizostethium*.

Family 411. **ETHEOSTOMIDÆ**

(Darters; Crawl-a-bottoms)

These dwarf or rather concentrated perches are peculiar to the waters of the eastern United States. They differ from the *Percidæ* in having six branchiostegals instead of seven, the head unarmed and the air-bladder obsolete or nearly so. Anal spines two, rarely one.

Etheostoma Rafinesque, 1819, 110.
Diplesion Rafinesque, 1820, 111.
Percina Haldeman, 1842, 211.
Pileoma Dekay, 1842, 210.
Boleosoma Dekay, 1842, 210.
Pœcilosoma Agassiz, 1850, 245.
Hadropterus Agassiz, 1854, 254.
Pœcilichthys Agassiz, 1854, 254.
Catonotus Agassiz, 1854, 254.
Hyostoma Agassiz, 1854, 254.
Oligocephalus Girard, 1859, 290.
Arlina Girard, 1859, 290.
Estrella Girard, 1859, 290.
Boleichthys Girard, 1859, 290.
Alvordius Girard, 1859, 290.
Alvarius Girard, 1859, 290.

Pleurolepis (Agassiz) Putnam, 1863, 328.
Microperca Putnam, 1863, 328.
Hololepis^{341a} (Agassiz) Putnam, 1863.
Nothonotus (Agassiz) Putnam, 1863, 328.
Cottogaster Putnam, 1863, 328.
Asproperca Heckel, 1860, 295.
Hypohomus Cope, 1870, 355.
Astichthys Vaillant, 1873, 371.
Plesioperca Vaillant, 1873, 371.
Imostoma Jordan, 1877, 390.
Ammocrypta Jordan, 1877, 390.
Nanostoma (Putnam) Jordan, 1877, 390.
Ericosma Jordan & Copeland, 1877, 390.
Rheocrypta Jordan, 1877, 390.
Vaillantia Jordan, 1878, 395.
Ioa Jordan & Brayton, 1878, 395.

^{341a} Omitted in "Genera of Fishes"; type *Boleosoma barratti* Holbrook (near *Boleichthys* or identical with it).

Ulocentra Jordan, 1878, 395.	Claricola J. & E., 1896, 474.
Serraria Gilbert, 1884, 428.	Nivicola Jordan, 1896, 474.
Crystallaria Jordan & Gilbert, 1885, 432.	Rafinesquiellus Jordan & Evermann, 1896, 474.
Rhothœca Jordan, 1885, 432.	Torrentaria J. & E., 1896, 474.
Copelandellus Jordan & Evermann, 1896, 474.	Swainia Jordan & Evermann, 1896, 474.
Psychromaster J. & E., 1896, 474.	Vigil Jordan, 1919, 567.

Family 412. PERCICHTHYIDÆ

This family and the next are confined to rivers of the Chilean region. They are intermediate between *Percidæ* and *Moronidæ*.

Percichthys Girard, 1854, 258.	Percosoma Gill, 1861, 304.
Deuteropterus Gill, 1861, 304.	

* Family 413. PERCILIIDÆ

- Percilia Girard, 1854, 258.

Family 414. APOGONIDÆ (*Amiidæ*; *Chilodipteridæ*) (Cardinal Fishes)

Anal spines two, rarely one; vent normal in position.

<i>Amia</i> Gronow, 1763, 20.	<i>Lanioperca</i> ³⁴³ Günther, 1872, 365.
<i>Apogon</i> Lacépède, 1802, 62.	<i>Neosphyræna</i> ³⁴³ Castelnau, 1872, 362.
<i>Cheilodipterus</i> ³⁴² Lacépède, 1802, 63.	<i>Vincentia</i> Castelnau, 1872, 363.
<i>Aspro</i> (Commerson) Lacépède, 1803, 70.	<i>Percamia</i> Bleeker, 1876, 382.
<i>Ostorhinchus</i> Lacépède, 1803, 63.	<i>Telescops</i> Bleeker, 1876, 382.
<i>Dipterodon</i> Lacépède, 1803, 63.	<i>Gulliveria</i> Castelnau, 1878, 393.
<i>Epigonus</i> Rafinesque, 1810, 83.	<i>Pomatomichthys</i> Giglioli, 1880, 402.
<i>Clodipterus</i> Rafinesque, 1815, 89.	<i>Monosira</i> Poey, 1881, 417.
<i>Macrolepis</i> Rafinesque, 1815, 89.	<i>Melanostoma</i> Steindachner & Döderlein, 1883, 426.
<i>Pomatomus</i> (Risso) Cuvier & Valenciennes, 1828, 124.	<i>Synagrops</i> Günther, 1887, 437.
<i>Apogonoides</i> Bleeker, 1849, 240.	<i>Telescopias</i> Jordan & Snyder, 1901, 495.
<i>Microichthys</i> Rüppell, 1852, 251.	<i>Fowleria</i> Jordan & Evermann, 1903, 504.
<i>Amia</i> Gronow, 1854, 259.	<i>Galeagra</i> Heller & Snodgrass, 1903, 503.
<i>Apogonichthys</i> Bleeker, 1854, 256.	<i>Foa</i> Jordan & Seale, 1905, 514.
<i>Monoprion</i> Poey, 1860, 298.	<i>Hynnodus</i> Gilbert, 1905, 513.
<i>Glossamia</i> Gill, 1863, 323.	<i>Gymnapogon</i> Regan, 1905, 515.
<i>Lepidamia</i> Gill, 1863, 323.	<i>Astrapogon</i> Fowler, 1907, 523.
<i>Archamia</i> Gill, 1863, 323.	<i>Siphamia</i> Weber, 1909, 534.
<i>Paramia</i> Bleeker, 1863, 322.	<i>Rhabdamia</i> Weber, 1909, 534.
<i>Pseudamia</i> Bleeker, 1865, 336.	<i>Neamia</i> Smith & Radcliffe, 1912, 544.
<i>Mionorus</i> Kreffit, 1867, 346.	<i>Amioides</i> Smith & Radcliffe, 1912, 544.
<i>Pristiapogon</i> Klunzinger, 1870, 358.	<i>Nectamia</i> Jordan, 1917, 562.
<i>Dinolestes</i> ³⁴³ Klunzinger, 1872, 366.	<i>Xystramia</i> Jordan, 1917, 562.

³⁴² Written *Chilodipterus* by authors.

³⁴³ These three generic names refer to the same fish, *Dinolestes muelleri*, of Australia.

Zoramia Jordan, 1917, 562.

ERITIMA Jordan & Gilbert, 1919, 569.

Adenapogon³⁴⁴ McCulloch, 1921.

Brephamia³⁴⁵ Jordan, 1922.

Scombrolabrax³⁴⁷ Roule, 1922.

Maccullochina³⁴⁶ Jordan, 1923.

Scepterias³⁴⁸ Jordan & Jordan, 1923.

³⁴⁴ *Records Austral. Mus.*, 13: 132; orthotype *Apogon roseigaster* Ramsay & Ogilby.

³⁴⁵ "Fishes of Hawaii," *Mem. Carnegie Museum*, 43; orthotype *Amia parvula* Smith & Radcliffe.

³⁴⁶ *Loc. cit.* 44; orthotype *Scombrops serratospinosa* Smith & Radcliffe.

³⁴⁷ Roule, *Bull. Sci. Oceanogr.*, No. 408, March 23, 1922; type *S. heterolepis* Roule; a deep-sea fish from Madeira. Spinous dorsal deeply divided; anal spine single; scales cycloid, very irregular as to size.

³⁴⁸ *Op. cit.* 44; orthotype *S. fragilis* Jordan & Jordan, from Hawaii.

Family 415. **SCOMBROPIDÆ**

Allied to the *Apogonidæ*, but with three or four anal spines. The number in the *Apogonidæ*, as in the *Percidæ* and *Etheostomatidæ*, is but two or rarely one.

Scombrops Temminck & Schlegel, 1845, 227.

Sphyrænops Poey, 1860, 299.

Latebrus Poey, 1860, 298.

Amiichthys Poey, 1886, 435.

Hypoclydonia Goode & Bean, 1895, 468.

Apogonops Ogilby, 1896, 475.

Parasphyrænops Bean, 1912, 542.

Neoscombrops Gilchrist, 1922. (See Index.)

Family 416. **ACROPOMATIDÆ**

Three anal spines; vent anterior.

Acropoma Temminck & Schlegel, 1843, 216.

Brephostema Alcock, 1889, 444.

Parascombrops³⁴⁹ Alcock, 1890, 450.

Oxyodon Brauer, 1906, 517.

³⁴⁹ A synonym of *Acropoma*.

Family 417. **AMBASSIDÆ**

Chanda Hamilton, 1822, 114.

Ambassis (Commerson) Cuvier & Valenciennes, 1828, 124.

Priopis (Kuhl & Van Hasselt) Cuvier & Valenciennes, 1830, 174.

Hamiltonia Swainson, 1839, 200.

Bogoda Bleeker, 1853, 253, 275.

Parambassis Bleeker, 1874, 374.

Pseudambassis Bleeker, 1876, 383.

Acanthoperca Castelnau, 1878, 393.

Pseudoambassis Castelnau, 1878, 393.

Tetracentrum Macleay, 1883, 425.

Family 418. **CENTRARCHIDÆ** (*Eucentrarchidæ*; *Micropteridæ*)

(Black Bass; Sun Fishes; Pumpkin-seeds)

The name *Centrarchus* of Cuvier was framed for those sun fishes which had more than three anal spines. The first species mentioned (*æneus*) is an *Ambloplites*, and this, it appears, was the only one actually seen by the author. But he also includes, without question, the *Labrus irideus* and *Labrus macropterus* of Lacépède, *irideus* being formally indicated as type of *Centrarchus* by Agassiz in 1854, by Holbrook in 1860, and by Jordan &

Gilbert in 1882. There seems no reason for changing this arrangement as with Culver *irideus* was not a "*species inquirenda*."

Micropterus Lacépède, 1803, 63.	Archoplites Gill, 1861, 305.
Pomoxis Rafinesque, 1818, 109.	Mesogonistius Gill, 1864, 332.
Calliurus Rafinesque, 1819, 110.	Chænobryttus Gill, 1864, 332.
Lepomis ⁸⁵⁰ Rafinesque, 1819, 110.	Hyperistius Gill, 1864, 332.
Pomotis Rafinesque, 1819, 110.	Eucentrarchus Gill, 1864, 332.
Apomotis Rafinesque, 1819, 110.	Acantharchus Gill, 1864, 332.
Aplesion Rafinesque, 1820, 111.	Enneacanthus Gill, 1864, 332.
Ichthelis ⁸⁵¹ Rafinesque, 1820.	Hemioplites Cope, 1867, 344.
Dioplites Rafinesque, 1820, 111.	Glossoplites ⁸⁵³ Jordan, 1876.
Nemocampsis Rafinesque, 1820, 111.	Helioperca Jordan, 1877, 390.
Ambloplites Rafinesque, 1820, 111.	Xystroplites Jordan, 1877, 388.
Aplites Rafinesque, 1820, 111.	Erichæta Jordan, 1877, 391.
Telipomis Rafinesque, 1820, 111.	Eupomotis Gill & Jordan, 1877, 389.
Huro Cuvier & Valenciennes, 1828, 124.	Xenotis Jordan, 1877, 390.
Centrarchus Cuvier, 1829, 126.	Copelandia Jordan, 1877, 390.
Pomotis Cuvier, 1829, 126.	PLIOPLARCHUS Cope, 1883, 422.
Gristes ⁸⁵² Cuvier, 1829, 126.	OLIGOPLARCHUS Cope, 1891, 454.
Bryttus Cuvier & Valenciennes, 1831, 137.	CENTRARCHITES Cockerell, 1919, 566.

⁸⁵⁰ Later corrected to *Lepiopomus*, an unacceptable alteration.

⁸⁵¹ *Ichthyologia Ohiensis*, 27; type *Labrus auritus* Linnæus; same as *Lepomis*. (Omitted in "Genera of Fishes.")

⁸⁵² Later written *Grystes*.

⁸⁵³ "Manual Vertebrates," Ed. 1, 223; type *Calliurus melanops* Girard; same as *Chænobryttus* Gill. (Omitted in "Genera of Fishes.")

Family 419. ELASSOMIDÆ

(Dwarf Sun Fishes)

Elassoma Jordan, 1877, 390.

Family 420. KUHLIIDÆ

(Mountain Bass; Sesele)

Kuhlia Gill, 1861, 304.	Platysoma ⁸⁵⁴ (Liénard) Scudder, (1832)
Moronopsis Gill, 1863, 324.	1882.
Nannoperca Günther, 1862, 307.	Herops De Vis, 1885, 431.
Paradules Bleeker, 1863, 322.	Boulengerina Fowler, 1904, 507, 523.
Paradules Klunzinger, 1872, 366.	Safole Jordan, 1912, 543.
Edelia Castelnau, 1873, 368.	Parakuhlia Pellegrin, 1913, 549.
Microperca Castelnau, 1873, 368.	

⁸⁵⁴ *Platysoma* Liénard (as "*Platysome*"), *Proc. Zool Soc. Lond.*, 1832, II, 112; type *Dules caudavittatus* Cuvier & Valenciennes; latinized by Scudder 1882; name preoccupied; same as *Safole* Jordan.

Family 421. CENTROPOMIDÆ

(Robalos)

Macrocephalus Browne, 1789, 47.	Macrocephalus (Browne) Bleeker, 1876,
Centropomus Lacépède, 1803, 63.	383.
Oxylabrax Bleeker, 1876, 382.	Platycephalus Ribeiro, 1902, 500.

Family 422. **LATIDÆ**

This group and the next two are usually united with the *Serranidæ* (including *Epinephelidæ*), forming thus a vast and divergent family, which for our purpose may be conveniently separated into some of its component parts. These are usually and perhaps justly regarded as sub-families. Boulenger places *Lates* with the *Centropomidæ* and Regan adds the *Ambassidæ* also.

Lates Cuvier & Valenciennes, 1828, 124.	PARALATES Sauvage, 1883, 425.
Psammoperca Richardson, 1844, 223.	PLATYLATES Storms, 1887, 439.
Cnidon Müller & Troschel, 1849, 243.	PSEUDOLATES Priem, 1898, 483.
Hypopterus Gill, 1861, 304.	PROLATES Priem, 1899, 487.
Pseudolates Alleyne & Macleay, 1877, 387.	Luciolates Boulenger, 1914, 552.

Family 423. **MORONIDÆ**

(White Bass)

Maxillary without supplemental bone. The fossil forms referred to this group and the preceding can not be placed with accuracy.

Labrax Klein, 1775, 39.	DAPALIS Gistel, 1848, 237.
Morone Mitchell, 1814, 86.	PLATACANTHUS Fischer von Waldheim, 1850, 246.
Roccus Mitchell, 1814, 86.	Dicentrarchus Gill, 1860, 296.
Lepibenna Rafinesque, 1820, 111.	Percalates Ramsay & Ogilby, 1887, 439.
Labrax (Klein) Cuvier, 1829.	Chrysoperca Fowler, 1907, 523.
SMERDIS Agassiz, 1833, 177.	
CYCLOPOMA Agassiz, 1833, 177.	

Family 424. **OLIGORIDÆ**

Maxillary with a supplemental bone, as in *Epinephelus*. This group is very close to the *Moronidæ*, both being usually merged in the *Serranidæ*.

Perca-Labrax Temminck & Schlegel, 1842, 213.	Oligorus Günther, 1859, 291.
Lateobrax Bleeker, 1857, 274.	Odontolabrax Bleeker, 1873, 367.
Percalabrax (Schlegel) Günther, 1859, 291.	Homodemus De Vis, 1885, 431.
	Malakichthys Döderlein, 1883, 426.
	Satsuma Smith & Pope, 1906, 520.

Family 425. **NIPHONIDÆ**

Niphon³⁵⁵ Cuvier & Valenciennes, 1828.

³⁵⁵ Cuvier & Valenciennes, *Hist. Poss.*, 2: 131; orthotype *Niphon spinosus* Cuvier & Valenciennes. (Omitted in "Genera of Fishes.")

Family 426. **EPINEPHELIDÆ**

(Sea Bass; Groupers; Garrupas)

The great group of genera commonly called percoid (although centering rather around *Epinephelus*, *Perca* being a somewhat aberrant form) is here provisionally divided into several families obviously of very unequal value. Several of them usually and very properly, no doubt, given the rank

of subfamily. Even after the removal of various outlying genera, the *Epinephelidæ* are very much diversified and further subdivision is natural. Whatever rank the divisions may receive, the presence of supplemental maxillary by which character the *Epinephelidæ* are set off from the *Serranidæ* is a matter of importance, perhaps adequate to define a separate family, although in some groups, as the *Centrarchidæ*, it disappears by degrees.

- Cugupuguacu* Catesby, 1771, 30.
Daba Forskål, 1775, 34.
Louti Forskål, 1775, 34.
*Bodianus*³⁵⁶ Block, 1790, 49.
Epinephelus Bloch, 1793, 51.
Grammistes Bloch & Schneider, 1801, 58.
Cephalopholis B. & S., 1801, 59.
Alphestes B. & S., 1801, 59.
Chrysomelanus (Plumier) Lacépède, 1803, 72.
Notognidion Rafinesque, 1810, 80.
Polyprion (Cuvier) Oken, 1817, 104, 117.
*Plectropomus*³⁵⁷ (Cuv.) Oken, 1817, 103.
*Rypticus*³⁵⁸ Cuvier, 1829, 125.
Macquaria Cuvier & Valenciennes, 1830, 135.
Merou Bonaparte, 1831, 175.
Cerna Bonaparte, 1837, 141, 187.
Uripheæton Swainson, 1839, 198.
Variola Swainson, 1839, 198.
Cynichthys Swainson, 1839, 198.
Cromileptes Swainson, 1839, 198.
Centrogenys Richardson, 1842, 212.
Aulacocephalus Temminck & Schlegel, 1842, 213.
Myriodon Brisout de Barneville, 1847, 230.
Paschalestes Gistel, 1848, 236.
Serranichthys Bleeker, 1855, 264.
Smecticus Valenciennes, 1855, 266.
Stereolepis Ayres, 1858, 277.
Trachypoma Günther, 1859, 291.
Pogonoperca Günther, 1859, 291.
Anyperodon Günther, 1859, 291.
Promicropterus Gill, 1861, 302.
Liopropoma Gill, 1861, 304.
Dermatolepis Gill, 1861, 304.
Prospinus Poey, 1861, 308.
Siniperca Gill, 1862, 313.
Lioperca Gill, 1862, 315.
Schistorus Gill, 1862, 315.
Gonioplectrus Gill, 1862, 315.
Plectroplites Gill, 1862, 315.
Acanthistius Gill, 1862, 315.
Labroperca Gill, 1862, 315.
Mycteroperca Gill, 1862, 315.
Hyporthodus Gill, 1862, 304.
Chorististium Gill, 1862, 313.
Petrometopon Gill, 1865, 337.
Enneacentrus Gill, 1865, 337.
Trisotropis Gill, 1865, 337.
Plectroperca Peters, 1865, 339.
Priacanthichthys Day, 1868, 349.
Promicrops Poey, 1868, 353.
Eleutheractis Cope, 1871, 361.
Ctenolates Günther, 1871, 361.
Menephorus Poey, 1871, 362.
Murrayia Castelnau, 1872, 362.
Riverina Castelnau, 1872, 362.
Actenolepis Dybowski, 1872, 364.
Bostockia Castelnau, 1873, 368.
Odontolabrax Bleeker, 1873, 367.
Hectoria Castelnau, 1873, 368.
Pikea Steindachner, 1874, 377.
Phaëthonichthys Bleeker, 1876, 382.
Hemilutjanus Bleeker, 1876, 382.
Homalogrystes Alleyne & Macleay, 1877, 387.
Itaiara Vaillant & Bocourt, 1878, 397.
Megaperca Hilgendorf, 1878, 395.
Doderleinia Steindachner, 1883, 426.
Acanthocephalus Döderlein, 1883, 426.
Labracopsis Steindachner & Döderlein, 1883, 426.
Garrupa Jordan & Eigenmann, 1890, 452.
Dinoperca Boulenger, 1895, 466.
Pseudalphestes Boulenger, 1895, 466.

³⁵⁶ *Bodianus* belongs here by first restriction, not by tautonomy, as *Bodianus bodianus* is a labroid fish.

³⁵⁷ Later written *Plectropoma*.

³⁵⁸ Later corrected to *Rhypticus*.

Pomodon Boulenger, 1895, 466.
Xystroperca Jordan & Evermann, 1896, 474.
Archoperca J. & E., 1896, 474.
Enneistus J. & E., 1896, 474.
Coreoperca Herzenstein, 1896, 472.
Centristhmus Garman, 1899, 486.
Epinephelides Ogilby, 1899, 487.
Bryttosus Jordan & Snyder, 1900, 490.
Eteliscus J. & S., 1900, 490.

Corusculus J. & E., 1901, 494.
Gilbertella Waite, 1902, 501.
Æthaloperca Fowler, 1904, 507.
Gennadius Jordan & Seale, 1907, 525.
Epelytes Evermann & Radcliffe, 1917, 562.
Mustelichthys Tanaka, 1918, 565.
EMMACHÆRE Jordan & J. Z. Gilbert, 1919, 569.
*Rhabdosebastes*³⁵⁹ Fowler & Bean, 1922.

³⁵⁹ Fowler & Bean, "Fishes from Formosa and the Philippine Islands," *Proc. U. S. Nat. Mus.*, 62: 60; orthotype *Sebastes stoliczæ* Day; same as *Gennadius* Jordan & Seale, both being synonyms of *Centrogenys*. This highly aberrant form with the lower pharyngeals united, bears a deceptive resemblance to species of *Sebastes*.

Family 427. SERRANIDÆ (Sea Bass)

Supplemental maxillary wanting.

Anthias Bloch, 1792, 50.
Hepatus Röse, 1793, 52.
Aylopon Rafinesque, 1810, 80.
Serranus Cuvier, 1817, 103.
Dules Cuvier, 1828, 126.
*Centropristes*³⁶⁰ Cuvier, 1829, 126.
Dulichthys Bonaparte, 1831, 175.
ACANUS Agassiz, 1838, 191.
Callanthias Lowe, 1839, 195.
Prionodes Jenyns, 1842, 211.
Caprodon Temminck & Schlegel, 1843, 216.
Diplectrum Holbrook, 1855, 265.
Paralabrax Girard, 1856, 269.
LUSPIA Costa, 1858, 574.
Atractoperca Gill, 1861, 305.
Triloburus Gill, 1861, 302.
Brachyrhinus Gill, 1862, 315.
Hypoplectrus Gill, 1862, 315.
Hypoplectrodes Gill, 1862, 315.
Mentiperca Gill, 1862, 314.
Haliperca Gill, 1862, 315.
Gonioperca Gill, 1862, 315.
Pronotogrammus Gill, 1863, 323.
Paranthias Guichenot, 1868, 352.
Holanthias Günther, 1869, 351.
Paracentropristes Klunzinger, 1870, 358.
Pseudoserranus Klunzinger, 1870, 358.
Cæsioperca Castelnau, 1872, 375.

Pseudanthias Bleeker, 1873, 367.
Plectranthias Bleeker, 1873, 367.
Dactylanthias Bleeker, 1873, 367.
Hemianthias Steindachner, 1874, 377.
Neoanthias Castelnau, 1878, 393.
Symphysanodon Bleeker, 1878, 393.
Cratinus Steindachner, 1878, 397.
Colpognathus Klunzinger, 1880, 575.
Bathyanthias Günther, 1880, 403.
PROPERCA Sauvage, 1880, 405.
Creolus Jordan & Gilbert, 1882, 420.
Hyposerranus Klunzinger, 1884, 429.
Neoniphon De Vis, 1885, 431.
*Gilbertia*³⁶¹ Jordan & Eigenmann, 1890, 452.
Serranellus J. & E., 1890, 452.
Chelidoperca Boulenger, 1895, 466.
Ocyanthias Jordan & Evermann, 1896, 474.
Anagramma Ogilby, 1899, 437.
Grammatonotus Gilbert, 1905, 513.
Sayonara Jordan & Seale, 1906, 518.
Eudulus Fowler, 1907, 523.
Callidulus Fowler, 1907, 523.
Xenanthias Regan, 1908, 529.
Zalanthias Jordan & Richardson, 1910, 536.
Sacura Jordan & Richardson, 1910, 536.

³⁶⁰ Later written *Centropristis*.

³⁶¹ This genus is probably distinct from *Hypoplectrodes*.

Sphenanthias Weber, 1913, 551.
Pteranthias Weber, 1913, 551.
Lepidoperca Regan, 1914, 554.
Serranops Regan, 1914, 554.
Franzia Jordan & Thompson, 1914, 554.
Rosanthias Tanaka, 1917, 563.

Selenanthias Tanaka, 1918, 565.
Leptanthias Tanaka, 1918, 565.
Rhyacanthias³⁶² Jordan, 1921.
Percanthias³⁶³ Tanaka, 1922.
Parosphenanthias Gilchrist, 1922. (See Index.)

³⁶² Jordan, *U. S. Nat. Mus.*, 59: 547; orthotype *R. carlsmithi* Jordan.

³⁶³ Tanaka, *Fishes Japan*, 32: 591; orthotype *Callanthias japonicus* Franz.

Family 428. PLESIOPIDÆ

This family and the next three are closely related, and also allied to the *Anthiinae* among the *Serranidae*.

Plesiops (Cuvier) Oken, 1817, 102.
Pharopteryx Rüppell, 1828, 122, 251.
Trachinops³⁶⁴ Günther, 1861.
Ruppelia Castelnau, 1873, 367.
Bleekeria Castelnau, 1873, 368.

Paraplesiops Bleeker, 1875, 378, 383.
Cirrhiptera (Kuhl & Van Hasselt)
 Bleeker, 1876, 383.
Tosana Smith & Pope, 1906, 520.
Belonepterygion McCulloch, 1915, 556.

³⁶⁴ Günther, *Cat. Fish*, 3: 366; type *Trachinops taniatus* Günther. (Omitted in "Genera of Fishes.")

Family 429. ACANTHOCLINIDÆ

Acanthoclinus Jenyns, 1842, 212.

Acanthoplesiops Regan, 1912, 545.

Family 430. PSEUDOPLESIOPIDÆ

Pseudoplesiops Bleeker, 1858, 278.

Family 431. PSEUDOCHROMIDÆ

Pseudochromis Rüppell, 1835, 184.
Labristoma Swainson, 1839, 200.
Cichlops Müller & Troschel, 1858, 278.
Gramma Poey, 1868, 353.
Dampieria Castelnau, 1875, 378.
Pseudogramma Bleeker, 1875, 378.

Leptochromis Bleeker, 1876, 382.
Labracinus (Schlegel) Bleeker, 1876, 383.
Stigmatonotus Peters, 1876, 386.
Onar De Vis, 1885, 431.
Nesiotes De Vis, 1884, 427.
Nematochromis Weber, 1913, 551.

Family 432. RHEGMATIDÆ

Rhegma Gilbert, 1900, 490.

Family 433. PRIACANTHIDÆ

(Big-eyes)

Abuhamrur Forskål, 1771, 34.
Priacanthus Cuvier, 1817, 104.
Boops Gronow, 1854, 258.

Bogota Blyth, 1860, 294, 383.
Pseudopriacanthus Bleeker, 1869, 353.

Family 434. PEMPHERIDÆ

(Catalufas)

A group of uncertain relationships, usually placed near the scombroid fishes.

Pempheris Cuvier, 1829, 128.
Parapriacanthus Steindachner, 1870, 360.
Pempherichthys Klunzinger, 1871, 361.
Leptobrama Steindachner, 1878, 397.

Neopempheris Macleay, 1881, 416.
Priacanthopsis Fowler, 1906, 517.
Catalufa Snyder, 1911, 541.
Liopempheris Ogilby, 1913, 549.

Family 435. **DIPLOPRIONIDÆ**

Diploprion (Kuhl & Van Hasselt) Cuvier
& Valenciennes, 1828, 124.

Family 436. **LOBOTIDÆ**

(Flashers)

Coius Hamilton, 1822, 172.

Datnioides Bleeker, 1852, 252.

Lobotes Cuvier, 1829, 128.

Verrugato^{364a} Jordan, 1923.

^{364a} *Verrugato* Jordan, 1924; new generic name; type *Lobotes pacificus* Gilbert; distinguished by the feebleness of head serrations.

Family 437. **GLAUCOSOMIDÆ**

Glaucosoma Temminck & Schlegel, 1843,
216.

Breviperca³⁶⁵ Castelnau, 1873, 378.

Reganichthys Ogilby, 1915, 557.

³⁶⁵ Young of *Glaucosoma*.

Family 438. **ARRIPIDÆ**

Arripis Jenyns, 1842, 211.

Homodon Brisout de Barneville, 1847,
230.

Family 439. **XENICHTHYIDÆ**

These genera are placed by Regan among the *Pomadasidæ*.

Xenichthys Gill, 1863, 324.

Xenocys Jordan & Bollman, 1889, 447.

Xenistius Jordan & Gilbert, 1882, 420.

Family 440. **HOPLOPAGRIDÆ**

Hoplopagrus Gill, 1861, 304

Family 441. **LUTIANIDÆ**

(Snappers)

To this family Regan refers the allies of *Cæsis*, together with *Apharcus*, *Propoma*, and *Hoplopagrus*.

Salpa Catesby, 1771, 30.

Etelis Cuv. & Val., 1828, 124.

Turdus Catesby, 1771, 30.

Aprion Cuv. & Val., 1830, 135.

Naqua Forskål, 1771, 34.

Apsilus Cuv. & Val., 1830, 135.

Anthea Catesby, 1771, 31.

Elastoma Swainson, 1839, 198.

Hobar Forskål, 1775, 34.

Chætopterus Temminck & Schlegel, 1844,
223.

Lutianus³⁶⁶ Bloch, 1790, 49.

Genyoroge Cantor, 1849, 241.

Sciænus (Commerson) Lacépède, 1802, 69.

Pristipomoides Bleeker, 1852, 250.

Sarda (Plumier) Lacépède, 1802, 72.

Pagrus (Plumier) Lacépède, 1803, 72.

Macrops Duméril, 1856, 269.

Sargus Plumier, 1803, 72.

Neomænis Girard, 1859, 291.

DiaCOPE Cuvier, 1815, 94.

Macolor Bleeker, 1860, 294.

Mesoprion Cuvier & Valenciennes, 1828,
124.

Ocyurus Gill, 1862, 315.

Proamblys Gill, 1862, 315.

³⁶⁶ Also spelled *Lutjanus*.

Rhomboplites Gill, 1862, 315.
*Platyinius*³⁶⁷ Gill, 1862, 315.
Hypoplites Gill, 1862, 315.
Evoplites Gill, 1862, 315.
Tropidinius (Gill) Poey, 1868, 353.
Neomesoprion Castelnau, 1875, 378.
Rabirubia Jordan & Fesler, 1893, 462.
Raizero Jordan & Fesler, 1893, 462.
*Bowersia*³⁶⁷ Jordan & Evermann, 1903,
 504.
Bennettia Fowler, 1904, 507.

Parkia Fowler, 1904, 507.
Etelides Jordan & J. C. Thompson, 1905,
 514.
Rooseveltia Jordan & Evermann, 1906,
 519.
*Ulaula*³⁶⁸ Jordan & W. F. Thompson, 1911.
Etelinus Jordan & W. F. Thompson, 1911,
 539.
Vegetichthys Tanaka, 1918, 565.
*Rhomboplitoides*³⁶⁹ Fowler, 1918.

³⁶⁷ *Platyinus* and *Bowersia* are apparently synonymous with *Pristipomoides*.

³⁶⁸ Jordan & W. F. Thompson, *Proc. U. S. Nat. Mus.*, 39: 459, 1911; type *Bowersia ulaula* Jordan & Evermann, *Chaetopterus sieboldi* Bleeker; replaces *Chaetopterus* Temminck & Schlegel, preoccupied.

³⁶⁹ Fowler, *Proc. Ac. Nat. Sci. Phila.*, 70: 33; orthotype *R. megalops* Fowler. (Omitted in "Genera of Fishes.")

Family 442. VERILIDÆ

Verilus Poey, 1860, 298.

Family 443. APHAREIDÆ

Aphareus Cuvier & Valenciennes, 1830,
 135.

Family 444. POMADASIDÆ (*Hæmulidæ*; *Pristipomidæ*) (Grunts)

Ghanan Forskål, 1775, 34.
Gaterin Forskål, 1775, 34.
Cæcio Lacépède, 1802, 61.
*Plectorhynchus*³⁷⁰ Lacépède, 1802, 61.
Pomadasys Lacépède, 1803, 64.
Cheloniger (Plumier) Lacépède, 1803, 73.
Diagramma Cuvier, 1815, 94.
*Scolopsis*³⁷¹ Cuvier, 1815, 94.
*Pristipomus*³⁷² (Cuvier) Oken, 1817, 103.
Diabasis Desmarest, 1823, 116.
Anomalodon Bowdich, 1825, 119.
*Hæmulon*³⁷³ Cuvier, 1829, 128.
Conodon Cuvier & Valenciennes, 1830,
 135.
Lycogenis (Kuhl & Van Hasselt) Cuv. &
 Val., 1830, 174.
Hapalogenys Richardson, 1844, 222.
Pinjalo Bleeker, 1845, 225.
Heterodon Bleeker, 1845, 225.
Heterognathodon Bleeker, 1848, 233.

Hyperoglyphe Günther, 1859, 291.
Odontonectes Günther, 1859, 291.
Orthopristis Girard, 1859, 291.
Apostata (Heckel) Canestrini, 1860, 294.
Anisotremus Gill, 1860, 301.
Orthostæchus Gill, 1862, 316.
Microlepidotus Gill, 1862, 316.
Genytremus Gill, 1862, 316.
Genyatremus Gill, 1862, 316.
Pristocantharus Gill, 1862, 316.
Brachydeuterus Gill, 1862, 313.
Anarmostus Scudder, 1863, 328.
Bathystoma Scudder, 1863, 328.
Brachygenys (Scudder) Poey, 1868, 353.
Hæmulopsis Steindachner, 1869, 355.
Parapristipoma Bleeker, 1873, 367.
Paracæcio Bleeker, 1875, 378.
Paraconodon Bleeker, 1876, 382.
Gymnocæcio Bleeker, 1876, 382.
Liocæcio Bleeker, 1876, 382.

³⁷⁰ Written *Plectorhynchus* by authors.

³⁷¹ Later called *Scolopsides*.

³⁷² Later written by Cuvier *Pristipoma*.

³⁷³ Also written incorrectly *Hæmylum*.

- Pterocæsius** Bleeker, 1876, 382.
Pseudopristipoma Sauvage, 1880, 405.
Propoma Günther, 1880, 403.
Lythrulon Jordan & Swain, 1884, 428.
Eurumetopos Morton, 1887, 438.
Isaciella Jordan & Fesler, 1893, 462.
Isacia Jordan & Fesler, 1893, 462.
Rhonciscus Jordan & Evermann, 1896, 472.
Rhencus J. & E., 1896, 472.
Evapristis J. & E., 1896, 472.
Parascolopsis Boulenger, 1901, 492.
Mylacrodon Regan, 1903, 505.
Euelatichthys Fowler, 1904, 508.
Spilotichthys Fowler, 1904, 508.
Diagrammella Pellegrin, 1912, 544, 549.
Leptoscolopsis Tanaka, 1915, 558.
Otoperca Boulenger, 1916, 558.
Dacymba Jordan & Hubbs, 1917, 562.

Family 445. THERAPONIDÆ

- Djabub* Forskål, 1775, 34.
Therapon³⁷⁴ Cuvier, 1817, 104.
Coius Hamilton, 1822, 172.
Helotes Cuvier, 1829, 127.
Pelates Cuvier, 1829, 126.
Pterapon Gray, 1833, 139, 179.
Mesopristes³⁷⁵ Bleeker, 1845, 225, 382.
Datnioides (Brisout de Barneville) Canestrini, 1860, 294.
Pseudohelotes Guimaraës, 1882, 419.
Autisthes De Vis, 1885, 431.
Hephæstus De Vis, 1885, 431.
Plagiogeneion Forbes, 1890, 450.
Eutherapon Fowler, 1904, 508.

³⁷⁴ Misprinted *Terapon*.

³⁷⁵ Replaces *Datnia* Cuvier & Valenciennes, which is not the same as *Datnia* Cuvier, the latter a synonym of *Sparus* Linnæus.

Family 446. BANJOSIDÆ

- Anoplus** Temminck & Schlegel, 1842, 213. **Banjos** Bleeker, 1876, 382.

Family 447. LETHRINIDÆ

- Schour* Forskål, 1775, 34.
Lethrinus Cuvier, 1829, 128.
Pentapus³⁷⁶ Cuvier & Valenciennes, 1830, 258.
Monotaxis Bennett, 1830, 136.
Leiopsis Bennett, 1830, 174.
Sphærodon Rüppell, 1830, 184.
Mænioides³⁷⁷ Richardson, 1843.
Maina Gistel, 1848, 236.
Lethrinella Fowler, 1904, 508.
Lethrinichthys Jordan & Thompson, 1912, 544.

³⁷⁶ *Pentapus* is transferred (with its synonyms, *Leiopsis* and *Mænioides*) from the *Pomadidae* to this group by Regan.

³⁷⁷ Richardson, "Icones Piscium," 8; logotype *M. aurofrenatus* Richardson = *Sparus vittatus* Cuvier & Valenciennes, a synonym of *Pentapus*. (Omitted in "Genera of Fishes.") (McCulloch.)

Family 448. NEOLETHRINIDÆ

Palate and whole roof of mouth said to be covered with small molar teeth.

- Neolethrinus** Castelnau, 1875, 378.

Family 449. SPARIDÆ (Pargos)

The genera related to *Sparus* are very differently distributed by Regan from a study of the skeletons. The present arrangement, mainly according

dentition, approximates more nearly the earlier arrangement of Günther and is at least not unnatural. Regan adds to this group all the Mediterranean genera (*Boops*, *Scatharus*, *Oblada*, etc.) here placed in *Girellidæ*. He also adds *Dentex* and its relatives, leaving *Nemipterus* (and its synonyms) with *Scolopsis* and *Heterognathodon* to form a separate family of *Nemipteridæ*.

Sparus Linnæus, 1758, 13.

Cynædus Gronow, 1763, 19.

Aurata Catesby, 1771, 30.

Sargus Klein, 1775, 39.

Cynædus (Gronow) Scopoli, 1777, 42.

Mylio (Commerson) Lacépède, 1802, 70.

Diplodus Rafinesque, 1810, 82.

Sargus Cuvier, 1817, 102.

Pagrus Cuvier, 1817, 103.

Aurata (Cuvier) Oken, 1817, 103.

Labeo Bowdich, 1825, 118.

Aurata Risso, 1826, 120.

Charax Risso, 1826, 173.

Daurada Stark, 1828, 123.

Pagellus Cuvier, 1828, 128.

*Datnia*³⁷⁸ Cuvier, 1829, 126.

*Chrysophris*³⁷⁹ Cuvier, 1829, 128.

*Boridia*³⁸⁰ Cuvier & Valenciennes, 1830, 135.

SPARNODUS Agassiz, 1838, 191.

Chrysoblephus Swainson, 1839, 199.

SPHÆRODUS Agassiz, 1839, 194.

Argyrops Swainson, 1839, 199.

Lithognathus Swainson, 1839, 199.

Calamus Swainson, 1839, 199.

SCLÆNURUS Agassiz, 1845, 223.

RADAMAS Münster, 1846, 229.

ASIMA Giebel, 1848, 233, 242.

Cæso Gistel, 1848, 235.

Denius Gistel, 1848, 237.

Eudynama Gistel, 1848, 238.

TRIGONODON Sismonda, 1849, 244.

Lagodon Holbrook, 1855, 265.

DICHELODUS Giebel, 1857, 409.

Pagrichthys Bleeker, 1860, 293.

LOBODUS Costa, 1866, 340.

Symphorus Günther, 1872, 365.

Grammateus Poey, 1874, 376.

SPAROIDES Probst, 1874, 376.

Puntazzo Bleeker, 1876, 383.

SPAROSOMA Sauvage, 1883, 425.

PSEUDOSPHERODON Noetling, 1885, 434.

Pagrosomus Gill, 1893, 461.

Sparosomus Gill, 1893, 461.

Otrynter Jordan & Evermann, 1896, 472.

Salema J. & E., 1896, 472.

Calopomus (Agassiz) Woodward, (1845) 1901, 224.

Taius Jordan & Thompson, 1912, 544.

*Evynnis*³⁸¹ J. & T., 1912, 544.

*Parargyrops*³⁸² Tanaka, 1916, 560.

Stenesthes Jordan, 1917, 562.

RHYTHMIAS Jordan & Gilbert, 1920, 571.

PLECTRITES Jordan, 1920, 571.

ATKINSONELLA Jordan, 1920, 572.

³⁷⁸ The original type species of this genus is said to be a *Sparus*.

³⁷⁹ Also written *Chrysophris*.

³⁸⁰ This little genus is placed by Regan with the *Pomadasiidæ*.

³⁸¹ This genus, otherwise close to *Pagrosomus*, differs from all other *Sparoid* fishes in having a few stout conical teeth on the vomer.

³⁸² Misprinted *Paragyrops* in "Genera of Fishes."

Family 450. DENTICIDÆ (*Nemipteridæ*)

Regan refers *Dentex* to the *Sparidæ*, leaving most of the other genera to form the *Nemipteridæ*.

Synagris Klein, 1775, 38.

Dentex Cuvier, 1815, 94.

Nemipterus Swainson, 1839, 199.

Synagris Günther, 1859, 291.

*Sparopsis*³⁸³ Kner, 1868, 352.

Gymnocranius Klunzinger, 1870, 358.

³⁸³ *Sparopsis* and *Anemura* are apparently synonymous with *Synagris* as restricted.

Polysteganus Klunzinger, 1870, 358.
Gnathodentex Bleeker, 1873, 367.
Paradentex Bleeker, 1876, 382.
Synagris (Klein) Bleeker, 1876, 383.

CTENODENTEX Storms, 1896, 475, 484.
Anemura³⁸³ Fowler, 1904, 507.
Odontoglyphis Fowler, 1904, 507.
Euthyopteroma Fowler, 1904, 507.

Family 451. GIRELLIDÆ

Vegetable-feeders with incisor teeth, mostly movable, and no molars.

Coracinus Gronow, 1763, 19.
Boops Cuvier, 1815, 94.
Cantharus Cuvier, 1817, 103.
Dipterodon Cuvier, 1829, 128.
Oblada Cuvier, 1829, 128.
Crenidens Cuvier & Valenciennes, 1830, 135.
Scatharus Cuv. & Val., 1830, 135.
Box Cuv. & Val., 1830, 135.
Sarpa Bonaparte, 1831, 175.
Girella Gray, 1833, 179.
Exocallus De la Pylaie, 1835, 183.
Melanichthys Temminck & Schlegel, 1844, 223.
Spondylisoma Cantor, 1849, 241.

Camarina Ayres, 1854, 255.
Doydixodon Valenciennes, 1855, 266.
Gymnocrotaphus Günther, 1859, 291.
Proteracanthus Günther, 1859, 291.
Tephraeops Günther, 1859, 291.
Pachymetopon Günther, 1859, 291.
Incisidens Gill, 1862, 316.
Melambaphes Günther, 1863, 326.
Glyphodes Guichenot, 1864, 332.
Tripteronodon Playfair, 1866, 343.
Girellichthys Klunzinger, 1872, 366.
Neotephraeops Castelnau, 1872, 362.
Apلودon Duméril, 1883, 426.
Dichistius Gill, 1888, 441.
Girellops Regan, 1913, 550.

Family 452. KYPHOSIDÆ

(Pilot Fishes)

Tahhmel Forskål, 1775, 34.
Kyphosus Lacépède, 1802, 61.
Pimelepterus Lacépède, 1803, 63.
Xyster Lacépède, 1803, 68.
Dorsuarius Lacépède, 1803, 68.

Xysterus Rafinesque, 1815, 90.
Seleima Bowdich, 1825, 119.
Opisthistius Gill, 1862, 316.
Sectator Jordan & Fesler, 1893, 462.

Family 453. HISTIOPTERIDÆ

(Boar Fishes)

Pentaceros Cuvier, 1829, 125.
Histioporus³⁸⁴ Temminck & Schlegel, 1843.
Richardsonia Castelnau, 1872, 362.
Pseudopentaceros Bleeker, 1876, 382.
Paristiopterus Bleeker, 1876, 382.
Pentaceropsis Steindachner & Döderlein, 1883, 426.

Prosoplismus Waite, 1903, 506.
Zanclistius Jordan, 1907, 524.
Evistias Jordan, 1907, 524.
Quadrarius Jordan, 1907, 524.
Quinquarius Jordan, 1907, 524.
Gilchristia Jordan, 1907, 524.
Maccullochia Waite, 1910, 537.

³⁸⁴ "Fauna Japonica," 86; orthotype *Histioporus typus* Temminck & Schlegel. (Omitted in "Genera of Fishes.")

Family 454. ENOPLOSIDÆ

Enoplosus Lacépède, 1803, 64.

Family 455. INERMIIDÆ

This small family has no visible relation to the *Emmelichthyidæ*, to which group the genus *Inermia* has been referred. The narrow maxillary is

devoid of scales and slips under the preorbital. The dorsal fins are separate, the first of many spines.

Dipterygonotus Bleeker, 1849, 240.

Inermia Poey, 1861, 299.

Family 456. **MÆNIDÆ** (*Merolepidæ*)

Mænas Klein, 1775, 39.

Smaris Cuvier, 1815, 93.

Spicara Rafinesque, 1810, 80.

Mæna Cuvier, 1829, 128.

*Centracanthus*³⁸⁶ Rafinesque, 1810, 80.

Mænas (Klein) Bleeker, 1876, 382.

Merolepis Rafinesque, 1810, 81.

³⁸⁶ Later spelled *Centracantha*, originally misspelled *Centracantus*.

Family 457. **EMMELICHTHYIDÆ** (*Erythrichthyidæ*)

This family differs widely from the *Mænidæ* in the large, scaly uncovered maxillary. The dorsal fin is divided into two.

Emmelichthys Richardson, 1844, 223.

Boxaodon Guichenot, 1848, 238.

Erythrichthys Temminck & Schlegel, 1845, 227.

Plagiogeneion Forbes, 1890, 450.

Erythrocles Jordan, 1919, 567.

Family 458. **GERRIDÆ** (*Xystæmidæ*)

(Mojarras; Silver Perch)

Mormyrus Catesby, 1771, 29.

Clara Gill, 1862, 314.

Gerres (Cuvier) Quoy & Gaimard, 1824, 117.

Moharra Poey, 1875, 379.

Diapterus Ranzani, 1840, 208.

Gerreomorpha Alleyne & Macleay, 1877, 387.

Podager Gistel, 1848, 236.

Parequula Steindachner, 1879, 401.

Catochænum Cantor, 1849, 241.

Chthalmopteryx Ogilby, 1887, 438.

Pentaprion Bleeker, 1850, 245.

Xystæma Jordan & Evermann, 1895, 468.

Eucinostomus Baird, 1857, 274.

Ulæma J. & E., 1895, 468.

Synistius Gill, 1862, 315.

Pertica Fowler, 1904, 508.

Family 459. **OPLEGNATHIDÆ**

Oplegnathus Richardson, 1840, 208.

Scarostoma Kner, 1867, 346.

Scaradon Temminck & Schlegel, 1844, 223.

Family 460. **MULLIDÆ**

(Surmulletts)

Mullus Linnæus, 1758, 14.

Acanthomullus Valenciennes, 1861, 309.

*Upeneus*³⁸⁶ Cuvier, 1829, 127.

Pseudupeneus Bleeker, 1862, 310.

Mulloidæ Bleeker, 1849, 240.

Parupeneus Bleeker, 1863, 322.

Upeneoides Bleeker, 1849, 240.

Mullhypeneus Poey, 1867, 347.

Megalepis Bianconi, 1855, 262.

Brachymullus Bleeker, 1876, 383.

Upeneichthys Bleeker, 1855, 263.

Pseudomulloidæ Ribeiro, 1915, 557, 560.

³⁸⁶ Name corrected to *Hypeneus* by authors.

Family 461. SCIÆNIDÆ

(Croakers; Roncadores)

Vertebræ of the usual number, 10 + 14.

- Sciæna* Linnæus, 1758, 13.
Alburnus Catesby, 1771, 30.
Cromis Browne, 1789, 47.
Johnius Bloch, 1793, 51.
Lonchiurus^{364a} Bloch, 1793, 51.
Pogonias Lacépède, 1802, 61.
Leiostomus^{364b} Lacépède, 1803, 64.
Pogonathus Lacépède, 1803, 65.
Chromis (Plumier) Lacépède, 1803, 73.
Coracinus Pallas, 1811, 84.
Equietus Rafinesque, 1815, 89.
Stellifer (Cuvier) Oken, 1817, 104.
Umbrina Cuvier, 1817, 104.
Aplodinotus^{364c} Rafinesque, 1819, 110.
Amblodon Rafinesque, 1819, 110.
Bola Hamilton, 1822, 114.
Stelliferus Stark, 1828, 123.
Pachyurus Agassiz, 1829, 132.
Corvina Cuvier, 1829, 128.
Larimus Cuvier & Valenciennes, 1830, 134.
Micropogon Cuv. & Val., 1830, 135.
Lepipterus Cuv. & Val., 1830, 135.
Micropogonias Bonaparte, 1831, 175.
Argyrosomus De la Pylaie, 1835, 184.
Cheilotrema Tschudi, 1846, 230.
Apeches Gistel, 1848, 236.
Melantha Gistel, 1848, 238.
Attilus Gistel, 1848, 238.
Homoprion Holbrook, 1855, 265.
Sciænoides Blyth, 1860, 294.
Collichthys Günther, 1860, 296.
Rhinoscion Gill, 1861, 304.
Plagioscion Gill, 1861, 304.
Anomiolepis Gill, 1861, 304.
Menticirrhus Gill, 1861, 304.
Pachypops Gill, 1861, 304.
Genyonemus Gill, 1861, 304.
Haplodonotus (Rafinesque) Gill, 1861, 304.
Bairdiella Gill, 1861, 302.
Pseudolithus Bleeker, 1861, 321.
Odontoscion Gill, 1862, 313.
Cirrhimens Gill, 1862, 313.
Amblyscion Gill, 1863, 324.
Ophioscion Gill, 1863, 324.
Diplolepis Steindachner, 1863, 328.
Hemisciæna Bleeker, 1863, 321.
Pseudosciæna Bleeker, 1863, 321.
Sciænops Gill, 1863, 323.
Polycirrus Bocourt, 1869, 354.
Paralonchurus Bocourt, 1869, 354.
Larimodon (Kaup) Bleeker, 1876, 383.
Eutychelithus Jordan, 1876, 386.
Pareques Gill, 1876, 385.
Roncador Jordan & Gilbert, 1880, 403.
Corvula Jordan & Eigenmann, 1889, 447.
Callaus Jordan & Eigenmann, 1889, 447.
Polyclemus Berg, 1895, 466.
Asperina Ostroumoff, 1896, 475.
Elattarchus Jordan & Evermann, 1896, 472.
Zonoscion J. & E., 1896, 472.
Zaclemus Gilbert, 1896, 473.
Nector Jordan & Evermann, 1898, 480.
Zestis J. & E., 1898, 481.
Zestidium J. & E., 1898, 481.
Stellicarens J. & E., 1898, 481.
Sigmurus Gilbert, 1898, 481.
Cilus Delfin, 1900, 489.
Larimichthys Jordan & Starks, 1905, 514.
Pseudomycterus Ogilby, 1908, 529.
Twingonia Pascoe, 1908, 529.
Othonias Jordan & Thompson, 1911, 539.
Nibea J. & T., 1911, 539.

^{364a} Often written *Lonchurus*.^{364b} Often written *Liostomus*.^{364c} Corrected to *Haplodonotus* by Gill.

Family 462. OTOLITHIDÆ

(Weak Fishes; Queen Fishes)

Vertebræ 14 + 10, not 10 + 14 as in *Sciænidae* and the types allied to *Sciæna*, *Serranus*, *Sparus*, and *Lutianus*.

Otolithes³⁸⁷ (Cuvier) Oken, 1817, 104.**Ancylodon** (Cuvier) Oken, 1817, 104.**Macrodon** Schinz, 1822, 115.**Nebris** Cuvier & Valenciennes, 1830, 134.**Nomalus** Gistel, 1848, 234.**Seriphus** Ayres, 1854, 255.**Cestreus** Gronow, 1854, 258.**Cynoscion** Gill, 1861, 304.**Atractoscion** Gill, 1862, 313.**Archoscion** Gill, 1862, 313.**Apseudobranchus** Gill, 1862, 313.**Isopisthus** Gill, 1862, 313.**Paraplesichthys** (Kaup) Bleeker, 1876, 383.**Sagenichthys** Berg, 1895, 466.**Buccone** Jordan & Evermann, 1896, 472.**ARCHÆOTOLITHUS** Stolley, 1910, 537.**Symphysoglyphus** Ribeiro, 1913, 554.**LOMPOQUIA** Jordan & Gilbert, 1919, 569.**ARISTOSCIION** Jordan, 1920, 571.**IOSCIION**³⁸⁸ Jordan, 1921.³⁸⁷ Later written *Otolithus* by Cuvier.³⁸⁸ Jordan, "Fishes of the California Tertiary," 283; orthotype *Ioscion morgani* Jordan.

Family 463. SILLAGINIDÆ

Sillago Cuvier, 1817, 101.**Sillaginodes** Gill, 1861, 306.**Sillaginopsis** Gill, 1861, 306.**Neosillago** Castelnau, 1875, 378.**Iosillago** Macleay, 1878, 396.

Family 464. NANDIDÆ

This group may require further subdivision.

Nandus Cuvier & Valenciennes, 1831, 137.**Bedula** Gray, 1833, 179.**Pomanotis** Guichenot, 1847, 232.**Acharnes** Müller & Troschel, 1848, 239.**Pristolepis** Jerdon, 1848, 239, 246.**Catopra** Bleeker, 1851, 248.**Badis** Bleeker, 1853, 253.**Paranandus** Day, 1865, 336.

Family 465. POLYCENTRIDÆ

Monocirrhus Heckel, 1840, 207.**Polycentrus** Müller & Troschel, 1848, 239.**Polycentropsis** Boulenger, 1901, 492.

Family 466. MALACANTHIDÆ

This family and the next four bear strong resemblance to the trachini-form fishes, differing mainly in the thoracic insertion of the ventrals.

Malacanthus Cuvier, 1829, 130**Oceanops** Jordan & Seale, 1906, 519.Family 467. BRANCHIOSTEGIDÆ (*Latilidæ*)**Coryphænoides** Lacépède, 1802, 62.**Branchiostegus** Rafinesque, 1815, 90.**Latilus** Cuvier & Valenciennes, 1830, 135.**Caulolatilus** Gill, 1862, 316.**Dekaya** Cooper, 1863, 323.**Prolatilus** Gill, 1865, 337.**Lopholatilus** Goode & Beane, 1879, 400.**Hoplolatilus** Günther, 1887, 438.

Family 468. LABRACOGLOSSIDÆ

Platystethus Günther, 1860, 296.*Evistius* Gill, 1893, 461.*Labracoglossa*³⁸⁹ Peters, 1866, 342.*Bathystethus* Gill, 1893, 461.*Cypselichthys* Steindachner & Döderlein, 1883, 426.

³⁸⁹ This genus is without teeth in the gullet and has no apparent affinity with the *Stromateidæ*.

Family 469. CEPOLIDÆ

Cepola Linnaeus, 1764, 22.*Acanthocephala* Bleeker, 1874, 372.*Tænia* Röse, 1793, 52.

Family 470. HENICICHTHYIDÆ

*Henichthys*³⁹⁰ Tanaka, 1915, 558.

³⁹⁰ Description in Japanese. The following is the translation as furnished me by Mr. Tanaka: *Henichthys foraminosus* (*Henichthyidæ* new family) proposed in Japanese in *Zool. Mag.*, 27: No. 325, Nov. 15, 1915, p. 568. Head 2.4-5 in length (exclusive of caudal), depth 5.3-8. Eye lateral; mouth large, somewhat oblique; maxillary extending behind posterior border of eye; teeth in jaws acute, arranged in a row; vomer and palatines toothed. Two dorsals somewhat close together. Dorsal, VI, 11; anal, 11; pectoral 13; ventral I, 5. Ventral fins close together, beneath pectoral; caudal nearly truncated. Scaleless; body and head with many pores which are arranged longitudinally and transversely. Color pale, plain. Length (exclusive of caudal) 5-5 cm. Nagasaki. The species seems to be a trachinoid fish and also to be included in a new family.

Series TRICHODONTIFORMES

Family 471. TRICHODONTIDÆ

The trachinoid fishes (*Jugulares*) follow in a natural sequence, a fact not to be shown in a linear series.

Trichodon (Steller) Cuvier, 1829, 127.*Arctoscopus* Jordan & Evermann, 1896, 474.*Chætichthys* Gistel, 1848, 238.

Suborder CIRRHITOIDEI

Family 472. CIRRHITIDÆ

The fishes of this group bear some resemblance to the *Cataphracti*, which may be an indication of common origin.

Cirrhitus^{390a} Lacépède, 1803, 65.*Zeodrius* Castelnau, 1878, 393.*Cirrhitichthys*^{390b} Bleeker, 1856, 274.*Paracirrhites* Steindachner & Döderlein, 1883, 426.*Oxycirrhites* Bleeker, 1857, 274.*Amblycirrhites* Gill, 1862, 313.*Psilocranium* Macleay, 1884, 429.*Cirrhitopsis* Gill, 1862, 313.*Dactylophora* De Vis, 1884, 427.*Lacepedia* Castelnau, 1873, 367.*Cirrhitoides* Jenkins, 1903, 504.*Neocirrhites* Castelnau, 1873, 368.*Isobuna* Jordan, 1907, 525.*Paracirrhites* Bleeker, 1875, 378.*Cyprinocirrhites* Tanaka, 1917, 563.

^{390a} Written *Cirrhites* by authors.

^{390b} This name appears first in *Ned. Tydschr. Dierk.*, 10: 474, 1856.

Family 473. **CHIRONEMIDÆ**

Chironemus Cuvier, 1828, 126.
Threpterus Richardson, 1850, 247.

Scianoides (Solander) Richardson, 1850,
 247.

Family 474. **CHEILODACTYLIDÆ**

Cheilodactylus Lacépède, 1803, 65.
*Nemadactylus*³⁹¹ Richardson, 1839, 197.
Pteronemus Van der Hoeven, 1849, 243,
 383.
Trichopterus Gronow, 1854, 259.

Chirodactylus Gill, 1862, 313.
Acantholatris Gill, 1862, 313.
Dactylopagrus Gill, 1862, 313.
Dactylosparus Gill, 1862, 314.

³⁹¹ Spelled also *Nematodactylus*.

Family 475. **APLODACTYLIDÆ**

*Aplodactylus*³⁹² Cuvier & Valenciennes,
 1831, 137.
Crinodus Gill, 1862, 313.

Dactylosargus Gill, 1862, 313.
Goniistius Gill, 1862, 314.
Parhaplodactylus Thominot, 1883, 426.

³⁹² Often written *Haplodactylus*.

Family 476. **LATRIDÆ**

Latris Richardson, 1839, 197.
Latridopsis Gill, 1862, 314.

Mendosoma Guichenot, 1848, 238.

*Series GADOPSIFORMES*Family 477. **GADOPSIDÆ**

Gadopsis Richardson, 1844, 223.

Series CAPRIFORMES

A small group of uncertain relations, bearing a strong resemblance to the *Zeidæ* in form and having, like the *Zeidæ* and the *Chætodontidæ*, the post-temporal solidly joined to the skull. But the ventral rays are always I, 5, as in the *Chætodonts*, and the gill membranes free from the isthmus, as in *Zeus*. A comparative study of the skeletons of these transitional groups, *Zeus*, *Capros*, *Toxotes*, *Scorpiis*, *Ephippus*, *Platax*, *Drepane*, and *Amphistium*, is much to be desired.

Family 478. **CAPROIDÆ**

Capros Lacépède, 1803, 65.
Caprophonus Müller & Troschel, 1849,
 243.

METOPONICHTHYS Kramberger, 1882, 420.
PROANTIGONIA Kramberger, 1882, 420.

Family 479. **ANTIGONIIDÆ**

Antigonia Lowe, 1843, 215.
Hypsinothus Temminck & Schlegel, 1844,
 223.

Acanthagonia Ogilby, 1918, 564.

Family 480. **AMPHISTIIDÆ**

A group of uncertain relations, apparently allied to the *Ephippidæ*, regarded by Boulenger as an ally of *Zeus* and perhaps ancestral to the

Heterosomata. As Regan finds the ventrals I, 5, we have separated it from the zeoid fishes.

AMPHISTIUM Agassiz, 1835, 181, 218.

MACROSTOMA³⁹³ Agassiz, 1838, 191.

³⁹³ A genus of doubtful affinity, resembling a chaetodont, the name preoccupied.

Series EPHIPPIFORMES

This group has many characters in common with the perciform fishes, especially in having the post-temporal not solidly united to the skull. It agrees, however, with the *Squamipennes* in many regards, notably the restriction of the gill openings to the sides; the compressed body and scaly fins mark a transition from the *Scorpidæ* and related forms to the *Chaetodontidæ*.

Family 481. SCORPIDÆ

(Half-moon Fishes)

Scorpius Cuvier & Valenciennes, 1831, 573.

Agenor Castelnau, 1878, 393.

Atypus Günther, 1860, 296.

Diodyxodon Thominot, 1881, 417.

Atypichthys Günther, 1862, 575.

Tilodon Thominot, 1881, 417.

Helotosoma Kaup, 1863, 327.

Neptotichthys Hutton, 1890, 451.

Parapsettus Steindachner, 1875, 381.

Medialuna Jordan & Fesler, 1893, 462.

Parascorpius Bleeker, 1875, 377.

Atyposoma Boulenger, 1899, 485.

Cæsiosoma Kaup, 1876, 383.

Neatypus Waite, 1905, 516.

Family 482. MONODACTYLIDÆ

A group of uncertain affinity, seeming close to the *Xyphosidæ* on the one hand and to the chaetodontoid forms on the other. I place them provisionally with the *Ephippidæ*, but it may be that the genera will require to be rearranged. From the allies of *Chaetodon*, the *Scorpidæ*, *Monodactylidæ*, *Platacidæ*, *Drepanidæ*, and *Ephippidæ* differ in not having the post-temporal coössified with the skull.

Monodactylus Lacépède, 1802, 61.

Psettus (Commerson) Cuvier, 1829, 128.

Centropodus Lacépède, 1802, 62.

Schuettea Steindachner, 1866, 343.

Psettus (Commerson) Lacépède, 1802, 70.

Psettias Jordan, 1906, 519.

Acanthopodus Lacépède, 1803, 64.

Family 483. PLATACIDÆ

Platax Cuvier, 1817, 105.

Family 484. EPHIPPIDÆ

Chaetodipterus Lacépède, 1803, 64.

Parephippus Gill, 1861, 305.

Ephippus Cuvier, 1817, 105.

EPHIPPIITES Von Ammon, 1901, 492.

Ilarches Cantor, 1849, 241.

Bramichthys Waite, 1905, 516.

Family 485. DREPANIDÆ

Drepane Cuvier & Valenciennes, 1831, 136,

Enixe Gistel, 1848, 235.

175.

Harpochirus Cantor, 1849, 241.

Drepanichthys³⁹⁴ Bonaparte, 1831.

Cryptosmilia Cope, 1867, 344.

³⁹⁴ Bonaparte, "Saggio," etc. A substitute for *Drepane*, as are also *Enixe* and *Harpochirus*, *Drepane* being regarded as preoccupied by the earlier names, *Drepana*, *Drepania*, *Drepanus*, *Drepanis*, and *Drepanius*. *Drepanichthys* is quoted by Agassiz, "Nomenclator," 23, 1843. (Overlooked in "Genera of Fishes.")

Suborder SQUAMIPENNES
(*Epelasmia*)

Post-temporal firmly attached to the skull, the interspace between the three forks filled in by bone; gill openings restricted to the sides; soft fins largely scaly.

Series TOXOTIFORMES

Family 486. **TOXOTIDÆ**

This family, of uncertain relationship, agrees with the *Chætodontidæ*, according to Günther in the union of the post-temporal with the skull.

Toxotes Cuvier, 1817, 105.

Amblytoxotes Bleeker, 1876, 383.

Trompe Gistel, 1848, 237.

Seriës CHÆTODONTIFORMES

Family 487. **SCATOPHAGIDÆ**

In this family the post-temporal is solidly united to the skull as in *Chætodontidæ*.

Scatophagus Cuvier & Valenciennes, 1831,
136.

Prenes Gistel, 1848, 237.

Cacodoxus Cantor, 1849, 241.

Family 488. **CHÆTODONTIDÆ**

(Butterfly Fishes; Coral Fishes)

Chætodon Linnæus, 1758, 13.

Acarauna Catesby, 1771, 32.

Tetragonopterus Klein, 1775, 40.

Holacanthus Lacépède, 1803, 64.

Pomacanthus Lacépède, 1803, 64.

*Chelmon*³⁹⁵ Cuvier, 1817, 105.

Heniochus Cuvier, 1817, 105.

Taurichthys Cuvier, 1829, 128.

Rabdophorus Swainson, 1839, 198.

*Microcanthus*³⁹⁶ Swainson, 1839, 198.

Genicanthus Swainson, 1839, 198.

Megaprotodon Guichenot, 1848, 238.

Diphreutes Cantor, 1849, 241.

Centropyge Kaup, 1860, 298.

Linophora Kaup, 1860, 297.

Eteira Kaup, 1860, 297.

Citharædus Kaup, 1860, 297.

Coradion Kaup, 1860, 297.

Therapaina Kaup, 1860, 298.

Sarothrodus Gill, 1861, 304, 316.

Prognathodes Gill, 1862, 316.

Pomacanthodes Gill, 1862, 316.

Tholichthys Günther, 1868, 351.

Tetragonopterus (Klein) Bleeker, 1868,
348, 383.

Neochætodon Castelnau, 1873, 368.

Parachætodon Bleeker, 1874, 372.

Oxychætodon Bleeker, 1876, 383.

Chætodontops Bleeker, 1876, 383.

Lepidochætodon Bleeker, 1876, 383.

Acanthochætodon Bleeker, 1876, 383.

Chætodontoplus Bleeker, 1876, 383.

Gonochætodon Bleeker, 1876, 383.

Hemitaurichthys Bleeker, 1876, 383.

Chelmonops Bleeker, 1876, 383.

Hemichætodon Bleeker, 1876, 384.

Anisochætodon Klunzinger, 1884, 429.

Angelichthys Jordan & Evermann, 1896,
473.

Forcipiger Jordan & McGregor, 1898,
481, 482.

Osteochromis Franz, 1910, 535.

³⁹⁵ Later written *Chelmo*.

³⁹⁶ A misprint for *Micracanthus*.

Vinculum McCulloch, 1914, 554.

Loa³⁹⁷ Jordan, 1921.

Tifia³⁹⁸ Jordan, 1923.

Xiphypops³⁹⁹ Jordan, 1923.

³⁹⁷ Jordan, *Proc. U. S. Nat. Mus.*, 653, 1921; type *Loa excelsa* Jordan.

³⁹⁸ "Fishes of Hawaii," *Mem. Carnegie Museum*, 1923, 60; orthotype *Chaetodon corallicola* Snyder.

³⁹⁹ *Loc. cit.*, 64; orthotype *Holacanthus fisheri* Snyder.

Series ZANCLIFORMES

Family 489. ZANCLIDÆ

Zanclus (Commerson) Lacépède, 1803, 70.

Gonopterus Gronow, 1854, 258.

Zanclus (Commerson) Cuvier & Valenciennes, 1831, 136.

Gnathocentrum Guichenot, 1866, 341.

Series ACANTHURIFORMES

Family 490. ACANTHURIDÆ (*Teuthididæ*; *Hepatidæ*)

Hepatus⁴⁰⁰ Gronow, 1763, 20.

Keris⁴⁰² Cuvier & Valenciennes, 1835, 181.

Teuthis⁴⁰¹ Linnæus, 1766, 23.

Zebrasoma Swainson, 1839, 201.

Rhombotides Klein, 1775, 38.

Callicanthus Swainson, 1839, 201.

Acanthurus Forskål, 1775, 33.

Ctenodon Swainson, 1839, 201.

Harpurus Forster, 1778, 43.

Acronurus Gronow, 1854, 259.

Teuthis Browne, 1789, 48.

Acronurus (Gronow) Günther, 1861, 307.

Monoceros Bloch & Schneider, 1801, 58.

Rhombotides (Klein) Bleeker, 1863, 322.

Naso Lacépède, 1802, 61.

Scopas⁴⁰³ (Bonaparte) Kner, 1865.

Naseus (Commerson) Lacépède, 1802, 69.

CALAMOSTOMA Steindachner, 1863, 328.

Aspisurus Lacépède, 1803, 64.

Ctenodon (Bonaparte) Klunzinger, 1884, 429.

Prionurus Lacépède, 1804, 169.

Nasonus Rafinesque, 1815, 88.

Ctenochætus Gill, 1884, 428.

CHIRURGUS Blainville, 1818, 108.

Colocopus Gill, 1884, 428.

Priodon Quoy & Gaimard, 1824, 118.

APOSTASIS Kramberger, 1891, 455.

Axinurus Cuvier, 1829, 129.

Xesurus Jordan & Evermann, 1896, 473.

Priodontichthys Bonaparte, 1831, 175.

Acanthocaulus Waite, 1900, 491.

Scopas Bonaparte, 1831, 175.

Hepatus (Gronow) Jordan & Seale, 1906.

Ctenodon Bonaparte, 1833, 175.

Læphichthys Ogilby, 1916, 560.

⁴⁰⁰ If Gronow's names (1763) are accepted *Hepatus* would replace *Acanthurus*. The original *Teuthis* of Linnæus, 1768, was exactly equivalent to the non-binomial *Hepatus* of Gronow. The generic distinction between the two species, *hepatus* and *javus*, was recognized by Forskål, 1775, who named the type of the former *Acanthurus*, the other *Siganus*. Cuvier & Valenciennes used the names *Acanthurus* and *Amphacanthus*. Neither of these writers adopted *Teuthis* as a generic name. The first restriction of *Teuthis* was that of Cantor, who used it for the *Siganus* group, although by good rights he should have taken it instead of *Acanthurus*. For the present we follow Cantor and Günther.

⁴⁰¹ This name, commonly used as a synonym of *Siganus*, has been often misspelled as *Teuthys*, *Theutis*, etc.

⁴⁰² Corrected to *Ceris*.

⁴⁰³ "Novara Fische," 212; type *Acanthurus scopas* Cuvier & Valenciennes. (Omitted in "Genera of Fishes.")

Family 491. **PYGÆIDÆ**

PYGÆUS Agassiz, 1838, 191.

PARAPYGÆUS Pellegrin, 1907, 526.

NOTE.—The *Plectognathi* follow naturally as next in this descent, a fact which can not be shown in a linear series.

Suborder **AMPHACANTHI**Family 492. **TEUTHIDÆ** (*Siganidæ*)Teuthis⁴⁰⁴ Linnæus, 1766, 23 (in part).

Buro Lacépède, 1803, 67.

Siganus Forskål, 1775, 32.

Buronus Rafinesque, 1815, 90.

Centrogaster Houttuyn, 1782, 44.

ARCHÆOTEUTHIS⁴⁰⁵ Wettstein, 1886, 436.

Amphacanthus Bloch and Schneider, 1801, 59.

Lo Seale, 1906, 519.

⁴⁰⁴ The proper application of the name *Teuthis* is not yet definitely settled. Its first restriction, that of Cantor, 1849, makes it identical with *Siganus*, but the first use of the name (pre-Linnæus) was for a species of *Acanthurus*.

⁴⁰⁵ Misspelled *Archateuthis* in "Genera of Fishes."

Order **CATAPHRACTI**(*Loricati; Parcioplitæ; Sclerogeni*)Series **SCORPAENIFORMES**Family 493. **SCORPÆNIDÆ**

(Scorpion Fishes; Rock Cod)

Scorpæna Linnæus, 1758, 13.

Pteroleptus Swainson, 1839, 201.

Pseudopterus Klein, 1775, 40.

Pteropterus Swainson, 1839, 201.

Scorpius (Plumier) Lacépède, 1802, 72.

Brachyrus⁴⁰⁸ Swainson, 1839, 201.

Tænianotus Lacépède, 1803, 63.

Platypterus Swainson, 1839, 201.

Panotus Rafinesque, 1815, 89.

Pterichthys Swainson, 1839, 201.

Pterois (Cuvier) Oken, 1817, 104.

Gymnapistes Swainson, 1839, 201.

AMPHERISTUS König, 1825, 118.

GONIOGNATHUS Agassiz, 1844, 218.

Apistes⁴⁰⁶ Cuvier, 1829, 127.

Hypodytes Gistel, 1848, 234.

Sebastes Cuvier, 1829, 127.

Corythobatus Cantor, 1849, 241.

Scorpænopsis Heckel, 1837, 189.

Prosopodasys Cantor, 1849, 241.

Pteropterus Swainson, 1839, 198.

Scorpænichthys Girard, 1854, 257.

Trichosomus Swainson, 1839, 197.

Pteroidichthys Bleeker, 1856, 267.

Trichophasia Swainson, 1839, 197.

Scorpænichthys Bleeker, 1856, 267.

Brachirus Swainson, 1839, 201.

CTENOPOMA Heckel, 1856, 270.

Dendrochirus⁴⁰⁷ Swainson, 1839, 198.

Scorpænodes Bleeker, 1857, 275.

Macrochyrus Swainson, 1839, 201.

Polemius Kaup, 1858, 282.

⁴⁰⁶ Spelled also *Apistus*.

⁴⁰⁷ A synonym of *Brachirus*, used for the same group on page 71, *loc. cit.*, *Dendrochirus* occurring on page 180, and *Brachyrus* on page 264.

⁴⁰⁸ Spelled *Brachirus* by Swainson on page 71, *loc. cit.*, *Brachyrus* on page 264; replaced by *Dendrochirus* on page 180, while the name *Brachirus* is on page 303, taken for a genus of the soles, *Synaptura* Cantor, of which genus the proper type is *Synaptura commersoniana*.

- Cocotropus** Kaup, 1858, 282.
SCORPÆNOPTERUS Steindachner, 1859, 293.
Tetraroge Günther, 1860, 296.
Glyptauchen Günther, 1860, 296.
Pentaroge Günther, 1860, 296.
Centropogon Günther, 1860, 296.
Pontinus Poey, 1860, 299.
Sebastodes Gill, 1861, 305.
Sebastichthys Gill, 1862, 317.
Sebastopsis Gill, 1862, 316.
Setarches Johnson, 1863, 319.
Sebastoplus Gill, 1863, 324.
Sebastosomus Gill, 1864, 330.
Sebastomus Gill, 1864, 330.
Neosebastes Guichenot, 1867, 345.
Sebastopsis Sauvage, 1873, 371.
Pseudopterus (Klein) Bleeker, 1876, 384.
Paracentropogon Bleeker, 1876, 384.
Parascorpæna Bleeker, 1876, 384.
Parapterois Bleeker, 1876, 384.
Pteroidichthys Bleeker, 1876, 384.
Amblyapistus Bleeker, 1876, 384.
Cottapistus Bleeker, 1876, 384.
Pseudosebastes Sauvage, 1878, 397.
Eusebastes Sauvage, 1878, 397.
Sebastapistes Gill, 1878, 397.
Lioscorpius Günther, 1880, 403.
Sebastolobus Gill, 1881, 415.
Auctospina Eigenmann & Beeson, 1893, 460.
Primospina E. & B., 1893, 460.
Acutomentum E. & B., 1893, 460.
Pteropodus E. & B., 1893, 460.
Helicolenus Goode & Bean, 1895, 468.
Hispanicus Jordan & Evermann, 1896, 474.
Eosebastes J. & E., 1896, 474.
Rosicola J. & E., 1896, 474.
Emmelas J. & E., 1898, 481.
SCORPÆNOIDES Priem, 1899, 487.
Ectreposebastes Garman, 1899, 486.
Iracundus Jordan & Evermann, 1903, 504.
Merinthe Snyder, 1904, 511.
Erisphex Jordan & Starks, 1904, 509.
Decterias J. & S., 1904, 509.
Ebosia J. & S., 1904, 509.
Lythrichthys J. & S., 1904, 509.
Sebastiscus J. & S., 1904, 509.
Thysanichthys J. & S., 1904, 509.
Daia Ogilby, 1904, 510.
Notesthes Ogilby, 1904, 510.
Liocranium Ogilby, 1904, 510.
Plectrogenium Gilbert, 1905, 513.
Sebastosemus Gill, 1905, 513.
Hypomacrus Evermann & Seale, 1907, 522.
Pogonoscorpius Regan, 1908, 530.
Vespicola⁴⁰⁹ Jordan & Richardson, 1910.
Apistops Ogilby, 1911, 540.
Kanekonia Tanaka, 1915, 558.
Sebastella Tanaka, 1918, 565.
SEBASTAVUS Jordan & Gilbert, 1919, 569.
RHOMARCHUS Jordan & Gilbert, 1919, 569.
RIXATOR Jordan & Gilbert, 1920, 571.
SEBASTOËSSUS Jordan, 1920, 571.
SEBASTINUS Jordan, 1920, 571.
Metzelaaria⁴¹⁰ Jordan, 1923.

⁴⁰⁹ Check List, "Fishes Philippines," 52; orthotype *Prosopodasys gogorzæ* Jordan & Seale. (Omitted in "Genera of Fishes.")

⁴¹⁰ New genus; type *Scorpæna tridecimspinosa* Metzelaar from Surinam; allied to *Auctospina* and *Pterodus*, with thirteen dorsal spines, but with nasal and maxillary tentacles.

Family 494. CONGIOPODIDÆ (*Agriopidæ*)

- Congiopus**⁴¹¹ Perry, 1811, 170.
Agriopus Cuvier, 1829, 127.
Cephalinus Gronow, 1854, 259.
Zanclorhynchus Günther, 1880, 403.
Snyderina Jordan & Starks, 1901, 495.
Ocosia Jordan & Starks, 1904, 509.

⁴¹¹ Written *Congiopodus* by some writers.

Family 495. APLOACTIDÆ

- Aploactis** Temminck & Schlegel, 1843, 216.
Sthenopus Richardson, 1848, 240.
Trichopleura Kaup, 1858, 282.
Paraploactis Bleeker, 1865, 335, 384.
Aploactisoma Castelnau, 1872, 363.

Family 496. **SYNANCEJIDÆ**

- Synanceja*⁴¹² Bloch & Schneider, 1803, 58.
Minous Cuvier & Valenciennes, 1829, 133.
Pelor Cuvier, 1829, 127.
Spurco (Commerson) Cuvier & Valenciennes, 1829, 174.
*Synanchia*⁴¹³ Swainson, 1839, 201.
Erosa Swainson, 1839, 197.
Bufichthys Swainson, 1839, 201.
Trachicephalus Swainson, 1839, 201.
Synancidium Müller, 1843, 216.
*Choridactylus*⁴¹⁴ Richardson, 1848, 240.
*Glyptauchen*⁴¹⁵ Günther, 1860.
Polycaulus Günther, 1860, 296.
Uranoblepus Gill, 1861, 302.
*Synanceichthys*⁴¹⁶ Bleeker, 1863.
- Leptosynanceia* Bleeker, 1874, 374.
Synanchia (Swainson) Bleeker, 1874, 374.
Pseudosynanceia Day, 1875, 379.
Emmydrichthys Jordan & Rutter, 1896, 472.
Choridactylodes Gilchrist, 1902, 498.
Inimicus Jordan & Starks, 1904, 509.
Erosa (Swainson) Jordan & Starks, 1904, 509.
Simopias Gill, 1905, 513.
Rhinopias Gill, 1905, 513.
Peloropsis Gilbert, 1905, 513.
Deleastes Seale, 1906, 520.
Lysodermus Smith & Pope, 1906, 520.

⁴¹² Usually written *Synanceia*; spelled by Swainson *Synanchia*.⁴¹³ A variant of *Synanceja*.⁴¹⁴ Name later written *Chorismodactylus*.⁴¹⁵ "Cat. Fishes," 2: 121; orthotype *Apistes panduratus* Richardson. (Omitted in "Genera of Fishes.")⁴¹⁶ "Ternate," 11: 324; type *Synanceja verrucosa* Bloch & Schneider. (Omitted in "Genera of Fishes.")Family 497. **CARACANTHIDÆ**

- Micropus* Gray, 1831, 139.
Caracanthus Kröyer, 1845, 227.
Amphiprionichthys Bleeker, 1855, 263.
- Crossoderma* Guichenot, 1869, 354.
Trachycephalus De Vis, 1884, 427.

Family 498. **PATÆCIDÆ**

- Pataecus* Richardson, 1844, 222.
Neopataecus Steindachner, 1884, 430.

Family 498a. **GNATHANACANTHIDÆ**

(Velvet Fishes)

- Gnathanacanthus* Bleeker, 1855, 263.
Holoxenus Günther, 1876, 385.
- Beridia* Castelnau, 1877, 388.

Series **HEXAGRAMMIFORMES**Family 499. **ANOPOLOPOMIDÆ**

(Skil Fishes; Sable Fishes)

- Anoplopoma* Ayres, 1858, 277.
Scombrocottus Peters, 1872, 366.
- Eoscorpius* Jordan & J. Z. Gilbert, 1919, 569.

Family 500. **ERILEPIDÆ**

(Fat-Priests)

- Myriolepis* Lockington, 1880, 404.
Erilepis Gill, 1893, 461.
- Ebisus* Jordan & Snyder, 1901, 494.

Family 501. **HEXAGRAMMIDÆ**
(Greenlings)

Hexagrammos ^{416a} (Steller) Tilesius, 1809, 76.	Grammatopleurus Gill, 1861, 305.
Labrax Pallas, 1810, 77.	Pleurogrammus Gill, 1861, 305.
Lebius (Steller) Pallas, 1811, 84.	Acantholebius Gill, 1861, 305.
Chirus (Steller) Pallas, 1811, 84.	Octogrammus Bleeker, 1874, 372.
Chiropsis Girard, 1857, 275, 410.	Hexagrammoides Gracianov, 1907, 524.
Agrammus Günther, 1860, 296.	ACHRESTOGRAMMUS ⁴¹⁷ Jordan, 1921.
	ZEMIAGRAMMUS ⁴¹⁸ Jordan, 1921.

^{416a} Usually corrected to *Hexagrammus*.

⁴¹⁷ "Fossil Fishes Cal. Tertiary," 289; orthotype *Hexagrammos achrestus* Jordan & Gilbert.

⁴¹⁸ *Loc. cit.*, 289; orthotype *Zemiagrammus isistius* Jordan.

Family 502. **OPHIODONTIDÆ**
(Cultus Cods)

Ophiodon Girard, 1854, 257.	Oplopoma Girard, 1856, 269.
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Family 503. **OXYLEBIIDÆ**

Oxylebius Gill, 1862, 316.

Family 504. **ZANIOLEPIDÆ**

Zaniolepis Girard, 1857, 275.	Xantocles Jordan, 1917, 562.
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Series **PLATYCEPHALIFORMES**

Family 505. **HOPLICHTHYIDÆ**

Hoplichthys⁴¹⁹ Cuvier & Valenciennes,
1829, 133.

⁴¹⁹ Also spelled *Oplichthys*.

Family 506. **PLATYCEPHALIDÆ**
(Flat-heads)

Platycephalus Bloch, 1795, 53.	Insidiator Jordan & Snyder, 1900, 490.
Calliomorus Lacépède, 1800, 56.	Grammoplites Fowler, 1904, 508.
Centranodon Lacépède, 1803, 66.	Bembradium Gilbert, 1905, 513.
Bembras Cuvier & Valenciennes, 1829, 133.	Elates Jordan & Seale, 1907, 525.
Amora ⁴²⁰ Gray, 1833, 179.	Rogadius Jordan & Richardson, 1908, 528.
Neoplatycephalus Castelnau, 1872, 362.	Bambradon J. & R., 1908, 528.
Parabembras Bleeker, 1874, 372.	Hyalorhynchus Ogilby, 1910, 536.
Thysanophrys Ogilby, 1898, 483.	Inegocia Jordan & Thompson, 1913, 549.
	Onigocia J. & T., 1913, 549.

⁴²⁰ Name corrected to *Anaora* on a plate examined.

Series **COTTIFORMES**

Family 507. **JORDANIIDÆ**

Ventral rays I, 5; head narrow; scales present, often reduced each to a few radiating spinules.

"The scales of *Jordania zonope* treated with hot caustic potash are nothing but rows of strong ctenoid spines placed as they would be in true scales. In the dorsal region the rows are curved as they would be were they margins of ctenoid scales. In *Lepidocottus brevis* (Agassiz) the ctenoid elements are as in *Jordania*, but complete scales are present with circuli and basal radii as usual. It must be supposed that *Jordania* came from such an ancestor and represents the survival of certain elements of scale structure without the scales." (Cockerell, *Science*, Dec. 19, 1919, 568.)

LEPIDOCOTTUS Sauvage, 1875, 380.

Paricelinus Eigenmann & Eigenmann, 1889, 445.

Jordania Starks, 1895, 469.

Alcidea Jordan & Evermann, 1898, 481.

Eocottus Woodward, 1901, 496.

Family 508. ICELIDÆ

Hemilepidotus Cuvier, 1829, 127.

Triglops Reinhardt, 1832, 175.

Temnistia Richardson, 1836, 136.

Enophrys Swainson, 1839, 202.

Icelus Kröyer, 1845, 226.

Aspicottus Girard, 1854, 257.

Clypeocottus Ayres, 1854, 257.

Calycilepidotus Ayres, 1855, 282.

Artedius Girard, 1856, 269.

Ceratocottus Gill, 1859, 290.

Melletes Bean, 1879, 398.

PARAPERCA Sauvage, 1875, 380.

Chitonotus Lockington, 1881, 416.

Prionistius Bean, 1883, 421.

Icelinus Jordan, 1885, 433.

Artediellus Jordan, 1885, 433.

Radulinus Gilbert, 1890, 451.

Ruscarius Jordan & Starks, 1895, 469.

Astrolytes J. & S., 1895, 469.

Rastrinus Jordan & Evermann, 1896, 474.

Axyrias Starks, 1896, 475.

Tarandichthys Jordan & Evermann, 1896, 472.

*Sternias*⁴²¹ J. & E., 1898.

Stelgistrum Jordan & Gilbert, 1898, 482.

Archistes J. & G., 1898, 482.

Stlengis Jordan & Starks, 1904, 509.

Schmidtia J. & S., 1904, 509.

Daruma J. & S., 1904, 509.

Ricuzenius J. & S., 1904, 509.

Schmidtina J. & S., 1904, 510.

Stelgidonotus Jordan & Thompson, 1905, 513.

Taurulus Gracianov, 1907, 524.

Agonocottus Pavlenko, 1910, 537.

Orthopnias Starks & Mann, 1911, 541.

Archaulus Gilbert & Burke, 1912, 543.

Thyriscus Gilbert & Burke, 1912, 543.

*Pterygiocottus*⁴²² Bean & Weed, 1920.

⁴²¹ "Fishes of North and Middle America," II, 1926; orthotype *Triglops xenostethus* Gilbert. (Omitted in "Genera of Fishes.")

⁴²² "Notes on a Collection of Fishes from Vancouver Island, British Columbia," *Trans. Roy. Soc. Canada*, 13: 73; orthotype *P. macouni* Bean & Weed; an ally of *Artedius*.

Family 509. BLEPSIIDÆ

Skin covered with velvety prickles, form compressed.

Blepsias Cuvier, 1829, 127.

Peropus Lay & Bennett, 1839, 125.

Nautichthys Girard, 1859, 290.

Histiocottus Gill, 1888, 441.

Nautiscus Jordan & Evermann, 1898, 481.

Family 510. SCORPÆNICHTHYIDÆ

(Cabezones)

Ventral rays I, 5; head broad; skin smooth.

Scorpænichthys Girard, 1854, 257.

Family 511. **COTTIDÆ**
(Sculpins)

Ventral rays I, 2, to I, 4; skin naked or with imbedded plates or prickles; general form more or less depressed.

Even after the elimination of several aberrant genera, *Jordania*, *Scorpenichthys*, *Ascelichthys*, *Synchirus*, *Psychrolutes*, *Blepsias*, *Abyssocottus*, *Hemitripterus*, *Ereunias*, *Cottocomephorus*, *Comephorus*, *Rhamphocottus*, etc., the *Cottidæ* are still extremely diversified and may, after study of the skeletons, require further subdivision into families or subfamilies. For purpose of laying stress on distinctions, we further separate certain more or less natural groups, the form centering about *Icelus* being apparently derived from the ancestors of *Jordania*, while *Cottus*, *Myoxocephalus* and their varied associates may have sprung from ancestors of *Scorpenichthys*. Both *Jordania* and *Scorpenichthys* have normal ventrals (I, 5), but little else in common. Most of the allies of *Icelus* and *Hemilepidotus* have developed scales, while none of the *Cottidæ* as here restricted have true scales other than prickles or imbedded dermal plates. But in a general treatment of the group, such a minute subdivision of families may be found superfluous.

Cottus Linnæus, 1758, 12.

Uranoscopus Gronow, 1763, 19.

Myoxocephalus (Steller) Tilesius, 1811, 83.

Pegedictis⁴²³ Rafinesque, 1820, 113.

Trachydermus Heckel, 1837, 189.

Gymnocanthus⁴²⁴ Swainson, 1839, 202.

Uranidea Dekay, 1842, 210.

Centridermichthys Richardson, 1844, 222.

Phobetor Kröyer, 1845, 226.

Scorpicthys Bonaparte, 1845, 226.

Podabrus Richardson, 1848, 240.

Aphobus Gistel, 1848, 237.

Pseudoblennius Temminck & Schlegel, 1850, 247.

Pseudoclinus T. & S., 1850, 247.

Cottopsis Girard, 1851, 249.

Acanthocottus Girard, 1851, 249.

Leptocottus Girard, 1854, 257.

Triglopsis Girard, 1854, 257.

Leiocottus Girard, 1856, 269.

Oligocottus Girard, 1856, 269.

Hoplocottus Kaup, 1858, 282.

Boreocottus Gill, 1859, 290.

Porocottus Gill, 1859, 290.

Ptyonotus Günther, 1860, 296.

Potamocottus Gill, 1861, 307.

Oncocottus Gill, 1861, 302, 313.

Clinocottus Gill, 1861, 305.

Blennicottus Gill, 1861, 305.

Megalocottus Gill, 1861, 305.

Bunocottus⁴²⁵ Kner, 1868, 352.

Cottunculus Collett, 1875, 379.

Elaphocottus Sauvage, 1878, 397.

Tauridea Jordan & Rice, 1878, 395.

⁴²³ Description confused with that of *Catonotus*.

⁴²⁴ Corrected usually to *Gymnacanthus*.

⁴²⁵ This genus, apparently cottoid, is described by Kner as lacking ventral fins, although these structures are plainly shown in his excellent figure. If the description is correct, the genus should stand as a separate family. The fish, *Bunocottus apus*, is said to be from deep water, off Cape Horn. But no other cottoid is known south of the Tropic of Cancer. If Kner's account is correct *Bunocottus* may be an aberrant scorpenoid.

Malacocottus Bean, 1890, 450.
Dasycottus Bean, 1890, 450.
Argyrocottus Herzenstein, 1892, 458.
Zesticelus Jordan & Evermann, 1896,
 474.

Oxycottus J. & E., 1898, 481.
Sigmistes Rutter, 1898, 482.
Dialarchus Greeley, 1901, 493.
Rusciculus Greeley, 1901, 493.
Eximia Greeley, 1901, 493.
Thecopterus H. M. Smith, 1904, 511.
Cottiusculus Schmidt, 1904, 509, 511.
Rheopresbe Jordan & Starks, 1904, 509.
Ainocottus J. & S., 1904, 509.
Crossias J. & S., 1904, 509.

Elaphichthys J. & S., 1904, 509.
Alcichthys J. & S., 1904, 509.
Furcina J. & S., 1904, 509.
Ocynectes J. & S., 1904, 509.
Bero J. & S., 1904, 509.
Vellitor J. & S., 1904, 509.
Cephalocottus Gracianov, 1907, 524.
Mesocottus Gracianov, 1907, 524.
Rusulus Starks & Mann, 1911, 541.
Trichocottus Soldatov & Pavlenko,
 1915, 557.
Taurocottus S. & P., 1915, 557.
HAYIA Jordan & Gilbert, 1919, 569.
Greeleya Jordan, 1920, 571.

Family 512. **ABYSSOCOTTIDÆ**

Degenerate sculpins found in the depths of Lake Baikal.

Procottus Gracianov, 1902, 498.
Batrachocottus Berg, 1903, 501.
Abyssocottus Berg, 1906, 516.
Asprocottus Berg, 1906, 516.
Linnocottus Berg, 1906, 516.
Cottinella Berg, 1907, 521.

Family 513. **ASCELICHTHYIDÆ**

Ventral fins wanting; head broad; skins smooth.

Ascelichthys Jordan & Gilbert, 1880, 404.

Family 514. **PSYCHROLUTIDÆ**

Psychrolutes Günther, 1861, 307.
Gilbertina Jordan & Starks, 1895, 469.
Gilbertidia Berg, 1899, 484.
Eurymen Gilbert & Burke, 1912, 543.

Family 515. **NEOPHRYNICHTHYIDÆ**

Until the New Zealand genus *Neophrynichthys* can be critically examined, it seems best to regard it as constituting a distinct family. As no other cottoid forms have been found south of the Tropic of Cancer, I associate with it provisionally a genus from Buenos Aires.

Neophrynichthys Günther, 1876, 385. *Besnardia* Lahille, 1913, 549.

Family 516. **SYNCHIRIDÆ**

Synchirus Bean, 1889, 444.

Family 517. **EREUNIIDÆ**

Ereunias Jordan & Snyder, 1901, 493.

Family 518. **RHAMPHOCOTTIDÆ**

Rhamphocottus Günther, 1874, 375.

Family 519. **HEMITRIPTERIDÆ**

(Sea Ravens)

Hemitripterus Cuvier, 1829, 117. *Ulca* Jordan & Evermann, 1896, 472.

Family 520. **COTTOCOMEPHORIDÆ**

Cottocomephorus Pellegrin, 1900, 491. *Baicalocottus* Berg, 1903, 501.

Family 521. **COMEPHORIDÆ**

(Baical Fishes)

Comephorus Lacépède, 1800, 56. *Elæorhoüs* Pallas, 1811, 83.

Family 522. **AGONIDÆ**

(Sea Poachers; Alligator Fishes)

<i>Percis</i> Scopoli, 1777, 41.	<i>Bothragonus</i> (Gill) Jordan & Gilbert, 1882, 420.
<i>Cataphractus</i> Klein, 1777, 43.	
<i>Agonus</i> ⁴²⁶ Bloch & Schneider, 1801.	<i>Bathyagonus</i> Gilbert, 1890, 451.
<i>Aspidophorus</i> Lacépède, 1802, 62.	<i>Xenochirus</i> Gilbert, 1890, 451.
<i>Phalangistes</i> Pallas, 1811, 83.	<i>Cheiragonus</i> Herzenstein, 1890, 451.
<i>Cataphractus</i> (Klein) Fleming, 1828, 123.	<i>Xystes</i> Jordan & Starks, 1895, 469.
<i>Hippocephalus</i> Swainson, 1839, 202.	<i>Averruncus</i> J. & S., 1895, 469.
<i>Brachyopsis</i> Gill, 1861, 304, 305.	<i>Stelgis</i> Cramer, 1895, 469.
<i>Agonopsis</i> Gill, 1861, 305.	<i>Pallasina</i> Cramer, 1895, 469.
<i>Leptagonus</i> Gill, 1861, 305.	<i>Stellerina</i> Cramer, 1896, 474.
<i>Hypsagonus</i> Gill, 1861, 305.	<i>Sarritor</i> Cramer, 1896, 474.
<i>Podothecus</i> Gill, 1861, 304.	<i>Occa</i> Jordan & Evermann, 1898, 481.
<i>Paragonus</i> Gill, 1862, 305.	<i>Draciscus</i> Jordan & Snyder, 1901, 493.
<i>Agonomalus</i> Guichenot, 1866, 341.	<i>Xeneretmus</i> Gilbert, 1903, 504.
<i>Paragonus</i> Guichenot, 1869, 355.	<i>Tilesina</i> Schmidt, 1904, 511.
<i>Siphagonus</i> Steindachner, 1876, 387.	<i>Asterotheca</i> Gilbert, 1915, 556.
<i>Odontopyxis</i> Lockington, 1879, 400.	<i>Paragonus</i> Ribeiro, 1918, 564.
	<i>Ribeiroa</i> Jordan, 1920, 571.

⁴²⁶ "Systema Ichthyologia," 104; type *Cottus cataphractus* Linnæus. (Omitted in "Genera of Fishes.")

Family 523. **ASPIDOPHOROIDIDÆ**

Aspidophoroides Lacépède, 1802, 62. *Anoplagonus* Gill, 1861, 305.
Canthirhynchus Swainson, 1839, 202. *Ulcina*⁴²⁷ Cramer, 1896.

⁴²⁷ In Jordan & Evermann's "Check List," 1896, 449; type *Aspidophoroides olriki* Lütken. (Omitted in "Genera of Fishes.")

Series **CYCLOPTERIFORMES**Family 524. **CYCLOPTERIDÆ**

(Lump Fishes)

<i>Cyclopterus</i> Linnæus, 1758, 12.	<i>Eumicrotremus</i> Gill, 1862, 317, 331.
<i>Oncotion</i> Klein, 1777, 42.	<i>Cyclopteroïdes</i> Garman, 1892, 457.
<i>Lumpus</i> Rafinesque, 1815, 90.	<i>Lethotremus</i> Gilbert, 1895, 469.
<i>Lumpus</i> Cuvier, 1817, 171.	<i>Cyclolumpus</i> Tanaka, 1912, 546.

Family 525. **LIPAROPIDÆ**

Aptocyclus De la Pylaie, 1835, 183. *Liparops* Garman, 1892, 457.
Cyclopterichthys Steindachner, 1881, 417.

Family 526. **LIPARIDÆ** (*Cyclogasteridæ*)
(Sea Snails)

- Cyclogaster* Gronow, 1763, 18.
Liparis Scopoli, 1777, 41.
Liparis Röse, 1793, 52.
Liparius Rafinesque, 1815, 90.
Massaria Gistel, 1848, 236.
Careproctus Kröyer, 1861, 308.
Neoliparis Steindachner, 1875, 381.
Paraliparis Collett, 1878, 393.
*Amitra*⁴²⁸ Goode, 1880, 402.
Monomitra Goode, 1883, 424.
Gymnolycodes Vaillant, 1888, 444.
Enantioliparis Vaillant, 1888, 443.
Bathyphasma Gilbert, 1895, 467.
Gyrinichthys Gilbert, 1895, 467.
Rhinoliparis Gilbert, 1895, 467.
Hilgendorfia Goode & Bean, 1895, 468.
*Amitrichthys*⁴²⁸ Jordan & Evermann, 1896, 474.
Allurus J. & E., 1896, 474.
Allochir J. & E., 1896, 474.
Caremitra J. & E., 1896, 474.
Lyoliparis J. & E., 1896, 474.
Crystallichthys Jordan & Gilbert, 1898, 482.
Prognurus J. & G., 1898, 482.
Allinectes Jordan & Evermann, 1898, 482.
Crystallias Jordan & Snyder, 1902, 499.
Trismegistus J. & S., 1904, 508.
Acantholiparis Gilbert & Burke, 1912, 543.
Elassodiscus G. & B., 1912, 543.
Polypera Burke, 1912, 542.
*Nectoliparis*⁴²⁹ Gilbert & Burke, 1912, 543.
Lipariscus Gilbert, 1915, 556.
Cyclogaster (Gronow) Burke, 1912.

⁴²⁸ A synonym of *Paraliparis* proper, according to Sigurd Johnsen.

⁴²⁹ According to Sigurd Johnsen of Bergen *Nectoliparis* is a larval *Paraliparis*. If so, it would seem to be an ally of *P. holomelas*, having a wide gill-slit, and may be generically distinct from *Paraliparis*, the type of which has a narrow slit as in the group called *Amitrichthys*.

Series **TRIGLIFORMES**

Family 527. **PERISTEDIIDÆ**

- Peristedion*⁴³⁰ Lacépède, 1802, 62.
Octonus Rafinesque, 1810, 82.
Peristethus Kaup, 1858, 282.
Vulsiculus Jordan & Evermann, 1896, 475.
*Gargariscus*⁴³¹ Smith, 1917.
*Heminodus*⁴³² Smith, 1917.
*Scalicus*⁴³³ Jordan, 1922.

⁴³⁰ Written *Peristethus* by some authors.

⁴³¹ "New Genera of Deep Sea Gurnards (*Peristediidae*) from the Philippine Islands," *Proc. Biol. Soc. Wash.*, 145; type *Gargariscus semidentatus* Smith. (Overlooked in "Genera of Fishes.")

⁴³² Smith, *op. cit.*, 146; type *Heminodus philippinus* Smith.

⁴³³ New genus: type *Pcristcdion amiscus* Jordan & Starks; distinguished by the shovel-shaped snout without horns at the angles. Japan.

Family 528. **TRIGLIDÆ**

- Trigla** Linnæus, 1758, 14.
Corystion Klein, 1775, 41.
Prionotus Lacépède, 1802, 62.
Lepidotrigla Günther, 1860, 296.
Hoplonotus Guichenot, 1866, 341.
Ornichthys Swainson, 1839, 201.
Microtrigla Kaup, 1873, 369.
Chelidonichthys Kaup, 1873, 370.
Palænichthys Kaup, 1873, 370.
Lyrichthys Kaup, 1873, 370.
TRIGLOIDES Van Beneden, 1871, 360.
Chriolax Jordan & Gilbert, 1878, 396.
PODOPTERYX Sauvage, 1880, 406.
Bellator Jordan & Evermann, 1896, 475.
Merulinus J. & E., 1898, 481.
Gurnardus J. & E., 1898, 481.
Pterygotrigla Waite, 1899, 488.
Colotrigla Gill, 1905, 513.
Fissala Gill, 1905, 513.
Otohime Jordan & Starks, 1907, 525.
Paratrigla Ogilby, 1911, 540.
Exolissus⁴⁴ Jordan, 1923.

⁴⁴ New genus: type *Prionotus alepis* Alcock, *Nat. Hist. Notes*, etc., 1889, 303. This genera differs from *Prionotus* in the absence of scales.

Series **DACTYLOPTERIFORMES**Family 529. **DACTYLOPTERIDÆ** (*Cephalacanthidæ*)

- Cephalacanthus** Lacépède, 1803, 62.
Dactylopterus Lacépède, 1803 62.
Cephacandia Rafinesque, 1815, 89.
Gonocephalus Gronow, 1854, 258.
Dactyloptena Jordan & Richardson, 1908, 528.
Daicocus J. & R., 1908, 528.
Ebisinus J. & R., 1908, 528.

Order **HOLCONOTI**Family 530. **EMBIOTOCIDÆ**

- Ditrema** Temminck & Schlegel, 1844, 223.
Embiotoca Agassiz, 1853, 252.
Rhacochilus Agassiz, 1854 (May), 255.
Holconotus Agassiz, 1854 (May), 255.
Amphistichus Agassiz, 1854 (May), 255.
Cymatogaster Gibbons, 1854 (May 18), 257.
Hyperprosopon Gibbons, 1854 (May 18), 257.
Micrometrus Gibbons, 1854 (May 30), 257.
Pachylabrus Gibbons, 1854 (June 21), 257.
Mytilophagus Gibbons, 1854 (July), 257.
Cymatogaster Gibbons, 1854 (June 21; not of May 18), 257.
Damalichthys Girard, 1854 (August), 258.
Abeona Girard, 1854, 258.
Ennichthys Girard, 1854, 258.
Phanerodon Girard, 1854, 258.
Metrogaster (Agassiz) Alex. Agassiz, 1861, 300.
Bramopsis (Agassiz), A. Agassiz, 1861, 300.
Tæniotoca A. Agassiz, 1861, 300.
Hypsurus A. Agassiz, 1861, 300.
Brachyistius Gill, 1862, 316.
Hypocritichthys Gill, 1862, 316.
Mænichthys (Kaup) Bleeker, 1876, 383.
Sema Jordan, 1878, 396.
Neoditrema Steindachner & Döderlein, 1883, 426.
Zalemnius Jordan & Evermann, 1896, 473.
Tocichthys Hubbs, 1918, 563.
Amphigonopterus Hubbs, 1918, 563.

Family 531. **HYSTEROCARPIDÆ**

- Hysterocharpus** Gibbons, 1854, 257.
Sargosomus (Agassiz) A. Agassiz, 1861, 300.
Dacentrus Jordan, 1878, 396.

Order CHROMIDES

Family 532. POMACENTRIDÆ

- Abudefduf** Forskål, 1775, 33.
Prochilus Klein, 1775, 39.
Amphiprion Bloch & Schneider, 1801, 59.
Glyphisodon⁴³⁵ Lacépède, 1803, 64.
Pomacentrus Lacépède, 1803, 64.
Chromis Cuvier, 1815, 93.
Premnas Cuvier, 1817, 106.
Heliastes⁴³⁶ Cuvier, 1829, 128.
Dascyllus⁴³⁷ Cuvier, 1829, 128.
Pristotis Rüppell, 1835, 184.
Chrysiptera Swainson, 1839, 199.
ODONTEUS Agassiz, 1839, 194.
Stegastes Jenyns, 1842, 211.
Pirene Gistel, 1848, 235.
Tetradrachmum Cantor, 1849, 241.
Furcaria Poey, 1860, 299.
Hypsypops Gill, 1861, 305.
Lepidozygus Günther, 1862, 318.
Microspathodon Günther, 1862, 318.
Parma Günther, 1862, 318.
Euschistodus Gill, 1862, 315.
Acanthochromis Gill, 1863, 324.
Dischistodus Gill, 1863, 324.
Ayresia Cooper, 1863, 323.
Pomatapriion Gill, 1863, 324.
Onychognathus Troschel, 1866, 343.
Jerdonia Day, 1870, 356.
Paraglyphidodon Bleeker, 1876, 384.
Heptadecacanthus Alleyne & Macleay, 1877, 387.
Parapomacentrus Bleeker, 1877, 387.
Glyphidodontops Bleeker, 1877, 387.
Brachypomacentrus Bleeker, 1877, 387.
Eupomacentrus Bleeker, 1877, 387.
Amblypomacentrus Bleeker, 1877, 387.
Daya⁴³⁸ Bleeker, 1877.
Hemiglyphidodon Bleeker, 1879, 398, 402.
Hermosilla Jenkins & Evermann, 1888, 442.
Nexilarius⁴³⁹ Gilbert, 1896, 475.
Azurina Jordan & McGregor, 1898, 481.
Nexilosus Heller & Snodgrass, 1903, 503.
Actinicola Fowler, 1904, 508.
Cheiloprion Weber, 1913, 551, 561.
Hoplochromis⁴⁴⁰ Fowler, 1918.
Ctenoglyphidodon⁴⁴¹ Fowler, 1918.
Azurella Jordan, 1919, 567.
*Actinochromis*⁴⁴².
Centrochromis⁴⁴³ Norman, 1922.

⁴³⁵ Often written *Glyphidodon*.⁴³⁶ Also written *Heliastes*.⁴³⁷ Also written *Dascyllus*.⁴³⁸ Bleeker, *Verh. Holl. Mij. Harlem*, 71; orthotype *Pomacentrus jerdoni* Day. (Omitted in "Genera of Fishes.")⁴³⁹ Misprinted *Nexilaris*.⁴⁴⁰ *Proc. Acad. Nat. Sci. Phila.*, 70: 66; orthotype *Heliastes caruleus* Cuv. & Val.⁴⁴¹ *Proc. Acad. Nat. Sci. Phila.*, 1918, 59; type *Abudefduf melanopselion* Fowler.⁴⁴² Orthotype *A. lividus*. (Further details lacking.)⁴⁴³ J. R. Norman, "Fishes from Tobago," *Ann. Mag. Nat. Hist.*, 9: 533; orthotype *Glyphidodon rudis* Poey.

Family 533. PRISCACARIDÆ

This extinct group of the American Eocene differs from the *Cichlidæ* in the possession of vomerine teeth.

PRISCACARA Cope, 1877, 388.

COCKERELLITES⁴⁴⁴ Jordan, 1923.

⁴⁴⁴ New genus, distinguished from *Priscacara* by the weak ventral spine and the long soft dorsal of 13 or 14 rays; orthotype *Priscacara liops* Cope. Named for Theodore Dru Alison Cockerell, of the University of Colorado.

Family 534. CICHLIDÆ

This vast group covers a wide variety of forms, river fishes of both tropics, and doubtless requires subdivision.

- Cichla** Bloch & Schneider, 1801, 59.
Chromis Cuvier, 1817, 102.
Etroplus Cuvier & Valenciennes, 1830, 135.
Cichlaurus Swainson, 1839, 198.
Cichlasoma Swainson, 1839, 200.
Astronotus Swainson, 1839, 200.
Chætolabrus Swainson, 1839, 199.
Microgaster Swainson, 1839, 199.
Tilapia⁴⁴⁵ Andrew Smith, 1840, 244.
Uaru Heckel, 1840, 207.
Symphysodon Heckel, 1840, 207.
Pterophyllum Heckel, 1840, 207.
Acara Heckel, 1840, 207.
Heros Heckel, 1840, 207.
Chætobranchus Heckel, 1840, 207.
Geophagus Heckel, 1840, 207.
Crenicichla Heckel, 1840, 207.
Batrachops Heckel, 1840, 207.
Chætostoma⁴⁴⁶ Heckel, 1846, 230.
Sarotherodon Rüppell, 1852, 231.
Coptodon Gervais, 1853, 253.
Herichthys Baird & Girard, 1854, 255.
Plataxoides Castelnau, 1855, 264.
Hemichromis Peters, 1857, 276.
Parachromis Agassiz, 1858, 277.
Hypsophrys Agassiz, 1858, 277.
Amphilophus Agassiz, 1858, 277.
Baiodon Agassiz, 1858, 277.
Chromichthys Duméril, 1858, 280.
Haligenes Günther, 1859, 292.
Hoplarchus Kaup, 1860, 297.
Satanoperca Günther, 1862, 318.
Hygrogonus Günther, 1862, 318.
Mesops Günther, 1862, 318.
Mesonauta Günther, 1862, 318.
Petenia Günther, 1862, 318.
Chromis (Cuvier) Günther, 1862, 318.
Theraps Günther, 1862, 318.
Pseudetroplus (Bleeker) Günther, 1862, 318.
Nandopsis Gill, 1862, 315.
Melanogenes Bleeker, 1863, 321.
Neetroplus Günther, 1866, 341.
Paretroplus Bleeker, 1868, 348.
Paratilapia Bleeker, 1868, 348.
Acaropsis Steindachner, 1875, 381.
Crenicara Steindachner, 1875, 381.
Dicrossus (Agassiz) Steindachner, 1875, 381.
Saraca Steindachner, 1875, 381.
Paracara Bleeker, 1878, 392.
Ptychochromis Steindachner, 1880, 406.
Hoplotilapia Steindachner, 1888, 443.
Haplochromis Hilgendorf, 1888, 442.
Oreochromis Günther, 1889, 446.
Lamprologus Schilthuis, 1890, 452.
Ctenochromis⁴⁴⁷ Pfeffer, 1893.
Retroculus Eigenmann & Bray, 1894, 464.
Æquidens Eigenmann & Bray, 1894, 464.
Pelmatochromis Steindachner, 1894, 465.
Docimodus Boulenger, 1896, 471.
Corematodus Boulenger, 1896, 471.
Boggiana Perugia, 1897, 478.
Chromidotilapia Boulenger, 1898, 479.
Telmatochromis Boulenger, 1898, 479.
Julidochromis Boulenger, 1898, 479.
Eretmodus Boulenger, 1898, 479.
Bathybates Boulenger, 1898, 479.
Tropheus Boulenger, 1898, 479.
Petrochromis Boulenger, 1898, 479.
Simochromis Boulenger, 1898, 479.
Perissodus Boulenger, 1898, 479.
Plecodus Boulenger, 1898, 479.
Ectodus Boulenger, 1898, 576.
Xenochromis Boulenger, 1899, 485.
Xenotilapia Boulenger, 1899, 485.
Trematocara Boulenger, 1899, 485.
Steatocranus Boulenger, 1899, 485.
Grammatotria Boulenger, 1899, 485.
Pseudoplesiops Boulenger, 1899, 485.
Spathodus Boulenger, 1900, 488.
Asprotilapia Boulenger, 1901, 492.
Gephyrochromis Boulenger, 1901, 492.

⁴⁴⁵ Type *Tilapia sparrmanni* Smith.

⁴⁴⁶ Written *Chatostomus* by Kner, 1854.

⁴⁴⁷ Type *Ctenochromis pectoralis*, a synonym of *Haplochromis*. (Omitted in "Genera of Fishes" and in *Zoological Record*.)

- Hemitylapia* Boulenger, 1902, 497.
Cyrtocara Boulenger, 1902, 497.
Chilochromis Boulenger, 1902, 497.
Biotæcus Eigenmann & Kennedy, 1903, 502.
Biotodoma Eigenmann & Kennedy, 1903, 502.
Ophthalmotilapia Pellegrin, 1904, 510.
Boulengerochromis Pellegrin, 1904, 510.
Astatotilapia Pellegrin, 1904, 510.
Nannochromis Pellegrin, 1904, 510.
Astatoreochromis Pellegrin, 1904, 510.
Lepidolamprologus Pellegrin, 1904, 510.
Astatheros Pellegrin, 1904, 510.
Thorichthys Meek, 1904, 510.
Nannacara Regan, 1905, 515.
Parapetenia Regan, 1905, 515.
Astatochromis Pellegrin, 1905, 515.
Platyæniodus Boulenger, 1906, 517.
Haplotaxodon Boulenger, 1906, 517.
Cunningtonia Boulenger, 1906, 517.
Heterogramma Regan, 1906, 520.
Enantiopus Boulenger, 1906. (See Index.)
Chætobranchopsis Eigenmann & Ward, 1907, 522.
Erythrichthys Meek, 1907, 525.
PALÆOCHROMIS Sauvage, 1907, 526, 537.
Tomocichla Regan, 1908, 530.
Chilotilapia Boulenger, 1908, 527.
Bayonia Boulenger, 1911, 538.
Acarichthys Eigenmann, 1912, 543.
Stappersia Boulenger, 1914, 552.
Schubotzia Boulenger, 1914, 552.
*Champsocchromis*⁴⁴⁸ Boulenger, 1916, 558.
Lobochilotes Boulenger, 1916, 558.
Gymnogeophagus Ribeiro, 1918, 565.
Nannacara Ribeiro, 1918, 564.
Pseudopercis Ribeiro, 1918, 564.
Otopharynx Regan, 1920, 572.
Limnotilapia Regan, 1920, 572.
Cyathopharynx Regan, 1920, 572.
Limnochromis Regan, 1920, 572.
Cyphotilapia Regan, 1920, 572.
Lipochromis Regan, 1920, 572.
Neochromis Regan, 1920, 572.
Cnestrostoma Regan, 1920, 572.
Mylochromis Regan, 1920, 572.
Sargochromis Regan, 1920, 572.
Labrochromis Regan, 1920, 572.
Serranochromis Regan, 1920, 572.
Clinodon Regan, 1920, 572.
Callochromis Regan, 1920, 572.
Leptochromis Regan, 1920, 572.
Aulonocranus Regan, 1920, 572.
Hemibates Regan, 1920, 572.
Neotilapia Regan, 1920, 572.
Heterotilapia Regan, 1920, 572.
Tylochromis Regan, 1920, 572.
*Pseudotropheus*⁴⁴⁹ Regan, 1921.
*Cynotilapia*⁴⁵⁰ Regan, 1921.
*Lethrinops*⁴⁵¹ Regan, 1921.
*Rhamphochromis*⁴⁵² Regan, 1921.
*Aulonocara*⁴⁵³ Regan, 1921.
Heterochromis^{453a} Regan, 1922.
Parachromis^{453b} Regan, 1922.
Macrolepurodus Regan, 1922. (See Index.)

⁴⁴⁸ A synonym of *Haplochromis*.

⁴⁴⁹ "Cichloid Fishes of Lake Nyassa," *Proc. Zool. Soc. Lond.*, 681; orthotype *Chromis williamsi* Günther.

⁴⁵⁰ *Loc. cit.*, 684; orthotype *C. afra* Günther.

⁴⁵¹ *Loc. cit.*, 718; orthotype *Chromis lethrinus* Günther.

⁴⁵² *Loc. cit.*; orthotype *Hemichromis longiceps* Günther.

⁴⁵³ *Loc. cit.*; orthotype *A. nyassæ* Regan.

^{453a} "Classification of the Fishes of the Family *Cichlidæ* II"; African and Syrian Genera, *Ann. Mag. Nat. Hist. X.*, September, 1922, 252; orthotype *Paratilapia multidens* Pellegrin.

^{453b} *Loc. cit.*, 251; orthotype *Hemichromis sacer* Günther.

Order PHARYNGOGNATHI

Family 535. PHARYNGOPILOIDÆ (*Phyllodontidæ*)

A small extinct family of Labroid fishes, with the upper pharyngeals united into one, the median teeth enlarged.

PHYLLODUS Agassiz, 1844, 217.

PHARYNGOPILUS Cocchi, 1864, 329.

LABRODON Gervais, 1857, 275.

EGERTONIA Cocchi, 1864, 329.

NUMMOPALATUS Rouault, 1858, 284.

PARAPHYLLODUS⁴⁵⁴ Sauvage, 1875.

DIAPHYODUS Schaffhütl, 1863, 328.

⁴⁵⁴ *Bull. Geol. Soc. France*, 3: 615; name given to species of *Phyllodus* with the median teeth small. (Omitted in "Genera of Fishes.")

Family 536. LABRIDÆ

This family may be naturally separated into the tropical forms, having the vertebræ in normal number ($10 + 15 = 25$), and those with the number increased ($10 + 17 = 27$ to $20 + 21 = 41$). Those with the increased numbers of vertebræ inhabit the colder seas.

Labrus Linnæus, 1758, 13.

Ronchifex Gistel, 1848, 235.

Scarus Gronow, 1763, 19.

PLATYLÆMUS Dixon, 1850, 245.

Suillus Catesby, 1771, 30.

Chærops Rüppell, 1852, 251.

Cicla Klein, 1775, 39.

Pteragogus Peters, 1855, 266.

Helops Browne, 1789, 47.

Xiphocheilus Bleeker, 1856, 268.

Bodianus⁴⁵⁵ Bloch, 1790, 49.

Cossyphodes Bleeker, 1860, 293.

Cicla Röse, 1793, 52.

Pseudodax⁴⁵⁹ Bleeker, 1861.

Hiatula Lacépède, 1800, 57.

Hypsigenys Günther, 1861, 308.

Harpe Lacépède, 1803, 63.

Semicossyphus Günther, 1861, 308.

Symphodus Rafinesque, 1810, 79.

Tautogolabrus Günther, 1862, 318.

Tautoga Mitchell, 1814, 86.

Trochocopus Günther, 1862, 318.

Corycus⁴⁵⁶ Cuvier, 1815, 93.

Decodon Günther, 1862, 318.

Crenilabrus Cuvier, 1815, 93.

Lepidaplois Gill, 1862, 314, 325.

Diastodon Bowdick, 1825, 119.

Euhypsocara Gill, 1863, 325.

Lachnolaimus⁴⁵⁷ Cuvier, 1829, 130.

Gymnopropoma Gill, 1863, 325.

Clepticus Cuvier, 1829, 130.

Achærodon Gill, 1863, 325.

Ctenolabrus Cuvier & Valenciennes, 1839, 194.

Pimelometopon Gill, 1864, 330.

Acantholabrus C. & V., 1839, 194.

Heterochærops Steindachner, 1866, 343.

Cossyphus C. & V., 1839, 194.

PHACODUS Cope, 1869, 354.

Malapterus⁴⁵⁸ C. & V., 1839.

CROMMYODUS Cope, 1870, 356.

Cynædus Swainson, 1839, 200.

PROTAUTOGA Leidy, 1873, 370.

Chærodon Bleeker, 1847, 230.

Torresia Castelnau, 1875, 378.

Platychoærops Klunzinger, 1880, 404.

⁴⁵⁵ By tautonomy, not by first restriction.

⁴⁵⁶ Later written *Coricus*.

⁴⁵⁷ Corrected later to *Lachnolæmus*.

⁴⁵⁸ *Poissons*, 12: 355; type *M. reticulatus* Cuvier & Valenciennes; spelled *Malacopterus* by Günther. (Omitted in "Genera of Fishes.")

⁴⁵⁹ Bleeker, "Scaroidi," 2; orthotype *Odax moluccensis* Cuvier & Valenciennes. (Omitted in "Genera of Fishes.")

Stylodus Sauvage, 1882, 421.
Pseudosphærodon Noetling, 1885, 434.
Graus Philippi, 1887, 438.
Lappanella Jordan, 1890, 452.
Protautoga di Alessandri, 1896, 471.
Teleogramma Boulenger, 1899, 453.
Verreo Jordan & Snyder, 1902, 499.

Verriculus Jordan & Evermann, 1903, 504.
Chæropsodes Gilchrist & Thompson, 1909, 533.
Gillidia Eastman, 1914, 553.
Eolabroides Eastman, 1914, 552.

Family 537. **CORIDÆ**

Platiglossus Klein, 1775, 40.
Gomphosus Lacépède, 1802, 61.
Coris Lacépède, 1802, 61.
Hemipteronotus Lacépède, 1802, 61.
Acarauna Sewastianof, 1802, 68.
Elops (Commerson) Lacépède, 1802, 70.
Hologymnosus Lacépède, 1802, 63.
Cheilinus Lacépède, 1802, 63.
Cheilio Lacépède, 1803, 63.
Tautoga Mitchill, 1814, 86.
Micropodus Rafinesque, 1815, 89.
*Xyrichthys*⁴⁶⁰ Cuvier, 1815, 93.
Epibulus Cuvier, 1815, 93.
Aygula Rafinesque, 1815, 90.
Julis Cuvier, 1815, 94.
Novacula Cuvier, 1817, 102.
Anampses (Cuvier) Quoy & Gaimard, 1824, 117.
Amorphocephalus Bowdich, 1825, 119.
Elops (Commerson) Bonaparte, 1831, 175.
Halichæres Rüppell, 1835, 184.
Thalassoma Swainson, 1839, 199.
Crassilabrus Swainson, 1839, 199.
Urichthys Swainson, 1839, 199.
Ichthycallus Swainson, 1839, 200.
Eupemis Swainson, 1839, 200.
Chlorichthys Swainson, 1839, 200.
Thalliurus Swainson, 1839, 200.
Cirrhilabrus Temminck & Schlegel, 1845, 227.
Neanis Gistel, 1848, 236.
Cheilinoides Bleeker, 1851, 248.
Labroides Bleeker, 1851, 248.

Labrichthys Bleeker, 1854, 256.
Duymæria Bleeker, 1856, 267.
*Xiphocheilus*⁴⁶¹ Bleeker, 1856, 268.
Labrastrum Guichenot, 1860, 296.
Stethojulis Günther, 1861, 308.
Hemigymnus Günther, 1861, 308.
Doratonotus Günther, 1862, 318.
Cymolutes Günther, 1862, 318.
*Ophthalmolepis*⁴⁶² Bleeker, 1862, 300.
Macropharyngodon Bleeker, 1862, 309.
PlatyGLOSSUS (Klein) Bleeker, 1862, 309.
Hemicoris Bleeker, 1862, 309.
Pseudojulis Bleeker, 1862, 309.
Pseudocheilinus Bleeker, 1862, 309.
Pseudocoris Bleeker, 1862, 309.
Guntheria Bleeker, 1862, 309.
Pseudolabrus Bleeker, 1862, 309.
Hemitautoga Bleeker, 1862, 309.
Diproctacanthus Bleeker, 1862, 309.
Novaculichthys Bleeker, 1862, 309.
Leptojulis Bleeker, 1862, 309.
*Oxycheilinus*⁴⁶³ Gill, 1862, 315.
Malacocentrus Gill, 1862, 314.
Chærojulis Gill, 1862, 314.
Iniistius Gill, 1862, 314.
Dimalacocentrus Gill, 1863, 325.
Oxyjulis Gill, 1863, 325.
Cheiliopsis Steindachner, 1863, 328.
Thysanocheilus Kner, 1865, 338.
Parajulis Bleeker, 1865, 335.
Cheilolabrus Alleyne & Macleay, 1877, 387.
Austrolabrus Steindachner, 1884, 430.

⁴⁶⁰ Spelled also *Xirichthys*.

⁴⁶¹ Corrected to *Xiphochilus*.

⁴⁶² The date of this paper (No. 712) is 1862, and the genera which follow are included in it as well as in No. 754. The type of *Hemicoris* is *Halichæres variegatus* Rüppell; that of *Guntheria*, *G. caruleovittatus* Bleeker; that of *Hemitautoga*, *Labrus centiquadrus* Lacépède; and of *Novaculichthys*, *Labrus taniourus* Lacépède.

⁴⁶³ Orthotype *Cheilinus arenatus*.

- Julichthys** De Vis, 1885, 431.
Eupetrichthys Ramsey & Ogilby, 1887, 439.
Xyrula Jordan, 1890, 452.
Pictilabrus Gill, 1891, 455.
Julidio Jordan & Evermann, 1896, 473.
Emmeekia J. & E., 1896, 473.
Iridio J. & E., 1896, 473.
Ampehes Jordan & Snyder, 1902, 499.
Octocynodon Fowler, 1904, 508.
Chæropsodes Gilchrist & Thompson, 1909, 533.
Bermudichthys Nichols, 1920, 572.
Hinalea⁴⁶⁴ Jordan & Jordan, 1923.

⁴⁶⁴ "Fishes of Hawaii," *Mem. Carnegie Mus.* 69; orthotype *Julis axillaris* Quoy and Gaimard; differs from *Stethojulis* in lacking posterior canines.

Family 538. NEOLABRIDÆ

Allied to the *Coridæ*, but with the weak dorsal spines only 3 or 4 in number.

Neolabrus Steindachner, 1875, 381.

Family 539. SPARISOMIDÆ (*Scarichthyidæ*)

This group is well distinguished from the *Scaridæ*, by its very different pharyngeal dentition as well as by numerous other characters of fins and teeth.

- Leptoscarus** Swainson, 1839, 199.
Sparisoma Swainson, 1839, 199.
Scarus (Forskål) Bleeker, 1849, 240.
Scarichthys Bleeker, 1859, 287.
TAURINICHTHYS Cocchi, 1864, 329.
Cryptotomus Cope, 1871, 361.
Heteroscarus Castelnau, 1872, 363.
Calotomus Gilbert, 1890, 451.
SCAROIDES Tould, 1899, 534.
Scaridea Jenkins, 1901, 493.
Xenoscarus Evermann & Radcliffe, 1917, 562.

Family 540. SCARIDÆ (*Callyodontidæ*)

- Callyodon** Gronow, 1763, 19.
Psittacus Catesby, 1771, 31.
Novacula Catesby, 1771, 31.
Scarus⁴⁶⁵ Forskål, 1775, 33.
Callyodon⁴⁶⁶ (Gronow) Scopoli, 1777, 42.
Callyodon (Gronow) Bloch, 1788, 45.
Mormyra Browne, 1789, 46.
Calliodon Bloch & Schneider, 1801, 59.
Odax (Commerson) Lacépède, 1802, 70.
Aper (Plumier) Lacépède, 1803, 72.
Calliodon Cuvier, 1829, 130.
Hemistoma Swainson, 1839, 199.
Petronason Swainson, 1839, 199.
Erychthys Swainson, 1839, 199.
Chlorurus Swainson, 1839, 199.
Amphiscarus Swainson, 1839, 199.
Euscarus Jordan & Evermann, 1896, 473.
Loro J. & E., 1896, 473.

⁴⁶⁵ I use this familiar name pending final decision as to the retention of Gronow's non-binomial post-Linnæan generic names.

⁴⁶⁶ Also often written *Calliodon*.

Family 541. ODACIDÆ

- Odax** Cuvier, 1829, 130.
Olisthops⁴⁶⁷ Richardson, 1850, 247.
Coridodax Günther, 1862, 318.
Heteroscarus Castelnau, 1872, 363.
Neoodax Castelnau, 1875, 378.

⁴⁶⁷ Spelled *Olistherops* by Günther.

Family 542. SIPHONOGNATHIDÆ

Siphonognathus Richardson, 1857, 276.

Order GOBIOIDEA

Family 543. RHYACICHTHYIDÆ (*Platypteridæ*)

Platyptera (Kuhl & Van Hasselt)
Cuvier, 1829, 150, 189.

Rhyacichthys Boulenger, 1901, 492.

Family 544. ELEOTRIDÆ
(Sleepers)

Eleotris Gronow, 1763, 20.
Pelmatia Browne, 1789, 47.
Gobiomorus Lacépède, 1800, 57.
Gobiomoroides Lacépède, 1800, 57.
Eleotris Bloch & Schneider, 1801, 58.
Bostrychus Lacépède, 1802, 61.
Bostrychoides Lacépède, 1802, 61.
Asellus (Plumier) Lacépède, 1802, 71.
Bostrichthys Duméril, 1806, 75.
Bostrictis Rafinesque, 1815, 88.
Psilus Fischer, 1813, 85.
Psiloides Fischer, 1813, 85.
Pterops Rafinesque, 1815, 88.
Ictiopogon Rafinesque, 1815, 92.
Epiphthalmus Rafinesque, 1815, 90.
Prochilus Cuvier, 1817, 104.
Asterropteryx Rüppell, 1828, 122.
Philypnus Cuvier & Valenciennes, 1837, 188.
Cestreus McClelland, 1842, 212.
Culius Bleeker, 1856, 267, 372.
Butis Bleeker, 1856, 267, 372.
Belobranchus Bleeker, 1856, 268, 372.
Eleotriodes Bleeker, 1857, 275, 373.
Lembus Günther, 1859, 291.
Erotelis Poey, 1860, 299.
Dormitator Gill, 1861, 302, 316.
Mogurnda Gill, 1863, 326.
Gobiomorphus Gill, 1863, 326.
Ophiocara Gill, 1863, 326.
Hypseleotris Gill, 1863, 326.
Odonteleotris Gill, 1863, 326.

Calleleotris Gill, 1863, 326.
Ptereleotris Gill, 1863, 326.
Valenciennesa Bleeker, 1868, 348.
Valenciennesia Bleeker, 1874, 373.
Amblyeleotris Bleeker, 1874, 372.
Eleotrioides Bleeker, 1874, 372.
Guavina Bleeker, 1874, 372.
Oxyeleotris Bleeker, 1874, 372.
Gymneleotris Bleeker, 1874, 372.
Gymnobutis Bleeker, 1874, 372.
Prionobutis Bleeker, 1874, 372.
Odontobutis Bleeker, 1874, 372.
Priolepis (Ehrenberg) Bleeker, 1874, 373.
Brachyeleotris Bleeker, 1874, 373.
Heteroleotris Bleeker, 1874, 373.
Pogoneleotris Bleeker, 1875, 377.
Giuris Sauvage, 1879, 401.
Ioglossus Bean, 1882, 419, 420.
Alexurus Jordan, 1895, 468.
Kreffti Ogilby, 1897, 478.
Carassiops Ogilby, 1897, 477.
Mulgoa Ogilby, 1897, 478.
Ophiorrhinus Ogilby, 1897, 478.
Caulichthys Ogilby, 1898, 483.
Vireosa Jordan & Snyder, 1901, 494.
Eviota Jenkins, 1903, 504.
Pariglossus⁴⁶⁸ Regan, 1912, 545.
Microeleotris Meek & Hildebrand, 1916, 559.
Hemieleotris M. & H., 1916, 560.
Leptophilypnus M. & H., 1916, 559.

⁴⁶⁸ Misprinted *Pariglossus* by authors.

Family 545. GOBIIDÆ
(Gobies)

Gobius Linnæus, 1758, 12.
Gobio Klein, 1779, 43.
Benthophilus Eichwald, 1831, 176.
Oplopomus (Ehrenberg) Cuvier & Valenciennes, 1837, 188.
Cryptocentrus (Ehrenberg) Cuvier & Valenciennes, 1837, 188, 374.

Apocryptes Cuvier & Valenciennes, 1837, 188.
Hexacanthus Nordmann, 1838, 193.
Ruppellia Swainson, 1839, 202.
Gobileptes Swainson, 1839, 198.
Brachyochirus Nardo, 1841, 209.
Chæturichthys Richardson, 1844, 222.

- Gobiodon** (Kuhl & Van Hasselt) Bleeker, 1856, 267.
Oxyurichthys Bleeker, 1858, 279.
Lepidogobius Gill, 1858, 280.
Tridentiger Gill, 1858, 280.
Triænophorus Gill, 1858, 280.
Triænophorichthys Gill, 1858, 280.
Chænogobius Gill, 1858, 280.
Ctenogobius Gill, 1858, 281.
Gobionellus Girard, 1859, 291.
Gobiosoma Girard, 1859, 291.
Euctenogobius Gill, 1859, 291.
Evorthodus Gill, 1859, 289.
Acanthogobius Gill, 1859, 290.
Glossogobius Gill, 1859, 290.
Rhinogobius Gill, 1859, 290.
Luciogobius Gill, 1859, 290.
Smaragdus Poey, 1860, 299.
Chonophorus Poey, 1860, 299.
Awaous Steindachner, 1860, 299.
Cyclogobius Steindachner, 1860, 299.
Oplopomus Steindachner, 1860, 299.
Gobiopsis Steindachner, 1860, 299.
Oxyurichthys Bleeker, 1860, 294.
Latrunculus Günther, 1861, 307.
Lentipes Günther, 1861, 307.
Lophogobius Gill, 1862, 316.
Eucyclogobius Gill, 1862, 316.
Gillichthys Cooper, 1863, 323.
Boreogobius Gill, 1863, 326.
Crystallogobius Gill, 1863, 326.
Gymnogobius Gill, 1863, 326.
Ophiogobius Gill, 1863, 326.
Synechogobius Gill, 1863, 326.
Pterogobius Gill, 1863, 326.
Coryphopterus Gill, 1863, 325.
Deltentosteus Gill, 1863, 325.
Pomatoschistus Gill, 1863, 325.
Cotylopus Guichenot, 1864, 332.
Gillia Günther, 1864, 334.
Orthostomus Kner, 1868, 352.
Gobiichthys Klunzinger, 1871, 361.
Paragobiodon Bleeker, 1873, 367.
Lophiogobius Günther, 1873, 369.
Ellerya Castelnau, 1873, 367.
Alepidogobius Bleeker, 1874, 373.
Gobiopterus Bleeker, 1874, 373.
Leptogobius Bleeker, 1874, 373.
Triænopogon Bleeker, 1874, 373.
Sicydiops Bleeker, 1874, 373.
Microsicydium Bleeker, 1874, 373.
Brachygobius Bleeker, 1874, 373.
Callogobius Bleeker, 1874, 373.
Platygobius Bleeker, 1874, 373.
Mesogobius Bleeker, 1874, 373.
Stenogobius Bleeker, 1874, 373.
Hemigobius Bleeker, 1874, 373.
Oligolepis Bleeker, 1874, 373.
Gnatholepis Bleeker, 1874, 373.
Hypogymnogobius Bleeker, 1874, 373.
Actinogobius Bleeker, 1874, 373.
Cephalogobius Bleeker, 1874, 373.
Centrogobius Bleeker, 1874, 373.
Acentrogobius Bleeker, 1874, 373.
Porogobius Bleeker, 1874, 373.
Pseudogobiodon Bleeker, 1874, 373.
Oxymetopon Bleeker, 1874, 373.
Paragobiodon Bleeker, 1874, 373.
Amblygobius Bleeker, 1874, 373.
Zonogobius Bleeker, 1874, 374.
Odontogobius Bleeker, 1874, 374.
Stigmatogobius Bleeker, 1874, 374.
Amblychæturichthys Bleeker, 1874, 374.
Parachæturichthys Bleeker, 1874, 374.
Apocryptodon Bleeker, 1874, 374.
Parapocryptes Bleeker, 1874, 374.
Gobileptes (Swainson) Bleeker, 1874, 374.
Pseudapocryptes Bleeker, 1874, 374.
Orthostomus Kner, 1874, 373.
Gobiopus Gill, 1874, 375.
Microgobius Poey, 1875, 379.
Latrunculodes Collett, 1875, 379.
Leptogobius Bleeker, 1875, 377.
Apocryptichthys Day, 1876, 385.
Paroxyurichthys Bleeker, 1876, 384.
Lebetus Winther, 1877, 392.
Perccottus Dybowski, 1877, 389.
Bathygobius⁴⁶⁹ Bleeker, 1878, 393.
Typhlogobius Steindachner, 1880, 406.
Leucopsarion Hilgendorf, 1880, 403.
Othonops Rosa Smith (Eigenmann), 1881, 417.
Saccostoma Sauvage, 1882, 421.
Leme De Vis, 1884, 427.
Clevelandia Eigenmann & Eigenmann, 1888, 440.
Barbulifer E. & E., 1888, 440.

⁴⁶⁹ An unfortunate name for a very common shallow-water form.

- Bollmannia Jordan, 1889, 447.
 Chriolepis Gilbert, 1891, 455.
 Salarigobius Pfeffer, 1893, 462.
 Garmannia Jordan, 1895, 576.
 Quietula Jordan & Evermann, 1895, 469.
 Aboma Jordan & Starks, 1895, 468.
 Evermannia Jordan, 1895, 468.
 Stiphodon⁴⁷⁰ Weber, 1895, 470.
 Sicya Jordan & Evermann, 1896, 474.
 Zalypnus J. & E., 1896, 474.
 Lythrypnus J. & E., 1896, 474.
 Ilypnus J. & E., 1896, 474.
 Sicyosus J. & E., 1898, 482.
 Enypnias J. & E., 1898, 481.
 Trichopharynx Ogilby, 1898, 483.
 Austrogobio Ogilby, 1898, 483.
 Oreogobius Boulenger, 1899, 485.
 Mapo Smitt, 1899, 487.
 Lebistes Smitt, 1899, 487.
 Caffrogobius Smitt, 1899, 487.
 Mugilogobius Smitt, 1899, 487.
 Proterorhinus Smitt, 1899, 487.
 Eichwaldia Smitt, 1899, 487.
 Trifissus Jordan & Snyder, 1900, 490.
 Chasmias J. & S., 1901, 494.
 Eutæniichthys J. & S., 1901, 494.
 Clariger J. & S., 1901, 494.
 Astrabe J. & S., 1901, 494.
 Ainosus J. & S., 1901, 494.
 Sagamia J. & S., 1901, 494.
 Suruga J. & S., 1901, 494.
 Chloëa J. & S., 1901, 494.
 Hazeus J. & S., 1901, 494.
 Chasmichthys J. & S., 1901, 494, 504.
 Mistichthys H. M. Smith, 1902, 500.
 Chlamydes Jenkins, 1903, 504.
 Vitraria Jordan & Evermann, 1903, 504.
 Quisquilius J. & E., 1903, 504.
 Elacatinus Jordan, 1904, 508.
 Pycnomma Rutter, 1904, 511.
 Allogobius Waite, 1904, 511.
 Gigantogobius Fowler, 1905, 513.
 Kelloggella Jordan & Seale, 1905, 514, 519.
 Drombus J. & S., 1905, 514.
 Waitea J. & S., 1906, 519.
 Pselaphias J. & S., 1906, 519.
 Exyrias J. & S., 1906, 519.
 Mars J. & S., 1906, 519.
 Vailima J. & S., 1906, 519.
 Vaimosa J. & S., 1906, 519.
 Vitreola J. & S., 1906, 519.
 Trimma J. & S., 1906, 519.
 Caragobius Smith & Seale, 1906, 520.
 Illana S. & S., 1906, 520.
 Ranulina Jordan & Starks, 1906, 519.
 Creisson Jordan & Seale, 1907, 525.
 Xenisthmus Snyder, 1908, 531.
 Doryptena Snyder, 1908, 531.
 Aparrius Jordan & Richardson, 1908, 528.
 Macgregorella Seale, 1909, 533.
 Biat Seale, 1909, 533.
 Expedio Snyder, 1909, 534.
 Inu Snyder, 1909, 534.
 Nematogobius Boulenger, 1910, 534.
 Mucogobius McCulloch, 1912, 544.
 Schismatogobius Beaufort, 1912, 542.
 Pleurosicya Weber, 1913, 551.
 Lubricogobius Tanaka, 1915, 558.
 Evermannichthys⁴⁷¹ Metzelaar, 1920.
 Xenogobius⁴⁷² Metzelaar, 1920.
 Micropercops⁴⁷³ Fowler & Gee, 1920.
 Ulcigobius⁴⁷⁴ Fowler, 1920.
 Arolepis⁴⁷⁵ Hubbs, 1921.
 Radcliffella⁴⁷⁶ Hubbs, 1921.

⁴⁷⁰ The reference on page 542 in "Genera of Fishes" should be canceled.

⁴⁷¹ *Over Tropisch Atlantisch Visschen*, 139; type *Evermannichthys spongicola* Metzelaar.

⁴⁷² *Op. cit.*, 140; type *Xenogobius weberi* Metzelaar.

⁴⁷³ *Proc. U. S. Nat. Mus.*, 58: 318; type *Micropercops dabryi* Fowler & Bean.

⁴⁷⁴ *Proc. Acad. Nat. Sci. Phila.*, 1918, 69; type *Drombus maculipinnis* Fowler.

⁴⁷⁵ *Occ. Papers Univ. Michigan*, 99: 1; orthotype *Arolepis barbaræ* Hubbs.

⁴⁷⁶ *Occ. Papers Univ. Mich.*, 99: 2; orthotype *Garmannia spongicola* Radcliffe.

Family 546. PERIOPHTHALMIDÆ

- Apocryptes*⁴⁷⁷ Osbeck, 1762, 17.
Periophthalmus Bloch & Schneider, 1801, 58.
Scartelaos Swainson, 1839, 202.
Apocryptes (Osbeck) Cuvier & Valenciennes, 1837, 188.
Boleophthalmus C. & V., 1837, 188.
Euchoristopus Gill, 1863, 326.
Boleops Gill, 1863, 326.
Periophthalmodon Bleeker, 1874, 374.

⁴⁷⁷ A binomial name, but first issued in 1757, before the "Systema Naturæ" of Linnæus; reprinted in 1762. The name was revived by Cuvier & Valenciennes, its designated type being that of Osbeck, identical with *Bolcophthalmus*, described on a subsequent page of the "Histoire Naturelle des Poissons." The name *Apocryptes* was later transferred to a different group.

Family 547. GOBIOIDIDÆ

- Gobioides** Lacépède, 1800, 57.
Tænioides Lacépède, 1806, 57.
Plecopodus Rafinesque, 1815, 90.
Gymnurus Rafinesque, 1815, 88.
Amblyopus Cuvier & Valenciennes, 1837, 188.
Psilosomus Swainson, 1839, 198.
Ognichodes Swainson, 1839, 202.
Tyntlastes Günther, 1862, 319.
Brachyamblyopus Bleeker, 1874, 374.
Odontamblyopus Bleeker, 1874, 374.
Cayennia Sauvage, 1880, 405.
Paragobioides Kendall & Goldsborough, 1911, 540.

Family 548. TRYPAUCHENIDÆ

- Trypauchen**⁴⁷⁸ Cuvier & Valenciennes, 1837.
Trypauchenichthys Bleeker, 1860, 293, 374.
Ctenotrypauchen Steindachner, 1867, 348.
Trypauchenopsis Volz, 1903, 506.
Trypauchenophrys Franz, 1910, 535.

⁴⁷⁸ "Histoire Naturelle des Poissons," XII, 162; type *Gobius vagina* Bloch & Schneider. (Omitted in "Genera of Fishes.")

Family 549. DOLIICHTHYIDÆ

- Doliichthys** Sauvage, 1874, 376.

Family 550. PSAMMICHTHYIDÆ

- Psammichthys** Regan, 1908, 530.

Order DISCOCEPHALI

Family 551. OPISTHOMYZONIDÆ

- OPISTHOMYZON** Cope, 1889, 445.

Family 552. ECHENEIDÆ

(Remoras; Shark-pilots)

- Echeneis** Linnæus, 1758, 12.
Remora Forster, 1771, 28.
Remora Catesby, 1771, 31.
Phtheirichthys Gill, 1862, 316.
Remilegia Gill, 1862, 316.
Remora Gill, 1862, 316.
Rhombochirus Gill, 1863, 324.
Remoropsis Gill, 1863, 324.
Leptecheneis Gill, 1864, 330.
Remorina Jordan & Evermann, 1896, 475.

Order JUGULARES

(Deripia)

Series TRACHINIFORMES

Family 553. TRACHINIDÆ

This group forms a natural sequence from *Trichodontidæ*, *Champso-*
dontidæ, etc.

Trachinus Linnæus, 1758, 12.**Echiichthys** Bleeker, 1862, 309.**Corystion** Rafinesque, 1810, 79.**PSEUDELEGINUS** Sauvage, 1873, 371.**Pseudotrachinus** Bleeker, 1862, 309.**TRACHINOPSIS** Sauvage, 1875, 380.

Family 554. CALLIPTERYGIDÆ

CALLIPTERYX Agassiz, 1838, 191.

Series NOTOTHENIIFORMES

Family 555. NOTOTHENIIDÆ

Eleginus Cuvier & Valenciennes, 1830,
135.**Phricus** Berg, 1895, 466.**Aphritis** Cuvier & Valenciennes, 1831,
137.**Dissostichus** Smitt, 1898, 483.**Notothenia** Richardson, 1844, 222.**Racovitzia** Dollo, 1900, 489.**Macronotothen** Gill, 1861, 306.**Artedidraco** Lönnberg, 1905, 515.**Eleginops** Gill, 1861, 306, 455.**Dolloidraco** Roule, 1913, 551.**Pseudaphritis** Castelnau, 1872, 575.**Pogonophryne** Regan, 1914, 554.**Histiodraco** Regan, 1914, 555.

Family 556. BATHYDRACONIDÆ

Bathyraco Günther, 1878, 394.**Cygnodraco** Waite, 1916, 561.**Gerlachea** Dollo, 1900, 489.**Aconichthys** Waite, 1916, 561.**Prinodraco** Regan, 1914, 554.

Family 557. CHANNICHTHYIDÆ

Channichthys Richardson, 1844, 222.**Cryodraco** Dollo, 1900, 489.**Pagetodes** Richardson, 1844, 222.**Chænocephalus** Regan, 1913, 550.**Chænichthys** Richardson, 1844, 222.**Pagetopsis** Regan, 1913, 550.**Champsocephalus** Gill, 1861, 306.**Chænodraco** Regan, 1914, 554.**Ponerodon** Alcock, 1890, 449.**Dacodraco** Waite, 1916, 561.

Family 558. BOVICTIDÆ

Bovictus⁴⁷⁹ Cuvier & Valenciennes, 1831,
137.**Cottoyperca** Steindachner, 1875, 381.**Aurion** Waite, 1916, 561.⁴⁷⁹ Later corrected to *Bovichthys*.

Family 559. HARPAGIFERIDÆ

Harpagifer Richardson, 1844, 222.**Sclerocottus** Fischer (J. G.), 1885, 431.

Series CALLIONYMIFORMES

Family 560. **DRACONETTIDÆ**

Draconetta Jordan & Fowler, 1903, 505. **Centrodraco** Regan, 1913, 550.

Family 561–562. **CALLIONYMIDÆ**

(Dragonets)

Callionymus Linnaeus, 1758, 12.

Synchiropus Gill, 1859, 290.

Dactylopus Gill, 1859, 290.

Vulsus Günther, 1861, 307.

Calliurichthys Jordan & Fowler, 1903, 505.

Draculo Snyder, 1911, 541.

Calymmichthys Jordan & Thompson, 1914, 553.

Series PERCOPHIDIFORMES

Family 563. **PERCOPHIDIDÆ**

Percophis Quoy & Gaimard, 1824, 118.

Family 564. **MUGILOIDIDÆ** (*Pinguipedidæ*)

Mugiloides Lacépède, 1803, 67.

Myxonum Rafinesque, 1815, 90.

Pinguipes Cuvier, 1829, 127.

Pseudopercis Ribeiro, 1903, 506.

Family 565. **PARAPERCIDÆ**

Percis Bloch & Schneider, 1801, 58.

Parapercis Bleeker, 1863, 322.

Parapercis Steindachner, 1884, 430.

Neopercis Steindachner, 1885, 434.

Bathypercis Alcock, 1893, 460.

Macrias Gill & Townsend, 1901, 493.

Pleuragramma Boulenger, 1902, 496.

Osurus Jordan & Evermann, 1903, 506.

Chilias Ogilby, 1910, 536.

Family 566. **PTEROPSARIDÆ** (*Bembropidæ*)

Bembrops Steindachner, 1876, 387.

Hypsicometes Goode, 1880, 403.

Bathypercis Alcock, 1880, 403.

Chrionema Gilbert, 1905, 513.

Acanthaphritis Günther, 1880, 403.

Pteropsaron⁴⁸⁰ Jordan & Snyder, 1902, 499.

Osopsaron Jordan & Starks, 1904, 509.

⁴⁸⁰ A synonym of *Acanthaphritis* according to Regan, but the two genera differ in several respects.

Family 567. **HEMEROCÆTIDÆ**

Hemerocætes Cuvier & Valenciennes, 1837, 189.

Family 568. **CHIMARRHICHTHYIDÆ**

Chimarrichthys Haast, 1874, 375.

Family 569. **CREEDIIDÆ**

Creedia Ogilby, 1898, 483.

Family 570. **LIMNICHTHYIDÆ**

Limnichthys Waite, 1904, 511.

Schizochirus Waite, 1904, 511.

Family 580. **OWSTONIIDÆ***Owstonia* Tanaka, 1908, 531.Family 581. **CHAMPSODONTIDÆ***Champsodon* Günther, 1867, 345.*Centropercis* Ogilby, 1895, 469.Family 582. **URANOSCOPIDÆ**

(Star-gazers)

Uranoscopus Linnæus, 1758, 12.*Genyagnus* Gill, 1861, 305.*Ichthyscopus* Swainson, 1839, 202.*Gnathagnus* Gill, 1861, 305.*Astroscopus* Brevoort, 1860, 295.*Synnema* Haast, 1873, 369.*Kathetostoma*⁴⁸³ Günther, 1860, 296.*Ariscopus* Jordan & Snyder, 1902, 499.*Agnus* Günther, 1860, 296.*Excecestides* Jordan & Thompson, 1905, 514.*Upsilonphorus* Gill, 1861, 305.*Nematagnus* Gill, 1861, 305.⁴⁸³ Later written *Cathetostoma*.Family 583. **LEPTOSCOPIDÆ***Leptoscopus* Gill, 1859, 290.*Crapatalus* Günther, 1861, 308.Family 584. **DACTYLOSCOPIDÆ***Dactyloscopus* Gill, 1859, 290.*Gillellus* Gilbert, 1890, 451.*Crapatalus* Günther, 1861, 208.*Esloscopus* Jordan & Evermann, 1896, 474.*Myxodagnus* Gill, 1861, 305.*Dactylagnus* Gill, 1862, 318.•Series **BLENNIIFORMES**Family 585. **CLINIDÆ***Clinus* Cuvier, 1817, 101.*Entomacrodus* Gill, 1859, 291.*Tripterygion*⁴⁸⁴ Risso, 1826, 119.*Malacoctenus* Gill, 1860, 295.*Myxodes* Cuvier, 1829, 129.*Gobioclinus* Gill, 1860, 295.*Cirrhibarbus* Cuvier, 1829, 129.*Blennioclinus* Gill, 1860, 295.*Enneapterygius* Rüppell, 1835, 184.*Auchenionchus* Gill, 1860, 296.*Cristiceps* Cuvier & Valenciennes, 1836, 185.*Calliclinus* Gill, 1860, 296.*PTERYGOCEPHALUS* Agassiz, 1839, 194.*Ophthalmolophus* Gill, 1860, 296.*Clinitrachus* Swainson, 1839, 197.*Auchenopterus* Günther, 1861, 307.*Blennophis* Swainson, 1839, 202.*Cremnobates* Günther, 1861, 308.*Labrisomus* Swainson, 1839, 202.*Gibbonsia* Cooper, 1863, 323.*Ophisomus* Swainson, 1839, 202.*Lepidoblennius* Steindachner, 1867, 348.*Lepisoma* Dekay, 1842, 210.*Lepidoblennius* Sauvage, 1874, 376.*Heterostichus* Girard, 1854, 258.*Blakea* Steindachner, 1876, 387.*Neoclinus*⁴⁸⁵ Girard, 1858.*Acanthoclinus* Mocquard, 1885, 433.*Pterognathus* Girard, 1859, 290.*Petraites* Ogilby, 1885, 434.*Paraclinus* Mocquard, 1888, 443.⁴⁸⁴ Also corrected to *Tripterygium*.⁴⁸⁵ Girard, *U. S. Pac. R. R. Surv.*, 10: 114; orthotype *Neoclinus blanchardi* Girard. (Omitted in "Genera of Fishes.")

- Dialommus** Gilbert, 1890, 451.
Cryptotrema Gilbert, 1890, 451.
Cologrammus Gill, 1893, 461.
Notoclinus Gill, 1893, 461.
Ericentrus Gill, 1893, 461.
Scleropteryx De Vis, 1894, 465.
Enneanectes Jordan & Gilbert, 1895, 468.
Exerpes Jordan & Evermann, 1896, 472.
Mnierpes J. & E., 1896, 474.
Starksia Jordan & Evermann, 1896, 472.
Emmion Jordan, 1897, 477.
Pterognathus (Girard) Jordan & Evermann, 1898, 481.
Corallicola Jordan & Evermann, 1898, 481.
Gillias Evermann & Marsh, 1899, 485.
Auchenistius Evermann & Marsh, 1899, 485.
Coralliozetus E. & M., 1899, 485.
Zacalles Jordan & Snyder, 1902, 499.
Ericteis Jordan, 1904, 508.
Acteis Jordan, 1904, 508.
Sauvagea Jordan & Seale, 1906, 519.
Congrammus Fowler, 1906, 517.
Calliblennius Barbour, 1912, 541.
Helcogramma McCulloch & Waite, 1918, 564.
Trianectes M. & W., 1918, 564.
Histioclinus⁴⁸⁶ Metzelaar, 1921.
Tekla Nichols, 1922. (See Index.)

⁴⁸⁶ *Trop. Atl. Visch.*, 157; orthotype *Histioclinus veliger* Metzelaar.

Family 586. NOTOGRAPTIDÆ

- Notograptus** Günther, 1867, 345. **Blanchardia** Castelnau, 1875, 378.
Sticharium Günther, 1867, 345.

Family 587. PERONEDYIDÆ

Body eel-shaped, without pectoral fins, scales rudimentary; three lateral lines; dorsal mostly of spines.

- Peronedys** Steindachner, 1884, 430. **Eucentronotus** Ogilby, 1898, 483.

Family 588. OPHIOCLINIDÆ

A group of slender, eel-shaped blennies, with rudimentary scales, the fin rays mainly spinous, here provisionally associated, their actual relationship undetermined.

- Ophioclinus** Castelnau, 1872, 363. **Neogunellus** Castelnau, 1875, 378.
Neoblennius Castelnau, 1875, 378. **Stenophus** Castelnau, 1875, 378.

Family 589. BLENNIIDÆ

- Blennius** Linnæus, 1758, 12.
Salaria Forskål, 1775, 33.
Blennius Klein, 1779, 44.
Alticus (Commerson) Lacépède, 1800, 69.
Salarias Cuvier, 1817, 101.
Pholis Cuvier, 1817, 101.
Petroscirtes Rüppell, 1828, 173.
Aspidontus Quoy & Gaimard, 1834, 180.
Ichthyocoris Bonaparte, 1836, 142, 206.
Chasmodes Cuvier & Valenciennes, 1836, 185.
*Alticus*⁴⁸⁷ (Commerson) Cuv. & Val., 1836.
Blennechis Cuv. & Val., 1836, 185.
Omobranchus (Ehrenberg) Cuv. & Val., 1836, 185.
Blennitrachus Swainson, 1839, 198.
Rupiscartes Swainson, 1839, 202.
Erpichthys Swainson, 1839, 202.
Cirripectes Swainson, 1839, 202.
Blennophis⁴⁸⁸ Valenciennes, 1844.
Adonis Gronow, 1854, 258.
Entomacrodus Gill, 1859, 289.
Ophioblennius Gill, 1860, 296.
Hypleurochilus Gill, 1861, 302.

⁴⁸⁷ "Histoire Naturelle Poissons," XI, 337; the name mentioned but not accepted.

⁴⁸⁸ Orthotype *Blennophis webbi* Valenciennes; preoccupied; replaced by *Ophioblennius* Gill.

- Hypsoblennius** Gill, 1861, 302.
Salarichthys⁴⁹⁰ Guichenot, 1867, 346.
Enchelyurus Peters, 1868, 353.
Alticus (Commerson) Bleeker, 1869, 353.
Isesthes Jordan & Gilbert, 1882, 420.
Scartella Jordan, 1886, 435.
Lipophrys Gill, 1896, 471.
Scartes Jordan & Evermann, 1896, 475.
Macrurrhynchus Ogilby, 1896, 475.
Homesthes Gilbert, 1898, 481.
- Blenniulus** Jordan & Evermann, 1898, 481.
Scartichthys Jordan & Evermann, 1898, 481.
ONCOLEPIS Bassani, 1898, 478.
Brannerella Gilbert, 1900, 489.
Graviceps Fowler, 1903, 502.
Exallias Jordan & Evermann, 1905, 514.
Cyneichthys Ogilby, 1910, 536.
Parablennius Ribeiro, 1915, 557.

⁴⁹⁰ Written also *Salarichthys*.

Family 590. EMBLEMARIIDÆ

This family and the three which follow are entirely provisional, designed to receive aberrant genera which by differences in dentition confuse the definition of *Blenniidæ*.

- Emblemaria** Jordan & Gilbert, 1882, 420. **Acanthemblemaria**⁴⁹⁰ Metzelaar, 1920.

⁴⁹⁰ "Trop. Atl. Visschen," 159; orthotype *A. spinosa* Metzelaar.

Family 591. RUNULIDÆ

A group of naked blennies with the mouth small, transverse, and inferior, the members perhaps not related one to another.

- Andamia** Blyth, 1859, 291. **Runula** Jordan & Bollman, 1889, 447.
Heteroclinus Castelnau, 1872, 363. **Runulops** Ogilby, 1910, 536.

Family 592. ATOPOCLINIDÆ

Teeth solid, trenchant.

- Atopoclinus** Vaillant, 1894, 466.

Family 593. CHÆNOPSIDÆ

A provisional group of elongate, naked blennies of the tropics, perhaps unrelated among themselves, and resembling on one hand the *Pholidæ* and on the other the *Clinidæ*.

- Pholidichthys** Bleeker, 1856, 267. **Psednoblennius** Jenkins & Evermann, 1888, 442.
Gunnellichthys Bleeker, 1858, 277. **Lucioblennius** Gilbert, 1890, 451.
Chænopsis Gill, 1863, 323.
Stathmonotus Bean, 1885, 430.

Family 594. CEBIDICHTHYIDÆ

The three genera here associated differ from the allied *Pholidæ* in having the posterior half of the dorsal fin of soft rays.

- Cebidichthys**⁴⁹¹ Ayres, 1855, 262. **Zoarchias** Jordan & Snyder, 1902, 499.
Neozoarces Steindachner, 1880, 406.

⁴⁹¹ Often misspelled *Cebedichthys*.

Family 595. PHOLIDÆ

A varied group of subarctic blennies which may require further subdivision.

Pholis Gronow, 1763, 19.

Pholis (Gronow) Scopoli, 1777, 42.

Pholis Röse, 1793, 52.

Pholidus Rafinesque, 1815, 88.

Murænoides Lacépède, 1800, 56.

Centronotus Bloch & Schneider, 1801, 58.

Dactyleptus Rafinesque, 1815, 88.

Gunnellus Cuvier & Valenciennes, 1836, 185.

Ophisomus Swainson, 1839, 202.

Chirolophis Swainson, 1839, 202.

Carelophus Kröyer, 1845, 226.

Dictyosoma Temminck & Schlegel, 1845, 227.

Apodichthys Girard, 1854, 258.

Blenniops Nilsson, 1855, 266.

Anoplarchus Gill, 1861, 305.

Asternopteryx (Rüppell) Günther, 1861, 307.

Urocentrus Kner, 1868, 352.

Opisthocentrus Kner, 1868, 352.

Gunnellops Bleeker, 1874, 372.

Plectobranthus Gilbert, 1890, 451.

Blenniophidium Boulenger, 1892, 457.

Plagiogrammus Bean, 1893, 460.

Xererpes Jordan & Gilbert, 1895, 469.

Bryostemma Jordan & Starks, 1895, 469.

Rhodymenichthys Jordan & Evermann, 1896, 475.

Ulvicola Gilbert & Starks, 1897, 477.

Alectrias Jordan & Evermann, 1898, 482.

Pholidapus Bean & Bean, 1896, 471.

Enedrias Jordan & Evermann, 1898, 481.

Eulophias Smith, 1902, 500.

Azuma Jordan & Snyder, 1902, 499.

Bryolophus J. & S., 1902, 499.

Abryois J. & S., 1902, 499.

Trigrammus Gracianov, 1907, 524.

Askoldia Pavlenko, 1910, 537.

Gymnoclinus Gilbert & Burke, 1912, 543.

Alectridium Gilbert & Burke, 1912, 543.

Family 596. XIPHISTERIDÆ (*Xiphidiontidae*)

*Xiphidion*⁴⁹² Girard, 1857, 290.

Xiphister Jordan, 1879, 400.

Xiphistes Jordan & Starks, 1895, 469.

*Phytichthys*⁴⁹³ Hubbs, 1923.

⁴⁹² Preoccupied by *Xiphidion* Seville, a genus of *Orthoptera*, the word later corrected to *Xiphidium*. *Xiphidion* was first used by Girard, *U. S. Pac. R. R. Surv.*, 6: 20, 1857.

⁴⁹³ Hubbs, ms.: new genus; orthotype *Xiphister chirus* Jordan & Gilbert; substitute for *Xiphistes*, preoccupied in insects.

Family 597. STICHÆIDÆ

*Stichæus*⁴⁹⁴ Reinhardt, 1837.

Eumesogrammus Gill, 1864, 331.

Stichæopsis Steindachner & Kner, 1870, 360.

*Notogrammus*⁴⁹⁵ Bean, 1881.

Dinogunnellus Herzenstein, 1890, 451.

Ulvarius Jordan & Evermann, 1896, 475.

Ernogrammus J. & E., 1898, 481.

Ozorthe J. & E., 1898, 481.

Trigrammus Gracianov, 1907, 524.

⁴⁹⁴ *Dansk. Vid. Nat. Afh.*, 109; orthotype *Stichæ punctatus* Reinhardt. (Omitted in "Genera of Fishes.")

⁴⁹⁵ Bean, *Proc. U. S. Nat. Mus.*, 4: 147; orthotype *N. rothrocki* Bean. A synonym of *Stichæus*. (Omitted in "Genera of Fishes.")

Family 598. **LUMPENIDÆ**

Lumpenus ⁴⁹⁶ Reinhardt, 1837.	Leptoclinus Gill, 1861, 302.
Ctenodon Nilsson, 1855, 266.	Centroblennius Gill, 1861, 302.
Leptogunnellus Ayres, 1855, 262.	Anisarchus Gill, 1864, 331.
Leptoblennius Gill, 1860, 295.	Poroclinus Bean, 1890, 450.

⁴⁹⁶ *Dansk. Vid. Selsk. Nat.*, 6: 110; orthotype *Blennius lumpenus* Fabricius, not of Linnæus. (Omitted in "Genera of Fishes.")

Family 599. **PTILICHTHYIDÆ**

Ptilichthys Bean, 1881, 415.

Family 600. **CRYPTACANTHODIDÆ**

Cryptacanthodes Storer, 1839, 197.	Lyconectes Gilbert, 1895, 467.
Delolepis Bean, 1881, 415.	

Family 601. **ANARHICHADIDÆ**

Anarchichas ⁴⁹⁷ Linnæus, 1758, 12.	Lycichthys Gill, 1877, 389.
Lathargus ⁴⁹⁸ Klein, 1775, 38.	LAPARUS (Agassiz) Woodward, (1845)
PALANARRHICHAS LeHon, 1871, 361.	1901, 224.

⁴⁹⁷ Often spelled *Anarrhichas*.

⁴⁹⁸ Misprinted *Latargus*.

Family 602. **ANARRHICHTHYIDÆ**

Anarrhichthys Ayres, 1855, 262.

Family 603. **XIPHASIIDÆ**

Xiphasia ⁴⁹⁹ Swainson, 1839, 201.	Xiphogadus Günther, 1862, 318.
Nemophis Kaup, 1858, 281.	Plagiotremus Gill, 1863, 323.

⁴⁹⁹ Also spelled *Ziphasia* by Swainson.

Family 604. **XENOCEPHALIDÆ**

Xenocephalus Kaup, 1858, 281.

*Series ZOARCIFORMES*Family 605. **CONGROGADIDÆ**

Haliophis Rüppell, 1828, 122.	Halidesmus Günther, 1871, 361.
Machærium Richardson, 1843, 216.	Blennodesmus Günther, 1871, 361.
Congrogadus Günther, 1862, 318.	Hierichthys Jordan & Fowler, 1902, 499.

Family 606. **CERDALIDÆ** (*Microdesmidæ*)

Microdesmus Günther, 1864, 333.	Leptocerdale Weymouth, 1910, 537.
Cerdale Jordan & Gilbert, 1881, 416.	

Family 607. **SCYTALINIDÆ**

Scytalina Jordan & Gilbert, 1880, 404.	Scytaliscus Jordan & Gilbert, 1883, 424.

Family 608. **ZOARCIDÆ** (*Lycodidæ*)

Enchelyopus Gronow, 1763, 19.
*Zoarcēs*⁶⁰⁰ Cuvier, 1829, 129.
Lycodes Reinhardt, 1838, 193.
Gymnelis Reinhardt, 1838, 193.
Phycocœtes Jenyns, 1842, 212.
Iluocœtes Jenyns, 1842, 212.
Uronectes Günther, 1862, 318.
Macrozoarces Gill, 1863, 325.
Maynea Cunningham, 1871, 361.
Paralycodes Bleeker, 1874, 372.
Lycodalepis Bleeker, 1874, 372.
Lycodopsis Collett, 1879, 399.
Leurynnis Lockington, 1879, 400.
Hypolycodes Hector, 1880, 403.
Melanostigma Günther, 1881, 416.
Bassozetus Gill, 1883, 424.
Lycocara Gill, 1884, 428.
Lycenchelys Gill, 1884, 428.
Gymnelichthys Fischer, 1885, 431.
Lycodophis Vaillant, 1888, 444.
Lycinema Gilbert, 1895, 467.

Nemalycodes Herzenstein, 1896, 472.
Furcella Jordan & Evermann, 1896, 475.
Aprodon Gilbert, 1890, 451.
Platea Steindachner, 1898, 484.
Lycias Jordan & Evermann, 1898, 481.
Embryx J. & E., 1898, 481.
Furcimanus J. & E., 1898, 482.
Selachophidium Gilchrist, 1903, 503.
Petrotyx Heller & Snodgrass, 1903, 503.
Eutyx Heller & Snodgrass, 1903, 503.
Krusensterniella Schmidt, 1904, 511.
Hadropareia Schmidt, 1904, 511.
Pachycara Zugmayer, 1911, 541.
Mastigopterus Radcliffe, 1913, 549.
Ophthalmolycus Regan, 1913, 550.
Austrolycus Regan, 1913, 550.
Austrolycichthys Regan, 1913, 550.
Crossolycus Regan, 1913, 550.
Zoarcites Zugmeyer, 1914, 555.
Lycogramma Gilbert, 1915, 556.

⁶⁰⁰ Also spelled *Zoarchus*.

Family 609. **LYCODAPODIDÆ**

Lycodapus Gilbert, 1890, 451.

Snyderidia Gilbert, 1905, 513.

Family 610. **DEREPODICHTHYIDÆ**

Derepodichthys Gilbert, 1895, 467.

Series **BROTULIFORMES**Family 611. **BROTULIDÆ**

*Brotula*⁶⁰¹ Cuvier, 1829.
Bythites Reinhardt, 1837, 190.
*Tilurus*⁶⁰² Kolliker, 1854, 254.
Dinematichthys Bleeker, 1855, 263.
Gadopsis Filippi, 1855, 265.
Brotulophis Kaup, 1858, 281.
Brotella Kaup, 1858, 281.
Hoplophycis Kaup, 1858, 281.
Sirembo Bleeker, 1858, 277.
Halias Ayres, 1859, 293.
Lucifuga Poey, 1860, 298.
Brosomphycis Gill, 1861, 305.

Nematobrotula Gill, 1863, 325.
Stygicola Gill, 1863, 325.
Hoplobrotula Gill, 1863, 325.
Acanthonus Günther, 1878, 394.
Bathynectes Günther, 1878, 394.
Aphyonus Günther, 1878, 394.
Typhlonus Günther, 1878, 394.
Dicrolene Goode & Bean, 1882, 419.
Lycodonus Goode & Bean, 1882, 419.
Poromitra Goode & Bean, 1882, 419.
Barathrodemus Goode & Bean, 1882, 419.

⁶⁰¹ *Régne Animal*; type *Enchelyopus barbatus* Bloch and Schneider. (Omitted in "Genera of Fishes.")

⁶⁰² This genus and its allies, *Tilurella*, *Tiluropis*, and *Grimaldichthys*, are larval forms, supposed to be of brotulids.

- Bellottia* Giglioli, 1883, 423.
Porogadus Goode & Bean, 1885, 432.
Bathyonus Goode & Bean, 1885, 432.
Neobythites Goode & Bean, 1885, 432.
Barathronus Goode & Bean, 1886, 435.
Myxocephalus Steindachner & Döderlein, 1887, 439.
Catætyx Günther, 1887, 437.
Pteroidonus Günther, 1887, 437.
Mixonus Günther, 1887, 437.
Diplacanthopoma Günther, 1887, 437.
Nematonus Günther, 1887, 437.
Alexeterion Vaillant, 1888, 444.
Pycnocraspedum Alcock, 1889, 444.
Paradicrolene Alcock, 1889, 444.
Saccogaster Alcock, 1889, 444.
Glyptophidium Alcock, 1889, 444.
Dermatorus Alcock, 1890, 449.
Monomitopus Alcock, 1890, 449.
Paradicrolene Alcock, 1890, 449.
Bothrocarara Bean, 1890, 450.
Lamprogrammus Alcock, 1891, 454.
Hephthocara Alcock, 1892, 457.
Benthocometes Goode & Bean, 1895, 468.
Dicromita G. & B., 1895, 468.
Celema G. & B., 1895, 468.
Penopus G. & B., 1895, 468.
Mœbia G. & B., 1895, 468.
Alcockia G. & B., 1895, 468.
Dermatopsis Ogilby, 1896, 475.
Monothrix Ogilby, 1897, 477.
Ogilbia Jordan & Evermann, 1898, 480.
Diancistrus Ogilby, 1898, 483.
Holcomycteronus Garman, 1899, 486.
Pseudonus Garman, 1899, 486.
Leucicorus Garman, 1899, 486.
Sciadonus Garman, 1899, 486.
Eretmichthys Garman, 1899, 486.
Bothrocaropsis Garman, 1899, 486.
Watasea Jordan & Snyder, 1901, 494.
Dipulus Waite, 1905, 516.
Bassobythites Brauer, 1906, 517.
Barathrites Zumayer, 1911, 541.
*Leucochlamys*⁵⁰³ Zugmayer, 1911.
*Parabrotula*⁵⁰⁴ Zugmayer, 1911.
Tilurella Roule, 1911, 541.
Tiluroopsis Roule, 1911, 541.
Xenobythites Radcliffe, 1913, 549.
Pyramodon Radcliffe, 1913, 549.
Hypopleuron Radcliffe, 1913, 549.
Mastigopterus Radcliffe, 1913, 549.
Homostolus Radcliffe, 1913, 549.
Enchelybrotula Radcliffe, 1913, 549.
Hypopleuron Radcliffe, 1913, 549.
Luciobrotula Radcliffe, 1913, 549.
Grimaldichthys Roule, 1913, 551.
Pyramodon Regan, 1914, 555.
Spectrunculus Jordan & Thompson, 1914, 553.
Cynophidium Regan, 1914, 554.

⁵⁰³ *Rés. Camp. Sci. Monaco*, 131; type *Leucochlamys cryptophthalmus* Zugmayer. (Omitted in "Genera of Fishes.")

⁵⁰⁴ *Loc. cit.*, 129; orthotype *Parabrotula plagiosphelmus* Zugmayer. (Omitted in "Genera of Fishes.")

Series OPHIDIIFORMES

Family 612. RHODICHTHYIDÆ

Rhodichthys Collett, 1878, 393.

Family 613. OPHIDIIDÆ

- Ophidion*⁵⁰⁵ Linnæus, 1758, 12.
Xiphiurus Smith, 1849, 244.
Cepolophis Kaup, 1856, 272.
Genypterus Philippi, 1857, 276.
Leptophidium Gill, 1863, 324.
Otophidium Gill, 1885, 433.
Lepophidium Gill, 1895, 467.
Chilara Jordan & Evermann, 1896, 475.
Rissola J. & E., 1896, 475.
Pseudophidium Gracianov, 1907, 524.

⁵⁰⁵ Often spelled *Ophidium*.

Series CARAPIFORMES

Family 614. **CARAPIDÆ** (*Fierasferidæ*)
(Pearl Fishes)

<i>Carapus</i> ⁵⁰⁶ Rafinesque, 1810.
Fierasfer (Cuvier) Oken, 1817, 93, 101.
Echiodon Thompson, 1837, 190.
Encheliophis Müller, 1843, 215.
Diaphasia Lowe, 1843, 215.
Oxybeles Richardson, 1844, 223.
Porobronchus Kaup, 1860, 297. | Helminthodes Gill, 1864, 331.
<i>Helminthostoma</i> Cocco, 1870, 357.
Vexillifer Gasco, 1870, 357.
Lefroyia Jones, 1874, 375.
Rhizoiketicus Vaillant, 1893, 463.
Jordanicus Gilbert, 1905, 513. |
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⁵⁰⁶ A genus based on a definition borrowed from Lacépède and including two unrelated forms; one *Fierasfer*; one *Gymnotus*; no type named. By a decision of the International Commission of Zoological Nomenclature, *Carapus* is held to replace *Fierasfer*, as the species first referred to it by a subsequent author was *Ohpidium imberbe* Linnæus.

Suborder HAPLODOCI

Family 615. **BATRACHOIDIDÆ**

Batrachoides Lacépède, 1800, 57.
Batrachus Bloch & Schneider, 1801, 57.
Batrichtius Rafinesque, 1815, 88.
Opsanus Rafinesque, 1818, 108.
Amphichthys Swainson, 1839, 202.
Porichthys Girard, 1854, 258.
Thalassophryne Günther, 1861, 307.
Halophryne Gill, 1863, 324.
Pseudobatrachus Castelnau, 1875, 378. | Phrynotitan Gill, 1885, 432.
Marcgravia Jordan, 1886, 435.
Thalassothia Berg, 1895, 466.
Dæctor Jordan & Evermann, 1898, 481.
Coryzichthys Ogilby, 1908, 529.
Halobatrachus Ogilby, 1908, 529.
Batrachomœus Ogilby, 1908, 529.
Marcgravichthys Ribeiro, 1915, 557.
Nautopædium Jordan, 1919, 567. |
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Order XENOPTERYGII (*Xenopteri*)

Family 616. **GOBIESOCIDÆ**

Lepadogaster Gouan, 1770, 28.
Gobiesox Lacépède, 1800, 57.
Piescephalus Rafinesque, 1810, 81.
Megaphalus Rafinesque, 1815, 89.
Gouania Nardo, 1832, 176.
Rupisuga Swainson, 1839, 206.
Cotyliis Müller, 1843, 215.
Sicyases Müller, 1843, 216.
Trachelochismus de Barneville, 1846, 228.
Chorisochismus de Barneville, 1846, 228.
Sicyogaster Brisout de Barneville, 1846, 228.
Tomicodon Brisout de Barneville, 1846, 228.
Apepton Gistel, 1848, 236. | Leptopterygius Troschel, 1860, 300.
Crepidogaster Günther, 1861, 307.
Diplocrepis Günther, 1861, 307.
Caularchus Gill, 1862, 317.
Mirbelia Canestrini, 1864, 329.
Rimicola Jordan & Evermann, 1896, 472.
Arbaciosa J. & E., 1896, 472.
Bryssætæres J. & E., 1896, 472.
Caulistius J. & E., 1896, 475.
Bryssophilus J. & E., 1898, 481.
Aspasma Jordan & Fowler, 1902, 498.
Lepadichthys Waite, 1904, 511.
Aspasmagaster Waite, 1907, 526.
BULBICEPS Jordan, 1919, 568.
Cotylichthys Jordan, 1919, 567. |
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Order PLECTOGNATHI

Suborder SCLERODERMI

This group is closely related to the *Squamipinnes*, especially to the *Acanthuridæ*, from ancestors of which it must have been derived.

Family 617. SPINACANTHIDÆ

SPINACANTHUS Agassiz, 1844, 219.

PROTOBALISTUM (Massalongo) Zigno,
1887, 439.

Family 618. TRIACANTHIDÆ

Triacanthus (Cuvier) Oken, 1817, 98.

Hollardia Poey, 1861, 308.

ACANTHOPLEURUS Agassiz, 1844, 217.

Halimochirus Alcock, 1899, 484.

Triacanthodes Bleeker, 1858, 277.

Tydemania Weber, 1913, 551.

Family 619. BALISTIDÆ

Balistes Linnæus, 1758, 15.

ANCISTRODON⁵¹⁰ (Debey) Roemer, 1843.

Capriscus Klein, 1777, 43.

ACANTHODERMA Agassiz, 1844, 217.

Capriscus Röse, 1793, 52.

AGOREION Gistel, 1848, 237.

Capriscus Rafinesque, 1810, 82.

Odonus Gistel, 1848, 238.

Balistapus Tilesius, 1820, 113.

Erythrodon Rüppell, 1852, 251.

Xenodon Rüppell, 1835, 184.

Pyrodon Kaup, 1855, 265.

Pachynathus⁵⁰⁷ Swainson, 1839, 199.

Xanthichthys Kaup, 1856, 274.

Zenodon⁵⁰⁸ Swainson, 1839, 204.

Pseudobalistes Bleeker, 1866, 340.

Rhinecanthus Swainson, 1839, 204.

Parabalistes Bleeker, 1866, 340.

Chalisoma Swainson, 1839, 204.

ANKISTRODUS Koninck, 1870, 358.

Canthidermis Swainson, 1839, 204.

PROTACANTHODES Gill, 1888, 441.

Melichthys⁵⁰⁹ Swainson, 1839, 204.

GRYPONDON⁵¹¹ Hay, 1899.

Capriscus Swainson, 1839, 204.

Abalistes Jordan & Seale, 1906, 519.

Leiurus Swainson, 1839, 205.

Sufflamen Jordan, 1916, 559.

⁵⁰⁷ Regarded by the International Commission as a misprint for *Pachygnathus*, a name already in use.

⁵⁰⁸ Perhaps a misprint for *Xenodon*.

⁵⁰⁹ Written later *Melanichthys*.

⁵¹⁰ "Texas," 420; orthotype *Ancistrodon texanus* Roemer. (Omitted in "Genera of Fishes.")

⁵¹¹ Substitute for *Ancistrodon*; preoccupied in snakes.

Family 620. MONACANTHIDÆ

Unicornis Catesby, 1771, 31.

Trichoderma Swainson, 1839, 205.

Monoceros (Plumier) Lacépède, 1800, 71.

Stephanolepis Gill, 1861, 304.

Monacanthus (Cuvier) Oken, 1817, 98.

Ceratacanthus Gill, 1861, 303.

Alutera⁵¹² (Cuvier) Oken, 1817, 98.

Pseudalutarius⁵¹³ Bleeker, 1865, 336.

Amanses Gray, 1833, 139, 179.

Pseudomonacanthus Bleeker, 1866, 340.

Cantherines Swainson, 1839, 205.

Acanthaluteres Bleeker, 1866, 340.

Chætodermis Swainson, 1839, 205.

Brachaluteres Bleeker, 1866, 340.

⁵¹² Various written *Aleuterus*, *Alutarius*, *Aleisterius*, etc.

Pseudaluteres⁵¹³ Bleeker, 1866, 340.
Paraluteres Bleeker, 1866, 340.
Oxymonacanthus Bleeker, 1866, 340.
Paramonacanthus Bleeker, 1866, 340.
Liomonacanthus Bleeker, 1866, 340.

Paramonacanthus Steindachner, 1867, 348.
Osbeckia Jordan & Evermann, 1896, 474.
Rudarius Jordan & Fowler, 1902, 498.
Davidia Ribeiro, 1915, 557.

⁵¹³ Same as *Pseudalutarius*.

Family 621. PSILOCEPHALIDÆ

Anacanthus Gray, 1833.

Pogonognathus Bleeker, 1849, 240.

Psilcephalus Swainson, 1839, 205.

Suborder OSTRACODERMI

Family 622. OSTRACIIDÆ

Ostracion Linnæus, 1758, 15.
Acarana Gray, 1833, 139, 179, 192.
Lactophrys Swainson, 1839, 204.
Rhinesomus Swainson, 1839, 204.
Tetrosomus Swainson, 1839, 204.
Platycanthus Swainson, 1839, 204.
Anoplocapros Kaup, 1855, 265.
Kentrocapros Kaup, 1855, 265.

Cibotion (Klein) Kaup, 1855, 265.
Capropygia Gray, 1855, 265.
Acanthostracion Bleeker, 1866, 339.
Chapinus Jordan & Evermann, 1896, 474.
Lactoria Jordan & Fowler, 1902, 498.
Caprichthys McCulloch & Waite, 1915, 557.

Suborder GYMNODONTES

Family 623. TRIODONTIDÆ

Triodon Cuvier, 1829, 131.

Family 624. TETRAODONTIDÆ (*Chonerhinidæ*)

Tetraodon⁵¹⁴ Linnæus, 1758, 15.
Orbis Catesby, 1771, 31.
Crayracion Klein, 1777, 42.
Ovoides⁵¹⁵ Lacépède, 1798.
Sphæroides⁵¹⁵ Lacépède, 1798.
Ovoides Cuvier, 1800, 55.
Orbis (Plumier) Lacépède, 1800, 71.
Ovum Bloch & Schneider, 1801, 60.
Spheroides (Lacépède) Duméril, 1806, 55, 75.
Ovoides (Lacépède) Duméril, 1806, 75.
Orbis Fischer, 1813, 85.
Oonidus Rafinesque, 1815, 91.
Orbidus Rafinesque, 1815, 91.

Physogaster Müller, 1839, 196.
Arothron Müller, 1839, 196.
Cheilichthys Müller, 1839, 196.
Chelonodon Müller, 1839, 196.
Leiodon Swainson, 1839, 198.
Lagocephalus Swainson, 1839, 205.
Cirrhisomus Swainson, 1839, 205.
Leisomus Swainson, 1839, 205.
Gastrophysus Müller, 1843, 216.
Anchisomus Kaub, 1854, 261.
Holacanthus Gronow, 1854, 258.
Chonerhinos⁵¹⁶ Bleeker, 1854, 256.
Dichotomycter Bibron, 1855, 263.
Epipedorhynchus Bibron, 1855, 263.

⁵¹⁴ Often written *Tetrodon*.

⁵¹⁵ In the *Allgemeine Literar Zeitung*, Berlin, No. 287, 1798, is an unsigned review of Lacépède's Volumes I and II, Latin names are supplied page 674 to "les Ovoides," and page 675 to "les Spheroides." *Sphæroides* of this reviewer, 1798, replaces *Sphæroides* Duméril, 1806. For this reference I am indebted to Mr. Remington Kellogg.

⁵¹⁶ Usually corrected to *Chonerhinus*.

Geneion Bibron, 1855, 263.
Catophorhynchus Bibron, 1855, 263.
Batrachops Bibron, 1855, 263.
Monotreta⁶¹⁷ Bibron, 1855, 263.
Ephippion Bibron, 1855, 263.
Aphanacanthus Bibron, 1855, 263.
Xenopterus Bibron, 1855, 263.
Amblyrhynchotus Bibron, 1855, 263.
Stenometopus Bibron, 1855, 263.
Dilobomycter Bibron, 1855, 263.
Promecocophalus Bibron, 1855, 262.

Apsicephalus Hollard, 1857, 275.
Brachycephalus Hollard, 1857, 275.
Pleuranacanthus (Bibron) Bleeker, 1865, 336.
Uranostoma (Bibron) Bleeker, 1865, 336.
Crayracion (Klein) Bleeker, 1865, 339.
Hemiconiatus Günther, 1870, 357.
Liosaccus Günther, 1870, 357.
Guentheridia Gilbert & Starks, 1904, 508.

⁶¹⁷ Also spelled *Monotretus*.

Family 625. **CANTHIGASTERIDÆ** (*Tropidichthyidæ*)
 (Sharp-nosed Puffers)

Canthigaster Swainson, 1839, 198. **Rhynchotus** Bibron, 1855, 263.
Psilonotus Swainson, 1839, 205. **Anosmius** Peters, 1855, 266.
Prilonotus⁶¹⁸ (Kaup) Müller, 1854, 261. **Eumycterias** Jenkins, 1901, 493.
Tropidichthys Bleeker, 1854, 256.

⁶¹⁸ Perhaps a slip for *Psilonotus*.

Family 626. **DIODONTIDÆ**

Diodon Linnæus, 1758, 15. **Paradiodon** Bleeker, 1865, 336.
Orbis Müller (P. L. S.), 1767, 24. **Trichodiodon** Bleeker, 1866, 340.
Chilomycterus Bibron, 1846, 228. **Trichocyclus** Günther, 1870, 357.
MEGALURITES Costa, 1850, 245. **GYMNODUS** Delfortrie, 1871, 361.
ENNEODON Heckel, 1854, 259. **PROGYMNODON** Dames, 1883, 422.
Cyclichthys Kaup, 1855, 265. **Lyosphæra** Evermann & Kendall, 1898, 480.
Cyanichthys Kaup, 1855, 265. **Euchilomycterus** Waite, 1900, 491.
Dicotylichthys Kaup, 1855, 265. **Allomycterus**⁶²⁰ McCulloch, 1921.
HEPTADIODON Bronn, 1855, 264.
Atopomycterus⁶¹⁹ (Verraux) Bleeker, 1865, 336.

⁶¹⁹ Orthotype *A. diversispinis* Verraux; incorrectly stated in "Genera of Fishes."

⁶²⁰ *Rec. Austr. Mus.*, 13: 141; orthotype *Diodon jaculiferus* Cuvier.

Family 627. **MOLIDÆ** (*Orthagoriscidæ*)

Mola Kœlreuter, 1770, 28. **Tympanomium** Ranzani, 1839, 196.
Mola Linck, 1790, 49. **Trematopsis** Ranzani, 1839, 196.
Mola Cuvier, 1798, 54. **Pallasia** Nardo, 1839, 196.
Orthagoriscus Bloch & Schneider, 1801, 60. **Ranzania** Nardo, 1839, 196.
Cephalus Shaw, 1804, 73. **Molacanthus** Swainson, 1839, 205.
Orthragus Rafinesque, 1810, 78. **Acanthosoma** Dekay, 1842, 210.
Diplanchias Rafinesque, 1810, 78. **Centaurus** Kaup, 1855, 265.
Pedalion Swainson, 1838, 193. **Masturus** Gill, 1884, 428.
Ozodura Ranzani, 1839, 196. **Chelonopsis**⁶²¹ Jordan, 1900.

⁶²¹ "Guide to the Study of Fishes," II, 425. This name, never intended as generic, is a printer's error for *Mola chelonopsis*, a fossil *Mola*.

Order PEDICULATI

Family 628. LOPHIIDÆ

Lophius Linnæus, 1758, 11.	Lophiomus Gill, 1882, 419.
Batrachus Klein, 1775, 40.	Lophiodes Goode & Bean, 1895, 468.
Lophidius Rafinesque, 1815, 92.	Chirolophius Regan, 1903, 505.
Lophiopsides Guichenot, 1867, 345.	Sladenia Regan, 1908, 530.

Family 629. ANTENNARIIDÆ

Antennarius (Commerson) Lacépède, 1798, 69.	Saccarius Günther, 1861, 307.
Histrio ⁶²² Fischer, 1813, 84.	Histiophryne Gill, 1863, 324.
Antennarius (Commerson) Cuvier, 1817, 104.	Pterophrynoides ⁶²⁴ Gill, 1878.
Chironectes Cuvier, 1817, 96.	Tetrabrachium Günther, 1880, 403.
Batrachopus ⁶²³ Goldfuss, 1820, 114, 172.	HISTIOCEPHALUS Zigno, 1890, 453.
Capellaria Gistel, 1848, 235.	HISTIONOTOPTERUS Eastman, 1904, 507.
Pterophryne Gill, 1863, 324.	Trianectes McCulloch, 1918, 564.
	Echinophryne McCulloch, 1918, 564.
	Trichophryne McCulloch, 1918, 564.

⁶²² This name may be questioned on account of an error in the published diagnosis, which transposes the generic character of *Lophius* and *Histrio*.

⁶²³ Misprinted *Batrachops* on page 114.

⁶²⁴ *Proc. U. S. Nat. Mus.*, 1: 215; orthotype *Lophius histrio* Gill; a substitute for *Pterophryne*, regarded as preoccupied by *Pterophrynus*, a synonym of *Histrio* if the latter is eligible. (Omitted in "Genera of Fishes.")

Family 630. BRACHIONICHTHYIDÆ

Brachionichthys Bleeker, 1855, 263.	Symptericthys Gill, 1878, 394.

Family 631. CHAUNACIDÆ

Chaunax Lowe, 1846, 229.

Family 632. OGCOCEPHALIDÆ (*Oncocephalidæ*; *Malthidæ*)

Ogcocephalus ⁶²⁵ Fischer, 1813, 85.	Halieutopsis Garman, 1899, 486.
Malthe ⁶²⁶ Cuvier, 1817, 105.	Dibranchichthys Garman, 1899, 486.
Halieutæa Cuvier & Valenciennes, 1837, 189.	Dibranchopsis Garman, 1899, 486.
Astrocanthus Swainson, 1839, 205.	Halicmetus Alcock, 1891, 454.
Halieutichthys Poey, 1863, 324.	Malthopsis Alcock, 1891, 454.
Dibranchus Peters, 1875, 379.	Zalieutes ⁶²⁷ Jordan & Evermann, 1896.
Halieutella Goode & Bean, 1885, 432.	Æschynichthys Ogilby, 1907, 526.
Allector Heller & Snodgrass, 1903, 503.	Tathicarpus Ogilby, 1907, 526.
Cœlophrys Brauer, 1902, 497.	Rhycherus Ogilby, 1907, 526.
Brephostoma Alcock, 1889, 444.	Dermatias Radcliffe, 1912, 544.

⁶²⁵ Sometimes corrected to *Oncocephalus*.

⁶²⁶ Afterwards written *Malthæa*.

⁶²⁷ Jordan & Evermann, "Check List," 511; type *Malthe elater* Jordan & Gilbert. (Omitted in "Genera of Fishes.")

Family 633. CERATIIDÆ

Ceratias Kröyer, 1845, 227.	Paraceratias Tanaka, 1908, 531.
Mancalias Gill, 1878, 394.	Neoceratias Pappenheim, 1914, 554.
Typhlopsaras Gill, 1883, 423.	Monoceratias Gilbert, 1915, 556.
Cryptopsaras Gill, 1883, 423.	Thaumatichthys Smith & Radcliffe,
Miopsaras Gilbert, 1905, 513.	1912, 546.

Family 634. HIMANTOLOPHIDÆ

Himantolophus Reinhardt, 1838, 193.	Diceratias Günther, 1887, 437.
Oneirodes ⁵²⁸ Lütken, 1871, 362.	Linophryne Collett, 1886, 434.
Corynolophus ⁵²⁹ Gill, 1878.	Paroneirodes Alcock, 1890, 449.
Ægæonichthys Clarke, 1878, 394, 575.	Dolopichthys Garman, 1899, 486.

⁵²⁸ Misprinted *Oneiroides* in "Genera of Fishes."

⁵²⁹ *Proc. U. S. Nat. Mus.*, 219; type *Himantolophus reinhardti* Lütken. (Omitted in "Genera of Fishes.")

Family 635. MELANOCETIDÆ

Melanocetus Günther, 1864, 333.	Lyocetus Günther, 1887, 437.

Family 636. CAULOPHRYNIDÆ

- Caulophryne** Goode & Bean, 1895, 468.

Family 637. ACERATIIDÆ

Aceratias Brauer, 1902, 497.	Haplophryne Regan, 1912, 545.

Family 638. GIGACTINIDÆ

- Gigantactis** Brauer, 1902, 497.

INDEX A

GENERIC NAMES NOT INCLUDED IN "GENERA OF FISHES."

In each of the four parts of the work entitled "Genera of Fishes," is an index of the names included, namely: in Part 1, 1758 to 1833; in Part 2, 1833 to 1858; in Part 3, 1859 to 1880; in Part 4, 1881 to 1920. The present list supplements these, including names overlooked or published since 1920.

Acanthemblemaria, 233	Boreosomus, 112	Diplocercides, 109
Acrorhabdus, 112	Brachyconger, 131	Drepanichthys, 205
Actinochromis, 218	Brachyspondylus, 143	Electrona, 155
Acanthenchelys, 133	Brephamia, 189	Endeconger, 131
Agonus, 215	Breviglanis, 151	Enantcopus ⁵ , 220
Aleposomus, 122	Brotula, 236	Eosemionotus, 114
Alisodon, 144	Cyathaspis, 85	Eulepidorhamphus, 161
Allomycterus, 241	Cladoselache, 91	Eumecichthys, 166
Allosomus, 124	Carcharocles, 99	Eumegistus, 181
Alticus, 232	Cœlosteus, 108	Eusolea, 170
Amphotistius, 104	Charitodon, 112	Evermannichthys, 226
Auchenipterus, 146	Chasmocephalus, 151	Exoglossops, 144
Ancistrodon, 239	Cetopsogiton, 152	Exolissus, 217
Anodontoglanis ¹ , 147	Crossorhombus, 168	Gargariscus, 216
Antacanthus, 93	Centratherina, 177	Gargilius, 164
Antimora, 164	Carangus, 184	Georgichthys, 144
Aprolepis, 226	Carapus, 238	Glaucolepis, 112
Archæonectes, 110	Centrochromis, 218	Glyptauchen, 210
Arnoldites, 164	Centroselachus, 101	Grypodon, 239
Asymmetron, 81	Chelonopsis, 241	Gyrace, 100
Atractophorus, 245	Cockerellites, 218	Hemicaranx, 185
Atule, 185	Coius ³ , 195	Heminodus, 216
Aulonocara, 220	Corynolophus, 243	Heterochromis, 220
Aurigequula, 186	Ctenochromis, 219	Heteronarce, 104
Austroglossus, 170	Ctenoglyphiodon, 218	Hinalea, 223
Axelia, 109	Cynias, 100.	Histioclinus, 232
Bathygadus, 162	Cynoglossoides, 245	Histioporus, 199
Bathymacrops, 245	Cynotilapia, 220	Holodus, 97
Bertoniolus, 137	Crystallogobius ⁴ , 225	Hololepis, 187
Birgeria, 112	Daya, 218	Homea, 82
Blavania ² , 145	Deprandus, 134	Hoplochromis, 218
Blennophis, 232	Dictyonosteus, 108	Hoplodus, 94

¹*Anodontoglanis* Rendahl, "Fish, N. W. Australia," *Zool. Mus. Kristiania*, 1922, 168; orthotype *A. dahli* Rendahl.

²*Blavania* Hora, *Rec. Ind. Mus.*, 1920, 202; orthotype *B. annandalei* Hora.

³*Coius* Hamilton, "Genera of Fishes," 1822, 172.

⁴*Crystallogobius* (*Latrunculodes*) and *Boreogobius* (*Latrunculus*, preoccupied), are minute, transparent, annual gobies. *Aphia*, with forked caudal fin, is an atherine, not a goby.

⁵*Enantiopus* Boulenger, *loc. cit.*, 1906; orthotype *E. melanogenys* Boul.

Hyomacrurus ⁶ , 163	Onychopristis, 102	Rhabdosebastes, 193
Hyphalonedrus, 154	Oroptychus, 95	Rhamphochromis, 220
Ioscion, 202	Ovoides, 240	Rhamphodermogenys, 161
Ischnacanthus, 91	Oxytomodus, 96	Rhechias, 131
Laguvia, 148	Pachythrissops, 117	Rhomboplitoides, 196
Lebistes, 158	Parabrotula, 237	Rhyacanthias ¹⁰ , 194
Leioderma, 109	Paracitharus, 168	Rouleina, 122
Leptochilichthys, 122	Parachromis, 220	Sambwa, 144
Lestichthys, 154	Paradistichodus, 138	Sassenia, 109
Lethrinops, 220	Paralepidotus, 112	Scæops, 167
Lissocampus, 175	Paraphyllodus, 221	Scalicus, 216
Loa, 207	Paraplotosus, 147	Scepterias, 189
Longirostrum, 185	Parasphenanchias, 245.	Scleracanthus, 109
Lumpenus, 235	Pareutropius, 149	Scombrolabrax, 189
Leucochlamys, 237	Paropsis, 184	Scopas, 207
Lyconodes, 245	Peleunominus, 245	Seriolina, 185
Maccullochina, 189	Percanthias, 194	Sigmodus, 108
Macronoides, 148	Perleidus, 112	Simenchelys, 130
Macropleurodus ⁷ , 220	Petalichthys, 161	Siphonostoma, 175
Mænioides, 197	Phenacobrycon, 137	Sphæroides, 240
Malapterus, 221	Phractolæmus, 123	Squamicreedia, 230
Margrethia, 127	Physodon, 100	Sternias, 212
Melanorhinus, 178	Phytichthys, 234	Stichæus, 234
Meridensia, 112	Platotichthys, 168	Strongylura, 160
Metzelaaria, 209	Platybelone, 161	Synanceichthys, 210
Microrasbora, 144	Platysoma, 190	Synapteretmus, 154
Micropercops, 226	Prionopleurus, 114	Stylophthalmordes ¹¹ , 127
Mylacanthus, 109	Psammodus, 93	Stylorhynchus, 113
Neocyttus, 171	Pseudepapterus ⁹ , 146	Tænioconger, 131
Neoclinus, 231	Pseudocitharichthyes, 168	Tekla ¹² , 232 (Note 532)
Neoscombrops, 245	Pseudodax, 221	Tifa, 207
Nippon, 191	Pseudotropheus, 220	Tomodus, 96
Notidanion, 97	Psilichthys, 111	Trachinops, 194
Notogrammus, 234	Pterophrynoides, 242	Trachypterophrys, 167
Nomorhamphus ⁸ , 161	Pterygiocottus, 212	Trossulus, 154
Nyctimaster, 155	Pungitius, 174	Trypauchen, 227
Omochelys, 133	Radcliffella, 226	Ulaula, 196

⁶"Genera of Fishes," p. 570; the name *Hyostomus* in proof-sheets changed to *Hyomacrurus* in publication. *Hyomacrurus* has priority.

⁷*Mucropleurodus* Regan, "Cichlid Fishes of Lake Victoria," *Proc. Zool. Soc. Lond.*, 1922, 189; orthotype *Paratilapia bicolor* Boulenger.

⁸*Nomorhamphus* Weber & de Beaufort, "Indo-Austr. Fishes IV," 1922, 141; orthotype *N. celebensis* W. & de B.

⁹*Denks. Akad. Wien*, 1893, 83; orthotype *Auchenipterus hasemani* Steind.

¹⁰*Rhyacanthias* is apparently a synonym of *Symphysansdon*.

¹¹Sanzo, *Mem. Acad. Roma*, 1920; orthotype *S. loviaanæ* Sanzo (larvæ of some Stomiatiid).

¹²*Tekla* Nichols, "Copeia," 1922, 69; orthotype *Cremnobates fasciatus* Steindachner.

Ulcigobius, 226	Wimania, 109	Xestias, 179
Ulcina, 215	Xenocephalidæ, 235	Xiphypops, 207
Verrugato, 195	Xenodolamia, 99	Xystrias, 168
Vespacula, 209	Xenogobius, 226	Zalieutes, 242
Vesposus, 171	Xenolepidichthys, 245.	Zelotes, 160

NOTE.—In the Report of the Fisheries and Marine Biological Survey of South Africa, received as these pages go through the press, are two important papers, the first on "The *Heterosomata* (Flat Fishes)" by Cecil von Bonde, the other "Deep Sea Fishes, Part I," by J. D. F. Gilchrist. The following new genera are proposed:

Cynoglossoides von Bonde, 1822, 23; orthotype *Cynoglossus attenuatus* Gilchrist (*Cynoglossidæ*).

Atractophorus Gilchrist, 48; orthotype *A. annectens* Gilchrist (*Squalidæ*).

Bathymacrops Gilchrist, 53; orthotype *B. macrolepis* G. (*Bathylagidæ*).

Pelecinomimus Gilchrist, 56; orthotype *P. picklei* G. (*Cetomimidæ*).

Lyconodes Gilchrist, 59; orthotype *L. argenteus* G. (*Macrouridæ*).

Neoscombrops Gilchrist, 67; orthotype *N. annectens* G. (*Scombropidæ*).

Parasphenanthias Gilchrist, 69; orthotype *P. weberi* G. (*Serranidæ*).

Xenolepidichthys Gilchrist, 73; orthotype *X. dalgleishi* G. (*Grammicolepidæ*).

INDEX B

NAMES OF FAMILIES AND HIGHER GROUPS INCLUDED IN THE PRESENT PAPER.

Abyssocottidæ, 214	Amphioxididæ, 81	Ascelichthyidæ, 214
Acanthoclinidæ, 194	Amphipnoidæ, 129	Asineopidæ, 165
Acanthoëssidæ, 91	Amphisilidæ, 176	Aspredinidæ, 151
Acanthodei, 91	Amphistiidæ, 204	Asterodermidæ, 103
Acanthodidæ, 91	Anabantidæ, 176	Asterodontidæ, 112
Acanthopterygii, 376	Anablepidæ, 160	Asterosteidæ, 88
Acanthuridæ, 207	Analithidæ, 103	Aspidoganoidei, 84
Acanthuriformes, 207	Anarhichadidæ, 235	Aspidophoroididæ, 215
Aceratiidæ, 243	Anarrhichthyidæ, 235	Aspidorhynchidæ, 115
Achiridæ, 169	Anaspida, 87	Aspidorhini, 85
Acipenseridæ, 113	Ancylostylidæ, 119	Astraspidæ, 85
Acropomatidæ, 189	Anguillavidæ, 130	Astrolepidæ, 86
Acrotidæ, 183	Anguillidæ, 130	Astronesthidæ, 127
Actinistia, 109	Anguilloidei, 130	Atelaxia, 166
Actinopteri, 111	Anodontidæ, 137	Ateleaspidæ, 86
Adiposiidæ, 145	Anomalopidæ, 172	Ateleopodidæ, 156
Adrianichthyidæ, 160	Anoplopomidæ, 210	Atherinidæ, 177
Aëtobatidæ, 105	Anostomidæ, 137	Atopoclinidæ, 233
Agonidæ, 215	Anotopteridæ, 127	Aulopidæ, 153
Agriopidæ, 209	Antacea, 90	Aulorhynchidæ, 174
Alabidæ, 129	Antennariidæ, 242	Aulostomi, 175
Alabiformes, 129	Antiarcha, 86	Aulostomidæ, 175
Alepisauridæ, 156	Antigoniidæ, 204	Azygostei, 86
Alepocephalidæ, 122	Aphareidæ, 196	Bagridæ, 148
Albulidæ, 118	Aphredoderidæ, 165	Balistidæ, 239
Albuloidei, 118	Apodes, 129	Banjosidæ, 197
Allotriognathi, 165	Apogonidæ, 188	Bathyclupeidæ, 186
Alopiidæ, 99	Aploactidæ, 209	Bathylagidæ, 125
Ambassidæ, 189	Aplochitonidæ, 125	Bathymasteriformes, 230
Amblycipitidæ, 148	Aplodactylidæ, 204	Bathydraconidæ, 228
Amblyopsidæ, 160	Apolectidæ, 184	Bathymasteridæ, 230
Ameiuridæ, 147	Apteronotidæ, 138	Bathypteroidæ, 154
Amiatidæ, 116	Arapaimidæ, 123	Bathythrissidæ, 119
Amiidæ, 116	Archæomænidæ, 116	Batoidei, 102
Amiidæ, 188	Archencheli, 129	Batrachoididæ, 238
Amioidei, 115	Argentinidæ, 125	Bedotiidæ, 177
Ammodytidæ, 230	Argidæ, 152	Belonidæ, 160
Ammodytiformes, 230	Ariidæ, 145	Belonorhynchidæ, 113
Amphacanthi, 208	Arripidæ ¹⁸ , 195	Bembropidæ, 229
Amphiliidæ, 149	Arthrodira, 88	Benthosauridæ, 154
Amphioxi, 81	Arthropteridæ, 103	Berycidæ, 172
Amphioxidæ, 81	Arthrothoraci, 88	Berycoidei, 172

¹⁸In words of this type classical authority prefers the shorter form to the less euphonious *Arripididæ*, and the like. (Dr. H. R. Fairclough.)

- Berycopsidæ, 172
 Birkeniidæ, 87
 Bleekeriidæ, 230
 Blenniidæ, 232
 Blenniiformes, 231
 Blepsiidæ, 212
 Blochiidæ, 180
 Bothide, 167
 Bothrolepidæ, 86
 Bovictidæ, 228
 Brachionichthyidæ, 242
 Brachiopteridæ, 105
 Bramidæ, 181
 Bramiformes, 181
 Branchiostegidæ, 202
 Branchiostomidæ, 81
 Bregmacerotidæ, 163
 Brotulidæ, 236
 Brotuliformes, 236
 Bunocephalidæ, 151
 Calamoichthyidæ, 110
 Callichthyidæ, 152
 Callionymidæ, 229
 Callionymiformes, 229
 Callipterygidæ, 228
 Callorhynchidæ, 107
 Callyodontidæ, 223
 Canthigasteridæ, 241
 Capriformes, 204
 Caproidæ, 204
 Caracanthidæ, 210
 Carangidæ, 184
 Carangiformes, 183
 Carapidæ, 238
 Carcharhinidæ, 100
 Carchariidæ, 99
 Carencheli, 129
 Caristiidæ, 173
 Cataphracti, 208
 Catopteridæ, 112
 Catostomidæ, 139
 Caulophrynidæ, 243
 Cebidichthyidæ, 233
 Centriscidæ, 176
 Centrobates, 104
 Cephalacanthidæ, 217
 Cephalaspidæ, 86
 Cephalopteridæ, 105
 Cepolidæ, 203
 Ceraspidæ, 85
 Ceratiidæ, 243
 Ceratodontidæ, 110
 Cerdalidæ, 235
 Cestraciontes, 92
 Cestraciontidæ, 95
 Cetomimidæ, 156
 Cetopsidæ, 152
 Cetorhinidæ, 99
 Centrarchidæ, 189
 Centrolophidæ, 182
 Centropomidæ, 190
 Cetunculi, 156
 Chacidæ, 149
 Chæto-bontidæ, 206
 Chætodontiformes, 206
 Chænopsidæ, 233
 Champsodontidæ, 231
 Chanidæ, 119
 Channichthyidæ, 228
 Characidæ, 134
 Characinidæ, 134
 Characodontidæ, 159
 Chaudhuriidæ, 129
 Chauliodontidæ, 127
 Chaunacidæ, 242
 Cheilodactylidæ, 204
 Chelonichthyidæ, 88
 Cheirothricidæ, 153
 Chiasmodontidæ, 230
 Chilodipteridæ, 188
 Chimæridæ, 106
 Chimaeroidæi, 105
 Chimarrichthyidæ, 229
 Chirocentridæ, 119
 Cirrostomi, 81
 Chironemidæ, 204
 Chismopnea, 105
 Chlamydoselachidæ, 97
 Chlorophthalmidæ, 154
 Chondrenchelyidæ, 92
 Chondrichthyes, 156
 Chondropterygii, 90
 Chondrostei, 111
 Chondrosteidæ, 113
 Chonerhinidæ, 240
 Chromides, 218
 Cichlidæ, 219
 Cirrhitidæ, 203
 Cirrhitoidæi, 203
 Citharinidæ, 138
 Cladistia, 110
 Cladodontidæ, 92
 Cladoselachea, 91
 Cladoselachidæ, 91
 Clariidæ, 149
 Clinidæ, 231
 Clupeidæ, 120
 Clupeoidei, 119
 Clupisudidæ, 123
 Cobitidæ, 144
 Coccosteidæ, 88
 Cochliodontidæ, 94
 Cœlacanthidæ, 109
 Cœlacanthini, 109
 Cœlopedidæ, 85
 Colobodontidæ, 112
 Colocephali, 133
 Comephoridæ, 215
 Congiopodidæ, 209
 Congridæ, 130
 Congrogadidæ, 235
 Congroidei, 130
 Coregonidæ, 124
 Coridæ, 222
 Coryphænidæ, 181
 Coryphænoididæ, 162
 Coryphæniformes, 181
 Cottidæ, 213
 Cottiformes, 211
 Cottocomephoridæ, 215
 Creediidæ, 229
 Cromeriidæ, 123
 Crossognathidæ, 157
 Crossopterygii, 108
 Cryptacanthodidæ, 235
 Ctenodipneusta, 110
 Ctenodipterini, 110
 Ctenodontidæ, 110
 Ctenothrissidæ, 173
 Curimatidæ, 137
 Cycliæ, 87
 Cycloganoidei, 115
 Cyclogasteridæ, 216
 Cyclopteridæ, 215
 Cyclopteriformes, 215
 Cyclostomi, 82
 Cyemidæ, 132
 Cynoglossidæ, 171
 Cyprinidæ, 139
 Cyprinodontes, 157

- Cyprinodontidae, 158
 Dactylopteridae, 217
 Dactylopteriformes, 217
 Dactyloscopidae, 231
 Dalatiidae, 102
 Dalliidae, 156
 Dapediidae, 114
 Dasyatidae, 104
 Dasybatidae, 104
 Denticidae, 198
 Dercetidae, 128
 Dercetiformes, 128
 Derepodichthyidae, 236
 Derichthyidae, 129
 Deripia, 228
 Dermopteri, 82
 Dianidae, 182
 Dictyopygidae, 112
 Dinichthyidae, 88
 Dinopterygidae, 173
 Diodontidae, 241
 Diphyodontidae, 113
 Diplacanthidae, 91
 Diplomystidae, 145
 Diploprionidae, 195
 Diplospondyli, 97
 Dipneusta, 110
 Dipnoi, 110
 Dipteridae, 110
 Diretmidae, 172
 Discobatidae, 103
 Discocephali, 227
 Doliichthyidae, 227
 Doradidae, 146
 Dorosomidae, 122
 Dorypteridae, 112
 Draconettidae, 229
 Drepanaspidae, 85
 Drepanidae, 205
 Dussumieriidae, 121
 Dysommidae, 130
 Echelidae, 131
 Echeneidae, 227
 Echinorhinidae, 102
 Edestidae, 96
 Elasmobranchii, 90
 Ellassomidae, 190
 Eleotridae, 224
 Elephenoridae, 182
 Electrophoridae, 138
 Elipesuridae, 104
 Elopidae, 117
 Elopoidea, 117
 Embiotocidae, 217
 Emblemariidae, 233
 Emmelichthyidae, 200
 Encheliidae, 131
 Enchelycephali, 130
 Enchodontidae, 126
 Enchodontoidei, 126
 Engraulidae, 122
 Enoplosidae, 199
 Epelasmia, 206
 Ephippidae, 205
 Ephippiformes, 205
 Epigonichthyidae, 81
 Epinephelidae, 191
 Eptatretidae, 82
 Erilepidae, 210
 Erisichthidae, 115
 Eretmophoridae, 164
 Ereuniidae, 214
 Erythrichthyidae, 200
 Erythrinolepidae, 119
 Esocidae, 157
 Etheostomidae, 187
 Eucentrarchidae, 189
 Eugnathidae, 116
 Euphaneropidae, 86
 Furidae, 116
 Eurypharyngidae, 134
 Euselachii, 97
 Eventognathi, 139
 Evermanellidae, 154
 Exocetidae, 161
 Fierasferidae, 238
 Fistulariidae, 175
 Fitzroyiidae, 160
 Flutidae, 129
 Forficidae, 160
 Gadidae, 163
 Gadopsidae, 204
 Gadopsiformes, 204
 Gaidropsaridae, 163
 Galaxiidae, 125
 Galei, 97
 Galeidae, 100
 Galeoidei, 100
 Galeorhinidae, 100
 Ganoidei, 111
 Ganolytidae, 118
 Gasteropelecidae, 137
 Gasterosteidae, 173
 Gempylidae, 180
 Geotriidae, 83
 Gerridae, 200
 Gigactindae, 243
 Gigactiniidae, 243
 Giganturidae, 166
 Ginglymodi, 115
 Ginglystomidae, 98
 Girellidae, 199
 Glaniostomi, 111
 Glaniostomi, 113
 Glaucosomidae, 195
 Gnathanacanthidae, 210
 Gobiesocidae, 238
 Gobiidae, 224
 Gobioidea, 224
 Gobioididae, 227
 Gonorhynchidae, 120
 Gonostomidae, 127
 Goodeidae, 159
 Grammicolepidae, 171
 Gymnarchidae, 124
 Gymnodontes, 240
 Gymnonoti, 138
 Gymnotidae, 138
 Gyraacanthidae, 92
 Hæmulidae, 196
 Halecomorphi, 115
 Halosauridae, 128
 Haplomi, 156
 Harpagiferidae, 228
 Harpodontidae, 154
 Helogenidae, 150
 Helostomidae, 176
 Homalopteridae, 145
 Hemerocetidae, 229
 Hemibranchii, 173
 Hemiodontidae, 137
 Hemiramphidae, 161
 Hemiscylliidae, 97
 Hemitriptidae, 214
 Henicichthyidae, 203
 Hepatidae, 207
 Heterenchelyidae, 133
 Heterocerci, 111
 Heterocongridae, 131
 Heterodontidae, 95

- Heterognathi, 134
 Heteromi, 128
 Heterostraci, 85
 Heterosomata, 166
 Heterotidæ, 123
 Hexagrammidæ, 211
 Hexagrammiformes, 210
 Hexanchidæ, 97
 Himantolophidæ, 243
 Hiodontidæ, 120
 Hippocampidæ, 174
 Hippoglossidæ, 168
 Histichthyes, 165
 Histiopteridæ, 199
 Holconoti, 217
 Hoplichthyidæ, 211
 Holocentridæ, 173
 Holocephali, 105
 Holoptychidæ, 108
 Holostei, 115
 Holostomi, 129
 Hoplopagridæ, 195
 Hoplopleuri, 128
 Hoplopterygidæ, 172
 Hybodontidæ, 95
 Hyperoartia, 83
 Hyperotreta, 82
 Hypophthalmidæ, 150
 Hypoptychidæ, 230
 Hypostomides, 175
 Hypotremata, 102
 Hysterozoidæ, 217
 Icelidæ, 212
 Ichthyodectidæ, 119
 Ichthyocephali, 129
 Ichthyodorulites, 96
 Ichthyodorulites, 107
 Ichthyotomi, 91
 Icosteidae, 183
 Icosteiformes, 183
 Ictinocephalidæ, 91
 Idiacanthidæ, 127
 Ilyophidæ, 130
 Inermiidæ, 199
 Iniomi, 153
 Ipnopidæ, 155
 Ischnacanthidæ, 91
 Isopholidæ, 116
 Isospondyli, 116
 Istiophoridæ, 181
 Janassidæ, 93
 Janassides, 92
 Jordaniidæ, 211
 Jugulares, 228
 Kneriidæ, 123
 Kuhliidæ, 190
 Kurtidæ, 186
 Kurtiformes, 186
 Kyphosidæ, 199
 Labracoglossidæ, 203
 Labridæ, 221
 Labyrinthici, 176
 Lactariidæ, 186
 Lamnidæ, 99
 Lamnoidei, 99
 Lampridæ, 166
 Lasaniidæ, 87
 Latidæ, 191
 Latilidæ, 202
 Latridæ, 204
 Leiognathidæ, 186
 Lepidoglanidæ, 149
 Lepidopidæ, 180
 Lepidosirenidæ, 111
 Lepidostei, 115
 Lepisosteidae, 115
 Lepidotidæ, 114
 Leptocardii, 81
 Leptocephalidæ, 130
 Leptolepidæ, 117
 Leptoscopidæ, 231
 Lethrinidæ, 197
 Limnichthyidæ, 229
 Liodesmidæ, 116
 Liparidæ, 216
 Liparopidæ, 215
 Lipogenyidæ, 128
 Lobotidæ, 195
 Lophiidæ, 242
 Lophobranchii, 174
 Lophotidæ, 166
 Loricariidæ, 152
 Loricati, 208
 Luciidæ, 157
 Luciocephalidæ, 176
 Lumpenidæ, 235
 Lutianidæ, 195
 Luvaridæ, 181
 Luvariformes, 181
 Lycodapodidæ, 236
 Lycodidæ, 236
 Lyomeri, 111
 Lyomeri, 134
 Lyopomi, 128
 Lysopteri, 111
 Macristiidæ, 123
 Macropetalichthyidæ, 88
 Macrosemiidae, 115
 Macrorhamphosidæ, 176
 Macrouridæ, 162
 Macrouroididæ, 162
 Macruridæ, 162
 Mænidæ, 200
 Malacanthidæ, 202
 Malacopterygii, 116
 Malacosteidae, 155
 Malapteruridæ, 150
 Malthidæ, 242
 Mantidæ, 105
 Marsipobranchii, 82
 Mastacembelidæ, 129
 Masticura, 104
 Maurolicidæ, 127
 Medidæ, 144
 Megalichthyidæ, 108
 Megalopidæ, 118
 Melamphaidæ, 172
 Melanocetidae, 243
 Melanotæniidæ, 177
 Menaspidae, 86
 Menidæ, 185
 Merlucciidae, 164
 Merolepidæ, 200
 Microcyprini, 157
 Microdesmidæ, 235
 Microstomidae, 125
 Micropteridæ, 189
 Mitsukurinidæ, 99
 Mobulidæ, 105
 Mochokidæ, 150
 Molidae, 241
 Monacanthidæ, 239
 Monocentridæ, 172
 Monodactylidæ, 205
 Monopteridæ, 129
 Mordaciidae, 83
 Moringuidæ, 133
 Mugiloididæ, 229
 Mormyridæ, 124
 Moronidæ, 191

- Mugilidæ, 178
 Mullidæ, 200
 Murænesocidæ, 130
 Murænidæ, 133
 Murænolepidæ, 164
 Myctophidæ, 155
 Myelozoa, 81
 Myliobatidæ, 105
 Mylostomidæ, 89
 Myriacanthidæ, 106
 Myridæ, 131
 Myrocongridæ, 130
 Myxinidæ, 82
 Myzontes, 82
 Nandidæ, 202
 Nannatherinidæ, 177
 Narcacientes, 103
 Narcacientidæ, 103
 Narcobatidæ, 103
 Neenchelyidæ, 133
 Nematistiidæ, 185
 Nematognathii, 145
 Nemichthyidæ, 132
 Nemipteridæ, 198
 Neolabridæ, 223
 Neolethrinidæ, 197
 Neophrynichthyidæ, 214
 Nettastomidæ, 131
 Niphonidæ, 191
 Nomeidæ, 183
 Notacanthidæ, 128
 Notidani, 97
 Notogoneidæ, 120
 Notograptidæ, 232
 Notopteridæ, 123
 Notopteroidei, 123
 Nototheniidæ, 228
 Nototheniiformes, 228
 Odacidæ, 223
 Odontaspidæ, 99
 Odontodontidæ, 86
 Odontostomidæ, 154
 Ogcocephalidæ, 242
 Oligopleuridæ, 117
 Oligoridæ, 191
 Omosudidæ, 155
 Onchidæ, 92
 Oncocephalidæ, 242
 Onychodontidæ, 109
 Ophicephalidæ, 176
 Ophichthyidæ, 132
 Ophidiidæ, 237
 Ophioclinidæ, 232
 Ophiodontidæ, 211
 Opistharthri, 97
 Opisthognathidæ, 230
 Opisthomi, 129
 Opisthomyzonidæ, 227
 Opisthoproctidæ, 127
 Oplegnathidæ, 200
 Orectolobidæ, 98
 Orestiidæ, 158
 Orodontidæ, 95
 Orthacanthidæ, 91
 Osmeridæ, 125
 Osphronemidæ, 176
 Ostariophysi, 134
 Osteoglossidæ, 123
 Osteoglossoidea, 123
 Osteolepidæ, 109
 Osteostraci, 86
 Ostraciidæ, 240
 Ostracodermi, 240
 Ostracodermi, 84
 Ostracodermi, 240
 Ostracophori, 84
 Otolithidæ, 202
 Oxudercidæ, 230
 Oxylebiidæ, 211
 Oxynotidæ, 102
 Owstoniidæ, 231
 Pachycormidæ, 115
 Pachyrhizodontidæ, 118
 Palæoniscidæ, 111
 Palæorhynchidæ, 180
 Palæspondylidæ, 87
 Pampidæ, 182
 Pangasiidæ, 149
 Pantodontidæ, 123
 Paralepidæ, 154
 Paralichthodidæ, 169
 Paralichthyidæ, 168
 Parapercidæ, 229
 Pareioplitæ, 208
 Patæcidæ, 210
 Pediculati, 242
 Pegasidæ, 175
 Pelecopteridæ, 115
 Pempheridæ, 194
 Pentanchidæ, 98
 Percesoces, 177
 Percichthyidæ, 188
 Percidæ, 186
 Perciliidæ, 188
 Percomorphi, 177
 Percophididæ, 229
 Percopsidæ, 165
 Periophthalmidæ, 227
 Peripristidæ, 94
 Peristediidæ, 216
 Peronedyidæ, 232
 Petalodontidæ, 93
 Petromyzonidæ, 83
 Phallostethidæ, 160
 Phaneropleuridæ, 110
 Pharyngognathi, 221
 Pharyngopilidæ, 221
 Pholidæ, 234
 Pholidophoridae, 116
 Pholidophoroidei, 116
 Phractolæmidæ, 123
 Phthinobranchii, 173
 Phyllodontidæ, 221
 Phyllolepidæ, 89
 Physostomi, 116
 Pimelodidæ, 150
 Pinguipedidæ, 229
 Pisces, 108
 Placodermi, 86
 Placoganoidei, 86
 Plagiostomata, 90
 Plagyodontidæ, 156
 Platacidæ, 205
 Platycephalidæ, 211
 Platycephaliformes, 211
 Platypteridæ, 224
 Platyrrhinidæ, 103
 Platysomidæ, 112
 Plecoglossidæ, 124
 Plectognathi, 239
 Plectospondyli, 134
 Plesiopidæ, 194
 Plethodontidæ, 119
 Pleuracanthidæ, 91
 Pleuronectidæ, 169
 Pleuropterygii, 91
 Pliotremidæ, 101
 Plotosidæ, 147
 Podopterygia, 111
 Pæcilidæ, 159

- Polyacanthidæ, 176
 Polycentridæ, 202
 Polymixiidæ, 172
 Polynemidæ, 178
 Polyodontidæ, 113
 Polypteridæ, 110
 Polyspondyli, 92
 Pomacentridæ, 218
 Pomadasidæ, 196
 Pomatomidæ, 186
 Potamotrygonidæ, 104
 Priacanthidæ, 194
 Priscacaridæ, 218
 Pristiophorida, 101
 Pristidæ, 102
 Pristipomidæ, 196
 Pristodontidæ, 94
 Pronotacanthidæ, 128
 Proarthri, 95
 Protocephali, 84
 Protopteridæ, 111
 Protoselachii, 97
 Protosphyrenidæ, 115
 Protospondyli, 115
 Protosyngnathidæ, 174
 Psammichthyidæ, 227
 Psammodontidæ, 93
 Psammosteidæ, 85
 Psenidæ, 183
 Psettodidæ, 167
 Pseudochromidæ, 194
 Pseudoplesiopidæ, 194
 Pseudotriakidæ, 98
 Psilcephalidæ, 240
 Psychrolutidæ, 214
 Pteraclidæ, 182
 Pteraspidæ, 85
 Pterichthyidæ, 86
 Pternodonta, 97
 Pteropsaridæ, 229
 Pterothrissidæ, 119
 Ptilichthyidæ, 235
 Ptychodontidæ, 105
 Ptyctodontidæ, 105
 Pycnodonti, 114
 Pycnodontidæ, 114
 Pygæidæ, 208
 Pygidiidæ, 151
 Rachycentridæ, 186
 Rajidæ, 103
 Raphiosauridæ, 118
 Regalecidæ, 166
 Retropinnidæ, 125
 Rhamphichthyidæ, 138
 Rhamphobatidæ, 102
 Rhamphocottidæ, 214
 Rhamphosidæ, 175
 Rhegmatidæ, 194
 Rhegnopteri, 178
 Rhinellidæ, 128
 Rhineodontidæ, 99
 Rhinidæ, 102
 Rhinobatidæ, 103
 Rhinochimeridæ, 107
 Rhinopteridæ, 105
 Rhipidistia, 108
 Rhizodontidæ, 108
 Rhodichthyidæ, 237
 Rhombodipteridæ, 109
 Rhombosoleidæ, 169
 Rhyacichthyidæ, 224
 Rhynchobatidæ, 102
 Rogeniidæ, 160
 Rondeletiidæ, 156
 Runulidæ, 233
 Saccopharyngidæ, 134
 Salangidæ, 125
 Salmonidæ, 124
 Salmonoidei, 124
 Salmopercæ, 164
 Samaridæ, 169
 Sarcura, 102
 Saurodontidæ, 120
 Sauromurænesocidæ, 130
 Scarichthyidæ, 223
 Scaridæ, 223
 Scatophagidæ, 206
 Schibeidæ, 149
 Sciænidæ, 201
 Sclerodermi, 239
 Sclerogeni, 208
 Scomberesocidæ, 161
 Scombridæ, 179
 Scombriformes, 179
 Scombropidæ, 189
 Scopelarchidæ, 154
 Scopelidæ, 155
 Scorpænichthyidæ, 212
 Scorpænidæ, 208
 Scorpæniformes, 208
 Scorpida, 205
 Scrotidæ, 112
 Scyllioidei, 97
 Scylliorhinidæ, 98
 Scymnorhinidæ, 102
 Scyphophori, 124
 Scytalinidæ, 235
 Selachii, 90
 Selachophidichthyoidei, 97
 Selachostomi, 113
 Selenichthyes, 166
 Selenosteidæ, 89
 Semionotidæ, 114
 Semiophoridæ, 166
 Serranidæ, 193
 Siganidæ, 208
 Sillaginidæ, 202
 Siluridæ, 147
 Simenchelyidæ, 130
 Siphonognathidæ, 223
 Sirenoidei, 110
 Sisoridæ, 148
 Soleidæ, 169
 Solenostomidæ, 174
 Somniosidæ, 102
 Sparidæ, 197
 Sparisomidæ, 223
 Sphærodontidæ, 114
 Sphyrenidæ, 178
 Sphyrnidæ, 101
 Spinacanthidæ, 239
 Squalidæ, 101
 Squaloidei, 101
 Squaloraidæ, 105
 Squamipennes, 206
 Squatinidæ, 102
 Squatinoidei, 102
 Stegophthalmi, 88
 Steinegeriidæ, 182
 Stephanoberycidæ, 171
 Sternarchidæ, 138
 Sternopthychidæ, 127
 Stichæidæ, 234
 Stomiatidæ, 126
 Stomatioidei, 126
 Stratodontidæ, 128
 Stromateidæ, 182
 Stromateiformes, 182
 Stylephoridæ, 166
 Stylodontidæ, 114

Stylophthalmidæ, 127	Thymallidæ, 125	Veliferidæ, 165
Sudidæ, 154	Titanichthyidæ, 89	Verilidæ, 196
Symbranchia, 128	Tomognathidæ, 126	Xenacanthidæ, 91
Synancejidæ, 210	Torpedinidæ, 103	Xenarchi, 165
Synaphobranchidæ, 130	Torpedinidæ, 150	Xenesthidæ, 160
Synapturidæ, 170	Toxotidæ, 206	Xenichthyidæ, 195
Synbranchidæ, 129	Toxotiformes, 206	Xenoberyces, 171
Synchiridæ, 214	Trachichthyidæ, 173	Xenocephalidæ, 235
Syentognathi, 160	Trachinidæ, 228	Xenocongridæ, 130
Syngnathidæ, 174	Trachipteridæ, 166	Xenomi, 156
Synodontidæ, 153	Tremataspidæ, 86	Xenopteri, 238
Tachysuridæ, 145	Triacanthidæ, 239	Xenopterygii, 238
Tæniosomi, 166	Trichiuridæ, 180	Xiphasiidæ, 235
Tamiobatidæ, 95	Trichodontidæ, 203	Xiphidiontidæ, 234
Tarrasiidæ, 109	Trichodontiformes, 203	Xiphiidæ, 181
Taxistia, 108	Trichonotidæ, 230	Xiphiiformes, 180
Tectospondyli, 101	Triglidæ, 217	Xiphiorhynchidæ, 181
Teleostei, 116	Trigliformes, 216	Xiphisteridæ, 234
Temnothoraci, 88	Triodontidæ, 240	Xiphostomidæ, 137
Tetragonuridæ, 183	Trygonidæ, 104	Xystæmidæ, 200
Tetraodontidæ, 240	Trypauchenidæ, 227	Zanclidæ, 207
Teuthidæ, 208	Tropidichthyidæ, 241	Zancliformes, 207
Teuthididæ, 207	Umbridæ, 157	Zaniolepidæ, 211
Thelodontidæ, 85	Uranoscopidæ, 231	Zaprorida, 230
Theraponidæ, 197	Uranoscopiformes, 230	Zeidæ, 171
Thoracostei, 173	Urenchelyidæ, 131	Zeoidei, 171
Thryptodontidæ, 119	Uronemidæ, 110	Zoarcidæ, 236
Thunnidæ, 179	Urosphenidæ, 175	Zoarciformes, 235
Thyestidæ, 86		

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