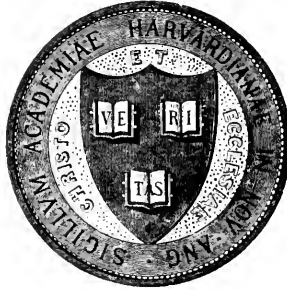


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THE GENERA OF FISHES

FROM LINNÆUS TO CUVIER, 1758-1833, SEVENTY-FIVE YEARS,
WITH THE ACCEPTED TYPE OF EACH.

A Contribution to the Stability of Scientific Nomenclature.

BY

DAVID STARR JORDAN

ASSISTED BY

BARTON WARREN EVERMANN

STANFORD UNIVERSITY, CALIFORNIA
PUBLISHED BY THE UNIVERSITY

1917

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CONTENTS

	PAGE
Introduction	7
I. Linnæus, <i>Systema</i> , Ed. X, 1758.....	11
II. Gunner, <i>Berglachs</i> , 1761.....	16
III. Schæfer, <i>Ratisbon</i> , 1761.....	16
IV. Osbeck, <i>Reise, China</i> , 1762.....	17
V. Gronow, <i>Zoophylaceum</i> , 1763.....	17
VI. Linnæus, <i>Museum</i> , 1764.....	22
VII. Houttuyn, <i>Natural History</i> , 1764.....	22
VIII. Linnæus, <i>Systema</i> , Ed. XII, 1766.....	23
IX. Müller, <i>Delineationes</i> , 1767.....	24
X. Geoffroy, <i>719 Plantes</i> , 1767.....	24
XI, XII. Valmont, <i>Dictionnaire</i> , II, 1768.....	24
XIII. Gouan, <i>Historia</i> , 1770.....	28
XIV. Kœlreuter, <i>Rarorum</i> , 1770.....	28
XV. Forster, <i>Remora</i> , 1771.....	28
XVI. Brünnich, <i>Regalecus</i> , 1771.....	28
XVII. Catesby & Edwards, <i>Carolina</i> , 1771.....	28
XVIII. Gùldenstadt, <i>Acerina</i> , 1774.....	32
XIX. Forskål, <i>Descriptiones</i> , 1775.....	32
XX. (Klein), <i>Schauplatz</i> , I-III, 1775-1776.....	34
XXI. Scopoli, <i>Introductio</i> , 1777.....	41
XXII. Forster, <i>Icones</i> , 1777.....	42
XXIII. (Klein), <i>Schauplatz</i> , IV, V, 1777.....	42
XXIV. Forster, <i>Enchiridion</i> , 1778.....	43
XXV. (Klein), <i>Schauplatz</i> , VI-X, 1778-1781.....	43
XXVI. Herrmann, <i>Sternoptix</i> , 1781.....	44
XXVII. Houttuyn, <i>Japan</i> , 1782.....	44
XXVIII. Bloch, <i>Ichthyologia</i> , 1786.....	44
XXIX. Bloch, <i>Fisch Arten</i> , 1787.....	44
XXX. Ahl, <i>Muræna</i> , 1787.....	45
XXXI. Ascanius, <i>Sildetusten</i> , 1788.....	45
XXXII. Bloch, <i>Papageyñsche</i> , 1788.....	45
XXXIII. Bloch, <i>Ichthyologia</i> , III, 1788.....	45

	PAGE
XXXIV. Browne, <i>Jamaica</i> , Ed. II, 1789.....	45
XXXV. Linck, <i>Neueste</i> , 1790.....	49
XXXVI. Bloch, <i>Ichthyologia</i> , IV, 1790.....	49
XXXVII. White, <i>New South Wales</i> , 1790.....	50
XXXVIII. Valmont, <i>Dictionnaire</i> , Ed. IV, 1791.....	50
XXXIX. Shaw, <i>Stylephorus</i> , 1791.....	50
XL. Walbaum, <i>Artedi Piscium</i> , 1792.....	50
XLI. Bloch, <i>Ichthyologia</i> , VI, VII, 1792-93.....	50
XLII. Röse, <i>Synonymia</i> , 1793.....	51
XLIII. Latham, <i>Saxefish</i> , 1794.....	52
XLIV. Vahl, <i>Cæcula</i> , 1794.....	52
XLV. Bloch, <i>Ichthyologia</i> , VIII, IX, 1794-95.....	53
XLVI. Fabricius, <i>Campylodon</i> , 1793.....	53
XLVII. Volta, <i>Blochius</i> , 1796.....	54
XLVIII. Lacepède, <i>Polyodon</i> , 1797.....	54
XLIX. Cuvier, <i>Tableau</i> , 1798.....	54
L. Geoffroy St. Hilaire, <i>Polypterus</i> , 1798.....	54
LI. Retzius, <i>Lampris</i> , 1799.....	54
LII. Shaw, <i>Trachichthys</i> , 1799.....	55
LIII. Cuvier, <i>Anatomie</i> , 1800.....	55
LIV. Lacepède, <i>Poissons</i> , I, II, 1798-1800.....	55
LV. Bloch & Schneider, <i>Systema</i> , 1801.....	57
LVI. Lacepède, <i>Poissons</i> , III, IV, V, 1802-03.....	60
LVII. Sewastianoff, <i>Acarauna</i> , 1802.....	68
LVIII. Commerson, in <i>Lacepède</i> , 1798-1803.....	69
LIX. Plumier, in <i>Lacepède</i> , 1798-1803.....	71
LX. Shaw, <i>General Zoology</i> , IV, V, 1803-04.....	73
LXI. Herrmann, <i>Notistium</i> , 1804.....	74
LXII. Giorna, <i>Poissons</i> , 1805.....	74
LXIII. Quensel, <i>Flunderslagte</i> , 1806.....	74
LXIV. Duméril, <i>Zoologie</i> , 1806.....	75
LXV. Duméril, <i>Torpedo</i> , 1806.....	75
LXVI. Humboldt, <i>Eremophilus</i> , 1806.....	76
LXVII. Duméril, <i>Cyclostomes</i> , 1808.....	76
LXVIII. Tilesius, <i>Krusensterns Reise</i> , 1809.....	76
LXIX. Geoffroy St. Hilaire, <i>Poissons du Nil</i> , 1809.....	76
LXX. Pallas, <i>Labrax</i> , 1810.....	77
LXXI. Risso, <i>Nice</i> , 1810.....	77
LXXII. Rafinesque, <i>Caratteri</i> , 1810.....	77
LXXIII. Rafinesque, <i>Indice</i> , 1810.....	81

	PAGE
LXXIV. Steller, in <i>Tilesius</i> , 1811.....	83
LXXV. Pallas, <i>Zoographia</i> , 1811.....	83
LXXVI. Leach, <i>Squalus</i> , 1812.....	84
LXXVII. Montagu, <i>Xiphotheca</i> , 1812.....	84
LXXVIII. Fischer, <i>Zoognosia</i> , 1813.....	84
LXXIX. Fischer, <i>Eleginus</i> , 1813.....	85
LXXX. Leach, <i>Hippocampus</i> , 1814.....	85
LXXXI. Mitchill, <i>Fishes of New York</i> , 1814.....	86
LXXXII. Rafinesque, <i>Leptopus</i> , 1814.....	86
LXXXIII. Rafinesque, <i>Nemochirus</i> , 1815.....	86
LXXXIV. Rafinesque, <i>Précis</i> , 1814.....	87
LXXXV. Rafinesque, <i>Analyse</i> , 1815.....	87
LXXXVI. Cuvier, <i>Recherches</i> , 1815.....	93
LXXXVII. Blainville, <i>Prodrome</i> , 1816.....	94
LXXXVIII. Cuvier, <i>Antennarius</i> , 1817.....	96
LXXXIX. Cuvier, <i>Hydrocyon</i> , 1817-19.....	96
XC. Le Sueur, <i>Catostomus</i> , 1817.....	96
XCI. Cuvier, <i>Règne Animal</i> , Ed. I, 1817.....	96
XCII. Oken, <i>Isis</i> , 1817.....	106
XCIII. Cloquet, <i>Dictionnaire</i> , 1817-19.....	106
XCIV. Geoffroy St. Hilaire, <i>Suite</i> , 1818.....	107
XCV. Le Sueur, <i>New Species</i> , 1818.....	107
XCVI. Ranzani, <i>Epidesmus</i> , 1818.....	107
XCVII. Blainville, <i>Dictionnaire</i> , 1818.....	107
XCVIII. Rafinesque, <i>Opsanus</i> , 1818.....	108
XCIX. Rafinesque, <i>Discoveries</i> , 1818.....	108
C. Rafinesque, <i>Further Discoveries</i> , 1818.....	108
CI. Rafinesque, <i>Fluviatile Fishes</i> , 1818.....	109
CII. Rafinesque, <i>Further Account</i> , 1818.....	109
CIII. Rafinesque, <i>Prodrome</i> , 1818.....	110
CIV. Rafinesque, <i>Hemiplus</i> , 1820.....	110
CV. Rafinesque, <i>Ichthyologia Ohiensis</i> , 1820.....	111
CVI. Tilesius, <i>Australia</i> , 1820.....	113
CVII. Risso, <i>Alepocephalus</i> , 1820.....	113
CVIII. Goldfuss, <i>Handbuch</i> , 1820.....	114
CIX. Le Sueur, <i>Mollinesia</i> , 1821.....	114
CX. Hamilton, <i>Ganges</i> , 1822.....	114
CXI. Leach & De la Bèche, <i>Dapedium</i> , 1822.....	115
CXI (A). Schinz, <i>Thierreich</i> , 1822.....	115
CXII. Van Hasselt, <i>Java</i> , 1823.....	116

	PAGE
CXIII. Desmarest, <i>Décade</i> , 1823.....	116
CXIV. Nardo, <i>Squatinatoraja</i> , 1824.....	116
CXV. Mitchill, <i>Saccopharynx</i> , 1824.....	117
CXVI. Valenciennes, <i>Cernié</i> , 1824.....	117
CXVII. Otto, <i>Propterygia</i> , 1824.....	117
CXVIII. Quoy & Gaimard, <i>Voyage Freycinet</i> , 1824.....	117
CXVIII (A). Harlan, <i>Saurocphalus</i> , 1824.....	118
CXIX. König, <i>Icones</i> , 1825.....	118
CXX. Bowdich, <i>Fishes Madeira</i> , 1825.....	119
CXXI. Risso, <i>Europe Méridionale</i> , 1826.....	119
CXXI (A). Germar, <i>Geognosie</i> , 1826.....	120
CXXII. Geoffroy St. Hilaire, <i>Mer Rouge</i> , 1826.....	120
CXXIII. Kaup, <i>Rachycentron</i> , 1826.....	121
CXXIV. Nardo, <i>Proctostegus</i> , 1827.....	121
CXXV. Nardo, <i>Aphanius</i> , 1827.....	121
CXXVI. Harwood, <i>Serpentiform Fish</i> , 1827.....	121
CXXVII. Cloquet, <i>Sandat</i> , 1827.....	122
CXXVIII. Rüppell, <i>Roths Meer</i> , 1828.....	122
CXXIX. Fleming, <i>British Animals</i> , 1828.....	122
CXXX. Stark, <i>Natural History</i> , 1828.....	123
CXXXI. Lesson, <i>Ichthyophis</i> , 1828.....	123
CXXXII. Cuvier & Valenciennes, <i>Poissons</i> , II, 1828.....	123
CXXXIII. Bory de St. Vincent, <i>Sandat</i> , 1828.....	124
CXXXIII (A). Sedgwick & Murchison, <i>Dipterus</i> , 1828.....	125
CXXXIV. Cuvier, <i>Règne Animal</i> , Ed. II, 1829.....	125
CXXXV. Agassiz & Spix, <i>Piscium Brasilianum</i> , 1829.....	131
CXXXVI. Cuvier & Valenciennes, <i>Poissons</i> , IV, 1829.....	133
CXXXVII. Cocco, <i>Argyropelecus</i> , 1829.....	133
CXXXVIII. Cocco, <i>Nyctophus</i> , 1829.....	133
CXXXIX. Cocco, <i>Schedophilus</i> , 1829.....	133
CXL. Serville, <i>Faune Française</i> , 1829.....	134
CXLI. Valenciennes, <i>Osteolepis</i> , 1829.....	134
CXLII. Cuvier & Valenciennes, <i>Poissons</i> , V, VI, 1830.....	134
CXLIII. Bennett, <i>Sumatra</i> , 1830.....	136
CXLIV. Brown, <i>Fischarten</i> , 1830.....	136
CXLV. Hays, <i>Saurodon</i> , 1830.....	136
CXLVI. Cuvier & Valenciennes, <i>Poissons</i> , VII, VIII, 1831...	136
CXLVII. Jardine, <i>Acestra</i> , 1831.....	137
CXLVIII. Gray, <i>Twelve Genera</i> , 1831.....	138
CXLIX. Gray, <i>Hardwicke, India</i> , 1831-33.....	138

	PAGE
CL. Gray, <i>Fish, China</i> , 1831.....	139
CLI. Gray, <i>Micropus</i> , 1831.....	139
CLI (A). Lesson, <i>La Coquille</i> , 1830.....	140
CLII. Minding, <i>Lehrbuch</i> , 1832.....	140
CLIII. Nilsson, <i>Prodromus</i> , 1832.....	140
CLIV. Agassiz, <i>Fischreste</i> , 1832.....	140
CLV. Von Meyer, <i>Palæologia</i> , 1832.....	141
CLVI. Bonaparte, <i>Fauna Italica</i> , 1832.....	141
CLVI (A). Rafinesque, <i>Trinectes</i> , 1832.....	142
CLVII. Cuvier & Valenciennes, <i>Poissons</i> , IX, 1833.....	142
CLVIII. Lowe, <i>Alcpisaurus</i> , 1833.....	143
CLIX. Lowe, <i>Leirus</i> , 1833.....	143
CLX. Cocco, <i>Tylosurus</i> , 1833.....	143
CLXI. Cocco, <i>Mupus</i> , 1833.....	143
CLXII. Cocco, <i>Ruvettus</i> , 1833.....	144
CLXIII. Nardo, <i>Skeponopodus</i> , 1833.....	144
CLXIV. Agassiz, <i>Poissons Fossiles</i> , 1833.....	144
Recapitulation	146

INTRODUCTION

The leading purpose of the Commission * of the International Congress of Zoology is to give stability to nomenclature. To that end numerous cases of doubt have been resolved by the Commission. But the work done thus far has been largely piecemeal, and by this method it cannot be always made consistent with itself. Recently the Commission has undertaken to fix generic names on a larger scale, covering, for example, all those in use in a given group. In some small classes of animals this has been possible. In larger ones, it demands a study of the literature more detailed than any one has yet attempted.

Recently efforts have been made to secure stability by fiat, using names more or less current, without serious regard to the law of priority. To accept this plan would merely accentuate the confusion already existing and which has arisen through just such disregard of fundamental rules.

It seems to us that the attempts thus far have mostly begun at the wrong end. The need is not to confirm modern errors but to give nomenclature a solid basis for the long future. Stability must rest on a thorough study of the foundations of biological nomenclature, after which the Commission's authority can be used to confirm the results of such studies.

There is no middle ground between using the oldest eligible names in any given group and using whatever names we please. With the latter

* The International Commission of Zoological Nomenclature consists (May 1917) of the following persons:

Carl Apstein, Berlin;	David Starr Jordan, Stanford University;
F. A. Bather, London;	J. H. Kolbe, Berlin;
Joel A. Allen, New York	F. S. Monticelli, Naples;
Raphael Blanchard, Paris, (President);	Dr. Roule, Paris;
Ph. Dautzenberg, Paris;	S. Simon, Paris;
Ernst Hartert, Tring, England;	Henry Skinner, Philadelphia;
Dr. Horvath, Budapest;	Leonhard Stejneger, Washington;
W. Evans Hoyle, Cardiff;	Charles Wardell Stiles, Washington,
Dr. Handlirsch, Vienna;	(Secretary).
Karl Jordan, Tring;	

alternative, Systematic Zoology and Botany would come to a condition of hopeless despair. There can be no finality when the question of acceptance or rejection of names is left as a matter of personal preference.

Binomial nomenclature has its recognized beginning with the Tenth Edition of the *Systema Naturæ* of Linnæus, published in 1758 with the assumed date of January 1. These names of Linnæus constitute the original framework of Zoological Taxonomy. In the nomenclature of this early period, there are two main elements of doubt: the first relates to the eligibility of authors who have for one reason or another not accepted the Linnæan Code; next of authors whose works, published before the Linnæan Code, have been revised more or less and reprinted after the date of the Tenth Edition of the *Systema Naturæ*. In all of these the species are designated by a descriptive phrase, as was the custom before Linnæus began the practice of "scientific bookkeeping" in Systematic Zoology. The writings of Gronow, Schæfer, and Valmont de Bomare come under the first of these heads; those of Klein (*Gesellschaft Schauplatz*), Browne, Catesby, and Osbeck, under the other. Comerson and Plumier, whose manuscript names were published by an author who did not accept them, come under a third head. It is the judgment of the present writer, that the best interests of Ichthyology would have been served by adopting the rule followed by Jordan & Evermann (*Fishes of North and Middle America*, 1898). In this work all writers who use polynomial phrases for the designation of species are disregarded as factors in nomenclature, however regular their practice may be as to genera. It is not a question of justice to able naturalists who, like Gronow and Browne, failed to adopt the Linnæan Code, solely because they had never heard of it. It is the convenience of future naturalists which is now concerned. This would apparently be best served by the exclusion of all these.

The arguments against such exclusion are mainly two: Brisson in 1760, polynomial as to species, had a stronger grasp on the significance of genera than any other ornithologist of his time. He has been called "the Father of Ornithology." Most students of birds wish to retain Brisson's genera as foundation-stones in nomenclature. There are good reasons for accepting Brisson as an exception. Similar exceptions may be demanded in other groups. It is desirable, but not vitally necessary, that all accepted rules be general, without exception; but as a member of the International Commission of Nomenclature, the present senior author has made no objection to the recognition of Brisson. The other argument is this: these writers have published generic names which

appear in systematic lists, like that of Sherborne (*Index Animalium*). The Commission has already approved the names of Gronow and Commerson. If the present Commission should decide to reject the whole series of "irregulars," some future Commission may reverse the decision, placing the element of priority above that of regularity. This possibility we cannot forestall, while if once accepted there would be no successful movement for their rejection. Previous decisions of the Commission, as to Gronow and Commerson, point in the direction of general acceptance.

It is especially important to have the status of questioned authors determined as soon as may be, not only for the convenience of ichthyologists but for workers in other fields which may be affected by questions of preoccupation.

More important than the question of acceptance or rejection of some or all of the questioned genera, is the securing of a final decision. This the Commission will be asked to make as soon as practicable. Pending this decision it is perhaps wise for systematic workers to refrain from acceptance of the names questioned.

The other problem is the assignment of generic types to the genera of authors who had no conception of types. In doing this we have followed as closely as may be the rules adopted by the Congress of Zoology, having especial regard to the "first reviser." In some cases we have been in doubt on account of conflicting usages or even rules. But in such cases the weight of authority of the Commission when exercised should serve to turn the scale. With the authors subsequent to Cuvier, 1829, this matter rarely offers any embarrassment. The later authors mostly look upon a genus, not as a pigeon-hole with arbitrary boundaries, but rather as a group of species, with certain definite structural marks clustered around some definite species, the type of the genus.

The writer asks from his colleagues the fullest criticism both as to matters of fact and of opinion, before placing the contents of this paper formally before the International Commission. We would especially request information concerning omissions. There are no doubt numerous generic names overlooked in dictionaries and in obscure publications.

We have arranged in chronological order the generic names of fishes published in the first seventy-five years of the history of ichthyological taxonomy. The determination of the validity of genera is treated only incidentally. Our main problem is the fixation of the type.

The Genera of Fishes from Linnæus to Cuvier 1758 to 1833

I. LINNÆUS, *Systema Naturæ*, Ed. X, Vol. I, 1758.

KARL LINNÉ (CAROLUS LINNÆUS).

The generic names of Linnæus represent, with one change and two or three additions, the system of Ichthyology as developed in 1738 by his friend and fellow-student, Peter Artedi, a naturalist whose knowledge of fishes was far greater than that of Linnæus. The types of most of the Linnæan genera have been accepted by common consent. As a rule we have not questioned the current application unless compelled to do so by the insistence of established rules.

Petromyzon Linnæus, 230, after Artedi; type PETROMYZON MARINUS L.
Unquestioned.

Raja Linnæus, 231, after Artedi; type RAJA BATIS L.
Spelled also RAIA, by authors.

Squalus Linnæus, 231, after Artedi; type SQUALUS ACANTHIAS L.
Restriction to S. ACANTHIAS and relatives, Rafinesque, *Indicc d'Ittiologia Siciliana*, 1810, 45, and by Gill, *Proc. Acad. Nat. Sci. Phila.*, 1862, 497. Gray, *Cat. Chond.*, 1851, following Bonaparte, 1838, uses the name SQUALUS for the allies of CARCHARHINUS COMMERSONIANUS. But this use of the name is no more a specification of a type than is that of Rafinesque, and the more formal choice of type by Gill reinforces the former. Swainson, 1838, chooses CARCHARODON CARCHARIAS L.

Chimæra Linnæus, 236; type CHIMÆRA MONSTROSA L.
Unquestioned.

Lophius Linnæus, 236, after Artedi; type LOPHIUS PISCATORIUS L.
Unquestioned.

Acipenser Linnæus, 237, after Artedi; type ACIPENSER STURIO L.
Unquestioned.

Muræna Linnæus, 244, after Artedi; type MURÆNA HELENA L.
Unquestioned, except by Bleeker, who takes as type MURÆNA ANGUILLA L., the first species named by Artedi.

Gymnotus Linnæus, 246, after Artedi; type GYMNOTUS CARAPO L.

Unquestioned, except by certain authors who take as type GYMNOTUS ELECTRICUS L. which appears first in the Twelfth Edition of the *Systema Naturæ*.

Trichiurus Linnæus, 246, after LEPTURUS Artedi; type TRICHIURUS LEPTURUS L.

Monotypic.

Anarhichas Linnæus, 247, after Artedi; type ANARHICHAS LUPUS L.

Monotypic. Usually and more correctly spelled ANARRHICHAS.

Ammodytes Linnæus, 247, after Artedi; type AMMODYTES TOBIANUS L.

Monotypic.

Stromateus Linnæus, 248, after Artedi; type STROMATEUS FIATOLA L.

Unquestioned.

Xiphias Linnæus, 248, after Artedi; type XIPHIAS GLADIUS L.

Monotypic.

Callionymus Linnæus, 249, after Artedi; type CALLIONYMUS LYRA L.

Unquestioned.

Uranoscopus Linnæus, 250, after Artedi; type URANOSCOPIUS SCABER L.

Monotypic.

Trachinus Linnæus, 250, after Artedi; type TRACHINUS DRACO L.

Monotypic.

Gadus Linnæus, 251, after Artedi; type GADUS MORHUA L.

By common consent.

Blennius Linnæus, 256, after Artedi; type BLENNIUS OCELLARIS L. as restricted by Jordan & Gilbert, 1883.

Ophidion Linnæus, 259, after Artedi; type OPHIDION BARBATUM L.

Unquestioned.

Cyclopterus Linnæus, 260, after Artedi; type CYCLOPTERUS LUMPUS L.

Unquestioned.

Echeneis Linnæus, 260, after Artedi; type ECHENEIS NAUCRATES L. (misprinted NEUCRATES).

First restriction by Gill, *Proc. Acad. Nat. Sci. Phila.*, 1862, 239. In 1864, *loc. cit.* 60, Gill proposed to adopt as type ECHENEIS REMORA, this being the only species noted by Artedi, and in Linnæus's earlier writings. But as Linnæus referred both species to ECHENEIS, this change seems not warranted.

Coryphæna Linnæus, 261, after Artedi; type CORYPHÆNA HIPPIURUS L.

Unquestioned.

Gobius Linnæus, 263, after Artedi; type GOBIUS NIGER L.

By common consent.

Cottus Linnæus, 264, after Artedi; type COTTUS GOBIO L.

First restriction by Cuvier & Valenciennes, *Hist. Nat. Poiss.*, IV, 1829, 142. "Ce genre avait pour type primitive, un petit acanthopterygien de nos rivières, à

tête large," etc. Later restricted to *COTTUS SCORPIUS* L. (*MYOXOCEPHALUS* Steller = *ACANTHOCOTTUS* Girard), by Putnam, *Bull. Mus. Comp. Zool.*, I, No. 1, 3, 1863.

Scorpæna Linnæus, 266, after Artedi; type *SCORPÆNA PORCUS* L.

Unquestioned.

Zeus Linnæus, 267, after Artedi; type *ZEUS FABER* L.

Unquestioned.

Pleuronectes Linnæus, 268, after Artedi; type *PLEURONECTES PLATESSA* L.

First restriction by Fleming, *Philos. Zool.*, 1822. Some writers have taken *PLEURONECTES MAXIMUS* L. as type, following a quasi-designation by Fleming in 1828.

Chætodon Linnæus, 272, after Artedi; type *CHÆTODON CAPISTRATUS* L.

First restriction by Cuvier, *Règne Animal*, 1817, 33, and by Jordan & Gilbert, *Synopsis Fish N. A.*, 1883. All authors, except Bleeker, have used the name for the same group. Artedi places first in his list under *CHÆTODON* the species called *CHÆTODON ARCUATUS*, a *POMACANTHUS*. Bleeker takes this species as type, replacing *POMACANTHUS* with *CHÆTODON*, and *CHÆTODON* by *TETRAGONOPTRUS*.

Sparus Linnæus, 277, after Artedi; type *SPARUS AURATA* L.

First restriction by Fleming, *Philos. Zool.*, 1822. This decision has been generally, but not universally accepted.

Labrus Linnæus, 282, after Artedi; type *LABRUS BIMACULATUS* L., the earliest type designated by Bonaparte (1839), under the name of *L. VETULUS* Bloch.

By common consent restricted to *LABRUS VIRIDIS* and closely allied forms.

Sciæna Linnæus, 288; type *SCIÆNA UMBRA* L.

Complex species, to be considered as identical with *CHEILODIPTERUS AQUILA* Lacepède. First exact restriction by Cuvier, 1815. *SCIÆNA UMBRA*, based on Artedi, is a mixture of two species, *SCIÆNA AQUILA* (Lac.) and *CORVINA NIGRA* (Bloch). It is the proper type of the genus *SCIÆNA*, but its component parts are not congeneric. The two species were confused until Cuvier (*Mém. du Muséum*, 1815, and later in the *Règne Animal*, Edition II, 1829, made clear the difference and definitely chose *AQUILA* as the type of *SCIÆNA*. Jordan & Evermann have adopted *CORVINA NIGRA*, under the name of *SCIÆNA UMBRA*, as type of *SCIÆNA*. An argument can be made for either arrangement, but convenience is best served and probably justice also by accepting the name *UMBRA* for the species called *AQUILA* and recognizing this as type of *SCIÆNA*. The two species concerned should then stand as *SCIÆNA UMBRA* L. and *CORVINA NIGRA* (Bloch). Bleeker has chosen as type *SCIÆNA CIRROSA*, the species placed first by Artedi, the type of *UMBRINA* Cuvier.

Perca Linnæus, 289, after Artedi; type *PERCA FLUVIATILIS* L.

By common consent.

Gasterosteus Linnæus, 295, after Artedi; type *GASTEROSTEUS ACULEATUS* L.

By common consent.

Scomber Linnæus, 297, after Artedi; type *SCOMBER SCOMBRUS* L.

By common consent.

Mullus Linnæus, 299; type *MULLUS BARBATUS* L.

By common consent.

Trigla Linnæus, 300, after Artedi; type *TRIGLA LYRA* L.

By common consent.

Cobitis Linnæus, 300, after Artedi; type *COBITIS TÆNIA* L.

By common consent.

Silurus Linnæus, 304, after Artedi; type *SILURUS GLANIS* L.

By common consent.

Loricaria Linnæus, 307, type *LORICARIA CATAPHRACTA* L.

Monotypic.

Salmo Linnæus, 308, after Artedi; type *SALMO SALAR* L.

By common consent.

Trutta Linnæus, as "TRUTTÆ," 308; type *SALMO TRUTTA* L.

Type by tautonomy.

Osmerus Linnæus, as "OSMERI," 310, after Artedi; type *SALMO EPERLANUS* L.

By common consent.

Coregonus Linnæus, as "COREGONI," 310, after Artedi; type *SALMO LAVARETUS* L.

By common consent.

Characinus Linnæus, as "CHARACINI," 311, after Gronow; type *SALMO GIBBOSUS* L.

First restriction by Gill, *Proc. U. S. Nat. Mus.*, 1895, 215. Replaces *CHARAX* Gronow, *EPICYRTUS* Müller & Troschel, *ANACYRTUS* Günther. Its use hinges on its eligibility, as Linnæus used only the plural form *CHARACINI* as a section *SALMO*. If not accepted, *CHARAX* Gronow (1763), Scopoli (1777), would replace it, with the same type. The same slight doubt applies to *TRUTTA*, *OSMERUS* and *COREGONUS*, all used in the plural form only by Linnæus. In our judgment all are eligible.

Fistularia Linnæus, 312; type *FISTULARIA TABACARIA* L.

Monotypic.

Esox Linnæus, 313; type *ESOX LUCIUS* L.

This type was indicated, somewhat arbitrarily, in Opinion 58 of the International Commission, accepting the view of Cuvier, and current usage both before and after Linnæus. Klein chose the name *LUCIUS* for the Pike, this name being adopted in the *Gesellschaft Schauplatz*. Rafinesque first separated the marine garfishes from the pike, calling the former *ESOX*, the latter *LUCIUS*. But neither ever stated formally that *ESOX BELONE* L. was the type of *ESOX*. In view of the arguments available on either side, we may "let sleeping dogs lie," and follow common custom, strengthened by the authority of the Commission.

Argentina Linnæus, 315, after Gronow, (*Museum Ichthyologicium*, a pre-Linnæan work); type ARGENTINA SPHYRÆNA L.

Monotypic.

Atherina Linnæus, 315, after Artedi; type ATHERINA HEPSETUS L.

Monotypic.

Mugil Linnæus, 316, after Artedi; type MUGIL CEPHALUS L.

Monotypic.

Exocætus Linnæus, 316; type EXOCÆTUS VOLITANS L. = E. EVOLANS L. (= HALOCYPSELUS Weinland).

Monotypic.

Polynemus Linnæus, 317, after Gronow and Artedi; type POLYNEMUS PARADISEUS L.

The first real restriction seems to be that of Günther, *Cat. Fishes*, II, 1860, 319. No type is specified, but the non-congeneric species, P. QUINQUARIUS L., is removed to form the genus PENTANEMUS, a name originally employed by Artedi, but changed to POLYNEMUS by Gronow. As this species, QUINQUARIUS, was the only one known to Artedi or to Gronow, Dr. Gill, with numerous writers, ourselves included, has regarded it as the type of POLYNEMUS. But common usage with the formal selection of P. PARADISEUS L. as type by Jordan & Gilbert, *Synopsis Fishes*, 1883, should prevail.

Clupea Linnæus, 317, after Artedi; type CLUPEA HARENGUS L.

Unquestioned.

Cyprinus Linnæus, 320, after Artedi; type CYPRINUS CARPIO L.

Unquestioned.

Mormyrus Linnæus, 327; type MORMYRUS CYPRINOIDES L.

Unquestioned.

Balistes Linnæus, 327, after Artedi; type BALISTES VETULA L.

Unquestioned.

Ostracion Linnæus, 330; type OSTRACION CUBICUS L.

As restricted by Swainson 1839, by Bleeker 1865, and in recent usage.

Unquestioned, except by Kaup, who takes as type O. TRIQUETER L., a species referred to LACTOPHRYS Swainson. O. CUBICUS L. is type of CIBOTION Kaup.

Tetraodon Linnæus, 332, after Artedi; type TETRAODON TESTUDINEUS L.

This genus has been variously treated by authors, but justice and convenience are best served by the choice of T. TESTUDINEUS as type. Bleeker, *Atlas Ichth.*, 1865, appears to be the first reviser. He observes: "C'est une de ces espèces qui est devenue le type du genre Linnéen . . . en effet le TETRAODON TESTUDINEUS, qui est la première des espèces de TETRAODON de la Dixième Edition du *Systema Naturæ*." Several writers have since indicated as type T. LINEATUS L. a species of OVOIDES.

Diodon Linnæus, 334, after Artedi; type DIODON HYSTRIX L.

Unquestioned, except by Bleeker, who takes the first species named, DIODON ATINGA L.

Centriscus Linnæus, 336, after Gronow; type *CENTRISCUS SCUTATUS* L.

Monotypic, a fact overlooked by various authors who choose *CENTRISCUS SCOLOPAX* L., 1766.

Syngnathus Linnæus, 336, after Artedi; type *SYNGNATHUS ACUS* L.

By common usage. The earliest restriction as approved by the International Commission is that of Jordan, *Opinion*, 45, 103, 1912.

Pegasus Linnæus, 358, after Gronow; type *PEGASUS VOLITANS* L.

Monotypic.

II. GUNNER, *Nachricht von Berglachs, welche CORYPHÆNOIDES RUPES-TRIS genannt werden kann*: Throndhjemske Selskab, *Schriften* III, 1761.

JOHAN ERNST GUNNER.

Coryphænoides Gunner, 43, 50; type *CORYPHÆNOIDES RUPESTRIS* Gunner.

III. SCHÆFER, *Piscium Bavarico Ratisbonensium*, 1761.

JACOB CHRISTIAN SCHÆFER.

The descriptions in this paper are exact and very elaborate ("in universum describiendibus"). The nomenclature is eccentric—in part monomial, and the names are perhaps not exactly used in the sense of genera. The perch is called *PERCA VULGARIS* and again *PERCA FLUVIATILIS*.

Names perhaps not eligible as monomial:

Cernua Schæfer, 37; type *CERNUA SEU PERCA FLUVIATILIS MINOR* Schæfer = *PERCA CERNUA* L.

Equivalent, if accepted, to *GYMNOCEPHALUS* Bloch, *ACERINA* Gùldenstadt, *CERNUA* Fleming.

Schraitzer Schæfer, 38; type *SCHRAITZER Ratisbonensium* = *PERCA SCHRÆTZER* L.

Equivalent to *LEPTOPERCA* Gill.

Asperulus Schæfer 59; type *ZINDEL RATISBONENSIS* Schæfer = *PERCA ZINGEL* L.

Equivalent to *ZINGEL* Oken.

Asper Schæfer 59; type *ASPER VERUS* Schæfer, "Streber ratisbonensis" = *PERCA ASPER* L.

Equivalent to *ASPRO* Cuvier, not of Commerson.

IV. OSBECK, *Reise durch China*, 1762.

PER OSBECK.

Osbeck, a pupil of Linnæus, published in 1757 the record of his travels in China. This work is wholly binomial, but being earlier than 1758, the Latin edition, "*Iter Chinensis*," 1757, cannot be used in nomenclature. The German edition, *Reise durch China*, bears the date of 1762, and is here considered. A Swedish version dates from 1765, an English edition from 1771. The case is exactly parallel with that of Hasselquist's "*Iter Palestinum*," published in 1757, and reprinted in German in 1762. Hasselquist, like Osbeck, was a pupil of Linnæus, and adopted the Linnæan Code. In Opinion 57, the Commission of Nomenclature rejected Hasselquist's work and its translation. "The German translation by Gadebusch, published in 1762, does not give validity to the names published in the original edition in 1757." The present writers question the wisdom of this decision.

The names of Osbeck are questioned as translations of work prior to 1758.

Apocryptes Osbeck, 130, 1762; type APOCRYPTES CHINENSIS Osbeck, GOBIUS PECTINIROSTRIS Gmelin.

APOCRYPTES is close to BOLEOPHTHALMUS but distinct. APOCRYPTES Cuvier is a different genus.

Albula Osbeck, 309, 1762; type ALBULA CHINENSIS Osbeck.

Same as SALANX Cuvier, not ALBULA GRONOW 1763. If accepted, the genus commonly called ALBULA must receive a new name, BUTYRINUS Lacepède.

V. GRONOW, *Zoophylaceum; Zoophylacii Gronoviana . . . Animalia quæ in musco suo adseruat, etc.*, 1763.

LORENZ THEODOR GRONOW (LAURENTIUS THEODORUS GRONOVIVS).

In this work of Gronow, printed in 1763, before its author had become acquainted with the *Systema Naturæ*, the genera of fishes are well defined, in a system which runs closely parallel with the system of Artedi (1738), but the species, as with Artedi, have polynomial designations only. In addition to the genera earlier named by Artedi and Linnæus, Gronow has a number of new names. Two of these, AMIA and HEPATUS, conflict with Linnæan genera of 1766. The completed manu-

script work of Gronow, written in 1780, called *Systema Ichthyologicum*, in which binomial names were attached to species, after the Linnæan fashion, became the property of the British Museum, by which institution it was published in 1854. This work, as edited by John Edward Gray, does great credit to the scientific discrimination of Gronow; but at that late date, exactly a hundred years after Gronow's first paper, "*Museum Ichthyologicum*," nearly all of his new names became synonyms.

Fortunately for the interests of nomenclature, most of Gronow's names were adopted in 1777 by Scopoli, *Introd. Hist. Nat.* Several other names have been used by subsequent authors, as Gmelin, Bloch and Cuvier; so that the adoption of the names of Gronow works less confusion in the system than might be expected. The suppression of AMIA, LIPARIS, ZOARCES, CONGER, and SCARUS, with the transposition of AMIA, are the results most to be regretted. As the few new names of Gronow have lain unnoticed for a century and a half, it seems a pity to revive them. The present writer believes, as already stated, that it would be a wise rule to exclude from the system all post-Linnæan writers who failed to adopt the binary designation of species. As however Brisson, 1760, "the Father of Ornithology," was a writer of this type, it may be possible to make an exception in his case, preserving his genera of Birds. But Ichthyology gains little to atone for the confusion resulting from the introduction at this late day of the names of Gronow, Klein and other polynomial writers not hitherto absorbed into the system. The generic names of Gronow have been, however, formally accepted by the International Commission of Zoological Nomenclature (Opinion 20, Smithsonian Miscellaneous Contributions, No. 1938): "Gronow, 1763, is binary, though not consistently binomial. Article 25 demands that an author be binary and Article 2 demands that generic names shall be uninomial. Under these articles, Gronow's names are to be accepted as complying with the conditions prescribed by the Code to render a name available under the Code."

The eligibility of the generic names of Gronow is questioned as not conforming to the Linnæan code in the terminology of species.

Callorhynchus Gronow, 31; type CHIMLERA CALLORHYNCHUS L. (CALLORHYNCHUS PINNA DORSI etc. Gronow).

Unquestioned: accepted by later writers.

Cyclogaster Gronow, 55; type CYCLOPTERUS LIPARIS L. (CYCLOGASTER BELGIS KRINGBURGK (Gronow)).

The name LIPARIS used for this genus by Artedi in 1738 was changed to Cy-

CLOGASTER by Gronow. LIPARIS was restored by Scopoli in 1777, and has been used by nearly all subsequent authors.

Gonorhynchus Gronow, 56; type CYPRINUS GONORHYNCHUS Gmelin.

Monotypic. The name was adopted by Schlegel, 1846, replacing RHYNCHÆUS Richardson. Also by Scopoli, 1777.

Uranoscopus Gronow, 57; type COTTUS GOBIO L.

Synonym of COTTUS L.

Cynædus Gronow, 60; type SPARUS AURATA L. (CYNÆDUS CAUDA LUNULATA etc. Gronow).

This genus is an assemblage of Sparoid fishes, essentially equivalent to SPARUS of Linnæus, and includes species of several modern genera. Jordan (Smithson. Publ. No. 1938: *Opinions on zoological nomenclature*) has proposed to treat CYNÆDUS as a synonym of SPARUS, having SPARUS AURATA as type.

Holocentrus Gronow, 65; type HOLOCENTRUS SOGO Bloch (HOLOCENTRUS MAXILLA SUPERIORE LONGIORE Gronow).

This name, taken from Artedi, was revived by Scopoli, 1777, and by Bloch, 1790, who changed the spelling to HOLOCENTRUM, the form used by Artedi. This neuter form has been used by most authors from Cuvier to Günther.

Coracinus Gronow, 66; type DIPTERODON CAPENSIS Cuv. & Val. (CORACINUS CAUDA-LUNATA Gronow).

Not DIPTERODON Lacepède. If accepted, replaces DICHISTIUS Gill.

Scarus Gronow, 67; type LABRUS VIRIDIS L. (SCARUS VIRIDIS Gronow).

This genus of Gronow unfortunately contains no species of the group later called SCARUS, the two other species enumerated being CICHLIDS from Surinam.

Callyodon Gronow, 72; type SCARUS CROICENSIS Bloch (CALLIODON CAPITATE SUBACUTO Gronow).

CALLYODON, if eligible, must replace SCARUS Forskål, 1775, as the name of this large and wide-spread genus. The name SCARUS of Gronow, applied to a species of LABRUS, antedates its use for a parrot-fish. The genus called CALLIODON by Cuvier (C. SPINIDENS), is distinct from CALLYODON of Gronow (CALLIODON of Bloch & Schneider), and must stand as CRYPTOTOMUS Cope. Revived by Scopoli, 1777.

Enchelyopus Gronow, 77, after Klein; type BLENNIUS VIVIPARUS L. (ENCHELTOPUS CORPORE LITURIS etc. Gronow).

This genus as proposed by Klein in 1744 contained a variety of fishes, eel-shaped but with ventral fins. As used by Gronow it is practically equivalent to ZOARCES Cuvier, and to this type it was restricted by Gill, 1863. ENCHELTOPUS Bloch & Schneider (type GADUS CIMBRIUS L., a species unknown to Gronow), should stand as RHINONEMUS Gill. ENCHELTOPUS Gronow must unfortunately supersede ZOARCES Cuvier.

Pholis Gronow, 78; type BLENNIUS GUNNELLUS L. (PHOLIS MACULIS ANNULATUS etc. Gronow).

Revived by Scopoli, 1777. Replaces MURENOIDES Lacepède and GUNNELLUS Cuvier, (not PHOLIS Cuv. & Val.). Monotypic.

Amia Gronow, 80; type *APOGON MOLUCCENSIS* Cuv. & Val. (*AMIA CAPUT CATHEOPLATEUM* Gronow).

Equivalent to *APOGON* Lacepède, 1802.

Eleotris Gronow, 83; type *GOBIOUS PISONIS* Gmelin = *ELEOTRIS GYRINUS* Cuvier & Valenciennes (*ELEOTRIS CAPITE PLAGEOPLATEO* etc. Gronow).

The name *ELEOTRIS* was used for the same group by Bloch & Schneider in 1801, and by all later authors.

Clarias Gronow, 100; type *CLARIAS ORONTIS* Günther (*CLARIAS* Gronow).

Accepted by Scopoli, 1777, and by other writers. Monotypic.

Albula Gronow, 102; type *ESOX VULPES* L. = *ALBULA CONORHYNCHUS* Bloch & Schneider.

Revived by Bloch & Schneider, 1801. Antedated by *ALBULA* Osbeck. Equivalent to *BUTYRINUS* Lacepède. Also used by Scopoli, 1777.

Aspredo Gronow, 102, after Linnæus, 1754; type *SILURUS ASPREDO* L. (*ASPREDO CIRRISS OCTO* Gronow).

Anableps Gronow; type *COBITIS ANABLEPS* L.

Anostomus Gronow, 112; type *SALMO ANOSTOMUS* L. (*ANOSTOMUS* Gronow).

Adopted by Müller & Troschel, 1845. Equivalent to *SCHIZODON* Agassiz, 1829. Monotypic. Revived by Scopoli, 1777.

Synodus Gronow, 112; type *SALMO SYNODUS* L.

This genus, equivalent to *SAURUS* Cuvier, was revived by Scopoli, 1777. Monotypic.

Hepatus Gronow, 113; type *TEUTHIS HEPATUS* L. = *CHÆTODON CHIRURGUS* Bloch, not *ACANTHURUS HEPATUS* Cuv. & Val. (*HEPATUS MUCRONE REFLEXO* Gronow).

HEPATUS Gronow is based on two species, on which two Linnæus based his genus *TEUTHIS*. The latter is a substitute for the former, and the two were accepted as identical by Scopoli. Of the two species mentioned by Gronow, *HEPATUS* L. and *JAVUS* L., Gronow had, according to Dr. Günther, a specimen of the first. This we may take as type of both *HEPATUS* and *TEUTHIS HEPATUS*. This example belonged to the species called later *CHÆTODON CHIRURGUS* by Bloch. This species must be regarded as the type of the genus *HEPATUS*. Cuvier & Valenciennes have used the name *HEPATUS* L. for an East Indian species, *COLOCOPUS LAMBDURUS* Gill. They were mistaken in supposing that this species was the one examined by Gronow. The restriction here made is that of the first reviser, Jordan, Tanaka & Snyder, *Cat. Fish Japan*, 1913, 214. If accepted, *HEPATUS* replaces *TEUTHIS* and *ACANTHURUS*.

Umbra (Krämer) Gronow, 114; type *CYPRINODON KRÄMERI* Walbaum. (*UMBRA KRAMERI* Gronow).

Revived by Scopoli, 1777, and Müller, 1842, as *UMBRA CRAMERI* Müller.

Erythrinus Gronow, 114; type *SALMO ERYTHRINUS* Bloch & Schneider, 1801 (= *ERYTHRINUS* Gronow).

The name was revived by Müller & Troschel, 1846, and is in general use. Monotypic. Used also by Scopoli, 1777.

Cataphractus Gronow, 115; type *PEGASUS DRACONIS* L. (*CATAPHRACTUS CORPORE TETRAGONE* Gronow).

This genus is a synonym of *PEGASUS* L.

Solenostomus Gronow, 119; type *FISTULARIA TABACARIA* L. (*SOLE- OSTOMUS CAUDA BIFURCA* etc. Gronow).

SOLE-OSTOMUS is equivalent to *FISTULARIA*. The genus *SOLE-OSTOMUS* Lacepède, 1803, typified by *FISTULARIA PARADOXA* Pallas, must receive a new name, if the names of Gronow are accepted.

Charax Gronow, 123; type *SALMO GIBBOSUS* L. (*CHARAX MAXILLA IN- FERIORE* etc. Gronow).

This name is equivalent to *CHARACINI* L.=*EPICYRTUS* Müller & Troschel, 1846, said to be preoccupied, and *ANACYRTUS* Günther, 1864, presented as a substitute for *EPICYRTUS*, all with the same type. *CHARAX* Risso (*C. PUNTAZZO*) belongs to the very different family *SPARIDÆ*. Revived by Scopoli, 1777.

Mystus Gronow, 124; type *BAGRUS HALEPENSIS* Cuv. & Val. (*MYSTUS CIRRI OCTO CAPITE LONGIORIBUS* Gronow).

The genus *MYSTUS* as defined by Gronow contains five species, not congeneric. The name is taken from Russell's *History of Aleppo*, who describes the species called *BAGRUS* or *HYPSELOBAGRUS HALEPENSIS* as *MYSTUS*. Of the generic names included, that of *HYPSELOBAGRUS* Günther, 1864, is the most recent. The species named "MYSTUS" by Russell may be taken as the type of "MYSTUS" which will, if accepted, supersede *HYPSELOBAGRUS*. *MYSTUS* Lacepède, 1805, (*MYSTUS CLUPE- OIDES* Lacepède) is a species of *COILIA* Gray, 1831, an Engraulid fish. Also Scopoli.

Plecostomus Gronow, 127, after Artedi; type *LORICARIA PLE- COSTOMUS* L. (*PLECOSTOMUS DORSO DIPTERYGIO* Gronow).

If accepted, replaces *HYPOSTOMUS* Lacepède; it is now in general use.

Callichthys Gronow, 127; type *SILURUS CALLICHTHYS* L. (*CALLICHTHYS CIRRI* Gronow).

Unquestioned, being accepted by later writers.

Mastacembelus Gronow, 132; type *OPHIDIUM SIMACK* Walbaum, 1792 = *RHYNCHOBELLA HALEPPENSIS* Bloch & Schneider, 1801 (*MASTACEMBELUS MAXILLIS SUBACUTIS* Gronow).

Revived by Cuvier & Valenciennes. The generic name *RHYNCHOBELLA* Bloch & Schneider included both species assigned by Gronow to *MASTACEMBELUS*. In dividing the group, Cuvier & Valenciennes assigned the former name to *OPHIDIUM ACULEATUM* Bloch, Gronow's second species, leaving *MASTACEMBELUS* for his first. Before Gronow, Klein, 1744, had used the name *MASTACEMBELUS* for an entirely different group. In this he had been followed by Bleeker, who recognized, at first, generic names of earlier date than 1758.

Channa Gronow, 135; type *CHANNA ORIENTALIS* Bloch & Schneider, 1801 (*CHANNA* Gronow).

This monotypic genus was accepted by Bloch & Schneider, 1801, and Scopoli.

Gasteropelecus Gronow, 135; type *CLUPEA STERNICLA* L. (*GASTEROPELECUS* Gronow).

Monotypic. The name was revived by Pallas in 1769.

Leptocephalus Gronow, 135; type *LEPTOCEPHALUS MORRISI* Gmelin, the larva of *MURÆNA CONGER* L. (*LEPTOCEPHALUS* Gronow).

This name, based on a larval conger, and revived by Scopoli in 1777, is held to replace *CONGER* Houttuyn, 1764, and of Cuvier, 1817, given to the adult of the same species. As *LEPTOCEPHALUS* has been in use more than a century as the collective name of the peculiar translucent expanded larvæ of the Conger and other eels, it would be well to restrict its use to those forms, reserving the genus to which the type belongs, the earliest name given to the adult fish, *CONGER* Houttuyn.

Gymnogaster Gronow, 136; type *TRICHIURUS LEPTURUS* L. (*GYMNOGASTER* Gronow).

Equivalent to *TRICHIURUS* L. Monotypic.

Pteraclis Gronow, 136; type *CORYPHÆNA VELIFERA* Pallas, 1770 (*PTERACLIS PINNATA* Gronow) 1777.

The name *PTERACLIS* was used by Gronow, 1772. It is monotypic and unquestioned.

VI. LINNÆUS, *Museum Adolphi-Frederici*, II, 1764.

CAROLUS LINNÆUS.

Cepola Linnæus, 63; type *CEPOLA RUBESCENS* L. = *C. TÆNIA* L. (also in *Syst. Nat.*, 1766.)

VII. HOUTTUYN, *Natuurlike Historie volgens den Heer Linnæus*, 1764.

MARTIN HOUTTUYN.

This work we have not seen. Mr. Garman (in lit.) quotes:

Conger Houttuyn, VII, 103; type *MURÆNA CONGER* L.

This name might well be retained for the Conger eel, leaving *LEPTOCEPHALUS* to its time-honored special use as a designation for the larval forms of Conger and similar eels.

Torpedo Houttuyn, VII, 453; type (not named) *RAJA TORPEDO* L.

Apparently this fixes the name *TORPEDO* on the Electric Ray.

VIII. LINNÆUS, *Systema Naturæ*, Ed. XII, 1766.

CAROLUS LINNÆUS.

This edition contains four genera in addition to those given in the Tenth Edition.

Cepola Linnæus, 445; type *C. TÆNIA* L. = *C. RUBESCENS* L.

Unquestioned.

Amia Linnæus, 500; type *A. CALVA* L.

The generic name *AMIA* appears in the Twelfth Edition of the *Systema Naturæ*, in 1766. It had been used earlier by Gronow, in 1763, for a percoid genus, later called *APOGON* by Lacepède.

In the opinions already rendered by the Commission, it was decided that the generic names in Gronow's *Zoophylaceum*, published in 1763, between the tenth and twelfth editions of the *Systema Naturæ*, should be adopted, although his names for species were polynomial. Gronow was an excellent ichthyologist, with broader knowledge than Linnæus, and later adopted the Linnæan nomenclature. In view of the fact that his names are not in current usage, and that he had not then accepted binomial nomenclature, most recent authors have rejected them, unless revived by some binomial writer. The transfer of *AMIA* from the ganoid to a percoid genus is, however, peculiarly undesirable, and it may be urged that general convenience justifies a special exception in this case. If *AMIA* be used for *APOGON*, *AMIA* L. is replaced by *AMIATUS* Rafinesque, 1815.

Teuthis, 507, after Browne; type *CHÆTODON CÆRULEUS* Bloch = *TEUTHIS HEPATUS* L. in part.

The name *TEUTHIS* was applied by Linnæus in the twelfth edition of the *Systema Naturæ*, to the two species which formed the genus *HEPATUS* of Gronow, in 1765. These were named *TEUTHIS HEPATUS* and *TEUTHIS JAVUS*. The name *TEUTHIS* was borrowed from Browne, a non-binomial author. The two Linnæan species belong to different families. The species first named *HEPATUS* may be regarded as the type of *HEPATUS*, as already indicated. The name *TEUTHIS* should properly go with *T. HEPATUS*, as the name is borrowed from Browne, who applied it to a single species, confused with *TEUTHIS HEPATUS* by Gronow and Linnæus, the *CHÆTODON CÆRULEUS* of Bloch. This species is a near relative of the type of *HEPATUS*. This decision follows the arguments of Dr. Gill. It is reasonable, but not above question. Meanwhile several authors, notably Cantor and Günther, use *TEUTHIS* for *T. JAVUS* (*SIGANUS* Forskål), while others suppress it altogether. Still others misspell it, as *THEUTYS*, *THEUTIS*, etc.

Elops Linnæus, 508; type *ELOPS SAURUS* L.

Monotypic.

IX. MÜLLER, *Delineationes Naturæ*, II, 1767, 141 (fide Sherborne, *Index Animalium*).

PHILIP LUDWIG STATIUS MÜLLER.

Not seen by us.

Acus Müller, 141; type probably SYNGNATHUS ACUS L.

Equivalent to SYNGNATHUS L.

Orbis Müller, 141; type probably DIODON HYSTRIX L.

Equivalent to DIODON L.

We copy these references from Sherborne. In a memoir by Professor Müller, 1774, vol. III, p. 341, ACUS appears as a specific name under SYNGNATHUS ACUS, and again, 1774, IV, 341, as a vernacular under ESOX BELONE. Under DIODON HYSTRIX (III, 327) he quotes "ORBIS MAXIMUS SPINOSUS." Mr. Garman, who gives us these references, remarks: "I would say that neither of these is available as a generic name." Neither is used in Müller's supplement to the *Systema Naturæ*, 1776.

X. GEOFFROY, *Descriptions de 719 Plantes* etc., 1767.

ÉTIENNE LOUIS GEOFFROY.

This paper we have not seen. We copy from Sherborne.

Ichthyocolla Geoffroy, 399; type presumably ACIPENSER HUSO L.

The name, meaning fish-glue, was early applied to the fish producing it. Prior to Huso Brandt, as a name for a subgenus of sturgeons.

Harengus Geoffroy, 405; type presumably CLUPEA HARENGUS L., in which case it is a synonym of CLUPEA.

Lucius Geoffroy, 407; type presumably ESOX LUCIUS L.

Trutta Geoffroy, 719; type presumably SALMO TRUTTA L.

XI. VALMONT DE BOMARE, *Dictionnaire Raisonné Universel d'Histoire Naturelle*, 1764, 1768, 1774, 1791.

JEAN CHRISTOPHE VALMONT DE BOMARE.

The eligibility of Valmont's names is questioned as binomial only by accident, and not accepted as genera by the author himself in 1791.

Of this work we have examined four editions, the first bearing date of 1764; the "new edition," considerably enlarged, of 1768; the second

edition, apparently mostly identical with the "new edition," 1775; and the fourth, still larger, in 1791.

The dictionary received no consideration in ichthyological nomenclature until the appearance of the elaborate treatise on the sharks of the world, "PLAGIOSTOMIA" by Samuel Garman, (*Memoirs of the Museum of Comparative Zoology at Harvard College*, vol. XXXVI, 1913).

In this work Mr. Garman makes brief reference to Valmont de Bomare as a worthy author hitherto ignored in taxonomy. "The selection of one authority because he favored binomials more than another, has led to much uncertainty among names and to many changes. It has led authors to belittle and to ignore excellent works which at their time of publication and much later ranked in accuracy and influence among the first of the scientific publications of this period." Mr. Stejneger informs me that a Danish edition of this Dictionary exists.

An examination of four editions of the *Dictionnaire* of Valmont de Bomare shows it to be a compilation pure and simple, that he did not intend to give any new scientific names to animals or plants, but that, in a few cases, he copied binomial appellations from earlier authors which might be construed as revived in a scientific sense.

It is therefore worth while to examine these cases in detail.

FIRST EDITION, 1764.

In the first edition, bearing date of 1764, there is no case of the use of anything resembling scientific nomenclature, although Valmont often gives a Latin equivalent to his French names. It is evident, however, that the work of Artedi, Klein, Gronow, and Linnæus in which genera and species are formally recognized, is unknown to him.

Thus, accompanied by fair descriptions compiled from other authors, he gives the following:

"AIOL, en Latin, SCARUS, un des plus beaux," etc. (vol. I, p. 95).

"ALOSE, ALOSA, poisson de mer qui remonte" (vol. I, p. 105).

"ANCHOIS, en Latin, APUA, petit poisson," etc. (I, 13, 3).

"ANGUILLE, ANGUILLA, poisson allongé," etc. (vol. I, p. 133).

"CONGRE, CONGER, excellent poisson," etc. (vol. II, p. 58).

"DAURADE, AURATA VULGARIS, Espèce de poisson," etc. (vol. II, p. 225).

"ÉPINOCHÉ, PISCIS ACULEATUS (vol. II, p. 306).

"GLAUCUS, bien des ichthyologues donnent ce nom à trois sortes de poissons, 1 au Derby, 2 au Liche, 3 au véritable GLAUCUS," etc. (vol. II, p. 512).

"HARENG, HALEC, Les harengs sont des poissons de passage," etc. (vol. II, p. 610).

"TORPILLE, TORPEDO OU TREMBLE, TORPEDO POISSON," etc. (p. 458).

"GRAPPE MARINE, UVA MARINA."

These are plainly not scientific names. While the writer evidently grasps more or less clearly the meaning of genus and species, he has no conception of binomial nomenclature, as distinct from Latin equivalents of the vernacular names in French. Thus no one would take "PISCIS ACULEATUS" as a generic and specific name for the stickleback or UVA MARINA for the Alga (SARGASSUM) known as Sea-Grape. Further along (Edition II) occurs "POISSON PÉTRIFIÉE" indicated as "Ichthyolithus," which certainly is not the name of any genus. No scientific names, generic or specific, can be held to bear date from this first edition, 1764, of the dictionary of Valmont de Bomare.

"NOUVELLE ÉDITION," 1768, and "ÉDITION II," 1775.

The "Nouvelle édition," dated 1768, is the one examined by Mr. Garman. Except for the paging it seems substantially identical with the edition of 1775, formally called the "second." It has a few binomial terms, mostly among the sharks. The use of Latin equivalents for the French vernacular is still continued, but these assume more frequently a binomial form, especially in the rather elaborate index. The first edition (octavo) contains no index.

In the editions of 1768 and 1775 the only new names to be considered are GALEUS, MUSTELUS, VULPECULA, and CATULUS.

On page 116 (Edition II) we read:

"CAGNOT BLEU, GALEUS GLAUCUS, Grand poisson cartilagineux de la famille des chiens de mer." Then follows a fair account of the Great Blue Shark (SQUALUS GLAUCUS L.; PRIONACE GLAUCA of recent writers), taken from the description of the "Chien de mer bleu" of Rondelet (*de Piscibus*, 1558, p. 296). Rondelet begins "GALEUS GLAUCUS, en Languedoc, CAGNOT BLEU, poisson cartilagineux," etc. He uses the name "Chien de mer," or GALEUS in a general sense, including the "Aiguillat" (ACANTHIAS), the Emissole, ("GALEUS LÆVIS"), the "Chien de Mer Étoilé, GALEUS ASTERIAS," the "Mélandre, GALEUS CANIS," and the "Chien de Mer bleu, GALEUS GLAUCUS."

The other sharks are treated under different heads by Valmont. The entire arrangement appears in the index to the same volume.

"Cagnot bleu, GALEUS GLAUCUS," does not appear in the Fourth Edition (1791).

On page cxxxvii "MUSTELLUS" is defined:

"Espèce de Chien de mer, c'est le GALEUS STELLATUS des auteurs."

The name SQUALUS MUSTELUS L. was mostly based on Artedi's references to the "Émissole" or unspotted dog-fish, the GALEUS LÆVIS of Rondelet and Valmont. The specific name MUSTELUS should remain with that species. On the "LÆVIS" the name MUSTELUS of Linck in 1790 was clearly based. The same species, the "Émissole Commune," is clearly the type of MUSTELUS Cuvier (1817). But if the name MUSTELUS Valmont be accepted, its type must be the dog-fish with round spots, SQUALUS STELLATUS of Risso, MUSTELUS ASTERIAS Valmont.

On page ccxxii of the Index occurs the name "Renard Marin, VULPECULA MARINA." This is apparently borrowed from Willughby and it refers to ALOPIAS VULPINUS, the "Sea Fox" of modern authors. The name is not a "scientific" term, but merely a Latin rendering of the vernacular.

CATULUS rests on CATULUS VULGARIS, which is SCYLLIORHINUS CANICULA L. But the name is not available in any case, being preoccupied by CATULUS Kniphof, a genus of insects.

In the fourth edition (1791) Valmont gives a list of the genera of fishes. All those of Linnæus (1766) are enumerated, but no others and none of his own names are included in the list. Evidently he did not regard himself as having made additions to scientific nomenclature.

The eligibility of Valmont's names is questioned as binomial only by accident, and not accepted as genera by the author himself in 1791.

Galeus Valmont de Bomare, I, 371, 1768; type SQUALUS GLAUCUS L.

"CAGNOT BLEU, GALEUS GLAUCUS," with description.

If regarded as eligible GALEUS will replace PRIONACE and CYNOCEPHALUS.

Vulpecula Valmont de Bomare, III, 740, 1768; type VULPECULA MARINA Valmont = SQUALUS VULPINUS Bonnaterre = SQUALUS VULPES Gmelin.

"VULPECULA MARINA; RENARD MARIN," with description.

If eligible, VULPECULA will replace ALOPIAS Rafinesque, 1810.

Catulus Valmont de Bomare, IV, 51, 1768; type SQUALUS CANICULUS L. (CATULUS MAJOR VULGARIS Ray).

According to Sherborne, *Index Animalium*, it is preoccupied by CATULUS Kniphof, *De. Pedic.*, p. 16, 1759, a genus of insects. Equivalent to SCYLLIORHINUS Blainville.

Mustelus Valmont de Bomare, Ed. II, 746, 1768, and Ed. III, 1775, lxxxii; type GALEUS ASTERIAS Valmont = MUSTELUS CANIS Mitchill, 1815 = MUSTELUS STELLATUS Risso, 1826.

"Galeus asterias aut Mustelus stellaris. Chien de mer à taches rondes."

XIII. GOUAN, *Historia Piscium*, 1770.

ANTOINE GOUAN.

Trachipterus Gouan, 104; type TRACHIPTERUS GOUANI = CEPOLA TRACHYPTERA Gmelin.

Lepadogaster Gouan, 105; type LEPADOGASTER GOUANI Gouan.

Lepidopus Gouan, 107; type LEPIDOPUS GOUANI Gouan (TRICHIURUS CAUDATUS Euphrasen).

XIV. KÆLREUTER, *Piscium Rarorum*; *Novi Comm. Act. Petropolit.* VIII, 1770.

JOSEPH GOTTLIEB KÆLREUTER.

Mola Kœlreuter, 337; type MOLA ACULEATA Kœlreuter.
Antedates MOLA Cuvier.

XV. FORSTER, *Catalogue of Animals of North America*, 1771.

JOHN REINHOLD FORSTER.

Remora Forster, 20; type ECHENEIS REMORA L.
Equivalent to REMORA of Catesby and of Gill.

XVI. BRÜNNICH, *Collectio Nova Scriptorum Societatis Scientiarum Hafnensis*, 1771.

M. T. BRÜNNICH.

Regalecus Brünnich, III, 418; type REGALECUS REMIPES Brünnich
(OPHIDIUM GLESNE Ascanius).
Also described in 1788.

XVII. CATESBY AND EDWARDS, *Natural History of Carolina, Florida and the Bahama Islands*, 1731-1750, by MARK CATESBY; Edition Second, 1771, by GEORGE EDWARDS.

The large folio volume in which Mark Catesby published the record of his visit to the Bahamas and other parts of America has had an important place in the history of American Ichthyology. Numerous editions of this work with the same plates have been published in German, French and English.

Two of these, the Edwards' Edition of 1771, and the edition quoted as "Catesby, Pisc. Imag., Etc., in 1777," are subsequent to Linnæus and may perhaps deserve consideration in nomenclature, although apparently not eligible in view of Opinion 57, which regards the post-Linnæan translation of Hasselquist as ineligible. These editions contain tables showing the Linnæan names of Catesby's species. Except as an evidence of "revision," these have no bearing on Catesby's "genera." If the generic names with polynomial specific names, of Gronow, Klein, and others are accepted, we can hardly refuse notice to the Latin nouns used by Catesby as republished by Edwards. These nouns have the force of genera, and being built about actual specimens they are mostly monotypic; while those of Gronow and Klein are subdivisions of a system, each covering as a rule many species. The names of Catesby are listed as genera in Sherborne's *Index Animalium* by an author who is rather critical of Latin vernaculars. But Catesby wrote before Artedi and Linnæus had framed the idea of a genus. He was not therefore consciously engaged in the differentiation of generic groups. He was not, to borrow a phrase from Mr. Stejneger, "playing the game." For this reason it seems to us that his names should not be admitted to the system. It is, however, very important to have a decision once for all in this matter.

The names in Edwards' Catesby are of doubtful eligibility as being Latin vernacular nouns rather than genera, and as a reprint virtually unchanged of a pre-Linnæan work.

Umbla Catesby, 1; type *ESOX BARRACUDA* Shaw (*SPHYRÆNA PICUDA* Bloch & Schneider). "UMBLA MINOR, MAXIMA MAXILLIS LONGIORIBUS, the Barracuda" Catesby.

Equivalent to *SPHYRÆNA* and prior to it, if accepted in the system.

Mormyrus Catesby, 2; type *ULEMA LEFROYI* (Goode). "MORMYRUS EX CINEREO NIGRICANS, the Bone-fish" Catesby.

Identification somewhat uncertain. The name in any event is subsequent to *MORMYRUS* L.

Saurus Catesby, 2; type *SALMO FÆTENS* L. "SAURUS EX CINEREO NIGRICANS, the Sea Sparrow Hawk" Catesby.

Identical with *SYNODUS* Gronow, 1763.

Albula Catesby, 6; type *MUGIL CUREMA* Cuv. & Val. ("ALBULA BAHAMENSIS Catesby).

A synonym of *MUGIL* L., subsequent to *ALBULA* Gronow, 1763, and *ALBULA* Osbeck, 1761.

Hirundo Catesby, 8; type *CYPSELURUS* sp., "HIRUNDO" Catesby.

Not *HIRUNDO* L., 1758, a genus of Swallows.

Turdus Catesby, 9; type *LUTIANUS GRISEUS* (L.) "TURDUS PINNIS BRANCHIALIBUS CARENS, the Mangrove Snapper" Catesby.

Not *TURDUS*, 1758, a genus of Thrushes.

Alburnus Catesby, 12; type *CYPRINUS AMERICANUS* L. = *MENTICIRRUS AMERICANUS*. "ALBURNUS AMERICANUS, the Carolina Whiting" Catesby, type of *CYPRINUS AMERICANUS* L., *Syst. Nat.*, X, 321.

If accepted, the genus *ALBURNUS* must replace *MENTICIRRUS* Gill, and the genus of *CYPRINIDÆ* called *ALBURNUS* by Rafinesque and Agassiz must receive another name.

Cugupuguacu Catesby, 14; refers to *EPINEPHELUS MACULOSUS* (Cuv. & Val.). ("CUGUPUGUACU BRAZIL, the Hind" Catesby).

Catesby's fish is not that called *CUGUPUGUACU* by Maregrave. If this barbarous name be allowed it will replace *EPINEPHELUS*. But it is evident that *CUGUPUGUACU*, *PETIMBUABO* and *ACARAUNA* are not in any sense generic names, but attempts on the part of Catesby to identify his species with those called in Brazil by these vernacular names. In the case of *ACARAUNA*, Catesby is himself doubtful. Even in case names used in an actual generic sense, as *UMBRA*, *AURATA*, *UNICORNIS* were allowed, *CUGUPUGUACU* and *ACARAUNA* should be rejected.

Saltatrix Catesby, 14; type *GASTEROSTEUS SALTATRIX* L., which is based on Catesby's figure, ("SALTATRIX, the Skipjack").

If allowed, will replace *POMATOMUS* Lacepède, 1802.

Suillus Catesby, 15; type *LACHNOLAIMUS SUILLUS* Cuvier, "SUILLUS" Catesby, based on Catesby's figure.

If allowed, *SUILLUS* will replace *LACHNOLAIMUS* Cuvier.

Aurata Catesby, 16; type *CALAMUS CALAMUS* (Cuv. & Val.). "AURATA BAHAMENSIS, the Porgy," Catesby.

Not *AURATA* Fleming, 1828, which is *SPARUS* L. If allowed, *AURATA* will replace *CALAMUS* Swainson.

Salpa Catesby, 17; type *SPARUS SYNAGRIS* L. (*LUTIANUS SYNAGRIS*, based on "SALPA PURPURASCENS VARIEGATA, the Lane Snapper," Catesby.

Prior to *SALPA* Forskål, 1775. If allowed, *SALPA* would replace *NEOMÆNIS* or *LUTIANUS* and perhaps add further to the confusion among the Salpoid Tunicates, although it is claimed that an earlier name, *DAGYSA*, must replace *SALPA* Forskål.

Novacula Catesby, 18; type *SCARUS CÆRULEUS* Bloch. "NOVACULA CÆRULEA, the Blue-fish," Catesby.

Name a synonym of *CALLYODON* Gronow, but prior to *NOVACULA* Cuvier, which is a synonym of *Xyrichtys* Cuvier.

Petimbuabo Catesby & Edwards, 18; refers to *FISTULARIA TABACARIA* L. "PETIMBUABO BRAZIL, the Tobacco Pipe-fish," Catesby.

A synonym of *FISTULARIA* L., but obviously not intended as a generic name.

Unicornis Catesby, 19; type *OSBECKIA SCRIPTA* (Osbeck). "UNICORNIS PISCIS BAHAMENSIS, the Bahama Unicorn-fish," Catesby.

If accepted, would replace *OSBECKIA* Jordan & Evermann.

Bagre Catesby, 23; type *SILURUS CATUS* L. (*AMEIURUS CATUS* L.) "BAGRE SECUNDÆ SPECIEI MARCGRAVEI AFFINIS, the Cat-fish," Catesby.

If accepted, *BAGRE* must replace *AMEIURUS*.

Harengus Catesby, 24; type *CLUPEA SARDINA* Poey. "HARENGUS MINOR BAHAMENSIS, the Pilchard," Catesby.

Equivalent to *HARENGULA* Cuv. & Val., and, if allowed, would replace the latter.

Anthea Catesby, 25; refers to *MESOPRION ANALIS* Cuv. & Val. A species of *NEOMENIS*, Girard. "ANTHEA QUARTUS RONDELETI, the Mutton-fish," Catesby.

Not intended as a generic name, being wrongly identified with the fourth *ANTHIA* of Rondelet.

Remora Catesby, 26; type *ECHENEIS REMORA* L. "REMORA, the Sucking-fish," Catesby.

Equivalent to *REMORA* Forster, and of Gill.

Solea Catesby, 27; type *PLEURONECTES LUNATUS* L., based on Catesby's figure. "SOLEA LUNATA ET PUNCTATA, the Sole," Catesby.

Not *SOLEA* of Klein nor of subsequent writers. If allowed, *SOLEA* would replace *PLATOPHRYS*; and *SOLEA* of Klein, Quensel, Rafinesque and Cuvier would require a new name.

Orbis Catesby & Edwards, 28; type *TETRAODON TESTUDINEUS* L. "ORBIS LÆVIS VARIEGATUS, the Globe-fish," Catesby.

A synonym of *TETRAODON* L.

Psittacus Catesby, 29; type *LABRUS CATESBÆI* Lacepède. "PSITTACUS PISCIS VIRIDIS BAHAMENSIS, the Parrot-fish," Catesby.

Not *PSITTACUS* L., 1758, a genus of parrots.

Acus Catesby, 30; type *ESOX OSSEUS* L. "ACUS MAXIMA SQUAMOSA VIRIDIS, the Green Gar-fish," Catesby.

Equivalent to *PSALISOSTOMUS* Klein and *LEPISOSTEUS* Lacepède.

Acarauna Catesby, 31; refers to *HOLACANTHUS CILARIS* L. "AN ACARAUNA MAJOR PINNIS CORNUTIS AN PARU BRASILIENSIBUS?, the Angel-fish," Catesby.

This name cannot be used to replace *HOLACANTHUS* as it represents a very doubtful identification on the part of Catesby; not at all a generic division.

Vipera Catesby, 9, Appendix; refers to *VIPERA MARINA* Catesby (*CHAULIODUS SLOANI* Bloch & Schneider).

As it is a fish, it cannot belong to the genus *VIPERA* L. *VIPERA MARINA* is apparently merely a vernacular name, sea-viper or viper-fish being intended.

Cataphractus Catesby, 9, Appendix; type *SILURUS CATAPHRACTUS* L. = *DORAS CATAPHRACTUS* of authors = *CATAPHRACTUS AMERICANUS* Catesby.

This name, being preoccupied, cannot replace *DORAS* Lacepède.

XVIII. GÜLDENSTADT, *Acerina piscis ad Percæ genus pertinens*:
Nov. Comm. Acad. Petropol., 1774, XIX.

ANTON JOHANN VON GÜLDENSTADT.

Not seen by us.

Acerina Gùldenstadt, 455; type *PERCA CERNUA* L. (*ACERINA KABIR* Gùldenstadt).

Equivalent to *CERNUA* Schæfer.

XIX. *Descriptiones Animalium quæ in Itinere Orientali Observavit*,
by PETRUS FORSKÅL (edited after the death of the author
by CARSTEN NIEBUHR). 1775.

Siganus Forskål, X; type *SCARUS RIVULATUS* Forskål.

No definition. This genus has been of late years generally called *TEUTHIS*, but apparently this Linnæan name should remain with the group for which Browne first used it.

Torpedo Forskål, 1775, 16; type *RAJA TORPEDO* (not of Linnæus) =
SILURUS ELECTRICUS Gmelin, *MALAPTERURUS ELECTRICUS* Lacepède.

Forskål describes the Electric Cat-fish of the Nile under the erroneous name of *RAJA TORPEDO* L. He questions whether it might be allied to *MORMYRUS* or whether it might find a place among the torpedoes of Rondelet, or might it be type of a new genus. "Aut potius novum constituere genus. Certe determinatur torpedinis CHARACTER GENERICUS: Piscis branchiostegus: apertura lineari, obliqua supra pinne pectorales; corpore nudo: pinnis ventralibus seu abdominalibus; dentibus numerosissimis densis, subulatis." This statement leaves no question as

to the species in mind, but TORPEDO Houttuyn, 1764, if available, is of still earlier date.

Salaria Forskål, X and 22; type (without specific name) = BLENNIUS BASILISCUS L.

The genus is equivalent to BLENNIUS L. Not SALARIAS Cuvier.

Scarus Forskål, 25; type SCARUS PSITTACUS Forskål.

The type no doubt intended was LABRUS SCARUS L., of the Mediterranean "antiquo nomine $\sigma\acute{\alpha}\rho\omicron\varsigma$ "; but that species was not mentioned by Forskål, and another must be taken as the type. The name SCARUS was earlier used by Gronow as a synonym of LABRUS. SCARUS of Forskål must give way to CALLYODON of Gronow if the names of Gronow are to be adopted. This is unfortunate, as CALLYODON has been used by most authors as the name of another genus in the same family.

Abu-defduf Forskål, 59; type CHÆTODON SORDIDUS Forskål.

Equivalent to the later GLYPHISODON of Lacepède, 1803. The definition of this genus admits of no question. It occurs in the same paragraph with the equally accurate definition of ACANTHURUS. It may receive objection as a barbarous name. It was probably a "stop-gap" word for which Forskål intended to supply a Latin equivalent. This his editor after his death failed to do and we must apparently take it as it stands: "A generic name is a name without necessary meaning." (Baird.)

Acanthurus Forskål, 59; type CHÆTODON SOHAL Forskål; to be replaced by HEPATUS Gronow, if Gronow's names are adopted; otherwise by TEUTHIS L.

Later restricted by authors to the first species named. CH. UNICORNIS.

Besides these names, clearly eligible, Forskål lists a number of subordinate groups or subgenera, under PERCA, SCARUS and SCIÆNA. Some of these are properly and fully defined, and would be accepted without question if in Latin. But all are in Arabic, and may perhaps be taken as vernacular words, as one might divide a genus into "Groupers," "Snappers" and "Porgies." We may perhaps reject them on the same ground as that on which we reject "les sphéroïdes."

In addition to these more or less formal names are two sections, one under SCARUS called "dentibus Abudjubbe," equivalent to CHEILINUS Lac., and one "dentibus Harid," equivalent to SCARUS. LOUTI and DABA are above reproach, except as to their Arabic origin. ABUHAMRUR is defined by reference to its type species. NAQUA is based on a species referred with doubt to SCIÆNA. GHANAN, SCHOUR and TAHHMEL are names only, identifiable by the correspondence with the Arabic names of their type species.

These names of Forskål doubtfully eligible, being vernacular and not meant as subgeneric.

Naqua Forskål, xvii; type *SCIÆNA GIBBA* Forskål.

With definition as "Piscis marinis rubri obscuris, an Sciæna 48?" Equivalent to *GENYOROGE* Cantor, 1850.

Louti Forskål, 44; type *PERCA LOUTI* Forskål.

With full definition. Equivalent to *VARIOLA* Swainson, 1839, which apparently it should replace.

Daba Forskål, 44; type *PERCA AREOLATA* Forskål.

With full definition. *EPINEPHELUS* Bloch, 1798, which apparently it should replace.

Abuhamrur Forskål, 44; type *SCIÆNA HAMRUR* Forskål.

With definition by reference to the type species. *PRIACANTHUS* Cuvier, 1817.

Hobar Forskål, 44; type *SCIÆNA BOHAR* Forskål.

With short definition. *LUTIANUS* Bloch, 1790.

Farer Forskål, 44; type *SCIÆNA SAMMARA* Forskål.

With definition. *HOLOCENTRUS* Gronow, 1763.

Ghanan Forskål, 44; type *SCIÆNA GHANAM* Forskål.

Without definition. *SCOLOPSIS* Cuvier, 1817.

Djabub Forskål, 44; type *SCIÆNA JARBUA* Forskål.

With definition. *THERAPON* Cuvier, 1817.

Gaterin Forskål, 44; type *SCIÆNA GATERINA* Forskål.

With scanty definition. *PLECTORHINCHUS* Lacepède, 1800.

Schour Forskål, 44; type *SCIÆNA NEBULOSA* Forskål.

Without definition. *LETHRINUS* Cuvier, 1817.

Tahmel Forskål, 44; type *SCIÆNA TAHMEL* Forskål.

Without definition. *KYPHOSUS* Lacepède, 1800, subgenus *OPISTHISTIUS* Gill, 1862.

XX. KLEIN, *Neuer Schauplatz der Natur, nach den Richtigsten Beobachtungen und Versuchen, in Alphabetischer Ordnung.*

Durch eine Gesellschaft der Gelehrten. Weidmann, Leipzig. (Quoted as "Gesellschaft Schauplatz.")

No author named, the account of the fishes compiled from *Historia Piscium Naturalis* Klein, perhaps by Philip Ludwig Stadius Müller, professor at Erlangen. Vol. I, 1775; vol. II, 1776; vol. III, 1776; vol. IV, 1777; vol. V, 1777; vol. VI, 1778; vol. VII, 1779; vol. VIII, 1779; vol. X, 1781.

JAKOB THEODOR KLEIN.

In a recent monograph of the sharks and rays (PLAGIOSTOMIA: Mem. Mus. Comp. Zool., Harvard College, XXXVI, 1916) Mr. Samuel Garman calls attention to the availability in nomenclature of names of genera accepted from Klein, a pre-Linnæan writer, in a post-Linnæan dictionary called "Neuer Schauplatz," or for convenience "Gesellschaft Schauplatz." This publication began, according to Mr. Garman, as a translation of Valmont de Bomare, but later it was extended and improved.

We find no copy of this work in the libraries of Washington and New York. It is probable that the copy in Mr. Garman's possession, which its owner has kindly placed at our disposal, is the only one now in the United States.

Mr. Garman remarks: "The Schauplatz referred to above is anonymous, it is true, but it gives the authorities for its generic and specific names, and thus its citations amount to republication after 1758, by the original authors, previous as the first publication may have been."

All the generic names used by Jacob Theodor Klein in his *Historia Piscium Naturalis*, 1740 to 1744, are here reproduced and accepted, thus bringing them for consideration into eligibility in scientific nomenclature. If accepted they therefore replace nearly all competing names except those of Artedi (1738) accepted by Linnæus (1758), and those of Gronow (1763).

Toward the middle of the eighteenth century the idea of genus among animals as a basis of classification became common property among naturalists. The name of the genus was recognized as consisting of a single word, but, until 1758, the species was indicated by a descriptive phrase attached to the name of the genus. By the device of binomial nomenclature, Linnæus made the system coherent, allotting to genus and species each a single word, the first a noun, the second of the nature of an adjective or genitive. In zoology, scientific nomenclature therefore dates from January 1, 1758, the time of the development of this system by Linnæus in the Tenth Edition of his *Systema Naturæ*.

Prior to Linnæus, on the basis of definite genera with polynomial species, three distinguished ichthyologists had separately developed, without knowledge of each other's work, a system of classification of fishes. These were Peter Artedi, "the Father of Ichthyology," in Upsala, in 1738; Jacob Theodor Klein, in Jena, 1740 to 1744; and Lorenz Theodor Gronow, in Leyden, 1754 to 1780. Of these authors the work of Artedi was the most compact and accurate, that of Klein the most elaborate, and that of Gronow based on the most material. Artedi's work was the basis of Linnæus's classification of the fishes. The principal part of the work

of Gronow was published in 1763. His names have been accepted as eligible by the International Commission of Zoological Nomenclature.

In this paper we give a list of these genera of Klein together with the Linnæan type, each as understood or as indicated by the present writer. In deciding on the type, the writer has been materially aided by the possession of a copy of Klein's *Historia Piscium Naturalis*, which was once the property of his commentator, Dr. Johann Julius Walbaum of Greifswald, and which contains profuse annotations in Walbaum's own handwriting.

Dr. Walbaum himself published in 1792 (*Petri Artedi sueci Genera Piscium*, 589-587) a classified record of the genera of Klein, but without actually accepting these as part of the System. Later Walbaum printed an Index to all these early names of various authors, as *Ichthyologia Enodata sive Index Rerum* (Leipzig, 1793). In this Index the generic and other names used by previous writers are arranged in alphabetical order with indication of the Linnæan synonymy. This again does not, in the view of the Zoological Commission (Opinion 21), involve the acceptance of any of these names. A reprint of Klein's *Historia Piscium Naturalis* was published, with notes by Walbaum, in 1802.

In the *Gesellschaft Schauplatz* Klein's names are frankly adopted, and the chief serious objection to be raised is that the species are named polynomially. We here omit those names in the *Schauplatz*, as ACIPENSER, CYPRINUS, XIPHIAS, etc., which had been used by Linnæus and were already accepted in the System with the same significance. We are indebted to Mr. Garman for the verification of the list and for the insertion of page references.

Illustrations of the method of the elliptical and disorderly *Schauplatz* are the following. In vol. I, p. 918, 1777, we read:

"Botte. RHOMBUS, ein Kleinisches Fischgeschlecht, welches Linné, PLEURONECTES G. 163, Müller Seitenschwimmer, Richter Butten nennt," etc. Description follows.

In III, p. 512, we find: "GREETE, Kleinische, eine Art platteise, Butten, Richter: s(iehe) Botte, RHOMBUS, des Kleins und unsern Artikel Th. I, s. 918; desgleichen Flunder, PASSER 4 des Kleins und unsern Artikel Th. III, s. 151" etc.

"PASSER 4" is the species called "PASSER ASPER S(EU), SQUAMOSUS Rondelet. This species is PLEURONECTES LIMANDA L. With (eight) other species named polynomially, it is set forth in the *Schauplatz*, after Klein. The quotations from Müller probably refer to the Nürnberg Edition of the *Systema Naturæ*, published in German by Professor Philip

Ludwig Stadius Müller of Erlangen, in 1776. This edition in its Supplement contains a few new specific names but no new genera, so far as noticed.*

The reference to "Richter," refers apparently to a work published at Leipzig, in 1754, by J. G. O. Richter, entitled "*Ichthyotheologie, oder Versuch die Menschen aus Betrachtung der Fische zu Bewunderung des Schöpfers zu führen.*" This we have not seen, but quote the title from Bosgoed. The same work appears in Dutch, in 1768, as "*Godleerende Viskunde.*"

The names in the "Gesellschaft Schauplatz" are all of doubtful eligibility, because not adopting the Linnæan Code as to species, and possibly because published in an anonymous dictionary.

Conger Klein, I, 22, 1775; type MURÆNA CONGER L. "CONGER PINNA MEMBRANACEA" Klein.

A synonym of CONGER Houttuyn.

Enchelyopus Klein, I, 32, 1775; type TRICHIURUS LEPTURUS L. "ENCHELYOPUS CAPITIS PRODUCTO SERPENTINO" Klein.

A synonym of TRICHIURUS L., not ENCHELYOPUS Gronow.

Brama Klein, I, 61, 932, 1775; type CYPRINUS BRAMA L. "BRAMA PRIMI RADIO PINNÆ DORSALIS SIMPLICI" Klein.

BRAMA, if accepted, replaces ABRAMIS Cuvier, and the marine genus now called BRAMA would take the name of LEPODUS Rafinesque.

Galeus Klein, I, 70, 1775; type SQUALUS GALEUS L. "GALEUS ROSTRI EXTREMA PARTE PELLUCIDA" Klein.

Equivalent to GALEORHINUS Blainville, 1816 = GALEUS Cuvier, 1817, not GALEUS Valmont, 1768, nor of Rafinesque, 1810.

Trutta Klein, I, 115, 1775; type SALMO TRUTTA L. "TRUTTA TOTA ARGENTEA" Klein.

A synonym of TRUTTÆ L.

Leuciscus Klein, I, 172, 1775; type CYPRINUS LEUCISCUS L. "LEUCISCUS SUPRA LINEA LATERALIS" Klein.

LEUCISCUS Klein would replace LEUCISCUS Cuvier, Rafinesque, Agassiz, for the same group.

Pelamys Klein, I, 176, 1775; type SCOMBER SCOMBRUS L. "PELAMYS CORPORE CASTIGATO" Klein, the "makarel" of Willughby.

The genus, based on the tunnies and the mackerels, is exactly coterminous with SCOMBER L. If regarded as eligible, the genus of snakes, PELAMYS Daudin, must receive a new name.

*See "On the Fishes Described in Müller's Supplemental Volume to the *Systema Naturæ* of Linnæus," D. S. Jordan, Proc. Acad. Nat. Sci., 1890, p. 48.

Harengus Klein, I, 209, 1775; type *CLUPEA HARENGUS* L. "HARENGUS VULGARIS" Klein.

Synonym of *CLUPEA* L.

Amphisilen Klein, I, 280, 1775; type *CENTRISCUS SCUTATUS* L. "AMPHISILEN" Klein.

Monotypic. A synonym of *CENTRISCUS* L., and *AMPHISILE* Cuvier.

Latargus Klein (misprint for *LATHARGUS*), I, 298, 1775; type *ANARHICAS LUPUS* L. "LATARGUS ROSTRO RETUSO DENTIS HORRIDIS" Klein.

Synonym of *ANARHICAS* L. Monotypic.

Leiobatus Klein, I, 316, 1775; type *RAJA OXYRHYNCHUS* L. "LEIOBATUS ROSTRO OMNIUM LONGISSIME PRODUCTO" Klein.

Synonym of *RAJA* L. Includes all smooth rays.

Synagris Klein, I, 442, 1775; type *SPARUS AURATA* L. "SYNAGRIS DORSO OBSCURE VIRIDE" Klein.

A synonym of *SPARUS* L. Includes many sparoid fishes.

Mystus Klein, I, 535, 1775; type "MYSTUS FLUVIATILIS" Klein = *CYPRIANUS BARBUS* L., not *MYSTUS* Gronow, 1763.

Equivalent to *BARBUS* Cuvier.

Passer Klein, I, 816, 1775; type *PLEURONECTES FLESUS* L. "PASSER CUTE DENSIS TUBERCULIS."

Not of Brisson, 1760, a genus of birds. A synonym of *FLESUS* Moreau.

Glaucus Klein, I, 829, 1775; type *SCOMBER GLAUCUS* L. "GLAUCUS ACULEATUS MACULIS IN UTROQUE LATERE" Klein.

GLAUCUS, if allowable, replaces *CÆSIOMORUS* Lacepède, a genus distinct from *TRACHINOTUS* Lacepède, 1803. *HYPODIS* Rafinesque, 1810, is the same.

Rhombus Klein, I, 918, 1775, VIII, 88, 1779; type *PLEURONECTES RHOMBUS* L. "RHOMBUS OMNIUM MINIMUS PALMÆ LONGITUDINE."

This name antedates *RHOMBUS* Da Costa, 1776, a genus of Snails. If eligible, it replaces *BOTHUS* Rafinesque, and is equivalent to *RHOMBUS* Cuvier, 1817. The other nominal species of *RHOMBUS* are synonyms of the Turbot, *PSETTA MAXIMA* (L.).

Rhombotides Klein, I, 922, 1775; type *CHÆTODON CÆRULEUS* Bloch. "RHOMBOTIDES OBSCURE CÆRULEUS" Klein, after Catesby.

Synonym of *ACANTHURUS* Forskål, and of *TEUTHIS* of Browne and Linnæus, Klein suggests as substitute names, if *RHOMBOTIDES* is not acceptable, *EUROPUS* and *PSETTA*.

Sargus Klein, I, 966, 1775; type SPARUS SARGUS L. "SARGUS PINNIS VENTRALIBUS" Klein.

SARGUS, if allowed, replaces DIPLODUS Rafinesque, and SARGUS Cuvier. The genus of Insects called SARGUS would in this case require a new name.

Dasybatus Klein, I, 991, 1775; type RAJA PASTINACA L. "DASYBATUS CAUDA SQUAMEIS OSSEIS" Klein.

DASYBATUS, if allowed, replaces DASYTIS Rafinesque and TRYGON Adanson. Intended to include all the rough-skinned rays.

Prochilus Klein, I, 1043, 1775; type, as here restricted, "PROCHILUS LAEVIS LATERIBUS CARINATUS" Klein (BLENNIUS PIOLIS L.).

Equivalent to PHOLIS Cuv. & Val., a name used earlier for another genus by Gronow and Scopoli. In this sense PROCHILUS is a subgenus under BLENNIUS. . .

On plates in Bleeker's Atlas, PROCHILUS is used instead of AMPHIPRION, the species named first by Klein being AMPHIPRION EPHIPIUM (Bloch). We find, however, no formal restriction of PROCHILUS by Bleeker.

Labrax Klein, II, 32, 1775, and VIII, 164, 1779; type PERCA LABRAX L. "LABRAX SIVE LUPUS" Klein.

LABRAX, if allowed, replaces DICENTRARCHUS Gill = LABRAX Cuvier, 1817. Not LABRAX of Pallas, 1810, which is HEXAGRAMMOS.

Percis Klein, II, 45, Ed. 2, 1776; type PERCA CERNUA L., as restricted by Bleeker, *Systema Percarum Revisum*. "PERCIS PINNIS SEX ANTERIORE PARTE DORSALIS 14" Klein.

Equivalent to CERNUA Schæfer 1761, GYMNOCEPHALUS Bloch & Schneider 1801, to ACERINA Cuvier 1817, and CERNUA Fleming 1828; not PERCIS Scopoli 1777, nor of Cuvier.

Narcacion Klein, II, 237, 1776; IV, 726, 1777; type RAJA TORPEDO L. "NARCACION DEMENTA CAUDA SINUOSA CIRCULARIS" Klein.

NARCACION, if accepted, replaces TORPEDO Duméril, not of Forskål. If rejected, NARCOBATUS Blainville is next in date. Monotypic.

Mænas Klein, II, 360, 1776; type SPARUS MÆNA L. "MÆNAS DILUTE VIRIDIS" Klein.

MÆNAS would replace MÆNA Cuvier.

Cicla Klein, II, 412, 1776; type LABRUS VIRIDIS L. "CICLA VIRIDIS OPERCULORUM" Klein.

Synonym of LABRUS L. Comprises all the species of LABRUS L., called TURDUS or MERULA by authors, these names also signifying "thrush." If accepted, CICHLA Bloch & Schneider, 1801, would require a new name.

Rhina Klein, II, 587, 1776; type RHINA SQUATINA L. "RHINA SIVE SQUATINA" Klein.

RHINA, if allowed, replaces SQUATINA Duméril.

Rhinobatus Klein, II, 593, 1776; type *RAJA RHINO-BATUS* L. "RHINO-BATUS SEU SQUATINO RAJA" Klein.

RHINO-BATUS would replace RHINO-BATUS Bloch & Schneider, 1801, and SYRRHINA Müller & Henle, based on the same species.

Solea Klein, III, 115, 1776; type *PLEURONECTES SOLEA* L. "SOLEA SQUAMIS MINUTIS" Klein.

SOLEA Klein would replace SOLEA Rafinesque, SOLEA Quensel and SOLEA Cuvier.

Pseudopterus Klein, III, 139, 1776; type *GASTEROSTEUS VOLITANS* L. "PSEUDOPTERUS QUI PERCA AMBOINENSIS" Klein.

Replaces, if allowed, PTEROIS Cuvier.

Tetragonopterus Klein, III, 153, 1776; type *CHÆTODON CAPISTRATUS* L. "TETRAGONOPTRUS LÆVIS AD CAUDAM BRUNNEA" Klein.

Synonym of CHÆTODON L. Bleeker uses this name in place of CHÆTODON, as Artedi's "type" of CHÆTODON—that is, the species first named—is a POMACANTHUS. But Artedi included also true species of CHÆTODON in his list, and the name was adopted by Linnæus from his own use of it, in the *Amœnitates Academicæ*.

Batrachus Klein, III, 202, 1776; type *LOPHIUS PISCATORIUS* L. "BATRACHUS RICTUQUE RANÆ" Klein.

Synonym of LOPHIUS L., not BATRACHUS Bloch & Schneider, 1801.

Mastacembelus Klein, III, 271, 1776; type *ESOX BELONE* L. "MASTACEMBELUS MANDIBULIS LONGISSIMIS" Klein.

Not MASTACEMBELUS Gronow, 1763; stands as BELONE Cuvier.

Platiglossus Klein, III, 300, 1776; type *HALICHERES MARGINATUS* Rüppell. "PLATIGLOSSUS SUBRUFUS SQUAMULIS LÆVIBUS" Klein.

Accepted by Bleeker as PLATYGLOSSUS. Klein's figure is crude, but recognizable.

Lucius Klein, III, 506, 1776; type *ESOX LUCIUS* L. "LUCIUS . . . ROSTRO QUASI ANSERINO" Klein.

Synonym of ESOX L. = LUCIUS Rafinesque.

Cestracion Klein, III, 523, 1776; type *SQUALUS ZYGÆNA* L. "CESTRACION FRONTE ACUS" Klein.

CESTRACION, if accepted, replaces SPHYRNA Rafinesque and ZYGÆNA Cuvier. CESTRACION Cuvier is a different genus, HETERODONTUS Blainville, CENTRACION Gray.

Trichidion Klein, III, 592, 1776; type *POLYNEMUS VIRGINICUS* L. "TRICHIDION CORPORE OBLONGO" Klein.

A synonym of POLYNEMUS L. as restricted by authors generally. Monotypic.

Asperulus Klein, III, 686, 1776; X, 236, 1781; type *PERCA ZINGEL* L. "ASPERULUS VEL ASPREDO DORSO ACUTO" Klein.

Identical with ZINGEL Oken. Monotypic.

Corystion Klein, III, 762, 1776; type TRIGLA LAPPONICA L. "CORYSTION CORPORE GRANULATO" Klein.

A synonym of TRIGLA L.

In volume III of the *Gesellschaft Schauplatz*, 1776, pp. 61-73, is given a list of the genera of fishes. This includes so far as we note all those proposed by Klein and those of Linnæus also, those of Klein appearing first. The names are not in alphabetical order, but follow the sequence of Klein's *Historia Piscum Naturalis*. This seems to imply a post-Linnæan acceptance of all of Klein's genera, even were their use in the text rejected. One new name appears:

Pristis Klein, III, 61, 1776; type "PRISTIS, der Sägeschnautz."

Equivalent to PRISTIS Linck.

XXI. SCOPOLI, *Introductio ad Historiam Naturalem*, Prague, 1777.

JOHANN ANTON SCOPOLI.

A descriptive catalogue of the genera of animals and plants. The genera of fishes are mostly those of Linnæus and Gronow. No types are named save in the two new, PERCIS and PTERIDIUM.

The following names given by Gronow are not accepted by Scopoli:

ENCHELYOPUS (regarded as a synonym of BLENNIUS), ELEOTRIS (= GOBIUS), PLECOSTOMUS (= LORICARIA), CORACINUS (= SCLÆNA), CALLORHYNCHUS (= CHIMÆRA), CATAPHRACTUS (= PEGASUS), GYMNOGASTER (= TRICHIURUS), CYCLOGASTER (= LIPARIS), HEPATUS, (= TEUTHIS); AMIA is used only in the Linnæan sense.

Liparis (Artedi) Scopoli, 453; type (not named) CYCLOPTERUS LIPARIS L.

Percis Scopoli, 454; type COTTUS JAPONICUS Pallas.

Equivalent to HIPPOCEPHALUS Swainson, 1839, not PERCIS Klein.

Pteridium Scopoli, 454; type CORYPHÆNA VELIFERA Pallas (PTERACLIS Gronow).

The following names of Gronow are introduced into Linnæan nomenclature by Scopoli, without mention of type. These date from Scopoli, 1777, if the *Zoophylaceum* of Gronow, 1763, be not accepted.

ERYTHRINUS, 449	MYSTUS, 451
SYNODUS, 449	CALLICHTHYS, 451
CALLYODON, 449	ASPEDO, 453
HOLOCENTRUS, 449	CIARAX, 455
(misprinted HOLOCENTHRUS)	CLARIAS, 455
GONORHYNCHUS, 450	CYNÆDUS, 455
ALBULA, 450	PHOLIS, 456
UMBRA (Krämer), 450	MASTACEMBELUS, 458
ANABLEPS, 450	CHANNA, 459
ANOSTOMUS, 451	

XXII. FORSTER, *Icones Ineditæ*; Bibliotheca Banksiæ, 1777.

JOHN REINHOLD FORSTER.

Echidna Forster, 181; type ECHIDNA VARIEGATA Forster = MURENA ECHIDNA Gmelin.

This generic name, according to Kaup, first appears in 1777, in the *Icones Ineditæ*. It must be retained for the genus of fishes, and is not available for the genus of mammals named ECHIDNA by Cuvier, = TACHYGLOSSUS.

XXIII. KLEIN, *Gesellschaft Schauplatz*, vols. IV, V, 1777.

JAKOB THEODOR KLEIN.

Oncotium Klein, IV, 46, 1777; type CYCLOPTERUS LUMPUS L. "ONCOTIUM COLORE NIGRICANTE" Klein.

A synonym of CYCLOPTERUS L.

Cynocephalus Klein, IV, 161, 1777; type SQUALUS GLAUCUS L. "CYNOCEPHALUS GLAUCUS" Klein, as restricted by Gill.

CYNOCEPHALUS Boddart is of later date. Equivalent to PRIONACE Cantor.

Callarias Klein, IV, 327, 1777; type GADUS MORRHUA L. "CALLARIAS SORDIDE OLIVACEUS" Klein.

Synonym of GADUS L.

Crayracion Klein, IV, 788, 1777; type TETRAODON SPENGLERI Bloch. "CRAYRACION LÆVISSIMUS EX TERREO RUFESCENS" Klein.

A synonym of TETRAODON L.

The type of this genus was first fixed by Bleeker, *Atlas Ichth.*, 1865, 65. Bleeker observes: "La première espèce du genre compliqué que Klein en 1742 déjà nomma CRAYRACION étant le TETRAODON SPENGLERI des auteurs ou au moins une espèce extrêmement voisine, je propose d'indiquer sous ce nom générique toutes

les espèces à tentacule nasale non perforée. . . Le nom de CRAYRACION est antérieur de plusieurs années à celui de TETRAODON et devrait être substitué à ce dernier si le type du genre n'était pas reconnu à un genre distincte du CRAYRACION LÆVISSIMUS de Klein."

This fixes the type of Klein on the species figured by him, but Bleeker is in error in supposing TETRAODON SPENGLERI to be a species with closed nostrils. The proper name for that group—(AROTHRON Müller: TETRAODON of several authors) seems to be OVOIDES Cuvier.

Cataphractus Klein, IV, 828, 1777; type COTTUS CATAPHRACTUS L.

"CATAPHRACTUS ROSTRO RESIMO" Klein.

Not CATAPHRACTUS Gronow. Stands as AGONUS Lacepède.

Capriscus Klein, V, 427, 1777; type BALISTES CAPRISCUS Gmelin.

"CAPRISCUS TRIBUS ACULEIS" Klein.

Synonym of BALISTES L.

Cestreus Klein, V, 460, 1777; type MUGIL CEPHALUS L. "CESTREUS DORSO REPANDO" Klein.

A synonym of MUGIL L.

XXIV. FORSTER, *Enchiridion*, 1778.

JOHN REINHOLD FORSTER.

Harpurus Forster, 84; type HARPURUS FASCIATUS FORSTER.

Equivalent to HEPATUS, TEUTHIS and ACANTHURUS.

XXV. KLEIN, *Gesellschaft Schauplatz*, vols. VI to X, 1778 to 1781.

JAKOB THEODOR KLEIN.

Solenostomus Klein, VI, 32, 1778; type FISTULARIA TABACCARIA L.

"SOLENOTOMUS CUTE GLABRA" Klein.

Synonym of FISTULARIA. If SOLENOTOMUS is accepted, a new generic name is required for SOLENOTSMUS Lacepède.

Sphyræna Klein, VI, 464, 1778; type ESOX SPHYRÆNA L.

Would replace SPHYRÆNA Röse, unless UMBLA Catesby is available.

Gobio Klein, VII, 178, 1779; type GOBIUS NIGER L. "GOBIO BRANCHIARUM OPERCULIS ET VENTRE FLAVICANTIBUS" Klein.

If allowed, GOBIO Klein becomes a synonym of GOBIUS L. and a new name would be required in place of GOBIO Cuvier.

Hippurus Klein, VII, 788, 1779; type CORYPHÆNA HIPPURUS L. "HIPPURUS PINNIS BRANCHIALIBUS" Klein.

Synonym of CORYPHÆNA L.

Blennus Klein, VIII, 589, 1779; type **BLENNIUS OCELLARIS** L. "BLENNUS PINNICEPS COLORIS" Klein.

Synonym of **BLENNIUS** L.

Psalisostomus Klein, X, 154, 1781; type **ESOX OSSEUS** L. "PSALISOSTOMUS OMNIUM MAXIMUS" Klein.

If allowed, replaces **LEPISOSTEUS** Lacepède.

XXVI. HERRMANN, *Schreiben ueber eine neues Americanisches Fischgeschlecht*, STERNOPTIX: Der Naturforscher, 2 Stück, vol. XVI, 1781.

JOHANN HERRMANN.

Sternoptix Herrmann, 8, 36; type **STERNOPTIX DIAPHANA** Herrmann.

Monotypic.

XXVII. HOUTTUYN, *Beskrifning van Ecnige Japanske Visschen*: Actæ Harlemensis, XX, pt. 2, 1782.

MARTIN HOUTTUYN.

Centrogaster Houttuyn, 333; type **CENTROGASTER FUSCESCENS** Houttuyn.

A synonym of **SIGANUS** Forskål.

XXVIII. BLOCH, *Naturgeschichte der Ausländischen Fische*. Nine parts, 1785 to 1795. Part 2, 1786.

MARK ELIESER BLOCH.

Kurtus Bloch, II, 122, 1786; type **KURTUS INDICUS** Bloch.

Also written **KYRTUS** and **CYRTUS**. Monotypic.

Macrourus Bloch, II, 150, 1786; type **CORYPHÆNA RUPESTRIS** Fabricius, the "Ingmingoak" = **MACROURUS BERGLAX** Lacepède, which is not the same as **CORYPHÆNOIDES RUPESTRIS** Gunner.

XXIX. BLOCH, *Ueber Zwey Merkwürdige Fisch-Arten*: Abhandlungen Böhmischer Gesellschaft, I, 1787.

Notacanthus Bloch, 278; type **NOTACANTHUS CHEMNITZI** Bloch.

This name was changed by Bloch in 1797 to **ACANTHONOTUS** and the species to **ACANTHONOTUS NASUS**. Monotypic.

XXX. AHL, *De Muræna et Ophichtho*, 1787.

JONAS NICHOLAS AHL.

Ophichthus Ahl, 5; type MURÆNA OPHIS L., as restricted.

Unquestioned.

XXXI. ASCANIUS, *Beretning um Silde-Tusten*: Dansk. Selsk. 1788.

P. ASCANIUS

Regalecus Ascanius, III, 419; type OPHIDIUM GLESNE Ascanius.

Other dates have been quoted, for example "Icones," 1772, a series of plates of objects in nature. This may not be the oldest.

XXXII. BLOCH, *Charactere und Beschreibung des Geschlechts der Papageyfische*, CALLYODON: Abhandlungen Böhmischer Gesellschaft, IV, 1788.

MARK ELIESER BLOCH.

Callyodon Bloch, 242; type (presumably) SCARUS CROICENSIS Bloch.

Not seen by us.

XXXIII. BLOCH, *Naturgeschichte der Ausländischen Fische*, III, 1788.

Gymnetrus Bloch, III, 1; type GYMNETRUS HAWKENI Bloch.

A synonym of REGALECUS.

XXXIV. BROWNE, *Civil and Natural History of Jamaica*, Second Edition, 1789.

PATRICK BROWNE, M. D.

Originally published in 1756, reprinted in 1789, with a table showing the Linnæan equivalents of species named, and perhaps other revisions. No changes have been noted in the systematic part. In the original edition of 1756, as in later editions, the author refers to the works of Artedi and Gronow, with both of whom he was familiar. His recognition of genus as a technical term and not as a mere Latin noun is unmistakable. Browne adopts various genera of Artedi (later accepted by Linnæus), and to these he adds twelve new genera of his own. The species are

indicated by polynomial terms, to which are added the English vernacular names current in Jamaica.

The *History of Jamaica* is the ablest of all the works describing a local fish-fauna, prior to Linnæus, in quality comparable to the work of Osbeck, Hasselquist, and even of Forskål.

The revised republication of the work in 1789 may perhaps make the names of Browne eligible in nomenclature, if other authors rigidly correct as to generic names but polynomial as to species are to be considered. We have examined the original edition and the edition of 1789.

The names of Browne are perhaps not eligible as not binomial and as occurring in a slightly revised reprint of a pre-Linnæan work.

Following the precedent of Opinion 57, rejecting Hasselquist (*Iter Palestinum*), Browne's work would not be regarded as available.

Solenostomus Browne, 441; type "SOLENOTOMUS CORPORE TERETE SUBROTUNDO etc., the Trumpeter" = *FISTULARIA TABACCARIA* L.

This name, if eligible, antedates *SOLENOTOMUS* Klein and *SOLENOTOMUS* Lacepède. Monotypic.

Menidia Browne, 441; type "MENIDIA CORPORE PELLUCIDO, LINEA LATERALI LATIORI ARGENTEA" = *ATHERINA BROWNI* Gmelin, 1789.

This name, if accepted, replaces *ANCHOVIELLA* Fowler, besides rendering *MENIDIA* Bonaparte ineligible. Monotypic.

Amia Browne, 442; type "AMIA SUBARGENTEA LABRIS ÆQUALIBUS OSSICULUS BRANCHIOSTEGUS VIGINTIDUOBUS, the Tarpon" = *MEGALOPS ATLANTICUS* Cuv. & Val.

This name is equivalent to *TARPON* Jordan & Evermann. It is however preoccupied by *AMIA* Gronow and by *AMIA* L. Browne refers also to *AMIA*, a second species, "the Ten-pounder," which is *ELOPS SAURUS* L., type of the genus *ELOPS*.

Mormyra Browne, 445; type "MORMYRA MAJOR CÆRULEA ET AUREO VARIA, the larger Painted Parrot-fish" = *SCARUS VETULA* Bloch & Schneider.

The name *MORMYRA*, too close to *MORMYRUS* L., is subsequent to *CALLYODON* of Gronow, and to *SCARUS* Forskål. Three other species of Parrot-fish are placed by Browne in *MORMYRA*. Synonym of *CALLYODON*.

Plagusia Browne, 445; type "PLAGUSIA SUBCINEREA CAUDA ATTENUATA, the little Brown Sole with a pointed tail" = *PLEURONECTES PLAGUSIA* Bloch & Schneider, 1801 = *SYMPHURUS PLAGUSIA* Jordan & Evermann.

The name *PLAGUSIA* was adopted for this genus by Cuvier in 1829. It had however been earlier (1806) used by Latreille for a genus of Crustaceans.

Browne's name *PLAGUSIA*, if available, has priority over *SYMPHURUS* Rafinesque, 1820, as well as over the numerous later names applied to this group, the best known of which are *APHORISTIA* Kaup and *AMMOPEUROPS* Günther. As there is a still earlier species, *PLAGUSIA PLAGIUSA* L., in this genus, the present species may perhaps stand as *PLAGUSIA ORNATA* Lacepède, "*PLAGIUSA*" being only a variant spelling of the same word.

Helops Browne, 445; type "*HELOPS NIGRESCENS VARIE NEBULATIM*, the Hog-fish of Catesby" = *LABRUS RUFUS* L.

If *HELOPS*, with this type, is accepted, it will eliminate the much confused generic name *BODIANUS* Bloch, based on the same type (*BODIANUS BODIANUS* Bloch = *LABRUS RUFUS* L.). *HARPE* Lacepède and *COSSYPHUS* Cuvier are later names for the same genus. The first species indicated by Browne under *HELOPS* is *LACHNOLAIMUS MAXIMUS* (Walbaum), the "*SUILLUS* or Great Hog-fish" of Catesby. This is "*HELOPS RUFESCENS IRIDE PARTIM RUBRA, PARTIM ALBIDA, MACULA NIGRA POST PINNIM DORSALEM*, the Hog-fish" of Browne. In the interest of nomenclature, it would be better to suppress *BODIANUS* rather than *LACHNOLAIMUS*, if *HELOPS* is found eligible.

Cromis Browne, 449; type "*CROMIS SUBARGENTEO OBLONGUS RADIIS ANTERIORIBUS DORSALIS ÆGRE PUNGENTIBUS*, the Drummer" = *LABRUS CROMIS* L. = *POGONIAS CHROMIS* of authors.

Browne cites four species of his genus *CROMIS*, the "Silver Shad" (*GERRES CINEREUS*), the Red-mouth Grunt (*HÆMULON PLUMIERI*), the Stone Bass (*DIAPTERUS BRASILIANUS*), and the Drummer (*POGONIAS CROMIS*). As the last named became *LABRUS CROMIS* L., we may take it as the type of the genus *CROMIS* of Browne, if the latter is eligible. *CROMIS* would then, if accepted, replace *POGONIAS* Lacepède. *CHROMIS* Cuvier, 1815, a more correct spelling of the same word, would then give place to *HELIASES* Cuvier.

Macrocephalus Browne, 449; type "*MACROCEPHALUS ARGENTEA MAJOR LINEA LATERALIS RECTA NIGRA*, the Snook" = *SCIÆNA UNDECIMALIS* Bloch.

Monotypic. Equivalent to *CENTROPOMUS* Lacepède. Preoccupied by *MACROCEPHALUS* Swederus, 1787, a genus of Insects.

Pelmatia Browne, 449; type "*PELMATIA MAJOR SQUAMIS VIX PERSPICUUS*, the Mud-fish" = *GOBIMORUS DORMITOR* Lacepède.

The name *PELMATIA*, if accepted, replaces *GOBIMORUS*, which in turn has replaced the excellent name *PHILYPNUS* of Cuvier.

The first species named under *PELMATIA* by Browne is "*PELMATIA MINOR SQUAMIS MAJUSCULUS*, the Bullhead." This is *DORMITATOR MACULATUS* (Bloch). Browne gives a long and correct account of *PELMATIA*, and notes that his "second sort," the mud-fish, is "most esteemed and grows frequently to the length of 17 to 20 inches. It is the most delicate fish I have yet known, when in full perfection."

Thynnus Browne, 451; type "THYNNUS BONTII CORPORE CRASSIORI ET BREVIORE etc., The Boneeto" = *SCOMBER PELAMYS* L.

This use of the name THYNNUS is later than that of Fabricius, 1775, for a genus of Insects. It antedates THYNNUS of Cuvier and it is equivalent to THYNNUS of Lütken, a name later changed to EUTHYNNUS by its author. *SCOMBER PELAMYS* L., the Oceanic Bonito, is the Bonito of Cuba and Jamaica, where the Northern Bonito, *SARDA SARDA*, is unknown. Of the "Boneeto," Browne observes that it is "a dry coarse fish, not much esteemed, though a hearty wholesome food." Should stand as EUTHYNNUS Lütken. Monotypic.

Saurus Browne, 452; type "SAURUS ARGENTEUS CUTE LONGITUDINALIS etc., the Leather Coat" = *SCOMBER SAURUS* Bloch & Schneider = *OLIGOPLITES SAURUS* of authors.

Not SAURUS Cuv. & Val., which is *SYNODUS* Gronow. If Browne's names are accepted, SAURUS must replace OLIGOPLITES Gill, its type species standing as SAURUS SAURUS (Bloch & Schneider). Two other species of SAURUS are enumerated by Browne, the "Red-tailed Jack" and the "White-fish."

Teuthis Browne, 454; type "TEUTHIS FUSCA CÆRULEO NITENS, the Doctor (*TURDUS RHOMBOIDES* Catesby)" = *CHÆTODON CÆRULEUS* Bloch.

The first application of the name TEUTHIS (τεῦθις, a squid) to a fish is that of Browne in 1756. Linnæus in 1766 accepted Browne's name TEUTHIS, and substituted it for Gronow's name HEPATUS, 1763. The republication of TEUTHIS in 1789 would help to fix the generic name TEUTHIS with Browne's original species. HEPATUS Gronow was primarily based on a specimen of the West Indian species called CHÆTODON CHIRURGUS by Bloch, with which CHÆTODON CÆRULEUS Bloch, the type of TEUTHIS, is strictly congeneric. The other species concerned, TEUTHIS JAVUS L., wrongly referred by Gronow to HEPATUS, should stand as SIGANUS Forskål. Cuvier and Valenciennes, according to Günther, were in error in referring Gronow's specimen, the type of TEUTHIS HEPATUS L., to an East Indian species, since called COLOCOPUS LAMBURUS Gill.

The four species entangled in the confusion superimposed upon Browne, should, as Gill has shown, stand as follows:

HEPATUS or TEUTHIS CÆRULEUS (Bloch & Schneider).

HEPATUS or TEUTHIS HEPATUS L.

COLOCOPUS LAMBURUS Gill.

SIGANUS JAVUS (L.).

Rhomboida Browne, 455; type "RHOMBOIDA ALEPIDOTA ARGENTEA PINNIS OMNIS BREVIBUS, the Silver-fish" = *VOMER BROWNI* Cuv. & Val., 1833.

The generic name RHOMBOIDA antedates that of VOMER Cuvier, and, if accepted, the type species would stand as RHOMBOIDA BROWNI (Cuv. & Val.) = *PLATYSOMUS SPIXI* Swainson, a species distinct from the northern VOMER SETIPINNIS (Mitchill).

Under Rhomboida, Browne mentions also "RHOMBOIDA MAJOR ALEPIDOTA, the Larger Silver-fish, with long fins (*ZEUS CAUDA BIFURCA* Artedi)." This must be

SELENE VOMER L. A third species is "RHOMBOIDA SQUAMOSA EX ARGENTEA, the Portuguese." This seems to be POMACANCHUS ARCUATUS L., the "Portugais" of the French Antillan fishermen.

XXXV. LINCK, *Magazin Neuestes aus der Physik und Naturgeschichte*,
Gotha, 1790.

H. F. LINCK.

This work we have not seen; we quote from Gill.

Mustelus Linck, 31; type SQUALUS MUSTELUS L. = MUSTELUS LAEVIS
of authors.

Equivalent to PLEURACROMYLON Gill, not quite the same as MUSTELUS Valmont.

Pristis Linck, 31; type SQUALUS PRISTIS L.

Unquestioned.

Rhinobatos Linck, 32; type not specified: RAJA RHINOBATOS L.

Equivalent to RHINOBATUS Klein.

Callichthys Linck, 32; type not specified: SILURUS CALLICHTHYS L.

Equivalent to CALLICHTHYS Gronow.

Alosa Linck, 35 (scarcely defined); type not specified: CLUPEA ALOSA
L. = ALOSA Cuvier.

Thymallus Linck, 35; type not specified: SALMO THYMALLUS L. =
THYMALLUS Cuvier.

Mola Linck, 37; type DIODON MOLA L.

Equivalent to MOLA Koelreuter and Cuvier.

Soarus Linck (misprint for SAURUS), 37; type not specified and un-
identifiable.

Barbatula Linck, 38; type COBITIS BARBATULA L.

Replaces OREIAS Sauvage; ORTHRIAS Jordan & Fowler.

XXXVI. BLOCH, *Naturgeschichte der Ausländischen Fische*, IV, 1790.

MARK ELIESER BLOCH.

Bodianus Bloch, IV, 48; type BODIANUS BODIANUS Bloch, by tautonomy.

Replaces HARPE Lacepède. By first restriction, Cuvier and Gill, the type would be BODIANUS GUTTATUS Bloch, a species of ENNEACENTRUS Gill. Tautonomy has precedence in this case.

Lutianus Bloch, IV, 105; type LUTIANUS LUTIANUS Bloch.

Unquestioned. Also spelled LUTJANUS.

XXXVII. WHITE, *Journal of a Voyage to New South Wales*, 1790.

J. WHITE.

Enoplosus White, plate 39; type *CILETODON ARMATUS* White.

Lacepède quotes the name *ENOPLOSUS* from White. We have not seen this paper, and the name may have been first printed by Lacepède.

XXXVIII. VALMONT DE BOMARE, *Dictionnaire* etc., Edition IV, vol. VIII, 1791.

JEAN CHRISTOPHE VALMONT DE BOMARE.

Acus Valmont; type *ACUS ARISTOTELIS* Valmont = *SYNGNATHUS ACUS* L.

After Willughby. Same as *SYNGNATHUS* L.

XXXIX. SHAW, *Description of STYLEPHORUS CHORDATUS, a new fish*: Transactions of the Linnæan Society of London, I, 1791.

GEORGE SHAW.

Stylephorus Shaw, I, 90; type *STYLEPHORUS CHORDATUS* Shaw.
Monotypic.

XL. WALBAUM, *Artedi Piscium*, 1792.

JOHANN JULIUS WALBAUM.

Curimata Walbaum, 80; type *SALMO MARCGRAVII* Walbaum, based on "CHARAX MAXILLA SUPERIORE LONGIORE" Gronow, which is *SALMO CYPRINOIDES* L.

CURIMATA should replace *CURIMATUS* Cuvier for this genus.

XLI. BLOCH, *Naturgeschichte der Ansländischen Fische*, VI, VII, 1792, 1793.

MARK ELIESER BLOCH.

Anthias Bloch, VI, 97, 1792; type *LABRUS ANTHIAS* L. = *ANTHIAS SACER* Bloch.

Unquestioned. *AYLOPON* Rafinesque is a substitute name, *ANTHIAS* being said to be preoccupied. We do not find it so. *ANTHIA*, a genus of Beetles, dates from 1801.

Epinephelus Bloch, VII, 11, 1793; type *EPINEPHELUS MARGINALIS* Bloch = *PERCA FASCIATA* Forskål, by general consent.

The genus *EPINEPHELUS* was based on *E. AFER*, *E. MARGINALIS*, *E. MERRA*, and *E. RUBER*. *MARGINALIS* and *MERRA* are congeneric, and belong to the great group called *EPINEPHELUS* by Gill, Bleeker, and nearly all recent authors. Of these, *MARGINALIS* is typical. The species named first, *AFER*, has been on that account chosen as type by Fowler, 1907. This species was separated as the type of *ALPH-ESTES* by Bloch & Schneider, 1801. *RUBER* was named as type by Jordan & Gilbert, 1883. This species under another name (*ACUTIROSTRIS* Cuv. & Val.) became the type of *PARAPINEPHELUS* Bleeker, 1875. Justice and convenience are best served by retaining the name *EPINEPHELUS* for its chief components, as understood by nearly all authors. Otherwise the genus would stand as *CERNA* Bonaparte, 1837, unless, with Fowler, we recognize *EPINEPHELUS GIGAS* (*PERCA GIGAS*) L. as the type of *SERRANUS* Cuvier, 1817, a change we think unnecessary. If the subgenera of Forskål, with Arabic names, are recognized, *EPINEPHELUS* must give place to *DABA*.

Gymnocephalus Bloch, VII, 24, 1793; type *PERCA SCHRETZER* L., equivalent to *CERNUA* Schæfer, *ACERINA* Cuvier, and *CERNUA* Fleming.

Johnius Bloch, VII, 132, 1793; type *JOHNIUS CARUTTA* Bloch, as restricted by Gill.

Lonchiurus Bloch, VII, 143, 1793; type *LONGHIURUS BARBATUS* Bloch, 1793 = *PERCA LANCEOLATA* Bloch, 1788.

Monotypic. Corrected by later writers to *LONGHURUS*.

Cataphractus Bloch, VII, 80, 1793; type *SILURUS CALLICHTHYS* L. as here restricted.

A synonym of *CALLICHTHYS*.

XLII. RÖSE, *Petri Artedi Angermannia-Succi Synonymia Nominum Piscium* etc. Greifswald. Edition II, 1793.

ANTON FERDINAND RÖSE.

This article, published as a supplement to Walbaum's *Artedi Piscium*, enumerates the generic names of Artedi and others, the species in their original polynomial form. In an Appendix are given a few new generic names, mostly taken from Aristotle. These genera are not described, nor are their species named, but the synonymy is fully given. Some of them had been already used by other authors. In our judgment, these names are eligible, and a few maintain priority of date.

Phycis Röse, III; type $\varphi\upsilon\zeta\iota\varsigma$ Aristotle, *PHYCIS TINCA* Bloch & Schneider. *GADUS BLENNOIDES* Brünnich.

This is identical with *PHYCIS* Bloch & Schneider, 1801; the latter, but not the former, antedated by *PHYCIS* Fabricius, 1798, a genus of Insects. *PHYCIS* Röse replaces *EMPHYCUS* Jordan & Evermann, 1898.

Cicla Röse, 112; type "CICLA VIX PALMARIS" Röse, κίχλη Aristotle, a species of LABRUS, perhaps L. VIRIDIS L.

CICLA Klein is identical with that of Röse. Schneider, more correctly, wrote the word CICHLA, but applied it to a different group.

Sphyræna Röse, 112; type σφύραϊνα Aristotle = ESOX SPHYRÆNA L.

This antedates SPHYRÆNA Bloch & Schneider, 1801, for the same genus.

Hepatus Röse, 113; type ἥπατος Aristotle, which is probably LABRUS HEPATUS L., the type of the genus PARACENTROPRISTIS Bleeker.

HEPATUS Gronow is wholly different.

Capriscus Röse, 114; type καπρίσκος Diphili, κάπρος Aristotle, which is probably BALISTES CAPRISCUS L.

A synonym of BALISTES L.

Tænia Röse, 114; type ταινία Aristotle = CEPOLA TÆNIA L.

The genus is equivalent to CEPOLA L., and is preoccupied in Worms by TÆNIA L.

Pholis Röse, 116; type φολίς Aristotle = BLENNIUS PHOLIS L.

Equivalent to PHOLIS Cuv. & Val., not of Scopoli, 1777.

Citharus Röse, 116; type κιθάρος Aristotle = PLEURONECTUS LINGUATULA L.

Equivalent to CITHARUS Bleeker, 1862, and EUCITHARUS Gill, 1888; not CITHARUS Reinhardt, 1838, which is HIPPOGLOSSOIDES.

Liparis Röse, 117; type "LIPARIS NOSTRAS Johnson" = CYCLOPTERUS LIPARIS L.

Equivalent to CYCLOGASTER Gronow and LIPARIS Scopoli.

Chelon Röse, 118; type χάλλων or χέλων Aristotle, CHELON of Gesner, which is probably MUGIL CHELO Cuv. & Val.

Probably equivalent to CHÆNOMUGIL Gill, but the European and American types need further comparison.

XLIII. LATHAM, *Essay on the various species of Saw-Fish*: Transactions of the Linnæan Society of London, 1794.

JOHN F. LATHAM.

Pristis Latham, II, 276; type SQUALUS PRISTIS L.

Same as PRISTIS Linck.

XLIV. VAHL, *Beskrivelse af en nye Fiskeslægt*: Shrivt. Naturh. Selsk., Kjöbenhavn, III, 1794.

M. VAHL.

Cæcula Vahl, III, 2, 149; type CÆCULA PTERYGERA Vahl.

Monotypic.

XLV. BLOCH, *Naturgeschichte der Ausländischen Fische*, VIII, 1794;
IX, 1795.

MARK ELIESER BLOCH.

Platystacus Bloch, VIII, 52, 1794; type *PLATYSTACUS COTYLEPHORUS*
Bloch, as usually restricted.

Ophicephalus Bloch, VIII, 137, 1794; type *OPHICEPHALUS PUNCTATUS*
Bloch.

Unquestioned. Corrected by later writers to *OPHIOCEPHALUS*.

Sphagebranchus Bloch, IX, 88, 1795; type *SPHAGEBRANCHUS ROSTRATUS*
Bloch.

Monotypic.

Gymnothorax Bloch, IX, 83, 1795; type *GYMNOTHORAX MURÆNA* Bloch
= *MURÆNA HELENA* L.

A synonym of *MURÆNA* L. Günther, *Cat. Fish*, VIII, p. 100, 1870, restricts
the names to allies of *MURÆNA AFRA* = *LYCODONTIS* McClelland, an arrangement
apparently not defensible, as *GYMNOTHORAX* was plainly a substitute name for
MURÆNA, and must retain the same type, *MURÆNA HELENA* L.

Synbranchus Bloch, IX, 86, 1795; type *SYMBRANCHUS MARMORATUS*
Bloch.

Name corrected by later writers to *SYMBRANCHUS*.

Platycephalus Bloch, IX, 96, 1795; type *PLATYCEPHALUS SPATHULA*
Bloch = *COTTUS INSIDIATOR* Forskål = *CALLIONYMUS INDICUS* L.

Unquestioned.

Gastrobranchus Bloch, XII, 51, 1797; type *GASTROBRANCHUS CÆCUS*
Bloch = *MYXINE GLUTINOSA* L.

A synonym of *MYXINE* L.

Acanthonotus Bloch, XII, 113, 1797; type *ACANTHONOTUS NASUS*
Bloch, 1797 = *NOTACANTHUS CHEMNITZI* Bloch, 1787.

A needless substitute name for *NOTACANTHUS*.

XLVI. FABRICIUS, *Beskrivelse over to sieldne Grönländske Fiske*:
Skrivt. Naturhist. Selskab. Kjöbenhavn, 1793, II.

OTTO FABRICIUS.

Campylodon Fabricius, 12; type *CAMPYLODON (FABRICII* Reinhardt),
1838.

A synonym of *NOTACANTHUS* Bloch. Monomial and monotypic.

XLVII. VOLTA, *Ichthyolithologia Veronensis*, 1796.

SERAFINO VOLTA.

Blochius Volta, 53; type **BLOCHIUS LONGIROSTRIS** Volta (Family BLOCHIIDÆ, fossil).

XLVIII. LACEPÈDE, *sur le Polyodon feuille*: Bull. Sci. Soc. Philom., 1797.

BERNARD GERMAIN ÉTIENNE DE LA VILLE-SUR-ILLON COMTE DE LACEPÈDE.

The name of this author should be written Lacepède. Sherborne, *Index Animalium*, says: "A letter dated 1831 is signed 'b. g. é cte. de Lacepède.' This spelling and accentuation should be adhered to."

Polyodon Lacepède, 49; type **POLYODON FOLIUM** Lacepède.
Monotypic.

XLIX. CUVIER, *Tableau Élémentaire*, 1798.

GEORGES JEAN LEOPOLD NICOLAS FRÉDÉRIC CUVIER.

Mola Cuvier, 323; type **DIODON MOLA** L.

Equivalent to **MOLA** Kœlreuter. Prior to **ORTHAGORISCUS** Bloch & Schneider, 1801. Monotypic.

Murænophis Cuvier, 329; type **MURÆNA HELENA** L.

A synonym of **MURÆNA** L.

L. GEOFFROY SAINT HILAIRE, *Description d'un nouveau Genre de Poisson*: Bull. Soc. Sci. Philom., III, "An X de la République," 1798.

ÉTIENNE GEOFFROY SAINT HILAIRE.

Polypterus St. Hilaire, 97; type **POLYPTERUS BICHIR** St. Hilaire.
Monotypic.

LI. RETZIUS, *Lampris, En ny Fiskslagt Beskriven*: Vet. Acad. Nya Handl., Stockholm, XX, 1799.

A. J. RETZIUS.

Lampris Retzius, 91; type **ZEUS GUTTATUS** Brünnich = **ZEUS REGIUS** Bonnaterre.

LII. SHAW, *Naturalist's Miscellany*, 1799.

GEORGE SHAW.

Trachichthys Shaw, 378: type TRACHICHTHYS AUSTRALIS Shaw.
Monotypic.

LIII. CUVIER, *Leçons d'Anatomie Comparée*, 1800.

GEORGES CUVIER.

Ovoïdes Cuvier, 1, tab. 1: type OVOIDES FASCIATUS Lacepède = TETRODON STELLATUS.

After "LES OVOIDES Lacepède," 1798. Replaces AROTHRON Müller.

LIV. LACEPÈDE, *Histoire Naturelle des Poissons*, *vol. I, 1798; II, 1800.

BERNARD GERMAIN ÉTIENNE DE LA VILLE-SUR-ILLON, COMTE DE
LACEPÈDE (here called "CITOYEN LA CEPÈDE").

The generic names in Volume I, 1798, and Volume II, 1800, to page 160, are nearly all given in French vernacular and are therefore ineligible. Scientific forms for most of these were supplied by Duméril, *Zoologie Analytique*, 1806, from which work the generic names in question must be dated.

Aodon Lacepède, I, 297. 1798: type SQUALUS MASSASA Forskål, as restricted by Jordan & Evermann.

A shark, perhaps imaginary, with no teeth and with long pectorals. The Latin name AODON is used, as well as the French "LES AODONS."

Ovoïdes (Lacepède), 521, "LES OVOIDES"; type "L'OVOIDE FASCÉ."

A front view of TETRAODON STELLATUS L. Equivalent to OVOIDES Cuvier.

Spheroides (Lacepède) Duméril (LES SPHÉROIDES), II, 22, 1800: type LE SPHÉROÏDE TUBERCULÉ Lacepède.

A front view of TETRAODON SPENGLERI Bloch. A synonym of TETRAODON as here understood.

* Of this work we have before us two reprints, neither with the original pagination. This, however, we are able to give, through the kindness of Mr. Henry W. Fowler of the Academy of Natural Sciences of Philadelphia, who has supplied us with a complete list of the genera and the pages on which they occur.

In the original edition the author styles himself "Citoyen La Cepède."

Macrorhynchus (Lacepède) Duméril (LES MACRORHYNQUES); type LE MACRORHINQUE ARGENTÉ Lacepède, SYNGNATHUS ARGENTEUS Osbeck.

Probably replaces DICROTUS Günther.

Cæcilia Lacepède), II, 134, 1800 (LES CÆCILIES); type CÆCILIA BRANDERIANA Lacepède = MURÆNA CÆCA L.

Not CÆCILIA L., a genus of Amphibians. A synonym of SPHAGEBRANCHUS Bloch.

Monopterus (Lacepède), Duméril, II, 138, 1800 (LES MONOPTÈRES); type MONOPTERUS JAVANENSIS Lacepède.

Notopterus Lacepède, II, 189, 1800; type GYMNOTUS KAPERAT Bonnaterre (GYMNOTUS NOTOPTERUS Pallas).

Ophisurus Lacepède, II, 195, 1800; type MURÆNA SERPENS L. as restricted by Risso, 1826.

Triurus Lacepède, II, 200, 1800; type TRIURUS BOUGAINVILLEI Lacepède, later called POMATIUS by Bloch & Schneider.

Unidentified. A deep-sea fish, apparently allied to AULOSTOMATOMORPHA Alcock, but without ventral fins.

Apteronotus Lacepède, II, 208, 1800; type APTERONOTUS PASSAN Lacepède = GYMNOTUS ALBIFRONS L.

Must replace STERNARCHUS Bloch & Schneider.

Odontognathus Lacepède, 220, 1800; type ODONTOGNATHIUS MURICATUS Lacepède.

Macrognathus Lacepède, II, 283, 1800; type OPHIDIUM ACULEATUM L.

Replaces RHYNCHOBELLA Bloch & Schneider, with the same type. The name MACROGNATHUS was used by Gronow in 1754 (but not in 1763) to designate the group called BELONE Cuvier.

Comephorus Lacepède, II, 312, 1800; type CALLIONYMUS BAIKALENSIS Bonnaterre.

Monotypic.

Rhombus Lacepède, II, 312, 1800; type STROMATEUS ALEPIDOTUS L.

Preoccupied, replaced by PEPILUS Cuvier.

Murænoides Lacepède, II, 324, 1800; type BLENNIUS MURÆNOIDES Stujef (BLENNIUS GUNNELLUS L.).

Equivalent to PHOLIS Scopoli, 1777.

Calliomorus Lacepède, II, 343, 1800; type CALLIONYMUS INDICUS L.

Synonym of PLATYCEPHALUS Bloch.

Batrachoides Lacepède, II, 351, 1800; type *BATRACHOIDES TAU* Lacepède.

Not *GADUS TAU* L.

Because the body is said to be covered with scales, "molles, petites, minces, rondes, brunes, bordées de blanc et arrosées par une mucosité très abondantes," we cannot identify this genus with the naked *GADUS TAU* L., which is identical with the type of *OPSANUS* Rafinesque.

Oligopodus Lacepède, II, 511, 1800; type *CORYPHÆNA VELIFERA* Pallas.

Equivalent to *PTERACLIS* Gronow.

Hiatula Lacepède, II, 522, 1800; type *HIATULA GARDENIANA* Lacepède = *LABRUS ONITIS* L. = *LABRUS HIATULA* L.

Not *HIATULA* Modcer, 1793, a genus of Mollusks. Gives way to *TAUTOGA* Cuvier.

Tænioides Lacepède, II, 532, 1800; type *TÆNIOIDES HERMANNIANUS* Lacepède.

Gobioides Lacepède, II, 576, 1800; type *GOBIOUS BROUSSONETI* Lacepède, as restricted by Jordan & Evermann, 1898.

Gobiomorus Lacepède, II, 583, 1800; type *GOBIOMORUS DORMITOR* Lacepède, as restricted by Jordan.

Replaces *PHILYPNUS* Bloch & Schneider, 1801.

Gobiomoroides Lacepède, II, 592, 1800; type *GOBIOMOROIDES PISON* Lacepède = *GOBIOUS PISONIS* L., a species of *ELEOTRIS* Gronow.

Monotypic.

Gobiesox Lacepède, II, 595, 1800; type *GOBIESOX CEPHALUS* Lacepède.

Monotypic.

LV. BLOCH & SCHNEIDER, *Systema Ichthyologia*, 1801.

MARK ELIESER BLOCH.

Edited and extended by JOHANN GOTTLÖB SCHNEIDER.

Batrachus Bloch & Schneider, 42; type *BATRACHUS SURINAMENSIS* Schneider, as restricted by Jordan & Evermann.

The name has been usually applied to the congeners of *GADUS TAU* L., not of Bloch, the group called *OPSANUS* by Rafinesque. But no ally of the scaleless *GADUS TAU* is placed in *BATRACHOIDES* by Lacepède or in *BATRACHUS* by Schneider, only scaly species being known to either.

Enchelyopus Bloch & Schneider, 50; type, as first restricted, *GADUS CIMBRIUS* L. (*RHINONEMUS CIMBRIUS* Gill).

Not *ENCHELIOPODUS* of Gronow, which is *ZOARCES* Cuvier, nor of Klein, which is *TRICHIURUS*.

Phycis Bloch & Schneider, 56; type *BLENNIUS PHYCIS* L. (*PHYCIS TINCA* Bloch & Schneider).

Equivalent to *PHYCIS* Röse, 1793; not *PHYCIS* Fabricius, 1798, a genus of Butterflies.

Periophthalmus Bloch & Schneider, 63; type *PERIOPHTHALMUS PAPILIO* Bloch & Schneider.

Eleotris Bloch & Schneider, 65; type *ELEOTRIS GRONOW* (*GOBIOUS PISONIS* Gmelin).

The name is borrowed from Gronow, whose *ELEOTRIS* is the *ELEOTRIS* of Cuvier and subsequent authors. But *ELEOTRIS PISONIS* is indicated by Schneider as "a species of doubtful relations, perhaps a *PERIOPHTHALMUS*." We let the current arrangement stand, though on shaky foundation, unless the names of Gronow are finally accepted. The genus *ELEOTRIS* of Bloch & Schneider represents an utter confusion of species, many of them not gobies at all.

Brama Bloch & Schneider, 98; type *SPARUS RAJI* Bloch.

Not *BRAMA* Klein, which is *ABRAMIS* Cuvier.

Monocentris Bloch & Schneider, 100; type *GASTEROSTEUS JAPONICUS* Houttuyn.

Monotypic.

Sphyræna Bloch & Schneider, 109; type *ESOX SPHYRÆNA* L.

Equivalent to *UMBLA* Catesby. Subsequent to *SPHYRÆNA* Röse.

Trichogaster Bloch & Schneider, 164; type *TRICHOGASTER FASCIATUS* Bloch & Schneider.

Centronotus Bloch & Schneider, 165; type *CENTRONOTUS FASCIATUS* Schneider.

A synonym of *PHOLIS* Scopoli.

Percis Bloch & Schneider, 179; type *PERCIS MACULATA* Schneider.

Not *PERCIS* Klein nor of Scopoli. Replaced by *PARAPERCIS* Bleeker. Monotypic.

Trichonotus Bloch & Schneider, 179; type *TRICHONOTUS SETIGER* Bloch & Schneider.

Monotypic.

Monoceros Bloch & Schneider, 180; type *MONOCEROS BIACULEATUS* Bloch & Schneider (*CHÆTODON UNICORNIS* Forskål).

Name preoccupied in Mollusks. Equivalent to *NASO* Lacepède.

Grammistes Bloch & Schneider, 182; type *PERCA SEXLINEATA* Thunberg.

A jumble of striped fishes, restricted by Cuvier to the *GRAMMISTES* of Seba, G. *SEXLINEATUS*.

Synanceja Bloch & Schneider, 194; type *SCORPÆNA HORRIDA* L.

By common consent. Commonly written *SYNANCEIA*.

- Amphiprion** Bloch & Schneider, 200; type LUTJANUS EPHIPPIMUM Bloch.
- Amphacanthus** Bloch & Schneider, 206; type CHÆTODON GUTTATUS Bloch.
Equivalent to TEUTHIS L. as restricted = SIGANUS Forskål.
- Alphestes** Bloch & Schneider, 236; type ALPHESTES AFER Bloch & Schneider.
- Cephalopholis** Bloch & Schneider, 311; type CEPHALOPHOLIS ARGUS Bloch & Schneider.
Monotypic. Replaces ENNEACENTRUS Gill.
- Calliodon** Bloch & Schneider, 312; type CALLIODON LINEATUS Bloch & Schneider (SCARUS CROICENSIS Bloch).
Equivalent to CALLYODON Gronow.
- Cichla** Bloch & Schneider, 336; type CICHLA OCELLARIS Bloch & Schneider as restricted by Heckel, 1840.
Name to be changed if CICLA Klein is eligible.
- Rhina** Bloch & Schneider, 353; type RHINA ANCYLOSTOMUS Bloch & Schneider.
Not of Klein; equivalent to RHAMPHOBATIS Gill.
- Rhinobatus** Bloch & Schneider, 353; type RAJA RHINOBATUS Forskål.
Equivalent to RHINOBATOS Linck.
- Anableps** Bloch & Schneider, 389; type ANABLEPS TETROPTHALMUS Bloch & Schneider (COBITIS ANABLEPS L.).
Equivalent to ANABLEPS Gronow and of Scopoli.
- Synodus** Bloch & Schneider, 396; type ESOX SYNODUS L.
Replaces SAURUS Cuvier.
- Chauliodus** Bloch & Schneider, 430; type CHAULIODUS SLOANI Schneider.
- Albula** Bloch & Schneider, 433; type ALBULA CONORHYNCHUS Schneider (ESOX VULPES L.). ALBULA Gronow.
Not ALBULA Osbeck. To stand as BUTYRINUS Lacepède, if Osbeck's names are accepted.
- Pœcilia** Bloch & Schneider, 453; type PÆCILIA VIVIPARA Bloch & Schneider.
By common consent.
- Polyodon** (Lacepède) Bloch & Schneider, 457; type "LE POLYDON FEUILLE" Lacepède, 1798 = SQUALUS SPATHULA Walbaum.
- Rhynchobdella** Bloch & Schneider, 479; type RHYNCHOBDELLA ORIENTALIS Bloch & Schneider = OPHIDIUM ACULEATUM Bloch.
As restricted by Cuvier. A synonym of MACROGNATHUS Lacepède, 1800.
- Sternarchus** Bloch & Schneider, 497; type GYMNOTUS ALBIFRONS L.
A synonym of APTERONOTUS Lacepède, 1800.

Orthagoriscus Bloch & Schneider, (misprinted ORTHRAGORISCUS), 510; type *DIODON MOLA* (Bloch).

Equivalent to *MOLA* Kœlreuter.

Bogmarus Bloch & Schneider, 518; type *BOGMARUS ISLANDICUS* Bloch & Schneider (*GYMNOGASTER ARCTICUS* Brünnich).

A synonym of *TRACHIPTERUS* Gouan. Monotypic.

Gymnonotus Bloch & Schneider, 521; type *GYMNOTUS CARAPO* L. (corrected spelling for *GYMNOTUS*).

Ovum Bloch & Schneider, 530; type *OVUM COMMERSONI* Bloch & Schneider = "*L'OVOIDE FASCÉ*, Lacepède, 1798.

Monotypic. Equivalent to *OVIDES* Cuvier. *OVUM* Martin, 1764, is recorded by Sherborne as a "vernacular name only."

Typhlobranchus Bloch & Schneider, 537; type *TYPHLOBRANCHUS SPURIUS* Bloch & Schneider.

Monotypic, not identified. A river eel of Tropical America, without gill-openings. Doubtless a synonym of *SYMBRANCHUS*.

Gnathobolus Bloch & Schneider, 556; type *ODONTOGNATHUS MUCRONATUS* Lacepède.

Equivalent to *ODONTOGNATHUS*.

Pomatias Bloch & Schneider, 559; type *TRIURUS BOUGAINVILLEI* Lacepède.

Equivalent to *TRIURUS*.

Fluta Bloch & Schneider, 565; type *MONOPTERUS JAVANENSIS* Lacepède.

Equivalent to *MONOPTERUS*. Like the two preceding, a needless substitute name.

LVI. LACEPÈDE, *Histoire Naturelle des Poissons*, vol. III, 1802; IV and V, 1803.

BERNARD GERMAIN LACEPÈDE.

Scomberoides Lacepède, III, 50, 1802; type *SCOMBEROIDES COMMERSONIANUS* Lacepède (*SCOMBER LYSAN* Forskål).

Caranx Lacepède, III, 57, 1802; type *SCOMBER CARANGUS* Bloch = *CARANX HIPPOS* L., as restricted by Bleeker, the first reviser.

The generic name *CARANX* was taken by Lacepède from the manuscripts of Commerson, who first applied the name to *SCOMBER SPECIOSUS* Forskål. In revising the genus, Bleeker referred *SPECIOSUS* to a new genus, *GNATHANODON*. This view Dr. Gill accepted at first, but later selected *SPECIOSUS* as the type of *CARANX*, leaving some older name as *TRICHOPTERUS* Rafinesque or *CARANGUS* Griffith for the bulk of the species of this extensive group. Later, by the process of elimination, *CARANX RUBER* was selected by Jordan as type of *CARANX*. On the whole it seems

most just, as it is certainly most convenient, to recognize the right of Bleeker as "first reviser." *CARANX CARANGUS* is congeneric with *C. RUBER*.

Trachinotus Lacepède, III, 78, 1802; type *SCOMBER FALCATUS* Forskål.

Caranxomorus Lacepède, III, 82, 1802; type *SCOMBER PELAGICUS* L.

Synonym of *CORYPHÆNA* L.

Cæsius Lacepède, III, 85, 1802; type *CÆSIO CÆRULEOAUREUS* Lacepède.

Cæsiomorus Lacepède, III, 92, 1802; type *CÆSIOMORUS BAILLONI* Lacepède.

Genus probably valid; equivalent to *GLAUCUS* Klein.

Coris Lacepède, III, 96, 1802; type *CORIS AYGULA* Lacepède.

Gomphosus Lacepède, III, 100, 1802; type *GOMPHOSUS CÆRULEUS* Lacepède.

Naso Lacepède, III, 105, 1802; type *CHÆTODON FRONTICORNIS* L.

Adopted from Commerson ms. Commerson writes *NASEUS*, but the form *NASO* occurs first. Identical with *MONOCEROS* Bloch & Schneider, the latter preoccupied.

Kyphosus Lacepède, III, 114, 1802; type *KYPHOSUS BIGIBBUS* Lacepède.

Osphronemus Lacepède, III, 116, 1802; type *OSPHRONEMUS GOURAMY* Lacepède.

Written *OSPHROMENUS* by Günther.

Trichopodus Lacepède, III, 125, 1802; type *TRICHOPODUS MENTUM* Lacepède (*OSPHRONEMUS GOURAMY* Lacepède).

Monodactylus Lacepède, III, 131, 1802; type *MONODACTYLUS FALCIFORMIS* Lacepède.

Called *PSETTUS* by Commerson in ms. as quoted by Lacepède. Monotypic.

Plectorhinchus Lacepède, III, 134, 1802; type *PLECTORHINCHUS CHÆTODONOIDES* Lacepède.

Monotypic. Replaces *DIAGRAMMA* Cuvier.

Pogonias Lacepède, III, 137; type *POGONIAS FASCIATUS* Lacepède = *LABRUS CROMIS* Lacepède.

Bostrychus Lacepède, III, 144, 1802; type *BOSTRYCHUS SINENSIS* Lacepède.

Not *BOSTRICHUS* Geoffroy 1762, a genus of Insects. Replaced by *BOSTRICHTHYS* Duméril, 1806, by *PSILUS* Fischer, 1813, and by *ICTIPOGON* Rafinesque, 1815.

Bostrychoides Lacepède, III, 144, 1802; type *BOSTRYCHOIDES OCULATUS* Lacepède.

Monotypic.

Hemipteronotus Lacepède, III, 214, 1802; type *HEMIPTERONOTUS QUINQUEMACULATUS* Lacepède (*CORYPHÆNA PENTADACTYLA* Gmelin).

- Coryphænoides** Lacepède, III, 219, 1802; type *CORYPHÆNOIDES HOUTTUYNII* Lacepède (*CORYPHÆNA JAPONICA* Houttuyn).
- Not *CORYPHÆNOIDES* Gunner. Replaced by *BRANCHIOSTEGUS* Rafinesque, 1815, which is earlier than *LATILUS* Cuvier & Val., 1830.
- Aspidophorus** Lacepède, III, 221, 1802; type *ASPIDOPHORUS ARMATUS* Lacepède (*COTTUS CATAPHRACTUS* Lacepède).
- Equivalent to *AGONUS* Bloch & Schneider.
- Aspidophoroides** Lacepède, III, 227, 1802; type *ASPIDOPHOROIDES TRANQUEBAR* Lacepède (*AGONUS MONOPTERYGIUS* Bloch & Schneider).
- Scomberomorus** Lacepède, III, 292, 1802; type *SCOMBEROMORUS PLUMIERI* Lacepède (*SCOMBER REGALIS* Bloch).
- Centropodus** Lacepède, III, 303, 1802; type *SCOMBER RHOMBEUS* Forskål.
- A synonym of *MONODACTYLUS* Lacepède.
- Centronotus** Lacepède, III, 309, 1802; type *CENTRONOTUS CONDUCTOR* Lacepède (*GASTEROSTEUS DUCTOR* Lacepède).
- Not *CENTRONOTUS* Bloch & Schneider, 1801 (*PHOLIS Scopoli*). Replaced by *NAUCRATES* Rafinesque.
- Lepisacanthus** Lacepède, III, 320, 1802; type *LEPISACANTHUS JAPONICUS* Lacepède (*GASTEROSTEUS JAPONICUS* L.).
- Equivalent to *MONOCENTRIS* Bloch & Schneider, 1801. Monotypic.
- Cephalacanthus** Lacepède, III, 323, 1802; type *GASTEROSTEUS SPINARELLA* L.
- The young of some species of *DACTYLOPTERUS*. Monotypic.
- Dactylopterus** Lacepède, III, 325, 1802; type *DACTYLOPTERUS PIRAPEDA* Lacepède (*TRIGLA VOLITANS* L.).
- Equivalent to *CEPHALACANTHUS* Lacepède.
- Prionotus** Lacepède, III, 336, 1802; type *PRIONOTUS EVOLANS* Lacepède. Monotypic.
- Peristedion** Lacepède, III, 368, 1802; type *PERISTEDION MALARMAT* Lacepède (*TRIGLA CATAPHRACTA* L.).
- Monotypic.
- Istiophorus** Lacepède, III, 374, 1802; type *SCOMBER GLADIUS* Broussonet.
- Monotypic. Spelled *HISTIOPHORUS* by Cuvier.
- Apogon** Lacepède, III, 411, 1802; type *APOGON RUBER* Lacepède (*MULUS IMBERBIS* L.).
- Monotypic. Equivalent to *AMIA* Gronow.

- Macropodus** Lacepède, III, 416, 1802; type *MACROPODUS VIRIDIAURATUS* Lacepède.
Monotypic.
- Cheilinus** Lacepède, III, 529, 1802; type *CHEILINUS TRILOBATUS* Lacepède.
Monotypic.
- Cheilodipterus** Lacepède, III, 539, 1802; type *CHEILODIPTERUS LINEATUS* Lacepède = *CHEILODIPTERUS OCTOVITTATUS* Cuv. & Val., as restricted by Cuv. & Val.
- Hologymnosus** Lacepède, III, 556, 1802; type *HOLOGYMNOSUS FASCIATUS* Lacepède (*CORIS ANNULATUS* Lacepède, 1802).
Equivalent to *CORIS*.
- Ostorhinchus** Lacepède, IV, 23, 1803; type *OSTORHINCHUS FLEURIEU* Lacepède.
Monotypic; subgenus of *APOGON*.
- Dipterodon** Lacepède, IV, 165, 1803; type *DIPTERODON HEXACANTHUS* Lacepède.
A species of *APOGON*, as restricted by Jordan & Evermann. *Fishes North Mid. Amer.*, 1106. Not *DIPTERODON* Cuvier.
- Centropomus** Lacepède, IV, 248, 1803; type *SCIÆNA UNDECIMALIS* Bloch, by common consent, as restricted by Cuvier.
Originally a peculiarly confused jumble of species.
- Tænianotus** Lacepède, IV, 303, 1803; type *TÆNIONOTUS TRIACANTHUS* Lacepède, restricted by Cuv. & Val., *Hist. Poiss.*, IV, 371.
- Micropterus** Lacepède, IV, 324, 1803; type *MICROPTERUS DOLOMIEU* Lacepède.
Monotypic.
- Harpe** Lacepède, IV, 426, 1803; type *HARPE CÆRULEO-AUREUS* Lacepède (*LABRUS RUFUS* L.).
A synonym of *BOBIANUS* Bloch and of *HELOPS* Browne.
- Pimelepterus** Lacepède, IV, 429, 1803; type *PIMELEPTERUS BOSCI* Lacepède.
Monotypic. A synonym of *KYPHOSUS* Lacepède.
- Cheilio** Lacepède, IV, 432, 1803; type *CHEILIO AURATUS* Lacepède (*LABRUS INERMIS* Forskål).
- Pomatomus** Lacepède, IV, 435, 1803; type *POMATOMUS SKIB* Lacepède (*PERCA SALTATRIX* L.).
Monotypic. The name afterwards improperly transferred by Cuvier to a genus of *APOGONIDÆ*, *EPIGONUS* Rafinesque.

Leiostomus Lacepède, IV, 438, 1803; type *LEIOSTOMUS XANTHURUS* Lacepède.

Monotypic.

Centrolophus Lacepède, IV, 441; type *PERCA NIGRA* L.

Leiognathus Lacepède, IV, 448; type *LEIOGNATHUS ARGENTEUS* Lacepède (*SCOMBER EDENTULUS* Bloch).

Monotypic. Prior to *EQUULA* Cuvier.

Acanthinion Lacepède, IV, 499, 1803; type *CHÆTODON RHOMBOIDES* L. Equivalent to *TRACHINOTUS*.

Chætodipterus Lacepède, IV, 503; type *CHÆTODIPTERUS PLUMIERI* Lacepède (*ZEUS FABER* Gmelin).

Monotypic.

Pomacentrus Lacepède, IV, 505, 1803; type *CHÆTODON PAVO* Bloch.

By general consent.

Pomadasys Lacepède, IV, 515, 1803; type *SCIÆNA ARGENTEA* Forskål.

Monotypic. Prior to *PRISTIPOMA* Cuvier.

Pomacanthus Lacepède, IV, 517, 1803; type *CHÆTODON ARCUATUS* L., as restricted by Cuvier.

Holacanthus Lacepède, IV, 525, 1803; type *CHÆTODON TRICOLOR* L., as restricted by Cuvier.

Enoplosus (White) Lacepède, IV, 540, 1803; type *CHÆTODON ARMATUS* White.

Monotypic.

Glyphisodon Lacepède, IV, 542, 1803; type *GLYPHISODON MOUCHARRA* Lacepède (*CHÆTODON SAXATILIS* L.).

Equivalent to *ABUDEFDUF* Forskål. Usually written *GLYPHIDODON*.

Aspisurus Lacepède, IV, 556, 1803; type *CHÆTODON SOHAR* Forskål.

Monotypic. Equivalent to *ACANTHURUS* Forskål, *TEUTHIS* L.

Acanthopodus Lacepède, IV, 558, 1803; type *ACANTHOPODUS ARGENTUS* Lacepède (*MONODACTYLUS FALCIFORMIS* Lacepède).

A synonym of *MONODACTYLUS*.

Selene Lacepède, IV, 560, 1803; type *SELENE ARGENTEA* Lacepède (*ZEUS VOMER* Cuvier).

Argyreiosus Lacepède, IV, 566, 1803; type *ZEUS VOMER* L.

Monotypic. A synonym of *SELENE*.

Gallus Lacepède, IV, 583, 1803; type *GALLUS VIRESCENS* Lacepède (*ZEUS GALLUS* L.).

Monotypic. Not *GALLUS* L., a genus of hens. Replaced by *ALECTIS* Rafinesque and *GALLICHTHYS* Cuvier.

Chrysotosus Lacepède, IV, 586, 1803; type ZEUS LUNA Gmelin.

A synonym of LAMPRIS. Monotypic.

Capros Lacepède, IV, 590, 1803; type ZEUS APER L.

Monotypic.

Achirus Lacepède, IV, 658, 1803; type PLEURONECTES ACHIRUS L.

As fixed by Jordan & Gilbert, 1883. ACHIRUS FASCIATUS Lacepède was wrongly supposed to be identical with PLEURONECTES ACHIRUS L.

Makaira Lacepède, IV, 688, 1803; type MAKAIRA NIGRICANS Lacepède.

Monotypic. A synonym of ISTIOPHORUS.

Cirrhitus Lacepède, V, 2, 1803; type CIRRHITUS MACULATUS Lacepède.

Monotypic. Written CIRRHITES by Cuvier.

Cheilodactylus Lacepède, V, 5, 1803; type CHEILODACTYLUS FASCIATUS Lacepède.

Monotypic.

Misgurnus Lacepède, V, 16, 1803; type COBITIS FOSSILIS L.

Monotypic.

Fundulus Lacepède, V, 37, 1803; type FUNDULUS MUDFISH Lacepède (COBITIS HETEROCLITA Gmelin).

Colubrina Lacepède, V, 40, 1803; type COLUBRINA CHINENSIS Lacepède.

An unidentified Chinese painting, probably fictitious.

Butyrinus Lacepède, V, 45, 1803; type BUTYRINUS BANANA Lacepède (ESOX VULPES L.).

Equivalent to ALBULA of Gronow and of Schneider, not ALBULA Osbeck. Should apparently replace ALBULA Gronow.

Tripteronotus Lacepède, V, 47, 1803; type TRIPTERONOTUS HAUTIN Lacepède (SALMO LAVARETUS L.).

Mutilated example. Equivalent to COREGONUS L.

Ompok Lacepède, V, 49, 1803; type OMPOK SILUROIDES Lacepède.

Replaces CALLICHRUS Hamilton.

Macropteronotus Lacepède, V, 84, 1803; type MACROPTERONOTUS CHARMUTH Lacepède (SILURUS ANGUILLARIS L.).

Identical with CLARIAS Gronow.

Malapterurus Lacepède, V, 90, 1803; type SILURUS ELECTRICUS L.

Monotypic. A synonym of TORPEDO Forskål.

Pimelodus Lacepède, V, 93, 1803; type PIMELODUS MACULATUS Lacepède.

As restricted by Cuvier, Gill and authors.

Doras Lacepède, V, 116, 1803; type SILURUS CARINATUS L.

Pogonathus Lacepède, V, 120, 1803; type POGONATHUS COURBINA Lacepède.

Identical with POGONIAS Lacepède, 1802.

Plotosus Lacepède, V, 129, 1803; type *PLATYSTACUS ANGUILLARIS* Bloch
(*SILURUS ANGUILLARIS* Forskål).

Ageneiosus Lacepède, V, 132, 1803; type *AGENEIOSUS ARMATUS* Lacepède
(*SILURUS MILITARIS* L.).

Macrorhamphosus Lacepède, V, 136, 1803; type *SILURUS CORNUTUS* L.
Equivalent to *CENTRISCUS* Cuvier, not of Linnæus.

Centranodon Lacepède, V, 138, 1803; type *CENTRANODON JAPONICUS*
Lacepède (*SILURUS IMBERBIS* Houttuyn) = *CALLIONYMUS IN-*
DICUS L.

Monotypic and unidentifiable, perhaps based on rough notes of *PLATY-*
CEPHALUS.

Hypostomus Lacepède, V, 144, 1803; type *HYPOSTOMUS GUACARI* Lacepède
(*LORICARIA PLECOSTOMUS* L.).

Monotypic. Identical with *PLECOSTOMUS* Gronow.

Corydoras Lacepède, V, 147, 1803; type *CORYDORAS GEOFFROY* Lacepède
(*CATAPHRACTUS PUNCTATUS* Bloch).

Tachysurus Lacepède, V, 150, 1803; type *TACHYSURUS SINENSIS* Lacepède.

A Chinese picture of some species of *ARIUS* Cuvier, which name it replaces, if identifiable.

Osmerus Lacepède, V, 229, 1803; type *SALMO EPERLANUS* L.
Equivalent to *OSMERI* L.

Coregonus Lacepède, V, 239, 1803; type *SALMO LAVARETUS* L.
Equivalent to *COREGONI* L.

Characinus Lacepède, V, 269, 1803; type *SALMO GIBBOSUS* L.
Equivalent to *CHARACINI* L. and to *CHARAX* Gronow, Scopoli.

Serrasalmus Lacepède, V, 283, 1803; type *SALMO RHOMBEUS* L.
Monotypic. Written *SERRASALMO* by Cuvier.

Megalops Lacepède, V, 289, 1803; type *MEGALOPS FILAMENTOSUS* Lacepède.
Monotypic.

Lepisosteus Lacepède, V, 331, 1803; type *LEPISOSTEUS GAVIALIS* Lacepède
(*ESOX OSSEUS* L.).
Usually written *LEPIDOSTEUS*.

Scomberesox Lacepède, V, 344, 1803; type *SCOMBERESOX CAMPERI* Lacepède
(*ESOX SAURUS* Walbaum).
Monotypic.

Aulostomus Lacepède, V, 356, 1803; type *AULOSTOMUS CHINENSIS*
Lacepède (*FISTULARIA CHINENSIS* L.).
Monotypic. Usually written *AULOSTOMA*.

Solenostomus Lacepède, V, 360, 1803; type *FISTULARIA PARADOXA* Pallas.

Monotypic. Not *SOLENOSTOMUS* Gronow nor of Klein.

Hydrargira Lacepède, V, 378, 1803; type *HYDRARGIRA SWAMPINA* Lacepède (*FUNDULUS MAJALIS* Walbaum).

Usually written *HYDRARGYRA*. Monotypic. Not separable from *FUNDULUS*.

Stolephorus Lacepède, V, 381, 1803; type *ATHERINA JAPONICA* Houttuyn (*SPRATTELLOIDES ARGYROTÆNIA* Bleeker).

Restriction of Jordan & Evermann, 1896.

The first species named by Lacepède, *ATHERINA JAPONICA* Houttuyn, was unknown to him, and very scantily and incorrectly described by its discoverer. Several authors—Bleeker, Jordan & Evermann—have assumed this species to be the type, and that it was congeneric with the second species named, from which Lacepède drew up his generic description and of which he gave a figure.

Study of the fauna of Nagasaki shows that no species of the modern genus *STOLEPHORUS* has been yet found there and that the *ATHERINA JAPONICA* of Houttuyn is most likely a description from rough notes or from memory of *SPRATTELLOIDES ARGYROTÆNIA* Bleeker. *ATHERINA JAPONICA* was the first species to be formally named as type of *STOLEPHORUS*. It would have been more convenient to assume the one species known to Lacepède to be his type, reverting to the system of Bleeker, who first acted on this supposition but who named no type formally. In that case *STOLEPHORUS* would become the equivalent of *ANCHOVIELLA* Fowler, 1911. *MENIDIA BROWNE*, if available, would replace both. But it is necessary here as elsewhere to recognize the first formally stated type. If this is regarded as identifiable *STOLEPHORUS* replaces *SPRATTELLOIDES*.

Mugiloides Lacepède, V, 393, 1803; type *MUGILOIDES CHILENSIS* Lacepède (*ESOX CHILENSIS* Molina).

Replaces *PINGUIPES* Cuv. & Val.

Chanos Lacepède, V, 395, 1803; type *CHANOS ARABICUS* Lacepède (*MUGIL CHANOS* L.).

Monotypic.

Mugilomorus Lacepède, V, 397, 1803; type *MUGILOMORUS ANNA-CAROLINA* Lacepède (*ELOPS SAURUS* L.).

Synonym of *ELOPS* L.

Polydactylus Lacepède, V, 419, 1803; type *POLYDACTYLUS PLUMIERI* Lacepède (*POLYNEMUS VIRGINICUS* L.).

As understood by us at present, a synonym of *POLYNEMUS* L.

Buro (Commerson) Lacepède, V, 421, 1803; type *BURO BRUNNEUS* Lacepède (*TEUTHIS HEXAGONATUS* Bleeker).

Monotypic. Same as *SIGANUS*.

Mystus Lacepède, V, 466, 1803; type *MYSTUS CLUPEOIDES* Lacepède (*CLUPEA MYSTUS* L.), a species of *COILIA* Gray.

The name *MYSTUS* is preoccupied.

Clupanodon Lacepède, V, 468, 1803; type *CLUPEA THRISSE* L.

As restricted by Rafinesque, 1815, through substitution for *CLUPANODON* the more euphonious name of *THRISSE*. The name *CLUPANODON* has been variously treated. It should properly replace *KONOSIRUS* Jordan & Snyder, although Lacepède's account of "*CLUPANODON THRISSE*" is taken mainly from the West Indian "Caillieu-Tassart," *OPHISTHONEMA OGLINUM* (Le Sueur), the *CLUPEA THRISSE* of Broussonet, but not of Linnæus.

Mene Lacepède, V, 479, 1803; type *MENE ANNA-CAROLINA* Lacepède (*ZEUS MACULATUS* Bloch), *MENE MACULATA* of authors.

Monotypic.

Dorsuarius Lacepède, V, 482, 1803; type *DORSUARIUS NIGRESCENS* Lacepède.

A species of *KYPHOSUS* Lacepède. Monotypic.

Xyster Lacepède, V, 484, 1803; type *XYSTER FUSCUS* Lacepède.

Equivalent to *KYPHOSUS*. Monotypic.

Cyprinodon Lacepède, V, 486, 1803; type *CYPRINODON VARIEGATUS* Lacepède.

Monotypic.

Murænophis Lacepède, V, 627, 1803; type *MURÆNA HELENA* Lacepède. Equivalent to *MURÆNA* L.

Gymnomuræna Lacepède, V, 648, 1803; type *GYMNOMURÆNA DOLIATA* Lacepède.

As first restricted by Kaup, 1856. Bleeker and Günther have used *G. MARMORATA* Lacepède as type, thus replacing *UROPTERYGIUS* Rüppell. A synonym of *ECHIDNA*.

Murænoblenna Lacepède, V, 652, 1803; type *MURÆNOBLENNA OLIVACEA* Lacepède.

A synonym of *MYXINE* L. Monotypic.

Unibranchapertura Lacepède, V, 656, 1803; type *SYMBRANCHUS MARMORATUS* Bloch.

A synonym of *SYMBRANCHUS*.

LVII. SEWASTIANOFF, *Acarauna, Piscium Thoracices*, 1796 (1802).

Acarauna Sewastianoff, 357; type *ACARAUNA LONGIROSTRIS* Sewastianoff (*GOMPHOSUS CÆRULEUS* Lacepède).

Equivalent to *GOMPHOSUS* Lacepède, and apparently of later date. Not seen by us.

LVIII. COMMERSON, *Lacepède, Histoire Naturelle des Poissons*, II, 1798; III, 1800; IV, V, 1803.

PHILIBERT COMMERSON.

Commerson was an active and accurate naturalist-explorer who collected mainly in the South Seas. His specimens were accompanied by manuscript names, polynomial in form. The author had a full grasp of the meaning of "genus," as he spoke sometimes of a "genus novissimum," XYSTER, for example. Many of his generic names were adopted by Lacepède and have found their way into the system. The others are here enumerated. These have been formally accepted as eligible by the International Commission (Opinions 23 and 24 as to **Antennarius** and **Aspro**). We think that this decision might well be reconsidered as Commerson was not "binomial" and his names were not adopted by the author who first printed them as synonyms.

The names of Commerson may be ineligible as not binomial as to species and not accepted by the author who published them. Accepted provisionally by the International Commission.

Antennarius Commerson, I, 327, 1798, footnote; type ANTENNARIUS BIVERTEX TOTUS ATER PUNCTO MEDIORUM, LATERUM ALBO Commerson (in foot-note) = LOPHIUS COMMERSONIANUS Lacepède.

Equivalent to CHIRONECTES Cuvier and ANTENNARIUS Cuvier. Regarded as eligible, in Opinion 24, International Commission.

Alticus Commerson, II, 458, 1800, footnote under BLENNIUS; type ALTICUS SALTATORIUS PINNA SPURIA IN CAPITE VERTICE, BLENNIUS SALIENS Lacepède.

Accepted by Jordan & Seale, *Fishes Samoa*, 421, 1806. Equivalent to RUPISCARTES Swainson. Cuv. & Val., XI, 337, 1836, adopted the name SALARIAS ALTICUS for the BLENNIUS SALIENS, "un petit SALARIAS qui nous paraît être celui-là même pour lequel Commerson a établi son genre, ALTICUS."

Sciænus Commerson, III, footnote under CARANXOMORUS; type SCIÆNUS EX FUSCO CÆRULESCENS: CARANXOMORUS SACRESTINUS Lacepède, LABRUS FURCATUS Lacepède.

Identical with APHAREUS Cuv. & Val., the name apparently a variant of SCIÆNA. Apparently ineligible.

Naseus Commerson, III, 105, under NASO; type NASEUS FRONTICORNIS FUSCUS Commerson (CHÆTODON FRONTICORNIS L.).

Equivalent to NASO Lacepède, NASEUS Cuv. & Val.

Coryphus Commerson, III, 1802, footnote under CORYPHÆNA; type CORYPHUS CHRYSURUS UNDIQUE DEAURATUS etc. Commerson, CORYPHÆNA CHRYSURUS Lacepède, CORYPHÆNA HIPPIURUS L.

Same as CORYPHÆNA.

Elops Commerson, III, 100, 1802, footnote under GOMPHOSUS; type GOMPHOSUS TRICOLOR Lacepède.

Equivalent to ACARAUNA Sewastianoff or to GOMPHOSUS Lacepède.

Psettus Commerson, III, 1802, footnote under MONODACTYLUS; type PSETTUS SPINIS PINNARUM VENTRALIUM LOCO DUABUS Commerson (MONODACTYLUS FALCIFORMIS Lacepède).

Revived by Cuvier & Valenciennes. A synonym of MONODACTYLUS Lacepède. Not PSETTUS Klein.

Odax Commerson, III, 1802, footnote under SCARUS; type ODAX ODON Commerson = SCARUS CHADRI Lacepède = SCARUS NIGER Forskål.

Monotypic. Equivalent to CALLYODON Gronow. If the names of Commerson are accepted, ODAX Cuvier requires a new name.

Mylio Commerson, III, 131, 1802, footnote under SPARUS; type MYLIO LINEIS LONGITUDINALIBUS PLURIBUS Commerson Ms. = SPARUS MYLIO Lacepède = CHÆTODON BIFASCIATUS Bloch.

Equivalent to SPARUS L.

Aspro Commerson, IV, 273, 1803, footnote; type ASPRO DORSO DIPTERYGIO DENTIBUS RARIS, ET LONGIS ET ENSERTIS etc. Commerson Ms. = CHEILODIPTERUS MACRODON Lacepède, as restricted by Jordan, Opinion 23, *Zoological Nomenclature*, 56, 1910.

A synonym of CHEILODIPTERUS as now restricted. Not ASPRO Cuvier.

Opisotomus Commerson, IV, 1803, footnote.

We have been unable to find this name.

Zanclus Commerson, V, 1803, footnote under CHÆTODON (misprinted ZANCHUS); type ZANCLUS TRANSVERSE FASCIATUS Commerson Ms. = CHÆTODON CORNUTUS Bloch.

Monotypic. Revived by Cuvier & Valenciennes, VII, 102, 1831.

Oculeus Commerson, V, 289, 1803, footnote under MEGALOPS; type OCULEUS SEU MEGALOPS POSTREMO PINNÆ etc. Commerson (MEGALOPS CYPRINOIDES Lacepède).

Equivalent to MEGALOPS.

Aulus Commerson, V, 1803, footnote under FISTULARIA; type AULUS UROGNOMON etc., FISTULARIA TABACARIA L.

Equivalent to FISTULARIA.

Encrasicholus Commerson, V, 382, 1803, footnote under CLUPEA; type ENCRASICHOLUS MANDIBULA INFERIORE BREVIORE, TÆNIA LATERALI ARGENTEA Commerson (CLUPEA VITTARGENTEA Lacepède).

Equivalent to ANCHOVIELLA Fowler (MENIDIA Browne).

Pterichthus Commerson, V, 401, 1803, footnote under EXOCÆTUS; type "PTERICHTHUS PINNIS PECTORALIBUS RADIORUM SEXDECIM VENTRALIBUS INTRA CORPORIS ÆQUILIBRIUM NEQUIDEM AD ANUM APICE PERTINGENTIBUS."

As indicated by Lacepède, this species, the one placed first by Commerson, seems to be EXOCÆTUS VOLITANS L. A synonym of EXOCÆTUS.

Halex Commerson, V, 462, 1803, footnote under CLUPEA; type HALEX CORPORE LATE CATHETEPLATEO etc. Commerson, CLUPEA FASCIATA Lacepède, a species of LEIOGNATHUS Lacepède.

LIX. PLUMIER, *Lacepède, Histoire Naturelle des Poissons*, II, 1798; III, 1800; IV, V, 1803.

CHARLES PLUMIER.

Le Père Plumier, a missionary in Martinique, sent to Lacepède numerous paintings of fishes with descriptions and manuscript names. The generic names used rest on exactly the same basis as those of Commerson. As they were polynomial and as they were not accepted by the author who published them in synonymy, we think that they should not be considered eligible in scientific nomenclature, a matter which awaits final decision.

The names probably not acceptable, as polynomial and as not adopted by the author who printed them.

Orbis Plumier, II, 504, 1800, in footnote under TETRAODON; type ORBIS MINIMUS Plumier = TETRAODON PLUMIERI Lacepède = TETRAODON SPENGLERI Bloch.

A synonym of TETRAODON.

Monoceros Plumier, II, 1800, in footnote under BALISTES; type MONOCEROS PISCIS CLUSII Plumier.

Probably same as MONACANTHUS CHLATUS L. Equivalent to MONOCANTHUS Cuvier. Not MONOCEROS Zimmermann, 1780, a genus of Gasteropods; not MONOCEROS Bloch & Schneider, 1801.

Asellus Plumier, III, 1802, footnote under GOBIOMORUS; type ASELLUS PALUSTRIS Plumier (PLATYCEPHALUS DORMITATOR Bloch & Schneider.

Identical with GOBIOMORUS Lacepède, as restricted. PHILYPNUS Cuvier.

Pelamis Plumier, III, 1802, footnote under SCOMBEROIDES; type PELAMIS MINIMA, VULGO SAUTEUR Plumier (SCOMBER SALIENS Bloch). Identical with OLIGOPLITES Gill. Not PELAMYS Klein.

Trachurus Plumier, III, 1802, footnote under CARANXOMORUS; type TRACHURUS MAXIMUS SQUAMIS MINUTISSIMIS Plumier = CARANXOMORUS PLUMIERIANUS Lacepède = SCOMBER TRACHURUS L. As here restricted, the same as TRACHURUS Rafinesque, 1810.

Scorpius Plumier, III, 1802, footnote under SCORPÆNA; type SCORPIUS NIGER CORNUTUS Plumier (SCORPÆNA PLUMIERI Lacepède).

The name may be available for the subgenus of SCORPÆNA, having the breast scaly (PARASCORPÆNA Bleeker). In the European type of SCORPÆNA, SCORPÆNA FORCUS L., the breast is scaleless.

Sarda Plumier, III, 141, 1802, footnote under SPARUS; type SARDA CAUDA AUREA ET LUNATA Plumier (SPARUS CHRYSURUS Bloch).

Equivalent to OCYURUS Gill. Not SARDA Cuvier, which requires a new name if the generic names of Plumier are accepted. Monotypic.

Erythrinus (ERITRINUS) Plumier, IV, 347; type ERYTHRINUS POLYGRAMMOS, MARIGNAN APUD CARAIBAS Plumier (HONOCENTRUS SOGO Bloch).

A synonym of HOLOCENTRUS; name preoccupied. Elsewhere written ERITRINUS.

Chrysomelanus Plumier, IV, 160, 1803, footnote under SPARUS; type CHRYSOMELANUS PISCIS Plumier, SPARUS CHRYSOMELANUS Lacepède, ANTHIAS STRIATUS Bloch.

A synonym of EPINEPHELUS.

Aper Plumier, IV, 1803, footnote under SPARUS; type APER SEU TURDUS ERYTHRINUS, SQUAMIS AMPLIS Plumier (SPARUS ABILDGAARDI Lacepède).

A synonym of CALLYODON Gronow. Name preoccupied.

Guaperva Plumier, IV, footnote under SELENE; type GUAPERVA MARCGRAVII, VULGO LA LUNE Plumier (SELENE ARGENTEA Lacepède).

Identical with SELENE.

Sargus Plumier, IV, 166, footnote under DIPTERODON; type SARGUS EX AURO VIRGATUS Plumier (DIPTERODON PLUMIERI Lacepède = SPARUS SYNAGRIS L.

Same as NEOMÆNIS Girard. Not SARGUS Klein nor Cuvier. Not SARGUS Fabricius, about 1798, a genus of flies.

Pagrus Plumier, IV, 1803, footnote under BODIANUS; type PAGRUS LEUCOPHÆUS VULGO VIVANET GRIS APUD MARTINICAM Plumier = BODIANUS VIVANET Lacepède = LUTIANUS GRISEUS (L.).

Not PAGRUS Cuvier, 1817. Equivalent to NEOMÆNIS Girard; same as SALPA Catesby.

Chromis Plumier, III, 546, 1803, footnote under CHEILODIPTERUS; type CHROMIS SEU TEMBRA AUREO-CÆRULEA LITTURIS FUSCA VARIEGATA Plumier (CHEILODIPTERUS CYANOPTERUS Lacepède), the "grygry" or "grogro" of Martinique, UMBRINA COROIDES Cuv. & Val.

The name is older than UMBRINA, but later than CROMIS Browne. The specific name UMBRINA CYANOPTERA (Lacepède), based on Plumier's figure, must replace COROIDES and BROUSSONETI for this species.

Cheloniger Plumier, IV, 542, 1803, footnote under CHEILODIPTERUS; type CHELONIGER EX AURO ET ARGENTEO VIRGATUS Plumier (CHEILODIPTERUS CHRYSOPTERUS Lac. (PERCA NOBILIS L.).

The name CHELONIGER, if eligible, has priority over CONODON Cuvier.

Cephalus Plumier, V, 1803; type CEPHALUS AMERICANUS VULGO ATOULRI Plumier (MUGIL CEPHALUS L.).

A synonym of MUGIL L.

Trichis Plumier, V, 1803, footnote under CLUPEA ALOSA; type "TRICHIS BELLONII LA PUCELLE" Plumier.

Doubtful, but wrongly identified by Lacepède with CLUPEA ALOSA L.

Acus Plumier, V, 1803, footnote under SPHYRÆNA; type ACUS AMERICANA, ROSTRI LONGIORI Plumier (SPHYRÆNA ACUS Lacepède).

Same as SPHYRÆNA Röse, 1793.

LX. SHAW, *General Zoology, or Systematic Natural History*, vol. IV, 1803; vol. V, 1804.

GEORGE SHAW.

Anguilla Shaw, IV, 15, 1803; type ANGUILLA VULGARIS Shaw (MURÆNA ANGUILLA L.).

The name ANGUILLA has been ascribed to Thunberg, but we find no notice of its use as a generic term prior to Shaw.

Vandellius Shaw, IV, 199, 1803.

Needless substitute for LEPIDOPUS Gouan.

Trichopus Shaw, IV, 392, 1803; type TRICHOPUS PALLASI Shaw (LABRUS TRICHOPTERUS Pallas).

Equivalent to OSPHRONEMUS Lacepède.

Cephalus Shaw, V, 432, 1804; type DIODON MOLA L.

Equivalent to MOLA Cuvier. Not CEPHALUS Plumier.

Trachichthys Shaw, IV, 630, 1803; type TRACHICHTHYS AUSTRALIS Shaw.

Spatularia Shaw, V, 362, 1804; type SPATULARIA RETICULATA (SQUALUS SPATHULA Walbaum).

Synonym of POLYODON Lacepède.

LXI. HERRMANN, *Observationes Zoologicae*, 1804.

JOHANN HERRMANN.

Notistium Herrmann, 305, 1804; type NOTISTIUM GLADIUS Herrmann.

Equivalent to ISTIOPHORUS Lacepède.

LXII. GIORNA, *Mémoire Sur des Poissons d'Espèces Nouvelles et de genres nouveaux*: Mémoires de l'Académie Impériale de Torino, XVI, 1803-1808.

MICHEL ESPRIT GIORNA.

Lophotes Giorna, 19, 1805; type LOPHOTES CEPEDIANUS Giorna.

Cœlorhynchus Giorna, 18, 1805; type CÆLORHYNCHUS LA VILLE Giorna.

Trachyrhynchus Giorna, 18, 1805; type (not named) LEPIDOLEPRUS TRACHYRINCUS Risso, 1810.

An earlier paper of Giorna is quoted by Dean, *Mémoire sur cinq poissons dont deux sont d'espèces nouvelles . . . et les trois autres sont de nouveaux genres*: Mém. Acad. Imp. Torino. The date of this paper is variously given. The three genera above noted were not named. Giorna would not give the nomenclature until he heard from Lacepède, to whom he had sent descriptions and drawings. The two species indicated were RAIA GIORNA Lacepède and BALISTES BUNIVA Lacepède.

LXIII. QUENSEL, *Forsäk at Narmäre Bestämna och naturligare Uppställa Svensk Arterna af Flunderslagte*: Kong. Vet. Akad. Nya Handling, XXVII, 1806.

C. QUENSEL.

Solea Quensel, XXVII, 44, 203, 1806; type PLEURONECTES SOLEA L.

LXIV. DUMÉRIL, *Zoologie Analytique*, 1806.

ANDRÉ MARIE CONSTANT DUMÉRIL.

This work furnishes in the Index, pp. 342, 343, Latin equivalents for French vernacular names used by Lacepède, *Hist. Nat. Poiss.*, I, II, 1798, 1800. (Partly examined by us, some of the pages not verified).

Squatina Duméril, 102, 342; type (not named) *SQUATINA ANGELUS* Duméril (*SQUALUS SQUATINA* L.).

Equivalent to *RHINA* Klein.

Torpedo Duméril, 102, 343; type (not named) *RAJA TORPEDO* L.

Not *TORPEDO* Forskål. Same as *NARCACION* Klein. *NARCOBATIS* Blainville.

Ovoïdes (Lacepède) Duméril, 108, 342; type *L'OVOÏDE FASCÉ*.

Based on a front view of *TETRAODON STELLATUS* L.

Equivalent to *OVOÏDES* Cuvier and *OVUM* Bloch & Schneider.

Apterichthys Duméril, 112, 331; type *MURÆNA CÆCA* L.

Substitute for *CÆCILIA* Lacepède, preoccupied. A synonym of *SPHAGEBRANCHUS* Bloch.

Bostrichthys Duméril, 120, 332; type *BOSTRYCHUS SINENSIS* Lacepède.

Name a substitute for *BOSTRYCHUS*, preoccupied.

Spheroides (Lacepède) Duméril, 342; type "LE SPHÉROÏDE TUBERCULÉ" Lacepède, 1798.

A front view of *TETRAODON SPENGLERI* Bloch. A synonym of *TETRAODON*, as restricted by Bleeker.

Macrorhynchus (Lacepède) Duméril, 342; type "MACRORHYNQUE ARGENTÉE" Lacepède (*SYNGNATHUS ARGENTEUS* Osbeck).

A species near *DICROTUS PROMETHEOIDES* Bleeker. Probably replaces *DICROTUS* Günther.

LXV. DUMÉRIL, *Dictionnaire des Sciences Naturelles*, 1806.

ANDRÉ MARIE CONSTANT DUMÉRIL.

Torpedo Duméril, pl. 21; type *RAJA TORPEDO* L.

Not *TORPEDO* Forskål, 1775; replaced by *NARCACION* Klein or by *NARCOBATIS* Blainville.

LXVI. HUMBOLDT, *Ueber den Eremophilus und den Astroblepus, zwei neue Fisch-Gattungen*: *Observationes Zoologicae, and in Philos. Mag.*, XXIV, 1806.

ALEXANDER VON HUMBOLDT.

Eremophilus Humboldt, 17, 329; type EREMOPHILUS MUTISII Humboldt.

Astroblepus Humboldt, 19, 331; type ASTROBLEPUS GRIXALVII Humboldt.

LXVII. DUMÉRIL, *Dissertation sur les Poissons CYCLOSTOMES*, 1808.

ANDRÉ MARIE CONSTANT DUMÉRIL.

Ammocœtus Duméril; type PETROMYZON PLANERI L.

The larva of LAMPETRA FLUVIATILIS (L.) and of PETROMYZON MARINUS L. Preferably retained, under the usual spelling, AMMOCÆTES, as a designation for larval lampreys. Otherwise replaces LAMPETRA Gray, 1854; type PETROMYZON FLUVIATILIS L.

LXVIII. TILESIIUS, *Descriptions de quelques Poissons*: Krusenstern's Reise um die Welt., Mem. Soc. Nat. Moscow, II, 1809.

W. G. VON TILESIIUS.

Not seen by us.

Ericius Tilesius, 213, 1809; type ERICIUS (JAPONICUS Houttuyn).

A synonym of MONOCENTRIS Bloch & Schneider.

Hexagrammos (Steller) Tilesius, *Actæ Academ. Petropol.*, II, 335, 1809; type HEXAGRAMMOS STELLERI Tilesius (HEXAGRAMMOS ASPER Tilesius).

Often written HEXAGRAMMUS.

LXIX. GEOFFROY SAINT HILAIRE, *Poissons du Nil, de la Mer Rouge et de la Méditerranée*: in *Description de l'Égypte*, publiée par Napoléon le Grand, *Histoire Naturelle*, I, 1809-1827.

ÉTIENNE FRANÇOIS GEOFFROY SAINT HILAIRE.

In this huge folio a few species of fishes are described in great detail, with steel engravings. The work is in three parts, published in 1809,

1818, and 1825, respectively, the second and third parts being prepared by Isidore Geoffroy Saint Hilaire.

Polypterus Geoffroy St. Hilaire, I, 1809; type POLYPTERUS BICHR St. Hilaire.

LXX. PALLAS, *Labraces novum piscium genus Oceani Orientalis*: Mem. Acad. Sci. Petersb., II, 1810.

PETER SIMON PALLAS.

Labrax Pallas, II, 382, 1810; type LABRAX LAGOCEPHALUS Pallas.
Not of Klein nor of Cuvier. A synonym of HEXAGRAMMOS Steller.

LXXI. RISSO, *Ichthyologie de Nice*, 1810.

ANASTASE RISSO.

Cephalopterus Risso, 14; type RAJA GIORNA Lacepède.

Not CEPHALOPTERUS of Geoffroy St. Hilaire, 1809, a genus of birds. Equivalent to MOBULA Rafinesque.

Lepidoleprus Risso, 197; type LEPIDOLEPRUS TRACHYRHYNCHUS Risso.
A synonym of TRACHYRHYNCHUS Giorna.

Tetragonurus Risso, 347; type TETRAGONURUS CUVIERI Risso.

LXXII. RAFINESQUE, *Caratteri di Alcuni Nuovi Generi e Nuove Specie di Animale e Piante della Sicilia*, April 1, 1810.

CONSTANTINE SAMUEL RAFINESQUE-SCHMALTZ
(later written simply "RAFINESQUE").

Carcharias Rafinesque, 10; type CARCHARIAS TAURUS Rafinesque.

The intended type was SQUALUS CARCHARIAS L., but C. TAURUS is the only species actually mentioned. Monotypic. Replaces ODONTASPIS Agassiz. Not CARCHARIAS Cuvier, 1817.

Dalatias Rafinesque, 10; type DALATIAS NOCTURNUS Rafinesque.

Gray in 1851 restricted DALATIAS to D. SPAROPHAGUS Rafinesque. Swainson, 1838, formally restricted DALATIAS to DALATIAS NOCTURNUS, which seems to be a species of CENTROPHORUS Müller & Henle, probably C. GRANULOSUS.

Tetroras Rafinesque, 11; type TETRORAS ANGIOVA Rafinesque.

A second-hand and erroneous description, possibly referring to CETORHINUS MAXIMUS, but unrecognizable. Monotypic.

Isurus Rafinesque, 11; type *ISURUS OXYRHYNCHUS* Rafinesque.

Monotypic. Replaces *OXYRHINA* Agassiz.

Cerictius Rafinesque, 12; type *CERICTIUS MACROURUS* Rafinesque.

Apparently imaginary.

Alopias Rafinesque, 12; type *ALOPIAS MACROURUS* Rafinesque (*SQUALUS VULPINUS* Bonnaterre).

Monotypic.

Heptranchias Rafinesque, 13; type *SQUALUS CINEREUS* Gmelin.

Monotypic.

Galeus Rafinesque, 13; type *GALEUS MUSTELUS* L.

As restricted by Jordan & Evermann, 1896, after Leach, 1812. Later restricted to *PRISTIURUS MELASTOMUS* by Garman. Not *GALEUS* Valmont, nor *GALEUS* Cuvier.

Rafinesque describes one new species of *GALEUS*, *G. MELASTOMUS*, but refers in the text to *GALEUS CATULUS* and *GALEUS MUSTELUS*. Unless *GALEUS* Valmont holds, in place of *PRIONACE*, *GALEUS* becomes a synonym of *MUSTELUS* Linck.

Hexanchus Rafinesque, 14; type *SQUALUS GRISEUS* L.

Monotypic. Replaces *NOTIDANUS* Cuvier.

Etmopterus Rafinesque, 14; type *ETMOPTERUS ACULEATUS* Rafinesque.

Monotypic. Replaces *SPINAX* Cuvier.

Rhina Rafinesque, 14; type *SQUALUS SQUATINA* L.

Monotypic. Identical with *RHINA* Klein, and *SQUATINA* Duméril.

Leiobatus Rafinesque, 16; type *LEIOBATUS PANDURATUS* Rafinesque.

Monotypic. A synonym of *RHINOBATUS* Linck. Not *LEIOBATUS* Klein.

Dipturus Rafinesque, 16; type *RAJA BATUS* L.

Monotypic. Identical with *RAJA* L.

Dasyatis Rafinesque, 16; type *DASYATIS UJO* Rafinesque (*RAJA PASTINACA* L.).

Monotypic. Identical with *DASYBATUS* Klein and *TRYGON* Adanson.

Orthragus Rafinesque, 17; type *TETRAODON MOLA* L.

Monotypic. Equivalent to *MOLA* Kœlreuter.

Diplanchias Rafinesque, 17; type *DIPLANCHIAS NASUS* Rafinesque.

Monotypic. Equivalent to *MOLA*.

Typhle Rafinesque, 18; type *TYPHLE HEXAGONUS* Rafinesque (*SYNGNATHUS TYPHLE* L.).

Misspelled *TYPHLE*. Preoccupied by *TYPHLE* * Lacepède, 1800, a genus of mammals. Replaced by *TYPHLINUS* Rafinesque, 1815, and by *SIPHONOSTOMUS* Kaup. Monotypic.

* Under the head of *CÆCILIA*, Lacepède refers to its alleged blindness, a character almost unknown among vertebrates. "Parmi lesquels on ne connoît encore qu'un mammifère, nommé *TYPHLE*, et le genre des cartilagineux nommés *GASTROBRANCHES* qui aient paru complètement aveugles."

- Siphostoma** Rafinesque, 18; type *SYNGNATHUS PELAGICUS* L.
 Monotypic. A synonym of *SYNGNATHUS* L. as the latter is now restricted.
- Hippocampus** Rafinesque, 18; type *SYNGNATHUS HIPPOCAMPUS* L.
 (*HIPPOCAMPUS HEPTAGONUS* Rafinesque).
- Oxyurus** Rafinesque, 19; type *OXYURUS VERMIFORMIS* Lacepède.
 A larva, probably of *CONGER*.
- Scarcina** Rafinesque, 20; type *SCARCINA ARGYREA* Rafinesque.
 A synonym of *LEPIDOPUS* Gouan.
- Luvarus** Rafinesque, 22; type *LUVARUS IMPERIALIS* Rafinesque.
 Monotypic.
- Bothus** Rafinesque, 23; type, as restricted, *BOTHUS RUMOLO* Rafinesque
 (*PLEURONECTES RHOMBUS* L.).
 Equivalent to *RHOMBUS* Klein, of earlier date.
- Corystion** Rafinesque, 24; type *CORYSTION MUSTAZOLA* Rafinesque.
 Some species of *TRACHINUS* L. Monotypic.
- Merluccius** Rafinesque, 25; type *GADUS MERLUCCIUS* L. (*MERLUCCIUS SMIRIDUS* Rafinesque).
 Monotypic.
- Phycis** Rafinesque, 26; type *PHYCIS PUNCTATUS* Rafinesque.
 Not *PHYCIS* Fabricius, 1798, a genus of Butterflies. Equivalent to *PHYCIS* Röse, 1793, which is not preoccupied.
- Oxycephas** Rafinesque, 31; type *OXYCEPHAS SCABRUS* Rafinesque.
 A species of *TRACHYRHYNCHUS* Giorna, 1805. Monotypic.
- Lepimphis** Rafinesque, 33; type *LEPIMPHIS HIPPUROIDES* Rafinesque
 (*CORYPHÆNA HIPPURUS* L.).
 Identical with *CORYPHÆNA*.
- Symphodus** Rafinesque, 41; type *SYMPHODUS FULVESCENS* Rafinesque
 = *LUTIANUS ROSTRATUS* Bloch = *LABRUS SCINA* Forskål.
 Replaces *CORICUS* Cuvier.
- Trachurus** Rafinesque, 41; type *SCOMBER TRACHURUS* L. (*TRACHURUS SAURUS* Rafinesque).
 By general usage and by tautonomy.
- Tricropterus** Rafinesque, 41; type by definition, *SCOMBER CARANGUS*
 Bloch (*SCOMBER HIPPOS* L.).
 Not separable from *CARANX*; no species named.
- Hypodis** Rafinesque, 41; type *SCOMBER GLAUCUS* L.
 Equivalent to *GLAUCUS* Klein; not separable from *CÆSIOMORUS* Lacepède.
- Centracanthus** Rafinesque, 42 (misprinted *CENTRACANTUS*); type *CENTRACANTUS CIRRUS* Rafinesque (*SMARIS INSIDIATOR* Cuv. & Val.).
 Monotypic; probably a specimen with the dorsal fin torn. This seems to be generically different from *SPICARA* Rafinesque, *SMARIS* Cuvier. Afterwards spelled *CENTRACANTHA*.

Hypacanthus Rafinesque, 43 (misprinted HYPACANTUS); type "SCOMBER ACULEATUS L."

But there is no such species of Linnæus. Rafinesque elsewhere identifies it with *CENTRONOTUS VADIGO* Lacepède, which is the type of *CAMPTOGRAMMA* Regan, 1903. This name must be replaced by *HYPACANTHUS*.

Naucrates Rafinesque, 43; type *NAUCRATES FANFARUS* Rafinesque (*GASTEROSTEUS DUCTOR* L.).

Replaces *CENTRONOTUS* Lacepède, preoccupied.

Notognidion Rafinesque, 46; type *NOTOGNIDION SCIRENGA* Rafinesque. Unidentified. Monotypic.

Spicara Rafinesque, 51; type *SPICARA FLEXUOSA* Rafinesque (*SPARUS SMARIS* L.).

Equivalent to *SMARIS* Cuvier and having priority. Monotypic.

Aylopon Rafinesque, 52; type *LABRUS ANTHIAS* L.

A substitute for *ANTHIAS* Bloch, said to be preoccupied. We do not find it so.

Lopharis Rafinesque, 52; type *PERCA LOPHAR* Forskål.

Identical with *POMATOMUS* Lacepède. Monotypic.

Lepterus Rafinesque, 52; type *LEPTERUS FETULA* Rafinesque (*STROMATEUS FIATOLA* L.).

Identical with *STROMATEUS* L. Monotypic.

Gonenion Rafinesque, 53; type *GONENION SERRA* Rafinesque (*PERCA LOPHAR* Forskål).

Identical with *POMATOMUS* Lacepède. Monotypic.

Lepodus Rafinesque, 53; type *LEPODUS SARAGUS* Rafinesque (*SPARUS RAI* Bloch).

Monotypic. Equivalent to *BRAMA* Bloch & Schneider, not of Klein. Replaces *BRAMA* Cuvier, if Klein's names are eligible.

Tetrapturus Rafinesque, 54; type *TETRAPTURUS BELONE* Rafinesque.

Argyctius Rafinesque, 55; type *ARGYCTIUS QUADRIMACULATUS* Rafinesque.

Equivalent to *TRACHYPTERUS* Gouan.

Tirus Rafinesque, 56; type *TIRUS MARMORATUS* Rafinesque (*ESOX SYNODUS* L.).

Equivalent to *SYNODUS*.

Lucius Rafinesque, 59; type *ESOX LUCIUS* L. (*LUCIUS VORAX* Rafinesque).

The author attempts to limit the name *ESOX* to *ESOX BELONE* L., and its allies, an arrangement not accepted by the International Commission, (Opinion 58).

Sudis Rafinesque, 60; type *SUDIS HYALINA* Rafinesque.

Monotypic.

Sayris Rafinesque, 60; type SAYRIS RECURVIROSTRA Rafinesque (ESOX SAURUS Walbaum).

A needless substitute for SCOMBERESOX.

Cogrus Rafinesque, 62; type COGRUS MACULATUS Rafinesque.

COGRUS is a tenable subgenus of OPHICHTHUS.

Piescephalus Rafinesque, 63; type PIESCEPHALUS ADHERENS Rafinesque (LEPADOGASTER GOUANI Gouan).

A synonym of LEPADOGASTER Gouan.

Echelus Rafinesque, 63; type by first restriction (Bleeker, *Atlas Ichth., Muræn.*, p. 30) ECHELUS PUNCTATUS Rafinesque (MURÆNA MYRUS L.).

Identical with MYRUS Kaup, 1856. Restricted later by Jordan & Evermann to species of CONGER, but the earliest arrangement must hold.

Nettastoma Rafinesque, 66; type NETTASTOMA MELANURA Rafinesque. Monotypic.

Dalophis Rafinesque, 68; type DALOPHIS SERPA Rafinesque (SPHAGEBRANCHIUS IMBERBIS De la Roche, 1809).

Equivalent to CÆCULA Vahl.

LXXIII. RAFINESQUE, *Indice d'Ittiologia Siciliana*, May, 1810.

CONSTANTINE SAMUEL RAFINESQUE-SCHMALTZ.

Onus Rafinesque, 12; type ONUS RIALI Rafinesque (GADUS MERLUCIUS L.).

A needless substitute for MERLUCCIUS.

Merolepis Rafinesque, 25; type SPARUS MASSILIENSIS Lacepède (SPARUS ZEBRA Brünnich).

Probably a genus distinct from MÆNA Cuvier.

Gaidropsarus Rafinesque, 11, 51; type GAIDROPSARUS MUSTELLARIS Rafinesque (GADUS MUSTELA L.).

Antedates MOTELLA Cuvier. Monotypic.

Strinsia Rafinesque, 12, 51; type STRINSIA TINCA Rafinesque.

Monotypic.

Symphurus Rafinesque, 13, 52; type SYMPHURUS NIGRESCENS Rafinesque.

Antedates APHORISTIA Kaup, but not PLAGUSIA Browne.

Solea Rafinesque, 14, 52; type SOLEA BUGLOSSA Rafinesque (PLEURONECTES SOLEA L.).

Equivalent to SOLEA Quensel.

Scophthalmus Rafinesque, 14, 53; type *PLEURONECTES RHOMBUS* L.

As later restricted, identical with *BOTHUS* Rafinesque and *RHOMBUS* Klein. *SCOPHTHALMUS* is based on descriptions, *BOTHUS* on specimens of the same two species.

Diplodus Rafinesque, 26, 54; type *SPARUS ANNULARIS* L.

Equivalent to *SARGUS* Cuvier and prior, but not prior to *SARGUS* Klein.

Octonus Rafinesque, 29, 54; type *OCTONUS OLOSTEON* Rafinesque (*TRIGLA CATAPHRACTA* L.).

Monotypic. Equivalent to *PERISTEDION* Lacepède.

Cephalepis Rafinesque, 31, 54; type *CEPHALEPIS OCTOMACULATUS* Rafinesque.

A synonym of *REGALECUS* Ascanius. Monotypic.

Myctophum Rafinesque, 35, 56; type *MYCTOPHUM PUNCTATUM* Rafinesque.

Nerophis Rafinesque, 37, 57; type *SYNGNATHUS OPHIDION* L.

Monotypic.

Carapus Rafinesque, 37, 57; type *GYMNOTUS ACUS* L.

Prior to *FIERASFER* Cuvier. Not *CARAPUS* Cuvier = *GITON* Kaup.

Sturio Rafinesque, 41, 58; type *STURIO VULGARIS* Rafinesque (*ACIPENSER STURIO* L.).

Capriscus Rafinesque, 41, 58; type *CAPRISCUS PORCUS* Rafinesque (*BALISTES CAPRISCUS* Gmelin, "the third division of Lacepède").

Equivalent to *BALISTES* L.

Chlopsis Rafinesque, 42, 58; type *CHLOPSIS BICOLOR* Rafinesque.

Monotypic.

Xypterus Rafinesque, 43, 59; type *XYPTERUS IMPERATI* Rafinesque.

Apparently a synonym of *REGALECUS* Ascanius. Monotypic.

Pterurus Rafinesque, 43, 59; type *PTERURUS FLEXUOSUS* Rafinesque (*SPHAGEBRANCHUS IMBERBIS* De la Roche).

Name preoccupied: a synonym of *CÆCULA* Vahl.

Oxynotus Rafinesque, 45, 60; type *SQUALUS CENTRINA* L.

Prior to *CENTRINA* Cuvier, 1817.

Sphyrna Rafinesque, 46, 60; type *SQUALUS ZYGÆNA* L.

Prior to *ZYGÆNA* Cuvier.

Torpedo Rafinesque, 48, 60; type *TORPEDO OCELLATA* Rafinesque (*RAJA TORPEDO* L.).

Not *TORPEDO* Forskål.

Mobula Rafinesque, 48, 61; type *MOBULA AURICULATA* Rafinesque (*RAJA MOBULAR* Lacepède).

Same as *CEPHALOPTERUS* Risso, preoccupied.

Cephalotherus Rafinesque, 48, 61; type *CEPHALEUTHERUS MACULATUS* Rafinesque.

Apparently a deformed *RAJA*. Monotypic.

Uroxis Rafinesque, 48, 61; type *UROXIS UJUS* Rafinesque (*RAJA PASTINACA* L.).

Monotypic. Equivalent to *DASYATIS* Rafinesque.

Apterurus Rafinesque, 48, 62; type *APTERURUS FABRONI* Rafinesque.

Equivalent to *MOBULA* Rafinesque.

Oxystomus Rafinesque, 49, 62; type *OXYSTOMUS HYALINUS* Rafinesque, larva of *OPHISURUS SERPENS* (L.).

A synonym of *OPHISURUS* Lacepède.

Helmictis Rafinesque, 49, 62; type *HELMICTIS PUNCTATUS* Rafinesque, 1810.

Probably a species of *CÆCULA*. Monotypic.

Epigonus Rafinesque, 64; type *EPIGONUS MACROPHthalmus* Rafinesque.

Equivalent to *POMATOMUS* Cuvier, not of Lacepède. Monotypic.

Gonostoma Rafinesque, 64; type *GONOSTOMA DENUDATUM* Rafinesque.

Monotypic.

Merlangus Rafinesque, 67; type *GADUS MERLUCIUS* L.

A needless substitute for *ONUS* and *MERLUCCIUS*.

LXXIV. STELLER in *Tilesius*: Mem. Acad. Sci., Petersburg, 1811.

GEORG WILHELM STELLER.

Myoxocephalus Steller, in *Tilesius*, IV, 273; type *MYOXOCEPHALUS STELLERI* Tilesius.

LXXV. PALLAS, *Zoographia Rosso-Asiatica*, III, 1811.

PETER SIMON PALLAS.

This important work was printed and partly distributed in 1811, the bulk of the edition being withheld until 1831.

Phalangistes Pallas, 113; type *COTTUS CATAPHRACTUS* L.

As restricted by Jordan & Evermann. Also written *PHALANGISTA*. Not *PHALANGISTA* Cuvier, 1800, a genus of mammals. Equivalent to *AGONUS* Lacepède.

Elæorhoüs Pallas, 122; type *CALLIONYMUS BAICALENSIS* Pallas.

A synonym of *COMEPHORUS* Lacepède.

Gasteracanthus Pallas, 228; type *GASTERACANTHUS CATAPHRACTUS* Pallas.

Equivalent to *GASTEROSTEUS* L.

Coracinus Pallas, 256; type *CORACINUS CHALCIS* Pallas (*SCIENA NIGRA* Bloch).

Equivalent to *CORVINA* Cuvier, 1829. Not *CORACINUS* Gronow, which is *DIPTERODON* Cuvier.

Lebius (Steller Ms.) Pallas, 279; type *LABRAX SUPERCILIOSUS* Pallas, "LEBIUS, CHIRUS VEL LABRAX Steller, Mss. Obs. Ichthyol."

These three names are indicated in Steller's unprinted manuscripts as words from which choice could be made.

Chirus (Steller Ms.) Pallas, 279; type *LABRAX SUPERCILIOSUS* Pallas.

Like the preceding synonym of *LABRAX* or *HEXAGRAMMOS*.

Plagyodus (Steller Ms.) Pallas, 383; type *PLAGYODUS* Steller (*ALEPISAUROS ÆSCULAPIUS* Bean).

Equivalent to *ALEPISAUROS* Lowe, 1833, the name used by Steller only in an oblique case, "PLAGYODONTEM" and without specific name.

LXXVI. LEACH, *Observations on the genus SQUALUS*, 1812.

WILLIAM E. LEACH.

Mustelus Leach, 62; type *SQUALUS MUSTELUS* L.

LXXVII. MONTAGU, *Wernerian Museum*, I, 1812.

GEORGE MONTAGU.

Xipotheca Montagu, I, 82; type *XIPOTHECA TETRADENS* Montagu = *LEPIDOPUS CAUDATUS* (Euphrasen).

A synonym of *LEPIDOPUS*.

LXXVIII. FISCHER, *Zoognosia, Tabulis Synopticus Illustrata*, Edition III, vol. I, 1813.

GOTTHELF FISCHER.

A series of Analytical Keys, leading to genera only.

Histrio Fischer, 70, 78; type (not named) *LOPHIUS HISTRIO* L., by tautonomy.

Diagnosis erroneous, by misprint "corpus depressum" instead of "corpus compressum." Has precedence over *PTEROPHRYS* Gill and *PTEROPHRYNOIDES* Gill.

Ogcocephalus Fischer, 70, 78; type not named; evidently by definition,
LOPHIUS VESPERTILIO L.

Replaces MALTHE Cuvier.

Orbis (Lacepède) Fischer, 70; no type named.

Said to be like DIODON but "ad minus 4 dentes in maxilla superiore." Evidently a misprint for "2 dentes." It is probably a synonym of OVOIDES Cuvier, the presumable type being TETRAODON LINEATUS L., the "ORBIS" of Salviani and Rondelet.

Odontolepis Fischer, 71, 78; no type named.

A flounder with "pinnæ pectorales tenuissimæ aut nullæ, reliquis conjunctis." The type may be assumed as SYMPHURUS NIGRESCENS. A synonym of SYMPHURUS Rafinesque, 1810. Perhaps species of MONOCHIRUS or MICROCHIRUS were included.

Psilus Fischer, 74.

A substitute for BOSTRYCHUS Lacepède, which is preoccupied. Equivalent to BOSTRICHTHYS Duméril.

Psiloides Fischer, 74.

A needless substitute for BOSTRYCHOIDES Lacepède.

Typhlotes Fischer, 75.

A substitute for CÆCILIA Lacepède, preoccupied. A synonym of SPHAGEBRANCHUS Bloch.

Mustellus Fischer, 78; type (not named) SQUALUS MUSTELUS L.

A synonym of MUSTELUS Linck, not of Valmont.

LXXIX. FISCHER, *Recherches Zoologiques: Mémoires de la Société Impériale des Naturalistes de Moscou*, IV, second edition, 1813.

Eleginus Fischer, 252; type GADUS NAVAGA Kœlreuter.

Replaces TILESIA Swainson, 1839 (preoccupied) and PLEUROGADUS Bean, 1885. Not ELEGINUS Cuv. & Val., 1830, which becomes ELEGINOPS Gill.

LXXX. LEACH, *Zoological Miscellany*, 1814.

WILLIAM E. LEACH.

Hippocampus Leach, 103; type SYNGNATHUS HIPPOCAMPUS L. (HIPPOCAMPUS ANTIQUORUM Leach).

Same as HIPPOCAMPUS Rafinesque, 1810.

LXXXI. MITCHILL, *Report in Part on the Fishes of New York*, 1814.

SAMUEL LATHAM MITCHILL.

Stomodon Mitchill, 7; type STOMODON BILINEARIS Mitchill.

Equivalent to MERLUCCIUS Rafinesque.

Morone Mitchill, 18; type MORONE PALLIDA Mitchill (PERCA AMERICANA Gmelin).

As restricted by Gill, 1860.

Tautoga Mitchill, 23; type TAUTOGA NIGER Mitchill (LABRUS ONITIS L.).

Roccus Mitchill, 25; type ROCCUS STRIATUS Mitchill (SCIÆNA LINEATA Bloch).

As restricted by Gill.

LXXXII. RAFINESQUE, *Descrizione di un Nuovo Genere di Pesce*:
Specchio delle Scienze, Palermo, 1814.

CONSTANTINE SAMUEL RAFINESQUE.

Leptopus Rafinesque, I, 16; type LEPTOPUS PEREGRINUS Rafinesque.

Monotypic. Name preoccupied and later changed to PODOLEPTUS Rafinesque, 1815. Apparently a synonym of LOPHOTES Giorna.

LXXXIII. RAFINESQUE, *Descrizione di un Nuovo Genere di Pesce*
Siciliano: Specchio delle Scienze, II, 1815.

Nemochirus Rafinesque, II, 100, 105; type NEMOCHIRUS ERYTHROPTERUS Rafinesque.

Unrecognized.

The following is Rafinesque's account of this fish:

NEMOCHIRUS. Corpo lanceolato compressissimo ensiforme, fronte diagonale, bocca dentata, un' ala dorsale longitudinale senza raggi sciolti, ala caudale sciolta, nessun' ala anale, le due ale pettorali filiformi avvicinate e situate sotto la gola al posto delle ventrali.

NEMOCHIRUS ERYTHROPTERUS. Corpo argentato, ale rosse, coda lunulata, con un raggio intermedio mucronato sciolto lunghissimo e filiforme, tre macchie fosche da ogni lato del dorso.

Descrizione. Lunghezza totale due palmi, muso ottuso, mascella inferiore più corta con denti acuti, occhi piccoli neri, iride grande argentina con un cerchio rosso esteriore, opercolo doppio: corpo d'un bel colore argenteo, con tre macchie irregolari fosche di ogni lato del dorso, linea laterale dritta, ventre un poco reti-

colato. Ale pettorali rosse lineari-filiformi acute e con un solo raggio, ala dorsale rossa principiando sopra gli occhi e giungendo sino alla coda, della quale è però staccata e con circa 200 raggi molli: coda rossa un poco trifida o quasi lunulata con però il raggio intermedio semplice, sporgente lunghissimo, mentre i laterali sono ramosi con i rami opposti.

We are indebted to Mr. H. M. Scudder for a copy of this rare and forgotten description. If this account is correct it is still unknown to science, though having much in common with *STYLEPHORUS CORDATUS* Shaw.

LXXXIV. RAFINESQUE, *Précis des Découvertes Somnologiques*, 1814.

Trisopterus Rafinesque, 16; type *GADUS CAPELANUS* Lacepède (*GADUS MINUTUS* L.).

According to Risso the name is synonymous with *MORUA* Risso, and must be older. Equivalent to *BRACHYGADUS* Gill.

Monochirus Rafinesque; type *MONOCHIRUS HISPIDUS* Raf.

LXXXV. RAFINESQUE, *Analyse de la Nature, ou Tableau de l'Univers et des Corps Organisés* "La Nature est mon Guide et Linneus mon maître." Palermo, 1815.

In this work the entire animal and plant kingdoms are classified, with definitions of the families and higher groups and lists of the known genera. Three hundred and seventy-seven genera of fishes are enumerated. Many of these are bare names, without explanation of any sort. Others represent changes of names of genera for reasons not expressed, but apparently because current names were too long, too short, or involved a termination (*OIDES*, *OMORUS*) expressing resemblance. The fishes are divided into two subclasses, *HOLOBRANCHIA* with opercles and gill membranes complete, and *ATELOSIA*, lacking either opercles or gill membranes.

The *HOLOBRANCHIA* are divided into *DERIPIA* (*Jugulares*), *GASTRIPIA* (*Abdominales*), *THORAXIPIA* (*Thoracices*), *APODIA* (*Apodes*).

The *ATELOSIA* are divided into *ELTROPOMIA* (*Sturgeons: Sternoptyx, Pegasus*) with one opercle and no gill membrane; *CHISMOPNEA*, with gill-membranes and one opercle (*Chimæra, Balistes, Conger, etc.*); and *TREMAPNEA*, with neither opercles nor gill membranes (*eels and sharks*).

This classification is singularly inept.

Dactyleptus Rafinesque, 82.

Substitute for *MURÆNOIDES* Lacepède.

Pholidus Rafinesque, 82.

A synonym of *PHOLIS* Scopoli. Substitute for *ENCHELYOPUS* Gronow.

Pteraclidus Rafinesque, 82.

Substitute for *OLIGOPODUS* Lacepède. A synonym of *PTERACLIS* Gronow.

Pacamus, 82; *nomen nudum*.**Ictius**, 82, "sp. do."

That is, based on species of the preceding, *i. e.*, *PACAMUS*.

Dropsarus, 82.

Evidently an emendation of *GAIDROPSARUS* Rafinesque.

Trisopterus, 82.**Brosme**, 82.**Batrictius**, 82.

A substitute for *BATRACHOIDES* Lacepède.

Ceracantha, 82.**Taunis**, 82.**Plagiusa**, 83, "sp. do."

That is, species of *PLEURONECTES*; apparently based on *PLEURONECTES PLAGIUSA* L., thus equivalent to *SYMPHURUS* Rafinesque, 1810.

Holacantha, 83.

Substitute for *HOLACANTHUS* Lacepède.

Pomacantha, 83.**Nasonus**, 83.

Substitute for *NASO* Lacepède.

Alectis, 84.

Substitute for *GALLUS* Lacepède, which is preoccupied, leaving *ALECTIS* as valid.

Bostrictis, 84.

Substitute for *BOSTRYCHUS* Lacepède: a synonym of *BOSTRICHTHYS* Dumèril, 1806.

Pterops, 84, 90.

Substitute for *BOSTRYCHOIDES* Lacepède.

Tasica, 84.**Nemipus**, 84.**Cephalepis**, 84.**Gymnurus**, 84.

Substitute for *TÆNIOIDES* Lacepède.

Polipturus, 84.

Substitute for *SCOMBEROMORUS* Lacepède.

Orcynus, 84.

Substitute for *SCOMBEROIDES* Lacepède.

Baillonus, 85.

Substitute for *CÆSIOMORUS* Lacepède.

Lepicantha, 85.

Apparently shortened from *LEPISACANTHUS* Lacepède.

Gastrogonus, 85.

Cephimmus, 85.

Substitute for *GYMNOCEPHALUS* Bloch.

Lepipterus, 85.

Panotus, 85.

Substitute for *TÆNIONOTUS* Lacepède.

Aylopon, 85.

Substitute for *ANTHIAS* Bloch.

Lopharis, 85.

Cephacandia, 85.

Substitute for *CEPHALACANTHUS* Lacepède.

“**Gonurus Lac.**,” 85.

Unexplained; no such name appears in Lacepède.

Lepomus, 86.

Pomagonus, 86.

Mesopodus, 86.

Acaramus, 86.

Clodipterus, 86, also on 88.

Substitute for *CHEILODIPTERUS* Lacepède.

Macrolepis, 86, “sp. do.”

That is, of *APOGON* Lacepède.

Guebucus, 86.

Micropodus, 86.

Substitute for *CHEILIO* Lacepède.

Megaphalus, 86.

Substitute for *GOBIESOX* Lacepède.

Pomacanthus, 86.

Oxima, 86.

Equetus, 86.

Substitute for *EQUES* Bloch.

Branchiostegus, 86.

Substitute for *CORYPHÆNOIDES* Lacepède, not of Gunner. Replaces *LATILUS* Cuv. & Val., 1830.

"Eleotris Gr., GOBIOMORUS Lacepède," 86.**Epiphthalmus**, 86.

Substitute for *GOBIOMOROIDES* Lacepède.

Lepimphis, 86.**Plecopodus**, 87.

Substitute for *GOBIOIDES* Lacepède.

Piescephalus, 87.**Lumpus**, 87, "sp. do."

That is, of *CYCLOPTERUS*.

Liparius, 87, "sp. do."

That is, of *CYCLOPTERUS*.

Percis Scopoli, 87.

Said to be same as *ASPIDOPHOROIDES* Lacepède.

Aygula, 87.

Substitute for *CORIS* Lacepède.

Octonus, 88.**Gasterodon**, 88.**Xysterus**, 88.

For *XYSTER* Lacepède.

Meneus, 88.

For *MENE* Lacepède.

Buronus, 88.

For *BURO* Lacepède.

Thrissa, 88.

Substitute for *CLUPANODON* Lacepède.

Megalops, 88.**Prinodon**, 88.

Substitute for *CYPRINODON* Lacepède.

Maturacus, 88.**Edomus**, 88.**Gonipus**, 88.**Myxonum**, 88.

Substitute for *MUGILOIDES* Lacepède.

Trichonotus, 88.

Substitute for *MUGILOMORUS* Lacepède.

Soranus, 88.

Cordorinus, 89.

Substitute for *CORYDORAS* Lacepède.

Amiatus, 89.

Substitute for *AMIA* L. *AMIATUS* becomes eligible if *AMIA* Gronow be accepted instead of *APOGON*.

Sayris, 89.

Substitute for *SCOMBRESOX* Lacepède.

Ramphistoma, 89; "Raf. *BELONE* Gronow."

The word *BELONE* was not used in a generic sense by Gronow, but first by Cuvier in 1817. Rafinesque apparently refers to synonymy of the species as quoted from Gronow by Lacepède.* This reference does not seem to justify the substitution of *RAMPHISTOMA* for *BELONE*.

Odumphus, 89.

Onopionus, 89.

Guaris, 90.

Typhlinus, 90, "sp. do."

That is, of *SYNGNATHUS*, earlier called *TYPHLE* by Rafinesque, which name is used by Lacepède for a "blind" genus of mammals, but without mention of type.

Phyllophorus, 90.

Homolenus, 90.

This and the two preceding are placed in the same family as *SYNGNATHUS*.

Goniodermus, 90, "sp. do."

Of *OSTRACION*.

Cephalopsis, 90, "sp. do."

Of *DIODON*.

Orbidus, 90.

For "*SPHEROIDE*" of Lacepède.

Oonidus, 90.

For "*OVOIDE*" of Lacepède.

Tangus, 91.

Said to be the same as "*HEPTACA*" Rafinesque.

Piratia, 91.

Opictus, 91.

*In the synonymy of *ESOX BELONE* Lacepède has this quotation:

"*Belone et raphis, id est acus. Petri Artedi Synonymia Piscium etc., auctore J. G. Schneider, etc.*

"Gronov. Mus. I, n. 39. Zooph., p. 117, n. 362."

In a hasty reading, Rafinesque must have ascribed both sentences to Gronow, who apparently did not use the name *BELONE*.

Ictiopogon, 91.

Substitute for *BOSTRYCHUS* Lacepède, which is preoccupied.

Dameus, 91.

Neleus, 91.

Nemochirus, 91.

Dipinotus, 91.

Symphocles, 91.

This and the preceding are placed near *TRICHIURUS*.

Melanictis, 92.

Epimonus, 92, "sp. do."

That is, of *BALISTES*, doubtless intended for *MONACANTHUS*.

Lophidius, 92.

Variant of *LOPHIUS*.

Chironectes, "R", 92, "sp. do."

Of *LOPHIUS*.

Conomus, 92, "sp. do."

Of *LOPHIUS*.

Branderius, 93.

Substitute for *CÆCILIA* Lacepède, a synonym of *SPHAGEBRANCHUS* Bloch.

Anopsus, 93.

Substitute for *MURÆNOBLENNA* Lacepède.

Gymnopsis, 93.

Substitute for *GYMNOMURÆNA* Lacepède.

Helmictis, 93.

Rincoxis, 93.

Zebricium, 93.

Pterurus, 93.

Sphyrnias, 93.

Variant of *SPHYRNA* Rafinesque.

Platopterus, 93.

Substitute for *RAJA* L.

Epinotus, 93.

Lymnea, 93.

Podoleptus, 93.

Substitute for *LEPTOPUS* Rafinesque, 1814. A synonym of *LOPHOTES* Giorna.

Megaderus, 93.

Substitute for *ECHIDNA* Forster.

Ictætus, 93.

Sephenia, 93.

Megabatus, 93.

Apturus, 93.

Lampreda, 94, "sp. do."

Of PETROMYZON.

Pricus, 94, "sp. do."

Of PETROMYZON. This and the preceding doubtless equivalent to AMMO-CÆTES Duméril and LAMPETRA Gray, the former based on the larval state of lampreys.

LXXXVI. CUVIER, *Observations et Recherches Critiques sur differens Poissons de la Méditerranée, et à leur Occasion sur des Poissons d'autres mers plus ou moins Liés avec Eux*: Mémoires du Museum d'Histoire Naturelle, Paris, I, 1815.

GEORGES LÉOPOLD CHRÉTIEN FRÉDÉRIC DAGOBERT CUVIER.

Glossodus Cuvier, I, 1815; type ARGENTINA GLOSSODONTA Forskål.

Same as ALBULA Gronow, BUTYRINUS Lacepède.

Fierasfer Cuvier, I, 119, 312, 359, 1815; type OPHIDION IMBERBE L.

Same as CARAPUS Rafinesque. (Name in French only; dates from Oken, 1817.)

Xyrichthys Cuvier, I, 317, 329, 355, 1815; type XYRICHTHYS CULTRATUS

Cuvier (CORYPHÆNA NOVACULA L.).

Epibulus Cuvier, I, 111; type SPARUS INSIDIATOR Pallas.

Smaris Cuvier, I, 111; type SPARUS SMARIS L.

Myletes Cuvier, I, 115; type MYLETES RHOMBOIDALIS Cuv.

Saurus Cuvier, I, 115; type SALMO SAURUS L.

Chromis Cuvier, 393; type SPARUS CHROMIS L.

Monotypic. Same as HELIASSES Cuvier, 1817.

Crenilabrus Cuvier, 357; type LABRUS LAPINA Forskål (Les Crénilabres).

Bonaparte, in 1839, named as type C. PAVO, which is the same as C. LAPINA. Name in French only, dates from Oken, 1817.

Corycus Cuvier, 359; type (not otherwise named) LUTIANUS ROSTRATUS Bloch.

Based on "les deux derniers Lutjans de M. Risso." Called CORICUS by Cuvier in 1817. A synonym of SYMPHODUS Rafinesque.

Tetragonopterus Cuvier, I, 114; type T. ARGENTUS Cuvier.

Les Serrans Cuvier.

This is not a scientific name. Reference is made to ANTHIAS SACER Bloch.

Diacope Cuvier, 360; type HOLOCENTRUS BENGALENSIS Bloch.

Name preoccupied, replaced by GENYOROGÉ Cantor, 1850.

Diagramma Cuvier, 360; type ANTHIAS DIAGRAMMA Bloch.

A synonym of PLECTORHINCHUS Lacepède.

Scolopsis Cuvier, 361; type the CURITE of Russell (SCOLOPSIS CURITE Cuvier).**Les Priacanthes** Cuvier, 361; type ANTHIAS MACROPHTHALMUS Bloch.

First called PRIACANTHUS by Cuvier in 1817.

Les Pristipomes Cuvier, 361; type LUTIANUS HASTA Bloch.

Called PRISTIPOMUS by Oken in 1817. A synonym of POMADASYUS Lacepède.

Julis Cuvier, 362; type LABRUS JULIS L.

By tautonomy and by first restriction.

Boops Cuvier, 453; type SPARUS BOOPS L.

By tautonomy. Later called BOX Cuvier.

The genus SPARUS L. is divided into Sargues, SPARUS SARGUS L.; Daurades, SPARUS AURATA L.; and Pagres, SPARUS PAGRUS L. No Latin names are indicated and no type assigned to SPARUS L. "Les Canthères" is a name assigned (p. 485) to SPARUS CANTHARUS L.

Dentex Cuvier, 486; type SPARUS DENTEX L.

By tautonomy,

Les Melettes, 457; type CLUPEA BRÜNNICHI Gmelin.

This group is equivalent to ENGRAULIS Cuvier, 1817. No Latin name is assigned.

On page 14 of this volume the name SCIÆNA UMBRA L., originally based on two species (the "Maigre" and the "Corb," confounded by Linnæus), is definitely restricted to the first of these, the CHELODIPTERUS AQUILA of Lacepède. This species then becomes the type of SCIÆNA, replacing ARGYROSOMUS DE LA PYLAIE and PSEUDOSCIÆNA Bleeker. The "Corb" remains as CORVINA NIGRA (Bloch).

LXXXVII. BLAINVILLE, *Prodrome d'Une Nouvelle Distribution Systématique du Règne Animal*: Bulletin de la Société Philomatique, 1816.

HENRI MARIE DUCROTAY DE BLAINVILLE.

Descriptions of the genera indicated appeared also in the *Fauna Française*, 1820-1830.

The pagination as here given is taken from Garman, *Plagiostomia*, 1913.

Trygonobatus Blainville, 112; type RAJA PASTINACA L.

Equivalent to DASYATIS Rafinesque.

Aetöbatus Blainville, 112; type *RAJA NARINARI* Euphrasen.

As restricted by Müller & Henle, 1838; not as restricted by Cantor, 1850. The latter arrangement would accord better with Blainville's obvious purpose of making *RAJA AQUILA* his "*AETOBATIS VULGARIS*," the best known of these "raies aigles," his type. The first restriction, however, has the sanction of Agassiz, Günther, and Gill.

Dicerobatus Blainville, 116; type *RAJA MOBULAR* Lacepède.

A synonym of *MOBULA Rafinesque*. Monotypic.

Leiobatus Blainville, 121, "*Raies lisses*"; type *LEIOBATUS SLOANI* Blainville.

A species of *UROTRYGON*. Not *LEIOBATUS Rafinesque*, which is *RHINOBATUS*; nor *LEIOBATUS Klein*, a synonym of *RAJA*.

Narcobatus Blainville, 121; type *RAJA TORPEDO* L.**Scylliorhinus** Blainville, 121, "*SQUALES ROUSSETTES*"; type *SQUALUS CANICULA* Lacepède.

As restricted. Prior to *SCYLLIUM Cuvier*.

Cestrorhinus Blainville, 121; type *SQUALUS ZYGÆNA* L.

A synonym of *CESTRACION Klein* and *SPHYRNA Rafinesque*.

Monopterhinus Blainville, 121, "*squales à une seule pinnule dorsale*"; type *SQUALUS GRISEUS* Gmelin.

A synonym of *HEXANCHUS Rafinesque*. Monotypic.

Acanthorhinus Blainville, 121, "*squales épineux*"; type *SQUALUS ACANTHIAS* Lacepède.

Equivalent to *SQUALUS L.* as restricted by Rafinesque and by Gill.

Heterodontus Blainville, 121; type *SQUALUS PHILIPPI* Lacepède.

The name seems sufficiently different from *HETERODON*, a genus of snakes of prior date, although from identical Greek roots. Otherwise would stand as *CENSTRACION Gray*. Monotypic.

Cetorhinus Blainville, 121; type *SQUALUS MAXIMUS* Gunner.

Monotypic.

Galeorhinus Blainville, 121, "*Squales demi-Requins*"; type *SQUALUS CANIS* L.

As restricted by Gill, 1864; *SQUALUS MUSTELUS* as restricted by Garman, 1913. The former arrangement must hold, replacing *EUGALEUS Gill*.

Carcharhinus Blainville, 121; type *SQUALUS COMMERSONIANUS* Blainville.

As restricted by authors.

Echinorhinus Blainville, 121, "*Squales bouclés*"; type *SQUALUS SPINOSUS* Gmelin.

Monotypic.

LXXXVIII. CUVIER, *Sur le genre* CHIRONECTES Cuv. (ANTENNARIUS Commerson): Mém. du Mus., III, 1817.

GEORGES CUVIER.

Chironectes Cuvier, 418; type LOPHIUS COMMERSONIANUS Lacepède.

LXXXIX. CUVIER, HYDROCYON, CHALCEUS etc.: Mémoires du Museum, IV, 1817; V, 1819.

Hydrocyon Cuvier, V, 353, 1819; type HYDROCYON FORSKALI Cuvier ("Les Hydrocyns," I, 115).

Myletes Cuvier, IV, 449, 1817; type MYLETES RHOMBOIDALIS Cuvier.

Tetragonopterus (Artedi) Cuvier, IV, 455, 1817; type TETRAGONOPTERUS ARGENTEUS Cuvier.

Chalceus Cuvier, IV, pl. XXI, 1817, V, 351; type CHALCEUS MACROLEPIDOTUS Cuvier.

XC. LE SUEUR, *A new genus of Fishes proposed under the name of* CATOSTOMUS: Journ. Acad. Nat. Sci. Phila., I, 1817.

CHARLES A. LE SUEUR.

Catostomus Le Sueur, 88; type CYPRINUS CATOSTOMUS Forster (CATOSTOMUS HUDSONIUS Le Sueur).

XCI. CUVIER, *Règne Animal*, Ed. I, 1817. *Le Règne Animal Distribué d'Après son Organisation*. Tome II, 1817 (Reptiles, Fishes, etc.).

GEORGES CUVIER.

This epoch-making work marks the advent of the modern epoch in zoological taxonomy. The entire animal kingdom is considered, its families and genera are all defined, and the entire system is placed on the sound basis of comparative anatomy.

In a number of cases the genera in this work receive French names only. But to all these, Latin forms were immediately supplied in the same year, 1817, by Oken, in the *Isis*.

Ammocœtes (Duméril) Cuvier, 119; type *PETROMYZON BRANCHIALIS* L.

The larval form of *PETROMYZON* and *LAMPETRA*.

Scyllium Cuvier, 124; type *SQUALUS CANICULA* L.

As restricted. A synonym of *SCYLLIORHINUS* Blainville, 1816.

Carcharias Cuvier, 125; type *SQUALUS CARCHARIAS*.

As shown in the figure of Bêlon, 60. "Cette figure de Bêlon est la seule bonne. La plupart des autres sont fausses." Equivalent to *CARCHARHINUS* Blainville. Not *CARCHARIAS* Rafinesque, 1810.

Lamna Cuvier, 126; type *SQUALUS CORNUBICUS* Bloch & Schneider
(*SQUALUS NASUS* Bonnaterre).

Zygæna Cuvier, 127; type *SQUALUS ZYGÆNA* L.

Equivalent to *CESTRACION* Klein, *SPHYRNA* Rafinesque.

Galeus Cuvier, 127; type *SQUALUS GALEUS* L.

Not *GALEUS* Valmont, nor of Klein, nor of Rafinesque. Equivalent to *GALEORHINUS* Blainville. Monotypic.

Mustelus Cuvier, 128; type *SQUALUS MUSTELUS* L.

Equivalent to *MUSTELUS* Linck.

Notidanus Cuvier, 128; type *SQUALUS GRISEUS* L.

Monotypic. Equivalent to *HEXANCHUS* Rafinesque, 1810.

Selache Cuvier, 129; type *SQUALUS MAXIMUS* L.

Equivalent to *CETORHINUS* Blainville, 1816. Monotypic.

Cestracion Cuvier in Oken, 129, ("Les Cestracions" Cuvier); Oken,*

Isis, 1183; type *SQUALUS PHILIPPI* Bloch & Schneider.

Equivalent to *HETERODONTUS* Blainville, 1816. Not *CESTRACION* Klein.

Spinax Cuvier, 129; type *SQUALUS SPINAX* L.

Equivalent to *ETMOPTERUS* Rafinesque, 1810.

Centrina Cuvier, 130; type *SQUALUS CENTRINA* L.

Equivalent to *ONYNOTUS* Rafinesque, 1810.

Scymnus Cuvier, 130; type *SQUALUS AMERICANUS* Gmelin.

Monotypic. Preoccupied by *SCYMNUS* Kugelmann, 1814, a genus of Beetles; replaced by *SCYMNORHINUS* Bonaparte, 1846.

DALATIUS Rafinesque may be the same.

*Oken, *Isis*, 1817. In *Isis*, 1817, immediately following the publication of the *Règne Animal*, Professor L. Oken recapitulated the genera of Cuvier, giving Latin forms to those left by the author with French names only. These occur on pages 1181, 1182, and 1183 (misprinted in the text as 1781, 1782, and 1783). Several of these were also Latinized by Cloquet, *Dictionnaire d'Histoire Naturelle*, in 1817, but the date of Oken is earlier. Still others were Latinized by John Stark, *Elements of Natural History, Edinburgh*, 1828, vol. I.

As the question of priority is not affected, we leave the names of Cuvier latinized by Oken in their proper sequence.

Trygon Adanson in Cuvier, 136; type *RAJA PASTINACA* L.

This name, quoted from Adanson's Manuscript *Cours d'Histoire Naturelle*, in 1772, has been adopted by several authors. *TRYGON* appears also as a new genus (equivalent to *TÆNIURA*) of Geoffroy St. Hilaire in the *Histoire d'Égypte*, with the date of 1825. The name is certainly later than *DASYBATUS* of Klein, with the same type, and also later than *DASYTIS* Rafinesque.

Callorhynchus (Gronow) Cuvier, 140; type *CHIMÆRA CALLORHYNCHUS* L.

Monacanthus (Cuvier) Oken, 152, ("Les Monacantes" Cuvier); type *BALISTES CHINENSIS* Bloch.

Alutera (Cuvier) Oken, 153, ("Les Alutères" Cuvier); type *BALISTES MONOCEROS* L.

Triacanthus (Cuvier) Oken, 153, ("Les Triacantes" Cuvier); type *BALISTES BIACULEATUS* Bloch.

Monotypic.

Hippocampus Cuvier, 157; type *SYNGNATHUS HIPPOCAMPUS* L.

Equivalent to *HIPPOCAMPUS* Rafinesque.

Characinus Cuvier, 164; no type named.

Equivalent to *CHARACINI* L., *CHARAX* Gronow.

Curimatus (Cuvier) Oken, 165, ("Les Curimates" Cuvier); type *SALMO EDENTULUS* Bloch (*SALMO CYPRINOIDES* L.).

Name latinized as *CURIMATUS* Oken, 1182, as *CURIMATA* by Cloquet. Equivalent to *CURIMATA* Walbaum, 1792.

Anostomus (Gronow) Cuvier, 165; type *SALMO ANOSTOMUS* L.

Called *LEPORINUS* by Cuvier & Valenciennes.

Piabucus (Cuvier) Oken, 166, ("Les Piabuques" Cuvier); type *SALMO ARGENTINUS* Bloch.

Latinized as *PIABUCUS* by Oken, as *PIABUCA* by Müller & Tröschel.

Citharinus Cuvier, 168; type "*LE SERRASALME CITHARINE*" Geoffroy.

CYTHARINUS Oken, 1182. ("Les Citharines" Cuvier, 1815, I. 115).

Saurus Cuvier, 169; type *SALMO SAURUS* L.

Scopelus Cuvier, 169; type *GASTEROPELECUS HUMBOLDTI* Risso.

Equivalent to *MYCTOPHUM* Rafinesque, 1810.

Aulopus Cuvier, 170; type *SALMO FILAMENTOSUS* Bloch.

Engraulis Cuvier, 174; type *CLUPEA ENCRASICHOLUS* L.

Thrissa Cuvier, 176; type *CLUPEA SETIROSTRIS* Broussonet.

Equivalent to *MYSTUS* Lacepède, preoccupied. Not *THRISSE* Rafinesque. Later spelled *THRYSSA* by Cuvier.

This genus or subgenus may receive a new name, *THRISOCLES* Jordan & Evermann, type *CLUPEA SETIROSTRIS* Broussonet. It is distinguished from *MENIDIA* Browne or *ANCHOVIELLA* Fowler, by the greatly prolonged maxillary.

Pristigaster Cuvier, 176; type not named.

Later fixed as *PRISTIGASTER CAYANUS* Cuvier.

Chirocentrus Cuvier, 178; type *ESOX CHIROCENTRUS* L. (*CLUPEA DORAB* Gmelin).

Sudis Cuvier, 180; type (not named) *SUDIS GIGAS* Cuvier.

Equivalent to *ARAPAIMA* Müller and Troschel, 1846 (*VASTRES* Valenciennes, 1846).

Not *SUDIS* Rafinesque, 1810.

Galaxias Cuvier, 183; type *ESOX TRUTTACEUS* Cuvier.

Monotypic.

Microstoma Cuvier, 184; type *GASTEROPELECUS MICROSTOMUS* Risso.

Monotypic.

Stomias Cuvier, 184; type *ESOX BOA* Risso.

Monotypic.

Salanx Cuvier, 185; type (not named) *SALANX REEVESI* Cuv. & Val. (*ALBULA CHINENSIS* Osbeck).

Monotypic. Synonym of *ALBULA* Osbeck, if the latter name is regarded as eligible.

Belone Cuvier, 185; type *ESOX BELONE* L.

Hemi-Ramphus Cuvier, 186; type *ESOX BRASILIENSIS* L.

Barbus Cuvier, 192; type *CYPRINUS BARBUS* L.

Gobio Cuvier, 193; type *CYPRINUS GOBIO* L.

Not *GOBIO* of Klein, which is identical with *GOBIUS* L. If Klein's names are accepted, *GOBIO* Cuvier, based on the common gudgeon of Europe, *CYPRINUS GOBIO* L., must receive a new name.

Tinca Cuvier, 193; type *CYPRINUS TINCA* L.

Cirrhinus (Cuvier) Oken, 193, ("Les Cirrhines" Cuvier); type *CYPRINUS CIRRHOSUS* Bloch.

The name is spelled *CIRRHINA* by Valenciennes.

Abramis Cuvier, 194; type *CYPRINUS BRAMA* L.

Equivalent to *BRAMA* Klein, not of Cuvier.

Labeo Cuvier, 194; type *CYPRINUS NILOTICUS* (Forskål) Geoffroy.

Not *LABEO* Bowdich, 1825.

Leuciscus (Klein) Cuvier, 194; type *CYPRINUS LEUCISCUS* (L.) Bloch.

Identical with *LEUCISCUS* Klein.

Lebia (Cuvier) Oken, 199, ("Les Lebias" Cuvier), Oken, *Isis*, 1183; type *CYPRINODON VARIEGATUS* Lacepède.

Monotypic. Identical with *CYPRINODON* Lacepède, 1803. Written *LEBIAS* by Cuvier.

Schilbe (Cuvier) Oken, 202, ("Les Schilbe" Cuvier), Oken, *Isis*, 1182;
type *SILURUS MYSTUS* Hasselquist.

Synodontis Cuvier, 203; type *PIMELODUS SYNODONTIS* Geoffroy.

Bagre (Cuvier) Oken, 204, ("Les Bagres" Cuvier), Oken, *Isis*, 1182;
type *SILURUS BAGRE* L.

By tautonomy. Latinized as *BAGRUS* by Valenciennes. This generic name must replace *FELICHTHYS* Swainson and *AILURICHTHYS* Baird, for the Gaff-top-sail Cat-fish *FELICHTHYS MARINUS* (L.), of American waters, unless the earlier name *BAGRE* of Catesby, applied to another genus, be deemed eligible. The name *BAGRUS*, transferred by Cuvier & Valenciennes to another part of the same group of "Bagres," may be replaced by *PORCUS* Geoffroy, 1817, as *BAGRUS* is only a variant spelling of *BAGRE*.

Morrhua (Cuvier) Oken, ("Les Morues"), 212, 1182; type *GADUS MORRHUA* L.

Same as *GADUS* L.

Merlangus (Cuvier) Oken, ("Les Merlans"), 213, 1182; type *GADUS MERLANGUS* L.

Not *MERLANGUS* Rafinesque, 1810.

Lota (Cuvier), ("Les Lottes") Oken, 215, 1182; type *GADUS LOTA* Bloch.

By tautonomy.

Mustela (Cuvier), ("Les Mustèles") Oken, 215, 1182; type *GADUS MUSTELA* L.

Preoccupied in Mammals: replaced by *MOTELLA* Cuvier, 1829. Synonym of *GAIDROPSARUS* Raf.

Brosme (Cuvier), ("Les Brosmes") Oken, 216, 1182; type *GADUS BROSME* Gmelin.

Called *BROSMIUS* by Cuvier, 1829.

Raniceps (Cuvier) Oken, 217, ("Les Raniceps" Cuvier), Oken, 1182;
type *GADUS RANINUS* Müller.

Platessa Cuvier, 220; type *PLEURONECTES PLATESSA* L.

Equivalent to *PLEURONECTES* as restricted by Fleming.

Hippoglossus Cuvier, 221; type *PLEURONECTES HIPPOGLOSSUS* L.

Rhombus Cuvier, 222; type *PLEURONECTES RHOMBUS* Cuvier.

Equivalent to *RHOMBUS* Klein, not of Lacepède. Name used in Mollusks, *RHOMBUS* Da Costa, 1776. Same as *BOTHUS* Rafinesque.

Solea Cuvier, 223; type *PLEURONECTES SOLEA* L.

Equivalent to *SOLEA* Quensel and *SOLEA* Rafinesque.

Monochirus (Cuvier) Oken, 223, ("Les Monochires" Cuvier), *MONOCHIRUS* Oken, 1182; type *PLEURONECTES MICROCHIRUS* De la Roche.

Monotypic. Equivalent to Rafinesque.

Plagusia (Browne) Cuvier, 224; type *PLEURONECTES PLAGUSIA* L.

Equivalent to *PLAGUSIA* Browne, not of Latreille, 1806, a genus of CRUSTACEANS.

Lumpus (Cuvier) Oken, 226, ("Les Lumps" Cuvier) Oken, 1182; type *CYCLOPTERUS LUMPUS* L.

Equivalent to *CYCLOPTERUS* L.

Conger (Cuvier) Oken, 231, ("Les Congres" Cuvier), Oken, 1182; type *MURÆNA CONGER* L.

Equivalent to *CONGER* Houttuyn.

Alabes (Cuvier) Oken, 235, ("Les Alabes" Cuvier), Oken, 1182; type (not named) *CHEILOBRANCHUS DORSALIS* Richardson.

Said to be identical with *CHEILOBRANCHUS* Richardson, 1848, which it replaces.

Carapus Cuvier, 237; type *GYMNOTUS MACROURUS* Bloch.

Not *CARAPUS* Rafinesque, 1810. The name is written *CARAPO* by Oken. Replaced by *GITON* Kaup.

Fierasfer (Cuvier) Oken, 239, ("Les Fierasfers" Cuvier) Oken, 1182; type *OPHIDIUM IMBERBE* L.

Equivalent to *CARAPUS* Rafinesque, 1810. Monotypic.

Lophotes (Giorna) Cuvier, 243, ("Les Lophotes" Cuvier), the name written *LOPHOTUS* by Oken, 1182; type "le Lophote Lacepède" Giorna (*LOPHOTES CEPEDIANUS*).

Monotypic.

Clinus Cuvier, 251; type *BLENNIUS SUPERCILIOSUS* L.

Pholis (Artedi) Cuvier, 251; type *BLENNIUS PHOLIS* Bloch.

Not *PHOLIS* Gronow.

Salarias Cuvier, 251; type *SALARIAS QUADRIPENNIS* Cuvier.

Opisthognathus (Cuvier) Oken, 252, ("Les Opisthognathes" Cuvier), Oken, 1182; type *OPISTHOGNATHUS SONNERATI* Cuvier.

Monotypic.

Sillago Cuvier, 258; type *SILLAGO ACUTA* Cuvier.

Julis Cuvier, 261; type *LABRUS JULIS* L.

This name has been unfortunately transferred by later writers to a great group of the tropical seas, *THALASSOMA* Swainson.

Crenilabrus Cuvier, 262, ("Les Crenilabres" Cuvier), Oken, 1182; type *LABRUS LAPINA* Forskål.

Valenciennes makes the type *LABRUS PAVO* Risso; but that species is not mentioned by Cuvier, although identical with *L. LAPINA*.

Bonaparte, in 1839, named as type *C. PAVO*, which is the same as *C. LAPINA*. In 1839, just previous, Swainson observes: "M. Cuvier having expressly stated

that the type of his genus *CRENILABRUS* is the *LUTJANUS VERRES* of Bloch, I have so retained it, placing all the others under the subgenus *CYNÆDUS*."

L. VERRES is identical with the type of *BODIANUS* Bloch. We find no such statement in Cuvier's writings, and *L. VERRES* is ninth of his original species. *CYNÆDUS* Swainson, as restricted by Bonaparte, is identical with *CTENOLABRUS* Cuv. & Val.

In the *Fauna Italica*, 156, 1839, Bonaparte assigned types to certain genera of Labroid fishes. *LABRUS GUTTATUS* Bloch was indicated as type of *HEMIULIS* Swainson; *LABRUS VETULUS* Bloch is considered as type of *LABRUS* L. This name, *VETULUS*, was not used by Linnæus, but it is a synonym of *LABRUS BIMACULATUS* L. and *LABRUS MIXTUS* L. *LABRUS BIMACULATUS* may thus be regarded as the type of *LABRUS*. *LABRUS RUPESTRIS* Bloch is indicated as type of *CYNÆDUS* Swainson. This becomes a synonym of *CTENOLABRUS* Cuv. & Val., of a little earlier date in 1839. *LABRUS PAVO* of authors, not of Linnæus, is recognized by Bonaparte as type of *CRENILABRUS*. This species is not named by Cuvier, but it is identical with *LABRUS LAPINA* Forskål, a species included by Cuvier. In Swain's excellent review of Swainson (1882) the type of each genus is indicated. The type of *HEMIULIS* (*AURATUS*) assigned by Swain is a species of *CHEILIO* Lacepède. The type of *CYNÆDUS* is *C. TINCA* = *C. DODERLEINI* Jordan, not *LABRUS TINCA* L., a species of *CRENILABRUS*. Bonaparte's selection of types has, however, priority over Swain's. Bonaparte and Swainson recognize *LABRUS JULIS* L. as type of *JULIS*. The same type, as *LABRUS PAVO* Hasselquist, is assigned to *CHLORICHTHYS* Swainson by Bonaparte. Swain makes the latter a synonym of *THALASSOMA* Swainson. Bonaparte, 1846, selected *L. JULIS* L. as type of *ICHTHYCALLUS* Swainson, reducing both *CHLORICHTHYS* and *ICHTHYCALLUS* to the synonymy of *JULIS*.

Coricus Cuvier, 263; type *LUTIANUS VIRESCENS* Risso (*L. ROSTRATUS* Bloch).

Equivalent to *SYMPHODUS* Rafinesque.

Epibulus Cuvier, 264; type *SPARUS INSIDIATOR* Pallas.

Monotypic.

Novacula Cuvier, 265; type *CORYPHÆNA NOVACULA* L.

By tautonomy. Afterwards restricted by Cuvier & Valenciennes to *CORYPHÆNA PENTADACTYLA* Lacepède, the genus *HEMIPTERONOTUS* Lacepède.

A synonym of *XYRICHTHYS* Cuvier, 1815.

Chromis (Cuvier) Oken, 266, ("Les Chromis" Cuvier), Oken, 1182; type *SPARUS CHROMIS* Lacepède.

Not *CROMIS* Browne, 1770, nor *CHROMIS* Cuvier, 1815. Called *HELIASES* by Cuvier & Valenciennes.

Plesiops (Cuvier) Oken, 266; type not named.

Afterwards described as *PLESIOPS NIGRICANS* Rüppell. Equivalent to *PHAROP-TERYX* Rüppell, 1828.

Smaris Cuvier, 269; type *SPARUS SMARIS* L.

A synonym of *SPICARA* Rafinesque.

Boops Cuvier, 270; type *SPARUS BOOPS* L.

Later called *Box* Cuv. & Val.

Sargus Cuvier, 272; type *SPARUS SARGUS* L.

Equivalent to *SARGUS* Klein and *DIPLODUS* Rafinesque.

Aurata (Cuvier) Oken, 272, ("Les Daurades" Cuvier), Oken, 1183; type *SPARUS AURATA* L.

Equivalent to *SPARUS* L., as restricted by Fleming. Later called *CHRYSOPHRYS* by Cuvier.

Pagrus Cuvier, 272; type *SPARUS ARGENTEUS* Bloch & Schneider (*SPARUS PAGRUS* L.).

Not *PAGRUS* Plumier.

Dentex Cuvier, 273; type *SPARUS DENTEX* L.

Diacope Cuvier, 275; type *DIACOPE SEBÆ* Cuvier.

Name preoccupied in butterflies (*DIACOPE* Hübner, 1816); replaced by *GENYOROGA* Cantor, 1850. Equivalent to *NAQUA* Forskål, 1775, a name doubtfully eligible.

Serranus Cuvier, 276, ("Perche de mer ou serran"); type *PERCA CABRILLA* L. ("le Serran proprement dit").

SERRANUS CABRILLA is usually assumed as the type of the genus *SERRANUS*, and therefore of the family *SERRANIDÆ*. But no species of the genus as thus restricted is mentioned by Cuvier by scientific name. Cuvier, however, remarks: "La Méditerranée en produit beaucoup dont les plus communs s'y confondent sous les noms vulgaires de *PERCHE DE MER*, de *SERRAN*, etc." This refers to *SERRANUS CABRILLA* and *SERRANUS SCRIBA*. The first of these may be retained as type, following general custom, although its scientific name is not mentioned. Otherwise *HOLOCENTRUS GIGAS* Bloch & Schneider, which is explicitly mentioned, must be taken, in which case *SERRANUS* disappears, as a synonym of *EPINEPHELUS* Bloch, and the name *SERRANELLUS* Jordan & Eigenmann, a sub-generic term for *SERRANUS SCRIBA*, would stand for the genus, as in Fowler's arrangement (*Proc. Ac. Nat. Sci. Phila.*, 1907, 266).

Plectropomus (Cuvier) Oken, 277, ("Les Plectropomes" Cuvier), *PLECTROPOMUS* Oken, 1182, *PLECTROPOMA* of Cuv. & Val.; type as restricted *BODIANUS MACULATUS* Bloch.

Cantharus Cuvier, 278; type *SPARUS CANTHARUS* L. ("Les Canthares," 1815.)

Name preoccupied; replaced by *SPONDYLIOSOMA* Cantor, 1850.

Pristipomus (Cuvier) Oken, 279, ("Les Pristipomes" Cuvier), Oken, 1182, (*PRISTIPOMA* of Cuvier & Valenciennes); type *LUTJANUS HASTA* Bloch.

Equivalent to *POMADASYS* Lacepède.

Scolopsis Cuvier, 280; type "le Kurite, Russell" (*SCOLOPSIDES KURITA* Cuv. & Val.).

Called *SCOLOPSIDES* by Cuvier.

Diagramma (Cuvier) Oken, 280, ("Les Diagrammes" Cuvier), Oken, 1183; type *ANTHIAS DIAGRAMMA* Bloch.

Equivalent to *PLECTORHYNCHUS* Lacepède.

- Priacanthus** (Cuvier) Oken, 281, ("Les Priacanthes" Cuvier), Oken, 1183; type *ANTHIAS MACROPHthalmus* Bloch.
Equivalent to *ABUHAMRUR* Forskål, a name doubtfully eligible.
- Polyprion** (Cuvier) Oken, 282, ("Les Polyprions" Cuvier), Oken, 1183; type *AMPHIPRION AMERICANUS* Bloch & Schneider.
- Acerina** Cuvier, 283; type *PERCA ACERINA* Cuvier (*PERCA CERNUA* L.).
Called *CERNUA* by Schæfer and by Fleming, *ACERINA* by Gldenstadt, *PERCIS* by Klein, and *GYMNOCEPHALUS* by Bloch.
- Stellifer** (Cuvier) Oken, 283, ("Les Stellifères" Cuvier), *STELLIFER* Oken, 1182; type *BODIANUS STELLIFER* Bloch.
Monotypic.
- Pterois** (Cuvier) Oken, 286, ("Les Pterois" Cuvier), Oken, 1183; type *SCORPÆNA VOLITANS* Bloch.
Equivalent to *PSEUDOPTERUS* Klein, which may not be eligible.
- Paralepis** Cuvier, 289; type *COREGONUS PARALEPIS* Risso Ms., *PARALEPIS COREGONOIDES* Risso.
Monotypic.
- Prochilus** Cuvier, 294; type *SCIÆNA MACROLEPIDOTA* Bloch.
Name preoccupied in mammals by *PROCHILUS* Illiger, 1811. Replaced by *DORMITATOR* Gill.
- Sander** (Cuvier) Oken, 294, ("Les Sandres" Cuvier), *SANDER* Oken, 1182; type *PERCA LUCIOPERCA* L.
- Terapon** Cuvier, 295; type *HOLOCENTRUS SERVUS* Bloch.
Error for *THERAPON*. Equivalent to *DJABUB* Forskål, which is doubtfully eligible.
- Zingel** (Cuvier) Oken, 296, ("Les Cingles" Cuvier), *ZINGEL* Oken, 1182; type *PERCA ZINGEL* L., *ASPERULUS* Schæfer.
- Umbrina** Cuvier, 297; type *SCIÆNA CIRRHOSA* L.
- Otolithes** (Cuvier) Oken, 299, ("Les Otolithes" Cuvier), *OTOLITHES* Oken, 1182; called *OTOLITHUS* by Cuvier & Valenciennes; type *JOHNIUS RUBER* Bloch & Schneider.
- Anclyodon** (Cuvier) Oken, 299, ("Les Ancylodons" Cuvier), Oken, 1182; type *LONCHURUS ANCYLODON* Bloch & Schneider.
Monotypic. Preoccupied; replaced by *MACRODON* Schinz; *SAGENICHTHYS* Berg, 1895.
- Antennarius** (Commerson) Cuvier, 310, "Les Chironectes (*ANTENNARIUS* Commerson)" Cuvier; type *LOPHIUS COMMERSONIANUS* Lacepède, *ANTENNARIUS ANTENNA TRICORNE* Commerson, in Lacepède.
Afterwards called *CHIRONECTES* by Cuvier, the name preoccupied.

Maithe Cuvier, 311; type *LOPHIUS VESPERTILIO* L.

Equivalent to *OGCOEPHALUS* Fischer, 1813.

Thynnus Cuvier, 313; type *SCOMBER THYNNUS* L.

Not *THYNNUS* Browne. The name *THYNNUS* Cuvier is preoccupied, and has been replaced by *THUNNUS* South and later by *ALBACORA* Jordan.

Orcynus Cuvier, 314; type *SCOMBER GERMON* Lacepède (*SCOMBER ALALONGA* Gmelin).

Name preoccupied by *ORCYNUS* Rafinesque, 1810, and replaced by *GERMO* Jordan.

Citula Cuvier, 315; type ("l'espèce est nouvelle") *SCIÆNA ARMATA* Forskål.

Seriola Cuvier, 315; type *CARANX DUMERILI* Risso.

Nomeus Cuvier, 315; type *GOBIUS GRONOVII* Gmelin.

Monotypic.

Vomer Cuvier, 316; type *VOMER BROWNI* Cuvier.

Equivalent to *RHOMBOIDA* Browne, 1789, which is probably not eligible.

Spinachia Cuvier, 320; type *GASTEROSTEUS SPINACHIA* L.

Monotypic.

Lichia Cuvier, 321; type *SCOMBER AMIA* L.

Blepharis Cuvier, 322; type *ZEUS CILIARIS* Bloch.

Monotypic; name preoccupied, replaced by *BLEPHARICHTHYS* Gill. A synonym of *ALECTIS* Rafinesque.

Equula Cuvier, 323; type *CENTROGASTER EQUULA* Gmelin.

A synonym of *LEIOGNATHUS* Lacepède.

Atropus (Cuvier) Oken, 324, ("Les Atropus" Cuvier), Oken, 1182; type *BRAMA ATROPUS* Bloch & Schneider.

Monotypic. Not separable from *CITULA*.

Oligopodes (Risso) Cuvier, 328, ("Les Leptopodes Cuvier, *OLIGOPODES* Risso"); type "l'Oligopode noir, Risso."

Described by Risso, 1826, as *OLIGOPUS NIGER*, apparently a species of *PTERACLIS*. Cuvier distinguishes *PTERACLIS* as "Les Oligopodes" and *OLIGOPODES* as "Les Leptopodes."

Chelmon Cuvier, 334; type *CHÆTODON ROSTRATUS* Bloch.

Platax Cuvier, 334; type *CHÆTODON TEIRA* Bloch.

Heniochus Cuvier, 335; type *CHÆTODON MACROLEPIDOTUS* Bloch.

Ephippus Cuvier, 335; type *CHÆTODON ORBIS* Bloch, as restricted by Cuv. & Val., 1831.

Toxotes Cuvier, 338; type *LABRUS JACULATOR* Bloch & Schneider.

Monotypic.

Anabas Cuvier, 339; type *PERCA SCANDENS* Daldorf.

Monotypic.

Fiatola Cuvier, 342; type *STROMATEUS FIATOLA* L.

Equivalent to *STROMATEUS* L.

Seserinus (Cuvier) Oken, 342, ("Les Seserinus" Cuvier); type "SESERINUS Rondelet" (*SESERINUS RONDELETI* Cuvier).

This is apparently a young *STROMATEUS*, *MICROCHIRUS* (Bonelli).

Premnas Cuvier, 345; type *CHÆTODON BIACULEATUS* Bloch.

Monotypic.

Temnodon Cuvier, 346; type *CHEILODIPTERUS HEPTACANTHUS* Lacepède.

Monotypic. Equivalent to *POMATOMUS* Lacepède. The name *POMATOMUS* was arbitrarily transferred to a different genus (*EPIGONUS* Raf.) by Cuvier.

Amphisile (Klein) Cuvier, 350; type *CENTRISCUS SCUTATUS* L.

Equivalent to *CENTRISCUS* L. and *AMPHISILEN* Klein.

XCII. OKEN, *Isis*, 1817.

L. OKEN.

On pages 1182-83 (misprinted 1782-83), Professor Oken gives Latin equivalents to all the French names in the first edition of the *Règne Animal* of Cuvier, as indicated above.

XCIII. CLOQUET, *Dictionnaire des Sciences Naturelles de Levrault* (Articles on Fishes), 1816 to 1830.

HIPPOLYTE CLOQUET.

(Latinizes several of Cuvier's names, as previously done by Oken.)

Zingel Cloquet, 1817; "les cingles" Cuvier, called *ZINGEL* by Oken; type *PERCA ZINGEL* L.

Eptatretus (Duméril) Cloquet, XV, 134, 1819; type *GASTROBRANCHUS DOMBEY* Lacepède.

Replaces *HEPTATREMA* Duméril and *BDELLOSTOMA* Müller.

XCIV. GEOFFROY ST. HILAIRE, *Suite de l'Histoire des Poissons du Nil*, Plates dated 1817, 1818.

ISIDORE GEOFFROY ST. HILAIRE.

Porcus Geoffroy St. Hilaire, 303, 1818; type *SILURUS BAJAD* Forskål.

Equivalent to *BAGRUS* Cuv. & Val. but not to "les Bagres" Cuvier, 1817, *BAGRE* Oken. *PORCUS* should probably replace *BAGRUS*, which is a latinization of *BAGRE*, the vernacular Spanish name for the larger cat-fishes.

Heterobranchus Geoffroy St. Hilaire, 305, 1818; type *HETEROBRANCHUS BIDORSALIS* Geoffroy St. Hilaire.

XCv. LE SUEUR, *Description of Several New Species of North American Fishes*: Jour. Ac. Nat. Sci. Phila., 1818.

CHARLES A. LE SUEUR.

Somniosus Le Sueur, 222; type *SOMNIOSUS BREVIPINNA* Le Sueur, *SQUALUS MICROCEPHALUS* Bloch & Schneider.

Platirostra Le Sueur, 223; type *PLATIROSTRA EDENTULA* Le Sueur.
Same as *POLYODON*.

Hiodon Le Sueur, 366; type *HIODON TERGISUS* Le Sueur.
Often spelled *HYODON*.

XCVI. RANZANI, *Descrizione di un Pesce, un Nuovo Genere dei Tanioidei*: Opusculo Sci. Bologna, II, 1818.

CAMILLO RANZANI.

Epidesmus Ranzani, 133; type *EPIDESMUS MACULATUS* Ranzani.
Synonym of *REGALECUS*.

XCvII. BLAINVILLE, *Poissons Fossiles*: Nouveau Dictionnaire, XXVII, 1818.

HENRI MARIE DUCROTAY DE BLAINVILLE.

Not seen by us.

Anenichelum Blainville; type *ANENICHELUM GLARISIANUM* Blainville (fossil: *LEPIDOPIDÆ*).

Chirurgus Blainville; type (perhaps *CHÆTODON CHIRURGUS* Bloch).

Not seen by us: probably a synonym of *HEPATUS* and *TEUTHIS*.

Palæoniscum Blainville, 320; type *PALÆONISCUM FRIESLEBENENSE* Blainville (fossil).

Written *PALÆONISCUS* by Agassiz.

Palæothrissum Blainville, 320; type *PALÆOTHRISSUM MACROCEPHALUM* Blainville (fossil).

Synonym of *PALÆONISCUM*.

Palæorhynchum Blainville, XXVII, 314, 1818; type *PALÆORHYNCHUM GLARISIANUM* Blainville.

Palæobalistum Blainville, 338; type *DIODON ORBICULARIS* Volta (fossil).

XCVIII. *RAFINESQUE, Description of two new Genera of North American Fishes*, *OPSANUS* and *NOTROPIS*: *American Monthly Magazine and Critical Review*, January 1818.

CONSTANTINE SAMUEL RAFINESQUE.

Opsanus Rafinesque, 203; type *OPSANUS CERAPALUS* Raf. (*GADUS TAU* L.).

This genus has been usually and wrongly called *BATRACHUS*.

Notropis Rafinesque, 204; type *NOTROPIS ATHERINOIDES* Raf. (*ALBURNUS RUBELLUS* Agassiz).

XCIX. *RAFINESQUE, Discoveries in Natural History*: *American Monthly Magazine*, September 1818.

Glossodon Rafinesque, 354; type *GLOSSODON HARENGOIDES* Raf. (*HIODON TERGISUS* Le Sueur).

A synonym of *HIODON*, regarded by Rafinesque as too "similar to *DIODON* in sound."

C. *RAFINESQUE, Further Discoveries in Natural History*: *Amer. Monthly Magazine*, October 1818.

Pogostoma Rafinesque, 445; type *POGOSTOMA LEUCOPS* Rafinesque.

A myth drawn by Audubon.

Dinectus Rafinesque, 445; type *DINECTUS TRUNCATUS* Raf.

A mythical sturgeon, drawn by Audubon.

Litholepis Rafinesque, 445; type LITHOLEPIS ADAMANTINUS Raf.

The "Devil-jack Diamond Fish," drawn by Audubon, a mythical gar-pike of which the scales will "turn a rifle ball."

This remarkable paper is based on paintings of fishes "seen down the river" by Audubon. Rafinesque was, in 1818, a guest at Audubon's house at Hendersonville, Kentucky. One night, bats entered the window. Rafinesque was convinced that they were of a new species, and used Audubon's costly violin to beat them down. Audubon in return showed him paintings of remarkable fishes. Rough copies of these are found in Rafinesque's note-books, preserved in the Smithsonian Institution. Their introduction into Science was a practical joke on the part of the great ornithologist.

Rafinesque also mentions as new genera, by name only, without explanation: CHEILOBUS, MINICULUS, OPLICTIS, LEPTOSOMA and GLANIS. These can have no place in the system.

CI. RAFINESQUE, *Description of Three New Genera of Fluviatile Fish*, POMOXIS, SARCHIRUS and EXOGLOSSUM: Jour. Ac. Nat. Sci. Phila., November 1818.

Pomoxis Rafinesque, 417; type POMOXIS ANNULARIS Raf.

Sarchirus Rafinesque, 419; type SARCHIRUS VITTATUS Raf.

Young of LEPISOSTEUS OSSEUS.

Exoglossum Rafinesque, 421; type EXOGLOSSUM ANNULATUM Raf.
(CYPRINUS MAXILLINGUA Le Sueur).

Maxillingua Rafinesque, 421; type CYPRINUS MAXILLINGUA Le Sueur.
Same as EXOGLOSSUM.

Hypentelium Rafinesque, 421; type EXOGLOSSUM MACROPTERUM Raf.
(CATOSTOMUS NIGRICANS Le Sueur).

Replaces HYLAMYZON Agassiz.

CII. RAFINESQUE, *Further account of Discoveries etc.*: Amer. Monthly Magazine, November 1818.

Noturus Rafinesque, 41; type NOTURUS FLAVUS Raf.

CIII. RAFINESQUE, *Prodrome de 70 Nouveaux Genres et d'Animaux Découverts dans l'intérieur des États Unis d'Amérique durant l'Année 1818*: Journal de Physique, de Chymie et d'Histoire Naturelle, Paris, June 1819.

Aplodinotus Rafinesque, 419; type *APLODINOTUS GRUNNIENS* Raf.

Spelling corrected by Gill to *HAPLODONOTUS*.

Etheostoma Rafinesque, 419; type *ETHEOSTOMA BLENNIOIDES* Raf.

As determined by Agassiz. Later fixed on *ETHEOSTOMA FLABELLARIIS* Rafinesque by Jordan & Evermann. Replaces *DIPLESION* Rafinesque and *HYOSTOMA* Agassiz.

Leucops Rafinesque, 419; type *POGOSTOMA LEUCOPS* Raf.

A myth of Audubon.

Aplocentrus Rafinesque, 420; type *APLOCENTRUS CALLIOPS* Raf.

Mythical; after Audubon.

Calliurus Rafinesque, 420; type *CALLIURUS PUNCTULATUS* Raf.

A synonym of *MICROPTERUS* Lacepède.

Lepomis Rafinesque, 420; type, as stated by the author, *LABRUS AURITUS* L.

Pomotis Rafinesque, 420; type also stated to be *LABRUS AURITUS* L.

Apomotis Rafinesque, 420; type *LEPOMIS CYANELLUS* Raf.

Notemigonus Rafinesque, 421; type *NOTEMIGONUS AURATUS* Raf. (*CYPRINUS CRYSOLEUCAS* Mitchill).

Amphiodon Rafinesque, 421; *AMPHIODON ALVEOIDES* Raf. (Misprint for *ALOSOIDES*.)

Replaces *ELATTONISTIUS* Gill & Jordan.

Ambلودon Rafinesque, 421; type *AMBLONDON BUBALUS* Raf.

The "Buffalo-fish," to which the large blunt pharyngeal teeth of *APLODINOTUS* were wrongly ascribed. A complex; the name *AMBLONDON* later restricted by Rafinesque to *APLODINOTUS GRUNNIENS*, while the Buffalo-fish became type of *ICTIOBUS* Rafinesque.

Cycleptus Rafinesque, 421; type *CYCLEPTUS NIGRESCENS* (*CATOSTOMUS ELONGATUS* Le Sueur).

Pilodictis Rafinesque, 422; type *PILODICTIS LIMOSUS* Raf.

A myth.

CIV. RAFINESQUE, *Annals of Nature*, I, 1820.

Hemiplus Rafinesque, 6; type *HEMIPLUS LACUSTRIS* Raf. (*CYPRINUS CRYSOLEUCAS* Mitchill).

Same as *NOTEMIGONUS* Rafinesque, 1819.

CV. RAFINESQUE, *Ichthyologia Ohiensis*, 1820.

It was the fortune of Professor Rafinesque to be one of the first to explore two of the richest fish faunas of the world, that of Sicily and that of the Ohio River. His various papers show his peculiar traits, intense activity, keen philosophical insight, and hopeless slovenliness in method.

Stizostedion Rafinesque, 23; type PERCA SALMONEA Raf. (PERCA VITREA Mitchill).

Lepibema Rafinesque, 23; type PERCA CHRYSOPS Raf.

Pomacampus Rafinesque, 23; type PERCA NIGROPUNCTATA Raf.

Mythical, being one of Audubon's practical jokes.

Ichthelis Rafinesque, 27; type LABRUS AURITUS L.

A needless substitute for LEPOMIS, which is transferred (p. 30) to species of MICROPTERUS Lacepède.

Telipomis Rafinesque, 27; type LEPOMIS CYANELLUS Raf.

A needless substitute for APOMOTIS.

Aplites Rafinesque, 30; type LEPOMIS PALLIDA Raf.

A species of MICROPTERUS.

Nemocampus Rafinesque, 30; type LEPOMIS FLEXUOLARIS Raf.

A species of MICROPTERUS.

Dioplites Rafinesque, 32; type LEPOMIS NOTATA Raf.

Also a synonym of MICROPTERUS.

Ambloplites Rafinesque, 33; type LEPOMIS ICHTHELOIDES Raf. (BODIANUS RUPESTRIS Raf., 1817).

Aplesion Rafinesque, 36; type ETHEOSTOMA CALLIURA Raf.

The young of MICROPTERUS.

Diplesion Rafinesque, 37; type ETHEOSTOMA BLENNIOIDES Raf.

A synonym of ETHEOSTOMA Raf. See opinion 14, Comm. Zool. Nomencl.

Pomolobus Rafinesque, 38; type POMOLOBUS CHRYSOCHLORIS Raf.

Dorosoma Rafinesque, 39; type DOROSOMA HETERURA Raf. (MEGALOPS CEPEDIANA Le Sueur).

Clodalus Rafinesque, 43; type HIODON CLODALUS Le Sueur.

Same as HIODON.

Minnilus Rafinesque, 45; type MINNILUS DINEMUS Raf.

This is apparently the same as NOTROPIS Raf., 1818.

Dobula Rafinesque, 45; type not named (*CYPRINUS DOBULA* L.).

Equivalent to *LEUCISCUS* Cuvier.

Phoxinus Rafinesque, 45; type not named (*CYPRINUS PHOXINUS* L.).

Alburnus Rafinesque, 45; type not named (*CYPRINUS ALBURNUS* L.).

Luxilus Rafinesque, 47; type *LUXILUS CHRYSOCEPHALUS* Raf. (*CYPRINUS CORNUTUS* Mitchill).

Chrosomus Rafinesque, 47; type *CHROSOMUS ERYTHROGASTER* Raf.

Semotilus Rafinesque, 49; type *SEMOTILUS DORSALIS* Raf. (*CYPRINUS ATROMACULATUS* Mitchill).

Rutilus Rafinesque, 50; type *LEUCISCUS RUTILUS* L.

Plargyrus Rafinesque, 50; type *RUTILUS PLARGYRUS* Raf. (*CYPRINUS CORNUTUS* Mitchill).

Pimephales Rafinesque, 52; type *PIMEPHALES PROMELAS* Raf.

Moxostoma Rafinesque, 54; type *CATOSTOMUS ANISURUS* Raf.

Ictiobus Rafinesque, 55; type *CATOSTOMUS BUBALUS* Raf.

Spelled *ICHTHYOBUS* by Agassiz.

The name *AMELONDON* was based, in part, on the same species, and may be held as tenable for this genus.

Leptops Rafinesque, 64; type *PIMELODUS VISCOSUS* Raf. (*SILURUS OLIVARIS* Raf.).

Opladelus Rafinesque, 64; type *PIMELODUS NEBULOSUS* Raf. (*SILURUS OLIVARIS* Raf.).

Written *HOPLADELUS* by Gill. A synonym of *LEPTOPS*.

Ameiurus Rafinesque, 65; type *PIMELODUS CUPREUS* Raf. (*PIMELODUS NATALIS* Le Sueur).

Ilictis Rafinesque, 66; type *PIMELODUS LIMOSUS* Raf. (*SILURUS OLIVARIS* Raf.).

A synonym of *LEPTOPS*.

Picorel Rafinesque, 70; type *ESOX VITTATUS* Raf.

A drawing in Rafinesque's note-book shows this to be a mythical species of "pickerel."

Cylindrosteus Rafinesque, 72; type *LEPISOSTEUS PLATOSTOMUS* Raf.

Atractosteus Rafinesque, 75; type *LEPISOSTEUS FEROX* Raf.

Sturio Rafinesque, 79; type *ACIPENSER MACULOSUS* Le Sueur.

Carpiodes Rafinesque, 56; type *CATOSTOMUS CYPRINUS* Le Sueur.

As fixed by Jordan & Gilbert, 1883.

Teretulus Rafinesque, 57; type *CATOSTOMUS AUREOLUS* Le Sueur.

As fixed by Jordan, 1877.

Decactylus Rafinesque, 60; type *CATOSTOMUS BOSTONIENSIS* Le Sueur
(*CYPRINUS TERES* Mitchill) as restricted by Jordan.

CATOSTOMUS TERES is probably the tenable name, as the earlier name *COMMERSONI* Lacepède is very doubtful.

Ictalurus Rafinesque, 61; type *SILURUS PUNCTATUS* Raf.

Ellioptis Rafinesque, 62; type *PIMELODUS MACULATUS* Raf.

A synonym of *ICTALURUS*.

Eurystomus Rafinesque, 65; type *CATOSTOMUS MEGASTOMUS* Raf.

An Audubonian myth.

Sterletus Rafinesque, 80; type *ACIPENSER SEROTINUS* Raf. (*ACIPENSER RUBICUNDUS* Le Sueur).

Dinectus Rafinesque, 80; type *DINECTUS TRUNCATUS* Raf.

Another of Audubon's mythical paintings, representing, as suggested by Rafinesque, "only a sturgeon incorrectly drawn."

Pegedictis Rafinesque, 85; type *PEGEDICTIS ICTALOPS* Raf.

Apparently a confusion of notes on *CATONOTUS FLABELLARIUS* and *COTTUS RICHARDSONI*. The species is therefore unidentifiable. Best regarded as a synonym of *COTTUS*.

Proceros Rafinesque, 87; type *PROCEROS MACULATUS* Raf.

A myth, not of Audubon but of "Mr. M. of St. Genevieve."

CVI. TILESIIUS, *De Piscium Australium Novo Genere*: Mémoires Académie Sciences, Petersburg, 1820.

W. G. VON TILESIIUS.

Balistapus Tilesius, 310; type (*BALISTES ACULEATUS* L.).

CVII. RISSO, *Alepocephalus, nouveau Genre de Poissons*: Mémoires de l'Académie Royale de Turin, XXV, 1820.

ANASTASE RISSO.

Alepocephalus Risso, 262; type *ALEPOCEPHALUS ROSTRATUS* Risso.

CVIII. GOLDFUSS, *Handbuch Zoologie*, II, 1820.*

GEORG AUGUST GOLDFUSS.

Batrachops Goldfuss; type *LOPHIUS COMMERSONIANUS* Lacepède.Substitute for *CHIRONECTES*, preoccupied. Equivalent to *ANTENNARIUS*.CIX. LE SUEUR, *Description of a new Genus and Several New Species of Fresh-Water Fish Indigenous to the United States*: Jour. Ac. Nat. Sci. Phila., II, 1821.

CHARLES A. LE SUEUR.

Mollinesia Le Sueur, 2; type *MOLLINESIA LATIPINNA* Le Sueur.CX. HAMILTON, *An Account of the Fishes found in the River Ganges and its Branches*: Edinburgh, 1822.†FRANCIS HAMILTON [formerly BUCHANAN].
(Often quoted as FRANCIS HAMILTON-BUCHANAN.)**Callichrous** Hamilton, 149; type *SILURUS BIMACULATUS* Bloch.Synonym of *OMPOK* Lacepède.**Cynoglossus** Hamilton, 365; type *CYNOGLOSSUS LINGUA* Hamilton.

Monotypic.

Bola Hamilton, 368; type *BOLA COITOR* Hamilton.

As restricted by Jordan.

Coius Hamilton, 369; type *COIUS COBOJUS* Hamilton (*PERCA SCANDENS* DALDORF).

As here restricted by us.

The first species named, *COIUS VACTI* Hamilton, is *LATES COLONORUM*. The genus *Coius* is grossly unnatural and is best served by relegation to synonymy.Hamilton observes: "The Cobojus by the natives is considered as the prototype of their genus 'Coi' from which the name *COIUS* is derived."Equivalent to *ANABAS* Cuvier.**Chanda** Hamilton, 370; type *CHANDA RUCONIUS* Hamilton.The first unquestioned species named. It is a species of *LEIOGNATHUS* Lacepède. The others named belong to *AMBASSIS* Cuvier.* "*ACANTHIOTUS* Goldfuss" quoted by Agassiz (Nomenclator) is merely a misprint for *ACANTHONOTUS*.

† We are indebted to Mr. John Smallwood for the record of the genera of Hamilton.

Sisor Hamilton, 379; type *SISOR RABDOPHORUS* Hamilton.

Monotypic.

Corica Hamilton, 383; type *CORICA COBORNA* Hamilton.

Monotypic. Apparently an ally of *CLUPEOIDES* Bleeker. Not *CORICUS* Cuvier.

Chela Hamilton, 383; type *CYPRINUS CACHIUS* Hamilton.

The first species named; as restricted by Bleeker, 1862. Günther later restricts it to *C. GORA* Hamilton. Replaces *CACHIA* Günther.

Barilius Hamilton, 384; type by tautonomy *CYPRINUS BARILA* Hamilton.

The first species named.

Bangana Hamilton, 385; type *CYPRINUS DERO* Hamilton.

The first species named; probably replaces *TYLOGNATHUS* Heckel and *LOBOCHEILUS* van Hasselt.

Puntius Hamilton, 388; type *CYPRINUS PUNTIO* Hamilton.

By tautonomy. Restricted to *CYPRINUS SOPHORE* Hamilton by Bleeker.

Danio Hamilton, 390; type *CYPRINUS DANGILA* Hamilton.

The first species named; as restricted by Bleeker.

Morulus Hamilton, 391; type *CYPRINUS MORALA* Hamilton.

The first species named; restriction by Bleeker.

Cabdio Hamilton, 392; type *CYPRINUS JAYA* Hamilton.

The first species named.

Garra Hamilton, 393; type *CYPRINUS LAMTA* Hamilton.

The first species named; as restricted by Bleeker. Replaces *DISCOGNATHUS* Heckel.

CXI (A). LEACH & DE LA BÈCHE, *Trans. Zool. Soc. London*, (2)
1822.

WILLIAM E. LEACH.

Dapedium Leach & De La Bèche, 45; type *DAPEDIUM POLITUM* Leach
(fossil).

Written *DAPEDIUS* by Agassiz.

CXI (B). SCHINZ, *Das Thierreich*, II, 1822.

H. R. SCHINZ.

Macrodon Schinz, 482; type *LONCHURUS ANCYLODON* Bloch & Schneider.

Replaces *ANCYLODON* Cuvier, 1817, preoccupied by *ANCYLODON* Illiger, 1811, a genus of mammals. *MACRODON* is prior to *SAGENICHTHYS* Berg, 1895, also a substitute for *ANCYLODON*. Not *MACRODON* Müller & Troschel, which is replaced by *HOPLIAS* Gill, 1903.

CXII. VAN HASSELT, (*Poissons de Java*): Allgemeine Konst. en Letterbok, II, 1823.

JAN COENRAD VAN HASSELT.

Homaloptera Van Hasselt, 130; type HOMALOPTERA FASCIATA Van Hasselt.

Crossocheilus Van Hasselt, 132; type CROSSOCHEILUS OBLONGUS Van Hasselt.

Hampala Van Hasselt, 132; type HAMPALA MACROLEPIDOTA Van Hasselt.

Lobocheilus Van Hasselt, 133; type LOBOCHEILUS FALCIFER Van Hasselt.

A synonym of BANGANA.

Nemacheilus Van Hasselt, 133; type COBITIS FASCIATUS Valenciennes.

Acanthopsis Van Hasselt, 133; type ACANTHOPSIS DIALYZONA Van Hasselt.

Acanthophthalmus Van Hasselt, 133; type ACANTHOPHTHALMUS FASCIATUS Van Hasselt.

Homaloptera Van Hasselt, 133; type HOMALOPTERA FASCIATA Van Hasselt.

Oxygaster Van Hasselt, 133; type OXYGASTER ANOMALURUS Van Hasselt.

CXIII. DESMAREST, *Première Décade Ichthyologique*, 1823.

ANSELME GAËTAN DESMAREST.

Diabasis Desmarest, 34; type DIABASIS PARRA Desmarest.

Not DIABASIS Hoffmanssegg, a genus of beetles, 1819. Replaced by HEMULON Cuvier.

CXIV. NARDO, *Osservazione Aggiunte all' Adriatica Ittiologia*, 1824.

GIAN DOMENICO NARDO.

Squatinatoraja Nardo; type SQUATINORAJA COLONNA (RHINOBATUS COLUMNÆ Müller & Henle).

A synonym of RHINOBATUS.

CXV. MITCHILL, *Description of an Extraordinary Fish*: Ann. Lyc. Nat. Hist. N. Y., 1, 1824.

SAMUEL LATHAM MITCHILL.

Saccopharynx Mitchill, 82; type SACCOPIHARYNX FLAGELLUM Mitchill.

CXVI. VALENCIENNES, *Description du Cernié*: Mém. du Museum, Paris, XI, 1824.

ACHILLE VALENCIENNES.

Polyprion Valenciennes, 265; type POLYPRION CERNIUM Valenciennes.

CXVII. OTTO, *Propterygia hyposticta*, Nova Acta Acad., 1824.

B. C. OTTO.

Propterygia Otto, 111; type PROPTERYGIA HYPOSTICTA Otto.

A deformed RAJA, with the pectoral fins free from the head, similar to CEPHALEUTHERUS Rafinesque.

CXVIII. QUOY & GAIMARD, *Voyage Autour du Monde . . . Exécuté sur les Corvettes l'Uranie et la Physicienne*. Under Captain Louis de Freycinet, 1824.

JEAN RÉNÉ CONSTANTINE QUOY; JOSEPH PAUL GAIMARD.

This important work, which closely preceded the second edition of the *Règne Animal*, adopted a few unpublished names from Cuvier's manuscripts.

Anampses (Cuvier) Quoy & Gaimard, 276; type ANAMPSES CUVIER Q. & G.

Monotypic.

Gerres (Cuvier) Quoy & Gaimard, 293; type GERRES VAIGIENSIS Q. & G., which is SCLÆNA ARGYREA Forskål.

In this paper the genus GERRES is mentioned for the first time. But two species are named, G. VAIGIENSIS and G. GULA. The former belongs to the modern genus XYSTĒMA Jordan & Evermann, the latter to EUCINOSTOMUS Baird. When GERRES was later defined by Cuvier in the *Règne Animal*, SCLĒNA ARGYREA, which is identical with G. VAIGIENSIS, is included, and G. GULA is not mentioned. It would appear that G. VAIGIENSIS must be taken as type, thus replacing XYSTĒMA.

Jordan & Evermann have taken an American species, GERRES LINEATUS (Humboldt) as type. This species is named by Cuvier, but not by Quoy & Gaimard. It cannot therefore serve as the type of GERRES. The genus called GERRES by Jordan & Evermann must apparently stand as DIAPTERUS Ranzani. If GERRES is regarded as preoccupied by GERRIS Fabricius, a genus of insects of earlier date, the substitute name of CATOCHÆNUM Cantor, 1850, should be used.

Percophis Quoy & Gaimard, 351; type PERCOPHIS BRASILIANUS Q. & G.
Monotypic.

Priodon (Cuvier) Quoy & Gaimard, 377; type PRIODON ANNULATUS Q.
& G.

A species of NASO Lacepède.

CXVIII (A). HARLAN, *Saurocephalus*: Journ. Ac. Nat. Sci. Phila.,
III (fossil fish), 1824.

RICHARD HARLAN.

Saurocephalus Harlan, 339; type SAUROCEPHALUS LANCIFORMIS Harlan.

CXIX. KÖNIG, *Icones Fossiles Sectione*, 1825.

C. KÖNIG.

Bucklandium König, 4; type BUCKLANDIUM DILUVII König.
Monotypic.

Ampheristus König, pl. XV, fig. 190; type AMPHERISTUS TOLIACUS
König.

Monotypic.

CXX. BOWDICH, *Fishes of Madeira*, 1825.

T. EDWARD BOWDICH.

Labeo Bowdich, 122; type LABEO SPAROIDES Bowdich.

A sparoid fish; not LABEO Cuvier, 1817.

Anomalodon Bowdich, 237; type ANOMALODON INCISUS Bowdich.

Apparently a synonym of POMADASYs Lacepède.

Diastodon Bowdich, 238; type DIASTODON SPECIOSUS Bowdich (LABRUS SCROFA Cuv. & Val.).

This genus appears valid. It is near LEPIDAPLOIS Gill, but with much smaller scales.

Seleima Bowdich, 238; type SELEIMA AURATA Bowdich.

A synonym of KYPHOSUS Lacepède (K. INCISOR).

Amorphocephalus Bowdich, 238; type AMORPHOCEPHALUS GRANULATUS Bowdich.

A synonym of XYRICHTHYS Cuvier.

CXXI. RISSO, *Histoire Naturelle des Principales Productions de l'Europe Méridionale*, vol. III, Paris, 1826.

ANASTASE RISSO.

Lamia Risso, 123; type SQUALUS CORNUBICUS L.

Monotypic. A synonym of LAMNA Cuvier, 1817.

Acanthias Risso, 131; type SQUALUS ACANTHIAS L.

Equivalent to SQUALUS L. as restricted.

Scyphius Risso, 185; type SCYPHIUS FASCIATUS Risso.

A synonym of NEROPHIS Rafinesque, 1810.

Onos Risso, 214; type GADUS MUSTELA Bloch.

A synonym of GADROPSARUS Rafinesque.

Lotta Risso, 217; type GADUS ELONGATUS Otto.

A variant of LOTA Cuvier, 1817 ("Les Lottes"); apparently not eligible as a substitute for MOLVA Fleming.

Mora Risso, 224; type MORA MEDITERRANEA Risso.

Morua Risso, 225; type GADUS CAPELAN Lacepède.

According to Risso, a synonym of TRISOPTERUS Rafinesque, 1814; prior to BRACHYGADUS Gill (GADUS MINUTUS L.). Monotypic.

Tripterygion Risso, 241; type TRIPTERYGION NASUS Risso.

Monotypic.

Diana Risso, 267; type DIANA SEMILUNATA Risso.

Monotypic.

Aphia Risso, 287; type APHIA MERIDIONALIS Risso.

Apparently a young ATHERINA. Monotypic.

Fiatola Risso, 289; type FIATOLA FASCIATA Risso.

Monotypic. Apparently a young STROMATEUS.

Ausonia Risso, 341; type **AUSONIA CUVIERI** Risso.

A synonym of **LUVARUS** Rafinesque.

Aurata Risso, 355; type **AURATA SEMILUNATA** Risso.

A synonym of **SPARUS** L. as restricted by Fleming.

Macrostoma Risso, 447; type **MACROSTOMA ANGUSTIDENS** Risso.

Not **MACROSTOMUS** Wied, a genus of insects; replaced by **NOTOSCOPELUS** Günther.

Alpismaris Risso, 458; type **ALPISMARIS RISSO** Risso.

The young of **Synodus**.

Paralepis Risso, 472; type **PARALEPIS COREGONOIDES** Risso (**COREGONUS MACRÆNULA** Risso, 1810).

CXXI (A). **GERMAR**, *Keferstein's Deutschland's Geognosie Dargestellt*, 1826.

E. F. **GERMAR**.

Ichthyolithus Gernar, IV, 96; type **ICHTHYOLITHUS ESOCIFORMIS** Gernar.

Perhaps identical with **LEPTOLEPIS**. **ICHTHYOLITHUS**, a term for fossil fishes used by early authors, is perhaps not intended as a scientific name.

CXXII. **GEOFFROY ST. HILAIRE**, *Histoire Naturelle des Poissons de la Mer Rouge et de la Méditerranée*, 1826.

ISIDORE GEOFFROY ST. HILAIRE.

Trygon Geoffroy St. Hilaire; type **TRYGON GRABATUS** Geoffroy St. Hilaire.

This species is not noticed by recent writers. It is apparently a species of **TÆNIURA** Müller & Henle, 1842, allied to **TÆNIURA LYMMA** (Forskål). This is generically distinct from the type of **TRYGON** (Adanson) Cuvier, 1817. St. Hilaire makes no reference to Adanson, from whose manuscripts Cuvier took the name. It is plain that the date of the article which contains the name **TRYGON** is subsequent to 1825, as a footnote relates to a paper read in October 1825, and printed in November. Hence we assume the date of the present paper as 1826. In any event **TRYGON** St. Hilaire is preceded by **TRYGON** Cuvier, and both are later than **DASYATIS** Rafinesque and **DASYBATUS** Klein.

CXXIII. KAUP, *Beiträge zur Amphibiologie und Ichthyologie*: Isis, XIX, 1826.

JOHANN JACOB KAUP.

Not seen by us.

Rachycentron Kaup, 89; type RACHYCENTRON TYPUS.

Name amended in 1827 (*Isis*, p. 624) to RACHYCENTRUM. Replaces ELACATE Cuvier.

Narke Kaup (Ueber NARKE, 65); type RAJA CAPENSIS Gmelin.

Replaces ASTRAPE Gray.

CXXIV. NARDO, *De Proctostego Novum Piscium*: in *Diario Chem. et Hist. Nat. Ticino*, vol. I, 1827.

GIAN DOMENICO NARDO.

Proctostegus Nardo, I, 18, 42; type PROCTOSTEGUS PROCTOSTEGUS Nardo.

A synonym of DIANA Risso.

CXXV. NARDO, *Prodromus Observationem et Disquisitionem, Adriaticæ Ichthyologiæ*: *Giorn. Fisica de Pavia*, I, 1827.

Aphanius Nardo, 17, 23; type APHANIUS NANUS Nardo (CYPRINODON CALARITANUS Cuv. & Val.).

A valid genus replacing LEBIAS of authors (not of Cuvier) and MICROMUGIL Gulia, 1861. Local name "Nani vel noni."

Acentrolophus Nardo, II; type ACENTROLOPHUS MACULATUS Nardo (PERCA NIGRA Gmelin).

Substitute for CENTROLOPHUS Lacepède, regarded as inapplicable.

Leptosoma Nardo, 15, 22; type LEPTOSOMA ATRUM Nardo.

Name preoccupied in Crustacea, Leach, 1819. "Stogio bastardo"; synonym probably of MONOCHIRUS.

Pastinacæ Nardo, II; type RAJA PASTINACA L.

Lævirajæ Nardo, II; type RAJA MIRALETUS L.

CXXVI. HARWOOD, *On a Newly Discovered Genus of Serpentine Fishes*: *Philos. Trans.*, 1827.

J. HARWOOD.

Ophiognathus Harwood, 49; type OPHIOGNATHUS AMPULLACEUS Harwood.

A synonym of SACOPHARYNX Mitchill.

CXXVII. CLOQUET, *Nouveau Dictionnaire d'Histoire Naturelle: Nouvelle Edition*, XXX, 1827.

HIPPOLYTE CLOQUET.

Sandat Cloquet, XXX, 126, 129; type PERCA LUCIOPERCA L.

Based on "Les Sandres" Cuvier. A synonym of SANDER (Cuvier) Oken.

CXXVIII. RÜPPELL, *Atlas zu der Reise in Nördlichen Afrika: Fische des Rothen Meeres*, 1828.

EDUARD RÜPPELL.

Pharopteryx Rüppell, 15; type PHAROPTERYX NIGRICANS Rüppell.

A synonym of PLESIOPS Cuvier as later shown by Rüppell.

Lutodeira (Van Hasselt) Rüppell, 17; type LUTODEIRA INDICA (MUGIL CHANOS L.).

A synonym of CHANOS. Monotypic.

Scoliostomus Rüppell, 17; same type.

A synonym of CHANOS.

Haliophis Rüppell, 49; type MURENA GUTTATA Forskål.

Monotypic.

Pastinachus Rüppell, 82; type RAJA SEPHEN Forskål.

Same as HYPOLOPHUS Müller & Henle. Not PASTINACA Nardo.

Asterropteryx Rüppell, 138; type ASTERROPTERYX SEMIPUNCTATUS Rüppell.

CXXIX. FLEMING, *History of British Animals*, 1828.

JOHN FLEMING.

Selanonius Fleming, 169; type SELANONIUS WALKERI Fleming = SQUALUS NASUS (Bonnaterre).

A synonym of LAMNA Cuvier.

Encrasicholus Fleming, 183; type CLUPEA ENCRASICHOLUS L.

Synonym of ENGRAULIS Cuvier, 1817. Monotypic.

Gobitis Fleming, 189; type COBITIS TÆNIA L.

A perversion of COBITIS.

Morhua Fleming, 190; type GADUS MORRHUA L.

A synonym of GADUS L.

Molva Fleming, 197; type GADUS MOLVA L.

Cernua Fleming, 212; type PERCA CERNUA L.

Same as CERNUA Schæfer or ACERINA Gildenstadt.

Cataphractus Fleming, 216; type COTTUS CATAPHRACTUS L.

A synonym of AGONUS Bloch & Schneider.

Spinachia Fleming, 219; type GASTEROSTEUS SPINACHIA L.

CXXX. STARK, *Elements of Natural History*, Edinburgh, 2 vols., 1828.

JOHN STARK.

Latinization of several of Cuvier's names, some of them differing from the form chosen by Oken. These are the following:

Brosmus Stark, 1, 425; type GADUS BROSME Müller.

Same as BROSME Oken, 1817.

Sandrus Stark, 1, 452; type PERCA LUCIOPERCA L.

Same as SANDER Oken.

Stelliferus Stark, 1, 459; type BODIANUS STELLIFER Bloch.

Same as STELLIFER Oken.

Cingla Stark, 1, 465; type PERCA ZINGEL L.

Same as ZINGEL Oken.

Daurada Stark, 1, 465; type SPARUS AURATA L.

A synonym of SPARUS L.

CXXXI. LESSON, *Description du Nouveau Genre Ichthyophis*: Mém. Soc. Nat. Hist. Paris, IV, 397, 1828.

R. P. LESSON.

Ichthyophis Lesson, 397; type ICHTHYOPHIS PANTHERINUS Lesson.

Name preoccupied; replaced by UROPTERYGIUS Rüppell.

CXXXII. CUVIER & VALENCIENNES, *Histoire Naturelle des Poissons*, vol. II, 1828.

GEORGES CUVIER and ACHILLE VALENCIENNES.

The first two volumes (the first one being anatomical and descriptive) of this great work preceded the second edition of the *Règne Animal*. The third and fourth volumes, also dated 1829, appeared in the last half of the year. The second edition of the *Règne Animal*, Vol. II, con-

taining the fishes, appeared in the first half of the year 1829, according to Mr. Fowler.

Labrax Cuvier & Valenciennes, II, 55; type PERCA LABRAX L. (LABRAX LUPUS C. & V.).

This is LABRAX of Klein, but not of Pallas, 1811.

Lates Cuvier & Valenciennes, 88; type PERCA NILOTICA L.

Lucioperca Cuvier & Valenciennes, II, 110; type PERCA LUCIOPERCA L. (LUCIOPERCA SANDRA Cuv. & Val.).

A synonym of SANDER Oken.

Huro Cuvier & Valenciennes, 125; type HURO NIGRICANS (LABRUS SALMOIDES Lacepède).

The genus is identical with GRYSTES. Both are synonyms of MICROPTERUS Lacepède.

Etelis Cuvier & Valenciennes, II, 127; type ETELIS CARBUNCULUS Cuv. & Val.

Monotypic.

Diploprion (Kuhl & Van Hasselt) Cuvier & Valenciennes, 137; type DIPLOPRION BIFASCIATUM Kuhl & Van Hasselt.

Monotypic.

Pomatomus (Risso) Cuvier & Valenciennes, II, 171; type POMATOMUS TELESCOPIUM Risso.

Not POMATOMUS Lacepède. Stands as EPIGONUS Rafinesque.

Ambassis (Commerson) Cuvier & Valenciennes, II, 175; type CENTROPOMUS AMBASSIS Lacepède (AMBASSIS COMMERSONI Cuv. & Val.), SCLÆNA SAFGHA Forskål.

Aspro Cuvier & Valenciennes, II, 188; type PERCA ASPER L.

Equivalent to ASPER Schæfer and ASPERULUS Klein. Not ASPRO Commerson. PERCA ASPER is probably generically distinct from ZINGEL (Cuvier) Oken. The genus may stand as ASPER Schæfer or ASPERULUS Klein, both names of questionable eligibility.

Mesoprion Cuvier (*Règne Animal*, 143), Cuv. & Val., II, 441; type LUTIANUS LUTIANUS Bloch.

Name a substitute for LUTJANUS, regarded as barbarous.

CXXXIII. BORY DE SAINT VINCENT, *Dictionnaire Classique d'Histoire Naturelle*, XIII, 201, 1828.

JEAN BAPTISTE GEORGE MARIE BORY DE ST. VINCENT.

Sandat Bory de St. Vincent, XIII, 204, 1828; type PERCA LUCIOPERCA L.
A synonym of SANDER Oken.

CXXXIII (A). SEDGWICK & MURCHISON, *Fossil Fishes*: Trans. Geol. Soc. (2), III, 1828.

ADAM SEDGWICK and RODERIC IMPEY MURCHISON.

Dipterus Sedgwick & Murchison, 143; type DIPTERUS VALENCIENNESI Sedgwick & Murchison.

CXXXIV. CUVIER, *Le Règne Animal, distribué d'Après son Organisation*: Edition II, Vol. II (Fishes etc.), 1829.

GEORGES CUVIER.

A work of great importance, constituting with the first edition in 1817 the foundation of modern Ichthyology. The classification of fishes by Cuvier was for the first time solidly based on the true basis of Comparative Anatomy.

According to Henry Weed Fowler (*Proc. Ac. Nat. Sci. Phila.*, 1907, 264) the first, second, fourth and fifth fascicles of the second volume (*Fishes* etc.) of the Second Edition of the *Règne Animal* appeared in January, February and March 1829. The third was delayed until about July. The third and fourth volumes of the *Histoire Naturelle des Poissons* appeared later in the same year, 1829. These facts do not affect nomenclature, so far as we observe. We are indebted to Mr. Fowler for the pagination of the *Règne Animal*, our two copies being reprints.

Acerina Cuvier, 144 (Cuv. & Val., III, 3); type PERCA CERNUA L.

Identical with CERNUA Schæfer, ACERINA Gùldenstadt, PERCIS Klein, and GYMNOCEPHALUS Bloch. The eligibility of these earlier names awaits decision.

Rypticus Cuvier, II, 144 (Cuv. & Val., III, 60); type ANTHIAS SAPO-
NACEUS Bloch.

More correctly written RHYPTICUS.

Pentaceros Cuvier, 145 (Cuv. & Val., III, 30); type PENTACEROS
CAPENSIS C. & V.

This name has been regarded as preoccupied by PENTACEROS Schulte, 1760, a star-fish.* It has been replaced by QUINQUARIUS Jordan. This change may not be necessary. According to Prof. Walter K. Fisher PENTACEROS of Schulte is not properly a generic name but a quasi-vernacular.

PENTACEROS Schröter, 1782, a name for the same animal is doubtfully tenable.

*Dr. Fisher (*Smithson. Misc. Coll.*, no. 1799, 1908) explains that Schulte ("Versteinerte Seesterne") following the pre-Linnæan work of Linck (*De Stel-*

Centropristes Cuvier, 145 (Cuv. & Val., III, 56); type *CENTROPRISTES NIGRICANS* Cuv. & Val. (*LABRUS STRIATUS* L.).

Later written *CENTROPRISTIS*.

Gristes Cuvier (Cuv. & Val., III, 54); type *LABRUS SALMOIDES* Lacepède.

A synonym of *MICROPTERUS* Lacepède. Later written *GRYSTES*.

Chironemus Cuvier (C. & V., 78), 146; type *CHIRONEMUS GEORGIANUS* Cuv. & Val.

Monotypic.

Pomotis Cuvier, 147 (C. & V., III, 99); type "*POMOTIS VULGARIS*" (*PERCA GIBBOSA* L.).

No reference is made to Rafinesque's genus *POMOTIS*, proposed in 1819, with "*LABRUS AURITUS* L." as type. The description of Cuv. & Val. refers to the species called *PERCA GIBBOSA* by Linnæus (*EUPOMOTIS GIBBOSUS* of Gill & Jordan). To this same species Rafinesque later transferred his generic name *POMOTIS*. Stands as *EUPOMOTIS* Gill & Jordan.

Centrarchus Cuvier 147 (C. & V., III, 84); type *CYCHLA ÆNEA* Le Sueur.

A synonym of *AMBLOPLITES* Rafinesque, 1820. *LABRUS IRIDEUS* Lacepède, usually accepted as the type of *CENTRARCHUS*, is noted by Cuvier as an uncertain species which the author had not seen. The genus typified by *IRIDEUS* Lacepède (= *MACROPTERUS* Lacepède) must stand as *EUCENTRARCHUS* Gill, and its family as *MICROPTERIDÆ*, as Fowler has already indicated.

Dules Cuvier, 147 (C. & V., III, 111); type *DULES AURIGA* Cuvier.

Fowler (1907) regards *DULES* as preoccupied by *DULUS* Vieillot, 1816, a genus of birds. He gives a new name, *EUDULUS*, to *DULES AURIGA*.

Datnia Cuvier, 147 (C. & V., III, 138); type *COIUS DATNIA* Hamilton (*DATNIA ARGENTEA* Cuv. & Val.).

Pelates Cuvier, 148 (C. & V., III, 145); type *PELATES QUADRILINEATUS* Cuv. & Val.

lis Marinis, 1793) divides the star-fishes into three "genera" ("Geschlechter"), to which he gives group names, the five-rayed forms being under the "genus" "quinquifidæ." Under these are several kinds or species ("Arten"), one of them, "Der fünfhörnichte, *PENTACEROS*, hat fünf tiefe ausgeschweifte Seiten und lange kolbichte oder zugespitzte Strahlen. Die hierher gehörigen Arten sind entweder platt, *PLANÆ*, oder ab hockericht und bauchericht, *GIBBÆ*."

Obviously this is not scientific nomenclature.

"Schröter in 1782 (*Musci Gottwaldiani Testaceorum, Stellarum marinum* etc., Nürnberg, 58) used *PENTACEROS*, but he is not a consistent binomialist, and his 'generic' names are not tenable."

It is evident that *PENTACEROS* has no standing in nomenclature prior to its use by Cuvier & Valenciennes, unless given it by Schröter in 1782, a matter which awaits decision.

Helotes Cuvier, 148 (C. & V., III, 149); type *THERAPON SEXLINEATUS* Quoy & Gaimard.

Monotypic.

Trichodon (Steller) Cuvier, about 150 (C. & V., III, 153); type *TRACHINUS TRICHODON* Steller (*TRICHODON STELLERI* Cuv. & Val.).

Monotypic.

Myripristis Cuvier (about 150), (C. & V., III, 160); type *MYRIPRISTIS JACOBUS* Cuv. & Val.

Beryx Cuvier (about 150), (C. & V., III, 222); type *BERYX DECADACTYLUS* Cuv. & Val.

Pinguipes Cuvier, 153 (C. & V., III, 277); type *PINGUIPES BRASILIANUS* Cuv. & Val.

Monotypic. A synonym of *MUGILOIDES* Lacepède.

Upeneus Cuvier (about 160), (C. & V., III, 446); type *MULLUS BIFASCIATUS* Lacepède.

As first restricted by Bleeker. Later Bleeker transferred the name *UPENEUS* to the first species named by Cuvier & Valenciennes, *MULLUS VITTATUS* Forskål, already the type of his own genus *UPENEOIDES*. *MULLUS BIFASCIATUS* became then *PARUPENEUS*. This reversal seems to us unjustified. The name has been spelled *HYPENEUS*. *UPENEUS* should stand.

Hemitripterus Cuvier, 164; type *COTTUS TRIPTERYGIUS* Bloch & Schneider.

Hemilepidotus Cuvier, 165; type *COTTUS HEMILEPIDOTUS* Tilesius.

Monotypic.

Sebastes Cuvier, 166; type *PERCA NORVEGICA* Müller.

Blepsias Cuvier, 167; type *BLENNIUS VILLOSUS* Pallas.

Monotypic.

Apistes Cuvier, 167; type *APISTES ALATUS* Cuvier.

Agriopus Cuvier ("Les Agriopes"), 168; type *BLENNIUS TORVUS* Walbaum.

Pelor Cuvier, 168; type *SCORPÆNA DIDACTYLA* Pallas (*PELOR OBSCURUM* Cuvier).

Monotypic. Name preoccupied for a genus of beetles, 1813. Replaced by *INIMICUS* Jordan & Starks (type *PELOR JAPONICUM* Cuv. & Val.). *P. FILAMENTOSUM* Cuv. & Val. cannot be taken as the type of *PELOR*, as Cuvier names but one species, the others being then undescribed. This species, with two of the pectoral rays tipped with filaments, may belong to a different genus.

Oreosoma Cuvier (about 170); type (not named) *OREOSOMA ATLANTICUM* Cuvier.

Corvina Cuvier, 173; type *SCIÆNA NIGRA* Gmelin; part of *SCIÆNA UMBRA* L.

The species *SCIÆNA UMBRA* L., the type of the genus *SCIÆNA*, was two-fold, a complex about evenly divided of the species called *SCIÆNA NIGRA* Gmelin and *CHEILODIPTERUS AQUILA* Lacepède. The synonymy was disentangled by Cuvier (*Mem. du Muséum*, 1815) and the name *SCIÆNA UMBRA* retained in place of *S. AQUILA*. In accepting this decision we restore the generic name *CORVINA*, for the "Corb," which becomes *CORVINA NIGRA*, while *SCIÆNA* replaces *ARGYROSOMUS* de la Pylaie and *PSEUDOSCIÆNA* Bleeker for the "Maigre," which remains *SCIÆNA UMBRA* L., the type of *SCIÆNA* L.

Hæmulon Cuvier, 175; type *HÆMULON ELEGANS* Cuvier (*SPARUS SCIURUS* Shaw).

Lobotes Cuvier, 177; type *HOLOCENTRUS SURINAMENSIS* Bloch.
Monotypic.

Scolopsides Cuvier, 178; type *SCOLOPSIDES KURITA* Cuvier.
Called *SCOLOPSIS* in Edition I.

Dascyllus Cuvier, 179; type *CHÆTODON ARUANUS* L.
Monotypic.

Heliases Cuvier; type (not indicated) *HELLIASTES INSOLATUS* Cuv. & Val.

Identical with *CHROMIS* Cuvier, 1815, not *CROMIS* Browne, 1789, nor *CHROMIS* Plumier.

Chrysophris Cuvier, 181; type *SPARUS AURATA* L.
A synonym of *SPARUS* L.

Pagellus Cuvier (about 182); type *SPARUS ERYTHRINUS* L.

Pentapus Cuvier ("Les Pentapodes") (about 182); type *SPARUS VITTATUS* Bloch.

Lethrinus Cuvier (about 182); type *SPARUS CHEROIHYNCHUS* Bloch & Schneider.

Oplada Cuvier, 185; type *SPARUS MELANURUS* L.
Monotypic.

Mæna Cuvier; type *SPARUS MÆNA* L.

Taurichthys Cuvier, 192; type *TAURICHTHYS VARIUS* Cuvier.
A subgenus of *HENIOCHUS* Cuvier.

Psettus (Commerson) Cuvier (about 193); type *CILÆTODON RHOMBEUS* Bloch & Schneider.
Synonym of *MONODACTYLUS* Lacepède.

Dipterodon Cuvier (about 195); type *DIPTERODON CAPENSIS* Cuvier.
Not *DIPTERODON* Lacepède, 1803. Monotypic. Replaced by *DICHISTIUS* Gill.

Pempheris Cuvier, 195; type *KURTUS ARGENTEUS* Bloch & Schneider (*PEMPHERIS TOUEA* Cuvier).

Auxis Cuvier, 199; type *SCOMBER ROCHETI* Risso (*SCOMBER THIAZARD* Lacepède).

Sarda Cuvier, 199; type *SCOMBER SARDA* Bloch.

Later (1831) called *PELAMYS* by Cuvier & Valenciennes. Monotypic. Not *SARDA* Plumier.

Cybium Cuvier, 199; type *SCOMBER COMMERSONI* Lacepède.

A synonym of *SCOMBEROMORUS* Lacepède, 1803.

Thyrsites Cuvier (about 200); type *SCOMBER ATUN* Euphrasen.

Gempylus Cuvier, 200; type *GEMPYLUS SERPENS* Cuvier.

This is identical with *LEMNISOMA* of Lesson, but the date of *LEMNISOMA* is 1830.

Elacate Cuvier, II, 203, as "LES ELACATES," the Latin name dating from C. & V., 1831; type *ELACATE MOTTA* C. & V.

Synonym of *RACHYCENTRON* Kaup.

Olistus Cuvier, II, 209; type (not named) *OLISTUS MALABARICUS* Cuv. & Val.

Scyris Cuvier, II, 209; type "LE GAL D'ALEXANDRIE," *SCYRIS INDICA* Cuv. & Val.

Not separable from *ALECTIS* Raf.

Blepharis Cuvier (about 210); type *ZEUS CILIARIS* Bloch.

Name preoccupied, replaced by *BLEPHARICHTHYS* Gill. A synonym of *ALECTIS*.

Peprilus Cuvier, 213; type *PEPRILUS CRENULATUS*.

Probably the young of *PEPRILUS ALEPIDOTUS* Cuvier. Monotypic. Same as *RHOMBUS* Lacepède, not of Klein.

Astrodermus (Bonelli) Cuvier (about 215); type *ASTRODERMUS GUTTATUS* Bonelli Ms. (*DIANA SEMILUNATA* Risso).

Axinurus Cuvier, 225; type *AXINURUS THYNNOIDES* Cuvier.

Monotypic.

Priodon Cuvier, 225; type *PRIODON ANNULARIS* Cuvier.

Polyacanthus (Kuhl) Cuvier, 227; type *TRICHOPODUS COLISA* Hamilton.

Helostoma (Kuhl) Cuvier, 228; type *HELOSTOMA TEMMINCKI* Cuvier. Monotypic.

Spirobranchus Cuvier, 229; type *SPIROBRANCHUS CAPENSIS* Cuvier.

Monotypic.

Myxodes Cuvier, 238; type (not named) *MYXODES VIRIDIS* Cuv. & Val.

Cirrhibarbus Cuvier ("LES CIRRHIBARBES") 238; type (not named) *CIRRHIBARBIS CAPENSIS* Cuv. & Val.

Monotypic.

Zoarcis Cuvier (about 240); type *BLENNIUS VIVIPARUS* L.

Equivalent to *ENCHELYOPUS* Gronow, 1763.

Platyptera (Kuhl & van Hasselt) Cuvier, 248; type *PLATYPTERA MELANOCEPHALA* K. & v. H.

Name preoccupied, replaced by *RHYACICHTHYS* Boulenger.

Chirus (Steller) Cuvier, about 250; type *LABRAX LAGOCEPHALUS* Pallas.
Substitute for *LABRAX* Klein.

Antennarius (Commerson) Cuvier (about 251); type *LOPHIUS COMMERSONIANUS* Lacepède.

Accepted as a substitute for *CHIRONECTES* Cuvier, 1817, preoccupied.

Malthe Cuvier, 252; type *LOPHIUS VESPERTILIO* L.

Synonym of *OGOCEPHALUS* Fischer. Monotypic.

Lachnolaimus Cuvier, 257; type *LACHNOLAIMUS SUILLUS* Cuvier.
SUILLUS of Catesby. Monotypic.

Anampses Cuvier, 259; type *ANAMPSES CUVIERI* Quoy & Gaimard.

Clepticus Cuvier, 261; type *CLEPTICUS GENIZARA* Cuvier.
Monotypic.

Malacanthus Cuvier, 264; type *CORYPHÆNA PLUMIERI* Bloch.

Calliodon Cuvier ("LES CALLIODON"), (about 265); type *SCARUS SPINIDENS* Q. & G.

Not identical with *CALLYODON* Gronow nor of Bloch & Schneider. Replaced by *CRYPTOTOMUS* Cope, 1871.

Odax Cuvier (about 265); type *SCARUS PULLUS* Forster.
Monotypic. Not *ODAX* Commerson.

Mallotus Cuvier, II, 305; type *SALMO GRÆNLANDICUS* Bloch (*CLUPEA VILLOSA* Gmelin).

Thymallus Cuvier, 306; type *SALMO THYMALLUS* L.

Regarded by some as preoccupied by *THYMALUS* Latreille, 1802, a genus of beetles; replaced by *CHOREGON* Minding, 1832. But the scantily noted *THYMALUS* of Linck, 1791, has priority over *THYMALUS*, if acceptable. The root-words of *THYMALLUS* and *THYMALUS* are not identical, *THYMALLUS* being a Latin name of the Grayling.

Coregonus Cuvier; type *SALMO OXYRHYNCHUS* L.

Alosa Cuvier, 319; type *CLUPEA ALOSA* L.
Same as *ALOSA* Linck.

Chatoëssus Cuvier, 320; type *MEGALOPS CEPEDIANUS* Le Sueur.
As restricted by Cuv. & Val. Equivalent to *DOROSOMA* Rafinesque.

Thryssa Cuvier; type *CLUPEA SETIROSTRIS* Broussonet (*THRISSA* Cuv. & Val., 1817).

Not *THRISSA* Rafinesque, 1815. To be replaced by *THRISSOCLES* Jordan, a new generic name.

Motella Cuvier, 334; type *GADUS MUSTELA* L.

Substitute for *MUSTELA* Cuvier, 1817, preoccupied in mammals. Identical with *GAIDROPSARUS* Rafinesque, 1810.

Monochir Cuvier, 336; type *PLEURONECTES MICROCHIRUS* De la Roche.

Substitute for *MONOCHIRUS*, preoccupied. Not sufficiently different.

Osteoglossum (Vandelli) Cuvier (about 390); type *OSTEOGLOSSUM VANDELLI* Cuvier.

Gymnarchus Cuvier (about 390); type *GYMNARCHUS NILOTICUS* Cuvier.

Triodon Cuvier (about 390); type *TRIODON BURSARIUS* Reinwardt.

Anacanthus (Ehrenberg) Cuvier (about 390); type (not named) *RAJA UARNAK* Forskål.

Monotypic. Replaces *HIMANTURA* Müller, 1837.

Heterotis Ehrenberg; type *SUDIS NILOTICUS* Cuv. & Val.

Quoted from the *Règne Animal* by Günther, but we do not find it there. Apparently it appears first in Cuv. & Val., XIX, 465, 1846.

CXXXV. AGASSIZ (AND SPIX), *Selecta Genera et Species Piscium quos in Itinere per Brasiliam, 1817, 1820, Collejit Dr. J. B. de Spix, 1829.*

LOUIS AGASSIZ and JEAN BAPTISTE SPIX.

The date of this work is apparently a little later than that of the Second Edition of the *Règne Animal*.

Acanthicus Spix, 2; type *ACANTHICUS HYSTRIX* Spix.

Rhinelepis Spix, 2; type *RHINELEPIS ASPERA* Spix.

Cetopsis Agassiz, 8; type *CETOPSIS CÆCUTIENS* Agassiz.

Hypophthalmus Spix, 9; type *HYPOPTHALMUS EDENTULUS* Spix.

Phractocephalus Agassiz, 10; type *PHRACTOCEPHALUS BICOLOR* Agassiz.

Platystoma Agassiz, 10; type *SILURUS LIMA* Bloch & Schneider.

Name preoccupied by a genus of flies, Meigen, 1803.

Glanis Agassiz, 10; type not named.

Name given in dative case only "*In Glanide Agass.*" Substitute for *BAGRE* Cuvier, rejected because of barbarous origin. Afterwards (1856) *GLANIS* was revived as the generic name for the Greek cat-fish, *GLANIS ARISTOTELIS* Agassiz, which is perhaps a *PARASILURUS*.

Ceratorhynchus Agassiz, 10; type *SILURUS MILITARIS* Bloch & Schneider.

Not L. Name given in genitive only as "CERATORHYNCHI." Genus close to *AGENEIOSUS* Lacepède but with the two short barbels replaced by erectile bony weapons.

Centrochir Agassiz, 14; type *DORAS CROCODILI* Humboldt. Based on a species of *DORAS* "non modo pinna pectorali uniradiata sed etiam appendice quadriradiata primæ caudalis maxime."

Sorubim Spix, 24; type *SILURUS LIMA* Bloch & Schneider.

Replaces *PLATYSTOMA*.

Xiphorhynchus Agassiz, 18; type *SALMO FALCATUS* Bloch.

Salminus Agassiz, 18; type *HYDROCYON BREVIDENS* Cuvier.

Osteoglossum (Vandelli) Agassiz, 46; type *OSTEOGLOSSUM VANDELLI* Cuv. & Val.

Ischnosoma Spix, 47; type *ISCHNOSOMA BICIRRHOSUM* Spix.

A deformed *OSTEOGLOSSUM*.

Glossodus (Cuvier) Agassiz, 48; type *GLOSSODUS FORSKALI* Agassiz (*ESOX VULPES* L.).

Same as *ALBULA* Gronow.

Anodus Spix, 57; type *ANODUS ELONGATUS* Spix.

Prochilodus Agassiz, 57; type *PROCHILODUS ARGENTEUS* Spix.

Leporinus Spix, 58; type *LEPORINUS NOVEMFASCIATUS* Spix.

Schizodon Agassiz, 58; type *SCHIZODON FASCIATUS* Agassiz.

Same as *ANOSTOMUS* Gronow.

Rhaphiodon Agassiz, 59; type *RHAPHIODON VULPINUS* Agassiz.

Cynodon Spix, 59, 76; type *CYNODON GIBBUS* Spix.

As restricted by Eigenmann. Not *CYNODONTA* Schuhmacher, 1817, a genus of mollusks.

Name changed to *RHAPHIODON* because earlier used in botany.

Xiphostoma Spix, 60, 78; type *XIPHOSTOMA CUVIERI* Spix.

Micropteryx Agassiz, 102; type (not named) *SERIOLA DUMERILI* Cuvier.

Substitute for *SERIOLA*, preoccupied in botany. A synonym of *SERIOLA* Cuvier.

Corniger Agassiz, 119; type *CORNIGER SPINOSUS* Agassiz.

Pachyurus Agassiz, 125; type *PACHYURUS SQUAMIPINNIS* Agassiz.

CXXXVI. CUVIER & VALENCIENNES, *Histoire Naturelle des Poissons*, IV, 1829.

GEORGES CUVIER and ACHILLE VALENCIENNES.

Hoplichthys Cuv. & Val., IV, XIX, 1829; type HOPLICHTHYS LANGSDORFII Cuv. & Val.

Called HOPLICHTHYS in table of contents, OPLICHTHYS in the text.

Oplichthys Cuv. & Val., IV, 264, 1829; type OPLICHTHYS LANGSDORFII Cuv. & Val.

A variant in spelling.

Bembras Cuv. & Val., IV, 282; type BEMBRAS JAPONICUS Cuv. & Val.

Minous Cuv. & Val., IV, 420, 1829; type MINOUS WOORA Cuv. & Val.

Name changed to CORYTHOBATUS by Cantor, 1850, on account of MINOIS Hübnér, 1816, a genus of butterflies.

Hoplostethus Cuv. & Val., IV, 469; type HOPLOSTETHUS MEDITERRANEUS Cuv. & Val.

CXXXVII. COCCO, *Su Alcuni Nuovi Pesce del Mar di Messina*: Archivio della R. Academia Peloritano, 1829.

ANASTASIO COCCO.

Argyropelecus Cocco, 146; type ARGYROPELECUS HEMIGYMNUS Cocco.

CXXXVIII. COCCO, *Su Alcuni Nuovi Pesci del Mar di Messina*: Giorni Sci. Lett. Sicilia, XXVI, no. 77, 1829.

Nyctophus Cocco, 44; type NYCTOPHUS RAFINESQUEI Cocco.

Substitute for MYCTOPHUM.

CXXXIX. COCCO, *Sullo Schedophilus Medusophagus*: Giorni, Cabin de Messina, I, 30 to 32; also quoted as Innom. Messina Ann., III, 1829, p. 57.

Schedophilus Cocco, 30, 57; type SCHEDOPHILUS MEDUSOPHAGUS Cocco.

We have seen none of these papers of Cocco.

CXL. SERVILLE, *Faune Française*, 1820 to 1830.

"Livraison 24 par M. Serville" contains the fishes. This bears no date, but it was probably issued about 1829. It is not quoted by Cuvier, nor does it quote Cuvier. The date is not important, as no question of priority is concerned. This work is commonly ascribed to Blainville, who with Vieillot, Desmarest, Serville and others edited the series. In any event, the work is based on Blainville's *Prodrome*. All of Blainville's generic names ending in BATUS are here changed to BATIS.

AUDINET-SERVILLE.

Dasybatis Serville, 12, 1829 ("RAIES EPINEUSES"); type RAJA BATIS L.
Same as RAJA.

Narcobatis (Blainville) Serville, 45 ("RAIES TORPILLES"); type RAIA TORPEDO L.

Same as NARCACION Klein, TORPEDO Duméril, not of Forskål. Called NARCIBATUS by Blainville, 1816.

Pristibatis Serville, 49 ("RAIES SCIES"); type SQUALUS PRISTIS L.
(PRISTIBATIS ANTIQUORUM Blainville).

CXLI. VALENCIENNES, *Poissons Fossiles*: Trans. Geol. Soc., III, 1829.

ACHILLE VALENCIENNES.

Osteolepis Valenciennes, 144; type OSTEOLEPIS MACROLEPIDOTUS Valenciennes.

CXLII. CUVIER & VALENCIENNES, *Histoire Naturelle des Poissons*, Vols. V (January) and VI (July) 1830.

GEORGES CUVIER and ACHILLE VALENCIENNES.

Larimus Cuvier & Valenciennes, V, 146; type LARIMUS BREVICEPS Cuv. & Val.

Monotypic.

Nebris Cuvier & Valenciennes, V, 149; type NEBRIS MICROPS Cuv. & Val.

Not NEBRIA Latreille, 1802, a genus of beetles. Monotypic.

Lepipterus Cuvier & Valenciennes, V, 151; type *LEPIPTERUS FRANCISCI* Cuv. & Val.

Monotypic.

Boridia Cuvier & Valenciennes, V, 154; type *BORIDIA GROSSIDENS* Cuv. & Val.

Monotypic.

Conodon Cuvier & Valenciennes, V, 156; type *CONODON ANTILLANUS* Cuv. & Val. (*PERCA NOBILIS* L.).

Monotypic. Same as *CHELONIGER* Plumier.

Eleginus Cuvier & Valenciennes, 158; type *ELEGINUS MACLOVINUS* Cuv. & Val.

Monotypic. Not *ELEGINUS* Fischer, 1813. Replaced by *ELEGINOPS* Gill.

Micropogon Cuvier & Valenciennes, V, 213; type *MICROPOGON LINEATUS* Cuv. & Val. (*PERCA UNDULATA* L.).

The original types of *LINEATUS* were from New York.

Latilus Cuvier & Valenciennes, V, 368; type *LATILUS ARGENTATUS* Cuv. & Val. (*CORYPHÆNA JAPONICA* Houttuyn).

A synonym of *BRANCHIOSTEGUS* Rafinesque, 1815.

Macquaria Cuvier & Valenciennes, V, 377; type *MACQUARIA AUSTRALASICA* Cuv. & Val.

Monotypic.

Etroplus Cuvier & Valenciennes, V, 486; type *ETROPLUS MELEAGRIS* Cuv. & Val. (*CHÆTODON SURATENSIS* Bloch).

As restricted by Bleeker.

Box Cuvier & Valenciennes, VI, 346; type *SPARUS BOOPS* L. (*BOX VULGARIS* Cuv. & Val.).

A synonym of *BOOPS* Cuvier.

Scatharus Cuvier & Valenciennes, VI, 375; type *SCATHARUS GRÆCUS* Cuv. & Val.

Monotypic.

Crenidens Cuvier & Valenciennes, VI, 377; type *CRENIDENS FORSKALII* Cuv. & Val.

Monotypic.

Aphareus Cuvier & Valenciennes, VI, 485; type *LABRUS FURCATUS* Lacepède.

Monotypic.

Aprion Cuvier & Valenciennes, VI, 544; type *APRION VIRESCENS* Cuv. & Val.

Monotypic.

Apsilus Cuvier & Valenciennes, VI, 548; type *APSILUS FUSCUS* Cuv. & Val.

Monotypic.

CXLIII. BENNETT, *Catalogue of the Fishes of Sumatra*: in Life and Public Services of Sir Stamford Raffles, 1830.

EDWARD TURNER BENNETT.

Monotaxis Bennett, 688; type *MONOTAXIS INDICA* Bennett (*SCIENA GRANDOCULIS* Forskål).
Replaces *SPHERODON* Rüppell.

CXLIV. BRONN, *Ueber Zwei Fossile Fischarten*: Neues Jahrbuch Mineralogie, 1830.

HEINRICH GEORG BRONN.

Tetragonolepis Bronn, 30; type *TETRAGONOLEPIS SEMICINCTUS* Bronn.
Monotypic.

CXLV. HAYS, *Saurodon*: Trans. Amer. Philos. Soc., III, 1830.

I. HAYS.

Saurodon Hays, 475; type *SAURODON LEANUS* Hays (fossil).

CXLVI. CUVIER & VALENCIENNES, *Histoire Naturelle des Poissons*, VII (January) and VIII (October), 1831.

GEORGES CUVIER and ACHILLE VALENCIENNES.

Chelmon Cuvier & Valenciennes, VII, 86; type *CHÆTODON ROSTRATUS* L.

Zanclus (Commerson) Cuv. & Val., VII, 92, 1831; type *CHÆTODON CORNUTUS* L.

Drepane Cuvier & Valenciennes, VII, 132; type *CHÆTODON PUNCTATUS* L.

Scatophagus Cuvier & Valenciennes, VII, 136; type *CHÆTODON ARGUS* L.

Psettus (Commerson) Cuvier & Valenciennes, VII, 240; type *PSETTUS COMMERSONI* Cuv. & Val. (*MONODACTYLUS FALCIFORMIS* Lacepède).

Pempheris Cuvier & Valenciennes, VII, 296; type *PEMPHERIS OUALENSIS* Cuv. & Val.

Toxotes Cuvier & Valenciennes, VII, 310; type *SCIÆNA JACULATRIX* Pallas.

Monotypic.

Colisa Cuvier & Valenciennes, VII, 359; type *COLISA VULGARIS* Cuv. & Val. (*TRICHOPODUS COLISA* Hamilton).

Same as *TRICHOGASTER* Bloch & Schneider as restricted by Cuv. & Val.

Spirobranchus Cuvier & Valenciennes, VII, 392; type *SPIROBRANCHIUS CAPENSIS* Cuv. & Val.

Monotypic.

Bryttus Cuvier & Valenciennes, VII, 454, 461; type *BRYTTUS PUNCTATUS* Cuv. & Val.

Same as *APOMOTIS* Rafinesque.

Nandus Cuvier & Valenciennes, VII, 481; type *NANDUS MARMORATUS* Cuv. & Val. (*COIUS NANDUS* Hamilton).

Rhynchichthys Cuvier & Valenciennes, VII, 504; type *RHYNCHICHTHYS PELAMIDIS* Cuv. & Val.

The young of *HOLOCENTRUS*.

Lichia Cuvier & Valenciennes, VIII, 340, 1831; type *SCOMBER AMLA* L.

Chorinemus Cuvier & Valenciennes, VIII, 367; type *SCOMBEROIDES COMMERSONIANUS* Lacepède.

A synonym of *SCOMBEROIDES* Lacepède.

Aplodactylus Cuvier & Valenciennes, VIII, 476; type *APLODACTYLUS PUNCTATUS* Cuv. & Val.

Usually written *HAPLODACTYLUS*.

Aphritis Cuvier & Valenciennes, VIII, 483; type *APHRITIS URVILLI* Cuv. & Val.

Monotypic.

Bovichtus Cuvier & Valenciennes, VIII, 487; type *CALLIONYMUS DIACANTHUS* Carmichæl.

CXLVII. JARDINE, *Acestra*, 1831.

SIR WILLIAM JARDINE.

Acestra Jardine; type *SYNGNATHUS ÆQUOREUS* Rafinesque.

A synonym of *NEROPHIS* Rafinesque. We take this incomplete reference from Bonaparte, *Catalogo Metodico*, 1846, 91.

CXLVIII. GRAY, *Description of Twelve New Genera of Fish found by General Hardwicke in India*: Zool. Misc., 1831, 7-10.

JOHN EDWARD GRAY.

Centracion Gray, 5; type CENTRACION ZEBRA Gray.

Equivalent to HETERODONTUS Blainville, regarded as preoccupied by HETERODON Latreille, a genus of serpents.

Temera Gray, 7, 152; type TEMERA HARDWICKEI Gray.

Monotypic. Also in Ill. Ind. Zool.

Botia Gray, 8; type BOTIA ALMORHE Gray.

Nandina Gray, 8; type CYPRINUS NANDINA Hamilton.

Chaca Gray, 8; type PLATYSTACUS CHACA Hamilton.

Coilia Gray, 9; type COILIA HAMILTONI Gray.

Raconda Gray, 9; type RACONDA RUSSELLIANA Gray.

Moringua Gray, 9; type MORINGUA LATERALIS Gray.

Also in Ill. Ind. Zool., 95.

CXLIX. GRAY, *Illustrations of Indian Zoology, chiefly selected from the collection of General Hardwicke*.

Two volumes of excellent plates, but without text; the plates not paged, but with manuscript numbers. Vol. I, 1830-1832, Vol. II, 1833-1834. The exact dates are uncertain. The first five of the following occur in CXLVIII; also, pp. 8, 9.

Ailia Gray, 85, 1831; type AILIA BENGALENSIS Gray.

Acanthonotus Gray, 85, 1831; type ACANTHONOTUS CUVIERI Gray (AILIA BENGALENSIS Gray).

Name preoccupied. Same as AILIA. Based on injured specimen.

Anacanthus Gray, 85, 1831; type ANACANTHUS BARBATUS Gray.

Name preoccupied by ANACANTHUS Ehrenberg, 1829. Replaced by PSILOCEPHALUS Swainson.

Diplopterus Gray, 87, 1831; type DIPLOPTERUS PULCHER Gray.

Not identified; said to have two anal fins. Name preoccupied in birds, Boie.

Rataboura Gray, 95, 1831; type MURÆNA RATABOURA Hamilton (RATABOURA HARDWICKEI Gray).

Same as MORINGUA Gray, but with line priority.

Bedula Gray, 88, 1833; type *BEDULA NEBULOSA* Gray.

A synonym of *NANDUS* Cuv. & Val., 1831.

Pterapon Gray, II, 88, 1833; type *PTERAPON TRIVITTATUS* Gray (*SCIÆNA JARBUA* Forskål).

A synonym of *THERAPON* Cuvier.

Amora Gray, II, 90, 1833, corrected in manuscript to *ANAORA*; type *AMORA TENTACULATA* Gray.

Not identified. A platycephalus-like fish with tentacles over eye and spinules on sides. Perhaps a species of *THYSANOPHRYS* Ogilby.

Apterygia Gray, II, 92, 1833; type *APTERYGIA RAMCARATE* Gray.

Same as *RACONDA* Gray.

Tor Gray, II, 96, 1833; type *CYPRINUS TOR* Hamilton (*TOR HAMILTONI* Gray).

Replaces *LABEOBARBUS* Bleeker.

Bengala Gray, 96, 1833; type *CYPRINUS ELANGA* Hamilton.

Replaces *MEGARASBORA* Günther, 1868.

Amanses Gray, II, 98, 1833; type *AMANSES HYSTRIX* Gray (*MONACANTHUS SCOPAS* Cuvier).

Acarana Gray, II, 98, 1833; type *OSTRACION AURITUS* Shaw.

Also in *Annals Nat. Hist.*, 1, 110, 1838.

Girella Gray, II, 98, 1833; type *GIRELLA PUNCTATA* Gray.

CL. GRAY, *Description of three new species of fish including two undescribed genera discovered by John Reeves in China: Zoological Miscellany*, 1831.

Leucosoma Gray, 4; type *LEUCOSOMA REEVESI* Gray (*ALBULA CHINENSIS* Osbeck).

Monotypic. A synonym of *SALANX* Cuvier and of *ALBULA* Osbeck.

Samaris Gray, 4; type *SAMARIS CRISTATUS* Gray.

Monotypic.

CLI. GRAY, *Description of a new genus of Percoid fish, discovered by Samuel Stutchbury in the Pacific Seas: Zoological Miscellany*, 1831.

Micropus Gray, 20; type *MICROPUS MACULATUS* Gray.

Name preoccupied by *MICROPUS* Wolf, 1810, a genus of birds. Replaced by *CARACANTHUS* Kröyer, 1844 (*C. TYPICUS*).

CLI (A). LESSON, *Voyage Autour du Monde sur la corvette La Coquille, under Captain L. I. Duperrey*, 1830.

R. P. LESSON.

Lemnisoma Lesson, 160; type LEMNISOMA THYRSITOIDES Lesson.
A synonym of GEMPYLUS Cuvier.

CLII. MINDING, *Lehrbuch, Naturgeschichte der Fische*, 1832.

JULIUS MINDING.

Not seen by us.

Pompilus Minding, 108; type GASTEROSTEUS DUCTOR L.
Same as NAUCRATES.

Choregon Minding, 119; type SALMO THYMALLUS L.

Substitute for THYMALLUS Cuvier, regarded as preoccupied by THYMALUS Latreille, 1802, a genus of beetles. But the two names seem to be from different roots. THYMALLUS Linck, with a word or two of definition, is older than THYMALUS Latreille.

CLIII. NILSSON, *Prodromus Ichthyologiæ Scandinavica*, 1832.

S. NILSSON.

Salvelini Nilsson, 7; type SALMO SALVELINUS L. (SALMO ALPINUS L.).
As group name. The normal form SALVELINUS used by Richardson, *Fauna Boreali Americana*, III, 169, 1836.

CLIV. AGASSIZ, *Fossile Fischreste: Neues Jahrbuch Mineralogie*, 1832.

LOUIS (JEAN RODOLPHE) AGASSIZ.

Ptycholepis Agassiz, 142; type PTYCHOLEPIS BOLLENSIS Agassiz.

Uræus Agassiz, 142; type URÆUS FURCATUS Agassiz.

Name preoccupied by Wagler, 1830. Replaced by CATURUS Agassiz, 1834.

Sauropsis Agassiz, 142; type SAUROPSIS LATUS Agassiz.

Pholidophorus Agassiz, 145; type PHOLIDOPHORUS MACROCEPHALUS Agassiz.

Semionotus Agassiz, 144; type SEMIONOTUS BERGERI Agassiz.

Lepidotes Agassiz, 145; type LEPIDOTES GIGAS Agassiz (CYPRINUS ELVENSIS Blainville).

Later written LEPIDOTUS.

Leptolepis Agassiz, 146; type LEPTOLEPIS BRONNI Agassiz.

Acanthoëssus Agassiz, 149; type ACANTHIOESSUS BRONNI Agassiz.

Later called ACANTHODES.

CLV. VON MEYER, *Palæologica*, 1832.

H. VON MEYER.

Lepidosaurus von Meyer, 208; type LEPIDOTUS UNGUICULATUS Agassiz.

A synonym of LEPIDOTES.

CLVI. BONAPARTE, *Iconografia della Fauna Italica*: III, 1832-1841.

CARLO LUCIANO PRINCIPE BONAPARTE

(otherwise CHARLES LUCIEN BONAPARTE, Prince of Canino).

An elaborate and finely illustrated work, issued in fascicles, these being numbered but not paged. The number of the fascicle is noted below, with the approximate date of each.

Cerna Bonaparte, 18, 1832; type PERCA GIGAS Brünnich (LABRUS GUAZA L.).

A synonym of EPINEPHELUS Bloch as now restricted.

Microchirus Bonaparte, 28, 1832; type PLEURONECTES MICROCHIRUS De la Roche.

MONOCHIRUS Cuvier, not of Rafinesque.

Monochirus Bonaparte,* 28, 1832; type SOLEA MONOCHIR Bonaparte.

Same as MONOCHIRUS Rafinesque.

Squalius Bonaparte, 96, 1834; type LEUCISCUS SQUALUS Bonaparte (CYPRINUS CEPHALUS L.).

Same as LEUCISCUS.

Telestes Bonaparte, 103, 1834; type TELESTES MUTICELLUS Bonaparte.

Ichthyococcus Bonaparte, 138, 1834; type ICHTHYOCOCCUS OVATUS Bonaparte.

Name later altered to COCCIA by Günther because of its objectionable form.

*For sake of completeness we add the remaining new genera of the later fascicles of the *Fauna Italica*.

- Lampanyctus** Bonaparte, 139, 1834; type *LAMPANYCTUS BONAPARTEI* Bonaparte.
- Chlorophthalmus** Bonaparte, 144, 1834; type *CHLOROPHTHALMUS AGASSIZI* Bonaparte.
- Scardinius** Bonaparte, 146, 1834; type *LEUCISCUS SCARDAFA* Bonaparte.
- Membras** Bonaparte, 1836; type (an "exotic species" not named except by reference to Valenciennes); *ATHERINA MARTINICA* Cuv. & Val.
Replaces *KIRTLANDIA* Jordan & Evermann.
- Menidia** Bonaparte, 1836; type (an "exotic species" not directly named) *ATHERINA MENIDIA* L.
- Hepsetia** Bonaparte, 1836; type *ATHERINA BOYERI* L.
Not separable from *ATHERINA* L.
- Ichthyocoris** Bonaparte, 1836; type *BLENNIUS VARUS* Risso.
A synonym of *BLENNIUS* L.

CLVI (A). *RAFINESQUE, Atlantic Journal and Friend of Knowledge*, I, 1832.

CONSTANTINE SAMUEL RAFINESQUE.

- Trinectes** Rafinesque; type *TRINECTES SCABRA* Rafinesque (*PLEURO-NECTES MOLLIS* Mitchell).
A subgenus under *ACHIRUS*.

CLVII. *CUVIER & VALENCIENNES, Histoire Naturelle des Poissons*, IX, 1833.

GEORGES CUVIER and ACHILLE VALENCIENNES.

- Hynnys** Cuvier & Valenciennes, IX, 95; type *HYNNIS GOREENSIS* Cuv. & Val.
- Nauclerus** Cuvier & Valenciennes, IX, 247; type *NAUCLERUS COMPRESSUS* Cuv. & Val.
Young of *NAUCRATES*.
- Porthmeus** Cuvier & Valenciennes, IX, 255; type *PORTHMEUS ARGENT-EUS* Cuv. & Val.
- Psenes** Cuvier & Valenciennes, IX, 259; type *PSENEs CYANOPHRYS* Cuv. & Val.

Lampugus Cuvier & Valenciennes, IX, 317; type SCOMBER PELAGICUS L.
Same as CORYPHÆNA L.

Aphredoderus (Le Sueur) Cuv. & Val., IX, 445; type APHREDODERUS
GIBBOSUS Le Sueur (SCOLOPSIS SAYANUS Gilliams).

Monotypic.

CLVIII. LOWE, *Description of a New Genus of Acanthopterygian
Fishes*: Proc. Zool. Soc. London, 1833.

RICHARD THOMAS LOWE.

Alepisaurus Lowe, 104; type ALEPISAURUS FEROX Lowe.

Monotypic. Equivalent to PLAGYODUS Steller, 1811.

CLIX. LOWE, *Characters of a New Genus and of Several New Species
of Fishes from Madeira*: Proc. Zool. Soc. London, I, 1833. (Also
repeated in other papers.)

Leirus Lowe, 142; type LEIRUS BENNETTI Lowe = CENTROPHORUS
OVALIS Cuv. & Val., 1833 = MUPUS IMPERIALIS Cocco, 1833.

Same as MUPUS Cocco of the same date. LEIRUS may be given precedence.

CLX. COCCO, *Lettere al Signor Risso su alcuni Pesci Novelli*: Giorn.
Sci. Lett. Sicilia, XLII, no. 124, 1833.

ANASTASIO COCCO.

Tylosurus Cocco; type TYLOSURUS CANTRAINI Cocco (ESOX IMPERIALIS
Rafinesque).

CLXI. COCCO, *Su Alcuni Pesci dei Mare di Messina*: Giorn. Sci.
Lett. Sicilia, XLII, 1833.

Mupus Cocco, 20; type MUPUS IMPERIALIS Cocco (CENTROLOPHUS
OVALIS Cuv. & Val.).

Same as LEIRUS Lowe of the same date.

CLXII. COCCO, *Osservationes Peloritani*, XIII, April 1833.

Ruvettus Cocco, 1833, 18; type RUVETTUS PRETIOSUS Cocco.

CLXIII. NARDO, *De Skeponopodo novo piscium genere et de Guebucu Margravii; Species illi cognata*: Mem. Assem. Nat. Vienna, Isis, 1833, fasc. 416.

GIAN DOMENICO NARDO.

Skeponopodus Nardo, 416; type SKEPONOPODUS TYPUS Nardo (XIPHIAS IMPERATOR Bloch & Schneider).

A synonym of TETRAPTURUS.

CLXIV. AGASSIZ, *Poissons Fossiles*, 1833.

LOUIS AGASSIZ.

Catopterus Agassiz, II, 3; type CATOPTERUS ANALIS Agassiz.

A synonym of DIPTERUS.

Amblypterus Agassiz, II, 3, 28; type AMBLYPTERUS LATUS Agassiz.

Notagogus Agassiz, 10; type NOTAGOGUS PENTLANDI Agassiz.

Microps Agassiz, II, 10; type MICROPS FURCATUS Agassiz.

Perhaps not distinct from PHOLIDOPHORUS; name preoccupied in beetles, Meigen, 1823.

Pachycormus Agassiz, II, 11; type ELOPS MACROPTERUS Blainville.

Thrissops Agassiz, II, 12; type THRISOPS FORMOSUS Agassiz.

Megalurus Agassiz, II, 13; type MEGALURUS LEPIDOTUS Agassiz.

Aspidorhynchus Agassiz, II, 14; type ESOX ACUTIROSTRIS Blainville.

Saurostomus Agassiz, II, 14; type SAUROSTOMUS ESOCINUS Agassiz.

Near to PACHYCORMUS; perhaps not distinguishable.

Gyrodus Agassiz, II, 16; type GYRODUS MACROPHthalmus Agassiz (MICRODON ABDOMINALIS Agassiz).

Microdon Agassiz, II, 16; type MICRODON ELEGANS Agassiz.

Name preoccupied by Meigen, 1803, a genus of DIPTERA.

Pycnodus Agassiz, II, 16; type ZEUS PLATESSUS Blainville (CORYPHÆNA APODA Volta).

Cyclopoma Agassiz, IV, 17, 1833; type *CYCLOPOMA GIGAS* Agassiz.

Calamostoma Agassiz, II, 18; type *SYNGNATHUS BREVICULUS* Blainville.
Monotypic.

Acanthodes Agassiz, II, 19; type *ACANTHOËSSUS BRONNI* Agassiz.
A needless substitute for *ACANTHOËSSUS*.

Smerdis Agassiz, IV, 32, 1833; type *PERCA MINUTA* Blainville.

RECAPITULATION.

SUGGESTED CHANGES IN GENERIC NOMENCLATURE OF FISHES.

A. Changes resting in Priority.

The following changes from current Nomenclature, apparently justified by the law of priority and the accepted rules, result from the present survey.

Acanthoëssus Agassiz: in place of ACANTHODES Agassiz (fossil).

Alabes Cuvier: CHEILOBRANCHUS Richardson.

Alosa Linck: ALOSA Cuvier.

Anacanthus Ehrenberg: HIMANTURA Müller.

Anchoviella Fowler: STOLEPHORUS Bleeker (not Lacepède).

Apteronotus Lacepède: STERNARCHIUS Bloch & Schneider.

Bagre Cuvier: FELICHTHYS Swainson, AILURICHTHYS Baird.

Barbatula Linck: OREIAS Sauvage, ORTHRIAS Jordan & Fowler.

Bengala Gray (1833): MEGARASBORA Günther, 1868.

Bodianus Bloch: HARPE Lacepède.

Branchiostegus Rafinesque: LATILUS Cuv. & Val.

Caranx Lacepède: CARANGUS Griffith.

Catonotus Agassiz: ETHESTOMA Jordan, not Raf.

Cephalopholis Bloch & Schneider: BODIANUS Cuv. & Val. (not Bloch).
ENNEACENTRUS Gill.

Chelon Röse: CHENOMUGIL Gill.

Citharus Röse: EUCITHARUS Gill.

Clupanodon Lacepède: KONOSIRUS Jordan & Snyder.

Conger Houttuyn: CONGER Cuvier.

Corvina Cuvier: SCLENA Jordan & Evermann (not of Cuvier), CORACINUS Pallas.

Curimata Walbaum: CURIMATUS Cuvier.

Diapterus Ranzani: GERRES Jordan & Evermann (not of Quoy & Gaimard).

Echeneis L.: LEPTECHENEIS Gill.

Echelus Rafinesque: MYRUS Cuvier.

Etheostoma Rafinesque: DIPLESION Raf.

- Eucentrarchus** Gill: *CENTRARCHUS* Jordan & Evermann (not of Cuv. & Val.).
- Gaidropsarus** Rafinesque: *MOTELLA* Cuvier.
- Gerres** Cuvier: *XYSTÆMA* Jordan & Evermann.
- Gnathanodon** Bleeker: (*CARANX SPECIOSUS*).
- Hemiulis** Swainson (as restricted by Bonaparte, 1839): *HALICHERES* Rüppell, *CHEEROJULIS* Gill.
- Histrio** Fischer: *PTERYPHRYNE* Gill, *PTEROPHRYNOIDES* Gill.
- Hoplias** Gill: *MACRODON* Müller & Troschel.
- Hypacanthus** Rafinesque: *CAMPTOGRAMMA* Regan.
- Inimicus** Jordan & Starks: *PELOR* Cuv. & Val.
- Leucichthys** Dybowski: *ARGYRO SOMUS* Agassiz.
- Lycodontis** McClelland: *GYMNOTHORAX* Günther (not of Bloch).
- Macrodon** Schinz: *ANCYLODON* Cuvier, *SAGENICHTHYS* Berg.
- Macrognathus** Lacepède: *RHYNCHOBELLA* Bloch & Schneider.
- Macrorhynchus** Lacepède: *DICROTUS* Günther.
- Membras** Bonaparte: *KIRTLANDIA* Jordan & Evermann.
- Merolepis** Rafinesque: (*SMARIS ZEBRA*).
- Micrometrus** Gibbons: *ABEONA* Girard.
- Mola** Kœlreuter: *MOLA* Cuvier.
- Mugiloides** Lacepède: *PINGUIPES* Cuvier.
- Narke** Kaup: *ASTRAPE* Gray.
- Naso** Lacepède: *MONOCEROS* Bloch & Schneider.
- Ompok** Lacepède: *CALlichrous* Hamilton.
- Ovoides** Cuvier: *OVOIDES* Lacepède.
- Pastinachus** Rüppell: *HYPOLOPHUS* Müller & Henle.
- Pentanemus** Günther: *POLYNEMUS* Gill (not of L. as restricted).
- Peprilus** Cuvier: *RHOMBUS* Lacepède.
- Phycis** Röse: *PHYCIS* Bloch & Schneider.
- Plagyodus** Steller: *ALEPISAURUS* Lowe.
- Pœciliichthys** Agassiz: *ETHEOSTOMA* Jordan & Evermann (not of Rafinesque as restricted).
- Polynemus** L.: *POLYDACTYLUS* Lacepède.
- Porcus** St. Hilaire: *BAGRUS* Cuv. & Val.
- Quinquarius** Jordan: *PENTACEROS* Cuvier.
- Remora** Forster: *REMORA* Gill.
- Sardina** Antipa (*S. PILCHARDUS*).
- Sardinella** Val., *AMBLYGASTER* Bleeker, *SARDINIA* Poey.
- Sciæna** L.: *ARGYRO SOMUS* De la Pylaie, *PSEUDOSCIÆNA* Bleeker.
- Scylliorhinus** Blainville: *CATULUS* Smith.

- Sphyræna** Röse: SPHYRÆNA Bloch & Schneider.
Spicara Rafinesque: SMARIS Cuv.
Stolephorus Lacepède: SPRATELLOIDES Bleeker.
Syngnathus L.: SIPHOSTOMA Raf.
Thrissocles Jordan*: THRYSSA Cuvier.
Thymallus Linck: THYMALLUS Cuvier.
Tor Gray (1833): LABEOBARBUS Bleeker.
Torpedo Houttuyn: TORPEDO Duméril.
Trisopterus Rafinesque: MORUA Risso, BRACHYGADUS Gill.
Typhlinus Rafinesque: TYPHLE Rafinesque, SIPHONOSTOMUS Kaup.
Xystramia † Jordan: GLOSSAMIA Goode & Bean (not of Gill).
Zoramia ‡ Jordan: MIONORUS Jordan & Seale (not of Krefft).

B. Changes resulting from the operations of Opinions 20, 37.

Taking the precedent of Opinion 20, which admits as eligible the generic names of Gronow, and that of 37, admitting those of Brisson, the following changes seem necessary, the status of Klein being almost identical with that of Gronow.

- Amia** Gronow: instead of APOGON Lacepède.
Amiatus Rafinesque: AMIA L.
Brama Klein: ABRAMIS Cuvier.
Callyodon Gronow: SCARUS Forskål.
Cestracion Klein: SPHYRNA Rafinesque.
Coracinus Gronow: DIPTERODON Cuvier.
Cyclogaster Gronow: LIPARIS Scopoli.
Dasybatus Klein: DASYTIS Rafinesque.
Enchelyopus Gronow: ZOARCES Cuvier.
Glaucus Klein: HYPODIS Rafinesque, CÆSIOMORUS Lacepède.
Hepatus Gronow: TEUTHIS L., ACANTHURUS Forskål.
Labrax Klein: DICENTRARCHUS Gill.
Lepodus Rafinesque: BRAMA Bloch & Schneider.
Leuciscus Klein: LEUCISCUS Cuvier.
Mænas Klein: MÆNA Cuvier.
Mystus Gronow: HYPSELOBAGRUS Günther.
Narcacion Klein: NARCOBATUS Blainville.

* Type *CLUPEA SETIROSTRIS* Broussonet.

† Type *GLOSSAMIA PANDIONIS* Goode & Bean: See *Copea*, 1917, p. 46.

‡ Type *APOGON GRÆFFEI* Günther: See *Copea*, 1917, p. 46.

Pristis Klein: PRISTIS Linck.
Prochilus Klein: PHOLIS Cuv. & Val. (preoccupied).
Pseudopterus Klein: PTEROIS Cuvier.
Rhina Klein: SQUATINA Duméril.
Rhinobatus Klein: RHINOBATUS Linck.
Rhombus Klein: BOTHUS Rafinesque.
Sargus Klein: DIPLODUS Rafinesque, SARGUS Cuvier.
 (new name) CICHLA Bloch & Schneider.
 (new name) SOLENOSTOMUS Lacepède.

C. Changes resulting from the operations of Opinion 24, which legalizes the names of Commerson in Lacepède. Those of Plumier in Lacepède are precisely similar.

Alticus Commerson: in place of RUPISCARTES Swainson.
Cheloniger Plumier: CONODON Cuvier.
Chromis Plumier: UMBRINA Cuvier. Unless CROMIS Browne is accepted.
Encrasicholus Commerson: ANCHOVIELLA Fowler.
Pagrus Plumier: NEOMÆNIS Girard.
Sarda Plumier: OCYURUS Gill.
 (new name) PAGRUS Cuvier.
 (new name) SARDA Cuvier.
 (new name) ODAX Cuvier.

D. Hypothetical changes in Nomenclature according to the law of priority but doubtfully eligible, being revised reprints or translations of pre-Linnæan authors; apparently to be rejected under Opinion 57.

Albula Osbeck: SALANX Cuvier.
Apocryptes Osbeck: A valid genus, near BOLEOPHTHALMUS Bloch & Schneider.
Butyrinus Lacepède: ALBULA Gronow.
Cromis Browne: POGONIAS Lacepède.
Heliases Cuvier: CHROMIS Cuvier.
Helops Browne: BODIANUS Bloch.
Menidia Browne: ANCHOVIELLA Fowler, ENCRASICHOLUS Commerson.
Pelmatia Browne: GOBIOMORUS Lacepède, PHILYPNUS Cuvier.
Plagusia Browne: SYMPHURUS Rafinesque.
Rhomboida Browne: VOMER Cuvier.
Saurus Browne: OLIGOPLITES Gill.

E. Changes as under D but the alleged generic names, perhaps to be regarded as Latin vernaculars.

Acus Catesby: PSALISOSTOMUS Klein, LEPISOSTEUS Lacepède.

Alburnus Catesby: MENTICIRRUS Gill.

Bagre Catesby: AMEIURUS Rafinesque.

Harengus Catesby: HARENGULA Cuv. & Val.

Salpa Catesby: NEOMÆNIS Girard.

Saltatrix Catesby: POMATOMUS Lacepède.

Solea Catesby: PLATOPHRYS Swainson.

Suillus Catesby: LACHNOLAIMUS Cuvier.

Unicornis Catesby: OSBECKIA Jordan & Evermann.

(new name) ALBURNUS Rafinesque.

(new name) SOLEA Quensel.

F. Changes in accord with the law of priority, but questionable on account of irregularities not yet passed upon by the Commission of Nomenclature.

Abuhamrur Forskål: PRIACANTHUS Cuvier.

Asper Schæfer: ASPRO Cuvier.

Asperulus Schæfer: ZINGEL Oken.

Cernua Schæfer: ACERINA Gùldenstadt, GYMNOCEPHALUS Bloch.

Daba Forskål: EPINEPHELUS Bloch.

Djabub Forskål: THERAPON Cuvier.

Galeus Valmont: PRIONACE Cantor.

Gaterin Forskål: PLECTORHYNCHUS Lacepède.

Ghanan Forskål: SCOLOPSIS Cuvier.

Hobar Forskål: LUTIANUS Bloch.

Louti Forskål: VARIOLA Swainson.

Mustelus Valmont: CYNIAS Gill.

Pleuracromylon Gill: MUSTELUS Leach.

Quinquarius Jordan: PENTACEROS Cuvier.

Ramphistoma Rafinesque: BELONE Cuvier.

Schour Forskål: LETHRINUS Cuvier.

Schraitzer Schæfer: LEPTOPERCA Gill.

Tahmel Forskål: KYPHOSUS Lacepède.

Vulpecula Valmont: ALOPIAS Rafinesque.

G. Changes due to virtual preoccupation of names now in use.

If we follow the current practice of regarding generic names in words otherwise similar and from identical roots, the same word if differing

only in gender, in the presence or absence of the initial *h* in words of Greek origin, or by the use of *i* or *o* as a connective, the following changes are necessary in the current nomenclature, as given by Jordan & Evermann, *Fishes N. M. America*, 1898.

Cenisophius Bonaparte: in place of LEUCOS Heckel, on account of the earlier LEUCUS.

Centridermichthys Richardson: TRACHIDERMUS Heckel; TRACHYDERMA.

Cheilonemus * Baird: LEUCOSOMUS Heckel; LEUCOSOMA.

Cremnobates Günther: AUCHENIPTERUS Günther; AUCHENOPTERUS.

Cynicoglossus Bonaparte: MICROSTOMUS Gottsche; MICROSTOMA.

Eudulus Fowler: DULES Cuvier; DULUS.

Evermannellus Fowler: ODONTOSTOMUS Cocco; ODONTOSTOMA.

Haloporphyrus Günther: LEPIDION Swainson; LEPIDIA.

Hemulius Swainson (as restricted by Bonaparte, 1839); HALICHÆRES Rüppell; HALICHÆRUS.

Hypolophus Müller: PASTINACHUS Rüppell; PASTINACA.

Nebrodes Garman: NEBRIUS Rüppell; NEBRIA.

Notoscopelus Günther: MACROSTOMA Risso; MACROSTOMUS.

Pisciregia Abbott: GASTROPTERUS Cope; GASTROPTERON.

Podateles Boulenger: ATELEOPUS Schlegel; ATELOPUS.

Quassilabia Jordan & Brayton: LAGOCHILA J. & B.; LAGOCHILUS.

Scaphirhynchops Gill: SCAPHIRHYNCHUS Heckel; SCAPHORHYNCHUS.

Scytaliscus Jordan & Gilbert: SCYTALINUS J. & G.; SCYTALINA.

Stenesthes † Jordan: new name for STENOTOMUS Gill; STENOTOMA.

Thrissocles Jordan: new name for THRYSSA Cuvier; THRISSA.

Xiphister Jordan & Gilbert: XIPHIDION Girard; XIPHIDIUM.

H. Questionable cases, similar to G.

Catochænum Cantor: GERRES Cuvier, on account of the prior GERRIS.

Centracion Gray: HETERODONTUS Blainville; HETERODON.

Choregon Minding: THYMALLUS Cuvier; THYMALUS.

Corythobatus Cantor: MINOUS Cuv. & Val.; MINOIS.

(new name) CHLOËA Jordan & Snyder; CHLOËIA.

(new name) GRAMMA Poey; GRAMMIA.

(new name) NEBRIS Cuvier; NEBRIA; NEBRIUS.

* Type CYPRINUS CORPORALIS Mitchill, CYPRINUS BULLARIS Rafinesque.

† Type SPARUS CHRYSOPS L.

INDEX

In the following list, the names of genera apparently valid are left unmarked; *d* indicates doubt of one form or another; *s* indicates synonyms, apparently never to be revived or added to the system.

- | | | |
|---|--|---|
| <p>Abramis, <i>d</i>, 99
 Abuhamrur, <i>d</i>, 34
 Abu-defduf, <i>d</i>, 33
 Acanthias, <i>s</i>, 119
 Acanthicus, 131
 Acanthinion, <i>s</i>, 64
 Acanthodes, <i>s</i>, 145
 Acanthurus, <i>s</i>, 33
 Acanthoëssus, 141
 Acanthonotus Bloch, <i>s</i>, 53
 Acanthonotus Gray, <i>s</i>,
 138
 Acanthopodus, <i>s</i>, 64
 Acanthopsis, 116
 Acanthophthalmus, 116
 Acanthorhinus, <i>s</i>, 95
 Acaramus, <i>s</i>, 89
 Acarana, 139
 Acarauna Catesby, <i>s</i>, 32
 Acarauna Sewas., <i>s</i>, 68
 Acentrolophus, <i>s</i>, 121
 Acerina Guld., <i>d</i>, 32
 Acerina Cuvier, <i>s</i>, 104,
 125
 Acestra, <i>s</i>, 137
 Achirus, 65
 Acipenser, 11
 Acus, <i>s</i>, 24, 31, 50, 73
 Aetöbatus, 95
 Ageneiosus, 66
 Agriopus, 127
 Ailia, 138
 Alabes, 101
 Albula Osbeck, <i>d</i>, 17
 Albula Gronow, <i>d</i>, 20, 30,
 42, 59
 Alburnus Catesby, <i>d</i>, 30</p> | <p>Alburnus Raf., 112
 Alectis, 88
 Alepisaurus, <i>d</i>, 143
 Alepocephalus, 113
 Alopias, <i>d</i>, 78
 Alosa, 49, 130
 Alphestes, 59
 Alpismaris, <i>s</i>, 120
 Alticus, <i>d</i>, 69
 Alutera, 98
 Amanses, 139
 Ambassis, 124
 Amblodon, <i>d</i>, 110
 Ambloplites, 111
 Amblypterus, 144
 Ameiurus, 112
 Amia Gronow, <i>d</i>, 20
 Amia L., <i>d</i>, 23
 Amia Browne, <i>s</i>, 46
 Amiatus, <i>d</i>, 91
 Ammocœtes, <i>s</i>, 97
 Ammocœtus, 76
 Ammodytes, 12
 Amora, <i>s</i>, 139
 Amorphocephalus, <i>s</i>, 119
 Amphacanthus, <i>s</i>, 59
 Amphiodon, 110
 Amphiprion, 59
 Amphisile, <i>s</i>, 106
 Amphisilen, <i>s</i>, 38
 Ampheristus, 118
 Anabas, 106
 Anableps, 20, 42, 59
 Anacanthus Ehr., 131
 Anacanthus Gray, <i>s</i>, 138
 Anampses, 117, 130
 Anarhichas, 12</p> | <p>Ancylodon, <i>s</i>, 104
 Anenchelum, 107
 Anguilla, 73
 Anodus, 132
 Anomalodon, <i>s</i>, 119
 Anopsus, <i>s</i>, 92
 Anostomus, 20, 42, 93
 Antennarius, 69, 104, 130
 Anthea, <i>s</i>, 31
 Anthias, 50
 Aodon, <i>s</i>, 55
 Aper, <i>s</i>, 72
 Aphanius, 121
 Aphareus, 135
 Aphia, <i>s</i>, 119
 Aphredoderus, 143
 Aphritis, 137
 Aplites, <i>s</i>, 111
 Apistes, 127
 Aplesion, <i>s</i>, 111
 Aplocentrus, <i>s</i>, 110
 Aplodactylus, 137
 Aplodinotus, <i>d</i>, 110
 Apocryptes, <i>d</i>, 17
 Apogon, <i>d</i>, 62
 Apomotis, 110
 Aprion, 135
 Apsilus, 135
 Apterichthys, <i>s</i>, 75
 Apteronotus, 56
 Apterurus, <i>s</i>, 83
 Apterygia, <i>s</i>, 139
 Apturus, <i>s</i>, 93
 Argentina, 15
 Argyctius, <i>s</i>, 80
 Argyreiosus, <i>s</i>, 64
 Argyropelecus, 133</p> |
|---|--|---|

- Asellus*, *s*, 71
Asper, *d*, 16
Asperulus Schæfer, *d*, 16
Asperulus Klein, *s*, 40
Aspidophoroides, 62
Aspidophorus, *s*, 62
Aspidorhynchus, 144
Aspisurus, *s*, 64
Aspredo, 20, 42
Aspro Comm., *s*, 70
Aspro Cuvier, *s*, 124
Asterropteryx, 122
Astroblepus, 76
Astrodermus, 129
Atherina, 15
Atractosteus, 112
Atropus, *s*, 105
Aulopus, 98
Aulostomus, 66
Aulus, *s*, 70
Aurata, *s*, 30, 103, 120
Ausonia, 120
Auxis, 129
Axinurus, *s*, 129
Aygula, *s*, 90
Aylopon, *s*, 80, 89
Bagre Catesby, *s*, 31
Bagre, 100
Bagrus, *d*, 100
Baillonus, *s*, 89
Balistapus, 113
Balistes, 15
Bangana, 115
Barbatula, 49
Barbus, 99
Barilius, 115
Batrachoides, 57
Batrachops, *s*, 114
Batrachus, *s*, 40, 57
Batrachtius, *s*, 88
Bedula, *s*, 130
Belone, *d*, 99
Bembras, 133
Bengala, 139
Beryx, 127
Blennius, 12
Blennus, *s*, 44
Blepharis, *s*, 105, 129
Blepsias, 127
Blochius, 54

Bodianus, *d*, 49
Bogmarus, *s*, 60
Bola, 114
Boops, 94, 102
Boridia, 135
Bostrichthys, 75
Bostrictis, *s*, 88
Bostrychoides, 61
Bostrychus, *s*, 61
Bothus, *d*, 79
Botia, 138
Bovichtus, 137
Box, 135
Brama Klein, *d*, 37
Brama Cuvier, *d*, 58
Branchiostegus, 90
Brandierius, *s*, 92
Brosme, 88, 100
Brosmus, *s*, 123
Bryttus, *s*, 137
Bucklandium, 118
Buro, *s*, 67
Buronus, *s*, 90
Butyrinus, *d*, 65
Cabdio, 115
Cæcilia, *s*, 56
Cæcula, 52
Cæcio, 61
Cæsiomorus, *d*, 61
Calamostoma, 145
Callarias, *s*, 42
Callichrous, *s*, 114
Callichthys, 21, 42, 49
Calliodon, 59, 130
Calliomorus, *s*, 56
Callionymus, 12
Calliurus, *s*, 110
Callorhynchus, 18, 98
Callyodon, 19, 42, 45
Campylodon, *s*, 53
Cantharus, *s*, 103
Capriscus, *s*, 43, 52, 82
Capros, 65
Caranx, 60
Caranxomorus, *s*, 61
Carapus Raf., 82
Carapus Cuvier, *s*, 101
Carcharhinus, 95
Carcharias Raf., 77
Carcharias Cuvier, *s*, 97

Carpiodes, 112
Cataphractus, *s*, 21, 32, 43, 51, 123
Catopterus, *s*, 144
Catostomus, 96
Catulus, *s*, 27
Centracanthus, 79
Centracion, *d*, 138
Centranodon, *s*, 66
Centrarchus, *s*, 126
Centrina, *s*, 97
Centriscus, 16
Centrochir, *s*, 132
Centrogaster, *s*, 44
Centrolophus, 64
Centronotus Schn., *s*, 58
Centronotus Lac., *s*, 62
Centropodus, *s*, 62
Centropomus, 63
Centropristes, 126
Cephacandia, *s*, 89
Cephalacanthus, *d*, 62
Cephalepis, *s*, 82, 88
Cephaletherus, *s*, 83
Cephalopholis, 59
Cephalopsis, *s*, 91
Cephalopterus, *s*, 77
Cephalus, *s*, 73
Cephimmus, *s*, 89
Cepola, 22, 23
Ceracantha, *s*, 88
Ceratorhynchus, 132
Cerictius, *s*, 78
Cerna, *d*, 141
Cernua, *d*, 16, 123
Cestracion Klein, *d*, 40
Cestracion Cuvier, *s*, 97
Cestreus, *s*, 43
Cestrorhinus, *s*, 95
Cetopsis, 131
Cetorhinus, 95
Chaca, 138
Chaetodipterus, 64
Chaetodon, 13
Chalceus, 96
Chanda, 114
Channa, 22, 42
Chanos, 67
Characinus, *s*, 14, 66, 98

- Charax, 21, 42
 Chatoessus, *s*, 130
 Chauliodus, 59
 Cheilinus, 63
 Cheilio, 63
 Cheilodactylus, 65
 Cheilodipterus, 63
 Chela, 115
 Chelmon, 105, 136
 Chelon, 52
 Cheloniger, *d*, 73
 Chimæra, 11
 Chirocentrus, 99
 Chironectes, *s*, 92, 96
 Chironemus, 126
 Chirurgus, *s*, 108
 Chirus, *s*, 84, 130
 Chlopsis, 82
 Chlorophthalmus, 142
 Choregon, *s*, 140
 Chorinemus, *s*, 137
 Chromis Plumier, *s*, 73
 Chromis Cuvier, *d*, 93,
 102
 Chrosomus, 112
 Chrysomelanus, *s*, 72
 Chrysophris, *s*, 128
 Chrysotosus, *s*, 65
 Cichla, *d*, 59
 Ciela, *d*, 39, 52
 Cingla, *s*, 123
 Cirrhibarbus, 129
 Cirrhinus, 99
 Cirrhitus, 65
 Citharinus, 98
 Citharus, 52
 Citula, 105
 Clarias, 20, 42
 Clepticus, 130
 Clinus, 101
 Clodalus, *s*, 111
 Clodipterus, *s*, 89
 Clupanodon, 68
 Clupea, 15
 Ccbitis, 14
 Ccelorhynchus, 74
 Cogrus, 81
 Coilia, 138
 Coius, *s*, 114
 Colisa, *s*, 137
 Colubrina, *d*, 65
 Comephorus, 56
 Conger, *d*, 22, 37, 101
 Conodon, *d*, 135
 Conomus, *s*, 92
 Coracinus Gronow, *d*, 19
 Coracinus Pallas, *d*, 84
 Cordorinus, *s*, 91
 Coregonus, 14, 66, 130
 Corica, *s*, 115
 Coricus, *s*, 102
 Coris, 61
 Corniger, 132
 Corvina, *d*, 128
 Corycus, *s*, 93
 Corydoras, 66
 Coryphæna, 12
 Coryphænoïdes Gunner,
 16
 Coryphænoïdes Lac., *s*,
 62
 Coryphus, *s*, 70
 Crystion, *s*, 41, 79
 Cottus, 12
 Crayracion, *s*, 42
 Crenidens, 135
 Crenilabrus, 93, 101
 Cromis, *d*, 47
 Crossocheilus, 116
 Cugupuguacu, *s*, 30
 Curimata, 50
 Curimatus, *s*, 98
 Cybium, *s*, 129
 Cycleptus, 110
 Cyclogaster, *d*, 18
 Cyclopoma, 145
 Cyclopterus, 12
 Cylindrosteus, 112
 Cynædus, *s*, 19, 42
 Cynocephalus, *d*, 42
 Cynodon, *s*, 132
 Cynoglossus, 114
 Cyprinodon, 68
 Cyprinus, 15
 Daba, *d*, 34
 Dactyleptus, *s*, 88
 Dactylopterus, *d*, 62
 Dalatias, *d*, 77
 Dalophis, *s*, 81
 Dameus, *s*, 92
 Danio, 115
 Dapedium, 115
 Dascyllus, 128
 Dasyatis, *d*, 78
 Dasybatis, *s*, 134
 Dasybatus, *d*, 39
 Datnia, 126
 Daurada, *s*, 123
 Decactylus, 113
 Dentex, 94, 103
 Diabasis, *s*, 116
 Diacope, *s*, 94, 103
 Diagramma, *s*, 94, 103
 Diana, 119
 Diastodon, 119
 Dicerobatus, *s*, 95
 Dinectus, *s*, 108, 113
 Diodon, 15
 Dioplites, *s*, 111
 Dipnotus, *s*, 92
 Diplanchias, *s*, 78
 Diplesion, *s*, 111
 Diplodus, *d*, 82
 Diploprion, 124
 Diplopterus, 138
 Dipteron Lac., *s*, 63
 Dipteron Cuvier, *s*, 128
 Dipterus, 125
 Dipturus, *s*, 78
 Djabub, *d*, 34
 Dobula, 112
 Doras, 65
 Dorosoma, 111
 Dorsuarius, *s*, 68
 Drepane, 136
 Dropsarus, *s*, 88
 Dules, *d*, 126
 Echelus, 81
 Echeneis, 12
 Echidna, 42
 Echinorhinus, 95
 Edomus, *s*, 90
 Elæorhoüs, *s*, 83
 Elacate, *s*, 129
 Eleginus Fischer, 85
 Eleginus Cuvier, *s*, 135
 Eleotris, 20, 58, 90

- Elliops*, *s*, 113
Elops Comm., *s*, 70
Elops L., 23
Enchelyopus Gronow, *d*,
 19
Enchelyopus Klein, *s*, 37
Enchelyopus Schn., *s*, 57
Encrasicholus Comm., *d*,
 71
Encrasicholus Fleming,
s, 122
Engraulis, 98
Enoplosus, 50, 64
Ephippus, 105
Epibulus, 93, 102
Epidesmus, *s*, 107
Epigonus, 83
Epinephelus, *d*, 51
Epimonus, *s*, 92
Epinotus, *s*, 92
Eptatretus, 106
Epiphthalmus, *s*, 90
Equetus, *s*, 89
Equula, *s*, 105
Eremophilus, 76
Ericius, *s*, 76
Eritrinus, *s*, 72
Erythrinus Gronow, 21,
 42
Erythrinus Plumier, *s*, 72
Esox, 14
Etheostoma, 110
Etelis, 124
Etmopterus, 78
Etroplus, 135
Eurystomus, *s*, 113
Exocætus, 15
Exoglossum, 109
Farer, *d*, 34
Fiatola, *s*, 106, 119
Fierasfer, *d*, 93, 101
Fistularia, 14
Fluta, *s*, 60
Fundulus, 65
Gadus, 12
Gaidropsarus, 81
Galaxias, 99
Galeorhinus, 95
Galeus Valmont, *d*, 27
Galeus Klein, *d*, 37
Galeus Raf., *s*, 78
Galeus Cuvier, *s*, 97
Gallus, *s*, 64
Garra, 115
Gasteracanthus, *s*, 84
Gasterodon, *s*, 90
Gasteropelecus, 22
Gasterosteus, 13
Gastrobranchus, *s*, 53
Gastrogonus, *s*, 89
Gaterin, *d*, 34
Gempylus, 129
Gerres, 117
Ghanan, *d*, 34
Girella, 139
Glanis, *s*, 131
Glaucus, *d*, 38
Glossodon, *s*, 108
Glossodus, *s*, 93, 132
Glyphisodon, *d*, 64
Gobiesox, 57
Gobio Klein, *s*, 43
Gobio Cuvier, *d*, 99
Gobioides, 57
Gobiomoroides, *s*, 57
Gobiomorus, 57
Gobitis, *s*, 122
Gobius, 12
Gomphosus, 61
Gonenion, *s*, 80
Goniodermus, *s*, 91
Gonipus, *s*, 90
Gonorhynchus, 19, 42
Gonostoma, 83
Gonurus, *s*, 89
Gnathobolus, *s*, 60
Grammistes, 58
Gristes, *s*, 126
Guaperva, *s*, 72
Guaris, *s*, 91
Guebucus, *s*, 89
Gymnarchus, 131
Gymnetrus, 45
Gymnocephalus, *s*, 51
Gymnogaster, *s*, 22
Gymnomuræna, *s*, 68
Gymnonotus, *s*, 60
Gymnopsis, *s*, 92
Gymnothorax, *s*, 53
Gymnotus, 12
Gymnurus, *s*, 88
Gyrodus, 144
Hæmulon, 128
Halex, *s*, 71
Haliophis, 122
Hampala, 116
Harengus, *s*, 24, 31, 38
Harpe, *s*, 63
Harpurus, *s*, 43
Heliasés, *d*, 128
Helmictis, *s*, 83, 92
Helops, *s*, 47
Helostoma, 129
Helotes, 127
Hemilepidotus, 127
Hemiplus, *s*, 110
Hemipteronotus, 61
Hemiramphus, 99
Hemitripterus, 127
Heniochus, 105
Hepatus, *d*, 20, 52
Hepsetia, *s*, 142
Heptranchias, 78
Heterobranchus, 107
Heterodontus, *d*, 95
Heterotis, 131
Hexagrammos, 76
Hexanchus, 78
Hiatula, *s*, 57
Hiidon, 107
Hippocampus, 79, 85, 98
Hippoglossus, 100
Hippurus, *s*, 43
Hirundo, *s*, 30
Histrio, 84
Hobar, *d*, 34
Holacantha, *s*, 88
Holacanthus, 64
Holocentrus, 19, 42
Hologymnosus, *s*, 63
Homaloptera, 116
Homolenus, *s*, 91
Hoplostethus, 133
Hoplichthys, 133
Huro, *s*, 124
Hynniss, 142
Hypacanthus, 80

- Hydrargira, *s*, 67
 Hydrocyon, 96
 Hypentelium, 109
 Hypostomus, 66
 Hypodis, *s*, 79
 Hypophthalmus, 131
 Ichthelis, *s*, 111
 Ichthyococcus, 141
 Ichthyocolla, *s*, 24
 Ichthyocoris, *s*, 142
 Ichthyolithus, *s*, 120
 Ichthyophis, *s*, 123
 Ictætus, *s*, 93
 Ictalurus, 113
 Ictiobus, *d*, 112
 Ictiopogon, *s*, 92
 Ictius, *s*, 88
 Ilictis, *s*, 112
 Ischnosoma, *s*, 132
 Istiophorus, 62
 Isurus, 78
 Johnius, 51
 Julis, 94, 101
 Kurtus, 44
 Kyphosus, 61
 Labeo Cuvier, 99
 Labeo Bowd., *s*, 118
 Labrax Klein, *d*, 39
 Labrax Pallas, *s*, 77, 124
 Labrus, 13
 Lachnolaimus, 130
 Læviraja, *s*, 121
 Lamia, *s*, 119
 Lamna, 97
 Lampanyctus, 142
 Lampreda, *s*, 93
 Lampris, 54
 Lampugus, *s*, 143
 Larimus, 134
 Latargus, *s*, 38
 Lates, 124
 Latilus, *s*, 135
 Lebia, *s*, 90
 Lebius, *s*, 84
 Leiobatus Klein, *s*, 38
 Leiobatus Raf., *s*, 78
 Leiobatus Blain., *s*, 95
 Leiognathus, 64
 Leiostomus, 64
 Leirus, 143
 Lemnisoma, *s*, 140
 Lepadogaster, 28
 Lepibema, 111
 Lepicantha, *s*, 89
 Lepidoleprus, *s*, 77
 Lepidopus, 28
 Lepidosaurus, *s*, 141
 Lepidotes, 141
 Lepimphis, *s*, 79, 90
 Lepipterus Raf., *s*, 89
 Lepipterus Cuv., 135
 Lepisacanthus, *s*, 62
 Lepisosteus, *d*, 66
 Lepodus, *d*, 80
 Lepomis, 110
 Lepomus, *s*, 89
 Leporinus, 132
 Lepterus, *s*, 80
 Leptosoma, *s*, 121
 Leptocephalus, 22
 Leptolepis, 141
 Leptops, 112
 Leptopus, *s*, 86
 Lethrinus, *d*, 128
 Leuciscus, 37, 99
 Leucops, *s*, 110
 Leucosomus, *s*, 139
 Lichia, 105, 137
 Liparis, *d*, 41, 52
 Liparius, *s*, 90
 Litholepis, *s*, 109
 Lobocheilus, *s*, 116
 Lobotes, 128
 Lonchiurus, 51
 Lopharis, *s*, 80, 89
 Lophidius, *s*, 92
 Lophius, 11
 Lophotes, 74, 101
 Loricaria, 14
 Lota, 100
 Lotta, *s*, 119
 Louti, *d*, 34
 Lucioperca, *s*, 124
 Lucius, *d*, 24, 40, 80
 Lumpus, *s*, 90, 101
 Lutianus, *d*, 49
 Lutodeira, *s*, 122
 Luvarus, 79
 Luxilus, 112
 Lynnea, *s*, 92
 Macquaria, 135
 Macrocephalus, *s*, 47
 Macrodon, 115
 Macrognathus, 56
 Macrolepis, *s*, 89
 Macropodus, 63
 Macropteronotus, *s*, 65
 Macrorhamphosus, 66
 Macrorhynchus, 56, 75
 Macrostoma, *s*, 120
 Macrourus, 44
 Mæna, *d*, 128
 Mænas, *d*, 39
 Makaira, *s*, 65
 Malacanthus, 130
 Malapterurus, 65
 Mallotus, 130
 Malthe, *s*, 105, 130
 Mastacembelus, *s*, 21, 42
 Maturacus, *s*, 90
 Maxillingua, *s*, 109
 Megabatus, *s*, 93
 Megaderus, *s*, 92
 Megalops, 66, 90
 Megalurus, 144
 Megaphalus, *s*, 89
 Melanictis, *s*, 92
 Meletta, *s*, 94
 Membras, 142
 Mene, 68
 Meneus, *s*, 90
 Menidia Browne, *d*, 46
 Menidia Bon., *d*, 142
 Merlangus, *s*, 83, 100
 Merluccius, 79
 Merolepis, 81
 Mesopodus, *s*, 89
 Mesoprion, *s*, 124
 Microchirus, 141
 Microdon, *s*, 144
 Micropodus, *s*, 89
 Micropogon, 135
 Microps, *s*, 144
 Micropterus, 63
 Micropteryx, *s*, 132
 Micropus, *s*, 139

- Microstoma, 99
 Minnilus, *s*, 111
 Minous, 133
 Misgurnus, 65
 Mobula, 82
 Mola, 28, 49, 54
 Mollinesia, 114
 Molva, 122
 Monacanthus, 98
 Monocentris, 53
 Monoceros, *s*, 58, 71
 Monochir, *s*, 131
 Monochirus Raf., 87
 Monochirus Cuvier, *s*, 100
 Monochirus Bon., *s*, 141
 Monodactylus, 61
 Monopterrhinus, *s*, 95
 Monopterus, 56
 Monotaxis, 136
 Mora, 119
 Morhua, *s*, 122
 Moringua, *d*, 138
 Mormyra, *s*, 46
 Mormyrus, 15, 29
 Morone, 86
 Morrhua, *s*, 100
 Morua, *s*, 119
 Morulus, *s*, 115
 Motella, *s*, 131
 Moxostoma, 112
 Mugil, 15
 Mugiloides, 67
 Mugilomorus, *s*, 67
 Mullus, 14
 Mupus, *s*, 143
 Muræna, 11
 Murænoblenna, *s*, 68
 Murænoides, *s*, 56
 Murænophis, *s*, 54, 68
 Mustela, *s*, 100
 Mustellus, *s*, 85
 Mustelus Valmont, *d*, 27
 Mustelus Linck, *d*, 49
 Mustelus Raf., *s*, 84
 Mustelus Cuvier, *s*, 97
 Myctophum, 82
 Myletes, 93, 96
 Mylio, *s*, 70
 Myoxocephalus, 83
 Myripristis, 127
 Mystus Gronow, 21
 Mystus Klein, *s*, 38
 Mystus Scopoli, 42
 Mystus Lac., *s*, 67
 Myxodes, 129
 Myxonum, *s*, 90
 Nandina, 138
 Nandus, 137
 Naqua, *d*, 34
 Narcacion, *d*, 39
 Narcobatis, *s*, 134
 Narcobatus, *d*, 95
 Narke, 121
 Naseus, *s*, 69
 Naso, 61
 Nasonus, *s*, 88
 Nauclerus, *s*, 142
 Naucrates, 80
 Nebris, 134
 Neleus, *s*, 92
 Nemacheilus, 116
 Nemipus, *s*, 88
 Nemocampsis, *s*, 111
 Nemochirus, 86, 92
 Nerophis, 82
 Nettastoma, 81
 Nomeus, 105
 Notacanthus, 44
 Notagogus, 144
 Notemigonus, 110
 Notidanus, *s*, 97
 Notistium, *s*, 74
 Notognidion, *s*, 80
 Notopterus, 56
 Notropis, 108
 Noturus, 109
 Novacula, *s*, 31, 102
 Nyctophus, *s*, 133
 Oblada, 128
 Octonus, *s*, 82, 90
 Oculeus, *s*, 70
 Odax Plumier, *s*, 70
 Odax Cuvier, *d*, 130
 Odontognathus, 56
 Odontolepis, *s*, 85
 Odumphus, *s*, 91
 Ogocephalus, 85
 Oligopodes, *s*, 105
 Oligopodus, *s*, 57
 Olistus, 129
 Ompok, 65
 Oncotion, *s*, 42
 Onopionus, *s*, 91
 Onos, *s*, 119
 Onus, *s*, 81
 Oonidus, *s*, 91
 Ophicephalus, 53
 Ophichthys, 45
 Ophidion, 12
 Ophiognathus, *s*, 121
 Ophisurus, 56
 Opictus, *s*, 91
 Opisotomus, *s*, 70
 Opisthognathus, 101
 Opladelus, *s*, 112
 Oplichthys, *s*, 133
 Opsanus, 108
 Orbidus, *s*, 91
 Orbis, *s*, 24, 31, 71, 85
 Orcynus, *s*, 89, 105
 Oreosoma, 127
 Orthagoriscus, *s*, 60
 Orthragus, *s*, 78
 Osmerus, 14, 66
 Osphronemus, 61
 Osteoglossum 131, 132
 Osteolepis, 134
 Ostorhinchus, 63
 Ostracion, 15
 Otolithes, 104
 Ovoides, 55, 75
 Ovum, *s*, 60
 Oxima, *s*, 86
 Oxycephas, *s*, 79
 Oxygaster, 116
 Oxynotus, *s*, 82
 Oxystomus, *s*, 83
 Oxyurus, *s*, 79
 Pacanus, *s*, 88
 Pachycormus, 144
 Pachyurus, 132
 Pagellus, 128
 Pagrus Plumier, *d*, 72
 Pagrus Cuvier, *d*, 103

- Palæobalistum, 108
 Palæoniscum, 103
 Palæorhynchum, 108
 Palæothrissum, *s*, 108
 Panotus, *s*, 89
 Paralepis, 104, 120
 Passer, *s*, 38
 Pastinaca, *s*, 121
 Pastinachus, *d*, 122
 Pegasus, 16
 Pegedictis, *d*, 113
 Pelamis, *s*, 72
 Pelamys, *s*, 37
 Pelates, 126
 Pelmatia, *d*, 47
 Pelor, *s*, 127
 Pempheris, 128, 136
 Pentaceros, *d*, 125
 Pentapus, 128
 Peprilus, 129
 Perca, 13
 Percis Klein, *s*, 39
 Percis Scopoli, *d*, 41
 Percis Schn., *s*, 58
 Percis Raf., *s*, 90
 Percophis, 118
 Periophthalmus, 58
 Peristedion, 62
 Petimbuabo, *s*, 31
 Petromyzon, 11
 Phalangistes, *s*, 83
 Pharoptyryx, *s*, 122
 Pholidophorus, 140
 Pholidus, *s*, 88
 Pholis Gronow, 19
 Pholis Scopoli, 42
 Pholis Röse, *s*, 52
 Pholis Cuvier, *s*, 101
 Phoxinus, 112
 Phractocephalus, 131
 Phycis Röse, 51
 Phycis Schn., *s*, 58
 Phycis Raf., *s*, 79
 Phyllophorus, *s*, 91
 Piabucus, *s*, 98
 Picorellus, *s*, 112
 Piescephalus, *s*, 81, 90
 Pilodictis, *s*, 110
 Pimelepterus, *s*, 63
 Pimelodus, 65
 Pimephales, 112
 Pinguipes, *s*, 127
 Piratia, *s*, 91
 Plaguia, *s*, 88
 Plagusia Browne, *d*, 46
 Plagusia Cuvier, *s*, 101
 Plagyodus, 84
 Plargyrus, *s*, 112
 Platax, 105
 Platessa, *s*, 100
 Platinglossus, 40
 Platirostra, *s*, 107
 Platopterus, *s*, 92
 Platycephalus, 53
 Platyptera, *s*, 130
 Platystacus, 53
 Platystoma, *s*, 131
 Plecopodus, *s*, 90
 Plecostomus, 21
 Plectorhynchus, *d*, 61
 Plectropomus, 103
 Plesiops, 102
 Pleuronectes, 13
 Plotosus, 66
 Podoleptus, *s*, 92
 Pœcilia, 59
 Pogonathus, *s*, 65
 Pogonias, 61
 Pogostoma, *s*, 108
 Polipturus, *s*, 89
 Polyacanthus, 129
 Polydactylus, *s*, 67
 Polynemus, 15
 Polyodon, 54, 59
 Polyprion, 104, 117
 Polypterus, 54, 77
 Pomacampsis, *s*, 111
 Pomacantha, *s*, 88
 Pomacanthis, *s*, 89
 Pomacanthus, 64
 Pomacentrus, 64
 Pomadasys, 64
 Pomagonus, *s*, 89
 Pomatias, *s*, 60
 Pomatomus Lac., 63
 Pomatomus Cuvier, *s*,
 124
 Pomolobus, 111
 Pomotis Raf., *s*, 110
 Pómotis Cuv., *s*, 126
 Pomoxis, 109
 Pompilus, *s*, 140
 Porcus, 107
 Porthmeus, 142
 Premnas, 106
 Priacanthus, *d*, 94, 104
 Pricus, *s*, 93
 Prinodon, *s*, 90
 Priodon, *s*, 118, 129
 Prionotus, 62
 Pristibatis, *s*, 134
 Pristigaster, 99
 Pristipomus, *s*, 94, 103
 Pristis, 41, 49, 52
 Proceros, *s*, 113
 Prochilodus, 132
 Prochilus Klein, *d*, 39
 Prochilus Cuvier, *s*, 104
 Proctostegus, *s*, 121
 Propterygia, *s*, 117
 Psalisostomus, *d*, 44
 Psenes, 142
 Psettus, *s*, 70, 128, 136
 Pseudopterus, *d*, 40
 Psiloides, *s*, 85
 Psilus, *s*, 85
 Psittacus, *s*, 31
 Pteraclidus, *s*, 88
 Pteraclis, 22
 Pterapon, *s*, 139
 Pterichthys, *s*, 71
 Pteridium, *s*, 41
 Pterois, *d*, 104
 Pterops, *s*, 88
 Pterurus, *s*, 82, 92
 Ptycholepis, 140
 Puntius, 115
 Pycnodus, 144
 Rachycentron, 121
 Raconda, 138
 Raja, 11
 Ramphistoma, *d*, 91
 Raniceps, 100
 Rataboura, *d*, 138
 Regalecus, 28, 45
 Remora, 28, 31
 Rhaphiodon, 132

- Rhina Klein, *d*, 39
 Rhina Schn., *d*, 59
 Rhina Raf., *s*, 78
 Rhinelepis, 131
 Rhinobatos, *s*, 49
 Rhinobatus, 40, 59
 Rhomboida, *d*, 48
 Rhombotides, *s*, 38
 Rhombus Klein, *d*, 38
 Rhombus Lac., *s*, 56
 Rhombus Raf., *d*, 100
 Rhynchichthys, *s*, 137
 Rhynchobdella, *s*, 59
 Rincoxis, *s*, 92
 Roccus, 86
 Rutilus, 112
 Ruvettus, 144
 Rypiticus, 125
 Saccopharynx, 117
 Salanx, *d*, 99
 Salaria, *s*, 33
 Salaria, 101
 Saltatrix, *s*, 30
 Salminus, 132
 Salmo, 14
 Salpa, *s*, 30
 Salvelinus, 140
 Samaris, 139
 Sandat, *s*, 122, 124
 Sander, 104
 Sandrus, *s*, 123
 Sarchirus, *s*, 109
 Sarda Plumier, *d*, 72
 Sarda Cuvier, *d*, 129
 Sargus Klein, *d*, 39
 Sargus Plumier, *d*, 72
 Sargus Cuvier, *s*, 102
 Saurocephalus, 118
 Saurodon, 136
 Sauropsis, 140
 Saurostomus, 144
 Saurus Catesby, *d*, 29
 Saurus Browne, *d*, 48
 Saurus Cuvier, *s*, 98
 Sayris, *s*, 81, 91
 Scarcina, *s*, 79
 Scardinius, 142
 Scarus Gronow, *s*, 19
 Scarus Forsk., *d*, 33
 Scatharus, 135
 Scatophagus, 136
 Schedophilus, 133
 Schilbe, 100
 Schizodon, *s*, 132
 Schour, *d*, 34
 Schraitzer, *d*, 16
 Sciæna, 13, 93
 Sciænus, *s*, 69
 Scoliostomus, *s*, 122
 Scolopsides, *s*, 128
 Scolopsis, *d*, 94, 103
 Scomber, 14
 Scomberesox, 66
 Scomberoides, 60
 Scomberomorus, 62
 Scopelus, *s*, 98
 Scopthalmus, *s*, 82
 Scorpæna, 13
 Scorpius, 72
 Scylliorhinus, 95
 Scyllium, *s*, 97
 Seymnus, *s*, 97
 Scyphius, *s*, 119
 Seyris, *s*, 129
 Sebastes, 127
 Selache, *s*, 97
 Selanionius, *s*, 122
 Seleima, *s*, 119
 Selene, 64
 Semionotus, 140
 Semotilus, 112
 Sphenia, *s*, 93
 Seriola, 105
 Serranus, 94, 103
 Serrasalmus, 66
 Sesarinus, *s*, 106
 Siganus, 32
 Sillago, 101
 Silurus, 14
 Siphostoma, *s*, 79
 Sisor, 115
 Skeponopodus, *s*, 144
 Smaris, *s*, 93, 102
 Smerdis, 145
 Soarus, *s*, 49
 Solea Klein, *d*, 31
 Solea Quensel, *d*, 40, 74,
 81, 100
 Solenostomus Gronow,
s, 21
 Solenostomus Klein, *s*,
 43
 Solenostomus Browne,
s, 46
 Solenostomus Lac., *d*, 67
 Somniosus, 107
 Soranus, *s*, 91
 Sorubim, 132
 Sparus, 13
 Spatularia, *s*, 74
 Sphagebranchus, 53
 Spheroides, *s*, 55, 75
 Sphyræna, 43, 52, 58
 Sphyrna, 82
 Spicara, 80
 Spinachia, 105, 123
 Spinax, *s*, 97
 Spirobranchus, 129, 137
 Squalius, *s*, 141
 Squalus, 11
 Squatina, *d*, 75
 Squatinoraja, *s*, 116
 Stellifer, 104
 Stelliferus, *s*, 123
 Sterletus, *s*, 113
 Sternarchus, *s*, 59
 Sternoptix, 44
 Stizostedion, 111
 Stolephorus, 67
 Stomias, 99
 Stomodon, *s*, 86
 Stromateus, 12
 Strinsia, 81
 Sturio, *s*, 82, 112
 Stylephorus, 50
 Sudis Raf., 80
 Sudis Cuv., *s*, 99
 Suillus, *s*, 30
 Siphocles, *s*, 92
 Symphodus, 79
 Symphurus, 81
 Synagris, *s*, 38
 Synanceja, 58
 Synbranchus, 53
 Syngnathus, 16
 Synodontis, 100
 Synodus, 20, 42, 59

- Syphyrnias, *s*, 92
 Tænia, *s*, 52
 Tænianotus, 63
 Tænioides, 57
 Tachysurus, *d*, 66
 Tahhmel, *d*, 34
 Tangus, *s*, 91
 Tasica, *s*, 88
 Taunis, *s*, 88
 Taurichthys, 128
 Tautoga, 86
 Telestes, 141
 Telipomis, *s*, 111
 Temera, 138
 Temnodon, *s*, 106
 Terapon, 104
 Teretulus, *s*, 113
 Tetragonolepis, 136
 Tetragonopterus, 93, 96
 Tetragonoptrus, *s*, 40
 Tetragonurus, 77
 Tetraodon, 15
 Tetrapturus, 80
 Tetroras, *s*, 77
 Teuthis, *d*, 23, 48
 Therapon, 104
 Thrissa, *s*, 90, 98
 Thrissocles, 130
 Thrissops, 144
 Thyssa, *s*, 130
 Thymallus, 49, 130
 Thynnus, *s*, 48, 105
 Thyrsites, 129
 Tinca, 99
 Tirus, *s*, 80
 Tor, 139
 Torpedo Houttuyn, 22
 Torpedo Forsk., 32
 Torpedo Raf., *s*, 75, 82
 Toxotes, 105, 137
 Trachichthys, 55, 73
 Trachinotus, 61
 Trachinus, 12
 Trachipterus, 28
 Trachurus, 72, 79
 Trachyrhynchus, 74
 Triacanthus, 98
 Trichidion, *s*, 40
 Trichis, *s*, 73
 Trichiurus, 12
 Trichiodon, 127
 Trichogaster, 58
 Trichonotus, 58, 90
 Trichopodus, *s*, 61
 Trichopus, *s*, 73
 Tricropterus, *s*, 79
 Trigla, 14
 Trinectes, 142
 Triodon, 131
 Tripteronotus, *s*, 65
 Tripterygion, 119
 Trisopterus, 87, 88
 Triurus, 56
 Trutta, 14, 24, 37
 Trygon, *s*, 98, 120
 Trygonobatus, *s*, 94
 Turdus, *s*, 30
 Tylosurus, 143
 Typhle, *s*, 78
 Typhlinus, 91
 Typhlobranchus, *s*, 60
 Typhlotes, *s*, 85
 Umbla, *s*, 29
 Umbra, 20, 42
 Umbrina, 104
 Unibranchapertura, *s*, 68
 Unicornis, *s*, 31
 Upeneus, 127
 Uræus, *s*, 140
 Uranoscopus L., 12
 Uranoscopus Gron., *s*, 19
 Uroxis, *s*, 83
 Vandellius, *s*, 73
 Vipera, *s*, 32
 Vomer, *d*, 105
 Vulpecula, *d*, 27
 Niphias, 12
 Niphorhynchus, 132
 Xiphostoma, 132
 Xipotheca, *s*, 84
 Xypterus, *s*, 82
 Xyrichthys, 93
 Xyster, *s*, 68
 Xysterus, *s*, 90
 Zancus, 70, 136
 Zebriicum, *s*, 92
 Zeus, 13
 Zingel, *d*, 104, 106
 Zoarces, *d*, 129
 Zygæna, *s*, 97

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A CONTRIBUTION TO THE STABILITY OF SCIENTIFIC NOMENCLATURE

BY

DAVID STARR JORDAN

Chancellor-Emeritus of Stanford University

Member of the International Commission of Zoological Nomenclature

STANFORD UNIVERSITY, CALIFORNIA
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STANFORD UNIVERSITY
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CONTENTS

	Page		Page
Introductory Note	163	136A. Smith, <i>South Africa</i> , 1829.....	174
Additions, Etc., to Part I.....	167	136B. Bancroft, <i>Sea Devil</i> , 1829.....	174
7. Houttuyn, <i>Historie</i> , 1764.....	167	142. Cuvier & Valenciennes, <i>Pois-</i>	
9. Müller, <i>Delineationes</i> , 1767.....	167	<i>sons</i> , 1830.....	174
10. Geoffroy, <i>719 Plantes</i> , 1767.....	168	143 Bennett, <i>Sumatra</i> , 1830.....	174
17A. Gronow, <i>Pteraclis</i> , 1772.....	168	143A. Bennett, <i>Mauritius</i> , 1830.....	174
17B. Gùldenstàdt, <i>Sterleta</i> , 1772.....	168	146A. Cuvier & Valenciennes, <i>Pois-</i>	
20. Klein, <i>Schauplatz</i> , I, 1775.....	168	<i>sons</i> , VII, VIII, 1831.....	175
31A. Klein, <i>Schauplatz</i> , VIII, 1779....	168	146B. Bonaparte <i>Saggio</i> , 1831.....	175
31B. Brùnnich, <i>Vaagmaer</i> , 1788.....	168	147A. Eichwald, <i>Rossia</i> , 1831.....	176
45. Bloch, <i>Auslândische</i> , IX, 1795....	168	150A. Gray, <i>Miscellany</i> , 1831.....	176
47. Volta, <i>Ichthyolithologia</i> , 1796....	169	151B. Münster, <i>Petrefakten</i> , 1832.....	176
55. Bloch & Schneider, <i>Systema</i> , 1801	169	151C. Couch, <i>British Fauna</i> , 1832.....	176
56. Lacépède, <i>Poissons</i> , IV, V, 1803	169	151D. Nardo, <i>Pesci nuovi</i> , 1832.....	176
56A. Lacépède, <i>Nouvelle Hollande</i> ,		151E. Krynicki, <i>Schilus</i> , 1832.....	176
1804	169	152. Minding, <i>Lehrbuch</i> , 1832.....	176
56B. Bory, <i>Afrique</i> , 1804.....	170	153 Nilsson, <i>Scandinavia</i> , 1832.....	176
67. Duméril, <i>Cyclostomes</i> , 1808.....	170	153A. Reinhardt, <i>Grønland</i> , 1832.....	176
72. Rafinesque, <i>Caratteri</i> , 1810.....	170	164. Agassiz, <i>Fossiles</i> , II, IV, 1833....	177
75A. Perry, <i>Arcana</i> , 1811.....	170	165. Brandt & Ratzeburg, <i>Medezi-</i>	
75B. Humboldt, & Valenciennes, <i>Voy-</i>		<i>nische</i> , 1833	177
<i>age</i> , 1811.....	170	166. Cocco, <i>Peloritani</i> , 1833.....	178
85. Rafinesque, <i>Analyse</i> , 1815.....	170	167. Cocco, <i>Lettere</i> , 1833.....	178
91. Cuvier, <i>Règne Animal</i> , I, 1817....	171	168. Cocco, <i>Messina</i> , 1833.....	178
92. Oken, <i>Isis</i> , 1817.....	171	169. Cuvier & Valenciennes, <i>Pois-</i>	
97. Blainville, <i>Fossiles</i> , 1818.....	171	<i>sons</i> , IX, 1833.....	178
108. Goldfuss, <i>Handbuch</i> , 1820.....	171	170. Gray, <i>Illustrations</i> , 1833.....	178
110. Hamilton, <i>Ganges</i> , 1822.....	172	171, 172. Lowe, <i>New Genus</i> , 1833.....	179
112. Van Hasselt, <i>Java</i> , 1823.....	172	173. Lowe, <i>Madeira</i> , 1833.....	179
119. König, <i>Icones</i> , 1825.....	172	174. Nardo, <i>Skeponopodus</i> , 1833.....	179
119A. Le Sueur, <i>New Salmo</i> , 1825....	172	175. Reinhardt, <i>Skandinavisk</i> , 1833....	179
119B. Adanson, <i>Histoire Naturelle</i> ,		176. Agassiz, <i>Fossile Fische</i> , 1834.....	179
1825	172	177. Agassiz, <i>Böhmen</i> , 1834.....	180
121. Risso, <i>Méridionale</i> , 1826.....	173	178. Agassiz, <i>Poissons Fossiles</i> , V,	
121A. Riley, <i>Squaloraia</i> , 1826.....	173	1834	180
128. Rüppell, <i>Rothes Meer</i> , 1828.....	173	179. Costa, <i>Cenni</i> , 1834.....	180
128A. Thienemann, <i>Lehrbuch</i> , 1828..	173	180. Griffith, <i>Cuvier</i> , 1834.....	180
132. Cuvier & Valenciennes, <i>Pois-</i>		181. Henle, <i>Narcine</i> , 1834	180
<i>sons</i> , II, 1828.....	173	182. Münster, <i>Rabenstein</i> , 1834.....	180
134. Agassiz, <i>Brazil</i> , 1829.....	173	183. Quoy & Gaimard, <i>Astrolabe</i> ,	
135. Cuvier, <i>Règne Animal</i> , II, 1829..	173	1834	180
136. Cuvier & Valenciennes, <i>Pois-</i>		184. Agassiz, <i>Karpfen</i> , 1834.....	180
<i>sons</i> , III, 1829.....	173		

	Page		Page
185. Agassiz, <i>Poissons Fossiles</i> , 1835.....	181	223. Buckland, <i>Bagshot Sands</i> , 1838..	191
186. Agassiz, <i>Glärner-Schiefer</i> , 1835.....	181	224. Cocco, <i>Messina</i> , 1838.....	191
187. Cuvier & Valenciennes, <i>Poissons</i> , X, 1835.....	181	225. Gray, <i>Aracana</i> , 1838.....	192
188. Gottsche, <i>Pleuronectes</i> , 1835.....	181	226. Heckel, <i>Caschmir</i> , 1838.....	192
189. Joannis, <i>Nil</i> , 1835.....	182	227. Lowe, <i>Maderensium</i> , 1838.....	192
190. Meyen, <i>Peru</i> , 1835.....	182	228. Müller & Henle, <i>Plagiostomen</i> , 1838	192
191. Müller, <i>Myxinoïden</i> , 1835.....	182	229. Müller & Henle, <i>Leptocharias</i> 1838	193
192. De la Pylaie, <i>Recherches</i> , 1835..	182	230. Nordmann, <i>Hexacanthus</i> , 1838..	193
193. Rüppell, <i>Abyssinien</i> , 1835.....	184	231. Reinhardt, <i>Grönland</i> , 1838.....	193
194. Schultze, <i>Hexabranchnus</i> , 1835....	184	232. Swainson. <i>Natural History</i> , I, 1838	193
195. Agassiz, <i>Poissons Fossiles</i> , III, 1836	184	233. Agassiz, <i>Stinkkerne</i> , 1839	194
196. Agassiz & Hibbert, <i>Burdichouse</i> , 1836	185	234. Agassiz, <i>Old Red Sandstone</i> , 1839	194
197. Cuvier & Valenciennes, <i>Poissons</i> , XI, 1836.....	185	235. Agassiz, <i>Poissons Fossiles</i> , II, IV (part), 1839.....	194
198. Heckel, <i>Scaphirhynchus</i> , 1836....	185	236. Bonaparte, <i>Systema</i> , 1839.....	194
199. Heckel & Fitzinger, <i>Acipenser</i> , 1836	185	237. Cuvier & Valenciennes, <i>Poissons</i> , XIII, XIV, 1839.....	194
200. Liénard, <i>Maurice</i> , 1836.....	185	238. Lay & Bennett, <i>Becchey</i> , 1839....	195
201. Münster, <i>Capitosaurus</i> , 1836.....	185	239. Lowe, <i>Madeira</i> , 1839.....	195
202. Richardson, <i>Arctic</i> , 1836.....	185	240. McClelland, <i>Indian Cyprinidæ</i> , 1839	195
203. Richardson, <i>Borcali-Americana</i> , III, 1836.....	186	241. McClelland, <i>Cyprinidæ</i> , 1839.....	195
204. Rüppell, <i>Nil</i> , 1836.....	186	242. Mitchell, <i>Australia</i> , 1839.....	196
205. Yarrell, <i>British Fishes</i> , 1836.....	186	243. Müller, <i>Cyclostomen</i> , 1839.....	196
206. Agassiz, <i>Poissons Fossiles</i> , III, V, 1837.....	186	244. Münster, <i>Kupferschiefer</i> , 1839....	196
207. Bonaparte, <i>Fauna Italica</i> , III, 1837	186	245. Nardo, <i>Mola</i> , 1839.....	196
208. Cantraine, <i>Messina</i> , 1837	188	246. Owen, <i>Lepidosiren</i> , 1839	196
209. Cuvier & Valenciennes, <i>Poissons</i> , XII, 1837.....	188	247. Owen, <i>Fossil Fishes</i> , 1839.....	196
210. Egerton, <i>Fossil Fishes</i> , 1837.....	189	248. Ranzani, <i>Mola</i> , 1839.....	196
211. Fitzinger, <i>Natterer</i> , 1837.....	189	249. Richardson, <i>Van Diemen's Land</i> , 1839	197
212. Fries, <i>Pterycombis</i> , 1837.....	189	250. Storer, <i>Massachusetts</i> , 1839.....	197
213. Geinitz, <i>Muschelkalk</i> , 1837.....	189	251. Swainson, <i>Natural History</i> , II, 1839	197
214. Heckel, <i>Beiträge</i> , 1837.....	189	252. Bennett, <i>Whaling Voyage</i> , 1840..	206
215. Kutorga, <i>Dorpat</i> , 1837.....	189	253. Bonaparte, <i>Fauna Italica</i> , 1840..	206
216. Müller & Henle, <i>Haifische</i> , 1837..	189	254. Cuvier & Valenciennes, <i>Poissons</i> , XV, 1840.....	206
217. Müller & Henle, <i>Cartilaginous Fishes</i> , 1837.....	189	255. Eichwald, <i>Fossil Fishes</i> , 1840.....	206
218. Redfield, <i>Connecticut</i> , 1837.....	190	256. Heckel, <i>Natterer</i> , 1840.....	207
219. Reinhardt, <i>Bythites</i> , 1837.....	190	257. Lowe, <i>Madeira</i> , 1840.....	207
220. Smith, <i>Squalus</i> , 1837	190	258. Münster, <i>Kupferschiefer</i> , 1840....	207
221. Thompson, <i>Echiodon</i> , 1837.....	190	259-261. Münster, <i>Bayreuth</i> , 1840.....	207
222. Agassiz, <i>Poissons Fossiles</i> , III, IV, 1838.....	190	262. Nordmann, <i>Pontica</i> , 1840	207
		263. Owen, <i>Odontography</i> , 1840.....	207

	Page		Page
264. Ranzani, <i>Piscium</i> , 1840.....	207	307, 308. Temminck & Schlegel,	
265. Richardson, <i>Australia</i> , 1840.....	208	<i>Fauna Japonica</i> , 1843.....	216
266. Thompson, <i>India</i> , 1840.....	208	309. Agassiz, <i>Poissons Fossiles</i> , I, II,	
267. Agassiz, <i>Ccará</i> , 1841.....	208	III, IV, V, 1844.....	216
268. Bonaparte, <i>Fauna Italica</i> , 1841....	208	310. Cocco, <i>Messina</i> , 1844.....	219
269. Eichwald, <i>Caspio-Caucasica</i> , 1841	208	311. Cuvier & Valenciennes, <i>Pois-</i>	
270. Fleming, <i>New Skate</i> , 1841.....	208	<i>sons</i> , XVII, 1844.....	219
271. Heckel, <i>Aulopyge</i> , 1841.....	209	312. Egerton, <i>Mount Lebanon</i> , 1844..	220
272. Hogg, <i>Protomelus</i> , 1841.....	209	313. Eichwald, <i>Pawlowusk</i> , 1844.....	220
273. Lowe, <i>Madeira</i> , 1841.....	209	314. Koninck, <i>Belgique</i> , 1844.....	220
274. Müller, <i>Old Red Sandstone</i> , 1841..	209	315. McClelland, <i>China</i> , 1844.....	220
275. Münster, <i>Asterodon</i> , 1841.....	209	316. McClelland, <i>Bengal</i> , 1844.....	220
276. Nardo, <i>Brachyochirus</i> , 1841	209	317. Meyer & Plieninger, <i>Württem-</i>	
277. Owen, <i>Fossil Teeth</i> , 1841	209	<i>berg</i> , 1844.....	221
278. Sykes, <i>Dukhun</i> , 1841.....	210	318. Müller & Troschel, <i>Characini</i> ,	
279. Agassiz, <i>Diplacanthus</i> , 1842	210	1844	221
280. Cuvier & Valenciennes, <i>Pois-</i>		319. Nardo, <i>Canino</i> , 1844	221
<i>sons</i> , XVI, 1842.....	210	320. Peters, <i>Rhinocryptis</i> , 1844.....	222
281. DeKay, <i>New York</i> , 1842.....	210	320A. Reuss, <i>Böhmen</i> , 1844.....	222
282. Gray, <i>New Zealand</i> , 1842.....	210	321. Richardson, <i>Hapalogenys</i> , 1844..	222
283. Haldeman, <i>Susquehannah</i> , 1842..	211	322. Richardson, <i>Channichthys</i> , 1844..	222
284. Heckel, <i>Syrien</i> , 1842.....	211	323. Richardson, <i>Patacus</i> , 1844.....	222
285. Jenyns, <i>Beagle</i> , 1842.....	211	324. Richardson, <i>Sulphur</i> , 1844.....	222
286. McClelland, <i>Cestreus</i> , 1842.....	212	325. Richardson, <i>Erebus and Terror</i> ,	
287. McClelland, <i>Fishes</i> , 1842	212	1844	222
288. Münster, <i>Bayern</i> , 1842.....	212	326. Temminck & Schlegel, <i>Fauna</i>	
289. Münster, <i>Æthalion</i> , 1842.....	212	<i>Japonica</i> , 1844.....	223
290. Owen, <i>Raphiosaurus</i> , 1842.....	212	327. Valenciennes, <i>Canaries</i> , 1844.....	223
291. Richardson, <i>King George's</i>		328. Agassiz, <i>Fossiles</i> , <i>Londres</i> , 1845..	223
<i>Sound</i> , 1842.....	212	329. Agassiz, <i>Vieux Grès Rouge</i> , 1845..	225
292. Schomburgk, <i>Fishes of Guiana</i> ,		330. Bleeker, <i>Batavia</i> , 1845.....	225
1842	212	331. Bonaparte, <i>Catalogo</i> , 1845.....	225
293. Temminck & Schlegel, <i>Fauna</i>		332. Brodie, <i>Fossil Insects</i> , 1845.....	226
<i>Japonica</i> , 1842.....	213	333. Costa, <i>Fossil Fishes</i> , 1845.....	226
294. Valenciennes, <i>Bonita</i> , 1842	213	334. Kröyer, <i>Icclus</i> , 1845.....	226
295. Agassiz, <i>Poissons Fossiles</i> , III		335. Kröyer, <i>Carelophus</i> , 1845.....	226
1843	213	336. Kröyer, <i>Caracanthus</i> , 1845.....	227
296. Egerton, <i>Chimæroids</i> , 1843.....	214	337. Kröyer, <i>Ceratias</i> , 1845.....	227
297. Hall, <i>New York</i> , 1843.....	214	338. McClelland, <i>Boutan</i> , 1845.....	227
298. Heckel, <i>Syrien</i> , 1843.....	214	339. Müller & Troschel, <i>Characinen</i> ,	
299. Heckel, <i>Russegger's Reisen</i> , 1843	215	1845	227
300. Lowe, <i>Madeira</i> , 1843	215	340. Owen, <i>Odontography</i> , 1845.....	227
301. Lowe, <i>Madeira</i> , 1843	215	341. Richardson, <i>Gasteroschisma</i> ,	
302. Müller, <i>Knochenfische</i> , 1843.....	215	1845	227
303. Müller, <i>Familien</i> , 1843.....	215	342. Richardson, <i>China</i> , 1845	227
304. Münster, <i>Petrefaktenkunde</i> , 1843	216	343. South, <i>Encyclopedia</i> , 1845.....	227
305. Portlock, <i>Loudonderry</i> , 1843.....	216	344. Temminck & Schlegel, <i>Fauna</i>	
306. Richardson, <i>Machærium</i> , 1843....	216	<i>Japonica</i> , 1845	227

	Page		Page
345. Agassiz, <i>Nomenclator</i> , 1846.....	228	384. Giebel, <i>Vorwelt</i> , 1848.....	233
346. Agassiz, <i>Manuscriptum</i> , 1846.....	228	385. Gistel, <i>Thierreich</i> , 1848.....	233
347. Bibron, <i>Chilomycterus</i> , 1846.....	228	386. Guichenot, <i>Megaprotodon</i> , 1848..	238
348. Brisout de Barneville, <i>Gobiosoces</i> , 1846.....	228	387. Guichenot, <i>Chile</i> , 1848.....	238
349. Brisout de Barneville, <i>Trachelochismus</i> , 1846.....	228	388. Heckel, <i>Xiphophorus</i> , 1848.....	238
350. Costa, <i>Napoli</i> , 1846.....	228	389. Jerdon, <i>India</i> , 1848	239
351. Cuvier & Valenciennes, <i>Poissons</i> , XVIII, 1846.....	228	390. M'Coy, <i>Carboniferous</i> , 1848.....	239
352. Eichwald, <i>Russia</i> , 1846.....	229	391. M'Coy, <i>Ichthyolites</i> , 1848.....	239
353. Keyserling, <i>Petchora</i> , 1846.....	229	392. Müller, <i>Fossile</i> , 1848.....	239
354. Kröyer, <i>Danmark</i> , 1846.....	229	393. Müller, & Troschel, <i>British-Guiana</i> , 1848.....	239
355. Lowe, <i>Lophiida</i> , 1846.....	229	394. Richardson, <i>Samarang</i> , 1848.....	239
356. Meyer, <i>Jena</i> , 1846.....	229	395. Ayres, <i>Malacosteus</i> , 1849.....	240
357. Müller, <i>Arapaima</i> , 1846.....	229	396. Bleeker, <i>Celebes</i> , 1849.....	240
358. Münster, <i>Ueberreste</i> , 1846.....	229	397. Bleeker, <i>Labroiden</i> , 1849.....	240
359. Norwood & Owen, <i>Indiana</i> , 1846.	229	398. Bleeker, <i>Percoiden</i> , 1849.....	240
359A. Richardson, <i>Australia</i> , 1846.....	230	399. Bleeker, <i>Blennioiden</i> , 1849.....	240
360. Peters, <i>Labyrinthfischen</i> , 1846....	230	400. Bleeker, <i>Madura</i> , 1849.....	241
361. Temminck & Schlegel, <i>Fauna Japonica</i> , 1846	230	401. Bleeker, <i>Bali</i> , 1849.....	241
362. Tschudi, <i>Fauna Peruana</i> , 1846....	230	402. Cantor, <i>Malayan Fishes</i> , 1849....	241
363. Valenciennes, <i>Eremophilus</i> , 1846.	230	403. Cuvier & Valenciennes, <i>Poissons</i> , XXII, 1849.....	242
364. Bleeker, <i>Siluroideorum</i> , 1847.....	230	404. Germar, <i>Wittenberg</i> , 1849.....	242
365. Bleeker, <i>Pharyngognathorum</i> , 1847	230	405, 406. Giebel, <i>Vorwelt</i> , 1849.....	242
366. Brisout de Barneville, <i>Centropristis</i> , 1847.....	230	407. Heckel, <i>Chirocentrites</i> , 1849.....	242
367. Brisout de Barneville, <i>Anguilliformes</i> , 1847.....	231	408. Heckel, <i>Syrien</i> , 1849.....	242
368. Cuvier & Valenciennes, <i>Poissons</i> , XX, 1847.....	231	409. Hoeven, <i>Dierkunde</i> , 1849.....	243
369. Egerton, <i>Chimæroids</i> , 1847.....	231	410. Jordan, <i>Triodus</i> , 1849.....	243
370. Giebel, <i>Glarus</i> , 1847.....	231	411. M'Coy, <i>Carboniferous</i> , 1849.....	243
371. Giebel, <i>Vorwelt</i> , 1847.....	231	412. Meyer, <i>Muschelkalk</i> , 1849.....	243
372. Guichenot, <i>Pomanotis</i> , 1847.....	232	413. Müller & Troschel, <i>Horæ Zoologica</i> , 1849.....	243
373. Kner, <i>Cephalaspis</i> , 1847.....	232	413A. Newman, <i>Devil Fish</i> , 1849.....	244
374. Meyer, <i>Paleontographica</i> , 1847..	232	414. Reid, <i>Vaagmar</i> , 1849.....	244
375. Meyer, <i>Muschelkalk</i> , 1847.....	232	415. Reinhardt, <i>Sydamerika</i> , 1849.....	244
376. Plieninger, <i>Degerloch</i> , 1847.....	232	416. Sismonda, <i>Piemonte</i> , 1849.....	244
377. Wood, <i>Leiodon</i> , 1847.....	232	417. Smith, <i>South Africa</i> , 1849.....	244
378. Agassiz, <i>Lake Superior</i> , 1848.....	232	418. Thiollière, <i>Jura</i> , 1849.....	244
379. Beyrich, <i>Rothliegenden</i> , 1848.....	233	419. Williamson, <i>Scales and Teeth</i> , 1849	244
380. Bleeker, <i>Sumbawa</i> , 1848.....	232	420. Agassiz, <i>Lake Superior</i> , 1850.....	245
381. Cuvier & Valenciennes, <i>Poissons</i> , XXI, 1848.....	233	421. Bleeker, <i>Manoiden</i> , 1850.....	245
382. Dana, <i>Australia</i> , 1848.....	233	422. Bleeker, <i>Betta</i> , 1850.....	245
383. Ewald, <i>Menaspis</i> , 1848.....	233	423. Costa, <i>Ittioliti</i> , 1850.....	245
		424. Dixon, <i>Susscr.</i> , 1850.....	245
		425. Egerton, <i>Ganoidei</i> , 1850.....	246
		426. Fischer, <i>Platacanthus</i> , 1850.....	246
		427. Fischer, <i>Ommatolampes</i> , 1850....	246
		428. Gibbes, <i>Mososaurus</i> , 1850.....	246

	Page		Page
429. Guichenot, <i>Algérie</i> , II, 1850.....	246	476. Bleeker, <i>Muraenoiden</i> , 1853.....	252
430. Heckel, <i>Oesterreich</i> , 1850.....	246	477. Bleeker, <i>Japan</i> , 1853.....	253
431. Jerdon, <i>Pristolepis</i> , 1850.....	246	478. Bleeker, <i>Bengalen</i> , 1853.....	253
432. Lankester, <i>Old Red Sandstone</i> , 1850	246	479. Costa, <i>Italy</i> , 1853.....	253
433. Lowe, <i>Madeira</i> , 1850.....	246	480. Gervais, <i>Algérie</i> , 1853.....	253
434. Pictet, <i>Mont Liban</i> , 1850.....	247	481. Kaup, <i>Lophobranchier</i> , 1853.....	253
435. Richardson, <i>Australia</i> , 1850.....	247	482. Kölliker, <i>Helmicthyiden</i> , 1853..	254
436. Temminck & Schlegel, <i>Fauna</i> <i>Japonica</i> , 1850.....	247	483. Owen, <i>Fossil Fishes</i> , 1853.....	254
437. Thiollière, <i>Jura</i> , 1850.....	247	484. Pomel, <i>Loire</i> , 1853.....	254
438. Bleeker, <i>Banka</i> , 1581	247	485. Romanovskii, <i>Fisch-Zähne</i> , 1853.	254
439. Bleeker, <i>Borneo</i> , II, 1851.....	247	486. Agassiz, <i>Tennessee River</i> , 1854.	254
440. Bleeker, <i>Makreelartige</i> , 1851.....	248	487. Agassiz, <i>Alconoti</i> , 1854.....	255
441. Bleeker, <i>Borneo</i> , III, 1851.....	248	488. Ayres, <i>California</i> , 1854.....	255
442. Bleeker, <i>Cheilinoïdes</i> , 1851.....	248	489. Ayres, <i>Four Fishes</i> , 1854	255
443. Bleeker, <i>Borneo</i> , IV, 1851.....	248	490. Baird & Girard, <i>Texas</i> , 1854.....	255
444. Bleeker, <i>Celbes</i> , II, 1851.....	248	491. Baird & Girard, <i>Cochlognathus</i> , 1854	255
445. Bleeker, <i>Banda</i> , 1851.....	248	492. Bleeker, <i>Batavia</i> , 1854.....	255
446. Gaimard, <i>Skandinavien</i> , 1851.....	249	493. Bleeker, <i>Flores</i> , 1854.....	256
447. Girard, <i>Cottus</i> , 1851.....	249	494. Bleeker, <i>Amboina</i> , 1854.....	256
448. Girard, <i>Cottopis</i> , 1851.....	249	494A. Bleeker, <i>Celebes</i> , 1854.....	256
449. Gray, <i>Australia</i> , 1851	249	495. Brandt, <i>Belonopsis</i> , 1854.....	256
450. Lütken, <i>Ophisurus</i> , 1851.....	249	496. Costa, <i>Napoli</i> , 1854.....	256
451. Meyer, <i>Jena</i> , 1851.....	249	497. Egerton, <i>Fossil Fishes</i> , 1854.....	256
452, 453. Meyer, <i>Nephrotus</i> , 1851.....	249	498. Egerton, <i>Dipteronotus</i> , 1854.....	256
454. M'Coy, <i>SteganoDictyum</i> , 1851....	249	499. Eichwald, <i>Lethæa Rossica</i> , 1854..	256
455. Thompson, <i>Percopsis</i> , 1851.....	249	500. Gibbons, <i>San Francisco</i> , 1854....	256
456. Wagner, <i>Lithographische</i> , 1851..	250	501. Gibbons, <i>Viviparous Fishes</i> , 1854	257
457. Bleeker, <i>Makreelartige</i> , 1852....	250	502. Girard, <i>Cottoids</i> , 1854.....	257
458. Bleeker, <i>Plagiostomen</i> , 1852.....	250	502A. Girard, <i>New Fishes</i> , 1854.....	257
459. Bleeker, <i>Sumatra</i> , 1852.....	250	503. Girard, <i>San Francisco</i> , 1854.....	257
460. Bleeker, <i>Celebes</i> , III, 1852.....	250	504. Girard, <i>Chili</i> , 1854.....	258
461. Duméril, <i>Torpédiens</i> , 1852.....	250	505. Girard, <i>Viviparous Fishes</i> , 1854.	258
462. Egerton, <i>Elasmodus</i> , 1852.....	250	506. Gronow, <i>Fishes</i> , 1854.....	258
463. Fischer, <i>Russic</i> , 1852.....	250	507. Heckel, <i>Chiavon</i> , 1854.....	259
464. Gervais, <i>Palæontologie</i> , 1852.....	251	508. Heckel, <i>Fische Zigno</i> , 1854.....	259
465. Lowe, <i>Madeira</i> , 1852.....	251	509. Hyrtl, <i>Heterotis</i> , 1854.....	259
466. Quenstedt, <i>Petrefakten</i> , 1852.....	251	510. Kner, <i>Panzerwelze</i> , 1854	260
467. Roemer, <i>Texas</i> , 1852.....	251	511. Kner, <i>Hypostomiden</i> , 1854.....	260
468. Rüppell, <i>Skelette</i> , 1852.....	251	512. Marcusen, <i>Mormyren</i> , 1854.....	260
469. Agassiz, <i>Rescarches</i> , 1853.....	251	513. Owen, <i>Fossil Remains</i> , 1854....	260
470. Agassiz, <i>California</i> , 1853.....	252	514. Poey, <i>Epimula</i> , 1854.....	260
471. Baird & Girard, <i>Mexican Bound-</i> <i>ary</i> , 1853.....	252	515. Poey, <i>Guajacones</i> , 1854.....	260
472. Baird & Girard, <i>Zuñi</i> , 1853.....	252	516. Rapp, <i>Bodensee</i> , 1854.....	261
473. Bleeker, <i>Batavia</i> , 1853.....	252	517. Richardson, <i>Herald</i> , 1854.....	261
474. Bleeker, <i>Ternate</i> , II, 1853.....	252	518. Thiollière, <i>Jura</i> , 1854.....	261
475. Bleeker, <i>Borneo</i> , VII, 1853.....	252	519. Troschel, <i>Siebengebirge</i> , 1854....	261
		520. Agassiz, <i>Pacific Slope</i> , 1855.....	261
		521. Ayres, <i>California</i> , 1855.....	262

	Page		Page
522. Basilewski, <i>China Borealis</i> , 1855..	262	569. Leidy, <i>Ichthyodorulites</i> , 1856.....	273
523. Bianconi, <i>Mosambica</i> , 1855.....	262	570. Leidy, <i>Extinct Fishes</i> , 1856.....	273
524. Bibron, <i>Gymnodontes</i> , 1855.....	262	571. Newberry, <i>Fossils of Ohio</i> , 1856..	273
525. Bleeker, <i>Van Diemensland</i> , 1855..	263	572. Pander, <i>Silurian</i> , 1856.....	273
526. Bleeker, <i>Kokos</i> , III, 1855.....	263	573. Richardson, <i>Ichthyology</i> , 1856....	274
527. Bleeker, <i>Batoe</i> , 1855.....	263	574. Thompson, <i>Ireland</i> , 1856.....	274
528. Bleeker, <i>Duizend-eilanden</i> , 1855..	263	575. Baird, <i>Long Island</i> , 1857.....	274
529. Bleeker, <i>Amboina</i> , VI, 1855.....	264	576. Bellotti, <i>Lombardia</i> , 1857.....	274
530. Bleeker, <i>Sumatra</i> , 1855.....	264	577. Bleeker, <i>Amboina</i> , 1857.....	274
531. Bleeker, <i>Geognostica</i> , 1855.....	264	578. Bleeker, <i>Japan</i> , 1857.....	274
532. Castelnau, <i>Amérique du Sud</i> , 1855	264	579. Bleeker, <i>Sangi</i> , 1857.....	274
533. Costa, <i>Caus</i> , 1855.....	264	580. Costa, <i>Libano</i> , 1857.....	275
534. Egerton, <i>Organic Remains</i> , 1855..	264	581. Egerton, <i>Ludlow</i> , 1857.....	275
535. Filippi, <i>Gadopsis</i> , 1855.....	265	581A. Emmons, <i>Geology</i> , 1857.....	275
536. Holbrook, <i>South Carolina</i> , 1855..	265	582. Gervais, <i>Labrodon</i> , 1857.....	275
537. Kaup, <i>Enchelynassa</i> , 1855.....	265	583. Girard, <i>Western Coast</i> , 1857.....	275
538. Kaup, <i>Sclerodermen</i> , 1855.....	265	584. Hollard, <i>Gymnodontes</i> , 1857.....	275
539. Kner, <i>Beiträge</i> , 1855.....	265	585. Newberry, <i>Devonian</i> , 1857.....	275
540. M'Coy, <i>Palæozoic Fossils</i> , 1855..	265	586. Newberry, <i>Eurylepis</i> , 1857.....	276
541. Meyer, <i>Physichthys</i> , 1855.....	266	587. Peters, <i>Hemichromis</i> , 1857.....	276
542. Nilsson, <i>Skandinavisk</i> , 1855.....	266	588. Philippi, <i>Fische</i> , 1857.....	276
543. Peters, <i>Mossambique</i> , 1855.....	266	589. Richardson, <i>Siphonognathus</i> , 1857	276
544. Roemer, <i>Palæoteuthis</i> , 1856.....	266	590. Rüttimeyer, <i>Encheiziphis</i> , 1857..	276
545. Storer, <i>Massachusetts</i> , 1855.....	266	591. Troschel, <i>Saarbrücke</i> , 1857.....	276
546. Valenciennes, <i>Vénus</i> , 1855.....	266	592. Wagner, <i>Solenhofen</i> , 1857.....	276
547. Agassiz, <i>Glanis</i> , 1856.....	267	593. Agassiz, <i>Skate</i> , 1858.....	277
548. Asmuss, <i>Hautskelet</i> , 1856.....	267	594. Agassiz, <i>Nicaragua</i> , 1858.....	277
549. Bleeker, <i>Amboina</i> , 1856.....	267	595. Ayres, <i>California</i> , 1858.....	277
550. Bleeker, <i>Menado</i> , 1856.....	267	596. Bleeker, <i>Sumatra</i> , VI, 1858.....	277
551. Bleeker, <i>Bocroe</i> , 1856.....	267	597. Bleeker, <i>Japan</i> , IV, 1858.....	277
552. Bleeker, <i>Nias</i> , 1856.....	267	598. Bleeker, <i>Celebes</i> , X, 1858.....	277
553. Bleeker, <i>Bali</i> , 1856.....	268	599. Bleeker, <i>Goram</i> , 1858.....	278
554. Costa, <i>Fossile</i> , 1856.....	268	600. Bleeker, <i>Bilitou</i> , IV, 1858.....	278
555. Duméril, <i>Ichthyologic</i> , 1856.....	268	601. Bleeker, <i>Borneo</i> , XII, 1858.....	278
556, 557. Girard, <i>Western Coast</i> , 1856..	269	602. Bleeker, <i>Siluri</i> , <i>Prodromus</i> , 1858..	278
558. Girard, <i>Cyprinoids</i> , 1856.....	269	603. Bleeker, <i>Cobitinen</i> , 1858.....	279
559. Holmes, <i>Devilfish</i> , 1856.....	270	604. Bleeker, <i>Japara</i> , 1858.....	279
560. Heckel, <i>Oesterreich</i> , 1856.....	270	605. Blyth, <i>Amblyceps</i> , 1858.....	279
561. Heckel, <i>Pycnodonten</i> , 1856.....	270	606. Bronn, <i>Raibl</i> , 1858.....	279
562. Kaup, <i>Aale</i> , 1856.....	270	607-612. Costa, <i>Uraleptus</i> , 1858.....	279
563. Kaup, <i>Apodal Fish</i> , 1856.....	271	613. Duméril, <i>Afrique</i> , 1858.....	280
564. Kaup, <i>Ophidina</i> , 1856.....	272	614. Egerton, <i>Chondrosteus</i> , 1858....	280
565. Kaup, <i>Lophobranchiates</i> , 1856....	272	615. Egerton, <i>Cosmolepis</i> , 1858.....	280
566. Leidy, <i>Extinct Vertebrates</i> , 1856..	272	616. Gill, <i>Gobinarum</i> , 1858.....	280
567. Leidy, <i>Sioux Country</i> , 1856.....	272	617. Gill, <i>Gobioidarum</i> , 1858.....	280
568. Leidy, <i>Extinct Fishes</i> , 1856.....	272	618. Gill, <i>Triacnophorichthys</i> , 1858....	280

	Page		Page
619. Gill, <i>Pimelodina</i> , 1858.....	280	630. Leidy, <i>Hadrodus</i> , 1858.....	283
620. Gill, <i>Trinidad</i> , 1858.....	281	631. Von der Marck, <i>Fossils</i> , 1858.....	283
621. Heckel & Kner, <i>Oesterreich</i> , 1858	281	632. Pander, <i>Ctenodipterinen</i> , 1858....	283
622. Kade, <i>Devonische</i> , 1858.....	181	633. Philippi, <i>Chile</i> , 1858.....	283
623. Kaup, <i>Gadida</i> , 1858.....	281	633A. Quenstedt, <i>Jura</i> , 1858.....	283
624. Kaup, <i>Nemophis</i> , 1858.....	281	634. Reinhardt, <i>Stegophilus</i> , 1859.....	284
625. Kaup, <i>Solcina</i> , 1858.....	282	635. Rouault, <i>Ouest de France</i> , 1858..	284
626. Kaup, <i>Plagusina</i> , 1858.....	282	636. Thiollière, <i>Bugcy</i> , 1858.....	284
627. Kaup, <i>Joue cuirassée</i> , 1858.....	282	637. Weinland, <i>Flying-fish</i> , 1858.....	284
628. Kner, <i>Beiträge</i> , II, 1858.....	282	Omissions	284
629. Leidy, <i>Carboniferous</i> , 1858.....	283		

Abbreviations of author names, where used, following words in small capitals are as follows:

Ag. Agassiz	J. & G. Jordan & Gilbert
B. & C. Bocage & Capello	J. & E. Jordan & Evermann
Baird & Grd. Baird & Girard.	K. & S. Kner & Steindachner
Barn. Barneville	Kölr. Költreuter
Beyr. Beyrich	L. Linnæus
Bl. & Schn. Bloch & Schneider.	Lac. Lacépède
Blainv. Blainville	Lank. Lankester
Blkr. Bleeker	M. & H. Müller & Henle
Bon. Bonaparte	M. & T. Müller & Troschel
Cuv. Cuvier	McCl. M'Clelland
Cuv. & Val. Cuvier & Valenciennes.	Q. & G. Quoy & Gaimard
Dum. Duméril	Raf. Rafinesque
Egert. Egerton	Ranz. Ranzani
Ehrenb. Ehrenberg	Reinh. Reinhardt
Eichw. Eichwald	Rich. Richardson
G. & B. Goode & Bean.	Steind. Steindachner
Grd. Girard	Sw. Swainson
Gthr. Günther	T. & S. Temminck & Schlegel
Guich. Guichenot	Val. Valenciennes
Ham. Hamilton	Woodw. Woodward

INTRODUCTORY NOTE

This present memoir is a continuation of a paper entitled, *The Genera of Fishes, from Linnæus to Cuvier, 1758-1833, seventy-five years, with the accepted type of each, a contribution to the stability of scientific nomenclature*, published by the present writer in 1917.

It is likewise a contribution to the stability of scientific nomenclature. It covers what may be termed the mediæval period of systematic ichthyology, the time in which nomenclature is fairly established, but in which, for want of a general zoological record, many papers have been overlooked or forgotten.

This period is especially marked by the studies of Professor Agassiz on the fossil fishes, by the exhaustive record of the fishes of the East Indies by Dr. Bleeker, and by the unification of ichthyological knowledge by Valenciennes and by Dr. Günther. Günther's *Catalogue of the Fishes of the British Museum*, 1859-1870, must always remain the solid foundation on which systematic zoology is built. This period is also marked by the studies in comparative zoology by Dr. Johannes Müller and by the opening to science of the rich fresh-water fauna of North and South America. In this period wrote also the keenest of taxonomic critics, Dr. Gill, whose conceptions of genera and of families are likely in a large degree to constitute the last word in regard to the status of groups of this grade. Other notable writers whose work has been of a high order are Richardson, Schlegel, Lowe, Egerton, Reinhardt, Poey, Heckel, Kner, Pictet, Holbrook, Baird, Troschel, Owen, McClelland, Rüppell, Henle, Storer, DeKay, Ayres, Cooper, Girard and Cope. Of the many writers in the period preceding the year 1870, Steindachner only, one of the most industrious and accurate, is still living. When the writer visited him in Vienna in 1913 he was still, at the age of 79, hard at work, and one important paper of his bearing date of 1915 has found its way through the vicissitudes of censorship to my library.

In accordance with the philosophy of evolution, the writers at the end of this period have inverted the fish series, the simplest and most ancient types being placed first in taxonomic records, rather than the perch and its relatives, so long regarded as typifying the perfect or completed fish.

Compilations of this sort constitute an exercise in modesty. They can never be made absolutely complete nor free from errors. In the present case, the author cannot be certain that the genotype he indicates is actually the one chosen by the first reviser. The compilation itself deals with the work of great minds, but also with a degree of ignorance, carelessness and perversity by which names were multiplied with no corresponding increase of ideas. Synonymy in general is the index of lack of actual knowledge, or else, of the failure to deal justly with the work of others, "a burden and a disgrace to science". No system of naming can be beyond the knowledge on which it rests. Ignorance of fact produces confusion in nomenclature.

The science of ichthyology, to which the present series of papers offers a kind of key, is the work of many scholars, each in his own field, each contributing a series of facts, a series of tests of the work of others, or else some improvement in the method of arrangement. As in other branches of science, this work has been done by sincere, devoted men, impelled by a love for this kind of labor, and having in view, as "the only reward they asked, a grateful remembrance of their work". And as future generations may be lenient towards our own shortcomings, we should be generous towards those of our predecessors.

In so far as the present paper assumes to decide questions of nomenclature, it follows strictly the rules agreed on by the International Commission. Of these, the one of most vital importance is concerned with the rigid enforcement of the law of priority.

The writer expresses his special obligation to Mr. Barton A. Bean of the United States National Museum, and to Henry Weed Fowler of the Academy of Natural Sciences of Philadelphia for services in examining rare or forgotten books, and to Mr. Masamitsu Oshima, for valuable aid in compilation. He is also under special obligations to Mr. R. A. Nelgner of the Stanford University Press for his care in ensuring accuracy in this difficult piece of work. In arranging the genera of fossil fishes, he has depended almost entirely on the *Catalogue of the Fossil Fishes in the British Museum*, by Arthur Smith Woodward. The cataloguing of the scattered and multifarious genera of Dr. Bleeker has been made possible by the *Index of the Ichthyological Papers of P. Bleeker*, by Dr. Max Weber and Dr. L. F. de Beaufort. In matters of citation of titles Dean's *Bibliography of Fishes* has been absolutely indispensable. The writer hopes to complete this work by a final paper covering the period from 1859 to 1920. The need of such compilation grows progressively less, as the *Zoological Record* of London, beginning with 1864, contains references to nearly all the generic names of subsequent date, although having occasional surprising omissions.

The writer asks for additions and corrections, that the work may be as helpful as possible to students of fishes.

It will be noted that the genera have been arranged as far as may be in chronological order, publications of the same year being arranged in alphabetical order in accord with the names of authors.

The term *orthotype* is applied to the type of a genus as indicated or distinctly implied by the original author. A *logotype* is one selected by the "first reviser". A *haplotype* is the sole species named under a genus, therefore of necessity an *orthotype* as well. A *tautotype* is a name of a genus identical with the specific name of one of its components.

STANFORD UNIVERSITY, CALIFORNIA,
November 11, 1918: Issued July, 1919.

ADDITIONS AND CORRECTIONS TO PART I.

1758

1. LINNÆUS (1758). *Systema Naturæ*. Ed. X, Vol. 1.

CARL LINNÉ (CAROLUS LINNÆUS). (1707-1778.)

Trigla Linnaeus, 300; logotype T. GURNARDUS L., as restricted by Kaup, 1873. Apparently this should replace the later restriction to T. LYRA L. of Jordan & Gilbert, 1883, this species being type of LYRICHTHYS Kaup.

Mormyrus Linnaeus, 327; logotype M. CASCHIVE Hasselquist, as restricted by Gill. (Not M. CYPRINOIDES L., as stated in part 1, page 15; this species is the type of MARCUSENIUS Gill.)

Tetraodon Linnaeus, 332; logotype T. LINEATUS L. I am compelled to revise my judgment, as given in part I of the *Genera of Fishes*, page 15, in which I present the reasons for regarding T. TESTUDINEUS L. as the type of TETRAODON. This judgment is based on Bleeker's restriction of the genus in 1865. I find that an earlier restriction was made by Bonaparte in the *Fauna Italica*, about 1841, "TETRAODON LINEATUS Bloch" being taken as type following a suggestion of Swainson. Bloch's account includes the synonymy and description of T. LINEATUS L., although the figure he offers may have been based on an example of T. STELLATUS.

In this view of the case, the type of TETRAODON should be T. LINEATUS, a fresh-water species of the Nile, with which the numerous marine species called OVIDES (AROTHRON) may not be congeneric. According to Dr. Gill, the type of TETRAODON is distinguished from the Pacific species known as OVIDES by the form of the frontal bones, a matter which needs further elucidation.

In this view the name SPHEROIDES should stand, as used by Jordan and Evermann, for the allies of T. TESTUDINEUS L.

1764

7. HOUTTUYN (1764). *Naturlike historie volgens den Heer Linnæus*.

MARTIN HOUTTUYN.

Conger Houttuyn, VII, 103, and TORPEDO Houttuyn, VII, 453, as quoted in *Genera of Fishes*, page 22, are not presented by Houttuyn as generic names, and the reference to them should be canceled.

In a personal letter dated August 23, 1918, Mr. C. Davies Sherborn says: "TORPEDO is the trivial Linnæan name of the species RAJA TORPEDO and CONGER is the trivial Linnæan part of the species name MURENA CONGER. Neither name is used scientifically nor is there any intention on Houttuyn's part to do more than quote the Linnæan term for the fish he describes as 'KRAMPFISCH' and 'CONGER'."

The record of this work of Houttuyn should therefore be erased as having no relation to scientific nomenclature.

1767

9. MÜLLER (1767). *Delinæationes Naturæ*. II, 141.

PHILIP LUDWIG STATIUS MÜLLER (1725-1776).

Mr. Sherborn informs me that the generic names ACUS, page 141, and

ORBIS, page 141; "are perfectly valid," that is, properly presented as generic names. ACUS is a synonym of SYNGNATHUS L., ORBIS of DIODON L.

10. GEOFFROY (1767). *Descriptions de 719 plantes*, etc.

ÉTIENNE LOUIS GEOFFROY (1725-1810).

Ichthyocolla Geoffroy, 399; haplotype ACIPENSER HUSO L. This replaces HUSO Brandt, and STERLETUS Raf. Mr. Sherborn informs me that the generic names used by Geoffroy are "perfectly valid" for purposes of nomenclature. These are:

ICHTHYOCOLLA, 399, (HUSO Brandt).

HARENGUS, 405, (CLUPEA L.).

LUCIUS, 467, (ESOX L.).

TRUTTA, 719, (TRUTTA L.).

1772

17A. GRONOW (1772). (*Pteraclis*.) *Actæ Helveticæ*. VII.

LORENZ THEODOR GRONOW (LAURENTIUS THEODORUS GRONOVIVS). (1730-1777).

Pteraclis Gronow, 44; orthotype P. PINNATA GRONOW = CORYPHÆNA VELIFERA Pallas. As here used, unquestionably binomial.

17B. GÜLDENSTÄDT (1772). (*Sterletia*.) *Nov. Comm. Sci. Petropol.* XVI.

ANTON JOHANN GÜLDENSTÄDT.

Sterleta GÜldenstädt, 533; type ACIPENSER RUTHENUS L. under polynomial designation. If eligible, will replace STERLETUS Brandt and STERLEDUS Bon.

1775

20. KLEIN (1775). *Neuer Schauplatz*, etc.

JAKOB THEODOR KLEIN (1685-1759).

Prochilus Klein, I, 1043; AMPHIPRION EPHIPIUM Bloch, as restricted by Bleeker, 1877 (P. OVATÆ FIGURÆ MACULA FUSCA MAGNA Klein). This name, if deemed eligible from the date of the *Schauplatz* would replace AMPHIPRION Bl. & Schn., instead of PHOLIS Cuv. & Val. (LIPOPHRYS Gill), as suggested in part I of this work.

1779

31A. KLEIN (1779). *Neuer Schauplatz*, etc.

JAKOB THEODOR KLEIN.

Platystacus Klein, VIII, 52, 1779: type (P. COTYLEPHORUS Bloch); a synonym of ASPREDO (Gronow) Scopoli.

1788

31B. BRÜNNICH (1788). *Om den islandske fisk Vaagmaeren (Gymnogaster arcticus)*. Kong. Dansk. Selsk. Skr., III, 408-413.

MORTEN THRANE BRÜNNICH (1737-1827)

Gymnogaster Brünnich, III, 408; orthotype G. ARCTICUS Brünnich. A synonym of TRACHIPTERUS Gouan. Not TRICHIURUS L.

1795

45. BLOCH (1795). *Naturgeschichte der ausländischen Fische*. IX.

MARK ELIESER BLOCH (1729-1799).

Gymnothorax Bloch IX, 83, 1795; type as first restricted (Bleeker, 1864) G. RETICULARIS Bloch. Although originally virtually a substitute name for MURÆNA L., the first fixation of types separates the two. GYMNOTHORAX thus replaces LYCODONTIS McCl.

1796

47. VOLTA (1796).
- Ichthyolithologia Veronese*
- .

GIOVANNI SERAFINO VOLTA.

Monopteros Volta, CXCL; orthotype *M. gigas* Volta (fossil). Replaces **PLATINX** Ag. **MONOPTERUS** Lac., 1798, is thus preoccupied and must give way to **FLUTA** Bl. & Schn. (1801).

1801

55. BLOCH & SCHNEIDER (1801).
- Systema Ichthyologia*
- .

MARK ELIESER BLOCH; JOHANN GOTTLÖB SCHNEIDER (1750-1822).

Periophthalmus Bloch & Schneider, 63; logotype, as first restricted (by Gill, 1863) **Gobius Schlosseri** Pallas. The name therefore replaces **PERIOPHTHALMODON** Blkr., while the common species known as **PERIOPHTHALMUS BARBARUS** or **P. KOELREUTERI** is the type of **EUCHORISTOPUS** Gill (1863).

Synanceja Bloch & Schneider, 194; logotype *S. verrucosa* Bl. & Schn., as first restricted by Müller, 1843. This limitation to species without vomerine teeth holds as against Bleeker's restriction to the first species named, *S. horrida*. **SYNANCEJA** thus replaces **SPURCO** Commerson, **SYNANCEICHTHYS** Blkr. and **EMMYDRICHTHYS** Jordan & Rutter. *S. horrida* is type of **SYNANCIDIUM** Müller. I am not convinced by Bleeker's statement that **SYNANCIDIUM** is not a valid genus.

Fluta Bloch & Schneider, 565; orthotype **MONOPTERUS JAVANENSIS** Lac. Name a substitute for **MONOPTERUS** Lac. (1798). The latter is preoccupied by **MONOPTEROS** Volta (1796). The type species should stand as **FLUTA ALBA** (Zuiew).

1803

56. LACÉPÈDE (1803).
- Histoire naturelle des poissons*
- . IV, V.

BERNARD GERMAIN LACÉPÈDE (1756-1825).

Enoplosus Lacépède, IV, 540; orthotype **CHAETODON ARMATUS** Shaw. This genus dates from 1803. The name **ENOPLOSUS** was not used by White in 1790.

Stolephorus Lacépède, V, 381; logotype *S. commersonianus* Lac. In view of the fact that the descriptions of **STOLEPHORUS** of Lacépède, Bleeker and Jordan were drawn from this species, the second-named by Lacépède, it may well be regarded as the type of **STOLEPHORUS**. *S. japonicus*, the first-named species and the one first formally indicated as type, was very scantily described, and was unknown to authors until very recently. In this view **STOLEPHORUS** will replace or include **ANCHOVIELLA** Fowler (1911). This reverses the decision in part I, page 67.

1804

- 56A. LACÉPÈDE (1804).
- Mémoires sur plusieurs animaux de la Nouvelle Hollande*
- , etc. Ann. Mus. Nat. Hist., IV, 1804.

BERNARD GERMAIN LACÉPÈDE.

Prionurus Lacépède, IV, 211; orthotype *P. microlepidotus* Lac.

Platypodus Lacépède, IV, 211; orthotype *P. furca* Lac.

This genus, overlooked by subsequent writers, seems to belong to the **OSPHRONEMIDE**, an ally of **MACROPODUS**. It is said to have large fan-like ventrals of at least eight rays, the dorsal extending from the nape to the base of the caudal, which is narrow, forked, its lobes half as long as rest of body; pectorals small; anal very low. This may be, as suggested by Dr. Günther for **MACROPODUS**, a domesticated form of **POLYACANTHUS**. Both names, if correctly written (**MACROPUS**; **PLATYPUS**), are preoccupied.

- 56B. BORY DE SAINT VINCENT (1804). *Voyage dans les quatre principales îles des Mers d'Afrique*. 1801 et 1802.

JEAN BAPTISTE BORY DE ST. VINCENT (1780-1846).

Acinacea Bory de St. Vincent, I, 93; orthotype *A. NOTHA* Bory ("l'acinacée bâtarde"). An ally of *THYRSITES* Cuv., overlooked by authors. It differs from *THYRSITES* (*ATUN*), if correctly described and figured, in the presence of twenty-nine spines in the dorsal fin, instead of twenty. The type specimen was from the open sea, off Africa. If identical with *THYRSITES*, *ACINACEA* has priority. The Latin form as well as the French is given by the author.

1808

67. DUMÉRIL (1808). *Dissertation sur les poissons Cyclostomes*.

ANDRÉ MARIE CONSTANT DUMÉRIL (1774-1860).

Ammocœtus Duméril; orthotype *PETROMYZON BRANCHIALIS* L. (larval form of *PETROMYZON MARINUS* or of *LAMPTERA PLANERI*, or both). Best treated as a synonym of *PETROMYZON*.

1810

72. RAFINESQUE (1810). *Caratteri di alcuni nuovi generi e nuove specie di animale e piante della Sicilia*.

CONSTANTINE SAMUEL RAFINESQUE (1783-1840).

Typhle Rafinesque, 18; orthotype *SYNGNATHUS TYPHLE* L. We are unable to find any further notice of the blind genus of mammals "*TYPHLE*", as noted by Lacépède. *TYPHLE* should therefore apparently stand, and not be replaced by *TYPHLINUS* Raf. (1814).

1811

- 75A. PERRY (1811). *Arcana or Museum of Natural History*.

GEORGE PERRY.

Congiopus Perry; orthotype *C. PERCATUS* Perry = *BLENNIUS TORVUS* Walbaum. Replaces *AGRIOPUS* Cuv., 1829.

- 75B. HUMBOLDT & VALENCIENNES (1811). *Recherches sur les poissons fluviatiles; Humboldt & Bonpland; voyage aux régions équinoxiales du nouveau continent*. II (later edition; the original in 1806).

FRIEDRICH HEINRICH ALEXANDER VON HUMBOLDT (1769-1859); ACHILLE

VALENCIENNES (1794-1865).

Thrycomycterus Humboldt & Valenciennes; orthotype *T. NIGRICANS* Humboldt & Val; a synonym of *EREMOPHILUS* Humboldt, according to Eigenmann. Name spelled *TRICHOMYCTERUS* by Valenciennes in 1846, and the genus made to include *PYGIDIUM* Meyer.

1815

85. RAFINESQUE (1815). *Analyse de la nature*, etc.

CONSTANTINE SAMUEL RAFINESQUE.

Raphistoma Rafinesque, 89; no type named and no diagnosis, except an erroneous reference to Lacépède. Intended to represent *ESOX BELONE* L. Spelled *RAMPHISTOMA* by Swainson, who adopts the name. Is apparently not eligible in place of *BELONE* Cuv., 1817, though an argument might be made for its acceptance, as we know the type intended and there are a few words of inaccurate diagnosis.

Eleuthurus Rafinesque; no diagnosis and no type given. Omitted by inadvertence in *Genera of Fishes*, part I. According to Bleeker, Rafinesque's names (undefined and without type), DAMEUS, ELEUTHURUS, RINCOXIS and ZEBRISCIUM, were intended for eels). In the account of Rafinesque's *Analyse*, given in *Genera of Fishes*, part I, are a few misprints arising from misreading a manuscript list. Read:

ICTIAS, p. 82.
 BATRICTIUS, 82.
 CEPHIMNUS, 85.
 EDONIUS, 88.
 PLATISTUS, 89 (for PLATYSTACUS).
 RAPHISTOMA, 89.
 ODAMPHUS, 89.
 GONODERMUS, 91.
 DISPINOTUS, 92.

1817

91. CUVIER (1817). *Le Règne Animal, etc.* Tome II.

GEORGES CUVIER (1769-1832).

Hydrocynus Cuvier, II, 167; logotype H. FORSKALI Cuvier; several species named, the genus restricted by Cuvier (*Mem. Mus.*, 1819) to H. FORSKALI, and the name spelled HYDROCYON. Also in *Cuv. & Val.*, XXI, 509, 1849. The name was afterwards restricted to H. LUCIUS Cuv., a species of XIPHOSTOMA, Ag., but the first adjustment must stand. The name is HYDROCYNUS and the genus contains no American species.

Bodianus Cuvier, *Règne Animal*, II, 276; logotype BODIANUS GUTTATUS Bloch; (not BODIANUS of Bloch) which by tautonomy goes with BODIANUS BODIANUS Bloch, and replaces HARPE Lac. Gill restricts BODIANUS (*Proc. Acad. Nat. Sci. Phil.*, 1862, 237) to B. GUTTATUS Bloch, a species of CEPHALOPHOLIS Bl. & Schn. By the rule of tautonomy, under present rules BODIANUS must stand for HARPE RUFa.

92. OKEN (1817). *Isis*.

LORENZ OKEN (1777-1851).

In *Isis*, 1817, Oken furnishes Latin equivalents to the French generic names used by Cuvier.

Lumpus Oken 1782, orthotype CYCLOPTERUS LUMPUS L. = LUMPUS ANGLORUM of authors. Equivalent for "les LUMPS" of Cuvier, a synonym of CYCLOPTERUS L. Omitted by accident in part I.

1818

97. BLAINVILLE (1818). (*Poissons fossiles.*) Nouveau Dictionnaire d'Histoire Naturelle.

HENRI MARIE DUCROTAY DE BLAINVILLE (1777-1850).

Anormurus Blainville, XXVII, 374; orthotype A. MACROLEPIDOTUS Blainv. (fossil). Perhaps the same as NOTOGONEUS Cope, 1885.

1820

108. GOLDFUSS (1820). *Handbuch der Zoologie*. II.

GEORGE AUGUST GOLDFUSS (1782-1848).

Rhomboides Goldfuss; orthotype PLEURONECTES RHOMBUS L. Substitute for RHOMBUS Cuv.; a synonym of BOTHUS Raf.

Batrachopus Goldfuss (not **BATRACHOPS**). Orthotype **LOPHIUS COMMERSONIANUS** Lac. A synonym of **ANTENNARIUS**.

1822

110. HAMILTON (1822). *An Account of the Fishes Found in the River Ganges and Its Branches*.

FRANCIS HAMILTON (formerly BUCHANAN) (1762-1829).

The reprint of Hamilton's *Fishes of the Ganges* has the pagination changed from that given in the text of the *Genera of Fishes*, page 114. Thus, in the reprint, **CHANDA** appears on page 109, not 370.

Callichrous Hamilton, 149; logotype **SILURUS PABDA** Ham. (as restricted by Bleeker, 1862). A synonym of **OMPOK** Lac.

Coius Hamilton, 369 (95); logotype **COIUS POLOTA** Ham., as restricted by Fowler, 1905. This designation of type prior to that of Jordan, 1917. Replaces **DATNIOIDES** Blkr., 1853.

Chanda Hamilton, 370; logotype **CHANDA NAMA** Ham. (fig. 37) (**HAMILTONIA OVATA** Sw.). The type of the substitute name **HAMILTONIA** Sw. (1839) as indicated by Swainson and by Swain (1882) carries the complex genus **CHANDA** with it. This antedates Fowler's choice (1902) of **CHANDA LALA** as type. **C. NAMA** is type of **BOGODA** Blkr. **CHANDA** should therefore replace **BOGODA**.

Corica Hamilton, 253 or 383; orthotype **CYPRINUS SOBORNA** Ham. The name **SOBORNA** (misspelled in the *Genera of Fishes*, page 115) is given as **GUBORNI** by Gray.

1823

112. VAN HASSELT (1823). *Poissons de Java*. Allgemeine Konst en Letterbok, II. JAN CENRAD VAN HASSELT (d. 1821).

Dermogenys Van Hasselt, 131; orthotype **D. PUSILLUS** Van Hasselt (omitted in part I). Spelled **DERMATOGENYS** by Peters.

Diplocheilus Van Hasselt, 329; orthotype **D. ERYTHOPTERUS** Van Hasselt.

Gonostoma Van Hasselt, 329; orthotype **G. JAVANICUM** Van Hasselt. Name pre-occupied; replaced by **ANODONTOSTOMA** Blkr.

1825

119. KÖNIG (1825). *Icones fossilium sectiles*.

CLEMENS KÖNIG.

Teratichthys König, 4; orthotype **T. ANTIQUITATIS** König (fossil). An unknown ally of **CARANX**.

119A. LE SUEUR (1825). *Description of a New Fish of the Genus Salmo (S. microps)*. Journ. Acad. Nat. Sci. Phila.

CHARLES ALEXANDRE LE SUEUR (1778-1846).

Harpodon Le Sueur, V, 50; orthotype **SALMO MICROPS** Le Sueur = **OSMERUS NEHEREUS** Ham.

119B. ADANSON (1825). *Cours d'histoire naturelle*.

MICHAEL ADANSON (1727-1806).

Trygon Adanson, II, 170; orthotype **RAJA PASTINACA** L. A synonym of **DASYATIS** Raf. (According to Auguste Duméril, Adanson's paper, written in 1772, was printed by Payer in 1825).

1826

121. RISSO (1826). *Histoire naturelle des principales productions de l'Europe méridionale.*

ANTOINE RISSO (1770-1845).

Charax Risso, III, 353; orthotype *C. ACUTIROSTRIS* Risso = *SPARUS PUNTAZZO* L. Preoccupied; replaced by *PUNTAZZO* Blkr.

- 121A. RILEY (1826). *On a Fossil in the British Museum (Squaloraia dolichognathos) and Discovered in the Lias at Lyme Regis.* Proc. Geol. Soc. I (also in Trans. Geol. Soc., 1833).

HENRY RILEY.

Squaloraia Riley, I, 484; orthotype *S. DOLICHOGNATHOS* Riley (fossil).

1828

128. RÜPPELL (1828). *Atlas zu der Reise im nördlichen Africa; Fische des Rothen Meeres.*

EDUARD RÜPPELL (1794-1884).

Petroscirtes Rüppell, 110; orthotype *P. MITRATUS* Rüppell. Omitted by accident from part I; sometimes spelled *PETROSKIRTES*.

128A. THIENEMANN (1828). *Lehrbuch der Zoologie.*

FRIEDRICH AUGUST THIENEMANN (1793-1858).

Sphyrichthys Thienemann, III, 408; orthotype *SQUALUS ZYGÆNA* L. A needless substitute for *SPHYRNA* Raf.

132. CUVIER & VALENCIENNES (1828). *Histoire naturelle des poissons.* II.

GEORGES CUVIER; ACHILLE VALENCIENNES.

Pomatomus Cuvier & Valenciennes, II, 171; type *P. TELESCOPIUM* RISSO (*EPIGONUS MACROPHthalmus* Raf.). Not *POMATOMUS* of Lacépède; a synonym of *EPIGONUS* Raf., 1820, as is also *TELESCOPS* Blkr.

1829

134. AGASSIZ (and SPIX) (1829). *Selecta genera et species piscium quos in itinere per Brasiliam (1817-1820) . . . collejit . . . Dr. J. B. de Spix. . . .*

LOUIS AGASSIZ (1807-1873); JEAN BAPTISTE DE SPIX (1807-1873).

Xiphorhynchus Agassiz, 18; orthotype *SALMO FALCATUS* Bloch. Name preoccupied; replaced by *XIPHORHAMPHUS* M. & T., 1845; also preoccupied, again replaced by *ACESTRORHYNCHUS* Eigenmann, 1910.

Pirarara Spix, 23; orthotype *PHRACTOCEPHALUS BICOLOR* Ag. A synonym of *PHRACTOCEPHALUS* Ag.

Erythrinus (Gronow) Agassiz, 41; haplotype *E. SALVUS* Ag., the only species named, the genus credited to Gronow. Same as *ERYTHRINUS* Gronow.

135. CUVIER (1829). *Le règne animal distribue d'après son organization.*

Edition, II, Vol. I.

GEORGES CUVIER.

Polyacanthus (Kuhl) Cuvier, 227; logotype *CHÆTODON CHINENSIS* Bloch, as restricted by Cuv. & Val. (not *TRICHOPODUS COLISA* as stated in part I, *Genera of Fishes*).

Rhinoptera (Kuhl) Cuvier, 401; orthotype *MYLIOBATIS MARGINATUS* Geoffroy St. Hilaire.

136. CUVIER & VALENCIENNES (1829). *Histoire naturelle des poissons.* III.

GEORGES CUVIER; ACHILLE VALENCIENNES.

- Ostichthys** (Langsdorff) Cuvier & Valenciennes, III, 160; orthotype *MYRIPRISTIS JAPONICUS* Cuv. & Val. No generic definition; reestablished by Jordan and Evermann, 1896.
- Apistus** Cuvier & Valenciennes, IV, 391; logotype *APISTUS ALATUS* Cuv. & Val. called "les APISTES" by Cuvier. Regarded as preoccupied by *APISTA* Hübner, a genus of insects, and by *ASPISTES* Meigen, a genus of flies. If rejected, it may be replaced by *PTERICHTHYS* Sw., 1839, unless that is regarded as invalid, from the non-binomial *PTERICHTHUS* of Commerson (1803), which is *EXOCÆTUS*. *HYPODYTES* Gistel (1848) is also a substitute name, but the indicated type (*LONGISPINIS*) is a *PARACENTROPAGON* of Bleeker, also not mentioned by Cuvier. *PROSOPODASYS* Cantor, 1849, is also given as a substitute name for *APISTUS* and must retain the same type. If *APISTUS* is preoccupied, I think that *PTERICHTHYS* should replace it. . . . *APISTES TRACHINOIDES* Cuv. & Val. used by Günther as type of *PROSOPODASYS* is not eligible for that purpose, the species not being one of those mentioned by Cuvier.
- Spurco** (Commerson) Cuvier & Valenciennes, IV, 448, 1829; (reference in passing) haplotype *SCORPENA BRACHIO* Cuv. = *SYNANCEJA VERRUCOSA* Bl. & Schn., same as *SYNANCEICHTHYS* Blkr.; a synonym of *SYNANCEJA* as restricted by Müller.
- 136A. SMITH (1829). *Contributions to the Natural History of South Africa*. Zoological Journal.
ANDREW SMITH (1797-1872).
- Rhineodon** Alexander Smith, IV, 443; orthotype *R. TYPUS* Smith. (*RHINCODON* by misprint.) Also spelled *RHINODON*.
- 136B. BANCROFT (1829). *On the Fish Known in Jamaica as the Sea Devil* (*Cephalopterus manta*). Zool. Journal, IV.
E. N. BANCROFT.
- Manta** Bancroft, IV, 444; orthotype *CEPHALOPTERUS MANTA* Bancroft = *RAIA BIR-OSTRIS* Walbaum, 1792.
- 1830
142. CUVIER & VALENCIENNES (1830). *Histoire naturelle des poissons*. V.
GEORGES CUVIER; ACHILLE VALENCIENNES.
- Lycogenis** (Kuhl & Van Hasselt) Cuvier & Valenciennes, V, 346; orthotype *HOLOCENTRUS CILIATUS* Lac. A section under *SCOLOPSIS* Cuv.
- Priopis** (Kuhl & Van Hasselt) Cuvier & Valenciennes, VI, 503; haplotype *PRIOPIS ARGYROZONA* Kuhl & Van Hasselt.
143. BENNETT (1830). *Catalogue of the Fishes of Sumatra*. Life and Public Services of Sir Stamford Raffles.
EDWARD TURNER BENNETT (1797-1836).
- Leiopsis** Bennett, 688; orthotype *SPARUS AUROLINEATUS* Lac. A synonym of *PENTAPUS* Cuv. & Val. (Omitted in part I.)
- 143A. BENNETT (1830). *Observations on a Collection of Fishes from the Mauritius with Characters of New Genera and Species*. Proc. Zool. Soc. London, 1831, part I.
EDWARD TURNER BENNETT.
- Psettodes** Bennett, I, 147; orthotype *P. BELCHERI* Bennett.
- Agonostomus** Bennett, I, 166; logotype *A. TELFARI* Bennett. Replaces *NESTIS* Cuv. & Val.

Apolectus Bennett, l, 169; orthotype *A. IMMUNIS* Bennett. A synonym of *SCOMBEROMORUS* Lac.

1831

146A. CUVIER & VALENCIENNES (1831). *Histoire naturelle des poissons*. VII (January, 1831), VIII, October, 1831.

GEORGES CUVIER; ACHILLE VALENCIENNES.

Drepane Cuvier & Valenciennes, VII, 129; orthotype *CHÆTODON PUNCTATUS* L.; name preoccupied by *DREPANA* or *DREPANE* Schranck, Lepidoptera, 1802; replaced by *ENIXE* Gistel, 1848, and by *HARPOCHIRUS* Cantor, 1849.

Spinax (Commerson) Cuvier & Valenciennes, VIII, 333; orthotype *S. EDAX* Commerson MS. = *GASTEROSTEUS CANADUS* L., note in passing. Name preoccupied; a synonym of *RACHYCENTRON* Kaup (*ELACATE* Cuv.).

146B. BONAPARTE (1831). *Saggio di una distribuzione metodica degli animali vertebrati*. Prospetto del Systema d'Istiologia Générale; also in *Giornale Arcadico*, 167-190, 1832.

CHARLES LUCIEN JULES LAURENT BONAPARTE, PRINCE DE CANINO (1803-1857).

(CARLO LUCIANO BONAPARTE).

Merou ("Cuvier") Bonaparte, 101; type presumably *SERRANUS GIGAS*; not defined. Same as *EPINEPHELUS* Bloch.

Dulichthys Bonaparte, 101; haplotype *DULES AURIGA* Cuv. Name a substitute for *DULES* Cuv., regarded as preoccupied by *DULUS*, a genus of birds. If needed, *DULICHTHYS* replaces *EUDULUS* Fowler.

Pogonathus (Lacépède) Bonaparte, 104. This name is revived as a substitute for *POGONIAS* Lac., 1803, "long since used in ornithology". But *POGONIAS* Illiger dates from 1811, while *POGONIA* and *POGONIAS*, as a genus of birds, are still later in date.

Micropogonias Bonaparte, 104; type *PERCA UNDULATA* L. Substitute for *MICROPOGON*, which is said to be, but apparently is not, preoccupied.

Sarpa Bonaparte 105; a bare word of reference. The intended type is obviously *SPARUS SALPA* L. *SARPA* may stand as a section under *BOOPS*, the body being deeper and more compressed than in *B. BOOPS*.

Palamita Bonaparte, 107; (type *SCOMBER SARDA* Bloch). Name a substitute for *PELAMYS* Cuv. & Val., 1801, preoccupied in reptiles. But *SARDA* Cuv., 1829, is older and stands unless the non-binomial *SARDA* Plumier, 1802 (= *OCYURUS* Gill) is deemed eligible, in which case *PALAMITA* would hold.

Priodontichthys Bonaparte, 109; haplotype *PRIODON ANNULARIS* Cuv. & Val., the young of *NASO ANNULATUS* Q. & G. Substitute for *PRIODON* Cuv., preoccupied. A synonym of *NASO* Lac.

Scopas Bonaparte, 109; type presumably *ACANTHURUS SCOPAS* Cuv. & Val., being placed next to *ACANTHURUS*, but neither diagnosis nor type is given. Presumably the same as *ZEBRASOMA* Sw., but not eligible.

Ctenodon Bonaparte, 109. No description nor type mentioned; presumably intended for *ACANTHURUS CTENODON* Cuv. & Val., preoccupied; replaced by *CTENOCHÆTUS* Gill, 1884.

Elops (Commerson) Bonaparte, 112; (type *GOMPHOSUS TRICOLOR* Lac.). Suggested as a substitute for *GOMPHOSUS* Lac. (Not *ELOPS* L., 1758.)

Erythrichthys Bonaparte, 116; type (*SALMO ERYTHRINUS* Bl. & Schn.). A needless substitute for *ERYTHRINUS* (Gronow) Scopoli. It renders *ERYTHRICHTHYS* T. & S. preoccupied, to be replaced by *ERYTHROCLES* Jordan, 1919.

- 147A. EICHWALD (1831). *Zoologia specialis potissima R. Rossiae et Poloniae* Wilna, 1831.
 CARL EDUARD VON EICHWALD (1795-1876).
- Nematosoma** Eichwald, III, 60; orthotype *N. OPHIDIUM* Eichw. (not SYNGNATHUS OPHIDIUM L.) = SCYPHIUS TERES Nordmann, 1840. Name regarded as preoccupied by NEMOSOMA, a genus of beetles. A synonym of NEROPHIS Raf. 1810.
- Benthophilus** Eichwald, III, 77; orthotype *Gobius macrocephalus* Pallas.
- 150A. GRAY (1831). *The Zoological Miscellany*. I.
 JOHN EDWARD GRAY (1800-1873).
- Centracion** Gray, I, 5; orthotype *C. ZEBRA* Gray, Same as CESTRACION Cuv., 1817, not of Klein. Replaces HETERODONTUS, if that name is regarded as preoccupied by the genus of snakes. HETERODON, 1802.
- 1832**
- 151B. MÜNSTER (1832). *Beiträge zur Kunde der Petrefakten*. I.
 GEORG (GRAF ZU) MÜNSTER (1776-1844).
- Janassa** Münster, I, 67; logotype *J. ANGULATA* Münster (fossil) = TRILOBATES BITUMINOSUS Schlotheim.
- 151C. COUCH (1832). *Fishes New to the British Fauna*. Mag. Nat. Hist., V.
 JONATHAN COUCH (1788-1870).
- Ciliata** Couch, V, 15; orthotype *C. GLAUCA* Couch, a larva of *GADUS MUSTELA* (L.). Name may be retained for the five-bearded Rocklings.
- 151D. NARDO (1832). *Annotazioni di quattro pesci nuovi*, etc.
 GIOVANNI DOMENICO NARDO (1802-1877).
 (Not seen by us; the title uncertain. The genus *Gouania* is quoted from Canestrini.)
- Gouania** Nardo; orthotype *G. PROTOTYPUS* Nardo = LEPADOGASTER WILLDENOWI (Risso). Antedates RUPISUGA Sw.
- 151E. KRYNICKI (1832). *Schilus pallasii descriptus et icone illustratus*. Nouv. Mém. Soc. Nat. Moscou, II.
 J. KRYNICKI.
- Schilus** Krynicky, II, 441; orthotype *S. PALLASI* Krynicky = *PERCA VOLGENSIS* Pallas. Replaces MIMOPERCA Gill & Jordan, 1877.
152. MINDING (1832). *Lehrbuch: Naturgeschichte der Fische*.
 JULIUS MINDING.
- Hydronus** Minding, 83; orthotype *GADUS MERLUCIUS* L. A synonym of *MERLUCIUS* Raf.
153. NILSSON (1832). *Prodromus ichthyologiae Scandinaviae*.
 SVEN NILSSON (1787-1883).
- Salvelini** Nilsson, 7; orthotype *SALMO SALVELINUS* L. = *S. ALPINUS* L. Group name, in the plural only; written as SALVELINUS by Richardson (1836).
- Carassius** Nilsson, IV, 290; orthotype *CYPRINUS CARASSIUS* L.
- 153A. REINHARDT (1832). *Bidrag til vor kundskab om Grönlands fiske*. Dansk. Vid. Selsk. Afh. Kjöbenhavn, V.
 JOHANNES REINHARDT (1776-1845).
- Triglops** Reinhardt, V, 52; orthotype *T. PINGELI* Reinhardt.

THE GENERA OF FISHES

PART II

1833

164. AGASSIZ (1833). *Recherches sur les poissons fossiles*. II; IV (first part; second part of Vol. II issued in 1844; part of Vol IV in 1833).

LOUIS AGASSIZ.

Catopterus Agassiz, II, 3; orthotype *C. OVALIS* Ag. (fossil). A synonym of **DIP-TERUS**.

Amblypterus Agassiz, II, 3, 28; orthotype *A. LATUS* Ag. (fossil).

Gyrolepis Agassiz, II, 6, 172; logotype *G. ALBERTI* Ag. (fossil).

Tetragonolepis Agassiz, II, 6, 181; logotype *T. CONFLUENS* Ag. (fossil). Name preoccupied; a synonym of **DAPEIDIUM** Leach.

Microps Agassiz, II, 10; orthotype *M. FURCATUS* Ag. (fossil). Name preoccupied; replaced by **PERIURGUS** Gistel, 1848.

Pygopterus Agassiz, II, 10; orthotype *P. HUMBOLDTI* Ag. (fossil).

Notagogus Agassiz, II, 10; orthotype *N. PENTLANDI* Ag. (fossil).

Acrolepis Agassiz, II, 11; orthotype *A. SEDGWICKI* Ag. (fossil).

Pachycormus Agassiz, II, 11; orthotype *ELOPS MACROPTERUS* Blainv. (fossil).

Thrissops Agassiz, II, 12; orthotype *T. FORMOSUS* Ag. (fossil).

Megalurus Agassiz, II, 13; orthotype *M. LEPIDOTUS* Ag. (fossil). Name preoccupied in birds (Horsfield, 1821), replaced by **SYNERGUS** Gistel (1848), also preoccupied; suggested as substitute for both **UROCLIS** Jordan, 1919.

Aspidorhynchus Agassiz, II, 14; orthotype *ESOX ACUTIROSTRIS* Blainv. (fossil).

Saurostomus Agassiz, II, 14; orthotype *S. ESOCINUS* Ag. (fossil).

Sphæroodus Agassiz, II, 15; logotype *S. GIGAS* Ag. (fossil). A synonym of **LEPIDOTES** Ag.; not **SPHÆRODON** Rüppell.

Pycnodus Agassiz, II, 16; orthotype *ZEUS PLATESSUS* Blainv. (fossil).

Gyrodus Agassiz, II, 16; orthotype *G. MACROPHthalmus* Ag. (fossil).

Microdon Agassiz, II, 16; orthotype *M. ELEGANS* Ag. (fossil). Name preoccupied in flies (Meigen, 1803), replaced by **PROSCINETES** Gistel, 1848, and, later, by **POLYPSEPHIS** Hay (1899).

Calamostoma Agassiz, II, 18; orthotype *SYNGNATHUS BREVICULUS* Blainv. (fossil).

Acanthodes Agassiz, II, 19; orthotype *ACANTHOËSSUS BRONNI* Ag. (fossil). A substitute, apparently unnecessary, for *ACANTHOËSSUS* Ag. (1832).

Cyclopoma Agassiz, IV, 17; orthotype *C. GIGAS* Ag. (fossil).

Smerdis Agassiz, IV, 32; logotype *PERCA MINUTA* Blainv. (fossil). Name preoccupied in insects; replaced by **DAPALIS** Gistel (1848).

Gasteronemus Agassiz, V, 17; logotype *G. RHOMBEUS* Ag. (fossil). An extinct homologue of **MENE**.

165. BRANDT & RATZEBURG (1833). *Medizinische Zoologie*. II.

JOHANN FRIEDRICH BRANDT (1802-1879); J. T. C. RATZEBURG (1801-1871).

Huso Brandt & Ratzeburg, II, 3; orthotype *ACIPENSER HUSO* L. A synonym of **ICHTHYOCOLLA** Geoffroy, 1767, and of **STERLETUS** Raf., 1820.

Helops Brandt & Ratzeburg II, 3; orthotype *ACIPENSER STELLATUS* Pallas, 1768, =
A. *HELOPS* Pallas, 1811.

Sterletus Brandt & Ratzeburg, II, 3, 349; orthotype *ACIPENSER RUTHENUS* L. Name spelled also *STERLETA* Müller and *STERLEDUS* (Bon.). Name preoccupied; replaced by *STERLETA* Gldenstdt, if binomial. *STERLETUS* Raf. (1820) is based on an American species, *ACIPENSER SEROTINUS* Raf., which is the same as *ACIPENSER RUBICUNDUS* Le Sueur, still earlier called *ACIPENSER FULVESCENS* by Rafinesque. This species belongs to the group or genus called *ICHTHYOCOLLA* by Geoffroy in 1767, and *HUSO* by Brandt & Ratzeburg in 1833.

166. COCCO (1833). *Osservazioni Peloritani*.

ANASTASIO COCCO (1799-1854).

Ruvettus Cocco, XIII, 18 (April, 1833); orthotype *R. PRETIOSUS* Cocco.

167. COCCO (1833). *Lettere al Signor Rizzo su alcuni pesci novelli*. Giorn. Sci. Lett. Sicilia, XLII.

ANASTASIO COCCO.

Tylosurus Cocco, XLII, No. 124; orthotype *T. CANTRAINI* Cocco = *ESOX IMPERIALIS* Raf. = *SPHYRENA ACUS* Lac.

168. COCCO (1833). *Su alcuni pesci de Mare di Messina*. Giorn. Sci. Lett. Sicilia, XLII.

ANASTASIO COCCO.

Mupus Cocco, 20; orthotype *M. IMPERIALIS* Cocco. The name *LEIRUS* Lowe, also of 1833, is preoccupied in beetles (1823) and must give place to *MUPUS*.

169. CUVIER & VALENCIENNES (1833). *Histoire naturelle des poissons*. IX. GEORGES CUVIER; ACHILLE VALENCIENNES.

Trachurus Cuvier & Valenciennes, IX, 6; haplotype *SCOMBER TRACHURUS* L. Same as *TRACHURUS* Raf., 1810.

Hynnys Cuvier & Valenciennes, IX, 95; orthotype *H. GORENSIS* Cuv. & Val.

Lactarius Cuvier & Valenciennes, IX, 237; haplotype *SCOMBER LACTARIUS* Bloch = *LACTARIUS DELICATULUS* Cuv. & Val.

Nauclerus Cuvier & Valenciennes, IX, 247; orthotype *N. COMPRESSUS* Cuv. & Val. Young of *NAUCRATES* Raf.

Porthmeus Cuvier & Valenciennes, IX, 255; orthotype *P. ARGENTUS* Cuv. & Val.

Psenes Cuvier & Valenciennes IX, 259; orthotype *P. CYANOPHRYS* Cuv. & Val.

Gallichthys Cuvier & Valenciennes, IX, 264; orthotype *GALLICHTHYS MAJOR* Cuv. & Val. Substitute for *GALLUS*, preoccupied in birds; a synonym of *ALECTIS* Raf.

Lampugus Cuvier & Valenciennes, IX, 317; orthotype *SCOMBER PELAGICUS* L. A synonym of *CORYPLENA* L.

Aphredoderus (Le Sueur) Cuvier & Valenciennes, IX, 445; orthotype *A. GIBBOSUS* Le Sueur = *SCOLOPUS SAYANUS* Gilliams. Also spelled *APHRODEDERUS* and *APHODODERUS* by authors.

170. GRAY (1833). *The Illustrations of Indian Zoology, Chiefly Selected from the Collection of General Hardwicke*.

JOHN EDWARD GRAY.

This paper contains plates only, no diagnosis of the new genera being given.

Balitora Gray, II, pl. 5; haplotype *B. BRUCEI* Gray. A synonym of *HOMALOPTERA* Van Hasselt.

- Bedula** Gray, II, 88; logotype *B. NEBULOSA* Gray. A synonym of *NANDUS* Cuv. & Val., 1831.
- Pterapon** Gray, II, 88; haplotype *P. TRIVITTATUS* Gray = *SCIÆNA JARBUA* Forskål. A synonym of *THERAPON* Cuv.
- Anaora** Gray, II, 90; haplotype *A. TENTACULATA* Gray. (Name misprinted *AMORA*, but corrected in manuscript on the plate.) Species not identified; resembles *THYSANOPHRYS* Ogilby.
- Apterygia** Gray, II, 92; haplotype *A. RAMCARATE* Gray. A synonym of *RACONDA* Gray.
- Tor** Gray, II, 96; haplotype *CYPRINUS TOR* Ham. = *TOR HAMILTONI* Gray. Replaces *LABEOBARBUS* Rüppell.
- Bengala** Gray, II 96; haplotype *CYPRINUS ELANGA* Ham. Replaces *MEGARASBORA* Gthr.
- Amanes** Gray, II, 98; haplotype *A. HYSTRIX* Gray = *MONACANTHUS SCOPAS* Cuv.
- Acarana** Gray, II, 98; haplotype *OSTRACION AURITUS* Shaw. Also in *Ann Nat. Hist.*, I, 110, 1838.
- Girella** Gray, II, 98; haplotype *G. PUNCTATA* Gray.
- 171, 172. LOWE (1833). *Character of a New Genus and of Several New Species of*
Proc. Zool. Soc. London, I.
RICHARD THOMAS LOWE (1802-1874).
- Alepisaurus** Lowe, 104; orthotype *A. FEROX* Lowe. A synonym of *PLAGYODUS* Steller, 1811, if the latter be deemed tenable, being given in the dative case only ("Plygyodontem") Often written *ALEPIDOSAURUS* by authors.
173. LOWE (1833). *Character of a New Genus and of Several New Species of*
Fishes from Madeira. Proc. Zool. Soc. London, I.
RICHARD THOMAS LOWE
- Leirus** Lowe, 142; orthotype *L. BENNETTI* Lowe = *CENTROLOPHUS OVALIS* Cuv. & Val. = *MUPUS IMPERIALIS* Cocco, the three names of the same date. *LEIRUS* is preoccupied in beetles (Meigen, 1823) and gives place to *MUPUS* Cocco.
174. NARDO (1833). *De Skeponopodo novo piscium genere et de Guebucu Mar-gravii: species illi cogniti:* *Isis.* Mem. Assemb. Nat. Vienna.
GIAN DOMENICO NARDO.
- Skeponopodus** Nardo, fasc. 416; orthotype *S. TYPUS* Nardo = *XIPHIAS IMPERATOR* Bl. & Schn. A synonym of *TETRAPTURUS* Raf.
175. REINHARDT (1833). *Bemærkningene til den Skandinaviske ichthyologie.*
JOHANNES REINHARDT.
- Silus** Reinhardt, 11; orthotype *SALMO SILUS* Ascanius. Apparently a synonym of *ARGENTINA* L.

1834

176. AGASSIZ (1834). *Abgerissene Bemerkungen über fossile Fische.* Neues
Jahrb. Mineralogie.
LOUIS AGASSIZ.
- Ophiopsis** Agassiz, 385; orthotype *O. PROCERUS* Ag. (fossil).
- Saurichthys** Agassiz, 386; orthotype *S. APICALIS* Ag. (fossil).
- Propterus** Agassiz, 386; orthotype *P. MICROSTOMUS* Ag. (fossil).
- Caturus** Agassiz, 387; orthotype *UREUS NUCHALIS* Ag. (fossil). Substitute for *UREUS* Ag., preoccupied.
- Macrosemius** Agassiz, 387; orthotype *M. ROSTRATUS* Ag. (fossil).

- Belonostomus** Agassiz, 388; orthotype *B. TENUIROSTRIS* Ag. (fossil).
Dercetis Agassiz, 389; orthotype *D. SCUTATUS* Ag. (fossil).
177. AGASSIZ (1834). *Verhandlungen der Gesellschaft des vaterländischen Museums. Böhmen.*
 LOUIS AGASSIZ.
Halec Agassiz, 67; orthotype *H. STERNBERGI* Ag. (fossil).
178. AGASSIZ (1834). *Recherches sur les poissons fossiles. V (part), 1834.*
 LOUIS AGASSIZ.
Acanthonemus Agassiz, V, 27; orthotype *A. FILAMENTOSUS* Ag. (fossil).
179. COSTA (1834). *Cenni zoologici, ossia descrizione sommaria delle specie nuovi di animali discoperti in diverse contrade del regno, nell' anno 1834.* (Naples.)
 ORONZIO GABRIELE COSTA (1787-1867).
Branchiostoma Costa, 49; orthotype *LIMAX LANCEOLATUS* Pallas; replaces *AMPHIOXUS* (Gray) Yarrell.
Nemotherus (Risso) Costa, fig. 9; orthotype *N. ERYTHROPTERUS* Risso. A synonym of *TRACHYPTERUS* (not verified).
180. GRIFFITH (1834). *The Class Pisces, Arranged by the Baron Cuvier, with Supplementary Additions by Edward Griffith and Charles Hamilton Smith.*
Carangus Griffith, 335; tautotype *SCOMBER CARANGUS* Bloch = *SCOMBER HIPPOS* L. A synonym of *CARANX* Lac. as restricted; same as *CARANGUS* Grd.
181. HENLE (1834). *Sur le Narcine, nouveau genre de raies electriques, etc.* Ann. Sci. Nat., II. (Also in German as *Ueber Narcine.*)
 FRIEDRICH GUSTAV JACOB HENLE (1807-1855).
Narcine Henle, 31; orthotype *TORPEDO BRASILIENSIS* Ölfers.
182. MÜNSTER (1834). *Knochenhöhle bei Rabenstein, etc.* Neues Jahrb. Miner.
 GEORG MÜNSTER.
Undina Münster, 539; orthotype *U. PENICILLATA* Münster (fossil).
183. QUOY & GAIMARD (1834). *Voyage de découvertes de "l'Astrolabe," etc.* (1826-29), sous le commandement de M. J. Dumont d'Urville.
 JEAN RÉNÉ CONSTANTIN QUOY (1707-1778); PAUL GAIMARD (1790-1858).
Aspidontus (Cuvier) Quoy & Gaimard, 719; orthotype *A. TÆNIATUS* Cuv. & Val. An ally of *PETROSCIRTES* Rüppell, distinguished by the lack of elevation of the anterior dorsal spines.

1835

184. AGASSIZ (1835). *Ueber die Familie der Karpfen.* Mem. Soc. Nat. Neufchâtel, I.
 LOUIS AGASSIZ.
Acanthopsis Agassiz, I, 36; orthotype *COBITIS TÆNIA* L. Name preoccupied. A synonym of *COBITIS* L.
Phoxinus Agassiz, 37; orthotype *LEUCISCUS PHOXINUS* L. Same as *PHOXINUS* Raf. 1820.
Rhodeus Agassiz, I, 37; orthotype *CYPRINUS AMARUS* Bloch.
Chondrostoma Agassiz, I, 38; orthotype *CYPRINUS NASUS* L.
Aspius Agassiz, I, 38; tautotype *CYPRINUS ASPIS* L.
Pelecus Agassiz, I, 39; orthotype *CYPRINUS CULTRATUS* L.

185. AGASSIZ (1835). *Recherches sur les poissons fossiles*. II.

LOUIS AGASSIZ.

- Plectrolepis** (Agassiz) II, 44; orthotype *P. RUGOSUS* Ag. (fossil). Name only; validated by Egerton, 1850. A synonym of *EURYNOTUS* Ag. = *NOTACMON* Gistel, 1848.
- Megalodon** Agassiz, II, 55; logotype *M. LEWESIENSIS* Ag. (fossil). Name preoccupied; a synonym of *PACHYRHIZODUS*.
- Enchodus** Agassiz, II, 55 (feuilleton); orthotype *ESOX LEWESIENSIS* Mantell (fossil).
- Macropoma** Agassiz, II, 55 (euilleton); orthotype *M. MANTELLI* Ag. (fossil).
- Diplopterus** Agassiz, II, 113; orthotype *D. MACROCEPHALUS* Ag. (fossil). Name preoccupied; replaced by *DIPLOPTERAX* McCoy (1885).
- Pleiopterus** Agassiz, II, 113; orthotype *OSTEOLEPIS MACROLEPIDOTUS* Val. (fossil). A synonym of *ASTROLEPIS*.
- Cheiracanthus** Agassiz, II, 125; orthotype *C. MURCHISONI* Ag. (fossil).
- Cheirolepis** Agassiz, II, 128; orthotype *C. TRAILLI* Ag. (fossil).
- Cephalaspis** Agassiz, II, 135; orthotype *C. LYELLI* Ag. (fossil).
- Eurynotus** Agassiz, II, 153; logotype *E. CRENATUS* Ag. (fossil). Name preoccupied; replaced by *NOTACMON* Gistel (1848).
- Platysomus** Agassiz, II, 6, 161; logotype *STROMATEUS GIBBOSUS* Blainv. (fossil). Name held to be preoccupied by *PLATYSOMA* Leach, 1817; replaced by *SCROTES* Gistel (1848); *UROPTERYX* (Ag.) Woodw. (1907) may be also regarded as a substitute.

186. AGASSIZ (1835). *Ueber das der Glarner-Schiefer-Formation nach ihren Fischresten*. Neues Jahrb. Mineral.

LOUIS AGASSIZ.

- Carangopsis** Agassiz, 293; orthotype *C. LATIOR* Ag. (fossil). Names only; validated in 1844.
- Urosphen** Agassiz, 293; orthotype *U. FISTULARIS* Ag. (fossil). Names only; validated in 1844.
- Amphistium** Agassiz, 294; orthotype *A. PARADOXUM* Ag. (fossil). Names only; validated in 1844.
- Xiphopterus** Agassiz, 295; orthotype *ESOX FALCATUS* Volta (fossil).
- Pristigenys** Agassiz, 299; orthotype *P. MACROPHthalmus* Ag. (fossil). Name only; described in 1839 (*Poiss. fossiles*, IV, 139).
- Cœlogaster** Agassiz, 304; orthotype *C. ANALIS* Ag. (fossil) (name only), and hence dating only from later usage.
- Platinx** Agassiz, 304; orthotype *P. ELONGATUS* Ag. (fossil). A synonym of *MONOPTEROS* Volta (1794).
- Enchelyopus** Agassiz, 307; orthotype *E. TIGRINUS* Ag. (fossil); name only; validated by Agassiz in 1844. Preoccupied; replaced by *PARANGUILLA* Blkr. (1864).
187. CUVIER & VALENCIENNES (1835). *Histoire naturelle des poissons*. X.
(The series continued after the death of Cuvier, in 1832, until 1848, by
ACHILLE VALENCIENNES.)
- Keris** Cuvier & Valenciennes, 304, 1835; orthotype *KERIS ANGUINOSUS* Cuv. & Val. Often written *CERIS*: the young of *NASO* Lac.
188. GOTTSCHÉ (1835). *Die seeländischen Pleuronectes-Arten*. Wiegmann's Archiv. der Naturgeschichte, II.
CARL MORITZ GOTTSCHÉ (1808-1892).

- Limanda** Gottsche, 100; orthotype *PLEURONECTES LIMANDA* L.
Microstomus Gottsche, 150; orthotype *M. LATIDENS* Gottsche. Regarded as pre-occupied by *MICROSTOMA* Risso, 1826; replaced by *CYNICOGLOSSUS* Bon.
Glyptocephalus Gottsche, 156; orthotype *PLEURONECTES SAXICOLA* Faber = *P. CYNOGLOSSUS* L.
Hippoglossoides Gottsche, 168; orthotype *H. LIMANDA* Gottsche = *PLEURONECTES LIMANDOIDES* Bloch.
Zeugopterus Gottsche, 178; orthotype *PLEURONECTES HIRTUS* Abildgard.

189. JOANNIS (1835). *Observations sur les poissons du Nil et descriptions de plusieurs espèces nouvelles*, etc. Mag. Zool., 1835.

L. DE JOANNIS.

Mochokus Joannis, pl. 8; orthotype *M. NILOTICUS* Joannis.

190. MEYEN (1835). *Reise in Peru*. I.

J. MEYEN.

Pygidium Meyen, I. 475; orthotype *P. FUSCUM* Meyen.

191. MÜLLER (1835). *Vergleichende Anatomie der Myxinoiden, der Cyclostomen mit durchbohrten Gaumen*. (Reprinted in *Arch. Naturg.*, Berlin, for 1846, 247.)

JOHANNES MÜLLER (1801-1858).

Sturio Müller, 77. (Sturgeons without opercle.) Type presumably *ACIPENSER STURIO* L. A synonym of *ACIPENSER* Ag.

Scaphirhynchus (Heckel) Müller, 77; footnote only; defined as lacking the quadrate bone; logotype *ACIPENSER PLATORHYNCHUS* Raf.

Bdellostoma Müller, 79 (248, reprint); orthotype *B. HEXATREMA* Müller; a substitute for *HEPTATREMA* DUROU. as not correct in fact. Both are synonyms of *EPTATRETUS* Cloquet, 1818.

192. DE LA PYLAIE (1835). *Recherches en France, sur les poissons de l'océan, pendant les années 1832 et 1833*. Congrès Scientifique de France tenue a Poitiers, 1834.

M. DE LA PYLAIE (DE FOUGÈRES).

This singularly useless paper has been totally overlooked by all naturalists except Dr. Gill, who has noted Pylaie's use of the name *ARGYROSOMUS* (1835), at a date prior to that of Agassiz (1850). Besides the "new genera" enumerated below, the following new species are indicated by De la Pylaie:

SPINAX VITULINUS p. 527 ("tête qui rappelle un muffle de veau").

SCYLLIUM ATLANTICUM (527) ("trop différente," etc.).

SCYMNUS AQUITANENSIS (527) (la Sénille ou Chénille de l'Île Dieu).

SQUALRAJA CERVICATA (527) ("pour le distinguer de l'ordinaire, que est acephale").

SQUALRAIA ACEPHALA (527) (= *SQUATINA SQUATINA*).

TORPEDO ELLIPTICA (527) ("d'après la structure de ses deux pectorales").

RAJABATIS MACROPHALLA (528) (Differing in length of clasper).

RAJABATIS MICROPHALLA (528). "Neuf autres espèces complètent ce genre; ce sont

les *R. TRIPTERA*, *POLYACANTHA*, *VARIEGATA*, *TIGRINA*, *MONOLIFERA*, *FLORIGERA*, *MELUMPSECA*, *MOZAICA*, *UNDULATA*.

HIPPOCAMPUS ATRICHUS (529) ("espèce de l'Océan").

HIPPOCAMPUS JUBATUS (529) ("des filamens qui composent, le long de son cou, une espèce de crinière peu fournie").

APTOCYCLUS OSTRACIODES (529). "Coffret." "Nouvelle espèce encore très bien caractérisée."

- ANGUILLA VULGARIS, "mes variétés MACROCEPHALA, ORNITHORHINCHA, PLATYURA, également nouvelles pour la science" (529).
- MURÆNA HIPPOCREPIS (529) "commune dans certain reservoirs des Salines, à l'Île de Noirmontier".
- ANMODYTES PICTAVUS (529a) "qui s'en distingue par l'absence de dents, par le nombre des rayons et par la couleur de quelques parties de son corps".
- MORRHUA VULGARIS CALLARINA (530), a variety "rare à ile Dieu," etc.
- GADUS ZONATUS (530), a "variety" of "GADUS BARBATUS".
- MUSTELA RUBENS (530), "La Coche Rouge".
- MUSTELA QUINQUECIRRHA (530), "a cinq barbillons".
- BLENNIUS GATTORUGINE BITENTACULARIS (530).
- BLENNIUS PICTAVUS (530), "nouvelles espèces".
- BLENNIUS PIETI (530).
- PTEROZYGUS BIEVRII (530).
- GOBIUS NIGRICANAS (531), "habite les roches de la côte".
- THYNNUS ATLANTICUS (531a), the albacore.
- THYNNUS OCEANICUS (531a), the tunny.
- TRIGLA MEGALOPHTHALMA (531a), "d'après la grosseur remarquable des yeux".
- CRENILABRUS PHENODONTUS (532), "a grand dent".
- CRENILABRUS MARMORATUS (532).
- CRENILABRUS OXYCEPHALUS (532), "n'a pas de tache noir sur la queue; son museau est plus pointée".
- SARGUS PULCHELLUS (532), "Ruscain, d'après sa chair rouge".
- EXOCALLUS INSIGNIS (532a), new name for Boops boops (L).
- PERCA OLONNENSIS (532a) ("nouvelle espèce").
- PERCA INERMIS (532a). Name only.
- ARGYROSUMUS PROCERUS (532a), "Baie de Bourgneuf".
- CLUPEA ELONGATA (532a) "une variété N. du CLUPEA ALOSA, le corps beaucoup plus allongé que dans l'alose ordinaire".
- APTEROGASTERUS ROSTELLATUS (532a), "Jacquine" "D'après la forme de son museau".
- LEUCISCUS PICTAVA (533), "Chévénau" "le corps est moins large" (que dans le LEUCISCUS CHUB de Pennant).
- LEUCISCUS OBTUSUS (533) "able ou petit verdon sans taches".
- GOBIO PHOXINOIDES (533), "Goujon véronette".
- COBITIS PARISENSIS (534), "Loche Franche".
- COBITIS PICTAVA (534), "repandu dans nos rivières".
- SOLEA CUNEATA (534), "Sole sétan": "espèce mediocre, mais parfaitement caractérisée".
- RHOMBUS GALLINULA (534), "poulette de mer".
- Squalraia** De la Pylaie, 526; orthotype *SQUALRAIA ACEPHALA* Pylaie = *RAJA SQUATINA* L. A synonym of *SQUATINA*; not *SQUALORAIATA* Riley (1826).
- Rajabatis** De la Pylaie, 528; logotype *RAJA MOSAICA* Lac. (most of the other species named being left undescribed). A synonym of *RAJA*, possibly not intended as a generic name.
- Aptocyclus** De la Pylaie, 529; orthotype "*CYCLOGASTERUS VENTRICOSUS*" Pallas (error for "*CYCLOPTERUS*"). Replaces *CYCLOPTERIGHTHYS* Steind. (1861).
- Pterozygus** De la Pylaie, 530; orthotype *P. BIEVRII* De la Pylaie. "Une loche qui presente le singulier caractère d'avoir ses nageoires pectorales et thoracins réunies par paires." Probably a monstrous form of *COBITIS* L.
- Exocallus** De la Pylaie, 532 (a); orthotype *E. INSIGNIS* Pylaie (*SPARUS BOOPS* L.). Name a substitute for *BOOPS*, of which it is a needless synonym.

Apterogasterus De la Pylaie, 532a; orthotype *A. rostellatus* Pylaie, "la Jacqueline". (Not identified.)

Argyrosomus De la Pylaie, 534; orthotype *A. procerus* De la Pylaie. A synonym of *Scleæna* L. as restricted by Cuvier; same as *Pseudoscleæna* Blkr.

193. RÜPPELL (1835). *Neue Wirbelthiere zu der Fauna von Abyssinien gehörig*. 2 vols.

EDUARD RÜPPELL.

Enneapterygius Rüppell, 2; orthotype *E. pusillus* Rüppell.

Gazza Rüppell, 4; orthotype *G. equulæformis* Rüppell.

Pseudochromis Rüppell, 8; logotype *P. olivaceus* Rüppell.

Halichoeres Rüppell, 14; logotype *H. bimaculatus* Rüppell (as restricted by Jordan & Snyder). Regarded as preoccupied by *Halichærus*, a genus of seals; replaced by *Hemulis* Sw. (1839) and by *Chærojulis* Gill (1864).

Lutodeira (Kuhl) Rüppell, 18; orthotype *Mugil chanos* Forskål. A synonym of *Chanos* Lac.

Xenodon Rüppell, 53; orthotype *Balistes niger* Lac. Preoccupied in reptiles; replaced by *Zenodon* Sw. (1839), by *Odonus* Gistel (1848), by *Erythron* Rüppell (1852) and by *Pyrodon* Kaup (1853). The validity of the oldest of these substitute names, *Zenodon*, may be questioned. See record of Swainson (1839).

Nebrius Rüppell, 62; orthotype *Nebrius concolor* Rüppell. Name regarded as preoccupied by *Nebria* Latreille and *Nebris* Cuv.; replaced by *Nebrodes* Garman. But the root is different: νεβρίος of Aristotle, referring to some shark.

Uropterygius Rüppell, 83; orthotype *N. concolor* Rüppell. This would be a synonym of *Gymnomuræna* Lac., as restricted by Bleeker, 1864, but not as limited by Kaup, 1856.

Sphærodon Rüppell, 113; orthotype *Scleæna grandoculis* Forskål. A synonym of *Monotaxis* Bennett.

Pristotis Rüppell, 128; orthotype *P. cyanostigma* Rüppell. A synonym of *Pomacentrus* Lac.

194. SCHULTZE (1835). *Versammlung von Naturforschers in Bonn*.

CARL AUGUST SIGMUND SCHULTZE (1795-1877).

Hexabanchus Schultze; orthotype presumably *Bdellostoma hexatrema* Müller. If so, a synonym of *Eptatretus* Cloquet. According to Agassiz, a genus of lampreys, presumably one with six gills; no further details available.

1836

195. AGASSIZ (1836). *Recherches sur les poissons fossiles*. III.

LOUIS AGASSIZ.

Zygobatis Agassiz, III, 79; orthotype *Z. jussieui* Ag. A synonym of *Rhinoptera* Kuhl.

Odontaspis Agassiz, III, 87; orthotype *O. ferox* Ag. A synonym of *Carcharias* Raf. as now limited.

Spinacorhinus Agassiz, III, 94; orthotype *S. polyspondylus* Ag. (fossil). A synonym of *Squaloraia* Riley.

Goniodus Agassiz, III, 183; orthotype *Squalus spinosus* Gmelin = *Squalus brucus* Bonnatere. A synonym of *Echinorhinus* Blainv.

Amblyurus Agassiz, III, 220; orthotype *A. macrostomus* Ag. (fossil). A synonym of *Dapedium* Leach.

196. AGASSIZ & HIBBERT (1836). *On the Fresh-water Limestones of Burdiehouse, etc.* Trans. Roy. Soc. Edinburg.
LOUIS AGASSIZ; SAMUEL HIBBERT (1782-1848).
Megalichthys Agassiz, VIII, 202; orthotype M. HIBBERTI Ag. (fossil).
197. CUVIER & VALENCIENNES (1836). *Histoire naturelle des poissons*. XI.
ACHILLE VALENCIENNES.
Omobranchus (Ehrenberg) Cuvier & Valenciennes, XI, 87; orthotype *BLENNICHIS FASCIOLATUS* Cuv. & Val. A synonym of *ASPIDONTUS* Cuv.
Cestræus Cuvier & Valenciennes, XI 157; type *CESTRÆUS PLICATILIS* Cuv. & Val. Near *AGONOSTOMUS* Bennett, 1830. Not *CESTRÆUS* Klein, nor of McClelland, nor Gronow.
Dajaus Cuvier & Valenciennes, XI, 164; haplotype *MUGIL MONTICOLA* Bancroft; near *AGONOSTOMUS* Bennett, 1800.
Nestis Cuvier & Valenciennes, XI, 167; logotype *NESTIS CYPRINOIDES* Cuv. & Val. = *AGNOSTOMUS TELFAIRI* Bennett, 1830. A synonym of *AGONOSTOMUS* Bennett.
Blennechis Cuvier & Valenciennes, XI, 279; logotype B. *FILAMENTOSUS* Cuv. & Val. A synonym of *PETROSCIERTES* Rüppell.
Chasmodes Cuvier & Valenciennes, XI, 295; logotype *BLENNIUS BOSQUIANUS* Lac.
Cristiceps Cuvier & Valenciennes, XI, 402; haplotype C. *AUSTRALIS* Cuv. & Val.
Gunnellus Cuvier & Valenciennes, XI, 419; tautotype *BLENNIUS GUNNELLUS* L. A synonym of *PHOLIS* (Gronow) Scopoli (1777), and of *MURENOIDES* Lac. (1803). Often spelled *GUNELLUS*.
198. HECKEL (1836). *Scaphirhynchus, eine Fischgattung aus der Ordnung der Chondropterygier mit freien Kiemen.* Ann. Wien. Mus., I.
JOHANN JAKOB HECKEL (1790-1857).
Scaphirhynchus Heckel, I, 71; orthotype S. *RAFINESQUEI* = *ACIPENSER PLATORYNCHUS* Raf. Regarded preoccupied by *SCAPHORHYNCHUS* Maximilian, 1831. a genus of birds; replaced by *SCAPHIRHYNCHOPS* Gill (see Müller 1835).
199. HECKEL & FITZINGER (1836). *Monographische Darstellung der Gattung Acipenser.* Ann. Wien. Mus., I.
JOHANN JAKOB HECKEL; LEOPOLD J. FITZINGER (1802-1884).
Antaceus Heckel & Fitzinger, 293; orthotype *ACIPENSER SCHYPA* Eichw.
Lioniscus Heckel & Fitzinger, 370; orthotype *ACIPENSER GLABER* Fitzinger.
200. LIÉNARD (1836). *Sur quelques poissons de l'île Maurice.* L'Institut, IV.
ÉLIZÉ LIÉNARD.
Platysoma Liénard. Name preoccupied; said to be near *DULES* (KÜHLIA). (Very doubtful; here quoted from Scudder. I fail to find the name in question elsewhere.)
201. MÜNSTER (1836). *Capitosaurus in Keupersandstein; Gyrodus multidens in Jurakalk; achte Belonostomus-Art; Lebias und Cyprinus in Braunköhle im Fichtelgebirge, etc.* Neues Jahrb. Mineral.
GEORG MÜNSTER.
Aellopos Münster, 581; orthotype A. *ELONGATUS* Münster (fossil). An extinct ally of *RHINOBATUS*.
202. RICHARDSON (1836). *Back's Narrative of an Arctic Land Expedition.*
JOHN RICHARDSON (1787-1865)
Stenodus Richardson (appendix), 521; orthotype *SALMO MACKENZIEI* Rich. Replaces *LUCIOTRUTTA* Gthr. (1866).

203. RICHARDSON (1836). *Fauna Borcali-Americana*. III.

JOHN RICHARDSON.

Ternistia Richardson, III, 59; orthotype **BLEPSIAS VENTRICOSUS** Eschscholtz. A synonym of **HEMILEPIDOTUS** Cuv.

Salvelinus (Nilsson) Richardson, III, 169; tautotype **SALMO SALVELINUS** L. First use in the singular of Nilsson's group name "SALVELINI". Replaces **BAIONE** Dekay (1842) and **UMBLA** Rapp (1854).

204. RÜPPELL (1836). *Neuer Nachtrag zu Beschreibungen und Abbildungen neuer Fische, im Nil entdeckt*. Museum Senckenberg, II.

WILHELM PETER EDUARD SIMON RÜPPELL.

Labeobarbus Rüppell, II, 14; haplotype **LABEOBARBUS NEDGIA** Rüppell. Probably not distinct from **TOR** Gray, 1833.

Varicorhinus Rüppell, II, 14; orthotype **V. BESO** Rüppell = **LABEO VARICORHINUS** Cuv. & Val. **VARICORHINUS** Rüppell is said by Berg to include **CAPOËTA**, **SCAPHIODON**, **DILLONIA**, **GYMNOSTOMUS**, **ONYCHOSTOMA**, **PTEROCAPOËTA** and **ACAPOËTA**. Some of these have doubtless standing as subgenera.

205. YARRELL (1836). *A History of British Fishes*, etc. 2 vols.

WILLIAM YARRELL (1784-1856).

Amphioxus (Gray) Yarrell, 468; orthotype **LIMAX LANCEOLATUS** Pallas. A synonym of **BRANCHIOSTOMA** Costa.

1837

206. AGASSIZ (1837). *Recherches sur les poissons fossiles*. III (part). V (part).

LOUIS AGASSIZ.

Onchus Agassiz, III, 6; orthotype **O. MURCHISONI** Ag. (fossil).

Ctenacanthus Agassiz, III, 10; logotype **C. MAJOR** Ag. (fossil).

Oracanthus Agassiz, III, 13; orthotype **O. MULLERI** Ag. (fossil).

Gyracanthus Agassiz, III, 17; orthotype **G. FORMOSUS** Ag. (fossil).

Tristychius Agassiz, III, 21; orthotype **T. ARCUATUS** Ag. (fossil).

Ptychacanthus Agassiz, III, 22; orthotype **P. SUBLÆVIS** Ag. (fossil). A synonym of **TRISTYCHIUS** Ag.

Sphenacanthus Agassiz, III, 23; orthotype **S. SERRULATUS** Ag. (fossil).

Nemacanthus Agassiz, III, 25; logotype **N. MONILIFER** Ag. (fossil).

Leptacanthus Agassiz, III, 27; logotype **L. LÆVISSIMUS** Ag. (fossil). Fossil spines of a **CHIMÆROID**, perhaps synonymous with **GANODUS**.

Asteracanthus Agassiz, III, 31; orthotype **A. ORNATISSIMUS** Ag. (fossil).

Pristeacanthus Agassiz, III, 35; orthotype **P. SECURIS** Ag. (fossil).

Myriacanthus Agassiz, III, 37; logotype **M. PARADOXUS** Ag. (fossil).

Hybodus Agassiz, III, 41; orthotype **H. PLICATILIS** Ag. (fossil).

Leiacanthus Agassiz, III, 55; orthotype **L. FALCATUS** Ag. (fossil).

Pleuracanthus Agassiz, III, 66; orthotype **P. LÆVISSIMUS** Ag. (fossil). Name preoccupied; probably replaced by **ORTHACANTHUS** Ag.: perhaps the spine of the forms known from the teeth, as **DIPLODUS**, **DICRANODUS**, **DITTODUS**, etc.

Hypsodon Agassiz, V, 100; logotype **MEGALODON LEWESIENSIS** Mantell (fossil). Specimens not all of one genus, some belonging to **PORTHEUS** Cope (1872).

207. BONAPARTE (1834-1841). *Iconografia della fauna italiana, per le quattro classi degli animali vertebrati*. Tome, III. *Pesce*.

CARLO LUCIANO BONAPARTE (Principe de Canino e de Musignano).

This sumptuous and finely illustrated work was issued in separate fascicles from 1832 to 1842. The fishes seem to begin with fascicle VI in 1837. The last are in fascicle 160, probably issued in 1841. There is no paging, and exact dates, except for a few fascicles, are inaccessible to me. I therefore divide the work into three parts, 1837, 1840 and 1841. Fascicles 156 to 160 are subsequent to Swainson's *Natural History*, 1839, from which they quote. So far as I know, no question of nomenclature hinges on these uncertain dates. Troschel (*Archiv. Naturg.*) gives the date 1884 for fascicles "Lieferungen" VI to XI, 1837 for XVI to XX, 1838 for XXVI to XXIII, 1839 for XXIV to XXVI, and 1840 for XXVII; but these "deliveries" seem not to correspond to the fascicles:

- Orectolobus** Bonaparte, fasc. 7; orthotype *SQUALUS BARBATUS* Gmelin (date probably 1837). Replaces *CROSSORHINUS* M. & H.
- Cerna** Bonaparte fasc. 10*; orthotype *PERCA GIGAS* Brünnich = *LABRUS GUAZA* L. (1837). A synonym of *EPINEPHELUS* Bloch, as now restricted.
- Cynicoglossus** Bonaparte, fasc. 19; orthotype *PLEURONECTES CYNOGLOSSUS* Nilsson (not of L.) = *PLEURONECTES KITT* Walbaum. Equivalent to *MICROSTOMUS* Gottsche, which it replaces if *MICROSTOMUS* is regarded as preoccupied by *MICROSTOMA* Cuv. (1817).
- Batis** Bonaparte, fasc 21*; orthotype *RAJA RADULA* De la Roche (called *DASYBATIS* in fasc. 68). A synonym of *RAJA* L.
- Læviraja** Bonaparte, fasc. 21*; orthotype *RAJA ONYRHYNCHUS* L.
- Microchirus** Bonaparte, fasc. 26*; orthotype *PLEURONECTES MICROCHIRUS* De la Roche. Same as *MONOCHIRUS* and *MONOCHIR* Cuv., not of Rafinesque; replaces *BUGLOSSUS* Gthr.
- Monochirus** Bonaparte, fasc., 26*; orthotype *SOLEA MONOCHIR* Bon. Same as *MONOCHIRUS* Raf.
- Pampus** Bonaparte, 48; orthotype (not named) but plainly *STROMATEUS CANDIDUS* Cuv. & Val. Replaces *STROMATEIODES* Blkr., 1851.
- "Diamo il nome di PAMPUS al secundo sottogenere in cui accogliamo quelle specie che non hanno pinne ventrali e portano innanzi ai raggi dorsale e dell' anale parecchie spine terminale superiormente da una lamina tagliente." (Bonaparte.) These peculiar trenchant spines are found in all the species called *STROMATEOIDES*, though buried in the flesh in the adult.
- Dasybatus** Bonaparte, fasc. 68; orthotype *RAJA RADULA* De la Roche. Called *BATIS* on fascicle 21; also written *DASYBATUS*. A synonym of *RAJA* L.; not *DASYBATUS* Raf. (1837).
- Membras** Bonaparte, fasc. 91; orthotype an "exotic species", evidently *ATHERINA MARTINICA* Cuv. & Val.
- Menidia** Bonaparte, fasc. 91; orthotype an "exotic species," evidently *ATHERINA MENIDIA* L.
- Hepsetia** Bonaparte, fasc. 91; orthotype *ATHERINA BOYERI* Risso.
- Cyprinopsis** (Fitzinger) Bonaparte, fasc. 92; orthotype *CYPRINUS CARASSIUS* L. (1838). A synonym of *CARASSIUS* Nilsson.
- Squalius** Bonaparte, fasc. 96; logotype *SQUALIUS TYBERINUS* Bon. = *LEUCISCUS SQUALUS* Bon. A synonym of *LEUCISCUS* Cuv.
- Scardinius** Bonaparte, fasc. 96; orthotype *LEUCISCUS SCARDAFA* Bon.
- Telestes** Bonaparte, fasc. 103; orthotype *TELESTES MUTICELLUS* Bon. (1839).
- Plagiusa** Bonaparte, fasc. 120; orthotype (by implication) *PLEURONECTES PLAGIUSA* L. A substitute for *PLAGUSISA* Cuv.; preoccupied ("non *PLAGUSIA*, nome di crustaceo"). A synonym of *SYMPHURUS* Raf. (1810).

208. CANTRAINÉ (1837). *Memoire sur un poisson nouveau (Acanthoderma temmincki) trouvé dans le canal de Messine*. Journ. de Bruxelles.

FRANÇOIS JOSEPH CANTRAINÉ (1801-1863).

Acanthoderma Cantraine, X, 1-19; orthotype *A. TEMMINCKI* Cantraine. A synonym of *RUVERTUS* Cocco.

209. CUVIER & VALENCIENNES (1837). *Histoire naturelle des poissons*. XII. ACHILLE VALENCIENNES.

Oplopomus (Ehrenberg) Cuvier & Valenciennes, XII, 66 (reference in synonymy); orthotype *O. PULCHER* Ehrenb. = *GOBIOUS OPLOPOMUS* Cuv. & Val. Replaces *CENTROGOBIUS* Blkr., 1874.

Cryptocentrus (Ehrenberg) Cuvier & Valenciennes, XII, 111; orthotype *C. MELEAGRIS* Ehrenb. = *GOBIOUS CRYPTOCENTRUS* Cuv. & Val. Replaces *PARAGOBIOUS* Blkr. Ehrenberg's manuscript, *Zoologia: Pisces*, quoted by Cuvier and Valenciennes, seems never to have been published.

Amblyopus Cuvier & Valenciennes, XII, 139; logotype *TÆNOIDES HERRMANNIANUS* Lac. A synonym of *TÆNOIDES* Lac. 1803

Apocryptes (Osbeck) Cuvier & Valenciennes, XII, 143; orthotype *GOBIOUS PECTINIROSTIS* Gmelin = *APOCRYPTES CHINENSIS* Osbeck, 1757, and in later translations (after 1758). *APOCRYPTES* Cuv. & Val. is plainly a revival of Osbeck's genus, and the name ought not legitimately to be transferred to another group as has been done by Günther and Bleeker. Bleeker makes *GOBIOUS BATO* Ham. the type of *APOCRYPTES* Cuv. & Val., as this is the first species named by these authors under *APOCRYPTES*. But it would seem that Osbeck's haplotype (*A. CHINENSIS*) must be accepted in the revival of his genus, in which case *APOCRYPTES* (Osbeck) Cuv. & Val. replaces *BOLEOPHTHALMUS* Cuv. & Val. (p. 198). As against the views here expressed, it may be urged that the pre-Linnæan name *APOCRYPTES* Osbeck has no standing and *APOCRYPTES* Cuv. & Val. is really based on *GOBIOUS BATO*, a species actually in hand, as the description shows. *APOCRYPTES CHINENSIS* (*PECTINIROSTRIS*) was included by error, it being a member in fact of the genus *BOLEOPHTHALMUS* Cuv. & Val., as later writers have recognized. It may be urged further that the first designation of type of *APOCRYPTES* is that of Bleeker, who places it on *APOCRYPTES BATO*.

A further point is that accepting *APOCRYPTES* in the Osbeckian sense leaves the genus of Cuvier and Valenciennes without a name, unless we accept *GOBILEPTES* Sw. But the scales in *GOBILEPTES* are described as large, while those of *APOCRYPTES BATO* are "exceedingly small". Swainson obviously drew his *GOBILEPTES* from the description of *GOBIOUS ACUTIPINNIS* Cuv. & Val., later abandoning the genus, which he does not again notice. Among the numerous genera of sharp-tailed gobies, I have not found the proper place for (*GOBILEPTES ACUTIPINNIS*). This generic name, *GOBILEPTES* Sw., with *no species mentioned*, is interpreted by Bleeker as referring to *GOBIOUS BATO* and hence is regarded by him as a synonym of *APOCRYPTES*.

Boleophthalmus Cuvier & Valenciennes, XII, 198; orthotype *GOBIOUS BODDERTI* Pallas. Perhaps a synonym of *APOCRYPTES* (Osbeck) Cuv. & Val., which see above.

Philypnus Cuvier & Valenciennes, XII, 235; haplotype *GOBIOMORUS DORMITOR* Lac. Same as *GOBIOMORUS* Lac., as first restricted by Jordan. Gill has later limited the name to *VALENCIENNEA* Blkr.

Hemerocœtes Cuvier & Valenciennes, XII, 311; haplotype *CALLIONYMUS ACANTHORHYNCHUS* Forster.

Platyptera (Kuhl & Van Hasselt) Cuvier & Valenciennes, XII, 320; orthotype *P. ASPRO* Van Hasselt. Name preoccupied, replaced by *RHYACICHTHYS* Boulenger, 1901.

Halieutæa Cuvier & Valenciennes, XII, 455; haplotype *HALIEUTÆA STELLATA* Cuv. & Val.

210. EGERTON (1837). (*Catalogue of Fossil Fishes.*)

PHILIP DE MALPAS GREY EGERTON (1806-1881).

Isurus (Agassiz) Egerton; orthotype *I. MACROURUS* Ag. (fossil). Name only; validated by Agassiz, 1844. Name preoccupied; replaced by *SAURICHTHYS* Woodw., 1901.

211. FITZINGER (1837). *Vorläufiger Bericht über eine höchst interessante Entdeckung Dr. Natterers in Brasil.* Oken's *Isis*.

LEOPOLD JOSEPH FRANZ FITZINGER.

Lepidosiren Fitzinger, 379; orthotype *L. PARADOXA* Fitzinger.

212. FRIES (1837). *Pterycombis, ett nytt fiskslägte från Ishafvet.* *Handl. K. Vetensk. Akad. Stockholm.*

BENGT FREDRIK FRIES (1799-1839).

Pterycombis Fries, 14; orthotype *P. BRAMA* Fries.

213. GEINITZ (1837). *Thüringischen Muschelkalk.*

HANS BRUNO GEINITZ (1814-1900).

Acrodus (Agassiz) Geinitz, 21; orthotype *A. GAILLARDOTI* Ag. (fossil). (Also in *Poissons fossiles*, III, 139, 1838.)

214. HECKEL (1837). *Ichthyologische Beiträge.* *Ann. Wiener Mus.*, II.

JOHANN JAKOB HECKEL.

Scorpænopsis Heckel, II, 158; orthotype *SCORPÆNA NESOGALLICA* Cuv. & Val.

Trachydermus Heckel, II, 159; orthotype *T. EFASCIATUS* Heckel. Name three times preoccupied as *TRACHYDERMA*; replaced by *CENTRIDERMICHTHYS* Rich.

215. KUTORGA (1837). *Beitrag zur Geognosie und Paleontologie Dorpats und seiner nächsten Umgebungen.* *St. Petersburg*, IV, for. 1835. Zweiter Beitrag, 1837.

STEPAN SEMENOVICH KUTORGA (1812-1861).

Ichthyosauroides Kutorga, II, 35; orthotype *TRIONYX SPINOSUS* Kutorga (fossil). Name rejected as inappropriate, the genus being supposed to be reptilian; an inadequate reason for change of name to *HETEROSTIUS* Asmuss, 1856.

216. MÜLLER & HENLE (1837). *Gattungen der Haifische und Rochen nach ihrer Arbeit, "Ueber die Naturgeschichte der Knorpelische".* *Ber. Akad. Wiss. Berlin.*

JOHANNES MÜLLER; FRIEDRICH GUSTAV JAKOB HENLE.

Tæniura Müller & Henle, 117; logotype *TRYGON ORNATA* Gray = *RAJA LYMMA* Forskål.

217. MÜLLER & HENLE (1837). *On the Generic Characters of Cartilaginous Fishes, with Descriptions of New Genera.* *Mag. Nat. Hist.*, II.

JOHANNES MÜLLER; FRIEDRICH GUSTAV JAKOB HENLE.

- Hemistrygon** Müller & Henle, 90; orthotype TRYGON BENNETTI M. & H.
Ginglymostoma Müller & Henle, 113; orthotype SQUALUS CIRRATUS Gmelin.
Scoliodon Müller & Henle, 114; orthotype CARCHARIAS LATICAUDUS M. & H.
Gymnura Müller & Henle, 117; orthotype RAJA ASPERRIMA Bl. & Schn. Name preoccupied; replaced by UROGYMNUM M. & H.
Himantura Müller & Henle, 400; orthotype RAJA UARNAK Forskål.
Urogymnus Müller & Henle, 434; logotype RAJA ASPERRIMA Bl. & Schn. Replaces ANACANTHUS Ehrenb. and GYMNUM M. & H., both preoccupied.
218. REDFIELD (1837). *Fossil Fishes of Connecticut and Massachusetts with a Notice of an Undetermined Genus*. Ann. Lyc. Nat. Hist. N. Y.
 JOHN HOWARD REDFIELD (1825-1895).
Catopterus Redfield, IV, 39; orthotype C. GRACILIS Redfield (fossil). Preoccupied by CATOPTERUS Ag. (1833); replaced by REDFIELDIUS Hay (1899).
219. REINHARDT (1837). *Bythites, novum genus piscium*. Danske Vid. Selsk. Afh., VI.
 JOHANNES CHRISTOPHER HAGEMANN REINHARDT.
Bythites Reinhardt, VI, 77; orthotype B. FUSCUS Reinh.
220. SMITH (1837). *On the Necessity for a Revision of the Groups Included in the Linnæan Genus Squalus*. Proc. Zool. Soc. London.
 ANDREW SMITH.
Poroderma Smith, 85; logotype SQUALUS AFRICANUS Gmelin.
Catulus Smith, 85; orthotype SCYLLIUM CAPENSE Smith. Name preoccupied in insects, partly equivalent to SCYLLIORHINUS Blainv., 1816.
Hemiscyllium Smith, 86; logotype SQUALUS OCELLATUS Bonnetterre.
Carcharodon Smith, 86; orthotype CARCHARODON CAPENSIS Smith = SQUALUS CARCHARIAS L.
Leptocarias Smith; *Ill. S. Afr. Zool.*; orthotype TRENODON SMITHI Gray; quoted by Agassiz, *Nom. Zool.*, 1846; hence prior to LEPTOCARCHARIAS Gthr., 1870. Replaces LEPTOCARCHARIAS.
221. THOMPSON (1837). *Notes Relating to the Natural History of Ireland, with a Description of a New Genus of Fishes (Echiodon)*. Proc. Zool. Soc. London, V.
 WILLIAM THOMPSON.
Echiodon Thompson, 55; orthotype E. DRUMMONDI Thompson. A synonym of CARAPUS Raf. (FIERASFER Cuv.).
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- 1838
222. AGASSIZ (1838). *Recherches sur les poissons fossiles*. III, IV (parts).
 LOUIS AGASSIZ.
Ptychopleurus Agassiz, III, 67; orthotype PTYCHACANTHUS FAUGASI Ag. A fossil ally of MYLIOBATIS.
Oxyrhina Agassiz, III, 86; logotype O. MANTELLI Ag. (fossil). Name preoccupied, the genus not separable from the living genus ISURUS Raf. (1810).
Orodus Agassiz, III, 96; logotype O. CINCTUS Ag. (fossil).
Ctenoptychius Agassiz, III, 99; orthotype C. APICALIS Ag. (fossil).
Helodus Agassiz, III, 104; orthotype H. SIMPLEX Ag. (fossil).
Chomatodus Agassiz, III, 107; logotype C. CINCTUS Ag. (fossil). An ally of COCHLIODUS, of undetermined value.

- Cochliodus** Agassiz, III, 113; orthotype *C. CONTORTUS* Ag. (fossil).
Strophodus Agassiz, III, 116; logotype *S. RETICULATUS* Ag. (fossil). A synonym of *ASTERACANTHUS*.
Ceratodus Agassiz, III, 129; orthotype *C. LATISSIMUS* Ag. (fossil). Considered by Gistel as preoccupied by the earlier *CERATODON*; *SCROPHA* Gistel (1848) has been proposed as a substitute.
Ctenodus Agassiz, III, 137; orthotype *C. CRISTATUS* Ag. (fossil). Considered as preoccupied by the earlier *CTENODON*. *RHADAMISTA* Gistel (1848) has been proposed as a substitute.
Acrodus Agassiz, III, 139; orthotype *A. GAILLARDOTI* Ag. (fossil). Name first published by Geinitz, 1837; regarded as preoccupied by *ACRODON* Zimm. (1832), a genus of beetles; *ADIAPNEUSTES* Gistel (1848) being suggested as substitute. But *THECTODUS* Meyer & Plieninger (1844) is earlier than *ADIAPNEUSTES*.
Hoplopteryx Agassiz, IV, 4; logotype *H. ANTIQUUS* Ag. (fossil).
Sphenocephalus Agassiz, IV, 4; orthotype *S. FISSICAUDUS* Ag. (fossil).
Acanus Agassiz, IV, 4; logotype *A. OVALIS* Ag. (fossil). (Printed first without explanation in *Neues Jahrb.*, 1834, 305).
Acrogaster Agassiz, IV, 5; orthotype *A. PARVUS* Ag. (fossil).
Podocys Agassiz, IV, 5, 135; orthotype *P. MINUTUS* Ag. (fossil).
Sparnodus Agassiz, IV, 10; orthotype *SPARUS MACROPHthalmus* Volta (fossil). (Printed first without definition, *Neues Jahrb.*, 1835, 300.)
Callipteryx Agassiz, IV, 12; logotype *C. SPECIOSUS* Ag. (fossil). (Also printed as name only in *Neues Jahrb.*, 1835, 293.)
Semiophorus Agassiz, IV, 14; orthotype *KURTUS VELIFER* Volta (fossil).
Pygæus Agassiz, IV, 16, 256; logotype *P. COLEANUS* Ag. (fossil).
Macrostoma Agassiz, IV, 15, 260; orthotype *M. ALTUM* Ag. (fossil). (Name twice preoccupied.)

223. BUCKLAND (1838). *On the Discovery of Fossil Fishes in the Bagshot Sands at Goldworth Hill, Four Miles North of Guildford.* Proc. Geol. Soc. London, II.

WILLIAM BUCKLAND (1784-1856).

- Edaphodon** Buckland, II, 687; logotype *CHIMERA MANTELLI* Buckland (fossil). According to Dr. L. Hussakof, the following genera based on Chimæroid teeth are all synonyms of *EDAPHODON*, namely, *ISCHYODUS*, *EUMYLODUS*, *PASSALODON*, *PSITTACODON*, *DIPRISTIS*, *DIPHRISSA* and *BRYACTINUS*.
Passalodon Buckland, II, 687; orthotype *CHIMERA AGASSIZI* Buckland (fossil). A synonym of *EDAPHODON*.
Ameibodon Buckland. This name is quoted by Agassiz from the *Proc. Zool. Soc. London*, 1839. I do not find it there.

224. COCCO (1838). *Su di alcuni salmonidi del mare di Messina; lettera al Ch. D. Carlo Luciano Bonaparte.* Nuovi Ann. Sci. Nat., II.

ANASTASIO COCCO.

- Gymnocephalus** Cocco, 26; orthotype *G. MESSINENSIS* Cocco. Name preoccupied; a synonym of *CENTROLOPHUS* Lac.
Mauroliscus Cocco, 32; orthotype *M. AMETHYSTINOPUNCTATUS* Cocco.
Odontostomus Cocco, 32; orthotype *O. HYALINUS* Cocco. Regarded as preoccupied by *ODONTOSTOMUS* (1887), a genus of mollusks; replaced by *EVERMANNELLA* Fowler.

225. GRAY (1838). (*Araçana*.) Ann. Hist., I.
JOHN EDWARD GRAY.
Araçana Gray, I, 110; logotype *A. ORNATA* Gray. (Printed without description in 1833.)
226. HECKEL (1838). *Fische aus Caschmir gesammelt und herausgegeben von Carl Freiherrn von Hügel*, etc. Wien.
JOHANN JAKOB HECKEL.
Schizothorax Heckel, 11; logotype *S. PLAGIOSTOMUS* Heckel as fixed by Bleeker, 1863; limited by Günther in 1868 to *S. CURVIFRONS*, etc. Same as *OREINUS* McCl., which it replaces if valid
227. LOWE (1838). *Piscium Maderensium species quædam novæ vel minus rite cognita breviter descriptæ*, etc. Trans. Cambridge Phil. Soc., VI.
RICHARD THOMAS LOWE.
Polymixia Lowe, VI, 198; orthotype *P. NOBILIS* Lowe.
228. MÜLLER & HENLE (1838). *Systematische Beschreibung der Plagiostomen*. Berlin (1838 to 1841).
JOHANNES MÜLLER; FREDERICK GUSTAV JAKOB HENLE.
Chiloscyllium Müller & Henle, 17; logotype *SCYLLIUM PLAGIOSUM* Bennett.
Crossorhinus Müller & Henle, 21; orthotype *SQUALUS BARBATUS* Gmelin. A synonym of *ORECTOLOBUS* Bon.
Stegostoma Müller & Henle 24; orthotype *SQUALUS FASCIATUS* Bloch.
Aprion Müller & Henle, 32; orthotype *CARCHARIAS ISODON* M. & H. Name preoccupied in fishes; replaced by *AFRIONODON* Gill, 1861.
Hypoprion Müller & Henle, 34; orthotype *CARCHARIAS MACLOTI* M. & H.
Prionodon Müller & Henle, 36; logotype *SQUALUS GLAUCUS* L. Preoccupied; replaced by *PRIONACE* Cantor, 1849.
Triakis Müller & Henle, II, 36; orthotype *T. SCYLLIUM*. Spelled *TRIACIS* by authors.
Triænodon Müller & Henle, 55; orthotype *CARCHARIAS OBESUS* M. & H.
Galeocerdo Müller & Henle, 59; orthotype *G. TIGRINUS* M. & H.
Loxodon Müller & Henle, 61; orthotype *L. MACRORHINUS* M. & H.
Thalassorhinus Müller & Henle, 62; orthotype *T. VULPECULA* M. & H.
Carcharodon (Smith) Müller & Henle, 70; orthotype *C. RONDELETI* M. & H. = *SQUALUS CARCHARIAS* L.
Alopecias Müller & Henle, 74; orthotype *SQUALUS VULPES* Gmelin = *S. VULPINUS* Bonnaterre. A revised spelling of *ALOPIAS* Raf.
Triglochis Müller & Henle, II, 88; orthotype *SQUALUS FEROX* Risso. A synonym of *ODONTASPIS* Ag. and of *CARCHARIAS* Raf.
Centrophorus Müller & Henle, 89; logotype *C. GRANULATUS* M. & H. Perhaps a synonym of *DALATIAS* Raf.
Læmargus Müller & Henle, 93; orthotype *SQUALUS BOREALIS* Scoresby. A synonym of *SOMNIOSUS* Le Sueur.
Pristiophorus Müller & Henle, 98; orthotype *PRISTIS CIRRATUS* Latham.
Rhynchobatis Müller & Henle, 111; orthotype *RHINOBATUS LÆVIS* Bl. & Schn.
Syrrhina Müller & Henle, 113; logotype *S. COLUMNÆ* M. & H. as restricted by Jordan & Evermann, 1896, the earliest definite restriction I have found. Garman, 1912, indicates *SYRRHINA BREVIROSTRIS* M. & H. as type. This is a species referred to *ZAPTERYX* J. & G. As here understood, *SYRRHINA* is a synonym of *RHINOBATUS*.
Trygonorhina Müller & Henle, 124; orthotype *T. FASCIATA* M. & H.

Platyrhina Müller & Henle, 125; logotype RAJA SINENSIS Lac. Name regarded as preoccupied by PLATYRHINUS; replaced by ANALITHIS Gistel (1848) and later by DISCOBATUS Garman (1881).

Astrape Müller & Henle, 130; logotype RAJA CAPENSIS Gmelin. A synonym of NARKE Kaup, 1826.

Uraptera Müller & Henle, 155; logotype U. AGASSIZI M. & H.

Sympterygia Müller & Henle, 155; orthotype S. BONAPARTII M. & H.

Pteroplatea Müller & Henle, 168; orthotype RAJA ALTAVELA L.

Hypolophus Müller & Henle, 170; orthotype RAJA SEPHEN Forskål. A synonym of PASTINACHUS Rüppell, if this name is accepted (not PASTINACA Nardo).

Tæniura Müller Henle, 171; logotype RAJA LYMMA Forskål.

Urolophus Müller & Henle, 173; logotype RAJA CRUCIATA Lac.

Trygonoptera Müller & Henle, 174; orthotype T. TESTACEA M. & H.

Aëtoplatea Müller & Henle, 175; orthotype A. TENTACULATA M. & H.

Ceratoptera Müller & Henle, 186; orthotype CEPHALOPTERA VAMPYRUS Mitchill. A synonym of MANTA Bancroft

Centroscyllium Müller & Henle, 191; orthotype SPINAX FABRICII Reinh.

229. MÜLLER & HENLE (1838). (*Plagiostomen.*) Charlesworth's Magazine of Natural History, 1838.

JOHANNES MÜLLER; FRIEDRICH HENLE.

Leptocharias Müller & Henle, II, 36; orthotype TRLENODON SMITHI Gray. Same as LEPTOCARIAS Smith, 1837.

230. NORDMANN (1838). *Bericht an die kaiserliche Akademie der Wissenschaften, über eine neue Fischgattung (Hexacanthus) aus der Familie der Gobioiden.* Bull. Acad. Sci. St. Petersb., III.

ALEXANDER VON NORDMANN.

Hexacanthus Nordmann; orthotype GOBIUS MACROCEPHALUS Pallas. Name regarded as preoccupied by HEXACANTHA; replaced by BENTHOPHILUS Eichw.

231. REINHARDT (1838). *Ichthyologische bidrag til den Grønlandske fauna,* etc. Danske Vid. Selsk. Afh. Kjöbenhavn, VII.

JOHANNES CHRISTOPHER HAGEMANN REINHARDT.

Himantolophus Reinhardt, 74; orthotype H. GRÖNLANDICUS Reinh.

Citharus Reinhardt, 116; orthotype PLEURONECTES PLATESSOIDES Fabricius, not of Röse, 1793, nor of Bleeker, 1862. A synonym of HIPPOGLOSSOIDES Gottsche.

Gymnelis Reinhardt, VII, 130; orthotype OPHIDIUM VIRIDE Fabricius.

Lycodes Reinhardt, VII, 153; logotype L. VAHLI Reinh.

232. SWAINSON (1838). *The Natural History of Fishes, Amphibians and Reptiles, or Monocardian Animals.* I.

WILLIAM SWAINSON (1789-1855).

Pedalion (Guilding) Swainson, I, 199; II, 195, 329; orthotype (TETRODON MOLA L.). A synonym of MOLA Kölr.

Ariosoma Swainson, I, 220; II, 195; (no type named); logotype, as restricted by Bleeker and by Swain, OPHISOMA ACUTA Sw. = MURÆNA BALEARICA De la Roche; replaced by OPHISOMA Sw., on II, 334; a name preoccupied; replaced by CONGERMURÆNA Kaup and CONGRELLUS Ogilby. Several other generic names defined by Swainson in Vol. II (1839) are casually mentioned with a few words of comparison. Thus BREVICEPS (238, 343, 345), CYPsilURUS (I, 299). But when no question of priority arises, these need not be mentioned further.

- Breviceps** Swainson, I, 328; II, 189; orthotype *B. FILAMENTOSUS* Sw. = *ARIUS BAHIENSIS* Castelnau. Name preoccupied; replaced by *FELICHTHYS* Sw. II, 305. A synonym of *BAGRE* (Cuv.) Oken, as restricted to its tautotype.

 1839

233. AGASSIZ (1839). *Künstliche Steinkerne von Conchylien und Fische*. Neues Jahrb. Mineral.
LOUIS AGASSIZ.
Eugnathus Agassiz, 118; logotype *E. MINOR* Ag. (fossil); regarded as preoccupied by *EUGNATHA*; replaced by *FURO* Gistel (1848).
234. AGASSIZ (1839). *Fishes of the Old Red Sandstone*. In Murchison's *Silurian System*.
LOUIS AGASSIZ.
Holoptychus Agassiz, 68; orthotype *H. NOBILISSIMUS* Ag. (fossil). Usually written *HOLOPTYCHIUS*.
Sclerodus Agassiz, 606; orthotype *S. PUSTULIFERUS* Ag.
Thelodus Agassiz, 606; orthotype *T. PARVIDENS* Ag. (fossil).
Plectrodus Agassiz, 606, 704; logotype *P. MIRABILIS* Ag. (fossil). A synonym of *SCLERODUS* Ag.
Sphagodus Agassiz (not quoted by Woodward). Name of an Ichthyodorulite or fossil fin-spine.
235. AGASSIZ (1839). *Recherches sur les poissons fossiles*. II, IV (part).
LOUIS AGASSIZ.
Sphærodus Agassiz, II, 215; logotype *S. CONICUS* Ag. (fossil). Not *SPHÆRODON* Rüppell.
Pristigenys Agassiz, IV, 136 orthotype *P. MACROPHTHALMUS* Ag. (fossil). (Printed as name only in *Neucs Jahrb.*, 1835, 299.)
Ptychodus Agassiz, III, 150; orthotype *P. MAMMILARIS* Ag. (fossil).
Odonteus Agassiz, IV, 178; orthotype *O. SPAROIDES* Ag. (fossil).
Pterygocephalus Agassiz, IV, 190; orthotype *P. PARADOXUS* Ag. (fossil). (Also as name only, *Neucs Jahrb.*, 1835, 295.)
236. BONAPARTE (1839). *Systema Ichthyologicum*. Mem. Sci. Nat. Neuf châtél, II, 1839.
CHARLES LUCIEN BONAPARTE.
Pristidurus Bonaparte, II, 11; orthotype *GALEUS MELASTOMUS* Raf. Commonly written *PRISTIURUS*, but the form here given is apparently earlier.
237. CUVIER & VALENCIENNES (1839). *Histoire naturelle des poissons*. XIII, XIV.
ACHILLE VALENCIENNES.
Cossyphus Cuvier & Valenciennes, XIII, 102; logotype *BODIANUS BODIANUS* Bloch. Identical with *BODIANUS* Bloch, as restricted, and *HARPE* Lac. The name *COSSYPHUS* is also preoccupied.
Acantholabrus Cuvier & Valenciennes, XIII, 242; logotype *LUTJANUS PALLONI* Risso.
Ctenolabrus Cuvier & Valenciennes, XIII, 223; logotype *LABRUS RUPESTRIS* L.
Bagrus Cuvier & Valenciennes, XIV, 388; logotype *SILURUS BAJAD* Forskål, not *BAGRE* (Cuv.) Oken, which is *FELICHTHYS* Sw. *BAGRUS* is regarded as

preoccupied by BAGRE, both being forms of "Les BAGRES" Cuv. If so, it is replaced by PORCUS Geoffroy St. Hilaire, 1818.

238. LAY & BENNETT (1839). *Fishes*. (In the *Zoology of Captain Beechey's Voyage*.)

G. T. LAY; EDWARD TURNER BENNETT.

Peropus Lay & Bennett, 59; orthotype BLEPSIAS BILOBUS Cuv. & Val. Name preoccupied; replaced by HISTIOCOTTUS Gill, 1888.

239. LOWE (1839). *A Supplement to a Synopsis of the Fishes of Madeira*. Proc. Zool. Soc. London, VII.

RICHARD THOMAS LOWE.

Callanthias Lowe, 76; orthotype C. PARADISÆUS = BODIANUS PELORITANUS Cocco.

Aphanopus Lowe, 79; orthotype A. CARBO Lowe.

Pompilus Lowe, 81; orthotype CORYPHÆNA POMPILUS L. = POMPILUS RONDELETI Lowe. A synonym of CENTROLOPHUS Lac.

Alysia Lowe, 87; orthotype A. LORICATA Lowe = SCOPELUS COCCOI Cocco. Name preoccupied; replaced by RHINSCOPELUS Lütken.

Acanthidium Lowe, 91; logotype A. PUSILLUM Lowe, as restricted by Jordan and Evermann, 1896. Garman, 1913, chooses the second species named by Lowe, A. CALCEUS, a species of DEANIA, as the type. As first restricted, ACANTHIDIUM is a synonym of ETMOPTERUS Raf.

240. McCLELLAND (1839). *Indian Cyprinida*. Asiatic Researches, XIX.

JOHN McCLELLAND (1805-1875).

Oreinus McClelland, 273; logotype O. GUTTATUS McCl. Regarded by Gistel as preoccupied by OREINA, the name ENGLOTTOGASTER substituted for it. Probably a synonym of SCHIZOTHORAX Heckel.

Systemus McClelland, 284; logotype S. IMMACULATUS McCl.

Perilampus McClelland, 288; logotype CYPRINUS DEVARIO Ham. A synonym of BARILIUS.

Opsarius McClelland, 295; logotype O. MACULATUS McCl. Apparently a synonym of BARILIUS Ham.

Psilorhynchus McClelland, 300; logotype CYPRINUS SUCATIO Ham. A synonym of HOMALOPTERA Van Hasselt.

Aplocheilus McClelland, 301; logotype A. CHRYSOSTIGMUS McCl. = ESX PANCHAX Ham. Name corrected to HAPLOCHILUS Günther.

Schistura McClelland, 306; logotype COBITIS RUPECUA McCl. A synonym of BARBATULA Linck.

Gonorhynchus McClelland, 373; logotype G. BREVIS McCl. Not GONORHYNCHUS of Gronow and Scopoli (1777). A synonym of CROSSOCHEILUS Van Hasselt.

Hymenophysa McClelland, 443; logotype COBITIS DARIO Ham. Corrected to HYMENOPHYSA by Günther; a synonym of BOTIA Gray.

241. McCLELLAND (1839). *Observations on Six New Species of Cyprinida with an Outline of a New Classification of the Family*. Journ. Asiatic Soc. Benal, VIII, 941-947.

JOHN McCLELLAND.

Platycara McClelland, VIII, 947; orthotype P. NASUTA McCl. A synonym of GARRA Ham., and DISCOGNATHUS Heckel.

242. MITCHELL (1839). *Three Expeditions into the Interior of Eastern Australia*. Ed. II.

JAMES MITCHELL.

Tandanus Mitchell, I, 95; orthotype *PLOTOSUS TANDANUS* Mitchell; replaces *COPIDOGLANIS* Gthr., 1864.

243. MÜLLER (1839). *Vergleichende Anatomie der Myxinoiden, der Cyclostomen mit durchbohrten Gaumen*. IV. *Ueber das Gefäß System*. Abh. Akad. Wiss. Berlin, 1839.

JOHANNES MÜLLER.

Heteropneustes Müller, 243; orthotype *SILURUS FOSSILIS* Bloch. Said to be the same as *SILURUS SINGIO* Ham., 243 (also in *Wieg. Arch.*, 1839, 115). Replaces *SACCOBRANCHUS* Cuv. & Val., 1848.

Amphipnous Müller, 244; orthotype *UNIBRANCHAPERTURA CUCHIA* Ham.

Physogaster Müller, 252; orthotype *TETRAODON LUNARIS* Bl. & Schn. Name pre-occupied; replaced by *GASTROPHYSUS* Müller. A synonym of *LAGOCEPHALUS* Swain.

Arothron Müller, 252; orthotype *A. TESTUDINARIUS* Müller = *TETRAODON RETICULARIS* Bl. & Schn. A synonym of *OVOIDES* Dum.

Cheilichthys Müller, 252; orthotype *TETRAODON TESTUDINEUS* L. A synonym of *SPHEROIDES* Dum.

Chelonodon Müller, 252; orthotype *TETRODON PATOCA* Ham.

244. MÜNSTER (1839). *Ueber einige merkwürdige Fische aus dem Kupferschiefer und dem Muschelkalk*. Beiträge zur Petrefactenkunde.

GEORG MÜNSTER.

Ascalabos Münster, I, 112; orthotype *A. VOITHI* Münster (fossil). A synonym of *LEPTOLEPIS*.

245. NARDO (1839). *Considerazioni sulla famiglia dei pesci Mola, e sui caratteri che li distinguono*. Ann. Sci. Lombardo-Veneto, X.

GIOVANNI DOMENICO NARDO.

Pallasia Nardo, V, 10, 112; orthotype *P. PALLASI* Nardo. A larval form of *MOLA* Kölz.

Ranzania Nardo, V, 10, 105; orthotype *TETRAODON TRUNCATUS* Retzius.

246. OWEN (1839). *On a New Species of the Genus Lepidosiren of Fitzinger and Natterer, L. Annectens*. Proc. Linn. Soc. London, 1839, I, 27-32.

RICHARD OWEN (1810-1890).

Protopterus Owen, 27; orthotype *LEPIDOSIREN ANNECTENS* OWEN.

247. OWEN (1839). (*Fossil Fishes*.) Report British Association for 1838 (1839).

RICHARD OWEN.

Dictyodus Owen, 142; orthotype *D. DESTRUCTOR* Owen (fossil) (1854).

248. RANZANI (1839). *Dispositio familiae Molarum in genera et in species*. Novi Comment. Acad. Sci. Inst. Bonon., III.

CAMILLO RANZANI.

Ozodura Ranzani, 81; orthotype *O. ORSINI* Ranzani = *MOLA MOLA* (L.). A synonym of *MOLA* Kölz.

Tympanomium Ranzani, 81; orthotype *T. PLANCI* Ranzani. A synonym of *MOLA*.

Trematopsis Ranzani, 81; orthotype *T. WILLUGHBEI* Ranzani. A synonym of *MOLA*.

249. RICHARDSON (1839). *Description of Fishes Collected at Port Arthur in Van Diemen's Land*. Proc. Zool. Soc. London, VII.

JOHN RICHARDSON.

Latris Richardson, 98; orthotype *L. HECATEIA* Rich.

Nemadactylus Richardson, 98; orthotype *N. CONCINNUS* Rich. Spelled *NEMATO-DACTYLUS* by Gill.

250. STORER (1839). *A Report on the Fishes of Massachusetts*. Boston Journ. Nat. Hist., II.

DAVID HUMPHREYS STORER (1804-1891).

Cryptacanthodes Storer, 28; orthotype *C. MACULATUS* Storer.

251. SWAINSON (1839). *The Natural History of Fishes, Amphibians and Reptiles or Monocardian Animals*. II.

WILLIAM SWAINSON.

In a review of Swainson's *Genera of Fishes*, Proc. Acad. Nat. Sci. Phila., 1882, page 272, Dr. Joseph Swain has made identifications of all of the series Swainson's genera, indicating a logotype for each. This designation of type must stand in every case, except when a prior indication has been made, as was done in a few cases by Bonaparte and by Bleeker. Swainson's work is perhaps the last and certainly the most unwelcome of an unfortunate series to which belong Scopoli's *Introductio*, Fischer's *Zoognosia*, Rafinesque's *Analyse de la Nature*, works which treat of the whole scope of Ichthyology, adding new genera here and there, but without special investigation of the animals concerned, leaving their generic names imperfectly defined as a burden to the real students who must give to these names their final meaning. Of the 153 new names introduced by Swainson, about 30 must be retained on the score of priority of date, but there is not a dozen of the whole number based on any clear understanding of the relations of the species indicated. In Chapter I of Vol. 2, on pages 167 to 197, Swainson gives an analytical key to the genera he recognizes. In this part no species are mentioned and in several cases the genera bear other names when they appear later in the regular text in Chapter II of Vol. 2 (197-339).

Erosa Swainson, II, 61; tautotype *SYNANCEIA EROSA* Langsdorff; type not indicated but understood from context, and from the generic name chosen. The genus is valid and was revived by Jordan & Starks (1904).

Trichosomus Swainson, II, 61, 265; logotype *APISTUS TRACHINOIDES* Cuv. & Val. Accidentally spelled also *TRICHOPIASIA* on page 61. Regarded as preoccupied by *TRICHOSOMA*, a genus of worms, and by *TRICHOSOMUS*, a genus of beetles; replaced by *VESPICULA* Jordan & Rich. *PROSOPODASY* Cantor, originally a substitute name for *APISTUS*, is transferred by Günther to *A. TRACHINOIDES*, an arrangement apparently not allowable, as Cuvier does not mention that species among "les *APISTES*". *TRICHOPIASIA*, an error, not a new name, seems also ineligible.

Trichophasia Swainson, II, 61; (used evidently by error of proof-reader for *TRICHOSOMUS*) which form appears before and after on page 61 and formally on page 279.

Clinitrachus Swainson, II, 75; II, 276; orthotype (on p. 75) *BLENNIUS VARIABILIS* Raf., a species not mentioned on page 276, hence *B. SUPERCILIOSUS* L., a species of *CLINUS*, was indicated as type by Swain. A synonym of *CRISTICEPS* Cuv. & Val. (1836).

- Blennitrachus** Swainson, II, 78; II, 274; orthotype *PHOLIS QUADRIFASCIATUS* Wood. A synonym of *CHASMODES* Cuv.
- Cichlaurus** Swainson, II, 173; haplotype (230) *LABRUS PUNCTATUS* Bloch. Later called *CICHLASOMA*, which name it should replace.
- Dendrochirus** Swainson, II, 180; logotype *PTEROIS ZEBRA* Cuv. & Val.
- Pteropterus** Swainson, II, 180; logotype (p. 264) *PTEROIS RADIATUS* Cuv. & Val. A synonym of *PTEROIS* Cuv.
- Psilosomus** Swainson, II, 183; logotype *TÆNIODES HERRMANNIANUS* Lac. A synonym of *TÆNIODES* Lac.
- Gobileptes** Swainson, II, 183; no type named; orthotype intended (as is evident from Swainson's description) *GOBIOUS ACUTIPINNIS* Cuv. & Val. "like *GOBIOUS*, but the caudal lanceolate and the scales large". Bleeker (1876) has, however, fixed the type, none having been named before, on *GOBIOUS BATO* Ham. This raises a question in nomenclature already noted under *APOCRYPTEUS* (1837).
- Salmostoma** Swainson, II, 184; logotype *CYPRINUS BACAILA* Ham, on page 284, where the genus is called *SALMOPHASIA*. Replaces *SECURICULA* Gthr., 1868.
- Scrophicephalus** Swainson, II, 187; no type named, *MORMYRUS CASCHIVE* Hasselquist intended ("dorsal fin single, very long; snout produced"). A synonym of *MORMYRUS* L., as restricted by Gill (1862).
- Ariosoma** Swainson, II, 194; logotype as restricted by Bleeker, 1864, *OPHISOMA ACUTA* Sw. = *MURENA BALEARICA* De la Roche. Replaces *CONGERMURENA* Kaup (1856) and *CONGRELLUS* Ogilby 1898.
- Leiodon** Swainson, II, 194; logotype *LEIOSOMUS MARMORATUS* Sw. = *TETRAODON CUTCUTIA* Ham., as defined by Bleeker (1865). Swain restricts the name *LEIOSOMUS* as later substituted by Swainson for *LEIODON*, to *LEIOSOMUS LEVISSIMUS* Sw., which is *TETRAODON SPENGLERI* Bloch, a species of *SPHEROIDES*. *LEIODON* Sw. has precedence over *LEIODON* Owen, 1841, and replaces *MONOTRETA* Bibron.
- Canthigaster** Swainson, II, 194; logotype *TETRAODON ROSTRATUS* Bloch. Called *PSILONOTUS* later in the text; replaces *ANOSMIUS* Peters.
- Cromileptes** Swainson, II, 201; logotype *SERRANUS ALTIVELIS* Cuv. & Val. Restricted by Bleeker (1875) to *S. ALTIVELIS*, thus replacing *SERRANICHTHYS* Blkr. Later restricted by Swain to *EPINEPHELUS GIGAS*.
- Cynichthys** Swainson, II, 201; haplotype *PERCA FLAVOPURPUREA* Bennett = *HOLOCENTRUS FLAVOCERULEUS* Lac. A synonym of *EPINEPHELUS* (not *PLECTORHYNCHUS* as stated by Swain).
- Variola** Swainson, II, 202; haplotype *V. LONGIPINNA* Sw. = *PERCA LOUTI* Forskål.
- Uripheæton** Swainson, II, 202; orthotype *SERRANUS PHAËTON* Cuv. & Val. = *U. MICROLEPTES* Sw. This genus is based on a made-up fish, a *CEPHALOPHOLIS*, with the tail of a *FISTULARIA* attached. A synonym of *CEPHALOPHOLIS* Bl. & Schn.
- Elastoma** Swainson, II, 202; type *ETELIS OCLATUS* (Cuv. & Val.). A synonym of *ETELIS* Cuv.
- Rabdophorus** Swainson, II, 211; haplotype *CHÆTODON EPHIPIUM* Bloch. A subdivision of *CHÆTODON*.
- Genicanthus** Swainson, II, 212; logotype *HOLACANTHUS LAMARCKI* (Cuv.) A synonym of *HOLACANTHUS* Lac.
- Microcanthus** Swainson, II, 215; haplotype *CHÆTODON STRIGATUS* Cuv., a wilful misprint for *MICRACANTHUS*.

- Chrysiptera** Swainson, II, 216; logotype GLYPHIDODON AZUREUS Q. & G. A subgenus under ABUEFFDUF.
- Microgaster** Swainson, II, 216; haplotype ETROPLUS CORUCHI Cuv. & Val. = CHÆTODON MACULATUS Bloch. Equivalent to PARETROPLUS Blkr. A synonym of ETROPLUS Cuv. & Val. as restricted.
- Chætolabrus** Swainson, II, 216; logotype CHÆTODON SURATENSIS Bloch. A synonym of ETROPLUS Cuv.
- Chrysoblephus** Swainson, II, 221; haplotype SPARUS GIBBICEPS Cuv. A section under SPARUS L.
- Argyrops** Swainson, II, 221; haplotype SPARUS SPINIFER Forskål. A section under SPARUS L.
- Calamus** Swainson, II, 221; haplotype PAGELLUS CALAMUS Cuv. & Val. = CALAMUS MEGACEPHALUS Sw.
- Lithognathus** Swainson, II, 222; haplotype SPARUS CAPENSIS Cuv.
- Nemipterus** Swainson, II, 223; haplotype DENTEX FILAMENTOSUS Cuv. Replaces SYNAGRIS Gthr., 1859.
- Thalassoma** Swainson, II, 224; haplotype LABRUS PURPUREUS Rüppell. Stands in place of JULIS Gthr., not of Cuvier.
- Urichthys** Swainson, II, 224; logotype LABRUS LUNULATUS Rüppell. A synonym of CHEILINUS Lac.
- Crassilabrus** Swainson, II, 225; haplotype CHEILINUS UNDULATUS Rüppell. A section under CHEILINUS Lac.
- Leptoscarus** Swainson, II, 226; haplotype SCARUS VAIGIENSIS Q. & G. = SCARUS SPINDENS Cuv. = CALLIODON VAIGIENSIS Cuv. & Val. Replaces CALOTOMUS Gilbert, and CALLIODON Cuv.; not CALLYODON of Gronow nor CALLIODON of Bl. & Schn.
- Hemistoma** Swainson, II, 226; haplotype SCARUS PEPO Bennett = HEMISTOMA RETICULATA Sw. A synonym of CALLYODON GRONOW or SCARUS Forskål.
- Erychthys** Swainson, II, 226; logotype LABRUS CROICENSIS Bloch. A synonym of CALLYODON GRONOW or SCARUS Forskål.
- Petronason** Swainson, II, 226; logotype CORYPHÆNA PSITTACUS L. as restricted by Bleeker and by Swain. A synonym of CALLYDODON or SCARUS.
- Pachynathus** Swainson, II, 226 (misprint for PACHYGNATHUS); haplotype P. TRIANGULARIS Sw., based on RAHTEE YELLAKAH Russell = BALISTES CAPISTRATUS Shaw. Name preoccupied as PACHYGNATHUS; replaced by SUFFLAMEN Jordan, 1917. The International Commission of Nomenclature has decided that PACHYGNATHUS is to be regarded as a misprint, hence identical with PACHYGNATHUS.
- Chlorurus** Swainson, II, 227; haplotype SCARUS GIBBUS Rüppell. A synonym of CALLYODON or SCARUS.
- Amphiscarus** Swainson, II, 227; SCARUS FUSCUS Griffith. A synonym of SIGANUS Forskål.
- Sparisoma** Swainson, II, 227; haplotype SCARUS ABILDGAARDI Bloch. Equivalent to SCARUS Gthr., which it replaces; not SCARUS of Forskål, which should stand as CALLYODON GRONOW, if Gronow's names are allowed.
- Hemiulis** Swainson, II, 228; logotype LABRUS GUTTATUS Bloch, as restricted by Bonaparte (*Fauna Italica*, 1841). Swain (1882) chose CHEILIO AURATUS Q. & G. as type regarding HEMIULIS as a synonym of CHEILIO. If HALICHÆRES Rüppell is regarded as preoccupied by HALICHÆRUS, HEMIULIS must replace it instead of CHÆROJULIS Gill.

- Cynædus** Swainson, II, 229; logotype *LABRUS RUPESTRIS* Bloch, as restricted by Bonaparte. *LABRUS TINCA*, as restricted by Swain. Swainson offers this name as a substitute for *CRENILABRUS* Cuv., of which he wrongly assigns *LUTIANUS VERRES*, a *BODIANUS*, as type. *CYNÆDUS* SW. (not of Gronow or Scopoli) is a synonym of *CTENOLABRUS* Cuv. & Val.
- Astronotus** Swainson, II, 229; haplotype *LOBOTES OCELLATUS* Spix. Replaces *ACARA* Heckel and *HYGROGONUS* Gthr., 1862.
- Thalliurus** Swainson, II, 230; haplotype *LABRUS BLOCHI* = *LABRUS FULIGINOSUS* Lac. Replaces *HEMIGYMNUS* Gthr., 1864.
- Labristoma** Swainson, II, 230; logotype *PSEUDOCROMIS OLIVACEUS* Rüppell. A needless substitute for *PSEUDOCROMIS* Rüppell, 1835.
- Cichlasoma** Swainson, II, 230; haplotype *LABRUS PUNCTATUS* Bloch. Called *CICHLAURUS* on page 173; equivalent to *HEROS* Heckel (1840) as restricted; apparently *CICHLAURUS* should stand.
- Ichthycallus** Swainson, II, 232; logotype *LABRUS JULIS* L., as restricted by Bonaparte (1839). Swain has chosen (1882) *LABRUS SEMIPUNCTATUS* as type, a species of *CORIS* Lac. Jordan later took the first species named, *DIMIDIATUS*, as type, a species of *IRIDIO*. *ICHTHYCALLUS* is a synonym of *JULIS* Cuv. & Val. "CHLORICHTHYS and *ICHTHYCALLUS*, confused jumble of species, may well be disposed of as synonyms of *THALASSOMA* and *CORIS*, respectively, although several other genera are represented in each." (Swain.)
- Eupemis** Swainson, II, 232; haplotype *LABRUS FUSIFORMIS* Rüppell. A synonym of *CHELIO* Lac.
- Chlorichthys** Swainson, II, 232; logotype *LABRUS BIFASCIATUS* Bloch, as restricted by Swain. Bonaparte selects as type *LABRUS PAVO* Hasselquist, a species not mentioned by Swainson. A synonym of *THALASSOMA* Sw.
- Zanclurus** Swainson, II, 239; type *HISTIOPHORUS INDICUS* Cuv. & Val. A synonym of *ISTIOPHORUS* Lac.
- Zyphothyca** Swainson, II, 239; type *GEMPYLUS COLUBER* Cuv. & Val.; for *XIPHO- THECA* Montague. A synonym of *GEMPYLUS* Cuv.
- Leiurus** Swainson, II, 242; logotype *GASTEROSTEUS ACULEATUS* L. A synonym of *GASTEROSTEUS* L.
- Polycanthus** Swainson, II, 242; type *GASTEROSTEUS SPINACHIA* L. A synonym of *SPINACHIA* Fleming, 1825. *POLYCANTHUS* is also preoccupied.
- Chirostoma** Swainson, II, 242; haplotype *ATHERINA HUMBOLDTIANA* Cuv. & Val.
- Meladerma** Swainson, II, 243; haplotype *M. NIGERRIMA* Sw. = *ELACATE PONDICERRIANA* Cuv. & Val. A synonym of *RACHYCENTRON* Kaup (1826), and of *ELACATE* Cuv. (1831).
- Platylepes** Swainson, II, 247; haplotype *SCOMBER LACTARIUS* Bl. & Schn. A synonym of *LACTARIUS* Cuv. & Val.
- Argyrlepes** Swainson, II, 247; haplotype *ARGYRLEPES INDICA* Sw., based on *MITTA PARAH* of Russell, pl. 156, a species of *LEIOGNATHUS*. A synonym of *LEIOGNATHUS* Lac.
- Alepes** Swainson, II, 248; haplotype *ALEPES MELANOPTERA* Sw., based on *WORI PARAH* Russell, pl. 155, apparently the same as *CARANX NIGRIPINNIS* Day, a species of *HEMICARANX*; apparently replaces *HEMICARANX* Blkr.
- Zonichthys** Swainson, II, 248; type *SCOMBER FASCIATUS* Bloch. A section or subgenus under *SERIOLA*.
- Hamiltonia** Swainson, II, 250; logotype *H. OVATA* Sw. = *CHANDA NAMA* Ham. (fig. 37) as fixed by Swain (1882). *HAMILTONIA* is given as a substitute for

CHANDA Ham., and the fixation of type for the substitute decides that of the original name. CHANDA NAMA is the orthotype of BOGODA Blkr., a genus well defined, AMBASSIS BOGODA being the type species. Swainson's second species, CHANDA LALA Ham., which he spells LATA, belongs to Bleeker's genus PSEUDAMBASSIS. This was chosen as type of CHANDA by Fowler, and still later C. RUCONIUS by Jordan, but Swain's choice of type must hold. HAMILTONIA and BOGODA are therefore both synonyms of CHANDA Ham.

- Platysomus** Swainson, II, 250; logotype VOMER BROWNI Cuv. & Val. A synonym of VOMER; name preoccupied.
- Ctenodon** Swainson, II, 255; logotype CTENODON RUPPELLI Sw. = CHETODON SOHAL Forskål, not CTENODON BOI. nor of Ehrenberg. A synonym of HEPATUS Gronow, TEUTHIS L. and ACANTHURUS Forskål.
- Callicanthus** Swainson, II, 256; haplotype ASPISURUS ELEGANS Rüppell = HARPURUS LITURATUS Forster. A section or genus near NASO.
- Zebrosoma** Swainson, II, 256; haplotype ACANTHURUS VELIFER Bloch.
- Xiphichthys** Swainson, II, 259; haplotype GYMNETRUS RUSSELLI Shaw. A synonym of REGALECCUS Brünnich. (Also, II, 46.)
- Xiphasia** Swainson, II, 259; type "XIPHASIA SETIFER" Sw. Replaces NEMOPHIS Kaup (1858) and XIPHOGADUS Gthr. (1862).
- Nemotherus** (Rafinesque) Swainson (II, 260); orthotype N. ERYTHROPTERUS Raf. Quoted from Rafinesque's *Specchio delle Scienze*, I, 101, 1815. This is evidently a slip for NEMOCHIRUS Raf. NEMOTHERUS (Risso) Costa is a synonym of TRACHYPTERUS. NEMOCHIRUS seems to be an ally of STYLEPHORUS, as yet unrecognized.
- Ornichthys** Swainson, II, 262; logotype TRIGLA PUNCTATA Bloch. A synonym of PRIONOTUS Lac.
- Pteroleptus** Swainson, II, 264; haplotype PTEROLEPTUS LONGICAUDA Sw., (KODIPUNGI Russell). A synonym of PTEROIS Cuv.
- Macrochyrus** Swainson, II, 264; haplotype SCORPENA MILES Bennett. A synonym of PTEROIS Cuv.
- Brachyrus** Swainson, II, 264; logotype PTEROIS ZEBRA Cuv. & Val. A synonym of DENDROCHIRUS Sw., not BRACHYCHIRUS Nardo. Name spelled BRACHIRUS when first used, page 71.
- Pteropterus** Swainson, II, 264; haplotype PTEROIS RADIATUS Cuv. & Val.
- Platypterus** Swainson, II, 265; logotype TÆNIONOTUS LATOVITATUS Lac. Name preoccupied; replaced by TETRAROGE Gthr., 1860.
- Pterichthys** Swainson, II, 265; logotype SCORPENA CARINATA Bl. & Schm. A synonym of APISTUS Cuv., to be used if that name is regarded as preoccupied by APISTES, etc.; not PTERICHTHUS Commerson (1803), nor PTERICHTHYS Ag.
- Gymnapistes** Swainson, II, 265; logotype APISTUS MARMORATUS Cuv. & Val. Replaces PENTAROGE Gthr.
- Synanchia** ("Cuvier") Swainson, 268; a variant of SYNANCEJA: (S. EROSA).
- Bufichthys** Swainson, II, 268; logotype SCORPENA HORRIDA L. which is also type of SYNANCHIDIUM Müller, 1844. Where BUFICHTHYS is first mentioned on page 180 it has the definition still earlier assigned to EROSA and here given to "SYNANCHIA". Gill therefore regards it as a synonym of EROSA Sw., rather than as equivalent of SYNANCHIDIUM Müller.
- Trachicephalus** Swainson, II, 268; haplotype SYNANCEIA ELONGATA Cuv. & Val. Preoccupied by TRACHYCEPHALUS, 1838, a genus of reptiles. Replaced by POLYCAULUS Gthr.

- Ichthyscopus** Swainson, II, 269; logotype *URANOSCOPIUS INERMIS* Cuv. & Val. Replaces *ANEMA* Gthr.
- Enophrys** Swainson, II, 271; haplotype *COTTUS CLAVIGER* Cuv. & Val.
- Gymnocanthus** Swainson, II, 271; haplotype *COTTUS VENTRALIS* Cuv. & Val. Replaces *PHOBETOR* Kröyer, 1844, and *ELAPHOCOTTUS* Sauvage. This name should read *GYMNACANTHUS*. There seems to be no classical warrant for Swainson's persistent use of "CANTHUS" (ζάνφος, a donkey) to mean spine (ἄκανθα).
- Canthirhynchus** Swainson, II, 272; haplotype *COTTUS MONOPTERYGIUS* Bloch. A synonym of *ASPIDOPHOROIDES* Lac. (1802).
- Hippocephalus** Swainson, II, 272; logotype *AGONUS SUPERCILIOSUS* Pallas, as restricted by Gill, 1861. A synonym of *PERCIS* Scopoli (1777), not *PERCIS* of Klein, nor of Cuvier.
- Chirolophis** Swainson, II, 275; haplotype *BLENNIUS YARRELLI* Cuv. & Val. = *BLENNIUS ASCANII* Walbaum. Replaces *BLENNIOPS* Nilsson (1855) and *CARELOPHUS LOPHUS* Kröyer.
- Erpichthys** Swainson, II, 275; logotype *SALARIAS QUADRIPINNIS* Rüppell. A synonym of *SALARIAS* Cuv.
- Rupiscartes** Swainson, II, 275; haplotype *SALARIAS ALTICUS* Cuv. & Val. = *BLENNIUS TRIDACTYLUS* Bl. & Schn. Equivalent to *ALTICUS* Commerson, but the latter may not be eligible.
- Cirripectes** Swainson, II, 275; haplotype *SALARIAS VARIOLOUSUS* Cuv. & Val. A synonym of *ALTICUS* or *RUPISCARTES*.
- Blennophis** Swainson, II, 276; logotype *CLINUS ANGUILLARIS* Cuv. & Val., not *BLENNOPHIS* Val. (1844), which is *OPHIOBLENNIUS* Gill.
- Labrisomus** Swainson, II, 277; logotype *CLINUS PECTINIFER* Cuv. & Val. Often written *LABROSOMUS*; replaces *LEPISOMA* Dekay, 1842.
- Ophisomus** Swainson, II, 277; haplotype *BLENNIUS GUNNELLUS* L. Substitute for *GUNNELLUS* Cuv. & Val. A synonym of *PHOLIS* Scopoli (1777) and *MURENOIDES* Lac. (1803).
- Ognichodes** Swainson, II, 278; type *GOBIOIDES BROUSSONNETI* Lac., a needless substitute for *GOBIOIDES* Lac. Same as *AMBLYOPUS* Cuv. & Val.
- Scartelaos** Swainson, II, 279; logotype *GOBIOUS VIRIDIS* Ham. Replaces *BOLEOPS* Gill, 1863.
- Ruppellia** (misprinted *RUPELLIA*) Swainson, II, 281; orthotype *GOBIOUS ECHINOCEPHALUS* Rüppell. Preoccupied, replaced by *PARAGOBIODON* Blkr. (1879).
- Amphichthys** Swainson, II, 282; haplotype *BATRACHUS RUBIGENES* Sw., from Pernambuco. This fish is said to have but one dorsal fin and no teeth on the palate. It is undoubtedly based on *BATRACHUS CRYPTOCENTRUS* Cuv. & Val. It therefore replaces *MARCGRAVIA* Jordan (1886) as also the substitute name, *MARCGRAVICHTHYS* Ribeiro.
- Salmophasia** Swainson, II, 284; logotype *CYPRINUS BACALLA* Ham. (*S. OBLONGA* Sw.). Called *SALMOSTOMA* on page 184. A synonym of *SALMOSTOMA*, which replaces *SECURICULA* Gthr. 1868).
- Chedrus** Swainson, II, 285; haplotype *CHEDRUS GRAYI* Sw. = *CYPRINUS CHEDRA* Ham. A synonym of *BARILIUS* Ham.
- Esomus** Swainson, II, 285; haplotype *ESOMUS VITTATUS* Sw. = *CYPRINUS DAURICA* Ham. Replaces *NURIA* Cuv. & Val. (1842).
- Clupisudis** Swainson, II, 286; haplotype *SUDIS NILOTICA* Ehrenb. Replaces *HETEROTIS* Ehrenb. (1843).

- Laurida** Swainson, II, 287; logotype *SALMO FÆTENS* L. A synonym of *SYNODUS* Bl. & Schn.
- Triurus** Swainson, II, 288; haplotype *TRIURUS MICROCEPHALUS* Sw. = *OSMERUS NEHEREUS* Ham. A synonym of *HARPODON* Le Sueur. Preoccupied by *TRIURUS* Lac. (1800).
- Mormyrhynchus** Swainson, II, 291; haplotype *M. GRONOVII* Sw. = *ANOSTOMUS* Gronow. Same as *ANOSTOMUS* (Gronow), Scopoli (1777) = *SCHIZODON* Ag., 1829).
- Trichosoma** Swainson, II, 292; haplotype *TRICHOSOMA HAMILTONI* Sw.; preoccupied by *TRICHOSOMUS* Sw., 265; and by *TRICHOSOMA* Rudolphi (1819), a genus of worms. Equivalent to *THRISSA* Cuv. (1817), not of Rafinesque (1815); replaced by *THRISOCLES* Jordan (1917).
- Setipinna** Swainson, II, 292; logotype *CLUPEA PHASA* Ham. (*SETIPINNA MEGALURA* Sw.). Replaces *TELARA* Gthr. (1868).
- Platygaster** Swainson, II, 294; logotype *CLUPEA AFRICANA* Bloch. Preoccupied in bees, 1809. A synonym of *ILISHA* Gray, 1846.
- Cypselurus** Swainson, II, 296 (misprinted *CYPSILURUS*); logotype *EXOCÆTUS NUTTALLI* Le Sueur = *EXOCÆTUS FURCATUS* Mitchell. Based on a young example, with barbel at the chin. In view of Swainson's general carelessness and of the irregularity of his proof-reading, the form *CYPSILURUS* has been officially deemed a misprint by the International Communion of Nomenclature. Same as *PTENICHTHYS* Müller, 1843.
- Ramphistoma** (Rafinesque) Swainson, 296 orthotype *R. VULGARIS* Sw., same as *BELONE* Cuv.
- Leptodes** Swainson, II, 298; logotype *CHAULIODUS SLOANI* Bl. & Schn. A synonym of *CHAULIODUS* Bl. & Schn., (1801).
- Tilesia** Swainson, II, 300; orthotype *GADUS GRACILIS* Tilesius; synonym of *ELEGINUS* Fischer.
- Cephus** Swainson, II, 300; haplotype *GADUS MACROCEPHALUS* Tilesius. A synonym of *GADUS* L.
- Lepidion** Swainson, II, 300; haplotype *GADUS LEPIDION* Risso = *LEPIDION RUBESCENS* Sw., regarded as preoccupied by *LEPIDEA* (1817), a genus of worms; replaced by *HALOPORPHYRUS* Gthr. (1862).
- Psetta** (Aristotle) Swainson, II 302; haplotype *PLEURONECTES MAXIMUS* L. Sufficiently distinct from *PSETTUS* Cuv.
- Platophrys** Swainson, II, 302; haplotype *PLEURONECTES OCELLATUS* Spix & Ag. Replaces *RHOMBODICHTHYS* Blkr. (1856).
- Brachirus** Swainson, II, 303; logotype *PLEURONECTES ORIENTALIS* Bl. & Schn. Preoccupied by *BRACHIRUS* and *BRACHYRUS* Sw.; replaced by *EURYGLOSSA* Kaup (1858).
- Plagusia** (Browne) Swainson, 302; orthotype *P. BILINEATA* Bloch; name preoccupied, same as *PARAPLAGUSIA* Blkr.
- Sturisoma** Swainson, II, 304; haplotype *LORICARIA ROSTRATA* Spix.
- Hoplisoma** Swainson, II, 304; haplotype *CATAPHRACTUS PUNCTATUS* Bloch = *CORYDORAS GEOFFROYI* Lac. A synonym of *CORYDORAS* Lac., 1803.
- Silonia** Swainson, II, 305; logotype *PIMELODUS SILONDIA* Ham. = *SILONIA LURIDA* Sw. Replaces *SILUNDIA* Cuv. & Val. (1830).
- Felichthys** Swainson, II, 305; logotype, as restricted by Swainson and Bleeker, *F. FILAMENTOSUS* Sw. = *ARIUS BAHIENSIS* Castelnau. Name a substitute for *BREVICEPS* Sw., preoccupied; a synonym of *BAGRE* (Cuv.) Oken (1817), as restricted through tautonymy.

- Cyclopium** Swainson, II, 305; haplotype *PIMELODUS CYCLOPUM* Humboldt = *CYCLOPIUM HUMBOLDTI* Sw. Replaces *STYGOGENES* Gthr. (1864).
- Clupisoma** Swainson, II, 306; haplotype *SILURUS GARUA* Ham., *CLUPISOMA ARGENTATA* Sw. Replaces *SCHILBEICHTHYS* Blkr., 1858.
- Pachypterus** Swainson, II, 306; logotype *SILURUS ATHERINOIDES* Bloch. Preoccupied in Coleoptera (1833); replaced by *PSEUDEUTROPIUS* Blkr. (1863).
- Pusichthys** Swainson, II, 307; haplotype *SCHILBE URANOSCOPIUS* Rüppell. A synonym of *SCHILBE* Cuv. (1817).
- Cotylephorus** Swainson, II, 308; haplotype *PLATYSTACUS COTYLEPHORUS* Bloch = *C. BLOCHI* Sw. A synonym of *PLATYSTACUS* Bloch, and of *ASPREDO* (Gronow) (Scopoli).
- Pteronotus** Swainson, II, 309; haplotype *HETEROBRANCHUS SENTENTACULATUS* Ag. Preoccupied in mollusks; gives way to *RHAMDIA* Blkr. (1858).
- Diacantha** Swainson, II, 310; logotype *DIACANTHA ZEBRA* Sw. = *COBITIS GETO* Ham. (pl. 11). A synonym of *BOTIA* Gray, 1831.
- Canthophrys** Swainson, II, 310; logotype *CANTHOPHRYS ALBESCENS* Sw., based on *COBITIS* No. 3, Hamilton. Said by Swain to be a species of *BOTIA* Gray (1831).
- Acoura** Swainson, II, 310; logotype *COBITIS SAVONA* Ham. (*ACOURA OBSCURA* Sw.). A synonym of *NEMACHEILUS* Van Hasselt; spelled *ACOURUS* on an earlier page.
- Somileptes** Swainson II, 311; logotype *S. BISPINOSA* Sw. = *COBITIS GONGOTA* Ham. A synonym of *COBITIS* L., 1758.
- Platysqualus** Swainson, II, 311; logotype *SQUALUS TIBURO* Sw. (not of L.), based on a figure by Russell, representing *SPHYRNA TUBES* Cuv. A synonym of *SPHYRNA* Raf.
- Pterocephala** Swainson, II, 321; haplotype *RAJA GIORNA* Lac. A synonym of *MOBULA* Raf.
- Tetrosomus** Swainson, II, 323; haplotype *OSTRACION TURRITUS* Forskål. A section of *OSTRACION* L.
- Rhinesomus** Swainson, II, 324; logotype *OSTRACION TRIQUETER* Bloch. A synonym of *LACTOPHRYS* Sw.
- Lactophrys** Swainson, II, 324; logotype *OSTRACION TRIGONUM* L.
- Platycanthus** Swainson, II, 324; haplotype *OSTRACION AURITUS* Shaw. A synonym of *ARACANA* Gray.
- Rhinecanthus** Swainson, II, 325; logotype *BALISTES ORNATISSIMUS* Lesson = *BALISTES ACULEATUS* L. A synonym of *BALISTAPUS* Tilesius.
- Zenodon** (Rüppell) Swainson, II, 194, 325; orthotype *BALISTES NIGER* Lac. This name *ZENODON*, being ascribed to Rüppell, is probably a careless misprint of *XENODON* Rüppell. Preoccupied in reptiles by *XENODON* Boie, 1827. The name is spelled *ZENODON* on page 194 also. *ZENODON* is, however, accepted by Fowler (1904). If adopted, it replaces *ODONUS* Gistel (1848), *ERYTHRON* Rüppell (1852) and *PYRON* Kaup (1855)—all substitutes offered for *XENODON*.
- Chalisoma** Swainson, II, 325; logotype *BALISTES PULCHERRIMUS* Lesson = *BALISTES VETULA* L. A synonym of *BALISTES* L.
- Canthidermis** Swainson, II, 325; logotype *BALISTES ANGULOSUS* Q. & G.
- Melichthys** Swainson, II, 325; logotype *BALISTES RINGENS* Osbeck (not of L.). Name changed to *MELANICHTHYS* by Gthr. (1870).
- Capriscus** (Willughby) Swainson, II, 326; logotype *BALISTES ERYTHROPTERON* Lesson; a synonym of *BALISTAPUS* Tilesius.

- Leiurus** Swainson, II, 326; logotype *LEIURUS MACROPHthalmus* Sw., based on *LAMA YELLAKAH* Russell, pl. 22 = *BALISTES STELLARIS* Bl. & Schn. Name preoccupied by *LEIURUS* Sw. (p. 242); replaced by *ABALISTES* Jordan & Seale (1911).
- Chætodermis** Swainson, II, 327; logotype *MONOCANTHUS SPINOSISSIMUS* Q. & G.
- Psilcephalus** Swainson, II, 327; haplotype *BALISTES BARBATUS* Gray. Substitute for *ANACANTHUS* Gray (1831), which is preoccupied by Ehrenberg, 1829.
- Cantherines** Swainson, II, 327; haplotype *MONACANTHUS NASUTUS* Q. & G. Replaces *LIOMONACANTHUS* Blkr. (1866).
- Cirrhisomus** Swainson, II, 328; haplotype *TETRAODON SPENGLERI* Bloch. Same as *CHEILICHTHYS* Müller, a synonym of *SPHEROIDES* Dumé.
- Leisomus** Swainson, II, 328; logotype *L. MARMORATUS* Sw. = *TETRAODON CUTCUTIA* Ham., as restricted by Bleeker, 1865. The genus is called *LEIODON* on page 194, without mention of type. *LEISOMUS* is preoccupied. *LEIODON* replaces *MONOTRETA* Bibron. Swain restricts *LEISOMUS* and therefore *LEIODON*, to the first species named, *L. LEVISSIMUS* Sw., a species of *SPHEROIDES* (*TETRAODON SPENGLERI* Bloch).
- Lagocephalus** Swainson, II, 328; logotype *TETRAODON STELLATUS* Donovan. Replaces *GASTROPHYSUS* Müller.
- Trichoderma** Swainson, II, 328; logotype *BALISTES SCAPUS* Lac. A synonym of *AMANSIS* Gray (1833).
- Psilonotus** Swainson, II, 328; logotype *TETRAODON ROSTRATUS* Bloch. Called *CANTHIGASTER* on page 194, and therefore a synonym of the latter.
- Molacanthus** Swainson, II, 329; logotype *MOLACANTHUS PALLASI* Sw. = *DIODON MOLA* Pallas. Young of *MOLA* Kölr. = *MOLA* Cuv.
- Astrocanthus** Swainson, II, 331; haplotype *LOPHIUS STELLATUS* Vahl. A synonym of *HALIEUTÆA* Cuv. & Val., 1837.
- Phyllopteryx** Swainson, II, 332; haplotype *SYNGNATHUS FOLIATUS* Shaw.
- Acus** (Willughby) Swainson, II, 333; logotype *SYNGNATHUS EQUOREUS* "Yarrell". A synonym of *NEROPHIS* Raf.
- Solegnathus** Swainson, II, 333; haplotype *SYNGNATHUS HARDWICKI* Gray. Spelled *SOLENOGNATHUS* by Günther.
- Ophisoma** Swainson, II, 334; logotype *O. ACUTA* Sw., as restricted by Bleeker (1864). Swain, in 1882, chose *O. OBTUSA* Sw. as type. The latter species is a *CONGER*, the former belongs to *CONGERMURÆNA* Kaup, as restricted. The name is preoccupied by *OPHISOMUS* Sw., page 277. It is called *ARIOSOMA* on page 194. *ARIOSOMA* thus replaces *CONGERMURÆNA* Kaup, and also *CONGRELLUS* Ogilby, all based on the same type, earlier described as *MURÆNA BALEARICA* De la Roche.
- Pterurus** Swainson, II, 334, logotype *PTERURUS MACULATUS* Sw. = *MURÆNA RAITOBORUA* Ham. A synonym of *RAITABOURA* Gray (1831) or *MORINGUA* Gray (1831).
- Leptognathus** Swainson, I, 221, and II, 334; haplotype *LEPTOGNATHUS OXYRHYNCHUS* Sw. = *MURÆNA SERPENS* L. A synonym of *OPHISURUS* Lac., as restricted by Risso.
- Pachyurus** Swainson, II, 335; haplotype *MORINGUA LINEARIS* Gray; preoccupied by *PACHYUBUS* Ag. (1829). A synonym of *PSEUDOMORINGUA* Blkr. (1864).
- Ophichthys** Swainson, II, 336; haplotype *UNIBRANCHAPERTURA CUCHIA* Ham. Name preoccupied by *OPHICHTHUS* Ahl. (1789). A synonym of *AMPHIPHOUS* Müller (1839).

Rupisuga Swainson, II, 339; haplotype *R. NICENSIS* Sw. = *LEPODOGASTER BALBIS* Risso. A synonym of *GOUANIA* Nardo (1833).

1840

252. BENNETT (1840). *Narrative of a Whaling Voyage Around the Globe.*

F. D. BENNETT.

Elagatis F. D. Bennett, II, 283; orthotype *SERIOLOA BIPINNULATA* Q. & G.

253. BONAPARTE (1840). *Iconografia della fauna italiana.* Fascicles 68 to 138, part 27. According to Troschel, fascicle 91 dates from 1837, 92 to 96 from 1838, 103 from 1839, and fascicle 138 dates from 1840.

CARLO LUCIANO BONAPARTE.

Stomocatus Bonaparte, 129*; logotype (not named) *CYPRINUS CATOSTOMUS* Forster. A synonym of *CATOSTOMUS* Le Sueur; species with the dorsal fin short, "especie . . . che han breve la pinna dorsale".

Ichthyocoris Bonaparte, fasc. 134; orthotype *BLENNIUS VARUS* Risso. A synonym of *BLENNIUS* L.

Ichthyococcus Bonaparte, fasc. 138; orthotype *I. OVATUS* Bon. Name later altered by Günther to *COCCIA* on account of its crude form (1840).

Lampanyctus Bonaparte, fasc. 138; orthotype *L. BONAPARTEI* Bon.

Chlorophthalmus Bonaparte, fasc. 138; orthotype *C. AGASSIZI* Bon.

254. CUVIER & VALENCIENNES (1840) *Histoire naturelle des poissons.* XV.

ACHILLE VALENCIENNES.

Galeichthys Cuvier & Valenciennes, XV, 28; logotype *GALEICHTHYS FELICEPS* Cuv. & Val., as restricted by Bleeker.

Pangasius Cuvier & Valenciennes, XV, 45; tautotype *PIMELODUS PANGASIUS* Ham.

Silundia Cuvier & Valenciennes, XV, 49; tautotype *PIMELODUS SILONDIA* Ham. A synonym of *SILONIA* Sw.

Arius Cuvier & Valenciennes, XV, 53; tautotype *PIMELODUS ARIUS* Ham. As so understood, a synonym of *TACHYSURUS* Lac., if the latter is correctly identified. Bleeker takes the first species named, *ARIUS STRICTICASSIS* Cuv. & Val., as type, thus replacing *NOTARIUS* Gill.

Trachelyopterus Cuvier & Valenciennes, XV, 220; orthotype *T. CORIACEUS* Cuv. & Val.

Arges Cuvier & Valenciennes, XV, 333; logotype *ARGES SABALO* Cuv. & Val.

Brontes Cuvier & Valenciennes, XV, 341; haplotype *BRONTES PRENADILLA* Cuv. & Val. Name two or three times preoccupied; replaced by *STREPHON* Gistel (1848).

Saccobranchus Cuvier & Valenciennes, XV, 399 haplotype *SILURUS SINGIO* Ham. = *HETEROPNEUSTES* Müller, 1839.

Chaca Cuvier & Valenciennes, XV, 444; haplotype *PLATYSTACUS CHACA* Ham.

255. EICHWALD (1840). (*Fossil Fishes.*) Bull. Acad. Sci. St. Petersburg.

CARL EDUARD VON EICHWALD.

Astrolepis Eichwald, VIII, 79; orthotype *A. ORNATUS* Eichw. (fossil). Later spelled *ASTEROLEPIS* by Eichwald and by most writers.

Bothriolepis Eichwald, VII, 79; orthotype *B. PRISCA* Eichw. (fossil).

256. HECKEL (1840). *Johann Natterer's neue Flussfische Brasiliens nach den Beobachtungen und Mittheilungen des Entdeckers beschrieben*. Abth. 1, Die Labroiden. Ann. Wien. Mus., II.

JOHANN JAKOB HECKEL.

- Uaru** Heckel, II, 330; orthotype *U. AMPHACANTHOIDES* Heckel.
Symphysodon Heckel, II, 332; orthotype *S. DISCUS* Heckel.
Pterophyllum Heckel, II, 334; orthotype *PLATAX SCALARIS* Cuv. & Val.
Acara Heckel, II, 338; logotype *A. CRASSISPINIS* Heckel, as restricted by Gill (1858). A synonym of *ASTRONOTUS* Sw. (*HYGROGONUS* Gthr.).
Heros Heckel, II, 362; logotype *H. SEVERUS* Heckel, as restricted by J. & G., 1883. A synonym of *CICHLAURUS* or *CICHLASOMA* Sw.
Geophagus Heckel, II, 383; logotype *G. MEGASEMA* Heckel.
Chætobranchus Heckel, II, 401; logotype *C. FLAVESCENS* Heckel.
Crenicichla Heckel, II, 416; logotype *C. VITTATA* Heckel.
Batrachops Heckel, II, 432; logotype *B. RETICULATUS* Heckel.
Monocirrhus Heckel, II, 439; orthotype *M. POLYACANTHUS* Heckel.

257. LOWE (1840). *Certain New Species of Madeiran Fishes*. Proc. Zool. Soc. London, 36-39.

RICHARD THOMAS LOWE.

- Cheilopogon** Lowe, VII, 38; orthotype *CYPSELURUS PULCHELLUS* Lowe. A manuscript name, withdrawn because of the earlier name *CYPSELURUS* Sw. Applied to young flying fish with barbels; equivalent also to *PTENICHTHYS* Müller.

258. MÜNSTER (1840). *Ueber einige Placoiden im Kupferschiefer zu Richelsdorf; Beiträge zur Petrefactenkunde*.

GEORG MÜNSTER.

- Dictea** Münster, III, 124; orthotype *D. STRIATA* Münster (fossil). A synonym of *JANASSA* Münster.

- 259-261. MÜNSTER (1840). (*Braun, Petrefakten von Bayreuth.*)

GEORG MÜNSTER.

- Saurorhynchus** (Münster) Braun, 73 (not defined); orthotype *SAURICHTHYS TENUIROSTRIS* (Münster) (fossil). Name apparently eligible, as being applied to a species already described.

262. NORDMANN (1840). *Observations sur la faune pontique; im Demidoff, voyage dans la Russie meridionale et la Crimée*. III.

ALEXANDER VON NORDMANN.

- Percarina** Nordmann, 357; orthotype *P. DEMIDOFFI* Nordmann.

263. OWEN (1840). *Odontography; or a Treatise on the Comparative Anatomy of the Teeth*.

RICHARD OWEN.

- Petalodus** Owen, 61; orthotype *P. HASTINGSI* Owen (fossil).
Rhizodus Owen, 75; orthotype *MEGALICHTHYS HIBLERTI* Ag. (fossil). A synonym of *MEGALICHTHYS* Ag.

264. RANZANI (1840). *De novis speciebus piscium; dissertationes quatuor*. Novi Comment. Acad. Sci. Inst. Bonon., IV.

CAMILLO RANZANI.

- Syacium** Ranzani, 20; orthotype *S. MICRURUM* Ranzani. Replaces *HEMIRHOMBUS* Blkr. (1862).

- Diapterus** Ranzani, IV, 340; orthotype *D. auratus* Ranzani. Replaces *GERRES* J. & E.; not of Cuvier as properly restricted.
265. RICHARDSON (1840). *On Some New Species of Fishes from Australia*. Proc. Zool. Soc. London, VIII.
JOHN RICHARDSON.
- Oplegnathus** Richardson, 27; orthotype *O. conwayi* Rich. Name later corrected by Richardson to *HOPLEGNATHUS CONWAYI*; altered by Günther to *HOPLOGNATHUS*, in which form it is preoccupied. If necessary, may be replaced by *SCARODON* T. & S.
266. THOMPSON (1840). *On a New Genus of Fishes from India (Bregmaceros maclellandi* Cantor, MS.). Ann. Mag. Nat. Hist., IV.
WILLIAM THOMPSON.
- Bregmaceros** (Cantor) Thompson, IV, 184; orthotype *B. maclellandi* (Cantor) Thompson.

1841

267. AGASSIZ (1841). *On the Fossil Fishes Found by Mr. Gardner in the Province of Ceará, in the North of Brazil*. Edinb. New Philos. Journ., XXX.
LOUIS AGASSIZ.
- Cladocycclus** Agassiz, XXX, 83; orthotype *C. gardneri* Ag. (fossil).
- Rhacolepis** Agassiz, XXX, 83; logotype *R. buccalis* Ag. (fossil). (Misprinted *PHACOLEPIS*.)
- Calamopleurus** Agassiz, XXX, 84; orthotype *C. cylindricus* Ag. (fossil). This genus belongs to the *ELOPIDÆ*, near to *ELOPS*, *RHACOLEPIS* and *NOTELOPS*. See Jordan & Branner, *Smithsonian Misc. Coll.*, 1793-1908 ("Cretaceous Fishes of Ceará, Brazil").
268. BONAPARTE (1841). *Iconografia della fauna italiana*. 3d part (fascicles 156-160 dating probably 1841).
CARLO LUCIANO BONAPARTE.
- Pristiurus** Bonaparte (1841); orthotype *GALEUS MELASTOMUS* Raf. (Written *PRISTURIUS* in *Saggio*, p. 121, 1831, and in *Fauna Italica*. Called *PRISTIDURUS* in *Mem. Soc. Sci. Neufchâtel*, II, p. 11, 1839). *PRISTURIUS* is the form in general use, but *PRISTIDURUS* may have priority of definition.
- Syrraxis** (Jourdan) Bonaparte, fasc. 160; orthotype *NARCINE (SYRRAXIS) INDICA* Henle. Manuscript name based on specimens in the Museum of Lyons "ben ordinato di celebri Prof. Jourdan," identified by Bonaparte as *NARCINE INDICA* Henle. A synonym of *NARCINE* Henle.
Agassiz quotes also a genus "*POWERIA* Bonaparte". This is certainly an error. Troschel writes, "*GON. POWERLE*" for *GONOSTOMA*. This was doubtless mistaken for "Gen."
269. EICHWALD (1841). *Fauna Caspio-Caucasica non nullis observationibus novis illustrata*. St. Petersburg.
CARL EDUARD VON EICHWALD.
- Sypterus** Eichwald; orthotype (*PERCA LOPHAR* Forskål). A synonym of *POMATOMUS* Lac. (not verified).
270. FLEMING (1841). *Description of a New Species of Skate (Hieroptera abredonensis) New to the British Fauna*. Edinb. New Phil. Journ., XXXI, 1841.
JOHN FLEMING (1785-1857).

Hieroptera Fleming, XXXI, 236; orthotype II. *ABREDONENSIS* Fleming (a monstrous form of *RAJA CLAVATA* *vide* Gill). A synonym of *RAJA* L.

271. HECKEL (1841). *Ueber eine neue Gattung (Aulopyge hugeli) von Süßwasserfische in Europa; aus einen Schreiben an den Akademiker Dr. Brandt.* Bull. Sci. Acad. St. Petersb., VIII.

JOHANN JAKOB HECKEL.

Aulopyge (Brandt) Heckel, I, 1021; orthotype A. *HUGELI* Heckel (also in *Russeger's Reisen*, p. 1021).

272. HOGG (1841). (*Protomelus and Amphibichthys.*) Am. Mag. Nat. Hist., VII.
JOHN HOGG.

Protomelus Hogg, VII, 359; orthotype *LEPIDOSIREN ANNECTENS* Owen. A synonym of *PROTOPTERUS* Owen.

Amphibichthys Hogg, 362; orthotype *LEPIDOSIREN PARADOXA* Fitzinger. A synonym of *LEPIDOSIREN* Fitzinger.

273. LOWE (1841). *Synopsis of the Fishes of Madeira, etc.* Trans. Zool. Soc. London, II.

RICHARD THOMAS LOWE.

Aplurus Lowe, II, 180; orthotype A. *SIMPLEX* Lowe. A synonym of *RUVETTUS* Cocco.

Prometheus Lowe, II, 181; orthotype *GEMPYLUS PROMETHEUS* Cuv. & Val. Name preoccupied; replaced by *PROMETHICHTHYS* Gill (1893).

274. MILLER (1841). *The Old Red Sandstone; or New Walks in an Old Field.* Edinburgh.

HUGH MILLER (1802-1856).

Pterichthys (Agassiz) Miller, XXII; orthotype P. *MILLERI* Ag. (fossil). Name preoccupied—Swainson (1839); replaced by *PTERICHTHYODES* Blkr. (1839 and by *MILLERICHTHYS* S. A. Miller, 1892.

275. MÜNSTER (1841). (*Asterodon.*) Beiträge zur Petrefaktenkunde, IV.
GEORG MÜNSTER.

Asterodon Münster, IV, 140; orthotype A. *BRONNI* Münster (fossil). Probably identical with *COLOBODUS* Ag. and of earlier date.

276. NARDO (1841). *Proposizione per la formazioni di un nuovo generi di pesci, intitolato Brachyochirus.* Ann. Sci. Reale Lombardo-Veneto, Padova.

GIOVANNI DOMENICO NARDO.

Brachyochirus Nardo I; orthotype *GOBIOUS APHYA* Risso = *GOBIOUS MINUTUS* L. A section of *GOBIOUS*; same as *POMATOSCHISTUS* Gill (1862). Perhaps to be regarded as preoccupied by *BRACHYRUS* and *BRACHIRUS* of Swainson (1839) of similar etymology.

277. OWEN (1841). *On the Structure of Fossil Teeth from the Central of Cornstone Division of the Old Red Sandstone, Indicative of a New Genus of Fishes, or Fish-like Batrachia, etc.* Micr. Journ., I.

RICHARD OWEN.

Dendrodus Owen, I, 4; logotype D. *BIPORCATUS* Owen (fossil).

Sphyrænodus (Agassiz) Owen, 129; orthotype S. *PRISCUS* Ag. (fossil). Names only; validated by Agassiz in 1844.

278. SYKES (1840). *The Fishes of Dukhoo*. Ann. Mag. Nat. Hist., IV.
WILLIAM HENRY SYKES.

Rohtee Sykes, II, 364; orthotype *R. VIGORSI* Sykes. Replaces *OSTEOBRAMA* Heckel.

1842

279. AGASSIZ (1942). (*Diplacanthus*.) In Duff's *Geology of Moray*.

LOUIS AGASSIZ.

Diplacanthus (Agassiz) Duff, 71; orthotype *D. CRASSISSIMUS* Duff = *D. STRIATUS* Ag. (fossil); more fully defined in *Poissons fossiles Vieux Grès Rouge*. Name misspelled *DIPLOCANTHUS* by Duff.

280. CUVIER & VALENCIENNES (1842). *Histoire naturelle des poissons*. XVI.

ACHILLE VALENCIENNES.

Dangila Cuvier & Valenciennes, XVI, 229; logotype *DANGILA CUVIERI* Val.

Nuria Cuvier & Valenciennes, XVI, 238; logotype *NURIA THERMOICOS* Cuv. & Val.
A synonym of *ESOMUS* Sw.

Rohita Cuvier & Valenciennes, XVI, 242; tautotype *CYPRINUS ROHITA* Ham., *ROHITA RUCHANANI* Val. Apparently identical with *LABEO* Cuv.

Capoëta Cuvier & Valenciennes, XVI, 278; tautotype *CAPOËTA FUNDULUS* Val. = *CYPRINUS CAPOËTA* Gùldenstadt (logotype *C. AMPHIBIA* Cuv. & Val.) as restricted by Bleeker.

281. DEKAY (1842). *Zoology of New York; or, The New York Fauna. Comprising Detailed Descriptions of All the Animals Hitherto Observed Within the State Borders*, etc. Natural History of New York State Geological Survey, Albany.

JAMES ELLSWORTH DEKAY (1792-1851).

Lepisoma Dekay, 11; orthotype *L. CIRRHOSUM* Dekay = *CLINUS PECTINIFER* Cuv. & Val. Regarded as preoccupied in beetles by *LEPISOMUS* Kirby. A synonym of *LABROSOMUS* Sw.

Pileoma Dekay, 16; haplotype *PILEOMA SEMIFASCIATA* Dekay = *ETHEOSTOMA CAPRODES* Raf. A synonym of *PERCINA* Haldeman, of earlier date in the same year.

Boleosoma Dekay, 20; haplotype *B. TESSELLATUM* Dekay = *ETHEOSTOMA OLMSTEDI* Storer.

Uranidea Dekay, 61; haplotype *URANIDEA QUIESCENS* Dekay.

Apeltes Dekay, 68; orthotype *GASTEROSTEUS QUADRACUS* Mitchill.

Argyrea Dekay, 141; haplotype *ATHERINA NOTATA* Mitchill. Name preoccupied; a synonym of *MENIDIA* Bon.

Amblyopsis Dekay, 187; haplotype *AMBLYOPSIS SPELEUS* Dekay.

Stilbe Dekay, 204; haplotype *CYPRINUS CRYSOLEUCAS* Mitchill. A synonym of *NOTEMIGONUS* Raf.

Baione Dekay, 244; haplotype *B. FONTINALIS* Dekay (the young of *SALMO FONTINALIS* Mitchill). A synonym of *SALVELINUS* Rich., 1836.

Acanthosoma Dekay, 350; orthotype *A. CARINATUM* Dekay. Same as *MOLACANTHUS* Sw., a larval form of *MOLA* Cuv.

Pastinaca (Belon) Dekay, 373; orthotype *RAJA PASTINACA* L. Name used for the same genus by several authors. A synonym of *DASYATIS* Raf.

282. GRAY (1842). *Description of Two Fresh-water Fish from New Zealand*. (In Dieffenbach, Ernst: *Travels in New Zealand*, II.)

JOHN EDWARD GRAY.

- Ptycholepis** Gray, II, 218; orthotype *MUGIL SALMONEUS* Forster. A synonym of *CHANOS* Lac.
283. HALDEMAN (1842). *Description of Two New Species of the Genus Perca, from the Susquehannah River*. Journ. Acad. Nat. Hist.
SAMUEL STEHMAN HALDEMAN (1712-1890).
- Percina** Haldeman, VIII, 330; logotype *PERCA NEBULOSA* Haldeman = *ETHEOSTOMA CAPRODES* Raf. Same as *PILEOMA* Dekay and a little earlier in date.
284. HECKEL (1842). *Ichthyologie (von Syrien)*. In Russegger (Joseph von): *Reisen in Europa, Asien und Africa*, etc. Part I.
JOHANN JAKOB HECKEL.
- Gibelion** Heckel, I, 1014; orthotype *CYPRINUS CATLA* Ham. Replaces *CATLA* Cuv. & Val.
- Cyprinion** Heckel, I, 1015; logotype *C. MACROSTOMUS* Heckel.
- Dillonia** Heckel, I, 1020; orthotype *CHONDROSTOMA DILLONI* Cuv. & Val.
- Scaphiodon** Heckel, I, 1020; logotype *S. TINCA* Heckel.
- Gymnostomus** Heckel, I, 1030; logotype *G. ARIZA* Heckel, as restricted by Bleeker (1860); logotype *CAPOËTA SYRIACA* Cuv. & Val., as limited by Günther (1868). Apparently replaces *TYLOGNATHUS* Gthr., but not of Heckel.
- Chondrochilus** Heckel, I, 1031; orthotype *C. NASICUS*. A synonym of *CHONDROSTOMA* Ag.
- Chondrorhynchus** Heckel, I, 1031; logotype *CH. SOETTA* Heckel. A synonym of *CHONDROSTOMA* Ag.
- Ballerus** Heckel, I, 1032; tautotype *CYPRINUS BALLERUS* L.
- Acanthobrama** Heckel, I, 1033; logotype *A. MARMID* Heckel, as restricted by Bleeker.
- Osteobrama** Heckel, I, 1033; logotype *CYPRINUS COTIO* Ham. A synonym of *ROHTEE* Sykes (1841).
- Pachystomus** Heckel, I, 1038; orthotype *P. SHACRA* Heckel. Name preoccupied. Same as *SHACRA* Blkr.
- Argyreus** Heckel, I, 1040; haplotype *CYPRINUS ATRONASUS* Mitchill. Name preoccupied. Equivalent to *RHINICHTHYS* Ag., 1850.
- Leucosomus** Heckel, I, 1042; haplotype *L. CHRYSOLEUCUS* Heckel, not of Mitchill = *CYPRINUS CORPORALIS* Mitchill. Considered as preoccupied by *LEUCOSOMA* Gray; replaced by *CHEILONEMUS* Baird (1855).
- Glossodon** Heckel, I, 1003; haplotype *CYPRINUS SMITHI* Rich.; identical with the type of *GLOSSODON* Raf. (1818). A synonym of *HODON* Le Sueur (1818).
- Luciobarbus** Heckel, I, 1054; orthotype *L. ESOCINUS* Heckel.
- Pseudophoxinus** Heckel, I, 1063; orthotype *PHOXINELLUS ZEREGI* Heckel.
- Discognathus** Heckel, I, 1071; logotype *D. VARIABILIS* Heckel, as restricted by Bleeker, 1863. A synonym of *GARRA* Ham., as restricted by Bleeker.
- Tylognathus** Heckel, I, 1073; logotype *T. DIPLOSTOMUS* Heckel, as restricted by Bleeker, 1863, not *TYLOGNATHUS*, as restricted by Günther, 1868.
285. JENYNS (1842). *The Zoology of the Voyage of H.M.S. "Beagle", During the Years 1832-1836; edited by Charles Darwin: Fishes*. London.
LEONARD JENYNS (1800-1893) (afterwards LEONARD JENYNS BLOMEFIELD).
- Arripis** Jenyns, 14; orthotype *CENTROPRISTES GEORGIANUS* Cuv. & Val.
- Prionodes** Jenyns, 46; orthotype *P. FASCIATUS* Jenyns.
- Stegastes** Jenyns, 63; orthotype *S. IMBRICATUS* Jenyns = *CHÆTODON LURIDUS* Broussonet. This is probably identical with *MICROSPATHODON* Gthr., 1862, and of earlier date.

- Acanthoclinus** Jenyns, 92; orthotype *A. FUSCUS* Jenyns.
Mesites Jenyns, 118; orthotype *M. ATTENUATUS* Jenyns. A synonym of *GALAXIAS* Cuv.
Aplochiton Jenyns, 130; orthotype *A. ZEBRA* Jenyns. Spelled *HAPLOCHITON* by Günther.
Iluocœtes Jenyns, 166; orthotype *I. FIMBRIATUS* Jenyns.
Phucocœtes Jenyns, 168; orthotype *P. LATITANS* Jenyns.
286. McCLELLAND (1842). *Remarks on a New Genus of Thoracic Percoid Fishes, Cestreus*. Journ. Nat. Hist. Calcutta, IV.
 JOHN McCLELLAND.
Cestreus McClelland, II, 150, 151; orthotype *C. MINIMUS* McCl. = *ATHERINA DANIUS* Ham. An ally of *ELEOTRIS*, near *HYPSELEOTRIS*, *CARASSOPS*, etc., small species with the habit of *GAMBUSIA*. D. V-9:A. 12. vertebræ 26, outer teeth minute, hooked (not "forked," as stated by Day).
287. McCLELLAND (1842). *On the Fresh-water Fishes Collected by William Griffin in His Travels, from 1835 to 1842*. Journ. Nat. Hist. Calcutta, II, 560-589.
 JOHN McCLELLAND.
Racoma McClelland, II, 576; logotype *R. LABIATA* McCl., according to Bleeker.
Glyptosternon McClelland, II, 584; logotype *G. RETICULATUS* McCl. Spelled *GLYPTOSTERNUM* by Günther.
Olyra McClelland, II, 588; logotype *O. LONGICAUDA* McCl.
288. MÜNSTER (1842). *Beschreibungen einiger neuer Fische aus den lithographischen Schieferen von Bayern*. Beiträge zur Petrefaktenkunde.
 GEORG MÜNSTER.
Dorypterus (Germar) Münster, V, 35; orthotype *D. HOFFMANNI* Germar (fossil).
Globulodus Münster, V, 47; orthotype *T. ELEGANS* Münster (fossil).
Thaumas Münster, V, 62; orthotype *T. ALIFER* Münster (fossil). A fossil homologue of *SQUATINA* Dum.
Capitodus Münster, V, 68; orthotype *C. SUBTRUNCATUS* Münster (fossil).
Soricidens Münster, V, 68; orthotype *S. HAUERI* Münster (fossil).
289. MÜNSTER (1842). *Neucs Jahrb. für Mineralogie*, etc.
 GEORG MÜNSTER.
Æthalion Münster, 41; logotype *A. INFLATUS* Münster (fossil).
Libys Münster, 45; orthotype *L. POLYPTERUS* Münster (fossil).
290. OWEN (1842). (*Raphiosaurus*.) Trans. Geol. Soc., London.
 RICHARD OWEN.
Raphiosaurus Owen, VI, 413; orthotype *R. SUBULIDENS* Owen (fossil).
291. RICHARDSON (1842). *Catalogue of Fish Found at King George's Sound*. (In Eyre, E. J.: *Journals of Expeditions of Discovery into Central Australia*. I.)
 JOHN RICHARDSON.
Centrogenys Richardson, IX, 120; orthotype *SCORPENA VAIGIENSIS* Blkr.
292. SCHOMBURGK (1842). *The Natural History of the Fishes of (British) Guiana*. Edinburgh.
 ROBERT HERMANN SCHOMBURGK.
Ellipesurus Schomburgk, II, 184; orthotype *E. SPINICAUDA* Schomburgk (misprinted *ELIPESURUS*).

293. TEMMINCK & SCHLEGEL (1842). *Fauna Japonica, sive descriptio animalium quæ in itinere per Japoniam suscepto annis 1823-30 collegit, notis observationibus et adumbrationibus illustravit P. F. de Siebold. Coniunctis studiis C. J. Temminck et H. Schlegel pro vertebratis, atque W. de Haan pro invertebratis elaborata.* (Part 1R, Pisces.) Edited by Carl Theodor Ernst von Siebold, the text of fishes mostly by Hermann Schlegel.

CUENRAAD JACOB TEMMINCK (1770-1858); HERMANN SCHLEGEL (1804-1884).

Temminck and Schlegel gave no specific names when but one species occurred in the genus. The names of type species have been given by subsequent writers.

Perca-Labrax Temminck & Schlegel, 2; orthotype LABRAX JAPONICUS Cuv. & Val. Name rejected by Bleeker and by Boulenger because no new genus was intended, LABRAX being merely entered as a subgenus of PERCA. Replaced by LATEOLABRAX Blkr. But an argument can be made for the retention of PERCALABRAX.

Aulacocephalus Temminck & Schlegel, 15; orthotype A. TEMMINCKI Blkr.

Anoplus Temminck & Schlegel, 17; orthotype ANOPOLUS BANJOS Rich. Name preoccupied; replaced by BANJOS Blkr. (1879).

294. VALENCIENNES (1842). *Determination des poissons: Voyage autour du monde . . . sur . . . la "Bonite,"* etc. Zoologie, I, Paris.

ACHILLE VALENCIENNES.

Oxudercus Valenciennes, 181; orthotype O. DENTATUS Val.

1843.

295. AGASSIZ (1843). *Recherches sur les poissons fossiles.* III, in part.

LOUIS AGASSIZ.

Orthacanthus Agassiz, III, pl. 45; orthotype O. CYLINDRICUS Ag. (fossil). Regarded by Woodward as a synonym of PLEURACANTHUS Ag., which preoccupied name it may replace.

Pleurodus Agassiz, III, 174; orthotype P. RANKINEI Ag. (fossil). No definition until accepted by Hancock and Althey, 1872. Regarded as preoccupied by PLEURODON (1840), replaced by PLEUROPLAX Woodw., 1889.

Cladacanthus Agassiz, III, 176; orthotype C. PARADOXUS Ag. (fossil); name only, defined first by Davis. *Trans. Roy. Dublin Soc.*, I, 1883, 365. A synonym of ERISMACANTHUS.

Cricacanthus Agassiz, III, 176; orthotype C. JONISI Ag. Name only, hence having no place in the system.

Gyropristis Agassiz, III, 177; orthotype G. OBLIQUUS Ag. Name only, hence without place in the system.

Cladodus Agassiz, III, 196; logotype C. MIRABILIS Ag. (fossil).

Sphenonchus Agassiz, III, 201; logotype S. ELONGATUS Ag. (fossil). A synonym, as restricted, of ACRODUS Ag.

Diplodus Agassiz, III, 204; logotype D. GIBBOSUS Ag. (fossil). Regarded by Woodward as a synonym of PLEURACANTHUS Ag. Both names are preoccupied. DIPLODUS has been replaced by DIDYMODUS Cope (1883), which is also preoccupied (as DIDYMODON Blake, 1863, a mammal) and again replaced by DICRANODUS Garman (1885). ORTHACANTHUS Ag. may replace PLEURACANTHUS, and some of the names given by Owen, as DITODUS, have priority over DICRANODUS. It is not yet certain that the teeth called DIPLODUS and the spines called ORTHACANTHUS belong to the same fish.

- Otodus** Agassiz, III, 206; logotype *O. ORLIQUUS* Ag., not *O. APPENDICULATUS* Ag. (fossil). Apparently not separable from the living genus, *LAMNA* Cuv. (1817).
- Corax** Agassiz, III, 244; logotype *GALEUS PRISTODONTUS* Morton (fossil)
- Hemipristis** Agassiz, III, 237; orthotype *H. SERRA* Ag. (fossil). A genus represented by a living homologue, *DIRRHIZODON ELONGATUS* Klunzinger in the Red Sea.
- Meristodon** Agassiz, III, 286; orthotype *OXYRHINA PARADOXA* Ag. (fossil). Probably a synonym of *HYBODUS*.
- Sphenodus** Agassiz, III, 298; orthotype *LAMNA LONGIDENS* Ag. (fossil). Name regarded as preoccupied as *SPIHENODON* Gray (1831); replaced by *ORTHACODUS* Woodw. (1889).
- Carcharopsis** Agassiz, III, 313; orthotype *C. PROTOTYPUS* Ag. (fossil). Name only; same as *PRISTICLADODUS DENTATUS* McCoy. A synonym of *DICRENODUS* Romanowsky (1853), which name Woodward adopts, as being first defined and with a described type.
- Zygobatis** Agassiz, III, 328; logotype *RHINOPTERA STUDERI* Ag. (fossil). Apparently a synonym of *RHINOPTERA* Kuhl.
- Ganodus** Agassiz, III, 339; orthotype *CHIMÆRA OWENI* Ag. (fossil).
- Psittacodon** Agassiz, III, 340; logotype *ISCHYODUS PSITTACINUS* Egert. (fossil). A synonym of *GANODUS*.
- Actinobatis** Agassiz, III, 372; orthotype *RAJA ORNATA* Ag. (fossil). Regarded as a synonym of *RAJA* L. If so, the living species, *RAJA ORNATA* Garman, must receive a new name.
- Scylliodus** Agassiz, III, 377; orthotype *S. ANTIQUS* Ag. (fossil). An ally of *THYELLINA* and *SCYLLIORHINUS*.
- Arthropterus** Agassiz, III, 379; orthotype *A. RILEYI* Ag. (fossil). A bit of some unrecognized ray.
- Asterodermus** Agassiz, III, 381; orthotype *A. PLATYPTERUS* (fossil). Name preoccupied by *ASTRODERMUS* Bonelli, 1829.
- Thyellina** Agassiz, III, 378; orthotype *T. ANGUSTA* Ag. (fossil). A fossil ally of *SCYLLIORHINUS* Blainv.
- Narcopterus** Agassiz, III, 382; orthotype *N. BOLCANUS* Ag. (fossil). Name only, hence not part of the system. An ally of *TORPEDO* Dum.
- Cyclarthrus** Agassiz, III, 382; orthotype *C. MACROPTENES* Ag. (fossil). A fin of some ray, imperfectly known.
- Euryarthra** Agassiz, III, 382; orthotype *E. MUNSTERI* Ag. (fossil). An ally of *RHINOBATUS* Linck and a synonym of *ÆLLOPOS* Münster.
296. EGERTON (1843). *On Some New Species of Fossil Chimæroid Fishes, with Remarks on Their Affinities* Proc. Geol. Soc., IV.
PHILIP DE MALPAS GREY EGERTON.
- Ischyodus** Egerton, IV, 155; orthotype *CHIMÆRA COLEI* (Buckland) Ag. (fossil).
- Elasmodus** Egerton, IV, 156; orthotype *E. HUNTERI* Egert. (fossil).
297. HALL (1843). *Natural History of New York*. (Palæontology.)
JAMES HALL.
- Sauripteris** Hall, IV, 282; orthotype *S. TAYLORI* Hall (fossil). Usually written *SAURIPTERUS*.
298. HECKEL (1843). *Abbildungen und Beschreibungen der Fische Syriens, nebst einer neuen Classification und Charakteristik sämtlicher Gattungen der Cyprinen*. Stuttgart.
JOHANN JAKOB HECKEL.

Leucos (Bonaparte) Heckel, 48; logotype *L. RUBELLUS* Bon. Name regarded as preoccupied as *LEUCUS* Kaup, a genus of birds; replaced by *CENISOPHIUS* Bon.

Phoxinellus Heckel, 50; orthotype *P. ALEPIDOTUS* Heckel, as restricted by Bleeker, who later separated *P. ZEREGI* as *PSEUDOPHOXINUS*, 1859. Same as *PARAPHOXINUS* Blkr., 1863.

Mola Heckel, appendix, 257; orthotype *CYPRINUS MOLA* Ham. Preoccupied in fishes; replaced by *AMBLYPHARYNGODON* Blkr.

299. HECKEL (1843). *Ichthyologic (von Syrien)*. In Russegger (Joseph von): *Reisen in Europa, Asien und Africa, mit besonderer Rücksicht auf naturwissenschaftlichen Verhältnisse der betreffenden Länder, unternommen in den Jahren 1835 bis 1841*. Part 2, 1843.

JOHANN JAKOB HECKEL.

Cyrene Heckel, II, 284; logotype *C. OCELLATA* Heckel. A synonym of *DANGILIA* Cuv. & Val. (1842).

Schizopyge Heckel, II, 285; logotype *SCHIZOTHORAX CURVIFRONS* Heckel, as restricted by Bleeker, 1863.

Aspidoparia Heckel, II, 288; orthotype *A. SARDINA* Heckel.

300. LOWE (1843). *Notice of Fishes Newly Observed or Discovered in Madeira During the Years 1840, 1841 and 1842*. Proc. Zool. Soc. London.

RICHARD THOMAS LOWE.

Taractes Lowe, 82; orthotype *T. ASPER* Lowe.

Antigonia Lowe, 85; orthotype *A. CAPROS* Lowe.

Hesperanthias Lowe, 14; orthotype *SERRANYS OCVLATUS* Cuv. & Val. A synonym of *ETELIS* Cuv. & Val.

Cubiceps Lowe, 82; orthotype *PSENES GRACILIS* Lowe. A synonym of *PSENES* Cuv. & Val.

Echiostoma Lowe, 87; orthotype *E. BARBATUM* Lowe.

Metopias Lowe, 90; orthotype *M. TYPHLOPS* Lowe. Preoccupied; replaced by *MELAMPHAËS* Gthr., 1864.

Gadella Lowe, 91; orthotype *G. GRACILIS* Lowe = *GADUS MARALDI* Risso. Replaces *URALEPTUS* Costa (1858).

Diaphasia Lowe, 92; orthotype *GYMNOTUS ACUS* Brünnich. A synonym of *CARAPUS* Raf.; a substitute for the "barbarous" name, *FIERASFER*.

301. LOWE (1843). *A History of the Fishes of Madeira, etc.*

RICHARD THOMAS LOWE.

Pleurothyris Lowe, 64; orthotype *STERNOPTYX OLFERSI* Cuv. Misprinted *PLEUROTHYSIS* by Günther. A synonym of *ARGYROPELECUS* Cocco.

302. MÜLLER (1843). *Beiträge zur Kenntniss der natürlichen Familien der Knochenfische*. Sitzb. Akad. Wiss. Berlin.

JOHANNES MÜLLER.

Encheliophis Müller, 153; orthotype *E. VERMICULARIS* Müller.

303. MÜLLER (1843). *Beiträge zur Kenntniss der natürlichen Familien der Fische*. Wiegmann's Arch. Naturgesch.

JOHANNES MÜLLER.

Cotylis Müller & Troschel, 297. haplotype *LEPADOGASTER NUDUS* Bl. & Schn. = *GOBIOX GYRINUS* J. & E., not *CYCLOPTERUS NUDUS* L., which is not identified. Later restricted by Günther, 1861, *COTYLIS FIMBRATA* M. & T., a species

- described later and not at first included by Müller. (*Horæ Ichthyologiæ*, II, 297. For *COTYLIS* Günther, not Müller, the name *COTYLICHTHYS* Jordan, 1919, has been substituted. A synonym of *GOBIESOX* Lac.
- Sicyases** Müller & Troschel, 298; orthotype *S. SANGUINEUS* M. & T.
- Synacidium** Müller, 302; orthotype *SCORPENA HORRIDA* L., "SYNANCEIA mit Vomerzähnen". A synonym of *SYNANCEJA* Bl. & Schn., as restricted.
- Ptenichthys** Müller, 312; logotype (*EXOCÆTUS FURCATUS* Mitchell; "EXOCÆTUS mit Barbfaden"). A synonym of *CYSELURUS* Sw., 1839.
- Hemiodus** Müller, 316; orthotype *H. CRENIDENS* Müller.
- Macrodon** Müller, 163; orthotype *M. TRAHIRA* Müller = *SYNODUS MALABARICUS* Bl. & Schn. Name preoccupied by *MACRODON* Schinz, 1822; replaced by *HOPLIAS* Gill.
- Euanemus** Müller, 318; orthotype *E. COLUMBETES* Müller = *HYPOPTHALMUS NUCHALIS* Spix. A synonym of *AUCHENIPTERUS* Cuv. & Val., as restricted by Bleeker and by Eigenmann.
- Calophysus** Müller, 318; orthotype *PIMELODUS MACROPTERUS* Lichtenstein.
- Mormyrops** Müller, 324; logotype *MORMYRUS ANGUILLOIDES* Geoffroy St. Hiraire.
- Gastrophysus** Müller, 330; orthotype *TETRAODON LUNARIS* L. Substitute for *PHYSOGASTER* Müller, preoccupied. A synonym of *LAGOCEPHALUS* Sw.
- Arapaima** Müller, 326; orthotype *SUDIS GIGAS* Cuv. A substitute for *SUDIS* Cuv., preoccupied by *SUDIS* Raf. (1810).
- Heterotis** (Ehrenberg) Müller, 326; orthotype *SUDIS NILOTICUS* Cuv. A synonym of *CLUPISUDIS* Sw.

304. MÜNSTER (1843). *Beiträge zur Petrefaktenkunde*. VI.

GEORG MÜNSTER.

- Wodnika** Münster, VI, 48; orthotype *ACRODUS ALTHAUSI* Münster (fossil).
- Byzenos** Münster, VI, 50; orthotype *B. LATIPINNATUS* Münster (fossil). A synonym of *JANASSA*.

305. PORTLOCK (1843). (*Geological Survey of Londonderry*.)

JOSEPH ELLISON PORTLOCK.

- Tristychius** Portlock, 464; orthotype *T. MINOR* Portlock (fossil).

306. RICHARDSON (1843). *Description of the Lurking Macherie (Machærium subducens) from the Northern Coast of New Holland*. Ann. Mag. Nat. Hist. VII.

JOHN RICHARDSON.

- Machærium** Richardson, XII, 175; orthotype *M. SUBDUCENS* Rich. Name preoccupied; replaced by *CONGROGADUS* Gthr., 1862.

307, 308. TEMMINCK & SCHLEGEL (1843). *Fauna Japonica* (part).

COENRAAD JACOB TEMMINCK; HERMANN SCHLEGEL.

- Acropoma** Temminck & Schlegel, 41; orthotype *ACROPOMA (JAPONICUM* Gthr.).
- Aploactis** Temminck & Schlegel, 51; orthotype *A. ASPERA* Rich.
- Glaucosoma** Temminck & Schlegel, 1843, 62; orthotype *G. BURGERI* Rich.
- Caprodon** Temminck & Schlegel, 64; orthotype *CAPRODON* = *ANTHIAS SCHLEGELI* Gthr.

1844

309. AGASSIZ (1844). *Recherches sur les poissons fossiles*. I, II, III, IV, V (parts completed).

LOUIS AGASSIZ.

- Placosteus** Agassiz, I, XXIII; orthotype *P. MEANDRINUS* Ag. (fossil); name only, replaced in 1845 by *PSAMMOSTEUS* Ag.
- Chelonichthys** Agassiz, I, XXXIII; logotype *C. ASMUSI* Ag. (fossil); name only. A synonym of *ICHTHYOSAUROIDES* Kutorga.
- Glyptosteus** Agassiz, I, XXXIV; orthotype *G. RETICULATUS* Ag. (fossil); name only. A synonym of *BOTHRIOLEPIS*.
- Psammolepis** Agassiz, I, XXXIV; orthotype *P. PARADOXUS* Ag. (fossil); name only, replaced in 1845 by *PSAMMOSTEUS* Ag.
- Scaphodus** Agassiz, I, XLIII; orthotype *GYRONCHUS OBLONGUS* Ag. (fossil). A synonym of *GYRONCHUS*.
- Pododus** Agassiz, II, 83; orthotype *P. CAPILLATUS* Ag. (fossil); name only. Identified by Woodward, 1901, as a synonym of *MESOLEPIS* Young.
- Megalichthys** Agassiz, II, 89, 154; orthotype *M. HIBBERTI* Ag. (fossil). Not *MEGALICHTHYS* Ag. 1836. Should apparently stand as *CENTRODUS* McCoy.
- Conodus** Agassiz, II, 105; orthotype *C. FEROX* Ag. (fossil); name only; preoccupied as *CONODON* Cuv. & Val., 1830. A synonym of *CATURUS* Ag.
- Thrissonotus** Agassiz, II, 128; orthotype *T. COLEI* Ag. (fossil); name only. Same as *OXYGNATHUS* Egert.; defined by Egerton, 1858.
- Microspondylos** Agassiz, II, 139; orthotype *M. ESCHERI* Ag. (no definition: shales of Glarus).
- Cricodus** Agassiz, II, 156; orthotype *DENDRODUS INCURVUS* Duff. (fossil).
- Amblysemus** Agassiz, II, 165; orthotype *A. GRACILIS* Ag. (fossil).
- Macropoma** Agassiz, II, 174; orthotype *M. EGERTONI* Ag. (fossil); name only. Defined by Egerton, *Mem. Geol. Surv.*, IX, No. 10, 1858, from which the name should date. A synonym of *EURYCORMUS* Wagner, 1863, and of earlier date.
- Uronemus** Agassiz, II, 178; orthotype *U. LOBATUS* Ag. (fossil).
- Hoplopygus** Agassiz, II, 178; orthotype *H. BINNEYI* Ag. (fossil). A synonym of *CÆLACANTHUS*.
- Gyrosteus** Agassiz, II, 179; orthotype *G. MIRABILIS* Ag. (fossil); name only; validated by Egerton, *Phil. Trans.*, 1858, 883.
- Ctenolepis** Agassiz, II, 180; orthotype *C. CYCLUS* Ag. (fossil). Undetermined scales; defined by Woodward, 1895.
- Periodus** Agassiz, II, 201; orthotype *P. KOENIGI* Ag. A synonym of *PYCNODUS* Ag.
- Gyronchus** Agassiz, II, 202; orthotype *G. OBLONGUS* Ag. (fossil).
- Acrotenuus** Agassiz, II, 203; orthotype *A. FABÆ* Ag. (fossil).
- Colobodus** Agassiz, II, 237; orthotype *C. HOGARDI* Ag. (fossil). Apparently a synonym of *ASTERODON* Münster.
- Phylloodus** Agassiz, II, 238; orthotype *P. TOLIAPICUS* Ag. (fossil).
- Acanthoderma** Agassiz, II, 251; logotype *A. SPINOSUM* Ag. (fossil). Name preoccupied. See *AGOREION* Gistel, 1847.
- Acanthopleurus** Agassiz, II, 253; orthotype *PLEURACANTHUS SERRATUS* Ag. (fossil). This name may be regarded as preoccupied by *ACANTHOPLEURA*, 1829.
- Rhinellus** Agassiz, II, 260; orthotype *R. FURCATUS* Ag. (fossil), regarded as preoccupied by *RHINELLA* Fitzinger, 1826; replaced by *ICHTHYOTRINGA* Cope, 1878.
- Glyptocephalus** Agassiz, II, 264; orthotype *G. RADIATUS* Ag. (fossil). Name preoccupied, Gottsche, 1835. A synonym of *BUCKLANDIUM* König.
- Chondrosteus** Agassiz, II, 280; orthotype *C. ACIPENSEROIDES* Ag. (fossil); name only; validated by Egerton, *Phil. Trans.*, 1858, 871.
- Nothosomus** Agassiz, II, 292; orthotype *N. OCTOSTYCHIUS* Ag. (fossil); name only; described by Egerton, *Mem. Geol. Surv.*, 1858, Dec. IX, No. 6. An ally of *PHOLIDOPHORUS*.

- Coccolepis** Agassiz, II, 300; orthotype *C. BUCKLANDI* Ag. (fossil).
- Plectrolepis** Agassiz, II, 306; orthotype *P. RUGOSUS* Ag. (fossil); name only; defined by Egerton, 1850. A synonym of *NOTACMON* Gistel, which replaces *EURYNOTUS* Ag.
- Oxyrhina** Agassiz, III, 276; orthotype *ISURUS SPALLANZANI* Raf. Preoccupied; replaced by *PLECTROSTOMA* Gistel (1848). A synonym of *ISURUS* Raf., 1810.
- Cœlacanthus** Agassiz, IV, 83; orthotype *C. GRANULATUS* Ag. (fossil).
- Rhamphosus** Agassiz, IV, 270; orthotype *CENTRISCUS ACULEATUS* Blainv. (fossil).
- Urosphen** Agassiz, IV, 284; orthotype *U. FISTULARIS* Ag. (fossil). (Printed as name only in *Neues Jahrb.*, 1835, 293.)
- Notæus** Agassiz, V, 12; orthotype *N. LONGICAUDUS* Ag. (fossil). Name regarded as preoccupied, as *NOTEUS* Ehrenb., 1830; replaced by *AMIOPSIS* Kner. A synonym of *CYCLURUS* Ag.
- Cyclurus** Agassiz, V, 12; orthotype *V. VALENCIENNESI* Ag. (fossil). Regarded as preoccupied by *CYCLURA* Harlan, 1825, a reptile, replaceable by *AMIOPSIS* Kner. A fossil homologue of *AMIA* L. (*AMIATUS* Raf.).
- Sphenolepis** Agassiz, V, 13; orthotype *CYPRINUS SQUAMOSSEUS* Blainv. (fossil). Name preoccupied, same as *NOTOGONEUS* Cope, 1885; perhaps a synonym of *ANORMURUS* Blainv., 1818.
- Autolepis** Agassiz, V, 14; orthotype *A. TYPUS* Ag.
- Enchelyopus** Agassiz, V, 16; orthotype *E. TIGRINUS* Ag. (fossil). (As name only in *Neues Jahrb.*, 1835, 307.) Name preoccupied; replaced by *PARANGUILLA* Blkr., 1864.
- Pamphractus** Agassiz, V, 20; orthotype *P. HYDROPHILUS* Ag. (fossil). A synonym of *BOTHRIOLEPIS*.
- Coccosteus** Agassiz, 22; orthotype *C. DECIPIENS* Ag. (fossil).
- Polyphractus** Agassiz, V, 29; orthotype *P. PLATYCEPHALUS* Ag. (fossil). A synonym of *DIPTERUS* Sedgwick & Murchison.
- Carangopsis** Agassiz, V, 39; logotype *C. LATIOR* Ag. (fossil). Published as name only, *Neues Jahrb.*, 1835, 293.
- Amphistium** Agassiz, V, 44; orthotype *A. PARADOXUM* Ag. (fossil). (Noted as name only, *Neues Jahrb.*, 1835, 294.)
- Halecopsis** Agassiz, V, 44; orthotype *H. LÆVIS* Ag. (fossil); names only; given definition by Woodward, 1901.
- Palimphyes** Agassiz, V, 46; logotype *P. LONGUS* Ag. (fossil).
- Archæus** Agassiz, V, 49; orthotype *A. GLARISIANUS* Ag. (fossil).
- Isurus** Agassiz, V, 51; orthotype *ISURUS MACRURUS* Egert. (fossil). (Printed as name only by Egerton, *Cat Foss. Fish*, 1837.) Name preoccupied; replaced by *ISURICHTHYS* Woodward, 1901.
- Pleionemus** Agassiz, V, 52; orthotype *P. MACROSPONDYLUS* Ag. (fossil). Name only. A fragment of an *ARCHÆUS*.
- Ductor** Agassiz, V, 53; orthotype *D. LEPTOSOMUS* Ag. (fossil). Printed in 1834 as name only in *Verhandl. Mus. Böhmen*, 66.
- Glyptopomus** Agassiz, 57; orthotype *G. MINOR* Ag. (fossil).
- Placothorax** Agassiz, 134; orthotype *P. PARADOXUS* Ag. (fossil). A synonym of *BOTHRIOLEPIS*.
- Platygnathus** Agassiz, V, 61; orthotype *P. JAMESONI* Ag. (fossil). A synonym of *HOLOPTYCHUS*.
- Glyptolepis** Agassiz, V, 62; logotype *G. LEPTOPTERUS* Ag. (fossil).
- Goniognathus** Agassiz, V, 63; logotype *G. MAXILLARIS* Ag. (fossil); name only. A synonym of *AMPHERISTUS* König.

- Phyllolepis** Agassiz, V, 67; orthotype *P. CONCENTRICA* Ag. (fossil).
- Nemopteryx** Agassiz, V, 75; orthotype *CYCLURUS CRASSUS* Egert. (fossil).
- Holosteus** Agassiz, V, 85; orthotype *H. ESOCINUS* Ag. (fossil).
- Hemirhynchus** Agassiz, V, 87; orthotype *HISTIOPHORUS DESHAYESI* Ag. (fossil). Name preoccupied; perhaps the same as *HOMORHYNCHUS* Van Beneden, 1873.
- Istieus** Agassiz, V, 91; logotype *I. GRANDIS* Ag. (fossil). An extinct ally of *PTEROTHRISSUS* Hilgendorf.
- Sphyrænodus** Agassiz, V, 98; orthotype *SPHYRÆNODUS PRISCUS* Ag. (fossil). Name printed by Owen, 1841.
- Cœlorhynchus** Agassiz, V, 92; orthotype *C. RECTUS* Ag. (fossil); name preoccupied.
- Hypsodon** Agassiz, V, 101; orthotype *H. TOLIAPICUS* Ag., name only (fossil). Apparently a synonym of ally of *MEGALOPS* Lac.
- Osmeroides** Agassiz, V, 103; orthotype *O. MONASTERI* Ag. (fossil). The name has been transferred by authors to *SALMO LEWESIENSIS* Mantell, the type of *HOLCOLEPIS* von der Marck. *OSMEROIDES* should replace *SARDINIOIDES* von der Marck.
- Rhamphognathus** Agassiz, V, 9, 104; orthotype *R. PARALEFOIDES* Ag. (fossil).
- Mesogaster** Agassiz, V, 9, 105; orthotype *M. SPHYRÆNOIDES* Ag. (fossil)
- Spinacanthus** Agassiz, V, 107; orthotype *S. BLENNIOIDES* Ag. (fossil).
- Acrognathus** Agassiz, V, 108; orthotype *A. BOOFS* Ag. (fossil).
- Rhynchorinus** Agassiz, V, 139; orthotype *R. BRANCHIALIS* Ag. (fossil); name only; validated by Woodward, 1901.
- Cœlocephalus** Agassiz, V, 139; orthotype *C. SALMONEUS* Ag. (fossil); name only. Preoccupied before defined by *CÆLOCEPHALUS* Clark, 1860, and by *CÆLOCEPHALUS* Gilbert & Cranier, 1897; replaced by *EOTHYNNUS* Woodw., 1901.
- Halecopsis** Agassiz, V, 139; orthotype *H. LEIS* Ag. (fossil) = *OSMEROIDES INSIGNIS* Delvaux & Ortlieb (fossil); name only; validated by Woodward, 1901.
- Elopidés** Agassiz, V, 139; orthotype *E. COULONT* Ag. (fossil); name only; validated by Woodward, 1901.
310. COCCO (1844). *Intorno ad alcuni nuovi pesci del mare di Messina*. Lettera del Prof. Anastasio Cocco al Signor Augusto Krohn.
ANASTASIO COCCO.
- Krohnus** Cocco, 1; orthotype *K. FILAMENTOSUS* Cocco. Young of *CÆLORHYNCHUS* Giorna.
- Bibronia** Cocco, 15; orthotype *B. LIGULATA* Cocco. Larva of *SYMPHURUS* Raf.
- Peloria** Cocco, 21; orthotype *P. HECKELI* Cocco. A larva of *PLATOPHYRUS* Sw.
- Coccolus** (Bonaparte) Cocco, 21; orthotype *C. ANNECTENS* Cocco. A larva of *PLATOPHYRUS* Sw.
311. CUVIER & VALENCIENNES (1844). *Histoire naturelle des poissons*. XVII.
ACHILLE VALENCIENNES.
- Catla** Cuvier & Valenciennes, XVII, 140; tautotype *CYPRINUS CATLA* Ham. A synonym of *GIBELION* Heckel.
- Sclerognathus** Cuvier & Valenciennes, XVII, 472; logotype, restriction of Günther, 1868, *SCLEROGNATHUS CYPRINELLA* Cuv. & Val.; the original diagnosis drawn up from *CATOSTOMUS CYPRINUS* Le Sueur, a species of *CARPIOIDES* Raf. A synonym of *ICTIOBUS* Raf., as here accepted. This view is not taken by Fowler, who regards *CARPIOIDES CYPRINUS* as type of *SCLEROGNATHUS* and gives to *I. CYPRINELLA* the new name of *MEGASTOMATOBUS*.

312. EGERTON (1845). *Description of a Fossil Ray from Mount Lebanon (Cyclobatis oligodactylus)*. Quart. Journ. Geol. Soc., I.
PHILIP DE MALPAS GREY EGERTON.
Cyclobatis Egerton, IV, 442; orthotype *C. OLIGODACTYLUS* Egert. (fossil).
313. EICHWALD (1844). *Ueber die Fische des devonischen Systems in der Gegend von Pawlowsk*. Bull. Soc. Nat. Moscow, XVII.
CARL EDWARD VON EICHWALD.
Sclerolepis Eichwald, XVII, 828; orthotype *S. DECORATA* Eichw. (fossil). A synonym of *GLYPTOLEPIS*.
Microlepis Eichwald XVII, 830; logotype *M. EXILIS* Eichw. (fossil). A doubtful genus, the name preoccupied in reptiles.
Chiaistolepis Eichwald, XVIII, 831; orthotype *C. CLATHRATA* Eichw. (fossil).
[GOLDFUSS (1844). *SCLEROCEPHALUS HAEUSERI* Goldfuss, 1844, described as a ganoid fish, is a reptile.]
314. KONINCK (1844). *Description des animaux fossiles qui se trouvent dans le terrain carbonifère de Belgique*.
LAURENT (GUILLAUME) DE KONINCK (1809-1887).
Campodus Koninck, 617; orthotype *C. AGASSIZIANUS* Koninck (fossil).
315. McCLELLAND (1844). *Description of a Collection of Fishes Made at Chasun and Ningpo in China by G. R. Playfair*. Journ. Nat. Hist. Calcutta, IV.
JOHN McCLELLAND.
Cossyphus McClelland, IV, 403; orthotype *C. ATER* McCl. Preoccupied; replaced by *PHAGORUS* McCl.
Phagorus McClelland, IV, 403; orthotype *COSSYPHUS ATER* McCl. = *MACROPTERONOTUS JAGUR* Ham. Replaces *COSSYPHUS* McCl., preoccupied.
Chaetomus McClelland, IV, 405; orthotype *C. PLAYFAIRI* McCl.
Murænesox McClelland, V, 408; logotype *M. TRICUSPIDATA* McCl.
316. McCLELLAND (1844). *Apodal Fishes of Bengal*. Journ. Nat. Hist. Calcutta, V.
JOHN McCLELLAND.
Lycodontis McClelland, V, 173; logotype *L. LITERATA* McCl., as restricted by Jordan & Evermann, 1896. A synonym of *GYMNOTHORAX* Bloch, as here understood.
Thærodontis McClelland, V, 174; orthotype *T. RETICULATA* McCl. A synonym of *GYMNOTHORAX*.
Strophidon McClelland, V, 187; orthotype *LYCODONTIS LONGICAUDATA* McCl. A synonym of *GYMNOTHORAX*, the name wrongly transferred by Bleeker and Günther to the genus *PSEUDOCHEIDNA* Blkr.
Ophicardia McClelland, V, 191; orthotype *O. PHAYRIANA* McCl. A synonym of *FLUTA* Bl. & Schn. = *MONOPTERUS* Lac.
Pneumabranchnus McClelland, V, 192; logotype *P. STRIATUS* McCl. A synonym of *AMPHIPNOUS* Müller.
Ophisternon McClelland, V, 197; logotype *O. BENGALENSIS* McCl. A synonym of *SYMBRANCHUS* Bloch.
Ptyobranchnus McClelland, V, 200; logotype *P. ARUNDINACEUS* McCl. A synonym of *RAITOBOURA* Gray = *MORINGUA* Gray.
Ophithorax McClelland, V, 212; logotype "OPHISURUS OPHIS Lac." (*MURÆNA MACULOSA* Cuv.). The species called *MURÆNA OPHIS* by Linnæus is the type of

the genus *OPHICHTHUS* of Ahl. *MURENA OPHIS* Bloch is probably the same and *M. OPHIS* Lac. seems to be drawn from the same material. The figure of Lacépède is the sole basis of Cuvier's *MURENA MACULOSA*. All these accounts seem to refer to the fish called *OPHICHTHUS HAVANNENSIS* (Bl. & Schn.). The *MACULOSUS* of Kaup and Günther is a different fish, a species of *MYRICHTHYS*. McClelland places "*OPHISURUS OPHIS* Lac." first among his species of *OPHITHORAX*. We therefore take it as his type, although his description is rather dubious. "Dorsal fin broad, anal narrow; body and dorsal covered with large round spots. Pectoral fin very minute. Seas of Europe." The genus is defined: "Pectoral fins very small so as to be scarcely perceptible." It is possible that this description applies to the species called *OPHICHTHUS MACULOSUS* by Günther (not by Cuvier). This is a species of *MYRICHTHYS*, thus far without tenable name. Using Günther's description of *OPHICHTHUS MACULOSUS* as the type, the species may be named *MYRICHTHYS GÜNTHERI* Jordan. It seems best to regard *OPHITHORAX* as a synonym of *OPHICHTHUS* Ahl, rather than to substitute it on doubtful grounds for *MYRICHTHYS* or for *CHLEVASTES (COLUBRINUS)*.

317. MEYER & PLIENINGER (1844). *Paläontologie von Württemberg*.
CHRISTIAN ERICH VON MEYER (1801-1894); WILHELM HEINRICH THEODOR
VON PLIENINGER (1795-1879).

Thectodus Meyer & Plieninger, 116; logotype *T. INFLATUS* Müller & Plieninger (fossil). A synonym of *ACRODUS*.

318. MÜLLER & TROSCHEL (1844). *Synopsis generum et specierum familiae Characinarum*. Wiegmann's *Archiv. Naturg.* (Also in *Horæ Ichthyologicae*, III, 1845.)

JOHANNES MÜLLER; FRANZ HERMANN TROSCHEL (1810-1882).

Chilodus Müller & Troschel, 85; haplotype *CHILODUS PUNCTATUS* M. & T. Preoccupied; replaced by *MICRODUS* Kner, 1859; also preoccupied, and by *CÆNOTROPUS* Gthr., 1864.

Alestes Müller & Troschel, 88; orthotype *SALMO NILOTICUS* Geoffroy St. Hilaire.

Brycon Müller & Troschel, 90; logotype *CHARACINUS MICROLEPIDOTUS* Cuv.

Exodon Müller & Troschel, 91; haplotype *EXODON PARADOXUS* M. & T. Said to be preoccupied; replaced by *HYSTRICODON* Gthr. 1864

Epicyrthus Müller & Troschel, 92; haplotype *SALMO GIBBOSUS* Gronow. Preoccupied; replaced by *ANACYRTUS* Gthr., 1864. A synonym of *CHARAX* (Gronow) Scopoli.

Xiphorhamphus Müller & Troschel, 92; orthotype *SALMO FALCATUS* Bloch. Substitute for *XIPHORHYNCHUS* Ag., preoccupied. This name is also preoccupied and changed to *ACESTORHYNCHUS* Eigenmann (1903). "Nomen *XIPHORHYNCHUS* usurpatum in Ornithologie" (M. & T.).

Hydrolycus Müller & Troschel, 93; orthotype *HYDROCYON SCOMBEROIDES* Cuv.

Pygocentrus Müller & Troschel, 94; logotype *SERRASALMO PIRAYA* Cuv.

Pygopristis Müller & Troschel, 95 logotype *SERRASALMO DENTICULATUS* Cuv.

Catoprion Müller & Troschel, 96; haplotype *SERRASALMO MENTO* Cuv.

Myleus Müller & Troschel, 98; orthotype *MYLEUS SETIGER* Müller.

319. NARDO (1844). *Proposizione per la formazione di un nuovo genere di Selachi chiamato Caninoa o Caninotus, che costituirebbe una nuova sottofamiglia prossima ai Notidani*. Ann. Soc. Lombardo-Veneto, III.

GIOVANNI DOMENICO NARDO.

Caninoa Nardo, 8; orthotype *SQUALUS BARBARUS* (Chierigini MSS.) = *C. CHIERIGHINI* Nardo. An anomalous shark, not since recognized, if existing.

- Caninotus** Nardo, 8; orthotype *CANINOA CHIEREGHINI* Nardo. (*SQUALUS BARBARUS* Chierigini MSS.) Name a provisional substitute for *CANINOA*.
320. **PETERS** (1844). *Ueber einem den Lepidosirens annectens verwandten, mit Lungen und Kiemen zugleich versehenen Fisch aus den Sümpfen von Quellimane (Rhinocryptis amphibia)*. Mon. Akad. Berlin.
WILHELM CARL HARTWIG PETERS (1815-1883).
- Rhinocryptis** Peters, 414; orthotype *R. AMPHIBIA* Peters = *LEPIDOSIRENS ANNECTENS* Owen. A synonym of *PROTOPTERUS* Owen.
- 320A. **REUSS** (1844). *Geognostische Skizzen aus Böhmen*.
AUGUST EMANUEL VON REUSS (1811-1873).
- Thaumaturus** Reuss, II, 264; orthotype *T. FURCATUS* Reuss (fossil). An extinct form of trout.
321. **RICHARDSON** (1844). *Description of a Genus of Chinese Fish (Hapalogenys)*. Ann. Mag. Nat. Hist., XIII.
JOHN RICHARDSON.
- Hapalogenys** Richardson, XIII, 463; logotype *H. NITENS* Rich. = *POGONIAS NIGRIPINNIS* T. & S.
322. **RICHARDSON** (1844). *Description of a New Genus of Gobioid Fish (Channichthys)*. Ann. Mag. Nat. Hist. XIII.
JOHN RICHARDSON.
- Channichthys** Richardson; orthotype *C. RHINOCERATUS* Rich. Name afterward spelled *CHÆNICHTHYS*, as dictated by a purist, an unwarranted change.
323. **RICHARDSON** (1844). *Generic Characters of an Undescribed Australian Fish (Pataeus fronto)*. Ann. Mag. Nat. Hist., XIV.
JOHN RICHARDSON.
- Pataeus** Richardson, XIV, 280; orthotype *P. FRONTO* Rich.
324. **RICHARDSON** (1844). *Ichthyology*. (In *The Zoology of the Voyage of H.M.S. "Sulphur", Under the Command of Captain Sir Edward Belcher, During the Years 1836-42*. Edited by R. B. Hinds).
JOHN RICHARDSON.
- Chæturichthys** Richardson, 54; orthotype *C. STIGMATIAS* Rich.
- Centridermichthys** Richardson, 74; orthotype *C. ANSATUS* Rich. = *TRACHIDERMUS FASCIATUS* Heckel. Replaces *TRACHIDERMUS* Heckel, regarded as preoccupied by *TRACHYDERMA*.
- Calloptilum** Richardson, 94; orthotype *C. MIRUM* Rich. A synonym of *BREGMACEROS* Cantor.
- Astronesthes** Richardson, 97; orthotype *A. NIGRA* Richardson.
325. **RICHARDSON** (1844). *The Zoology of the Voyage of H.M.S. "Erebus and Terror", Under the Command of Captain Sir J. C. Ross . . . During 1839-43*. Edited by J. Richardson . . . and J. E. Gray. London.
JOHN RICHARDSON.
- Notothenia** Richardson, 5; logotype *N. CORICEPS* Rich.
- Harpagifer** Richardson, 11; orthotype *CALLIONYMUS BISPINIS* Forster.
- Chænichthys** Richardson, 12; orthotype *C. RHINOCERATUS* Rich.; a substitute for *CHANNICHTHYS*.
- Pagetodes** Richardson, 15; orthotype (not given a specific name, a cat having run away with the type specimen).

- Emmelichthys** Richardson, 47; orthotype *E. NITIDUS* Rich.
Cheilobranchys Richardson, 50; logotype *C. DORSALIS* Rich. A synonym of *ALABES* Cuv.
Prymnothonus Richardson, 51; orthotype *P. HOOKERI* Rich. A larval form.
Xystophorus Richardson, 52; very young of *NAUCRATES*.
Aleuterius (Cuvier) Richardson, 66; after *ALUTERA* (Cuv.) Oken. One of many varied spellings of *ALUTERA*, derived from "les *ALUTERES*", as *ALUTARIUS*, *ALUTERUS*, etc. *ALUTERA* has priority.
Oxybeles Richardson, 74; orthotype *O. HOMEI* Rich. A synonym of *CARAPUS* (*FIERASFER*).
Molarii (Molarius) Richardson, 79; logotype "*MURÆNA OPIIIS*" = *ECHIDNA NEBULOSA* (plural form only). A synonym of *ECHIDNA* Forster.
Channo-Muræna Richardson, 96 orthotype *ICHTHYOPHIS VITTATUS* Rich.
Congrus Richardson, 107; orthotype *MURÆNA CONGER* L. A variant spelling of *CONGER*.
Psammoperca Richardson, 115; orthotype *Ps. DATNIOIDES* Rich. = *LABRAX WAIGIENSIS* Cuv. & Val.; replaces *CNIDON* M. & T. (1849).
Gadopsis Richardson, 122; orthotype *G. MARMORATUS* Rich.

326. TEMMINCK & SCHLEGEL (1844). *Fauna Japonica* (part).

COENRAAD JACOB TEMMINCK; HERMANN SCHLEGEL.

- Chætopterus** Temminck & Schlegel, 78; orthotype *C. SIEBOLDI* Blkr. Name pre-occupied; replaced by *PRISTIPOMOIDES* Blkr.
Melanichthys Temminck & Schlegel, 75; orthotype *CRENIDENS MELANICHTHYS* Rich. A synonym of *GIRELLA* Gray.
Ditrema Temminck & Schlegel, 77; orthotype *D. TEMMINCKI* Blkr.
Hypsinotus Temminck & Schlegel, 84; orthotype *H. RUBESCENS* Gthr. A synonym of *ANTIGONIA* Lowe.
Scarodon Temminck & Schlegel, 89; logotype *S. FASCIATUS* T. & S. A synonym of *OPLEGNATHUS* Rich., 1840; available if the latter is regarded as pre-occupied.

327. VALENCIENNES (1844). *Ichthyologie des îles Canaries, ou Histoire naturelle des poissons, rapportés par MM. Webb & Berthelot*. In Webb, *Histoire naturelle des îles Canaries*. II, 1835-1850.

ACHILLE VALENCIENNES.

- Nemobrama** Valenciennes, 40; orthotype *N. WEBBI* Val. = *POLYMIXIA NOBILIS* Lowe. A synonym of *POLYMIXIA* Lowe.
Crius Valenciennes, 43; orthotype *C. BERTHELOTI* Val. = *SCHEDOPHILUS MEDUSOPHAGUS*. A synonym of *SCHEDOPHILUS* Cocco.
Asellus Valenciennes, 76; orthotype *ASELLUS CANARIENSIS* Val. A synonym of *MORA* Risso.

1845

328. AGASSIZ (1845). *Rapport sur les poissons fossiles de l'argile de Londres*. Rept. British Assoc. Adv. Sci.

LOUIS AGASSIZ.

- Rhinocephalus** Agassiz, 294; orthotype *R. PLANICEPS* Ag. (fossil). Name only, noted by Woodward, 1901.
Sciænurus Agassiz, 295; orthotype *S. BOWERBANKI* Ag. (fossil) A synonym of *SPARNODUS*.

- Pomaphractus** Agassiz, 307; orthotype *P. EGERTONI* Ag. (fossil); name only; identification by Woodward, 1901. A synonym of *BRYCHÆTUS* (Ag.) Woodw.
- Cœlopoma** Agassiz, 307; orthotype *C. COLEI* Ag. (fossil); name only; preoccupied (Adams, 1867) and replaced by *ECCÆLOPOMA* Woodw., 1901.
- Eurygnathus** Agassiz, 307; orthotype *E. CAVIFRONS* Ag. (fossil). Name only; validated by Woodward, 1901; preoccupied and replaced by *ESOCELOPS* Woodw.
- Percostoma** Agassiz, 307; orthotype *P. ANGUSTA* Ag. Name only; noted by Woodward, *Cat.*, 519, 1901.
- Cœloperca** Agassiz, 307; orthotype *CÆLOPERCA LATIFRONS* Ag. (fossil). Name only; noted by Woodward, *Cat.*, IV, 519.
- Bothrosteus** Agassiz, 307; orthotype *B. MINOR* Ag. (fossil). Name only, noted by Woodward, *Cat.*, IV, 611, 1901.
- Calopomus** Agassiz, 307; orthotype *C. POROSUS* Ag. (fossil), name only.
- Brachygnathus** Agassiz, 307; orthotype *B. TENUICEPS* Ag. (fossil). Name only, noted by Woodward *Cat.*, 1901, 519; name preoccupied.
- Podocephalus** Agassiz, 307; orthotype *P. NITIDUS* Ag. (fossil). Name only; noted by Woodward, *Cat.*, 519, 1901.
- Brychætus** Agassiz, 308; orthotype *B. MULLERI* Ag. (undefined) (fossil); first defined by Woodward, 1901.
- Merlinus** Agassiz, 308; orthotype *M. CRISTATUS* Ag. (fossil), noted by Woodward, 1901.
- Scombrinus** Agassiz, 308; orthotype *S. NUCHALIS* Ag. (fossil); name only; validated by Woodward, 1901.
- Phalacrus** Agassiz, 308; orthotype *P. CYBIOIDES* Ag. (fossil); name only; referred by Woodward to synonymy of *EOTHYNNUS* Woodw.
- Rhonchus** Agassiz, 308; orthotype *R. CARANGOIDES* Ag. (fossil). Name only; explained by Woodward, *Cat.*, IV, 458. A synonym of *EOTHYNNUS* Woodw.
- Naupygyus** Agassiz, 308; orthotype *N. BUCKLANDI* Ag. (fossil). Name only; noted by Woodward, *Cat.*, 611 (1901).
- Acestrus** Agassiz, 308; orthotype *A. ORNATUS* Ag. (fossil). Name only; validated by Woodward, 1901, perhaps to be regarded as preoccupied by *ACESTRA* Jardine, 1831.
- Laparus** Agassiz, 308; orthotype *L. ALTICEPS* Ag. (fossil); name only; discussed by Woodward, 1901).
- Labrophagus** Agassiz, 308; orthotype *L. ESOCINUS* Ag. (fossil). Name only; noticed by Woodward, *Cat.*, IV, 611, 1901.
- Loxostomus** Agassiz, 308; orthotype *L. MANCUS* Ag. (fossil). Name only; noted by Woodward, *Cat.*, IV, 612, 1901.
- Pachycephlus** Agassiz, 308; orthotype *P. CRISTATUS* Ag. (fossil). Name only; noted by Woodward, *Cat.*, IV, 612, 1901.

Most of the foregoing names from Agassiz's list of the Egerton collection have been identified from labeled specimens and several have justly come into use as dating, not from 1845, but from their first definition. Woodward gives the following additional generic names, of which nothing is known, and which, until defined, have no place in the system.

- Echenus** (POLITUS).
Gadopsis (BREVICEPS).
Phasganus (DECLIVIS).
Rhipidolepis (ELEGANS).
Synophrys (HOPEI).

329. AGASSIZ (1845). *Monographie des poissons fossiles du Vieux Grès Rouge, ou Système Dévonien (Old Red Sandstone) des îles Britanniques et de Russie. Part 2.*

LOUIS AGASSIZ.

- Diplacanthus** Agassiz, 34, 40; orthotype *D. STRIATUS* Ag.
Lamnodus Agassiz, 83; orthotype *DENDRODUS BIPORCATUS* Owen (fossil). A synonym of *DENDRODUS*.
Psammosteus Agassiz, 103; logotype *P. MEANDRINUS* Ag. (fossil).
Homacanthus, 113; orthotype *H. ARCUATUS* Ag. (fossil).
Haplacanthus Agassiz, 114; orthotype *H. MARGINALIS* Ag. (fossil).
Odontacanthus Agassiz, 114; logotype *O. CRENATUS* Ag. (fossil). A synonym of *ASTROLEPIS*.
Narcodes Agassiz, 115; orthotype *N. PUSTULIFER* Ag. (fossil). A supposed synonym of *ASTROLEPIS*.
Byssacanthus Agassiz, 116; orthotype *B. CRENULATUS* Ag. (fossil).
Naulas Agassiz, 116; orthotype *N. SULCATUS* Ag. (fossil).
Climatius Agassiz, 119; orthotype *C. RETICULATUS* (Ag. fossil).
Cosmacanthus Agassiz, 120; orthotype *C. MALCOLMSONI* Ag. (fossil).
Parexus Agassiz, 120; orthotype *P. INCURVUS* Ag. (fossil).
Homothorax Agassiz, 134; orthotype *H. FLEMINGI* Ag. (fossil). A synonym of *BOTHRIOLEPIS*.
Chelyophorus Agassiz, 135; orthotype *C. VERNEULI* Ag. (fossil).
Actinolepis Agassiz, 141; orthotype *A. TUBERCULATUS* Ag. (fossil). A supposed synonym of *ASTROLEPIS*.
Stagonolepis Agassiz (not quoted by Woodward; referred to the *DIPTERINI*).
 330. BLEEKER (1845). *Bijdragen tot geneseskunde topographie van Batavia. Generisch overzicht der fauna. II, 1845. Arch. Nederl. Indie.*
 PIETER BLEEKER (1819-1878).
Pinjalo Bleeker, II, 251 (1845); orthotype *CESIO PINJALO* Blkr. = *P. TYPUS* Blkr.
Heterodon Bleeker, 323; orthotype *H. ZONATUS* Blkr. Name preoccupied in serpents; replaced by *HETEROGNATHODON* Blkr., 1848.
Mesopristes Bleeker, 523; orthotype *M. MACRACANTHUS* Blkr.; a synonym of *DATNIA* Cuv. & Val.
 331. BONAPARTE (1845). *Catalogo metodico dei pesci Europei. Atti Sci. Ital.* (Reprint as a separate volume, Naples, 1846.)
 CARLO L. PRINCIPE BONAPARTE.

Some of the names here used may have occurred in other papers of 1844 and 1845.

- Glaucostegus** Bonaparte, 14; orthotype *G. CEMICULUS* Bon. ("RHINA RHINOBATUS SHAW = *RH. CEMICULUS* Geoffroy.") A synonym of *RHINOBATUS*.
Acanthias Bonaparte, 15; orthotype *SQUALUS ACANTHIAS* L. *A. VULGARIS* Bon. same as *ACANTHIAS* Risso. A synonym of *SQUALUS* L., as restricted.
Lepidorhinus Bonaparte, 16; orthotype *SQUALUS SQUAMOSUS* Broussonnet.
Scymnorhinus Bonaparte, 16; orthotype *S. LICHIA*. Replaces *SCYMNUS* Cuv., preoccupied.
Spinax Bonaparte, 16; tautotype *SQUALUS SPINAX* L. Same as *SPINAX* Cuv. A synonym of *ETMOPTERUS* Raf.
Sterledus Bonaparte, 21; orthotype *ACIPENSER RUTHENUS* Bon. Same as *STERLETA* Gldenstdt.

- Cenisophius** Bonaparte, 29; orthotype *LEUCISCUS PAUPERUM* Bon. Replaces *LEUCUS* Heckel, preoccupied in birds, as *LEUCUS*.
- Gardonus** Bonaparte, 29; orthotype *LEUCISCUS DECIPIENS* Ag. A synonym of *CENISOPHIUS*.
- Pigus** Bonaparte, 29; tautotype *CYPRINUS PIGUS* Cloquet. Apparently a synonym of *CENISOPHIUS*.
- Cephalus** Bonaparte, 30; orthotype *CYPRINUS CEPHALUS* L. Name preoccupied; a synonym of *LEUCISCUS* Cuv.
- Microlepis** Bonaparte, 30; no diagnosis; orthotype *M. TURSKYI* Bon. A synonym of *LEUCISCUS* Cuv.
- Hegerius** Bonaparte, 31; orthotype *SCARDINIUS HEGERI* Bon., *HEGERIUS TYPUS* Bon. An ally of *TELESTES*; the name later spelled *HEGERIUS*.
- Scardinius** Bonaparte, 31; logotype *LEUCISCUS SCARDAFA* Bon.
- Pollachius** (Nilsson) Bonaparte 45; orthotype *GADUS POLLACHUS* L. = *GADUS VIRENS* L.
- Coccolus** Bonaparte, 47; orthotype *C. ANNECTENS* Bon., a substitute for *KROHNIUS* Cocca (*K. FLAMENTOSUS*, which is the larva of the *MACRURID*, *CÆLORHYNCHUS*, *Giorna*).
- Cynoglossa** Bonaparte, 48; orthotype *PLEURONECTES CYNOGLOSSUS* L. A synonym of *CYNICOGLOSSUS* Bon., not *CYNGLOSSUS* Ham.
- Plagusia** Bonaparte, 51; orthotype *PLAGUSIA LACTEA* Bon. A substitute for *PLAGUSIA* Cuv., preoccupied. A synonym of *SYMPHURUS* Raf.
- Scorpichthes** Bonaparte, 62; logotype *COTTUS SCORPIUS* L., in plural form only. A synonym of *MYOXOCEPHALUS* Stellar.
- Gastronemus** (Cocco) Bonaparte, 68; orthotype *PHAROPTERYX BENOITI* Rüppell. Name preoccupied. A synonym of *MORA* Risso.
- Tinimogaster** (Cocco) Bonaparte, 68; no definition; quoted by Bonaparte in connection with *GASTRONEMUS* Cocco. A synonym of *MORA* Risso, apparently a substitute for *GASTRONEMUS*, preoccupied.
- Selenia** Bonaparte, 75; orthotype *CARANX LUNA* Geoffroy St. Hilaire = *SCOMBER GUARA* *Bonnaterre*. Apparently replaces *URASPIS* Blkr.

332. BRODIE (1845). (*Fossil Insects*.)

PETER BELLINGER BRODIE.

- Oxygonius** (Agassiz) Brodie, 16; orthotype *O. TENUIS* Ag. (fossil). Young fishes, indeterminate.
- Ceramurus** (Egerton) Brodie, 17; orthotype *C. MACROCEPHALUS* Egert. (fossil).

333. COSTA (1845). (*Fossil Fishes*.) *Atti Acad. Pontan. Napoli*.

ORONZIO GABRIELE COSTA.

- Megastoma** Costa, V, 287; orthotype *M. APENNINUM* Costa (fossil). A synonym of *LEPTOLEPIS*.

334. KRÖYER (1845). *Icelus Hamatus*. *Naturhist. Tidsskr.*, I.

HENRIK NICOLAJ KRÖYER (1799-1870).

- Icelus** Krøyer, I, 253; orthotype *I. HAMATUS* Krøyer.
- Phobeter** Krøyer, I, 263; orthotype *COTTUS TRICUSPIS* Reinh. A synonym of *GYMNOCANTHUS* Sw.

335. KRÖYER (1845). *Carelophus stromii*. *Naturhist. Tidsskr.*, I.

HENRIK NICOLAJ KRÖYER.

- Carelophus** Krøyer, I; orthotype *C. STROMI* Krøyer. A synonym of *CHIROLOPHIS* Sw.

336. KRÖYER (1845). *Caracanthus typicus*. Naturhist. Tidsskr., I.
HENRIK NICOLAJ KRÖYER.
Caracanthus Kröyer, I, 267; orthotype *C. TYPICUS* Kröyer = *MICROPUS MACULATUS* Gray. Replaces *MICROPUS* Gray, preoccupied.
337. KRÖYER (1845). *Ceratis hollbolli*. Naturhist. Tidsskr., I.
HENRIK NICOLAJ KRÖYER.
Ceratis Kröyer, I, 639; orthotype *C. HOLLBOLLI* Kröyer.
338. McCLELLAND (1845). *Description of Four Species of Fishes from the Rivers at the Foot of the Boutan Mountains*. Journ. Nat. Hist. Calcutta, V, 1840, 272, 282.
JOHN McCLELLAND.
Ctenops McClelland, V, 281; orthotype *C. NOBILIS* McCl. A synonym of *OSPHROMENUS* Lac.
339. MÜLLER & TROSCHEL (1845). *Horæ Ichthyologicae. Beschreibung und Abbildung neuer Fische; die Familie Characinen*. I. Berlin.
JOHANNES MÜLLER; FRANZ HERMANN TROSCHEL.
Distichodus Müller & Troschel, I, 12; orthotype *SALMO NILOTICUS* Hasselquist = *CHARACINUS NEFASCH* Lac.
Agoniatés Müller & Troschel, I, 19; haplotype *AGONIATES HALECINUS* M. & T.
Cnidon Müller & Troschel, I, 21; orthotype *CNIDON CHINENSIS* M. & T.
340. OWEN (1845). *Odontography*.
RICHARD OWEN.
Pisodus (Agassiz) Owen, 138; orthotype *P. OWENI* Ag. (fossil). An ally of *ALBULA* Gronow.
341. RICHARDSON (1845). *Generic Characters of Gasteroschisma melampus, a Fish which Inhabits Port Nicholson, New Zealand*. Ann. Mag. Nat. Hist., XV.
JOHN RICHARDSON.
Gasteroschisma Richardson, 346; orthotype *G. MELAMPUS* Rich.
342. RICHARDSON (1845). *Report on the Ichthyology of the Seas of China and Japan*. Rept. Brit. Assoc. Adv. Sci.
JOHN RICHARDSON.
Ilisha (Gray) Richardson, 306; haplotype *ILISHA ABNORMIS* Gray = *ALOSA ELONGATA* Bennett. Replaces *PELLONA* Cuv. & Val., and *ZUNASIA* Jordan & Thompson.
343. SOUTH (1845). *Encyclopedia Metropolitana*. (Edition for 1845.)
JOHN FLINT SOUTH.
Thunnus South, V, 620; orthotype *SCOMBER THYNNUS* L. A substitute for *THYNNUS* Cuv., preoccupied in butterflies.
344. TEMMINCK & SCHLEGEL (1845). *Fauna Japonica* (issued in parts).
CENRAAD JACOB TEMMINCK; HERMANN SCHLEGEL.
Erythrichthys Temminck & Schlegel, 1845, 117; orthotype *E. SCHLEGELI* Gthr. Name preoccupied; replaced by *ERYTHROCLES* Jordan, 1919.
Scombrops Temminck & Schlegel, 118; orthotype *S. CHELODIPTEROIDES* Blkr. = *SCOMBER BOOPS* Houttuyn.
Dictyosoma Temminck & Schlegel, 139; orthotype *D. BURGERI* Van der Hoeven.
Cirrhilabrus Temminck & Schlegel, 167; orthotype *C. TEMMINCKI* Blkr.

1846

345. AGASSIZ (1846). *Nomenclator Zoologicus. Pisces.*

LOUIS AGASSIZ.

Hypeneus Agassiz, 190; logotype MULLUS BIFASCIATUS Lac. A corrected spelling of UPENEUS.

346. AGASSIZ (1846). *Nomen manuscriptum in diversis museo usurpatum. Nomina systematica generum piscium, tam viventium quam fossilium.* Addenda to *Nomenclator Zoologicus. Pisces.*

LOUIS AGASSIZ.

The three names which follow occur in the *Nomenclator Zoologicus* as manuscript names used by Agassiz on labels in different museums. They have no place in the system.

Glaphyrodus Agassiz, Addenda, 3; species not named (same as OXYRHINA). A synonym of ISURUS Raf.

Holodus Agassiz, Addenda, 3; species not named. A synonym of HEPTRANCHIAS (NOTIDANUS).

Oroptychus Agassiz, Addenda, 4 species not named ("CESTRACIONTES").

Toxophorus. This name is given by Agassiz, page 63, with no indication as to its author.

347. BIBRON (1846). *Revue Zoologique.*

GABRIEL BIBRON (1806-1848).

Chilomycterus Bibron, 40; logotype DIODON RETICULATUS L.

348. BRISOUT DE BARNEVILLE (1846). *Note sur le groupe des Gobiesoces.* Rev. Zool.

CHARLES N. F. BRISOUT DE BARNEVILLE (1823-1893).

Tomicodon Brisout de Barneville, 144; orthotype T. CHILENSIS Barn. A synonym of SICYASES M. & T.

Sicyogaster Brisout de Barneville, 144; orthotype GOBIESOX MARMORATUS Jenyns. Name preoccupied; replaced by Gill.

Chorisoichismus Brisout de Barneville, 209; orthotype C. NUDUS Barn. = CYCLOPTERUS DENTEX Pallas.

349. BRISOUT DE BARNEVILLE (1846). *Note sur le nouveau genre de la famille des Discoboles (Trachelochismus).* Rev. Zool.

CHARLES N. F. BRISOUT DE BARNEVILLE.

Trachelochismus Brisout de Barneville, 214; orthotype CYCLOPTERUS PINNULATUS Forster.

350. COSTA (1846). *Fauna del regno di Napoli, ossia enumerazione di tutti gli animali che abitano le diverse regioni di questo regno e le acque che le bagnano*, etc. Vol. III.

ORONZIO GABRIELE COSTA.

Cynoponticus Costa, pl. 28; orthotype C. FEROX Costa = CONGER SAVANNA Cuv.

351. CUVIER & VALENCIENNES (1846). *Histoire naturelle des poissons.* XVIII, 1835.

ACHILLE VALENCIENNES.

Grundulus Cuvier & Valenciennes, XVIII, 216; haplotype FUNDULUS BOGOTENSIS Humboldt. Eigenmann identifies this with CHARACIN, CTENOCARAX BOGOTENSIS Regan, 1907.

Orestias Cuvier & Valenciennes, XVIII, 221; logotype ORESTIAS CUVIERI Val.

- Vastres** Cuvier & Valenciennes, XIX, 433; orthotype *VASTRES CUVIERI* Val. = *SUDIS GIGAS* Cuv. Same as *SUDIS* Cuv., preoccupied by *SUDIS* Raf., 1810; replaced by *ARAPAIMA* M. & T., 1846.
- Heterotis** (Ehrenberg MS.) Cuvier & Valenciennes, XIX, 465; orthotype *HETEROTIS EHRENBERGI* Val. I do not find that Ehrenberg had published this name elsewhere. A synonym of *CLUPISUDIS* Sw.
- Lebiasina** Cuvier & Valenciennes, XIX, 531; haplotype *LEBIASINA BIMACULATA* Val.
- Pyrhulina** Cuvier & Valenciennes, XIX, 534; haplotype *P. FILAMENTOSA* Val.
352. EICHWALD (1846). *Geognosy of Russia* (in Russian). Reproduced in 1860 in *Lethæa Rossica*.
CARL EDUARD VON EICHWALD.
- Aulacosteus** Eichwald; logotype (in 1860) *A. COCHLEARIFORMIS* Eichw. Same as *PRYCODUS* Pander and, if eligible, of prior date.
353. KEYSERLING (1846). *Reise in das Petchoraland im Jahre 1843*.
ALEXANDER VON KEYSERLING.
- Dimeracanthus** Keyserling, 292b; orthotype *D. CONCENTRICUS* Keyserling (fossil).
354. KRÖYER (1846). (*Danmarks Fiske.*)
HENRIK NIKOLAJ KRÖYER.
- Acantholepis** Kröyer, III, 98; orthotype *ARGENTINA SILUS*. A synonym of *SILUS* Reinhardt and probably of *ARGENTINA* L.
355. LOWE (1846). *On a New Genus of the Family Lophiidae (les Pectorales pediculées, Cuv.) Discovered in Madeira*. Proc. Zool. Soc. London, XIV.
RICHARD THOMAS LOWE.
- Chaunax** Lowe, III, 339; orthotype *C. PICTUS* Lowe.
356. MEYER (1846). *Geologie von Jena*. Schmidt und Schleiden.
HERMANN VON MEYER.
- Tholodus** Meyer, I, 199; orthotype *T. SCHMIDTI* Meyer (fossil). Undetermined; perhaps an *ASTERODON*, perhaps a reptile.
357. MÜLLER (1846). (*Arapaima.*) Abhandl. Akad. Wiss. Berlin.
JOHANNES MÜLLER.
- Arapaima** Müller; haplotype *SUDIS GIGAS* Cuv. Replaces *SUDIS* Cuv., preoccupied, and *VASTRES* Cuv. & Val. of the same year but of later date, as Valenciennes quotes *ARAPAIMA*.
358. MÜNSTER (1846). *Ueber die im Korallenkalk des Lindner Berges bei Hannover vorkommenden Ueberreste von Fischen, etc.* Beiträge zur Petrefacten-Kunde.
GEORG MÜNSTER.
- Radamas** Münster, VII, 11, 28; orthotype *ASIMA JUGLERI* Giebel (fossil). Same as *ASIMA* Giebel and of prior date.
359. NORWOOD & OWEN (1846). *Description of a New Fossil Fish from the Palæozoic Rocks of Indiana*. Amer. Journ. Sci., I.
JOSEPH GRANVILLE NORWOOD; DAVID DALE OWEN.
- Macropetalichthys** Norwood & Owen, I, 371; orthotype *M. RAPHEIDOLABIS* Norwood & Owen (fossil).

- 359A. RICHARDSON (1846). *Stokes: Discoveries in Australia*.
JOHN RICHARDSON.
Assiculus Richardson, 492; orthotype A. PUNCTATUS Rich. A synonym of PSEUDOCROMIS Rüppell.
360. PETERS (1846). *Ueber eine neue Gattung von Labyrinthfischen . . . aus Quellimane*. Arch. Anat.
WILHELM CARL HARTWIG PETERS.
Ctenopoma Peters, 481; orthotype C. MULTISPINIS Peters.
361. TEMMINCK & SCHLEGEL (1846). *Fauna Japonica* (part).
COENRAAD JACOB TEMMINCK; HERMANN SCHLEGEL.
Plecoglossus Temminck & Schlegel, 229; orthotype P. ALTIVELIS T. & S.
Ateleopus Temminck & Schlegel, 255; orthotype A. JAPONICUS Blkr. Name preoccupied as ATELOPUS; replaced by PODATELES Boulenger.
362. TSCHUDI (1846). *Untersuchungen über die Fauna Peruana*.
JOHANN JACOB TSCHUDI (1818-1882).
Cheilotrema Tschudi, 13; orthotype C. FASCIATUM Tschudi.
Chætostoma (Heckel) Tschudi, 25; orthotype C. LOBORHYNCHUS Heckel. Said to be thus originally written by Heckel; spelled CHÆTOSTOMUS by Kner (1854) and by subsequent writers.
Discopyge Tschudi, 32; orthotype D. TSCHUDI Tschudi.
363. VALENCIENNES (1846). *Nouvelles observations sur l'Eremophilus*.
Recueil d'Observ. Zool., II.
ACHILLE VALENCIENNES.
Trichomycterus Valenciennes, 347; orthotype T. NIGRICANS Humboldt, 1811. Same as THRYCOMYCTERUS.
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364. BLEEKER (1847). *Siluroideorum bataviensium conspectus diagnosticus*.
Verh. Batav. Genootsch., XXI.
PIETER BLEEKER.
Ketengus Bleeker, 9; orthotype K. TYPUS Blkr.
Osteogeneiosus Bleeker, XXI, 49; orthotype O. MACROCEPHALUS Bleeker
Batrachocephalus Bleeker, XXI, 158, 375; orthotype B. MICROPOGON Blkr.
365. BLEEKER (1847). *Pharyngognathorum Siluroideorumque species nova Javanenses*. Nat. & Geneesk. Arch. Neder.-Indie, IV.
PIETER BLEEKER.
Chærodon Bleeker, 10; orthotype LABRUS MACRODONTUS Lac. Replaces CHÆROPS Rüppell, 1852; later written CHOIRODON.
366. BRISOUT DE BARNEVILLE (1847). *Note sur le genre Centropristis Cuvier*.
Rev. Zool.
CHARLES N. F. BRISOUT DE BARNEVILLE.
Homodon Brisout de Barneville, 133; logotype CENTROPRISTIS GEORGIANUS Cuv. & Val. A synonym of ARRIPIS Jenyns.
Muriodon Brisout de Barneville, 133; orthotype CENTROPRISTIS SCORPÆNOIDES Cuv. & Val. = SCORPÆNA WAIGIENSIS Q. & G. A synonym of CENTROGENYS.

367. BRISOUT DE BARNEVILLE (1847). *Note sur un nouveau genre d'Anguilliformes*. Rev. Zool.
CHARLES N. F. BRISOUT DE BARNEVILLE.
Ichthyapus Brisout de Barneville, 219; orthotype I. ACUTIROSTRIS Baril. A synonym of SPHAGEBRANCHUS Bloch.
368. CUVIER & VALENCIENNES (1847). *Histoire naturelle des poissons*. XX.
ACHILLE VALENCIENNES.
Sardinella Cuvier & Valenciennes, XX 261; logotype SARDINELLA AURITA Val.
Harengula Cuvier & Valenciennes, XX, 277; logotype HARENGULA LATULUS Val. (said to be from France, but apparently an American species, not the French "Blanquette", which is reputed to be the sprat (SPRATELLA SPRATTUS) *vide* Cligny).
Pellona Cuvier & Valenciennes, XX, 300; logotype PELLONA ORBIGNYANA Val. = PRISTIGASTER FLAVIPINNIS Val. A synonym of ILISHA Gray (1846).
Rogenia Cuvier & Valenciennes, XX, 340; haplotype ROGENIA ALBA Val. Young of CLUPEA L. ("Whitebait").
Clupeonia Cuvier & Valenciennes, XX, 345; logotype CLUPEONIA JUSSIEUI Val. Very near HARENGULA Cuv. & Val.
Spratella Cuvier & Valenciennes, XX, 356; logotype SPRATELLA PUMILA Val. Young of CLUPEA SPRATTUS L.
Kowala Cuvier & Valenciennes, XX, 362; logotype KOWALA ALBELLA Cuv. & Val. Very close to CLUPEONIA, if not identical with it.
Meletta Cuvier & Valenciennes, XX, 366; type MELETTA VULGARIS Val. (young of SPRATELLA SPRATTUS). A synonym of SPRATELLA Cuv. & Val.
Alausa Cuvier & Valenciennes, XX, 389; type ALAUSA VULGARIS = CLUPEA ALOSA L. A variant spelling of ALOSA Cuv.
Dussumieria Cuvier & Valenciennes, XX, 467; haplotype DUSSUMIERIA ACUTA Val.
369. EGERTON (1847). *On the Nomenclature of the Fossil Chimæroid Fishes*.
Quart. Journ. Geol. Soc., III.
PHILIP DE MALPAS GREY EGERTON.
Dictyopyge Egerton, III, 276; orthotype CATOPTERUS MACRURUS Egert. (fossil).
Ischypterus Egerton, III, 277; orthotype F. LATUS Egert. (fossil). A synonym of SEMIONOTUS.
370. GIEBEL (1847). *Vier neue Fische aus dem dunkeln Kreide-Schiefer von Glarus*. Neues Jahrb. Mineral.
CHRISTOPH GOTTFRIED ANDREAS GIEBEL (1820-1881).
Palymphyes Giebel, 666; logotype P. CRASSUS Giebel.
Pachygaster Giebel, 667; orthotype P. SPINOSUS Giebel (fossil).
371. GIEBEL (1847). *Fauna der Vorwelt . . . monographisch dargestellt*.
CHRISTOPH GOTTFRIED ANDREAS GIEBEL.
Centroodus Giebel, 344; orthotype C. ACUTUS Giebel (fossil).
Chilodus Giebel, I, 352; orthotype (not named in Woodward). A tooth of dubious nature.
Oxytes Giebel, 364; orthotype O. OBLIQUA Giebel (fossil). A fossil homologue of CARCHARIAS Raf., ODONTASPIS Ag.

372. GUICHENOT (1847). *Notice sur un nouveau genre de Percoides (Pomanotis)*.
Rev. Zool., X.
ALPHONSE GUICHENOT.
Pomanotis Guichenot, 390; orthotype *P. RUBESCENS* Guich. A genus not since recognized. The type *P. RUBESCENS* was brought by Dussumier from Alipey,* a locality I do not find on the maps, but evidently in India or eastward. The genus is not related to EUCENTRARCHIDÆ, as its author suggests, but belongs probably to the NANDIDÆ (D. XIV, 14. A III, 9) near PRISTOLEPIS (CATOPRA).
373. KNER (1847). *Ueber die beiden Arten Cephalaspis lloydii und C. lewisii Agassiz, und einige diesen zunächst stehenden Schalenreste*. Naturwiss. Abh., I.
RUDOLF KNER.
Pteraspis Kner, I, 165; orthotype CEPHALASPIS LEWISI Ag. (fossil).
374. MEYER (1847). *Palæontographica*.
HERMANN VON MEYER.
Tyloodus Meyer, I, 102; orthotype T. GLABER Meyer (fossil).
375. MEYER (1847). *Vorläufige Uebersicht der in dem Muschelkalk Ober-Schlesiens vorkommenden Saurier, Fische, Crustaceen und Echinodermen, nach der Sammlung des Herrn Mentzel in Königshütte*. Uebersicht Schles. Ges. Breslau.
HERMANN VON MEYER.
Omphalodus Meyer, 574; orthotype O. CHORZOWENSIS Meyer (fossil). A synonym of ASTERODON.
376. PLIENINGER (1847). *Microlestes antiquus und Sargodon tomicus in der Grenzenbreccie des Kupfers von Degerloch*. Jahresschr. Ver. Vaterl. Naturk. Württemberg.
WILHELM HEINRICH THEODOR VON PLIENINGER.
Sargodon Plieninger, III, 165; orthotype S. TOMICUS Plieninger (fossil).
377. WOOD (1847). *Description of a Species of Shark (Leiodon echinatum)*.
Proc. Boston Nat. Hist. Soc., II.
WILLIAM WOOD.
Leiodon Wood, 174; orthotype L. ECHINATUM Wood. Name preoccupied; a synonym of SOMNIOSUS Le Sueur.

 1848

378. AGASSIZ (1848). *Two New Fishes from Lake Superior, Percopsis and Rhinichthys*. Proc. Boston Soc. Nat. Hist., III.
LOUIS AGASSIZ.
Percopsis Agassiz, 80; haplotype PERCOPSIS GUTTATUS Ag. = SALMO OMISCOMAYCUS Walbaum (1792). Also in *Lake Superior*, 1850, 284.
Rhinichthys Agassiz, 80; haplotype CYPRINUS ATRONASUS Mitchill. Also in *Lake Superior*, 1850, 353.

* Alipey is probably the same as Alleppi or Allapalli, a seaport of Travancore in southern India, 33 miles south of Cochin.

379. BEYRICH (1848). *Ueber Xenacanthus decheni und Holacanthodes gracilis, zwei Fische aus der Formation des Rothliegenden in Nord-Deutschland.* Archiv. f. Mineral., XXII.

HEINRICH ERNST BEYRICH (1815-1896).

- Xenacanthus** Beyrich, 24; orthotype ORTHACANTHUS DECHENI Goldfuss (fossil). Regarded as a synonym of ORTHACANTHUS Ag. (PLEURACANTHUS).
Holacanthodes Beyrich, 24; orthotype H. GRACILIS Beyr. (fossil). A synonym of ACANTHOESSUS and of ACANTHODES.

380. BLEEKER (1848). *A Contribution to the Ichthyology of Sumbawa.* Journ. Ind. Arch. IX, 1848.

PIETER BLEEKER.

- Heterognathodon** Bleeker, I, 101; orthotype H. BIFASCIATUS Blkr., a substitute for HETERODON, preoccupied. A synonym of PENTAPUS Cuv. & Val.

381. CUVIER & VALENCIENNES (1848). *Histoire naturelle des poissons.* XXI.

ACHILLE VALENCIENNES.

- Fario** Cuvier & Valenciennes, XXI, 277; tautotype SALMO FARIO L. = SALMO ARGENTEUS Val. Same as TRUTTA L., a subgenus of SALMO.

- Salar** Cuvier & Valenciennes, XXI, 314; type SALAR AUSONII Val., a form or ally of SALMO FARIO L. A synonym of FARIO Val. and TRUTTA L.

382. DANA (1848). *Fossils of the Exploring Expedition Under the Command of Charles Wilkes, U. S. N.; a Fossil Fish from Australia, and a Belemnite from Tierra del Fuego.* Amer. Journ. Sci., V.

JAMES DWIGHT DANA (1813-1895).

- Urostheneis** Dana, V, 433; orthotype U. AUSTRALIS Dana (fossil).

383. EWALD (1848). *Ueber Menaspis, eine neue fossile Fischgattung.*

Ber. Akad. Wiss. Berlin.

AUGUST EWALD.

- Menaspis** Ewald, 83; orthotype M. ARMATA Ewald (fossil).

384. GIEBEL (1848). *Die Fische der Vorwelt in seiner Berücksichtigung der lebenden Fische.*

CHRISTOPH GOTTFRIED ANDREAS GIEBEL.

- Tharsis** Giebel, 145; orthotype T. GERMARI Giebel (fossil). A synonym of LEPTOLEPIS.

- Asima** Giebel, 184; orthotype A. JUGLERI Giebel (fossil). A synonym of RADAMAS Münster.

- Elonichthys** Giebel, 249; logotype E. GERMARI Giebel (fossil).

385. GISTEL (1848). *Naturgeschichte des Thierreichs für höhere Schulen.*

JOHANNES GISTEL.

A remarkable dull and confused publication, not hitherto noticed by ichthyologists. Gistel speaks feelingly of his "höchst mühsamer Vergleichung, zeiträubenden Nachschlagens, in vielen hundert Werken, etc., aus meinen Manuscripten aufzuführen". It is not often that so fatiguing a piece of work presents itself in such a crabbed form. Gistel insists that personal names of genera are allowable only in Botany and in the lowest classes of animals ("den niedrigsten Thierklassen").

The following may replace names actually preoccupied:

ABRON instead of PLATYSTOMA.

DAPALIS instead of SMERDIS.
 ENIXE instead of DREPANE.
 HYPODYTES instead of PARACENTROPOGON.
 NOTACMON instead of EURYNOTUS.
 ODONUS instead of XENODON (ERYTHRODON).
 PERIURGUS instead of MICRIPS.
 PROSCINETES instead of MICRODON.
 SECUTOR instead of DEVEXIMENTUM.
 STREPIION instead of BRONTES.
 STROTES instead of PLATYSOMUS.

The following are also admissible if a name differing in gender or slightly in form but from the same roots as an earlier name is to be rejected as preoccupied:

ANALITHIS instead of PLATYRHINA.
 ALAZON instead of PÆCILIA.
 ENLOTTOGASTER instead of OREINUS.
 FURO instead of EUGNATHUS.
 MYRMILLO instead of MUSTELUS.
 PRENES instead of SCATOPHAGUS.
 RHADAMISTA instead of CTENODUS.
 SCROPHA instead of CERATODUS.
 PEDITES instead of MACROPODUS.

The twice preoccupied name of *UNDINA* Gistel, IX, is offered as a substitute for *LINKIA* Nardo, said to be a fish, *LINKIA TYPUS* Nardo, preoccupied by *LINCKIA* Ag., a genus of ECHINODERMS, for which he offers the substitute name of *CATANTES*. But both *LINKIAS* are starfishes and neither a fish. Another generic name, *PHYGAS* Gistel, X, is proposed in place of *POLIA* (Della Chiaje, *Isis*, 1832, 647, *SCLENA*), said to be preoccupied in worms, by *POLIA* Grube, which genus Gistel renames *CYRYX*. But I am informed by Mr. Bean that *POLIA SIPUNCULUS* Della Chiaje is itself a worm also, not a fish.

- Carcharias** Gistel, VIII; type *SQUALUS ACANTHIAS* L.; substitute for *ACANTHIAS* Risso, regarded as preoccupied by *ACANTHIA*. *CARCHARIAS* was already twice preoccupied. A synonym of *SQUALUS* L., as restricted.
- Pelonectes** Gistel, VIII; type (*ACANTHOËSSUS BRONNI* Ag.). Substitute for *ACANTHODES* Ag. (1833), wrongly said to be preoccupied in crustacea (Serville, 1835). A synonym of *ACANTHOËSSUS* Ag. (1832).
- Gremilla** Gistel, VIII; type (*PERCA CERNUA* L.). A substitute for *ACERINA* Cuv.; but *CERNUA* Schäfer and *ACERINA* Gùldenstädt, as well as *GYMNOCEPHALUS* Bloch & Schneider are still older than *GREMILLA*.
- Adiapneustes** Gistel, VIII; type (*ACRODUS GAILLARDOTI* Ag.). A substitute for *ACRODUS* Ag. (1838), wrongly regarded as preoccupied by *ACRODON* Zimmermann (1840).
- Histiodromus** Gistel, VIII; type (*SALMO ANOSTOMUS* L.). Name a substitute for *ANASTOMUS* Gronow, Scopoli, Cuvier. All these writers have priority over *ANASTOMUS* Illiger (1835), a genus of birds. The name has often been written *ANOSTOMUS*.
- Nomalus** Gistel, VIII; type *LONCHURUS ANCYLON* Bl. & Schn. (A *JACULIDENS* Cuv. & Val.) Substitute for *ANCYLON*, preoccupied. A synonym of *MACRODON* Schinz (1822).

Hypodytes Gistel, VIII; orthotype "ASPISTES Q. & G.", which is *APISTUS LONGISPINIS* Cuv. & Val. The name is a substitute for *APISTES* ("ASPISTES") regarded as preoccupied.

As the species of Quoy & Gaimard (1834) (*LONGISPINIS*) is the type of *PARACENTROPOGON* Blkr., *HYPODYTES* may supersede that name, rather than replace it by *PROSOPODASYS* Cantor (1849). Gistel offers *HYPODYTES* as a substitute for "ASPISTES Quoy, *Astrolabe Fische*," although *APISTES* occurs in the *Règne Animal*, 1829 (Index), and *APISTUS* in *Cuv. & Val.*, IV, also in 1829, in the *latter* part of the same year. As *HYPODYTES* is expressly used to replace *ASPISTUS* (not *ASPISTES*) of Quoy & Gaimard and as the chief species figured by those authors is *A. LONGISPINIS*, the type of the later genus *PARACENTROPOGON*, *HYPODYTES* may replace the latter, if *APISTES* or *APISTUS* is deemed occupied.

Scrofaria Gistel, VIII; orthotype *AUSONIA CUVIERI* Risso. Name an unexplained substitute for *AUSONIA*; a synonym of *LUVARUS* Raf.

Gliscus Gistel, VIII; type (*BLOCHIUS LONGIROSTRIS* Volta) (fossil). A substitute for *BLOCHIUS*, a personal name.

Strephon Gistel, VIII; orthotype (*BRONTES PRENADILLA* (Cuv. & Val.)). A substitute for *BRONTES* Cuv. & Val. several times preoccupied.

Thalassoklephtes Gistel, VIII; orthotype (*CANINOA CHIEREGHINI* Nardo). A substitute for *CANINOA* Nardo, as a genus unworthy of a prince: "Ist denn der Prinz von Canino mit einem HAYEN vergleichbar?"

Scrophia Gistel, VIII; type (*CERATODUS LATISSIMUS* Ag.) (fossil). A substitute for *CERATODUS*, regarded as preoccupied by *CERATODON* Brisson.

Capellaria Gistel, VIII; type (*LOPHIUS COMMERSONIANUS* Lac.). Substitute for *CHIRONECTES* Cuv., preoccupied. A synonym of *ANTENNARIUS* Cuv.

Cæso Gistel, VIII; type (*SPARUS BERDA* Forskål). A substitute for "CHRYSOPHRYS Rüppell" (*BERDA*). A synonym of *SPARUS* L. as understood by me.

Cerdo Gistel, VIII; type (*GADUS CALLARIAS* L.) as here restricted. *CERDO* is offered as a substitute for "ASELLUS Klein." But Klein does not accept *ASELLUS* as a generic name, but discusses its application to various cod-like fishes. He refers to "CERDONES" in a discussion of dried codfish. We may therefore regard *CERDO* Gistel as a synonym of *GADUS* L.

Echemythes Gistel, VIII; type (*ZEUS LUNA* Gmelin). A substitute for *CHRYSOTOSUS* Lac. A synonym of *LAMPRIS*.

Ronchifex Gistel, VIII; type (*HARPE RUFa* Lac.). substitute for *COSSYPHUS* Cuv., preoccupied; *BODIANUS* Bloch and *HARPE* Lac. are names still older for the same genus.

Rhadamista Gistel, VIII; type (*CTENODUS CRISTATUS* Ag. (fossil)). A substitute for *CTENODUS* Ag. (1838) regarded as preoccupied by *CTENODON* Wagner (1830).

Pirene Gistel, IX; type (*CHELETODON ARUANUS* L.). Substitute for *DASCYLUS*; preoccupied as *DASCILLUS*; *PIRENE* is itself preoccupied and gives way to *TETRABRACHMUM* Cantor, 1849.

Enixe Gistel, IX; type (*CHELETODON PUNCTATUS* L.). A substitute for *DREPANE* Cuv., regarded as preoccupied by *DREPANE* or *DREPANA* Schranck. It has priority over *HARPOCHIRUS* Cantor (1849).

Secutor Gistel, IX; orthotype *SPARUS INSIDIATOR* (Bloch). A substitute for *EQUULA* Cuv., but with a different type. Has priority over *DEVEXIMENTUM* Fowler, if this subgenus is distinct from *LEIOGNATHUS* Lac.

- Furo** Gistel, IX; type (*EUGNATHUS ORTHOSTOMUS* Ag. fossil). Substitute for *EUGNATHUS* Ag. regarded as preoccupied by *EUGNATHA*, a genus of spiders.
- Notacmon** Gistel, IX; type (*EURYNOTUS CRENATUS* Ag. fossil). Substitute for *EURYNOTUS* Ag., preoccupied by a genus of beetles (Kirby, 1817).
- Podager** Gistel, IX; logotype *GERRES WAIGIENSIS* Q. & G. Name a substitute for *GERRES*, regarded as preoccupied by *GERRIS* Fabricius, a genus of insects. But *PODAGER* is itself preoccupied in birds, and if a new name is needed, it must give place to *CATOCHENUM* Cantor (1849). But the root words, *GERRIS* and *GERRES*, are different.
- Synergus** Gistel, IX; orthotype (*MEGALURUS LEPIDOTUS* Ag. fossil). A substitute for *MEGALURUS* Ag. preoccupied in mammals, but *SYNERGUS* is preoccupied also by *SYNERGUS* Hartig, 1840, a genus of Hymenoptera, and *MEGALURUS* may be replaced by *UROCLES* Jordan as already indicated.
- Ellops** Gistel, IX, type (*ACIPENSER HELOPS* Pallas). A substitute for *HELOPS*, ἔλλοψ being the original Greek form.
- Apeches** Gistel, IX; logotype *JOHNIUS*, *CARUTTA* Bl. & Schn. A substitute for *JOHNIUS*, a name regarded as objectionable. In general Gistel offers a substitute for all personal names everywhere except among plants and the lowest animals.
- Neanis** Gistel, IX; type (*LABRUS JULIS* L.). Name a substitute for *JULIS* Cuv., regarded as preoccupied by *JULUS* L., a genus of myriapods. But the two names are of entirely distinct origin.
- Exoles** Gistel, IX; type (*SQUALUS NASUS* Bonnaterre). A substitute for *LAMIA* Bon., itself a synonym of *LAMNA* Cuv.
- Apepton** Gistel, IX; orthotype *LEPADOGASTER PIGER* Nardo. A needless synonym of *GOUANIA* Nardo, a personal name.
- Anepistomon** Gistel, IX; type (*LEPTORHYNCHUS CAPENSIS* Smith). A substitute for *LEPTORHYNCHUS* Smith, preoccupied. A synonym of *OPHISURUS*, as restricted.
- Spanis** Gistel, IX; type (*LEPTOSOMA ATRA* Nardo). Name a substitute for *LEPTOSOMA*, preoccupied; probably a synonym of *MONOCHIRUS* Raf. "Soglio bastardo".
- Encrotos** Gistel, IX; type *CYPRINODON VARIEGATUS* Lac. A substitute for *LEBIA* or *LEBIAS* Cuv. on account of the name *LEBIA* Latreille, 1802, an earlier name wrongly attributed to Bonaparte. But *LEBIA* Cuv. (later written *LEBIAS*) is a synonym of *CYPRINODON* Lac.
- Maina** Gistel, IX; type (*SPARUS CHÆRORHYNCHUS* Bl. & Schn.). Name a substitute for *LETHRINUS* Cuv. unreasonably regarded as preoccupied by *LETHRUS* Fabricius, a genus of beetles.
- Massaria** Gistel, IX; type *CYCLOPTERUS LIPARIS* L. A needless substitute for *LIPARIS*, used in Botany.
- Pedites** Gistel, IX (*MACROPODUS VIRIDIAURATUS* Lac.). Name a substitute for *MACROPODUS* Lac. corrected by Günther as *MACROPUS*, in that form preoccupied by *MACROPUS* Thunberg, a genus of beetles. Perhaps to be adopted as the roots are the same and *MACROPODUS* an incorrect form.
- Paschalestes** Gistel, IX; type (*MACQUARIA AUSTRALASICA* Cuv. & Val. Substitute for *MACQUARIA* Cuv. & Val., rejected, as a personal name.
- Englottogaster** Gistel, IX; type *OREINUS GUTTATUS* McCl. Substitute for *OREINUS* McCl., regarded as preoccupied in beetles as *OREINA*. But the generic value of *OREINUS* is doubtful.

- Proscinetes** Gistel, X; type *MICRODON ELEGANS* Ag. (fossil). Substitute for *MICRODON* Ag., preoccupied; replaces *POLYPSEPHIS* Hay, 1899, which is also a substitute for *MICRODON*.
- Periergus** Gistel, X; type *MICROPS FURCATUS* Ag. (fossil). A substitute for *MICROPS* Ag., preoccupied in beetles.
- Arnion** Gistel, X; type (*MUGIL CEPHALUS* L.). A substitute for *MUGIL* L. for no assigned reason.
- Myrmillo** Gistel, X; orthotype *MUSTELUS VULGARIS*. A substitute for *MUSTELUS* Cuv., regarded as preoccupied by *MUSTELA* L. Same as *PLEURACROMYLON* Gill.
- Analithis** Gistel, X; orthotype *PLATYRHINA SINENSIS* (Bl. & Schn.). Substitute for *PLATYRHINA* M. & H., regarded as preoccupied by *PLATYRHINUS*, replaced by *DISCOBATUS* Garman (1881).
- Strotres** Gistel, X; type (*STROMATEUS GIBBOSUS* Blainv.). Name a substitute for *PLATYSOMUS* Ag. preoccupied by a genus of beetles.
- Abron** Gistel, X; orthotype *SILURUS LIMA* Ag. A substitute for *PLATYSTOMA* Ag., 1829, preoccupied in insects.
- Plectrostoma** Gistel, X; type *OXYRHINA MANTELLI* Ag. (fossil). Substitute for *OXYRHINA* Ag., preoccupied. A synonym of *ISURUS* Raf.
- Euporista** Gistel, X; type *PLEURONECTES PLAGIUSA* L. A substitute for *PLAGUSIA* Bon., preoccupied; a synonym of *SYMPHURUS* Raf.
- Deportator** Gistel, X; type (*SILURUS ANGUILLARIS* Forskål). Name a substitute for *PLOTOSUS* Lac., needlessly regarded as preoccupied by *PLOTUS* L.
- Alazon** Gistel, X; orthotype (*PÆCILIA VIVIPARA*). A substitute for *PÆCILIA* Cuv. & Val., regarded as preoccupied by *PÆCILUS* Bon., a beetle.
- Apodometes** Gistel, X; type (*PSAMMODUS RUGOSUS* Ag., fossil). A substitute for *PSAMMODUS* Ag. regarded as preoccupied by *PSAMMODIUS*, a genus of beetles, but the words are not from the same roots.
- Demiurga** Gistel, X; type (*RHINA ANCYLOSTOMA* Bl. & Schn.). A substitute for *RHINA* Bon., etc., regarded as preoccupied by *RHINA* Olivier (1807), a genus of beetles. But this genus of rays was called *RHINA* in 1801, by Bloch & Schneider. The same name was used by non-Linnæan writers in place of *SQUATINA*. For this purpose it was first binomially used in 1810. If *RHINA* is used for *SQUATINA*, *DEMIURGA* could replace it for this genus, instead of *RHAMPHOBATIS* Gill (1861).
- Prenes** Gistel, X; type (*CHÆTODON ARGUS* Bloch). Name a substitute for *SCATOPHAGUS* Cuv., regarded as preoccupied by *SCATOPHAGA*. Has priority over *CACODOXUS* Cantor, 1849.
- Agoreion** Gistel, X; type *ACANTHODERMA SPINOSUM* Ag. (fossil). Name a substitute for "*SCLERODERMA* Ag.", used in fungi, also as *SCLERODERMUS* in bees, but I find no *SCLERODERMA* in Agassiz. It was probably the preoccupied name, *ACANTHODERMA* Ag., which Gistel had in mind; for this *AGOREION* may perhaps be substituted.
- Creotroctes** Gistel, X; type *SCOMBER SARDA* L. Name an unexplained substitute for *SARDA* Cuv. It is a synonym of *PALAMITA* Bon., offered in 1832 as a substitute for *PELAMYS* Cuv. & Val., 1831, which is the same as *SARDA* Cuv., 1829.
- Denius** Gistel, X; type (*SPARUS SARGUS* L.). Name a substitute for *SARGUS* Cuv., preoccupied. A synonym of *DIPLODUS* Raf.
- Borborodes** Gistel, X; type (*SQUALUS LICHIA* Cuv., *SQUALUS LICHIA* Bonnaterre). Substitute for *SCYMNUS* Cuv., preoccupied in beetles. A synonym of *SCYMNORHINUS* Bon., 1846.

- Dapalis** Gistel, XI; type (*PERCA MINUTA* Blainv.) (fossil). Name a substitute for *SMERDIS* Ag., 1833, preoccupied by *SMERDIS* Leach, a genus of beetles.
- Peroptera** Gistel, XI; said to be a fish and substituted for *PERIOPTERA* Gistel, "deleatur". I find no reference elsewhere to either name.
- Orthocolus** Gistel XI; type *SALMO THYMALLUS* L. Substitute for *THYMALLUS* Cuv., regarded as preoccupied by *THYMALLUS* Latr., 1803, a genus of beetles. But the root word is different. In any event, *CHOREGON* Minding has priority.
- Trompe** Gistel, XI, 109; type (*SCIÆNA JACULATRIX* Pallas). Name an unexplained substitute for *TOXOTES* Cuv.
- Aphobus** Gistel, XI; type (*TRACHIDERMIS FASCIATUS* Heckel). Name a substitute for *TRACHIDERMIS* Heckel preoccupied as *TRACHYDERMA*, etc., a synonym of *CENTRIDERMICITHYS* Rich., 1844.
- Chætichthys** Gistel, XI; type (*TRACHINUS TRICHODON* Steller). Name a substitute for *TRICHODON* Cuv., deemed preoccupied by *TRICHODA* and *TRICHODES*, but the root meaning is different.
- Lithulcus** Gistel, XI; type (*TRICHOPODUS MENTUM* Lac.). Substitute for *TRICHOPODUS* (*TRICHOPUS*) (Lac.) Cuv. & Val.; used also in botany. The oldest use of the name in Zoology is that of Lacépède, 1802 (III, 125), a genus of fishes already called (116) *OSPHRONEMUS* by the same author.
- Odonus** Gistel, XI; type (*BALISTES NIGER* Lac.). A substitute for *XENODON* Rüppell, preoccupied. *ODONUS* is prior to *ERYTHRODON* Rüppell, 1852, and to *PYRODON* Kaup. If *ZENODON* Sw. (1839) is regarded as eligible, not as a mere misprint, it will be preferred to *ODONUS*.
- Eudynama** Gistel, XIII, 108; orthotype (*SPARUS AURATA* L.). A substitute for *CHRYSOPHRYS* Cuv. A synonym of *SPARUS* L. as restricted.
- Eupnœa** Gistel, 105; orthotype *PLAGIUSA LACTEA* Bon. (*SYMPHURUS NIGRESCENS* Raf.). A synonym of *SYMPHURUS* Raf.
- Melantha** Gistel, 109; orthotype *SCIÆNA NIGRA* Gmelin, "die Seekrähe". A needless synonym of *CORVINA* Cuv.
- Attilus** Gistel, 109; orthotype *SCIÆNA CIRRIOSA* L., "der Schattenfisch". A needless synonym of *UMBRINA* Cuv.
386. GUICHENOT (1848). *Notice sur l'établissement d'un nouveau genre de Chétodons (Megaprotodon)*. Rev. Zool., XI.
ALPHONSE GUICHENOT.
- Megaprotodon** Guichenot 12; orthotype *CHÆTODON BIFASCIALIS* Cuv. & Val.
387. GUICHENOT (1848). *Peces de Chile*. (In Claudio Gay: *Historia física y política de Chile*.)
ALPHONSE GUICHENOT.
- Boxaodon** (Guichenot) Gay, II, 208; orthotype *B. CYANESCENS* Guich. An ally of *EMMELICHTHYS* Rich.
- Mendosoma** (Guichenot) Gay, II, 212; logotype *M. LINEATUM* Guich.
- Seriolella** (Guichenot) Gay, II, 238; orthotype *S. POROSA* Guich.
- Merlus** (Guichenot) Gay, II, 238; orthotype *M. GAYI* Guich. Apparently a variant of *MERLUCCIUS*, of which it is a synonym.
388. HECKEL (1848). *Eine neue Gattung von Pécilien mit rochenartigem Anklammerungs-Organ (Xiphophorus)*. Sitzb. Akad. Wiss. Wein.
JOHANN JAKOB HECKEL.
- Xiphophorus** Heckel, I, 163; orthotype *X. HELLERI* Heckel.

389. JERDON (1848). *On the Fresh-water Fishes of Southern India*. Madras Journ. Lit. Sci., XV.
 THOMAS CLAVERHILL JERDON (1811-1873).
Pristolepis Jerdon, XV, 141; orthotype *P. MARGINATUS* Jerdon. Replaces CATOPRA Blkr.
390. M'COY (1848). *On Some New Fossil Fish of the Carboniferous Period*. Ann. Mag. Nat. Hist., II. .
 FREDERICK M'COY.
Isodus M'CoY, 3; orthotype *I. LEPTOGNATHUS* M'CoY (fossil).
Colonodus M'CoY, II, 5; orthotype *C. LONGIDENS* M'CoY (fossil).
Osteoplax M'CoY, II, 6; orthotype *O. EROSA* M'CoY (fossil).
391. M'COY (1848). *On Some New Ichthyolites from the Scotch Old Red Sandstone*. Ann. Mag. Nat. Hist., II.
 FREDERICK M'COY.
Physonemus M'CoY, II, 117; orthotype *P. ARCUATUS* M'CoY (fossil).
Erismacanthus M'CoY, II, 118; orthotype *E. JONESI* M'CoY (fossil).
Asteroptychius (Agassiz) M'CoY, II, 118; orthotype *A. ORNATUS* (Ag.) M'CoY (fossil). Name only, in *Poissons fossiles*, III, 176, 1843; made valid by M'CoY, 1848.
Platyacanthus M'CoY, II, 120; orthotype *P. ISOSCELES* M'CoY (fossil). Name preoccupied. A synonym of *ORACANTHUS* Ag.
Polyrhizodus M'CoY, II, 125; orthotype *P. MAGNUS* M'CoY (fossil).
Glossodus M'CoY, II, 127; logotype *G. LINGUA-BOVIS* M'CoY (fossil). Not *GLOSSODON* Raf.
Climaxodus M'CoY, II, 128; orthotype *C. IMBRICATUS* M'CoY (fossil). A synonym of *JANASSA*.
Cheirodus M'CoY, II, 130; orthotype *C. PES-RANÆ* M'CoY (fossil).
Petrodus M'CoY, II, 132; logotype *P. PATELLIFORMIS* M'CoY (fossil).
Tripterus M'CoY, II, 306; orthotype *T. POLLEXFENI* M'CoY (fossil). A synonym of *OSTEOLEPIS* Val. Name preoccupied; replaced by *TRIPLOPTERUS* M'CoY (1855).
Gyroptychius M'CoY, II, 307; orthotype *G. ANGUSTUS* M'CoY (fossil).
Conchodus M'CoY, II, 312; orthotype *C. OSTREIFORMIS* M'CoY (fossil).
392. MÜLLER (1848). (*Fossile Fische*.) *Reise in den äussersten Norden und Osten Sibierens während der Jahr 1843-44*. Herausgegeben von A. Th. v. Middendorf, I.
 JOHANNES MÜLLER.
Lycoptera Müller, I, 262; orthotype *L. MIDDENDORFI* Müller (fossil).
393. MÜLLER & TROSCHEL (1848). *Reisen in British-Guiana in den Jahren 1840-44*. (Im Auftrag Sr. Majestät des Königs von Preussen ausgeführt von Richard Schomburgk: *Versuch einer Fauna und Flora von British-Guiana*. (*Fische*.) III.)
 JOHANNES MÜLLER; FRANZ HERMANN TROSCHEL.
Acharnes Müller & Troschel, III, 622; orthotype *A. SPECIOSA* M. & T.
Polycentrus Müller & Troschel, III, 622; orthotype *P. SCHOMBURGI* M. & T.
394. RICHARDSON (1848). *Fishes: The Zoology of the Voyage of H.M.S. "Samarang"; Under the Command of Captain Sir Edward Belcher, During the years 1843-1846*.

JOHN RICHARDSON.

- Choridactylus** Richardson, 8; orthotype *C. MULTIBARBIS* Rich. Later spelled *Chorismodactylus*.
Sthenopus Richardson, 10; orthotype *S. MOLLIS* Rich. Name preoccupied; replaced by *Trichopleura* Kaup.
Podabrus Richardson, 11; logotype *P. CENTROPOMUS* Rich. Preoccupied in beetles; replaced by *Vellitor* Jordan & Starks (1894).
Nemichthys Richardson, 25; orthotype *N. SCOLOPACEUS* Rich.
Aperioptus Richardson, 27; orthotype *A. PICTORIUS* Rich.

1849

395. AYRES (1849). *On a Very Curious Fish, for which the Name Malacosteus niger Is Proposed.* Journ. Bost. Soc. Nat. Hist.
 WILLIAM O. AYRES.
Malacosteus Ayres, 53; orthotype *M. NIGER* Ayres.
396. BLEEKER (1849). *A Contribution to the Knowledge of the Ichthyological Fauna of Celebes.* Journ. Ind. Arch., III.
 PIETER BLEEKER.
Apogonoides Bleeker, III, 70; orthotype *A. MACASSARIENSIS* Blkr. This forgotten genus is based on a species without teeth on the plate; with the preopercle entire, no opercular spines: D .VI-1, 9; caudal bilobed. *Apogonoides* seems to differ from the later *Apogonichthys* only in the presence of 6, not 7, dorsal spines and in the bilobed caudal.
- Amblygaster** Bleeker, 70; orthotype *A. CLUPEOIDES* Blkr. A synonym of *SARDINELLA* Cuv. & Val. The true sardines (*SARDINIA* Poey) are well distinguished from *SARDINELLA* externally by the strong concentric grooves on the opercles.
- Dipterygonotus** Bleeker, 70; orthotype *D. LEUCOGRAMMICUS* Blkr. An ally or synonym of *EMMELICHTHYS* Rich.
- Pogonognathus** Bleeker, III, 73; orthotype *P. BARBATUS* Blkr. = *ANACANTHUS BARBATUS* Gray. A synonym of *PSILOCEPHALUS* Sw.
397. BLEEKER (1849). *Overzicht der te Batavia voorkomende Gladschubbige Labroiden, met beschrijving van 11 nieuwe soorten.* Verh. Bat. Gen. XXII, 1849, 1-64.
 PIETER BLEEKER.
Scarus (Forskål) Bleeker XII, 3; orthotype *LABRUS CRETENSIS* L. (not *SCARUS* Forskål). A synonym of *SPARISOMA* Sw.
398. BLEEKER (1849). *Bijdrage tot de kennis der Percoïden van den Malayo-Molukschen Archipel, met beschrijving van 22 nieuwe soorten.* Verh. Batav. Genootsch., XXII.
 PIETER BLEEKER.
Mulloides Bleeker, 12; orthotype *MULLUS FLAVOLINEATUS* Lac.
Upeneoides Bleeker, 63; orthotype *MULLUS VITTATUS* Forskål
399. BLEEKER (1849). *Bijdrage tot de kennis der Blennioïden en Gobioïden van den Soenda-Molukschen Archipel, met beschrijving van 42 nieuwe soorten.* Verh. Batav. Genootsch., XX.
 PIETER BLEEKER.

Philypnoides Bleeker, XXIII, 19; orthotype *P. SURAKARTENSIS* Blkr. (Young of *OPHICEPHALUS GACHUA* Ham.) A synonym of *OPHICEPHALUS* Bloch.

400. BLEEKER (1849). *Bijdrage tot de kennis der ichthyologische fauna van het eiland Madura, met beschrijving van eenige nieuwe species*. Verh. Batav. Genootsch., XXII.

PIETER BLEEKER.

Leptonurus Bleeker, XXII, 14; orthotype *L. CHRYSOSTIGMA* Blkr. A synonym of *COILIA* Gray.

Hippichthys Bleeker, XXII, 15; orthotype *H. HEPTAGONUS* Blkr. (not *HIPPOCAMPUS HEPTAGONUS* Raf.). Probably the same as *CORYTHOICHTHYS* Kaup and of earlier date.

Anodontostoma Bleeker, XXI, 15; orthotype *A. HASSELTII* Blkr. = *CHATOËSSUS CHACUNDA* Cuv. & Val.; replaces *GONOSTOMA* Van Hasselt, 1823, preoccupied.

401. BLEEKER (1849). *Bijdrage tot de kennis der ichthyologische fauna van het eiland Bali, met beschrijving van eenige nieuwe species*. Verh. Batav. Genootsch., XXII.

PIETER BLEEKER.

Stomianodon Bleeker, XXII, 10; orthotype *S. CHRYSOPHEKADION* Blkr. A synonym of *ASTRONESTHES* Rich.

402. CANTOR (1849). *Catalogue of Malayan Fishes*. Journ. Roy. Asiat. Soc. Bengal, XVIII (1849). Reprinted as a separate volume, 1850.

THEODORE EDWARD CANTOR.

Genyoroqe Cantor, 12; logotype *DIACOPE SEBÆ*. Name a substitute for *DIACOPE* Cuv. & Val., preoccupied.

Prosopodasys Cantor, 44; orthotype *APISTUS ALATUS* Cuv. A substitute for *APISTUS* Cuv., regarded as preoccupied by *APISTA*, hence must retain the same type. *PTERICHTHYS* Sw., 1839, has priority over *PROSOPADASY*.

Corythobatus Cantor, 45; orthotype *APISTUS MINOUS* Cuv. & Val. = *MINOUS MOORA* Cuv. & Val. Substitute for *MINOUS*, regarded as preoccupied by *MINOËS*.

Spondyliosoma Cantor, 50; orthotype *SPARUS CANTHARUS* L. Substitute for *CANTHARUS* Cuv., preoccupied.

Catochænum Cantor, 55; orthotype *GERRES WAIGENSIS* Cuv. & Val. Substitute for *GERRES*, unnecessarily regarded as preoccupied by *GERRIS*, a genus of insects. *PODAGER* Gistel (1848), also a substitute for *GERRES*, is preoccupied. I think that *GERRES* should hold.

Ilarches Cantor, 100; orthotype *CHÆTODON ORBIS* Bloch. Substitute for *EPHIPPIUS* Cuv., regarded as preoccupied by *EPHIPPIUM*.

Diphreutes Cantor, 159; orthotype *CHÆTODON MACROLEPIDOTUS* L., replacing *HENIOCHUS* Cuv. (1817), regarded as preoccupied by *HENIOCHE*, 1816.

Harpochirus Cantor, 162; orthotype *CHÆTODON PUNCTATUS* Gmelin. Same as *ENIXE* Gistel, 1848, an earlier substitute for *DREPANE* Cuv., regarded as preoccupied by *DREPANA*, *DREPANIA*, *DREPANIS* and *DREPANIUS*.

Cacodoxus Cantor, 163; orthotype *CHÆTODON ARGUS* Gmelin. Same as *PRENES* Gistel, 1848. Substitute for *SCATOPHAGUS* Cuv. & Val. regarded as preoccupied by *SCATOPHAGA*.

Cannorhynchus Cantor, 211; orthotype *FISTULARIA TABACARIA* L. A synonym of *FISTULARIA*.

Synaptura Cantor, 222; logotype *PLEURONECTES COMMERSONIANUS* Lac., as restricted by Bleeker.

Tetradrachmum Cantor, 240; logotype *CHÆTODON ARUANUS* L. Same as *PIRENE* Gistel (1848). A substitute for *DASCYLLUS* Cuv., regarded as preoccupied by *DASCILLUS* and often spelled *DASCILLUS*.

Prionace Cantor, 399; logotype *SQUALUS GLAUCUS* L. Substitute for *PRIONODON* M. & H., preoccupied.

Rhachinotus Cantor, 422; orthotype *RAJA AFRICANA* Bl. & Schn. A substitute for *ANACANTHUS* Ehrenb., 1837, preoccupied. A synonym of *UROGYMNUS* M. & H.

Stoasodon Cantor, 434; orthotype *RAJA NARINARI* Euphrasen. Substitute for *ÆTOBATIS* as restricted by Müller & Henle, the proper type of *ÆTOBATIS* Blainv. being regarded by tautonymy as *RAJA AQUILA* L.

403. CUVIER & VALENCIENNES (1849). *Histoire naturelle des poissons*. XXII.
ACHILLE VALENCIENNES.

Parodon Cuvier & Valenciennes, XXII, 50; haplotype *PARODON SUBORBITALE* Val.

Brycinus Cuvier & Valenciennes, XXII, 157; haplotype *BRYCINUS MACROLEPIDOTUS* Val.

Piabucina Cuvier & Valenciennes, XXII, 161; haplotype *PIABUCIANA ERYTHRINOIDES* Val.

Distichodus Cuvier & Valenciennes, XXI, 172; haplotype *SALMO NEFASCH* Lac. = *SALMO NILOTICUS* Hasselquist.

Tometes Cuvier & Valenciennes, XXII, 225; logotype *TOMETES TRILOBATUS* Val. A synonym of *MYLEUS* M. & T.

Mylesinus Cuvier & Valenciennes, XXII, 234; haplotype *MYLESINUS SCHOMBURGI* Val.

Chalcinus Cuvier & Valenciennes, XXII, 258; logotype *CHALCINUS BRACHYOMUS* Val.

Cynopotamus Cuvier & Valenciennes, XXII, 317; logotype *HYDROCYON ARGENTEUS* Val.

Saurida Cuvier & Valenciennes, XXII, 499; logotype *SALMO TUMBIL* Bloch.

Farionella Cuvier & Valenciennes, XXII, 507; haplotype *FARIONELLA GAYI* Val. A synonym of *APLOCHITON* Jenyns (1842).

404. GERMAR (1849). *Steinkohle Wittenbergs*.
ERNST FRIEDRICH GERMAR (1786-1853).

Styracodus Gernar, 70; orthotype *CENTRODUS ACUTUS* Giebel (fossil). A synonym of *CENTRODUS*.

405. 406. GIEBEL (1849). *Fauna der Vorwelt*.
CHRISTIAN GOTTFRIED ANDREAS GIEBEL.

Asima Giebel, 184; orthotype *RADAMAS JUGLERI* Münster. A synonym of *RADAMAS*.

407. HECKEL (1849). *Abhandlung über eine neue fossile Fischgattung, Chirocentrites, und die ersten Ueberreste eines Siluroiden aus der Vorwelt*. Sitzb. Akad. Wiss. Wien, II.

JOHANN JAKOB HECKEL.

Chirocentrites Heckel, I, 18; logotype *C. MICRODON* Heckel (fossil). A synonym of *THRISSEPS*.

408. HECKEL (1849). *Ichthyologie (von Syrien)*. In Russegger, Joseph von, *Reisen in Europa, Asien und Africa, mit besonderer Rücksicht auf die naturwissenschaftlichen Verhältnisse der betreffenden Länder unternommen in den Jahren 1835 bis 1841*, etc. II, part 3. (To this part Dean assigns the date 1843.)

- Isodus** Heckel, II, 342; orthotype I. SULCATUS Heckel (fossil). A synonym of ENCHODUS Ag.
- Pycnosterina** Heckel, II, 337; orthotype P. RUSSEGERI Heckel (fossil).
409. HOEVEN, VAN DER (1849). *Handboek der dierkunde; tweede verbeterde uitgave; met bijvoegsels en aanmerkingen door Leuckart*. Amsterdam.
JANUS VAN DER HOEVEN (1802-1868).
- Pteronemus** Van der Hoeven, II, 177; orthotype CHEILODACTYLUS FASCIATUS Lac. A synonym of CHEILODACTYLUS.
- Sphyrna** Van der Hoeven, II; type SQUALUS ZYGÆNA L. Emendation of SPHYRNA Raf.
410. JORDAN (1849). (*Triodus*.) Neues Jahrb. von Mineralogie.
AUGUST JORDAN.
- Triodus** Jordan, 843; orthotype T. SESSILIS Jordan = PLEURACANTHUS DECHENI (fossil). A synonym of ORTHACANTHUS (PLEURACANTHUS).
411. M'COY (1849). *On Some New Fossil Fish of the Carboniferous Period*. Ann. Mag. Nat. Hist., ser. II.
FREDERICK M'COY.
- Centrodus** M'Coy, II, 3; orthotype C. STRIATULUS M'Coy (fossil). Same as MEGALICHTHYS Ag., 1844, not of 1838.
412. MEYER (1849). *Fische, etc., aus dem Muschelkalk Ober-Schlesiens*. Palæontographica, I.
HERRMANN VON MEYER.
- Palæobates** Meyer, I, 234; orthotype PSAMMODUS ANGUSTISSIMUS Ag. (fossil).
413. MÜLLER & TROSCHEL (1849). *Horæ Zoologicae. Beschreibung und Abbildung neuer Fische*. III.
JOHANNES MÜLLER; FRANZ HERMANN TROSCHEL.
- Sciades** Müller & Troschel, III, 6; logotype SCIADES PICTUS M. & T.
- Eutropius** Müller & Troschel, III, 6; logotype HYPOPHthalmus NILOTICUS Rüppell.
- Citharinus** Müller & Troschel, III, 8; tautotype SERRASALMO CITHARINUS Cuv. = SALMO UNIMACULATUS Bloch.
- Hemiodys** Müller & Troschel, III, 9; logotype ANODUS CRENIDENS M. & T. = SALMO UNIMACULATUS Bloch.
- Ariodes** Müller & Troschel, III, 9; logotype ARIODES ARENARIUS M. & T.
- Erethistes** Müller & Troschel, III, 12; orthotype E. PUSILLUS M. & T.
- Carapus** (Cuvier) Müller & Troschel, III, 13; logotype, restricted by Eigenmann, to FASCIATUS Pallas = GYMNOTUS CARAPO L. (CARAPUS Cuv., but not of Rafinesque). A synonym of GYMNOTUS L.
- Sternopygus** Müller & Troschel, III, 13; orthotype GYMNOTUS MACRURUS Bl. & Schn.
- Rhamphichthys** Müller & Troschel, III, 15; orthotype GYMNOTUS ROSTRATUS L.
- Cnidon** Müller & Troschel, III, 21; orthotype C. CHINENSIS M. & T. = LABRAN WAIGIENSIS Cuv. & Val. A synonym of PSAMMOPERCA Rich.
- Cichlops** Müller & Troschel, III, 24; orthotype C. MICROPHthalmus M. & T. Name preoccupied; replaced by DAMPIERIA Castelnau, 1875, or by LABRACINUS Schlegel, 1875.
- Caprophonus** Müller & Troschel, III, 28; orthotype C. AURORA M. & T. = ANTIGONIA CAPROS Lowe. A synonym of ANTIGONIA Lowe.

- 413A. NEWMAN (1849). (*Devil Fish.*) *The Zoologist*.
EDWARD NEWMAN.
Brachioptilon Newman, 74; orthotype *B. HAMILTONI* Newman. A synonym of *MANTA* Bancroft.
414. REID (1849). *An Account of a Specimen of the Vaagmær . . . Thrown Ashore in the Firth of Forth*. *Ann. Mag. Nat. Hist.*, III.
JOHN REID.
Vogmarus Reid, III, 456; orthotype *BOGMARUS ISLANDICUS* Bl. & Schn. A substitute for *BOGMARUS*, both names synonyms of *TRACHIPTERUS* Gouan.
415. REINHARDT (1849). *Nye sydamerikanske ferskvandsfiske*. *Vidensk. Meddel-Naturh. Foren. Kjöbenhavn*.
JOHANN THEODOR REINHARDT (1816-1882).
Hydropardus Reinhardt, 46; orthotype *H. RAPAX* Reinh. = *RAPHIODON VULPINUS* Ag. A synonym of *RAPHIODON*.
416. SISMONDA (1849). *Descrizione dei pesci e dei crustacci fossili nel Piemonte*, *Mem. Reale Accad. Sci. Torino*, ser. X.
EUGENIO SISMONDA.
Trigonodon Sismonda, 25; orthotype *T. OWENI* Sismonda (fossil).
417. SMITH (1849). *Illustrations from the Zoology of South Africa; Consisting Chiefly of Figures and Descriptions of Objects of Natural History Collected During an Expedition into the Interior of South Africa in 1834-36*.
ANDREW SMITH.
Leptorhynchus Smith, pl. 6; orthotype *L. CAPENSIS* Smith. A synonym of *OPHISURUS* Lac., as restricted.
Cheilobarbus Smith, pl. 10; logotype *BARBUS CAPENSIS* Smith.
Pseudobarbus Smith, pl. 11; orthotype *BARBUS BURCHELLI* Smith.
Abrostomus Smith, pl. 12; logotype *A. UMBRATUS* Smith.
Tilapia Smith; orthotype *CHROMIS NILOTICA* Cuv. & Val. Replaces *CHROMIS* Gthr., not of Cuvier.
Atimostoma Smith, XXIV; orthotype *A. CAPENSE* Smith. A synonym of *PSENES* Cuv. & Val.
Rhineodon Smith, pl. 26; orthotype *R. TYPICUS* Smith. Misprinted *RHINCODON*; often written *RHINODON*.
Xiphiurus Smith; orthotype *X. CAPENSIS* Smith. Name preoccupied as *XIPHIURA*, a synonym of *GENYPTERUS* Philippi.
418. THIOLLIÈRE (1849). *Un nouveau gisement de poissons fossiles dans le Jura du département de l'Ain*. *Ann. Soc. Agric. Lyons*, I.
VICTOR JOSEPH DE L'ISLE THIOLLIÈRE (1801-1859).
Spathobatis Thiollière, I, 63; orthotype *S. BUGESIACUS* Thiollière (fossil). A synonym of *AELLOPOS* Münster.
419. WILLIAMSON (1849). *On the Microscopic Structure of the Scales and Dermal Teeth of Some Ganoid and Placoid Fishes*. *Phil. Trans. Roy. Soc. London*.
WILLIAM CRAWFORD WILLIAMSON.
Pholidotus Williamson, 444; orthotype *P. LEACHI* Williamson (fossil). A synonym of *DAPEDIUM* Leach.

1850

420. AGASSIZ (1850). *Lake Superior: Its Physical Character, Vegetation, and Animals, Compared with Those of Other and Similar Regions, etc.*
LOUIS AGASSIZ.
Pœcilosoma Agassiz, 299; haplotype *ETHEOSTOMA VARIATEUM* Kirtland. Preoccupied; replaced by *PÆCILICHTHYS* Ag., 1854.
- Argyrosomus** Agassiz, 339; haplotype *SALMO CLUPIFORMIS* Ag., not of Mitchill = *SALMO HARENGUS* Rich. Name preoccupied (Pylaie, 1834); replaced by *THRISOMIMUS* Gill (1909). A subgenus under *LEUCICHTHYS* Dybowski.
- Hypsolepis** (Baird) Agassiz, 368; orthotype *CYPRINUS CORNUTUS* Mitchill. Written *HYPSELEPIS* by Cope.
421. BLEEKER (1850). *Bijdrage tot de kennis der Mœnoiden van den Sænda-Molukschen Archipel.* Verh. Batav. Genootsch., XXIII.
PIETER BLEEKER.
Pentaprion Bleeker, I, 104; orthotype *P. GERREOIDES* Blkr.
422. BLEEKER (1850). *Bijdrage tot de kennis der visschen met doolhofvormige kieuwen van den Sænda-Molukschen Archipel.* Verh. Batav. Genootsch., XXIII, 1850.
PIETER BLEEKER.
Betta Bleeker, XXIII, 12; orthotype *B. TRIFASCIATA* Blkr.
423. COSTA (1850). (*Fossil Fishes: Ittioliti.*) Atti Accad. Pontan, V.
ORONZIO GABRIELE COSTA.
Sarginites Costa, V, 285; orthotype, *S. PYGMÆUS* Costa (fossil). A synonym of *LEPTOLEPIS*.
- Histiurus** Costa, V, 288; orthotype *H. ELATUS* Costa. Preoccupied as *ISTIURUS* Cuv., 1829, emended as *HISTIURUS* Ag.; replaced by *KNIGHTIA* Jordan, 1907; type *K. EOCÆNA* Jordan.
- Rhynchoncodes** Costa, V, 317; orthotype *R. SCACCHI* Costa (fossil). A synonym of *PROPTERUS* Ag.
- Blenniomœus** Costa, V, 319; orthotype *B. LONGICAUDA* Costa (fossil). A synonym of *NOTAGOGUS* Ag.
- Sauropsidium** Costa, V, 322; orthotype *S. LEVISSIMUM* Costa.
- Megalurites** Costa, V, 370; orthotype *DIODON SCILLE* Ag. (fossil). A synonym or fossil ally of *DIODON*.
424. DIXON (1850). *The Geology and Fossils of the Tertiary and Cretaceous Formations of Sussex.*
A. FRANCIS DIXON.
Platylæmus Dixon, 205; orthotype *P. COLEI* Dixon (fossil).
- Aulodus** Dixon, 366; orthotype *A. AGASSIZI* Dixon (fossil). A synonym of *PTYCHODUS* Ag.
- Plethodus** Dixon, 366; logotype *P. EXPANSUS* Dixon (fossil). (Not *PLETHODON* Tschudi, a genus of lizards.)
- Pomognathus** Dixon, 367; orthotype *P. EURYPTERYGIUS* Dixon (fossil). A synonym of *HALEC* Ag.
- Prionolepis** (Egerton) Dixon, 368; orthotype *P. ANGUSTUS* Egert. (fossil).
- Homonotus** Dixon, 372; orthotype *B. ELEGANS* Dixon (fossil).
- Berycopsis** Dixon, 372; orthotype *B. ELEGANS* Dixon (fossil).

- Stenostoma** Dixon, 373; orthotype *S. PULCHELLA* Dixon (fossil).
Pachyrhizodus (Agassiz) Dixon, 374; orthotype *P. BASALIS* Dixon (fossil).
Tomognathus Dixon, 376; logotype *P. MORDAX* Dixon (fossil).
425. EGERTON (1850). *Palichthyologic Notes, Supplemental to the Work of Prof. Agassiz on the Ganoidei heterocerci*. Quart. Journ. Geol. Soc. Lond.
 PHILIP DE MALPA GREY EGERTON.
Plectrolepis (Agassiz) Egerton, VI, 4; orthotype *P. RUGOSUS* (Ag.) Egert. (fossil).
 A synonym of *EURYNOTUS* Ag. = *NOTACMON* Gistel.
426. FISCHER VON WALDHEIM (1850). *Sur un poisson fossile de la Grèce (Platacanthus)*. Bull. Soc. Imp. Nat. Moscou., XXIII.
 GOTTHELF FISCHER VON WALDHEIM (1771-1853).
Platacanthus Fischer von Waldheim, XXIII, 286; orthotype *P. UBINOI* Waldheim (fossil). An extinct ally of *DICENTRARCHIUS* Gill = *LABRAX* Cuv., not Pallas.
427. FISCHER VON WALDHEIM (1850). *Ommatolampes et Trachelacanthus, genera piscium fossilium nova, in literis Eduardo ab Eichwald datis, descripta*. Mosquæ.
 GOTTHELF FISCHER VON WALDHEIM.
Ommatolampes Fischer von Waldheim, 4; orthotype *O. EICHWALDI* Fischer.
Trachelacanthus Fischer von Waldheim, 9; orthotype *T. STSCHUROVSKII* Waldheim (fossil).
428. GIBBES (1850). *Mososaurus and Allied Genera*. Smithsonian Contr. Knowledge, II.
 ROBERT WILSON GIBBES (1809-1866).
Conosaurus Gibbes, 10; orthotype *C. BOWMANI* Gibbes. Name regarded as pre-occupied by *CONIOSAURUS*; replaced by *CONOSAUROPS* Leidy (1868).
429. GUICHENOT (1850). *Exploration scientifique de l'Algérie*. Paris.
 ALPHONSE GUICHENOT.
Gadiculus Guichenot, 101; orthotype *G. ARGENTEUS* Guich.
430. HECKEL (1850). *Beiträge zur Kenntniss der fossilen Fische Oesterreichs*. Denkschr. Akad. Wiss. Wien, I.
 JOHANN JAKOB HECKEL.
Saurorhamphus Heckel I, 217; orthotype *S. FREYERI* Heckel (fossil).
Lepidopides Heckel, I, 239; *LEPIDOPUS LEPTOSPONDYLUS* Heckel (fossil). A synonym of *ANENCHELUM* Blainv. and probably of the living genus *LEPIDOPUS*
431. JERDON (1850). (*Pristolepis*). Madras Journ. Lit. Sci., XVI.
 THOMAS CLAVERHILL JERDON.
Pristolepis Jerdon, XVI, 298; orthotype *P. MARGINATUS* Jerdon. Jerdon (*Ann. Mag. Nat. Hist.*, 1865, 298) claims priority of *PRISTOLEPIS* over *CATOPRA* Blkr. *CATOPRA* was first noted in 1851.
432. LANKESTER (1850). (*Fishes of the Old Red Sandstone*).
 EDWIN RAY LANKESTER (1847-).
Zenaspis Lankester, 43; orthotype *CEPHALASPIS SALWEYI* Egert. (fossil). A synonym of *CEPHALASPIS*.
433. LOWE (1850). *An Account of Fishes Discovered or Observed in Madeira Since the Year 1842*. Proc. Zool. Soc. London, XVIII.
 RICHARD THOMAS LOWE.

Phænodon Lowe, 250; orthotype *P. RINGENS* Lowe. A synonym of *ASTRONESTHES* Rich.

434. PICTET (1850). *Description de quelques poissons fossiles du Mont Liban*. Mém. Soc. Phys. Hist. Nat. Genève, XII, 1849, published in 1850.

FRANÇOIS JULES PICTET (1809-1872).

Petalopteryx Pictet, 20; orthotype *P. SYRIACUS* Pictet (fossil).

Eurypholis Pictet, 28; logotype *E. BOISSIERI* Pictet (fossil). A synonym of *SAURORHAMPHUS*.

Spaniodon Pictet, 33; logotype *S. BLONDELI* Pictet (fossil).

Coccodus Pictet, 51; orthotype *C. ARMATUS* Pictet (fossil).

435. RICHARDSON (1850). *Notices of Australian Fish*. Proc. Zool. Soc. London. XVIII.

JOHN RICHARDSON.

Sciænoïdes (Solander MS.). Richardson, 62; haplotype *S. ABDOMINALIS* Solander = *SCLENA MACROPTERA* Forster; in synonymy only; a species of *DACTYLOSPARUS* Gill.

Threpterus Richardson, 68; orthotype *T. MACULOSUS* Rich.

Olisthops Richardson, 74; orthotype *O. CYANOMELAS* Rich. (Also in *Ann. Mag. Nat. Hist.*, VIII, 185, 290.) Name spelled *OLISTHEROPS* by Günther.

436. TEMMINCK & SCHLEGEL (1850). *Fauna Japonica* (last part).

COENRAAD JACOB TEMMINCK; HERMANN SCHLEGEL.

Pseudoblennius Temminck & Schlegel, 313; orthotype *P. PERCOIDES* Gthr.

Pseudoclinus Temminck & Schlegel, pl. LXXIX; orthotype *PSEUDOBLENNIIUS PERCOIDES* Gthr. A slip of the pen for *PSEUDOBLENNIIUS*.

Velifer Temminck & Schlegel, 312; orthotype *V. HYPSELOPTERUS* Blkr.

437. THIOLLIÈRE (1850). *Un nouveau gisement de poissons fossiles dans le Jura de département de l'Ain*. Ann. Soc. Agric. Lyon, I.

VICTOR JOSEPH DE L'ISLE THIOLLIÈRE.

Disticholepis Thiollière, III, 136; orthotype *M. FOURNETI* Thiollière. A synonym of *MACROSEMIUS* Ag.

Oligopleurus Thiollière, III, 154; orthotype *O. ESOCINUS* Thiollière (fossil).

1851

438. BLEEKER (1851). *Visschen van Banka*. Nat. Tijdschr. Neder.-Indie, 1851.

PIETER BLEEKER.

Gnathanodon Bleeker, 160; orthotype *SCOMBER SPECIOSUS* Forskål. Not *CARANX* of Lacépède, as first restricted (to *C. CARANGUS*) by Bleeker.

439. BLEEKER (1851). *Nieuwe bijdrage tot de kennis der ichthyologische fauna van Borneo, met beschrijving van eenige nieuwe soorten van zoetwater-visschen*. Nat. Tijdschr. Neder.-Indie, II.

PIETER BLEEKER.

Wallago Bleeker, 202; orthotype *WALLAGO DINEMA* Blkr.

Achiroides Bleeker, 262; logotype *PLAGUSIA MELANORHYNCHUS* Blkr.

Clupeoides Bleeker, 275; orthotype *C. BORNEENSIS* Blkr. A synonym of *CORICA* Gray.

Luciocephalus Bleeker, 278; orthotype *DIPLOPTERUS PULCHER* Gray. Replaces *DIPLOPTERUS* Gray, preoccupied in birds.

440. BLEEKER (1851). *Over einige nieuwe geslachten en soorten van Makreelagtige Visschen van den Indischen Archipel*. Nat. Tijdschr. Neder.-Indie, I, 1851.

PIETER BLEEKER.

Decapterus Bleeker, II, 358; orthotype *CARANX KURRA* Cuv. & Val.

Selar Bleeker, 359; logotype *CARANX HASSELTII* Blkr. (*C. BOOPS* Cuv. & Val. indicated as type by Jordan & Evermann, 1898, was not named in Bleeker's first account (only *S. HASSELTII*, *S. KUHLI*, *S. MACRURUS*, *S. MALAM*).

Carangoides Bleeker, 366; orthotype *CARANX PRÆUSTUS* Bennett, the only other species here mentioned being *C. ATROPUS*, type of *ATROPUS* Cuv. Defined to include *CITULA*, *ATROPUS* and *OLISTUS* as well as *CARANGOIDES* proper, as restricted by Jordan & Evermann.

Leioglossus Bleeker, 367; orthotype *L. CARANGOIDES* Blkr.

Stromateoides Bleeker, I, 368; orthotype *STROMATEUS CINEREUS* Bloch; a synonym of *PAMPUS* Bon.

441. BLEEKER (1851). *Derde bijdrage tot de kennis der ichthyologische fauna van Borneo, etc.* Nat. Tijdschr. Neder.-Indie, II.

PIETER BLEEKER.

Tetrabranhus Bleeker, II, 69; orthotype *T. MICROPHALMA* Blkr. A synonym of *SYMBRANCHUS* Bloch.

Catopra Bleeker, 172; orthotype *C. FASCIATA* Blkr. A synonym of *PRISTOLEPIS* Jerdon, 1850.

442. BLEEKER (1851). *Cheilinoides, een nieuw geslacht van gladschubbig Labroiden van Batavia*. Nat. Tijdschr. Neder.-Indie, II

PIETER BLEEKER.

Cheilinoides Bleeker, II, 71; orthotype *C. CYNANOPELURA* Blkr.

443. BLEEKER (1851). *Vierde bijdrage tot den kennis der ichthyologische fauna van Borneo, met beschrijving van eenige nieuwe soorten van zoetwater-visschen*. Nat. Tijdschr. Neder.-Indie, II.

PIETER BLEEKER.

Bagroides Bleeker, II, 204; orthotype *B. MELANOPTERUS* Blkr.

444. BLEEKER (1851). *Nieuwe bijdrage tot de kennis der ichthyologische fauna van Celebes*. Nat. Tijdschr. Neder.-Indie, II, 1851.

PIETER BLEEKER.

Megalaspis Bleeker, II, 213; orthotype *SCEMBER CORDYLA* L. (*CARANX ROTTLERI* Blkr.).

Selaroides Bleeker, II, 213; orthotype *CARANX LEPTOLEPIS* Kuhl & Van Hasselt. Later called *LEPTASPIS*, the reason not stated.

Spratelloides Bleeker, 214; orthotype *CLUPEA ARGYROTÆNIA* Blkr.

445. BLEEKER (1851). *Bijdrage tot de kennis der ichthyologische fauna van de Banda eilanden*. Nat. Tijdschr. Neder.-Indie, II.

PIETER BLEEKER.

Labroides Bleeker, II, 249; orthotype *L. PARADISEUS* Bleeker.

Syngnathoides Bleeker, 259; orthotype *S. BLOCHII* Blkr. Replaces *GASTEROTOKEUS* Heckel (1856).

446. GAIMARD (1851). *Voyage de la Commission Scientifique du Nord. Voyage en Scandinavie, en Lapponie, à Spitzberg et aux Faroë*, Paris, VII. Zoologie (1851).

JOSEPH PAUL GAIMARD.

Eperlanus Gaimard, VII; orthotype SALMO EPERLANUS L. A synonym of OSMERUS L. (Not seen.)

447. GIRARD (1851). *On the Genus Cottus auct.* Proc. Boston Soc. Nat. Hist., III. CHARLES FRÉDÉRIC GIRARD (1822-1895).

Acanthocottus Girard, III, 185; logotype COTTUS GREENLANDICUS Cuv. & Val. A section under MYOXOCEPHALUS Steller.

448. GIRARD (1851). *Some Additional Observations on the Nomenclature and Classification of the Genus Cottus.* Proc. Boston Soc. Nat. Hist., III (for 1848), 1851.

CHARLES FRÉDÉRIC GIRARD.

Cottopsis Girard, III, 303; orthotype COTTUS ASPER Rich. A section of COTTUS L.

449. GRAY (1851). *Description of a New Form of Lamprey from Australia with a Synopsis of the Family.* Proc. Zool. Soc. London.

JOHN EDWARD GRAY.

Geotria Gray, 143; orthotype GEOTRIA AUSTRALIS Gray.

Velasia Gray, 143; orthotype V. CHILENSIS Gray.

Caragola Gray, 143; orthotype C. LAPICIDA Gray. Same as MORDACIA Gray.

Mordacia Gray, 144; orthotype PETROMYZON MORDAX Rich. A synonym of CARAGOLA Gray.

Lampetra Gray, 235; logotype PETROMYZON FLUVIATILIS L.

450. LÜTKEN (1851). *Nogle bemærkinger om naesceborenes stiling hos de i gruppe med Ophisurus staaende slaegter af aalefamilien.* Vidensk. Meddel. Naturhist. Foren. Kjöbenhavn.

CHRISTIAN FREDERIK LÜTKEN (1827-1901).

Myrophis Lütken, 1; orthotype M. PUNCTATUS Lütken.

Chilorhinus Lütken, 1; orthotype C. SUENSONI Lütken.

451. MEYER (1851). *Fossile Fische aus dem Muschelkalk von Jena, Quercfurt und Esperstadt.* Palaeontographica.

HERMANN VON MEYER.

Tholodus (Meyer) Schmid & Schleiden, I, 199; orthotype T. SCHMIDI (fossil). Perhaps a tooth of a reptile.

452, 453. MEYER (1851). *Palaeontographica.* I.

HERMANN VON MEYER.

Nephrotus Meyer, I, 243; orthotype OMPHALODUS CHORZOWENSIS Meyer (fossil). A synonym of ASTERODON.

454. M'COY (1851). (*Steganodictyum.*) Mag. Nat. Hist., VIII.

FREDERICK M'COY.

Steganodictyum M'Coy, VIII, 481; orthotype S. CORNUBICUM M'Coy (fossil). (Shields of a PTERASPID mistaken for part of a sponge.)

455. THOMPSON (1851). *On Percopsis pellucida.* Proc. Boston Soc. Nat. Hist., III. ZADOCK THOMPSON (1796-1856).

Salmoperca Thompson, III, 164; haplotype SALMOPERCA PELLUCIDA Thompson = PERCOPSUS GUTTATIS Ag. = SALMO OMISCOMAYCUS Walbaum. A synonym of PERCOPSIS Ag., 1848.

456. WAGNER (1851). *Beiträge zur Kenntniss der in den lithographischen Schieferen abgelagerten urweltlichen Fische*. Abh. Bayer. Akad. Wiss., VI.
JOHANN ANDREAS WAGNER (1797-1861).
- Mesodon** Wagner, VI, 56; orthotype *GYRODUS MACROPTERUS* Ag. (fossil). Name preoccupied in mollusks, Rafinesque, 1819; replaceable by *TYPODUS* Quenstedt, 1858.
- Strobilodus** Wagner, VI, 75; orthotype *S. GIGANTEUS* Wagner (fossil). A synonym of *CATURUS* Ag.

1852

457. BLEEKER (1852). *Bijdrage tot de kennis der Makreelachtige visschen van den Soenda-Molukschen Archipel*. Verh. Batav. Genootsch., XXIV, 1852.
PIETER BLEEKER.
- Leptaspis** Bleeker, XXIV, 71; orthotype *CARANX LEPTOLEPIS* Kuhl & Van Hasselt. Called earlier *SELAROIDES*, the reason for changing not known to me.
458. BLEEKER (1852). *Bijdrage tot de kennis der Plagiostomen van den Indischen Archipel*. Verh. Batav. Genootsch., XXIV.
PIETER BLEEKER.
- Hemigaleus** Bleeker, XXIV, 45; orthotype *H. MICROSTOMA* Blkr. Preoccupied in mammals as *HEMIGALEA*.
459. BLEEKER (1852). *Diagnostische beschrijving van nieuwe of weinig bekende visschsoorten van Sumatra*. Nat. Tijdschr. Neder.-Indie, III, 1852.
PIETER BLEEKER.
- Pristipomoides** Bleeker, III, 574; orthotype *P. TYPUS* Blkr. Replaces *CHÆTOPTERUS* T. & S., preoccupied
460. BLEEKER (1852). *Derde bijdrage tot de kennis der ichthyologische fauna van Celebes*. Nat. Tijdschr. Neder.-Indie, III.
PIETER BLEEKER.
- Carangichthys** Bleeker, III, 760; orthotype *C. TYPUS* Blkr. A synonym of *CARANX* Lac. (based on young specimens).
461. DUMÉRIL (1852). *Monographie de la famille des torpediniciens, ou poissons plagiostomes électriques*. Rev. Mag. Zool., IV.
AUGUSTE HENRI ANDRÉ DUMÉRIL (1812-1870).
- Hypnos** A. Duméril, 279; orthotype *H. SUBNIGRUM* Dum. Name preoccupied: replaced by *HYPNARCE* Waite, 1902.
462. EGERTON (1852). *Fish: Elasmodus, etc.* (In *Figures and Descriptions of British Organic Remains*.) Mem. Geo. Surv. United Kingdom.
PHILIP DE MALPAS GREY EGERTON.
- Lophistomus** Egerton, Dec. VI, No. 10; orthotype *L. DIXONI* Egert. (fossil).
463. FISCHER VON WALDHEIM (1852). *Sur quelques poissons fossiles de la Russie*. Bull. Soc. Imp. Nat. Moscou, XXV.
GOTTHELF FISCHER VON WALDHEIM.
- Pycnacanthus** Fischer von Waldheim, XXV, 174; orthotype (not named by Woodward) (fossil). (An unrecognized fragment.)
- Siphonodus** Fischer von Waldheim, XXV, 175; orthotype *S. PANDERI* Waldheim (fossil).

464. GERVAIS (1852). *Zoologie et Paléontologie Françaises*. II.

FRANÇOIS LOUIS PAUL GERVAIS.

Sandroserrus Gervais, II, 8; orthotype PERCA REBOULI Gervais (fossil).

465. LOWE (1852). *An Account of Fishes Discovered or Observed in Madeira Since the Year 1842*. Ann. Mag. Nat. Hist. London, ser. X.

RICHARD THOMAS LOWE.

Leptorhynchus Lowe, X, 54; orthotype L. LEUCHTENBERGI Lowe. Name preoccupied; replaced by BELONOPSIS Brandt. A synonym of NEMICHTHYS Rich.

466. QUENSTEDT (1852). *Handbuch der Petrefaktenkunde*.

FRIEDRICH AUGUST VON QUENSTEDT (1809-1889).

Selachidea Quenstedt, 173; orthotype S. TOROLOSI Quenstedt (fossil). Probably a synonym of HYBODUS.

Serrolepis Quenstedt, 207; orthotype S. SUEVICUS Dames. (fossil).

Pleurolepis Quenstedt, 214; orthotype P. SEMICINCTUS Quenstedt (fossil). A synonym of TETRAGONOLEPIS Bronn.

467. ROEMER (1852). *Die Kreidebildungen von Texas und ihre organischen Einschlüsse. Mit einem die Beschreibung von Versteinerungen aus paläozoischen und tertiären Schichten enthaltenden Anhang und mit II von Choienach der Natur auf Stein gezeichneten Tafeln*. Bonn.

CARL FERDINAND VON ROEMER.

Ancistrodon (Derby) Roemer, 30; orthotype later called A. TEXANUS Dames (fossil). Teeth undetermined. Name preoccupied in snakes as AGKISTRODON; replaced by ANKISTRODUS Koninck, 1870, scarcely better, and by GRYPONDON Hay, 1899.

468. RÜPPELL (1852). *Verzeichniss der in dem Museum der senckenbergischen naturforschenden Gesellschaft aufgestellten Sammlungen*. Vierte Abtheilung. *Fische und deren Skelette*.

WILHELM PETER EDUARD SIMON RÜPPELL.

Microichthys Rüppell, 1; orthotype M. COCCOI Rüppell.

Pharopteryx Rüppell, 16; orthotype P. BENOIT Rüppell. Not PHAROPTERN of Rüppell, 1828, which is a synonym of PLESIOPS Cuv. A synonym of MORA Risso.

Chærops Rüppell, 20; orthotype C. MELEAGRIS Rüppell. A synonym of CHÆRODON Blkr.

Sarotherodon Rüppell, 21; orthotype S. MELANOTHERON Rüppell.

Erythrodon Rüppell, 34; orthotype BALISTES NIGER Lac., BALISTES ERYTHRODON Gthr. Substitute for XENODON Rüppell, 1835, preoccupied, but the name ODONUS Gistel (1848) has priority and ZENODON Sw. (1829) is still older, if available.

1853

469. AGASSIZ (1853). *Recent Researches of Professor Agassiz*. (Extract from letter to J. D. Dana dated Cambridge, June 9, 1853). Amer. Journ. Sci., XVI.

LOUIS AGASSIZ.

In this paper four new genera are briefly described. The species concerned were not named until later.

Chologaster Agassiz, 135; (haplotype CHOLOGASTER CORNUTUS Ag.). Short account of the genus, the species named later.

Heterandria Agassiz, 135; (logotype H. FORMOSA Ag.). Stated to contain two species named later, H. FORMOSA and H. HOLBROOKI, the latter being GAM-

- RUSIA PATRUELIJS Baird & Grd. After consultation with Professor Poey FORMOSA was chosen by Jordan as the type of HETERANDRIA. This name replaces GIRARDINUS Poey.
- Zygonectes** Agassiz, 135; logotype POECILIA OLIVACEA Storer = SEMOTILUS NOTATIUS Raf. Brief notice of genus; its species indicated in 1854 (*Fish. Tennessee River*).
- Melanura** Agassiz, 135; orthotype EXOGLOSSUM ANNULATUM Raf. Note on the genus, the type indicated on page 217 of the same journal. A synonym of UMBRA Gronow.
470. AGASSIZ (1853). *Extraordinary Fishes from California Constituting a New Family (Holconoti or Embiotocidæ)*. Amer. Journ. Sci., XVI.
LOUIS AGASSIZ.
- Embiotoca** Agassiz, 386; orthotype E. JACKSONI Ag.
471. BAIRD & GIRARD (1853). *Descriptions of New Species of Fishes Collected by Mr. John H. Clark on the U. S. and Mexican Boundary Survey, under Lt.-Col. Jas. D. Graham*. Proc. Acad. Nat. Sci. Phila.
SPENCER FULLERTON GIRARD (1823-1887); CHARLES GIRARD.
- Ceraticthys** Baird & Girard, 391; orthotype C. VIGILAX Baird & Girard (not of Baird & Girard, 1856). No description. Replaces CLIOLA Grd., 1856.
472. BAIRD & GIRARD (1853). *Descriptions of New Fishes from the River Zuñi*. Proc. Acad. Nat. Sci. Phila.
SPENCER FULLERTON BAIRD; CHARLES GIRARD.
- Gila** Baird & Girard, VI, 368; logotype GILA ROBUSTA Grd.
473. BLEEKER (1853). *Diagnostische beschrijvingen van nieuwe of weinig bekende visschsoorten van Batavia*. Tintal I-IV, Nat. Tijdschr. Neder.-Indie, IV, 1853.
PIETER BLEEKER.
- Muraenichthys** Bleeker, 506; orthotype M. GYMNOPTERUS Blkr.
474. BLEEKER (1853). *Nieuwe bijdrage tot de kennis de ichthyologische fauna van Ternate en Halmaheira (Giolo)*. Nat. Tijdschr. Neder.-Indie, IV.
PIETER BLEEKER.
- Polyptherichthys** Bleeker, II, 608; orthotype P. VALENTINI Blkr. A synonym of AULOSTOMUS.
475. BLEEKER (1853). *Zevende bijdrage tot de kennis der ichthyologische fauna van Bornco. Zoetwatervisschen van Sambas, Pontianak en Pengaron*. Nat. Tijdschr. Neder.-Indie, V.
PIETER BLEEKER.
- Datnioides** Blkr., V, 440; orthotype CIUS POLOTA Ham. A synonym of COIUS Ham., as restricted by Fowler, 1905, to COIUS POLOTA. This antedates the restriction by Jordan (*Genera of Fishes*, 1917, 114) to C. COBOJUS Ham.
476. BLEEKER (1853). *Bijdrage to de kennis der Muraenoiden en Symbranchoiden van den Indischen Archipel*. Verh. Batav. Genootsch., XXV.
PIETER BLEEKER.
- Stethopterus** Bleeker, XXV, 24, 36; orthotype OPHISURUS VIMINEUS Rich. A synonym of LEIURANUS Blkr. and having line priority.

Leiuranus Bleeker, XXV, 36; orthotype *L. LACEPEDEI* Blkr. (*OPHISURUS SEMICINCTUS* Bennett.). Same as *STETHOPTERUS* Blkr., the latter having line priority, the name *LEIURANUS* preferred by the author.

477. BLEEKER (1853). *Nalezingen op de ichthyologie van Japan*. Verh. Batav. Genootsch., XXV.

PIETER BLEEKER.

Atherinichthys Bleeker, 40; orthotype *ATHERINA HUMBOLDTIANA* Cuv. & Val. A synonym of *CHIROSTOMA* Sw.

Atherinoides Bleeker, 40; orthotype *ATHERINA VOMERINA* Cuv. & Val. = *ATHERINA HUMBOLDTIANA* Cuv. & Val. A synonym of *CHIROSTOMA* Sw.

Etrumeus Bleeker, XXV, 48; orthotype *CLUPEA MICROPUS* T. & S.

478. BLEEKER (1853). *Nalezingen op de ichthyologische fauna van Bengalen en Hindostan*. Verh. Batav. Genootsch., XXV.

PIETER BLEEKER.

Bogoda Bleeker, 89; *CHANDA BOGODA* Ham. = *CHANDA NAMA* Ham. A synonym of *CHANDA* as now restricted.

Badis Bleeker, 106; orthotype *LABRUS BADIS* Ham. = *BADIS BUCHANANI* Blkr.

Bagarius Bleeker, 121; tautotype *PIMELUDUS BAGARIUS* Ham.

479. COSTA (1853). (*Fossil Fishes of Italy.*) Atti Soc. Pontan. VII.

ORONZIO GABRIELE COSTA.

Ionoscopus Costa, 2; orthotype *I. PETRAROLÆ* Costa (fossil). Name changed in 1864 to *CENOSCOPIUS* Costa for no obvious reasons.

Calignathus Costa, VII, 17; orthotype *BLENNIOMÆUS LONGICAUDA* Costa (fossil). A synonym of *NOTAGOGUS* Ag

Glossodus Costa, VII, 26; orthotype *PYCNODUS MANTELLI* Ag. (fossil). Name preoccupied; to be replaced by *COSMODUS* Sauvage (1879).

480. GERVAIS (1853). *Remarques sur les poissons fluviatiles de l'Algérie, et description de deux genres nouveaux sous les noms de Coptodon et Tellia*. Ann. Nat. (Zool.), XIX.

FRANÇOIS LOUIS PAUL GERVAIS.

Coptodon Gervais, II, 15; orthotype *C. ZILLI* Gervais. Also in *Bull. Soc. Agr. Hérault*, 1853, 80.

Tellia Gervais, XIX, 15; orthotype *TELLIA APODA* Gervais.

481. KAUP (1853). *Uebersicht der Lophobranchier*. Archiv. Naturg.

JOHANN JACOB KAUP (1802-1873).

All these genera, except *HEMIMARSUPIUM*, are repeated in Kaup's *Catalogue of the Lophobranchiate Fishes in the British Museum*, 1856.

Acentronura Kaup, 230; orthotype *HIPPOCAMPUS GRACILLIMUS* T. & S.

Gasterotokeus (Heckel) Kaup, 230; orthotype *SYNGNATHUS BIACULEATUS* Bloch = *SYNGNATHOIDES BLOCHI* Blkr. A synonym of *SYNGNATHOIDES* Blkr.

Halicampus Kaup, 231; logotype *H. GRAYI* Kaup.

Trachyrhamphus Kaup 231; orthotype *T. SERRATUS* Kaup (not *SYNGNATHUS SERRATUS* T. & S.).

Corythroichthys Kaup, 231; logotype *C. ALBIROSTRIS* Heckel. A synonym of *HIPPICHTHYS* Blkr.

Ichthyocampus Kaup 231; logotype *I. BELCHERI* Kaup.

Leptonotus Kaup, 232; orthotype *SYNGNATHUS BLAINVILLEANUS* Eydoux & Gervais.

- Leptoichthys** Kaup, 232; orthotype *L. FISTULARIS* (Bibron).
Stigmatophora Kaup, 233; logotype *SYNGNATHUS ARGUS* Rich.
Doryrhamphus Kaup, 233; orthotype *D. EXCISUS* Kaup.
Choëroichthys Kaup, 233; orthotype *C. VALENCIENNESI* Kaup.
Doryichthys Kaup, 233; logotype *D. BILINEATUS* Heckel.
Hemimarsupium Kaup, 234; orthotype *TYPHILUS GONDOTII* Bibron. For this name Kaup has substituted in 1856 the name *HEMITHYLACUS*. Replaces *CÆLONOTUS* Peters, 1855.
Micropphis Kaup, 234; logotype *SYNGNATHUS DEOKHATA* Ham.
482. KÖLLIKER (1853). *Weitere Bemerkungen über die Helmichthyiden*. Verh. Phys. Med. Ges. Würzburg., IV.
 RUDOLPH ALBERT VON KÖLLIKER (1817-1905).
Tilurus Kölliker, IV, 100; orthotype *T. GEGENBAURI* Kölliker. A larva of some form allied to *CONGPR*.
Hyoprorus Kölliker, IV, 101; orthotype *H. MESSINENSIS* Kölliker. A larva of *NETASTOMA* Raf.
483. OWEN (1853). (*Fossil Fishes.*) Quarterly Journ. of Geology.
 RICHARD OWEN.
Parabatrachus Owen, IX, 67; orthotype *P. COLEI* Owen (fossil). Same as *CENTRODUS* McCoy, a preoccupied name.
484. POMEL (1853). *Catalogue méthodique des vertèbres fossiles de la Loire*.
 A. POMEL.
Propalæoniscus Pomel, 133; orthotype *P. AGASSIZI* Pomel (fossil) (undescribed). Probably the same as *ELONICHTHYS*.
Cobitopsis Pomel, 134; orthotype *C. EXILIS* Pomel (fossil).
Pœcilops Pomel, 135; orthotype *P. BREVICEPS* Pomel (fossil).
485. ROMANOVSKII 1833). *Ueber eine neue Gattung versteinerte Fisch-Zähne*.
 Bull. Soc. Imp. Nat. Moscou, XXVI.
 GHEENADI DANILOVICH ROMANOVSKII.
Dicrenodus Romanovskii, XXVI, 407; orthotype *D. OKENSIS* Romanovskii (fossil). Same as *CARCHIAROPSIS* Ag.

1854

486. AGASSIZ (1854). *Notice of a Collection of Fishes from the Southern Bend of the Tennessee River in the State of Alabama*. Am. Journ. Sci., XVII.
 LOUIS AGASSIZ.
Pœcilichthys Agassiz, 304; orthotype *ETHEOSTOMA VARIATUM* Kirtland. Substitute for *PÆCILIOSOMA* Ag., preoccupied.
Catonotus Agassiz, 305; haplotype *C. LINEOLATUS* Ag. This name has been regarded as a synonym of *ETHEOSTOMA*, but a decision of the International Committee makes *ETHEOSTOMA* identical with *HYOSTOMA*.
Hadropterus Agassiz, 305; haplotype *H. NIGROFASCIATUS* Ag.
Hyostoma Agassiz, 305; haplotype *H. NEWMANI* Ag. = *ETHEOSTOMA BLENNIOIDES* Raf. 1818. A synonym of *ETHEOSTOMA* Raf. and of *DIPLESION* Raf. (1820).
Hybopsis Agassiz, 358; haplotype *H. GRACILIS* Ag., identified by me with *RUTILUS AMBLOPS* Raf., a member of the group called *ERNEMUS* Jordan. If this identification is correct, Agassiz must have overlooked the characteristic barbel. His description fairly fits another species of the same waters, without a bar-

bel. *HYBOPSIS STRAMINEUS* Cope (*MINNILUS MICROSTOMUS* Raf.), a near ally of *ALBURNOPS BLENNIUS*, type of *ALBURNOPS*. Girard and Jordan identify *HYBOPSIS* with *ERINEMUS*; Cope with the *ALBURNOPS* group. Girard's view seems on the basis of evidence available to be correct, and *HYBOPSIS* replaces *ERINEMUS*.

Hypsoplepis (Baird) Agassiz, 359; haplotype *CYPRINUS CORNUTUS* Mitchill. A subgenus under *NOTROPIS*. A synonym of *LUXILUS* Raf., later written *HYPISILEPIS*.

487. AGASSIZ (1854). *Additional Notes on the Holconoti*. Amer. Journ. Sci. XVIII (May, 1854).

LOUIS AGASSIZ.

Rhacochilus Agassiz, 367; orthotype *R. TOXOTES* Ag.

Amphistichus Agassiz, 367; orthotype *A. ARGENTEUS* Ag.

Holconotus Agassiz, XXVII, 367; orthotype *H. RHODOTERUS* Ag.

488. AYRES (1854). (*Description of New Fishes from California*.) Proc. Calif. Acad. Nat. Sci., I (1857).

WILLIAM O. AYRES.

Clypeocottus Ayres, 12; orthotype *C. ROBUSTUS* Ayres = *ASPICOTTUS BISON* Grd. A synonym of *ASPICOTTUS* Grd. of the same date.

489. AYRES (1854). (*Description of Four Species of Fishes, Camarina nigricans, Poronotus simillimus Ayres, Johnius nobilis, and Seriphus politus*.) Proc. Calif. Acad. Nat. Sci., I (1857).

WILLIAM O. AYRES.

Seriphus Ayres, 80; orthotype *SERIPHUS POLITUS* Ayres.

Camarina Ayres, 81; orthotype *CAMARINA NIGRICANS* Ayres. A synonym of *GIRELLA* Gray.

490. BAIRD & GIRARD (1854). *Descriptions of New Species of Fish Collected in Texas, New Mexico and Sonora, by Mr. John H. Clark on the U. S. and Mexican Boundary Survey, and in Texas by Capt. Stewart Van Vliet, U. S. A.* Proc. Acad. Nat. Sci. Phila.

SPENCER FULLERTON BAIRD; CHARLES GIRARD.

Herichthys Baird & Girard, 25; haplotype II. *CYANO-GUTTATUS* Baird & Girard. A synonym of *HEROS* Heckel, itself a synonym of *ASTRONOTUS* Sw.

Ailurichthys Baird & Girard, 26; haplotype *SILURUS MARINUS* Mitchill (name corrected to *ÆLURICHTHYS* by Gill). A synonym of *BAGRE* (Cuvier) Oken, 1817, and *FELICHTHYS* Sw., 1839.

Æstyanax Baird & Girard, 26; haplotype *A. ARGENTATUS* Baird & Girard.

491. BAIRD & GIRARD (1854). *Notice of a New Genus of Cyprinidæ (Cochlognathus)*. Proc. Acad. Nat. Sci. Phila.

SPENCER FULLERTON BAIRD; CHARLES GIRARD.

Cochlognathus Baird & Girard, 150; haplotype *C. ORNATUS* Baird & Girard.

492. BLEEKER (1854). *Species piscium bataviensium novæ vel minus cognitæ*. Nat. Tijdschr. Neder-Indie, VI.

PIETER BLEEKER.

Seriolichthys Bleeker, VI, 196; orthotype *SERIOLA BIPINNULATA* Q. & G. A synonym of *ELAGATIS* Bennett.

493. BLEEKER (1854). *Bijdrage tot de kennis der ichthyologische fauna van het eiland Flores*. Nat Tijdschr. Neder.-Indie, VI, 1854, 311-338.
PIETER BLEEKER.
Apogonichthys Bleeker, 321; logotype A. PERDIX Blkr.
Labrichthys Bleeker, 415; orthotype L. CYANOLENIA Blkr.
494. BLEEKER (1854). *Vijfde bijdrage tot de kennis der ichthyologische fauna van Amboina*. Nat. Tijdschr. Neder.-Indie, VI.
PIETER BLEEKER.
Tropidichthys Bleeker, VI, 501; logotype T. MARGARITATUS Blkr. A synonym of CANTHIGASTER Sw.
- 494A. BLEEKER (1854). *Bijdrage tot de Kennis van de ichthyologische fauna van Celebes*. Nat. Tijdschr. Neder.-Indie, VII.
PIETER BLEEKER.
Chonerhinos Bleeker, 259; orthotype TETRAODON MODESTUS Blkr.; replaces XENOPTERUS Bibron (1855).
495. BRANDT (1854). (*Belonopsis*). Mém. Acad. Sci. St. Petersburg.
JOHANN FRIEDRICH BRANDT.
Belonopsis Brandt, 174; orthotype LEPTORHYNCHUS LEUCHTENBERGI Lowe. Substitute for LEPTORHYNCHUS, preoccupied; a synonym of NEMICHTHYS Rich.
496. COSTA (1854). *Fauna del regno di Napoli, ossia enumerazione di tutti gli animali che abitano le diverse regioni di questo regno e le acque che le bagnano; contenente la descrizione di nuovi o poco esattamente conosciuti; con figure ricavata da original viventi e dipinte al naturale di O. G. Costa (continuata da A. Costa)*.
ORONZIO GABRIELE COSTA.
Helmichthys Costa, tavola 31; orthotype H. DIAPHANUS Costa. A larva of CONGER.
497. EGERTON (1854). *On Some New Genera and Species of Fossil Fishes*. Ann. Mag. Nat. Hist., XIII.
PHILIP DE MALPAS GREY EGERTON.
Æchmodus Egerton, X, 367; logotype TETRAGONOLEPIS CONFLUENS Ag. (fossil). A substitute for TETRAGONOLEPIS Ag., not of Bronn. A synonym of DAPEDIUM Leach.
Histionotus Egerton, XIII, 434; orthotype H. ANGULARIS Egert. (fossil).
Legnonotus Egerton, III, 435; orthotype L. COTHAMIENSIS Egert. (fossil).
498. EGERTON (1854). *Palæichthyologic Notes. ..Supplemental to the Works of Prof. Agassiz*. Quart. Journ. Geol. Soc. On a fossil (DIPTERONOTUS CYPHUS) from the upper beds of the new red sandstone at Bromsgrove, X.
PHILIP DE MALPAS GREY EGERTON.
Dipteronotus Egerton, X, 369; orthotype D. CYPHUS Egert.
499. EICHWALD (1854). *Lethæa Rossica, ou Paléontologie de la Russie décrite et figurée*.
CARL EDUARD VON EICHWALD.
Thyestes Eichwald, I, 108; orthotype T. VERRUCOSUS Eichw. (fossil).
500. GIBBONS (1854). *Description of New Species of Viviparous Marine and Fresh-water fishes, from the Bay of San Francisco and from the River and Lagoons of the Sacramento*. Proc. Acad. Nat. Sci. Phila., VII. (These

genera were printed in advance, in the local proceedings of the society, in the *Daily Placer Times and Transcript*, San Francisco, May and June, 1854 (the genus MYTILOPHAGUS excepted.)

WILLIAM P. GIBBONS.

- Hysterocharys** Gibbons, May 18; orthotype H. TRASKI Gibbons (later published in *Proc. Acad. Nat. Sci. Phila.*).
- Cymatogaster** Gibbons, May 18; haplotype C. AGGREGATUS Gibbons (not CYMATOGASTER of Gibbons, *Proc. Acad. Nat. Sci. Phila.*, 1854, 123, or of *Placer Times*, June 21, which is a synonym of HOLCONOTUS Ag.)
- Hyperprosopon** Gibbons, May 18; orthotype H. ARGENTEUS Gibbons.
- Micrometrus** Gibbons, May 30; restricted by Alexander Agassiz, 1861, to logotype M. MINIMUS Gibbons. Replaces ABEONA Grd.
- Pachylabrus** Gibbons, June 21; orthotype P. VARIEGATUS Gibbons. A synonym of RHACOCHEILUS Ag.

501. GIBBONS (1854). *Description of New Species of Viviparous Marine and Fresh-water Fishes, from the Bay of San Francisco, and from the River and Lagoons of the Sacramento.* Proc. Acad. Nat. Sci. Phila., 1854, VII.

WILLIAM P. GIBBONS.

In this paper are repeated the descriptions in the *Daily Placer Times and Transcript*, with the addition of the genus MYTILOPHAGUS, and the transfer of the name CYMATOGASTER to the group called HOLCONOTUS by Agassiz.

- Mytilophagus** Gibbons, 125; orthotype M. FASCIATUS Gibbons (not in the *Placer Times*). A synonym of AMPHISTICHUS Ag.
502. GIRARD (1854). *On a New Genus of American Cottoids.* Proc. Boston Soc. Nat. Hist., IV (for 1851), 1854.
- CHARLES FRÉDÉRIC GIRARD.
- Triglopsis** Girard, IV, 16; haplotype T. THOMPSONI Grd. Name changed on account of the earlier TRIGLOPS to PTYONOTUS by Gthr., 1860; this change is not necessary.
- 502A. GIRARD (1854). *Description of New Fishes Collected by A. L. Heermann, Naturalist Attached to the Survey of the Pacific Railroad, Under Lieut. R. S. Williams, U. S. A.* Proc. Acad. Nat. Sci. Phila., VII.
- CHARLES FRÉDÉRIC GIRARD.
- Aspicottus** Girard, 130; orthotype A. BISON Grd.
- Leptocottus** Girard, 130; orthotype L. ARMATUS Grd.
- Scorpænichthys** Girard, 131; orthotype HEMITRIPTERUS MARMORATUS Ayres.
- Ophiodon** Girard, 133; orthotype O. ELONGATUS Grd.
- Atherinopsis** Girard, 134; orthotype A. CALIFORNIENSIS Grd.
- Pogonichthys** Girard, 136; logotype POGONICHTHYS INÆQUILOBUS Baird & Girard.
- Lavinia** Girard, 137; haplotype L. EXILICAUDA Baird & Girard.
- Platichthys** Girard, 139; orthotype P. RUGOSUS Grd. = PLEURONECTES STELLATUS Pallas.
- Pleuronichthys** Girard, 139; orthotype P. CENOSUS Grd.
- Parophrys** Girard, 139; orthotype P. VETULUS Grd.
- Psettichthys** Girard, 140; orthotype P. MELANOSTICTUS Grd.
503. GIRARD (1854). *Enumeration of the Species of Marine Fishes Collected at San Francisco, California, by Dr. C. B. R. Kennerly, Naturalist, Attached to*

the Survey of the Pacific Railroad Route Under Lieut. A. W. Whipple.
Proc. Acad. Nat. Sci., Phila., VIII.

CHARLES FRÉDÉRIC GIRARD.

Porichthys Girard, 141; orthotype *P. NOTATUS* Grd.

Heterostichthys Girard, 143; orthotype *H. ROSTRATUS* Grd.

Apodichthys Girard, 150; logotype *A. FLAVIDUS* Grd.

Phanerodon Girard, 153; orthotype *P. FURCATUS* Grd.

504. GIRARD (1854). *Abstract of a Report to Lieut. James M. Gilliss, U. S. N., Upon the Fishes Collected During the U. S. Naval Astronomical Expedition to Chili.* Proc. Acad. Nat. Sci. Phila. (Complete report printed in 1855.)

CHARLES FRÉDÉRIC GIRARD.

Percichthys Girard, 197; logotype *PERCA TRUCHA* Cuv. & Val.

Percilia Girard, 197; orthotype *P. GILLISSI* Grd.

Basilichthys Girard, 198; orthotype *ATHERINA MICROLEPIDOTA* Jenyns.

Heterognathus Girard, 198; logotype *ATHERINA HUMBOLDTIANA*, Cuv. & Val. A synonym of *CHIROSTOMA* Sw.

Nematogenys Girard, 198; orthotype *TRICHOMYCTERUS INERMIS* Guich.

Cheirodon Girard, VII, 199; orthotype *CHEIRODON PISCICULUS* Grd. Name spelled *CHIRODON* by Günther.

505. GIRARD (1854). *Notice Upon the Viviparous Fishes Inhabiting the Pacific Coast of North America, with an Enumeration of the Species Observed.* Proc. Acad. Nat. Sci. Phila., VII.

CHARLES FRÉDÉRIC GIRARD.

Damalichthys Girard, 321; orthotype *D. VACCA* Grd. = *EMBIOTOCA ARGYROSOMA* Grd.

Abeona Girard, 322; orthotype *A. TROWBRIDGEI* Grd. A synonym of *MICROMETRUS* Gibbons, as restricted by A. Agassiz (1861).

Ennichthys Girard, 322; logotype *HOLCONOTUS MEGALOPS* Grd. A synonym of *HYPERPROSOPON* Gibbons.

506. GRONOW (1854). *Catalogue of Fishes Collected and Described by Laurence Theodore Gronow, Now in the British Museum.* Edited from the manuscript, by Albert Günther (written about 1770, an admirable paper, had it seen the light 80 years earlier).

LORENZ THEODOR GRONOW.

(Laurentius Theodorus Gronovius.)

Pastinaca Gronow, 11; logotype *P. LÆVIS* GRONOW, *RAJA PASTINACA* GRONOW. A synonym of *DASYTIS* Raf.

Holacanthus Gronow, 23; orthotype *H. LEIONOTHOS* GRONOW. Name preoccupied; a synonym of *TETRAODON* L. as understood.

Cestreus Gronow, 49; orthotype *C. CAROLINENSIS* GRONOW. Name preoccupied by *CESTREUS* McCl.; equivalent to *CYNOSCION* Gill.

Boops Gronow, 58; orthotype *B. ASPER* GRONOW = *PRIACANTHUS BOOPS* Cuv. A synonym of *PRIACANTHUS* Cuv.

Gonopterus Gronow, 77; orthotype *G. MÆRENS* GRONOW. A synonym of *ZANCLUS* Cuv.

Adonis Gronow, 93; logotype *A. PAVONINUS* GRONOW = *BLENNIUS OCELLARIS* L. A synonym of *BLENNIUS* L.

Gonocephalus Gronow, 105; orthotype *G. MACROCEPHALUS* GRONOW = *TRIGLA VOLITANS* L. A synonym of *DACTYLOPTERUS* Lac.

- Sarda** Gronow, 119; logotype *SARDA IMMACULATA* Gronow = *SCOMBER PELAGICUS* L., not of Cuvier; a synonym of *CORYPHÆNA* L.
- Thynnus** Gronow, 121; logotype *T. MOLUCCENSIS* Gronow; name preoccupied; a synonym of *SCOMBEROIDES* Lac.
- Trachurus** Gronow, 124; logotype *T. CORDYLA* L. Name preoccupied; same as *MEGALASPIS* Blkr.
- Merlucius** Gronow, 129; orthotype *M. LANATUS* Gronow. Same as *MERLUCCIUS* Raf.
- Glanis** Gronow, 135; orthotype *G. IMBERBIS* Gronow = *MYSTUS CHIHALA* Ham. A species of *NOTOPTERUS*. Name preoccupied.
- Macrognathus** Gronow, 147; logotype *CENTRISCUS SCOLOPAX* L. Name preoccupied; a synonym of *MACRORHAMPHOSUS* Lac.
- Chromis** Gronow, 149; orthotype *C. EPICURORUM* Gronow = *GASTEROSTEUS SALTATRIX* L. Name preoccupied; a synonym of *POMATOMUS* Lac.
- Cephalinus** Gronow, 159; logotype *BLENNIUS TORVUS*. A synonym of *CONGIOPUS* Perry (*AGRIOPUS* Cuv.).
- Trichopterus** Gronow, 162; orthotype *T. INDICUS* Gronow = *CHEILODACTYLUS FASCIATUS* Lac. A synonym of *CHEILODACTYLUS* Lac.
- Cordylus** Gronow, 163; orthotype *SCOMBER SCOMBRUS* L. A synonym of *SCOMBER* L.
- Mystus** Gronow, 165; type *M. CAROLINENSIS* Gray. Name preoccupied; a synonym of *BAGRE* Cuv. = *FELICHTHYS* Sw.
- Lepturus** Gronow, 165; orthotype *LEPTURUS BREVIROSTRIS* Gronow = *CORYPHÆNOIDES RUPESTRIS* Gunner. A synonym of *CORYPHÆNOIDES* Gunner.
- Dascillus** Gronow, 171; type not named; a clupeid fish, part of the description lost; not *DASCYLLUS* Cuv.
- Amia** Gronow, 173; orthotype *A. PERCÆFORMIS* Gronow = *APOGON MOLUCCENSIS* Blkr. This is the first use of the name *AMIA* by a binomial author (after Gronow's non-binomial use in 1763) in place of *APOGON* Lac. This was followed afterward by Bleeker, Gill and others.
- Stethochætus** Gronow, 174; orthotype *S. BIGUTTATUS* Gronow; a synonym of *SETIPINNA* Sw. (*TELARA* Gthr.).
- Acronurus** Gronow, 190; logotype *TEUTHIS HEPATUS* L. A synonym of *HEPATUS* or *TEUTHIS*.

507. HECKEL (1854). *Ueber fossile Fische aus Chiavon und das geologische Alter der sie enthaltenden schichten*. Sitzb. Akad. Wiss. Wien, IX, 1854, 322-334.

JOHANN JACOB HECKEL

Galeodes Heckel, XI, 324; orthotype *GALEOCERDO PRISCUS* Zigno (fossil). A fossil ally of *GALEOCERDO*.

508. HECKEL (1854). *Bericht ueber die vom Herrn Cavaliere Achille de Zigno hier angelangte Sammlung fossiler Fische*. Sitzb. Akad. Wiss. Wien, XI, 1854.

JOHANN JACOB HECKEL

Solenorhynchus Heckel, XI, 126; orthotype *S. ELEGANS* Heckel (fossil).

Enneodon Heckel XI, 127; orthotype *E. ECHINUS* Heckel (fossil). Name preoccupied, replaced by *HEPTADIODON*; a fossil ally of *Diodon*.

Vomeropsis Heckel, XI, 134; logotype *VOMER LONGISPINUS* Ag. (fossil).

509. HYRTL (1854). *Beitrag zur Anatomie von Heterotis ehrenbergii C. et V.* Denkschr. Akad. Wiss. Wien, VIII.

CARL JOSEPH HYRTL (1811-1894).

- Helicobranchus** Hyrtl, VIII, 73; orthotype *SUDIS NILOTICUS* Cuv. & Val. A substitute for *HETEROTIS* Ehrenb.; preoccupied, already replaced by *CLUPISUDIS* Sw., 1839.
510. **KNER** (1854). *Die Panzerwelze des K. K. Hofnaturalien-Cabinetes zu Wien. I. Abtheilung, Loricarina.* Denkschr. Akad. Wiss. Wien, 1854. (An abstract in *Sitzb. Akad. Wiss. Wien*, X, 113.)
 RUDOLPH KNER.
- Hemiodon** Kner, about 65; logotype *H. DEPRESSUS* Kner.
- Acestra** Kner, 93; orthotype *A. ACUS* Kner. Name preoccupied; replaced by *FARLOWELLA* Eigenmann (1890).
511. **KNER** (1854). *Die Hypostomiden. Zweite Hauptgruppe der Familie der Panzerfische (Loricata vel Goniodontes).* Denkschr. Akad. Wiss. Wien, 1853. This paper appeared in 1854, an abstract in *Sitzb. Akad. Wiss. Wien*, 1853.
 RUDOLPH KNER.
- Ancistrus** Kner VII, 272; logotype *HYPOSTOMUS TEMMINCKI* Val, as restricted by Bleeker, 1863; Eigenmann (1912) indicates as type *A. CIRRHOSUS* Kner, a congeneric species.
512. **MARCUSEN** (1854). *Vorläufige Mittheilung aus einer Abhandlung über die Familie der Mormyren.* Bull. Acad. Sci. St. Pétersb., XII.
 JOHANN MARCUSEN
- Petrocephalus** Marcusen, XII, 10; orthotype *MORMYRUS BANE* Val.
513. **OWEN** (1854). *Descriptive Catalogue of the Fossil Organic Remains of Reptilia and Pisces Contained in the Museum of the Royal College of Surgeons of England.* London, XIX.
 RICHARD OWEN.
- Eucynodus** Owen, 160; orthotype *E. HUNTERI* Owen (fossil).
- Acropoma** Owen, 164; orthotype *A. ALTA* Owen (fossil). Name preoccupied by *ACROPOMA* T. & S.
- Toxopoma** Owen, 164 orthotype *T. POLITUM* Owen (fossil).
- Cariniceps** Owen, 165; orthotype *C. COMPRESSUS* Owen (fossil); name only, referred by Woodward to synonym of *EOTHYNNUS*.
- Platygenys** Owen, 165; orthotype *P. RUGOSUS* Owen (fossil).
- Pygacanthus** Owen, 166; orthotype *P. ALTUS* Owen (fossil).
- Planesox** Owen, 169; orthotype *P. VORAX* Owen (fossil). Name only, noted by Woodward, *Cat.*, V, 519, 1901. Same as *PERCOSTOMA* Ag.
- Platops** Owen, 170; orthotype *P. SUBULIDENS* Owen (fossil). Undefined; supposed to be a synonym of *BRYCHÆTUS* (Ag.)
- Sciænurus** Owen, 171; orthotype *S. LONGIOR* Owen (fossil). Name only; noted by Woodward, *Cat.*, 519, 1901.
514. **POEY** (1854). *Nuevo genero de peces Escombridos, Epinnula magistralis* Poey. *Memorias de Cuba*, I.
 FELIPE POEY Y ALOY (1799-1891).
- Epinnula** Poey, I, 369 (April, 1854); orthotype *E. MAGISTRALIS* Poey.
515. **POEY** (1854). *Los Guajacones, peces de agua dulce.* *Memorias de Cuba*, I. (June, 1854.)
 FELIPE POEY Y ALOY.
- Gambusia** Poey, I, 382; orthotype *G. PUNCTATA* Poey.

Girardinus Poey I, 383; orthotype *G. METALLICUS* Poey. A synonym of *HETERANDRIA* Ag. as restricted by Poey.

Limia Poey, I, 382; orthotype *L. CUBENSIS* Poey. A synonym of *PÆCILIA* Cuv. (*ALAZON* Gistel).

516. RAPP (1854). *Die Fische des Bodensees untersucht und beschrieben*. Jahresschr. Ver. Vaterl. Naturg. Württemberg, X.

WILHELM LUDWIG VON RAPP.

Umbra Rapp, 32; orthotype *SALMO UMBRA* = *SALVELINUS ALPINUS* L. A synonym of *SALVELINUS* Rich.

517. RICHARDSON (1854). *Vertebrates, Including Fossil Mammals*. (In Forbes, Edward (editor), *The Zoology of the Voyage of H. M. S. "Herald," Under the Command of Captain Henry Kellett, R. N., During the Years 1845-1851*. London.

JOHN RICHARDSON.

Prilonotus (Müller) Richardson; orthotype *P. CAUDACACINCTUS* Rich. A synonym of *CANTHIGASTER* Sw. or *PSILONOTUS* Sw.

Anchisomus (Kaup) Richardson, 156; logotype *TETRAODON SPENGLERI* Bloch. A synonym of *SPHEROIDES* L. as restricted.

518. THIOLLIÈRE (1854). *Description des poissons fossiles provenant des gisements coralliens du Jura dans le Bugey*. Lyons.

VICTOR JOSEPH DE L'ISLE THIOLLIÈRE.

Holochondrus Thiollière, 4; orthotype (not named) (name only) (fossil).

Spathobatis Thiollière, 7; orthotype *S. BUGESIACUS* Thiollière (fossil).

Belemnobatis Thiollière, 8; orthotype *B. SISMONDÆ* Thiollière (fossil).

Phorcynus Thiollière, 9; orthotype *P. CATULINA* Thiollière (fossil). An ally of *SQUATINA* Dum.

519. TROSCHEL (1854). *Ueber die fossilien Fische aus der Braunkohle des Siebengebirgcs*. Verh. Naturh. Ver. Preuss. Rheinl. Westphal.

FRANZ HERMANN TROSCHEL.

Tarsichthys Troschel, XI, 11; orthotype *LEUCISCUS TARSIGER* Troschel (fossil). A fossil analogue of *TINCA* Cuv.

1855

520. AGASSIZ (1855). *Synopsis of the Ichthyological Fauna of the Pacific Slope of North America, Chiefly from the Collections Made by the Expedition Under the Command of Captain C. Wilkes, etc*. Amer. Journ. Sci., XIX.

LOUIS AGASSIZ.

Bubalichthys Agassiz, 192; orthotype *CARPIODES URUS* Ag. Regarded as a synonym of *ICTIOBUS* Raf.

Ptychostomus Agassiz, 203; logotype *CATOSTOMUS AUREOLUS* Le Sueur. A synonym of *MOXOSTOMA* Raf.

Hylomyzon Agassiz, 205; haplotype *CATOSOMUS NIGRICANS* Le Sueur. A synonym of *HYPENTELIUM* Raf.

Acrocheilus Agassiz, 211; orthotype *LEUCISCUS ALUTACEUS* Rich.

Campostoma Agassiz, 218; orthotype *RUTILUS ANOMALUS* Raf.

Hyborhynchus Agassiz, 223; haplotype *MINNILUS NOTATUS* Raf.

Hybognathus Agassiz, 223; haplotype *H. NUCHALIS* Ag.

Ptychocheilus Agassiz, 227; logotype *PTYCHOCHEILUS GRACILIS* Ag. = *CYPRINUS OREGONENSIS* Rich.

Mylocheilus Agassiz, 229; haplotype *MYLOCHEILUS LATERALIS* Ag.

521. AYRES (1855). *Description of New species of California Fishes*. Proc. Cal. Acad. Sci., I, 1855.

WILLIM O. AYRES.

Leptogunnellus Ayres, 26; orthotype *L. GRACILIS* Ayres. A synonym of *LUMPENUS*.

Anarrhichthys Ayres, I, 33; orthotype *A. OCELLATUS* Ayres.

Mylopharodon Ayres, 33; orthotype *M. ROBUSTUS* Ayres.

Cebedichthys Ayres, I, 59; orthotype *C. VIOLACEUS* Ayres.

Notorhynchus Ayres, I, 72; orthotype *N. MACULATUS* Ayres.

Calycilepidotus Ayres, I, 76; orthotype *C. SPINOSUS* Ayres.

522. BASILEWSKI (1855). *Ichthyographia Chinae Borcalis*. Nouv. Mém. Soc. Nat. Moscou, X.

STEPHANUS BASILEWSKI.

Nasus Basilewski, 234; orthotype *CYPRINUS NASUS* L. A synonym of *CHONDROSTOMA* Ag.

Leptocephalus Basilewski, 234; logotype *L. MONGOLICUS* Basilewski. Name preoccupied in eels; replaced by *CHANODICHTHYS* Blkr.

Cephalus Basilewski, 235; orthotype *C. MANTSCHURICUS* Basilewski. Name preoccupied; a synonym of *HYPOPTHALMICHTHYS* Blkr.

Culter Basilewski, 236; logotype *C. ALBURNUS* Basilewski, as restricted by Bleeker and Günther. Under the head of *CULTER* Basilewski mentions especially (*CYPRINUS CULTRATUS* L.) the type of *PELECUS* Ag., although he does not exactly specify this as type. He then proceeds to describe certain Chinese species. For some of these the name *CULTER* has been kept, although Basilewski plainly intended to make his type *CYPRINUS CULTRATUS*, in which case *CULTER* would be a synonym of *PELECUS*. At present we follow the authority of Bleeker and Günther.

Eperlanus Basilewsky, 242; orthotype *E. CHINENSIS* Basilewsky = *SALANX HYALOCRANIUS* Abbott. Name preoccupied; a synonym of *SALANX* Cuv.

Osteoglossum Basilewski, X, 244; logotype *O. PRIONOSTOMA* Basilewski. Name preoccupied by *OSTEOGLOSSUM* Vandelli. A synonym of *CHÆTOMUS* McCl.

Apterigia Basilewski, 247; logotype *A. SACCOGLARIS* Basilewski. A synonym of *MONOPTERUS* Lac. or *FLUTA* Bl. & Schn.

523. BIANCONI (1855). *Specimina zoologica Mosambicana quibus vel novæ vel minus notæ animalium species illustrantur*. Bononia.

GIOVANNI GIUSEPPE BIANCONI (1809-1878).

Megalepis Bianconi, 270; orthotype *M. ALESSANDRAI* Bianconi (= *UPENOIDES VITATUS*, *vide* Günther). A synonym of *UPENOIDES* Blkr.

524. BIBRON (1855). *Note sur un travail inédit de Bibron relatif aux poissons plectognathes gymnodontes (Diodons et Tetrodons)*. Rev. Mag. Zool., VIII.

GABRIEL BIBRON.

This is an important piece of work, but left incomplete at the death of its author, hence becoming in some degree a stumbling block in taxonomy. It was ably continued with the same material by Hollard in 1857. Edited by Auguste Henri Duméril.

Promeccephalus Bibron, 279; orthotype *TETRAODON LÆVIGATUS* L. A synonym of *LAGOCEPHALUS* Sw.

- Dilobomycter** Bibron, 279; orthotype *T. RETICULARIS* Bl. & Schn. A synonym of *OVIDES*.
- Amblyrhynchotus** Bibron, 279; orthotype *TETRAODON HONCKENI* Bloch. (in French form only). Apparently distinct from *LAGOCEPHALUS* Sw.
- Stenomtopus** Bibron, 279; logotype *TETRAODON TESTUDINEUS* L. A synonym of *SPHEROIDES* Dum.
- Dichotomycter** Bibron, 279; orthotype *TETRAODON PLUVIATILIS* Ham. A synonym of *TETRAODON* L. Later called *BRACHYCEPHALUS* by Hollard.
- Epipedorhynchus** Bibron, 279; orthotype *TETRAODON PREYCINETI* Bibron. No diagnosis. A synonym of *OVIDES* Cuv.
- Geneion** Bibron, 280; orthotype *G. MACULATUS* Bibron. Apparently a synonym of *LAGROCEPHALUS* Sw.
- Catophorhynchus** Bibron, 280; orthotype *C. LAMPRI* Bibron. Probably a synonym of *LAGOCEPHALUS* Sw.
- Batrachops** Bibron, 280; orthotype *TETRAODON PSITTACUS* Bl. & Schn. Name preoccupied; replaced by *COLOMESUS* Gill.
- Monotreta** Bibron, 280; orthotype *TETRODON CUTCUTIA* Ham. (French form only), the Latin given by Hollard, 1857; also spelled *MONOTRETUS*. A synonym of *LEIODON* Sw.
- Rhynchotus** Bibron, 280; orthotype *TETRAODON GRONOVII* Cuv. A synonym of *CANTHIGASTER* Sw.
- Ephippion** Bibron, 280; orthotype *E. MACULATUM* Bibron = *TETRODON GUTTIFER* Bennett, 1830. Regarded as twice preoccupied as *EPHIPPIUM*, therefore replaced by *HEMICONIATUS* Gthr., 1870.
- Aphanacanthus** Bibron, 280; orthotype *T. RETICULATUS* Bibron. No diagnosis. Regarded by Bleeker as identical with *MONOTRETA* (= *LEIODON*). A synonym of *LEIODON* Sw.
- Xenopterus** Bibron, 281; orthotype *X. BELLENGERI* Bibron = *TETRAODON NARITUS* Rich. A synonym of *CHONERHINUS* Blkr. (1854). *CHONERHINUS* has clear priority, as claimed by Bleeker.

525. BLEEKER (1855). *Over eenige visschen van Van Diemensland*. Verh. Akad. Amsterdam, II, 1855, 1-30.

PIETER BLEEKER,

Upeneichthys Bleeker, 7; orthotype *UPENEUS POROSUS* Cuv. & Val.

Brachionichthys Bleeker, II, 12; logotype *B. POLITUS* Blkr.

Gnathanacanthus Bleeker, II, 21; orthotype *G. GOETZI* Blkr. Replaces *HOLOXENUS* Gthr.

526. BLEEKER (1855). *Derde bijdrage tot de kennis der ichthyologische fauna van de Kokos-eilanden*. Neder. Tijdschr. Dierk., III.

PIETER BLEEKER,

Amphiprionichthys Bleeker, III, 172; orthotype *MICROPUS UNIPINNA* Gray. Replaces *MICROPUS* Gray, preoccupied.

527. BLEEKER (1855). *Bijdrage tot de kennis der ichthyologische fauna van de Batoc-eilanden*. Nat Tijdschr. Neder.-Indie, VIII.

PIETER BLEEKER,

Dinematichthys Bleeker, 318; orthotype *D. ILUOCETOIDES* Blkr.

528. BLEEKER (1855). *Visschen van de Duizend-eilanden*. Nat. Tijdschr. Neder.-Indie, VIII, 1855, 344.

PIETER BLEEKER,

- Serranichthys** Bleeker, 344; orthotype *SERRANUS ALTIVELIS* Cuv. & Val. A synonym of *CROMILEPTES* Sw. as restricted by Bleeker and by Swain.
529. BLEEKER (1855). *Zesde bijdrage tot de kennis der ichthyologische fauna van Amboina*. Nat. Tijdschr. Neder-Indie, VIII.
PIETER BLEEKER.
- Uraspis** Bleeker, VI, 418; orthotyp U. *CARANGOIDES* Blkr. Near *SELENIA* Bon.; perhaps a synonym of the latter.
530. BLEEKER (1855). *Nalezingen op de vischfauna van Sumatra. Visschen van Lahat en Siboga*. Nat. Tijdschr. Neder-Indie, IX, 1855, 257-280.
PIETER BLEEKER.
- Luciosoma** Bleeker, IX, 258; orthotype *BARBUS* Cuv. & Val.
- Schismatorhynchus** Bleeker, IX, 258; orthotype *LOBOCHEILUS HETERORHYNCHOS* Blkr.
- Clupeichthys** Bleeker, IX, 275; orthotype *C. GONIOGNATHUS* Blkr. A synonym of *CORICA* Ham.
- Epalzeorhynchus** Bleeker, IX, 279, 258; orthotype *BARBUS KALOPTERUS* Blkr.
531. BRONN (1855). *Lethæa Gcognostica, oder Abbildungen und Beschreigen der für die Gebirgs-Formation bezeichnendsten Versteinerungen*. Stuttgart, Ed. I, 1834; Ed. III, 1855.
HEINRICH GEORG BRONN (1800-1862).
- Archæoteuthis** (Roemer) Bronn, I, 520, ed. III; orthotype *PTERASPIS DUNENSIS* Huxley (fossil). A synonym of *PTERASPIS* Kner.
- Heptadiodon** Bronn, III, 677; orthotype *ENNEODON ECHINUS* Heckel (fossil). Name substitute for *ENNEODON* Heckel, preoccupied.
532. CASTELNAU (1855). *Expédition dans les parties centrales de l'Amérique du Sud, de Rio de Janeiro à Lima, et de Lima à Para; exécutée . . . pendant les années 1834 à 1844*. (Tome 3.)
(COMTE) FRANÇOIS L. DE LAPORTE DE CASTELNAU (1812-1880).
- Plataxoides** Castelnau, 21; orthotype *P. DUMERILI* Castelnau. A synonym of *PTEROPHYLLUM* Heckel.
- Genidens** Castelnau, 33; tautotype *BAGRUS GENIDENS* Cuv. & Val. = *GENIDENS CUVIERI* Castelnau.
- Sternarchorhynchus** Castelnau, 95; orthotype *STERNARCHUS OXYRHYNCHUS* M. & T. = *STERNARCHORHYNCHUS MULLERI* Castelnau; replaces *RHAMPHOSTERNARCHUS* Gthr., 1870.
- Acanthodemus** Castelnau; logotype *HYPOSTOMUS AURANTIACUS* Castelnau; name in French only (*ACANTHODÈMES*), latinized by Marshall (*Nomenclator Zoologicus*, 1873).
533. COSTA (1855). *Su di un nuovo genere di pesce fossile (Cacus)*. Atti Reale Accad. Sci. Napoli, II.
ORONZIO GABRIELE COSTA.
- Cacus** Costa, II, 234. (Noted by Dean and Eastman, not by Woodward. Probably a misprint for *CÆUS* Costa (*C. LEOPOLDI*, 1864).)
534. EGERTON (1855). *Fish: . . .* (In *Figures and Descriptions of British Organic Remains*.) Mem. Geol. Surv. United Kingdom.
PHILIP DE MALPAS GREY EGERTON.
- Oxygnathus** Egerton, VIII, No. 9; orthotype *O. ORNATUS* Egert. (fossil).

535. FILIPPI (1855). (*Gadopsis*.) Zeitschr. Akad. Wiss. Wien, VII.
 FILIPPO DE FILIPPI (1814-1867).
Gadopsis Filippi, VII, 170; orthotype OLIGOPUS ATER Risso. Name preoccupied by GADOPSIS Rich. (1844) It may be replaced by the new name, VERATER Jordan, orthotype OLIGOPUS ATER Risso.
536. HOLBROOK (1855). *Ichthyology of South Carolina*. (Edition of 1855 nearly but not all destroyed by fire; replaced in 1860 by a second edition. The generic names should date from 1855.
 JOHN EDWARDS HOLBROOK (1796-1871).
Diplectrum Holbrook, 32; orthotype D. FASCULARIS Holbrook = PERCA FORMOSA L.
Lagodon Holbrook, 59; orthotype SPARUS RHOMBOIDES L.
Bothrolæmus Holbrook, 80; orthotype TRACHINOTUS PAMPANUS Cuv. & Val. (TRACHINOTUS CAROLINUS). A synonym of TRACHINOTUS.
Homoprion Holbrook, 168 (second edition, 1860); orthotype H. LANCEOLATUS Holbrook. A synonym of STELLIFER (Cuvier) Oken.
537. KAUP (1855). *Enchelynassa, neue Gattung aus der Familie der Aale*. Arch. Naturgesch. XXI.
 JOHANN JACOB KAUP.
Enchelynassa Kaup, 213; orthotype E. BLEEKERI Kaup. Perhaps the same as ENCHLYCORE Kaup (1856).
538. KAUP (1855). *Uebersicht über die Species einiger Familien der Sclerodermen*. Wiegmann's Arch. Naturg., XXI.
 JOHANN JACOB KAUP.
Cibotion (Kaup), 215; orthotype OSTRACION CUBICUS L. A synonym of OSTRACION as here restricted.
Capropygia (Gray) Kaup, 220; orthotype C. UNISTRIATA Gray.
Centaurus Kaup, 221; orthotype OSTRACION BOOPS Rich. A larva of MOLA.
Kentrocabros Kaup, 221; orthotype OSTRACION ACULEATUS Houttuyn.
Anoplocabros Kaup, 221; orthotype A. GRAYI Kaup.
Dicotylichthys Kaup, 230; orthotype D. PUNCTULATUS Kaup.
Cyanichthys Kaup, 231; orthotype C. CÆRULEUS Kaup (not of Q. & G.) = DIODON TIGRINUS Cuv. A synonym of CHILOMYCTERUS Bibron.
Cyclichthys Kaup, 231; logotype DIODON ORBICULARIS Bloch.
Pyrodon Kaup; orthotype BALISTES NIGER Lac. Name a substitute for XENODON, preoccupied. Later than ZENODON Sw., ODonus Gistel and ERYTHRODON Rüppell, substitutes for XENODON.
539. KNER (1855). *Ichthyologische Beiträge*. Abh. Sitzb. Akad. Wiss. Wien, XVII.
 RUDOLF KNER.
Bunocephalus Kner, XVII, 95; type B. VERRUCOSUS Bloch.
Oxydoras Kner, XVII, 115; orthotype DORAS NIGER Kner, not of Val. = OXYDORAS KNERI Blkr.
Clarotes Kner, XVII, 313; orthotype PIMELODUS LATICEPS Rüppell.
Pareiodon Kner, XVII, 611; orthotype P. MICROPS Kner. Spelled PARIODON by Günther.
540. M'COY (1855). *Descriptions of the British Palæozoic Fossils in the Geological Museum of the University of Cambridge*.
 FREDERICK M'COY.
Diplopterax M'Coy, 586; orthotype (D. MACROLEPIDOTUS Ag.) (fossil). Name a substitute for DIPLOPTERUS, preoccupied.

- Triplopterus** M'Coy, 589; orthotype **TRIPTERUS POLLEXFENI** M'Coy (fossil). A synonym of **OSTEOLEPIS**; name a substitute for **TRIPTERUS**, preoccupied.
- Pœcilodus** M'Coy, 638; logotype **P. JONESI** (Ag.) M'Coy (fossil) as restricted by Woodward.
- Pristicladodus** M'Coy, 642; orthotype **P. DENTATUS** M'Coy (fossil). A synonym of **DICRENODUS** Romanovskii.
541. MEYER (1855). *Physichthys höningshausi aus dem Uebergangskalke der Eifel*. Palæontographica, IV.
HERMANN MEYER.
- Physichthys** Meyer, IV, 80; orthotype **ASTEROLEPIS HÖENINGSHAUSI** Ag. (fossil). A synonym of **MACROPETALICHTHYS**.
542. NILSSON (1855). *Skandinavisk fauna*. Fjerde Delen: *Fiskarna*. Lund. XXXIV.
SVEN NILSSON.
- Blenniops** Nilsson, IV, 184; orthotype **BLENNIUS GALERITA** Pennant, not of Linnæus. A synonym of **CHIROLOPHIS** Sw.
- Ctenodon** Nilsson, IV, 190; orthotype **CLINUS MACULATUS** Fries. Name three times preoccupied; replaced by **LEPTOCLINUS** Gill.
543. PETERS (1855). *Uebersicht der in Mossambique beobachteten Seefische*. Monatsber, Akad. Wiss. Berlin.
WILHELM CARL HARTWIG PETERS.
- Ctenopoma** Peters, XXI, 1, 247; orthotype **C. MULTISPINIS** Peters, not **CTENOPOMA** of Heckel, 1856.
- Pteragogus** Peters XXI 261; orthotype **COSSYPHUS OPERCULARIS** Peters.
- Anosmius** Peters, XXI, 274; orthotype **T. TENIATUS** Peters. A synonym of **CÆNTHIGASTER** Sw.
- Cœlonotus** Peters XXI, 465; orthotype **C. ARGULUS** Peters.
544. ROEMER (1855). *Palæoteuthis, eine Gattung nackter Cephalopoden in devonischen Schichten der Eifel*. Palæontographica, IV.
CARL FERDINAND VON ROEMER.
- Palæoteuthis** Roemer, IV, 72; orthotype **PTERASPIS DUNENSIS** Huxley (fossil) (wrongly supposed to be a cuttle-fish). A synonym of **PTERASPIS** Kner.
545. STORER (1855). *A History of the Fishes of Massachusetts*. Mem. Amer. Acad. Arts. Sci. Boston, V.
DAVID HUMPHREYS STORER.
- Cheilonemus** (Baird) Storer, 285; haplotype **LEUCISCUS PULCHELLUS** Storer = **CYPRINUS CORPORALIS** Mitchill. Same as **LEUCOSOMUS** Heckel, regarded as preoccupied by **LEUCOSOMA**.
546. VALENCIENNES (1855). *Ichthyologie de la Voyage de la Vénus*.
ACHILLE VALENCIENNES.
- Doydixodon** Valenciennes; orthotype **D. FREMINVILLEI** Val.
- Passer** (Klein) Valenciennes, 344; haplotype **P. MARCHIONESSARUM** Val. Name preoccupied in birds. A synonym of **PLATOPHRYS** Sw.
- Smecticus** Valenciennes, 305; orthotype **SMECTICUS BICOLOR** Val. A synonym of **RYPTICUS**.

1856

547. AGASSIZ (1856). *The Habits of the Glanis of Aristotle*. Proc. Amer. Acad. Sci. Arts. Sci. III.
LOUIS AGASSIZ.
Glanis Agassiz; orthotype GLANIS ARISTOTELIS Ag.; not GLANIS Ag., 1829, a substitute for BAGRE; not GLANIS GRONOW, 1854. Same as PARASILURUS Blkr.
548. ASMUSS (1856). *Das vollkommenste Hautskelet der bisher bekannten Thierreihe. An fossilien Fischen des alten rothen Sandsteins aufgefunden und aus ihren Resten erläutert*. Abh. Erlangung der Magisterwürde, Dorpat.
HERMANN ASMUSS.
Heterosteus Asmuss, 7; orthotype ASTEROLEPIS ASMUSSE Ag. A synonym of ICHTHYOSAUROIDES Kutorga.
- Homostius** Asmuss, 8; orthotype H. FORMOSISSIMUS ASMUSS (fossil). (Name corrected to HOMOSTEUS.)
549. BLEEKER (1856). *Beschrijvingen van nieuwe en weinig bekende vischsoorten van Amboina, versameld op eene reis door den Molukschen Archipel, gedaan in het gevolg van den Gouverneur-Generaal Duymaer van Twist in September en October, 1855*. Act. Soc. Sci. Indo-Nederl., I.
PIETER BLEEKER.
Pteroidichthys Bleeker, I, 33; orthotype P. AMBOINENSIS Blkr.
Duymæria Bleeker, I, 52; logotype CRENILABRUS AURIGARIA Rich.
550. BLEEKER (1856). *Beschrijvingen van nieuwe en weinig bekende vischsoorten van Menado en Makassar grootendeels verzameld op eene reis naar den Molukschen Archipel in het gevolg van den Gouverneur-General Duymaer van Twist*. Act. Soc. Sci. Indo-Nederl., I.
PIETER BLEEKER.
Heterophthalmus Bleeker, 43; orthotype H. KATOPRON Blkr. Name preoccupied in beetles, Blanchard, 1851. A synonym of ANOMALOPS Kner, 1858.
- Rhomboidichthys** Bleeker, I, 67; orthotype R. MYRIASTER Blkr. A synonym of PLATOPHRYS Sw.
- Leptocephalichthys** Bleeker, I, 69; orthotype L. HYPSELOSOMA Blkr. A larval form allied to CONGER.
551. BLEEKER (1856). *Bijdrage tot de kennis der ichthyologische fauna van het eiland Boeroe*. Nat. Tijdschr. Neder.-Indie. XI.
PIETER BLEEKER.
Scorpænichthys Bleeker, XI, 385, 402; orthotype SCORPÆNA Gibbos. Name preoccupied (Girard, 1854); a synonym of SCORPÆNOPSIS Heckel.
- Pholidichthys** Bleeker, 406; orthotype P. LEUCOTÆNIA Blkr.
- Gobiodon** (Kuhl & Van Hasselt) Bleeker, 407; logotype GOBIUS HETEROSPILUS Blkr.
- Culius** Bleeker, 411; orthotype ELEOTRIS NIGER Blkr. = CHEILODIPTERUS CULIUS Ham. A synonym of ELEOTRIS as restricted.
- Butis** Bleeker, 42; orthotype BUTIS GYMNOPOMUS Blkr. (tautotype CHEILODIPTERUS TERUS. BUTIS Ham.).
552. BLEEKER (1856). *Bijdrage tot de kennis der ichthyologische fauna van Nias*. Nat. Tijdschr. Neder.-Indie. XII.
PIETER BLEEKER.

- Solenognathus** Bleeker, 218; orthotype *SYNGNATHOIDES BLOCHI* Blkr.; also written *SOLEGNATHUS*. A synonym of *SYNGNATHOIDES* Blkr., equivalent to *GASTROTOKEUS* Heckel.
- Xiphochilus** Bleeker, 223; orthotype *X. TYPUS* Blkr.
553. BLEEKER (1856). *Nieuwe bijdrage tot de kennis der ichthyologische fauna van Bali*. Nat. Tijdschr. Neder.-Indie, XIII.
PIETER BLEEKER.
- Belobranchus** Bleeker, 300; orthotype *ELEOTRIS BELOBRANCHA* Cuv. & Val.
554. COSTA (1856). *Ittiologia fossile Italiana. Edizione simile all' opera dell' Agassiz sui pesci fossili alla quale è destinata a supplimento*. Disp. v. Napoli.
ORONZIO GABRIELE COSTA.
- Dichelospondylus** Costa, 13; orthotype *D. LONGIROSTRIS* Costa (fossil). A synonym of *BELONOSTOMUS* Ag.
- Ophirachis** Costa, 13; orthotype *O. DEPERDITUS* Costa (fossil). Probably a synonym of *BELONOSTOMUS*.
- Anomiophthalmus** Costa, 30; orthotype *A. VETUSTUS* Costa (fossil). Probably identical with *CÆLODUS* and *COSMODUS* and of earlier date than the latter.
555. DUMÉRIL (1856). *Ichthyologie analytique ou classification des poissons, suivant la méthode naturelle, à l'aide de tableaux synoptiques*. Mém. Acad. Sci. Paris, XXVII.
ANDRÉ MARIE CONSTANT DUMÉRIL.
- Heptatrema** C. Duméril; orthotype *PETROMYZON CIRRHATUS* Forster. A synonym of *EPTATRETUS* Cloquet.
- Pastinaca** Duméril; tautotype *RAJA PASTINACA* L. A synonym of *DASYTIS* Raf.
- Ptérure** Duméril, 169; orthotype *SYNGNATHUS ÆQUOREUS* Gmelin (name in French only). A synonym of *NEROPHIS* Raf.
- Péromere** Duméril, 170; logotype *SYNGNATHUS RONDELETT* De la Roche (name in French only). A synonym of *TYPHLE* or *TYPHLINUS* Raf. In this volume of Duméril a list of genera of eels is given by Kaup in advance of its publication elsewhere. But in the same year, apparently before the appearance of Duméril's work, Kaup published his *Catalogue of Apodal Fishes*, and several of the names given by him to Duméril were dropped in this completed work.
- Auchenichthys** (Kaup) Duméril, 198; orthotype *A. TYPUS* Kaup. Name only; an ally of *MURÆNICHTHYS*.
- Leiurus** (Kaup) Duméril, 198; orthotype *MURÆNA COLUBRINA* Boddaert. Name twice preoccupied in Swainson; replaced by *CHLEVASTES* Jordan & Snyder.
- Scytallurus** (Kaup) Duméril, 199; orthotype *SPHAGEBRANCHUS IMBERBIS* De la Roche. A synonym of *CÆCULA* Vahl, 1794.
- Enchelycotte** (Kaup) Duméril, 200; orthotype *ENCHELICORE EURHINA* Kaup. A manuscript name changed to *ENCHELICORE* when printed in 1854.
- Memarchus** (Kaup) Duméril, 201; orthotype *GYMNOTUS ALBIFRONS* L. No definition; a synonym of *APTERONOTUS* Lac. = *STERNARCHUS* Cuv.
- Altona** (Kaup) Duméril, 201; orthotype *GYMNOTUS ROSTRATUS* L. (no definition), a synonym of *RHAMPHICHTHYS* M. & T.
- Unipertura** (Kaup) Duméril, 201; orthotype *UNIBRANCHAPERTURA LEVIS* Lac. An abridgment of *UNIBRANCHAPERTURA* Lac.; a synonym of *FLUTA* Bl. & Schn. if regarded as a new name.
- Giton** (Kaup) Duméril, 201; orthotype *GYMNOTUS FASCIATUS* Pallas. = *GYMNOTUS CARAPO* L. A synonym of *GYMNOTUS* L. No definition.

- Aptérichthe** C. Duméril, 205; orthotype *MURÆNA CÆCA* L.; name in French only; given in Latin form, 1806. A synonym of *SPHAGEBRANCHUS* Bloch.
- Macrops** Duméril, 279; orthotype *SERRANUS ACULEATUS (OCULATUS)* Cuv. & Val. (name three times preoccupied). A synonym of *ETELIS* Cuv. & Val.
- Macrones** Duméril, 484; orthotype *BAGRUS LAMARRII* Cuv. & Val. Name preoccupied in beetles (Newman, 1841); replaced by *AORIA* Jordan, type *BAGRUS LAMARRII* Cuv. & Val.
- Conostome** (for *CONOSTOMUS*) Duméril, 484; orthotype *PIMELODUS CONIROSTRIS* Cuv. & Val. Called *CONORHYNCHUS* by Bleeker.
- Diplomyste** (Le) Duméril, 487; haplotype *ARIUS PAPILLOSUS* Cuv. & Val. Latinized as *DIPLOMYSTES* by Bleeker; *DIPLOMYSTAX* by Günther.
- Hydrocion** "ou mieux *HYDROCYNUS* Duméril," restricted to "une seule espèce du Nil" (*HYDROCYNUS FORSKALI* Cuv.). A synonym of *HYDROCYNUS* Cuv., 1817.
- 556, 557.** GIRARD (1856). *Contributions to the Ichthyology of the Western Coast of North America from Specimens in the Smithsonian Institute . . .* Proc. Acad. Nat. Sci. Phila.

CHARLES GIRARD.

- Paralabrax** Girard, 131; orthotype *LABRAX NEBULIFER* Grd.
- Homalopomus** Girard, 132; orthotype *H. TROWBRIDGE* Grd. A synonym of *MERLUCCIUS* Raf.
- Oligocottus** Girard, 133; logotype *O. MACULATUS* Grd.
- Leiocottus** Girard, 133; orthotype *L. HIRUNDO* Grd.
- Artedius** Girard, VIII, 134; logotype *A. LATERALIS* Grd.
- Oplopoma** Girard, 135; orthotype *O. PANTHERINA* Grd. A synonym of *OPHIODON* Grd., 1854.
- 558.** GIRARD (1856). *Researches Upon the Cyprinoid Fishes Inhabiting the Fresh Waters of the United States West of the Mississippi Valley, from Specimens in the Museum of the Smithsonian Institution.* Proc. Acad. Nat. Sci. Phila., VIII.

CHARLES GIRARD.

- Minomus** Girard, 173; haplotype *CATOSTOMUS INSIGNIS* Baird & Grd. A synonym of *CATOSTOMUS* Le Sueur, section *DECACTYLUS* Raf., 1818.
- Acomus** Girard, 173; logotype *CATOSTOMUS FORSTERIANUS* Rich. = *CYPRINUS CATOSTOMUS* Le Sueur. A synonym of *CATOSTOMUS* Le Sueur.
- Dionda** Girard, 176; logotype *D. EPISCOPA* Grd.
- Algoma** Girard, 180; logotype *A. AMARA* Grd. Not separable from *DIONDA*, both scarcely distinct from *HYBOGNATHUS*?
- Orthodon** Girard, 182; orthotype *GILA MICROLEPIDOTA* Ayres.
- Algansea** Girard, 182; orthotype *LEUCISCUS TINCELLA* Cuv & Val.
- Agosia** Girard, 186; logotype *A. CHRYSOGASTER* Grd.
- Nocomis** Girard, 190; logotype *N. NEBRASCENSIS* Grd. = *RUTILUS KENTUCKIENSIS* Raf. = *LEUCISCUS BIGUTTATUS* Kirtland.
- Meda** Girard, 192; haplotype *MEDA FULGIDA* Grd.
- Cliola** Girard, 192; logotype *CERATICHTHYS VIGILAX* Baird & Grd. A synonym of *CERATICHTHYS* Baird & Grd., as first used; the name later taken for the genus *NOCOMIS*.
- Alburnellus** Girard, 193; orthotype *ALBURNUS DILECTUS* Grd. A synonym of *NOTROPIS* Raf. (1818).

- Codoma** Girard, 194; logotype *CODOMA ORNATA* Grd.
Alburnops Girard, 194; logotype *ALBURNOPS BLENNIUS* Grd.
Cyprinella Girard, 196; logotype *LEUCISCUS BUBALINUS* Baird & Grd. Probably a valid genus allied to *NOTROPIS* and *ALBURNOPS*.
Richardsonius Girard, 201; haplotype *ABRAMIS BALTEATUS* Baird & Grd. Probably distinct from *LEUCISCUS* Cuv. and from *TIGOMA* Grd.
Tiaroga Girard, 204; haplotype *TIAROGA COBITIS* Grd.
Moniana Girard, 199; logotype *LEUCISCUS LUTRENSIS* Baird & Grd. Not separable from *CYPRINELLA*.
Tigoma Girard, 205; logotype *GILA PULCHELLA* Baird & Grd. Probably a genus distinct from *LEUCISCUS* Cuv. and from *RICHARDSONIUS* Grd.
Cheonda Girard, 207; logotype *CHEONDA COOPERI* Grd. Probably not distinct from *TIGOMA*.
Siboma Girard, 209; haplotype *SIBOMA CRASSICAUDA* Baird & Grd. A section or genus close to *TIGOMA*.
Hudsonius Girard, 210; orthotype *CLUPEA HUDSONIA* Clinton. A section or subgenus of *NOTROPIS* or *ALBURNOPS*.
Clinostomus Girard, 211; logotype *LUXILUS ELONGATUS* Kirtland (not *CLINOSTOMUM*, a genus of worms). A section or subgenus near *NOTROPIS*.
Ceraticthys (Baird MS.) Girard, 212; haplotype *SEMOTILUS BIGUTTATUS* Kirtland (not *CERATICHTHYS* Baird & Grd., 1854). A synonym of *NOCOMIS* Grd.
559. HOLMES (1856). *Contributions to the Natural History of the American Devilfish, with Descriptions of a New Genus from the Harbor of Charleston, South Carolina.* Proc. Elliott Soc. Nat. Hist., I.
 FRANCIS S. HOLMES
Diabolichthys Holmes, 39; orthotype *D. ELLIOTTI* Holmes. A synonym of *MANTA* Bancroft.
560. HECKEL (1856). *Neue Beiträge zur Kenntniss der fossilen Fische Oesterreichs.* Denkschr. Akad. Wiss. Wien, XI.
 JOHANN JAKOB HECKEL.
Thrissopterus Heckel, XI, 245; orthotype *T. CATULLI* Heckel (fossil). A synonym of *MONOPTEROS* Volta (*PLATINX* Ag.)
Elopopsis Heckel, XI, 251; logotype *E. FENZLI* Heckel (fossil).
Carangodes Heckel, XI, 262; orthotype *C. CEPHALUS* Heckel (fossil). Perhaps to be regarded as preoccupied by *CARANGOIDES* Blkr., 1851.
Ctenopoma Heckel, XI, 272; orthotype *PYGÆUS JEMELKA* Heckel (fossil); preoccupied by *CTENOPOMA* Peters, 1855.
561. HECKEL (1856). *Ueber den Bau und die Eintheilung der Pycnodonten,* etc. Sitzb. Akad. Wiss. Wien, VIII, 433-464, 1854 (1856).
 JOHANN JAKOB HECKEL.
Stemmatodus Heckel, XI, 202; orthotype *PYCNOTUS RHOMBUS* Ag. (fossil). Preoccupied; replaced by *STEMMATIAS* Hay, 1899.
Cœlodus Heckel, XI, 202, 455; orthotype *CÆLODUS SATURNUS* Heckel (fossil). If regarded as preoccupied by *CÆLON* Lund, may be replaced by *COSMODUS* Sauvage, 1879.

562. KAUP (1856). *Uebersicht der Aale.* Arch. Naturg.

JOHANN JACOB KAUP.

In this paper occurs the first diagnosis of the many genera of eels,

published in the same year as the *Catalogue of the Apodal Fish*. The pagination of the volume last mentioned is given in parentheses in the following list:

563. KAUP (1856). *Catalogue of the Apodal Fish in the Collection of the British Museum*. London.
JOHANN JACOB KAUP.
- Congerodon** Kaup, 37; orthotype *C. INDICUS* Kaup. (Not in *Cat. Apodal Fishes*.)
- Centrurophis** Kaup, 42 (2); logotype *C. SPADICEUS* Kaup. A synonym of *OPHICHTHUS* Ahl.
- Pœcilocephalus** Kaup, 43 (5); orthotype *P. BONAPARTEI* Kaup. A synonym of *OPHICHTHUS* Ahl.
- Microdonophis** Kaup, 43 (6) orthotype *M. ALTIPINNIS* Kaup. A synonym of *OPHICHTHUS*.
- Cœcilophis** Kaup, 44 (6); orthotype *C. COMPAR* Kaup. A synonym of *OPHICHTHUS*.
- Herpetoichthys** Kaup, 44 (7); orthotype *H. ORNATISSIMUS* Kaup. A synonym of *OPHICHTHUS*.
- Brachysomophis** Kaup, 45 (9); orthotype *B. HORRIDUS* Kaup.
- Elapsopsis** Kaup, 45 (9); orthotype *E. VERSICOLOR* Kaup (misprinted *ELAPSOPIS*). A synonym of *OPHICHTHUS*.
- Mystriophis** Kaup, 45 (10); orthotype *OPHISURUS ROSTELLATUS* Rich.
- Murænopsis** (Le Sueur) Kaup, 46 (11); orthotype *MURÆNOPHIS OCELLATUS* Le Sueur. This name was not used by Le Sueur, who wrote *MURÆNOPHIS* after Lacépède.
- Echipsis** Kaup, 46 (13); orthotype *OPHISURUS INTERTINCTUS* Rich. A synonym of *MYSTRIOPHIS* Kaup.
- Scytalophis** Kaup, 46 (13); orthotype *S. MAGNIOCULIS* Kaup.
- Leptorhinophis** Kaup, 46 (14); orthotype *OPHISURUS GOMESI* Castelnau. A synonym of *SCYTALOPHIS* Kaup.
- Pisodonophis** Kaup, 47 (17); logotype *P. CANCRIVORUS* Kaup, as restricted by Bleeker. Later written *PISOODONOPHIS* by Kaup, and since spelled *PISODONOPHIS* by purists.
- Lamnostoma** Kaup, 49 (24); logotype *L. PICTUM* Kaup.
- Anguisurus** Kaup, 50 (24); orthotype *A. PUNCTULATUS* Kaup. A synonym of *CÆCULA* Vahl.
- Callechelys** Kaup, 51 (28); orthotype *C. GUICHENOTI* Kaup.
- Cirrhimuræna** Kaup, 52 (27); orthotype *C. CHINENSIS* Kaup.
- Ophisurapus** Kaup, 52 (29); orthotype *O. GRACILIS* Kaup. Later written *OPHISURAPHIS* A synonym of *SPHAGEBRANCHUS* Bloch.
- Myrus** Kaup, 53 (31); orthotype *MURÆNA MYRUS* L. = *MYRUS VULGARIS* Kaup. A synonym of *ECHELUS* Raf., as restricted by Bleeker.
- Enchelynassa** Kaup, 59 (72); orthotype *E. BLEEKERI* Kaup.
- Eurymyctera** Kaup, 59 (72); orthotype *E. CRUDELIS* Kaup. A synonym of *GYMNOTHORAX*.
- Siderea** Kaup, 59 (70); orthotype *S. PFEIFFERI* Kaup. Later written *SIDERA*. A synonym of *GYMNOTHORAX*, as restricted by Bleeker.
- Enchelycore** Kaup, 60 (72); orthotype *MURÆNA NIGRICANS* Bonnaterre.
- Thyrsoidea** Kaup, 60 (74); tautotype *MURÆNA THYRSOIDEA* Rich., but first restricted to *MURÆNA MACRURA* Bleeker, by Bleeker. As understood by me, a synonym of *GYMNOTHORAX*. As used by Bleeker, the same as *EVENCHELYS* J. & E.
- Limamuræna** Kaup 65 (95): orthotype *L. GUTTATA* Kaup. A synonym of *MURÆNA* L. as restricted by Ahl, 1789.

- Polyuranodon** Kaup, 65 (96); orthotype *MURÆNA POLYURANODON* Blkr. A synonym of *GYMNOTHORAX*.
- Pæcilophis** Kaup, 66 (98); orthotype *GYMNOTHORAX CATENATUS* Bloch. A synonym of *ECHIDNA* Forster.
- Aphthalmichthys** Kaup, 68 (105); orthotype *A. JAVANICUS* Kaup.
- Murænoblenna** (Lacépède) Kaup, 67; orthotype *ICHTHYOPHIS TIGRINUS* Lesson, not of Lacépède, whose type *M. OLIVACEA* is a MYXINE. Kaup observes: "Ich kenne *M. OLIVACEA* nicht."
- Congermuræna** Kaup, 71 (108); logotype *MURÆNA BALEARICA* De la Roche, as restricted by Bleeker. A synonym of *ARIOSOMA* Sw., equivalent to *CONGRELLUS* Ogilby, 1898, who restricts *CONGERMURÆNA* to *C. HABENATA*, which probably belongs to *GNATHOPHIS* Blkr. The name is spelled *CONGROMURÆNA* by authors.
- Uroconger** Kaup, 71 (110); orthotype *U. LEPTURUS* Kaup.
- Esunculus** Kaup, 143; orthotype *E. COSTAI* Kaup. A larva, allied to *ALEPOCEPHALUS*. (Not in *Uebersicht*.)
564. KAUP (1856). *Einiges über die Unterfamilie Ophidiinæ*. Arch. Naturg., XXII.
JOHANN JACOB KAUP.
- Cepolophis** Kaup, I, 96; orthotype *OPHIDIUM VIRIDE* Fabricius. A synonym of *GYMNELIS* Reinh.
565. KAUP (1856). *Catalogue of the Lophobranchiate Fish in the Collection of the British Museum*. London.
JOHANN JACOB KAUP.
The various genera of Kaup, 1853, *HEMIMARSUPIUM* excepted, are in this paper with their redescribed species
- Hemithylacus** Kaup, 61; orthotype *SYNGNATHUS LEIASPIS* Kaup. An unexplained substitute for *HEMIMARSUPIUM* Kaup, 1853. Same as *CÆLONOTUS* Peters (1855).
566. LEIDY (1856). *Notice of Remains of Extinct Vertebrated Animals Discovered by Professor E. Emmons*. Proc. Acad. Nat. Sci. Phila., 1856.
JOSEPH LEIDY (1825-1891).
- Ischyrrhiza** Leidy, VIII, 256; logotype *I. MIRA* Leidy (fossil). Supposed to be a synonym of *PACHYRRHIZODUS*.
567. LEIDY (1856). *Notices of Extinct Vertebrata Discovered by Dr. F. V. Hayden, During the Expedition to the Sioux Country Under the Command of Lieut. G. K. Warren*. Proc. Acad. Nat. Sci. Phila., VIII.
JOSEPH LEIDY.
- Mylognathus** Leidy, 312; orthotype *M. PRÆSCUS* Leidy (fossil). Probably a synonym of *EDAPHODON*.
568. LEIDY (1856). *Indications of Five Species, with Two New Genera, of Extinct Fishes*. Proc. Acad. Nat. Sci. Phila., VII.
JOSEPH LEIDY.
- Edestus** Leidy, VII, 414; orthotype *E. VORAX* Leidy (fossil).
- Sicarius** Leidy, VII, 414; orthotype *S. EXTINCTUS* Leidy (fossil). A synonym of *PETALODUS*.

569. LEIDY (1856). *Description of Two Ichthyodorulites (Stenacanthus nitidus and Cylindracanthus ornatus)*. Amer. Journ. Sci., XXI.

JOSEPH LEIDY.

Stenacanthus Leidy, XXI, 8; orthotype *S. NITIDUS* Leidy (fossil) (also in *Proc. Acad. Nat. Sci. Phila.*, 1856, 11.). A synonym of *BOTHRIOLEPIS*.

Cylindracanthus Leidy, XXI, 8; orthotype *C. ORNATUS* Leidy. Regarded as a synonym of *CÆLORHYNCHUS* Ag., which name is preoccupied.

570. LEIDY (1856). *Remarks on Certain Extinct Species of Fishes*. Proc. Acad. Nat. Sci., VIII, 301. (Also in *Trans. Philos. Soc.*, XI, 1857.)

JOSEPH LEIDY.

Protosphyræna Leidy, 56, VIII, 302 (and XI, 95); orthotype *P. FEROX* Leidy (fossil).

Cimolichthys Leidy, VIII, 302 (also XI, 95); orthotype *C. LEWIEENSIS* Leidy (fossil).

571. NEWBERRY (1856). *Description of Several New Genera and Species of Fossil Fishes from the Carboniferous Strata of Ohio*. Proc. Acad. Nat. Sci. Phila., VIII.

JOHN STRONG NEWBERRY (1822-1892).

Mecolepis Newberry, VIII, 96; logotype *M. GRANULATUS* Newberry (fossil). Name preoccupied, replaced by *EURYLEPIS* Newberry (1857).

Compsacanthus Newberry, 100; orthotype *PLEURACANTHUS LÆVIS* Newberry (fossil). A synonym of *PLEURACANTHUS*.

572. PANDER (1856). *Monographie der fossilen Fische des silurischen Systems der russisch-baltischen Gouvernements*. St. Petersburg.

CHRISTIAN HEINRICH PANDER.

Rytidolepis Pander, 48; orthotype *R. QUENSTEDTI* Pander (fossil). Besides this nominal genus, the following additional generic names have been given in this paper by Pander. All are based on fragments of dermal armor, not identified and some of them, according to Eichwald (1860), likely to belong to Eurypterid crustaceans rather than to fishes. These are *COCCOPELTUS*, *CYPHOMALEPIS*, *TRACHYLEPIS* and *PHLEBOLEPIS*. The following is the list of these nominal genera and their type species as given by Woodward:

- RYTIDOLEPIS* (UENSTEDTI), 48.
SCHEDIOSTEUS (MUSTELENIS), 49.
COCCOPELTUS (ASMUSI), 50.
CYPHOMALEPIS (EGERTONI), 51.
TRACHYLEPIS (FORMOSA), 52.
STIGMOLEPIS (OWENI), 53.
DASYLEPIS (KEYSERLINGI), 54.
LOPHOLEPIS (SCHMIDTI), 55.
DICTYOLEPIS (BRONNI), 56.
ONISCOLEPIS (MAGNA, etc.), 58.
MELITTOMALEPIS (ELEGANS), 60.
PHLEBOLEPIS (ELEGANS), 60.
PRIONACANTHUS (DUBIA), 70.

Stigmolepis Pander, 53; orthotype *S. OWENI* Pander (fossil).

Cælolepis Pander, 56; logotype *C. LÆVIS* Pander (fossil).

Tolypelepis Pander, 61; orthotype *T. UNDULATUS* Pander (fossil) (fragment of a *PTERASPID*).

- Lophosteus** Pander, 62; orthotype *L. SUPERBUS* Pander (fossil).
Pachylepis Pander, 67; orthotype *P. GLABER* Pander (fossil). A synonym of *THELODUS* Ag.
Thelelepis Pander, 67; orthotype *THELODUS PARVIDENS* Ag. (fossil). A synonym of *THELODUS* Ag.
Nostolepis Pander, 68; orthotype *N. STRIATA* Pander (fossil).
Rabdacanthus Pander 69; orthotype *R. TRUNCATUS* Pander (fossil).
Odontotodus Pander, 75; orthotype *O. ROOTSIKULLIENSIS* Pander (fossil). A
Gomphodus Pander 76; orthotype *G. SANDELENSIS* Pander (fossil).
 synonym of *STIGMOLEPIS* Pander.
573. RICHARDSON (1856). *Ichthyology*. (In *Encyclopedia Britannica*, I, London.)
 JOHN RICHARDSON.
- Xanthichthys** (Kaup) Richardson, XII, 313; orthotype *BALISTES CURASSAVICUS*
 Gmelin.
574. THOMPSON (1856). *The Natural History of Ireland*. London.
 WILLIAM THOMPSON.
- Couchia** Thompson, IV, 188; orthotype *COUCHIA MINOR* Thompson. A larval form
 of *CILIATA*.

 1857

575. BAIRD (1857). *Report on the Fishes Observed on the Coast of New Jersey and Long Island During the Summer of 1854*. From the ninth annual report of the Smithsonian Institution for 1854.
 SPENCER FULLERTON BAIRD.
- Eucinostomus** Baird, 345; orthotype *E. ARGENTEUS* Baird = *GERRES GULA* Cuv. & Val.
576. BELLOTTI (1857). *Stoppani Studii Geol. e Paleontol.* Lombardia.
 CRISTOFORO BELLOTTI.
- Urolepis** Bellotti, 431; orthotype *U. MACROPTERA* Bellotti (fossil).
Heptanema Bellotti, 435; orthotype *H. PARADOXUM* Bellotti (fossil).
Ichthyorhynchus Bellotti, 436; orthotype *I. CURIONI* Bellotti (fossil). A synonym of *SAURORHYNCHUS*.
577. BLEEKER (1857). *Achtste bijdrage tot de kennis der vischfauna van Amboina*.
 Act. Soc. Sci. Indo-Nederl., II.
 PIETER BLEEKER.
- Cirrhichthys** Bleeker, II, 39; orthotype *CIRRHITES GRAPHIDOPTERUS* Blkr. = *CIRRH. APRINUS* Cuv. & Val.
Oxycirrhites Bleeker, II, 39; orthotype *O. TYPUS* Blkr.
578. BLEEKER (1857). *Nieuwe nalezingen op de ichthyologie van Japan*. Verh.
 Bat. Gen.
 PIETER BLEEKER.
- Lateolabrax** Bleeker, XXVI, 53; orthotype *LABRAX JAPONICUS* Cuv & Val. Same as *PERCA-LABRAX* T. & S., but this word may not have been meant as a new name.
579. BLEEKER (1857). *Bijdrage tot de kennis der ichthyologische fauna van de Sangi-eilanden*. Nat. Tijdschr. Neder.-Indie, XIII.
 PIETER BLEEKER.

- Scorpænodes** Bleeker, 371; orthotype *SCORPÆNA POLYLEPIS* Blkr. Replaces *SEBASTOPSIS* Gill.
- Eleotriodes** Bleeker, XIII, 372; orthotype *E. SENGUTTATA* Blkr. *E. HELDSINGENI* Blkr., sometimes named as type, occurs in a later paper.
- Bogoda** Bleeker, 468; orthotype *CHANDA NAMA* Ham. A synonym of *CHANDA* as restricted.
580. COSTA (1857). *Descrizione di alcuni pesci fossili del Libano*. Mem. Reale Accad. Napoli, II, 97-112.
ORONZIO GABRIELE COSTA.
- Imogaster** Costa, II, 102; orthotype *I. AURATUS* Costa (fossil).
- Omosoma** Costa, II, 105; orthotype *O. SACHELALMÆ* Costa (fossil).
- Rhamphornimia** Costa, II, 108; orthotype *R. RHINELLOIDES* Costa (fossil).
581. EGERTON (1857). *Paleolithologic Notes on Some Fish Remains from the Neighborhood of Ludlow*. Quart. Journ. Geol. Sci., XIII.
PHILIP DE MALPAS GREY EGERTON.
- Auchenaspis** Egerton, XIII, 286; orthotype *A. SALTERI* Egert. (fossil). A synonym of *THYESTES* Eichw.
- 581A. EMMONS (1857). *American Geology*, etc. Ed. I.
EBENEZER EMMONS (1799-1863).
- Rabdiolepis** Emmons, VI, 45; orthotype *R. SPECIOSUS* Emmons (fossil) (fragment of a scale) (not *RHABDOLEPIS* Troschel).
- Microdus** Emmons, VI, 48; orthotype *M. LÆVIS* Emmons (a shark tooth of uncertain relations).
582. GERVAIS (1857). *Sur un poisson labroïde fossile dans les sables marins de Montpellier (Labrodon pavementatum)*. Mém. Acad. Sci. Montpellier, III.
FRANÇOIS LOUIS PAUL GERVAIS.
- Labrodon** Gervais, III, 515; orthotype *L. PAVIMENTATUM* Gervais (fossil).
583. GIRARD (1857). *Contributions to the Ichthyology of the Western Coast of the United States, from Specimens in the Museum of the Smithsonian Institution*. Proc. Acad. Nat. Sci. Phila., VIII.
CHARLES GIRARD.
- Chiropsis** Girard, IX, 201; orthotype *CHIRUS CONSTELLATUS* Grd. (male of *H. DECAGRAMMUS*). A synonym of *HEXAGRAMMOS* Steller.
- Zaniolepis** Girard, IX, 202; orthotype *Z. LATIPINNIS* Grd. Misquoted as *ZANIODERMIS* by Günther (1860).
584. HOLLARD (1857). *Études sur les gymnodontes et en particulier sur leur ostéologie et sur les indications qu'elle peut fournir pour leur classification*. Ann. Sci. Nat. (Zool.), VIII.
HENRI LOUIS GABRIEL MARC HOLLARD (1801-1866).
- Apsicephalus** Hollard, 275; orthotype *TETRODON FLUVIATILIS* Ham. No type named; said to be equivalent to *DICHOTOMYCTER* Bibron, but including several other of Bibron's genera. Apparently a valid genus to be called *DICHOTOMYCTER*.
- Brachycephalus** Hollard, VIII, 275; orthotype not named, the genus said to be equivalent to *TETRAODON* of Bibron. *T. LINEATUS* L. may be assumed as type. A synonym of *TETRAODON* L.
585. NEWBERRY (1857). *Fossil Fishes from the Devonian of Ohio*. Proc. Nat. Inst. Washington, I.
JOHN STRONG NEWBERRY

- Agassichthys** Newberry, 3; orthotype *PLACOTHORAX AGASSIZI* Meyer (fossil). A synonym of *MACROPETALICHTHYS* Ag.
- Machæracanthus** Newberry, 6; orthotype *M. PERACUTUS* Newberry (fossil).
- Onychodus** Newberry, 7; orthotype *O. SIGMOIDES* Newberry (fossil).
586. NEWBERRY (1857). *Letter Changing the Genus Mekolepis to Eurylepis, the Former Being Preoccupied.* Proc. Acad. Nat. Sci. Phila., IX.
JOHN STRONG NEWBERRY.
- Eurylepis** Newberry, 150; orthotype *MECOLEPIS GRANULATUS* Newberry (fossil). Substitute for *MECOLEPIS* Newberry, preoccupied.
587. PETERS (1857). *Neue Chromidengattung (Hemichromis).* Monatsber. Akad. Wiss. Berlin.
WILHELM CARL HARTWIG PETERS.
- Hemichromis** Peters, 403; orthotype *H. FASCIATUS* Peters.
588. PHILIPPI (1857). *Ueber einige chilenische Vögel und Fische, etc.* Arch. Naturgesch.
RUDOLPH AMANDUS PHILIPPI (b. 1808).
- Genypterus** Philippi, 268; orthotype *G. NIGRICANS* Philippi.
- Thysanochilus** Philippi, 268; orthotype *T. VALDIVIANUS* Philippi. A synonym of *VELASIA* Gray, suppressed (but printed) by Troschel, editor of the *Archiv.* Not *THYSANOCHILUS* Kner, 1865.
- Rhynchobatis** Philippi, 270; orthotype a ray from Juan Fernandez, not given a specific name, only the dried head with long, flat snout preserved. Name preoccupied as *RHYNCHOBATUS*. This animal is described as a ray with a long, thin, flat snout, rounded at the tip apparently like that of the shark, *MITSUKURINA*. Its surface below, except at the smooth base, is covered by small stellate prickles, curved backward at tip. Larger spinules cover the head with six still larger ones forming a curve around the eye. As this form, obviously distinct, is without a name, it has been called *TARSISTES PHILIPPI* Jordan.
589. RICHARDSON (1857). *On Siphonognathus, a New Genus of Fistulariæ.* Proc. Zool. Soc. London.
JOHN RICHARDSON.
- Siphonognathus** Richardson, 237; orthotype *S. ARGYROPHANES* Rich.
590. RÜTIMEYER (1857). (*Encheiziphius.*) Verh. Ges. Basel, I.
CARL LUDWIG RÜTIMEYER.
- Encheiziphius** Rüttimeyer, I, 561; orthotype *E. TERETIROSTRIS* Rüttimeyer (fossil). A synonym or fossil homologue of *ISTIOPHORUS*.
591. TROSCHER (1857). *Beobachtungen über die Fische in den Eisennieren des Saarbrücker Steinkohlgebirges.* Verh. Naturh. Ver. Preuss. Rheinl. Westphal.
FRANZ HERMANN TROSCHER.
- Rhabdolepis** Troschel, 15; logotype *PALÆONISCUM MACROPTERUM* Bronn (fossil). A synonym of *ELONICHTHYS* Giebel.
592. WAGNER (1857). *Characteristik neuer Arten von Knorpelfischen aus den lithographischen Schieferen der Umgegend von Solenhofen.* Gelehrte Anz. Bayer. Akad. Wiss., XLIV.
JOHANN ANDREAS WAGNER.
- Palæoscyllium** Wagner, XLIV, 291; orthotype *P. FORMOSUM* Wagner (fossil).

1858

593. AGASSIZ (1858). *Remarks on a New Species of Skate from the Sandwich Islands*. Proc. Boston Soc. Nat. Hist., VI.
LOUIS AGASSIZ.
- Goniobatis** Agassiz, VI, 385; orthotype *RAJA FLAGELLUM* Bl. & Schn. A synonym of *AËTOBATIS* Blainv., as restricted by Müller & Henle. Same as *STOASODON* Cantor, 1850.
594. AGASSIZ (1858). *Remarks on New Fishes from Nicaragua Collected by Julius Fræbel*. Proc. Boston Soc. Nat. Hist., VI.
LOUIS AGASSIZ.
- Parachromis** Agassiz, VI, 401; orthotype *P. GULOSUS* Ag. (not identifiable, said to be a CICHLID (CHROMID) resembling *DENTEX*, but with the lateral line broken. Probably a synonym of *CICHLAURUS* Sw.
- Hypsophrys** Agassiz, VI, 401; orthotype *H. UNIMACULATUS* Ag. No description. A CICHLID said to resemble *CHRYSOPHRYS* (SPARUS) with a large, black shoulder spot (as in *ASTRONOTUS HELLERI* Steind. and other species). Probably a synonym of *ASTRONOTUS* Sw.
- Baiodon** Agassiz, VI, 401; orthotype *B. FASCIATUS* Ag. A slender form, said to resemble *BOOPS* Cuv. Possibly the same as *THERAPS IRREGULARIS* Gthr., but not identifiable.
- Amphilophus** Agassiz, VI, 401; orthotype *A. FRÆBELI* Ag., apparently *HEROS LABIATUS* Gthr. or *H. LOBOCHEILUS* Gthr. species in which the male has both lips greatly enlarged, "peculiar in not having the ordinary fleshy lips, but a large, triangular lobe projecting above and below jaw like the fleshy appendages of some bats" (Agassiz). It is possible that the species thus provided should stand as a distinct genus *AMPHILOPHUS*.
595. AYRES (1858). *On New Fishes of the Californian Coast*. Proc. Calif. Acad. Sci., 1858-1861 (1853), II.
WILLIAM O. AYRES.
- Anoplopoma** Ayres, II, 27; orthotype *A. MERLANGUS* Ayres. = *GADUS FIMBRIA* Pallas.
- Stereolepis** Ayres, II, 28; orthotype *S. GIGAS* Ayres.
596. BLEEKER (1858). *Zesde bijdrage (etc.) vischfauna van Sumatra (Visschen van Padang, etc.)*. Act. Soc. Neder.-Indie, III.
PIETER BLEEKER.
- Helicophagus** Bleeker, 45; orthotype *H. TYPUS* Blkr.
597. BLEEKER (1858). *Vierde bijdrage tot de kennis der ichthyologische Fauna van Japan*. Act. Soc. Sci. Indo-Neerl., III.
PIETER BLEEKER.
- Sirembo** Bleeker, 22; orthotype *BROTULA IMBERBIS* T. & S.
- Congerodon** (Kaup) Bleeker, 29; orthotype *C. INDICUS* Kaup MS. = *COGRUS LEP-
TURUS* Rich. Same as *UROCONGER* and of the same original date, 1856.
- Triacanthodes** Bleeker, 37; orthotype *TRICANTHUS ANOMALUS* T. & S.
598. BLEEKER (1858). *Tiende bijdrage tot de kennis der vischfauna van Celebes*. Act. Soc. Sci. Indo-Neerl., III.
PIETER BLEEKER.
- Gunnellichthys** Bleeker, III, 9; orthotype *G. PLEUROTENIA* Blkr.

599. BLEEKER (1858). *Bijdrage tot de kennis der vischfauna van den Goram-Archipel*. Nat Tijdschr. Neder.-Indie, XV.
PIETER BLEEKER.
Pseudoplesiops Bleeker, XV, 217; orthotype *P. TYPUS* Bleeker.
600. BLEEKER (1858). *Vierde bijdrage (etc.) van Bilitou*. Nat. Tijdschr. Neder.-Indie, XV.
PIETER BLEEKER.
Leiocassis Bleeker, 225; orthotype *L. MICROPOGON* Blkr. Corrected by Günther to *LIOCASSIS*.
- Silurichthys** Bleeker, 225; orthotype *S. PHAIOSOMA* Blkr.
601. BLEEKER (1858). *Twaalfde bijdrage tot de kennis der vischfauna van Borneo, visschen van Sinkawang*. Act. Soc. Sci. Indo-Neerl., V.
PIETER BLEEKER.
Sauridichthys Bleeker, 2; orthotype *S. OPHIODON* Blkr. (1858). A synonym of *HARPODON* Le Sueur.
- Hexanematchthys** Bleeker, V, 2; orthotype *BAGRUS SUNDAICUS* Blkr.
- Sciadeichthys** Bleeker, 99; orthotype *SCIADES PICTUS* M. & T. Not *SCIADEICHTHYS* Blkr., 1863.
602. BLEEKER (1858). *De visschen van den Indischen Archipel, etc. I. Siluri*. Title also in Latin as *Prodromus*.
PIETER BLEEKER.
Most of these genera occur also in later papers, 1862, 1863; the type species often indicated later.
- Pseudodoras** Bleeker, I, 53; orthotype *DORAS NIGER* Val.
- Hemidoras** Bleeker, I, 53; orthotype *DORAS STENOPELTIS* Kner. A synonym of *DORAS* Lac. as restricted by Bleeker.
- Davalla** Bleeker, 58; orthotype *HYPOPHTHALMUS DAVALLA* Schomburgk.
- Pseudobagrus** Bleeker, 60; orthotype *BAGRUS AURANTIACUS* T. & S.
- Melanodactylus** Bleeker 60; orthotype *M. ACUTIVELIS* Blkr. = *PIMELODUS NIGRODIGITATUS* Lac.
- Chrysichthys** Bleeker, 60; orthotype *PIMELODUS AURATUS* Geoffroy St. Hilaire.
- Octonematchthys** Bleeker, 60; orthotype *O. NIGRITUS* Blkr.
- Rita** Bleeker, 60; orthotype *PIMELODUS RITA* Ham. (*R. BUCHANANI* Blkr.).
- Selenaspis** Bleeker, I, 62; haplotype *SILURUS HERZBERGI* Bloch.
- Cephalocassis** Bleeker, 62; orthotype *ARIUS TRUNCATUS* Cuv. & Val.
- Netuma** Bleeker, 62; orthotype *N. THALASSINA* Blkr. = *N. NASUTA* Blkr. *
- Guiritinga** Bleeker, 62; orthotype *G. COMMERSONI* Blkr.
- Ostogeneiosus** Bleeker, 63; orthotype *ARIUS MILITARIS* Blkr.
- Batrachocephalus** Bleeker, 63; orthotype *B. MICROPOGON* Blkr.
- Ketengus** Bleeker, 190; orthotype *K. TYPUS* Blkr.
- Conorhynchos** Bleeker, 191; orthotype *PIMELODUS CONIROSTRIS* Cuv. & Val.
- Hemipimelodus** Bleeker, 195; orthotype *H. BORNEENSIS* Blkr.
- Zungaro** Bleeker, 196; orthotype *PIMELODUS ZUNGARO* Humboldt = *ZUNGARO HUMBOLDTI* Blkr.
- Heptapterus** Bleeker, 197; orthotype *H. SURINAMENSIS* Blkr.
- Rhamdia** Bleeker, 197; orthotype *PIMELODUS QUELEN* Q. & G.
- Pinirampus** Bleeker, 198; orthotype *P. TYPUS* Blkr. = *PIMELODUS PINIRAMPU* Spix.
- Auchenaspis** Bleeker, 198; orthotype *PIMELODUS BISCUTATUS* Geoffroy. Name preoccupied; replaced by *AUCHENOGLANIS* Gthr.

- Trachcorystes** Bleeker, 200; orthotype *T. TYPUS* Blkr.
Rama Bleeker, 201; orthotype *PIMELODUS RAMA* Ham. = *RAMA BUCHANANI* Blkr.
Acrochordonichthys Bleeker, 204; orthotype *A. PLATYCEPHALUS* Blkr.
Gagata Bleeker, 204; orthotype *G. TYPUS* Blkr.
Schilbeichthys Bleeker, 253; orthotype *SILURUS GARUA* Ham. A synonym of *CLUPI-SOMA* Sw.
Belodontichthys Bleeker, 253; orthotype *B. MACROCHIR* Blkr. = *WALLAGO DINEMA* Blkr.
Pseudosilurus Bleeker, 253; orthotype *P. BIMACULATUS* Blkr. A synonym of *OMPOK* Lac.
Siluranodon Bleeker, 253; orthotype *SILURUS AURITUS* Geoffroy.
Kryptopterus Bleeker, 253; tautotype *SILURUS CRYPTOPTERUS* Blkr. Corrected to *CRYPTOPTERUS* by Günther.
Kryptopterichthys Bleeker, 253; orthotype *SILURUS PALEMBRANGENSIS* Blkr.
Micronema Bleeker, 253; orthotype *M. TYPUS* Blkr.
Phalacronotus Bleeker, 253; orthotype *P. LEPTONEMA* Blkr.
Hemisilurus Bleeker, 255; orthotype *H. HETERORHYNCHUS* Blkr.
Schilbeodes Bleeker, 258; orthotype *SILURUS GYRINUS* Mitchell.
Aspredinichthys Bleeker, 328; orthotype *ASPREDO TIBICEN* Temminck.
Bunocephalichthys Bleeker, 329; orthotype *BUNOCEPHALUS VERRUCOSUS* Kner.
Piratinga Bleeker, 355; orthotype *BAGRUS RETICULATUS* Kner.
Platynematischthys Bleeker, 357; orthotype *BAGRUS PUNCTULATUS* Kner.
Piramutana Bleeker, 355; orthotype *BAGRUS PIRAMUTA* Kner.
603. BLEEKER (1858). *Over de geslachten der Cobitinen*. Nat. Tijdschr. Neder-Indie, XVI, 1858-1859, 302-304.
 PIETER BLEEKER.
Lepidocephalus Bleeker, 303; orthotype *C. MICROCHIR* Blkr.
Cobiitichthys Bleeker, 304; orthotype *C. ENALIOS* Bleeker. A synonym of *MISGURNUS* Lac.
604. BLEEKER (1858). *Vischsoorten gevangen bij Japara, versameld door S. A. Thurkow*. Nat. Tijdschr. Neder.-Indie, XVI, 1858-1859, 406-409.
 PIETER BLEEKER.
Oxyurichthys Bleeker, 408; orthotype *O. MICROLEPIS* Blkr. or *GOBIOUS BELOSSO* Blkr.
605. BLYTH (1858). (*Amblyceps*). Journ. Asiat. Soc. Bengal, XXVII.
 EDWARD BLYTH.
Amblyceps Blyth, XXVIII, 281; haplotype *A. CAECUTIENS* Blyth.
606. BRONN (1858). *Beiträge zur triasischen Fauna und Flora der bituminösen Schiefer von Raibl in Kärnten*. Neues Jahrb. Min.
 HEINRICH GEORG BRONN (1800-1862).
Belonorhynchus Bronn, 12; orthotype *B. STRIOLATUS* Bronn (fossil). A synonym of *SAURORHYNCHUS*.
Pholidopleurus Bronn, 17; orthotype *P. TYPUS* Bronn (fossil).
Thoracopterus Bronn 21; orthotype *T. NIEDERRISTI* Bronn (fossil).
- 607, 612. COSTA (1858). (*Uraleptus*). Archiv. Naturg. (1858).
 ORONZIO GABRIELE COSTA.
Uraleptus Costa, 87; orthotype *GADUS MARALDI* Risso. A synonym of *GADELLA* Lowe.

613. DUMÉRIL (1858). *Reptiles et poissons de l'Afrique occidentale*, etc. Comtes Rendus Acad. Sci. Paris, 1858, LXI.
AUGUSTE HENRI ANDRÉ DUMÉRIL.
Chromichthys A. Duméril, X, 257; orthotype C. **ELONGATUS** Guich.
614. EGERTON (1858). *On Chondrosteus, an Extinct Form of the Sturionidæ, Found in the Lias Formation at Lyme Regis*. Phil. Trans. London, 1858.
PHILIP DE MALPAS GREY EGERTON.
Chondrosteus (Agassiz) Egerton, 871; orthotype C. **ACIPENSEROIDES** Ag. (fossil).
Gyrosteus (Agassiz) Egerton, 883; orthotype G. **MIRABILIS** Ag. (fossil).
615. EGERTON (1858). *Fish: Cosmolepis*, etc. (In *Figures and Descriptions of British Organic Remains*.) Mem. Geol. Surv. United Kingdom, 1858, 9 dec.
PHILIP DE MALPAS GREY EGERTON.
Cosmolepis Egerton, Dec. IX, No. 1; orthotype C. **EGERTONI** Ag. (fossil).
Endactis Egerton, Dec. IX, No. 4; orthotype E. **AGASSIZI** Egert. (fossil). A synonym of **CATURUS**.
Centrolepis Egerton, Dec. IX, No. 5; orthotype C. **ASPER** Ag. (fossil).
Nothosoma (Agassiz) Egerton, Dec. IX, No. 6; orthotype N. **OCTOSTYCHIUS** Ag. (fossil).
Pleuropholis Egerton, Dec. IX, No. 7; logotype **PHOLIDOPHORUS LÆVISSIMUS** Ag. (fossil).
Macropoma (Agassiz) Egerton, Dec. IX, No. 10; orthotype M. **EGERTONI** Ag. (fossil). Replaces **EURYCORMUS** Wagner (1863).
616. GILL (1858). *Prodromus descriptionis subfamilia Gobinarum squamis cycloideis piscium, a cl. W. Stimpsono in mare Pacifico acquisite*. Ann. Lyceum Nat. Hist. N. Y., 1858-1862, VII, 12-16.
THEODORE NICHOLAS GILL (1837-1914).
Chænogobius Gill, 12; orthotype C. **ANNULARIS** Gill.
Lepidogobius Gill, 14; orthotype **GObIUS GRACILIS** Grd. = G. **LEPIDUS** Grd.
617. GILL (1858). *Description of a New Genus of Pimelodina from Canada*. Ann. Lyceum Nat. Hist. N. Y., 1853-1858, VI, 3.
THEODORE NICHOLAS GILL.
Synechoglanis Gill, 39; orthotype **SYNECHOGLANIS BEADLEI** Gill = **ICTALURUS PUNCTATUS** (Raf.). A synonym of **ICTALURUS** Raf.
618. GILL (1858). *Prodromus descriptionis familiae Gobioidarum generum novorum*. Ann. Lyceum Nat. Hist. N. Y., 1858-1862, VII, 16-19.
THEODORE NICHOLAS GILL.
Tridentiger Gill, 16. Dec.; orthotype **SICYDIUM OBSCURUM**, T. & S.
Triænophorus Gill, 17; orthotype T. **TRIGONOCEPHALUS** Gill. Name preoccupied, replaced by **TRÆNOPHORICHTHYS** Gill.
619. GILL (1858). (*Triænophorichthys*.) Proc. Acad. Nat. Sci. Phila., 1859.
THEODORE NICHOLAS GILL.
Triænophorichthys Gill 195; orthotype **TRÆNOPHORUS TRIGONOCEPHALUS** Gill. Substitute for **TRÆNOPHORUS** Gill, preoccupied.

620. GILL (1858). *Synopsis of the Fresh-water Fishes of the Western Portion of the Island of Trinidad, West Indies*. Ann. Lyceum Nat. Hist. N. Y., 1853-1858. VI, 363-430.

THEODORE NICHOLAS GILL. A

- Ctenogobius** Gill, 374; orthotype *C. FASCIATUS* Gill.
Pimelonotus Gill, VI, 387; orthotype *P. VILSONI*. A synonym of *RHAMDIA* Blkr. of the same year.
Batrachoglanis Gill, VI, 389; orthotype *PIMELODUS RANINUS* Cuv. & Val. A synonym of *PSEUDOPIMELODUS* Blkr. of about the same date.
Hoplosternum Gill, VI, 395; orthotype *CALlichthys LÆVIGATUS* Val.
Pterygoplichthys Gill, VI, 408; orthotype *HYPOSTOMUS DUODECIMALIS* Cuv. & Val.
Pœcilurichthys Gill, 414; logotype *P. BREVOORTI* Gill.
Hemigrammus Gill, 416; haplotype *H. UNILINEATUS* Gill.
Stevardia Gill, 423; orthotype *S. ALBIPINNIS* Gill.
Corynopoma Gill, 425; orthotype *C. RIJSEI* Gill. A synonym of *STEVARDIA* Gill.
Nematopoma Gill, 428; orthotype *N. SEARLESI* Gill. A synonym of *STEVARDIA* Gill.

621. HECKEL & KNER (1858). *Die Süßwasserfische der oesterreichischen Monarchie mit Rücksicht auf die angränzenden Länder*.

JOHANN JAKOB HECKEL; RUDOLPH KNER.

- Carpio** Heckel, 64; orthotype *CYPRINUS KOLLARI* Heckel. A supposed hybrid of *CYPRINUS* and *CARASSIUS*.
Blicca Heckel, 120; orthotype *CYPRINUS BLICCA* Gmelin.
Leucaspis Heckel & Kner, 145; orthotype *L. ABRUPTUS* Heckel & Kner.
Idus Heckel, 147; orthotype *CYPRINUS IDUS*, L.

622. KADE (1858). *Ueber die devonischen Fischreste eines diluvial Blockes*. Meseritz, 1858.

G. KADE.

- Gyrolepis** Kade, 17, 18; orthotype *G. POSNANIENSIS* Kade (fossil). Name pre-occupied; perhaps a *DIPLOTERAX*.
Archæacanthus Kade, 19; orthotype *A. QUADRISULCATUS* Kade (fossil). A synonym of *ONCHUS*.
Spirodus Kade, 20; orthotype *S. REGULARIS* Kade (fossil).

623. KAUP (1858). *Uebersicht der Familie Gadidæ*. Arch. Naturg., 1858, XXIV, pt. 1.

JOHANN JACOB KAUP.

- Xenocephalus** Kaup, 83; orthotype *X. ARMATUS* Kaup.
Physiculus Kaup, 88; orthotype *P. DALWIGKII* Kaup.
Lotella Kaup, 88; orthotype *LOTA PHYCIS* T. & S.
Molvella Kaup, 90; orthotype *M. BOREALIS* Kaup = *GADUS MUSTELA* L. A synonym of *CILIATA* Couch.
Brotella Kaup, 92; orthotype *BROTULA IMBERBIS* T. & S. A synonym of *SIREMBO* Blkr.
Hoplophycis Kaup, 93; orthotype *XIPHIURUS CAPENSIS* Smith. A section under *GENYPTERUS* Philippi.
Brotulophis Kaup, 93; orthotype *B. ARGENTISTRATUS* Kaup.

624. KAUP (1858). *On Nemophis, a New Genus of Riband-shaped Fishes*. Proc. Zool. Soc. London, 1858, pt. 26.

JOHANN JACOB KAUP.

- Nemophis** Kaup 168; orthotype *N. LESSONI* Kaup.

625. KAUP (1858). *Uebersicht der Soleinae*, etc. Arch. Naturg.

JOHANN JACOB KAUP.

Monochirus Kaup, 94; orthotype *M. MACULIFINNIS* Kaup. Not of Rafinesque, 1814; a synonym of *ACHIRUS* Lac.

Grammichthys Kaup 94; orthotype *ACHIRUS LINEATUS* L. A synonym of *ACHIRUS* Lac.

Æsopia Kaup, 97; logotype *SOLEA CORNUTA* Cuv. (as restricted by Günther, 1862).

Euryglossa Kaup, 99; orthotype *PLEURONECTES ORIENTALIS* Bl. & Schn.

Eurypleura Kaup, 100; logotype *E. LEUCORHYNCHA* Kaup. A needless substitute for *ACHIROIDES* Blkr.

Gymnachirus Kaup, 101; orthotype *G. NUDUS* Kaup.

Aseraggodes Kaup, 103, logotype *A. GUTTULATUS* Kaup.

Heteromycteris Kaup, 103; orthotype *H. CAPENSIS* Kaup.

Apionichthys Kaup, 104; orthotype *A. DUMERILI* Kaup.

626. KAUP (1858). *Uebersicht der Plagusinae, der fünften Subfamilie der Pleuronectida*. Arch. Naturg., 1858, XXIV, pt. 1.

JOHANN JACOB KAUP.

Cantoria Kaup, 106; orthotype *PLAGUSIA CANTORI* Blkr. = *CANTORIA PINANGENSIS* Kaup.

Aphoristia Kaup, 106; orthotype *ACHIRUS ORNATUS* Lac. A synonym of *SYMPHURUS* Raf.

Areliia Kaup, 106; logotype *PLEURONECTES AREL* Bl. & Schn.

Trulla Kaup, 106; orthotype *PLAGUSIA TRULLA* Cantor.

Icania Kaup, 106; orthotype *ACHIRUS CYNOGLOSSUS* Buchanan.

627. KAUP (1858). *Einiges über die Acanthopterygiens à joue cuirassée* Cuv. Arch. Naturg., 1858, XXIV, pt. 1.

JOHN JACOB KAUP

Polemium Kaup, 333; orthotype *APISTUS ALATUS* Cuv. & Val. Kaup transfers *APISTUS* Cuv. to *A. TRACHINOIDES*, a species not mentioned by Cuvier, making *PROSOPODASYS*, Cantor's substitute name (1849), a synonym of *APISTUS*. *POLEMIUS* must be regarded as a synonym of *PTERICHTHYS* Sw. if *APISTUS* is rejected.

Cocotropus Kaup, 333; orthotype *CORYTHOBATUS ECHINATUS* Cantor.

Peristethus Kaup, 336; orthotype (*TRIGLA CATAPHRACTA* L.). A change in spelling of *PERISTEDION* a name also revised to *PERISTETHIDIUM*.

Trichopleura Kaup, 338; orthotype *STHENOPUS MOLLIS* Rich. A synonym of *STHENOPUS*.

Hoplocottus Kaup, 339; logotype *PODABRUS COTTOIDES* Rich. (first species named), a species of *PSEUDOBLENNIIUS* T. & S., 1850. *PODABRUS* is preoccupied and *HOPLOCOTTUS* was made to contain both *PODABRUS* and *TRACHIDERMIS* Heckel. A synonym of *PSEUDOBLENNIIUS* T. & S.

628. KNER (1858). *Ichthyologische Beiträge*. II. Abtheilung. Sitzb. Akad. Wiss. Wien, XXVI.

RUDOLPH KNER.

Asterophysus Kner, XXVI, 402; orthotype *A. BATRACHUS* Kner.

Centromochlus Kner, XXVI, 430; orthotype *C. MEGALOPS* Kner.

629. LEIDY (1858). *Descriptions of Some Remains of Fishes from the Carboniferous and Devonian Formations of the United States*. Journ. Acad. Nat. Sci. Phila., III.

JOSEPH LEIDY.

Apedodus Leidy, III, 164; orthotype *A. PRISCUS* Leidy (fossil). Probably a synonym of *DENDRODUS*.

630. LEIDY (1858). *Notices of Some Remains of Extinct Fishes (Hadrodus, etc.)*. Proc. Acad. Nat. Sci. Phila., 1857 (1858), 167-168.

JOSEPH LEIDY.

Hadrodus Leidy, 167; orthotype *H. PRISCUS* Leidy.

Phasganodus Leidy, 167; orthotype *P. DIRUS* Leidy (fossil). A synonym of *CIMOLICHTHYS* Leidy.

Turseodus Leidy, 167; orthotype *T. ACUTUS* Leidy (fossil).

631. VON DER MARCK (1858). (*Fossil Fishes.*) *Zeitschrift der Deutschen Geologie*, X.

W. VON DER MARCK (*d.* 1900).

Pelargorhynchus von der Marck, X, 242; logotype *P. DERCETIFORMIS* Marck (fossil).

Sardinius von der Marck, X, 245; orthotype *OSMERUS CORDIERI* Ag. (fossil). Not *SARDINIA* Poey, 1860, nor *SARDINA* Antipa, 1914, which is the same.

Sardinioides von der Marck, X, 245; orthotype *OSMEROIDES MONASTERI* Ag. (fossil). A synonym of *OSMEROIDES* Ag.

Echidnocephalus von der Marck, X, 247; orthotype *E. TROSCHELI* Marck (fossil). An extinct analogue of *HALOSAURUS*.

Ischyrocephalus von der Marck, X, 248; orthotype *I. GRACILIS* Marck (fossil). A synonym of *ENCHODUS*.

Platycormus von der Marck, X, 351; orthotype *BERYX GERMANUS* Ag. (fossil).

632. PANDER (1858). *Die Ctenodipterinen des devonischen Systems*. St. Petersburg, 1858, VIII, 65.

CHRISTIAN HEINRICH PANDER.

Cheirodus Pander, 33; orthotype *C. JEROFEJEWI* Pander (fossil). A synonym of *CONCHODUS* McCoy; the name preoccupied.

Ptyctodus Pander, 48; orthotype *P. OBLIQUUS* Pander (fossil).

633. PHILIPPI (1858). *Beschreibung neuer Wirbelthiere aus Chile*. Arch. Naturg.

RUDOLPH AMANDUS PHILIPPI.

Chilopterus Philippi, 306; no specific name given. A larval lamprey; probably of *CARAGOLA* Gray.

633A. QUENSTEDT (1858). *Der Jura*. Tübingen, 1856-1858, VI.

FRIEDERICH AUGUST VON QUENSTEDT.

Desmacanthus Quenstedt, 34; orthotype *D. CLOACINUS* Quenstedt (fossil). A synonym of *NEMACANTHUS*.

Lycodus Quenstedt, 240; orthotype *SAURICHTHYS GIGAS* Quenstedt (fossil).

Pachylepis Quenstedt, 241; orthotype (problematical cranial bones) (fossil).

Chimæracanthus Quenstedt, 347; orthotype *A. AALENSIS* Quenstedt (fossil). A synonym of *ISCHYDUS*.

Psilacanthus Quenstedt, 347; orthotype *P. AALENSIS* Quenstedt (fossil).

Typodus Quenstedt, 781; logotype *T. ANNULATUS* Quenstedt (fossil). Apparently a synonym of *MESODON*, which, being preoccupied, it replaces.

Kokkoderma Quenstedt, 810; orthotype *K. SUEVICUM* Quenstedt (fossil). Later spelled *COCCODERMA*.

634. REINHARDT (1858). *Stegophilus insidiosus, en ny mallefisk fra Brasilien og dens levemaade*. Vidensk. Meddel. Naturh. Foren. Kjöbenhavn, 1859, 79-97.
JOHANN THEODOR REINHARDT.
Stegophilus Reinhardt, tab. 2; orthotype *S. INSIDIOSUS* Reinh.
635. ROUAULT (1858.) *Note sur les vertèbres fossiles des terrains sédimentaires de l'ouest de la France*. Comtes Rendus Acad. Sci. Paris, 1858, XLVII, 99-103.
MARIE ROUAULT.
Nummopalatus Rouault, XLVII, 101; orthotype *N. EDWARDSIUS* Rouault (fossil).
A synonym of *LABRODON* Gervais.
- Machærius** Rouault, XLVII, 102; orthotype *M. ARCHIACI* Rouault (fossil). Name preoccupied; a synonym of *MACHÆRACANTHUS* Newberry.
636. THIOLLIÈRE (1858). *Notice sur les poissons fossiles du Bugcy, et sur application de la méthode de Cuvier à leur classement*. Bull. Soc. Géol. France, 1858, 2 sér., XV, 782-794.
VICTOR JOSEPH DE L'ISLE THIOLLIÈRE.
Attakeopsis Thiollière, XV, 784; orthotype *A. DESORI* Thiollière (fossil). Name only; validated in 1873. A synonym of *IONOSCOPIUS* Costa.
- Callopterus** Thiollière, XV, 784; orthotype *C. AGASSIZI* Thiollière (fossil). Name occupied as *CALOPTERUS* in beetles (1838); may be replaced by *AINIA* Jordan, from the locality Ain in France.
637. WEINLAND (1858). *A New Division of the Five Species of Flying-fish Found Along the Coast of North America, Which Have Hitherto All Been Referred to the Genus Exocetus*. Proc. Boston Soc. Nat. Hist., VI, 385.
DAVID FRIEDRICH WEINLAND.
Halocypselus Weinland, VI, 385; orthotype "*EXOCETUS MESOGASTER*" = *EXOCETUS VOLITANS* L. = *E. EVOLANS* L., the two being identical, as Dr. Lönberg has shown by the examination of Linnæus' type of *E. VOLITANS*.

OMISSIONS IN PART II.

As these pages go through the press the following errors and omissions are noted:

On page 173, Bennett's *Fishes of Mauritius*, No. 143A, is in two parts, both in 1831, not 1830. The first is the collection of Captain Belcher (November), the second that of Charles Telfair (December).

Insert—

Apolectus Bennett, I, 146 (November); orthotype *A. IMMUNIS* Bennett. Name preoccupied, replaced by *APODONTIS* Bennett.

Apodontis Bennett, I, 169 (December); orthotype *APOLECTUS IMMUNIS* Bennett, substitute for *APOLECTUS* Bennett, preoccupied by *APOLECTUS* Cuv. & Val. (October) 1830.

Under **Agonostomus** read *A. TELFAIRI*.

On page 174, to 142A Cuvier & Valenciennes add—

Apolectus Cuvier & Valenciennes, VIII, 438; orthotype *A. STROMATEUS* Cuv. & Val. = *STROMATEUS NIGER* Bloch.

On page 219 the name *COCOLUS* was given as substitute for *KROHNIUS*, a larval *MACROID*, as stated on page 226.

INDEX TO PART II.

In the following list, the names of genera likely to prove valid are left unmarked; *d* indicates doubt of one form or another; *s* indicates synonyms, apparently never to be revived or added to the system.

- Abeona*, *s*, 258
Abron, 237
Abrostomus, 244
Acanthias, *s*, 225
Acanthidium, 195
Acanthobrama, 211
Acanthoclinus, 212
Acanthocottus, *s*, 249
Acanthodemus, *d*, 264
Acanthoderma Cantraine, *s*, 188
Acanthoderma Ag., *s*, 217
Acanthodes, *s*, 177
Acantholabrus, 194
Acantholepis, *s*, 229
Acanthonemus, 180
Acanthopleurus, *d*, 217
Acanthopsis, *s*, 180
Acanthosoma, *s*, 210
Acanus, 191
Acara, *s*, 207
Acarana, 179
Acentronura, 253
Acestra, *s*, 260
Acestrus, *d*, 224
Acharnes, 239
Achiroides, 247
Acinacea, *d*, 170
Acomus, *s*, 269
Acoura, *s*, 204
Acrocheilus, 261
Acrochordonichthys, 279
Acrodus Geinitz, 189
Acrodus Ag., 191
Acrogaster, 191
Acrognathus, 219
Acrolepis, 177
Acronurus, *s*, 259
Acropoma Owen, *s*, 216
Acropoma T. & S., 260
Acrotemnus, 217
Actinobatis, *d*, 214
Actinolepis, *d*, 225
Acus, *s*, 205
Adiapneustes, *s*, 234
Adonis, *s*, 258
Æchmodus, *s*, 256
Aellopos, 185
Æsopia, 182
Æthalion, 212
Ætöplatea, 193
Agassichthys, *s*, 276
Agoniatas, 227
Agonostomus, 174
Agoreion, *d*, 237
Agosia, 269
Ailurichthys, *s*, 255
Alausa, *s*, 231
Alazon, *d*, 237
Alburnellus, *s*, 269
Alburnops, 270
Alepes, 200
Alepisaurus, *d*, 179
Algansea, 269
Alestes, 221
Aleuterius, *s*, 223
Algoma, *s*, 269
Alopecias, *s*, 192
Altona, *s*, 268
Alysia, *s*, 195
Amanses, 179
Amblyceps, 279
Amblygaster, *s*, 240
Amblyopsis, 210
Amblyopus, *s*, 188
Amblypterus, 177
Amblyrhynchotus, *d*, 263
Amblysemus, 217
Amblyurus, *s*, 184
Ameibodon, *d*, 191
Amia, *d*, 259
Amniocœtus, *d*, 170
Amphibichthys, *s*, 209
Amphichthys, 202
Amphilophus, 277
Amphioxus, *s*, 186
Amphipnous, 196
Amphiprionichthys, 263
Amphiscaurus, *s*, 199
Amphistichus, 255
Amphitium, 181, 218
Analithis, *d*, 237
Anaora, *d*, 179
Anarrhichthys, 262
Anchisomus, *s*, 261
Ancistrodon, *s*, 250
Ancistrus, 260
Anepistomon, *s*, 236
Anguisurus, *s*, 271
Anodontostoma, 241
Anomiophthalmus, *d*, 268
Anoplocapros, 265
Anoplopoma, 277
Anoplus, *s*, 213
Anormurus, *d*, 171
Anosmius, *s*, 266
Antaceus, *d*, 185
Antigonia, 215
Apeches, *s*, 236
Apedodus, *d*, 283
Apeltes, 210
Apepton, *s*, 236
Aperioptus, 240
Apanacanthus, *s*, 263
Aphanopus, 195
Aphobus, *s*, 238
Aphoristia, *s*, 282

- Aphredoderus, 178
 Aphthalmichthys, 272
 Apionichthys, 282
 Apistus, *d*, 174
 Aploactis, 216
 Aplocheilus, 195
 Aplochiton, 212
 Aplurus, *s*, 209
 Apocryptes, *d*, 188
 Apodichthys, 258
 Apodometes, *s*, 237
 Apodontis, 284
 Apogonichthys, 256
 Apogonoides, 240
 Apolectus Bennett, *s*, 175
 Apolectus Cuv. & Val., 285
 Aprion, *s*, 192
 Apsicephalus, *d*, 275
 Aptérichthe, *s*, 269
 Apterigia, *s*, 262
 Apterogasterus, *d*, 184
 Apterygia, *s*, 179
 Aptocyclus, 183
 Aracana, 192
 Arapaima Müller, 216, 229
 Archæacanthus, *s*, 281
 Archæoteuthis, *s*, 264
 Archæus, 218
 Arelia, 282
 Arges, 206
 Argyrea, *s*, 210
 Argyreus, *s*, 211
 Argyrlepes, *s*, 200
 Argyrops, 199
 Argyrosomus De la Pylaie, *s*, 184
 Argyrosomus Ag., *s*, 245
 Ariodes, 243
 Ariosoma, 193, 198
 Arius, *d*, 206
 Arnion, *s*, 237
 Arothron, *s*, 196
 Arripis, 211
 Artedius, 269
 Arthropterus, *d*, 214
 Ascalabos, *s*, 196
 Asellus, *s*, 223
 Aseraggodes, 282
 Asima, *s*, 233, 242
 Aspicottus, 257
 Aspidontus, 180
 Aspidoparia, 215
 Aspidorhynchus, 177
 Aspius, 180
 Aspredinichthys, 279
 Assiculus, *s*, 230
 Asteracanthus, 186
 Asterodermus, *s*, 214
 Asterodon, 209
 Asteroptychius, 239
 Asterophysus, 282
 Astrape, *s*, 193
 Astrocanthus, *s*, 205
 Astrolepis, 206
 Astronesthes, 222
 Astronotus, 200
 Astyanax, 255
 Ateleopus, *d*, 230
 Atherinichthys, *s*, 253
 Atherinoides, *s*, 253
 Atherinopsis, 257
 Atimostoma, *s*, 244
 Attakeopsis, *s*, 284
 Attilus, *s*, 238
 Auchenaspis Egert., *s*, 275
 Auchenaspis Blkr., *s*, 278
 Auchenichthys, *s*, 268
 Aulacocephalus, 213
 Aulacosteus, 229
 Aulodus, *s*, 245
 Aulopyge, 209
 Autolepis, 218
 Badis, 253
 Bagarius, 253
 Bagroides, 248
 Bagrus, *d*, 194
 Baiodon, *s*, 277
 Baione, *s*, 210
 Balitora, *s*, 178
 Ballerus, 211
 Basilichthys, 258
 Batis, *s*, 187
 Batrachocephalus, 230, 278
 Batrachoglanis, *d*, 281
 Batrachops Heckel, 263
 Batrachops Bibron, *s*, 207
 Batrachopus, *s*, 172
 Bdellostoma, *s*, 182
 Bedula, *s*, 179
 Belemnobatis, 261
 Belobranchus, 268
 Belodontichthys, 279
 Belonopsis, *s*, 256
 Belonorhynchus, *s*, 279
 Belonostomus, 180
 Bengala, 179
 Benthophilus, 176
 Berycopsis, 245
 Betta, 245
 Bibronia, *s*, 219
 Blenmechis, *s*, 185
 Blenniomæus, *s*, 245
 Blenniops, *s*, 266
 Blennitrachus, *s*, 198
 Blennophis, *s*, 202
 Blicca, 281
 Bodianus, 171
 Bogoda, *s*, 253, 275
 Boleophthalmus, *d*, 188
 Boleosoma, 210
 Boops, *s*, 258
 Borborodes, *s*, 237
 Borholæpis, 206
 Bothrolæmus, *s*, 265
 Bothrosteus, *d*, 224
 Boxaodon, *d*, 238
 Brachionichthys, 263
 Brachioptilon, *s*, 244
 Brachirus, *s*, 203
 Brachycephalus, *d*, 275
 Brachygnathus, *s*, 224
 Brachyochirus, *d*, 209
 Brachyrus, *s*, 201
 Brachysomophis, 271
 Branchiostoma, 180
 Bremaceros, 208
 Breviceps, *s*, 194
 Brontes, *s*, 206
 Brotella, 281
 Brotulophis, 281
 Brychætus, 224
 Brycinus, 242
 Brycon, 221
 Bubalichthys, *d*, 261
 Bufichthys, *s*, 201
 Bunocephalichthys, 279
 Bunocephalus, 265
 Butis, 267
 Byssacanthus, 225
 Bythites, 190

- Byzenos, *s.*, 216
 Cacus, *d.*, 264
 Cacodoxus, *d.*, 241
 Cæso, *s.*, 235
 Calamopleurus, 208
 Calamostoma, 177
 Calamus, 199
 Calignathus, *s.*, 253
 Callanthias, 195
 Callechelys, 271
 Callicanthus, 201
 Callichrous, *s.*, 172
 Callipteryx, 191
 Callopterus, *s.*, 284
 Calloptilum, *s.*, 222
 Calophysus, 216
 Calopomus, *d.*, 224
 Calycilepidotus, 262
 Camarina, *s.*, 255
 Campodus, 220
 Campostoma, 261
 Caninoa, *d.*, 221
 Caninotus, *s.*, 222
 Cannorhynchus, *s.*, 241
 Cantherines, 205
 Canthidermis, 204
 Canthigaster, 198
 Canthirhynchus, *s.*, 202
 Canthophrys, *s.*, 204
 Cantoria, 282
 Capellaria, *s.*, 235
 Capitodus, 212
 Capoëta, 210
 Capriscus, *s.*, 204
 Caprodon, 216
 Caprophonus, *s.*, 243
 Capropygia, 265
 Caracanthus, 227
 Caragola, *s.*, 249
 Carangichthys, *s.*, 250
 Carangodes, *d.*, 270
 Carangoides, 248
 Carangopsis, 181, 218
 Carangus, *d.*, 180
 Carapus, *d.*, 243
 Carassius, 176
 Carcharias, *s.*, 234
 Carcharodon Smith, 190
 Carcharodon M. & H., 192
 Carcharopsis, *s.*, 214
 Carelophus, *s.*, 226
 Cariniceps, *s.*, 260
 Carpio, *s.*, 281
 Catla, *s.*, 219
 Catochænum, *s.*, 241
 Catonotus, *d.*, 254
 Catophorhynchus, *s.*, 263
 Catopra, *s.*, 248
 Catoprion, 221
 Catopterus Ag., 177
 Catopterus Redfield, *s.*, 190
 Catulus, *s.*, 190
 Caturus, 179
 Cebedichthys, 262
 Cenisophius, *d.*, 226
 Centaurus, *s.*, 265
 Centracion, *d.*, 176
 Centridermichthys, 222
 Centroodus M'Coy, *s.*, 243
 Centroodus Giebel, 231
 Centrolepis, 280
 Centrogenys, 212
 Centromochlus, 282
 Centrophorus, *d.*, 192
 Centroscyllium, 193
 Centrurrophis, *s.*, 271
 Cephalaspis, 181
 Cephalinus, *s.*, 259
 Cephalocassis, 278
 Cephalus Bon., *s.*, 226
 Cephalus Basilewski, *s.*, 262
 Cephus, *s.*, 203
 Cepolophis, *s.*, 272
 Ceramurus, 226
 Ceratias, 227
 C raticthys Baird &
 Grd., 252
 Ceraticthys Girard, *s.*, 270
 Ceratodus, *d.*, 191
 Ceratoptera, *s.*, 193
 Cerdo, *s.*, 235
 Cerna, *d.*, 187
 Cestræus, *d.*, 185
 Cestreus McClelland, 212
 Cestreus Gronow, *s.*, 258
 Chaca, 206
 Chaenichthys, *s.*, 222
 Chaenogobius, 280
 Chæticthys, *s.*, 238
 Chætobranchus, 207
 Chætodermis, 205
 Chætolabrus, *s.*, 199
 Chætomus, 220
 Chætopterus, *s.*, 223
 Chætoptoma, 230
 Chæturichthys, 222
 Chalcinus, 242
 Chalisoma, *s.*, 204
 Chanda, 172
 Channichthys, 222
 Channo-Muraena, 223
 Charax, *s.*, 173
 Chasmodes, 185
 Chaunax, 229
 Chedrus, *s.*, 202
 Cheilichthys, *s.*, 196
 Cheilinoidea, 248
 Cheilobarbus, 244
 Cheilobranchus, *s.*, 223
 Cheilonemus, *d.*, 266
 Cheilopogon, *s.*, 207
 Cheilotrema, *s.*, 230
 Cheiracanthus, 181
 Cheirodon, 258
 Cheiroodus M'Coy, 239
 Cheiroodus Pander, *s.*, 283
 Cheirolepis, 181
 Chelonichthys, *s.*, 217
 Chelonodon, 196
 Chelyophorus, 225
 Cheonda, *s.*, 270
 Chiastolepis, 220
 Chilodus M. & T., *s.*, 221
 Chilodus Giebel, *d.*, 231
 Chilomycterus, 228
 Chilopterus, *d.*, 283
 Chilorhinus, 249
 Chiloscyllium, 192
 Chimæracanthus, *s.*, 283
 Chirocentrites, *s.*, 242
 Chirolophis, 202
 Chiropsis, *s.*, 275
 Chirostoma, 200
 Chlorichthys, *s.*, 200
 Chlorophthalmus, 206
 Chlorurus, *s.*, 199
 Chærodon, 230
 Choëroichthys, 254
 Chærops, *s.*, 251
 Chologaster, 251

- Chomatodus, 190
 Chondrochilus, *s*, 211
 Chondrorhynchus, *s*, 211
 Chondrosteus Egert., 280
 Chondrosteus Ag., 217
 Chondrostoma, 180
 Chonerhinos, 256
 Choridactylus, 240
 Chorisochismus, 228
 Chromichthys, 280
 Chromis, *s*, 259
 Chrysichthys, 278
 Chrysiptera, *d*, 199
 Chrysolephus, *d*, 199
 Cibotium, *s*, 265
 Cichlasoma, *d*, 200
 Cichlaurus, *d*, 198
 Cichlops, *s*, 143
 Ciliata, 176
 Cimolichthys, 273
 Citharinus, 243
 Cirrhilabrus, 227
 Cirrhimuræna, 271
 Cirrhisomus, *s*, 205
 Cirrhitichthys, 274
 Cirripectes, *s*, 202
 Citharus, *s*, 193
 Cladacanthus, *s*, 213
 Cladocyclops, 208
 Cladodus, 213
 Clarotes, 265
 Climatius, 225
 Climaxodus, *s*, 239
 Clinitrachus, *s*, 197
 Clinostomus, *d*, 270
 Cliola, *s*, 269
 Clupeichthys, *s*, 264
 Clupeoides, *s*, 247
 Clupeonia, *d*, 231
 Clupisoma, 204
 Clupisudis, 202
 Clypeocottus, *s*, 255
 Cnidon, *s*, 227, 243
 Cobiitichthys, *s*, 279
 Cobitopsis, 254
 Coccodus, 247
 Coccolepis, 218
 Coccolus Bon., *s*, 226, 284
 Coccolus Cocco, *s*, 219
 Coccosteus, 218
 Cochliodus, 191
 Cochlognathus, 255
 Cocotropus, 282
 Codoma, 270
 Cœcilophis, *s*, 271
 Cœlacanthus, 218
 Cœlocephalus, *s*, 219
 Cœlodus, *d*, 270
 Cœlolepis, 273
 Cœlogaster, 181
 Cœlonotus, 266
 Cœloperca, *d*, 224
 Cœlopoma, *s*, 224
 Cœlorhynchus, 219
 Coius, 172
 Colobodus, *s*, 217
 Colonodus, 239
 Compsacanthus, *s*, 273
 Conchodus, 239
 Conger, *s*, 167
 Congermuræna, *s*, 272
 Congerodon Kaup, 271
 Congerodon Blkr., 277
 Congiopus, 170
 Congrus, *s*, 223
 Conodus, *s*, 217
 Conorhynchus, 278
 Conosaurus, *d*, 246
 Conostome, *d*, 269
 Coptodon, 253
 Corax, 214
 Cordylus, *s*, 259
 Corica, *d*, 172
 Corynopoma, *s*, 281
 Corythobatus, *d*, 241
 Corythroichthys, *s*, 253
 Cosmacanthus, 225
 Cosmolepis, 280
 Cossyphus Cuv. & Val.,
 s, 194
 Cossyphus McClelland,
 s, 220
 Cottopsis, *d*, 249
 Cotylephorus, *s*, 204
 Cotylis, *s*, 215
 Couchia, *s*, 274
 Crassilabrus, *d*, 199
 Crenicichla, 207
 Creotroctes, *s*, 237
 Cricathanthus, *s*, 213
 Cricodus, 217
 Criciceps, 185
 Crius, *s*, 223
 Cromileptes, 198
 Crossorhinus, *s*, 192
 Cryptacanthodes, 197
 Cryptocentrus, 188
 Ctenacanthus, 186
 Ctenodon Nilsson, *s*, 266
 Ctenodon Bon., *s*, 175
 Ctenodon Sw., *s*, 201
 Ctenodus, *d*, 191
 Ctenogobius, 281
 Ctenolabrus, 194
 Ctenolepis, *d*, 217
 Ctenopoma Peters, 230,
 266
 Ctenopoma Heckel, *s*, 270
 Ctenops, *s*, 227
 Ctenoptychius, 190
 Cubiceps, *s*, 215
 Cuius, *s*, 267
 Culter, *d*, 262
 Cyanichthys, *s*, 265
 Cyclarthrus, *d*, 214
 Cyclichthys, 265
 Cyclobatis, 220
 Cyclopium, 204
 Cyclopoma, 177
 Cyclurus, *d*, 218
 Cylindracanthus, *d*, 273
 Cymatogaster, 257
 Cynædus, *s*, 200
 Cynichthys, *s*, 198
 Cynicoglossus, *d*, 187
 Cynoglossa, *s*, 226
 Cynoponticus, 228
 Cynopotamus, 242
 Cyprinella, 270
 Cyprinion, 211
 Cyprinopsis, *s*, 187
 Cypselurus, 203
 Cyrene, *s*, 215
 Dajaus, *d*, 185
 Damalichthys, 258
 Dangila, 210
 Dapalis, 238
 Dascillus, *s*, 259
 Dasybatus, *s*, 187
 Datnioides, *s*, 252

- Davalla, 278
 Decepterus, 248
 Demiurga, *s.*, 237
 Dendrochirus, 198
 Dendrodus, 209
 Denius, *s.*, 237
 Deportator, *s.*, 237
 Dercetis, 180
 Dermogenys, 172
 Desmacanthus, *s.*, 283
 Diabolichthys, *s.*, 270
 Diacantha, *s.*, 204
 Diaphasia, *s.*, 215
 Diapterus, 208
 Dichelospondylus, *s.*, 268
 Dichotomycter, *s.*, 263
 Dicotylchthys, 265
 Dierenodus, 254
 Ditea, *s.*, 207
 Dictyodus, 196
 Dictyopyge, 231
 Dictyosoma, 227
 Di'onia, 211
 Dilobomycter, *s.*, 263
 Dimeracanthus, 229
 Dinematischthys, 263
 Dionda, 269
 Diphreutes, *d.*, 241
 Diplacanthus Duff, 210
 Diplacanthus Ag., 225
 Diplectrum, 265
 Diplocheilus, 172
 Diplodus, *s.*, 213
 Diplomyste, 269
 Diplopterax, 265
 Diplopterus, *s.*, 181
 Dipteronotus, 256
 Dipterigonotus, *s.*, 240
 Discognathus, *s.*, 211
 Discopyge, 230
 Distichodus M. & T., 227
 Distichodus Cuv. & Val., 242
 Disticholepis, *s.*, 247
 Ditrema, 223
 Doryrhamphus, 254
 Doryichthys, 254
 Doydixodon, 266
 Dorypterus, 212
 Drepane, *d.*, 175
 Ductor, 218
 Dulichthys, *d.*, 175
 Dussumieria, 231
 Duymæria, 267
 Echemythes, *§*, 235
 Echenus, *s.*, 224
 Echidnocephalus, *d.*, 283
 Echiodon, *s.*, 190
 Echiopsis, *s.*, 271
 Echiostoma, 215
 Edaphodon, 191
 Edestus, 272
 Elagatis, 206
 Elapsopsis, *s.*, 271
 Elasmodus, 214
 Elastoma, *s.*, 198
 Ellipesurus, 212
 Ellops, *s.*, 236
 Eleuthurus, *s.*, 171
 Elonichthys, 233
 Elopopsis, 270
 Elopides, 219
 Elops, *s.*, 175
 Eleotriodes, 275
 Embiotoca, 252
 Emmelichthys, 223
 Encheiziphis, 276
 Encheliophis, 215
 Enchelycore, 271
 Enchelycotte, *s.*, 268
 Enchelynassa, *d.*, 265, 271
 Enchelyopus, *s.*, 181, 218
 Enchodus, 181
 Encrotes, *s.*, 236
 Endactis, *s.*, 280
 Englottogaster, *d.*, 236
 Enixe, *d.*, 235
 Enneapterygius, 184
 Enneodon, *s.*, 259
 Ennichthys, *s.*, 258
 Enophrys, 202
 Enoplosus, 169
 Epalzeorhynchus, 264
 Eperlanus Gaimard, *s.*, 249
 Eperlanus Basilewsky, *s.*, 262
 Ephippoin, *d.*, 263
 Epicyrus, *s.*, 221
 Epinnula, 260
 Epipedorhynchus, *s.*, 263
 Erethistes, 243
 Erismacanthus, 239
 Erosa, 197
 Erpichthys, *s.*, 202
 Erythrichthys T. & S., *s.*, 227
 Erythrichthys Bon., *s.*, 175
 Erythrinus, 173
 Erythrodon, *s.*, 251
 Erychthys, *s.*, 199
 Esomus, 202
 Esunculus, *d.*, 272
 Etrumeus, 253
 Euanemus, *s.*, 216
 Eucinostomus, 274
 Eucynodus, 260
 Eudynama, *s.*, 238
 Eugnathus, *d.*, 194
 Eupemis, *s.*, 200
 Euporista, *s.*, 237
 Eupncea, *s.*, 238
 Euryarthra, *s.*, 214
 Euryglossa, 282
 Eurygnathus, *s.*, 224
 Eurylepis, 276
 Eurymyctera, *s.*, 271
 Eurynotus, *s.*, 181
 Eurypholis, *s.*, 247
 Eurypleura, *s.*, 282
 Eutropius, 243
 Exocallus, *s.*, 183
 Exodon, *d.*, 221
 Exoles, *s.*, 236
 Fario, *s.*, 233
 Farionella, *s.*, 242
 Felichthys, *d.*, 203
 Fluta, *s.*, 169
 Furo, *d.*, 236
 Gadella, 215
 Gadiculus, 246
 Gadopsis Rich., 223
 Gadopsis Filippi, *s.*, 265
 Gadopsis Ag., *s.*, 224
 Gagata, 279
 Galeichthys, 206
 Galeocerdo, 192
 Galeodes, *d.*, 259
 Gallichthys, *s.*, 178
 Gambusia, 260

- Ganodus, 214
 Gardonus, *s.*, 226
 Gasteronemus Ag., 177
 Gasteroschisma, 227
 Gasterotokeus, *s.*, 253
 Gastronemus Bon., *s.*, 226
 Gastrophysus, *s.*, 216
 Gazza, 184
 Geneion, *s.*, 263
 Genicanthus, *s.*, 198
 Genidens, 264
 Genyorogete, 241
 Genypterus, 276
 Geophagus, 207
 Geotria, 249
 Gibelion, 211
 Gila, 252
 Ginglymostoma, 190
 Girardinus, *s.*, 261
 Girella, 179
 Giton, *s.*, 268
 Glanis Ag., *s.*, 267
 Glanis Gronow, *s.*, 259
 Glaphyrodus, *s.*, 228
 Glaucosoma, 216
 Glaucostegus, *s.*, 225
 Gliscus, *s.*, 235
 Globulodus, 212
 Glossodon, *s.*, 211
 Glossodus Costa, *s.*, 253
 Glossodus M'Coy, 239
 Glyptocephalus Gottsche, 182
 Glyptocephalus Ag., *s.*, 217
 Glyptolæmus, *s.*, 284
 Glyptolepis, 218
 Glyptopomus, 218
 Glyptosternon, 212
 Glyptosteus, *s.*, 217
 Gnathanacanthus, 263
 Gnathanodon, 247
 Gobileptes, *d.*, 198
 Gobiodon, 267
 Gomphodus, *s.*, 274
 Goniobatis, *s.*, 277
 Goniodus, *s.*, 184
 Goniognathus, *s.*, 218
 Gonocephalus, *s.*, 258
 Gonopterus, *s.*, 258
 Gonorhynchus, *s.*, 195
 Gonostoma, *s.*, 172
 Gouania, 176
 Grammichthys, *s.*, 282
 Gremilla, *s.*, 234
 Grundulus, 228
 Guiritinga, 278
 Gunnellichthys, 277
 Gunnellus, *s.*, 185
 Gymnachirus, 282
 Gymnapistes, 201
 Gymnelis, 193
 Gymnnoanthus, 202
 Gymnocephalus, *s.*, 191
 Gymnogaster, *s.*, 168
 Gymnostomus, 211
 Gymnothorax, 168
 Gymnura, *s.*, 190
 Gyracanthus, 186
 Gyrodus, 177
 Gyrolepis Kade, *s.*, 281
 Gyrolepis Ag., 177
 Gyronchus, 217
 Gyropristis, *s.*, 213
 Gyroptychius, 239
 Gyrosteus Ag., 217
 Gyrosteus Egert., 280
 Hadrodus, 283
 Hadropterus, 254
 Halec, 180
 Halecopsis, 218, 219
 Halicampus, 253
 Halichæres, *d.*, 184
 Halieutæa, 189
 Halocypselus, *s.*, 284
 Hamiltonia, *s.*, 200
 Hapalogenys, 222
 Haplacanthus, 225
 Harengula, 231
 Harpagifer, 222
 Harpochirus, *d.*, 241
 Harpodon, 172
 Hegerius, *d.*, 226
 Helicobranchus, *s.*, 260
 Helicophagus, 277
 Helmichthys, *s.*, 256
 Helodus, 190
 Helops, 178
 Hemerocætes, 189
 Hemichromis, 276
 Hemidoras, *s.*, 278
 Hemigaleus, *d.*, 250
 Hemigrammus, 281
 Hemiodus M. & T., 243
 Hemiodus Müller, 216
 Hemiodon, 260
 Hemimarsupium, 254
 Hemipimelodus, 278
 Hemipristis, 214
 Hemirhynchus, *s.*, 219
 Hemiscyllium, 190
 Hemisilurus, 279
 Hemistoma, *s.*, 199
 Hemithylacus, *s.*, 272
 Hemitrygon, 190
 Hemiulus, *d.*, 199
 Hepsætia, 187
 Heptadiodon, 264
 Heptanema, 274
 Heptapterus, 278
 Heptatrema, *s.*, 268
 Herichthys, *s.*, 255
 Heros, *s.*, 207
 Herpetoichthys, *s.*, 271
 Hesperanthias, *s.*, 215
 Heterandria, 251
 Heterodon, *s.*, 225
 Heterognathodon, *s.*, 233
 Heterognathus, *s.*, 258
 Heteromycteris, 282
 Heterophthalmus, *s.*, 267
 Heteropneustes, 196
 Heterosteus, *s.*, 267
 Heterostichthys, 258
 Heterotis Müller, *s.*, 216
 Heterotis Cuv. & Val., *s.*, 229
 Hexabranchus, *s.*, 184
 Hexacanthus, *d.*, 193
 Hexanematchthys, 278
 Hieroptera, *s.*, 209
 Himantolophus, 193
 Himantura, 190
 Hippichthys, 241
 Hippocephalus, *d.*, 202
 Hippoglossoides, 182
 Histiodromus, *s.*, 234
 Histionotus, 256
 Histiurus, *s.*, 245
 Holacanthodes, *s.*, 233
 Holacanthus, *s.*, 258

- Holconotus, 255
 Holochondrus, *s.*, 261
 Holodus, *s.*, 228
 Holoptychus, 194
 Holosteus, 219
 Homacanthus, 225
 Homalopomus, *s.*, 269
 Homodon, *s.*, 230
 Homonotus, 245
 Homoprion, *s.*, 265
 Homostius, 267
 Homothorax, *s.*, 225
 Hoplisoma, *s.*, 203
 Hoplocottus, *s.*, 282
 Hoplogygus, *s.*, 217
 Hoplophycis, *s.*, 281
 Hoplopteryx, 191
 Hoplosternum, 281
 Hudsonius, *d.*, 270
 Huso, *s.*, 177
 Hybodus, 186
 Hybognathus, 261
 Hybopsis, 254
 Hyborchynchus, 261
 Hydrocion, *s.*, 269
 Hydrocynus, 171
 Hydrolycus, 221
 Hydronus, *s.*, 176
 Hydropardus, *s.*, 244
 Hylomyzon, *s.*, 261
 Hymenphysa, *s.*, 195
 Hynnis, 178
 Hyoprorus, *s.*, 254
 Hyostoma, *s.*, 254
 Hypeneus, *s.*, 228
 Hyperprosopon, 257
 Hypnos, *s.*, 250
 Hypodytes, *d.*, 235
 Hypolophus, *s.*, 193
 Hypoprion, 192
 Hysinotus, *s.*, 223
 Hypsodon, *d.*, 186, 219
 Hypsolepis, *s.*, 245, 255
 Hypsophrys, *s.*, 277
 Hysterocarpus, 257
 Icania, 282
 Icelus, 226
 Ichthyapus, *s.*, 231
 Ichthyacallus, *s.*, 200
 Ichthyocampus, 253
 Ichthyococcus, 206
 Ichthyocolla, 168
 Ichthyocoris, *s.*, 206
 Ichthyorhynchus, *s.*, 274
 Ichthyosauroides, 189
 Ichthyoscopus, 202
 Idus, 281
 Harches, *d.*, 241
 Hisha, 227
 Huocetes, 212
 Imogaster, 275
 Ionoscopus, 253
 Ischyodus, 214
 Ischypterus, *s.*, 231
 Ischyrrhiza, *s.*, 272
 Ischyrocephalus, *s.*, 283
 Isodus M'Coy, 239
 Isodus Heckel, *s.*, 243
 Isticus, 219
 Isurus Egert., *s.*, 189
 Isurus Ag., *s.*, 218
 Janassa, 176
 Kentrocapros, 265
 Keris, 181
 Ketengus, 230, 278
 Kokkoderma, 283
 Kowala, 231
 Krohnus, 219
 Kryptoptericthys, 279
 Kryptopterus, 279
 Labeobarbus, *s.*, 186
 Labrichthys, 256
 Labrisomus, 202
 Labristoma, *s.*, 200
 Labrodon, 275
 Labroides, 248
 Labrophagus, *d.*, 224
 Lactarius, 178
 Lactophrys, 204
 Lagocephalus, 205
 Lagodon, 265
 Læmargus, *s.*, 192
 Læviraja, *d.*, 187
 Lamnodus, *s.*, 225
 Lamnostomo, 271
 Lampanyctus, 206
 Lampetra, 249
 Lampugus, *s.*, 178
 Laparus, *d.*, 224
 Lateolabrax, *d.*, 274
 Latris, 197
 Laurida, *s.*, 203
 Lavinia, 257
 Lebiasina, 229
 Legnonotus, 256
 Leiacanthus, 186
 Leiocassis, 278
 Leiocottus, 269
 Leiodon Wood, *s.*, 232
 Leiodon Sw., 198
 Leioglossus, 248
 Leiopsis, 174
 Leirus, *s.*, 179
 Leisomus, *s.*, 205
 Leiuranus, *d.*, 253
 Leirus Dum., *s.*, 268
 Leirus Sw., *s.*, 200, 205
 Lepidion, *d.*, 203
 Lepidocephalus, 279
 Lepidogobius, 280
 Lepidopides, *s.*, 246
 Lepidorhinus, 225
 Lepidosiren, 189
 Lepisoma, *s.*, 210
 Leptacanthus, 186
 Leptaspis, *s.*, 250
 Leptocarias, 190
 Leptocephalichthys, *s.*, 267
 Leptocephalus, *s.*, 262
 Leptocharias, *s.*, 193
 Leptocottus, 257
 Leptodes, *s.*, 203
 Leptognathus, *s.*, 205
 Leptogunnellus, 262
 Leptoichthys, 254
 Leptonotus, 253
 Leptonurus, *s.*, 241
 Leptorhinophis, *s.*, 271
 Leptorhynchus Lowe, *s.*,
 244
 Leptorhynchus Smith, *s.*,
 251
 Leptoscarus, 199
 Lepturus, *s.*, 259
 Leucaspius, 281
 Leucos, *d.*, 215
 Leucosomus, *d.*, 211
 Libys, 212
 Limamuræna, *s.*, 271
 Limanda, 182

- Limia*, *s.*, 261
Lioniscus, 185
Lithognathus, 199
Lithulus, *d.*, 238
Lophistomus, *d.*, 250
Lophosteus, 274
Lotella, 281
Loxodon, 192
Loxostomus, *d.*, 224
Luciobarbus, 211
Luciocephalus, 247
Luciosoma, 264
Lumpus, *s.*, 171
Lutoderia, *s.*, 184
Lycodes, 193
Lycodontis, *d.*, 220
Lycodus, 283
Lycogenis, *d.*, 174
Lycoptera, 239
Machæracanthus, 276
Machærium, *s.*, 216
Machærius, *s.*, 284
Macrochyrus, *s.*, 201
Macrodon, *s.*, 216
Macrogathus, *s.*, 259
Macrones, *s.*, 269
Macropetalichthys, 229
Macropoma Ag., 181, 217
Macropoma Egert., *s.*, 280
Macrops, *s.*, 269
Macrosemius, 179
Macrostoma, *s.*, 191
Maina, *s.*, 236
Malacosteus, 240
Manta, 174
Massaria, *s.*, 236
Maurolicus, 191
Mecolepis, *s.*, 273
Meda, 269
Megalaspis, 248
Megalepis, *s.*, 262
Megalichthys, *s.*, 185, 217
Megalodon, 181
Megalurites, *d.*, 245
Megalurus, *s.*, 177
Megaprotodon, 238
Megastoma, *s.*, 226
Meladerma, *s.*, 200
Melanichthys, *s.*, 223
Melantha, *s.*, 238
Melanodactylus, 278
Melanura, *s.*, 252
Meletta, *s.*, 231
Melichthys, 204
Memarchus, *s.*, 268
Membras, 187
Menaspis, 233
Mendosoma, 238
Menidia, 187
Meristodon, *d.*, 214
Merlinus, *d.*, 224
Merlucius, *s.*, 259
Merlus, *s.*, 238
Merou, *s.*, 175
Mesites, *s.*, 212
Mesodon, *s.*, 250
Mesogaster, 219
Mesopristes, *s.*, 225
Metopias, *s.*, 215
Microcanthus, 198
Microchirus, 187
Microdon, *s.*, 177
Microdonophis, *s.*, 271
Microdus, *d.*, 275
Microgaster, *s.*, 199
Microichthys, 251
Microlepis Eichw., *d.*, 220
Microlepis Bon., *s.*, 226
Micrometrus, 257
Micronema, 279
Microphis, 254
Micropogonias, *s.*, 175
Microps, *s.*, 177
Microspondylos, *d.*, 217
Microstomus, *d.*, 182
Minomus, *s.*, 269
Mochokus, 182
Mola, *s.*, 215
Molacanthus, *s.*, 205
Molariii, *s.*, 223
Molvella, *s.*, 281
Moniana, *s.*, 270
Monochirus Bon., *s.*, 282
Monochirus Kaup., *s.*, 187
Monocirrhus, 207
Monotreta, *s.*, 263
Monopteros, 169
Mordacia, *s.*, 249
Mormyrhynchus, *s.*, 203
Mormyrops, 216
Mormyrus, 167
Mulloides, 240
Mupus, 178
Murænesox, 220
Murænichthys, 252
Murænoblenna, *s.*, 272
Murænopsis, *s.*, 271
Mylesinus, 242
Myleus, 221
Mylocheilus, 262
Mylognathus, *d.*, 272
Mylopharodon, 262
Myriacanthus, 186
Myriodon, *s.*, 230
Myrmillo, *s.*, 237
Myrophis, 249
Myrus, *s.*, 271
Mystriophis, 271
Mystus, *s.*, 259
Mytilophagus, *s.*, 257
Narcine, 180
Narcodes, *d.*, 225
Narcopterus, *d.*, 214
Nasus, *s.*, 262
Nauclerus, *s.*, 178
Naulas, 225
Naupygus, *d.*, 224
Neanis, *s.*, 236
Nebrius, *d.*, 184
Nemacanthus, 186
Nemadactylus, 197
Nematogenys, 258
Nematopoma, *s.*, 281
Nematosoma, *d.*, 176
Nemichthys, 240
Nemipterus, 199
Nemobrama, *s.*, 223
Nemophis, 281
Nemopteryx, 219
Nemotherus Costa., *s.*, 180
Nemotherus Sw., *s.*, 201
Nephrotus, *s.*, 249
Nestis, *s.*, 185
Netuma, 278
Nocomis, 269
Nomalus, *s.*, 234
Nostolepis, 274
Notacmon, 236
Notæus, 218
Notagodus, 177

- Nothosoma, 280
 Nothosomus, 217
 Notorhynchus, 216
 Notothenia, 222
 Nummopalatus, *s*, 284
 Nuria, *s*, 210
 Octonematischthys, 278
 Odontacanthus, *s*, 225
 Odontaspis, *d*, 184
 Odonteus, *s*, 194
 Odontostomus, *s*, 191
 Odontotodus, 274
 Odonus, *d*, 238
 Ognichodes, *s*, 202
 Oligocottus, 269
 Oligopleurus, 247
 Olisthops, 247
 Olyra, 212
 Ommatolampes, 246
 Omobranchus, *s*, 185
 Omosoma, 275
 Omphalodus, *s*, 232
 Onchus, 186
 Onychodus, 276
 Ophicardia, *s*, 220
 Ophichthys, *s*, 205
 Ophiodon, 257
 Ophiopsis, 179
 Ophirachis, *d*, 268
 Ophisoma, *s*, 205
 Ophisomus, *s*, 202
 Ophisternon, *s*, 220
 Ophisurapus, *s*, 271
 Ophithorax, *s*, 220
 Oplegnathus, 208
 Oplopoma, *s*, 269
 Oplopomus, 188
 Opsarius, *d*, 195
 Oracanthus, 186
 Orectolobus, 187
 Oreinus, *d*, 195
 Orestias, 228
 Ornichthys, *s*, 201
 Orodus, 190
 Oroptychus, *d*, 228
 Orthacanthus, *d*, 213
 Orthocolus, *s*, 238
 Orthodon, 269
 Osmeroides, 219
 Osteobrama, *s*, 211
 Osteogeneiosus, 230
 Osteoglossum, *s*, 262
 Osteoplax, 239
 Ostichthys, 174
 Ostogeneiosus, 278
 Otodus, *d*, 214
 Oxudercus, 213
 Oxybeles, *s*, 223
 Oxycirrhites, 274
 Oxydoras, 265
 Oxygnathus, 264
 Oxygonius, *d*, 226
 Oxyrhina, *s*, 190, 218
 Oxytes, 231
 Oxyurichthys, 279
 Ozodura, *s*, 196
 Pachycephalus, *d*, 224
 Pachycormus, 177
 Pachygaster, 231
 Pachylabrus, *s*, 257
 Pachylepis Pander, *s*, 274
 Pachylepis Quenstedt, *s*,
 283
 Pachynathus, *s*, 199
 Pachypterus, *s*, 204
 Pachyrhizodus, 246
 Pachystomus, *s*, 211
 Pachyurus, *s*, 205
 Pagetodes, 222
 Paleobates, 243
 Paleoscyllium, 276
 Paleoteuthis, *s*, 266
 Palamita, *d*, 175
 Pallasia, *s*, 196
 Palimphyes, 218
 Pamphractus, *s*, 218
 Pampus, 187
 Palymphyes, 231
 Pangasius, 206
 Parabatrachus, 254
 Parachromis, *d*, 277
 Paralabrax, 269
 Pareiodon, 265
 Parexus, 225
 Parodon, 242
 Parophrys, 257
 Paschalestes, *s*, 236
 Passolodon, *s*, 191
 Pastinaca Dekay, *s*, 210
 Pastinaca Gronow, *s*, 258
 Pastinaca Duméril, *s*, 268
 Patecus, 222
 Pedalion, *s*, 193
 Pedites, *d*, 236
 Pelargorhynchus, 283
 Pelecus, 180
 Pellona, *s*, 231
 Pelonectes, *s*, 234
 Peloria, *s*, 219
 Pentaprion, 245
 Perca-Labrax, *d*, 213
 Percarina, 207
 Percichthys, 258
 Percilia, 258
 Percina, 211
 Percopsis, 232
 Percostoma, *d*, 224
 Periergus, 237
 Perilampus, *s*, 195
 Periodus, 217
 Periophthalmus, 169
 Peristhethus, *s*, 282
 Péromere, *s*, 268
 Peroptera, *s*, 238
 Peropus, *s*, 195
 Petalodus, 207
 Petalopteryx, 247
 Petrocephalus, 260
 Petrodus, 239
 Petronason, *s*, 199
 Petrosirtes, 173
 Phænodon, *s*, 247
 Phasganodus, 283
 Phasganus, *d*, 224
 Phagorus, 220
 Phalacronotus, 279
 Phalacrus, *s*, 224
 Phanerodon, 258
 Phaneropleuron, 284
 Pharopteryx, *s*, 251
 Philypnoides, *s*, 241
 Philypnus, *s*, 188
 Phobetor, *s*, 226
 Pholidichthys, 267
 Pholidopleurus, 279
 Pholidotus, *s*, 244
 Phorcynus, *s*, 261
 Phoxinellus, 215
 Phoxinus, *s*, 180
 Phucocætes, 212

- Phyllodus, 217
 Phyllolepis, 219
 Phyllopteryx, 205
 Physichthys, *s*, 266
 Physiculus, 281
 Plysogaster, *s*, 196
 Physonemus, 239
 Piabucina, 242
 Pigus, *s*, 226
 Pileoma, *s*, 210
 Pimelonotus, *s*. 281
 Pinirampus, 278
 Pinjalo, 225
 Piramutana, 279
 Pirarara, *s*, 173
 Piratinga, 279
 Pirene, *s*, 235
 Pisodonophis, 271
 Pisodus, *d*, 227
 Placosteus, *s*, 217
 Placothorax, *s*, 218
 Plagiusa, *s*, 187
 Plagusia Sw., *s*, 203
 Plagusia Bon., *s*, 226
 Planesox, *d*, 260
 Platacanthus, *d*, 246
 Platichthys, 257
 Platinx, *s*, 181
 Platophrys, 203
 Platops, *s*, 260
 Plataxoides, *s*, 264
 Platyacanthus, *s*, 239
 Platycanthus, *s*, 204
 Platycara, *s*, 195
 Platycormus, 283
 Platygaster, *s*, 203
 Platygenys, 260
 Platygnathus, *s*, 218
 Platylemus, 245
 Platylepes, *s*, 200
 Platyneimaticthys, 279
 Platypodus, 169
 Platyptera, *s*, 189
 Platypterus, *s*, 201
 Platyrrhina, *d*, 193
 Platsyoma, *s*, 185
 Platysomus Ag., *d*, 181
 Platysomus Sw., *s*, 201
 Platysqualus, *s*, 204
 Platyctacus, *s*, 168
 Plecoglossus, 230
 Plectroodus, *s*, 194
 Plectrolepis Ag., *s*, 181, 218
 Plectrolepis Egert., *s*, 246
 Plectrostoma, *s*, 237
 Pleionemus, *d*, 218
 Pleiopterus, *s*, 181
 Plethodus, *d*, 245
 Pleuracanthus, *s*, 186
 Pleuroodus, *d*, 213
 Pleurolepis, *s*, 251
 Pleuronichthys, 257
 Pleuropholis, 280
 Pleurothyris, *s*, 215
 Pneumabanchus, *s*, 220
 Podabrus, *s*, 240
 Podager, *s*, 236
 Podocephalus, *d*, 224
 Podocys, 191
 Pododus, *d*, 217
 Pogonathus, *s*, 175
 Pogonichthys, 257
 Pogonognathus, *s*, 240
 Pœcilichthys, 254
 Pœcilocephalus, *s*, 271
 Pœcilodus, 266
 Pœcilophis, *s*, 272
 Pœcilops, 254
 Pœcilosoma, *s*, 245
 Pœcilurichthys, 281
 Polemius, *s*, 282
 Pollachius, 226
 Polyacanthus, 173
 Polycanthus, *s*, 200
 Polycentrus, 239
 Polymixia, 192
 Polyphractus, *s*, 218
 Polypterichthys, *s*, 252
 Polyrhizodus, 239
 Polyuranodon, *s*, 272
 Pomanotis, 232
 Pomaphractus, *s*, 224
 Pomatomus, *s*, 173
 Pomognathus, *s*, 245
 Pompilus, 195
 Porichthys, 258
 Poroderma, 190
 Porthmeus, *s*, 178
 Prenes, *d*, 237
 Prilonotus, *s*, 261
 Priodontichthys, *s*, 175
 Prionace, 242
 Prionodes, 211
 Prionodon, *s*, 192
 Prionolepis, 245
 Prionurus, 169
 Priopis, 174
 Pristecanthus, 186
 Pristicladosus, *s*, 266
 Pristidurus, *s*, 194
 Pristigenys, 181, 194
 Pristophorus, 192
 Pristipomoides, 250
 Pristiurus, 208
 Pristolepis, 239, 246
 Pristotis, *s*, 184
 Prochilus, *d*, 168
 Promecocophalus, *s*, 262
 Prometheus, *s*, 209
 Propalæoniscus, *d*, 254
 Propterus, 179
 Proscinetes, 237
 Prosopodasys, *d*, 241
 Protomelus, *s*, 209
 Protopterus, 196
 Protosphyraena, 273
 Prynnothonus, *d*, 223
 Psammolepis, *d*, 217
 Psammoperca, 223
 Psammosteus, 225
 Psenes, 178
 Psetta, 203
 Psettichthys, 257
 Psettodes, 174
 Pseudobagrus, 278
 Pseudobarbus, 244
 Pseudoblennius, 274
 Pseudochromis, 184
 Pseudoclinus, *s*, 247
 Pseudodoras, 278
 Pseudophoxinus, 211
 Pseudoplesiops, 278
 Pseudosilurus, *s*, 279
 Psilacanthus, 283
 Psilocephalus, 205
 Psilonotus, *s*, 205
 Psilorhynchus, *s*, 195
 Psilosomus, *s*, 198
 Psittacodon, *s*, 214
 Ptenichthys, *s*, 216

- Pteraclis, 168
 Pteragogus, 266
 Pterapon, *s*, 179
 Pteraspis, 232
 Pterichthys Miller, *s*, 209
 Pterichthys Sw., *d*, 201
 Pterocephala, *s*, 204
 Pteroidichthys, 267
 Pteroleptus, *s*, 201
 Pteronemus, *s*, 243
 Pteronotus, *s*, 204
 Pterophyllum, 207
 Pteroplatea, 193
 Pteropterus, *s*, 198, 201
 Pterozygus, *d*, 183
 Ptérure, *s*, 268
 Pterurus, *s*, 205
 Pterycombus, 189
 Pterygocephalus, *d*, 194
 Pterygoplichthys, 281
 Ptychacanthus, *s*, 186
 Ptychocheilus, 262
 Ptychodus, 194
 Ptycholepis, 211
 Ptychopleurus, *d*, 190
 Ptychostomus, *s*, 261
 Ptyctodus, 283
 Ptyobranchus, *s*, 220
 Pusichthys, *s*, 204
 Pycnacanthus, *d*, 250
 Pycnodus, 177
 Pycnosterina, 243
 Pygacanthus, 260
 Pygæus, 191
 Pygidium, 182
 Pygocentrus, 221
 Pygopterus, 177
 Pygopristis, 221
 Pyrodon, *s*, 265
 Pyrrhulina, 229
 Rabdacanthus, 274
 Rabdiolepis, *d*, 275
 Rabdophorus, *d*, 198
 Racoma, 212
 Radamas, 229
 Rajabatis, *s*, 183
 Rama, 279
 Ramphistoma, *d*, 203
 Ranzania, 196
 Raphiosaurus, 212
 Raphistoma, *d*, 170
 Rhabdolepis, 276
 Rhachinotus, 242
 Rhacochilus, 255
 Rhacolepis, 208
 Rhadamista, *d*, 235
 Rhamdia, 278
 Rhamphichthys, 243
 Rhamphognathus, 219
 Rhamphornimia, 275
 Rhamphosus, 218
 Rhinecanthus, *s*, 204
 Rhinellus, *d*, 217
 Rhineodon Smith, 174, 244
 Rhinesomus, *s*, 204
 Rhinichthys, 232
 Rhinocephalus, *d*, 223
 Rhinocryptis, *s*, 222
 Rhinoptera, 173
 Rhipidolepis, *d*, 224
 Rhizodus, *s*, 207
 Rhodeus, 180
 Rhomboides, *s*, 171
 Rhomboidichthys, *s*, 267
 Rhonchus, *s*, 224
 Rhynchobatis Philippi, *s*,
 276
 Rhynchobatis M. & H., 192
 Rhyconcodes, *s*, 245
 Rhynchorinus, *d*, 219
 Rhynchotus, *s*, 263
 Richardsonius, 270
 Rita, 278
 Rogenia, *s*, 231
 Rohita, *s*, 210
 Rohtee, 210
 Ronchifex, *s*, 235
 Rupiscartes, *d*, 202
 Rupisuga, *s*, 206
 Ruppellia, *s*, 202
 Ruvettus, 178
 Rytidolepis, *d*, 273
 Saccobranchus, *s*, 206
 Salar, *s*, 233
 Salmoperca, *s*, 249
 Salmophasia, 202
 Salmostoma, *s*, 198
 Salvelini, 176
 Salvelinus, 186
 Sandroserus, 251
 Sarda, *s*, 259
 Sardinella, 231
 Sardiniodes, 283
 Sardinius, 283
 Sarginites, *s*, 245
 Sargodon, 232
 Saurotherodon, 251
 Sarpa, *d*, 175
 Saurichthys, 179
 Saurida, 242
 Sauridichthys, *s*, 278
 Sauripteris, 214
 Sauropsidium, 245
 Saurorhamphus, 246
 Saurorhynchus, 207
 Saurostomus, 177
 Scaphiodon, 211
 Scaphirhynchus Heckel,
 d, 185
 Scaphirhynchus Müller, *d*,
 182
 Scaphodus, 217
 Scardinius, 187, 226
 Scarodon, *d*, 223
 Scartelaos, 202
 Scarus, *s*, 240
 Scleroosteus, 273
 Schilbeichthys, *s*, 279
 Schilbeodes, 279
 Schilus, 176
 Schismatorhynchus, 264
 Schistura, *s*, 195
 Schizopyge, 215
 Schizothorax, *d*, 192
 Sciadeichthys, 278
 Sciades, 243
 Sciænoides, *s*, 247
 Sciænurus Ag., *s*, 223
 Sciænurus Owen, *d*, 260
 Sclerodus, 194
 Sclerognathus, *s*, 219
 Scololepis, *s*, 220
 Scoliodon, 190
 Scombrinus, 224
 Scombrops, 227
 Scopas, *s*, 175
 Scorpenichthys Blkr., *s*, 267
 Scorpenichthys Grd., 257
 Scorpenodes, 275
 Scorpenopsis, 189

- Scorpiclithes*, *s*, 226
Scrofaria, *s*, 235
Scrophia, *d*, 235
Scrophicephalus, *s*, 198
Scylliodus, *d*, 214
Scymnorhinus, 225
Scytallurus, *s*, 268
Scytalophis, 271
Secutor, 235
Selachidea, *d*, 251
Selar, 248
Selaroides, 248
Selenaspis, 278
Selenia, 226
Semiophorus, 191
Serirolella, 238
Seriolichthys, *s*, 255
Seriphus, 255
Serranichthys, *s*, 264
Serrolepis, 251
Setipinna, 203
Siboma, 270
Sicarius, *s*, 272
Sicyases, 216
Sicyogaster, *s*, 228
Siderea, *s*, 271
Silonia, 203
Silundia, *s*, 206
Siluranodon, 279
Silurichthys, 278
Silus, *s*, 179
Siphonodus, 250
Siphonognathus, 276
Sirembo, 277
Skeponopodus, *s*, 179
Smecticus, *s*, 266
Smerdis, *s*, 177
Solegnathus, 205
Solenognathus, *s*, 268
Solenorhynchus, 259
Somileptes, *s*, 240
Soricidens, 212
Spaniodon, 247
Spanius, *s*, 236
Sparisoma, 199
Sparnodus, 191
Spathobatis, *s*, 244, 261
Sphærodon, *s*, 194
Sphærodon, *d*, 184
Sphagodus, *d*, 194
Sphenacanthus, 186
Sphecephalus, 191
Sphenodus, *d*, 214
Sphenolepis, *d*, 218
Sphenonchus, *s*, 213
Sphærodon, *s*, 177
Sphyra, *s*, 243
Sphyrænodus, 209, 219
Sphyrichthys, *s*, 173
Spinacanthus, 219
Spinacorhinus, *s*, 184
Spinax Bon., *s*, 225
Spinax Cuv. & Val., *s*, 175
Spirodus, 281
Spondyliosoma, 241
Spratella, 231
Spratelloides, 248
Spurco, *s*, 174
Squalius, *s*, 187
Squaloraia, 173
Squalraia, *s*, 183
Stagonolepis, *d*, 225
Steganodictyum, *d*, 249
Stegastes, 211
Stegophilus, 284
Stegostoma, 192
Stemmatodus, *s*, 270
Stenacanthus, *s*, 273
Stenodus, 185
Stenometopus, *s*, 263
Stenostoma, 246
Stereolepis, 277
Sterledus, *s*, 225
Sterleta, *d*, 168
Sterletus, *d*, 178
Sternarchorhynchus, 264
Sternopygus, 243
Stethochætus, *s*, 259
Stethopterus, *d*, 252
Stewardia, 281
Sthenopus, *s*, 240
Stigmatophora, 254
Stigmolepis, 273
Stilbe, *s*, 210
Stoasodon, *s*, 242
Stolephorus, 169
Stomianodon, *s*, 241
Stomocatus, *s*, 206
Strephon, *s*, 235
Strobilodus, *s*, 250
Stromateoides, *s*, 248
Strophidon, *s*, 220
Strophodus, *s*, 191
Strotes, 237
Sturio, *s*, 182
Sturisoma, 203
Styracodus, *s*, 242
Syacium, 207
Symphysodon, 207
Sympterygia, 193
Synanceja, 169
Synanchia, *s*, 201
Synacidium, *s*, 216
Synaptura, 241
Synechoglanis, *s*, 280
Synergus, *s*, 236
Syngnathoides, 248
Synophrys, *d*, 224
Sypterus, *s*, 208
Syraxis, *s*, 208
Syrrhina, *s*, 192
Systemus, 195
Teniura, 189, 193
Taractes, 215
Tandanus, 196
Tarsichthys, *d*, 261
Telestes, 187
Tellia, 253
Temnistia, *s*, 186
Teratichthys, *d*, 172
Tetrabanchus, *s*, 248
Tetradrachmum, *d*, 242
Tetragonolepis, *s*, 177
Tetraodon, 167
Tetrosomus, *s*, 204
Thærodon, *s*, 220
Thalassokleptes, *s*, 235
Thalassoma, 199
Thalassorhinus, 192
Thalliurus, 200
Tharsis, *s*, 233
Thaumas, *d*, 212
Thaumaturus, 222
Thectodus, *s*, 221
Thelodus Ag., 194
Tholodus Meyer, *d*, 229
Tholodus Schmid, 249
Thelolepis, *s*, 274
Thoracopterus, 279

- Threpterus, 247
 Thrissonotus, 217
 Thrissops, 177
 Thrissopterus, *s.*, 270
 Thrycomycterus, *s.*, 170
 Thunnus, 227
 Thyellina, *d.*, 214
 Thyestes, 256
 Thynnus, *s.*, 259
 Thyrsoidea, *s.*, 271
 Thysanochilus, 276
 Tiaroga, 270
 Tigoma, 270
 Tilapia, 244
 Tilesia, *s.*, 203
 Tiltrus, *s.*, 254
 Tinimogaster, *s.*, 226
 Tolypelepis, *d.*, 273
 Tometes, *s.*, 242
 Tomicodon, *s.*, 228
 Tomognathus, 246
 Tor, 179
 Toxophorus, *d.*, 228
 Toxopoma, 260
 Trachelacanthus, 246
 Trachelochismus, 228
 Trachelyopterus, 206
 Trachicephalus, *s.*, 201
 Trachoryster, 279
 Trachurus Cuv. & Val., *s.*, 259
 Trachurus Gronow, *s.*, 178
 Trachydermus, *d.*, 189
 Trachyrhamphus, 253
 Trematopsis, 196
 Triacanthodes, 277
 Triænodon, 192
 Triænophorichthys, 280
 Triænophorus, *s.*, 280
 Triakis, 192
 Trichoderma, *s.*, 205
 Trichomycterus, *s.*, 230
 Trichophasia, *s.*, 197
 Trichopleura, *s.*, 282
 Trichopterus, *s.*, 259
 Trichosoma, *s.*, 203
 Trichosomus, *s.*, 197
 Tridentiger, 280
 Trigla, 167
 Triglochis, 192
 Triglops, 176
 Triglopsis, 257
 Trigonodon, 244
 Triodus, *s.*, 243
 Triplopterus, 266
 Tripterus, *s.*, 239
 Tristychius Ag., 186
 Tristychius Portlock, *s.*, 216
 Triurus, *s.*, 203
 Trompe, *s.*, 238
 Tropidichthys, *s.*, 256
 Trulla, 282
 Trygon, *s.*, 172
 Trygonoptera, 193
 Trygonorhina, 192
 Turseodus, 283
 Tylodus, 232
 Tylognathus, 211
 Tylosurus, 178
 Tympanomium, 196
 Typhle, *s.*, 170
 Typodus, 283
 Uaru, 207
 Umbla, *s.*, 261
 Unipertura, *s.*, 268
 Undina, 180
 Upeneichthys, 263
 Upeneoides, 240
 Uraleptus, *s.*, 279
 Uranidea, *d.*, 210
 Uraptera, 193
 Uraspis, *d.*, 264
 Urichthys, *s.*, 199
 Uriphæton, *s.*, 198
 Uroconger, *d.*, 272
 Urogymnus, 190
 Urolepis, 274
 Urolophus, 193
 Uronemus, 217
 Uropterygius, 184
 Urosphen, 181, 218
 Urostenes, 233
 Varicorhinus, 186
 Variola, 198
 Vastres, *s.*, 229
 Velasia, 249
 Velifer, 247
 Vogmarus, *s.*, 244
 Vomeroptis, 259
 Wallago, 247
 Wodnika, 216
 Xenacanthus, *s.*, 233
 Xanthichthys, 274
 Xenoccephalus, 281
 Xenodon, *s.*, 184
 Xenopterus, *s.*, 263
 Xiphasia, 201
 Xiphichthys, *s.*, 201
 Xiphirus, *s.*, 244
 Xiphochilus, 268
 Xiphophorus, 238
 Xiphopterus, 181
 Xiphorhamphus, *s.*, 221
 Xiphorhynchus, *s.*, 173
 Xystophorus, *s.*, 223
 Zancurus, *s.*, 200
 Zaniolepis, 275
 Zebrasoma, 201
 Zenaspis, *s.*, 246
 Zenodon, *d.*, 204
 Zeugopterus, 182
 Zonichthys, *d.*, 200
 Zungaro, 278
 Zygodatis, *d.*, 184, 214
 Zygonectes, 252
 Zypothyca, *s.*, 200

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