THE NOMENCLATURE OF THE RECENT CRINOIDS.

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In view of the present demand for the strict application of certain fixed and definite rules governing all cases in zoological nomenclature, it has become necessary to carefully review the literature on the recent crinoids in an effort to unravel the somewhat complicated tangle into which their nomenclature has been thrown, owing to the unfortunate carelessness of a few of the writers on the subject.

Mr. F. A. Bather has already made a beginning in attempting to show where we stand in reference to the genera of Pentacrinitidæ (not Pentacrinidæ), and to the fossil genus *Encrinus*. Although it will be shown that his conclusions are incorrect, except in the case of *Isocrinus* and *Metacrinus* (and the first references to both of these are omitted), the fact remains that he was the first to realize the necessity of a revision of the nomenclature of the recent crinoids, and to act upon that realization.

The present paper is a continuation of the work begun by Mr. Bather; an attempt is made to bring together all the generic and specific names which have ever been applied to recent crinoids (and names of genera which have been used for recent species), giving the correct first reference, the types of genera and the type-localities of species, the derivation of the names, and the present locality of the type specimen of each species, so far as known. The revised international code has been followed strictly. It has not been considered worth while in this connection to enter into detail in regard to such genera as *Astrophyton*, *Ophiura*, and *Euryale*, belonging to quite a different class of animals, as their use can in no way cause any confusion. In the numerous cases where a name has subsequently been emended or misspelled, each variation is shown, as the changes are often quite misleading; while *escrichtii*, *eschrictii*, and *eschrichti* for *eschrichtii*, *Actinomedra*, *Actinometer*, and *Actrinometra* for *Actinometra* are obvious enough, *mauonema* and *mucronata* for *macronema*, *variispina* for *variipinna*, *crassispina* for *crassipinna*, *sertosa* for *sentosa*, *aster* for

asteria, *monobrachius* for *macrobrachius*, and *radiata* and *alarchianus* for *pectinata* and *aldrichianus* are not quite so evident.

More or less confusion has arisen from the use by Professor von Graff and others of a number of manuscript names furnished by Prof. C. Semper and Dr. P. H. Carpenter, as many of the species to which they refer have never been described, or have been described under different names. The manuscript names published by Doctor Lütken and by Dujardin and Hupé seem to have entirely escaped the notice of subsequent workers. In the case of a *nomen nudum*, the name is referred to the first author who published it; if the same species to which the original name referred was subsequently described under that name, the name of the species is credited to the one who first described it; but the first reference to it as a *nomen nudum* is cited. Many names ran for years as *nomina nuda* before being definitely attached to any species, while a large amount of anatomical work has been done on species mentioned by name, but never properly described. Such a case is that of *Actinometra nigra*, the anatomy of which was worked out in part, and a number of figures of arm sections and other features, interesting from an anatomical, but wholly worthless from a systematic point of view, published. Finally, after twelve years from the first appearance of the name, a meager summary of its specific characters is found, but no good description has ever been published. While anatomical characters constitute an "indication" in the strict sense of the term, they are largely worthless, so far as our present knowledge goes, for correct specific determination; but, as names based on them are not *nomina nuda*, they must be considered in the same way as a description, and these names must receive the same treatment as names accompanied by a satisfactory diagnosis.

In regard to the names published by Prof. F. J. Bell in 1882 accompanied by certain so-called specific formulæ, the formulæ must be taken as constituting descriptions, however non-diagnostic they may be, and Professor Bell had no right to change certain of the names when, two years later, he published detailed descriptions. The same applies to the formulas published by Doctor Carpenter in footnotes in his report on the *Challenger* stalked crinoids; he evidently supposed them to be diagnostic, and it becomes necessary to date many of his free crinoids from these formulas given in 1884, instead of from the detailed descriptions published four years later.

In addition to specific names applied to recent species, in the genera *Eudiocrinus*, *Atelecrinus*, *Comatula*, *Antedon*, and *Actinometra* those applied to fossil species have also been included, to guard against the possibility of future writers using these names over again. These are indicated by a dagger (†); a dagger preceding a generic name indicates that all the included species are fossil.

The present paper is in no way a synonymy of the group, and so remarks under the respective names are avoided so far as possible; but

it has been thought best to here call attention to certain flagrant errors, for instance where, as in the case of *Antedon capensis*, *Antedon sclateri*, *Antedon magnicirra*, *Antedon scalaris*, and *Antedon bassett-smithi*, species have been described in "groups" widely different from those in which they belong. These cases, however, are remarkably few; and the student of the recent crinoids is to be congratulated upon the masterly way the group has been handled by practically every worker upon it, and the excellent shape in which it has been left. Dr. P. H. Carpenter, especially, in his two magnificent monographs and his numerous other writings, giving us the results of years of study and research, has, by his investigations of the types of almost all of the earlier species, laid the foundation for a solid, stable nomenclature.

I wish here to express my appreciation of the kindness of Dr. Leonhard Stejneger and Dr. Charles W. Richmond, of the U. S. National Museum, who have generously lent their aid in elucidating many difficult nomenclatorial problems.

Actinomedra VON GRAFF, 1883.

1883. VON GRAFF, Bull. Mus. Comp. Zool., XI, No. 7, p. 132.
Misprint for *Actinometra*.

Actinometer SPRINGER, 1903.

1903. SPRINGER, Bull. Lab. of Nat. Hist. State University of Iowa, V, No. 3, p. 220 (p. 6 of separate).
Misprint for *Actinometra*.

Actinometra J. MÜLLER, 1841.

1841. J. MÜLLER, Wiegm. Archiv für Naturgesch., I, p. 140.
Type.—*Actinometra imperialis* J. Müller (n. sp.) = *Comatula solaris* Lamarck, 1816. (See under *Comatula*.)
ἀκτίς = a ray + μετρέω (in passive) to be surrounded.

† **Actinometra abnormis.**

Actinometra affinis P. H. CARPENTER, 1882. ("Lütken MS.")

1882. P. H. CARPENTER, Journ. Linn. Soc. (Zool.), XVI, p. 517.
Type-locality.—Java.
affinis = related.
A few characters only are given; but such as they are they may be found to have systematic value; the name can not be considered a *nomen nudum*.

Actinometra albonotata BELL, 1882.

1882. BELL, Proc. Zool. Soc. London, 1882, p. 535.
Type-locality.—Albany Island. H. M. S. *Alert*.
Specific formula given.
albus = white + *notatus* = marked. British Museum.
See *Actinometra solaris* var. *albonotata*.

Actinometra alternans P. H. CARPENTER, 1881.

1881. P. H. CARPENTER, Notes from the Leyden Museum, III, p. 177; detailed description, p. 208.

Type-locality.—Unknown.

alternans=changing, varying. Leyden Museum.

Actinometra annulata BELL, 1882 (not *Comatula annulata* Risso, 1826).

1882. BELL, Proc. Zool. Soc. London, 1882, p. 535, pl. XXXV.

Type-locality.—Cape York, North Australia.

annulata=ornamented with rings. British Museum.

Actinometra armata P. H. CARPENTER, 1879. ("Semper MS.")

1876. W. B. CARPENTER, Proc. Roy. Soc., XXIV, p. 451.

A *nomen nudum*.

1879. P. H. CARPENTER, Trans. Linn. Soc. (Zool.), 2d ser., II, p. 50.

Type-locality.—Philippines. Prof. C. Semper.

armata=armed.

Actinometra belli P. H. CARPENTER, 1888.

1888. P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 330, pl. LXIV, figs. 1, 2; detailed description, p. 334; first mentioned, p. 59.

Type-locality.—10° 30′ south latitude, 142° 18′ east longitude (Prince of Wales Channel, near Cape York, north Australia); 8 fathoms. H. M. S. *Challenger*.

Prof. F. Jeffrey Bell. British Museum.

Actinometra blakei VON GRAFF, 1883. ("P. H. Carpenter MS.")

1883. VON GRAFF, Bull. Mus. Comp. Zool., XI, No. 7, pp. 127, 129.

A *nomen nudum*.

1884. VON GRAFF, *Challenger* Reports, X, Zoology, Pt. 27, p. 14.

A *nomen nudum*.

U. S. S. *Blake*.

It is unfortunate that this name, together with *Actinometra carinata* and a number of others, should have been allowed to remain as *nomina nuda* so long; but, as it is known to what species Doctor Carpenter applied these names in the manuscript list he furnished Professor von Graff, I look forward to seeing them described in the near future.

Actinometra brachymera LÜTKEN, 1877.

1877. LÜTKEN, Mus. Godeffr. Cat., V, p. 100.

A *nomen nudum*.

1893. HARTLAUB, Nova Acta Acad. German., LVIII, No. 1, p. 95.

A *nomen nudum*.

βραχύς=short+μηρός=joint.

Actinometra brasiliensis P. H. CARPENTER, 1888. ("Lütken MS.")

1888. P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 302, pl. IV.

A *nomen nudum*.

brasiliensis=of Brazil.

† **Actinometra calloviensis.**

† **Actinometra cheltonensis.**

Actinometra coccodistoma P. H. CARPENTER, 1883. ("Mus. Paris MS.")

1883. P. H. CARPENTER, Proc. Zool. Soc. London, 1882, p. 747.

A *nomen nudum*.

κόκκος=a kernel, a berry+δίστομος=with two openings.

Actinometra conjungens P. H. CARPENTER, 1888.

1888. P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 60.

Editorial error for *Antedon conjungens*.

Actinometra coppingeri BELL, 1882.

1882. BELL, Proc. Zool. Soc. London, 1882, p. 535.

Non-diagnostic specific formula given; full description in BELL, Rep. Zool. Coll., H. M. S. *Alert*, p. 168, pl. XVI, fig. B (1884).

Type-locality.—Flinders; Clairmont (Cape York Peninsula, Queensland). H. M. S. *Alert*.

Dr. R. W. Coppinger, surgeon of the *Alert*. British Museum.

Actinometra difficilis P. H. CARPENTER, 1888.

1888. P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 93.

A *nomen nudum*.

difficilis=difficult.

Actinometra discoidea P. H. CARPENTER, 1888.

1883. VON GRAFF, Bull. Mus. Comp. Zool., XI, No. 7, p. 127.

A *nomen nudum*.

1884. VON GRAFF, *Challenger* Reports, X, Zoology, Pt. 27, p. 14.

A *nomen nudum*.

1888. P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 317.

Type-locality.—Caribbean Islands; 88–118 fathoms. U. S. S. *Blake*.

δισκοειδής=discoidal.

Actinometra dissimilis P. H. CARPENTER, 1884.

1884. P. H. CARPENTER, *Challenger* Reports, XI, Zoology, p. 110 (specific formula given).

See also P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 337 (1888).

Type-locality.—Zamboanga; 10 fathoms. H. M. S. *Challenger.*

This name is available for a varietal form (according to Doctor Carpenter) of the species called *Actinometra nobilis.*

dissimilis=unlike. British Museum.

Actinometra distincta P. H. CARPENTER, 1888.

1888. P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 295, pl. LV, fig 1; first mentioned, p. 57.

Type-locality.—Zamboanga, Philippines; 10 fathoms. H. M. S. *Challenger.*

distincta=distinguished. British Museum.

Actinometra divaricata P. H. CARPENTER, 1888.

1888. P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 330, pl. LXIII, figs. 6–8; detailed description, p. 332; first mentioned, p. 15.

Type-locality.—Banda (Moluccas); 17 fathoms. H. M. S. *Challenger.*

divaricata=spreading. British Museum.

Actinometra duplex P. H. CARPENTER, 1888.

1888. P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 330, pl. XLVI, fig. 3; detailed description, p. 335; first mentioned, p. 59.

Type-locality.—Banda (Moluccas); 17 fathoms. H. M. S. *Challenger.*

duplex=broad, large. British Museum.

Actinometra elongata P. H. CARPENTER, 1888 (not *Comatula elongata* J. Müller, 1849).

1888. P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 311, pl. LVII, figs. 2–4; first mentioned, p. 45.

Type-locality.—Banda (Moluccas). H. M. S. *Challenger.*

elongata=elongate. British Museum.

In 1849 J. Müller (Abh. d. k. Ak. d. wiss., 1847 [1849], p. 257) placed the species which in 1841 he described as *Alecto elongata* in the genus *Comatula.* Now, although he did this wrongly (*Alecto elongata* being referable to *Himerometra*), the fact remains that he made the combination, thus invalidating the specific name *elongata*, in so far as *Comatula* (=*Actinometra*) is concerned. The species may be renamed *Comatula helianthus.*

† **Actinometra formæ.**

Actinometra fusca LÜTKEN, 1877.

1877. LÜTKEN, Mus. Godeffr. Cat., V, p. 100.

A *nomen nudum.*

1888. P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 306.

A *nomen nudum*.

fusca = brown, dark.

Actinometra gracilis LÜTKEN, 1874.

1874. LÜTKEN, Mus. Godeffr. Cat., V, p. 190.

A *nomen nudum*.

gracilis=slender.

Actinometra gracilis HARTLAUB, 1890 (not *Actinometra gracilis* Lütken, 1874).

1890. HARTLAUB, Nachr. Ges. Göttingen, May, 1890, p. 170; detailed description, p. 187.

Type-locality, Pulo Edam.

gracilis=slender. Göttingen Museum.

Lütken's *Actinometra gracilis*, being a *nomen nudum*, does not, of course, invalidate this.

Actinometra grandicalyx P. H. CARPENTER, 1882.

1882. P. H. CARPENTER, Journ. Linn. Soc. (Zool.), XVI, p. 514; detailed description, p. 520.

Type-locality.—Canton, China.

grandis=large+*calyx*="calyx." Hamburg Museum.

† **Actinometra guirandi.**

Actinometra guttata HARTLAUB, 1893. ("Lütken MS.")

1893. HARTLAUB, Nova Acta Acad. German., LVIII, No. 1, p. 96.

A *nomen nudum*.

guttata=spotted.

Actinometra imperialis J. MÜLLER, 1841.

1841. J. MÜLLER, Wiegmann's Archiv für Naturgeschichte, I, p. 140.

Type-locality.—Unknown.

imperialis=imperial. Vienna Museum.

Actinometra intermedia BELL, 1884.

1884. BELL, Rep. Zool. Coll. H. M. S. *Alert*, p. 166, pl. XVI, figs. A, B.

Type-locality.—Albany Island. H. M. S. *Alert*.

intermedia=intermediate. British Museum.

Actinometra intricata LÜTKEN, 1874.

1874. LÜTKEN, Mus. Godeffroy Cat., V, p. 190.

A *nomen nudum*.

1888. P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 310.

A *nomen nudum*.

intricata=intertwined.

Doctor Carpenter in many different places introduces names credited to "Lütken MS.;" but it seems to have entirely escaped his notice that many of these names were really published by

Doctor Lütken in the lists of crinoids given in the catalogue of the collections in the Museum Godeffroy. The names as given by Doctor Lütken are pure *nomina nuda*, followed by a locality.

Actinometra iowensis SPRINGER, 1902.

1902. SPRINGER, American Geologist, XXX, p. 98.

Type-locality.—Florida reefs; ½ fathom. Dr. C. C. Nutting.

iowensis; for the University of Iowa. Springer Collection.

Actinometra jukesii P. H. CARPENTER, 1879.

1879. P. H. CARPENTER, Proc. Roy. Soc., XXVIII, p. 390.

Type-locality.—Northeast coast of Australia. Professor Jukes. Professor J. Bute Jukes. British Museum.

This name, in common with all others ending in "*ii*" was later emended by Doctor Carpenter, appearing as *jukesi*.

Actinometra lineata P. H. CARPENTER, 1880.

1880. P. H. CARPENTER, Journ. Linn. Soc. (Zool.), XV, p. 198, pl. XII, figs. 27 *a*, *b;* better description on p. 213.

Type-locality.—Bahia, Brazil; 7–20 fathoms. H. M. S. *Challenger.*

lineata=marked with lines. British Museum.

Actinometra litoralis PFEFFER, 1900.

1900. PFEFFER, Senckenb. Ges. Abh., XXV, p. 85.

Emendation.

Actinometra littoralis P. H. CARPENTER, 1888.

1888. P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 330, pl. LXVII, figs. 1, 2; detailed description, p. 346; first mentioned, p. 15.

Type-locality.—Banda (Moluccas); 17 fathoms. H. M. S. *Challenger.*

littoralis=of the seashore. British Museum.

†**Actinometra loveni.**

Actinometra macrobrachius HARTLAUB, 1890.

1890. HARTLAUB, Nach. Ges. Göttingen, May 1890, p. 170; detailed description, p. 186.

Type-locality.—China Sea.

μακρός=long+βραχίων=arm. Hamburg Museum.

Actinometra maculata P. H. CARPENTER, 1888.

1888. P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 304, pl. V, figs. 1 *a–d;* pl. LV, fig. 2; detailed description, p. 307; first mentioned, p. 20.

Type-locality.—10° 30′ south latitude, 142° 18′ east longitude (Prince of Wales Channel, near Cape York, north Australia); 8 fathoms. H. M. S. *Challenger.*

maculata=spotted. British Museum.

Actinometra magnifica P. H. CARPENTER, 1884.

1884. P. H. CARPENTER, *Challenger* Reports, XI, Zoology, p. 57, pl. LVI, fig. 7; better description in P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 330 (1888).

Type-locality.—Philippines.

magnifica=splendid, magnificent.

Actinometra meridionalis var. **carinata** VON GRAFF, 1883 (not *Comatula carinata*, Lamarck, 1816).

1883. VON GRAFF, Bull. Mus. Comp. Zool., XI, No. 7, pp. 130, 131.

A *nomen nudum.*

1884. VON GRAFF, *Challenger* Reports, X, Zoology, Pt. 27, pp. 15, 16, 19.

A *nomen nudum.*

carinata=keeled.

Actinometra meridionalis var. **quadrata** VON GRAFF, 1883.

1883. VON GRAFF, Bull. Mus. Comp. Zool., XI, No. 7, p. 127.

A *nomen nudum.*

1884. VON GRAFF, *Challenger* Reports, X, Zoology, Pt. 27, pp. 14, 20.

A *nomen nudum.*

quadrata=quadrate (in reference to the shape of the brachials).

Actinometra meyeri P. H. CARPENTER, 1882.

1882. P. H. CARPENTER, Journ. Linn. Soc. (Zool.), XVI, p. 514; detailed description, p. 525.

Type-locality.—Australia.

Dr. A. B. Meyer, formerly director of the Dresden Museum. Hamburg Museum.

Actinometra monobrachius MINCHIN, 1892.

1892. MINCHIN, in Zoological Record for 1891, Echinodermata, p. 80.

A *nomen nudum.*

μόνος=single+*βραχίων*=arm.

There can be no excuse for quoting *macrobrachius* as *monobrachius;* the absurdity of the latter in reference to crinoids should have been obvious. The mistake is the more unfortunate coming as it does in an index to the literature on the group.

Actinometra morsei VON GRAFF, 1884.

1884. VON GRAFF, *Challenger* Reports, X, Zoology, Pt. 27, pp. 14, 20.

A *nomen nudum.*

Prof. E. S. Morse, of Salem, Mass.

†**Actinometra mülleri.**

Actinometra multibrachiata P. H. CARPENTER, 1888.

1888. P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 295, pl. LVI, figs. 3, 4; detailed description, p. 299; first mentioned, p. 27.

Type-locality.—Banda (Moluccas); 17 fathoms. H. M. S. *Challenger.*

multibrachiata=many armed. British Museum.

Actinometra multifida P. H. CARPENTER, 1888 (not *Alecto multifida* J. Müller 1841=*Comatula multiradiata* Lamarck=*Asterias multiradiata* Linnæus [not *Asterias multiradiata* Schweigger nor *Comatula multiradiata* Goldfuss nor *Comatula multiradiata* Leuckart]).

1888. P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 330.

Type-locality.—Not given.

multifida=divided into many parts. Paris Museum.

Alecto multifida of Müller, according to the author's own statement, is clearly a synonym of *Comatula multiradiata* Lamarck. Müller took the ground that Lamarck's description was not identifiable, but that the same name had been applied by Goldfuss to quite a different species, which was adequately described, so that the name held for the latter: *multifida* was proposed to cover Lamarck's type specimens. We know now what the *Comatula multiradiata* of Lamarck really is, and that it is the same as one of the species included by Linnæus in his *Asterias multiradiata;* therefore, it is really the *Comatula multiradiata* of Goldfuss which needs a new name, and the *Alecto multifida* of Müller becomes a pure synonym of *Comatula multiradiata* Lamarck. This leaves *Actinometra multifida* P. H. Carpenter (not of Müller) without a name; it may be called *Comaster carpenteri.*

Actinometra mutabilis VON GRAFF, 1884. ("P. H. Carpenter MS.")

1884. VON GRAFF, *Challenger* Reports, X, Zoology, Pt. 27, p. 13.

A *nomen nudum.*

mutabilis=changeable.

According to Carpenter (*Challenger* Reports, XXVI, Zoology, 1888, p. 53) this name originated with Lütken.

Actinometra nigra P. H. CARPENTER, 1888. ("Semper MS.")

1876. W. B. CARPENTER, Proc. Roy. Soc., XXIV, p. 451.

A *nomen nudum.*

1876. P. H. CARPENTER, Jour. Anat. and Physiol., X, p. 583.

A *nomen nudum.*

1884. VON GRAFF, *Challenger* Reports, X, Zoology, Pt. 27, pp. 16, 20.

A *nomen nudum*.

1884. P. H. CARPENTER, *Challenger* Reports, XI, Zoology, p. 96.
A *nomen nudum*.

1888. P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 304.
Type-locality.—Bohol, Philippines. Prof. C. Semper.
nigra=black.

Actinometra nobilis P. H. CARPENTER, 1884.

1884. P. H. CARPENTER, *Challenger* Reports, XI, Zoology, p. 55.
Specific formula given; full description in P. H. CARPENTER *Challenger* Reports, XXVI, Zoology, p. 336, pl. LXV (1888).
Type-locality.—11° 37′ north latitude, 123° 31′ east longitude (Philippines); 18 fathoms. H. M. S. *Challenger*.
nobilis=noble; distinguished. British Museum.

Actinometra notata P. H. CARPENTER, 1889.

1888. BELL, Proc. Zool. Soc. London, 1888, p. 389 (footnote).
A *nomen nudum*.

1889. P. H. CARPENTER, Journ. Linn. Soc. (Zool.), XXI, p. 312.
Type-locality.—King Island, Mergui Archipelago (off Tenasserim); "sublittoral." Dr. John Anderson.
notata=distinguished. British Museum.

Actinometra parvicurva SPRINGER, 1901.

1901. SPRINGER, Mem. Mus. Comp. Zool., XXV, No. 1, p. 88.
Typographical error for *parvicirra*.

Actinometra paucicirra BELL, 1882.

1882. BELL, Proc. Zool. Soc. London, 1882, p. 535.
Non-diagnostic specific formula given; full description in BELL, Zool. Coll. H. M. S. *Alert*, p. 169, pl. XVII, figs. A, A*a* (1884).
Type-locality.—Prince of Wales Channel, or Thursday Island (near Cape York). H. M. S. *Alert*.
pauci=few+*cirra*="cirri." British Museum.

Actinometra peregrina BELL, 1894.

1894. BELL, Proc. Zool. Soc. London, 1894, p. 402; first mentioned, p. 396.
Type-locality.—Macclesfield Bank (west of Luzon, Philippines); 55 to 60 fathoms.
peregrinus=exotic. British Museum.

Actinometra peronii P. H. CARPENTER, 1881.

1881. P. H. CARPENTER, Notes from the Leyden Museum, III, p. 178; detailed description, p. 214.
Type-locality.—South coast of Ceram. M. Hoedt.
M. François Péron. Leyden Museum.

Actinometra polymorpha P. H. Carpenter, 1879.

1877. P. H. Carpenter, Journ. Linn. Soc. (Zool.), XIII, p. 440.

A *nomen nudum*.

1879. P. H. Carpenter, Trans. Linn. Soc. (Zool.), 2d ser., II, p. 51, pl. II, figs. 2–11; pl. III, figs. 1–10 (except fig. 4); pl. VI, figs. 1–24; pl. VII, figs. 1 *a–d*, 2 *a–d*, 3 *a–d*, 4 *a–d*, 5 *a–d*, 6 *a–d*; pl. VIII.

Type-locality.—Bohol, Philippines. Prof. C. Semper.

πολύς=many+μορφή=form.

Actinometra quadrata P. H. Carpenter, 1888 (not *Actinometra meridionalis* var. *quadrata* von Graff 1883).

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 330, pl. LXII, fig. 1; detailed description, p. 331; first mentioned, p. 45.

Type-locality.—Tongatabu Reefs (Tonga Islands). H. M. S. *Challenger*.

quadrata=quadrate (in reference to the shape of the brachials). British Museum.

†**Actinometra ranvillensis.**

Actinometra regalis P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 331, pl. LXVIII; detailed description, p. 347; first mentioned, p. 45.

Type-locality.—Banda, 17 fathoms. H. M. S. *Challenger*.

regalis=regal. British Museum.

Actinometra robusta P. H. Carpenter, 1879. ("Lütken MS.")

1879. P. H. Carpenter, Trans. Linn. Soc. (Zool.), 2d. ser., II, p. 86, pl. V, figs. 10–15; first mentioned, p. 27; detailed description, 1882, P. H. Carpenter, Journ. Linn. Soc. (Zool.), XVI, p. 517.

Type-locality.—Australia.

robusta=sturdy, robust. Hamburg Museum.

Actinometra robustipinna P. H. Carpenter, 1881.

1881. P. H. Carpenter, Notes from the Leyden Museum, III, p. 177; detailed description, p. 201.

Type-locality.—Moluccas. M. Macklot.

robustus=stout+*pinna*="pinnules." Leyden Museum.

The type of this species is a much mutilated specimen, without the highly characteristic cirri: for the first really satisfactory description of this common form see Kœhler, Rev. Suisse Zool., III, p. 290 (1895).

Actinometra schlegelii P. H. Carpenter, 1881.

1881. P. H. Carpenter, Notes from the Leyden Museum, III, p. 178; detailed description, p. 210.

Type-locality.—? East Indies.

Professor Hermann Schlegel. Leyden Museum.

Actinometra sentosa P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 317, pl. LXVI, figs. 4–6; detailed description, p. 325; first mentioned, p. 43.

Type-locality.—Banda. H. M. S. *Challenger.*

sentosa=thorny. British Museum.

Actinometra sertosa Latter, 1889.

1889. Latter in Zoological Record for 1888, Echinodermata, p. 15.

serta=a festoon.

Editorial error for *Actinometra sentosa.*

Actinometra simplex P. H. Carpenter, 1888 (not *Comatula simplex* P. H. Carpenter 1879 and 1881).

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 311, pl. LIX, fig. 1; detailed description, p. 312; first mentioned, p. 58.

Type-locality.—Admiralty Islands; 16 to 25 fathoms. H. M. S. *Challenger.*

simplex=simple. British Museum.

This species has been renamed *Comatula orientalis.*

Actinometra solaris var. **albonotata** Bell, 1884.

1884. Bell, Rep. Zool. Coll. H. M. S. *Alert*, p. 166.

Type-locality.—Albany Island. H. M. S. *Alert.*

albus=white+*notata*=marked. British Museum.

This is the same species which was named by Bell in 1882 *Actinometra albonotata.*

Actinometra stellata P. H. Carpenter, 1879.

1874. Lütken, Mus. Godeffr. Cat., V, p. 190.

A *nomen nudum.*

1879. P. H. Carpenter, Proc. Roy. Soc., XXVIII, p. 390.

Type-locality.—Fiji.

stellata=star-shaped.

In the later reference Doctor Carpenter gives a few non-diagnostic characters; but in 1881 and 1888 he merely cites the name in the synonomy of *Phanogenia typica* of Lovén.

Actinometra stelligera P. H. CARPENTER, 1880.

1880. P. H. CARPENTER, Journ. Linn. Soc. (Zool.), XV, p. 198, pl. XII, fig. 26.

Type-locality.—About 19° 6′ south latitude, 178° 18′ east longitude (near Kandavu Fiji); 255, 610, or 210 fathoms. H. M. S. *Challenger.*

stelligera=ornamented with a star. British Museum.

Actinometra stewarti P. H. CARPENTER, 1888.

1888. P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 321.

A *nomen nudum.*

Prof. Charles Stewart.

Actinometra strata P. H. CARPENTER, 1888.

1888. P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 93.

A *nomen nudum.*

strata=spread out.

Actinometra strota P. H. CARPENTER, 1884.

1884. BELL, Rep. Zool. Coll. H. M. S. *Alert*, p. xiii.

A *nomen nudum.*

1884. P. H. CARPENTER, *Challenger* Reports, XI, Zoology, p. 67.

Type-locality.—Cape York, Australia.

στρωτός=spread out.

This refers to the same species as does the preceding.

Actinometra tenax LÜTKEN, 1874.

1874. LÜTKEN, Mus. Godeffr. Cat., V, p. 190.

A *nomen nudum.*

1879. P. H. CARPENTER, Trans. Linn. Soc. (Zool.), 2d ser., II, p. 29 (footnote).

A *nomen nudum.*

tenax=tenacious.

Actinometra trachigaster PERRIER, 1886.

1886. PERRIER, Nouv. Archives du Muséum d'Histoire Naturelle de Paris, 2d ser., IX, p. 116 (footnote).

Emendation.

τραχύς=rough+*γαστήρ*=the ventral side.

Actinometra trachygaster LÜTKEN, 1869.

1869. LÜTKEN, Mus. Godeffr. Cat., IV, p. 125.

A *nomen nudum.*

1879. P. H. CARPENTER, Trans. Linn. Soc. (Zool.), 2d ser., II, p. 29 (footnote).

A *nomen nudum.*

τραχύς=rough+*γαστήρ*=the ventral side.

†**Actinometra vagnasensis.**

Actinometra valida P. H. CARPENTER, 1888.

1888. P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 311, pl. LIX, fig. 3; detailed description, p. 314; first mentioned, p. 58.

Type-locality.—10° 30′ south latitude, 142° 18′ east longitude (Prince of Wales Channel); 8 fathoms. H. M. S. *Challenger.*

valida=stout, robust. British Museum.

Actinometra variabilis BELL, 1882.

1882. BELL, Proc. Zool. Soc. London, 1882, p. 535.

Non-diagnostic specific formula given; full description in BELL, Rep. Zool. Coll. H. M. S. *Alert*, p. 169, pl. XVII, figs. B. B*a*, (1884).

Type-locality.—Thursday Island. H. M. S. *Alert.*

variabilis=changeable. British Museum.

†**Actinometra wurtembergica.**

Actinometra (Comatula) armata P. H. CARPENTER, 1876. ("Semper MS.")

1876. P. H. CARPENTER, Journ. Anat. and Physiol., X, p. 574. A *nomen nudum.*

armata=armed.

Actrinometra HARTLAUB, 1893.

1893. HARTLAUB, Nova Acta Acad. German., LVIII, No. 1, p. 97. Misprint for *Actinometra.*

Adelometra A. H. CLARK, 1907.

1907. A. H. CLARK, Smiths. Miscell. Coll. (Quarterly Issue), L, pp. 346, 363.

Type.—*Antedon angustiradia* P. H. Carpenter, 1888.

ἀδηλός=obscure+*metra.*

Adelometra tenuipes A. H. CLARK, 1908.

1908. A. H. CLARK, Proc. U. S. Nat. Mus., XXXIV, p. 236.

Type-locality.—Off Havana, Cuba; 211 fathoms. U. S. S. *Albatross.*

tenuis=slender+*pes*=foot. U. S. National Museum.

Aetinometra P. H. CARPENTER, 1881.

1881. P. H. CARPENTER, Notes from the Leyden Museum, III, p. 204.

Typographical error.

Alecto LEACH, 1815.

1815. LEACH, Zool. Miscell., II, p. 61.

Type.—*Alecto horrida* Leach (n. sp.) (first species) *not recognizable.*

Ἀληκτώ=Alecto, one of the Furies.

The genus *Alecto* has no standing whatever, as *Alecto horrida* is quite unrecognizable from the description or the figure, and

the type-specimen has been lost. In 1819 Schweigger (Beobachtungen auf Naturhistorischen Reisen, Berlin, 1819, p. 66) referred it to the Linnæan *Asterias multiradiata*, and figured certain parts of a specimen supposed to belong to the species. The figures, however, are as unrecognizable as those of Leach, but probably do not represent the Linnæan species as now restricted. The mere fact that he assigned *Alecto horrida* to *Asterias multiradiata* would seem to imply that the two were identical, in which case the *Actinometra* of Müller, 1841, and the *Comatula* of Lamarck, 1816, would become synonyms of *Alecto*, 1815; but it must be remembered that nothing was known of the specific, or even of the generic, characters of free crinoids until a much later date, and any multibrachiate form was considered "*Asterias multiradiata* Linnæus," regardless of whether it belonged to the Antedonidæ or Actinometridæ. We find this well illustrated by Leuckart, who in 1839 (Isis, V, p. 612) referred to what is most probably *Himerometra savignii* (Müller) under the name of *Comatula multiradiata*. Therefore, in the absence of any proof as to which of the two families *Alecto horrida* really belonged, to say nothing of its specific relations, we can do nothing but consider it unrecognizable, and the generic name *Alecto* as quite meaningless.

Alecto bennetti J. Müller, 1841.

1841. J. Müller, Wiegmann's Archiv für Naturgesch., I, p. 146.

Type-locality.—Unknown. Mr. George Bennett.

Mr. George Bennett. Leyden Museum.

Alecto carinata Leach, 1815.

1815. Leach, Zool. Miscell., II, p. 63.

Type-locality.—Unknown.

carinata=keeled (in reference to the arms). Type lost.

There can be little doubt that this is the same species as *Comatula carinata* Lamarck, 1816, as was suggested by Lamarck himself. The description, however, is quite useless, and the type has been lost. We know what Lamarck's species really is. Therefore, we must date the name from Lamarck, 1816, with *Alecto carinata* Leach, 1815, as a questionable synonym.

Alecto echinophora J. Müller, 1843.

1843. J. Müller, Abh. d. k. Akad. d. wiss., 1841 [1843], p. 48.

Editorial error for *Alecto echinoptera*.

Alecto echinoptera J. Müller, 1841.

1841. J. Müller, Wiegmann's Archiv für Naturgesch., I, p. 143.

Type-locality.—Unknown. Captain Wendt.

ἐχῖνος=rough, prickly+πτέρον=wing (i. e. arm).

Berlin Museum.

Doctor Carpenter believes, with good reason, that this species was originally brought from the West Indies.

Alecto elongata J. Müller, 1841.

1841. J. Müller, Wiegmann's Archiv für Naturgesch., I, p. 146.

Type-locality.—New Guinea. Salomon Müller.

elongata=lengthened, elongate. Leyden Museum.

Alecto eschrichtii J. Müller, 1841.

1841. J. Müller, Wiegmann's Archiv für Naturgesch., I, p. 142: first mentioned, p. 139.

Type-locality.—Greenland. Herr D. F. Eschricht.

Prof. D. F. Eschricht.

Anatomical and Zoological Museum, Berlin.

(See *Comatula eschrichtii.*)

Alecto europæa Leach, 1815.

1815. Leach, Zoolog. Miscell., II, p. 61.

Type-locality.—"In oceano Europæo."

europæa=European. Type lost.

Alecto flagellata J. Müller, 1841. ("Mus. Leyd. MS.")

1841. J. Müller, Wiegmann's Archiv für Naturgesch., I, p. 145.

Type-locality.—Unknown. Herr Brugmann.

flagellata=whip-shaped (in reference to the arms).

Leyden Museum.

Alecto glacialis Leach (previous to 1830).

1830. [Leach] Catalogue of the contents of the Museum of the Royal College of Surgeons of London, Pt. IV, fasc. I, p. 14, No. 85a.

Type-locality.—80° 26′ north latitude, 12° 30′ east longitude (off the northwest coast of Spitzbergen); 226 fathoms. H. M. S. *Dorothea.* Or, 80° 26′ north latitude, 11° 32′ east longitude (same locality); 250 fathoms. H. M. S. *Trent.*

glacialis=icy (in reference to the habitat).

Type apparently lost.

I have not been able to find the original reference to this species in any of Doctor Leach's published works. Nothing more than a sketch of the digestive system is given in any of the seven later references, so that the species is quite unidentifiable. This form was named *Alecto eschrichtii* by J. Müller in 1841.

Alecto horrida Leach, 1815.

1815. Leach, Zool. Miscel., II, p. 61, pl. LXXX.

Not recognizable.

horridus=bristly, prickly, uncouth. Type lost.

Alecto japonica J. Müller, 1841.

1841. J. Müller, Wiegmann's Archiv für Naturgesch., I, p. 145.

Type-locality.—Japan. Herr von Siebold.

japonica=Japanese. Leyden Museum.

Alecto meridionalis AGASSIZ and AGASSIZ, 1865. ("A. Agassiz MS.")

1865. AGASSIZ and AGASSIZ, Seaside Studies, Boston, 1865, p. 121, figs. 153, 154.

Type-locality.—Coast of South Carolina, United States.

meridionalis=southern. Museum of Comparative Zoology.

Alecto multifida J. MÜLLER, 1841.

1841. J. MÜLLER, Wiegmann's Archiv für Naturgesch., I, p. 147; first mentioned, p. 144.

multifida=divided into many parts.

Alecto multifida was based on the specimens which served Lamarck as the basis of his description of *Comatula multiradiata*, and which (together with the Linnæan types of *Asterias multiradiata*) have subsequently been carefully examined and specifically determined by Doctor Carpenter. Müller took the ground that these specimens are not specifically identical with that described as *Comatula multiradiata* by Goldfuss, and that, whereas Goldfuss's description is diagnostic and Lamarck's is not, the name *multiradiata* should be retained for the form adequately described, i. e., *Comatula multiradiata* Goldfuss, and a new name should be conferred on Lamarck's types. It is unnecessary to state that, as we know exactly what the *multiradiata* of Linnæus and Lamarck is, the name must be retained for that species, and Müller's *multifida*, being proposed merely as a substitute, becomes a synonym of it.

Alecto novæ-guineæ J. MÜLLER, 1841. ("Mus. Leyd. MS.")

1841. J. MÜLLER, Wiegmann's Archiv für Naturgesch., I, p. 146.

Type-locality.—Eidouma, New Guinea. Salomon Müller.

nova-guineæ=of New Guinea. Leyden Museum.

Alecto palmata J. MÜLLER, 1841.

1841. J. MÜLLER, Wiegmann's Archiv für Naturgesch., I, p. 144.

Type-locality.—India. Herr D. F. Eschricht.

palmatæ=palmate. Berlin Museum.

Alecto parvicirra J. MÜLLER, 1841.

1841. J. MÜLLER, Wiegmann's Archiv für Naturgesch., I, p. 145.

Type-locality.—Unknown.

parvus=small+*cirra*="cirri." Paris Museum.

Alecto petasus DÜBEN and KOREN, 1844.

1844. DÜBEN og KOREN, K. Vetensk. Akad. Handl. för 1844, p. 229, pl. VI, fig. 1.

Type-locality.—Swedish coast, near Fiskebäckskihl in Bohuslän.

πέτασος=a spreading or broad-brimmed hat.

Alecto phalangium J. MÜLLER, 1841.

1841. J. MÜLLER, Wiegmann's Archiv für Naturgesch., I, p. 142; first mentioned, p. 140.

Type-locality.—Mediterranean Sea; Nice and Naples. Doctor Peters.

φαλάγγιον= a spider. Berlin Museum.

Alecto pollyarthra J. Müller, 1841.

1841. J. Müller, L'Institut for October 21, 1841, p. 357.

Typographical error.

Alecto polyarthra J. Müller, 1841.

1841. J. Müller, Wiegmann's Archiv für Naturgesch., I, p. 144.

Type-locality.—Unknown.

πολύς=many+*ἄρθρα*=segments. Berlin Anatomical Museum.

Not recognizable; the species is founded on some arm fragments.

Alecto purpurea J. Müller, 1843.

1843. J. Müller, Wiegmann's Archiv für Naturgesch., I, p. 132.

Type-locality.—New Holland. Herr Preiss.

purpurea=purple.

Alecto rosea J. Müller, 1841.

1841. J. Müller, Wiegmann's Archiv für Naturgesch., I, p. 143.

Type-locality.—Unknown.

rosea=rose-colored. Vienna Museum.

Alecto sarsii Düben and Koren, 1844.

1844. Düben og Koren, K. Vetensk Akad. Handl., 1844, p. 231, pl. VI, fig 2.

Type-locality.—Coast of Norway from Christiania to Bergen. Prof. Michael Sars.

Alecto savignii J. Müller, 1841.

1841. J. Müller, Wiegmann's Archiv für Naturgesch., I, p. 144.

Based on *Comatula multiradiata* Audouin (not *Asterias multiradiata* Linnæus) in Savigny, Description de l'Égypte; Échinodermes pl. I, figs. 1–6 (1817).

Type-locality.—Red Sea. M. Savigny.

M. Marie Jules César Lelorgne de Savigny. Berlin Museum.

The specimen which served as the basis for Müller's description was brought from the Red Sea by Hemprich and Ehrenberg, and is now in the Berlin Museum. This name has been very generally emended to "*savignyi.*"

Alecto tessellata J. Müller, 1841.

1841. J. Müller, Wiegmann's Archiv für Naturgesch., I, p. 144.

Type-locality.—India. Herr Schönlein.

tessellata=checkered. Bamburg Museum.

Alecto timorensis J. Müller, 1841. ("Mus. Leyd. MS.")

1841. J. Müller, Wiegmann's Archiv für Naturgesch., 1, p. 145.

Type-locality.—Timor. Herren Boie and Salomon Müller.

timorensis=of Timor. Leyden Museum.

Alecto wahlbergii J. Müller, 1843.

1843. J. Müller, Wiegmann's Archiv für Naturgesch., I, p. 131.

Type-locality.—Port Natal. Herr J. A. Wahlberg.

Herr J. A. Wahlberg. Stockholm Museum.

Alectro Say, 1825.

1825. Say, Journ. Acad. Nat. Sci. Philadelphia, V, Pt. 1, p. 153.

This is clearly an emendation of *Alecto*, as the genus is referred to Leach.

Alectro dentata Say, 1825.

1825. Say, Journ. Acad. Nat. Sci. Philadelphia, V, Pt. 1, p. 153.

Type-locality.—Great Egg Harbor, New Jersey, United States. Mr. Titian Peale.

dentata=with teeth. Museum of the Philadelphia Academy.

Antedon de Fréminville, 1811.

1811. de Fréminville, Bull. Soc. Philom. (Paris), II, p. 349.

Type.—*Antedon gorgonia* de Fréminville (n. sp.)=*Asterias bifida* Pennant, 1777=*Comatula mediterranea* Lamarck, 1816.

'Ανθηδών, ("the flowery one") a nymph (from Pausanias).

Antedon abbotti A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 130; detailed description, p. 148.

Type-locality.—Pulo Taya, China Sea. Dr. W. L. Abbott.

Dr. W. L. Abbott. U. S. National Museum.

Antedon abyssicola P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 158, pl. xxxiii, figs. 1, 2; detailed description, p. 191; first mentioned, p. 30.

Type-locality.—35° 22′ north latitude, 169° 53′ east longitude (north Pacific); 2,900 fathoms. H. M. S. *Challenger*.

abyssicola=inhabiting great depths. British Museum.

The fact that this species was only dredged twice by the *Challenger* at stations 78° apart, the single specimen from Station No. 160 showing certain differences from those from Station No. 244, makes it necessary, if possible, to fix upon a definite type-locality, in case the differences should prove to be constant. Now, where the characters are first given (in the key on p. 158) the only differential character mentioned is the number of cirrus segments. The single specimen from Station No. 160 had no cirri, and therefore could not have been the original from which this character was taken. The type-locality must, then, of necessity, be the other station.

Antedon abyssorum P. H. Carpenter, 1888.

1887. P. H. Carpenter, Quart. Journ. Micr. Sci., XXVII, p. 386.

A *nomen nudum*.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 158, pl. xxix, figs. 10–13; detailed description, p. 190; first mentioned, p. 54.

Type-locality.—46° 16′ south latitude, 48° 27′ east longitude (near the Crozet Islands); 1,600 fathoms. H. M. S. *Challenger.*

abyssorum=of great depths. British Museum.

Antedon acœla P. H. Carpenter, 1884.

1884. P. H. Carpenter, *Challenger* Reports, XI, Zoology, pp. 57, 83, 84, 93, etc., pl. liv, figs. 1–4; pl. lv, fig. 5; detailed description in *Challenger* Reports, XXVI, Zoology, p. 132, pl. ii, fig. 3; pl. xvi.

Type-locality.—4° 33′ north latitude, 127° 06′ east longitude (off the Meangis Islands); 500 fathoms. H. M. S. *Challenger.*

ἀκοίλιος=without hollows. British Museum.

Antedon aculeata P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 103, pl. xxiii, fig. 3; detailed description, p. 128; first mentioned, p. 54.

Type-locality.—4° 33′ north latitude, 127° 06′ east longitude (off the Meangis Islands); 500 fathoms. H. M. S. *Challenger.*

aculeata=sharp-pointed. British Museum.

Antedon acuticirra P. H. Carpenter, 1882.

1882. P. H. Carpenter, Journ. Linn. Soc. (Zool.), XVI, p. 502; detailed description, p. 509.

Type-locality.—Unknown.

acutus=sharp+*cirra*=" cirri." Hamburg Museum.

Antedon acutiradia P. H. Carpenter, 1888.

1887. P. H. Carpenter, Quart. Journ. Micr. Sci., XXVII, p. 386.

A *nomen nudum*.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 102, pl. xi, figs. 3, 4; detailed description, p. 113; first mentioned, p. 32.

Type-locality.—19° 02′ south latitude, 177° 10′ east longitude (near Kandavu, Fiji); 1,350 fathoms. H. M. S. *Challenger.*

acutus=sharp+*radia*=" rays." British Museum.

† **Antedon admirabilis.**

Antedon adrestine A. H. Clark, 1907.

1907. A. H. Clark, Smiths. Miscell. Coll. (Quarterly Issue), L, p. 340.

Type-locality.—Off the southern coast of Hondo, Japan; 45 to 48 fathoms. U. S. S. *Albatross.*

Ἀδρέστινη; a feminine name. U. S. National Museum.

†**Antedon æquimarginata.**

Antedon æquipinna P. H. Carpenter, 1882.

1882. P. H. Carpenter, Journ. Linn. Soc. (Zool.), XVI, p. 502; detailed description, p. 504.

Type-locality.—Unknown.

æquus=equal+*pinna*="pinnules." Hamburg Museum.

Antedon affinis Hartlaub, 1890. ("Lütken MS.")

1890. Hartlaub, Nachr. Ges. Göttingen, May, 1890, p. 170; detailed description, p. 184.

Type-locality.—Amboina.

affinis=related. Göttingen Museum.

Antedon afra Hartlaub, 1890. ("Lütken MS.")

1890. Hartlaub, Nachr. Ges. Göttingen, May, 1890, p. 168; detailed description, p. 172.

Type-locality.—Bowen, Queensland.

Ἀφρά=Aphrodite. Hamburg Museum.

Antedon agassizii Hartlaub, 1895.

1895. Hartlaub, Bull. Mus. Comp. Zool., XXVII, No. 4, p. 131, pl. I, figs. 4, 7, 8; pl. II, figs. 16, 18, 19; pl. III, fig. 23; pl. IV, fig. 26; first mentioned, p. 129.

Type-locality.—6° 35′ 00″ north latitude, 81° 44′ 00″ west longitude (off Panama); 782 fathoms: 0° 12′ 30″ north latitude, 90° 32′ 30″ west longitude (off the Galapagos Islands); 684 fathoms: or 0° 18′ 40″ north latitude, 90° 34′ 00″ west longitude (Galapagos Islands); 327 fathoms. U. S. S. *Albatross.*

Mr. Alexander Agassiz.

Type will be deposited in the U. S. National Museum.

Antedon alata Pourtalès, 1878.

1878. Pourtalès. Bull. Mus. Comp. Zool., V, No. 9, p. 215.

Type-locality.—Barbados (British West Indies): 100 fathoms. U. S. S. *Hassler.*

alata=winged. Museum of Comparative Zoology.

This is the name which must be used for the species called *Actinometra pulchella* by Doctor Carpenter, who discarded *alata* as not being so appropriate as *pulchella.*

Antedon alboflava A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 129; detailed description, p. 145.

Type-locality.—30° 54′ 40″ north latitude; 130° 37′ 30″ east longitude (off Kagoshima Gulf, Japan); 103 fathoms. U. S. S. *Albatross.*

albus=white+*flavus*=yellow. U. S. National Museum.

†**Antedon allardi.**

†**Antedon almerai.**

Antedon alternata P. H. CARPENTER, 1888.

1887. VON GRAFF, *Challenger* Reports, XX, Zoology, Pt. 61, p. 6. A *nomen nudum.*

1888. P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 158, pl. XVIII, figs. 1–3; pl. XXXII, fig. 5–9; detailed description, p. 179; first mentioned, p. 27.

Type-locality.—37° 34′ south latitude, 179° 22′ east longitude; 700 fathoms. H. M. S. *Challenger.*

alternata=alternating. British Museum.

†**Antedon alticeps.**

†**Antedon ambiguus.**

Antedon amboinensis HARTLAUB, 1890.

1890. HARTLAUB, Nachr. Ges. Göttingen, May, 1890, p. 170; detailed description, p. 181.

Type-locality.—Amboina. Dr. J. Brock.

amboinensis=of Amboina. Göttingen Museum.

Antedon anceps P. H. CARPENTER, 1888.

1888. P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 194, pl. XXXV, figs. 1–3; detailed description, p. 254; first mentioned, p. 54.

Type-locality.—6° 54′ north latitude, 122° 18′ east longitude; 10 fathoms. H. M. S. *Challenger.*

anceps=having two heads; (i. e., double; dimorphic).

British Museum.

Antedon andersoni P. H. CARPENTER, 1889.

1888. BELL, Proc. Zool. Soc. London, 1888, p. 387 (footnote). A *nomen nudum.*

1889. P. H. CARPENTER, Jour. Linn. Soc. (Zool.), XXI, p. 306, pl. XXVI, figs. 1–5; pl. XXVII, fig. 8.

Type-locality.—King Island, Mergui Archipelago. Dr. John Anderson.

Dr. John Anderson. British Museum.

The original description of this species is based on a much mutilated individual, and, in addition, contains some misleading statements. For the first good description see HARTLAUB Nova Acta Acad. German., LVIII, No. 1, p. 78 (1893).

†Antedon anglesensis.

Antedon angusticalyx P. H. Carpenter, 1884.

1884. von Graff, *Challenger* Reports, X, Zoology, Pt. 27, p. 17. A *nomen nudum*.

1884. P. H. Carpenter, *Challenger* Reports, XI, Zoology, p. 57 (footnote), pl. liv, fig. 5; pl. lv, fig. 6; full description in P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 242, pl. ii, figs. 4 *a–d;* pl. l, figs. 1, 2; woodcut, p. 246, fig. 5 B (1888).

Type-locality.—4° 33′ north latitude, 127° 06′ east longitude (off the Meangis Islands); 500 fathoms. H. M. S. *Challenger.*

angustus=narrow+*calyx*=" calyx." British Museum.

Antedon angustipinna P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 158, pl. xxix, figs. 1–4; detailed description, p. 189; first mentioned, p. 54.

Type-locality.—37° 17′ south latitude, 53° 52′ west longitude; 600 fathoms. H. M. S. *Challenger.*

angustus=narrow+*pinna*=" pinnules." British Museum.

Antedon angustiradia P. H. Carpenter, 1888.

1883. von Graff, Bull. Mus. Comp. Zool., XI, No. 7, p. 133. A *nomen nudum*.

1884. von Graff, *Challenger* Reports, X, Zoology, Pt. 27, p. 17. A *nomen nudum*.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 252, pl. xlv, fig. 4; detailed description, p. 253; first mentioned, p. 55.

Type-locality.—5° 49′ 15″ south latitude, 132° 14′ 15″ east longitude (near the Ki Islands); 140 fathoms. H. M. S. *Challenger.*

angustus=narrow+*radia*=" rays." British Museum.

Antedon antarctica P. H. Carpenter, 1880.

1880. P. H. Carpenter, Journ. Linn. Soc. (Zool.), XV, p. 198, pl. xii, figs. 29 *a*, *b;* detailed description in P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 138, pl. i, figs. 6 *a–d*, 7 *a*, *b;* pl. xxv; detailed description, p. 144 (1888).

Type-locality.—52° 59′ 30″ south latitude, 73° 33′ 30″ east longitude (near Heard Island); 75 fathoms. H. M. S. *Challenger.*

antarctica=of the antarctic regions. British Museum.

Antedon anthus A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 128; detailed description, p. 136.

Type-locality.—30° 54′ 40″ north latitude, 130° 37′ 30″ east longitude (off Kagoshima Gulf, Japan); 103 fathoms. U. S. S. *Albatross.*

ἄνθος=a flower. U. S. National Museum.

Antedon arctica A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 71; detailed description, p. 82.

Type-locality.—Camp Clay, Cape Sabine (arctic coast of Alaska). Lieut. Adolphus W. Greeley, U. S. A.

arctica=arctic. U. S. National Museum.

Antedon armata Pourtalès, 1869.

1869. Pourtalès, Bull. Mus. Comp. Zool., I, No. 11, p. 356.

Type-locality.—West of the Tortugas, Florida; 35 fathoms. U. S. S. *Bibb.*

armata=armed. Museum of Comparative Zoology.

†**Antedon arnaudi.**

† **Antedon aspera.**

Antedon aspera A. H. Clark, 1908 (not †*Antedon aspera*).

1908. A. H. Clark, Proc. Biol. Soc. Washington, XXI, p. 131. A *nomen nudum.*

Error for *Trichometra aspera.*

Antedon asperrima A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 70; detailed description, p. 73.

Type-locality.—54° 02′ 50″ north latitude, 166° 45′ 00″ west longitude (Bering Sea); 406 fathoms. U. S. S. *Albatross.*

asperrima=very rough. U. S. National Museum.

Antedon aster A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 129; detailed description, p. 145.

Type-locality.—35° 11′ 25″ north latitude, 139° 28′ 20″ east longitude (Sagami Bay, Japan); 369 to 405 fathoms. U. S. S. *Albatross.*

ἀστήρ = a star, U. S. National Museum.

Antedon australis P. H. Carpenter, 1882. ("Lütken MS.")

1882. P. H. Carpenter, Journ. Linn. Soc. (Zool.), XVI, p. 510.

Type-locality.—Sydney, New South Wales.

australis=southern. Copenhagen Museum.

A few characters are given which may prove to be of systematic importance.

Antedon australis P. H. Carpenter, 1888 (not *Antedon australis* P. H. Carpenter, 1882).

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 138, pl. xxvi, figs. 4, 5; pl. xxvii, figs. 14–20; detailed description, p. 146; first mentioned, p. 33.

Type-locality.—52° 04′ south latitude, 71° 22′ east longitude (near Kerguelen Island); 150 fathoms. H. M. S. *Challenger.*

australis=southern. British Museum.

This species has been renamed *Heliometra glabra.*

†**Antedon avenionensis.**

†**Antedon avenionensis** var. **minor.**

Antedon barentsi P. H. Carpenter, 1886.

1886. P. H. Carpenter, Bijdragen tot de Dierkunde, afl. xiii, p. 9, pl. i, figs. 1–5; first mentioned, p. 3.

Type-locality.—70° 40′ north latitude, 31° 10′ east longitude (north of Nardö, Norway); 132 fathoms. Dutch S. S. *Willem Barents.*

S. S. *Willem Barents.*

Antedon basicurva P. H. Carpenter, 1884.

1884. von Graff, *Challenger* Reports, X, Zoology, Pt. 27, p. 17. A *nomen nudum.*

1884. P. H. Carpenter, *Challenger* Reports, XI, Zoology, p. 84, pl. liv, fig. 9; pl. lv, fig. 7; detailed description in *Challenger* Reports, XXVI, Zoology, p. 102, pl. ii, figs. 2 *a–d;* pl. xxi, fig. 3; pl. xxii, figs. 3, 4; woodcut, p. 122, figs. 2 A, B (1888).

Type-locality.—29° 45′ south latitude, 178° 11′ west longitude (near the Kermadec Islands); 630 fathoms. H. M. S. *Challenger.*

basis=base+*curvus*=bent. British Museum.

Antedon bassett-smithi Bell, 1894.

1894. Bell, Proc. Zool. Soc. London, 1894, p. 399, pl. xxiv; first mentioned, p. 393.

Type-locality.—Macclesfield Bank; 13 to 36 fathoms.

Dr. P. W. Bassett-Smith, Surgeon, R. N. British Museum.

This species was, unfortunately, wrongly described in the "Spinifera group," with which it has no affinities; it is in reality a species of the "Palmata group" of Dr. Carpenter, as is obvious from the shape of the lower pinnules, as given in the plate.

It should be noticed that the description does not agree with the figure in respect to the number of arms or cirri, or the length of the first pinnule.

†Antedon beaugrandi.

Antedon bella Hartlaub, 1890.

1890. Hartlaub, Nachr. Ges. Göttingen, May, 1890, p. 169; detailed description, p. 174.

Type-locality.—Noordwachter Eiland (North Watcher Island), Gulf of Tonkin; 15 to 20 fathoms.

bella=pretty. Göttingen Museum.

Antedon bella var. brunnea Hartlaub, 1893.

1893. Hartlaub, Nova Acta Acad. German. LVIII, No. 1, p. 44.

Type-locality.—Amboina. Dr. J. Brock.

brunnea=brown. Göttingen Museum.

†Antedon beltremiuxi.

Antedon bengalensis Hartlaub, 1890.

1890. Hartlaub, Nachr. Ges. Göttingen, May, 1890, p. 170, detailed description, p. 182.

Type-locality.—Bay of Bengal.

bengalensis=of Bengal. Göttingen Museum.

Antedon bicolor P. H. Carpenter, 1879. ("Mus. Paris MS.")

1879. P. H. Carpenter, Trans. Linn. Soc. (Zool.), 2d ser., II, p. 29.

A *nomen nudum*.

bicolor=of two colors.

Antedon bidens Bell, 1884.

1884. Bell, Rep. Zool. Coll. H. M. S. Alert, p. 158, pl. xi, figs. A *a–c;* first mentioned, p. xiii.

Type-locality.—Torres Straits. H. M. S. *Alert.*

bidens=having two teeth (on the cirri). British Museum.

Antedon bidentata von Graff, 1884. ("P. H. Carpenter MS.")

1884. von Graff, *Challenger* Reports, X, Zoology, Pt. 27, pp. 15, 16, 17.

A *nomen nudum*.

bidentata=having two teeth.

Antedon bigradata Hartlaub, 1895.

1895. Hartlaub, Bull. Mus. Comp. Zool., XXVII, No. 4, p. 145, pl. i, fig. 5.

Type-locality.—6° 30′ 00″ north latitude, 81° 44′ 00″ west longitude (off Panama); 555 fathoms; or between Chatham and Hood Islands, Galapagos; 385 fathoms. U. S. S *Albatross.*

bigradata=with two steps.

Type will be deposited in U. S. National Museum.

Antedon bimaculata P. H. Carpenter, 1881.

1881. P. H. Carpenter, Notes from the Leyden Museum, III, p. 176; detailed description, p. 186.

Type-locality.—Amboina.

bimaculata=(here) two-colored. Leyden Museum.

Antedon bipartipinna P. H. Carpenter, 1882.

1882. P. H. Carpenter, Journ. Linn. Soc. (Zool.), XVI, p. 502; detailed description, p. 512.

Type-locality.—Hongkong.

bipartio=bisect+*pinna*=" pinnules." Hamburg Museum.

Antedon bispinosa P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 102; pl. xx, figs. 3, 4; detailed description, p. 115; first mentioned, p. 33.

Type-locality.—46° 16′ south latitude, 48° 27′ east longitude (near the Crozet Islands); 1,600 fathoms. H. M. S. *Challenger.*

bispinosa=with two spines. British Museum.

†**Antedon bituricensis.**

Antedon bowersi A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 130, detailed description, p. 148.

Type-locality.—30° 58′ 30″ north latitude, 130° 32′ 00″ east longitude (off Kagoshima Gulf); 152 to 103 fathoms. U. S. S. *Albatross.*

Hon. George M. Bowers. U. S. National Museum.

Antedon brachymera A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 71; detailed description, p. 76.

Type-locality.—43° 01′ 40″ north latitude, 140° 22′ 40″ east longitude. (Sea of Japan); 172 fathoms. U. S. S. *Albatross.*

βραχύς=short+μηρός=segment. U. S. National Museum.

Antedon brasiliensis P. H. Carpenter, 1879. (" Lütken MS.")

1879. P. H. Carpenter, Proc. Roy. Soc., XXVIII, p. 386.

A *nomen nudum.*

brasiliensis=of Brazil.

Antedon braziliensis Rathbun, 1879. (" Lütken MS.")

1867. Verrill, Trans. Connect. Acad Arts and Sci., I, pp. 341, 365.

A *nomen nudum.*

1879. Rathbun, Trans. Conn. Acad. Sci., V, p. 156.

Type-locality.—Coast of Brazil.

braziliensis=of Brazil.

†**Antedon breviceps.**

Antedon brevicirra Bell, 1894.

1894. Bell, Proc. Zool. Soc. London, 1894, p. 400; first mentioned, p. 396.

Type-locality.—Macclesfield Bank; 20 to 35 fathoms.

brevis=short+*cirra*="cirri." British Museum.

This species is quite unidentifiable from the description.

Antedon brevicuneata P. H. Carpenter, 1881.

1881. P. H. Carpenter, Notes from the Leyden Museum, III, p. 176; detailed description, p. 187.

Type-locality.—Amboina.

brevis=short+*cuneata*=wedge-shaped. Leyden Museum.

Antedon breviradia P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 102, pl. III, figs. 4, 5 *a–c;* pl. XI, fig. 5; pl. XIX; pl. XX, figs. 1, 2; detailed description, p. 110; first mentioned, p. 20.

Type-locality.—29° 45′ south latitude, 178° 11′ west longitude (near the Kermadec Islands); 630 fathoms. H. M. S. *Challenger.*

brevis=short+*radia*="rays." British Museum.

Antedon briareus Bell, 1882.

1882. Bell, Proc. Zool. Soc. London, 1882, p. 534.

The specific formula given for this species is particularly misleading, as it should have been given under "*Actinometra*," not *Antedon;* full description in Bell, Rep. Zool. Coll. H. M. S. *Alert*, p. 163, pl. XIV (1884).

Type-locality.—Port Denison. H. M. S. *Alert.*

Βριάρεως=Briareus or Ægæon. British Museum.

Antedon briseis A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 71; detailed description, p. 83.

Type-locality.—Sea of Japan.

Βρισηΐς=Briseis or Hippodamia. U. S. National Museum.

Antedon brockii Hartlaub, 1890.

1890. Hartlaub, Nachr. Ges. Göttingen, May, 1890, p. 170; detailed description, p. 183.

Type-locality.—Amboina. Dr. J. Brock.

Dr. J. Brock. Göttingen Museum.

†**Antedon bronnii.**

†**Antedon brownii.**

†**Antedon burgundiaca.**

Antedon callista A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 128; detailed description, p. 135.

Type-locality.—32° 31′ 10″ north latitude, 128° 33′ 20″ east longitude (Eastern Sea); 139 to 107 fathoms. U. S. S. *Albatross.*

κάλλιστος=very beautiful. U. S. National Museum.

†Antedon calloviensis.

†Antedon campichei.

†Antedon canaliculata.

Antedon capensis Bell, 1905.

1905. Bell, Marine Investigations in South Africa, III, p. 139, pl. II.

Type-locality.—South Africa; 13–27 fathoms.

capensis; in reference to the Cape of Good Hope.

Professor Bell described this species in the "Basicurva group," whereas it really belongs with *Comatula carinata* of Lamarck, placed by Doctor Carpenter in the "Milberti group." I have examined some of the original specimens and can not separate them from true *Comatula carinata* from Mauritius or Zanzibar. *Comatula carinata* from East Africa varies very little, but specimens from the West Indies and Brazil are very variable, especially in regard to the carination of the arms. Six-rayed individuals also are common in the latter locality.

†Antedon carabœufi.

†Antedon carentonensis.

Antedon carpenteri Bell, 1884.

1884. Bell, Zool. Coll. H. M. S. *Alert*, p. 157, pl. x, figs. A *a–c;* first mentioned, p. xiii.

Type-locality.—Port Curtis (Queensland). H. M. S. *Alert.*

Dr. P. Herbert Carpenter. British Museum.

†Antedon cartenniensis.

Antedon challengeri A. H. Clark, 1907.

1907. A. H. Clark, Smiths. Miscell. Coll. (Quarterly Issue), L, p. 353.

New name for *Antedon lineata* P. H. Carpenter, 1888, not *Antedon lineata* Pomel, 1887.

H. M. S. *Challenger.*

†Antedon changarnieri.

†Antedon choffati.

Antedon ciliata A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 71; detailed description, p. 81.

Type-locality.—43° 00′ 00″ north latitude, 140° 10′ 30″ east longitude (Sea of Japan); 390 to 428 fathoms. U. S. S. *Albatross.*

ciliata=ciliated. U. S. National Museum.

Antedon cirri Honeyman, 1889.

1889. Honeyman, Proc. Nova Scotia Sci. Inst., VII, p. 265.

Type-locality.—Off Halifax.

cirrus=a lock of hair. Halifax Museum.

Probably this combination was not intended as a new name, but, taking the context into consideration, I do not see how it can be treated otherwise. The specimen was presented to the museum by Sir C. Wyville Thomson under the name of *Antedon eschrichtii*, of which species it is a synonym; but in case a definite geographical variety should be proved to inhabit the vicinity given, this name would have to be used. The character of "single claws" given is somewhat obscure, and the number of cirrus segments is equally worthless, falling, as it does, within the range of a large number of species of various genera.

Antedon claræ Hartlaub, 1890.

1890. Hartlaub, Nachr. Ges. Göttingen, May, 1890, p. 169; detailed description, p. 174.

Type-locality.—Amboina. Dr. J. Brock.

Göttingen Museum.

Antedon clemens P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 225, pl. xxxix, fig. 5; detailed description, p. 229; first mentioned, p. 54.

Type-locality.—6° 54′ north latitude, 122° 18′ east longitude (Celebes Sea); 10 fathoms. H. M. S. *Challenger.*

clemens=placid, calm. British Museum.

Antedon clio A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 71; detailed description, p. 79.

Type-locality.—32° 31′ 20″ north latitude, 128° 32′ 40″ east longitude (Eastern Sea); 107 fathoms. U. S. S. *Albatross.*

Κλειώ=Clio, a Muse. U. S. National Museum.

Antedon columnaris P. H. Carpenter, 1881.

1881. P. H. Carpenter, Bull. Mus. Comp. Zool., IX, No. 4, p. 169, pl. 1, fig. 8; first mentioned, p 152.

Type-locality.—Off St. Lucia, British West Indies; 422 fathoms. U. S. S. *Blake.*

columnaris=columnar. Museum of Comparative Zoology.

Antedon comata von Graff 1887. ("P. H. Carpenter MS.")

1887. von Graff, *Challenger* Reports, XX, Zoology, Pt. 61, p. 2. A *nomen nudum.*

comata=with long hair.

†Antedon complanata.

Antedon compressa P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 212, pl. XLI; detailed description, p. 222; first mentioned, p. 54.

Type-locality.—5° 49′ 15″ south latitude, 132° 14′ 15″ east longitude (near the Ki Islands); 140 fathoms. H. M. S. *Challenger.*

compressa=compressed. British Museum.

Antedon conifera Hartlaub, 1890.

1890. Hartlaub, Nachr. Ges. Göttingen, May, 1890, p. 169; detailed description, p. 173.

Type-locality.—Japan. Dr. F. Hilgendorf.

conifera=cone-bearing. Berlin Museum.

Antedon conjungens P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 225, pl. XLV, fig. 1; detailed description, p. 233; first mentioned, p. 55.

Type-locality.—Zebu Reefs. H. M. S. *Challenger.*

conjungens=binding together; uniting. British Museum.

†Antedon costata.

Antedon crassipinna Hartlaub, 1890.

1890. Hartlaub, Nachr. Ges. Göttingen, May, 1890, p. 170; detailed description, p. 185.

Type-locality.—Amboina; Cochin China.

crassus=stout, thick+*pinna*=" pinnules."

Göttingen and Hamburg Museums.

Antedon crassispina Kœhler, 1895.

1895. Kœhler, Mém. Soc. Zool. France, VIII, p. 420.

crassus=thick+*spina*=thorn.

Editorial error for *crassipinna.*

Antedon crenulata P. H. Carpenter, 1882.

1882. P. H. Carpenter, Journ. Linn. Soc. (Zool.), XVI, p. 502; detailed description, p. 507.

Type-locality.—Borneo.

crenulata=crenulate. Hamburg Museum.

Antedon cubensis Pourtalès, 1869.

1869. Pourtalès, Bull. Mus. Comp. Zool., I, No. 11, p. 356.

Type-locality.—Off Cojima, near Havana, Cuba; 450 fathoms. U. S. S. *Bibb.*

cubensis=of Cuba. Museum of Comparative Zoology.

Antedon cumingii Pfeffer, 1900.

1900. Pfeffer, Senckenb. Ges. Abh., XXV, p. 85.

Editorial error for *Comatula cumingii* J. Müller.

Antedon cupulifera HARTLAUB, 1893. ("Lütken MS.")

1893. HARTLAUB, Nova Acta Acad. German., LVIII, No. 1, p. 82.

A *nomen nudum*.

cupulifera=bearing small casks; i. e., with barrel-shaped segments.

†Antedon decameros.

Antedon decameros J. E. GRAY, 1848.

1848. J. E. GRAY, List of Brit. Animals in Brit. Mus., Pt. 1. Centroniæ or Radiated Animals, p. 28.

Type-locality.—Plymouth Sound. Dr. W. E. Leach.

δέκα=ten+*μηρός*=part. British Museum.

No description is given, but there is a good synonymy, making it evident that the species in question is the *Asterias bifida* of Pennant.

Antedon decipiens BELL, 1882.

1882. BELL, Proc. Zool. Soc. London, 1882, p. 534.

Non-diagnostic specific formula given; full description in BELL, Rep. Zool. Coll. H. M. S. *Alert*, p. 159, pl. XI. figs. B, Ba (1884).

Type-locality.—Arafura Sea; 32 to 36 fathoms. H. M. S. *Alert*.

decipiens=deceiving. British Museum.

Antedon defecta P. H. CARPENTER, 1888.

1888. P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 206; first mentioned, p. 54.

Type-locality.—Caribbean Sea; 77 to 242 fathoms. U. S. S. *Blake*.

defecta=imperfect. Museum of Comparative Zoology.

†Antedon delgadoi.

Antedon delicatissima A. H. CLARK, 1907.

1907. A. H. CLARK, Proc. U. S. Nat. Mus., XXXIII, p. 130; detailed description, p. 149.

Type-locality.—30° 12′ 00″ north latitude, 130° 44′ 00″ east longitude (Eastern Sea); 84 fathoms. U. S. *Albatross*.

delicatissima=very elegant. U. S. National Museum.

Antedon denticulata P. H. CARPENTER, 1888.

1888. P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 103, pl. XXII, figs. 1, 2; detailed description, p. 130; first mentioned, p. 34.

Type-locality.—8° 56′ north latitude, 136° 05′ east longitude (near the Pelew Islands); 49 fathoms. H. M. S. *Challenger*.

denticulata=set with teeth. British Museum.

†Antedon depereti.

†Antedon depressa.

†Antedon desori.

Antedon diadema A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 129; detailed description, p. 144.

Type-locality.—30° 58′ 30″ north latitude, 130° 32′ 00″ east longitude (off Kagoshima Gulf); 152 to 103 fathoms. U. S. S. *Albatross.*

διάδημα=a diadem. U. S. National Museum.

Antedon diomedeæ A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 130; detailed description, p. 146.

Type-locality.—31° 28′ 20″ north latitude, 130° 35′ 30″ east longitude (off the southern coast of Japan); 51 fathoms. U. S. S. *Albatross.*

diomedea=an albatross. U. S. National Museum.

Antedon disciformis P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 225, pl. IV, figs. 2 *a–d;* pl. XXXIX, fig. 4; detailed description, p. 228; first mentioned, p. 8.

Type-locality.—Zebu Reefs. H. M. S. *Challenger.*

discus=a disk+*formis*=shape. British Museum.

Antedon discoidea P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 132, pl. X, figs. 1, 2; detailed description, p. 134; first mentioned, p. 54.

Type-locality.—5° 49′ 15″ south latitude, 132° 14′ 15″ east longitude (near the Ki Islands); 140 fathoms. H. M. S. *Challenger.*

δισκοειδής=discoidal. British Museum.

Antedon distincta P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 241, pl. LI, fig. 1; detailed description, p. 247; first mentioned, p. 45.

Type-locality.—9° 26′ north latitude, 123° 45′ east longitude (off Panglao and Siquijor); 375 fathoms. H. M. S. *Challenger.*

distincta=distinguished.

Antedon dividua P. H. Carpenter, 1879. ("Mus. Paris MS.")

1879. P. H. Carpenter, Trans. Linn. Soc. (Zool.), 2d ser., II, p. 29.

A *nomen nudum.*

dividua=divided.

Antedon döderleini DE LORIOL, 1900.

1900. DE LORIOL, Rev. Suisse Zool., VIII, p. 93, pl. IX, figs. 2 *a–i*.

Type-locality.—Kagoshima, Japan. Doctor Döderlein.

Dr. Ludwig Döderlein.

†**Antedon d'orbignyi.**

Antedon dübenii BÖHLSCHE, 1866.

1866. BÖHLSCHE, Wiegmann's Archiv für Naturgesch., 1866, I, p. 92 (fig.).

Type-locality.—Rio Janeiro, Brazil.

Dr. M. W. von Düben. Göttingen Museum.

The type specimen is figured in *Challenger* Report, XXVI, Zoology, pl. XXXVII, fig. 2 (1888).

"*Antedon dübenii*" is the young of *Comatula carinata* Lamarck.

Antedon dubia P. H. CARPENTER, 1888. ("Semper M. S.")

1884. VON GRAFF, *Challenger* Reports, X, Zoology, pp. 15, 18, 47.

1888. P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 258, pl. XXXVI, figs. 1–6.

Type-locality.—Aru Islands. H. M. S. *Challenger*.

dubius=uncertain. British Museum.

Antedon duplex P. H. CARPENTER, 1888.

1883. VON GRAFF, Bull. Mus. Comp. Zool., XI, No. 7, p. 133. A *nomen nudum*.

1884. VON GRAFF, *Challenger* Reports, X, Zoology, Pt. 27, pp. 17, 18. A *nomen nudum*.

1888. P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 212.

Type-locality.—West Indies; 88 to 262 fathoms. U. S. S. Blake.

duplex=broad, large.

Antedon echinata P. H. CARPENTER, 1888.

1888. P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 102, pl. XXI, figs. 4, 5; detailed description, p. 119; first mentioned, p. 54.

Type-locality.—29° 45′ south latitude, 178° 11′ west longitude (near the Kermadec Islands); 630 fathoms. H. M. S. *Challenger*.

echinata=prickly. British Museum.

Antedon elegans BELL, 1884.

1882. BELL, Proc. Zool. Soc. London, 1882, p. 534.

Non-diagnostic specific formula given; full description in BELL, Zool. Coll. H. M. S. *Alert*, p. 162, pl. XIII, figs. B, B*a* (1884).

Type-locality.—Port Molle (Queensland). H. M. S. *Alert*.

elegans=beautiful. British Museum.

Antedon emendatrix Bell, 1892.

1892. Bell, Ann. and Mag. N. H., 6th ser., IX, p. 428, pl. xviii.

Type-locality.—Mauritius.

emendatrix=an improver. British Museum.

Antedon erinacea Hartlaub, 1890.

1890. Hartlaub, Nachr. Ges. Göttingen, May, 1890, p. 169; detailed description, p. 177.

Type-locality.—Cebu. Captain Ringe.

erinacea=spiny. Hamburg Museum.

Antedon erythrizon A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 71; detailed description, p. 79.

Type-locality.—42° 58′ 15″ north latitude, 140° 09′ 10″ east longitude (Sea of Japan); 406 to 390 fathoms. U. S. S. *Albatross.*

U. S. National Museum.

Antedon eschrichti var. **magellanica** Bell, 1882.

1882. Bell, Proc. Zool. Soc. London, 1882, p. 651.

Type-locality.—Straits of Magellan. Dr. R. W. Coppinger.

magellanica, for the Straits of Magellan. British Museum.

This species has never been adequately described. The character separating it from *A. rhomboidea* in the key in the *Challenger* report does not hold.

Antedon eschrichtii var. **acadiæ** Verrill, 1879.

1879. Verrill, Preliminary check-list of the marine invertebrata of the Atlantic coast from Cape Cod to the Gulf of St. Lawrence. New Haven, 1879, p. 15.

A *nomen nudum.*

Acadiæ, of Acadia, *i. e.*, Nova Scotia.

Antedon eschrichtii var. **maxima** A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 75; first mentioned, p. 69.

Type-locality.—43° 01′ 35″ north latitude, 140° 10′ 40″ east longitude (Sea of Japan); 248 fathoms. U. S. S. *Albatross.*

maxima=largest. U. S. National Museum.

Antedon eschrictii W. B. Carpenter, 1884.

1884. W. B. Carpenter, Proc. Roy. Soc., XXXVII, p. 72.

Typographical error.

Antedon escrichtii Wyville Thomson, 1872.

1872. Wyville Thomson, Proc. Roy. Soc. Edinb., 1872, VII, p. 764.

Typographical error.

†Antedon essenensis.

Antedon eversa P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, pl. III, fig. 5.

Type-locality.—29° 45′ south latitude, 178° 11′ west longitude (near the Kermadec Islands); 630 fathoms. H. M. S. *Challenger.*

eversa=turned outward.

Antedon exigua P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 158, pl. XXXII, figs. 1–4; detailed description, p. 178; first mentioned, p. 54.

Type-locality.—Off Marion Island; 50 to 140 fathoms. H. M. S. *Challenger.*

exigua=small. British Museum.

†Antedon exilis.

Antedon fieldi Bell, 1894.

1894. Bell, Proc. Zool. Soc. London, 1894, p. 400; detailed description, p. 401; first mentioned, p. 396.

Type-locality.—Macclesfield Bank; 22 to 30 fathoms.

Commander A. M. Field, R. N. British Museum.

This species is quite unrecognizable from the description; a redescription of the type is very desirable. It certainly does not belong to the "Spinifera group," in which it was described.

†Antedon filiformis.

Antedon fimbriatus Lütken, 1871.

1871. Lütken, Vidensk. Meddel. fra. den. naturhist. Forem. Kjøbenhavn, 1871, p. 176.

For *Comatula* (or *Actinometra*) *fimbriata.*

Antedon finschii Hartlaub, 1890.

1890. Hartlaub, Nachr. Ges. Göttingen, May, 1890, p. 169; detailed description, p. 176.

Type-locality.—New Britain. Dr. O. Finsch.

Dr. O. Finsch. Berlin Museum.

†Antedon fischeri.

Antedon flava Kœhler, 1895.

1895. Kœhler, Rev. Biol. Nord France, VII, p. 475.

Type-locality.—45° 57′ north latitude, 6° 21′ west longitude (Bay of Biscay); 1,410 meters. French S. S. *Caudan.*

flava=yellow.

Antedon flavomaculata Bell, 1894.

1894. Bell, Proc. Zool. Soc. London, 1894, p. 400; first mentioned, p. 396.

Type-locality.—Macclesfield Bank; 13 fathoms.

flavus=yellow+*maculata*=spotted. British Museum.

Not recognizable from the description. Although described in the "Spinifera group," this is probably a member of the "Palmata group," possibly of the "Multicolor group," but certainly not of the "Spinifera group."

Antedon flavopurpurea A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 128; detailed description, p. 134.

Type-locality.—30° 57′ 20″ north latitude, 130° 35′ 10″ east longitude (off Kagoshima Gulf): 103 fathoms. U. S. S. *Albatross.*

flavus=yellow+*purpurea*=purple. U. S. National Museum.

Antedon flexilis P. H. Carpenter, 1888.

1887. von Graff, *Challenger* Reports, XX, Zoology, Pt. 61, p. 8. A *nomen nudum.*

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 103, pl. xlii; detailed description, p. 217; first mentioned, p. 54 [ten-armed form considered, p. 128].

Type-locality.—5° 49′ 15″ north latitude, 132° 14′ 15″ east longitude (near the Ki Islands): 140 fathoms. H. M. S. *Challenger.*

flexilis=flexible. British Museum.

Antedon fluctuans P. H. Carpenter, 1884.

1884. von Graff, *Challenger* Reports, X, Zoology, Pt. 27, pp. 16, 18.

A *nomen nudum.*

1884. P. H. Carpenter, *Challenger* Reports, XI, Zoology, p. 280; detailed description in P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 94, pl. viii (1888).

Type-locality.—8° 56′ south latitude, 136° 05′ east longitude; 49 fathoms. H. M. S. *Challenger.*

fluctuans=wavering. British Museum.

†**Antedon fontannesi.**

†**Antedon formosus.**

Antedon fragilis A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 71; detailed description, p. 80.

Type-locality.—14° 05′ 00″ north latitude, 145° 30′ 00″ east longitude (Yezo Straits); 500 fathoms. U. S. S. *Albatross.*

fragilis=fragile. U. S. National Museum.

†Antedon gaivensis.

Antedon garrettiana A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 129; detailed description, p. 142.

Type-locality.—32° 33′ 00″ north latitude, 128° 32′ 00′ east longitude (Eastern Sea); 95 fathoms. U. S. S. *Albatross.* Lieut.-Commander L. M. Garrett, U. S. N.

U. S. National Museum.

†Antedon gevreyi.

†Antedon gillerioni.

†Antedon glandiferus.

†Antedon globosus.

Antedon gorgonia de Fréminville, 1811.

1811. de Fréminville, Bull. Soc. Philom. (Paris), II, p. 349.

Type-locality.—Havre, France.

γοργόνειος = belonging to the Gorgon.

It is difficult to see just why there has been so much confusion in regard to this species. Dr. P. H. Carpenter follows Lamarck in placing it with a query in the synonomy of *Comatula carinata* Lamarck, 1816, and says that the type of *Antedon* is a tropical species. It is wholly improbable that any *Antedon* could cling to the growth on a ship's bottom from the most northern point in the range of *Comatula carinata* all the way to Havre without getting swept off or killed by the violent wave action to which it would of necessity be subjected; moreover, it is extremely doubtful if *Comatula carinata* from the littoral zone of the tropics could survive the cold surface water of the ocean off the coast of France, even in the summer. On the other hand, if there were any individuals of *Antedon bifida* living about the dock (and the old-fashioned dry dock is very attractive to marine organisms) it is quite probable that they would become disturbed by the commotion caused by an entering ship and swim about; and they would be as likely to settle on the ship's bottom as anywhere else. Therefore it seems to me that there can be no doubt that the type of *Antedon gorgonia* came from Havre. The figure to which de Fréminville refers undoubtedly refers to *Asterias bifida*. *Antedon gorgonia* was referred unconditionally to *Asterias bifida* by Bell in 1892, but he did not state his reasons for doing it at the time, nor has anything been published on the subject since. As it is of considerable importance to have a definite type for the genus, the preceding remarks may not be entirely superfluous.

†Antedon gracilis.

Antedon gracilis P. H. Carpenter, 1888.

1888. P. H. Carpenter. *Challenger* Reports, XXVI, Zoology, p. 102, pl. XII, figs. 3–5; pl. XV, figs. 1–4; detailed description, p. 107; first mentioned, p. 54.

Type-locality.—4° 33′ north latitude, 127° 06′ east longitude (off the Meangis Islands); 500 fathoms. H. M. S. *Challenger.*

gracilis=slender. British Museum.

Dr. P. H. Carpenter repeatedly asserted the identity of *Solanocrinites* Goldfuss with *Antedon* de Fréminville, and in his synonomy of *Antedon* in the *Challenger* report he places *Solanocrinites* under it, and in his remarks on the genus again asserts their identity. However, with curious inconsistency, almost invariably when he mentions certain of the fossil species he uses the generic name *Solanocrinus*, even though he explicitly states that it has no standing. It is here understood that the inclusion unconditionally of one generic name under another implies the regarding of all species described under the former as members of the latter; therefore *Solanocrinites gracilis* becomes, according to the ruling proposed (but not put into effect) by Carpenter, *Antedon gracilis*. This species, however, is not the *Antedon gracilis* of Carpenter, 1888, which therefore requires a new name. It has been called in consequence *Antedon pergracilis*.

Antedon granulifera Pourtalès, 1878.

1878. Pourtalès, Bull. Mus. Comp. Zool., V, No. 9, p. 215.

Type-locality.—25° 33′ north latitude, 84° 21′ west longitude (west of southern Florida); 101 fathoms. U. S. S. *Blake.*

granulifera=bearing small grains.

Museum of Comparative Zoology.

†**Antedon greppini.**

†**Antedon gresslyi.**

†**Antedon guirandi.**

Antedon gyges Bell, 1884.

1884. Bell, Rep. Zool. Coll. H. M. S. *Alert*, p. 160, pl. XII, figs. B, B *a*, *b*; first mentioned, p. xiii.

Type-locality.—Thursday Island. H. M. S. *Alert.*

Γύγες=Gyges, son of Dascylus. British Museum.

Antedon hana A. H. Clark, 1907.

1907. A. H. Clark. Proc. U. S. Nat. Mus., XXXIII, p. 128; detailed description, p. 137.

Type-locality.—32° 31′ 10″ north latitude, 128° 33′ 20″ east longitude (Eastern Sea); 139 to 107 fathoms. U. S. S. *Albatross.*

hana=flower (Japanese). U. S. National Museum.

Antedon hartlaubi A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 70; detailed description, p. 72.

Type-locality.—30° 58′ 30″ north latitude, 130° 32′ 00″ east longitude (off Kagoshima Gulf); 152 to 153 fathoms. U. S. S. *Albatross.*

Dr. Clemens Hartlaub. U. S. National Museum.

Antedon hawaiiensis A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 128; detailed description, p. 152.

Type-locality.—30° 58′ 30″ north latitude, 130° 32′ 00″ east longitude (Hawaiian Islands); 351 fathoms. U. S. S. *Albatross.*

hawaiiensis=of the Hawaiian Islands. U. S. National Museum.

Antedon hepburniana A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 129; detailed description, p. 139.

Type-locality.—32° 26′ 30″ north latitude, 128° 36′ 30″ east longitude (Eastern Sea); 135 fathoms. U. S. S. *Albatross.*

Lieut. Arthur J. Hepburn, U. S. N. U. S. National Museum.

†**Antedon herberti.**

Antedon hirsuta P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 158, pl. xxxi, fig. 5; detailed description, p. 188; first mentioned, p. 54.

Type-locality.—46° 43′ 00″ south latitude, 38° 04′ 30″ east longitude (near Marion Island); 140 fathoms. H. M. S. *Challenger.*

hirsuta=rough, bristly. British Museum.

Antedon hondoensis A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 71; detailed description, p. 78.

Type-locality.—38° 09′ 24″ north latitude, 141° 51′ 30″ east longitude (off Kinka San light, east coast of Hondo); 129 fathoms. U. S. S. *Albatross.*

hondoensis, for the island of Hondo. U. S. National Museum.

Antedon hupferi Hartlaub, 1890.

1890. Hartlaub, Nachr. Ges. Göttingen, May, 1890, p. 168; detailed description, p. 171.

Type-locality.—Wapoo (Ivory coast, west Africa); 21 fathoms. Captain Hupfer.

Captain Hupfer. Hamburg Museum.

Antedon hystrix P. H. CARPENTER, 1884.

1884. VON GRAFF, *Challenger* Reports, X, Zoology, Pt. 27, p. 15. A *nomen nudum*.

1884. P. H. CARPENTER, Proc. Roy. Soc. Edinb., XII, p. 365; detailed description, p. 374.

Type-locality.—"Cold area" Faroë Channel. H. M. S. *Porcupine*.

hystrix=a porcupine. British Museum.

†Antedon iheringi.

Antedon imparipinna P. H. CARPENTER, 1882.

1882. P. H. CARPENTER, Journ. Linn. Soc. (Zool.), XVI, p. 502; detailed description, p. 505.

Type-locality.—Unknown.

impar=uneven+*pinna*="pinnules." Hamburg Museum.

†Antedon imperialis.

Antedon impinnata P. H. CARPENTER, 1888.

1884. VON GRAFF, *Challenger* Reports, X, Zoology, Pt. 27, pp. 15, 16, 18. A *nomen nudum*.

1888. P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 206.

Type-locality.—North Bay, Mauritius; 15 fathoms. Professor Karl Möbius.

impinnata=lacking "pinnules." Kiel.

†Antedon impressa.

Antedon inæqualis P. H. CARPENTER, 1884.

1884. VON GRAFF, *Challenger* Reports, X, Zoology, Pt. 27, pp. 13, 16, 18. A *nomen nudum*.

1884. P. H. CARPENTER, *Challenger* Reports, XI, Zoology, p. 83, pl. LIV, fig. 8; better description in P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 241, pl. II, figs. 5 *a–d;* pl. LI, fig. 2; woodcut, p. 246, fig. 5 *a;* detailed description, p. 244 (1888).

Type-locality.—29° 45′ south latitude, 178° 11′ west longitude (near the Kermadec Islands); 630 fathoms; or 19° 06′ south latitude, 178° 18′ east longitude (about) (near Kandavu, Fiji); 210 to 610 fathoms. H. M. S. *Challenger*.

inæqualis=uneven. British Museum.

Antedon incerta P. H. CARPENTER, 1884.

1884. P. H. CARPENTER, *Challenger* Reports, XI, Zoology, p. 57, pl. LIV, figs. 6, 7; better description in P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 102, pl. XVIII, figs. 4, 5; detailed description, p. 106 (1888).

Type-locality.—29° 45′ south latitude, 178° 11′ west longitude (near the Kermadec Islands); 630 fathoms. H. M. S. *Challenger.*

incerta=doubtful, uncertain. British Museum.

Antedon incisa P. H. Carpenter, 1888.

1884. von Graff, *Challenger* Reports, X, Zoology, Pt. 27, pp. 13, 17, 18.

A *nomen nudum.*

1887. von Graff, *Challenger* Reports, XX, Zoology, Pt. 61, p. 2. A *nomen nudum.*

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 102, pl. II, figs. 1 *a–d*; pl. XXI, figs. 1, 2; detailed description, p. 124; first mentioned, p. 54.

Type-locality.—29° 45′ south latitude, 178° 11′ west longitude (near the Kermadec Islands); 630 fathoms. H. M. S. *Challenger.*

incisa=incised. British Museum.

Antedon incommoda Bell, 1888.

1888. Bell, Ann. and Mag. Nat. Hist., 6th ser., II, No. 11, p. 404; first mentioned, p. 402.

Type-locality.—Port Philip (Victoria). Mr. J. Bracebridge Wilson.

incommoda=troublesome. British Museum.

†**Antedon incurva.**

Antedon inexpectata A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXVIII, p. 70; detailed description, p. 75.

Type-locality.—56° 00′ 00″ north latitude, 154° 20′ 00″ west longitude (south of Alaska peninsula); 159 fathoms. U. S. S. *Albatross.*

inexpectata=unexpected. U. S. National Museum.

Antedon informis P. H. Carpenter, 1888.

1888. P. H. Carpenter *Challenger* Reports, XXVI, Zoology, p. 194, pl. XXXIII, fig. 3; detailed description, p. 205; first mentioned, p. 54.

Type-locality.—11° 37′ north latitude, 123° 31′ east longitude (Philippine Islands); 18 fathoms. H. M. S. *Challenger.*

informis=deformed. British Museum.

†**Antedon infracretacea.**

Antedon inopinata Bell, 1894.

1894. Bell, Proc. Zool. Soc. London, 1894, p. 398; first mentioned, p. 396.

Type-locality.—Macclesfield Bank; 31 to 36 fathoms. H. M. S. *Penguin.*

inopinata=unexpected. British Museum.

Described in Dr. P. H. Carpenter's "Granulifera group," but evidently belonging to his "Savignii group;" the species is not recognizable from the description.

Antedon insignis Bell, 1882.

1882. Bell, Proc. Zool. Soc. London, 1882, p. 534.

Type-locality.—Port Denison. H. M. S. *Alert.*

insignis=well-marked. British Museum.

This species was redescribed in 1884 under the name of *Antedon loveni* (q. v.), which name had been used in 1882 for a different species. Now, while the specific formula given in 1882 is quite non-diagnostic, the fact remains that it was intended for a description, and therefore the name has a standing in nomenclature.

Antedon irregularis Bell, 1882.

1882. Bell, Proc. Zool. Soc. London, 1882, p. 534.

Non-diagnostic specific formula given; full description in Bell, Rep. Zool. Coll. H. M. S. *Alert*, p. 161, pl. XIII, figs. A, A *a–c* (1884).

Type-locality.—Prince of Wales Channel; Torres Straits. H. M. S. *Alert.*

irregularis=irregular. British Museum.

Antedon isis A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 71; detailed description, p. 82.

Type-locality.—30° 24′ 00″ north latitude, 129° 06′ 00″ east longitude (about 90 miles W. S. W. of Kagoshima Gulf); 361 fathoms. U. S. S. *Albatross.*

Ἴσις=Isis, an Egyptian goddess. U. S. National Museum.

†**Antedon italica.**

†**Antedon jaegeri.**

†**Antedon japonica** Hartlaub, 1890.

1890. Hartlaub, Nachr. Ges. Göttingen, May, 1890, p. 168; detailed description, p. 172.

Type-locality.—Japan. Dr. F. Hilgendorf.

japonica=Japanese. Berlin Museum.

†**Antedon jutieri.**

Antedon klunzingeri Hartlaub, 1890.

1890. Hartlaub, Nachr. Ges. Göttingen, May, 1890, p. 169; detailed description, p. 175.

Type-locality.—Koseir, on the Red Sea. Herr Klunzinger.

Herr Klunzinger. Stuttgart.

†Antedon koprivnicensis.

Antedon kraepelini Hartlaub, 1890.

1890. Hartlaub, Nachr. Ges. Göttingen, May, 1890, p. 170; detailed description, p. 183.

Type-locality.—Akyab (Arakan, Burma).

Prof. Karl Kräpelin, Director of the Hamburg Museum. Hamburg Museum.

† Antedon ladoixensis.

Antedon laevicirra P. H. Carpenter, 1881.

1881. P. H. Carpenter, Notes from the Leyden Museum, III, p. 176; detailed description, p. 189.

Type-locality.—Aru Islands. Coll. von Rosenberg.

lævus=unsuitable+*cirra*="cirri." Leyden Museum.

Antedon lævipinna P. H. Carpenter, 1882.

1882. P. H. Carpenter, Jour. Linn. Soc. (Zool.), XVI, p. 501; detailed description, p. 502.

Type-locality.—Canton, China.

lævus=unsuitable+*pinna*="pinnules." Hamburg Museum.

Antedon lævis P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports XXVI, Zoology, p. 158, pl. xxxi, fig. 6; detailed description, p. 187; first mentioned, p. 54.

Type-locality.—4° 33′ north latitude, 127° 06′ east longitude (off the Meangis Islands); 500 fathoms. H. M. S. *Challenger.*

lævis=insignificant. British Museum.

†Antedon lamberti.

Antedon laodice A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 70; detailed description, p. 75.

Type-locality.—33° 23′ 40″ north latitude, 135° 33′ 00″ east longitude (off southern Japan); 587 fathoms. U. S. S. *Albatross.*

Λαοδίκη=Laodice, a nymph. U. S. National Museum.

Antedon lata A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 129; detailed description, p. 140.

Type-locality.—30° 22′ 00″ north latitude, 129° 08′ 30″ east longitude (Eastern Sea); 361 fathoms. U. S. S. *Albatross.*

lata=broad. U. S. National Museum.

†Antedon laticirra.

Antedon latipinna P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 102, pl. x, fig. 3; detailed description, p. 116; first mentioned, p. 54.

Type-locality.—35° 11′ north latitude, 139° 28′ east longitude (off southern Japan): 345 fathoms. H. M. S. *Challenger.*

latus=broad+*pinna*="pinnules." British Museum.

†Antedon lenticularis.

Antedon lepida Hartlaub, 1890.

1890. Hartlaub, Nachr. Ges. Göttingen, May, 1890, p. 169; detailed description, p. 176.

Type-locality.—Tonga Islands.

lepidus=pretty. Hamburg Museum.

†Antedon lettensis.

Antedon leucomelas Hartlaub, 1893.

1893. Hartlaub, Nova Acta Acad. Germ., LVIII, No. 1, p. 51.

A *nomen nudum.*

λευκός=white+μέλας=black.

Antedon lineata P. H. Carpenter, 1888 (not *Antedon lineatus* Pomel, 1887).

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 158, pl. xiii, figs. 4, 5; detailed description, p. 183; first mentioned, p. 54.

Type-locality.—37° 17′ south latitude, 53° 52′ west longitude; 600 fathoms. H. M. S. *Challenger.*

lineata=marked with lines. British Museum.

This species has been renamed *Antedon challengeri.*

†Antedon lineatus Pomel, 1887.

1887. Pomel, Paléontol. de l'Algérie. Zoöphytes, 2d fasc., 2d part, p. 335, pl. d, ii.

Type-locality.—Sahelian, Algeria.

lineatus=marked with lines.

Antedon longicirra P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 102, pl. xvii; detailed description, p. 103; first mentioned, p. 22.

Type-locality.—5° 49′ 15″ south latitude, 132° 14′ 15″ east longitude (near the Ki Islands); 140 fathoms. H. M. S. *Challenger.*

longus=long+*cirra*="cirri." British Museum.

†Antedon longimana.

Antedon longipinna P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 158, pl. xxx, figs. 1–3; detailed description, p. 185; first mentioned, p. 54.

Type-locality.—37° 17′ south latitude, 53° 52′ west longitude (off Montevideo): 600 fathoms. H. M. S. *Challenger.*

longus=long+*pinna*="pinnules." British Museum.

†Antedon lorioli.

Antedon loveni Bell, 1882.

1882. Bell, Proc. Zool. Soc. London, 1882, p. 534.

Type-locality.—Port Jackson; 0 to 5 fathoms. H. M. S. *Alert.*

Prof. Sven Lovén. British Museum.

This species is based on a non-diagnostic specific formula. In 1884 it was described in detail and figured by Professor Bell under the name of *Antedon pumila* (q. v.), which, of course, becomes a pure synonym of *A. loveni*. The species now known as *A. loveni* must become *Antedon insignis*, and the species now known as *A. pumila*, *Antedon loveni*.

Antedon loveni Bell, 1884 (not *Antedon loveni* Bell, 1882).

1884. Bell, Rep. Zool. Coll. H. M. S. *Alert*, p. 158, pl. x, figs. B, C *a–c* (not A *a–c* as given in the reference to the plate); first mentioned, p. xiii.

Type-locality.—Port Denison (Queensland). H. M. S. *Alert.*

Prof. Sven Lovén. British Museum.

This is a pure synonym of *Antedon insignis* Bell, 1882, being founded on the type of that species. On pl. x there are two figures lettered "B" and none lettered "C;" the upper figure "B," however, represents this species, and should have been lettered "C."

†Antedon ludgreni.

Antedon ludovici P. H. Carpenter, 1882.

1882. P. H. Carpenter, Jour. Linn. Soc. (Zool.), XVI, p. 502; detailed description, p. 510.

Type-locality.—Hongkong.

Prof. Hubert Ludwig. Hamburg Museum.

Antedon lusitanica P. H. Carpenter, 1884.

1884. P. H. Carpenter, Proc. Roy. Soc. Edinb., XII, p. 368.

Type-locality.—39° 39′ north latitude, 9° 39′ west longitude (off the coast of Portugal): 740 fathoms. H. M. S. *Porcupine.*

Lusitania=Portugal. British Museum.

Antedon macrocnema P. H. Carpenter, 1879.

1879. P. H. Carpenter, Trans. Linn. Soc. (Zool.), 2d ser., II, p. 29.

Emendation.

Antedon macrodiscus Hara, 1895.

1895. Hara, Zool. Mag. Tokyo, VII, p. 115.

Type-locality.—Misaki, Japan; 3 fathoms.

μακρός=long+δίσκος="disk." Imperial University, Tokyo.

The affinities of this remarkable species are with *Antedon afra* Hartlaub, from which, however, it is quite distinct, the length

of the lower pinnules being especially remarkable. It is strange that specimens of these two species should be so rare in collections. I have only been able to examine one of each.

Antedon macropoda A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 128; detailed description, p. 136.

Type-locality.—30° 57′ 20″ north latitude, 130° 35′ 10″ east longitude (off Kagoshima Gulf); 103 fathoms. U. S. S. *Albatross.*

μακρός=long+*πούς*=foot. U. S. National Museum.

Antedon macropygus Hartlaub, 1890. ("Lutken MS.")

1890. Hartlaub, Nachr. Göttingen, May, 1890, p. 170.

A *nomen nudum.*

μακρός=long+*πυγών*=elbow (segment).

Antedon magnicirra Bell, 1905.

1905. Bell, Marine Investigations in South Africa, III, p. 141, pl. IV.

Type-locality.—East London; 300 to 450 fathoms.

magnus=large+*cirra*="cirri."

This species was described as appearing "to stand next to *A. angustiradia*" (i. e., in the "Savignyi group" of Dr. P. H. Carpenter); it has not the remotest relation to any species of that group, however, but belongs to the "Granulifera group," falling in the genus *Thalassometra.*

Antedon magnicirrus Bell, 1905.

1905. Bell, Marine Investigations in South Africa, III, p. 142. Typographical error.

Antedon magnicirnus Bell, 1905.

1905. Bell, Marine Investigations in South Africa, III, pl. IV. Editorial error.

Antedon manca P. H. Carpenter, 1888.

1884. von Graff, *Challenger* Reports, X, Zoology, Pt. 27, pp. 16, 18.

A *nomen nudum.*

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 225, pl. XLIV, figs. 2, 3; detailed description, p. 226.

Type-locality.—5° 49′ 15″ south latitude, 132° 14′ 15″ east longitude (near the Ki Islands); 140 fathoms. H. M. S. *Challenger.*

manca=maimed. British Museum.

Antedon marginata P. H. Carpenter, 1888.

1887. von Graff, *Challenger* Reports, XX, Zoology, Pt. 61, p. 12.

A *nomen nudum.*

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 225, pl. XL; detailed description, p. 230.

Type-locality.—11° 37′ north latitude, 123° 31′ east longitude (off Manila, Philippines); 18 fathoms. H. M. S. *Challenger.*

marginata=bordered. British Museum.

Antedon mariæ A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 71; detailed description, p. 77.

Type-locality.—35° 04′ 50″ north latitude, 139° 38′ 18″ east longitude (Uraga Straits, entrance to Tokyo Gulf); 70 fathoms. U. S. S. *Albatross.*

Mrs. Mary W. Clark. U. S. National Museum.

Antedon marmorata P. H. Carpenter, 1888. ("Vienna Mus. MS.")

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 202.

A *nomen nudum.*

marmorata=marbled.

Antedon martensi Hartlaub, 1890.

1890. Hartlaub, Nachr. Ges. Göttingen. May, 1890, p. 170; detailed description, p. 182.

Type-locality.—Singapore. Prof. Ed. von Martens.

Prof. Ed. von Martens. Berlin Museum.

Antedon mauonema Bell, 1882.

1885. Bell, Proc. Linn. Soc. New South Wales, 1884, IX, p. 497. Typographical error.

†**Antedon mediterraneæformis.**

Antedon meridionalis Verrill, 1866.

1866. Verrill, Proc. Boston Soc. Nat. Hist., X, p. 339.

For *Comatula meridionalis.*

†**Antedon michelottii.**

Antedon microdiscus Bell, 1882.

1882. Bell, Proc. Zool. Soc. London, 1882, p. 534.

Non-diagnostic specific formula given; full description in Bell, Rep. Zool. Coll. H. M. S. *Alert*, p. 163, pl. xv (1884).

Type-locality.—Port Molle (Queensland); 12 fathoms. H. M. S. *Alert.*

μικρός=small+*δίσκος*="disk." British Museum.

†**Antedon minimus.**

Antedon minor A. H. Clark, 1907 (not *Antedon avenionensis* var. *minor*).

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 129; detailed description, p. 144.

Type-locality.—33° 35′ 20″ north latitude, 135° 10′ 50″ east longitude (off southern Japan); 191 fathoms. U. S. S. *Albatross.*

minor=lesser. U. S. National Museum.

This species has been renamed *Nanometra minckerti.*

Antedon minuta A. H. Clark, 1907.

1907. A. H. Clark, Smiths. Miscell. Coll. (Quarterly Issue), L, p. 341.

Type-locality.—Off the southern coast of Hondo, Japan; 13 fathoms. U. S. S. *Albatross.*

minuta=very small. U. S. National Museum.

†**Antedon miocensis.**

Antedon monocantha Hartlaub, 1890.

1890. Hartlaub, Nachr. Ges. Göttingen, May, 1890, p. 169; detailed description, p. 179.

Type-locality.—Mortlock Island; Torres Straits.

μόνος=single+*ἄκανθα*=spine

Göttingen and Hamburg Museums.

Antedon moorei Bell, 1894.

1894. Bell, Proc. Zool. Soc. London, 1894, p. 401; partial diagnosis, p. 400; first mentioned, p. 396.

Type-locality.—Macclesfield Bank; 13 fathoms.

Capt. W. U. Moore, R. N. British Museum.

This species is quite unrecognizable from the published description. It certainly does not belong in the "Spinifera group," but is probably a member of the "Palmata group."

Antedon moræ Honeyman, 1889.

189. Honeyman, Proc. Nova Scotia Inst., VII, p. 265.

Type-locality.—41° 38′ north latitude, 51° 06′ west longitude (Grand Banks); 570 fathoms. British cable S. S. *Minia.*

mora=a delay, a hindrance. Halifax Museum.

The description is quite worthless, and the name is, to all intents and purposes, a *nomen nudum.*

†**Antedon morierei.**

Antedon mucronata Hamann, 1907.

1907. Hamann, Bronn's Klassen u. Ordnungen des Tier-Reichs, II. abt. 3, p. 1580.

Editorial error for *Antedon macronema.*

Antedon multicolor A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 128; detailed description, p. 130.

Type-locality.—32° 33′ 00″ north latitude, 128° 32′ 10″ east longitude (Eastern Sea); 95 fathoms. U. S. S. *Albatross.*

multicolor=of many colors. U. S. National Museum.

Antedon multiradiata P. H. Carpenter, 1884.

1884. von Graff, *Challenger* Reports, X, Zoology, pp. 16, 18.

A *nomen nudum*.

1884. P. H. CARPENTER, *Challenger* Reports, XI, Zoology, p. 84, pl. LV, figs. 3, 4. Better description in P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 94, pl. IX; detailed description, p. 96 (1888).

Type-locality.—10° 36′ south latitude, 141° 55′ east longitude (off Booby Island, Torres Straits); 6 fathoms. H. M. S. *Challenger*.

multiradiata=many-rayed. British Museum.

Antedon multispina P. H. CARPENTER, 1888.

1888. P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 102, pl. XIII, figs. 1–3; pl. XIV, figs. 5–7; pl. LXIX, figs. 1–4; detailed description, pp. 117 (241), 248; first mentioned, p. 33.

Type-locality.—7° 54′ 20″ south latitude, 14° 28′ 20″ west longitude (near Ascension Island); 420 fathoms. H. M. S. *Challenger*.

multispina=many-spined. British Museum.

†**Antedon mystica.**

Antedon nana HARTLAUB, 1890.

1890. HARTLAUB, Nachr. Ges. Göttingen, May, 1890, p. 168; detailed description, p. 170.

Type-locality.—Amboina (Dr. J. Brock); Tonga Islands.

nana=a dwarf. Göttingen and Hamburg Museums.

Antedon nematodon HARTLAUB, 1890.

1890. HARTLAUB, Nachr. Ges. Göttingen, May, 1890, p. 170; detailed description, p. 185.

Type-locality.—Bowen, Queensland.

νῆμα=a thread + *ὀδών*=a tooth. Hamburg Museum.

†**Antedon nicolasi.**

Antedon notata P. H. CARPENTER, 1888.

1888. P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 187 (in text), pl. XXXIII, figs. 4, 5.

Type-locality.—1° 54′ 00″ south latitude, 146° 39′ 40″ east longitude: 150 fathoms. H. M. S. *Challenger*.

notata=marked. British Museum.

†**Antedon oblita.**

Antedon occulta P. H. CARPENTER, 1888.

1887. VON GRAFF, *Challenger* Reports, XX, Zoology, pl. LXI, p. 4.

A *nomen nudum*.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 226, pl. XLVII, figs. 1, 2; pl. XLIX, figs. 3, 4; detailed description, p. 236; first mentioned, p. 50.

Type-locality.—19° 06′ south latitude, 178° 18′ east longitude (about) (near Kandavu, Fiji); 210–610 fathoms. H. M. S. *Challenger*.

occulta=concealed. British Museum.

Antedon okelli Chadwick, 1904.

1904. Chadwick, in Herdman, Rep. Ceylon Pearl Oyster Fisheries, Pt. 2, Suppl. Rep., XI, p. 155, pl., figs. 3–5.

Type-locality.—West coast of Ceylon and Gulf of Manaar; 8 to 36 fathoms.

Mr. Robert Okell. British Museum.

†**Antedon orbignyi.**

Antedon orientalis A. H. Clark, 1907.

1907. A. H. Clark, Smiths. Miscell. Coll. (Quarterly Issue), L, p. 341.

Type-locality.—Off Kagoshima Gulf, Japan; 152 fathoms. U. S. S. *Albatross*.

orientalis=eastern. U. S. National Museum.

Antedon orion A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 129; detailed description, p. 143.

Type-locality.—30° 58′ 30″ north latitude, 130° 32′ 00″ east longitude (Eastern Sea); 152 to 103 fathoms. U. S. S. *Albatross*.

Ὠρίων=Orion. U. S. National Museum.

Antedon oxyacantha Hartlaub, 1890.

1890. Hartlaub, Nachr. Ges. Göttingen, May, 1890, p. 169; detailed description, p. 178.

Type-locality.—Amboina. Dr. J. Brock.

ὀξύς=sharp+ἄκανθα=a spine. Göttingen Museum.

†**Antedon pannulatus.**

†**Antedon paradoxa.**

†**Antedon paronai.**

Antedon parvicirra P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 194, pl. XXXVI, figs. 7, 8; detailed description, p. 204; first mentioned, p. 54.

Type-locality.—11° 37′ north latitude, 123° 31′ east longitude; 18 fathoms. H. M. S. *Challenger*.

parvus=small+*cirra*="cirri." British Museum.

Antedon parvipinna P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 103, pl. xv, fig. 9; detailed description, p. 127; first mentioned, p. 54.

Type-locality.—5° 49′ 15″ south latitude, 132° 14′ 15″ east longitude (near the Ki Islands); 140 fathoms. H. M. S. *Challenger.*

parvus=small+*pinna*="pinnules." British Museum.

Antedon parvula Hartlaub, 1895.

1895. Hartlaub, Bull. Mus. Comp. Zool., XXVII, No. 4, p. 144, pl. iii, fig. 21.

Type-locality.—Off Cocos Islands (near Panama); 978 fathoms.

parvula=very small.

Type will be deposited in U. S. National Museum.

Antedon patula P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 212, pl. xliii; detailed description, p. 219; first mentioned, p. 54.

Type-locality.—5° 49′ 15″ south latitude, 132° 14′ 15″ east longitude (near the Ki Islands); 140 fathoms. H. M. S. *Challenger.*

patula=broad and flat. British Museum.

†**Antedon pellati.**

†**Antedon pennatus.**

†**Antedon perforata.**

Antedon pergracilis A. H. Clark, 1907.

1907. A. H. Clark, Smiths. Miscell. Coll. (Quarterly Issue), L, p. 360.

New name for *Antedon gracilis* P. H. Carpenter, 1888, preoccupied.

pergracilis=very slender.

†**Antedon perrieri.**

Antedon perplexa A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 70; detailed description, p. 74.

Type-locality.—47° 29′ 30″ north latitude, 125° 43″ 00″ west longitude (off the coast of Washington); 636 fathoms. U. S. S. *Albatross.*

perplexa=obscure. U. S. National Museum.

Antedon perspinosa P. H. Carpenter, 1881.

1881. P. H. Carpenter, Notes from the Leyden Museum, III, p. 175; detailed description, p. 178.

Type-locality.—Island of Jobie. Coll. von Rosenberg.

perspinosa=very spiny. Leyden Museum.

†Antedon pertusa.

Antedon petosus Minchin. 1891.

1891. Minchin, Zool. Record for 1890. Echinod., p. 81.

Editorial error for *Antedon petasus*.

†Antedon picteti.

†Antedon pilularis.

†Antedon pinnata.

Antedon pinniformis P. H. Carpenter, 1881.

1881. P. H. Carpenter, Notes from the Leyden Museum, III, p. 175; detailed description, p. 180.

Type-locality.—Andai, New Guinea.

pinna=a feather+*formis*=shape. Leyden Museum.

†Antedon pinnulatus.

Antedon polyactinis P. H. Carpenter, 1879. ("Mus. Paris MS.")

1879. P. H. Carpenter, Trans. Linn. Soc. (Zool.), 2d ser., II, p. 29.

A *nomen nudum*.

πολύς=many+ἀκτίς=a ray.

Antedon polypus Hartlaub, 1893. ("Lütken MS.")

1893. Hartlaub, Nova Acta Acad. German., LVIII, No. 1, p. 78.

A *nomen nudum*.

πολύπους = many-footed.

Antedon porrecta P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 241, pl. LII, figs. 3–5; detailed description, p. 250: first mentioned, p. 45.

Type-locality.—7° 54′ 20″ south latitude, 14° 28′ 20″ west longitude (near Ascension Island); 420 fathoms. H. M. S. *Challenger*.

porrecta=extended. British Museum.

Antedon pourtalesi P. H. Carpenter, 1888.

1883. von Graff, Bull. Mus. Comp. Zool., XI, No. 7, p. 128 (*Antedon pourtalesii*).

A *nomen nudum*.

1884. von Graff, *Challenger* Reports, X, Zoology, Pt. 27, p. 14 (*Antedon pourtalesii*).

A *nomen nudum*.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 212.

Type-locality.—West Indies: 124 to 262 fathoms. U. S. S. *Blake*.

Mr. L. F. de Pourtalès. Museum of Comparative Zoology.

†Antedon prisca.

Antedon prolixa SLADEN, 1881.

1881. SLADEN in DUNCAN and SLADEN Memoir Arctic Echinoderms, p. 77.

Type-locality.—Discovery Bay, 81° 41′ north latitude; 25 fathoms. Capt. H. W. Feilden.

prolixa=long.

Antedon propinqua A. H. CLARK, 1907.

1907. A. H. CLARK, Proc. U. S. Nat. Mus., XXXIII, p. 128 detailed description, p. 133.

Type-locality.—32° 33′ 10″ north latitude, 128° 32′ 10″ east longitude (Eastern Sea); 95 fathoms. U. S. S. *Albatross.*

propinqua=near. U. S. National Museum.

Antedon protectus LÜTKEN, 1879.

1874. LÜTKEN, Mus. Godeffr. Cat., V, p. 190.

A *nomen nudum.*

1879. LÜTKEN, in P. H. CARPENTER, Trans. Linn. Soc. (Zool.), 2d ser., II, p. 19.

Type-locality.—Tonga Islands.

protectus=roofed over.

The very insufficient characters given in the reference cited must be accepted as the first description of this species; although now known to be non-diagnostic, at the time it was written they separated this species sharply from all others which had been described. In 1881 P. H. Carpenter (Notes from the Leyden Museum, III, p. 192 [" *protecta* "]) gave some additional data, and compared the species with *Himerometra spicata;* in 1888 (*Challenger* Reports, XXVI, Zool., p. 225) he inserted it in his key to the " Palmata group," thereby making its specific relations clear. Ignoring all this, Hartlaub in 1890 described it as a new species (Nachr. Ges. Göttingen, May, 1890, p. 180), although in his later work (Nova Acta Acad. German., LVIII, No. 1, p. 63) he acknowledged the priority of Carpenter, 1888.

Antedon psyche A. H. CLARK, 1908.

1907. A. H. CLARK, Smiths. Miscell. Coll. (Quarterly Issue), L, p. 353.

A *nomen nudum.*

1908. A. H. CLARK, Bull. Mus. Comp. Zool., LI, No. 8, p. 241, pl. 1, figs. 2, 3.

Type-locality.—Southern Japan.

ψυχή=a spirit. Museum of Comparative Zoology.

Antedon pubescens A. H. CLARK, 1907.

1907. A. H. CLARK, Proc. U. S. Nat. Mus., XXXIII, p. 129; detailed description, p. 139.

Type-locality.—30° 34′ 00″ north latitude, 129° 19′ 30″ east longitude (Eastern Sea); 440 fathoms. U. S. S. *Albatross.*

pubescens=becoming downy. U. S. National Museum.

Antedon pulchella Pourtalès, 1878 (not *Ganymeda* [=*Antedon*] *pulchella* Gray, 1834).

1878. Pourtalès, Bull. Mus. Comp. Zool., V, No. 9, p. 216.

Type-locality.—West Indies.

pulchella=pretty. Museum of Comparative Zoology.

This is the same species as *Antedon alata* Pourtalès, 1878, described on the previous page; *alata* is, of course, the name which must be used. Doctor Carpenter discarded *alata* and used *pulchella* because he thought the latter more appropriate. *Pulchella* is, moreover, preoccupied.

Antedon pulcher Hartlaub, 1893. ("Lütken MS.")

1893. Hartlaub, Nova Acta Acad. German., LVIII, No. 1, p. 73.

A *nomen nudum.*

pulcher=beautiful.

Antedon pumila Bell, 1884.

1884. Bell, Rep. Zool. Coll. H. M. S. *Alert*, p. 157, pl. x, figs. B, B *a*, *b*; first mentioned, p. xiii.

Type-locality.—Port Jackson; 0 to 5 fathoms. H. M. S. *Alert.*

pumila=a dwarf. British Museum.

This is a pure synonym of *Antedon loreni* Bell, 1882, being founded on the same specimen.

On pl. x there are two figures lettered "B;" the present species is represented by the lower fig. B, the upper one being a misprint for "C."

Antedon pusilla P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 103, pl. xxiii, fig. 1; detailed description, p. 131; first mentioned, p. 54.

Type-locality.—5° 49′ 15″ south latitude, 132° 14′ 15″ east longitude (near the Ki Islands); 140 fathoms. H. M. S. *Challenger.*

pusilla=little. British Museum.

Antedon quadrata P. H. Carpenter, 1884.

1884. P. H. Carpenter, Proc. Roy. Soc. Edinb., 1884, p. 375.

Type-locality.—60° 22′ 40″ north latitude, 8° 21′ west longitude; or 60° 31′ 15″ north latitude, 8° 14′ west longitude (north Atlantic); 327 to 430 fathoms. H. M. S. *Triton.*

quadrata=quadrate (in reference to the brachials).

British Museum.

Antedon quinduplicava P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 253, pl. iv, fig. 1 *a–d;* pl. xlvii, figs. 4, 5; detailed description, p. 262; first mentioned, p. 9.

Type-locality.—6° 54′ north latitude, 122° 18′ east longitude; 10 fathoms. H. M. S. *Challenger.*

quinduplicava=doubled five times. British Museum.

Antedon quinquecostata P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 211, pl. iii, figs 6 *a–d;* pl. xxxviii, figs 1–3; detailed description, p. 215; first mentioned, p. 8.

Type-locality.—5° 49′ 15″ south latitude, 132° 14′ 15″ east longitude (near the Ki Islands); 140 fathoms. H. M. S. *Challenger.*

quinque=five+*costata*=ribbed. British Museum.

Antedon radiospina P. H. Carpenter, 1888.

1883. von Graff, Bull. Mus. Comp. Zool., XI, No. 7, p. 133.

A *nomen nudum.*

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, pl. iii, fig. 4 *a–c* (centrodorsal only).

Type-locality.—29° 45′ south latitude, 178° 11′ west longitude (near the Kermadec Islands); 630 fathoms. H. M. S. *Challenger.*

radio=I radiate+*spina*=a spine. British Museum.

† **Antedon ransomei.**

Antedon rara A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 70; detailed description, p. 72.

Type-locality.—32° 27′ 30″ north latitude, 128° 33′ 00″ east longitude (Eastern Sea); 181 fathoms. U. S. S. *Albatross.*

rara=extraordinary. U. S. National Museum.

Antedon rathbuni A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 70; detailed description, p. 76.

Type-locality.—44° 04′ 20″ north latitude, 145° 28′ 00″ east longitude (Yezo Straits); 533 fathoms. U. S. S. *Albatross.*

Dr. Richard Rathbun. U. S. National Museum.

Antedon regalis P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 226, pl. xlvi; detailed description, p. 237; first mentioned, p. 31.

Type-locality.—Tongatabu Reefs. H. M. S. *Challenger.*

regalis=regal. British Museum.

Antedon reginæ Bell, 1882.

1882. Bell, Proc. Zool. Soc., London, 1882, p. 534.

Non-diagnostic specific formula given; full description in Bell, Rep. Zool. Coll. H. M. S. *Alert*, p. 160, pl. XII, figs. A, A*a*.

Type-locality.—Port Molle, Queensland, H. M. S. *Alert*.

regina=a queen. British Museum.

Antedon remota P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 158, pl. XXIX, figs. 5–9; detailed description, p. 184; first mentioned, p. 27.

Type-locality.—46° 16′ south latitude, 48° 27′ east longitude near the Crozet Islands); 1,600 fathoms, H. M. S. *Challenger*.

remota=remote. British Museum.

†Antedon retzii.

†Antedon rhodanica.

Antedon rhomboidea P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 138, pl. XII, figs. 1, 2; pl. XXIV, figs. 1–3; detailed description, p. 148; first mentioned, p. 30.

Type-locality.—50° 08′ 30″ south latitude, 74° 41′ 00″ west longitude; 175 fathoms. H. M. S. *Challenger*.

ῥομβοειδής=rhomboidal. British Museum.

†Antedon ricordeanus.

†Antedon ricordenus.

Antedon robusta P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 212, pl. XLIV, fig. 1; detailed description, p. 220; first mentioned, p. 54.

Type-locality.—5° 49′ 15″ south latitude, 132° 14′ 15″ east longitude (near the Ki Islands); 140 fathoms. H. M. S. *Challenger*.

robusta=stout. British Museum.

†Antedon rotunda.

Antedon ruber A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 130; detailed description, p. 146.

Type-locality.—32° 33′ 00″ north latitude, 128° 32′ 10″ east longitude (Korean Straits); 95 fathoms. U. S. S. *Albatross*.

ruber=red. U. S. National Museum.

Antedon rubiginosa POURTALÈS, 1869.

1869. POURTALÈS, Bull. Mus. Comp. Zool., 1, No. 11, p. 356.

Type-locality.—Off Orange Key, Bahama Bank; 9 fathoms. U. S. S. *Bibb.*

rubiginosa=rusty. Museum of Comparative Zoology.

Antedon rubroflava A. H. CLARK, 1907.

1907. A. H. CLARK, Proc. U. S. Nat Mus., XXXIII, p. 130; detailed description, p. 150.

Type-locality.—34° 16′ 00″ north latitude, 130° 16′ 00″ east longitude (Korean Straits); 59 fathoms. U. S. S. *Albatross.*

ruber=red+*flavus*=yellow. U. S. National Museum.

†**Antedon rugosa.**

Antedon scalaris A. H. CLARK, 1907.

1907. A. H. CLARK, Proc. U. S. Nat. Mus., XXXIII, p. 129; detailed description, p. 141.

Type-locality.—30° 22′ 00″ north latitude, 129° 08′ 30″ east longitude (Eastern Sea); 361 fathoms. U. S. S. *Albatross.*

scalaris=belonging to a flight of steps. U. S. National Museum.

†**Antedon schlumbergeri.**

Antedon sclateri BELL, 1905.

1905. BELL, Marine Investigations in South Africa, III, p. 140, pl. III.

Type-locality.—East London; 250 to 300 fathoms.

Mr. W. L. Sclater.

This species was referred by the describer to Doctor Carpenter's "Savignyi group;" in reality, however, it is a member of Carpenter's "Granulifera group," and is very close to *Charitometra inæqualis.*

†**Antedon scrobiculata.**

†**Antedon semiglobosa.**

Antedon (Ophiocrinus) semperi P. H. CARPENTER, 1888.

1888. P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, pl. III.

For *Eudiocrinus semperi.*

Antedon separata A. H. CLARK, 1907.

1907. A. H. CLARK, Proc. U. S. Nat. Mus., XXXIII, p. 128; detailed description, p. 133.

Type-locality.—32° 32′ 00″ north latitude, 128° 32′ 50″ east longitude (Eastern Sea); 106 fathoms. U. S. S. *Albatross.*

separata=distinct. U. S. National Museum.

†**Antedon sequanus.**

Antedon serrata A. H. Clark, 1908.

1907. A. H. Clark, Smiths. Miscell. Coll. (Quarterly Issue), L, p. 353.

A *nomen nudum*.

1908. A. H. Clark, Bull. Mus. Comp. Zool., LI, No. 8, p. 240, pl. 1, fig. 4.

Type-locality.—Tokio Bay, Japan; 8–12 fathoms. Alan Owston.

serrata=serrate. Museum of Comparative Zoology.

Antedon serratissima A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 71; detailed description, p. 77.

Type-locality.—48° 14′ 00″ north latitude, 123° 20′ 40″ west longitude (off the coast of Washington); 40 fathoms. U. S. S. *Albatross*.

serratissima=very serrate. U. S. National Museum.

Antedon serripinna P. H. Carpenter, 1881.

1881. P. H. Carpenter, Notes from the Leyden Museum, III, p. 175; detailed description, p. 182.

Type-locality.—Andai, New Guinea.

serra=a saw+*pinna*=" pinnules." Leyden Museum.

Antedon setosa P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 34.

A *nomen nudum*.

setosa=bristly.

†**Antedon sigillata.**

Antedon similis P. H. Carpenter, 1888.

1887. von Graff, *Challenger* Reports, XX, Zoology, Pt. 61, p. 4.

A *nomen nudum*.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 226, pl. xlvii, figs. 1–3; detailed description, p. 235.

Type-locality.—19° 06′ south latitude, 178° 18′ east longitude (about) (near Kandavu, Fiji); 210 to 260 fathoms. H. M. S. *Challenger*.

similis=like. British Museum.

†**Antedon solutus.**

†**Antedon speciosus.**

†**Antedon sphæroides.**

Antedon spicata P. H. Carpenter, 1881.

1881. P. H. Carpenter, Notes from the Leyden Museum, III, p. 176; detailed description, p. 190.

Type-locality.—Banda Sea. Coll. Doctor Semmelink.

spicata=set with spines. Leyden Museum.

Antedon spinicirra P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 102, pl. xi, figs. 1, 2; detailed description, p. 112; first mentioned, p. 54.

Type-locality.—34° 08′ south latitude, 152° 00′ east longitude (near Port Jackson): 950 fathoms. H. M. S. *Challenger.*

spina=a thorn+*cirra*=" cirri." British Museum.

Antedon spinifera P. H. Carpenter, 1881.

1881. P. H. Carpenter, Bull. Mus. Comp. Zool., IX, No. 4, p. 158.

Type-locality.—Guadeloupe. M. Duchassaing.

spinifera=thorn-bearing. Paris Museum.

Antedon spinipinna Hartlaub, 1890.

1890. Hartlaub, Nachr. Ges. Göttingen, May, 1890, p. 169; detailed description, p. 179.

Type-locality.—Amboina. Dr. J. Brock.

spina=thorn+*pinna*=" pinnules." Göttingen Museum.

Antedon stella A. H. Clark, 1907.

1907. A. H. Clark, Smiths. Miscell. Coll. (Quarterly Issue). L, p. 353.

stella=a star.

This name was proposed as a substitute for *Antedon tenuis*, A. H. Clark, 1907, not *Antedon tenuis*, P. H. Carpenter, 1887; the latter, however, is a *nomen nudum*, so that *Antedon stella* becomes a synonym of *Antedon tenuis* A. H. Clark, 1907.

†**Antedon stellatus.**

†**Antedon striatus.**

Antedon stylifer A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 130; detailed description, p. 149.

Type-locality.—30° 12′ 30″ north latitude, 130° 43′ 00″ east longitude (Eastern Sea); 84 fathoms. U. S. S. *Albatross.*

stylifer=spike-bearing. U. S. National Museum.

Antedon subtilis Hartlaub, 1895.

1895. Hartlaub, Bull. Mus. Comp. Zool., XXVII, No. 4, p. 144.

Type-locality.—Gaspard Strait (between Banka and Billiton, Dutch East Indies).

subtilis=delicate. Museum of Comparative Zoology.

†**Antedon sulcata.**

Antedon tanneri Hartlaub, 1895.

1895. Hartlaub, Bull. Mus. Comp. Zool., XXVII, No. 4, p. 141, pl. i, fig. 9; pl. ii, fig. 13; pl. iii, figs. 20, 22; first mentioned, p. 129.

Type-locality.—Entrance to Bay of Panama; 286 fathoms. U. S. S. *Albatross.*

Capt. Z. N. Tanner, U. S. N.

Type will be deposited in U. S. National Museum.

†**Antedon taurinensis.**

Antedon tenax VON GRAFF, 1884. ("Lütken MS.")

1884. VON GRAFF, *Challenger* Reports, X, Zoology, Pt. 27, p. 13.

A *nomen nudum.*

tenax=tenacious.

Antedon tenelloides A. H. CLARK, 1907.

1907. A. H. CLARK, Proc. U. S. Nat. Mus., XXXIII, p. 70; detailed description, p. 73.

Type-locality.—35° 04′ 50″ north latitude, 139° 38′ 18″ east longitude (Uraga Straits, entrance to Tokyo Gulf); 70 fathoms. U. S. S. *Albatross.*

tenelloides=resembling (*Antedon*) *tenella.*

U. S. National Museum.

Antedon tener LÜTKEN, 1877.

1877. LÜTKEN, Mus. Godeffr. Cat., V, p. 100.

A *nomen nudum.*

This refers, however, to the succeeding species.

Antedon tenera HARTLAUB, 1890.

1890. HARTLAUB, Nachr. Ges. Göttingen. May, 1890, p. 170; detailed description, p. 180.

Type-locality.—Queensland: Torres Strait.

tenera=tender, soft. Hamburg and Göttingen Museums.

This specific name was misspelled *tenerea* by Hartlaub, 1893, and has since been similarly misspelled by other authors.

Antedon tennicirra HAMANN, 1907.

1907. HAMANN, Brown's Klassen und Ordnungen des Tier-Reichs, II, abt. 3, p. 1579.

Editorial error for *Antedon tenuicirra.*

Antedon tenuicirra P. H. CARPENTER, 1888.

1888. P. H. CARPENTER, *Challenger* Reports, XXVI, Zoology, p. 158, pl. XXX, figs. 4–8; pl. XXXIII, figs. 4, 5; detailed description, p. 186; first mentioned, p. 54.

Type-locality.—1° 54′ 00″ south latitude, 146° 39′ 40″ east longitude; 150 fathoms. H. M. S. *Challenger.*

tenuis=slender+*cirra*="cirri." British Museum.

Antedon tenuipinna HARTLAUB, 1890.

1890. HARTLAUB, Nachr. Ges. Göttingen, May, 1890, p. 169; detailed description, p. 178.

Type-locality.—Matupi, New Britain. Dr. O. Finsch.

tenuis=slender+*pinna*="pinnules." Berlin Museum.

Antedon tenuis P. H. Carpenter, 1887.

1887. P. H. Carpenter, Quart. Journ. Micros. Sci., XXVII, p. 386.

A *nomen nudum*.

tenuis=slender.

Antedon tenuis A. H. Clark, 1907 (not *Antedon tenuis* P. H. Carpenter, 1887).

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 71; detailed description, p. 80.

Type-locality.—47° 38′ 40″ north latitude, 141° 24′ 30″ east longitude (Gulf of Tartary); 318 fathoms. U. S. S. *Albatross.*

tenuis=slender. U. S. National Museum.

This species has been renamed *Antedon stella*. It must be known as *Antedon tenuis*, however, as Carpenter's name, being a *nomen nudum*, has no effect on the validity of the specific name *tenuis* as applied to this species.

†**Antedon tessoni.**

Antedon thetis A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 128; detailed description, p. 151.

Type-locality.—8.83 miles west of Suno Saki, Hondo, Japan; 46 fathoms. U. S. S. *Albatross.*

Θέτις=a sea nymph. U. S. National Museum.

†**Antedon thiollierei.**

Antedon tigrina A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 130; detailed description, p. 147.

Type-locality.—Kagoshima Bay, Japan. U. S. Exploring Expedition.

tigrina=striped like a tiger. U. S. National Museum.

†**Antedon tourtiæ.**

Antedon triqueta von Graff, 1884. ("P. H. Carpenter MS.")

1884. von Graff, *Challenger* Reports, X, Zoology, Pt. 27, pp. 13, 15, 16.

A *nomen nudum*.

triqueta=three-cornered.

†**Antedon truncata.**

Antedon tuberculata P. H. Carpenter, 1888.

1887. von Graff, *Challenger* Reports, XX, Zoology, Pt. 61, p. 4. A *nomen nudum*.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 225, pl. xlv, figs. 2, 3; detailed description, p. 232.

Type-locality.—19° 06′ south latitude, 178° 18′ east longitude (near Kandavu, Fiji); 210 to 610 fathoms. H. M. S. *Challenger.*

tuberculata=tuberculate. British Museum.

Antedon tuberosa P. H. Carpenter, 1888.

1884. von Graff, *Challenger* Reports, X, Zoology, Pt. 27, p. 79. A *nomen nudum.*

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 103, pl. xiv, fig. 9; pl. xxiii, fig. 2; detailed description, p. 126.

Type-locality.—9° 26′ north latitude, 123° 45′ east longitude (off Panglao and Siquijor); 375 fathoms. H. M. S. *Challenger.*

tuberosa=having tubercles. British Museum.

Antedon typica Hartlaub, 1890.

1890. Hartlaub, Nachr. Ges. Göttingen, May, 1890, p. 187.

For *Comatula* (or *Phanogenia*) *typica.*

Antedon valida P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 102; pl. xv, figs. 5–8; detailed description, p. 104; first mentioned, p. 54.

Type-locality.—4° 33′ north latitude, 127° 06′ east longitude (off the Meangis Islands); 500 fathoms. H. M. S. *Challenger.*

valida=robust. British Museum.

Antedon variipenna P. H. Carpenter, 1888.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 205.

Editorial error for *Antedon variipinna.*

Antedon variipinna P. H. Carpenter, 1882.

1882. P. H. Carpenter, Journ. Linn. Soc. (Zool.), XVI, p. 502; detailed description, p. 506.

Type-locality.—Canton, China.

varius=varied+*pinna*=" pinnules." Hamburg Museum.

Antedon variispina Bell, 1894.

1894. Bell, Proc. Zool. Soc. London, 1894, p. 396.

Editorial or typographical error.

Antedon versicolor A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 128; detailed description, p. 132.

Type-locality.—32° 32′ 00″ north latitude, 129° 30′ 45″ east longitude (Eastern Sea); 53 fathoms. U. S. S. *Albatross.*

versicolor=parti-colored. U. S. National Museum.

Antedon vicaria BELL, 1894.

1894. BELL, Proc. Zool. Soc. London, 1894, p. 400: first mentioned, p. 396.

Type-locality.—Macclesfield Bank; 30 to 40 fathoms.

vicaria=vicarious. British Museum.

This species is not identifiable from the published description. Although described in the "Spinifera group," it is in reality a member of the "Palmata group."

Antedon villosa A. H. CLARK, 1907.

1907. A. H. CLARK, Proc. U. S. Nat. Mus., XXXIII, p. 128; detailed description, p. 138.

Type-locality.—52° 01′ 00″ north latitude, 174° 39′ 00″ east longitude (Bering Sea); 1,046 fathoms. U. S. S. *Albatross.*

villosa=rough, bristly. U. S. National Museum.

Antedon wilsoni BELL, 1888.

1888. BELL, Ann. and Mag. Nat. Hist., 6 ser., II, No. 11, p. 403; first mentioned, p. 402.

Type-locality.—Port Phillip. Mr. J. Bracebridge Wilson.

Mr. J. Bracebridge Wilson. British Museum.

Antedon wood-masoni BELL, 1893.

1893. BELL, Journ. Linn. Soc. (Zool.), XXIV, p. 340.

Type-locality.—Sahul Bank, North Australia.

Mr. J. Wood-Mason.

British Museum and Indian Museum, Calcutta.

Anthedon STEBBING, 1877.

1877. STEBBING, Nature, XV, p. 366.

This is considered to be the correct spelling for "*Antedon*," and has recently been accepted by MINCKERT, Zool. Anz., XXVIII, p. 491, and following (1905).

Asterias LINNÆUS, 1758.

1758. LINNÆUS, Syst. Nat., 10th ed., p. 661.

Type.—*Asterias rubens* (n. sp.). (Belongs to the Asteroidea, not to the Crinoidea.)

ἀστερίας=starred.

Asterias bifida PENNANT, 1777.

1777. PENNANT, British Zoology, IV, p. 65, No. 70.

Type-locality.—Cornwall, England.

bifida=divided into two parts (in reference to the arms).

Asterias decacnemus PENNANT, 1777.

1777. PENNANT, British Zoology, IV, p. 66, No. 71, pl. XXXIII.

Type-locality.—Western coasts of Scotland.

δέκα=ten + νῆμα=thread.

Asterias multiradiata LINNÆUS, 1758.

1758. LINNÆUS Syst. Nat., 10th ed., p. 663.

Type-locality.—Indian Seas.

multiradiata=many-rayed. Lund Museum.

This, of course, is not the *Asterias multiradiata* of Gray, which forms the type of his genus *Heliaster*.

Asterias pectinata LINNÆUS, 1758.

1758. LINNÆUS, Syst. Nat., 10th ed., p. 663.

Type-locality.—Indian Seas.

pectinata=combed. Lund Museum.

Like the preceding, this was originally a composite species, but Doctor Carpenter has revised them both and restricted each name to a definite specific type. Fortunately, the history of each name is such as to permit of accepting his conclusions. *Pectinata* originally included the *Asterias bifida* of Pennant, and was used exclusively for that species by Barbut in 1783, Olivi in 1792, and by Adams in 1800; in 1777 Pennant restricted *pectinata* by removing *Asterias bifida* from it, leaving the name for certain tropical forms, among which was the *Actinometra pectinata* of Carpenter (the *Asterias pectinata* of Retzius, 1783), to which the name is now fixed.

Asterias radiata W. B. CARPENTER, 1866.

1866. W. B. CARPENTER, Phil. Trans. Roy. Soc., 1866, p. 680 (footnote).

Editorial error for *Asterias pectinata*.

Asterias tenella RETZIUS, 1783.

1783. RETZIUS, K. Svensk. Vetensk. Akad. Handl., IV, p. 241.

Type-locality.—Santa Cruz (? Danish West Indies); later this is corrected to read "in oceano Americano."

tenella=delicate. Lund Museum.

Astrophyton, a genus of Ophiuroidea.

ἀστήρ=star+φυτόν=a creature.

Astrophyton elizabethæ MCINTOSH, 1866.

1866. MCINTOSH, Proc. Roy. Soc. Edinb., V, p. 609 (fig.).

Type-locality.—North Uist, outer Hebrides; 6 fathoms.

"Named after a zoological benefactress."

This is the *Asterias bifida* of Pennant.

Atecto J. MÜLLER, 1843.

1843. J. MÜLLER, Abhandl. d. k. Akad. d. Wiss. Berlin, 1841, p. 216.

Typographical error.

Atelecrinus P. H. Carpenter, 1881.

1881. P. H. Carpenter, Bull. Mus. Comp. Zool., IX, No. 4, p. 166; first mentioned, p. 152.

Type.—*Atelecrinus balanoides* P. H. Carpenter (n sp.).

ἀτελής=incomplete+κρίνον=lily.

Atelecrinus balanoides P. H. Carpenter, 1881.

1881. P. H. Carpenter, Bull. Mus. Comp. Zool., IX, No. 4, p. 166, pl. 1, figs. 1–6.

Type-locality.—Off Nevis, British West Indies; 356 fathoms. U. S. S. *Blake.*

βαλανοειδής=acorn-shaped. Museum of Comparative Zoology.

†**Atelecrinus belgicus.**

Atelecrinus conifer A. H. Clark, 1908.

1908. A. H. Clark, Proc. U. S. Nat. Mus., XXXIV, p. 214.

Type-locality.—Off the north coast of Molokai, Hawaiian Islands; 552–809 fathoms. U. S. S. *Albatross.*

conifer=cone-bearing. U. S. National Museum.

Atelecrinus cubensis P. H. Carpenter, 1881.

1881. P. H. Carpenter, Bull. Mus. Comp. Zool., IX, No. 4, p. 166.

cubensis=of Cuba.

Doctor Carpenter referred this name to the *Antedon cubensis* of Pourtalès; but, as the type of that species is quite a different form, and two species of two distinct families obviously can not share a single specific name, even although it was originally a composite, this species has been renamed *Atelecrinus pourtalesi.*

Atelecrinus pourtalesi A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 155.

Type-locality.—Off Cojima, near Havana, Cuba; 450 fathoms. U. S. S. *Bibb.*

Mr. L. F. de Pourtalès. Museum of Comparative Zoology.

New name for *Atelecrinus cubensis* P. H. Carpenter, 1881, not *Antedon cubensis* Pourtalès, 1869.

Atelecrinus wyvillii P. H. Carpenter, 1882.

1882. P. H. Carpenter, Journ. Linn. Soc. (Zool.), XVI, p. 492; first mentioned, p. 489.

Type-locality.—19° 07′ 50″ south latitude, 178° 19′ 35″ east longitude (near Fiji): 610 fathoms. H. M. S. *Challenger.*

Sir C. Wyville Thomson. British Museum.

Bathhycrinus Wyville Thomson, 1878.

1878. Wyville Thomson, Journ. Linn. Soc. (Zool.), XIII, (1876), p. 50.

Editorial error for *Bathycrinus.*

Bathycrinus Wyville Thomson, 1872.

1872. Wyville Thomson, Proc. Roy. Soc. Edinb., VII, p. 772.

Type.—Bathycrinus gracilis Wyville Thomson (n. sp.).

$\beta\alpha\theta\acute{\upsilon}\varsigma$=deep+$\kappa\rho\acute{\iota}\nu o\nu$=lily.

Bathycrinus alarchianus Perrier, 1885.

1885. Perrier, Revue Sciéntifique, XXXV, May 30, 1885, p. 691.

Editorial error for *aldrichianus*.

Bathycrinus aldrichianus Wyville Thomson, 1878.

1878. Wyville Thomson, Journ. Linn. Soc. (Zool.), XIII, (1876), p. 50, fig., p. 49; first mentioned, p. 47.

Type-locality.—1° 47′ north latitude, 24° 26′ west longitude; 1,850 fathoms. H. M. S. *Challenger*.

Lieut. Pelham Aldrich, R. N. British Museum.

Bathycrinus australis A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXII, p. 553.

Type-locality.—46° 46′ south latitude, 45° 31′ east longitude (near the Crozet Islands); 1,375 fathoms. H. M. S. *Challenger*.

australis=southern. British Museum.

New name for *Bathycrinus aldrichianus* P. H. Carpenter, 1888 (not of Wyville Thomson, 1878).

Bathycrinus campbellianus P. H. Carpenter, 1884.

1884. P. H. Carpenter, *Challenger* Reports, XI, Zoology, p. 238, pl. viia, figs. 22, 23; pl. viii; wood-cut fig. 15, p. 239 (the latter the same one used by Wyville Thomson to illustrate his *B. aldrichianus*).

Lieut. Lord George Campbell, R. N.

This species was founded on the type specimen of *Bathycrinus aldrichianus*.

Bathycrinus caribbeus A. H. Clark, 1908.

1908. A. H. Clark, Bull. Mus. Comp. Zool., LI, No. 8, p. 235.

Type-locality.—16° 54′ north latitude, 63° 12′ west longitude; 687 fathoms. U. S. S. *Albatross*.

caribbeus=Caribbean. U. S. National Museum.

Bathycrinus complanatus A. H. Clark, 1907.

1907. A. H. Clark, Smiths. Misc. Coll. (Quarterly Issue), L, p. 337, fig. 123, p. 338.

Type-locality.—40 miles S. S. W. ½ W. of Southeast Cape, Copper Island; 1,567 fathoms. U. S. S. *Albatross*.

complanatus=flattened. U. S. National Museum.

Bathycrinus equatorialis A. H. Clark, 1908.

1908. A. H. Clark, Bull. Mus. Comp. Zool., LI, No. 8, p. 233, pl. i, fig. 1.

Type-locality.—0° 3.4′ north latitude, 117° 15.8′ west longitude (between the Marquesas Islands and Central America); 2,320 fathoms. U. S. S. *Albatross.*

equatorialis=equatorial. U. S. National Museum.

Bathycrinus gracilis Wyville Thomson, 1872.

1872. Wyville Thomson, Proc. Roy. Soc. Edinb., VII, p. 772.

Type-locality.—47° 38′ north latitude, 12° 08′ west longitude (Bay of Biscay); 2,435 fathoms. H. M. S. *Porcupine.*

gracilis=slender. British Museum.

Bathycrinus minimus Döderlein, 1907.

1907. Döderlein, Die gestielten Crinoiden der Siboga-Expedition, p. 8, pl. I, fig. 1; pl. II, figs. 1–1*f*; pl. VI, fig. 5; fig. 1, p. 8.

Type-locality.—0° 34.6′ north latitude, 119° 8.5′ east longitude (near Celebes, Straits of Macassar); 1,301 meters. Dutch S. S. *Siboga.*

minimus=smallest.

Bathycrinus nodipes Döderlein, 1907.

1907. Döderlein, Die gestielten Crinoiden der Siboga-Expedition, p. 8, pl. I, figs. 2–4; pl. III, figs. 1, 2; pl. IV, figs. 1–5; pl. V, figs. 1–4; pl. VI, figs. 1–3; full description, p. 9; first mentioned, p. 4.

Type-locality.—0° 34.6′ north latitude, 119° 8.5′ east longitude (Straits of Macassar); 1,301 meters: or 4° 24.3′ south latitude, 129° 49.3′ east longitude (off Banda); 1,570 meters. Dutch S. S. *Siboga.*

nodus=a knot+*pes*=foot.

Bathycrinus pacificus A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXII, p. 510; fig. 2, p. 511.

Type-locality.—Shio Misaki Light (south coast of Hondo, Japan), bearing N. 25° E., 8.7 miles distant; 905 fathoms. U. S. S. *Albatross.*

pacificus, for the Pacific Ocean. U. S. National Museum.

Bathycrinus poculum Döderlein, 1907.

1907. Döderlein, Die gestielten Crinoiden der Siboga-Expedition, p. 8, pl. I, fig. 4*f*; pl. II, figs. 2–2*d*; pl. VI, fig. 4; detailed description, p. 12.

Type-locality.—4° 24.3′ south latitude, 129° 49.3′ east longitude (near Banda); 1,570 meters. Dutch S. S. *Siboga.*

poculum = a cup.

Bathycrinus serratus A. H. Clark, 1908.

1908. A. H. Clark, Proc. U. S. Nat. Mus., XXXIV, p. 205; fig. 1, p. 206.

Type-locality.—Off the coast of Virginia; 2,045 fathoms. U. S. S. *Albatross.*

serratus=serrate. U. S. National Museum.

Bathymetra A. H. Clark, 1908.

1908. A. H. Clark, Proc. Biol. Soc. Washington, XXI, p. 132.

Type.—*Antedon abyssicola* P. H. Carpenter, 1888 (restricted).

βαθύς = deep + *metra.*

Bathymetra brevicirra A. H. Clark, 1908.

1908. A. H. Clark, Proc. Biol. Soc. Washington, XXI, p. 132.

A *nomen nudum.*

1908. A. H. Clark, Proc. U. S. Nat. Mus., XXXIV, p. 234.

Type-locality.—Western Bering Sea; 1,766 fathoms. U. S. S. *Albatross.*

brevis=short+*cirra*="cirri." U. S. National Museum.

Bathymetra carpenteri A. H. Clark, 1908.

1908. A. H. Clark, Proc. Biol. Soc. Washington, XXI, p. 132.

A *nomen nudum.*

1908. A. H. Clark, Proc. U. S. Nat. Mus., XXXIV, p. 235.

Type-locality.—West of Tasmania; 2,600 fathoms. H. M. S. *Challenger.*

Dr. P. Herbert Carpenter. British Museum.

Benthocrinus Verrill, 1885.

1885. Verrill, Rep. U. S. Commissioner of Fish and Fisheries for 1883 (Pt. XI), p. 521.

Editorial error for *Bathycrinus.*

†**Bourgueticrinus hotessieri** (not of d'Orbigny) Pourtalès, 1868.

1868. Pourtalès, Bull. Mus. Comp. Zool., I, No. 7, p. 128.

Pourtalès under this name referred to some specimens of the form now known by Sars' name *Rhizocrinus lofotensis* from the Samboes and off Sand Key, considering them possibly the same as a fossil species from Guadeloupe.

†**Cainocrinus** Forbes, 1852.

1852. Forbes, Monogr. of the Echinod. of the British Tertiaries, p. 34.

Type.—† *Cainocrinus tintinnabulum* Forbes (n. sp.).

καίνος=new+κρίνον=lily.

Calamocrinus A. Agassiz, 1890.

1890. A. Agassiz, Neues Jahrb. für Mineral., I, p. 95; also Bull. Mus. Comp. Zool., XX, No. 6, p. 165.

Type.—*Calamocrinus diomedæ* A. Agassiz (n. sp.).

κάλαμος=a reed or cane+κρίνον=lily.

Calamocrinus diomedæ A. Agassiz, 1890.

1890. A. Agassiz, Bull. Mus. Comp. Zool., XX, No. 6, p. 165.

Type-locality.—Off Indefatigable Island, Galapagos; 392 fathoms. U. S. S. *Albatross.*

diomedea=an albatross. U. S. National Museum.

This species has frequently been misspelled *diomedeæ*.

Calometra A. H. Clark, 1907.

1907. A. H. Clark, Smiths. Miscell. Coll. (Quarterly Issue), L. pp. 347, 362.

Type.—*Antedon callista* A. H. Clark, 1907.

καλός=handsome+*metra*.

Carpenterocrinus A. H. Clark, 1908.

1908. A. H. Clark, Proc. U. S. Nat. Mus., XXXIV, p. 319.

Type.—*Pentacrinus mollis* P. H. Carpenter, 1884.

Dr. P. Herbert Carpenter.

Catoptometra A. H. Clark, 1908.

1908. A. H. Clark, Proc. U. S. Nat. Mus., XXXIV, p. 317.

Type.—*Antedon hartlaubi* A. H. Clark, 1907.

κάτοπτος=conspicuous+*metra*.

Cenocrinus Wyville Thomson, 1864 (not *Cainocrinus* Forbes, 1852, which has the same derivation).

1864. Wyville Thomson, The Intellectual Observer, August, 1864, p. 2.

Type.—*Pentacrinites caput-medusæ* Miller, 1821=*Encrinus caput-medusæ* Lamarck, 1816=*Isis asteria* Linnæus, 1766.

καινός=“recent”+κρίνον=lily.

Charitometra A. H. Clark, 1907.

1907. A. H. Clark, Smiths. Miscell. Coll. (Quarterly Issue), L. pp. 347, 360.

Type.—*Antedon incisa* P. H. Carpenter, 1888.

χάρις=beauty+*metra*.

Charitometra imbricata A. H. Clark, 1908.

1908. A. H. Clark, Proc. U. S. Nat. Mus., XXXIV, p. 266, fig. 3 (proximal part of arm).

Type-locality.—“Caribbean Islands;” 101–120 fathoms. U. S. S. *Blake.*

imbricata=imbricating.

Charitometra lateralis A. H. Clark, 1908.

1908. A. H. Clark, Proc. U. S. Nat. Mus., XXXIV, p. 226.

Type-locality.—Off Niihau, Hawaiian Islands; 378–426 fathoms. U. S. S. *Albatross.*

lateralis=lateral. U. S. National Museum.

(?) Cladactis RAFINESQUE, 1815.

1815. RAFINESQUE, Analyse de la Nature, p. 153.

A nomen nudum.

Possibly an ophiuroid; no type is mentioned.

Coccometra A. H. CLARK, 1908.

1908. A. H. CLARK, Proc. Biol. Soc. Washington, XXI, p. 128.

Type.—*Comatula hagenii* Pourtalès, 1869.

κόκκος=a berry, a kernel+*metra.*

Coccometra nigrolineata A. H. CLARK, 1908.

1908. A. H. CLARK, Proc. Biol. Soc. Washington, XXI, p. 129.

Type-locality.—Porto Rico.

niger=black+*lineata*=lined. U. S. National Museum.

Comaster L. AGASSIZ, 1836.

1836. L. AGASSIZ, Mém. de Soc. de Sci. Nat. de Neuchâtel, I, p. 193.

Type.—*Comatula multiradiata* Lamarck, 1816=*Asterias multiradiata* Linnæus, 1758.

coma=hair+*aster*=a star.

It has been stated by several authors, following Müller, 1841, that *Comaster* was based on *Comatula multiradiata* Goldfuss (not of Linnæus nor of Lamarck) (=*Alecto novæ-guineæ* J. Müller), but this is a mistake. The type of the genus is the species cited above.

Comaster carpenteri A. H. CLARK, 1908.

1908. A. H. CLARK, Proc. U. S. Nat. Mus., XXXIII, p. 686.

New name for *Actinometra multifida* P. H. Carpenter, 1888 (not *Alecto multifida* J. Müller, 1841).

Dr. P. H. Carpenter.

Comaster imbricata A. H. CLARK, 1908.

1908. A. H. CLARK, Proc. U. S. Nat. Mus., XXXIV, p. 306.

Type-locality.—Sagami Bay, Japan; 50 fathoms. Mr. Alan Owston.

imbricata=imbricating. U. S. National Museum.

Comatula LAMARCK, 1816.

1816. LAMARCK, Hist. Nat. des animaux sans vertèbres II, p. 530.

Type.—*Comatula solaris* Lamarck (n. sp.).

coma=a lock of hair+diminutive suffix.

It is a little difficult to understand just why Dr. P. H. Carpenter ignored this genus. In his treatment of the unstalked crinoids he used *Antedon* for the endocylic forms, *Actinometra* for the exocyclic; but he used *Comatula* as a general term to include both. *Antedon* was proposed to cover a single species, the only one, apparently, known to de Fréminville (*A. gorgonia*=*Asterias bifida* Pennant); *Comatula* was proposed as a

term to include all the living free crinoids, and eight species are included by Lamarck under that heading, no particular one being selected as the type; his generic diagnosis, however, is quite explicit; it reads, "bouche inférieur, centrale, isolée, membraneuse, tubuleuse, saillante." This obviously refers to the anal tube, taken by Lamarck for the mouth, and makes it plain that this diagnosis was drawn up from an exocyclic species; in other words, *Comatula*, as originally defined by Lamarck, is practically the same as *Actinometra* as rediagnosed by Doctor Carpenter. Subsequent authors have all either accepted *Comatula* for all free crinoids, or (following Carpenter) abandoned it altogether; the genus has never been revised. It becomes necessary, therefore, to decide upon a type, and we have no choice but to accept the first species, *Comatula solaris*, which species, moreover, accords perfectly with the generic diagnosis drawn up by Lamarck. *Actinometra* was founded by Müller in 1841, the type being *Actinometra imperialis*, a species described at the same time; but *Actinometra imperialis* is a synonym of *Comatula solaris*, as Müller himself discovered later, so *Actinometra* Müller, 1841, is a pure synonym of *Comatula* Lamarck, 1816, being based on the same species as type.

Comatula actinodes Dujardin and Hupé, 1862.

1862. Dujardin and Hupé, Hist. Nat. des Zooph. Echin., p. 208.

A *nomen nudum*.

ἀκτινοειδής=like rays.

Comatula adeonæ Lamarck, 1816.

1816. Lamarck, Nat. Hist. des Animaux sans Vertèbres, II, p. 535.

Type-locality.—New Holland. M. M. Péron and le Sueur. Paris Museum.

Adeona=a genus of hydroids.

This species has never been properly described, and has never been figured, so that its true status and affinities remain uncertain. The multibrachiate "*Comatula adeona*" figured by de Blainville, is, of course, a case of misidentification. It is a copy of the figure illustrating the *Comatula multiradiata* of Audouin (not of Lamarck) from the Red Sea, upon which Müller's name *savignii* is based.

Comatula annulata Risso, 1826.

1826. Risso, Hist. Nat. des principales productions de l'Europe méridionale, V, p. 275.

Type-locality.—Nice.

annulata=banded.

Comatula (Alecto) articulata J. MÜLLER, 1849. (" Valenciennes MS.")

1849. J. MÜLLER, Abhandl. Akad. Berlin, 1847, p. 263.

Type-locality.—Moluccas. MM. Quoy and Gaimard.

articulata=jointed. Paris Museum.

Comatula barbata FLEMING, 1828.

1828. FLEMING, History of British Animals, p. 490.

Type-locality.—West coast of Scotland; Wales.

barbata=bearded.

Comatula bicolor DELLE CHIAIE, 1841.

1841. DELLE CHIAIE. Descrizione e notomia degli animali invertebrati della Sicilia citeriore, IV, p. 65, pl. CLXXII, figs. 6, 7.

Type-locality.—Pozzuoli and Mondrazone, Sicily.

bicolor=two-colored.

Comatula bicolor DUJARDIN and HUPÉ, 1862 (not of Delle Chiaie, 1841).

1862. DUJARDIN and HUPÉ, Hist. Nat. des Zooph. Echinod., p. 208.

A *nomen nudum*.

bicolor=two-colored.

Comatula (Actinometra) borneensis GRUBE, 1875.

1875. GRUBE, J.-B. Schl. Ges., 1875, p. 75.

Type-locality.—North Borneo.

borneensis=of Borneo. Type lost.

Comatula brachiolata LAMARCK, 1816.

1816. LAMARCK, Nat. Hist. des Animaux sans Vertèbres, II, p. 535.

Type-locality.—? Atlantic Ocean (probably erroneous).

brachiolata=with arms. Paris Museum.

Comatula brevicirra P. H. CARPENTER, 1879. (" Troschel MS.")

1879. P. H. CARPENTER, Trans. Linn. Soc. (Zool.), 2d ser., II, p. 28.

A *nomen nudum*.

brevis=short+*cirra*=" cirri."

Comatula brevipinna, POURTALÈS, 1868.

1868. POURTALÈS. Bull. Mus. Comp. Zool., I, No. 6, p. 111.

Type-locality.—Off Havana, Cuba; 270 fathoms. U. S. S. *Corwin*.

brevis=short+*pinna*=" pinnules."

Museum of Comparative Zoology.

†**Comatula brownii.**

Comatula carinata LAMARCK, 1816.

1816. LAMARCK, Hist. Nat. des Animaux sans Vertèbres, II, p. 534.

Type-locality.—Mauritius. M. Mathier.

carinata=keeled (in reference to the arms). Paris Museum.

This is possibly the same species as that called by Doctor Leach *Alecto carinata* in the previous year; Leach's description is, however, worthless, and his type is lost, whereas, thanks to Dr. P. H. Carpenter, we know what Lamarck's species really is, as he examined the type. The species should, therefore, be referred to Lamarck, 1816.

Comatula celtica Barrett and McAndrew, 1858.

1858. Barrett and McAndrew, Ann. and Mag. Nat. Hist., 2d ser., XX, p. 44.

celticus=Celtic.

New name for *Comatula woodwardii* Barrett 1857 (not †*Comatula woodwardii* Forbes, 1852).

†Comatula claudiana.

Comatula coccodistoma Dujardin and Hupé, 1862.

1862. Dujardin and Hupé, Hist. Nat. des Zooph. Echinod., p. 208.

A *nomen nudum.*

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 320.

A *nomen nudum.*

κόκκος=a kernel + δίστομα=with two openings.

†Comatula conoidea.

Comatula coralina Risso, 1826.

1826. Risso, Hist. Nat. des principales productions de l'Europe méridionale, V, p. 275.

Type-locality.—Nice.

coralina=of coral.

Comatula cumingii J. Müller, 1849.

1849. J. Müller, Abhandl. Berlin Akad., 1847, p. 255.

Type-locality.—Malacca. Mr. Hugh Cuming.

Mr. Hugh Cuming. Berlin Museum.

†Comatula depressa.

Comatula dibrachiata Dujardin and Hupé, 1862.

1862. Dujardin and Hupé, Hist. Nat. des Zooph. Echinod., p. 208.

A *nomen nudum.*

dibrachiata=double-armed.

Comatula dividua Dujardin and Hupé, 1862.

1862. Dujardin and Hupé, Hist. Nat. des Zooph. Echinod., p. 208.

A *nomen nudum.*

dividua=divided.

Comatula dubia VON GRAFF, 1877.

1877. VON GRAFF, Das Genus Myzostoma, pp. 15, 22, 72, 79.

A *nomen nudum*.

dubia=uncertain.

(See *Antedon dubia*.)

Comatula echinoptera J. MÜLLER, 1840.

1840. J. MÜLLER, L'Institut for November 19, 1840, p. 394.

Syzygial interval only given; *not recognizable* (see *Alecto echinoptera*).

Comatula elongata J. MÜLLER, 1841. ("Mus. Leyd. MS.")

1841. J. MÜLLER, Wiegmann's Archiv für Naturgesch., 1841, I, p. 146.

A manuscript name adopted by Müller in his description of *Alecto elongata*.

Comatula eschrichtii J. MÜLLER, 1840.

1840. J. MÜLLER, Wiegmann's Archiv für Naturgesch., 1840, I, p. 311 (also L'Institut for Nov. 19, 1840, p. 393).

Syzygial interval only given: the species was fully described under the name of *Alecto eschrichtii* (q. v.) in the following year. The description here given must be considered unrecognizable.

†**Comatula exilis.**

Comatula fimbriata LAMARCK, 1816.

1816. LAMARCK, Hist. Nat. des Animaux sans Vertèbres, II, p. 535.

Type-locality.—Australian seas. MM. Péron and le Sueur.

fimbriata=fringed. Paris Museum.

Comatula fimbriata MILLER, 1821 (not *Comatula fimbriata* LAMARCK, 1816).

1821. MILLER, A Natural History of the Crinoidea, p. 132, and frontispiece.

Type-locality.—Milford Haven.

This species has been renamed *Comatula milleri*.

Comatula flagellata J. MÜLLER, 1841. ("Mus. Leyd. MS.")

1841. J. MÜLLER, Wiegmann's Archiv für Naturgesch., 1841, I, p. 145.

flagellata=whip-shaped.

A manuscript name adopted by Müller in his description of *Alecto flagellata*.

Comatula glacialis DUJARDIN and HUPÉ, 1862.

1862. DUJARDIN and HUPÉ, Hist. Nat. des Zooph. Echinod., p. 208.

A *nomen nudum*.

glacialis=cold; icy.

Comatula (Alecto) hagenii Pourtalès, 1868.

1868. Pourtalès, Bull. Mus. Comp. Zool., I, No. 6, p. 111.

Type-locality.—Off Sand Key, Florida; 100 fathoms. U. S. S. *Corwin.*

Dr. H. A. Hagen. Museum of Comparative Zoology.

Comatula (Actinometra?) hamata Kuhl and van Hasselt, 1869.

1869. Kuhl and van Hasselt in Herklots, Bijdrage tot de Dierkunde, IX, p. 10, pl. IX.

Type-locality.—Cape Bantam (=Cape Bantano).

hamata=bearded. Leyden Museum.

Comatula helianthus, new name for *Actinometra elongata* P. H. Carpenter, 1888, not *Comatula elongata* J. Müller, 1849.

"Ἥλιος=the sun+ἄνθος=a flower.

Comatula holmesi Pourtalès, 1869.

1869. Pourtalès, Bull. Mus. Comp. Zool., I, No. 11, p. 355.

A *nomen nudum.*

Comatula indica Smith, 1879.

1879. Smith, Ann. and Mag. Nat. Hist., 4th ser., XVII, p. 406; better description in Smith, Phil. Trans. Roy. Soc., CLXVIII, p. 564, pl. LI, figs. 3, 3 *b* (but not 3 *a*).

Type-locality.—Rodriguez. Mr. H. H. Slater.

indica=of India.

Comatula inserta Dujardin and Hupé, 1862.

1862. Dujardin and Hupé, Hist. Nat. des Zooph. Echinod., p. 208.

A *nomen nudum.*

inserta=inserted.

Comatula jacquinoti J. Müller, 1846. ("Valenciennes MS.")

1846. J. Müller, Monatsber. d. Acad. Berlin, 1846, p. 178.

Type-locality.—Ceram. M. Honoré Jacquinot.

M. Honoré Jacquinot. Paris Museum.

Comatula japonica J. Müller, 1841. ("Mus. Leyd. MS.")

1841. J. Müller, Wiegmann's Archiv für Naturgesch., I, p. 145.

A manuscript name adopted by Müller in his description of *Alecto japonica.*

Comatula laevissima Grube, 1875.

1875. Grube, J.-B. d. schl. Gesellsch. für vaterl. Cultur, 1875, p. 74.

Type-locality.—North Borneo.

lævissima=very insignificant. Breslau Museum.

†**Comatula longimana.**

Comatula macronema J. Müller, 1846. ("Valenciennes MS.")

1846. J. Müller, Monatsber. d. Acad. Berlin, 1846, p. 179.

Type-locality.—King George's Haven, New Holland. MM. Quoy and Gaimard.

μακρός=long+*νῆμα*=thread. Paris Museum.

Comatula mariæ A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 153.

Type-locality.—34° 16′ 00″ north latitude, 130° 16′ 00″ east longitude (near the Oki Islands, sea of Japan); 59 fathoms. U. S. S. *Albatross.*

Mrs. Mary W. Clark. U. S. National Museum.

Comatula mediterranea Lamarck, 1816.

1816. Lamarck, Hist. Nat. des Animaux sans Vertèbres, II, p. 535.

Type-locality.—Mediterranean. M. de Lalande.

mediterranea=of the Mediterranean. Paris Museum.

†**Comatula mediterraneæformis.**

Comatula mertensi Grube, 1875.

1875. Grube, J.-B. der schls. Gesellsch. für vaterl. Cultur, 1875, p. 71.

Type-locality.—North Borneo. Dr. Carl H. Mertens.

Dr. Carl H. Mertens.

Comatula (Alecto) milberti J. Müller, 1846. ("Valenciennes MS.")

1846. J. Müller, Monatsber. d. Acad., 1846, p. 178.

Type-locality.—"North America: type brought from New York," (probably, however, Indian Ocean; the species does not occur in the Atlantic).

M. Jacques Gérard Milbert. Paris Museum.

Comatula milleri J. Müller, 1849.

1849. J. Müller, Abhandl. Berlin Acad., 1847, p. 251.

Mr. J. S. Miller.

New name for *Comatula fimbriata* Miller, 1821, not *Comatula fimbriata* Lamarck, 1816.

Comatula moniliformis Dujardin and Hupé, 1862.

1862. Dujardin and Hupé, Hist. Nat. des Zooph. Echinod., p. 208.

A *nomen nudum.*

monile=a necklace+*formis*=form.

Comatula monilis Dujardin and Hupé, 1862.

1862. Dujardin and Hupé, Hist. Nat. des Zooph. Echinod., p. 208.

A *nomen nudum.*

monile=a necklace.

Comatula multistriata de Loriol, 1889.

1889. de Loriol, Paléontol. Française, IX, Pt. 2, p. 437.

Editorial error for *Comatula multiradiata.*

Comatula nigra von Graff, 1877. (" Semper MS.")

1877. von Graff, Das Genus Myzostoma, pp. 17, 23, 72, 79.

A *nomen nudum*.

nigra=black.

(See *Actinometra nigra*.)

Comatula novæ-guineæ J. Müller, 1841. (" Mus. Leyd. MS.")

1841. J. Müller, Wiegmann's Archiv für Naturgesch., 1841, I, p. 146.

A manuscript name adopted by Müller in his description of *Alecto novæ-guineæ*.

Comatula orientalis A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 155.

orientalis=eastern.

New name for *Actinometra simplex* P. H. Carpenter, 1888, not *Comatula simplex* P. H. Carpenter, 1879 and 1881.

Comatula philiberti J. Müller, 1849. (" Valenciennes MS.")

1849. J. Müller, Abhandl. Berlin Akad., 1847, p. 259.

Type-locality.—Java. M. Philibert.

M. Philibert. Paris Museum.

Comatula picta Dujardin and Hupé, 1862.

1862. Dujardin and Hupé, Hist. Nat. des Zooph. Echinod., p. 208.

A *nomen nudum*.

picta=painted.

† **Comatula pinnata.**

Comatula polyactinia Dujardin and Hupé, 1862.

1863. Dujardin and Hupé, Hist. Nat. des Zooph. Echinod, p. 208.

A *nomen nudum*.

πολύς=many+ἀκτινόεις=emitting rays.

Comatula polyartha J. Müller, 1840.

1840. J. Müller, Monatsber d. k. Preuss Ak. d. Wiss., Apr., 1840, p. 6.

Editorial error for *Comatula polyarthra*.

†**Comatula polydactyla.**

†**Comatula ransomi.**

Comatula (Alecto) reynaudi J. Müller, 1846. (" Valenciennes MS.")

1846. J. Müller, Monatsber. d. Acad. Berlin, 1846, p. 178.

Type-locality.—Ceylon. M. Jean Ernest Reynaud.

M. Jean Ernest Reynaud. Paris Museum.

Comatula rosacea Fleming, 1828.

1828. Fleming, History of British Animals, p. 490.

Type-locality.—Pensance (Luid); Milford Haven.

rosacea=rosy.

This is the first post-Linnæan reference to the specific name *rosacea*. It is antedated by *bifida* Pennant, 1777, *gorgonia* de Fréminville, 1811, *mediterranea* Lamarck, 1816 [*fimbriata* Miller, 1821, not available], *annulata* Risso, 1826, and *coralina* Risso, 1826.

Comatula rosea J. Müller, 1841. ("Mus. Vienn. MS.")

1841. J. Müller, Wiegmann's Archiv. für Naturgesch., 1841, I, p. 143.

rosea=rosy.

A manuscript name adopted by Müller in his description of *Alecto rosea*.

Comatula rotalaria Lamarck, 1816.

1816. Lamarck, Hist. Nat. des Animaux sans Vertèbres, II, p. 534.

Type-locality.—Australian Seas. MM. Péron and le Sueur.

rotalaria=circular. Paris Museum.

Comatula rotularia de Blainville, 1836.

1836. de Blainville Manuel d'Actinologie [1834], p. 249.

Editorial error for *Comatula rotalaria*.

Comatula scita Dujardin and Hupé, 1862.

1862. Dujardin and Hupé, Hist. Nat. des Zooph. Echinod., p. 208.

A *nomen nudum*.

scita=beautiful, elegant.

Comatula serrata A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 154.

Type-locality.—32° 33′ 10″ north latitude, 128° 32′ 10″ east longitude (southern part of the Sea of Japan); 95 fathoms. U. S. S. *Albatross*.

serrata=serrate. U. S. National Museum.

This species belongs to the genus *Comaster*, and not to *Comatula*, as stated in Proc. U. S. Nat. Mus., XXXIII, p. 685.

Comatula simplex P. H. Carpenter, 1881.

1862. Dujardin and Hupé, Hist. Nat. des Zooph. Echinod., p. 208.

A *nomen nudum*.

1879. P. H. Carpenter, Trans. Linn. Soc. (Zool.), 2d ser., II, p. 28.

A *nomen nudum*.

1881. P. H. Carpenter, Notes from the Leyden Museum, III, p. 205.

Type-locality.—Australia. MM. Péron and le Sueur.

simplex=simple. Paris Museum.

Comatula solaris Lamarck, 1816.

1816. Lamarck, Hist. Nat. des Animaux sans Vertèbres, II, p. 533.

Type-locality.—Australian Seas. MM. Péron and le Sueur.

solaris=of the sun. Paris Museum.

Comatula solaster A. H. Clark, 1907.

1907. A. H. Clark, Proc U. S. Nat. Mus., XXXIII, p. 153.

Type-locality.—31° 38′ 15″ north latitude, 130° 46′ 50″ east longitude (in Kagoshima Gulf); 43 fathoms. U. S. S. *Albatross.*

sol=sun+*aster*=star. U. S. National Museum.

†**Comatula tenella.**

This is the type of the genus *Saccocoma* L. Agassiz, 1836, and is not congeneric with *Asterias tenella* Retzius.

Comatula timorensis J. Müller, 1841. ("Mus. Leyd. MS.")

1841. J. Müller, Wiegmann's Archiv für Naturgesch., 1841, I, p. 145.

A manuscript name adopted by Müller in his description of *Alecto timorensis.*

Comatula trichoptera J. Müller, 1846. ("Valenciennes MS.")

1846. J. Müller, Monatsber. d. Acad., 1846, p. 178.

Type-locality.—King Georges Haven, New Holland. MM. Quoy and Gaimard.

θρίξ=hair+*πτερόν*=wing. Paris Museum.

Comatula triqueta von Graff, 1877. ("Lütken MS.")

1877. von Graff, Das Genus Myzostoma, pp. 12, 13, 14, 15, 16, 18, 22, 23, 72, 79.

A *nomen nudum.*

triquetra=three-cornered.

†**Comatula wagneri.**

†**Comatula woodwardii** Forbes, 1852.

1852. Forbes, Monograph of the Echinoderms of the British Tertiaries, p. 19, pl. I, fig. 20.

Comatula woodwardii Barrett, 1857 (not of Forbes, 1852).

1857. Barrett, Ann. and Mag. Nat. Hist., 2d ser., XIX, p. 33, pl. VII, fig. 1.

Type-locality.—Sound of Skye; 25 to 40 fathoms.

Mr. S. P. Woodward.

This species has been renamed *Comatula celtica.*

Comatulus Linville and Kelly, 1906.

1906. Linville and Kelly, A Text-Book in General Zoölogy, p. 247.

Intended for *Antedon.*

Compsometra A. H. Clark, 1908.

1908. A. H. Clark, Proc. Biol Soc. Washington, XXI, p. 131.

Type.—*Antedon loreni* Bell, 1882 (=*Antedon pumila* Bell, 1884).

κομψός=pretty+*metra*.

Cyllometra A. H. Clark, 1907.

1907. A. H. Clark, Smiths. Miscell. Coll. (Quarterly Issue), L, pp. 347, 356.

Type.—*Antedon manca* P. H. Carpenter, 1888.

κυλός=maimed+*metra*.

Cyllometra albopurpurea A. H. Clark, 1908.

1908. A. H. Clark, Proc. U. S. Nat. Mus., XXXIV, p. 239.

Type-locality.—Entrance to Tokyo Gulf, Japan; 58 fathoms. U. S. S. *Albatross.*

albus=white+*purpurea*=purple. U. S. National Museum.

Cyllometra belli A. H. Clark, 1907.

1907. A. H. Clark, Smiths. Miscell. Coll. (Quarterly Issue), L, p. 357.

This name was originally proposed as a substitute for *Antedon loreni* Bell, 1884, not *Antedon loreni* Bell, 1882; but *Antedon loreni* Bell, 1884=*Antedon insignis* Bell, 1882; therefore *Cyllometra belli* is a pure synonym of *Antedon insignis* Bell, 1882. Professor F. Jeffrey Bell.

[**Decacnimos**; NOT BINOMIAL, although listed as such by Mr. C. D. Sherborn. See under *Enerinus*.]

Decametrocrinus Minckert, 1905.

1905. Minckert, Zool. Anz., XXVIII, p. 494; first mentioned, p. 490.

Type.—*Promachocrinus abyssorum* P. H. Carpenter, 1888.

δεκά=ten + μέτρον=measure + κρίνον=lily.

No type is mentioned by the author, but two species, *Promachocrinus abyssorum* and *Promachocrinus naresi*, are assigned to it, of which the former agrees rather better with the generic diagnosis.

Decametrocrinus borealis A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXIII, p. 70; detailed description, p. 71.

Type-locality.—30° 22′ 00″ north latitude, 129° 08′ 30″ east longitude (Eastern Sea); 361 fathoms. U. S. S. *Albatross.*

borealis=of the north. U. S. National Museum.

Decametrocrinus rugosus A. H. Clark, 1908.

1908. A. H. Clark, Proc. U. S. Nat. Mus., XXXIV, p. 215.

Type-locality.—Off Bird Island, Hawaiian Islands; 762–1,000 fathoms. U. S. S. *Albatross.*

rugosus=rugose. U. S. National Museum.

Democrinus Perrier, 1883.

1883. Perrier, Comptes Rendus, XCVI, No. 7, p. 450.

Type.—Democrinus parfaiti Perrier (n. sp.) [=*Rhizocrinus rawsonii* Pourtalès].

δέμω=to build+κρίνον=lily.

Democrinus parfaiti Perrier, 1883.

1883. Perrier, Comptes Rendus, XCVI, No. 7, p. 450.

Type-locality.—Off the coast of Morocco, near Cape Blanc; 1,900 meters. French S. S. *Travailleur.*

M. T. Parfait, commander of the *Travailleur.* Paris Museum.

(?) **Diteropus** Rafinesque, 1815.

1815. Rafinesque, Analyse de la Nature, p. 153.

A *nomen nudum.*

Possibly an Ophiuroid; no type is mentioned.

[†**Encrinus** Schulze, 1760; not binomial; see following.]

†**Encrinus** Andreae, 1763.

1763. Andreae, Hannoverische Magazin, 1763; reprinted in Andreae, Briefe aus der Schweiz nach Hannover beschrieben in dem Jare 1763, p. 4 (1776).

Type.—Encrinus coralloides (n. sp.), founded on Brückner Versuch einer Beschreibung historisch und natürlicher Merkwürdigkeiten der Landschaft Basel, Part 6, pl. figs. *g*, *h*, *i*, *k*, *l*, *m* (1748).

ἐν=in+κρίνον=lily.

According to Bather, *Encrinus* dates from Schulze, Betrachtung der versteinerten Seesterne und ihrer Theile, p. 27, No. 17 (1760); this work is, however, non-binomial, and can not, therefore, serve as the original reference for *any* names employed according to the present usages in nomenclature. Schulze uses the names in a purely historical sense, and takes all of them from previous authors, and he says of *Encrinus*, "Man findet gewisse Versteinerung, die, in Ansehung ihrer Gestalt, einige Gleichert mit einer Lilie zu haben scheinert; daher man dieselbe anfänglich für die Versteinerung dieser Blume gehalten, und sie die Lilienstein, Encrinum gennenen hat," showing that he was merely repeating the name by which these fossils were known to pre-Linnæan authors. It should be noticed that Schulze makes no reference whatever to Linnæus' work. While it would save

a vast amount of trouble if we could accept Schulze as the authority for such names as *Encrinus*, *Astropecten*, *Palmipes*, *Pentagonaster*, etc., it must be emphatically stated that such a course would be entirely unwarranted; it would be more sensible to date everything from Linck 1733, and other early authors than from a compiler who copied their names. Mr. Bather lays himself open to a charge of inconsistency; for, while, accepting *Encrinus* from Schulze in 1898, in 1899 we find him still using *Antedon* (de Fréminville 1811) and *Actinometra* (J. Müller 1841) instead of *Decacnimos*, *Triscadecacnimos*, and *Polyactinis* used by Schulze (taken from Linck and Seba) for these genera. Surely if one of Schulze's names be valid, all of them are.

Andreae, so far as the names given by himself go, was a binomialist in the Linnæan sense, although, like most of the early workers, he employed the polynomials of his predecessors. He gives many references to Linnæus, showing that he was acquainted with his work, and he is accepted by the leading ornithologists as consistently binomial, his bird names, such as *Fringilla gularis* being accepted.

I have not been able to consult the Hannoverische Magazin, nor the work of Brückner. So far as I can judge, *Encrinus coralloides* appears to be the same as the *Pentacrinites fossilis* of Blumenbach 1804, in which case *Pentacrinites* becomes a pure synonym of *Encrinus*.

Encrinus australis ANONYMOUS, 1845.

1845. ANONYMOUS, L'Institut, 1845, p. 292.

Type-locality.—Newcastle, on the Hunter River, Australia. Rev. C. Pleydell.

australis = southern.

This cannot be a crinoid.

Encrinus caput-medusæ LAMARCK, 1816.

1816. LAMARCK, Hist. Nat. des Animaux sans Vertèbres, II, p. 435.

Type-locality.—Martinique.

caput=head+*Medusa*=Medusa, one of the Gorgons.

Encrinus caput-medusæ Lamarck 1816 = *Isis asteria* Linnæus, 1766.

Encrinus milleri GUILDING, 1828 (not †*Encrinites milleri* VON SCHLOTHEIM, 1822).

1828. GUILDING, Zool. Journ., IV, p. 175.

Type-locality.—St. Vincent, West Indies.

Mr. J. S. Miller.

The species of *Isocrinus* to which this name belongs can not be determined from the description.

Encrinus parræ GUÉRIN, 1835.

1835. GUÉRIN, Dict. d'Hist. Nat., III, p. 49, pl. 147, fig. 1.

Type-locality.—Off Havana, Cuba.

Señor Antonio Parra.

This species is based on the "Palma animal" of Parra (Description de diferentes piezas de Historia Natural. Havana, 1787, p. 191, pl. LXX, facing p. 191). Parra's plate (which is copied by Guérin), represents a remarkably fine specimen of the species subsequently called *Pentacrinus mülleri* by Örsted. The short internodes, consisting of only three or four columnars, and the consequent crowding of the cirri are sufficient to identify the species beyond question. The *Pentacrinus mülleri* of Örsted, P. H. Carpenter, and other authors, must be known as *Isocrinus parræ*.

Endiocrinus BATHER, 1899.

1899. BATHER, Rep. Brit. Assoc. for 1898 (Bristol) p. 923.

1900. CHUN, Aus den Tiefen des Weltmeeres, p. 488.

1904. HUTTON, Index Faunæ Novæ Zelandiæ, p. 291.

Typographical error for *Eudiocrinus*.

Endoxocrinus A. H. CLARK, 1908.

1908. A. H. CLARK, Proc. Biol. Soc. Washington, XXI, p. 151.

Type.—Encrinus parræ Guérin, 1835 (=*Pentacrinus mülleri* Örsted, 1856).

ἔνδοξος=notable+κρίνον=lily.

Erythrometra A. H. CLARK, 1908.

1908. A. H. CLARK, Proc. Biol. Soc. Washington, XXI, p. 126.

Type.—Antedon ruber A. H. Clark, 1907.

ἐρυθρός = red + *metra*.

Eudiocrinus P. H. CARPENTER, 1882.

1882. P. H. CARPENTER, Journ. Linn. Soc. (Zool.), XVI, p. 493; first mentioned, p. 488.

New name for *Ophiocrinus* Semper, 1868 (not *Ophiocrinus* Salter, 1856).

εὔδιος=calm + κρίνον=lily.

Eudiocrinus atlanticus PERRIER, 1883.

1883. PERRIER, Comptes Rendus. XCVI. p. 725.

Type-locality.—Gulf of Gascony; 896 meters. French S. S. *Travailleur.*

atlanticus=of the Atlantic. Paris Museum.

Eudiocrinus granulatus BELL, 1894.

1894. BELL. Proc. Zool. Soc. London. 1894, p. 397, pl. XXIII; first mentioned, p. 396.

Type-locality.—Macclesfield Bank; 34 to 40 fathoms. H. M. S. *Egeria.*

granulatus=granulated. British Museum.

†Eudiocrinus hyselyi.

Eudiocrinus japonicus P. H. Carpenter, 1882.

1882. P. H. Carpenter, Journ. Linn. Soc. (Zool.), XVI, p. 495; detailed description, p. 499.

Type-locality.—37° 07′ north latitude, 138° 00′ east longitude (off southern Japan); 565 fathoms. H. M. S. *Challenger.*

japonicus=Japanese. British Museum.

Eudiocrinus semperi P. H. Carpenter, 1882.*

1882. P. H. Carpenter, Journ. Linn. Soc. (Zool.), XVI, p. 495; detailed description, p. 497.

Type-locality.—34° 08′ south latitude, 152° 00′ east longitude (near Sydney, New South Wales); 950 fathoms. H. M. S. *Challenger.*

Prof. Carl Semper, of Wurzburg. British Museum.

Eudiocrinus tuberculatus A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXII, p. 573.

Type-locality.—Off Ukishima, Gulf of Tokyo; 169 fathoms. U. S. S. *Albatross.*

tuberculatus=with tubercles. U. S. National Museum.

Eudiocrinus varians P. H. Carpenter, 1882.

1882. P. H. Carpenter, Journ. Linn. Soc. (Zool.), XVI, p. 495; detailed description, p. 496; first mentioned, p. 494.

Type-locality.—16° 42′ north latitude, 119° 22′ east longitude (off the west coast of Luzon, Philippines); 1,050 fathoms. H. M. S. *Challenger.*

varians=varying. British Museum.

Eudiocrinus variegatus A. H. Clark, 1908.

1908. A. H. Clark, Proc. Biol. Soc. Washington, XXI, p. 134. A *nomen nudum.*

1908. A. H. Clark, Proc. U. S. Nat. Mus., XXXIV, p. 278, figs. 9, 10, 11.

Type-locality.—34° 59′ north latitude, 139° 34′ east longitude (Sagami Bay, Japan); 60 fathoms. Mr. Alan Owston.

variegatus=variegated. U. S. National Museum.

[Euryale; see note under *Ophiocrinus.*]

Ganymeda Gray, 1834.

1834. Gray, Proc. Zool. Soc. London, 1834, Pt. 2, No. 14, p. 15.

Type.—*Ganymeda pulchella* Gray (n. sp.).

Γανυμήδα, Ganymeda, or Hebe.

Ganymeda pulchella Gray, 1834.

1834. Gray, Proc. Zool. Soc. London, 1834, Pt. 2, No. 14, p. 16.

Type-locality.—Kent, England.

pulchella=pretty. British Museum.

Ganymeda pulchella=detached centro-dorsal of *Asterias bifida* Pennant, *Ganymeda* therefore becoming a synonym of *Antedon* de Fréminville, with the same species as type. The specific name *pulchella* is not the same as the *Antedon pulchella* of Pourtalès, 1878; but, fortunately, a previous name (*alata*) is available for the latter.

Gephyrocrinus Kœhler and Bather, 1902.

1902. Kœhler and Bather, Mém. Soc. Zool. de France, XV, p. 68.

Type.—*Gephyrocrinus grimaldii* Kœhler and Bather (n. sp.).

γεφυρόω=to bridge over+κρίνον=lily.

Gephyrocrinus grimaldii, Kœhler and Bather, 1902.

1902. Kœhler and Bather, Mém. Soc. Zool. de France, XV, p. 68.

Type-locality.—27° 41′ north latitude, 20° 14′ west longitude (Canary Islands); 1,786 meters. Yacht *Princess Alice.*

The Prince of Monaco.

Goldfussia Norman, 1891 (not of de Castelnau, 1843).

1891. Norman, Ann. and Mag. Nat. Hist., ser. VI, VII, p. 387.

Type.—*Comatula multiradiata* Goldfuss (not *Comatula multiradiata* Lamarck=*Asterias multiradiata* Linnæus)=*Alecto novæ-guineæ* J. Müller.

Georg August Goldfuss.

Canon Norman proposed the name *Goldfussia* as a substitute for *Comaster* J. Müller (not of L. Agassiz). Professor Agassiz's type was the *Comatula multiradiata* of Lamarck, which is the same as the *Asterias multiradiata* of Linnæus; but Professor Müller shifted this name to a specimen figured by Goldfuss, which represents a different species, and renamed Lamarck's types *multifida.*

Gynameda Gray, 1848.

1848. Gray, List of the British Animals in Brit. Mus., Pt. I, Centroniæ or Radiated Animals, p. 28.

Emendation or typographical error.

Gynameda pulchella Gray, 1848.

1848. Gray, List of the British Animals in Brit. Mus., Pt. I, Centroniæ or Radiated Animals, p. 29.

Emendation or typographical error.

Hathrometra A. H. Clark, 1908.

1908. A. H. Clark, Proc. Biol. Soc. Washington, XXI, p. 130.

Type.—*Alecto dentata* Say. 1825.

ἀθρόος=assembled in crowds+*metra.*

Heliometra A. H. Clark, 1907.

1907. A. H. Clark, Smiths. Miscell. Coll. (Quarterly Issue), L, pp. 345, 350.

Type.—*Alecto eschrichtii* J. Müller, 1841.

"*Ηλιος*=the sun+*metra*.

Heliometra glabra A. H. Clark, 1907.

1907. A. H. Clark, Smiths. Miscell. Coll. (Quarterly Issue), L, p. 351.

Proposed as a new name for *Antedon australis* P. H. Carpenter, 1888, preoccupied.

glabra=smooth.

Heliometra juvenalis A. H. Clark, 1908.

1908. A. H. Clark, Bull. Mus. Comp. Zool., LI, No. 8, p. 239, pl. 1, fig. 5.

Type-locality.—Off Cape Raper, Davis Strait; 60 fathoms. Rev. A. M. Norman.

juvenalis=juvenile. Museum of Comparative Zoology.

(?) **Heterias** Rafinesque, 1815.

1815. Rafinesque, Analyse de la Nature, p. 153.

A *nomen nudum*.

Possibly an asteroid; no type is mentioned.

Hibernula Fleming, 1828.

1828. Fleming, History of Brit. Animals, p. 494.

Type.—*Pentacrinus europæus* J. V. Thompson, 1827.

Hibernia=Ireland+diminutive suffix.

Pentacrinus europæus J. V. Thompson, 1827=the larva of *Asterias bifida* Pennant, 1777=*Antedon gorgonia* de Fréminville, 1811; *Hibernula*, therefore, is a pure synonym of *Antedon*.

Himerometra A. H. Clark, 1907.

1907. A. H. Clark, Smiths. Miscell. Coll. (Quarterly Issue), L, pp. 346, 355.

Type.—*Antedon crassipinna* Hartlaub, 1890.

ἵμερος=lovely+*metra*.

Himerometra acuta A. H. Clark, 1908.

1908. A. H. Clark, Bull. Mus. Comp. Zool., LI, No. 8, p. 242.

Type-locality.—Fiji.

acuta=sharp. Museum of Comparative Zoology.

Himerometra helianthus A. H. Clark, 1907.

1907. A. H. Clark, Smiths. Miscell. Coll. (Quarterly Issue), L, p. 356.

A *nomen nudum*.

"*Ηλος* = the sun + *ἄνθος* = flower.

This refers, however, to the following; mistakes of this kind are quite inexcusable, and very annoying.

Himerometra heliaster A. H. Clark, 1908.

1908. A. H. Clark, Bull. Mus. Comp. Zool., LI, No. 8, p. 242.

Type-locality.—Ebon, Marshall Islands. Rev. B. G. Snow.

"Ἥλιος = the sun = ἀστήρ + a star.

Museum of Comparative Zoology.

Himerometra persica A. H. Clark, 1908.

1907. A. H. Clark, Smiths. Miscell. Coll. (Quarterly Issue), L, p. 356.

A *nomen nudum.*

1908. A. H. Clark, Bull. Mus. Comp. Zool., LI, No. 8, p. 243.

Type-locality.—Persian Gulf. F. W. Townsend.

persica=of Persia. Museum of Comparative Zoology.

Himerometra subcarinata A. H. Clark, 1908.

1908. A. H. Clark, Proc. U. S. Nat. Mus., XXXIV, p. 237.

Type-locality.—Sea of Japan; 59 fathoms. U. S. S. *Albatross.*

subcarinata=slightly carinate. U. S. National Museum.

Holopus d'Orbigny, 1837.

1837. d'Orbigny, Magas. de Zool., 7me année, classe X, p. 1.

Type.—Holopus rangii d'Orbigny (n. sp.).

ὅλος=entire+πούς=foot.

Holopus rangii d'Orbigny, 1837.

1837. d'Orbigny, Magas. de Zool., 7me année, classe X, p. 6, pl. III.

Type-locality.—Off Martinique. M. Sander Rang.

M. Sander Rang. Paris Museum.

Hybernula de Blainville, 1836.

1836. de Blainville, Manuel d'Actinologie, [Paris 1834], p. 256.

Emendation.

Hyocrinus Wyville Thomson, 1877.

1877. Wyville Thomson, The Atlantic (London), II, p. 96; see also

1878. Wyville Thomson, Journ. Linn. Soc. (Zool.) XIII, p. 47. 1876 (1878).

Type.—Hyocrinus bethellianus Wyville Thomson (n. sp.).

ὗς = a hog+κρίνον = lily; named for Hog Island, one of the Crozets, near which the genus was found.

Hyocrinus bethellianus Wyville Thomson, 1877.

1877. Wyville Thomson, The Atlantic (London), II, p. 96; see also

1878. Wyville Thomson, Journ. Linn. Soc. (Zool.), XIII, p. 51 (fig.); first mentioned, p. 47. 1876 (1878).

Type-locality.—46° 16′ south latitude, 48° 27′ east logitude (30 miles west of Hog Island, Crozet group); 1,600 fathoms, H. M. S. *Challenger.*

Lieut. George R. Bethell, R. N. . British Museum.

This has been misspelled *bethelianus* by Springer.

Hypalocrinus A. H. Clark, 1908.

1908. A. H. Clark, Proc. Biol. Soc. Washington, XXI, p. 152.

Type.—*Pentacrinus naresianus* P. H. Carpenter, 1882.

ὑπό = under + ἅλός = at sea + κρίνον = lily.

Hypalometra A. H. Clark, 1908.

1908. A. H. Clark, Proc. Biol. Soc. Washington, XXI, p. 133.

Type.—*Antedon defecta* P. H. Carpenter, 1888.

ὑπό = under + ἅλς = the sea + *metra.*

Hypomene Wachsmuth and Springer, 1879.

1879. Wachsmuth and Springer, Proc. Acad. Nat. Sci. Phila., 1879, p. 28 (footnote); *idem*, Rev. Palæocrinoidea, p. 202 (footnote).

Editorial error for *Hyponome.*

Hyponome Lovén, 1868.

1868. Lovén, Forhandl. Skand. Naturf. Christiania, X, p. liv.

Type.—*Hyponome sarsii* Lovén (n. sp.).

ὑπονομή = an underground passage.

Hyponome sarsii Lovén, 1868.

1868. Lovén, Fordhandl. Skand. Naturf. Christiania, X, p. liv.

Type-locality.—Cape York, Australia.

Prof. Michael Sars.

Hyponome sarsii is the detached visceral mass of some species of Antedonidæ, possibly *Zygometra microdiscus* Bell; but as the characters given are non-diagnostic when referred to any of the Antedonidæ with plated disks, the generic name can never become available.

Ilycrinus Danielssen and Koren, 1877.

1877. Danielssen and Koren, Nyt Magasin for Naturvidenskaberne, XXIII, 3die Hefte, p. 45.

Type.—*Ilycrinus carpenterii* Danielssen and Koren (n. sp.).

ἰλύς = mud + κρίνον = lily.

Ilycrinus carpenterii Danielssen and Koren, 1877.

1877. Danielssen and Koren, Nyt Magasin for Naturvidenskaberne, XXIII, 3die Hefte, p. 45, pls. I, II, figs. 1–16.

Type-locality.—63° 22′ north latitude, 1° 20′ east longitude; 65° 55′ north latitude, 7° 20′ east longitude; or 65° 15′ north latitude, 0° 36′ west longitude; 1,050 to 1,495 fathoms. Norwegian S. S. *Vøringen.*

Dr. W. B. Carpenter.

Ilyocrinus Perrier, 1885.

1885. Perrier, Revue Scientifique, XXXV, May 30, 1885, p. 691.
Type.—*Ilyocrinus recuperatus* Perrier (n. sp.).
ἰλύς=mud+κρίνον=lily.

Perrier intended to write *Ilycrinus* and to refer the species to the genus *Ilycrinus* of Danielssen and Koren; but the specimen he had lacked the very character on which *Ilycrinus* was separated from *Bathycrinus*, besides presenting (according to Professor Perrier) some very remarkable features; so, as science only concerns itself with what authors *do*, not what they *intend*, it becomes necessary to accept *Ilyocrinus* as a generic term distinct from *Ilycrinus*, based on characters quite foreign to the latter genus as diagnosed by its authors.

Ilyocrinus recuperatus Perrier, 1885.

1885. Perrier, Revue Scientifique, XXXV, May 30, 1885, p. 691.
Type-locality.—Eastern Atlantic.
recuperatus=recovered. Paris Museum

This species is figured by Perrier in 1886 in "Explorations Sous-Marines," p. 273, fig. 193, under the name of *Ilycrinus recuperatus.*

Iridometra A. H. Clark, 1908.

1908. A. H. Clark, Proc. Biol. Soc. Washington, XXI, p. 130.
Type.—*Antedon adrestine* A. H. Clark, 1907.
ἶρις=the rainbow+*metra.*

Iridometra crispa A. H. Clark, 1908.

1908. A. H. Clark, Proc. Biol. Soc. Washington, XXI, p. 131.
A *nomen nudum.*
1908. A. H. Clark, Proc. U. S. Nat. Mus., XXXIV, p. 218.
Type-locality.—Off Laysan Island, Hawaiian Islands; 148–163 fathoms. U. S. S. *Albatross.*
crispa=curled. U. S. National Museum.

Isis Linnæus, 1758.

1758. Linnæus, Syst. Nat., 10th ed., p. 799.
Type.—*Isis hippuris* (n. sp.).
Ἴσις=Isis, an Egyptian goddess.

Isis aster Cuvier, 1830.

1830. Cuvier, Le Règne Animal, III, p. 229.
Editorial error for *Isis asteria.*

Isis asteria Linnæus, 1766.

1766. Linnæus, Syst. Nat., 12th ed., I, p. 1288.
Type-locality.—Barbados, British West Indies.
ἀστερία=an old name for detached pentacrinoid columnars.

Isocrinus L. AGASSIZ, 1836.

1836. L. AGASSIZ, Mém. de Soc. d. Sci. Nat. de Neuchâtel, I, p. 195.

Type.—*Isocrinus pendulus* von Meyer, 1837.

ἴσος=equal+κρίνον=lily.

Isocrinus is equivalent to *Pentacrinus* as used by Dr. P. H. Carpenter and most other writers on recent crinoids, as was ably pointed out by Mr. F. A. Bather (Natural Science, XII, April, 1898, p. 245). He credits *Isocrinus* to von Meyer, 1837 (see beyond); but in the previous year Professor Agassiz described the genus, naming *Isocrinus pendulus* von Meyer as the type. Clearly, he had no intention of anticipating von Meyer, but the fact remains that he did, so we have no alternative and must accept the genus from him.

† **Isocrinus pendulus** VON MEYER, 1837.

1835. DE MEYER, L'Institut, December 30, 1835, p. 425 (*Isocrinites pendulus*).

A *nomen nudum*.

1837. VON MEYER, Mus. Senckenb., II, p. 260, pl. XVI, figs. 1–5.

pendulus=hanging.

Isocrinus sibogae DÖDERLEIN, 1907.

1907. DÖDERLEIN, Die gestieten Crinoiden der Siboga-Expedition, p. 18, pl. IX, fig. 1; pl. XIII, fig. 12; first mentioned, p. 2.

Type-locality.—10° 39′ south latitude, 123° 40′ east longitude (near Timor); 520 meters. Dutch S. S. *Siboga*.

Dutch S. S. *Siboga*.

Isometra A. H. CLARK, 1908.

1908. A. H. CLARK, Proc. Biol. Soc. Washington, XXI, p. 133.

Type.—*Antedon lineata* P. H. Carpenter, 1888 (not *Antedon lineatus* Pomel, 1887).

ἴσος=like+*metra*.

Kallispongia WRIGHT, 1877.

1877. WRIGHT, Proc. Roy. Irish Acad., 2d ser., II, p. 754, pl. XL.

Type.—*Kallispongia archeri* Wright (n. sp.).

καλλός=beautiful+σπογγία=a sponge.

Kallispongia archeri WRIGHT, 1877.

1877. WRIGHT, Proc. Roy. Irish Acad., 2d ser., II, p. 754, pl XL.

Type-locality.—Australia.

This is the stalked larva of some free crinoid.

Leptometra A. H. CLARK, 1908.

1908. A. H. CLARK, Proc. Biol. Soc. Washington, XXI, p. 129.

Type.—*Alecto phalangium* J. Müller, 1841.

λεπτός=slender+*metra*.

Metacrinus P. H. CARPENTER, 1882.

1882. P. H. CARPENTER, Bull. Mus. Comp. Zool., X, No. 4, p. 167.

Type.—*Metacrinus wyvillii* P. H. Carpenter, 1884.

μετά=among, in company with+κρίνον=lily.

The view that *Metacrinus* was not described until 1884 is quite untenable, as in the article on West Indian stalked crinoids to which reference is made above a fairly complete diagnosis is given, and the most important differences between *Metacrinus* and *Isocrinus* ("*Pentacrinus*") are made clear.

Metacrinus has never had any species selected as the type; Doctor Carpenter records, however, that it was upon the proof of the plate representing his *Metacrinus wyvillii* that the name was found in Sir Wyville's handwriting. It has seemed best, therefore, to select this species as the type, particularly as it is a very typical form. It is also appropriate to have as the type of this interesting genus a species named for the able naturalist who first discovered it.

Metacrinus acutus DÖDERLEIN, 1907.

1907. DÖDERLEIN, Die gestielten Crinoiden der Siboga-Expedition, p. 34, pl. x, figs. 1–16; pl. xi, figs. 6–8; pl. xii, figs. 6–13; pl. xiv, figs. 3, 11, 12; pl. xv; pl. xix, fig. 1; fig. 7*b*, p. 21; full description, p. 35; first mentioned, p. 20 (IBB discussed).

Type-locality.—Off the Ki Islands; 204 to 310 meters. Dutch S. S. *Siboga*.

acutus=sharp.

Metacrinus angulatus P. H. CARPENTER, 1884.

1884. P. H. CARPENTER, *Challenger* Reports, XI, Zoology, p. 344, pls. xxxviii, xxxix; detailed description, p. 345; first mentioned, p. 19.

Type-locality.—5° 49′ 15″ south latitude, 132° 14′ 15″ east longitude (Arafura Sea, off the Ki Islands); 140 fathoms. H. M. S. *Challenger*.

angulatus=provided with angles. British Museum.

Metacrinus cingulatus P. H. CARPENTER, 1884.

1884. P. H. CARPENTER, *Challenger* Reports, XI, Zoology, p. 344, pl. xl; pl. xli, figs. 1–4; detailed description, p. 347; first mentioned, p. 17.

Type-locality.—5° 49′ 15″ south latitude, 132° 14′ 15″ east longitude (off the Ki Islands); 140 fathoms. H. M. S. *Challenger*.

cingulatus=girdled. British Museum.

Metacrinus costatus P. H. Carpenter, 1884.

1884. P. H. Carpenter, *Challenger* Reports, XI, Zoology, p. 344, pl. XLVII, fig. 13; pl. XLIX; detailed description, p. 360; first mentioned, p. 17.

Type-locality.—4° 33′ north latitude, 127° 06′ east longitude (off the Meangis Islands); 500 fathoms. H. M. S. *Challenger.*

costatus=ribbed. British Museum.

Metacrinus interruptus P. H. Carpenter, 1884.

1884. P. H. Carpenter, *Challenger* Reports, XI, Zoology, p. 344, pl. LII; detailed description, p. 367; first mentioned, p. 134.

Type-locality.—10° 14′ north latitude, 123° 54′ east longitude; 95 fathoms. H. M. S. *Challenger.*

interruptus=interrupted. British Museum.

Metacrinus moseleyi P. H. Carpenter, 1884.

1884. P. H. Carpenter, *Challenger* Reports, XI, Zoology, p. 344, pls. XLV, XLVI; detailed description, p. 355; first mentioned, p. 17.

Type-locality.—4° 33′ north latitude, 127° 06′ east longitude (off the Meangis Islands); 500 fathoms. H. M. S. *Challenger.*

Prof. H. N. Moseley. British Museum.

Metacrinus murrayi P. H. Carpenter, 1884.

1884. P. H. Carpenter, *Challenger* Reports, XI, Zoology, p. 344, pl. XLI, figs. 12–17; pl. XLII; detailed description, p. 349; first mentioned, p. 17.

Type-locality.—Western Pacific. H. M. S. *Challenger.*

Sir John Murray. British Museum.

Metacrinus nobilis P. H. Carpenter, 1884.

1884. P. H. Carpenter, *Challenger* Reports, XI, Zoology, p. 344, pl. XLI, figs. 5–11; pl. XLIII; detailed description, p. 351; first mentioned, p. 17.

Type-locality.—5° 49′ 15″ south latitude, 132° 14′ 15″ east longitude (off the Ki Islands); 140 fathoms. H. M. S. *Challenger.*

nobilis=remarkable. British Museum.

Metacrinus nobilis var. **timorensis** Döderlein, 1907.

1907. Döderlein, Die gestielten Crinoiden der Siboga-Expedition, p. 45, pl. XIII, fig. 8; pl. XXI, fig. 1.

Type-locality.—10° 39′ south latitude, 123° 40′ east longitude (near Timor); 520 meters. Dutch S. S. *Siboga.*

timorensis=of Timor.

Metacrinus nobilis var. **typica** Döderlein, 1907.

1907. Döderlein, Die gestielten Crinoiden der Siboga-Expedition, p. 43.

Type-locality.—5° 49′ 15″ south latitude, 132° 14′ 15″ east longitude (near the Ki Islands); 140 fathoms. H. M. S. *Challenger.*

typica="typical." British Museum.

Metacrinus nodosus P. H. CARPENTER, 1884.

1884. P. H. CARPENTER, *Challenger* Reports, XI, Zoology, p. 344, pls. L, LI; detailed description, p. 364; first mentioned, p. 51.

Type-locality.—29° 45′ south latitude, 178° 11′ west longitude (near the Kermadec Islands); 630 fathoms. H. M. S. *Challenger.*

nodosus=knotty. British Museum.

Metacrinus rotundus P. H. CARPENTER, 1884.

1884. P. H. CARPENTER, *Challenger* Reports, XI, Zoology, p. 344; first mentioned, p. 343; detailed description in P. H. CARPENTER, Trans. Linn. Soc. (Zool.), 2d ser., II, p. 436, pl. L; pl. LII, figs. 1–7 (1885).

Type-locality.—Sagami Bay, Japan; 70 fathoms. Dr. Ludwig Döderlein.

rotundus=rounded.

This species must, of course, be dated from the first reference where the specific characters are given. Doctor Carpenter inserted it in the key to the species of *Metacrinus*, published in the *Challenger* report a year before his formal description appeared. As its specific characters are here not only given in considerable detail, but its relation to the other species in the genus is made clear, we can not but accept this as the description of the species. It has been suggested, on good grounds (Sperry, Proc. Mich. Acad. Sci., 1902 [1904], p. 195), that this species is identical with *M. interruptus*. Those who adopt this view must use the name *rotundus*, this having priority of place over *interruptus*, which therefore becomes a synonym.

Metacrinus serratus DÖDERLEIN, 1907.

1907. DÖDERLEIN. Die gestielten Crinoiden der Siboga-Expedition, p. 34, pl. XI, fig. 5; pl. XII, figs. 3–5; pl. XIV, fig. 10; pl. XVII, fig. 2; full description, p. 37; first mentioned, p. 23.

Type-locality.—5° 43.5′ north latitude, 119° 40′ east longitude (Sulu Archipelago); 522 meters. Dutch S. S. *Siboga.*

serratus=serrate.

Metacrinus stewarti P. H. CARPENTER, 1884.

1884. P. H. CARPENTER, *Challenger* Reports, XI, Zoology, p. 344; first mentioned, p. 288; detailed description in Trans. Linn. Soc. (Zool.) 2d ser., II, p. 443, pl. LII, figs. 13–18 (1885).

Type-locality.—? Singapore. (See remarks under *Metacrinus superbus.*) Prof. Charles Stewart.

Prof. Charles Stewart.

Metacrinus suluensis DÖDERLEIN, 1907.

1907. DÖDERLEIN, Die gestielten Crinoiden der Siboga-Expedition, p. 33, pl. XI, fig. 10; pl. XIII, fig. 6; pl. XVII, fig. 1; detailed description, p. 47; first mentioned, p. 25.

Type-locality.—5° 48.7′ north latitude, 119° 49.6′ east longitude (Sulu Archipelago); 564 meters. Dutch S. S. *Siboga.*

suluensis=of Sulu.

Metacrinus superbus P. H. CARPENTER, 1884.

1884. P. H. CARPENTER, *Challenger* Reports, XI, Zoology, p. 344; detailed description in Trans. Linn. Soc. (Zool.), 2d ser., II, p. 440, pl. LI; pl. LII, fig. 8–12 (1885).

Type-locality.—? Singapore. Prof. Charles Stewart.

superbus=magnificent.

The types of this and the preceding species were brought into Singapore by a cable-repair ship, presumably from somewhere in the vicinity; but it is quite possible that they may have been obtained at some distance from that port. This species, at least, is abundant off southwestern Japan; and, in view of the fact that some important cables pass under the sea at this point, it is not improbable that the first specimen was obtained somewhere in this region.

Metacrinus superbus var. **typica** DÖDERLEIN, 1907.

1907. DÖDERLEIN, Die gestielten Crinoiden der Siboga-Expedition, p. 49.

Typica here is equivalent merely to saying that the specimen is "typical."

Metacrinus tuberosus P. H. CARPENTER, 1884.

1884. P. H. CARPENTER, *Challenger* Reports, XI, Zoology, p. 344, pl. LIII, figs. 1–6; detailed description, p. 369; first mentioned, p. 288.

Type-locality.—5° 49′ south latitude, 132° 14′ east longitude (near the Ki Islands); 140 fathoms. H. M. S. *Challenger.*

tuberosus=with tubercles. British Museum.

Metacrinus varians P. H. CARPENTER, 1884.

1884. P. H. CARPENTER, *Challenger* Reports, XI, Zoology, p. 344, pl. XLIV; pl. XLVII, figs. 6–12; detailed description, p. 353; first mentioned, p. 17.

Type-locality.—4° 33′ north latitude, 127° 06′ east longitude (off the Meangis Islands); 500 fathoms. H. M. S. *Challenger.*

varians=varying. British Museum.

Metacrinus wyvillii P. H. Carpenter, 1884.

1884. P. H. Carpenter, *Challenger* Reports, XI, Zoology, p. 344, pl. xlvii, figs. 1–5; pl. xlviii; detailed description, p. 358; first mentioned, p. 129.

Type-locality.—4° 33′ north latitude, 127° 06′ east longitude (off the Meangis Islands); 500 fathoms. H. M. S. *Challenger.*

Sir C. Wyville Thomson. British Museum.

Nanometra A. H. Clark, 1907.

1907. A. H. Clark, Smiths. Miscell. Coll. (Quarterly Issue), L, pp. 345, 348.

Type.—*Antedon minor* A. H. Clark, 1907.

νάνος=dwarf+*metra.*

Nanometra minckerti A. H. Clark, 1907.

1907. A. H. Clark, Smiths. Miscell. Coll. (Quarterly Issue), L, p. 349.

Proposed as a new name for *Antedon minor* A. H. Clark, 1907, preoccupied.

Mr. Wilhelm Minckert.

Neocrinus Wyville Thomson, 1864.

1864. Wyville Thomson, The Intellectual Observer, August, 1864, p. 7.

Type.—*Pentacrinus decorus* Wyville Thomson (n. sp.).

νέον=recent+κρίνον=lily.

Oligometra A. H. Clark, 1908.

1908. A. H. Clark, Proc. Biol. Soc. Washington, XXI, p. 126.

Type.—*Antedon serripinna* P. H. Carpenter, 1881.

ολίγος=small+*metra.*

Oligometra caribbea A. H. Clark, 1908.

1908. A. H. Clark, Proc. Biol. Soc. Washington, XXI, p. 126. A *nomen nudum.*

1908. A. H. Clark, Proc. U. S. Nat. Mus., XXXIV, p. 238.

Type-locality.—Off Colon, Canal Zone; 34 fathoms. U. S. S. *Albatross.*

caribbea=Caribbean. U. S. National Museum.

Ophiocrinus Semper, 1868 (not *Ophiocrinus* Salter, 1856).

1868. Semper, Wiegmann's Archiv für Naturgesch., 1868, I, p. 68.

Type.—*Ophiocrinus indivisus* Semper (n. sp.).

ὀφίς=a snake+κρίνον=lily.

This genus has been renamed *Eudiocrinus.*

Note.—*Ophiura* was used by Oken in 1815 for the *Asterias multiradiata* of Linnæus (!), and at the same time he referred *Asterias pectinata* to *Euryale* (!!). As these two generic names

are never used again, and as no new crinoid species were described under them, it is not considered necessary to do more than call attention to them here.

†Ophiocrinus hyselyi.

Ophiocrinus indivisus SEMPER, 1868.

1868. SEMPER, Wiegmann's Archiv für Naturgesch., 1868, I. p. 68.

Type-locality.—Pandanon, near Bohol, Philippines; 30 fathoms. Prof. Carl Semper.

indivisus=undivided (in reference to the arms).

†Pentacrinites BLUMENBACH, 1804.

1804. BLUMENBACH, Abbildungen naturhistoricher Gegenstände, Göttingen, 1804, Hefte 7, p. 70.

Type.—*Pentacrinites fossilis* Blumenbach (n. sp.)=*Pentacrinites brittanicus* von Schlotheim, 1820=*Pentacrinites* (*Pentacrinus*) *briareus* Miller, 1821 [=?*Encrinus coralloides* Andreae, 1763].

Pentacrinites, a common name for Pentacrinoid remains.

Although as early as 1864 Sir Wyville Thomson writes that *Pentacrinites briareus* seems to have a valid claim as the type of "*Pentacrinus*," this was ignored by P. H. Carpenter, who accepted *Isis asteria* Linnæus as the type and always dated the genus from Miller, 1821, although he must have known it had been in more or less common use since the time of Agricola. *Extracrinus* Austin and Austin, 1845, has the same type as *Pentacrinites* Blumenbach, and is therefore a pure synonym of it. *Pentacrinites* is not congeneric with any recent crinoid, and therefore must be dropped so far as recent forms are concerned. *Isocrinus* L. Agassiz, 1836, is equivalent to "*Pentacrinus*" as used by P. H. Carpenter and most other authors, and must therefore be adopted for the recent species.

Mr. F. A. Bather, in his admirable essay on "*Pentacrinus*, a name and its history" (Natural Science, XII, April, 1898, p. 245), first made this point clear; but it seems necessary to call attention to it again, as a few writers still continue to use "*Pentacrinus* Miller, 1821," in spite of the facts as stated by him.

Pentacrinites Blumenbach, 1804, appears to be a synonym of *Encrinus* Andreae, 1763, with the same species as type, but I have been unable to consult the plate on which the type species of the latter is figured.

Pentacrinus alternicirra P. H. CARPENTER, 1882.

1882. P. H. CARPENTER, Bull. Mus. Comp. Zool., X, No. 4, p. 167; detailed description in *Challenger* Reports, XI, Zoology, p. 321 (1884).

Type-locality.—28° 33′ south latitude, 177° 50′ west longitude (near the Kermadec Islands); or 4° 33′ north latitude, 127° 06′ east longitude (off the Meangis Islands); 600 or 500 fathoms. H. M. S. *Challenger.*

alternicirra=with alternating cirri. British Museum.

This name is frequently given as "*alternicirrus.*"

Pentacrinus arndtii Schultze, 1858.

1858. Schultze, Bericht. u. d. Versamml. deutsch. Naturf. in Karlsruhe, 1858, p. 293.

A *nomen nudum.*

Pentacrinus balfouri Wyville Thomson MS.

Specimens of *Pentacrinus naresianus* P. H. Carpenter, 1882, were distributed under this name, which was originally applied by Sir Wyville Thomson to the species. It has, of course, no standing whatever in zoological nomenclature, but is merely inserted for the benefit of those who have received specimens thus labeled.

Pentacrinus blakei P. H. Carpenter, 1882.

1882. P. H. Carpenter, Bull. Mus. Comp. Zool., X, No. 4, p. 167: detailed description, p. 172; first mentioned, p. 166.

Type-locality.—Off Montserrat in 120 fathoms; or off Barbados in 200 fathoms. U. S. S. *Blake.*

U. S. S. *Blake.* Museum of Comparative Zoology.

This specific name was misspelled "*blakii*" by Bell (Zool. Record for 1882, Echinod., p. 10 [1883]).

Pentacrinus europæus J. V. Thompson, 1827.

1827. J. V. Thompson, A Memoir on the *Pentacrinus europæus*, Cork, 1827, p. 1, pls. I, II.

Type-locality.—Cove of Cork, Ireland.

europæus=of Europe.

Pentacrinus europæus is the stalked larva of *Asterias bifida* Pennant, 1777.

Pentacrinus guettardi Schultze, 1858.

1858. Schultze, Bericht u. d. Versamml. deutsch. Naturf. in Karlsruhe, 1858, p. 293.

A *nomen nudum.*

Pentacrinus maclearanus Wyville Thomson, 1877.

1877. Wyville Thomson, The Atlantic (London), II, p. 113, fig. p. 112.

Type-locality.—9° 05′ north latitude, 34° 50′ west longitude; 350 fathoms. H. M. S. *Challenger.*

Commander J. L. P. Maclear, R. N. British Museum.

This name was emended to *maclearianus* by Lockington in 1884 (Standard Natural History, I, p. 145).

Pentacrinus mollis P. H. Carpenter, 1884.

1884. P. H. Carpenter, *Challenger* Reports, XI, Zoology, p. 338, pl. xxxiii, figs. 7–10; first mentioned, p. 44.

Type-locality.—34° 7′ north latitude, 138° 00′ east longitude (off southern Japan); 565 fathoms.

mollis=soft. British Museum.

Pentacrinus mülleri Örsted, 1856.

1856. Örsted, Forhandl. Skand. Naturf. 7de Möde i Cristiania, p. 202.

Type-locality.—Near St. Thomas, Danish West Indies.

Prof. Johannes Müller.

This species was named *Encrinus parræ* by Guérin in 1835.

Pentacrinus naresianus P. H. Carpenter, 1882.

1882. P. H. Carpenter, Bull. Mus. Comp. Zool., X, No. 4, p. 167; detailed description in *Challenger* Reports, XI, Zoology, p. 324 (1884).

Type-locality.—4° 33′ north latitude, 127° 06′ east longitude (off the Meangis Islands); 500 fathoms. H. M. S. *Challenger.*

Admiral Sir George Nares, R. N. British Museum.

Pentacrinus rawsoni Kœhler, 1895.

1859. Kœhler, Rev. Biol. du nord de la France, VII, No. 8, p. 27.

Editorial error for *Rhizocrinus rawsonii.*

Pentacrinus thomsoni Brehm, 1878.

1878. Brehm, Thierleben, X, p. 445.

Editorial error for *Pentacrinus wyville-thomsoni.*

Pentacrinus wyville-thomsoni Wyville Thomson, 1872.

1870. Jeffreys, Proc. Roy. Soc., XIX, p. 157.

A *nomen nudum.*

1871. Jeffreys, Rept. Brit. Association for 1870, p. 119.

A *nomen nudum.*

1872. Wyville Thomson, Proc. Roy. Soc. Edinb., VII, p. 767.

Type-locality.—39° 42′ north latitude, 9° 43′ west longitude (off the coast of Portugal); 1,095 fathoms. H. M. S. *Porcupine.*

Sir C. Wyville Thomson. British Museum.

This has been misspelled *wyville-thompsoni* by Filhol.

Pentacrinus (Neocrinus) decorus Wyville Thomson, 1864.

1864. Wyville Thomson, The Intellectual Observer, August, 1864, p. 7.

Type-locality.—" Seas of the outer Antilles."

decorus=beautiful. British Museum.

Pentametrocrinus A. H. Clark, 1908.

1908. A. H. Clark, Proc. Biol. Soc. Washington, XXI, p. 134.

Type.—Eudiocrinus japonicus P. H. Carpenter, 1882.

πέντε=five+μετρέω=to be surrounded (in passive)+κρίνον=lily.

Pentametrocrinus diomedeæ A. H. Clark, 1908.

1908. A. H. Clark, Proc. U. S. Nat. Mus., XXXIV, p. 319.

A *nomen nudum*.

Pentarinus Greeff, 1876.

1876. Greeff, S.-B. Gesellsch. Marburg, 1876, No. 5 (May), p. 91.

Typographical error.

Perometra A. H. Clark, 1907.

1907. A. H. Clark, Smiths. Miscell. Coll. (Quarterly Issue), L, pp. 347, 357.

Type.—Antedon diomedeæ A. H. Clark, 1907.

πηρός=maimed+*metra*.

Phanogenia Lovén, 1866.

1866. Lovén, Öfversigt k. Vetensk.-Akad. Förhandl., 1866, No. 9, p. 231; first mentioned, p. 223.

Type.—Phanogenia typica Lovén (n. sp.).

φανογένεια=born of a sea-god.

Phanogenia typica Lovén, 1866.

1866. Lovén, Öfversigt k. Vetensk.-Akad. Förhandl., 1866, No. 9, p. 231, fig. p. 230 *a–h*.

Type-locality.—New Harbour, near Singapore. Capt. A. Vestöö.

typica=typical.

Phrynocrinus A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXII, p. 507, fig. 1, p. 508.

Type.—Phrynocrinus nudus A. H. Clark (n. sp.).

φρύνη=a toad+κρίνον=lily.

Phrynocrinus nudus A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXII, p. 507, fig. 1, p. 508.

Type-locality.—9.6 miles S. 75° W. of Shio Misaki light (off the south coast of Nipon, Japan); 649 fathoms. U. S. S. *Albatross*.

nudus=naked. U. S. National Museum.

Phytocrinus de Blainville, 1830.

1830. de Blainville, Dict. d. Sci. Nat., LX, p. 229.

Type.—Pentacrinus europæus, J. V. Thompson, 1827.

φύτος=animal+κρίνον=lily.

De Blainville took exception to Fleming's name *Hibernula*, founded on the same type, believing that the names of all stalked crinoids should end in "*—crinus*," and therefore proposed *Phytocrinus* as a substitute.

Pœcilometra A. H. Clark, 1907.

1907. A. H. Clark, Smiths. Miscell. Coll. (Quarterly Issue), L, pp. 347, 361.

Type.—*Antedon acuta* P. H. Carpenter, 1888.

ποικίλος=variegated+*metra*.

[**Polyactinis**: NOT BINOMIAL; see under *Encrinus*].

(?) **Polyactis** Rafinesque, 1815.

1815. Rafinesque, Analyse de la Nature, p. 153.

A *nomen nudum*.

Possibly an Asteroid or an Ophiuroid; no type is mentioned.

Pontiometra A. H. Clark, 1907.

1907. A. H. Clark, Smiths. Miscell. Coll. (Quarterly Issue), L, pp. 346, 354.

Type.—*Antedon andersoni* P. H. Carpenter, 1889.

πόντιος=of the sea+*metra*.

Promachocrinus P. H. Carpenter, 1879.

1879. P. H. Carpenter, Proc. Roy. Soc., 1879, XXVII, p. 385.

Type.—*Promachocrinus kerguelensis* P. H. Carpenter, 1880.

πρόμαχος=a challenger+*κρίνον*=lily.

This has been misspelled *Promachorinus* by de Loriol.

Promachocrinus abyssorum P. H. Carpenter, 1888.

1879. P. H. Carpenter, Proc. Roy. Soc., 1879, XXVIII, p. 385.

A *nomen nudum*.

1888. P. H. Carpenter, *Challenger* Reports, XXVI, Zoology, p. 350; pl. 1, figs. 4, 5; pl. LXIX, figs. 5–7; detailed description, p. 351.

Type-locality.—46° 16′ south latitude, 48° 27′ east longitude, 1,600 fathoms; or 50° 01′ south latitude, 123° 04′ east longitude, 1,800 fathoms. H. M. S. *Challenger*.

abyssorum=of the depths. British Museum.

Promachocrinus kerguelensis P. H. Carpenter, 1880.

1879. P. H. Carpenter, Proc. Roy. Soc., XXVIII, 1879, p. 385.

A *nomen nudum*.

1880. P. H. Carpenter, Journ. Linn. Soc. (Zool.), XV, pl. XII, fig. 27 (centro-dorsal).

Type-locality.—Balfour Bay, Kerguelen; 20 to 60 fathoms. H. M. S. *Challenger*.

kerguelensis=of Kerguelen. British Museum.

It seems best to date this species from 1880 when a figure of the centro-dorsal was published, as it happens that in this species the centro-dorsal is quite characteristic.

Promachocrinus kerguellenensis Perrier, 1886.

1886. Perrier, Nouvelles Archives des Mus. d'Hist. Nat., 2d ser., IX, p. 150.

Editorial or typographical error.

Promachocrinus naresi P. H. Carpenter, 1884.

1884. P. H. Carpenter, *Challenger* Reports, XI, Zoology, p. 378.

Type-locality.—4° 33′ north latitude, 127° 06′ east longitude (off the Meangis Islands); 500 fathoms. H. M. S. *Challenger.*

Admiral Sir George Nares, R. N. British Museum.

Promachocrinus naresii P. H. Carpenter, 1879.

1879. P. H. Carpenter, Proc. Roy. Soc., 1879, XXVIII, p. 385.

A *nomen nudum.*

(See preceding; Doctor Carpenter in his later work emended all words ending in "*ii*" to "*i*.")

Promachocrinus vanhöffenianus Minckert, 1905.

1905. Minckert, Zool. Anzeiger, XXVIII, p. 496.

Type-locality.—66° 02′ 09″ south latitude, 89° 38′ 00″ east longitude; 350–400 meters. German S. S. *Gauss.*

Prof. E. Vanhöffen.

Psathyrometra A. H. Clark, 1907.

1907. A. H. Clark, Smiths. Miscell. Coll. (Quarterly Issue), L, pp. 346, 353.

Type.—*Antedon fragilis* A. H. Clark, 1907.

$\psi\alpha\theta\upsilon\rho\acute{o}\varsigma$=brittle+*metra.*

Psathyrometra borealis A. H. Clark, 1908.

1908. A. H. Clark, Proc. U. S. Nat. Mus., XXXIV, p. 236.

Type-locality.—East of Agattu Island, Aleutians; 1,046 fathoms. U. S. S. *Albatross.*

borealis=northern. U. S. National Museum.

Psathyrometra congesta A. H. Clark, 1908.

1908. A. H. Clark, Proc. U. S. Nat. Mus., XXXIV, p. 221.

Type-locality.—Off Kauai, Hawaiian Islands: 400–500 fathoms. U. S. S. *Albatross.*

congesta=crowded. U. S. National Museum.

Psathyrometra profundorum A. H. Clark, 1908.

1908. A. H. Clark, Proc. U. S. Nat. Mus., XXXIV, p. 237.

Type-locality.—Off Moresby Island, Queen Charlotte group; 1,588 fathoms. U. S. S. *Albatross.*

profundorum=of the depths. U. S. National Museum.

†Pterocoma L. Agassiz, 1836.

1836. L. Agassiz, Mém. de Soc. d. Sci. Nat. de Neuchâtel, I, p. 193.

Type.—†*Comatula pinnata* Goldfuss.

$\pi\tau\varepsilon\rho\acute{o}\nu$=a feather+*coma*=hair.

Pterocrinus P. H. Carpenter, 1884.

1884. P. H. Carpenter, *Challenger* Reports, XI, Zoology, pp. 242, 243.

Type.—*Bathycrinus australis* A. H. Clark, 1907.

πτερόν=a feather+κρίνον=lily.

No generic diagnosis is given with this name; it was found in Sir Wyville Thomson's handwriting on a bottle containing specimens of the species given as the type. We have, therefore, a definite generic name, with a definite type, so the genus must be accepted if it should ever become necessary to separate *Bathycrinus gracilis* and *Bathycrinus australis* generically. The case is exactly parallel to that of *Dafilula* Coues, where the generic name only was given with the type *Querquedula cutoni*.

Ptilocrinus A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXII, p. 551.

Type.—*Ptilocrinus pinnatus* A. H. Clark (n. sp.).

πτίλον=feather+κρίνον=lily.

Ptilocrinus pinnatus A. H. Clark, 1907.

1907. A. H. Clark, Proc. U. S. Nat. Mus., XXXII, p. 551, pl. LIII, fig. p. 552.

Type-locality.—52° 39′ 30″ north latitude, 130° 38′ 00″ west longitude (Queen Charlotte Islands, British Columbia); 1,588 fathoms. U. S. S. *Albatross*.

pinnatus=feathered. U. S. National Museum.

Ptilometra A. H. Clark, 1907.

1907. A. H. Clark, Smiths. Miscell. Coll. (Quarterly Issue), I, pp. 347, 358.

Type.—*Comatula macronema* J. Müller, 1846.

πτίλον=feather+*metra*.

Rhizocrinus M. Sars, 1864.

1864. M. Sars, Forhandl. Vidensk. Selsk., p. 127.

Type.—*Rhizocrinus lofotensis* M. Sars (n. sp.).

ῥίζα=root+κρίνον=lily.

Rhizocrinus chuni Döderlein, 1907.

1907. Döderlein, Die gestielten Crinoiden der Siboga-expedition, p. 14, pl. I, fig. 5; pl. VI, fig. 6; fig. 6, p. 14.

Type-locality.—Off Somaliland, East Africa; 1644 and 1668 meters. German S. S. *Valdivia*.

Professor Karl Chun.

Rhizocrinus lofotensis M. Sars, 1864.

1864. M. Sars, Forhandl. Vidensk. Selsk., 1864, p. 127.

Type-locality.—Lofoten Islands, among the Guldbrand Islands, near the fishing village of Skraaven (68° 11′ north latitude); 720 feet (120 fathoms). George Ossian Sars.

lofotensis, for the Lofoten Islands.

This name has been misspelled *loffotensis* by Perrier and Wyville Thomson.

Rhizocrinus rawsonii Pourtalès, 1874.

1874. Pourtalès, Ill. Cat. Mus. Comp. Zool., IV., No. 8. p. 27.

Type-locality.—Off Sandy Bay, Barbados; 80 to 120 fathoms. U. S. S. *Hassler.*

Sir Rawson W. Rawson. Museum of Comparative Zoology.

Rhizocrinus verrilli A. H. Clark, 1908.

1908. A. H. Clark, Proc. U. S. Nat. Mus., XXXIV, p. 207.

Type-locality.—Off Marthas Vineyard, Massachusetts; 640 fathoms. U. S. S. *Fish Hawk.*

Prof. Addison E. Verrill. U. S. National Museum.

Rhizocrinus weberi Döderlein, 1907.

1907. Döderlein, Die gestielten Crinoiden der Siboga-expedition, p. 15, pl. I, figs. 6–11; pl. II, figs. 3–5; pl. VI, figs. 7–11; pl. VII, figs. 1–4; pl. VIII, figs. 1–4; fig. 5 *a*, *b*, p. 14; first mentioned, p. 2.

Type-locality.—Sulu Archipelago, near Ceram Laut, or near Timor; 112 to 2,050 meters. Dutch S. S. *Siboga.*

Dr. Max Weber.

Stylometra A. H. Clark, 1908.

1908. A. H. Clark, Bull. Mus. Comp. Zool., LI, No. 8, p. 245.

Type.—*Antedon spinifera* P. H. Carpenter. 1881.

στῦλος=a pillar+*metra.*

Thalassometra A. H. Clark, 1907.

1907. A. H. Clark, Smiths. Miscell. Coll. (Quarterly Issue), L, pp. 347, 359.

Type.—*Antedon villosa* A. H. Clark, 1907.

θάλασσα=the sea+*metra.*

Thalassometra crassicirra A. H. Clark, 1908.

1908. A. H. Clark, Proc. U. S. Nat. Mus., XXXIV, p. 225.

Type-locality.—Off Molokai, Hawaiian Islands; 350–355 fathoms. U. S. S. *Albatross.*

crassus=thick+*cirra*=cirri. U. S. National Museum.

Thalassometra delicata A. H. Clark, 1908.

1908. A. H. Clark, Proc. U. S. Nat. Mus., XXXIV, p. 225.

Type-locality.—Off Laysan Island, Hawaiian Islands; 319 fathoms. U. S. S. *Albatross.*

delicata=delicate. U. S. National Museum.

Thalassometra fisheri A. H. Clark, 1908.

1908. A. H. Clark, Proc. U. S. Nat. Mus., XXXIV, p. 223.

Type-locality.—Southeast of Oahu, Hawaiian Islands; 192–352 fathoms. U. S. S. *Albatross.*

Mr. Walter K. Fisher. U. S. National Museum.

Thalassometra gigantea A. H. Clark, 1908.

1908. A. H. Clark, Proc. U. S. Nat. Mus., XXXIV, p. 222.

Type-locality.—Off Kauai, Hawaiian Islands; 477–430 fathoms. U. S. S. *Albatross.*

gigantea=Gigantean. U. S. National Museum.

Thalassometra komachi A. H. Clark, 1908.

1908. A. H. Clark, Proc. U. S. Nat Mus., XXXIV, p. 311.

Type-locality.—Misaki, Sagami Bay, Japan. Mr. Alan Owston.

Komachi; a famous Japanese court beauty; also the vernacular name for a comatulid. U. S. National Museum.

Thalassometra pergracilis A. H. Clark, 1907.

1907. A. H. Clark, Smiths. Miscell. Coll. (Quarterly Issue), L, p. 360.

Proposed as a new name for *Antedon gracilis* P. H. Carpenter, 1888, not *Solanocrinites* (=*Antedon*, according to P. H. Carpenter) *gracilis* of Goldfuss.

pergracilis=very slender.

This name was inadvertently given as *Antedon pergracilis* on the same page, in a footnote.

Thaumatocrinus P. H. Carpenter, 1883.

1883. P. H. Carpenter, Phil. Trans. Roy. Soc., 1883, p. 919.

Type.—*Thaumatocrinus renovatus* P. H. Carpenter (n. sp.).

θαῦμα=a marvel+κρίνον=lily.

Thaumatocrinus renovatus P. H. Carpenter, 1883.

1883. P. H. Carpenter, Phil. Trans. Roy. Soc., 1883, p. 919.

Type-locality.—50° 01′ south latitude, 123° 04′ east longitude; 1,800 fathoms. H. M. S. *Challenger.*

renovatus=renewed. British Museum.

Thaumatometra A. H. Clark, 1908.

1908. A. H. Clark, Proc. Biol. Soc. Washington, XXI, p. 127.

Type.—*Antedon ciliata* A. H. Clark, 1907.

θαῦμα=a wonder+*metra.*

Thaumatometra comaster A. H. Clark, 1908.

1908. A. H. Clark, Proc. Biol. Soc. Washington, XXI, p. 128.

A *nomen nudum.*

1908. A. H. Clark, Proc. U. S. Nat. Mus., XXXIV, p. 232.

Type-locality.—In Yezo Straits, Japan; 300–533 fathoms. U. S. S. *Albatross.*

coma=hair+*aster*=a star. U. S. National Museum.

Thaumatometra parva A. H. Clark, 1908.

1908. A. H. Clark, Proc. Biol. Soc. Washington, XXI, p. 128. A *nomen nudum*.

1908. A. H. Clark, Proc. U. S. Nat. Mus., XXXIV, p. 231.

Type-locality.—Sagami Bay, Japan; 120–265 fathoms. U. S. S. *Albatross*.

parva=small. U. S. National Museum.

Thysanometra A. H. Clark, 1907.

1907. A. H. Clark, Smiths. Miscell. Coll. (Quarterly Issue), L, pp. 346, 351.

Type.—*Antedon tenelloides* A. H. Clark, 1907.

θύσανος=fringed+*metra*.

Trichometra A. H. Clark, 1908.

1908. A. H. Clark, Proc. Biol. Soc. Washington, XXI, p. 131.

Type.—*Trichometra aspera* A. H. Clark, 1908.

θρίξ=hair+*metra*.

Trichometra aspera A. H. Clark, 1908.

1908. A. H. Clark, Proc. Biol. Soc. Washington, XXI, p. 132. A *nomen nudum*.

1908. A. H. Clark, Proc. U. S. Nat. Mus., XXXIV, p. 229.

Type-locality.—Off southern Georgia, U. S. A.; 270 fathoms. U. S. S. *Albatross*.

aspera=rough. U. S. National Museum.

Trichometra vexator A. H. Clark, 1908.

1908. A. H. Clark, Proc. Biol. Soc. Washington, XXI, p. 132. A *nomen nudum*.

1908. A. H. Clark, Proc. U. S. Nat. Mus., XXXIV, p. 217.

Type-locality.—South of Oahu, Hawaiian Islands; 323–299 fathoms. U. S. S. *Albatross*.

vexator=a troubler. U. S. National Museum.

[**Triscædecacnimos**; NOT BINOMIAL; see under *Encrinus*.]

Tropiometra A. H. Clark, 1907.

1907. A. H. Clark, Smiths. Miscell. Coll. (Quarterly Issue), L, pp. 345, 349.

Type.—*Comatula carinata* Lamarck, 1816.

τρόπις=a keel+*métra*.

Zenometra A. H. Clark, 1907.

1907. A. H. Clark, Smiths. Miscell. Coll. (Quarterly Issue), L, pp. 346, 354.

Type.—*Antedon columnaris* P. H. Carpenter, 1881.

ξένος=strange+*metra*.

Zenometra pyramidalis A. H. Clark, 1908.

1908. A. H. Clark, Proc. U. S. Nat. Mus., XXXIV, p. 237.

Type-locality.—Off Savannah, Georgia; 440 fathoms. U. S. S. *Albatross.*

pyramidalis=pyramidal. U. S. National Museum.

Zenometra triserialis A. H. Clark, 1908.

1908. A. H. Clark, Proc. U. S. Nat. Mus., XXXIV, p. 219.

Type-locality.—Southeast of Oahu, Hawaiian Islands; 192–352 fathoms. U. S. S. *Albatross.*

triserialis=triserial. U. S. National Museum.

Zygometra A. H. Clark, 1907.

1907. A. H. Clark, Smiths. Miscell. Coll. (Quarterly Issue), L, pp. 345, 347.

Type.—*Antedon microdiscus* Bell, 1884.

ζύγον=a yoke+*metra.*

Zygometra kœhleri A. H. Clark, 1907.

1907. A. H. Clark, Smiths. Miscell. Coll. (Quarterly Issue), L, p. 339.

Type-locality.—Sagami Bay, Japan; 63–100 fathoms. U. S. S. *Albatross.*

Prof. René Kœhler. U. S. National Museum.

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