PROCEEDINGS

OF THE

ROYAL IRISH ACADEMY

VOLUME XXV

SECTION B.—BIOLOGICAL, GEOLOGICAL, AND CHEMICAL SCIENCE



DUBLIN
HODGES, FIGGIS, & CO., L_{TD}.
LONDON: WILLIAMS & NORGATE
1904-1905

III.

A LIST OF IRISH CŒLENTERATA, INCLUDING THE CTENOPHORA.

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Being a Report from the Royal Irish Academy Fauna and Flora Commuttee. Communicated by R. F. Scharff, Ph.D.

[Read February 27; Ordered for publication March 1; Published April 8, 1905.]

THE first account of Irish Coelenterata was published just one hundred and fifty years ago, when John Ellis, in his "Essay towards a Natural History of the Corallines and other Marine Productions of like kind commonly found on the Coasts of Great Britain and Ireland," described and gave beautiful figures of several Calyptoblastic Hydroids and a species of Gorgonia found on the Irish coast. Eighty-one years later, in 1836, Templeton, in the "Magazine of Natural History," recorded a number of species from Ireland. A. H. Hassall, in 1841, drew up a "Catalogue of Irish Zoophytes"; most of his specimens were collected in Dublin Bay. William Thompson, in the fourth volume of his "Natural History of Ireland," 1856, gives a list of 102 species, about twenty of which, however, are not now considered recognised species. This is the most recent list containing an account of all the different classes of the Collenterata. About this time G. J. Allman. J. R. Greene, and E. P. Wright worked, respectively, at the Hydroids, Medusæ, and Sea-anemones. Of late years Dr. Duerden has added largely to the records of Irish Hydroids, Prof. Haddon to the Actinia. and Mr. E. T. Browne to the Medusæ of the south-west coast.

The following list contains about 250 species, excluding many doubtful ones. The parts of the coast which have been best worked out are the north-east, east, and south-west; while the north-west still remains neglected, and many of the commonest species have not yet been recorded from it.

With Mr. A. R. Nichols' kind permission, I have followed his definition of the Irish marine area, and his division of the coast of Ireland into the six provinces which he has adopted in his reports on

the "Marine Mollusca of Ireland" (Proc. Roy. Irish Acad. (3), v., 1900) and on "Irish Echinoderms" (Proc. Roy. Irish Acad., xxiv., Sect. B., 1903), namely:—

- North-east.—From Malin Head, Co. Donegal, to St. John's Point, Co. Down.
- ii. East.—From St. John's Point to Carnsore Point, Co. Wexford.
- iii. South.—From Carnsore Point to Cape Clear, Co. Cork.
- iv. South-west .- From Cape Clear to Loop Head, Co. Clare.
- v. West.—From Loop Head to Erris Head, Co. Mayo.
- vi. North-west.—From Erris Head to Malin Head, Co. Donegal.

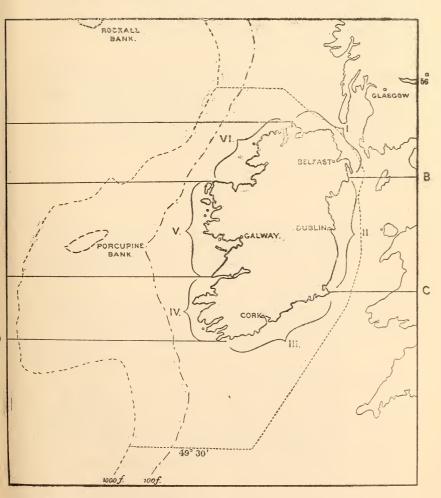
The classification of the Hydroids is based on that proposed by K. C. Schneider in his paper on the "Hydropolypen von Rovigno, nebst Uebersicht des Systems der Hydropolypen im Allgemeinen" (Zoologische Jahrbücher, x., 1898), while the Medusæ are arranged according to Haeckel. The Hydroids and Medusæ are kept quite distinct, as any attempt to combine them would create too much confusion in a list of this kind; when possible, however, the Medusa is given the name belonging to its Hydroid. The arrangement of the Anthozoa is taken from Professor Ray Lankester's "Treatise of Zoology," Part II. The nomenclature and synonomy of the Seaanemones, especially, is still in a very unsatisfactory state.

Very few Ctenophora occur off our coast; they are included here, although attempts have lately been made to class them with the Turbellarian worms.

The Hydroids of the Irish Coast belong, for the most part, to widely distributed species, some of them having been recorded for North America, India, Australia, and New Zealand. On the other hand, Tubiclava lucerna, T. cornucopiæ, and Heterocordyle conybearei have been recorded for two, or at the most, three localities; while Perigonimus gelatinosus, P. inflatus, and Campanulina turrita seem to have been found hitherto only off the Irish coast. The fresh-water Hydroids are very few in number, namely Cordylophora lacustris and three species of Hydra, and are included in this list.

Our knowledge of the Medusæ of the south-west of Ireland is almost entirely due to Mr. E. T. Browne; while Professor Haddon, working chiefly at the material collected during several Royal Irish Academy Expeditions, has added some Sea-anemones to the British Fauna:—Edwardsia [tecta, Halcampa arenarea, Epizoanthus wrightii, Parazoanthus dixoni, Chitonactis marioni, Paraphellia expansa, Gephyra dohrnii, and a species of Actinerus.

Attention has been drawn to the overlapping of, species characteristic of the northern and southern faunas on the south-west coast of Ireland; and it is interesting to notice how this works out in connection with the Coelenterata.



Map showing the Shallow- and Deep-water District, and the six Provinces.

A—Malin Head. C—Carnsore Point. E—Loop Head. B—St. John's Point. D—Cape Clear. F—Erris Head. Among the Hydromedusæ, Melicertidium octocostatum and Margelis pyramidata, for example, are northern forms, while the Siphonophore Muggiæa atlantica is southern. The Trachomedusæ and Narcomedusæ are to be regarded merely as visitors to the coast from their ocean home; they are essentially Atlantic forms. Among the Sea-anemones Epizoanthus incrustatus, Parazoanthus anguicomus, and perhaps Actinauge richardi, may be regarded as northern species, while Gephyra dohrnii is distinctly southern.

Owing to the vague and indefinite character of the descriptions in some of the older papers, it is almost impossible to refer the species in question to their proper positions in the group. A list of the names of these doubtful species is given in the appendix. An index of generic and specific names is also given at the end of the paper.

My thanks are due to Dr. Scharff for the advice and assistance he

so kindly gave me when drawing up this list.

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HYDROMEDUSÆ.

GYMNOBLASTEA.

Family—Corynidæ.

Coryne pusilla, Gaertner. Coryne glandulosa, Lamarck.

i., ii., . iv., v., vi.

i. Strangford Lough (Thompson '40).

- ii. Dalkey (Haddon '86): Rush (Duerden '97): Howth (Dublin Mus.).
- iv. Berehaven, coll. R. I. A. Exp.; * Dursey Island (Duerden '97).
- v. Kilkieran Bay, coll. R. D. S.* (Duerden '97).
- vi. Donegal Bay (Duerden '97).

Coryne vaginata, Hincks. Tubularia muscoides, Thompson. Hermia glandulosa, Hassall. Coryne ramosa, Johnston.

i. Strangford Lough (Thompson '40).

- ii. Ireland's Eye (Thompson '40): Dublin Bay (Hassall '41_B): Dalkey Island (Haddon '86): Rush (Duerden '94_A).
- iii. South Coast of Ireland (Allman '71-'72).
- iv. Valencia Harbour (Gamble '96, sub C. pusilla; Browne '97).
- v. Clew Bay (Hincks '68).

Coryne vanbenedenii, Hincks.

, ii.,

ii. Recorded as a rare species, found in Killiney Bay, by the Hon. Miss Lawless (Mackintosh '78).

Syncoryne eximia (Allman). ? Coryne listerii, Van Beneden.

- ?i. Ballyholme, Belfast Bay (Thompson '46, sub *Coryne listerii*, Van Ben.).
- ? ii. Scotch Bay, Kingstown, coll. A. C. Haddon and H. W. Jacob (Haddon '86).

Identification not considered certain by Professor Haddon, as gonophores were not present on his specimens.

^{*} The specimens obtained during the Expeditions of the Royal Irish Academy (R. I. A.) and the Royal Dublin Society (R. D. S.) are now in the collection of the Dublin Museum.

Syncoryne frutescens, Allman.

. ii.,

ii. Kingstown. This species was only once met with: it was found attached to floating logs in a reservoir exposed to the tide and constantly supplied by sea-water from Dublin Bay (Allman '71-'72).

Cladonema radiatum, Dujardin.

. . . iv., . .

iv. Valencia Harbour, found by Miss M. Delap (Browne 1900).

Clavatella prolifera, Hincks.

. . iii., . . .

iii. Cork (Allman '71-'72).

Family-Tubularidæ.

Tubularia indivisa, Linn.

i., ii., iii., iv., v., .

A common species, but apparently not recorded from vi.

Tubularia larynx, Ellis and Solander.

i., ii., . iv., . vi.

- i. Belfast Lough; Strangford Lough (Thompson '40): off Larne, 70-90 fms. (Hyndman '59).
- ii. Dublin Bay, coll. R. Ball (Thompson '40): Howth, Lambay, and Kingstown (Hassall '41B): Ireland's Eye (Irvine '54).
- iv. Off the Blasket Islands, 35-40 fms. (Andrews '70A): Valencia Harbour (Browne '97): Bantry Bay (Dublin Mus.).

vi. Bundoran (Duerden '95A).

Tubularia simplex, Alder.

. . . iv., . .

iv. Berehaven, 7 fms., coll. R. I. A. Exp. 1888 (Duerden '93).

Tubularia bellis, Allman.

... iv., ...

iv. Dursey Island, at extreme low water (Duerden '97): Dingle Bay (Dublin Mus.).

Tubularia humilis, Allman.

. ii., iii., . . .

- ii. Dalkey Island (Haddon '86).
- iv. Mouth of Kinsale Harbour (Allman '64).

Tubularia coronata, Abildgaard. Tubularia larynx, var. β , Johnston. Tubularia gracilis, Harvey.

. ii., . iv., . .

- ii. Howth, Lambay, and Kingstown (Hassall '41B): Portmarnoek (Baily '65).
- iv. South-west Ireland (Bourne '90).

Ectopleura dumortierii (Van Beneden).

?i.,

?i. Belfast Lough, coll. Wyville Thomson (Hyndman '58). Hincks examined some of the Belfast specimens, and says that they "are much stouter and of coarser texture than any examples I have seen of E. Dumortierii, and, I believe, must be referred to some other species."

Corymorpha nutans, Sars.

. ii., . iv., . .

- ii. Scotch Bay, Kingstown (Haddon '86).
- iv. Valencia (Dublin Mus.).

Family-Myriothelidæ.

Myriothela phrygia (Fabricius).

. . . iv., . .

iv. Church Island and Murreagh Point, Valencia (Gamble '96).

Family-CLAVIDE.

Clava multicornis (Forskal).

i., ii., . iv., v., vi.

- i. White House Point (Templeton'36): Strangford Lough (Thompson '56): Belfast Lough (Hyndman '58).
- ii. Dublin coast (Mackintosh '78).

- iv. R. I. A. Exp. 1885 and 1886, Dursey Sound, 20-25 fms.; Kenmare River, 23-48 fms.; Berehaven, 5-10 fms. and 37½ fms. (Duerden '93): Ballinskelligs Bay, 55 fms., coll. R. D. S. (Duerden '97): Valencia Harbour (Browne '97): Smerwick Harbour (Dublin Mus.).
- v. Clifden (Thompson '56): Roundstone (Duerden '97).
- vi. Lough Swilly, on *Inachus*; Killybegs, on *Stenorhynchus*, coll. R. D. S.: Donegal Bay (Duerden '97).

Clava squamata (Müller).

. ii., . iv., . .

- ii. Seapoint (Hassall '41B): Dublin Bay (Allman '71-'72).
- iv. Valencia Harbour (Gamble '96; Browne '97.)

Rhizogeton fusiformis, Agassiz.

...iv., ...

iv. Knightstown, Valencia, "hitherto only found in Massachusetts Bay, U.S.A." (Gamble '96; Browne '97.)

Cordylophora lacustris, Allman.

Found in the Grand Canal, Dublin (Allman, '44A).

Tubiclava lucerna, Allman.

. ii.,

ii. Dublin Bay (Allman '63): Dalkey, coll. Hon. Miss Lawless (Mackintosh '78).

Tubiclava cornucopiæ, Norman.

. . . . v., .

v. Blacksod Bay, 6-8 fms., on the shells of Astarte sulcata (Duerden in the Irish Naturalist, 1893; and Duerden '95).

Family—Bougainvilling.

Bougainvillia ramosa (Van Beneden).

. . iii., iv., . vi.

iii. Glandore Harbour, growing on *Retepora couchii*, 4 fms., coll. R.I.A. Exp. 1886 (Duerden '93).

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- iv. Dingle Bay; Berehaven, coll. R.I.A. Exp.; off the Skelligs, 80 fms. (Duerden '97): Kenmare River, Bantry Bay (Dublin Mus.).
- vi. Donegal Bay, coll. J. E. Duerden; Lough Swilly, coll. R. D. S. (Duerden '97).

Bougainvillia fruticosa, Allman. Eudendrium ramosum, Allman. . . . iv., . .

iv. Mouth of Kenmare River, on a piece of floating timber (Allman '58A): Bantry Bay, on Stenorhynchus, coll. R.D.S. (Duerden '95).

The Bantry Bay specimens were described by Duerden in the Irish Naturalist, ii., 1893, as belonging to a new species, intermediate between *B. ramosa* and *B. muscus*: they were afterwards found to be *B. fruticosa*.

Perigonimus repens (T. S. Wright).

. . iii., iv., v., .

iii. Thirteen miles south-west of Galley Head, and south south-west of Barlogue, coll. R. I. A. Exp. 1886 (Dublin Mus.).

iv. Berehaven, on *Sertularia abietina*, coll. R. I. A. Exp. 1885 (Duerden '93): Dingle Bay; Bantry Bay; the Skelligs, 40-80 fms., coll. R.D.S. (Duerden '95).

v. Galway Bay, on Scaphander, from 15 fms., coll. R. D. S. (Duerden '95).

Perigonimus gelatinosus, Duerden.

. . iii., iv., . .

iii. Eleven miles south of Glandore Harbour, 54 fms., coll. R.I.A. Exp. 1888 (Dublin Mus.).

iv. Dingle Bay, 40 fms., coll. R. D. S.; south-west of Ireland 50 fms.; 9½ miles south-west of Castletown Berehaven, 37½ fms., coll. R. I. A. Exp. 1886 and 1888 (Duerden '95).

Perigonimus ?inflatus, Duerden.

. . iii., . . .

iii. From rather deep water, growing on other Zoophytes; 11 miles south of Glandore Harbour, 54 fms.; 13 miles south-west of Galley Head, 43 fms., coll. R. I. A. Exp. 1886 and 1888 (Duerden '95).

Perigonimus ? linearis (Alder).

. . iii., . . .

- iii. Eleven miles south of Glandore Harbour, 54 fms., coll. R. I. A. Exp. 1888 (Duerden '93).
- G. C. Bourne ('90) records a species under the name of *Perigonimus arenaceus*,? which was found off the south-west of Ireland at a depth of 200 fms.
- Hydractinia echinata (Fleming). ? Clava minuticornis (Müller). ? Clava capitata, Müller. ? Hydra corynaria, Templeton. Alcyonidium echinatum, Johnston. Echinochorium clavigerum, Hassall.

This species is common round the coast. Thompson ('40) and Hassall ('41 and '41s) give descriptions of it under the names Alcyonidium echinatum and Echinochorium clavigerum. A Hydroid has been recorded from Belfast Lough under the name Hydra corynaria (Templeton '36), which may possibly, according to Johnston, be referred to H. echinata.

Podocoryne carnea, Sars.

- iii. Long Island Bay, on *Buccinum undatum*, inhabited by *Pagurus*, coll. R.I.A. Exp. 1885 (Duerden '93).
- iv. Berehaven (Dublin Mus.).
- v. Galway Bay, on Nassa; Blacksod Bay, on Aporrhais, coll. R.D.S. (Duerden '97).

Podocoryne areolata (Alder).

. . . iv., . .

iv. Dursey Head, 93 fms.; Berehaven, 7 fms.; 40 miles off the south-west of Ireland, 75-90 fms., coll. R.I.A. Exp. 1885 and 1886 (Duerden '93): south-west of Ireland, 150 fms., growing on *Aporrhais pes-carbonis*, coll. "Flying Fox" Exp. 1889 (Kirkpatrick '89).

Dicoryne conferta (Alder).

.. iii., iv., ..

iii. Scullane Bay, coll. R.I.A. Exp. 1886 (Dublin Mus.).

iv. Bantry Bay, 40 fms.; Berehaven, 7 fms.; coll. R.I.A. Exp. 1885 and 1888 (Duerden '93): off the Skelligs, 50 fms.; Kenmare River, coll. R.D.S. (Duerden '97).

Garveia nutans, T. S. Wright.

i., ii.,

i. Belfast Lough (Hurst in the Irish Naturalist, v., 1896).

ii. Dalkey Island (Haddon '86).

Bimeria vestita, T. S. Wright.

. vi.

vi. Lough Swilly, 6-8½ fms.; coll. R.D.S. (Duerden '95).

Heterocordyle conybearei, Allman.

. . . iv., . .

iv. Glengariff Harbour, co. Cork. "Dredged in considerable abundance from a rather muddy bottom—always investing old gasteropodous shells." (Allman '64).

Wrightia arenosa (Alder). Atractylis arenosa, Alder.

. ii., . iv., . .

 South-west of Ireland, 50 fms., coll. R.I.A. Exp. 1888 (Duerden '93).

Family—Eudendriidæ.

Eudendrium rameum (Pallas). Tubularia ramea, Pallas.

i., ii., iii., iv., . vi.

i. Belfast Lough; off the Gobbins (Hyndman '58).

ii. Blackrock, Dublin (Hassall '41).

iii. South-west of Galley Head, 43 fms.; south of Glandore Harbour, coll. R.I.A. Exp. 1885 and 1886 (Duerden '93): Cork Harbour and Wexford (Dublin Mus.).

iv. South-west of Ireland, 55 fms., coll. "Flying Fox" Exp. (Kirk-patrick'89): Great Skellig, 70-80 fms., coll. R.I.A. Exp. 1888 (Duerden '93): 40 miles off Bolus Head, 115 fms., coll. R.D.S. (Duerden '97): Bantry Bay, 50-60 fms. (Dublin Mus.).

vi. Lough Swilly, on Hyas araneus, coll. R.D.S. (Duerden '97).

Eudendrium ramosum (Linn.). Tubularia ramosa, Linn.
i., ii., iii., iv., v., vi.

Found all round the Irish coast.

Eudendrium capillare, Alder.

. ii., . iv., v., vi.

ii. Dublin Bay (Haddon '86).

iv. Berehaven (Duerden '97).

v. Casheen Bay; Kilkieran Bay; Blacksod Bay (Duerden '97).

vi. Off Malin Head, coll. R.D.S. (Duerden '97).

Eudendrium insigne, Hincks.

. vi.

vi. Lough Swilly, 8-12 fms., coll: R.D.S. (Duerden '95).

Family—HYDRIDÆ.

Hydra viridis, Linn.

Found in a tank in the Botanic Gardens, Glasnevin, Dublin (Mackintosh '78): Sutton, Co. Dublin (F. M. Sellens in the Irish Naturalist, x., 1901): near Crumlin, coll. J. N. Halbert (Toppin 1901): Bandon, Co. Cork, coll. G. J. Allman (Thompson '41).

Hydra grisea, Linn. *Hydra vulgaris*, Pallas. *Hydra brunnea*, Templeton.

Found in the Lagan Canal, on stems of *Potamogeton natans* (Templeton '36): Zoological Gardens, Dublin (Thompson '56): Loughlinstown (Toppin 1901): and in the South of Ireland (Thompson '44A).

Hydra fusca, Linn. ? Hydra verrucosa, Templeton.

This species is recorded for Ireland (Allman'44). Thompson ('56) found it occurring plentifully in a pond in the Botanic Gardens, Belfast. It has also been collected at Sutton, county Dublin (F. M. Sellens in the Irish Naturalist, x., 1901).

Templeton ('36) describes a species from a pond at Cranmore, under the name of *Hydra verrucosa*: Allman considers it to be identical with *H. fusca*.

CALYPTOBLASTEA.

Family-Haleciide.

Halecium halecinum (Linn.). Thoa halecina, Lamouroux.

i., ii., iii., iv., v., .

Common round the coast.

Halecium muricatum (Ellis and Solander). Thoa muricata, Couch.

- i. The Giant's Causeway (Hassall '41B).
- ii. "A specimen (of *H. muricatum*) was found in the late W. Thompson's collection, marked Newcastle, county Down" (Hyndman '58).

Halecium beanii (Johnston). Thou beanii, Johnston.

i., ii., iii., iv., v., .

Common round the coast.

Halecium tenellum, Hincks.

. ii., . . . vi.

- ii. Monkstown (Mackintosh '78).
- vi. On Tubularia, from the Fairy Bridge, Bundoran (Duerden '95A).

Halecium plumosum, Hincks.

This species was described from a single Irish specimen in the collection of Trinity College, Dublin (Hincks '68).

Family—Campanularidæ.

Clytia johnstoni (Alder). Campanularia volubilis, Lamouroux. Campanularia johnstoni, Alder.

One of the commonest hydroids round the coast: apparently not yet recorded from vi.

Obelia geniculata (Linn.). Laomedea geniculata, Lamouroux.

i., ii., iii., iv., v., vi.

This very common hydroid has been recorded all round the coast.

Obelia gelatinosa (Pallas). Laomedea gelatinosa, Lamouroux. Laomedea flemingii, Milne-Edwards.

- i. Bangor, county Down (Thompson '40): North-east coast (Hyndman '58).
- ii. Blackrock (Hassall '41): between Laytown and the Boyne (Duerden '94): Howth (Duerden '97).
- iii. Youghal, coll. Miss Ball (Thompson '40): Courtmacsherry Harbour, coll. J. G. Allman (Thompson '56).

Obelia longissima (Pallas).

- ii. Portmarnock, in Trinity College collection (Hincks '60): Howth, coll. W. M'Calla (Mackintosh '78).
- v. Galway Bay, coll. R. D. S. (Duerden '97).
- vi. Donegal Bay, coll. J. E. Duerden (Duerden '97).

Obelia dichotoma (Linn.). Campanularia dichotoma, Linn. Laomedea dichotoma, Lamouroux.

This common species occurs all round the coast.

Obelia flabellata (Hincks).

- ii. Dublin Bay (Haddon '86).
- v. Roundstone, coll. J. E. Duerden (Duerden '97): S. Y. "Argo" Cruise off the West Coast (Herdman '91).
- vi. Bundoran, Donegal Bay, coll. J. E. Duerden (Duerden '97).

Campanularia volubilis (Linn.).

- i. Belfast Lough (Templeton '36): Port Stewart, coll. R.D.S. (Duerden '97).
- ii. Dublin coast (Mackintosh '78, and Duerden '97).
- iv. Dursey Island (Duerden '97): Bantry Bay (Dublin Mus.).
- v. Blacksod Bay, coll. R. D. S. (Duerden '97).
- vi. Off Malin Head, coll. R. D. S. (Duerden '97).

Campanularia verticillata, Linn.

i., ii., iii., . . .

- i. Belfast Lough (Templeton'36): Magilligan, coll. G. C. Hyndman (Thompson'56).
- ii. Generally distributed.
- iii. Courtmacsherry Harbour, coll. G. J. Allman (Thompson '56):
 13 miles south-west of Galley Head, coll. R.I.A. Exp. 1886 (Duerden '93): Barlogue, coll. R.I.A. Exp. 1886 (Dublin Mus.).

Campanularia flexuosa (Hineks).

This species does not seem to be reported from i.; but is common round the coast.

- ii. Dublin (Mackintosh '78): between Laytown and the Boyne (Duerden '94): Dalkey Island (Dublin Mus.).
- iii. Glandore Harbour (Duerden '93).
- iv. Berehaven, coll. R.I.A. Exp. 1885 (Haddon '86a): Kenmare River, 23-38 fms., coll. R.I.A. Exp. 1886 (Duerden '93): Valencia Harbour (Browne '97.)
 - v. Roundstone (Dublin Mus.); Killary Bay (Dublin Mus.).
- vi. Bundoran (Duerden 95A).

Campanularia angulata, Hineks.

- i. North of Ireland, coll. Wyville Thomson (Hincks '68).
- ii. Dublin (Mackintosh '78).
- iii. Youghal, coll. Miss Ball (Hincks '68).
- iv. Ballinskelligs Bay, coll. R.I.A. Exp. 1885 (Haddon '86A).
- v. Roundstone (Dublin Mus.).

Campanularia neglecta (Alder).

- ii. Dalkey Sound (Duerden '97).
- v. West of Ireland, coll. S. Y. "Argo" Cruise (Herdman '91): Blacksod Bay, coll. R. D. S. (Duerden '97).

Campanularia hincksii, Alder.

- i. North of Ireland, in deep water, coll. Wyville Thomson (Hyndman '58).
- ii. Dalkey, coll. Hon. Miss Lawless (Mackintosh '78): Dublin Bay, common, coll. J. E. Duerden (Duerden '97).
- iv. South-west of Ireland, 55 fms., coll. "Flying Fox" Exp. 1889 (Kirkpatrick '89).

Campanularia integra, Macgillivray.

i.,

i. Belfast Bay (Thompson '44 A).

Campanularia caliculata, Hincks.

. ii., iii., . v., .

- Recorded from Dublin in British Association List (Mackintosh '78).
- iii. The Old Head of Kinsale, coll. R. Allman (Hincks '53): Court-macsherry Harbour (Allman '58).

Campanularia exigua (Sars).

. ii.,

ii. Recorded in the Dublin list (Mackintosh '78).

Campanularia (?) gigantea, Hincks.

. ii.,

ii. Dublin Bay, coll. A. C. Haddon (Dublin Mus.).

Campanularia (?) raridentata, Alder.

. . iii., iv., v., .

- iii. Glandore Harbour, on Bougainvillia ramosa; Ballycotton Bay (Duerden '97).
- iv. Off the south-west of Ireland, coll. R. I. A. Exp. 1888 (Duerden '93).
- v. Blacksod Bay, on Sertularella polyzonias (Duerden '97).

Lovenella clausa (Loven).

. ii.,

ii. Recorded from Monkstown; ?genus (Mackintosh '78).

Lafoëa dumosa (Fleming). Campanularia dumosa, Fleming.
i., ii., iii., iv., . .

Common round the coast; but apparently not yet recorded from v. and vi.

Lafoëa parvula (Hincks). Campanularia parvula, Hincks.

i. North of Ireland, on *Nitophyllum*, coll. Professor Hincks, Toronto (Hincks '53).

Lafoëa pocillum, Hincks.

. ii.,

ii. Howth, (Grant, in Journ. Proc. Dublin Micr. Club, iii., 1878): Dublin Bay (Haddon '86): Killiney (Duerden '97).

Lafoëa abietina (Sars). Salacia abietina (Sars).

. ii.,

ii. Dublin coast, coll. A. H. Hassall and D. St. J. Grant (Mackintosh '78).

Lafoëa serpens (Hassall). Filellum serpens (Hassall). Halia reticulata, Wyville Thomson.

i., . iii., iv., v., .

 i. North of Ireland, coll. Wyville Thomson (Hyndman '58): Belfast Lough (Hurst in the Irish Naturalist, v., 1896).

iii. Thirteen miles south-west of Galley Head; eleven miles south of Glandore, coll. R. I. A. Exp. 1886 and 1888 (Duerden '93).

iv. Off Galley Head; Glandore Harbour; Berehaven, coll. R. I. A. Exp. 1886 and 1888 (Duerden '93).

v. West coast, coll. S. Y. "Argo" Cruise (Herdman '91).

The forms described under the name *Coppinia* have been proved by Levinsen to be the gonosomes of various *Lafoëa* species. "C. arcta" has been recorded from provinces i., ii., iii. and v., and is probably the *Coppinia* stage of *Lafoëa serpens*.

Gonothyræa loveni, Allman.

- i. Carrickfergus (Hincks '60): Port Stewart, coll. R.D.S. (Dublin Mus.).
- ii. Dublin Bay (Haddon '86): Malahide, Killiney Bay, Bray Head (Dublin Mus.).
- iii. Monkstown, co. Cork, coll. Wyville Thomson (Hincks '60).
- v. Lough Atalia, coll. R. D. S. (Duerden '97): Roundstone (Dublin Mus.).

Gonothyræa gracilis (Sars).

. . . . v., .

v. Birturbuy Bay, dredged by G. S. Brady (Hincks '66).

Gonothyræa (?) hyalina, Hincks.

i., ii.,

- i. Port Stewart, on Hydrallmania falcata (Duerden '97).
- ii. Between Laytown and the Boyne (Duerden '94): Dublin Bay (Dublin Mus.).

Campanulina turrita, Hincks.

- i. Holywood, Belfast Lough, coll. Wyville Thomson (Hincks '68).
- ii. Rush (Duerden '94A): Dalkey (Duerden '95).
- iv. Bantry Bay; Dursey Island (Duerden '95).
- v. Blacksod Bay, coll. R.D.S.; Roundstone (Duerden '95).
- vi. Bundoran (Duerden '95).

This species seems only to have been obtained from Irish waters.

Campanulina panicula, G.O. Sars.

. . . . v., .

v. 40 miles off Achill Head, 220 fms., coll. R.D.S. (Duerden '95).

Calycella syringa (Linn.).

i., ii., iii., iv., v., .

Common round the coast; but apparently not recorded from vi.

Calycella fastigiata (Alder).

. . iii., iv., v., .

- iii. 13 miles south-west of Galley Head, 43 fms.; 11 miles south of Glandore Harbour, coll. R.I.A. Exp. 1886 and 1888 (Duerden '93): Scullane Bay and Barlogue, coll. R.I.A. Exp. 1886 (Dublin Mus.).
- iv. Off the south-west of Ireland, 50 fms.; Dursey Sound, coll. R.I.A. Exp. 1886 and 1888 (Duerden '93): Ballinskelligs Bay (Duerden '97).
- v. Roundstone (Dublin Mus.).
- "This rare hydroid appears to be widely distributed on the west coast of Ireland, almost as much so as *C. syringa*" (Duerden '93).

Calycella pygmæa (Alder). Lafoëa pygmæa, Alder.

. ii., . . v., .

- ii. Dublin Bay (Haddon '86).
- v. Roundstone (Duerden '97).

Opercularella lacerata (Johnston). Laomedea lacerata, Hincks.

i.,

i. North of Ireland, coll. Wyville Thomson (Hyndman '58).

Cuspidella humilis (Hincks).

. . . . v., .

v. Reported from Connemara (Hincks '66).

Cuspidella grandis, Hincks.

. . iii., . v., .

- iii. Ballycotton, 30 fms., coll. R.D.S. (Duerden '97).
 - v. Birturbuy Bay, coll. G. S. Brady (Hincks '68).

Cuspidella costata, Hincks.

... iv., ...

iv. Berehaven, coll. R.I.A. Exp. 1885 (Duerden '93).

Family—Sertularidæ.

Sertularella polyzonias (Linn.). Sertularia polyzonias, Linn. Sertularia pinnata, Templeton.

i., ii., iii., iv., v., .

A very common species; but apparently not yet recorded from vi.

Sertularella gayi (Lamouroux). Sertularia polyzonias, var. β , Johnston.

i., ii., . iv., v., .

i. Donaghadee, coll. J. Gilles (Templeton '36).

ii. Dublin Bay, in Trinity College collection (Hincks '60).

iv. South-west Ireland (Bourne '90).

v. Birturbuy Bay, coll. G. S. Brady (Hincks '68).

Sertularella rugosa (Linn.). Sertularia rugosa, Linn. Clytia rugosa, Lamouroux.

i., ii., iii., . . vi.

i. Off Larne, 70-90 fms. (Hyndman '59): Magilligan, coll. G. C. Hyndman (Thompson '56).

ii. Kingstown (Hassall '41): Lambay (Dublin Mus.).

iii. 13 miles south-west of Galley Head, 43 fms., coll. R.I.A. Exp. 1886 (Duerden '93).

vi. Bundoran, Donegal Bay (Duerden '97).

Sertularella tenella, Alder.

. . . iv., . .

iv. South-west of Ireland, 55 fms., coll. "Flying Fox" Exp. 1889 (Kirkpatrick'89).

Dynamena pumila (Linn.). Sertularia pumila, Linn.

i., ii., iii., iv., v. -

One of our commonest species; but apparently not yet recorded from vi.

Dynamena operculata (Linn.). Sertularia operculata, Linn.

i., ii., iii., iv., v., vi.

Generally distributed; and common round the coast.

Dynamena gracilis (Hassall). Sertularia gracilis, Hassall.

. ii., iii., . v., .

- ii. Between Laytown and the Boyne (Duerden '94).
- iii. Cork Harbour, coll. A. C. Haddon (Duerden '97).
- v. Birturbuy Bay; Blacksod Bay; Casheen Bay, coll. R.D.S. (Duerden '97): Roundstone (Dublin Mus.).

Dynamena rosacea (Linn.). Sertularia rosacea, Linn. Diphasia rosacea, Agassiz.

i., ii., iii., iv., . vi.

Generally distributed round the coast.

Dynamena attenuata (Hincks). Diphasia attenuata, Hincks. . ii., iii., iv., . .

- ii. Dublin Bay (Haddon '86): between Laytown and the Boyne (Duerden '94): Lambay (Dublin Mus.): Howth, (Dublin Mus.).
- iii. 13 miles south-west of Galley Head, 43 fms., coll. R.I.A. Exp. 1886 (Duerden '93).
- iv. Bantry Bay (Dublin Mus.).

Dynamena tamarisca (Linn.). Sertularia tamarisca, Linn. Sea Tamarisk, Ellis. Diphasia tamarisca, Agassiz.

i., ii., iii., . . .

- i. Belfast Lough, coll. J. Templeton; Ballycastle, coll. J. L. Drummond (Johnston '47): off Larne, 70-90 fms. (Hyndman '59).
- ii. Dalkey Island, from deep-water (Ellis 1755): Blackrock (Hassall '41): Howth and Portmarnock (Thompson '56).
- iii. 13 miles south-west of Galley Head, coll. R.I.A. Exp. 1886 (Duerden 393): south-south-west of Barlogue, coll. R.I.A. Exp. 1886 (Dublin Mus.).

Dynamena fallax (Johnston). Diphasia fallax, Agassiz.
. ii., iii., . . .

ii. Dalkey and Howth (Irvine '54).

iii. 13 miles south-west of Galley Head, 43 fms., coll. R.I.A. Exp. 1886 (Duerden '93): south-south-west of Barlogue, coll. R.I.A. Exp. 1886 (Dublin Mus.).

Sertularia pinaster, Ellis and Solander. Diphasia pinaster, Agassiz. Sertularia margareta, Hassall.

i., ii., . iv., . .

- i. Belfast Lough (Hyndman '58): Giant's Causeway (Hassall '41B).
- ii. Howth (Hassall '41B): Dublin Bay, coll. Dr. Harvey (Johnston '47): Lambay (Dublin Mus.).
- iv. 52° 25′, 11° 40′, 90 fms., coll. "Porcupine" Exp. (Allman '74a): South-west coast (Bourne '90).

Sertularia alata (Hincks). Diphasia alata, Hincks.

. . iii., . . .

iii. South-west of Galley Head, 43 fms., rare; coll. R.I.A. Exp. 1886 (Duerden '93): Scullane Bay, coll. R.I.A. Exp. 1886 (Dublin Mus.).

Sertularia filicula, Ellis and Solander.

i., ii., . . v., .

i. Ballycastle, coll. R. Brown; Bangor, Co. Down (Thompson '40): Giant's Causeway (Hassall '41B): Belfast Lough, coll. R. Patterson: Magilligan, coll. G. C. Hyndman; dredged off the Gobbins (Thompson '56).

 Dalkey (Thompson '56): Hassall ('41) records this species for Dublin Bay, but later corrects this statement ('41B). Portmarnock (Macalister in Proc. Nat. Hist. Soc. Dublin, iv., 1865).

v. Clew Bay (Thompson '56).

Sertularia abietina, Linn.

i., ii., iii., iv., v., vi.

Common round the coast.

Sertularia argentea, Ellis and Solander.

i., ii., iii., iv., v., vi.

Common round the coast.

Sertularia cupressina, Linn. Sea Fir, Ellis.

i., ii., iii., iv., v., vi.

Common round the coast: Ellis (1755) is the first to give an Irish locality for this species.

Hydrallmania falcata (Linn.). Plumularia falcata, Linn.

i., ii., iii., iv., v., vi.

Common round the coast.

Thuiaria thuia (Linn.).

i., ii.,

i. Derry coast, between Moville and Greencastle (Thompson '44).

ii. Dublin Bay: a single specimen in the Trinity College collection (Mackintosh'78).

Thuiaria articulata (Pallas). Sea Spleenwort or Polypody, Ellis.

Sertularia lonchitis, Ellis and Solander.

i., ii.,

- i. Donaghadee, coll. W. Thompson (Johnston '47): Belfast Lough; coast of Down (Hyndman '58).
- ii. Dublin Bay (Ellis 1755): off Howth (Hassall '41B).

Family—Plumulariidæ.

Antennularia antennina (Linn.). Antennularia indivisa, Lamarck.

i., ii., iii., iv., v., vi.

Generally distributed round the coast.

Antennularia ramosa (Lamarck). Antennularia arborescens, Hassall. i., ii., iii., iv., v., .

Generally distributed; but apparently not yet recorded from vi.

Aglaophenia pluma (Linn.). Plumularia cristata, Lamarck.
The Podded Coralline, Ellis.

i., ii., iii., iv., v., vi.

This species occurs all round the coast.

Aglaophenia tubulifera (Hincks).

. . . iv., v., .

- iv. Smerwick Harbour (Dublin Mus.).
- v. West coast, S. Y. "Argo" Cruise (Herdman '91): Blacksod Bay, on Stenorhynchus, coll. R. D. S. (Duerden '97).
- Aglaophenia myriophyllum (Linn.). Sertularia myriophyllum, Linn.

 Plumularia myriophyllum, Lamarek. Pheasant's-tail Coralline, Ellis.

 i., ii., iii., iv., . .
 - i. Ballycastle, coll. R. Brown (Templeton '36): Belfast Lough, coll. W. M'Calla (Hincks '68).
 - ii. Dublin Bay (Ellis 1755; Templeton '36): Howth and Lambay (Hassall '41B).
 - Youghal, coll. Miss Ball (Johnston '47): Ballycotton, 30 fms., coll. R.D.S. (Dublin Mus.).
 - iv. South-west of the Great Skellig, 79 fms., coll. R. I. A. Exp. 1885 (Haddon '86a, and Duerden '93): South-west of Ireland (Bourne '90).

Aglaophenia pennatula (Ellis and Solander). Sertularia pennatula, Ellis and Solander.

ii. Dublin Bay (Irvine '54).

iii. Youghal, coll. Miss Ball (Thompson '40): Ballycotton, coll. Miss Gaggin (Thompson '56).

v. Near Roundstone, coll. W. M'Calla (Johnston '47).

Plumularia pinnata (Linn.).

i., ii., iii., iv., v., vi.

Reported from all the provinces; common.

Plumularia setacea (Ellis).

i., ii., iii., iv., v., vi.

Generally distributed round the coast.

Plumularia catharina, Johnston.

i. Belfast Lough (Hyndman '58).

ii. Howth and Lambay (Hassall '41B): Dublin Bay (Hincks '68): Dalkey (Mackintosh '78).

iii. 13 miles south-west of Galley Head, coll. R.I.A. Exp. 1886 (Duerden '93): Ballycotton, 30 fms., coll. R.D.S. (Duerden '97).

v. Aran Islands, coll. Mr. Barlee (Hincks '68).

Plumularia echinulata, Lamarck.

. ii., iii., iv., v., vi.

ii. Dublin (Hincks '60): Monkstown (Grant, in Journ. Proc. Dublin Micr. Club, 1877): Rush (Duerden '94A).

iii. Cork Harbour (Dublin Mus.).

iv. Bantry Bay, coll. R.D.S. (Duerden '97).

v. Roundstone (Duerden '97).

vi. Bundoran (Dublin Mus.).

Plumularia similis, Hincks.

i. Donaghadee, coll. G. C. Hyndman (Hincks '68).

ii. Between Laytown and the Boyne (Duerden '94): Malabide (Dublin Mus.).

iv. Berehaven (Duerden '97).

Plumularia halecioides, Alder.

- iv. Berehaven, 7 fms.; a rather rare species, coll. R.I.A Exp. 1885 (Duerden '93).
- v. West coast, S. Y. "Argo" Cruise (Herdman '91).

Plumularia frutescens (Ellis and Solander).

- i. One specimen dredged off the Gobbins (Hyndman '58).
- ii. Dublin; a single specimen found (Hassall '41B).
- iii. Youghal, coll. Miss Ball (Johnston '47).

ANTHOMEDUSÆ.

Family-Codonide.

Sarsia tubulosa (Forbes). Oceania? tubulosa, Sars.

- i. Belfast Lough (Thompson '40): Larne; Bangor, co. Down, coll. R. Patterson (Forbes '48).
- ii. Kingstown (Greene '57): Dublin Bay (Haddon '86).
- iv. Valencia Harbour (Browne 1900).
- v. Ballynakill Harbour, coll. R.D.S. (Holt '92).

Sarsia prolifera, Forbes.

. . . iv., . .

iv. Valencia Harbour (Browne 1900).

Sarsia gemmifera, Forbes.

. . . iv., . .

iv. Valencia Harbour (Browne 1900).

Sarsia pattersoni, Haddon.

i., ii.,

- i. Larne, coll. R. Patterson (Forbes '48).
- ii. Dublin Bay (Haddon '86 and '86B).

Professor Haddon proposed the above as a provisional name for the species which Forbes describes in his "British Naked-eye Medusæ," p. 56, and which was found by himself in Dublin Bay.

Ectopleura dumortierii (Van Beneden).

... iv., ...

iv. Valencia Harbour (Browne 1900).

Dipurena halterata (Forbes).

. . . iv., . .

iv. Valencia Harbour (Browne '96 and '96A).

Dipurena ophiogaster, Haeckel. Sarsia strangulata, Allman.

. . . iv., . .

iv. South-west of Ireland (Allman '71-'72): Valencia Harbour (Browne 1900).

Corymorpha nutans, M. Sars. Steenstrupia rubra, Forbes. Steenstrupia faveola, Forbes.

. ii., . iv., . .

ii. Kingstown (Haddon '86).

iv. Valencia Harbour (Browne '96 and '96A; Gamble '96).

Euphysa aurata, Forbes.

...iv., ...

iv. Valencia Harbour (Browne '96 and '96A).

Hybocodon prolifer, Agassiz. Diplonema islandica, Greene. Steenstrupia owenii, Greene.

. ii., . iv., . .

ii. Dublin coast (Greene '57).

iv. Valencia Harbour (Browne '96 and '96A).

Family-Tiaridæ.

Amphinema dinema (Péron and Lesueur).

. . . iv., . .

iv. Valencia Harbour (Browne, 1900).

Tiara octona, Forbes. Oceania turrita, Forbes.

. ii.,

ii. Dublin Bay (Haddon '86).

Tiara pileata (Forskål). Oceania episcopalis, Forbes. ? i., . . iv., . .

? i. Bangor, county Down, coll. R. Patterson (Forbes '48).

iv. Valencia Harbour (Browne '964 and 1900).

Turris constricta, Patterson.

i.,

i. Strangford Lough, found by Mrs. Ward (Patterson '59).
 This does not seem to be a recognised species.

Family-Margelidæ.

Podocoryne carnea, Sars. Dysmorphosa carnea, Haeckel. . . . iv., . .

iv. Valencia Harbour (Browne '96 and '96A).

Cytæandra areolata (Alder).

. . . iv., . .

iv. Valencia Harbour (Browne '96A and '97A).

Lizzia blondina, Forbes.

. . . iv., . .

iv. Valencia Harbour (Browne '96 and '96A).

Margelis principis, Steenstrup. Margelis britannica, Browne.

ii. Kingstown and Dalkey (Haddon '86).

iv. Valencia Harbour (Browne '96A, and 1900).

Margelis ramosa (L. Agassiz). Bougainvillia britannica, Forbes.

Hippocrene britannica, Forbes.

i., ii.,

i. Ballycastle and Portrush (Forbes '41): Strangford Lough, coll.
 R. Patterson (Forbes '48).

ii. Dublin coast (Greene '57).

Margelis zygonema, Haeckel. ? Bougainvillia dinema, Greene.

. ii.,

ii. Dublin coast (Greene '57, sub Bougainvillia dinema): Ireland's Eye (Haeckel '79).

Margelis autumnalis (Hartlaub).

...iv., ...

iv. Valencia Harbour (Browne 1900).

Margelis bella (Hartlaub).

...iv., ...

iv. Valencia Harbour (Browne 1900).

Margelis pyramidata (Forbes and Goodsir).

...iv, ...

iv. Valencia Harbour (Browne 1900).

Margellium octopunctatum (Sars).

...iv., ...

iv. Valencia Harbour (Browne '96 and '96A).

Family-Cladonemidæ.

Clavatella prolifera, Hincks.

...iv., ..

iv. Valencia (Gamble '96; Browne '97 and 1900; Beaumont 1900).

Cladonema radiatum, Dujardin.

. . . iv., . .

iv. Valencia Harbour (Browne 1900).

Lar sabellarum, Gosse. Willsia stellata, Forbes.

. . . iv., . .

iv. Berehaven (Wright and Greene '59): Valencia (Browne '96 and '96a).

LEPTOMEDUSÆ.

Family—THAUMANTHDÆ.

Thaumantias hemisphaerica (Gronovius). Medusa hemisphaerica,
Müller. Thaumantias pileata, Forbes. Thaumantias lineata,
Forbes. Thaumantias neglecta, Greene. Thaumantias typica,
Greene. Thaumantias inconspicua, Hincks.

i., ii.,

- i. Belfast Lough; Larne, coll. R. Patterson (Thompson '40): Portrush (Forbes '41).
- ii. Kingstown Harbour (Greene '57; Haddon '86).

Laodice calcarata, Agassiz.

. . . iv., . .

iv. Valencia Harbour (Browne '96 and '96A).

Laodice cruciata (Forskal). Cosmetira pilosella, Forbes.

- iii. Ballycotton Bay, coll. R.I.A. Exp. 1885 and 1886(Haddon '86A and '88).
- Melicertidium octocostatum (Sars). Melicertum campanulatum, Ehrenberg. Stomobrachium octocostatum, Forbes.

i., ii., . iv., . vi.

- i. Portrush; Ballycastle (Thompson '44).
- ii. Dublin coast (Greene '57).
- iv. Valencia Harbour (Browne 1900).
- vi. North-west coast (Forbes '48).

Family-Cannotide.

Dipleurosoma typicum (Boeck). Ametrangia hemisphærica, Allman. ii., iii., iv., . .

ii. Kingstown (Haddon '86).

iii. South coast of Ireland (Allman '74).

iv. Valencia Harbour (Browne 1900).

Family-Eucopidæ.

Obelia nigra, Browne.

. . . iv., . .

iv. Valencia Harbour (Browne 1900).

Obelia lucifera (Haeckel). Thaumantias lucifera, Forbes

. ii., • . . .

ii. Kingstown Harbour (Greene '57).

Euchilota pilosella (Forbes).

. . . iv., . .

iv. Valencia Harbour (Browne '96 and '96A).

Agastra caliculata (Hincks).

. . . iv., . .

iv. Valencia Harbour (Browne '97A, sub A. Leptomedusa gen. ? sp.?; and 1900).

Eutima insignis (Keferstein).

... iv., ..

iv. Valencia Harbour (Browne '96 and '96A).

Saphenia mirabilis (Wright).

...iv., ...

iv. Valencia Harbour (Browne '96A and 1900).

Octorchis gegenbauri, Haeckel.

...iv., ...

iv. Valencia Harbour (Browne 1900).

Irene viridula (Lamarck). Geryonopsis delicatula, Forbes.

. ii.,

ii. Kingstown Harbour (Greene '57).

Phialidium variabile (Claus). Thaumantias globosa, Forbes.

. ii., iii., . v., .

ii. Dublin Bay (Haddon '86).

iii., v. South and west coasts (Wright and Greene '59).

Phialidium cymbaloideum (Van Beneden).

. . . iv., v., .

iv. Valencia Harbour (Browne '96 and '96A).

v. Ballynakill, Galway (Dublin Mus.).

Phialidium temporarium (Browne).

. . . iv., . .

iv. Valencia Harbour (Browne '96 and '96A).

Tiaropsis multicirrata (Sars). Thaumantias pattersoni, Greene.

i., . . iv., . .

i. Belfast Lough (Greene '57).

iv. Valencia Harbour (Browne '96 and '96A).

Epenthesis cymbaloidea (Slabber). Thaumantias thompsoni, Forbes. . ii., iii., . v., .

ii. Dublin coast (Greene '57).

iii. South coast (Thompson '44A; Wright and Greene '59).

v. Clifden Bay; Roundstone Bay (Forbes '41 and '48).

Browne ('96) says of this species that *Phialidium buskianum*, Gosse, closely resembles the figure given by Forbes of *Thaumantias thompsoni*.

Family-AEQUORIDÆ.

Polycanna forskalea (Forbes).

. . . iv., . .

iv. Valencia Harbour (Browne '97A and 1900).

TRACHOMEDUSÆ.

Family—Petasidæ.

Gossea circinata, Haeckel.

. . . iv., . .

iv. Valencia Harbour, very rare (Browne 1900).

Family—AGLAURIDÆ.

Aglantha rosea (Forbes).

. . • iv., . .

iv. Valencia Harbour (Browne '96A and '97A).

Agliscra invertens (Haeckel.) Circe invertens, Allman.

. . iii., . . .

iii. South coast of Ireland (Allman '74).

Family-Geryonidæ.

Liriantha appendiculata (Forbes).

... iv., ...

iv. Valencia Harbour (Browne 1900).

NARCOMEDUSÆ.

Family-Solmaridæ.

Solmaris corona (Keferstein and Ehlers).

. . . iv., . .

iv. Valencia Harbour (Browne 1900).

SIPHONOPHORA.

Family—Velellidæ.

Velella spirans (Forskal). Velella limbosa, Lamarck.

?i., ?ii., ?iii., iv., . vi.

- ?i., ii., iii. Thompson ('56) records specimens from Larne, Portrush, and Youghal, which he doubtfully refers to V. limbosa. Dalkey, found by Dr. Tufnell. ? = V. spirans (Haddon'86).
- iv. Valencia Harbour (Browne 1900).
- vi. Lough Swilly (Dublin Mus.): ?Ballyshannon and Bundoran (Thompson '56).

Vellelæ are found washed ashore, especially on the north and west coasts; but the species is not often determined, as the specimens are usually injured. Velellæ are reported from Lough Swilly (Harte in the Irish Naturalist, 1892): Dingle Bay (Andrews '70A), and Portrush (R. Ll. Praeger).

Velella mutica, Lamarek.

i., . iii., . . .

- i. Magilligan, very common (Templeton '36): Groomsport, coll. Dr. M'Gee; Portrush (Thompson '56).
- iii. South coast, coll. Mrs. Mant (Thompson '56).

Velella subemarginata, Thompson. Velella emarginata, Thompson. . . iii., . . .

iii. Courtmacsherry Harbour, coll. G. J. Allman (Thompson '44 and '44a).

This species is not recognised by Haeckel.

Family-Monophyidæ.

Muggiæa atlantica, Cunningham.

...iv., ...

iv. Valencia Harbour (Browne 1900).

Muggiæa kochii, Will.

...?iv.,..

?iv. South-west of Ireland (Bourne '90).

Römer, in his "Siphonophoren," 1901, identifies the species described by Bourne with *M. atlantica*, Cunningham.

Family - AGALMIDE.

Cupulita sarsii, Haeckel. Agalmopsis elegans, Sars, in part.

. ii., . iv., . .

ii. Kingstown Harbour (sub Agalmopsis elegans; Greene '57).

iv. Valencia Harbour (Browne 1900).

Agalmopsis sarsii, Kölliker.

. ? ii.,

?ii. Dalkey Sound (Haddon '86).

Family—DIPHYIDÆ.

Diphyes elongata, Hyndman.

i., ? vi.

i. Belfast Lough and the Giant's Causeway (Hyndman '41).

?vi. "Several Diphyidæ (apparently D. elongata) collected at Bundoran by Mrs. Hancock" (Thompson '44A).

Haeckel, in his "Report on the Siphonophora of the Challenger Expedition," 1888, regards this as a doubtful species; Römer, in his "Siphonophoren," 1901, identifies it with *D. bipartata*, Costa.

Family—Forskalidæ.

Forskalia contorta, Leuckart. Stephanomia contorta, Milne-Edwards. ? Agalma gettyana, Hyndman.

?i., ii.,

?i. Belfast Lough, coll. E. Getty (Melville '56).

ii. Kingstown Harbour, coll. J. R. Greene (Melville '56).

Family-Anthophysidæ.

Athorybia ocellata, Haeckel.

...? iv., ...

?iv. South-west of Ireland. A specimen was obtained which was "a near ally of, if not identical with, the *Athorybia ocellata* of Haeckel" (Bourne '90).

Family—Physaliidæ.

Physalia pelagica, Eschscholtz.

. . iii., . . .

iii. Near Ardmore, Waterford, coll. Miss Ball (Thompson '35).

SCYPHOMEDUSÆ.

STAUROMEDUSÆ.

Family.—Tesseridæ.

Depastrum cyathiformis, Gosse.

. ii.,

ii. Dalkey Sound (G. Y. and A. F. Dixon '93).

Family—Lucernariid.

Halielystus auricula (Rathke). Lucernaria auricula, Clark.

i., . iii., iv., . .

- i. Ballycastle and Dunluce Castle (Templeton '36): Carnlough, co. Antrim (Thompson '56): Portrush and the Giant's Causeway (Wright '59).
- iii. Cork (Wright '59).
- iv. Kerry coast (Wright '59): Valencia (Gamble '96; Beaumont 1900).

Lucernaria quadricornis, O. F. Müller. Lucernaria fascicularis, Fleming.

i., . . iv., . .

- i. Donaghadee (Templeton '36).
- iv. Ventry Bay (Wright '59).

Lucernaria campanulata, Lamouroux.

i., ii., . iv., v., .

- i. Portrush (Greene '58A).
- ii. Bray, coll. R. Ball (Thompson '56).
- iv. Kerry (Wright '59): Valencia Harbour (Beaumont 1900).
- v. Miltown Malbay, coll. Prof. Harvey (Thompson '56).

Greene ('58c) records a young specimen (taken at Trabulgan, co. Cork) under the name *L. typica*, Greene. He considers that the species auricula, campanulata, and fascicularis should be united under this name.

Hydra tuba; Dublin Bay and Galway Bay (Wright '59); ? = a young Lucernarian.

DISCOMEDUSÆ.

Family-Pelagide.

Pelagia perla (Slabber).

. . . iv., . .

iv. South-west of Ireland (Bourne '90): Valencia Harbour, Browne (Browne 1900; Delap 1900).

Chrysaora isosceles (Linn.). Chrysaora hyoscella, Linn

- ii. Dublin coast (Greene '57).
- iv. Berehaven, coll. R.I.A. Exp. 1885 (Haddon '86a): Valencia 1901).

Family-CYANEIDÆ.

Cyanea capillata (Linn.).

i.. ii., . . v., .

- i. Holywood Warren, Belfast Lough (Thompson '56).
- ii. Kingstown Harbour (Greene '57).
- v. West coast (Thompson '44A).

Cyanea lamarckii, Péron and Lesueur.

i., ii., . iv., v., .

- i. Holywood Warren (Thompson '56).
- ii. Kingstown Harbour (Greene '57).
- iv. Valencia Harbour (Browne 1900).
- v. Galway coast, coll. R. Ball and W. Thompson (Thompson '44).

Family-Ulmaride.

Aurelia aurita (Linn.). Aurelia campanulata, Forbes

i., ii., . iv., v., vi.

- i. North coast (Templeton '36): Bangor, coll. G. C. Hyndman and W. Thompson; Holywood Warren (Thompson '56).
- ii. Kingstown Harbour (Greene '57): Dalkey (Haddon '86).
- iv. South of Great Skellig, coll. R.I.A. Exp. 1885 (Haddon '86A): Valencia Harbour (Browne 1900).
- v. Blacksod Bay (Dublin Mus.).
- vi. Donegal Bay, coll. R.D.S. (Holt '92).

Family—PILEMIDÆ.

Pilema octopus (Linn.). Medusa undulata, Pennant. Rhizostoma cuvieri, Péron and Lesueur. Rhizostoma octopus, Oken. Rhizostoma pulmo, Forbes. Cassiopæa lunulata, Fleming.

i., ii., iii., iv., ? v., .

- i. Belfast Lough, coll. E. Getty (Thompson '40).
- ii, Kingstown Harbour (Greene '57; Haddon '86): Portmarnock (Baily '65): Greystones (Mackintosh '84).
- iii. Youghal, coll. R. Ball (Thompson '56).
- iv. Valencia; between Bray Head and Puffin Island, coll. F. W. Gamble (Browne 1900).
- ?v. West coast (Thompson '44A).

CTENOPHORA.

Family—Pleurobrachild.

Pleurobrachia pileus, Fabricius. Beroe pileus, Fleming. Cydippe pileus, Eschscholtz. Cydippe pomiformis, Patterson. ? Cydippe lagena, Forbes.

i., ii., iii., iv., v., .

- i. Giant's Causeway, coll. G. C. Hyndman: Larne; Belfast and Strangford Loughs (Patterson '43).
- ii. Lambay, coll. W. Thompson and R. Ball; Kingstown Harbour (Patterson '43): Greystones (Mackintosh '84.)
- iii. Youghal, coll. R. Ball (Patterson '43): south coast (Wright and Greene '59): Ballycotton Bay, coll. R.I.A. Exp. 1886 (Haddon '88)
- iv. South-west of Ireland, coll. R.I.A. Exp. 1885 (Haddon '86A): Valencia Harbour (Browne 1900),
- v. West coast (Wright and Greene '59).

Family-Bolinidæ.

Bolina norvegica (Sars). Mnemia norvegica, Sars. Bolina hibernica, Patterson. Alcinoe hibernica, Thompson.

i., ii., iii., iv., v., .

- i. Larne, Bangor, and Strangford Lough (Patterson '43 and '43A).
- ii. Lambay (Patterson '43 and '43A): Kingstown Harbour (Greene '57).
- iii. Youghal (Patterson '43 and '43a): south coast (Wright and Greene '59).
- iv. South-west coast, coll. R.I.A. Exp. 1885 (Haddon '86a): Valencia Harbour, ?sp. (Browne 1900).
- v. West coast (Wright and Greene '59).

Family-Mnemiidæ.

Alcinoe smithii, Forbes.

i.,

i. North coast (Forbes and Goodsir '40).

Family-Beroide.

Beroe ovata, Eschscholtz.

. ii., iii., iv. v., .

- ii. Kingstown Harbour (Greene '57).
- iii. South coast (Wright and Greene '59).
- vi. South-west coast, coll. R.I.A. Exp. 1885 (Haddon '86A): Valencia Harbour (Browne 1900).
- v. West coast (Wright and Greene '59).

Beroe cucumis, Fabricius.

i., ii.,

- i. Bangor, co. Down (Thompson '56).
- ii. Dublin coast (Greene '57).

ANTHOZOA.

ALCYONARIA.

Family-HAIMEIDÆ.

Hartea elegans, E. P. Wright.

. . . , . vi.

vi. Rathmullen, co. Donegal; found by W. Harte (Wright '65).

Family-Cornularide.

Sarcodictyon catenata, Forbes.

i., . iii., . v., .

i. Antrim coast (Thompson '56; Hyndman '59).

iii. Youghal, coll. R. Ball (Thompson '44 and '44a, sub Zoanthus couchii).

v. Roundstone, coll. W. M'Calla (Thompson '56).

Family—Alcyonidæ.

Alcyonium digitatum, Linn.

i., ii., . iv., v., vi.

Common round the coast.

Alcyonium glomeratum, Hassall. Alcyonidium rubrum, Hassall.

ii. Dublin Bay (Hassall '41): Portmarnock (Baily '65).

iv. South-west of Ireland (Bourne '90).

Family-ISIDÆ.

Acanella arbuscula, Johnston.

. . . iv., . .

iv. South-west of Ireland, 750 fms., coll. R.I.A. Exp. 1888 (Dublin Mus.).

Family—Gorgoniid.

Gorgonia verrucosa, Pallas.

. ii., iii., . v., vi.

ii. Lambay, coll. R. Ball (Thompson '49).

iii. Nymph Bank and Toe Head, coll. R.I.A. Exp. 1886 (Haddon '88).

v. Galway Bay, 24 fms., coll. R.D.S. (Holt '92).

vi. Donegal Bay (Dublin Mus.).

Gorgonia anceps, Pallas. Keratophyton dichotomum, Seawillow, Ellis.

A doubtful species; recorded by Ellis (1755) for the Irish coast.

Family-Virgulariidæ.

Virgularia mirabilis, Lamarck.

i., . . iv., . .

i. North coast (Thompson '44a): Belfast Lough and Bangor (Thompson, '56): Carrickfergus (Dublin Mus.).

iv. Ballybunion (Andrews '70): Kenmare River, 40 fms.; Bantry Bay, 36 fms., coll. R.I.A. Exp. 1885 (Haddon '86A): Glengariff, S. Y. "Argo" Cruise (Herdman '91).

Svava glacialis, var. alba (Koren and Danielssen).

. . . iv., . .

iv. "Porcupine" Exp. 1869. 51° 51′—11° 50′, 100 fms. (Marshall and Fowler '88).

ZOANTHARIA.

Family—Cerianthidæ.

Cerianthus lloydii, Gosse.

. . . iv., . .

iv. Smerwick Harbour (C. ? lloydii, Andrews '70); Valencia (Gamble '96).

Arachnactis bournei, Fowler. Arachnactis albida, Sars (in part).

Arachnactis lloydii, Van Beneden.

. . . iv., . .

iv. South-west of Ireland (Bourne '90, sub A. albida): Valencia Harbour (Browne 1900; see also G. H. Fowler in Proc. Zool. Soc. 1897, p. 805).

Van Beneden ('91 and '97) refers all Bourne's Irish specimens to the species *lloydii*, and considers that they are the larvæ of *Cerianthus lloydii*, Gosse.

Arachnactis albida, Sars (in part).

. . . iv., . .

iv. Valencia Harbour (Browne 1900; see also Fowler in Proc. Zool. Soc. 1897, p. 803).

Family-Zoanthide.

Epizoanthus incrustatus (Düben and Koren). Epizoanthus papillosus (Johnston). Polythoa incrustata, Bourne.

- iii. Nymph Bank, co. Cork, 50 fms., coll. R.I.A. Exp. 1886 (Haddon '88).
- iv. Forty miles south-west of Cape Clear, 80-90 fms., coll. R.I.A. Exp. 1885 (Haddon '86A): south-west of Ireland, 70 fms. (Bourne '90).
- v. Clew Bay; Aran, co. Galway, 33-40 fms. (Haddon and Shackleton '91): Inishmore, coll. R.D.S. (Holt '92).
- vi. Donegal Bay, 33-36 fms. (Haddon and Shackleton '91).

Epizoanthus paguriphilus, Verrill.

. . . iv., v., .

- iv. South-west Ireland, 400 fms. (Bourne '90): 71 miles west by south of the Fastnet, 315 fms. (Haddon and Shackleton '91).
- v. Fifty-four miles off Achill Head, 500 fms. (Haddon and Shackleton '91).

Epizoanthus couchii (Johnston). Zoanthus couchii, Johnston.

- i. Strangford Lough, 15-20 fms. (Johnston in "A History of British Sponges," 1842, pp. 190, 251; plate xvi., figs. 6, 7, sub *Dysidea*? papillosa).
- iii. Off Glandore, 40 fms. (Haddon and Shackleton '91).
- iv. Berehaven, 10 fms., coll. R.I.A. Exp. 1885 (Haddon '86A, sub *Polythoa arenacea* (?) D. Ch.; Haddon and Shackleton '91): 30 miles off Cape Clear, 80 fms. (Haddon and Shackleton '91): Valencia (Gamble '96).

Epizoanthus wrightii, Haddon and Shackleton.

ii. Dalkey Sound (G. Y. and A. F. Dixon '91, sub *Epizoanthus* sp.; Haddon and Shackleton '91).

Parazoanthus anguicomus (Norman).

. . . iv., v., .

iv. Fortymiles south-west of Ireland; Berehaven, 10 fms., coll. R.I.A. Exp. 1885 and 1886 (Haddon '86A and '88, sub *Palythoa* sp.): off the Skelligs, 80 fms., (Haddon and Shackleton '91).

v. Off Galway Bay, 100-159 fms., coll. "Porcupine" Exp., 1869; off Achill, 126 fms. (Haddon and Shackleton '91).

Parazoanthus dixoni, Haddon and Shackleton.

. . . iv., . .

iv. Five to eight miles west of Great Skellig, 70-80 fms. (Haddon and Shackleton '91).

Family—Edwardshdæ.

Edwardsia beautempsii, Quatrefages.

. . . iv., . .

iv. Berehaven, 10 fms., coll. R.I.A. Exp. 1886 (Haddon '88).

Edwardsia timida, Quatrefages.

. ii.,

ii. Malahide, at extreme low water (G. Y. Dixon '86).

Edwardsia tecta, Haddon.

. . iii., iv., . .

iii. Nymph Bank, 52 fms.; 28 miles south-west of Ballycotton, coll. R.I.A. Exp. 1886 (Haddon '88 and '89).

iv. Five to eight miles west of the Great Skellig, 70-80 fms. (Haddon'89).

Edwardsia? sp.; an immature specimen found at Salthill (Haddon '86).

Family-ILYANTHIDÆ.

Halcampa chrysanthellum (Peach). Halcampa andresii, Haddon. . ii., iii., . . .

- ii. Malahide, coll. Miss Shannon (Haddon '85 and '86c).
- iii. ? Nymph Bank, co. Cork, 52½ fms.; the parasitic larva was found at Ballycotton Bay, coll. R.I.A. Exp. 1886 (Haddon '87 and '89).

An immature specimen, parasitic on a *Thaumantias*, found at Kingstown, and described under the name *H. fultoni*, T. S. Wright, is probably the larval form of *H. chrysanthellum* (Haddon '86 and '86c).

Halcampa arenarea, Haddon.

...iv., ...

iv. Kenmare River, 38-44 fms.; Bantry Bay, 38 fms., coll. R.I.A. Exp. 1885 and 1886 (Haddon '864 and '88): Ballinskelligs Bay, 28-32 fms., coll. R.D.S. (Holt '92).

Ilyanthus scoticus, Forbes.

. ? ii.,

?ii. A specimen, doubtfully referred to this species, was found by Mrs. Handcock at Balbriggan, after a storm (Thompson '45).

Peachia hastata (Gosse).

? i., ii.,

?i. Larne; reported by Miss Shannon (Haddon and Dixon '85).

ii. Dollymount, Dublin Bay, coll. G. Y. Dixon (Haddon and Dixon '85; G. Y. and A. F. Dixon '91).

Holt ('92) records a species of *Peachia* from Donegal Bay, and off the Skelligs.

Family—ACTINIDE.

Sub-family—Antheinæ.

Actinia equina, Linn. Actinia mesembryanthemum, Ellis and Solander. Actinia margaritifera, Templeton.

i., ii., iii., iv., v., vi.

This anemone is common all round the coast.

Anemonia sulcata (Pennant). Actinia cereus, Ellis and Solander.

Anthea cereus, Gærtner.

i., ii., iii., iv., v., vi.

This species has been recorded from many localities round the coast.

Sub-family-SAGARTINÆ.

Actinoloba dianthus (Ellis). Actinia dianthus, Ellis. Metridium dianthus, Fischer.

i., ii., iii., iv., v., vi.

Recorded from many localities round the coast.

Cereus pedunculatus (Pennant). Sagartia (Heliactus) bellis (Ellis and Solander).

i., ii., iii., iv., v., vi.

Found all round the coast.

Sagartia (Heliactis) venusta, Gosse.

i., ii., iii., iv., v., vi.

i. Belfast (Wright '59).

ii. Monkstown (Mackintosh '78): Dalkey Island (Haddon '86).

iii. South coast (Wright '59; Wright and Greene '59).

iv. Bantry Bay, coll. E. P. Wright (Greene '58a): Dingle Bay (Andrews '70): Valencia, coll. A. C. Haddon (G. Y. Dixon '88).

v. West coast (Wright '59; Wright and Greene '59): Clare coast • (Foot '63).

vi. Bundoran (Duerden '95A).

Sagartia (Heliactis) ornata, Holdsworth.

...iv., ...

iv. Crookhaven Harbour (Wright '59).

Sagartia (Heliactis) miniata, Gosse. Paraphellia greenii, Haddon.

ii. Bray Head, 23 fms.; Dalkey (Haddon '86).

iv. Crookhaven, Dingle, and Berehaven (Wright '59): Dingle Bay (Andrews '70): 42 miles off the Great Skellig, 160 fms., coll. R.I.A. Exp. 1886 (Haddon '88).

v. Off Inishmaan, 20-7 fms.; Killary Bay, 15-9 fms., coll. R.D.S. (Holt '92).

Sagartia rosea (Gosse).

. ii., . iv., v., .

ii. Dalkey Island (Haddon '86).

iv. Adragool, co. Cork (Wright '59): Dingle Bay (Andrews '70): Valencia, coll. W. de V. Kane (A. F. Dixon '88).

v. West coast (Wright '59): Miltown Malbay (Foot '60).

Sagartia nivea (Gosse).

. ii., . iv., v., vi.

ii. Dalkey Island (Haddon '86).

iv. Crookhaven (Wright '59): Valencia (Gamble '96).

v. West coast (Wright '59): Miltown Malbay (Foot '60).

vi. Bundoran (Duerden '95A).

Sagartia sphyrodeta, Gosse.

... iv., v., •

iv. Parkmore Head, Ventry Bay (Wright '59): Dingle Bay (Andrews '70).

v. Lahinch (Foot '63).

Sagartia pura, Alder.

...iv.,..

iv. Berehaven (Wright '59).

Sagartia pallida, Holdsworth.

...? iv., ..

?iv. Dursey Sound; ?a variety of S. pallida, coll. R.I.A. Exp. 1885 (Haddon '86A).

Sagartia ? herdmani, Haddon.

· · · · · V., ·

v. Killary Lough, on *Turritella* shells; West of Ireland, 5-10 fms., abundant, coll. S. Y. "Argo" Cruise, described by Professor Haddon (Herdman '91).

Sagartia (Thoe) hastata, E. P. Wright.

. . iv., . .

iv. The Pipers, Berehaven Harbour (Wright '59). Considered by Andres to be a doubtful species.

Cylista viduata (Müller). Actinia effecta, Brug. Actinia viduata, Müller. Sagartia viduata, Gosse.

i. Between Ballyholme Bay and Groomsport, in great numbers (Templeton '36, sub A. effæta, Brug.): Bangor, co. Down (Thompson '56).

ii. Dublin coast (Greene '58a): Malahide and Howth (G. Y. and A. F. Dixon '91).

v. Lahinch (Thompson '41).

Cylista undata (Müller). Sagartia troglodytes (Johnston). i., ii., . iv., v., vi.

- i. Portrush (Greene '58A): Belfast; ? Portrush and Giant's Causeway (Wright '59).
- ii. Monkstown and Dalkey (Haddon '86).
- iv. Dingle Harbour (Andrews '70): Valencia (Gamble '96).
- v. Spanish Point, Miltown Malbay (Foot '60).
- vi. Bundoran (Duerden '95A).

Cylista coccinea (Müller). Actinia coccinea, Müller. Sagartia coccinea, Gosse.

i., ii., . ?iv., v., ?vi.

- i. On the "Turbot bank" (Hyndman '60).
- ii. Dublin Bay (Irvine '54).
- ?iv. Dursey Sound (Haddon '88).
 - v. West coast (Thompson '44A).
- ?vi. Between Erris Head and Horn Head (Wright and Greene '59).

Chitonactis coronata (Gosse). Bunodes coronata, Gosse.

. . . iv., . .

iv. South-west of Ireland, 50 fms., and 200 fms. (Haddon '89; Bourne '90): off the Skelligs, 80 fms., coll. R.D.S. (Holt '92).

Chitonactis marioni (Haddon).

... iv., ..

iv. Off the south-west of Ireland, 325 fms., coll. R.I.A. Exp. 1886 (Haddon '88 and '89).

Actinauge richardi (Marion). Chitonactis richardi, Marion.
. . iii., iv., . .

iii. Off Glandore, 50 fms., coll. R.I.A. Exp. 1886 (Haddon '88).

iv. Off Dursey Head, 93 fms. and 100 fms.; west of Great Skellig, 70-80 fms., coll. R.I.A. Exp. 1886 (Haddon '88 and '89): south-west of Ireland, "Flying Fox" Exp., 1889 (Green '89): south-west of Ireland, 200 fms. and 400 fms. (Bourne '90).

Actinauge sp.

South-west of Ireland, 345 fms., coll. R.I.A. Exp. 1888; perhaps a deeper-water variety of *A. richardi* (Haddon '90).

Paraphellia expansa (Haddon). Chitonaetis (?) expansa, Haddon.
. . . iv., v., .

iv. Mouth of Bantry Bay, 40 fms., coll. R.I.A. Exp. 1885 and 1886 (Haddon '86A, '88 and '89): between Doulus Head and Blasket Islands (Beaumont 1900).

v. Galway Bay, 14 fms., coll. R.D.S. (Holt '92).

Adamsia palliata (Bohadsh). Actinia maculata, Adams. Adamsia maculata, Forbes

i., ii., iii., iv., v., .

i. Strangford Lough; Belfast Lough (Thompson '40): off Larne, 70-90 fms. (Hyndman '59): Portrush (Mackintosh '84).

ii. Howth, one specimen (Hassall '41B): ? Dublin Bay, coll. Dr. Ball (Wright '59): Greystones (Mackintosh '84).

iii. Waterford (Farran '60).

iv. Bantry Bay (Wright '59): Dingle Bay (Andrews '70): the Skelligs, coll. R.I.A. Exp. 1886 (Haddon '88): between Doulus Head and Blasket Islands (Beaumont 1900).

v. Birturbuy Bay, 7 fms., coll. R.D.S. (Holt '92).

Adamsia rondeletii (Delle Chiaje). Sagartia parasitica (Couch).
. . . iv., v., .

iv. Bantry Bay (Wright '59): Dingle Bay (Andrews '70).

v. Coast of Clare (Foot '63).

Aiptasia couchii (Gosse).

. . . iv., . .

iv. Dingle Harbour (Andrews '70).

Sub-family—Bunodinæ.

Bunodes verrucosa (Pennant). Actinia gemmacea, Ellis. Bunodes gemmacea, Gosse.

i., ii., iii., iv., v., vi.

i. North coast (Thompson '44A).

ii. Dublin coast (Hassall '41B): Rush (Duerden '94B).

iii. Cork Harbour (Greene '58D).

iv. Bantry Bay (Wright '59): Valencia, coll. J. M. Jones (Gosse '60).

v. Spanish Point, Miltown Malbay (Foot '60).

vi. Bundoran (Duerden '95A): Knocklane, co. Sligo (W. H. Gallway in the Irish Naturalist, xiii., 1904).

Bunodes balli (Cocks).

. . . iv., v., .

iv. Parkmore Head, Ventry (Wright '59).

v. Coast of Clare (Foot '63).

Bolocera tuediæ (Johnston).

. . . iv., . .

iv. South-west of Ireland, 50 fms., coll. R.I.A. Exp. 1888 (Haddon '90).

Bolocera eques, Gosse.

. ii.,

ii. Greystones, 12 fms. (Mackintosh '84).

Stomphia churchiæ, Gosse.

. ii., .? iv., ...

ii. Greystones, 12 fms. (Mackintosh '84).

? iv. Dingle Bay, 40 fms. (Andrews '70, sub S. (?) churchiæ). The position of this species is still considered doubtful.

Family—Corallimorphidæ.

Corynactis viridis, Allman. Corynactis allmanni, E. P. Wright.

- i. Belfast Lough and Strangford Lough, 15-20 fms. (Thompson '46).
- iv. Crookhaven (Allman '46): Bantry Bay and Ventry Harbour (Wright '59): the Skelligs, coll. R.I.A. Exp. 1886 (Haddon '88): Valencia (Gamble '96).
- v. West coast (Wright and Greene '59).
- vi. Bundoran (Duerden '95A).

Capnea sanguinea, Forbes.

...? iv., ..

? iv. Dingle Bay, 40 fms. (? C. sanguinea, Andrews '70).

Aureliana heterocera, Thompson.

. ii., . iv., . .

i. Greystones, between tides (Mackintosh '84).

iv. Crookhaven (Wright '59; Wright and Greene '59).

Family—Amphianthidæ.

Gephyra dohrnii, Von Koch.

. . iii., iv., . .

iii. Between Cork and Youghal, found by Rev. W. S. Green; 9 miles south of Glandore Harbour, 40 fms., coll. R.I.A. Exp. 1885 (Haddon'86a).

iv. 30 miles off the Fastnet, 80 fms.; 5-8 miles off the Skelligs, 70-80 fms., coll. R.I.A. Exp. 1886 (Haddon '88 and '89).

Family-Tealide.

Urticina felina (Linn.). Tealia crassicornis (Müller). Actinia gemmacea, Couch. Tealia greenii, E. P. Wright.

i., ii., iii., iv., v. .

Common round the coast.

INCERTÆ SEDIS.

Actinerus, sp.

. . . iv., . .

iv. South-west Ireland, 750 fms., coll. R.I.A. Exp. 1888. "There is at present no information by means of which the genus can be allocated a definite position in the classification of the Actiniæ." (Haddon '90).

For definition of the genus, see also Verrill in American Journ. Sci., xvii., 1879.

MADREPORARIA.

Family—Turbinolidæ.

Caryophyllia clavus, Scaechi: var. borealis, Fleming; var. smithii, Stokes.

i., ii., iii., iv., v., vi.

Reported from many localities round the coast.

Caryophyllia cylindracea, Reuss.

... iv., ...

iv. Mouth of Kenmare River, 40 fms., coll. R.I.A. Exp. 1885 (Haddon '86A).

Sphenotrochus macandrewanus, M. Edwards and Haime. *Turbinolia milletiana*, Defrance.

. . . . Ve, e

v. Off the Aran Islands, dredged by Mr. Barlee (Thompson '46).

Sphenotrochus wrightii, Gosse.

i., ii., . iv., . .

- i. The "Turbot bank," off the Antrim coast (Hyndman '60).
- ii. The "Shell bank," off the Dublin coast (Kinahan '61).
- iv. Berehaven; undoubtedly fresh specimens, coll. R.I.A. Exp. 1885 (Haddon '86a).

Paracyathus taxilianus, Gosse.

. . . iv., . .

iv. Recorded by Andrews ('70a) as occurring off the Blasket Islands, 35-40 fms.

Paracyathus thulensis, Gosse.

. . . iv., . .

iv. Recorded by Andrews ('70A) as occurring off the Blasket Islands, 35-40 fms.

Flabellum laciniatum, M. Edwards. Ulocyathus arcticus, Sars and Haime.

. . . iv., . .

iv. South-west of Ireland, 370 fms., "Porcupine" Exp. (Jeffreys in Nature, i., 1869; Duncan '70).

Family—Oculinidæ.

Lophohelia prolifera, Pallas.

. . . iv., v., .

iv. South-west of Ireland, 364 fms., "Porcupine" Exp. (Jeffreys in Nature, i., 1869; Duncan '70): 50 miles off Bolus Head, co. Kerry, 220 fms., coll. R. D. S. (Holt '92).

v. West coast, 173 fms., and 422 fms., "Porcupine" Exp. (Duncan '70; Carpenter, Jeffreys, and Thomson '70): abundant off the west coast, at depths from 150 fms. to 500 fms. (Thomson '73).

Family—EUPSAMMIDE.

Balanophyllia regia, Gosse.

... iy., ...

iv. Dingle Bay (Andrews '70).

APPENDIX.

The following names occur in some of the older accounts of Irish Cœlenterata; it seems impossible to determine absolutely to what species they refer.

- Actinia monile; Belfast Lough (Templeton '36). ? A young Bunodes verrucosa.
- **Æquorea formosa**; Dublin coast (Greene '57). Perhaps the larval form of one of the Æquoridæ: or ? *Dipleurosma hemisphærica* (Haddon '86_B).
- Æquorea radiata; Portrush (Templeton '36).
- **Æquorea** sp. nov.; Dublin Bay and south-west coast (Greene '58B).

 "? = A young stage of an Æquorea, or a Polycanna."

 (Browne 1900).
- Aurelia bilobata, Forbes. Portrush (Thompson '44a).
- Callirhoë dubia; Irish coast (Templeton '36).
- Cucumis fulgens, Macartney; Dundrum Bay, west of St. John's Point (Templeton '36).
- Cyanea inscripta; Carrickfergus (Templeton '36). ? = Cyanea capillata (Haeckel '79).
- Cymodoce simplex, Turner; Ireland. "Probably founded on injured specimens of *Obelia gelatinosa*, or some other Zoophyte" (Johnston '47).
- Ephysa hemisphærica; common on the coast (Templeton '36).

 Forbes suggests that this may be a "young state of Aurelia."
- Ephysa simplex; Donaghadee (Templeton '36). "Probably, as Cuvier suggests, some species in a mutilated state." Forbes.
- Mammaria mamilla, Müller. Irish coast (Fleming, "History of British Animals").

- Medusa (Oceania) papillata, Müller; Strangford Lough (Thompson '40). ? = Eucopium-larva of *Phialidium variable* (Haeckel '79).
- Medusa scintillans; Dublin Bay and Carlingford Bay (Macartney '10): Bangor and Glenarm (Templeton '36). This is the protozoon *Noctiluca miliaris*.
- Ocyrhoë (Cassiopea) cruciata; north coast of Ireland (Templeton '36).
- Ocyrhoë (Chrysaora) tuberculata; north coast of Ireland (Templeton '36). ? = Chrysaora isosceles (Haeckel '79).
- Piliscelotus (Obelia) vitreus; Whitehead (Templeton '36).
 ? = Tiara pileata (Haeckel '79), or ? = Sarsia tubulosa (Forbes '48).
- Sertularia templetoni; Belfast Lough (Fleming in the "Edinburgh Phil. Journ.," 1820, p. 88).
- Thaumantias confluens; south and west coasts (Wright and Greene '59). ? = Laodice ulothrix (Haeckel '79).

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