

(2.)
With the Compiler's Compliments.

MUSEUM NORMANIANUM,

OR

A Catalogue of the Invertebrata

OF

EUROPE, AND THE ARCTIC AND NORTH ATLANTIC OCEANS,

WHICH ARE CONTAINED IN THE COLLECTION OF

THE REV. CANON A. M. NORMAN, M.A., D.C.L., F.L.S.

I.—ECHINODERMATA.
II.—PANTOPODA.

PRINTED FOR PRIVATE DISTRIBUTION.

MORTON, PRINTER, HOUGHTON-LE-SPRING.

January, 1886.

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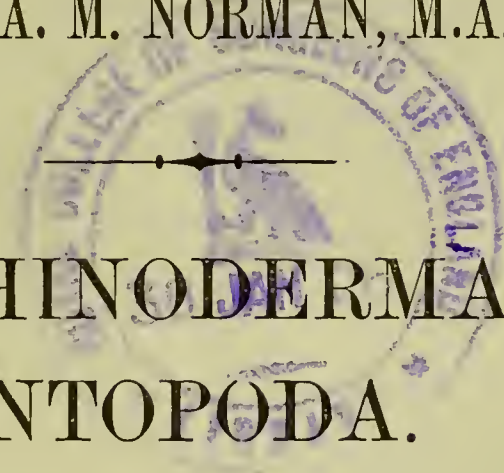
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PREFATORY NOTES.

THE collections to which these Catalogues refer is confined to the Fauna of Europe, together with that of the Arctic and North Atlantic Oceans, including the Seas connected with them.

The North Atlantic Ocean is here regarded as terminating towards the South at lat. 35° N. ; or, at a line drawn from a little to the South of the Straits of Gibraltar on the Eastern, to about Cape Hatteras on the Western side. This boundary is adopted as perhaps the best to embrace the Arctic and Temperate regions, and, at the same time, to exclude the tropical animals of the Gulf of Mexico. The entire area of the Mediterranean is of course included.

These Catalogues are printed in order to make known to Curators of Museums and private Naturalists the present condition of my collection, and to invite exchange.

Opportunities of adding species, which are among my desiderata, either by exchange or purchase will, I hope, thus be afforded to me.

I shall be glad to send, in return for animals received, species either from the present or other classes of Invertebrata which may be preferred. Of course it will be understood that a Catalogue which embraces my entire collection necessarily includes a large number of forms of which there are no duplicates.

Letters should be addressed,—

BURNMOOR RECTORY,
FENCE HOUSES,
CO. DURHAM, ENGLAND.

1.—The Echinodermata are chiefly defective in N.E. American forms, especially the Holothuroidea. The Fauna of the Great Depths of the Atlantic is scarcely represented, while many Mediterranean and recently described Arctic species are also much wanted.

2.—I shall be especially obliged for examples of the Arctic, abyssal Atlantic, and other Pantopoda, which are absent in the present list.

January 11th, 1886.

MUSEUM NORMANIANUM.

I.—ECHINODERMATA.

Order I.—Crinoidea.

Rhizocrinus.

- 1 lofotensis, M. Sars.

Antedon.

- 2 Eschrichtii, M and T.
3 dentata Say, (=Sarsii D. & K.)
4 rosacea Linck.
5 phalangium, J. Müll.
5* celtica, Barrett.

Order II.—Ophiuroidea.

Ophiura.

- 6 lævis, Rond.

Ophioglypha.

- 7 Sarsii, Lütken.
8 signata, Verrill.
9 lacertosa, Linck.
10 carnea, M. Sars.
11 albida, Forbes.
12 affinis, Lütken.
13 robusta, Ayres.
14 aurantiaca, Verrill.
15 nodosa, Lütken.
16 Stuwitzii, Lütken.

Ophiecten.

- 17 sericeum, Forbes.

Ophiomusium.

- 18 Lymani, Wy. Thom.

Ophiopholis.

- 19 aculeata, Lin.

Ophiactis.

- 20 Ballii, Thompson.
21 virens, M. Sars.
22 abyssicola, M. Sars.

Amphiura.

- 23 elegans, Leach.
24 tenuispina, Ljungman.
25 Chiajei, Forbes.
26 Sundevalli, M. and T.
27 filiformis, Forbes.
28 borealis, G. O. Sars.
29 securigera, Düb. and Kor.
30 macilenta, Verrill.

Amphilepis.

- 31 norvegica, Ljungman.

Ophiocnida.

- 32 brachiata, Montagu.
33 olivacea, Lyman.

Ophiopsila.

- 34 annulosa, M. Sars.
35 aranea, Forbes.

Ophiocoma.

- 36 nigra, Abild.

Ophiacantha.

- 37 bidentata, Retz.
38 millespina, Verrill.
39 spectabilis, G. O. Sars.
40 anomala, G. O. Sars.
41 setosa, M. and T.
42 abyssicola, G. O. Sars.

Ophiolebes.

- 43 claviger, Ljungman.

Ophiothrix.

- 44 fragilis, Abild.
45 Lütkeni, Lyman.
46 pentaphyllum, Penn.

Ophioscolex.

- 47 glacialis, M. and T.
48 purpureus, Düb. and Kor.

Ophiobyrsa.

- 49 hystricis, Lyman; (an arm only.)

Ophiomyxa.

- 50 pentagona, Lamarck.

Gorgonocephalus.

- 51 Lamarckii, Lyman.
52 eucnemis, M. and T.
53 Agassizii, Stimpson.
54 Lincki, D. and K.

Astrochele.

- 55 Lymani, Verrill.

Asteronyx.

- 56 Lovéni, Müll and Tr.

Order III.—Asteroidea.**Luidia.**

- 57 ciliaris, Phil. (=Savignii, Aud.)
58 Sarsii, Düb. and Kor.

Ctenodiscus.

- 59 crispatus, Retz.

Archaster.

- 60 Parelly, Düb. and Kor.
61 bifrons, Wyv. Thom.
62 tenuispinus, Dan. and Kor.
63 americanus, Verrill.
64 Agassizii, Verrill.
65 Floræ, Verrill.
66 arcticus, M. Sars.

Porcellanaster.

- 67 cæruleus, Wyv. Thom.

Astropecten.

- 68 irregularis, Linck.
69 acicularis, Norman.
70 andromeda, M. and T.
71 aurantiacus, Gray.
72 bispinosus, M. and T.
73 pentacanthus, M. and T.
74 platyacanthus, M. and T.
75 subinermis, M. and T.

Odontaster.

- 76 hispidus, Verrill.

Pteraster.

- 77 militaris, O. F. Müll.
78 pulvillus, M. Sars.

Diploteraster.

- 79 multipes, M. Sars.

Asterina.

- 80 gibbosa, Pennant.
81 Pancerii, Gasco.

Asteropsis.

- 82 capreensis, Gasco.

Chætaster.

- 83 longipes, M. and T.

Ophidiaster.

- 84 ophidianus, Lamk.
85 Lessonæ, Gasco.

Asterias.

- 86 rubens, Lin.
87 violacea, O. F. Müll.
88 hispida, Forbes.
89 Forbesii, Desor.
90 vulgaris, Stimpson.
91 stellionura, Perrier.
92 glacialis, Müller.
93 Mülleri, M. Sars.
94 Linckii, M. and T.
95 grœnlandica, Steens.
96 polaris, M. and T.

Leptasterias.

- 97 compta, Verrill.

Porania.

- 98 pulvillus, Müller.
99 grandis, Verrill.

Palmipes.

- 100 membranaceus, Retz.

Hippasteria.

- 101 plana, Linck.

Pentagonaster.

- 102 granularis, O. F. Müll.
103 hispidus, M. Sars.

Solaster.

- 104 papposus, Linck.
105 furcifer, Düb. and Kor.
106 endeca, Gmelin.

Pedicellaster.

- 107 typicus, M. Sars (= A. palæocrystal-
linus, D. and S.)

Cribrella.

- 108 sanguinolenta, Müll.

Stichaster.

- 109 roseus, O. F. Müll.
110 albulus, Stimpson (=problema Stimp.)

Echinaster.

- 111 sepositus, Retz.

Order IV.—Echinoidea.**Dorocidaris.**

- 112 papillata, Leske.

- Arbacia.**
 113 punctulata, Gray.
 114 pustulata, Gray.
- Centrostephanus.**
 115 longispinus, Pet.
- Asthenosoma.**
 116 hystrix, Wy. Thom.
- Strongylocentrotus.**
 117 dröbachiensis, Müll.
 118 pictus, Norman.
 119 lividus, Lamarck.
- Sphærechinus.**
 120 granularis, Lamarck.
- Echinus.**
 121 esculentus, Lin.
 122 acutus, Lamarck.
 123 melo, Lamarck.
 124 microstoma, Wyv. Thom.
 125 elegans, Düb. and Kor.
 126 gracilis, A. Agass.
 127 microtuberculatus, Bl.
 128 miliaris, Müll.
 129 norvegicus, Düb. and Kor.
- Echinocyamus.**
 130 pusillus, Müll.
- Echinanthus.**
 131 rosaceus, Lin.
- Echinarachnius.**
 132 parma, Lamarck.
- Mellita.**
 133 testudinata, Klein.
- Pourtalesia.**
 134 phiale, Wy. Thomson.
- Spatangus.**
 135 purpureus, Leske.
 135* Raschi Lovén.
- Echinocardium.**
 136 cordatum, Pennant.
 137 flavescens, Müll.
 138 mediterraneum, Forbes.
 139 pennatifidum, Norman.
- Brissopsis.**
 140 lyrifera, L. Agass.
- Aerope.**
 141 rostrata, Wyv. Thom.
- Brissus.**
 142 unicolor, Klein.
- Schizaster.**
 143 canalifer, L. Agass.
 144 fragilis, L. Agass.

Moira.

- 145 atropos, A. Agass.

Order V.—Holothuroidea.**Cucumaria.**

- 146 cucumis, Risso.
 147 syracusana, Grube.
 148 tergestina, M. Sars.
 149 doliolum, Pallas.
 150 lactea, Forbes.
 151 Montagui, Fleming.
 152 frondosa, Gunner.
 153 brunnea, Forbes.
 154 Hyndmanni, Forbes.
 155 calcigera, L. Agass.
 156 minuta, Fabr.
 157 elongata, Düb. and Kor.
 158 Koellikeri, Semper.

Orcula.

- 159 Barthii, Troschel.

Echinocucumis.

- 160 hispida, Barratt, (=typica, M. Sars.)

Thyonidium.

- 161 hyalinum, Forbes.
 162 productum, Norman.
 163 commune, Forbes and Good.
 164 Dübeni, Norman.

Thyone.

- 165 fusus, Müller.
 166 raphanus, Düb. and Kor.
 167 aurantiaca, Costa.
 168 briareus, Selenka.

Phyllophorus.

- 169 urna, Grube.
 170 granulatus, Grube.

Psolus.

- 171 phantapus, Strussenf.

Lophothuria.

- 172 Fabricii, Düb. and Kor.
 173 squamata, Koren.

Holothuria.

- 174 tremula, Gunner.
 175 intestinalis, Ascanius.
 176 Polii, Del Ch.
 177 impatiens, Forskal.
 178 Stellati, Del Ch.
 179 tubulosa, Gmel.
 180 Sanctori Del. Ch.

Stichopus.

- 181 regalis, Cuv.
 182 natans, M. Sars.

- Trochostoma.**
 183 boreale, M. Sars.
Ankyroderma.
 184 Jeffreysii, Dan and Kor.
Trochoderma.
 185 elegans, Theel.
Chirodota.
 186 lævis, Fab.
Myriotrochus.
 187 Rinkii, Steens.
 188 brevis, Huxley, (=Oligotrochus vitreus, M. Sars.)

- Synapta.**
 189 digitata, Montagu.
 190 inhærens, Müll.
 191 tenera, Norman.
Leptosynapta.
 192 Girardii, Verrill.
Elpidia.
 193 glacialis, Theel.
Lætmogone.
 194 violacea, Theel.

II.—PANTOPODA.

(=PYCNOGONOIDEA).

- Nymphon.**
 1 hirtum, Kröyer.
 2 hirtipes, Bell.
 3 Strömii, Kröyer.
 4 grossipes, O. Fab.
 5 robustum, Bell (=abyssorum, Norman)
 6 longitarse, Kröyer.
 7 gracile, Leach.
 8 gallicum, Hoek.
 9 brevirostre, Hodge.
 10 macronyx, G. O. Sars.

- Pallene.**
 11 intermedia, Kröyer.
 12 emaciata, Dohrn.
 13 spectrum, Dohrn.
 14 tiberi, Dohrn.

- Neopallene.**
 15 campanellæ, Dohrn.

- Barana.**
 16 castelli, Dohrn.
 17 arenicola, Dohrn.

- Ammothoa.**
 18 longipes, Hodge.
 19 echinata, Hodge, (=fibulifera, Dohrn).
 20 franciscana, Dohrn.

- Ammothoa.**—(continued.)
 21 *Langi, Dohrn.
 22 appendiculata, Dohrn.
Tragæus.
 23 communis, Dohrn.
Rhyncothorax.
 24 mediterraneus, Dohrn.
Clotenia.
 25 conirostris, Dohrn.

- Phoxichilidium.**
 26 femoratum, Rathke.
 27 minor, Wilson.
 28 virescens, Hodge.
 29 longicolle, Dohrn.
 30 exiguum, Dohrn.
 31 angulatum, Dohrn.
 32 robustum, Dohrn.

- Phoxichilus.**
 33 spinosus, Montagu.
 34 vulgaris, Dohrn.
 35 œarybdæus, Dohrn.

- Pycnogonum.**
 36 littorale, Ström.
 37 pusillum, Dohrn.