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A
PROCEEDINGS

OF THE

ACADEMY OF NATURAL SCIENCES

OF

PHILADELPHIA.

v 45

1893.

COMMITTEE ON PUBLICATION.

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PHILADELPHIA :
ACADEMY OF NATURAL SCIENCES,
LOGAN SQUARE.

1894.

CATALOGUE OF THE CRUSTACEANS IN THE MUSEUM OF THE ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA.

BY DR. BENJ. SHARP.

According to the catalogue of Professor Lewis R. Gibbes, of Charleston, S. C., published in the Proceedings of the Academy for 1850 (p. 22 to 30), the collection of crustacea contained one hundred and seventy-five (175) species.

In 1851, additions were made by Mr. McAndrews and Messrs E. & C. Wilson. In this year Dr. T. B. Wilson presented the collection of Guérin-Méneville, consisting of 413 species (1,482 specimens). They were classified and catalogued by Dr. R. Bridges, and the collection now contained 980 species (2,054 specimens).

In 1852, Edward Wilson, Esq., presented 54 species from Great Britain, and Dr. T. B. Wilson presented 282 species of the Guérin Collection. About 64 species were presented during the year from M. J. Verreaux, of Paris, and Messrs E. Wilson, S. Ashmead, J. Le Conte and others.

In 1855, Mr. S. Ashmead presented 34 species.

In 1856, 65 species (358 specimens) were received from Messrs W. S. Wilson, S. Ashmead, Davidson and others.

In 1857, 15 species were received from Dr. W. Stimpson from the West Coast of America, and 30 species from Drs, W. S. W. Ruschenberger and Hammond and Mr. Pease.

In 1858, Mr. W. J. Taylor, Dr. J. L. Le Conte and others, presented 15 species, and Mr. Slack 22 species.

In the beginning of the year 1860 the collection contained about 1,000 species.

In 1861, the Smithsonian Institution presented 55 species, and G. Davidson 12.

In 1864, the Smithsonian Institution presented 62 species, mostly collected by Dr. Wm. Stimpson of the North Pacific Exploring Expedition.

In 1872, a collection was presented by Wm. M. Gabb, from San Domingo.

In 1873, a fine collection in alcohol from the Fiji Islands was presented by Mr. A. J. Garrett.

In 1875, many species were presented by Dr. Wm. H. Jones, of the United States Navy, and during this year the collection was

relabelled and mounted by Messrs C. F. Parker and G. W. Tryon, Jr.

Since 1875 but little has been done to the Carcinological Collection of the Academy and many specimens from want of care have been damaged. In 1878, Mr. J. S. Kingsley worked over the Crangonidae and some of the families of the Brachyura, and later Mr. Walter Faxon renamed the Astacidae of the collection.

A few species were added to the collection by the Bermuda and Mexican expeditions of the Academy.

During the last three or four years Mr. Frederick E. Stearns has added a number of specimens from the Bahamas and West Coast of the United States.

In the following catalogue the first number under a species refers to the tray or jar in which the specimen or specimens are placed; the second number, in brackets, to the number of specimens catalogued under the first number: *a*, meaning alcoholic and *d*, dried; thus (2d) means two dried specimens, and (xa) more than ten alcoholic specimens.

STOMATOPODA.

SQUILLIDAE Latreille.

GONODACTYLUS Latreille, 1825.

G. EDWARDSII Berthold, 1847.

G. japonicus DeHaan, 1849.

Habitat. Pacific coasts.

23. (1d) China. Dr. T. B. Wilson.

24. (1d) Chili. Dr. T. B. Wilson.

G. FALCATUS (Forskael, 1775).

Cancer falcatus Forskael, 1775.

Squilla chiragra Fabricius, 1793.

G. chiragra Latreille, 1825, and authors.

Habitat. All seas.

25. (3d) Bahamas. Dr. H. C. Wood, Jr.

26. (1d) Key West, Florida. S. Ashmead.

27. (2d) West Indies. Dr. Morton.

50. (8a) Garden Key, Florida. Smithsonian Institution.

51 & 52. (3a & 1a). No locality. Smithsonian Institution.

53. (1a) Bermuda. Heilprin Collection, 1888.

54. (xa) Tahiti. A. J. Garrett.

57. (5a) Lower California. W. N. Lockington.

111. (3d) Mauritius. Dr. T. B. Wilson.

LYSIOSQUILLA Dana, 1852.

Coronis Latreille, 1825 (name pre-occupied).

L. GLABRIUSCULA (Lamarck, 1818).

Squilla glabriuscula Lamarck, 1818.

Squilla vittata H. Milne-Edwards, 1837.

Habitat. Eastern coast of North America.

18. (1d) Key West, Florida. S. Ashmead.

37. (1a) Hilton Head, South Carolina. J. J. Craven.

49. (1a) No locality. Smithsonian Institution.

L. MACULATA (Fabricius, 1793).

Squilla maculata Fabricius, 1793.

Cancer arenarius Herbst, 1796.

Habitat. Indo-Pacific region.

19. (2d) Sandwich Islands. J. K. Townsend.

46. (1a) Oahu, Sandwich Islands. Dr. W. H. Jones.

L. SCABRICAUDA (Lamarck, 1818).

Squilla scabricauda Lamarck, 1818.

Squilla hoeveni Herklots, 1851.

L. inornata Dana, 1852.

Habitat. Eastern coast of America.

20 & 21. (1d & 2d) Key West, Florida. S. Ashmead.

22. (1d) Brazil. Dr. T. B. Wilson.

44. (2a) No locality. No donor's name.

45. (1a) West Indies. Dr. T. B. Wilson.

47. (1a) No locality. Dr. T. B. Wilson.

PSEUDOSQUILLA Dana, 1852.**P. CERISII (Roux, 1828).**

Squilla cerisii Roux, 1828.

Squilla broadbenti Coco, 1833.

Habitat. Mediterranean.

30. (1a) Algiers. Guérin Collection.

P. CILIATA (Fabricius, 1793).

Squilla ciliata Fabricius, 1793.

Squilla stylifera Lamarck, 1818.

P. stylifera Dana, 1852.

Squilla quadrispinosa, Miers, 1880.

Habitat. Indo-Pacific region.

15. (5d) Sandwich Islands. Nuttall & Townsend.

16. (1d) Peru. Dr. W. S. W. Ruschenberger.

28. (1a) Mauritius. Guérin Collection.

29. (6a) Oahu, Sandwich Islands. Dr. W. H. Jones.

36. (2a) No locality. Smithsonian Institution.
 55. (2a) Tahiti. A. J. Garrett.
- P. LESSONII** (Guérin, 1830), (type No. 4).
Squilla cerisii Guérin, 1830.
Squilla lessonii, Guérin, 1830.
Squilla spinifrons Owen, 1832.
Squilla monoceros H. Milne-Edwards, 1837.
P. marmorata Lockington, 1877.
- Habitat. Indo-Pacific region.
4. (1d) Mauritius. Guérin Collection (Guérin's type).
 10, 11 & 12 (1d, 1a, 1d) Chili. Guérin Collection.
 17. (1d) Peru. Dr. W. S. W. Ruschenberger.
- P. MONODACTYLA** (A. Milne-Edwards, 1878.)
Squilla monodactyla A. Milne-Edwards, 1878.
- Habitat. Pacific region.
56. (1a) Lat. 6° North ; Long. 166° West. Dr. W. H. Jones.
- P. STYLIFERA** (H. Milne-Edwards, 1837).
Gonodactylus styliferus H. Milne-Edwards, 1837.
- Habitat. Pacific region.
13. (1d) Chili. Guérin Collection.
 14. (1d) Sandwich Islands. J. K. Townsend.
 58. (1a) Valpariso, Chili. Dr. W. S. W. Ruschenberger.
- SQUILLA** Fabricius, 1798.
 including
Chlorida Edyoux & Souleyet, 1841 (name pre-occupied).
Chloridella Miers, 1880.
- S. DESMARESTII** Risso, 1816.
- Habitat. Seas of Europe.
1. (4d) Mediterranean. Guérin Collection.
- S. DUBIA**. H. Milne-Edwards, 1837.
S. mantis Desmarest, 1825.
S. rubrolineata Dana, 1852.
- Habitat. Eastern coast of America.
9. (1d) Trinidad, B. W. I. Dr. Samuel Lewis.
- S. EMPUSA** Say, 1818 (? No. 2 type).
- Habitat. Atlantic region.
2. (3d) Rhode Island. W. E. Halloway (probably Say's type).
 8. (1d) Gulf of Mexico. C. Bryan.
 31. (1a) New Bedford, Mass. J. H. Thompson.

32. (1a) No locality. Smithsonian Institution.
33. (1a) Hilton Head, South Carolina. J. J. Craven.
34. (1a) Beaufort, North Carolina. E. D. Cope.
35. (1a) No locality. J. Walton.
39. (2a) South America. No donor's name.

S. MANTIS Latreille, 1802.

Habitat. European Seas.

6. (3d) Mediterranean. Guérin Collection.

S. NEPA Latreille, 1825.

- S. affinis* Berthold, 1847.
- S. oratoria* DeHaan, 1849.
- S. laevis* Hess, 1865.

Habitat. Indo-Pacific region.

3. (2d) No locality. No donor's name.
7. (3d) China. Dr. T. B. Wilson.
- 40 & 43. (3a & 2a) No locality. Smithsonian Institution.
41. (2a) Oahu, Sandwich Islands. Dr. W. H. Jones.
42. (1a) Malacca. Guérin Collection.

S. PRASINOLINEATA Dana, 1852.

- S. dufresnii* Miers, 1880.

Habitat. East coast of tropical America.

48. (1a) Silam, Yucatan. Mexican Expedition (*fide* Ives, 1891).

S. RAPHIDEA Fabricius, 1798.

- S. mantis* var. *B major* Lamarck, 1818.
- S. harpax* DeHaan, 1849.

Habitat. Indo-Pacific region.

5. (1d) India. Guérin Collection.
38. (1a) Malacca. Guérin Collection.

Numbers 101 to 110 inclusive, are alcoholic specimens of Stomatopod larvae collected by Dr. W. H. Jones in Central and Eastern Pacific, as far North as Latitude 50°.

PENAEIDEA.

PENAEIDAE Sp. Bate, 1886.

PENAEUS Fabricius, 1798.

P. BRASILIENSIS Latreille, 1817.

- P. brevirostris* Kingsley, 1878.

Habitat. Atlantic region.

59. (xa) West coast of Florida. Heilprin Collection, 1886 (*fide* Ives, 1891).

60. (2a) St. Martin, D. W. I. Dr. J. van Rijgersma.
63. (5a) San Domingo, West Indies. W. M. Gabb.
64. (2a) Anclote Bay, Florida. Heilprin Collection, 1886 (*fide* Ives, 1891.)
65. (1a) Sand Key, Florida. Heilprin Collection, 1886.
66. (2a) Cat Island, Bahamas. Smithsonian Institution.
69. (3a) Rio Janiero, Brazil. Dr. W. S. W. Ruschenberger.
78. (2a) San Domingo, West Indies. No donor's name.

P. BRASILIENSIS AZTECUS Ives, 1891. (No. 61 types.)

Habitat. East coast of Mexico.

61. (xa) Vera Cruz, Mexico. Mexican Expedition, 1890 (Ives' type).
62. (1a) Vera Cruz, Mexico. Mexican Expedition, 1890.

P. BREVICORNIS H. Milne-Edwards, 1837 (No. 365 type).

Habitat. Indo-Pacific region.

365. (1d) Bombay, India. Guérin Collection (H. Milne-Edwards' type).

P. CANALICULATUS (Olivier, 1811).

Palaemon canaliculatus Olivier, 1811.

P. marginatus Randall, 1839.

P. plebejus Hess, 1865.

Habitat. Indo-Pacific region and Red Sea.

70. (1a) Sandwich Islands. Nuttall & Townsend.
71. (4a) Mauritius. Guérin Collection.

P. CRASSICORNIS H. Milne-Edwards, 1837 (? No. 366 type.)

Habitat. Indian Region.

366. (1d) Bombay, India. Guérin Collection.

P. INDICUS H. Milne-Edwards, 1837.

Habitat. Indian region.

77. (1a) No locality. Smithsonian Institution.

P. KERATHURUS (Forskael, 1775).

Cancer kerathurus Forskael, 1775.

Palaemon sulcatus Olivier, 1811.

P. trisulcatus Leach, 1815.

Alpheus caramote Risso, 1816.

P. caramote Desmarest 1825, and authors.

Habitat. Seas of Europe.

72. (2a) Greece. Dr. T. B. Wilson.

363. (1d) Algiers. Guérin Collection.

P. MEMBRANACEUS Risso, 1816.

P. longirostris Lucas, 1849 (No. 145, probably type).

P. bocagei Johnson, 1863.

Habitat. Mediterranean.

145. (1a) Algiers. Guérin Collection (? Lucas' type of *P. longirostris*).

P. MONOCEROS Fabricius, 1798.

Habitat. Indian region.

360. (1d) Bombay, India. Guérin Collection.

P. MONODON Fabricius, 1798.

Habitat. Indo-Pacific region.

74. (1a) Mauritius. Guérin Collection.

P. SETIFERUS (Linnaeus, 1766).

Cancer setiferus Linnaeus, 1766.

Palaemon setiferus Olivier, 1811.

P. orbignyanus Latreille, 1817.

P. fluvialis Say, 1817.

Habitat. East coast of America.

67. (2a) Hilton Head, South Carolina. J. J. Craven.

68. (2a) New Orleans, Louisiana. Dr. Walker.

75 & 76. (1a & 2a) No locality. Smithsonian Institution.

361. (1d) Cuba, West Indies. Guérin Collection.

362. (2d) Charleston, South Carolina. Dr. W. Blanding.

P. STYLIROSTRIS Stimpson, 1871.

P. occidentalis Streets, 1871 (No. 73 type).

Habitat. East Coast of Central America.

73. (xa) Panama. McNeil Expedition (Streets' type).

P. VILLOSUS Guérin, 1830 (No. 79 type).

Habitat. Pacific region.

79. (1a) New Ireland. Guérin Collection (Guérin's type).

SICYONIA H. Milne-Edwards, 1830.

S. SCULPTA H. Milne-Edwards, 1830.

Habitat. Atlantic region and Mediterranean.

100. (1a) Hilton Head, South Carolina. J. J. Craven.

SERGESTIDAE Sp. Bate, 1886.

SERGESTES H. Milne-Edwards 1830.

S. ARCTICUS Kroeyer, 1855.

Habitat. North Atlantic.

112. (1a) Lat. 40° 16' 30" North ; Long. 67° 26' 15" West—828 fathoms. Smithsonian Institution.

EUCYPHIDEA.**PASIPHAEIDAE Sp. Bate, 1886.****PASIPHÆA Savigny, 1818.****P. SIVADO** (Risso, 1816).*Alpheus sivado* Risso, 1816.*P. savignyi* H. Milne-Edwards, 1837.*P. brevirostris* H. Milne-Edwards, 1837.**Habitat.** West coast of Europe and Mediterranean.

364. (1d) Nice, France. Guérin Collection.

ATYIDAE Kingsley, 1878.**ATYA Leach, 1817.***Atys* Leach, 1815 (name pre-occupied).

including

Atyoida Randall, 1839.**A. BISULCATA** (Randall, 1839) (No. 231 type).*Atyoida bisulcata* Randall, 1839.**Habitat.** Sandwich Islands.

162. (xa) Oahu, Sandwich Islands. Dr. W. H. Jones.

231. (1d) Sandwich Islands. T. Nuttall (Randall's type, damaged).

A. SCABRA Leach, 1815.**Habitat.** East coast of tropical America.

229. (1d) Mexico. W. Stimpson.

230. (1d) Martinique, Fr. W. I. Guérin Collection.

CARIDINA H. Milne-Edwards, 1837.*Caradina* Kingsley, 1879.**C. AFRICANA** Kingsley, 1882 (No. 163 type).**Habitat.** Zulu-land, South Africa.

163. (xa) Zulu-land, South Africa. S. A. Grout (Kingsley's types).

C. LONGIROSTRIS H. Milne-Edwards, 1837.**Habitat.** Mediterranean.

233. (1d) Algiers. Guérin Collection.

C. TYPUS H. Milne-Edwards, 1837.*Caradina typus* Kingsley, 1879.**Habitat.** Indo-Pacific Region.

232. (1d) Mauritius. Guérin Collection.

ALPHEIDAE Sp. Bate, 1886.**ALOPE** White, 1847.**A. PALPIES** White, 1847.**Habitat.** New Zealand and Australia.

234 (1d) New Zealand. Dr. T. B. Wilson.

ALPHEUS Fabricius, 1878.

including,

Cryptophthalmus Rafinesque, 1814.*Asphalius* Roux, 1831.*Dienecia* Westwood, 1835.*Haplopsyche* Saussure, 1857.*Alpheoides* Paulson, 1880.**A. BELLIMANUS** Lockington, 1876.**Habitat.** Coast of California.

118. (3a) San Diego, California. Joseph Jeans.

A. BREVIROSTRIS (Olivier, 1811).*Palaemon brevirostris* Olivier, 1811.*Asphalius brevirostris* Roux, 1831.*A. malabaricus* Hilgendorf, 1878.**Habitat.** Indo-Pacific region.

245. (3d) Yanaon, French India. Guérin Collection.

246. (1d) Manilla. Dr. Burrough.

A. DENTIPES Guérin, 1832 (No. 239 type).**Habitat.** Mediterranean.

239. (1d) Nice, France. Guérin Collection (Guérin's type).

A. DOTO Miers, 1878.**Habitat.** Australia.

237. (1d) Australia. Dr. T. B. Wilson.

A. EDWARDSII Audouin, 1810 (?).? *A. monodon* Bosc. 1801.*A. pacificus* Dana, 1852.*A. edwardsii* var *leviusculus* Dana, 1852.*A. avarus* Sp. Bate, 1887.*A. leviusculus* (Dana, 1852) Sp. Bate, 1887.**Habitat.** Tropical seas.

129. (xa) Bermuda. Heilprin Collection, 1888.

135. (1a) No locality. W. N. Lockington.

250. (1d) Australia. Dr. T. B. Wilson.

A. HETEROCHELES Say, 1818 (? No. 240 type).*A. armillatus* H. Milne-Edwards, 1837.*Haplopsyche lutaria* Saussure, 1857.

- A. lutaria* Saussure, 1858.
A. bispinosus Streets, 1872 (No. 134 type).
A. equidactylus Lockington, 1877.

Habitat. East coast of America.

133. (2a) Silam, Yucatan. Mexican Expedition, 1890 (*fide* Ives, 1891).
 134. (4a) Panama. McNeill Expedition (Streets' types, *A. bispinosus*).
 240. (1d) No locality. Thomas Say (probably Say's type—damaged).
 241. (2d) No locality. Smithsonian Institution.
 242. (2d) No locality. No donor's name.

A. LAEVIGATUS Guérin, 1830 (No. 251 type).

Habitat. Pacific region.

251. (5d) Timor. Guérin Collection (Guérin's type—damaged).
A. LOTTINII Guérin, 1830 (No. 249 type)¹.
A. ventrosus, H. Milne-Edwards, 1837.
A. laevis Randall, 1839 (No. 247 type).
Alpheoides laevis Kossmann, 1880.

Habitat. Indo-Pacific.

115. (xa) No locality (probably from S. Pacific). No donor's name.
 131. (2a) ? Japan. Smithsonian Institution.
 247. (1d) Sandwich Islands. T. Nuttall (Randall's type of *A. laevis*).
 249. (1d) Mauritius. Guérin Collection (Guérin's type).

A. MALLEATOR Dana, 1852.

Habitat. Brazil.

- 116 & 243. (1a & 2d). No locality. Smithsonian Institution.
 244. (1d) Brazil. Wilkes' Expedition.

A. MEGACHELES (Hailstone, 1835).

Hippolyte rubra Westwood, 1835 (not *A. ruber* H. Milne-Edwards, 1837).

Hippolyte megacheles Hailstone, 1835.

Dienecia rubra Westwood, 1835.

A. edwardsii H. Milne-Edwards, 1837 (not *A. edwardsii* of Audouin).

A. affinis Guise, 1854.

A. milnei Guérin, 1857.

A. platyrhynchus Heller, 1862.

Cryptophthalmus ruber Costa, 1846.

¹See J. S. Kingsley. Bull. Essex. Inst. Vol. XIV. 1882, p. 113.

Habitat. Seas of Europe.

130. (3a) Villa Franca, France. Dr. B. Sharp, 1882.

A. MINUS Say, 1818.

A. formosus Gibbes, 1851.

A. tridentulatus Dana, 1852.

A. saulcyi Guérin, 1857 (No. 236 type).

A. minor Lockington, 1878.

Habitat. East coast of America.

117. (xa) Bermuda. Heilprin Collection, 1888.

236. (1d) Martinique. Guérin Collection (Guérin's type, *A. saulcyi*).

248. (5d) No locality. Smithsonian Institution.

1006. (1a) Port Antonio, Jamaica. W. J. Fox.

? **A. NOVAE-ZELANDIAE** Miers, 1876.

Habitat. New Zealand.

252. (2d) New Zealand. No donor's name.

A. POEYI Guérin, 1857 (No. 235 type).

A. floridianus Kingsley, 1878.

Habitat. West Indian region.

235. (1d) Cuba. Guérin Collection (Guérin's type).

A. SINUOSUS Guérin, 1857 (No. 388 type).

Habitat. West coast of South America.

388. (1d) Callao, Peru. Guérin Collection (Guérin's type).

A. THETIS Miers, 1875.

Habitat. Pacific region.

238. (2d) New Zealand. Dr. T. B. Wilson (*fide* Kingsley, 1882).

ATHANAS Leach, 1815.

A. NITESCENS Leach, 1815.

Palaemon nitescens Leach, 1815.

Arete diocletiana Heller, 1862.

Arete nitescens Heller, 1863.

Habitat. Seas of Europe.

253. (1d) Coast of France. Guérin Collection.

PANDALIDAE Sp. Bate, 1886.

PANDALUS Leach, 1815.

P. ANNULICORNIS Leach, 1815.

P. leavigatus Stimpson, 1854.

P. montagui Smith, 1879.

Habitat. Circumpolar and North Atlantic.

139. (3a) Lat. 46°, 23' N.; Long. 52°, 45' W. U. S. Fish Commission, 1885.

140. (xa) Massachusetts Bay. U. S. Fish Commission.
141. (xa) Salem, Massachusetts. Dr. T. H. Streets.
142. (4a) Halifax, Nova Scotia. Dr. T. H. Streets.
255. (2d) Belfast Bay, Ireland. W. Thompson (in exchange).

P. BOREALIS Kroeyer, 1838.

Habitat. Circumpolar and North Atlantic.

137. (3a) Salem, Massachusetts, 50 fathoms. Dr. T. H. Streets.
138. (4a) Massachusetts Bay, 40–55 fathoms. U. S. Fish Commission.

P. DANAЕ Stimpson, 1854.

Habitat. Northwest coast of America.

144. (3a) Marmot Isle, Alaska (45 fathoms). Dr. W. H. Jones.
254. (1d) Coast of Oregon. W. Stimpson.

P. LEPTOCERUS Smith, 1881.

Habitat. North Atlantic.

143. (4a) Lat. 41°, 48', 45" N., Long. 65°, 47', 00" W. 85 fathoms; U. S. Fish Commission, 1885.

P. PROPINQUUS G. O. Sars, 1869.

Habitat. North Atlantic.

136. (2a) Off Martha's Vineyard, 390 fathoms. U. S. Fish Commission.

HIPPOLYTIDAE Sp. Bate, 1886.

HIPPOLYSMATA Stimpson, 1860.

H. WURDEMANNI (Gibbes, 1850).

Hippolyte wurdemanni Gibbes, 1850.

Habitat. Coasts of Florida.

164. (3a) Pt. Pinellas, Tampa Bay, Florida. Heilprin Collection, 1886 (*fide* Ives, 1891).

HIPPOLYTE Leach, 1815.

H. CRANCHII Leach, 1815.

Palaemon microramphos Risso, 1816.

H. crassicornis H. Milne-Edwards, 1837.

H. yarelli Thompson, 1853.

Habitat. European seas.

258. (2d) Rochelle, France. Guérin Collection.

259. (xd) Pembrokeshire, Wales. E. Wilson.

H. FABRICII Kroeyer, 1842.

Habitat. North Atlantic.

166. (4a) Salem, Massachusetts. Dr. T. H. Streets.

167 & 264. (4a & 3d) No locality. Smithsonian Institution.

265. (1d) Coast of Massachusetts. Dr. T. H. Streets.

H. GAIMARDII H. Milne-Edwards, 1837.

H. gibba Kroeyer, 1842.

Habitat. Circumpolar.

150. (1a) Lat. 46° , $09'$, $30''$ N., Long. 49° , $48'$, $30''$ W. 39 fathoms;
U. S. Fish Commission, 1885.

155. (4a) Spitzbergen. Guérin Collection (Guérin mss. type,
H. Robertii).

257. (1d) Maine coast. Dr. J. H. Slack.

H. GIBBEROSUS H. Milne-Edwards, 1837.

H. gibbosus Dana, 1852.

Habitat. Pacific region.

165. (1a) Oahu, Sandwich Islands. Dr. W. H. Jones, 1874.

175. (2a) ? South Pacific. No donor's name.

H. GROENLANDICA (J. C. Fabricius, 1775).

Astacus groenlandica J. C. Fabricius, 1775.

Cancer aculeatus O. Fabricius, 1780.

Alpheus aculeatus Sabine, 1821.

H. aculeata Owen, 1835.

H. armata Owen, 1839.

H. cornuta Owen, 1839.

Habitat. Circumpolar.

151. (3a) Marmot Isles, Alaska, 45 fathoms. Dr. W. H. Jones.

152. (1a) No locality. No donor's name.

153. (1a) Godhaab, Greenland. Dr. Hayes' Expedition.

H. LILLJEBORGII Danielssen, 1861.

H. securifrons Norman, 1863.

Habitat. North Atlantic.

146. (1a) Lat. 42° , $41'$, $00''$ N., Long. 64° , $55'$, $30''$ W. 62 fathoms;
U. S. Fish Commission, 1885.

H. LINEATA Lockington, 1876.

Habitat. Coast of California.

174. (3a) San Diego, California. Joseph Jeans.

H. MARMORATA (Olivier, 1811).

Palaemon marmoratus Olivier, 1811.

Alpheus marmoratus Lamarck, 1818.

Habitat. Pacific region.

148. (1a) Samoan Islands. J. S. Kingsley (in exchange).

161. (2a) ? South Pacific. No donor's name.

263. (3d) Sandwich Islands. T. Nuttall.

H. MACILENTA Kroeyer, 1840.

Habitat. North Atlantic.

171. (1a) Lat. 47° , $21'$, $00''$ N., Long. 51° , $38'$, $30''$ W. 81 fathoms;
U. S. Fish Commission, 1885.

172. (2a) No locality. Dr. T. H. Streets.

256. (3d) Halifax, Nova Scotia. Dr. T. H. Streets.

H. PHIPPSII Kroeyer, 1840.

H. turgida Kroeyer, 1840.

H. ochotensis Brandt, 1849.

H. vibrans Stimpson, 1871.

Habitat. Circumpolar and North Atlantic.

147. (1a) Cape Cod, Mass, 90 fathoms. U. S. Fish Commission.

266. (2d) Salem, Mass. Dr. T. H. Streets.

H. POLARIS (Sabine, 1821).

Alpheus polaris Sabine, 1821.

Habitat. Circumpolar and North Atlantic.

154. (3a) Salem, Mass. Dr. T. H. Streets.

260. (1d) Arctic Ocean. No donor's name.

H. PRIONOTA Stimpson, 1864.

Habitat. North Pacific.

393. (2a) Marmot Isles, Alaska, 45 fathoms. Dr. W. H. Jones.

H. PUSIOLA Kroeyer, 1842.

Habitat. North Atlantic.

149 & 262. (2a & 4d) No locality. Smithsonian Institution.

261. (1d) Halifax, Nova Scotia. Dr. T. H. Streets.

H. TAYLORI Stimpson, 1857.

Habitat. Pacific coast of United States.

173. (3a) Santa Cruz, California. J. S. Kingsley (in exchange).

LYSMATA Risso, 1826.

Melicerta Risso, 1816 (name preoccupied).

L. SETICAUDA (Risso, 1816).

Melicerta seticauda Risso, 1816.

Habitat. Mediterranean, Japan, Amboina.

271. (2d) Nice, France. Guérin Collection.

SPIRONTOCARIS Sp. Bate, 1887.

S. SPINUS (Sowerby, 1806).

Cancer spinus Sowerby, 1806.

Alpheus spinus Leach, 1815.
Hippolyte sowerbaei Leach, 1815.
Hippolyte spinus Owen, 1835.

Habitat. North Atlantic.

- 156 & 267. (6a & 1d) No locality. Smithsonian Institution.
157. (8a) Salem, Mass. Dr. T. H. Streets.
158. (7a) Coast of Maine, Dr. J. H. Slack.
159. (1a) Bay of Fundy, 10–20 fathoms. U. S. Fish Commission.
160. (8a) Marmot Isle, Alaska, 45 fathoms. Dr. W. H. Jones.

VIRBIUS Stimpson, 1860.

V. VARIANS (Leach, 1815).

Hippolyte varians Leach, 1815.
Hippolyte smaragdina Kroeyer, 1842.

Habitat. European seas.

268. (7d) France. Guérin Collection.

V. VIRIDIS (Otto, 1828).

Alpheus viridis Otto, 1828.
Hippolyte brullei Guérin (No. 269 type).
Hippolyte viridis H. Milne-Edwards, 1837.
Hippolyte mauritanicus Lucas, 1849.
V. brullei Czerniawsky, 1884.

Habitat. Mediterranean and Black Sea.

269. (1d) Coast of Morea. Guérin Collection (Guérin's type of *H. brullei*).

RHINCOCYNETIDAE Ortman, 1890.

RHINCOCYNETES H. Milne-Edwards, 1837.

R. TYPUS H. Milne-Edwards, 1837.

Habitat. Indo-Pacific and Red Sea.

168. (2a) Red Sea. Guérin Collection.
169. (4a) No locality. Smithsonian Institution.
170. (2a) Chili. Wilkes' Expedition.
270. (2d) Chili. Dr. T. B. Wilson.
272. (1d) New Zealand. Dr. T. B. Wilson.

PONTONIIDAE Sp. Bate, 1887.

ANCHISTIA Dana, 1852.

A GRANDIS Stimpson, 1860.

Habitat. Coast of China.

176. (xa) No locality. No donor's name.

PONTONIA Latreille, 1829.*Conchodytes* Peters, 1852.

P. ARMATA H. Milne-Edwards, 1837.

Habitat. New Ireland and Cuba.

344. (1d) Cuba. Guérin Collection.

P. CUSTOS (Forskael, 1775).

Cancer custos Forskael, 1775.*Astacus tyrrhenus* Petagna, 1792.*Alpheus tyrrhenus* Risso, 1816.*Gnathophyllum tyrrhenus* Desmarest, 1825.*P. tyrrhena* Latreille, 1825.*Callianassa thyrrhenus* Risso, 1826.*Alpheus pinnoplax* Otto, 1828.

Habitat. Mediterranean.

177. (xa) Greece. Guérin Collection.

TYPTON Costa, 1844.*Pontonella* Heller, 1856.

T. SPONGICOLA Costa, 1844.

Pontonella glabra Heller, 1856.*T. spongiosus* Sp. Bate, 1868.

Habitat. Mediterranean.

178. (1a) Villa Franca, France. Dr. B. Sharp, 1882.

HYMENOCERIDAE Ortmann, 1890.**HYMENOCERA** Latreille, 1829.

H. LATREILLII Guérin (No. 367 type).

Habitat. Indian region.

367. (1d) Agalega, Seychelles. Guérin Collection (type).

PALAEMONIDAE Sp. Bate, 1887.**BITHYNIS** Philippi, 1860.

P. GAUDICHAUDII (Olivier, 1791).

Palaemon gaudichaudii Olivier, 1791.*Palaemon coementarus* Poeppig, 1836.*Bithynis longimana* Philippi, 1860.*Macrobrachium africanum* Sp. Bate, 1868.

Habitat. Rivers of Chili and Peru.

98. (1a) Chili. Guérin Collection.

359. (1d) Peru. Dr. W. S. W. Ruschenberger.

LEANDER Desmarest, 1849.

L. ADSPERSUS (Rathke, 1837).

Palaemon adspersus Rathke, 1837.

Palaemon squilla (part) H. Milne-Edwards, 1837.

Palaemon fabricii Rathke, 1843.

Palaemon rectirostris Zaddach, 1844.

Palaemon leachii Bell, 1853.

L. rectirostris Heller, 1863.

Habitat. European seas.

128. (1a) Liberia. No donor's name.

L. DEBILIS Dana, 1852.

Habitat. Indo-Pacific.

395. (xa) Oahu, Sandwich Islands. Smithsonian Institution.

L. NATATOR (H. Milne-Edwards, 1837).

Palaemon natator H. Milne-Edwards, 1837.

Palaemon latirostris DeHaan, 1849.

L. erraticus Desmarest, 1849.

Palaemon tenuirostris (Say) Carus, 1884.

Habitat. On weed in all seas.

126. (xa) Lat. 23°, 53' N.; Long. 53°, 06' W. Dr. W. H. Jones.

132. (xa) Lat. 24°, 26' N.; Long. 34°, 32' W. Dr. W. H. Jones.

345. (2d) Atlantic Ocean. Guérin Collection.

346. (2d) Antilles. Guérin Collection.

L. SERRATUS (Pennant, 1777.)

Astacus serratus Pennant, 1777.

Cancer squilla Herbst, 1796.

Palaemon serratus Fabricius, 1798.

Palaemon squilla Latreille, 1806.

Habitat. European seas.

119. (xa) British. No donor's name.

120. (3a) No locality. Géurin Collection.

348. (3d) Wales. E. Wilson.

349. (1d) Coast of France. Guérin Collection.

L. SQUILLA (Linnaeus, 1758).

Cancer squilla Linnaeus, 1758.

Astacus squilla Petagna, 1792.

Palaemon squilla Fabricius, 1793.

Palaemon antennarius H. Milne-Edwards, 1837 (part).

Habitat. Mediterranean.

127 & 398. (2a & 1a) Algiers. Guérin Collection.

L. XIPHIAS (Risso, 1816).

Palaemon xiphias Risso, 1816.

Palaemon crenulatus Risso, 1826.

Habitat. Mediterranean.

350. (1d) Nice, France. Guérin Collection.

NEMATOCARCINUS A. Milne-Edwards, 1881.

Eumiersia S. I. Smith, 1882.

N. CURSOR A. Milne-Edwards, 1881.

Habitat. Deep water of the Atlantic.

87. (1a) Martha's Vineyard, 551 fathoms. U. S. Fish Commission, 1885.

N. ENSIFERUS (S. I. Smith, 1882).

Eumiersia ensifera S. I., Smith, 1882.

Habitat. Deep water of Atlantic.

88. (2a) Martha's Vineyard, 1168 fathoms. U. S. Fish Commission, 1884.

OPLOPHORUS H. Milne-Edwards, 1837.

Xiphocaris Martens, 1872.

O. ELONGATUS (Guérin, 1856).

Hippolyte elongata Guérin, 1856.

O. americanus Saussure, 1858.

Xiphocaris elongata Martens, 1872.

Habitat. West Indies.

396. (2a) San Domingo, West Indies. W. M. Gabb.

PALAEON Fabricius, 1798.

P. ACANTHURUS Wiegmann, 1836.

P. forceps H. Milne-Edwards, 1837.

Bithynis forceps Sp. Bate, 1887.

Habitat. East coast of tropical America.

82. (2a) San Domingo, West Indies. W. M. Gabb.

83. (1a) St. Martin, West Indies. Dr. J. Van Rijgersma.

84 & 85. (xa & 1a) Panama. McNeil Expedition.

P. ACUTIROSTRIS Dana, 1852.

Habitat. Pacific region.

124. (xa) Sandwich Islands. No donor's name.

P. AFRICANUS Kingsley, 1882 (No. 81 type).

Habitat. West Africa.

81. (3a) West Africa. P. DuChaillu (Kingsley's type).

P. CARCINUS (Linnaeus, 1758.)

Cancer carcinus Linnaeus, 1758.

Astacus carcinus Fabricius, 1793.

Bithynis carcinus Sp. Bate, 1887.

Habitat. Indo-Pacific region.

347. (1d) Bombay. Guérin Collection (mss. type of *P. whitei* Guérin.)

358. (1d) Hoogley River, India. Dr. Harlan.

P. FAUSTINUS Saussure, 1858.

Habitat. Rivers of the West Indian region.

122. (6a) Vera Cruz, Mexico. No donor's name.

P. FLUVIATILIS Streets, 1871 (No. 114 type).

Habitat. Rivers of Mexico.

114. (2a) Tehuantepec. No donor's name (Streets' type).

P. GRACILIMANUS Randall, 1839 (No. 125 type).

Habitat. Sandwich Islands.

125. (1a) Sandwich Islands. Nuttall and Townsend (Randall's type).

P. GRANDIMANUS Randall, 1839 (No. 123 type).

Bithynis grandimanus Sp. Bate, 1887.

Habitat. Sandwich Islands.

123. (2a) Sandwich Islands. J. K. Townsend (Randall's type).

P. HIRTIMANUS Olivier, 1811.

P. latimanus De Man, 1887.

Bithynis hirtimanus Sp. Bate, 1887.

Habitat. Indo-Pacific region.

99. (2a) Mauritius. Guérin Collection.

P. JAMAICENSIS Olivier, 1811.

Astacus fluviatilis Sloane, 1725, (not binominal).

P. carcinus Leach, 1815.

P. brachydactylus Wiegmann, 1836.

P. punctatus Randall, 1839 (No. 90 type).

P. aztecus Saussure, 1858.

Macrobrachium americanum Sp. Bate, 1868.

Bithynis jamaicensis Sp. Bate, 1887.

Habitat. West Indies.

90. (1a) No locality. No donor's name (Randall's type of *P. punctatus*).

91. (7a) St. Martin, West Indies. Dr. J. Van Rijgersma.

92. (1a) Cuba, West Indies. Dr. T. B. Wilson.

93. (1a) Guatemala. W. S. Vaux.

94. (8a) San Domingo. W. M. Gabb.
 95. (4a) No locality. Smithsonian Institution.
 287. (1d) Brazil. Dr. T. B. Wilson.
 356. (1d) Cuba, West Indies. Dr. Spackman.
 357. (1d) No locality. No donor's name.
 1001. (2a) Kingston, Jamaica. W. J. Fox, 1891.

P. LAR Fabricius, 1798.

- P. longimanus* Fabricius, 1798.
P. ornatus Olivier, 1811.
P. vagus Heller, 1862.
P. equidens Heller, 1862.
P. reunionensis Hoffman, 1874.
P. mayottensis Hoffman, 1874.
P. madagascarensis Hoffman, 1874.
Bithynis ornatus Sp. Bate, 1887.
Bithynis lar Sp. Bate, 1887.
P. ornatus var *vagus* De Man, 1891.

Habitat. Indo-Pacific region.

97. (4a) Navigator Islands. Dr. W. S. W. Ruschenberger.
 353 & 355. (1d & 1d) Mauritius. Guérin Collection.
 96 & 181. (8a & 1a). No locality. No donor's name.

P. MEXICANUS Saussure, 1858.

- P. dasydactylus* Streets, 1871 (No. 89 type).
P. sexdentatus Streets, 1871 (No. 113 type).

Habitat. Rivers of Mexico and West Indies.

89. (2a) Coatzacoalcos River, Mexico. No donor's name (Streets' type of *P. dasydactylus*).
 113. (3a) Coatzacoalcos River, Mexico. No donor's name (Streets' type of *P. sexdentatus*).

P. OHIOENSIS S. I. Smith, 1874.

- P. sallaei* Guérin, mss. (No. 86 type).

Habitat. Ohio and Mississippi Rivers.

80. (xa) Vicksburg, Mississippi. L. C. Rice.
 86. (2a) Mississippi River. Guérin Collection (Guérin's mss. type).

P. OLTERSII Wiegmann, 1836.

- P. spinimanus* H. Milne-Edwards, 1837.
Bithynis spinimanus Sp. Bate, 1887.
P. cubanus Guérin, mss. (No. 182 type).

Habitat. Rivers of tropical America and of West Africa.

121. (1a) No locality. No donor's name.

182. (1a) Cuba, Guérin Collection (Guérin's mss. type of *P. cubanus*).

354. (1d) Brazil. No donor's name.

PALAEOMONELLA Dana, 1852.

P. YUCATANICA Ives, 1891 (No. 389 type).

Habitat. East coast of Mexico.

389. (1a) Progreso, Yucatan. Mexican Expedition, 1890 (Ives' type.)

PALAEOMONETES Heller, 1869.

P. PALUDOSA (Gibbes, 1851).

Hippolyte paludosa Gibbes, 1851.

P. exilipes Stimpson, 1871.

Habitat. East coast of United States.

352. (4d) Wyandotte Cave, Indiana. E. D. Cope.

390. (1a) Caloosahatche River, Florida. Heilprin Collection 1886 (fide Ives, *P. exilipes*, 1891.).

391. (4a) Lake Hikpoche (canal), Florida. Heilprin Collection 1886 (fide Ives, *P. exilipes*, 1891.).

392. (8a) Lake Okeechobee, Florida. Heilprin Collection 1886 (fide Ives, *P. exilipes*, 1891.).

P. VARIANS (Leach, 1815).

Palaemon varians Leach, 1815.

Palaemon antennarius H. Milne-Edwards, 1837 (part).

Palaemon lacustris Martens, 1857.

Pelias migratorius Heller, 1862.

Anchistia migratorius Heller, 1863.

Leander antennarius Czernaiwsky, 1884.

Habitat. Seas of Europe.

351. (3d) France. Guérin Collection.

P. VULGARIS (Say, 1818).

Palaemon vulgaris Say, 1818.

Habitat. East coast of United States.

179. (5a) Greenport, Long Island. Smithsonian Institution.

180. (xa) No locality. No donor's name.

1028. (xa) Beasley's Point, New Jersey. Dr. B. Sharp, 1893.

1029. (xa) Nantucket, Massachusetts. Dr. B. Sharp, 1893.

NIKIDAE, Sp. Bate, 1887.

PROCESSA Leach, 1815.

Nika Risso, 1816.

Nica Stimpson, 1860.

P. CANALICULATUS Leach, 1815.*Nika edulis* Risso, 1816, and authors.*Nika variegata* Risso, 1816.*Nika canaliculata* Desmarest, 1825.*Nica edulis* Stimpson, 1860.**Habitat.** Seas of Europe.

273. (1d) Nice, France. Guérin Collection.

368. (7a) Nice, France. Guérin Collection.

CRANGONIDAE Sp. Bate, 1887.**CRANGON Fabricius, 1798.****C. CRANGON** (Linnaeus, 1758.)*Cancer crangon* Linnaeus, 1758.*Squilla cinerea* Klein, 1754 (not binomial).*Astacus crangon* Herbst, 1796.*C. vulgaris* Fabricius, 1798, and authors.*C. rufopunctatus* Risso, 1816.*C. septemspinosa* Say, 1818.**Habitat.** All seas.

274 & 370. (1d & xa). Mediterranean. Guérin Collection.

275. (2d) Pembrokeshire, Wales. E. Wilson.

276. (1d) England. E. Wilson.

277. (1d) Belfast Bay, Ireland. W. Thompson (in exchange).

278. (2d) California. W. Stimpson.

279. (3d) Salem, Massachusetts. Dr. T. H. Streets.

280 & 372. (2d & 6a) No locality. Smithsonian Institution.

369. (8a) No locality. No donor's name.

371. (7a) Beasley's Point. New Jersey. S. Ashmead.

397. (3a) Coast of Massachusetts. U. S. Fish Commission.

C. FRANCISCORUM Stimpson, 1856.**Habitat.** Coast of California.

373. (9a) San Francisco, California. W. Stimpson.

374. (2a) No locality. Smithsonian Institution.

375. (xa) San Francisco. California. E. H. Kelly.

C. TENUIFRONS Kingsley, 1882 (No. 377 type).**Habitat.** Alaska.377. (2a) Marmot Isles, Alaska, 45 fathoms. Dr. W. H. Jones
(Kingsley's type).**EGERON** Risso, 1816.**Aegeon** Kinahan, 1862.**E. CATAPHRACTUS** (Olivi, 1792).*Cancer cataphractus* Olivi, 1792.

E. loricatus Risso, 1816.

Crangon catapractus H. Milne-Edwards, 1837.

Crangon cataphractus Heller, 1863.

Habitat. European seas.

282. (1d) Algiers. Guérin Collection.

E. FASCIATUS (Risso, 1816.)

Crangon fasciatus Risso, 1816.

Aegeon fasciatus Kinahan, 1862.

Habitat. European seas.

281. (4d) Mediterranean. Guérin Collection.

NECTOCRANGON Brandt, 1852.

Argis Kroeyer, 1841 (name preoccupied).

N. ALASKENSIS Kingsley, 1878 (No. 384 type).

Habitat. Alaska.

384. (1a) Marmot Isle, Alaska, 45 fathoms, Dr. W. H. Jones
(Kingsley's type).

N. LAR (Owen, 1839.)

Crangon lar Owen, 1839.

Argis lar Kroeyer, 1843.

Habitat. Arctic seas and North Atlantic.

382. (1a) Newfoundland. Guérin Collection.

383. (3a) Halifax, Nova Scotia. Dr. T. H. Streets.

PARACRANGON Dana, 1852.

P. ECHINATUS Dana, 1852.

Habitat. Northwest coast of America.

387. (2a) Marmot Isle, Alaska, 45 fathoms. Dr. W. H. Jones.

PONTOPHILUS Leach, 1815.

P. NORVEGICUS (M. Sars, 1861.)

Crangon norvegicus M. Sars 1861.

Habitat. North Atlantic.

385. (2a) Lat. 43°, 32' N., Long. 59°, 22' W. 110 fathoms
U. S. Fish Commission.

P. SPINOSUS Leach, 1815.

Crangon cataphractus Olivi, 1792 (part).

Crangon spinosus Lamarck, 1818.

Cheraphilus spinosus Kinahan, 1862.

Habitat. European seas.

283. (2d) Mediterranean. Guérin Collection.

SABINEA Owen, 1835.**S. SEPTEMCARINATA** (Sabine, 1824).*Crangon septemcarinata.* Sabine, 1824.**Habitat.** Arctic seas and North Atlantic.

284. (1d) No locality. Smithsonian Institution.

386. (4a) Off Salem, Massachusetts, 35 fathoms. Dr. T. H. Streets.

SCLEROCRANGON G. O. Sars, 1885.**S. BOREAS** (Phipps, 1774).*Cancer boreas* Phipps, 1774.*Cancer homaroides* O. Fabricius, 1780.*Astacus boreas* Olivier, 1791.*Crangon boreas* Fabricius, 1798.*Cheraphilus boreas* Miers, 1877.**Habitat.** Arctic seas and North Atlantic.

285. (1d) Lat. 66° North, 40 fathoms. No donor's name.

378. (2a) Halifax, Nova Scotia. Dr. T. H. Streets.

379. (5a) Spitzbergen. Guérin Collection.

380. (2a) Smithsonian Institution. No locality.

381. (1a) McCormick Bay. West Greenland Expedition, 1891.

S. SALEBROSUS (Owen, 1839).*Crangon salebrosus* Owen, 1839.**Habitat.** Arctic seas.

376. (1a) No locality. Smithsonian Institution.

GNATHOPHYLLIDAE Ortmann, 1890.**DRIMO** Risso, 1826.*Gnathophyllum* Latreille, 1829.**D. ELEGANS** (Risso, 1816).*Alpheus elegans* Risso, 1816.*Gnathophyllum elegans* Latreille, 1829, and authors.**Habitat.** Mediterranean.

286. (5d) Oran, Algiers. Guérin Collection.

SUMMARY.

Stomatopoda, genera, 4 species	17	(var 0)	types	1 doubtful types	1.
Peneidea,	"	3	"	15 (" 1)	" 3 " " 1.
Eucyphidea,	"	33	"	96 (" 0)	" 12 " " 1.
Total	"	40	"	128 (" 1)	" 16 " " 3.