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Boston Society of Natural History

Volume 7

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FAUNA OF NEW ENGLAND

Part 2

List of the Invertebrates

Volume 1

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Occasional Papers
OF THE
Boston Society of Natural History.
VII.

FAUNA OF NEW ENGLAND.

4.

LIST OF THE ECHINODERMATA.

By HUBERT LYMAN CLARK.

BOSTON:
PRINTED FOR THE SOCIETY FROM THE
GURDON SALTONSTALL FUND.
FEBRUARY, 1905.

	Me.	N. H.	Mass.	R. I.	Conn.
Ctenodiscus crispatus	+		+		
Hippasteria phrygiana	—		+		
Solaster endeca	+		+		
Crossaster papposus	+		+		
Pteraster pulvillus		—			
militaris	—		—		
Cribrella pectinata	—				
sanguinolenta	+		+	—	—
Stichaster albulus	+				
Asterias austera			—		
forbesi	+		+	—	+
littoralis	+				
tenera	—		—	—	
vulgaris	+		+	—	+
Ophiura brevispina			—		—
Ophioglypha affinis	—				
robusta	+		+		
sarsii	+		+		
Ophiopholis aculeata	+		+	+	+
Amphipholis squamata	+		—	—	
Amphioplus abdita					+
Ophiacantha bidentata	—				
Gorgonocephalus agassizii	+		—		
Strongylocentrotus dröbachiensis	+		+	—	—
Arbacia punctulata			+	—	+
Echinarachnius parma	+		+	+	+
Mellita pentapora			—		
Cucumaria calcigera	—		+		
frondosa	+		+		
minuta	—				
pulcherrima			—		
Thyone briareus			+		—
elongata			—		
scabra			—	—	
unisemita			+	—	
Thyonidium productum	—				
pellucidum	—				
Psolus phantapus	—		+		
fabricii	+		+		
squamatus	—				
Caudina arenata			+		

	Me.	N	H.	Mass.	R. I.	Conn.
Trochostoma oöliticum				—		—
turgidum	—			—		
Synapta inhaerens				+		+
roseola				—		—
Chiridota laevis	+			—		

ECHINODERMATA.

ASTEROIDEA. EUASTEROIDEA. PHANEROZONIA.

PORCELLANASTERIDAE.

1. Ctenodiscus crispatus (Retzius) Düben & Koren.

Asterias crispata Retzius, Dissert. Asterianum, 1805, p. 17. "Oceano Indico."

Ctenodiscus corniculatus Duncan & Sladen, Echinod. Arctic Sea, 1881, p. 49, pl. 3, figs. 17–20.

Massachusetts Bay and northward; in 5 fathoms or more.[1]

GONIASTERIDAE.

2. Hippasteria phrygiana (Parelius) Agassiz.

Verrill, Rept. U. S. fish comm. for 1883, 1885, pt. 11, p. 542, pl. 17, fig. 47.

Asterias phrygiana Parelius, K. Norske. vid. selsk. Schrifter, 1768, vol. 4, p. 423.

Cape Cod (off Chatham Light) and northward; in 20 fathoms or more.

CRYPTOZONIA.

SOLASTERIDAE.

3. Solaster endeca (Linné) Forbes.

Purple sun-star.

Clark, Bull. U. S. fish comm. for 1902, 1904, vol. 22, p. 556, pl. 3, figs. 12–13, pl. 4, fig. 23.

[1] The statements regarding the geographical and bathymetrical distribution refer only to occurrences on the New England coast, which is considered as including the mainland shore, with the neighboring islands, ledges, banks, and shoals out to a depth of 50 fathoms. Only such species therefore as have been reported from less than 50 fathoms are included.

SOLASTERIDAE.

Asterias endeca Linné Mantissa, 1771, p. 543. "IN OCEANO NORVEGICO."

Crab Ledge, off Chatham, Mass., and northward; low water mark (Maine and northward) to far beyond the 50 fathom line.

4. CROSSASTER PAPPOSUS (Linné) Müller & Troschel.

Common sun-star.

Duncan & Sladen, Echinod. Arctic Sea, 1881, p. 36, pl. 3, figs. 1–4.

Asterias papposa Linné, Syst. nat. ed. 12, 1767, p. 1098. "IN O. EUROPAEO & ASIATICO."

Massachusetts Bay and northward; low water mark (northerly) to far beyond the 50 fathom line.

PTERASTERIDAE.

5. PTERASTER PULVILLUS M. Sars.

M. Sars. Overs. Norges Echinod., 1861, p. 62, pl. 6, figs 14–18, pls. 7–8. "MANGER."

Off Isle of Shoals, N. H., in 35 fathoms.

6. PTERASTER MILITARIS (Müller) Müller & Troschel.

M. Sars, Overs. Norges Echinod., 1861, p. 48, pl. 3, figs. 8–9, pls. 4–6.

Asterias militaris Müller, Zool. Dan. Prod., 1776, p. 234.——

Massachusetts Bay and northward; in 10 fathoms or more.

ASTEROIDEA. CRYPTOZONIA.

ECHINASTERIDAE.

7. Cribrella pectinata Verrill.

Verrill, Proc. U. S. nat. mus., 1894, vol. 17, p. 278. "Eastport, Me., in shallow water."

Eastport, Maine, "Shallow water (about 20 fathoms)" (Verrill).

8. Cribrella sanguinolenta (Müller) Lütken.

Clark, Bull. U. S. fish comm. for 1902, 1904, vol. 22, p. 555, pl. 3, figs. 10–11; pl. 4, fig. 22.

Asterias sanguinolenta Müller, Zool. Dan. Prod. 1776, p. 234. ——

Off Connecticut and Rhode Island in the deeper, cooler water; common from Woods Hole, Mass., northward; low water mark to great depths.

STICHASTERIDAE.

9. Stichaster albulus (Stimpson) Verrill.

Duncan & Sladen, Echinod. Arctic Sea, 1881, p. 29, pl. 2, figs. 13–17.

Asteracanthion albulus Stimpson, Invert. Grand Manan, 1853, p. 14, pl. 1, fig. 5. "in 4 or 5 fathoms, on the east side of the islands."

Eastport, Maine, and northward; low water mark to far beyond the 50 fathom line.

ASTERIIDAE.

10. Asterias austera Verrill.

Verrill, Amer. journ. sci., 1895, ser. 3, vol. 49, p. 209. "33 to 35 fath. George's Bank and off Cape Cod."

Clark, Bull. U. S. fish comm. for 1902, 1904, vol. 22, p. 555, pl. 2, figs. 8–9; pl. 4, figs. 18–19.

Crab Ledge, off Chatham, Mass., and northward; in 17–35 fathoms.

ASTERIIDAE.

11. Asterias forbesi (Desor) Verrill.

Common starfish.

Clark, Bull. U. S. fish comm. for 1902, 1904, vol. 22, p. 552, pl. 1, figs. 1–2; pl. 4, figs. 14–15.

Asteracanthion forbesi Desor, Proc. Boston soc. nat. hist., 1848, vol. 3, p. 67. "eight fathoms in the Vineyard Sound."

Long Island Sound to Casco Bay, Maine; low water mark to 27 fathoms.

12. Asterias littoralis (Stimpson) Verrill.

Verrill, Proc. Boston soc. nat. hist., 1866, vol. 10, p. 349.

Asteracanthion littoralis Stimpson. Invert. Grand Manan, 1853, p. 14. "middle region of the littoral zone."

Casco Bay, Maine, and northward; low water mark to 23 fathoms.

13. Asterias tenera Stimpson.

Stimpson, Proc. Boston soc. nat. hist., 1862, vol. 8, p. 269. "in twenty fathoms, in Massachusetts Bay, ten miles south of Cape Ann."

Clark, Bull. U. S. fish comm. for 1902, 1904, vol. 22, p. 554, pl. 2, figs. 5–7; pl. 4, figs. 20–21.

Asterias compta Stimpson, *op. cit.*, p. 270.

Cold water south of Rhode Island, east and north; in 10 fathoms or more.

14. Asterias vulgaris Verrill.

Northern starfish.

Verrill, Proc. Boston soc. nat. hist., 1866, vol. 10, p. 347. "from Cape Cod and South Shoals, Mass., to Labrador."

ASTEROIDEA CRYPTOZONIA.

ASTERIIDAE.

Clark, Bull. U. S. fish comm. for 1902, 1904, vol. 22, p. 553, pl. 1, figs. 3–4; pl. 4, figs. 16–17.

Eastern part of Long Island Sound and northward; low water mark to far beyond the 50 fathom line.

OPHIUROIDEA. OPHIURAE.

OPHIURIDAE.

15 (1). Ophiura brevispina Say.

Say, Journ. acad. nat. sci. Phil., 1825, vol. 5, p. 149. "the coast of Florida."

Clark, Bull. U. S. fish comm. for 1902, 1904, vol. 22, p. 558, pl. 5, figs. 28–30; pl. 7, figs. 37–38.

North Falmouth, Buzzards Bay, Mass., and southward; low water mark to beyond the 50 fathom line.

OPHIOLEPIDIDAE.

16 (2). Ophioglypha affinis (Lütken) Lyman.

Lyman, Ill. cat. [Mem.] mus. comp. zoöl., 1865, vol. 1, p. 52.

Ophiura affinis Lütken, Add. ad. hist. Oph., 1858, pt. 1, p. 45, pl. 2, figs. 10 *a*, *b*. "ved Bollaerene og ved Asgaardstrand i Christiana Fjord paa 20–30 favnes dybde."

Casco Bay, Maine, and northward; in 20 fathoms or more.

17 (3). Ophioglypha robusta (Ayres) Lyman.

Lyman, Ill. cat. [Mem.] mus. comp. zoöl., 1865, vol. 1, p. 45.

Clark, Bull. U. S. fish comm. for 1902, 1904, vol. 22, p. 558, pl. 6, figs. 31–32; pl. 7, figs. 39–40.

Ophiolepis robusta Ayres, Proc. Boston soc. nat. hist., 1852, vol. 4, p. 134. "Massachusetts Bay."

OPHIUROIDEA. OPHIURAE.

OPHIOLEPIDIDAE.

Crab Ledge off Chatham, Mass., and northward; low water mark (northerly) to far beyond the 50 fathom line.

18 (4). Ophioglypha sarsii (Lütken) Lyman.

Lyman, Ill. cat. [Mem.] mus. comp. zoöl., 1865, vol. 1, p. 41, figs. 2, 3.

Ophiura sarsii Lütken, Vid. meddel., 1854, nos. 4–7, p. 101. "Bergen og Godhavn." Add. ad. hist. Oph., 1858, pt. 1, p. 42, pl. 1, figs. 3–4.

Massachusetts Bay and northward; in 15 fathoms or more.

AMPHIURIDAE.

19 (5). Ophiopholis aculeata (Linné) Gray.

Daisy brittle-star.

Clark, Bull. U. S. fish comm. for 1902, 1904, vol. 22, p. 559, pl. 5, figs. 24–27; pl. 7, figs. 41–42.

Asterias aculeata Linné, Syst. nat., ed. 12, 1767, vol. 1, p. 1101. "in Oceano."

Long Island Sound and northward; low water mark (northerly) to great depths.

20 (6). Amphipholis squamata (Delle Chiaje) Verrill.

Clark, Bull. U. S. fish comm. for 1902, 1904, vol. 22, p. 560, pl. 6, figs. 33–34; pl. 7, figs. 43–44.

Asterias squamata Delle Chiaje, Mem., 1828, vol. 3, p. 77.——

Long Island Sound and northward; low water mark to beyond the 50 fathom line.

21 (7). Amphioplus abdita (Verrill) Verrill.

Verrill, Trans. Conn. acad. sci., 1899, vol. 10, p. 314.

Amphiura abdita Verrill, Amer. journ. sci., 1871, ser. 3, vol.

OPHIUROIDEA OPHIURAE.

AMPHIURIDAE.

2, p. 132. "Off Thimble Islands and Savin Rock, near New Haven, in 3 to 6 fathoms, muddy bottom." Invert. anim. Vineyard Sound, 1873, p. 720.

Long Island Sound; in 3–8 fathoms.

OPHIACANTHIDAE.

22 (8). Ophiacantha bidentata (Retzius) Ljungman.

Ophiacantha spinulosa Lyman, Ill. cat. [Mem.] mus. comp. zoöl., 1865, vol. 1, p. 93, figs. 6–7.

Asterias bidentata Retzius, Dissert. Asterianum, 1805, p. 33. "Mari Norwegico."

Casco Bay, Maine, and northward; in 15 fathoms or more.

EURYALAE.

GORGONOCEPHALIDAE.

23 (9). Gorgonocephalus agassizii (Stimpson) Lyman.

Basket-fish.

Clark, Bull. U. S. fish comm. for 1902, 1904, vol. 22, p. 561, pls. 6, figs. 35–36; pl. 7, figs. 45–47.

Astrophyton agassizii Stimpson, Invert. Grand Manan, 1853, p. 12. "Grand Manan. . . . coraline zone."

Off Nantucket and northward; low water mark (northerly) to far beyond the 50 fathom line.

ECHINOIDEA. EUECHINOIDEA. DIADEMATOIDA.

ECHINOMETRIDAE.

24 (1). Strongylocentrotus dröbachiensis (O. F. Müller) A. Agassiz.

Green sea-urchin.

A. Agassiz, Rev. Echini, 1872, p. 162, 277; pl. 4ª, figs. 2–4.

ECHINOIDEA. EUECHINOIDEA. DIADEMATOIDA.

ECHINOMETRIDAE.

Echinus dröbachiensis O. F. Müller, Zool. Dan. Prod., 1776, p. 235. ——

Long Island Sound and northward; low water mark (northerly) to far beyond the 50 fathom line.

ARBACIIDAE.

25 (2). Arbacia punctulata (Lamarck) Gray.

Common sea-urchin.

A. Agassiz, Rev. Echini, 1872, p. 91, 263, pl. 2, fig. 4.

Echinus punctulatus Lamarck Anim. sans Vert., 1816, vol. 3, p. 47. "l'océan des Grandes-Indes."

Off Sankaty Head, Nantucket, through Vineyard and Long Island Sounds, and southward; low water mark to beyond the 50 fathom line.

CLYPEASTROIDA.

SCUTELLIDAE.

26 (3). Echinarachnius parma (Lamarck) Gray.

Sand-dollar.

A. Agassiz, Rev. Echini, 1872, p. 107, 316, pl. 11e, figs. 4–5.

Scutella parma Lamarck, Anim. sans Vert. 1816, vol. 3, p. 11. "l'océan des Indes."

Long Island Sound and northward; low water mark to far beyond the 50 fathom line.

27 (4). Mellita pentapora (Gmelin) Lütken.

Key-hole urchin.

Echinus pentaporus Gmelin, Syst. nat., 1788, vol. 1, pt. 6, p. 3189.

Mellita testudinata Klein. A. Agassiz, Rev. Echini, 1872, p. 141, 322, pl. 12^{c}, figs. 1–2.

ECHINOIDEA. CLYPEASTROIDA.

SCUTELLIDAE.

Vineyard Sound and Nantucket Shoals and southward; shallow water.

HOLOTHURIOIDEA. ACTINOPODA.

DENDROCHIROTAE.

28 (1). Cucumaria calcigera (Stimpson) Selenka.

Duncan & Sladen, Echinod. Arctic Sea, 1881, p. 5, pl. 1, figs. 3–8.

Pentacta calcigera Stimpson, Proc. Boston soc. nat. hist., 1851, vol. 4, p. 67.——

Massachusetts Bay and northward; in 7 fathoms or more.

29 (2). Cucumaria frondosa (Gunnerus) Forbes.

Sea-cucumber.

Clark, Bull. U. S. fish comm. for 1902, 1904, vol. 22, p. 566, pl. 11, figs. 65–66; pl. 12, figs. 76–80.

Holothuria frondosa Gunnerus, K. vet. akad. Handl., 1767, vol. 28, p. 115, pl. 4, figs. 1–2.

Off Sankaty Head, Nantucket, and northward; low water (northerly) to far beyond the 50 fathom line.

30 (3). Cucumaria minuta (Fabricius) Lütken.

Danielssen & Koren, Norw. North Atl. exp., 1882, p. 77, 81, pl. 13, fig. 2.

Holothvria minvta Fabricius, Fauna Groenlandica, 1780, p. 354. "ad littora maris in fundo arenoso."

Eastport, Maine and northward; in 1 fathom or more.

31 (4). Cucumaria pulcherrima (Ayres) Lampert.

Clark, Bull. U. S. fish comm. for 1902, 1904, vol. 22, p. 567, pl. 11, fig. 70; pl. 12, figs. 81–85.

Pentamera pulcherrima Ayres, Proc. Boston, soc. nat. hist. 1852, vol. 4, p. 207. "NEAR FORT JOHNSON, S. C."

Buzzard's Bay and Vineyard Sound, Mass. The only New England specimens known have been found on beaches after storms.

32 (5). THYONE BRIAREUS (Lesueur) Selenka.

Common Thyone.

Clark, Bull. U. S. fish comm. for 1902, 1904, vol. 22, p. 567, pl. 11, fig. 67; pl. 13, figs. 95–102.

Holothuria briareus Lesueur, Journ. acad. nat. sci. Phil., 1824, vol. 4, p. 161. "COAST OF FLORIDA."

Vineyard Sound, Buzzards Bay, Mass., and southward; low water to 10 fathoms.

33 (6). THYONE ELONGATA (Ayres) Lampert.

Lampert, Die seewalzen — Holothurioidea, 1885, p. 159.

Thyonidium elongatum Ayres, Proc. Boston soc. nat. hist., 1851, vol. 4, p. 60. "GEORGE'S BANK. . . . THIRTY FATHOMS."

?Massachusetts Bay.

34 (7). THYONE SCABRA Verrill.

Verrill, Amer. journ. sci., 1873, ser. 3, vol. 5, p. 100. "NEAR ST. GEORGE'S BANKS, IN 110 AND 150 FATHOMS."

Clark, Bull. U. S. fish comm. for 1902, 1904, vol. 22, p. 568, pl. 11, fig. 71; pl. 13, figs. 91–94.

Narragansett Bay and northward; in 10 fathoms or more.

35 (8). THYONE UNISEMITA (Stimpson) Ludwig.

Clark, Bull. U. S. fish comm. for 1902, 1904, vol. 22, p. 569, pl. 11, figs. 68–69; pl. 12, figs. 86–90.

Anaperus unisemita Stimpson, Proc. Boston soc. nat. hist., 1851, vol. 4, p. 8. "Grand Bank, and the coast of New England."

Narragansett Bay, South Shoals of Nantucket, and northward; in 10 fathoms or more.

36 (9). Thyonidium productum (Ayres) Stimpson.

Stimpson, Invert. Grand Manan, 1853, p. 17.

Duasmodactyla producta Ayres, Proc. Boston soc. nat. hist., 1852, vol. 4, p, 244. "Eastport, Me."

Eastport, Maine (Ayres), Casco Bay, Maine (Kingsley). Depth?

37 (10). Thyonidium pellucidum (O. F. Müller) Düben & Koren.

Düben & Koren, Kgl. vet.-akad. Handl. för 1844, 1846, p. 303, pl. 4, figs. 15–17, pl. 11, fig. 57.

Holothuria pellucida O. F. Müller, Zool. Dan. Prod., 1806, vol. 4, p. 17, pl. 135, fig. 1. "In arvenosis submarinis locis in Norlandia."

Casco Bay, Maine (Kingsley, as *Thyonidium hyalinum*). Depth?

38 (11). Psolus phantapus (Strussenfeldt) Forbes.

Forbes, Hist. Brit. Starfishes, 1841, p. 203, fig.

Holothuria phantapus Strussenfeldt, Abh. kgl. Schurd. akad., wiss., 1767, vol. 27, p. 268–275, pl. 10. "zwischen Landskrona und Hwen."

Massachusetts Bay, and northward; low water mark to far beyond the 50 fathom line.

39 (12). Psolus fabricii (Düben & Koren) Lütken.

Kingsley, Mem. Peabody acad. sci., 1881, vol. 1, p. 1–14, pl. 1, figs. 1–5; pl. 2, figs. 6–12.

Cuvieria fabricii Düben & Koren, Kgl. vet.-akad. Handl. för 1844, 1846, p. 316.——

Massachusetts Bay and northward; low water mark (northerly) to far beyond the 50 fathom line.

40 (13). Psolus squamatus (O. F. Müller) Lütken.

Holothvria squamata O. F. Müller Zool. Dan. Prod., 1776, p. 232.——

Cuvieria squamata O. F. Müller. Düben & Koren, Kgl. vet.-akad. Handl. för 1844, 1846, p. 315, pl. 4, figs. 35–41.

? Massachusetts Bay and northward; in 20 fathoms or more.

MOLPADIIDAE.

41 (14). Caudina arenata (Gould) Stimpson.

Gerould, Proc. Boston soc. nat. hist., 1896, vol. 27, p. 7–74, pls. 1–8. Bull. Mus. comp. zoöl., 1896, vol. 29, p. 121–190, pls. 1–8.

Chirodota arenata Gould, Invert. Mass., 1841, p. 346, fig. "Chelsea beach."

Cuttyhunk Island, Mass., and northward; low water mark to 18½ fathoms.

42 (15). Trochostoma oölitıcum (Pourtales) Danielssen and Koren.

Clark, Bull. U. S. fish comm. for 1902, 1904, vol. 22, p. 570, pl. 11, fig. 72; pl. 13, figs. 105–108.

Chirodota oolitica Pourtales, Proc. Amer. ass. adv. sci. for 1851, 1851, p. 13. "Atlantic coast of the United States .... stomachs of fishes."

Off Block Island and northward; in 18 fathoms or more.

43 (16). Trochostoma turgidum (Verrill) Théel.

Molpadia turgida Verrill, Amer. journ. sci., 1879, ser. 3, vol.

HOLOTHURIOIDEA. ACTINOPODA.

MOLPADIIDAE.

17, p. 473. "Bay of Fundy, ... Massachusetts Bay, 40–100 fath., soft mud, ... Gulf of Maine, ... Casco Bay . . . . off Nova Scotia, ... Gulf of St. Lawrence."

Massachusetts Bay and northward; in 40 fathoms or more.

PARACTINOPODA.

SYNAPTIDAE.

44 (17). Synapta inhaerens (O. F. Müller) Düben & Koren

Common Synapta.

Clark, Bull. U. S. fish comm. for 1899, 1901, vol. 19, p. 23, pl. 10, fig. 3, pl. 11, figs. 1, 3, 5, 7.

Holothvria inhaerens O. F. Müller, Zool. Dan. Prod. 1776, p. 232.——

Long Island Sound and northward; low water mark to far beyond the 50 fathom line.

45 (18). Synapta roseola (Verrill) Théel.

Clark, Bull. U. S. fish comm. for 1899, 1901, vol. 19, p. 24, pl. 10, figs. 1–2, pl. 11, figs. 2, 4, 6, 8.

Leptosynapta roseola Verrill, Invert. anim. Vineyard Sound, 1873, p. 716. "Long Island Sound, at Savin Rock, near New Haven; Vineyard Sound, at Naushon Island; in sand at low-water mark."

Cape Cod and southward; near low water mark.

46 (19). Chiridota laevis (Fabricius) Grube.

Duncan & Sladen, Echinod. Arctic Sea, 1881, p. 12, pl. 1, figs. 14–19.

Holothvria laevis Fabricius, Fauna Groenlandica, 1780, p. 353. "ad scupulos maris in fundo argilloso."

Massachusetts Bay and northward; low water mark to 45 fathoms.

Occasional Papers
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VII.

FAUNA OF NEW ENGLAND.

5.

LIST OF THE CRUSTACEA.

By MARY J. RATHBUN.

BOSTON:
PRINTED FOR THE SOCIETY FROM THE
GURDON SALTONSTALL FUND.
July, 1905.

	Me.	N. H.	Vt.	Mass.	R. I.	Conn.	Gulf of Me., Georges Bk., etc.
Ocypode albicans				—	—		
Uca pugnax				+	—	—	
pugilator				+	—	—	
minax				—	—	—	
Geryon quinquedens	—			—	—		—
Grapsus grapsus				—			
Pachygrapsus transversus				—			
Planes minutus				—	—		
Sesarma reticulatum				—		—	
Pinnotheres ostreum				—	—	—	
maculatus				+	—	—	
Pinnixa chaetopterana				—		—	
sayana				—		—	
Eupanopeus herbstii				—	—	—	
Eurypanopeus depressus				+	—	—	
Neopanope texana sayi				+	—	—	
Hexapanopeus angustifrons				—	—	+	
Rhithropanopeus harrisii	—			—		+	
Carcinides maenas	—			+	—	—	
Portunus sayi				—			
Callinectes sapidus				—	—	—	
Ovalipes ocellatus				+	—	—	
Cancer irroratus	—	—		+	—	—	—
borealis	—	—		+	—	—	—
Chionoecetes opilio	—						—
Hyas coarctatus	+	—		+	—		—
araneus	—			+			—
Pelia mutica				+	—	—	
Libinia emarginata	—	—		+	—	+	
dubia				+	—	—	
Heterocrypta granulata				—			
Calappa flammea				—			
Petrolisthes armatus						—	
Polyonyx macrocheles					—		
Lithodes maja	—			—			—
Pagurus pollicaris				+	—	—	

	Me.	N. H.	Vt.	Mass.	R. I.	Conn.	Gulf of Me., Georges Bk., etc.
Pagurus acadianus	+	—		+	—	—	—
longicarpus	—			+	—	+	
pubescens	+			—	—		—
kroyeri	—			—	—		+
politus				+			—
annulipes				—			
Emerita talpoida				+			
Callianassa stimpsoni				+	—	—	
Upogebia affinis				+		—	
Axius serratus				—	—	—	—
Naushonia crangonoides				—			
Homarus americanus	—	—		+	—	—	
Cambarus bartonii	—		+	—			
Penaeus brasiliensis				—			
Crago septemspinosus	+	—		+	—	+	—
Sclerocrangon boreas	+			—			—
Pontophilus norvegicus				+			—
Sabinea septemcarinata	—	—		—			+
sarsii							+
Caridion gordoni	—	—		—			—
Latreutes ensiferus				—			
Hippolyte zostericola				+			
Spirontocaris groenlandica	—			—	—		—
spina	+			—			—
liljeborgii	—			+			—
phippsii	—			—			—
polaris	—			—			—
fabricii	—			+			—
gaimardii	—			—			—
pusiola	+			—	—	—	—
Pandalus borealis	—			—			—
montagui	—			—	—		—
leptocerus	—			+	—		—
propinquus				—			+
Acanthephyra agassizii							—
Palaemonetes vulgaris		—		+	—	—	
Pasiphaea tarda				—			—
Rhoda inermis	—			—			—

	Me.	N. H.	Vt.	Mass.	R. I.	Conn.	Gulf of Me., Georges Bk., etc.
Nyctiphanes norvegica	—			—			—
Mysis mixta	—			—			—
stenolepis	—			—		—	
americana	—			+	—	—	
Heteromysis formosa				—		—	
Erythrops goësii				—			
Parerythrops robusta				—			
Pseudomma roseum							—
Lysiosquilla armata				—			
scabricauda				—			
Chloridella empusa				+	+	—	
Lamprops quadriplicata	—			—			
Leucon nasicoides	—						
Eudorella hispida	—			—			—
pusilla	—			—	—		
deformis				—			
Diastylis lucifera	—						
sculpta	—			—	—		—
quadrispinosa	—			—	—		—
abbreviata	—			—			
polita	—			—			—
Leptostylis ampullacea							—
longimana	—						
Campylaspis rubicunda	—			—			
Tanais cavolinii						—	
Leptognathia coeca				—			
Heterotanais limicola				—			
Leptochelia rapax				—			
savignyi				—		—	
Gnathia cerina	—			—			
Anthura tenuis	—			—	—	—	
Cyathura carinata				—	—	—	
Calathura brachiata	—			—			—
Cirolana concharum				+	—		
polita	—			—			—
Aega psora				—			—

	Me.	N. H.	Vt.	Mass.	R. I.	Conn.	Gulf of Me., Georges Bk., etc.
Rocinela americana	—						
Syscenus infelix				—			
Aegathoa loliginea						—	
Nerocila munda				—			
Cymothoa excisa				—			
Livoneca ovalis				—		—	
Limnoria lignorum	+			+	—	—	
Sphaeroma quadridentatum				—	—	—	
Chiridotea coeca				+		+	
tuftsii	+			—		—	—
Idothea marina	—			+	—	—	
phosphorea	—			—	—	—	
metallica	—			—	—		—
Synidotea nodulosa							—
Erichsonella attenuata						—	
filiformis	—			—		—	
Edotea triloba	—			—		—	
montosa	—			—	—	—	
Astacilla granulata				—			—
Asellus communis				—	—	—	
Jaera albifrons	—			+	—	—	
Janira alta	—			—			
Munna fabricii	—						
Munnopsis typica	—						
Ilyarachna, sp.				—			
Oniscus asellus	—			—	—		
Philoscia vittata				—		—	
Porcellio rathkei	—			—	—		
spinicornis						—	
scaber	—			—		—	
convexus				—			
Armadillidium vulgare				—	—		
Ligyda oceanica					—		
Actoniscus ellipticus						—	
Scyphacella arenicola				—			
Phryxus abdominalis	—			—			—
Stegophryxus hyptius				—	—		
Bopyroides hippolytes	+			—			—
Probopyrus pandalicola				—	—		

	Me.	N. H.	Vt.	Mass.	R. I.	Conn.	Gulf of Me., Georges Bk., etc.
Ione thompsoni				—			
Vibilia viatrix				—	—		
Hyperia galba	+			+		+	
medusarum	—			—		—	
Euthemisto compressa				—			
bispinosa				—			—
Phronima sedentaria				—			
Oxycephalus clausi				—			
Thyropus, sp.				—			
Talorchestia longicornis				+	—		
megalophthalma	—			—			+
Orchestia agilis	+			—	—	+	
palustris				+			
Allorchestes littoralis	—			—		—	
Hyalella dentata	—			—		—	
Anonyx nugax				+			
Tryphosa pinguis				+			
Hippomedon serratus				—	—		
Hoplonyx cicada				—			
Lysianopsis alba				—			
Pontoporeia femorata				—			
Haustorius arenarius				—	—	—	
Phoxocephalus holbölli	—			—	—		—
Paraphoxus spinosus					—		
Harpinia plumosa	—			—			—
Ampelisca macrocephala	—			+	—		—
spinipes				—	+	+	
compressa				+	+	+	
agassizi					—		
Byblis gaimardii	+			—			
serrata	—			—	—		
Haploops tubicola	—						—
setosa	—						—
robusta	—						—
Stegocephalus inflatus	+			+	—		—
Metopa groenlandica	—						—
Stenothoë peltata							—
cypris				—			

	Me.	N. H.	Vt.	Mass.	R. I.	Conn.	Gulf of Me., Georges Bk., etc
Stenothoë minuta				—			
Leucothoë spinicarpa							—
Paroediceros lynceus	+			+			—
Monoculodes edwardsi				—	—		
Pleustes panoplus	—						—
Paramphithoë pulchella	—						—
Sympleustes glaber	+						
Epimeria loricata	+			—			—
Acanthozone cuspidata	—						—
Acanthonotosoma serratum	—						—
Lafystius sturionis	—			+			
Syrrhoë crenulata	—			—			
Pardalisca cuspidata							—
Rhachotropis aculeata				+			—
Calliopius laeviusculus	—			+	—		
Halirages fulvocinctus				+			
Apherusa gracilis				—			
Pontogeneia inermis	—			+			—
Dexamine thea				—		—	
Batea secunda				—			
Melphidippa spinosa	—						
Gammarus locusta	+	—		+	—	+	
annulatus	—			—	—	+	
marinus	—			—	—	—	
fasciatus	—					—	
Carinogammarus mucronatus	—			+	—		
Melita dentata	—			—	—	—	—
nitida				—			
parvimana					—		
Maera danae	+						—
Elasmopus levis				—		—	
Gammarellus angulosus	—			—			
Crangonyx tenuis						—	
Microdeutopus gryllotalpa				—		—	
damnoniensis				—	—		
Autonoë smithi				+			
Ptilocheirus pinguis	+	—		+	+	+	—
Podoceropsis nitida	+				—		—
Amphithoë rubricata	+			+	—	+	

	Me.	N. H.	Vt.	Mass.	R. I.	Conn.	Gulf of Me., Georges Bk., etc.
Amphithoë longimana				+			
Ischyrocerus anguipes	—				—		
Podocerus falcatus				—			
marmoratus				—	—		
Grubia compta				—			
Ericthonius rubricornis	—			—			—
minax				—		—	
Cerapus tubularis				—		—	
Siphonoecetes smithianus				—			
Corophium cylindricum	—			+		+	
Unciola irrorata	+			+	+	—	—
Chelura terebrans				—			
Dulichia porrecta	—						
Luconacia incerta				—			
Aegina longicornis	—			—			
longicornis nodosa				—	—		
spinifera	—	—		—			
spinosissima	+			+		+	
Paracaprella tenuis				—			
Caprella acutifrons	—			+			
linearis	+	—		+			
septentrionalis	—						
septentrionalis longicornis	—						
polyceros	—						
stimpsoni	+						
unica				—			
Trypetesa lampas				—			
Coronula diadema				+			
Balanus tintinabulum				—			
tintinabulum zebra				+			
amphitrite				+			
eburneus				—		+	
porcatus	+			—	—	—	—
crenatus	—			—		+	—
balanoides	—			—	+	—	
hameri				—			—
Tetraclita squamosa				—			
Scalpellum stroemii				—			—

	Me.	N. H.	Vt.	Mass.	R. I.	Conn.	Gulf of Me., Georges Bk., etc.
Lepas anatifera				+	—		
billii				—			
anserifera				+			
pectinata				—			
fascicularis	—			—			
Conchoderma aurita				+			
virgata				—			
Argulus latus	—			—			
laticauda				—		—	
megalops				—	—		
alosae	—			—			
catostomi				—		—	
funduli				—		—	
versicolor				—			
Bomolochus scomberesocis				—			
Ergasilus funduli				—			
Caligus rufimaculatus				—			
schistonyx				—			
bonito				—			
rapax	—			—	—		
mutabilis				—			
curtus	—			—			
chelifer				—			
belones				—			
pelamydis				—			
Caligodes megacephalus				—			
Lepeophtheirus nordmannii	—			—			
hippoglossi				—			
edwardsi				—			
thompsoni				—			
salmonis	—						
Gloiopotes ornatus				—			
Alebion gracile				—			
glabrum				—			
Trebius tenuifurcatus				—			
Nesippus alatus				—			
Echthrogaleus coleoptratus				—			

	Me.	N. H.	Vt.	Mass.	R. I.	Conn.	Gulf of Me., Georges Bk., etc.
Echthrogaleus denticulatus				—			
Perissopus communis				—		—	
Pandarus cranchii				—			
sinuatus				—			
smithii				—		—	
Dinematura lamnae	—						
latifolia					—		
Cecrops latreillii				—			
Laemargus muricatus				+			—
Eudactylina nigra				—			
Dichelesthium sturionis				—		—	
Anthosoma crassum				—			
Lernanthropus brevoortiae				—			
pomatomi				—			
Philichthys xiphiae				—			
Sphaerifer lintoni				—			
Penella filosa				—			
costai				—			
Lernaeenicus radiatus				—			
Lerneonema ?, sp.				—			
Lernaeolophus sultanus				—			
Lernaea branchialis	—			+			—
Chondracanthus cornutus				—			
cottunculi				—			
galeritus				—			
phycidis				—			
merluccii				—			
Lernaeopoda fontinalis	—						
Brachiella ramosa				—			
rostrata				—			
thynni				—			
Clavella uncinata	—				—	—	—
Calanus finmarchicus				—			
Heterocope, sp.				—			
Diaptomus leptopus				—			
Centropages typicus				—			
hamatus				—			
Temora longicornis				—			

	Me.	N. H.	Vt.	Mass.	R. I.	Conn.	Gulf of Me., Georges Bk., etc.
Metridia lucens				—			
Labidocera aestiva				—			
Pontella meadii				—			
Anomalocera pattersonii				—			
Acartia tonsa				—			
Tortanus bumpusii				—			
Oithona similis				—			
Cyclops viridis insectus				—			
bicuspidatus				—			
albidus				—			
serrulatus	—			—			
prasinus				—			
phaleratus				—			
elongatus				—			
Sapphirina gemma				—			
Cypris scabra				—			
Sida crystallina				—			
Daphnella brachyura				—		•	
Latona setifera				—			
Ceriodaphnia dentata				—			
cristata				—			
Scapholeberis mucronata							
Daphnia pulex denticulata				—			
laevis				—			
Lathonura rectirostris				—			
Streblocerus serricaudatus				—			
Bosmina longirostris				—			
cornuta				—			
obtusirostris				—			
Pleuroxus procurvus				—			
straminius				—			
insculptus				—			
denticulatus				—			
hamatus				—			
Chydorus sphaericus				—			
Graptoleberis testudinaria				—			
Alona angulata				—			

	Me.	N. H.	Vt.	Mass.	R. I.	Conn.	Gulf of Me., Georges Bk., etc.
Alona porrecta				—			
glacialis				—			
spinifera				—			
tuberculata				—			
Alonella rostrata				—			
Monospilus tenuirostris				—			
Acroperus leucocephalus				—			
Camptocercus macrurus				—			
Polyphemus pediculus				—			
Limnetis gouldii		—		—	—		
Limnadia americana				—			
Eulimnadia agassizii				—			
Artemia gracilis				—		—	
Eubranchipus vernalis				—	—	—	

CRUSTACEA.

MALACOSTRACA.

THORACOSTRACA. DECAPODA.

OCYPODIDAE.

1. Ocypode albicans Bosc.

Sand crab; Ghost crab.

Ocypoda albicans Bosc, Hist. nat. Crust., 1802 [an X], vol. 1, p. 196 (not pl. 4, fig. 1). "la Caroline."

Ocypoda arenaria Milne Edwards, Hist. nat. Crust., 1837, vol. 2, p. 44, pl. 19, figs. 13, 14.

In deep burrows on sandy beaches, above tides. A southern species, the young only having been found in New England.

Mass.— Vineyard Sound (Megalops stage).

R. I.— Block Island.

2. Uca pugnax (Smith).

Fiddler crab.

Gelasimus pugnax Smith, Trans. Conn. acad. sci., 1870, vol.

Note: — From the accompanying list of recent Crustacea those species are omitted which have been dredged in deep water off the continental slope of southeastern New England, at such a great distance as not properly to be included in the New England fauna.

The compiler is indebted to Dr. S. J. Holmes and Dr. Charles B. Wilson for access to unpublished MSS. on the Amphipoda and the parasitic Copepoda of the Woods Hole region. The arrangement of the Amphipoda is that of Dr. Holmes, except for the Caprellidae where the classification of Dr. Paul Mayer has been followed.

Doubtless some errors have been introduced through the inability of the compiler to reconcile the nomenclature of different authors.

Those references which were inaccessible to Miss Rathbun have been verified through the kindness of Drs. E. L. Bouvier, W. T. Calman, W. Faxon, K. W. Genthe, H. J. Hansen, Witmer Stone and Charles B. Wilson.

2, p. 131, pl. 2, fig. 1, pl. 4, figs. 2–2d. "New Haven, Conn.; * * * St. Augustine, Fla.; * * * Bahamas; * * * Hayti."

Burrows in salt marshes; also found on muddy or sandy flats, and beaches.

Mass.— From Provincetown and Barnstable southward.

R. I.

Conn.

3. Uca pugilator (Bosc).

Fiddler crab.

Ocypoda pugilator Bosc, Hist. nat. Crust., 1802 [an X], vol. 1, p. 197. "Caroline."

Gelasimus pugilator Smith, Trans. Conn. acad. sci., 1870, vol. 2, p. 136, pl. 4, fig. 7.

On muddy and sandy flats and beaches.

Mass.— From Boston Harbor southward.

R. I.

Conn.

4. Uca minax (Le Conte).

Fiddler crab.

Gelasimus minax Le Conte, Proc. acad. nat. sci. Phil., 1855, vol. 7, p. 403. "Beesley's Point, N. J." Smith, Trans. Conn. acad. sci., 1870, vol. 2, p. 128, pl. 2, fig. 4, pl. 4, figs. 1–1b.

Salt marshes, frequently where the water is most of the time nearly fresh.

Mass.

R. I.

Conn.— West River and Mill River, near New Haven.

OCYPODIDAE.

5. Geryon quinquedens Smith.

Geryon quinquedens Smith, Trans. Conn. acad. sci., 1879, vol. 5, p. 35, pl. 9, figs. 1–1b, 2. "off Casco Bay and in the Gulf of Maine, off Massachusetts Bay."

Me.— Off Casco Bay, deep water from stomachs of fishes.

Off Georges Bank, 105 fms.

Mass.— Off Cape Ann, 98 to 160 fms.; off Mass. Bay, 117 to 142 fms.; off Cape Cod, 94 to 118 fms.

R. I.— Off Block Island, 322 to 452 fms.

GRAPSIDAE.

6. Grapsus grapsus (Linné).

Rock crab.

Cancer grapsus Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 630, "in America, Insula Adscensionis."

Grapsus maculatus Milne Edwards, Ann. sci. nat., 1853 (3), vol. 20, p. 167 [133], pl. 6.

A tropical species.

Mass.— Provincetown Harbor, from bottom of whaler just returned from a voyage; one specimen.

7. Pachygrapsus transversus (Gibbes).

Grapsus transversus Gibbes, Proc. Amer. assoc. adv. sci., 1850, vol. 3, p. 181 [17]. "Key West."

Goniograpsus innotatus Dana, Crust. U. S. Expl. Exped., 1852, pt. 1, p. 345; atlas, 1855, pl. 21, fig. 9.

A tropical species.

Mass.— Provincetown Harbor, from bottom of whaler; 4 specimens.

GRAPSIDAE.

8. Planes minutus (Linné).

Gulf-weed crab.

Cancer minutus Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 625. "in Pelagi Fuco natante."

Planes clypeatus Bowdich, Excursions in Madeira and Porto Santo, 1825, p. 15, pl. 12, figs. 2a, 2b.

Pelagic, common in gulf stream.

Mass.— Woods Hole, 1 ♂; Wareham, 1.

R. I. — Sakonnet Point, under rocks, 1 ♀ bearing eggs (W. Nye, Jr.).

9. Sesarma reticulatum (Say).

Ocypode reticulatus Say, Journ. acad. nat. sci. Phil., 1817, vol. 1, p. 73, pl. 4, fig. 6. "muddy salt marshes."

Ocypode (Sesarma) reticulatus Say, *op. cit.*, 1818, p. 442.

On salt marshes in burrows.

Mass.— Wareham; Acushnet River, near New Bedford.

Long Island Sound.

PINNOTHERIDAE.

10. Pinnotheres ostreum Say.

Oyster crab.

Pinnotheres ostreum Say, Journ. acad. nat. sci. Phil., 1817, vol. 1, p. 67, pl. 4, fig. 5 (♀). "Inhabits the common oyster."

Pinnotheres ostreum DeKay, Nat. Hist. New York, pt. 6, Crust., 1844, p. 12, pl. 7, fig. 16 (♀); Smith, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 546 [252], not pl. 1, fig. 2 (♂).

PINNOTHERIDAE.

Female in the gill-cavity of oysters; male free-swimming at surface.

MASS. — From Salem southward.

R. I.

CONN.

11. PINNOTHERES MACULATUS Say.

Mussel crab.

Pinnotheres maculatum Say, Journ. acad. nat. sci. Phil. 1818, vol. 1, p. 450. "INHABITS THE MURICATED PINNA OF OUR COAST."

Pinnotheres ostreum Smith, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), pl. 1, fig. 2 (♂).

Female between the gills of *Mytilus edulis* and *Pecten tenuicostatus*; male free-swimming at surface.

MASS.— From Cape Cod southward.

R. I.

CONN.

12. PINNIXA CHAETOPTERANA Stimpson.

Pinnixa cylindrica Stimpson, Ann. lyc. nat. hist. N. Y., 1859, vol. 7, p. 68. Not *P. cylindrica* (Say).

Pinnixa chaetopterana Stimpson, Ann. lyc. nat. hist. N. Y., 1860, vol. 7, p. 235. "IN THE TUBES OF CHAETOPTERUS PERGAMENTACEUS, ON MUDDY OR CLAYEY SHORES OF CHARLESTON HARBOR, S. C."

In tubes of annelids, *Chaetopterus pergamentaceus* and *Amphitrite ornata*.

MASS.— Wellfleet; Woods Hole; Naushon; Vineyard Sound; Buzzards Bay.

CONN. — Noank; Stony Creek.

PINNOTHERIDAE.

13. Pinnixa sayana Stimpson.

Pinnixa sayana Stimpson, Ann. lyc. nat. hist. N. Y., 1860, vol. 7, p. 236. "in six fathoms, sandy mud, off the mouth of Beaufort Harbor, N. C."

Pinnixa cylindrica Smith, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 546 [252], pl. 1, fig. 1. Not *P. cylindrica* (Say).

In tubes of large annelids.
Mass. — Vineyard Sound; Buzzards Bay.
Conn. — New Haven.

PILUMNIDAE.

14. Eupanopeus herbstii (Milne Edwards).

Mud crab.

Panopeus herbstii Milne Edwards, Hist. nat. Crust., 1834, vol. 1, p. 403. "côtes de l'amérique septentrionale."

Panopeus herbstii Benedict & Rathbun, Proc. U. S. nat. mus., 1891, vol. 14, p. 358, pl. 19, figs. 1–2, pl. 23, figs. 10–12.

On oyster beds in brackish water.
Mass. — Boston.
R. I. — Newport; Providence River.
Long Island Sound.

15. Eurypanopeus depressus (Smith).

Mud crab.

Panopeus depressus Smith, Proc. Boston soc. nat. hist., 1869, vol. 12, p. 283. "New Haven, Conn. * * * Egmont Key, Fla." Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 547 [253], pl. 1, fig. 3.

Under stones in mud.

MASS. — From Massachusetts Bay southward.

R. I.

CONN.

16. NEOPANOPE TEXANA SAYI (Smith).

Mud crab.

Panopeus sayi Smith, Proc. Boston soc. nat. hist., 1869, vol. 12, p. 284. "NEW HAVEN, CONN. * * * EASTHAM, CAPE COD."

Panopeus sayi Benedict & Rathbun, Proc. U. S. nat. mus., 1891, vol. 14, p. 363, pl. 22, fig. 4, pl. 23, figs. 7, 8.

Under stones in mud.

MASS. — From Provincetown southward.

R. I.

CONN.

17. HEXAPANOPEUS ANGUSTIFRONS (Benedict & Rathbun).

Mud crab.

Panopeus angustifrons Benedict & Rathbun, Proc. U. S. nat. mus., 1891, vol. 14, p. 373, pl. 22, fig. 3, pl. 24, fig. 18. VINEYARD SOUND TO BRAZIL.

MASS. — Vineyard Sound; Buzzards Bay.

R. I.— Narragansett Bay.

CONN. — Off Milford, Stratford, Bridgeport, Norwalk; on oyster grounds.

18. RHITHROPANOPEUS HARRISII (Gould).

Pilumnus harrisii Gould, Invert. Mass., 1841, p. 326. "CAMBRIDGE MARSHES; * * * CLINGING TO FLOATING SEAWEED IN CHARLES RIVER."

Panopeus harrisii Benedict & Rathbun, Proc. U. S. nat. mus., 1891, vol. 14, p. 378, pl. 21, fig. 2, pl. 24, fig. 16.

PILUMNIDAE.

Under stones, toward high-water mark. Local.
ME.— Sheepscot River.
MASS.— Massachusetts Bay.
CONN.— East side of New Haven Harbor.
Long Island Sound.

PORTUNIDAE.

19. CARCINIDES MAENAS (Linné).

Green crab; Joe rocker.

Cancer maenas Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 627, "IN OCEANO EUROPÆO, ASIATICO." Fauna Svecica, 1761, p. 492.

Carcinus maenas, De Kay, Nat. hist. New York, pt. 6, Crust., 1844, p. 8, pl. 5, figs. 5, 6.

Under stones toward high-water mark to a few fathoms, and in tidal pools.

ME. — Harpswell; New Meadows River, near Harpswell; Eagle Harbor, Casco Bay; Kittery.

MASS. — Ipswich; Nahant; Lynn; Cohasset; Manomet Point; and from Cape Cod southward.

R. I.

CONN.

20. PORTUNUS SAYI (Gibbes).

Gulf-weed crab.

Lupa sayi Gibbes, Proc. Amer. assoc. adv. sci., 1850, vol. 3, p. 178 [14]. "COAST OF SOUTH-CAROLINA."

Neptunus sayi A. Milne Edwards, Arch. mus. hist. nat., Paris, 1861, vol. 10, p. 317, pl. 29, fig. 2.

Surface, on gulf weed.

MASS.— Vineyard Sound.

PORTUNIDAE.

21. Callinectes sapidus Rathbun.

Blue crab; Common edible crab.

Lupa hastata Say, Journ. acad. nat. sci. Phil., 1817, vol. 1, p. 65. "In bays, &c."

Callinectes sapidus Rathbun, Proc. U. S. nat. mus., 1896, vol. 18, p. 352, pl. 12, pl. 24, fig. 1, pl. 25, fig. 1, pl. 26, fig. 1, pl. 27, fig. 1.

Muddy shores to deep water; brackish water of estuaries.

Mass.—Millpond, an inlet of Salem Harbor; Mass. Bay; from Cape Cod southward.

R. I.

Conn.

22. Ovalipes ocellatus (Herbst).

Lady crab; Sand crab.

Cancer ocellatus Herbst, Naturg. d. krabben u. krebse, 1799, vol. 3, pt. 1, p. 61, pl. 49, fig. 4. "Long-Eiland bey Newyorck."

Platyonichus ocellatus DeKay, Nat. hist. New York, pt. 6, Crust., 1844, p. 9, pl. 1, fig. 1, pl. 5, fig. 7.

In sand at low-water mark and off shore to 10 fathoms.

Mass.— From Provincetown and Barnstable southward.

R. I.

Conn.

CANCRIDAE.

23. Cancer irroratus Say.

Rock crab.

Cancer irroratus Say, Journ. acad. nat. sci. Phil., 1817, vol. 1, p. 59, pl. 4, fig. 2. "Inhabits the ocean. Common." R. Rathbun, Fisheries industries of U. S., 1884, sec. 1, p. 766, pl. 260, figs. 1–3.

CANCRIDAE.

Platycarcinus irroratus De Kay, Nat. hist. New York, pt. 6, Crust., 1844, p. 6, pl. 2, fig. 2.

From under rocks near low-water mark to 314 fathoms.
From Eastport, Me., to Conn.

24. Cancer borealis Stimpson.

Jonah crab.

Cancer borealis Stimpson, Ann. lyc. nat. hist. N. Y., 1859, vol. 7, p. 50. "A northern species, not found south of Cape Cod, although extending to the northward at least as far as Nova Scotia." Smith, Trans. Conn. acad. sci., 1879, vol. 5, p. 39, pl. 8.

Rocks near low tide to deep water, 435 fathoms.
Me.— Bay of Fundy; Casco Bay.
N. H.
Mass.— Salem; Manomet Point; Chatham; Vineyard Sound; No Mans Land.
R. I.— Off Watch Hill; off Newport; Narragansett Bay; off north end of Block Island.
Conn.— Off Noank.

INACHIDAE.

25. Chionoecetes opilio (O. Fabricius).

Cancer phalangivm O. Fabricius, Favna Groenlandica, 1780, p. 234. Greenland.
Cancer opilio O. Fabricius, K. Danske vid. selsk. skr., nye saml., 1788, vol. 3, p. 182, plate.
Chionoecetes opilio Kröyer, Naturh. Tidssk., 1838 (1), vol. 2, p. 249.

Me. — Off Casco Bay, in fish stomachs.

INACHIDAE.

26. Hyas coarctatus Leach.

Toad crab.

Hyas coarctatus Leach, Trans. Linn. soc. London, 1815, vol. 11, p. 329. "Habitat in mari Britannico; apud Frith of Forth, Plymouth Sound et Salcombe."

Hyas coarctata Milne Edwards, R. Anim. de Cuvier, disciples ed., p. 90, pl. 32, fig. 3.

On sandy and gravelly bottoms, 5½ to 906 fathoms.
Me. — From Bay of Fundy westward.
N. H.
Mass.
R. I. — Cox Ledge; Block Island Sound.

27. Hyas araneus (Linné).

Toad crab.

Cancer araneus Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 628. "in Oceano Europæo."

Hyas araneus Leach, Mal. Podoph. Brit., 1816, pl. 21 A, and explanatory text.

5 to 106 fathoms.
Me. — From Bay of Fundy westward.
Mass. — As far south as Cape Cod.

28. Pelia mutica (Gibbes).

Pisa mutica Gibbes, Proc. amer. assoc. adv. sci., 1850, vol. 3, p. 171 [7]. "Charleston Harbor, off White Point Battery, [S. C.]."

Pelia mutica A. Milne Edwards, Miss. sci. au Mexique, 1875, pt. 5, vol. 1, p. 73, pl. 16, fig. 2.

INACHIDAE.

On gravelly and shelly bottoms of bays and sounds.
MASS. — From Vineyard Sound westward.
R. I.
CONN.

29. LIBINIA EMARGINATA Leach.

Spider crab.

Libinia emarginata Leach, Zool. Misc., 1815, vol. 2, p. 130, pl. 108. Locality unknown. Rathbun, Proc. U. S. nat. mus., 1892, vol. 15, p. 235, pl. 31, fig. 2.

Muddy shores and flats.
ME. — From Casco Bay southward.
N. H.
MASS.
R. I.
CONN.

30. LIBINIA DUBIA Milne Edwards.

Spider crab.

Libinia dubia Milne Edwards, Hist. nat. Crust., 1834, vol. 1, p. 300, pl. 14 bis, fig. 2. "CÔTES DES ETATS-UNIS." Rathbun, Proc. U. S. nat. mus., 1892, vol. 15, p. 237, pl. 31, fig. 1.

Muddy shores.
MASS. — From Cape Cod southward.
R. I.
CONN.

PARTHENOPIDAE.

31. HETEROCRYPTA GRANULATA (Gibbes).

Pentagon crab.

Cryptopodia granulata Gibbes, Proc. Amer. assoc. adv. sci.,

PARTHENOPIDAE.

1850, vol. 3, p. 173[9]. "[South Carolina,] near Kiawah Island; *** Sullivan's Island; *** White Point Shoal, Charleston Harbor."

Cryptopodia granulata Gibbes, Proc. Elliott Soc., 1856, vol. 1, p. 35, wood-cut.

Mass. — Vineyard Sound; Woods Hole.

CALAPPIDAE.

32. Calappa flammea (Herbst).

Box crab; Shamefaced crab.

Cancer flammeus Herbst, Naturg. d. krabben u. krebse, 1794, vol. 2, p. 161, pl. 40, fig. 2; 1803, vol. 3, pt. 3, p. 19. "Ostindien."

Calappa flammea Rathbun, Bull. U. S. fish comm. for 1900 (1901), vol. 2, p. 84, pl. 2.

A southern species.

Mass. — Ram Island, Woods Hole Harbor, low water, one specimen; Woods Hole, one specimen and megalops.

PORCELLANIDAE.

33. Petrolisthes armatus (Gibbes).

Porcellana armata Gibbes, Proc. Amer. assoc. adv. sci., 1850, vol. 3, p. 190. "Florida."

Porcellana gundlachii Guérin, La Sagra's Hist. Cuba, 1857, vol. 7, Crust., p. XVI; 1855, vol. 8 (atlas), Articulata, pl. 2, fig. 6.

A southern species.

Conn. — Stony Creek, near New Haven, one specimen.

PORCELLANIDAE.

34. Polyonyx macrocheles (Gibbes).

Porcellana macrocheles Gibbes, Proc. Amer. assoc. adv. sci., 1850, vol. 3, p. 191 [27]. "coast of South Carolina."

Porcellana (Polyonyx) macrocheles Faxon, Bull. mus. comp. zoöl., 1879, vol. 5, p. 256, pls. 2 and 3.

A southern species.

R. I. — Newport, under stones on shore. Zoeae at mouth of Narragansett Bay, and at Newport.

LITHODIDAE.

35. Lithodes maja (Linné).

Northern stone crab; Spider crab.

Cancer maja Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 629. "in Oceano Europæo."

Lithodes maja Leach, Mal. Podoph. Brit., 1816, pl. 24 and explanatory text.

From Casco Bay, Me., to Mass. Bay, 52 to 141 fms.; off Nantucket, 291 fms.

PAGURIDAE.

36. Pagurus pollicaris Say.

Warty hermit crab.

Pagurus pollicaris Say, Journ. acad. nat. sci. Phil., 1817, vol. 1, p. 162. "coast of the United States." De Kay, Nat. hist. New York, pt. 6, Crust., 1844, p. 19, pl. 8, fig. 21.

From Cape Cod Bay to Long Island Sound. Low water mark to 14 fathoms.

PAGURIDAE.

37. Pagurus acadianus Benedict.

Hermit crab.

Pagurus acadianus Benedict, Proc. U. S. nat. mus., 1901, vol. 23, p. 454, text fig. "From the Grand Bank of Newfoundland to the mouth of Chesapeake Bay."

Sandy and hard bottoms. Abundant.

From Eastport, Me., to eastern part of Long Island Sound. Low water to 150 fathoms.

38. Pagurus longicarpus Say.

Long-wristed hermit crab; Little hermit crab.

Pagurus longicarpus Say, Journ. acad. nat. sci. Phil., 1817, vol. 1, p. 163. "Inhabits bay shores." DeKay, Nat. hist. New York, pt. 6, Crust., 1844, p. 20, pl. 8, fig. 22.

Eupagurus longicarpus Thompson, Proc. Boston soc. nat. hist., 1903, vol. 31, p. 150, pls. 4–10, figs. 1–29, 31–60, 62–64 d.

Me. — Quahog Bay, Casco Bay; Freeport River, head of Casco Bay.

From Cape Ann, Mass., to western end of Long Island Sound. Shore to 18 fathoms.

39. Pagurus pubescens Kröyer.

Hairy hermit crab.

Pagurus pubescens Kröyer, K. Danske vid. selsk. natur. og math. afh., 1838, vol. 7, p. 314 [86]. Greenland: "Fiskenoesset, Godthaab, Holsteinborg og Omenak." Iceland. Naturh. tidssk., 1839, vol. 2, p. 251 (part). Benedict, Ann. mag. nat. hist., 1896 (6), vol. 18, p. 99, fig. A (left cheliped).

Common.

Bay of Fundy to off Block Island. Low water mark (rare) to 150 fathoms.

PAGURIDAE.

40. Pagurus kroyeri (Stimpson).

Hermit crab.

Eupagurus kroyeri Stimpson, Ann. lyc. nat. hist. N. Y., 1859, vol. 7, p. 89. "Found at Grand Manan, and in Massachusetts Bay, by myself, and also occurs in Puget Sound."

Pagurus kroyeri Benedict, Ann. mag. nat. hist., 1896 (6), vol. 18, p. 99, fig. B (left cheliped).

Coast of Maine and southward to Block Island Sound. 8 to 306 fathoms.

41. Pagurus politus (Smith).

Hermit crab.

Eupagurus politus Smith, Bull. mus. comp. zoöl., 1882, vol. 10, p. 12, pl. 2, fig. 5. "Blake" stations 309, 310, 336, [from Georges Bank to Cape May, 197 to 304 fathoms].

Off Georges Bank, 55–304 fms.

Mass. — Off Marthas Vineyard, 65 to 365 fms.

42. Pagurus annulipes (Stimpson).

Small hermit crab.

Eupagurus annulipes Stimpson, Ann. lyc. nat. hist. N. Y., 1860, vol. 7, p. 243. "Beaufort Harbor, N. C., and off the coast adjacent, in from two to eight fathoms"

Mass.— Off East Chop; Vineyard Sound; Nantucket Sound.

HIPPIDAE.

43. Emerita talpoida (Say).

Sand bug; Bait bug; Hippa.

Hippa talpoida Say, Journ. acad. nat. sci. Phil., 1817, vol. 1,

HIPPIDAE.

p. 160. "COAST OF THE UNITED STATES." Smith, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 548 [254], pl. 2, fig. 5.

Sandy beaches. Burrows.
From Cape Cod southward.

CALLIANASSIDAE.

44. CALLIANASSA STIMPSONI Smith.

Callianassa stimpsoni Smith, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 549 [255],pl. 2, fig. 8 (larger cheliped). "FROM THE COAST OF THE SOUTHERN STATES NORTH TO LONG ISLAND SOUND."

Burrows in mud. Near low water and in shallow water.
Vineyard Sound to Long Island Sound.

45. UPOGEBIA AFFINIS (Say).

Gebia affinis Say, Journ. acad. nat. sci. Phil., 1818, vol. 1, p. 241. "GEORGIA." Smith, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 549 [255], pl. 2, fig. 7.

Burrows on muddy shores.
MASS.— Wellfleet; Woods Hole; head of Buzzards Bay.
CONN.— New Haven.

AXIIDAE.

46. AXIUS SERRATUS Stimpson.

Axius serratus Stimpson, Proc. Boston soc. nat. hist., 1852, vol. 4, p. 222. "TWENTY FATHOMS, OFF SCITUATE." Smith, Trans. Conn. acad. sci., 1879, vol. 5, p. 55, pl. 10, figs. 4, 4a.

AXIIDAE.

MASS.— Off Scituate, 20 fms.; about 5 miles S. E. of Cape Ann, 42 fms., in stomach of flounder.

Georges Bank.

R. I.— Narragansett Bay, 20 fms.

CONN.— Off Stratford Point and Norwalk, 10–15 fms.

47. NAUSHONIA CRANGONOIDES Kingsley.

Naushonia crangonoides Kingsley, Bull. Essex inst., 1895 (1897), vol. 27, p. 96, pl. 3, figs. 8–10. "ISLAND OF NAUSHON." Thompson, Proc. Boston soc. nat. hist., 1903, vol. 31, p. 2, pls. 1–3.

MASS. — Naushon "gutters" in sand, one specimen; Ram Island, Woods Hole Harbor, burrow 10 inches deep in sand, one specimen.

HOMARIDAE.

48. HOMARUS AMERICANUS Milne Edwards.

Lobster.

Homarus americanus Milne Edwards, Hist. nat. Crust., 1837, vol. 2, p. 334. Locality not indicated except by specific name. R. Rathbun, Fisheries & fishery industries of U. S., 1884, sec. 1, p. 781, pl. 271.

From Bay of Fundy to Conn. Rocky shores, 1–20 fms.

ASTACIDAE.

49. CAMBARUS BARTONII (Fabricius).

Crayfish; Crawfish.

Astacus bartonii Fabricius, Suppl. entom. syst., 1798, p. 407. "IN AMERICA BOREALI."

ASTACIDAE.

Cambarus bartonii Hagen, Ill. cat. mus. comp. zoöl., 1870, No. III, p. 75, pl. 1, figs. 47–50, pl. 2, figs. 135–139, pl. 3, fig. 166.

ME.— Houlton and Maysville, Aroostook Co.; Madison, Somerset Co.; head of Kennebec River, outlet of Moosehead Lake.

VT.— Burlington, Colchester, and Shelburne, Chittenden Co.

MASS.— North Grafton, Worcester Co.; Williamstown and North Adams, Berkshire Co.; also probably, tributary of Housatonic River, Berkshire Co.

R. I.?— Crayfish are said to have been common 60 years ago at Westerly.

CONN.?— *C. bartonii* introduced into brook at New Haven in 1880, but none have been seen there since.

PENAEIDAE.

50. PENAEUS BRASILIENSIS Latreille.

Southern shrimp.

Penaeus brasiliensis Latreille, Nouv. dict. hist. nat., 1817 vol. 25, p. 156. "BRÉSIL."

Peneus brasiliensis Kröyer, K. Danske vid. selsk. skr., naturv. math. afd., 1856 (5), vol. 4, p. 290, pl. 5, fig. 23 (superior antenna).

A southern species.

MASS.— Katama Bay, Marthas Vineyard, one specimen.

CONN.?— (See Smith, Trans. Conn. acad. sci., 1880, vol. 4, p. 267).

CRAGONIDAE.

51. CRAGO SEPTEMSPINOSUS (Say).

Sand shrimp; Grey shrimp.

Crangon septemspinosus Say, Journ. acad. nat. sci. Phil.,

1818, vol. 1, p. 246. "Inhabits bay shores and inlets of the sea." "found as far south as East Florida."

Crangon vulgaris Smith, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 550 [256], pl. 3, fig. 10.

On sandy bottoms.

From Bay of Fundy to Conn. Low water to 60 or 70 fathoms.

52. Sclerocrangon boreas (Phipps).

Cancer boreas Phipps, Voyage north pole, 1773 (1774), p. 190, pl. 12, fig. 1. "near the coast of Spitsbergen * * * in the stomach of a seal."

Crangon boreas Kröyer, Naturh. tidssk., 1842, vol. 4, p. 218, pl. 4, figs. 1–14.

From Bay of Fundy to Cape Cod, 5–36 fms.

53. Pontophilus norvegicus (M. Sars).

Crangon norvegicus M. Sars, Nyt mag. f. naturvid., 1861, vol. 11, p. 248. "Tid siden ved Florøen Manger og i Bundefjorden ved Christiania, paa 30–50 f. d."

Pontophilus norvegicus M. Sars, Forh. vid.-selsk. Christiania, 1861 (1862), p. 183; Nyt mag. f. naturvid., 1868, vol. 15, p. 242, pls. 1 and 2, figs. 1–37.

Mass.— Off Cape Ann, 110–115 fms.; off Cape Cod, 94–524 fms.

Georges Bank, 105 fms.

54. Sabinea septemcarinata (Sabine).

Crangon septemcarinatus Sabine, Suppl. append. Parry's [first] voy., 1824, p. ccxxxvi, pl. 2, figs. 11–13. "west coast of Davis' Strait."

Sabinea (Crangon) septemcarinata Kröyer, Naturh. tidssk., 1842, vol. 4, p. 244, pl. 4, figs. 34–40, pl. 5, figs. 41–44.

CRAGONIDAE.

ME.— Casco Bay; off Casco Bay; 8 miles south of Monhegan.
N. H.— Off Isles of Shoals.
MASS.— Off Cape Ann; Mass. Bay; off Cape Cod.
Georges Bank.
15 to 70 fathoms.

55. SABINEA SARSII Smith.

Sabinea sarsii Smith, Trans. Conn. acad. sci., 1879, vol. 5, p. 59, pl. 11, figs. 6–8. "ST. GEORGE'S BANKS * * * GULF OF MAINE * * * LE HAVE BANK * * * LOFOTEN ISLANDS."

Gulf of Maine, 112 fms.; off Georges Bank, 83–150 fms.

HIPPOLYTIDAE.

56. CARIDION GORDONI (Bate).

Hippolyte gordoni Bate, Nat. hist. review, 1858, vol. 5, p. 51, 4 wood-cuts, (full name in index, p. IV). "MORAY FRITH."
Doryphorus gordoni Norman, Ann. mag. nat. hist., 1861 (3), vol. 8, p. 277, pl. 13, figs. 6 and 7.

From Bay of Fundy to Cape Cod, 27–110 fms.

57. LATREUTES ENSIFERUS (Milne Edwards).

Hippolyte ensiferus Milne Edwards, Hist. nat. Crust., 1837, vol. 2, p. 374. "EN HAUTE MER, PRÈS DES AÇORES."
Latreutes ensiferus Bate, Challenger rept., zool., 1888, vol. 24, p. 538, pl. 184, fig. 1.

A gulf stream species.
MASS.— Vineyard Sound, surface.

58. HIPPOLYTE ZOSTERICOLA (Smith).

Virbius zostericola Smith, Rept. U. S. commr. of fish & fish-

eries, pt. 1, for 1871–1872 (1873), p. 550 [256], pl. 3, fig. 11. "Among eel-grass about Vineyard Sound."

Mass. — Davis Neck Beach, Falmouth; Vineyard Sound; Woods Hole; Hadley Harbor, Naushon; Quissett Harbor.

59. Spirontocaris groenlandica (J. C. Fabricius).

Astacus groenlandicus J. C. Fabricius, Syst. Entom., 1775, p. 416. "in mari groenlandico."

Hippolite armata Owen, in Zool. Capt. Beechey's voyage [of the Blossom], Crust., 1839, p. 88, pl. 27, fig. 2 (♀).

Hippolite cornuta Owen, *op. cit.*, 1839, p. 89, pl. 28, fig. 2 (♂).

From Eastport, Me., to Narragansett Bay, R. I. 1–72 fathoms.

60. Spirontocaris spina (Sowerby).

Cancer spinus Sowerby, British Miscellany, 1805, vol. 1, p. 47, pl. 23. "among oysters on the Scottish coast."

Spirontocaris spina Rathbun, Harriman Alaska Exped., 1904, vol. 10, p. 63, pl. 3, fig. 5, text fig. 19.

From Bay of Fundy to Cape Cod. 5–90 fms.

61. Spirontocaris liljeborgii (Danielssen).

Hippolyte liljeborgii Danielssen, Nyt mag. f. naturvid., 1859, vol. 11, p. 5. "Slotholmen, (Lofoten) * * * 40 favne." Danielssen and Boeck, Nyt mag. f. naturvid., 1872, vol. 19, p. 196 [8], plate, figs. 15–20.

Me.— Off Casco Bay.

Gulf of Maine; Georges Bank.

Mass. — Massachusetts Bay; off Cape Cod; off Marthas Vineyard and Nantucket.

25 to 640 fathoms.

HIPPOLYTIDAE.

62. Spirontocaris phippsii (Kröyer).

Hippolyte phippsii Kröyer, Naturh. tidssk., 1841, vol. 3, p. 575 (♂); K. Danske vid. selsk. naturv. math. afhand., 1842, vol. 9, p. 314, pl. 3, figs. 64–68 (♂). "Spitsbergen, Norges Vestkyst (og Grønland?)."

Hippolyte turgida Kröyer, Naturh. tidssk., 1841, vol. 3, p. 575 (♀); K. Danske vid. selsk. naturv. math. afhand., 1842, vol. 9, p. 308, pl. 2, figs. 57 and 58, pl. 3, figs. 59–63 (♀).

From Eastport, Maine, to Cape Cod. 8 to 125 fathoms.

63. Spirontocaris polaris (Sabine).

Alpheus polaris Sabine, Suppl. append. Parry's [first] voy., 1824, p. ccxxxviii, pl. 2, figs. 5–8. "fifty fathoms' depth, on the coast of Melville Island."

Hippolite borealis James C. Ross, in John Ross, Append. narr. second voyage in search of a north-west passage, 1835, p. lxxxiv, pl. B, fig. 3 (♂).

Hippolite polaris James C. Ross, *op. cit.*, p. lxxxv (♀).

From Bay of Fundy to Cape Cod. 10 to 218 fathoms.

64. Spirontocaris fabricii (Kröyer).

Hippolyte fabricii Kröyer, Naturh. tidssk., 1841, vol. 3, p. 571. "Grönland." K. Danske vid. selsk. naturv. math. afhand., 1842, vol. 9, p. 277, pl. 1, figs. 12–20.

From Eastport, Me., to Cape Cod. Low water to 64 fathoms.

65. Spirontocaris gaimardii (Milne Edwards).

Hippolyte gaimardii Milne Edwards, Hist. nat. Crust., 1837, vol. 2, p. 378. "les mers d'Islande." Kröyer, K. Danske vid. selsk. naturv. math. afhand., 1842, vol. 9, p. 282, pl. 1, figs. 21–29.

HIPPOLYTIDAE.

ME.— Eastport; Casco Bay.
MASS.— Massachusetts Bay.
Low water to 30 fathoms.

66. SPIRONTOCARIS PUSIOLA (Kröyer).

Hippolyte pusiola Kröyer, K. Danske vid. selsk. naturv. math. afhand., 1842, vol. 9, p. 319, pl. 3, figs. 69–73. "KRISTIANSUND," FEW FATHOMS.

From Bay of Fundy to Connecticut. 2–90 fms.

PANDALIDAE.

67. PANDALUS BOREALIS Kröyer.

Pandalus borealis Kröyer, Naturh. tidssk., 1838, vol. 2, p. 254. "GROENLANDIA": SYDPRÖVEN, JULIANEHAAB, FISKENAESSET, &c. In Gaimard, Voyages en Scandinavie, en Laponie, au Spitzberg, etc., Zool., Crust., 1846 (?), pl. 6, fig. 2.

From Maine to Cape Cod. 40 to 160 fathoms.

68. PANDALUS MONTAGUI Leach.

Pandalus montagui Leach, Edinb. Encyc., 1814, vol. 7, p. 432. "ZETLAND."
Pandalus annulicornis Leach, Mal. Podoph. Brit., 1815, pl. 40, and accompanying text.

From Bay of Fundy to off Newport, R. I. 10 to 430 fathoms.

69. PANDALUS LEPTOCERUS Smith.

Pandalus leptocerus Smith, Proc. U. S. Nat. Mus., 1881, vol. 3, p. 437. FROM NOVA SCOTIA TO RHODE ISLAND, SHALLOW WATER TO 430 FATHOMS. A. Milne Edwards, Recueil planches expéd. Travailleur, 1883, pl. 22.

PANDALIDAE.

From Casco Bay, Me., to R. I. Shallow water to 155 fathoms.

70. Pandalus propinquus G. O. Sars.

Pandalus propinqvus G. O. Sars, Forh. vid.-selsk. Christiania, 1869 (1870), p. 148 [4]. "Skraaven" Lofoten, 200–300 fathoms. *Op. cit.*, 1871 (1872), p. 259 [16].

Mass.— Off Cape Cod, 116–118 fms.; off Martha's Vineyard and Nantucket, 158–640 fms.

Georges Bank, 122–304 fms.

OPLOPHORIDAE.

71. Acanthephyra agassizii (Smith).

Miersia agassizii Smith, Bull. mus. comp. zoöl., 1882, vol. 10, p. 67, pl. 11, figs. 5–7, pl. 12, figs. 1–4. "Blake" stations 305, 323, 330 [from Georges Bank to Cape Hatteras, 457–1047 fms.]

Acanthephyra agassizii Smith, Rept. U. S. commr. of fish & fisheries, pt. 10, for 1882 (1884), p. 372, pl. 8, fig. 1.

Georges Bank, 105–810 fathoms.

PALAEMONIDAE.

72. Palaemonetes vulgaris (Say).

Common shrimp or prawn.

Palaemon vulgaris Say, Journ. acad. nat. sci. Phil., 1818, vol. 1, p. 248. "Inhabits bays and estuaries. * * * Found as far south as East Florida."

Palaemonetes vulgaris Smith, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 550 [256], pl. 2, fig. 9.

THORACOSTRACA. DECAPODA.

PALAEMONIDAE.

Muddy shores and in brackish water among eel-grass.
N. H.— Hampton.
Mass.— From Salem southward.
R. I.
Conn.

PASIPHAEIDAE.

73. Pasiphaea tarda Kröyer.

Pasiphae tarda Kröyer, Naturh. tidssk., 1845 (2), vol. 1, p. 453. "SYDLIGE GRØNLAND." Smith, Trans. Conn. acad. sci., 1879, vol. 5, p. 88, pl. 10, fig. 1.

Mass.— Southeast of Cape Ann, 140–175 fms.; Cape Cod Bay, 14 fms.; off Cape Cod, 116–122 fms.

SCHIZOPODA.

Opossum shrimps.

EUPHAUSIIDAE.

74. Rhoda inermis (Kröyer).

Kril.

Thysanopoda inermis Kröyer, in Gaimard, Voyages en Scandinavie, en Laponie, au Spitzberg, etc., Zool., Crust., 1846 (?), pl. 7, fig. 2 a–t. Locality not specified. K. Danske vid. selsk. skr., naturv. math. afd., 1856 (5), vol. 4, p. 294, pl. 5, fig. 24.

From Bay of Fundy to Vineyard Sound. Surface and 40 to 107 fathoms.

75. Nyctiphanes norvegica (M. Sars).

Thysanopoda norvegica M. Sars, Forh. ved de Skand. naturf. 1856 (1857), vol. 7, p. 169. Island of Florö in Söndfjord

EUPHAUSIIDAE.

SWIMMING ALMOST AT SURFACE; AND AT MANGER FROM MOUTH OF *Sebastes norvegicus* WHICH LIVES BETWEEN 40 TO 50 FATHOMS AND 100 TO 120 FATHOMS.

From Bay of Fundy to Cape Cod. Surface and 26½ to 160 fathoms.

MYSIDAE.

76. MYSIS MIXTA Lilljeborg.

Mysis mixta Liljeborg [Lilljeborg], Öfver. k. vet.-akad. förh., Stockholm, 1852 (1853), vol. 9, pp. 3 and 6. "KULLABERG IN SCANIA."

? *Mysis latitans* Krŏyer, Naturh. tidssk., 1861 (3), vol. 1, p. 30, pl. 1, fig. 4.

From Bay of Fundy to Cape Cod Bay. 20 to 90 fathoms.

77. MYSIS STENOLEPIS Smith.

Mysis stenolepis Smith, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 551 [257], pl. 3, fig. 12. "(♂) NEW HAVEN, CONN. * * * (♀) VINEYARD SOUND * * * WOOD'S HOLE.

On muddy shores especially among eel-grass; also from 7 to 30 fathoms.

ME. — Casco Bay.

MASS. — Gloucester; Provincetown; Vineyard Sound; Buzzards Bay.

CONN. — Noank; New Haven.

78. MYSIS AMERICANA Smith.

Mysis americana Smith, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 552 [258]. "BEESLEY'S POINT, NEW JERSEY; NEW HAVEN, CONNECTICUT * * *; OFF VINEYARD SOUND."

MYSIDAE.

Among algae and in stomachs of fish. Below low-water mark to 30 fathoms.

ME. — Portland Harbor; Casco Bay.

MASS. — Salem; Vineyard Sound.

R. I. — Block Island Sound.

CONN. — New Haven.

79. HETEROMYSIS FORMOSA Smith.

Heteromysis formosa Smith, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 553 [259]. Locality not specified. Norman, Ann. mag. nat. hist., 1892 (6), vol. 10, p. 158, pl. 9, figs. 6–11.

Rocky bottoms of bays and sounds, sometimes in dead shells.

MASS. — Haste Island, Salem; Nantucket Sound, 18 fms.; Vineyard Sound and Buzzards Bay, surface, and low water to 10 fms.

CONN. — Tide-pool at Thimble Islands; mouth of New Haven Harbor; New Haven.

80. ERYTHROPS GOËSII (G. O. Sars).

Nematopus goësii G. O. Sars, Nyt mag. f. naturvid., 1866, vol. 15, p. 96. "HABITAT IN SINU LANGESUNDENSI IN PROF. 50 ORGYARUM SAT FREQVENS."

Erythrops goësii G. O. Sars, Carcinologiske bidrag til Norges, Fauna, I, Mysider, 1870, pt. 1, p. 24, pl. 1.

MASS. — Off Salem, 20 to 48 fathoms.

81. PARERYTHROPS ROBUSTA (Smith).

Meterythrops robusta Smith, Trans. Conn. acad. sci., 1879 vol. 5, p. 93, pl. 12, figs. 1–2. "OFF SALEM, 33 FATHOMS * * * OFF BAY OF CHALEURS, GULF OF ST. LAWRENCE!, 50 AND 70 FATHOMS."

MYSIDAE.

Parerythrops robusta G. O. Sars, Carcinologiske bidrag til Norges Fauna, I, Mysider, 1879, pt. 3, p. 98, pl. 39.

MASS.— Off Salem, 33 fathoms.

82. PSEUDOMMA ROSEUM G. O. Sars.

Pseudomma roseum G. O. Sars, Forh. vid.-selsk. Christiania, 1869 (1870), p. 154 [10]. "SKRAAVEN" 200–300 FMS. Carcinologiske bidrag til Norges Fauna, I, Mysider, 1870, pt. 1, p. 54, pl. 4.

Near Jeffrey's Bank, Gulf of Maine, 105 fathoms, one specimen.

STOMATOPODA.

Mantis shrimps.

CHLORIDELLIDAE.

83. LYSIOSQUILLA ARMATA Smith.

Lysiosquilla armata Smith, Proc. U. S. nat. mus. for 1880 (1881) vol. 3, p. 446. [OFF MARTHAS VINEYARD] "STATION 865, 65 FATHOMS * * * 876, 120 FATHOMS * * * STOMACH OF LOPHOLATILUS." Bigelow, Proc. U. S. nat. mus., 1894, vol. 17, p. 507.

MASS.— From stomach of flounder, southwest of Gay Head, 17 to 27 fathoms (determination doubtful); off Marthas Vineyard, 65 and 120 fathoms.

84. LYSIOSQUILLA SCABRICAUDA (Lamarck).

Squilla scabricauda Lamarck, Hist. nat. anim. sans vert., 1818, vol. 5, p. 188. "L'OCÉAN INDIEN."

MASS.— Vineyard Sound, surface.

85. CHLORIDELLA EMPUSA (Say).

Squilla empusa Say, Journ. acad. nat. sci. Phil., 1818, vol. 1, p. 250. "COAST OF RHODEISLAND."

THORACOSTRACA. STOMATOPODA.

CHLORIDELLIDAE.

Squilla empusa De Kay, Nat. hist. New York, pt. 6, Crust., 1844, p. 32, pl. 13, fig. 54.

Burrows in mud near low-water mark. Beach to 12 fathoms.

Mass.— Woods Hole; Vineyard Sound; Acushnet River; New Bedford; Buzzards Bay.

R. I. (Say).— Providence River; Narragansett Bay.

Conn.— Stonington; New Haven.

CUMACEA.

LAMPROPIDAE.

86. Lamprops quadriplicata Smith.

Lamprops quadriplicata Smith, Trans. Conn. acad. sci., 1879, vol. 5, p. 118. "Gloucester Harbor!, Massachusetts, 7 to 10 fathoms * * * Casco Bay!, * * * surface."

Me.— Casco Bay, surface.

Mass.— Gloucester Harbor, 7 to 10 fathoms.

LEUCONIDAE.

87. Leucon nasicoides Lilljeborg.

Leucon nasicoides Liljeborg [Lilljeborg], Öfvers. k. vet.-akad. förh., Stockholm, 1855 (1856), vol. 12, p. 122. "Kullaberg." G. O. Sars, Crust. Norway, 1900, vol. 3, p. 31, pl. 23.

Me.— Eastport.

88. Eudorella hispida G. O. Sars.

Eudorella hispida G. O. Sars, Öfvers. k. vet.-akad. förh., Stockholm, 1871 (1872), vol. 28, p. 80. "in prof. 30–35 orgyar. latit. 39° 54′ sept., longit. 73° 15′ occid." K. Svenska vet.-akad. handl., 1870 (1871), n. s., vol. 9, no. 13, p. 49, pl. 18, figs. 95–97.

Me.— Bay of Fundy; Casco Bay; off Casco Bay.

Mass.— Off Cape Ann; Salem Harbor.

Surface and 1 to 54 fathoms.

LEUCONIDAE.

89. Eudorella pusilla G. O. Sars.

Eudorella pusilla G. O. Sars, Öfvers. k. vet.-akad. förh., Stockholm, 1871 (1872), vol. 28, p. 79. "extra Shinnicockbay Americæ borealis in prof. 18 orgyar., fundo argillaceo." K. Svenska vet.-akad. handl., 1870 (1871), n. s., vol. 9, no. 13, p. 46, pls. 16 and 17, figs. 76–94.

Me.— Bay of Fundy; Casco Bay.
Mass.— Off Gloucester.
R. I.— Block Island Sound.
1 to 25 fathoms.

90. Eudorellopsis deformis (Kröyer).

Leucon deformis Kröyer, Naturh. tidssk., 1846 (2), vol. 2, pp. 194 and 209, pl. 2, fig. 4. Southern Greenland.
Eudorellopsis deformis G. O. Sars, Crust. Norway, 1900, vol. 3, p. 40, pls. 31 and 32.

Mass.— Off Gloucester, 25 fathoms.

DIASTYLIDAE.

91. Diastylis lucifera (Kröyer).

Cuma lucifera Kröyer, Naturh. tidssk., 1841, vol. 3, pp. 527 and 531, pl. 6, figs. 34–35. "sydlige Kattegat."
Diastylis lucifera G. O. Sars, Crust. Norway, 1900, vol. 3, p. 49, pl. 38.

Me.— Bay of Fundy, off Head Harbor. 60 to 77 fathoms.

92. Diastylis sculpta G. O. Sars.

Diastylis sculpta G. O. Sars, Öfvers. k. vet.-akad. förh., Stockholm, 1871 (1872), vol. 28, p. 71. "extra Shinnicockbay Americæ borealis in profunditate 18 orgyarum fundo

ARGILLACEO." K. Svenska vet.-akad. handl., 1870 (1871), n. s., vol. 9, no. 13, p. 24, pls. 1–9, figs. 1–49.

ME.— Bay of Fundy; Casco Bay.
MASS.— Gloucester Harbor; off Cape Ann; Vineyard Sound.
R. I.— Off Watch Hill; Block Island Sound.
Surface; low water to 60 fathoms.

93. DIASTYLIS QUADRISPINOSA G. O. Sars.

Diastylis quadrispinosa G. O. Sars, Öfvers. k. vet.-akad. förh., Stockholm, 1871 (1872), vol. 28, p. 72. "IN PROF. 30–35 ORG. LATITUD. 39° 54′ SEPT., LONGIT. 73° 15′ OCCID. GREENW., FUNDO ARGILLACEO, NEC NON EXTRA SHINNICOCKBAY IN PROF. 18 ORG." Smith, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 554 [260], pl. 3, fig. 13.

ME.— Bay of Fundy; Casco Bay.
GULF OF MAINE.— Jeffreys Ledge.
MASS. — Between Cape Ann and Isles of Shoals; off Cape Ann; off Salem; Vineyard Sound, off Tarpaulin Cove; off Marthas Vineyard; Southwest Ledge; off Buzzards Bay.
R. I.— Off Watch Hill; Block Island Sound.
2 to 68 fathoms.

94. DIASTYLIS ABBREVIATA G. O. Sars.

Diastylis abbreviata G. O. Sars, Öfvers. k. vet.-akad. förh., Stockholm, 1871 (1872), vol. 28, p. 74. "IN PROF. 30–35 ORG. LAT. 39° 54′, LONG. 73° 15′ FUNDO ARGILLACEO." K. Svenska vet.-akad. handl., 1870 (1871), n. s., vol. 9, no. 13, p. 30, pl. 12, figs. 62–64.

ME.— Casco Bay.
MASS.— Off Cape Ann.
17 to 35 fathoms.

DIASTYLIDAE.

95. Diastylis polita Smith.

Diastylis politus Smith, Trans. Conn. acad. sci., 1879, vol. 5, p. 108. "Vineyard Sound * * * Gloucester * * * Casco Bay * * * Trenton Bay * * * Halifax * * * 120 miles south of Halifax * * * Northumberland Straits, Gulf of St. Lawrence."

Me.— Trenton Bay; Casco Bay.
Mass.— Gloucester; Vineyard Sound.
Surface, and 7 to 10 fathoms.

96. Leptostylis ampullacea (Lilljeborg).

Cuma ampullacea Liljeborg [Lilljeborg], Öfvers. k. vet.-akad. förh., Stockholm, 1855 (1856), vol. 12, p. 120. "Kullaberg."
Leptostylis ampullacea G. O. Sars, Crust. Norway, 1900, vol. 3, p. 70, pl. 50, fig. 1.

Gulf of Maine, near Cashes Ledge, 52 to 90 fathoms.

97. Leptostylis longimana (G. O. Sars).

Diastylis longimana G. O. Sars, Förh. vid.-selsk. Christiania 1864 (1865), p. 173. "in sinu Christianiensi inqve fretu Drøbakiensi prof. 20–30 orgyar."
Leptostylis longimana G. O. Sars, Crust. Norway, 1900, vol. 3, p. 68, pl. 48.

Me.— Casco Bay.

CAMPYLASPIDAE.

98. Campylaspis rubicunda (Lilljeborg).

Cuma rubicunda Liljeborg [Lilljeborg], Öfvers. k. vet.-akad. förh., Stockholm, 1855 (1856), vol. 12, p. 121. "Kullaberg."
Campylaspis rubicunda G. O. Sars, Crust. Norway, 1900, vol. 3, pp. 84 & 108, pls. 56 & 57.

Me.— Casco Bay, in stomach of common flounder.
Mass.— Off Cape Ann, 35 fathoms.

TANAIDAE.

99. Tanais cavolinii Milne Edwards.

Tanais cavolinii Milne Edwards, Hist. nat. Crust., 1840, vol. 3, p. 141, pl. 3, fig. 6. "LE GOLFE DE NAPLES."

Tanais vittatus Harger, Rept. U. S. commr. of fish & fisheries, pt. 6, for 1878 (1880), p. 418, pl. 13, figs. 81–82.

On piles and among algae and eel-grass.

CONN.— Noank.

100. Leptognathia coeca (Harger).

Paratanais coeca Harger, Amer. journ. sci., 1878 (3), vol. 15, p. 378. "FORTY-EIGHT FATHOMS. MASSACHUSETTS BAY, OFF SALEM."

Leptochelia coeca Harger, Rept. U. S. commr. of fish & fisheries, pt. 6, for 1878 (1880), p. 427, pl. 13, fig. 91.

MASS.— Off Salem, 48 fathoms; Provincetown.

101. Heterotanais limicola (Harger).

Paratanais limicola Harger, Amer. journ. sci., 1878 (3), vol. 15, p. 378. "FORTY-EIGHT FATHOMS. MASSACHUSETTS BAY, OFF SALEM."

Leptochelia limicola Harger, Rept. U. S. commr. of fish & fisheries, pt. 6, for 1878 (1880), p. 424, pl. 13, figs. 87 & 88.

MASS.— Off Salem, 48 fathoms.

102. Leptochelia rapax Harger.

Leptochelia rapax Harger, Proc. U. S. nat. mus., 1879, vol. 2, p. 163. "ANNISQUAM, MASS." Rept. U. S. commr. of fish & fisheries, pt. 6, for 1878 (1880), p. 424, pl. 13, figs. 89 & 90.

MASS.— Annisquam, 3 feet, on muddy bottom.

TANAIDAE.

103. Leptochelia savignyi (Kröyer).

Tanais savignyi Kröyer, Naturh. tidssk., 1842, vol. 4, p. 168, pl. 2, figs. 1–12. "Madera," about 15 fathoms.

Leptochelia algicola Harger, Rept. U. S. commr. of fish & fisheries, pt. 6, for 1878 (1880), p. 421, pl. 12, fig. 80; pl. 13, figs. 83–86.

Among eel-grass, in old piles, etc. Surface to 3 feet.
Mass.— Provincetown; Woods Hole.
Conn.— Noank.

GNATHIIDAE.

104. Gnathia cerina (Stimpson).

Praniza cerina Stimpson, Mar. invert. Grand Manan, 1853, p. 42, pl. 3, fig. 31. "20–30 fathoms in the Hake Bay," [Grand Manan].

Gnathia cerina Harger, Rept. U. S. commr. of fish & fisheries, pt. 6, for 1878 (1880), p. 410, pl. 12, figs. 75–79.

From Bay of Fundy to Massachusetts Bay. 10 to 60 fathoms.

ANTHURIDAE.

105. Anthura tenuis (Harger).

Ptilanthura tenuis Harger, Amer. journ. sci., 1878 (3), vol. 15, p. 377. "New England coast from Noank Harbor, Conn., to Casco Bay, Maine." Rept. U. S. commr. of fish & fisheries, pt. 6, for 1878 (1880), p. 406, pls. 11 & 12, figs. 71–74.

Me.— Casco Bay.
Mass.— Waquoit.
R. I.— Off Block Island; Watch Hill.
Conn.— Noank Harbor.
Low water to 19½ fathoms.

ANTHURIDAE.

106. Cyathura carinata (Kröyer).

Anthura carinata Kröyer, Naturh. tidssk., 1847 (2), vol. 2, p. 402. "I Öresundet ved Kjobenhavn (Kallebod Strand)." Schioedte, Naturh. tidssk., 1875, (3) vol. 10, p. 211, pl. 4, figs. 1–14.

In eel-grass or mud. Low water to 19½ fathoms.
Mass.— Gloucester; Squam Estuary; Vineyard Sound.
R. I.— Off Block Island; East Providence.
Conn.— Noank Harbor and other localities.

107. Calathura brachiata (Stimpson).

Anthura brachiata Stimpson, Mar. invert. Grand Manan, 1853, p. 43. "twenty fathoms off the northern point of Duck Island" [Grand Manan].
Paranthura brachiata Harger, Rept. U. S. commr. of fish & fisheries, pt. 6, for 1878 (1880), p. 402, pl. 11, fig. 70.

Me.— Bay of Fundy; Casco Bay.
Gulf of Maine; Jeffreys Bank; Georges Bank.
Mass.— Vineyard Sound.
20 to 115 fathoms.

CIROLANIDAE.

108. Cirolana concharum (Stimpson).

Aega concharum Stimpson, Mar. invert. Grand Manan, 1853, p. 42. "Charleston, S. C., Harbor."
Cirolana concharum Harger, Rept. U. S. commr. of fish & fisheries, pt. 6, for 1878 (1880), p. 378, pls. 9 & 10, figs. 58–63.

Mass.— Eel-pond, Woods Hole; Vineyard Sound; Muskeget Channel; off Marthas Vineyard.
R. I.— Off Block Island, near eastern end of Long Island Sound.
Shallow water to 45 fathoms.

CIROLANIDAE.

109. Cirolana polita (Stimpson).

Aega polita Stimpson, Mar. invert. Grand Manan, 1853, p. 41. "low-water mark on High Duck Island" [Grand Manan].

Me.— Eastport.
Mass.— Salem; near Swampscott; Cape Cod Bay.
Georges Bank.
Low-water to 150 fathoms.

AEGIDAE.

110. Aega psora (Linné).

Salve-bug.

Oniscus psora Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 636. "habitat in mari Norvegico."
Aega psora Harger, Rept. U. S. commr. of fish & fisheries, pt. 6, for 1878 (1880), p. 384, pl. 10, fig. 64.
On cod, skate and halibut. 40 to 150 fathoms.

Mass.— Beverly; Provincetown; off Marthas Vineyard.
Gulf of Maine; Georges Bank.

111. Rocinela americana Schioedte and Meinert.

Rocinela americana Schioedte and Meinert, Naturh. tidssk., 1879 (3), vol. 12, p. 394, pl. 10, figs. 16–18. "Ireston Americæ septentrionalis." Ireston is an error for Trenton. Harger, Bull. mus. comp. zoöl., 1883, vol. 11, p. 98, pl. 3, figs. 3, 3a, and 4, pl. 4, figs. 2, 2a.

Me.— Trenton.

112. Syscenus infelix Harger.

Syscenus infelix Harger, Rept. U. S. commr. of fish & fisheries, pt. 6, for 1878 (1880), p. 387. "About fifteen miles north-

AEGIDAE.

EAST OF CAPE COD!, IN 130 FATHOMS." Bull. mus. comp. zoöl., 1883, vol. 11, p. 100, pl. 3, figs. 5, 5a, pl. 4, figs. 3–3h.

MASS.— 15 miles northeast of Cape Cod, 130 fathoms.

CYMOTHOIDAE.

113. AEGATHOA LOLIGINEA Harger.

Aegathoa loliginea Harger, Amer. journ. sci., 1878 (3), vol. 15, p. 376. "SAVIN ROCK, NEAR NEW HAVEN, FROM THE MOUTH OF A SQUID (*Loligo Pealii*)." Rept. U. S. commr. of fish & fisheries, pt. 6 for 1878 (1880), p. 393, pl. 10, fig. 66.

CONN.— Savin Rock, near New Haven.

114. NEROCILA MUNDA Harger.

Nerocila munda Harger, Rept. U. S. commr. of fish and fisheries, pt. 1, for 1871–1872 (1873), p. 571 [277]. "ON THE DORSAL FIN OF *Ceratacanthus aurantiacus*." [AT WOODS HOLL, VINEYARD SOUND.] Rept. U. S. commr. of fish & fisheries, pt. 6, for 1878 (1880), p. 392, pl. 10, fig. 65.

MASS.— Vineyard Sound and Woods Hole, on file-fish.

115. CYMOTHOA EXCISA Perty.

Cymothoa excisa Perty, in Spix and Martius, Del. animal. artic. Brasil., 1830–1834, p. 211, pl. 40, fig. 11. "HABITAT PROPE SEBASTIANOPOLIN." Schioedte and Meinert, Naturh. tidssk., 1884, vol. 14, p. 238, pl. 6, figs. 11–16.

MASS.

116. LIVONECA OVALIS (Say).

Cymothoa ovalis Say, Journ. acad. nat. sci. Phil., 1818, vol. 1, p. 394. "INHABITS THE MOUTHS OF PERCÆ, &C."

CYMOTHOIDAE.

Livoneca ovalis Harger, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 572 [278]; *op. cit.*, pt. 6, for 1878 (1880), p. 395, pl. 11, fig. 67.

From scup and bluefish.
MASS.—Vineyard Sound.
CONN.—Thimble Islands; New Haven.

LIMNORIIDAE.

117. LIMNORIA LIGNORUM (Rathke).

Gribble.

Cymothoa lignorum Rathke, Skrivt. naturh. selsk., 1799, vol. 5, pt. 1, p. 101, pl. 3, fig. 14. [WESTERN COAST OF NORWAY FROM BERGEN TO NORDLAND.]
Limnoria lignorum Harger, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 571 [277], pl. 6, fig. 25.

Burrows in wood.
From Bay of Fundy to western end of Long Island Sound; to a depth of 10 fathoms.

SPHAEROMIDAE.

118. SPHAEROMA QUADRIDENTATUM Say.

Sphaeroma quadridentata Say, Journ. acad. nat. sci. Phil., 1818, vol. 1, p. 400. "COAST OF GEORGIA AND OF EAST FLORIDA." Harger, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 569 [275], pl. 5, fig. 21.

Under stones and rocks and on seaweeds.
MASS.— Provincetown.
Common on southern shore of New England.

IDOTHEIDAE.

119. Chiridotea coeca (Say).

Idotea coeca Say, Journ. acad. nat. sci. Phil., 1818, vol. 1, p. 424. "coast of the United States."

Chiridotea coeca Harger, Rept. U. S. commr. of fish & fisheries, pt. 6, for 1878 (1880), p. 338, pl. 4, figs. 16–19.

On sandy beaches, below high tide, or burrows just under the surface; also swims with facility.

Mass.— Nahant; Cohasset; Provincetown; Vineyard Sound; Tarpaulin Cove, Naushon; Nantucket.

Conn.— New Haven and other localities.

120. Chiridotea tuftsii (Stimpson).

Idotaea tuftsii Stimpson, Mar. invert. Grand Manan, 1853, p. 39. "dredged on a sandy bottom in 10 fathoms, off Cheney's Head" [Grand Manan].

Chiridotea tuftsii Harger, Rept. U. S. commr. of fish & fisheries, pt. 6, for 1878 (1880), p. 340, pls. 4 & 5, figs. 20–23.

Me.— Eastport; Casco Bay.

Mass.— Gloucester Harbor; off Boston Harbor; Stellwagen Bank.

Conn.— Off New London.

Low water to 17 fathoms.

121. Idothea marina (Linné).

Oniscus marinus Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 637. "in Oceano Norvegico."

Idotea irrorata Harger, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 569 [275], pl. 5, fig. 23.

Among algae, stones, etc. Low water to 10 fathoms.

From Bay of Fundy to western end of Long Island Sound.

IDOTHEIDAE.

122. Idothea phosphorea (Harger).

Idotea phosphorea Harger, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 569 [275]. "Long Island Sound to Bay of Fundy." *Op. cit.*, pt. 6, for 1878 (1880), p. 347, pl. 5, figs. 27–29.

Among rocks and seaweed. Surface, and from 1 to 30 fathoms. From Bay of Fundy to western end of Long Island Sound.

123. Idothea metallica (Bosc).

Idotea metallica Bosc, Hist. nat. Crust., 1802, vol. 2, p. 179, pl. 15, fig. 6. "Se trouve dans la haute mer."

Idotea robusta Harger, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 569 [275], pl. 5, fig. 24.

Pelagic.

Me.— Between Boon Island and Matinicus Rocks.

Georges Bank.

Mass.— Vineyard Sound; Nantucket Shoals; off Marthas Vineyard and No Mans Land.

R. I.— Off Newport.

124. Synidotea nodulosa (Kröyer).

Idothea nodulosa Kröyer, Naturh. tidssk., 1846 (2), vol. 2, p. 100. Southern Greenland.

Synidotea nodulosa Harger, Rept. U. S. commr. of fish & fisheries, pt. 6, for 1878 (1880), p. 351, pl. 6, figs. 33–35.

Georges Bank.

125. Erichsonella attenuata (Harger).

Erichsonia attenuata Harger, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 570 [276], pl. 6 fig. 27. "Great Egg Harbor, New Jersey, * * * New Haven,[1] Connecticut."

[1] After his original citation, Harger does not mention New Haven but Noank; therefore the former may be an error.

IDOTHEIDAE.

On eel-grass.

CONN.— Noank; New Haven.

126. ERICHSONELLA FILIFORMIS (Say).

Stenosoma filiformis Say, Journ. acad. nat. sci. Phil., 1818, vol. 1, p. 424. "EGG-HARBOUR."

Erichsonia filiformis Harger, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 570 [276], pl. 6, fig. 26.

In tide-pools and among algae to 7 fathoms.

ME.— Casco Bay (?).

MASS.— Vineyard Sound; Nantucket Sound.

Long Island Sound.

127. EDOTEA TRILOBA (Say).

Idotea triloba Say, Journ. acad. nat. sci. Phil., 1818, vol. 1, p. 425. "EGG-HARBOUR."

Epelys trilobus Smith, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 571 [277], pl. 6, fig. 28.

ME.— Quahog Bay, about 30 miles northeast of Portland.

MASS.— Gloucester; near Cape Cod; Provincetown; Vineyard Sound.

CONN.— Noank; Savin Rock, near New Haven.

128. EDOTEA MONTOSA (Stimpson).

Idotaea montosa Stimpson, Mar. invert. Grand Manan, 1853, p. 40. "TAKEN IN DEEP WATER ON SANDY AND MUDDY BOTTOMS" [AT GRAND MANAN].

Epelys montosus Harger, Rept. U. S. commr. of fish & fisheries, pt. 6, for 1878 (1880), p. 359, pl. 8, figs. 44–47.

From Bay of Fundy to Long Island Sound. 16 to 40 fathoms.

ARCTURIDAE.

129. Astacilla granulata (G. O. Sars).

Leachia granulata G. O. Sars, Arch. math. nat., Kristiania, 1877, vol. 2, p. 351 [251]. Lat. 64° 9′ N., long. 1° 48′ E., 412 fms., sta. 18; lat. 64° 36′ N., long. 10° 21.5′ W., 299 fms., sta. 48.

Astacilla granulata Harger, Rept. U. S. commr. of fish & fisheries, pt. 6, for 1878 (1880), p. 364, pls. 8 & 9, figs. 48–52.

Georges Bank, on *Primnoa*.
Off Marthas Vineyard, 291–640 fathoms.

ASELLIDAE.

130. Asellus communis Say.

Asellus communis Say, Journ. acad. nat. sci. Phil., 1818, vol. 1, p. 427. "A very common species in our fresh waters, particularly in rivulets under stones. It is frequently introduced with the Schuylkill water into Philadelphia." Harger, in Smith, Rept. U. S. commr. of fish & fisheries, pt. 2, for 1872–1873 (1874), p. 657, pl. 1, fig. 4.

Mass.
R. I.— Carolina (determination doubtful).
Conn.— About New Haven.

JANIRIDAE.

131. Jaera albifrons Leach.

Jaera albifrons Leach, Edinb. encyc., 1814, vol. 7, p. 434. "Inhabits the British sea everywhere, under stones and amongst fuci." Harger, Rept. U. S. commr. of fish & fisheries, pt. 6, for 1878 (1880), p. 315, pl. 1, figs. 4–8.

Among rocks, algae and rubbish, along shore.
Whole coast of New England.

JANIRIDAE.

132. Janira alta (Stimpson).

Asellodes alta Stimpson, Mar. invert. Grand Manan, 1853, p. 41, pl. 3, fig. 30. "Dredged in soft mud in 40 f., off Long Island, G. M."

Janira alta Harger, Rept. U. S. commr. of fish & fisheries, pt. 6, for 1878 (1880), p. 321, pls. 2 & 3, figs. 9, 12 & 13.

From Bay of Fundy to Massachusetts Bay. Low water to 190 fathoms.

MUNNIDAE.

133. Munna fabricii Kröyer.

Munna fabricii Kröyer, Naturh. tidssk., 1847 (2), vol. 2, p. 380. Godthaab, southern Greenland, 50 fathoms. Harger, Rept. U. S. commr. of fish & fisheries, pt. 6, for 1878 (1880), p. 325, pl. 3, fig. 14.

Me.— South Bay, Eastport; Casco Bay, near Portland.
Low water to 12 fathoms.

MUNNOPSIDAE.

134. Munnopsis typica M. Sars.

Munnopsis typica M. Sars, Förh. vidensk.-selsk. Christiania, 1860 (1861), p. 84. "50–60 Favne ved Christiansund." Harger, Rept. U. S. commr. of fish & fisheries, pt. 6, for 1878 (1880), p. 330, pl. 2, fig. 11.

On muddy bottoms.
Me.— Bay of Fundy, between Head Harbor and the Wolves, 60 fathoms.

MUNNOPSIDAE.

135. Ilyarachna, species, Harger.

Ilyarachna species, Harger, Rept. U. S. commr. of fish & fisheries, pt. 6, for 1878 (1880), p. 335. "106 fathoms, gray mud, 21 miles east of cape cod light."

Perhaps *I. hirticeps* G. O. Sars.

Mass.— 21 miles east of Cape Cod Light, 106 fathoms.

ONISCIDAE.

Sow-bugs; Pill-bugs; Wood-lice.

136. Oniscus asellus Linné.

Oniscus asellus Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 637. "Habitat in Domibus, Muris, Hybernaculis, lignis putridis."

Oniscus murarius Cuvier, Journ. hist. nat., Paris, 1792, vol. 2 p. 22, pl. 26, figs. 11–13.

Me.— Freeport.

Mass.— Woods Hole.

R. I.— Providence.

137. Philoscia vittata Say.

Philoscia vittata Say, Journ. acad. nat sci. Phil., 1818, vol. 1, p. 429. "United States." Harger, Rept. U. S. commr. of fish & fisheries, pt. 6, for 1878 (1880), p. 306, pl. 1, fig. 1.

Under rubbish and stones.

Mass.— Barnstable; Vineyard Sound; Woods Hole.

Conn.— Stony Creek.

138. Porcellio rathkii Brandt.

Porcellio rathkii Brandt, Bull. soc. imp. nat. Moscou, 1833, vol. 6, p. 177. "Germania."

Porcellio trivittatus Lereboullet, Mém. soc. mus. hist. nat.

Strasbourg, 1853, vol. 4, p. 54, pl. 1, figs. 13 & 14, pl. 3, figs. 66–70.

Me.— Freeport.
Mass.— Lawrence; Lanesboro.
R. I.— Providence.

139. Porcellio spinicornis Say.

Porcellio spinicornis Say, Journ. acad. nat. sci. Phil., 1818, vol. 1, p. 431. "North America."
Porcellio pictus Brandt & Ratzeburg, Med. zool., Berlin, 1833, vol. 2, p. 78, pl. 12, figs. 5, 5e, 5f.

In damp cellars, etc.
Conn.— Goshen.

140. Porcellio scaber Latreille.

Porcellio scaber Latreille, Hist. nat. Crust. Ins., an XII (1804), vol. 7, p. 45. "Cette espèce se trouve plus particulièrement sur les murs." Lereboullet, Mém. soc. mus. hist. nat. Strasbourg, 1853, vol. 4, p. 34, pl. 1, figs. 4 & 5, pl. 2, figs. 43–47.

Me.— Freeport.
Mass.— Lawrence; Woods Hole.
Conn.— West Haven.

141. Porcellio convexus (De Geer).

Oniscus (convexus) De Geer, Mém. pour servir à l'hist. des Insectes, 1778, vol. 7, p. 553, pl. 35, fig. 11. "dans ma chambre."
Porcellio armadilloides Bate and Westwood, Brit. Sessile-eyed Crust., 1868, vol. 2, p. 485, 3 woodcuts.

Mass. — "Hab. in New England circa Mount Lebanon" (Stuxberg).

ARMADILLIDIDAE.

Sow-bugs; Pill-bugs; Wood-lice.

142. Armadillidium vulgare (Latreille).

Armadillo vulgare Latreille, Hist. nat. Crust. Ins., an XII (1804), vol. 7, p. 48. "Il est très-commun."

Armadillidium commutatum Brandt & Ratzeburg, Med. zool., Berlin, 1833, vol. 2, p. 81, pl. 13, figs. 1, 2, 3, A, B.

Under boards and stones, in gardens and cellars.

Mass.

R. I. — Providence.

LIGYDIDAE.

143. Ligyda oceanica (Linné).

Oniscus oceanicus Linné, Syst. nat., ed. 12, 1767, vol. 1, pt. 2, p. 1061. "Habitat in Oceano."

Ligia oceanica Kinahan, Nat. hist. rev., 1857, vol. 4, p. 279, pl. 20, figs. 7–10.

R. I. — Off Newport.

TRICHONISCIDAE.

144. Actoniscus ellipticus Harger.

Actoniscus ellipticus Harger, Amer. journ. sci., 1878 (3), vol. 15, p. 373. "at Savin Rock, near New Haven, and also at Stony Creek." Rept. U. S. commr. of fish & fisheries, pt. 6, for 1878 (1880), p. 309, pl. 1, fig. 3.

Conn. — Savin Rock & Stony Creek.

145. Scyphacella arenicola Smith.

Scyphacella arenicola Smith, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 568 [274]. "Somers's

AND BEESLEY'S POINTS, ON GREAT EGG HARBOR, NEW JERSEY." Harger, Rept. U. S. commr. of fish and fisheries, pt. 6, for 1878 (1880), p. 307, pl. 1, fig. 2.

Burrows in sand just above high-water mark.

MASS. — Nobska Beach, Vineyard Sound; Ram Island, Woods Hole Harbor; Nantucket.

BOPYRIDAE.

146. PHRYXUS ABDOMINALIS (Kröyer).

Bopyrus abdominalis Kröyer, Naturh. tidssk., 1840, vol. 3, pp. 102 & 289, pls. 1 & 2. MANY PLACES ON THE NORTH COAST OF NORWAY, BUT MOST FREQUENTLY AT KRISTIANSSUND (ABOUT 63° N.) ON *Hippolyte* (APPARENTLY *H. gaimardii*).

Phryxus abdominalis G. O. Sars, Crust. Norway, 1898, vol. 2, p. 215, pls. 90 & 91.

Parasitic on shrimps, *Spirontocaris spina*, *S. polaris*, *S. pusiola*, *S. liljeborgii*, *Pandalus borealis*, *P. montagui*, *P. leptocerus*.

ME.— Casco Bay.

Cashes Ledge, Gulf of Maine; Georges Bank.

MASS.— Off Salem; off Cape Cod.

18 to 90 fathoms.

147. STEGOPHRYXUS HYPTIUS Thompson.

Stegophryxus hyptius Thompson, Bull. U. S. fish comm., 1901, vol. 21, p. 53, pls. 9 & 10. "AT WOODS HOLE * * * GREAT HARBOR * * * HADLEY HARBOR * * * EDGARTOWN * * * WARWICK, RHODE ISLAND.

On *Pagurus longicarpus*.

MASS.— Great Harbor, Woods Hole; Hadley Harbor, Naushon; Edgartown, Marthas Vineyard.

R. I.— Warwick.

ARTHROSTRACA. ISOPODA.

BOPYRIDAE.

148. Bopyroides hippolytes (Kröyer).

Bopyrus hippolytes Kröyer, K. Danske vid. selsk. natur. og math. afh., 1838, vol. 7, p. 306 [78], pl. 4, fig. 22. Greenland on *Hippolyte polaris.*

Bopyroides hippolytes G. O. Sars, Crust. Norway, 1898, vol. 2, p. 199, pl. 84, fig. 2.

Parasitic on *Spirontocaris spina, S. fabricii, S. liljeborgii, S. polaris* and *S. pusiola.*

From Bay of Fundy to Cape Cod, 22 to 160 fathoms.

149. Probopyrus pandalicola (Packard).

Bopyrus pandalicola Packard, Zoology for students and general readers, 1879, p. 308, text-fig. 262. Locality not specified.

Probopyrus palaemoneticola Richardson, Proc. U. S. nat. mus., 1904, vol. 27, p. 66, figs. 41–43.

On *Palaemonetes vulgaris.*

Mass.— Acushnet River.

R. I.— East Providence.

150. Ione thompsoni Richardson.

Ione thompsoni Richardson, Proc. U. S. nat. mus., 1904, vol. 27, p. 75, text-figs. 64–68. "North Falmouth, Massachusetts, * * * on *Callianassa stimpsoni.*"

On *Callianassa stimpsoni.*

Mass.— North Falmouth.

AMPHIPODA.

VIBILIDAE.

151. Vibilia viatrix Bovallius.

Vibilia viatrix Bovallius, K. Svenska vet.-akad. handl., 1886 (1887), vol. 11, p. 9. "Atlantic."

VIBILIDAE.

Mass.— Off Marthas Vineyard, surface. Doubtfully determined by Holmes.

R. I.— Off Newport.

HYPERIIDAE.

152. Hyperia galba (Montagu).

Cancer Gammarus galba Montagu, Trans. Linn. Soc. London, 1813, vol. 11, p. 4, pl. 2, fig. 2. South coast of Devonshire, "appears to inhabit the open sea, and is frequently dragged on shore amongst marine plants and zoophyta in the nets, especially at Torcross."

Hyperia galba G. O. Sars, Crust. Norway, 1890, vol. 1, p. 7, pl. 2, pl. 3, fig. 1.

Commonly found in *Aurelia*.

Me.— Eastport.

Mass.— Salem; Woods Hole.

Conn.— Off Fishers Island.

153. Hyperia medusarum (O. F. Müller).

Cancer medusarum O. F. Müller, Zool. Dan. prod., 1776, p. 196. [Söndmör.]

Hyperia medusarum G. O. Sars, Crust. Norway, 1890, vol. 1, p. 7, pl. 3, fig. 2.

Often found in *Cyanea* and other jellyfishes.

Me.— Casco Bay.

Mass.— Vineyard Sound and northward.

Conn.— Noank; off New Haven.

154. Euthemisto compressa (Goës).

Themisto compressa Goës, Öfvers. k. vetensk. akad. förh.,

HYPERIIDAE.

Stockholm, 1865 (1866), vol. 22, p. 533, pl. 41, fig. 34. "IN MARI SEPTENTRIONALI GROENLANDIAM ALLUENTE, DAVIS STRAIT * * * ET IN OCEANO BOREALI-ATLANTICO GRADU LATITUDINIS 58°, 4′ ET ALIBI CIRCA."

Euthemisto compressa G. O. Sars, Crust. Norway, 1890, vol. 1, p. 12, pl. 5, fig. 2.

MASS.— Off Marthas Vineyard; off Nantucket Shoals.

Surface to 18 fathoms.

155. EUTHEMISTO BISPINOSA (Boeck).

Themisto bispinosa Boeck, Forh. vid.-selsk. Christiania, 1870 (1871), p. 88. "GROENLANDIA."

Euthemisto bispinosa G. O. Sars, Crust. Norway, 1890, vol. 1, p. 14, pl. 6, fig. 2 (*E. crassicornis* in explanation of plate).

Gulf of Maine.

MASS.— Off Cape Cod; Vineyard Sound; off Martha's Vineyard.

Usually at surface.

PHRONIMIDAE.

156. PHRONIMA SEDENTARIA (Forskäl).

Cancer sedentarius Forskäl, Desc. anim. quæ in itinere orientali observavit, 1775, p. 95. "IN MARI MEDITERRANEO."

Phronima sedentaria Claus, Zeits. wiss. zool., 1872, vol. 22, p. 331, pls. 26 & 27, & 3 figs. in text.

Often found in the tests of *Salpa* and *Pyrosoma*.

MASS.— Off Nantucket Shoals, surface.

OXYCEPHALIDAE.

157. OXYCEPHALUS CLAUSI Bovallius.

Oxycephalus clausi Bovallius, K. Svenska vet.-akad. handl.,

OXYCEPHALIDAE.

1886 (1887), vol. 11, p. 35. "ATLANTIC, MEDITERRANEAN, INDIAN OCEAN, PACIFIC."

MASS.— Off Marthas Vineyard, surface.

PARASCELIDAE.

158. THYROPUS, sp.

Thyropus sp., Smith, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 567 [273]. "WITH THE *Phronima* AND *Salpa*, OFF GAY HEAD."

MASS.— Off Gay Head.

ORCHESTIIDAE.

159. TALORCHESTIA LONGICORNIS (Say).

Talitrus longicornis Say, Journ. acad. nat. sci. Phil., 1818, vol. 1, p. 384. "THE SEABEACH OF NEW-JERSEY."

Orchestia longicornis De Kay, Nat. hist. New York, pt. 6, Crust., 1844, p. 35, pl. 9, figs. 28 & 28A.

Sandy shores, among weeds, or burrowing in sand.

MASS.— Salem; Provincetown; Barnstable; Woods Hole; Vineyard Sound; Buzzards Bay.

R. I.— Newport.

160. TALORCHESTIA MEGALOPHTHALMA (Bate).

Orchestia megalophthalma Bate, Cat. Amphip. Crust. Brit. mus., 1862, p. 22, pl. 3, fig. 8. Locality unknown.

Talorchestia megalophthalma Smith, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 556 [262].

Sandy shores, among weeds, or burrowing in sand.

ME.— Casco Bay.

Gulf of Maine.

Mass.— Provincetown; Race Point; Buzzards Bay at Woods Hole.

161. Orchestia agilis Smith.

Beach-flea.

Orchestia agilis Smith, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 555 [261], pl. 4, fig. 14. "Bay of Fundy to New Jersey."

Burrows in sand. Under seaweed on rocky shores.

From the Bay of Fundy to Conn.

162. Orchestia palustris Smith.

Orchestia palustris Smith, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 555 [261]. "Cape Cod to New Jersey."

Salt marshes, under drift-wood, &c.; above high-water mark, in almost dry places.

Mass.— Boston.

From Cape Cod southward.

163. Allorchestes littoralis Stimpson.

Allorchestes littoralis Stimpson, Mar. invert. Grand Manan, 1853, p. 49, pl. 3, fig. 36. "our whole coast from Massachusetts Bay to Grand Manan." Bate, Cat. Amphip. Crust. Brit. mus., 1862, p. 48, pl. 8, fig. 2.

Rocky shores, piles of wharves, &c.

Me.— Bay of Fundy; Casco Bay.

Mass.— Mass. Bay; Provincetown.

Conn.— New Haven.

164. Hyalella dentata Smith.

Hyalella dentata Smith, Rept. U. S. commr. of fish & fisheries,

pt. 2, for 1872–1873 (1874), p. 645, pl. 2, figs. 8–10. "Madison, Wis." (Although many localities are mentioned, the figured ♂ is from Madison.)

In fresh water.
Me.— Bangor; Norway.
Mass.— Salem; Cambridge.
Conn.— New Haven.

LYSIANASSIDAE.

165. Anonyx nugax (Phipps).

Cancer nugax Phipps, Voyage North Pole, 1773 (1774), p. 192, pl. 12, fig. 2. "in the trawl near Moffen Island."

Mass.— Woods Hole & Vineyard Sound. Surface & bottom.

166. Tryphosa pinguis (Boeck).

Anonyx pinguis Boeck, Förh. ved de Skand. naturf., 1860 (1861), vol. 8, p. 642. [Norway.]
Orchomenella pingvis G. O. Sars, Crust. Norway, 1891, vol. 1, p. 67, pl. 24, fig. 2.

Mass.— Woods Hole; off Gay Head; off Marthas Vineyard.

167. Hippomedon serratus Holmes.

Hippomedon serratus Holmes, Amer. nat., 1903, vol. 37, p. 278. "m. Cape Cod to Hatteras."

Mass.— Off Cape Ann, 36 feet (Holmes MS.).
R. I.— Newport (Holmes MS.).

168. Hoplonyx cicada (O. Fabricius).

Oniscus cicada O. Fabricius, Fauna Groenlandica, 1780, p.

LYSIANASSIDAE.

258. "Habitat in libero mari, raro inter fucos, potissimum ad ostia riuorum in fundo arenoso, non tamen numerosus."

Hoplonyx cicada G. O. Sars, Crust. Norway, 1891, vol. 1, p. 92, pl. 32, fig. 2.

Mass.— Near Woods Hole (Holmes MS.); off Marthas Vineyard, on trawl line.

169. Lysianopsis alba Holmes.

Lysianopsis alba Holmes, Amer. nat., 1903, vol. 37, p. 276. "m. Cape Cod to Hatteras." Types from Woods Hole in U. S. national museum.

Mass.— Woods Hole.

PONTOPOREIIDAE.

170. Pontoporeia femorata Kröyer.

Pontoporeia femorata Kröyer, Naturh. tidssk., 1842, vol. 4, p. 153. "E mari Groenlandiæ australi" G. O. Sars, Crust. Norway, 1891, vol. 1, p. 123, pl. 41, fig. 1.

Mass.— Salem Harbor, 5 fathoms.

171. Haustorius arenarius (Slabber).

Oniscus arenarius Slabber, Natuurkundige Verlustigingen, etc., 1769, p. 92, pl. 11, figs. 3–4. (*Arenarius* in index, *arenatius* on p. 92.) "Dorpe Oost-kappelle, op het Eiland van Walcheren."

Haustorius arenarius G. O. Sars, Crust. Norway, 1891, vol. 1, p. 135, pl. 46.

Burrows in sand at low-water mark.

Mass.— Smith's Point, Beverly; Cape Cod; Tarpaulin Cove, Naushon; Vineyard Sound.

R. I.— Newport.

Conn.— New Haven.

PHOXOCEPHALIDAE.

172. Phoxocephalus holbölli (Kröyer).

Phoxus holbölli Kröyer, Naturh. tidssk., 1842, vol. 4, p. 151. Greenland.

Phoxocephalus holbölli G. O. Sars, Crust. Norway, 1891, vol. 1, p. 144, pl. 49.

Me.— Bay of Fundy; Casco Bay.
Stellwagen Bank; off Georges Bank.
Mass.— In and off Vineyard Sound.
R. I.— Newport.
Low water to 45 fathoms.

173. Paraphoxus spinosus Holmes.

Paraphoxus spinosus Holmes, Amer. nat., 1903, vol. 37, p. 276. "m. Cape Cod to Hatteras." Types from Newport in U. S. national museum.

R. I.— Off Block Island; Newport.

174. Harpinia plumosa (Kröyer).

Phoxus plumosus Kröyer, Naturh. tidssk., 1842, vol. 4, p. 152. Greenland.

Harpinia plumosa G. O. Sars, Crust. Norway, 1891, vol. 1, p. 151, pl. 52.

Me.— Bay of Fundy; Casco Bay.
Gulf of Maine.
Mass.— South of Marthas Vineyard.
20 to 428 fathoms.

AMPELISCIDAE.

175. Ampelisca macrocephala Lilljeborg.

Ampelisca macrocephala Liljeborg [Lilljeborg], Öfvers. k. vet.-akad. förh., Stockholm, 1852 (1853), vol. 9, p. 7. "Kulla-

BERG IN SCANIA." G. O. Sars, Crust. Norway, 1891, vol. 1, p. 172, pl. 60, fig. 1.

Tube-dwelling, in mud. From 6 to 29 fathoms.
ME. — Casco Bay.
Gulf of Maine.
MASS.— Cape Ann; Ipswich Bay; Vineyard Sound; Buzzards Bay.
R. I. — Newport; off Newport.

176. AMPELISCA SPINIPES Boeck.

Ampelisca spinipes Boeck, Förh. ved. de Skand. naturf., 1860 (1861), vol. 8, p. 653. "FARSUND * * * BERGEN." G. O. Sars, Crust. Norway, 1891, vol. 1, p. 173, pl. 60, fig. 2.

MASS. — Woods Hole.
R. I. — Newport; off Newport, 20 fathoms; off Block Island.
Long Island Sound. — Off Sea-flower Key; Fishers Island.

177. AMPELISCA COMPRESSA Holmes.

Ampelisca compressa Holmes, Amer. nat., 1903, p. 37, p. 273. "M. CAPE COD TO HATTERAS."

MASS. — Off Chatham; Vineyard Sound; South of Nantucket.
R. I. — Block Island Sound; off Block Island; Newport; off Newport.
Long Island Sound.
Surface to 47 fathoms.

178. AMPELISCA AGASSIZI (Judd).

Byblis agassizi Judd, Proc. U. S. nat. mus., 1896, vol. 18, p. 599, text figs. 9–11. "SURFACE OF NARRAGANSETT BAY," [OFF NEWPORT].

R. I. — Off Newport.[1]

179. Byblis gaimardii (Kröyer).

Ampelisia gaimardii Kröyer, in Gaimard, Voyages en Scandinavie, en Laponie, au Spitzberg, etc., Zool., Crust., 1846 (?), pl. 23, fig. 1a–y. Locality not specified.

Byblis gaimardii G. O. Sars, Crust. Norway, 1891, vol. 1, p. 183, pl. 64 (*gaimardi* on plate).

Tube-dwelling. 10 to 60 fathoms.

Me. — Bay of Fundy; Casco Bay.

Mass. — Off Thatchers Island; off Half-way Rock, Salem.

180. Byblis serrata Smith.

Byblis serrata Smith, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 561 [267]. "Deep water off Vineyard Sound and Buzzards Bay." Judd, Proc. U. S. nat. mus., 1896, vol. 18, p. 596, text figs. 4–8.

Me. — Casco Bay.

Mass. — Woods Hole; Vineyard Sound; Buzzards Bay.

R. I. — Newport.

Surface to 16 fathoms.

181. Haploops tubicola Lilljeborg.

Haploops tubicola Liljeborg [Lilljeborg], Öfvers. k. vet.-akad. förh., Stockholm, 1855 (1856), vol. 12, p. 135. "Kullaberg." G. O. Sars, Crust. Norway, 1891, vol. 1, p. 192, pl. 67.

Bay of Fundy (off Grand Manan), 97 to 106 fathoms.

Off Georges Bank, 1188 to 1769 fathoms.

[1] *Ampelisca typica* (Bate) and *A. limicola* (Stimpson) recorded by Verrill (without description) from Long Island Sound, Fishers Island Sound, etc., are perhaps two of the species listed above.

AMPELISCIDAE.

182. Haploops setosa Boeck.

Haploops setosa Boeck, Förh. vid.-selsk. Christiania, 1870 (1871), p. 228. "Bergensfjord." G. O. Sars, Crust. Norway, 1891, vol. 1, p. 194, pl. 68, fig. 1.

Bay of Fundy.
Off Georges Bank, 99½ fathoms.

183. Haploops robusta G. O. Sars.

Haploops robusta G. O. Sars, Crust. Norway, 1891, vol. 1, p. 195, pl. 68, fig. 2. "off the coast of Finmark."

Bay of Fundy (Holmes MS.).
Off Georges Bank, deep water.

STEGOCEPHALIDAE.

184. Stegocephalus inflatus Kröyer.

Stegocephalus inflatus Kröyer, Naturh. tidssk., 1842, vol. 4, p. 150. "E mari groenlandico" G. O. Sars, Crust. Norway, 1891, vol. 1, p. 198, pl. 69.

Me.— Eastport; off Head Harbor.
Mass.— Off Cape Ann; off Cape Cod; near Woods Hole.
Jeffreys Ledge; off Georges Bank.
R. I.— South of Block Island.
To a depth of 150 fathoms.

STENOTHOIDAE.

185. Metopa groenlandica Hansen.

Metopa groenlandica Hansen, Vid. meddel. fra den naturh. foren. i Kjöbenhavn, 1887, p. 94, pl. 3, figs. 7–7e. "Godthaab * * * Egedesminde * * * Disco, Nordfjord * * * Grønland."

STENOTHOIDAE.

ME.— Eastport (Holmes MS.).
Off Georges Bank, 86 to 150 fathoms.

186. STENOTHOË PELTATA Smith.

Stenothoe peltata Smith, Trans. Conn. acad. sci., 1874, vol. 3, p. 29, pl. 3, figs. 5–8. "NEAR CULTIVATOR SHOAL * * * 30 FATHOMS."

Near Cultivator Shoal, northwestern part of Georges Bank, 30 fathoms; off Cashes Ledge, 110 fathoms.

187. STENOTHOË CYPRIS Holmes.

Stenothoe cypris Holmes, Amer. nat., 1903, vol. 37, p. 278. "M. CAPE COD TO HATTERAS."

MASS.— Woods Hole.

188. STENOTHOË MINUTA Holmes.

Stenothoe minuta Holmes, Amer. nat., 1903, vol. 37, p. 278. "M. CAPE COD TO HATTERAS." Types from WOODS HOLE in U. S. national museum.

MASS.— Woods Hole.

LEUCOTHOIDAE.

189. LEUCOTHOË SPINICARPA (Abildgaard).

Gammarus spinicarpus Abildgaard, in O. F. Müller, Zool. Danica, ed. 3, 1789, vol. 3, p. 66, pl. 119, figs. 1–4. "AD LITTORA SEPTENTRIONALIA INSULAE SIAELANDIAE."

Leucothoë spinicarpa G. O. Sars, Crust. Norway, 1892, vol. 1, p. 283, pl. 100, pl. 101, fig. 1 (*articulosa*).

Cashes Ledge.

OEDICERIDAE.

190. Paroediceros lynceus (M. Sars).

Oediceros lynceus M. Sars, Förh. vid. selsk. Christiania, 1858 (1859), p. 143. "Vadsø paa 60–70 Favnes."

Paroediceros lynceus G. O. Sars, Crust. Norway, 1892, vol. 1, p. 292, pl. 103, fig. 2, pl. 104, fig. 1.

Me.— Bay of Fundy; Casco Bay.
Gulf of Maine; Cashes Ledge; Georges Bank.
Mass.— Cape Ann.
From 27 to 90 fathoms.

191. Monoculodes edwardsi Holmes.

Monoculodes edwardsi Holmes, Amer. nat., 1903, vol. 37, p. 275. "m. Cape Cod to Hatteras." Type from Woods Hole, in U. S. national museum.

Mass.— Woods Hole.
R. I.— Newport.

PARAMPHITHOIDAE.

192. Pleustes panoplus (Kröyer).

Amphithoë panopla Kröyer, K. Danske vid. selsk. natur. og math. afh., 1838, vol. 7, p. 270 [42], pl. 2, fig. 9. Southern Greenland.

Pleustes panoplus G. O. Sars, Crust. Norway, 1893, vol. 1, p. 344, pl. 121.

Me.— Eastport; Bay of Fundy; Casco Bay.
Cashes Ledge; Stellwagen Bank; Georges Bank.
From 5 to 50 fathoms.

193. Paramphithoë pulchella (Kröyer).

Amphitoe pulchella Kröyer, in Gaimard, Voyages en Scandi-

navie, en Laponie, au Spitzberg, etc., Zool., Crust., 1846 (?), pl. 10, fig. 2 a–r. Locality not specified.

Paramphithoë pulchella G. O. Sars, Crust. Norway, 1893, vol. 1, p. 346, pl. 122, fig. 1.

Me.— Bay of Fundy; Casco Bay.

Cashes Ledge; Stellwagen Bank; Georges Bank.

From 40 to 142 fathoms.

194. Sympleustes glaber (Boeck).

Amphithopsis glaber Boeck, Förh. ved de Skand. naturf., 1860 (1861), vol. 8, p. 662. [Norway.]

Parapleustes glaber G. O. Sars, Crust. Norway, 1893, vol. 1, p. 358, pl. 126, fig. 1.

Me.— Eastport.

EPIMERIDAE.

195. Epimeria loricata G. O. Sars.

Epimeria loricata G. O. Sars, Arch. math. naturv., 1879, vol. 4, p. 450. Stations 326, 357 & 363 (lat. 75° 31.5′ to 80° N., long. 8° 15′ to 17° 50′ E., 123 to 260 fms.). Crust. Norway, 1893, vol. 1, p. 368, pl. 129, fig. 3.

Me.— Off Head Harbor.

Off Jeffreys Ledge.

Mass.— Off Cape Cod; also off Marthas Vineyard, deep water.

From 35 to 106 fathoms.

196. Acanthozone cuspidata (Lepechin).

Oniscvs cvspidatvs Lepechin, Acta acad. sci. imp. Petropolitanae for 1778 (1780), pt. 1, p. 249, pl. 8, fig. 3. "locus, mare album."

EPIMERIDAE.

Acanthozone cuspidata G. O. Sars, Crust. Norway, 1893, vol. 1, p. 370, pl. 130.

Me.— Bay of Fundy; Casco Bay.
Jeffreys Ledge; Stellwagen Bank.
From 5 to 40 fathoms.

IPHIMEDIDAE.

197. Acanthonotosoma serratum (O. Fabricius).

Oniscvs serratvs O. Fabricius, Favna Groenlandica, 1780, p. 262. [Greenland] "in locis profundis."
Acanthonotosoma serratum G. O. Sars, Crust. Norway, 1893, vol. 1, p. 374, pl. 131, fig. 1.

Me.— Bay of Fundy; Casco Bay.
Georges Bank.
From 5 to 50 fathoms.

LAFYSTIIDAE.

198. Lafystius sturionis Kröyer.

Lafystius sturionis Kröyer, Naturh. tidssk., 1842, vol. 4, p 157. "Gregatim sub pinnis Acipenseris Sturionis pectoralibus degit in sinu Codano. Rarius ex Sqvalo Galeo cepi."
Darwinia compressa Bate and Westwood, Brit. sessile-eyed Crust., 1863, vol. 1, p. 184, woodcuts.

Parasitic on fish.
Me.— Bay of Fundy, from the back of a skate.
Mass.— Cape Ann; Vineyard Sound, in the mouth of a goosefish.

SYRRHOIDAE.

199. Syrrhoë crenulata Goës.

Syrrhoë crenulata Goës, Öfver. k. vet.-akad. förh., Stockholm, 1865 (1866), vol. 22, p. 527. "AD SPETSBERGIAM FUNDO ARGILLACEO ET ALGOSO, ORG, PROFUNDITATE 20–80 RARA UT IN TREURENBERG BAY, EXTRA VERLEGENHOEK, SHOAL POINT." G. O. Sars, Crust. Norway, 1893, vol. 1, p. 390, pl. 136.

ME.—Johnson's Bay, near Eastport, 12 fathoms.

MASS.—Off Thatcher's Island, 27 to 36 fathoms.

PARDALISCIDAE.

200. Pardalisca cuspidata Kröyer.

Pardalisca cuspidata Kröyer, Naturh. tidssk., 1842, vol. 4, p. 153. "IN MARI GROENLANDIAM AUSTRALEM ALLUENTE (AD GODTHAAB)" G. O. Sars, Crust. Norway, 1893, vol. 1, p. 403, pl. 141, pl. 142, fig. 1.

Near Jeffreys Ledge, 35 fathoms.

EUSIRIDAE.

201. Rhachotropis aculeata (Lepechin).

Oniscvs acvleatvs Lepechin, Acta acad. sci. imp. Petropolitanae for 1778 (1780), pt. 1, p. 247, pl. 8, fig. 1. "LOCUS MARE ALBUM."

Rhachotropis aculeata G. O. Sars, Crust. Norway, 1893, vol. 1, p. 424, pl. 149.

MASS.—Cape Ann; off Cape Cod.

Cashes Ledge; Jeffreys Ledge; Stellwagen Bank; Georges Bank.

From 45 to 122 fathoms.

CALLIOPIIDAE.

202. Calliopius laeviusculus (Kröyer).

Amphithoe laeviuscula Kröyer, K. Danske vid. selsk. natur.

og math. afh., 1838, vol. 7, p. 281 [53], pl. 3, fig. 13. "Fiskenaesset" [Greenland].

Calliope laeviuscula Bate & Westwood, Brit. sessile-eyed Crust., 1863, vol. 1, p. 259, woodcut.

Rocky shores, in tidal pools, among sea-weeds, or at surface.
Coast of Maine to Narragansett Bay.

203. Halirages fulvocinctus (M. Sars).

Amphithoë fulvocincta M. Sars, Förh. vid. selsk. Christiania, 1858 (1859), p. 141. "Slaatholmen i Lofoten og ved Tromsø, i Laminariabæltet paa 1–10 favnes."

Halirages fulvocinctus G. O. Sars, Crust. Norway, 1893, vol. 1, p. 436, pl. 154.

Mass.— Ipswich Bay, 27 fathoms.

204. Apherusa gracilis Holmes.

Apherusa gracilis Holmes, Amer. nat., 1903, vol. 37, p. 287. "M. Cape Cod to Hatteras." Type specimens from off Gay Head, in U. S. national museum.

Mass.— Off Gay Head.

205. Pontogeneia inermis (Kröyer).

Amphithoe inermis Kröyer, K. Danske vid. selsk. natur. og math. afh., 1838, vol. 7, p. 275 [47], pl. 3, fig. 11. "Julianehaab og Godthaab," [Greenland].

Me.— Bay of Fundy, in tide pools; Casco Bay.
Georges Bank, 45 fathoms.
Mass.— Salem; Vineyard Sound, surface.

ATYLIDAE.

206. Dexamine thea Boeck.

Dexamine thea Boeck, Förh. vid.-selsk. Christiania, 1870 (1871), p. 187. "Christianiafjord, Farsund." G. O. Sars, Crust. Norway, 1893, vol. 1, p. 477, pl. 168, fig. 1.

Mass.— Woods Hole.

Conn.— Noank Harbor, among eel-grass. (Determined with doubt by S. I. Smith.)

BATEIDAE.

207. Batea secunda Holmes.

Batea secunda Holmes, Amer. nat., 1903, vol. 37, p. 284. "m. Cape Cod to Hatteras." Types from Woods Hole in U. S. national museum.

Mass.— Woods Hole.

GAMMARIDAE.

208. Melphidippa spinosa (Goës).

Gammarus spinosus Goës, Öfver. k. vet.-akad. förh., Stockholm, 1865 (1866), vol. 22, p. 530, pl. 40, fig. 30. "ad Spetsbergiam rarus fundo argilloso org. 5–30 profundit. in Bell Sound * * * in Storfjord."

Melphidippa spinosa G. O. Sars, Crust. Norway, 1894, vol. 1, p. 483, pl. 169.

Me.— Eastport (Holmes MS.).

209. Gammarus locusta (Linné).

Scuds.

Cancer locusta Linné, Fauna Svecica, ed. 2, 1761, p. 497.

GAMMARIDAE.

"Habitantem vidi ad montem *Thorsburg* in mari juxta Gotlandiam."

Gammarus locusta Bate and Westwood, Brit. sessile-eyed Crust., 1863, vol. 1, p. 378, woodcut.

Under rocks, in eel-grass, etc. Low water to 21 fathoms.

Entire coast of New England.

210. Gammarus annulatus Smith.

Gammarus annulatus Smith, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 557 [263]. "New Haven, Connecticut, and Eastport, Maine."

Gammarus natator Smith, *op. cit.*, p. 558 [264].

Under stones and in rock-weed, above low-water mark; surface to 11½ fathoms.

Me.— Eastport.

Mass.— Gloucester; Provincetown; off Chatham; off Cape Cod; Woods Hole; Vineyard Sound; Nantucket.

R. I.— Newport; Carolina; Providence Harbor.

Conn.— Off Fishers Island; New Haven.

211. Gammarus marinus Leach.

Gammarus marinus Leach, Trans. Linn. Soc. London, 1815, vol. 11, p. 359. "in Danmoniæ australis mari." Bate and Westwood, Brit. sessile-eyed Crust., 1863, vol. 1, p. 370, woodcut.

Me.— Jones's Cove, Frenchmans Bay; Casco Bay.

Mass.— Cohasset; Wepecket Island; Gull Island; Cuttyhunk; Vineyard Sound; Buzzards Bay.

R. I.— Watch Hill; Newport.

Conn.— New Haven.

212. Gammarus fasciatus Say.

Gammarus fasciatus Say, Journ. acad. nat. sci. Phil., 1818,

vol. 1, p. 374. "A COMMON INHABITANT OF OUR RIVERS, AND IS FREQUENTLY INTRODUCED INTO PHILADELPHIA, IN THE SCHUYLKILL WATER." Smith, Rept. U. S. commr. of fish & fisheries, pt. 2, for 1872–1873 (1874), p. 653.

Fresh water streams and ponds.
ME.— Eastport.
CONN.— New Haven.

213. CARINOGAMMARUS MUCRONATUS (Say).

Gammarus mucronatus Say, Journ. acad. nat. sci. Phil., 1818, vol. 1, p. 376. "COAST OF THE UNITED STATES." "THIS SPECIES, ... I CAUGHT IN THE BAY OF EGG-HARBOUR, AND NEAR THE MOUTH OF ST. JOHN'S RIVER, FLORIDA."

Low water and among algae; often in brackish water.
ME.— Quahog Bay, Casco Bay.
MASS.— Provincetown; Woods Hole.
R. I.— Newport.

214. MELITA DENTATA (Kröyer).

Gammarus dentatus Kröyer, Naturh. tidssk., 1842, vol. 4, p. 159. "GROENLANDIA AUSTRALI."
Melita dentata G. O. Sars, Crust. Norway, 1894, vol. 1, p. 513, pl. 181, fig. 1.

ME.— Casco Bay.
Gulf of Maine; Cashes Ledge; off Georges Bank.
MASS.— Off Half-way Rock, Salem; off Race Point; off Cape Cod.
R. I.— Off Watch Hill.
CONN.— Off Fisher's Island.
From 7½ to 430 fathoms.

GAMMARIDAE.

215. Melita nitida Smith.

Melita nitida Smith, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 560 [266]. "New Jersey to Cape Cod."

On rocky shores, under stones and among rock-weed near low-water mark.

Cape Cod southward.

216. Melita parvimana Holmes.

Melita parvimana Holmes, Amer. nat., 1903, vol. 37, p. 279. "M. Cape Cod to Hatteras." Type from Newport in U. S. national museum.

R. I. — Newport.

217. Maera danae (Stimpson).

Leptothoe danae Stimpson, Mar. invert. Grand Manan, 1853, p. 46, pl. 3, fig. 32. [Grand Manan.]

Me.— Eastport (Holmes MS.).

Cashes Ledge; Stellwagen Bank; off Georges Bank, 50 fathoms.

218. Elasmopus levis (Smith).

Moera levis Smith, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 559 [265]. "New Jersey, Long Island Sound, Vineyard Sound."

On rocky shores, under stones and among rock-weed near low-water mark.

Mass.— Provincetown; Woods Hole; Vineyard Sound.

Long Island Sound.

GAMMARIDAE.

219. Gammarellus angulosus (Rathke).

Gammarus angulosus Rathke, Verhandl. K. Leopold.-Carol. akad. naturf., Breslau, 1843, vol. 12 (Nov. actorum, vol. 20), p. 72, pl. 3, fig. 3. "Christiansund."

Amathilla angulosa G. O. Sars, Crust. Norway, 1894, vol. 1, p. 492, pl. 173, fig. 2.

Me.— Casco Bay.
Mass.— Nahant.

220. Crangonyx tenuis Smith.

Crangonyx tenuis Smith, Rept. U. S. commr. of fish & fisheries, pt. 2, for 1872–1873 (1874), p. 656. "wells at Middletown, Conn."

In wells.
Conn.— Middletown.

PHOTIDAE.

221. Microdeutopus gryllotalpa Costa.

Microdeutopus gryllotalpa Costa, Rend. soc. reale Borbonica accad. sci., Napoli, 1853, n. s., vol. 2, p. 178. "Napoli." G. O. Sars, Crust. Norway, 1894, vol. 1, p. 543, pl. 192, fig. 2.

Low water and on piles and eel-grass.
Mass.— Provincetown; Vineyard Sound; Woods Hole.
Long Island Sound.

222. Microdeutopus damnoniensis (Bate).

Lembos damnoniensis Bate, Ann. mag. nat. hist., 1857 (2), vol. 19, p. 142. [Devon.]

Microdeutopus damnoniensis G. O. Sars, Crust. Norway, 1894, vol. 1, p. 542, pl. 192, fig. 1.

PHOTIDAE.

Mass.— Woods Hole.
R. I. — Providence Harbor.

223. Autonoë smithi Holmes.

Autonoe smithi Holmes, Amer. nat., 1903, vol. 37, p. 290. "m. Cape Cod to Hatteras."

Mass.— Vineyard Sound, living in tubes in masses of a compound Ascidian (*Amouroucium pellucidum* Verrill) in 3 to 8 fathoms (Smith); Woods Hole.

224. Ptilocheirus pinguis Stimpson.

Ptilocheirus pinguis Stimpson, Mar. invert. Grand Manan, 1853, p. 56. "abundant on the whole coast of New England, as well as at Grand Manan."
Protomedeia pinguis Bate, Cat. Amphip. Crust. Brit. mus., 1862, p. 170, pl. 31, fig. 3.

Muddy bottoms down to 150 fathoms.
Whole coast of New England.

225. Podoceropsis nitida (Stimpson).

Podocerus nitidus Stimpson, Mar. invert. Grand Manan, 1853, p. 45. "dredged in thirty fathoms on a shelly bottom in the Hake Bay."
Xenoclea megachir Smith, Trans. Conn. acad. sci., 1874, vol. 3, p. 32, pl. 3, figs. 1–4.

Me.— Eastport.
Georges Bank; near Cultivator Shoal.
R. I.— Off Watch Hill.
To a depth of 60 fathoms.

226. Amphithoë rubricata (Montagu).

Cancer Gammarus rubricatus Montagu, Trans. Linn. soc. London, 1808, vol. 9, p. 99, pl. 5, fig. 1. "South coast of Devonshire."

Amphithoë rubricata Bate, Cat. Amphip. Crust. Brit. mus., 1862, p. 233, pl. 41, fig. 1.

Lives in coarse tubes made of gravel, seaweed, etc.; under rocks at low water.

From Bay of Fundy to Long Island Sound.

227. Amphithoë longimana Smith.

Amphithoë longimana Smith, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871-1872 (1873), p. 563 [269]. "New Jersey; Great South Bay, Long Island; Vineyard Sound."

Amphithoe longimana Holmes, Biol. Bull., 1901, vol. 2, p. 165, text figs. 1 & 2.

Among eel-grass and at low water.

Mass.— Annisquam; Provincetown; Woods Hole; Vineyard Sound.

R. I.— Newport.

Long Island Sound.

228. Ischyrocerus anguipes Kröyer.

Ischyrocerus anguipes Kröyer, K. Danske vid. selsk. natur. og math. afh., 1838, vol. 7, p. 283 [55], pl. 3, fig. 14. "Fiskenæsset, Julianehaab, Godthaab og Holsteinborg" [Greenland].

Ischyrocerus anguipes G. O. Sars, Crust. Norway, 1894, vol. 1, p. 588, pl. 209.

Me.— Bay of Fundy; Casco Bay.

R. I.— Off Watch Hill, 4 to 5 fathoms.

PODOCERIDAE.

229. Podocerus falcatus (Montagu).

Cancer Gammarus falcatus Montagu, Trans. Linn. soc. London, 1808, vol. 9, p. 100, pl. 5, fig. 2. "Torcross."

Podocerus falcatus G. O. Sars, Crust. Norway, 1894, vol. 1, p. 594, pl. 212.

Mass.— Vineyard Sound, surface. Determined with doubt by S. I. Smith.

230. Podocerus marmoratus (Holmes).

Jassa marmorata Holmes, Amer. nat., 1903, vol. 37, p. 289. "a. m. Arctic America to Hatteras."

Mass.— Nahant; Woods Hole.
R. I.—Newport.

231. Grubia compta (Smith).

Amphithoë compta Smith, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 564 [270]. "North Carolina to Cape Cod."

Common among eel-grass.
From Cape Cod southward. Vineyard Sound, surface.

232. Ericthonius rubricornis (Stimpson).

Cerapus rubricornis Stimpson, Mar. invert. Grand Manan, 1853, p. 46, pl. 3, fig. 33. "dredged abundantly on stems of *Bolteniæ* in 20 f., rocks, off Moose Inlet, towards the Seal Islands. * * * occurred sparingly in 10 f., off Cheney's Head, and in 25 f., off Duck Island." Bate, Cat. Amphip. Crust. Brit. mus., 1862, p. 265, pl. 45, fig. 4.

Inhabits flexible tubes of fine mud and animal cement.
Me.— Bay of Fundy; Casco Bay.

PODOCERIDAE.

MASS.—Off Half-way Rock, Salem; Vineyard Sound. Jeffreys Ledge; Stellwagen Bank; Georges Bank. To a depth of 100 fathoms.

233. ERICTHONIUS MINAX (Smith).

Cerapus minax Smith, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 565 [271]. "LONG ISLAND SOUND, VINEYARD SOUND."

MASS.—Woods Hole; Vineyard Sound. Long Island Sound.

COROPHIIDAE.

234. CERAPUS TUBULARIS Say.

Cerapus tubularis Say, Journ. acad. nat. sci. Phil., 1817, vol. 1, p. 50, pl. 4, figs. 7–11. "AMONGST FUCI ON THE SEA BEACH AT EGG-HARBOUR." Smith, Trans. Conn. acad. sci., 1882, vol. 4, p. 277, pl. 2a.

Constructs a little slender, free tube, which it inhabits and carries about upon its back when it travels.

In eel-grass and among masses of a large compound ascidian (*Amouroucium pellucidum*); to a depth of 10 fathoms.

MASS.—Off Falmouth; off Nobska Point; Vineyard Sound.
CONN.—Noank Harbor.

235. SIPHONOECETES SMITHIANUS Rathbun, nom. nov.

Siphonoecetes cuspidatus Smith, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 566 [272]. "IN DEEP WATER OFF VINEYARD SOUND AND BUZZARDS BAY." Not *S. cuspidatus* Metzger, Jahresb. naturh. ges. Hannover, 1871, vol. 21, p. 30.

Inhabits tubes constructed of grains of sand; on bottoms of fine compact mud and sand.

COROPHIIDAE.

Mass.— Off Vineyard Sound and Buzzards Bay, 20 to 29 fathoms.

236. Corophium cylindricum (Say).

Podocerus cylindricus Say, Journ. acad. nat. sci. Phil., 1818, vol. 1, p. 387. "Egg-harbour." Not *P. cylindricus* Bate, 1862.

Very abundant among weeds and hydroids about piles of wharves and almost everywhere in shallow water; to a depth of 30 fathoms.

Me.— Casco Bay.

Mass.— Beverly Bridge; Provincetown; Vineyard Sound.

Conn. — Noank.

237. Unciola irrorata Say.

Unciola irrorata Say, Journ. acad. nat. sci. Phila., 1818, vol. 1, p. 389. "Eggharbour." Smith, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 567 [273], pl. 4, fig. 19.

Tube-dwelling. Low water to 430 fathoms.

From Bay of Fundy to Long Island Sound.

CHELURIDAE.

238. Chelura terebrans Philippi.

Boring amphipod.

Chelura terebrans Philippi, Arch. f. Naturg., 1839, Jahrg. 5, Bd. 1, p. 120, pl. 3, fig. 5. "Triest." G. O. Sars, Crust. Norway, 1894, vol. 1, p. 627; 1895, vol. 1, p. 699.

Bores in timber of piles, etc.

Mass. — Provincetown; Woods Hole.

DULICHIIDAE.

239. Dulichia porrecta (Bate).

Dyopedos porrectus Bate, Ann. mag. nat. hist., 1857 (2), vol. 19, p. 151. "Macduff."

Dulichia porrecta G. O. Sars, Crust. Norway, 1894, vol. 1, p. 637, pl. 229.

Me. — Eastport (Holmes MS.).

CAPRELLIDAE.

Skeleton shrimps.

240. Luconacia incerta Mayer.

Luconacia incerta Mayer, Caprellidae Siboga-Exped., 1903, p. 49, pl. 2, figs. 11–14, pl. 6, figs. 73–75, pl. 9, figs. 21, 40 and 67. Gulf of Mexico, 27–32 fms.

Mass. — Woods Hole, one young female, determined with doubt by P. Mayer.

241. Aegina longicornis Kröyer.

Aegina longicornis Kröyer, Naturh. tidssk., 1843, vol. 4, p. 509, pl. 7, figs. 1–12. Narsalik, 6 miles south of Frederikshaab, 12 to 16 fathoms; Godthaab, 25 to 60 fathoms. In Gaimard, Voyages en Scandinavie, en Laponie, au Spitzberg, etc., Zool., Crust., 1846 (?), pl. 24, fig. 3a–l.

Me.— Bay of Fundy.
Mass.— Woods Hole; Vineyard Sound; Nantucket.
Surface, and beach to 32 fathoms.

242. Aegina longicornis nodosa Mayer.

Aegina longicornis forma *β nodosa* Mayer, Caprelliden Golfes Neapel, nachtrag, 1890, p. 33. "Provincetown, Mass."

CAPRELLIDAE.

Mass.— Gloucester Harbor; Essex Bridge, Salem; Provincetown; Nantucket; off Nantucket Shoals.

R. I.— Off Newport.

From 7 to 32 fathoms.

243. Aegina longicornis spinifera (Bell).

Caprella spinifera Bell, in Belcher's Last of the Arctic voyages, 1855, vol. 2, p. 407, pl. 35, fig. 2. "Throughout the Strait" [between Beechey Island and Northumberland Sound].

Me.— Eastport; Portland.

N. H.— Jeffreys Ledge, near Portsmouth.

Mass.— Essex Bridge, Salem.

From 6 to 33 fathoms.

244. Aegina longicornis spinosissima Stimpson.

Aegina spinosissima Stimpson, Mar. invert. Grand Manan, 1853, p. 44. "adhering to *Gemellaria dumosa* in ten fathoms, off Cheney's Head."

Me.— Eastport; West Penobscot Bay.

Mass.— Ipswich.

Conn.— Off Fisher's Island.

Specimens all determined by Dr. S. J. Holmes.

245. Paracaprella tenuis Mayer.

Paracaprella tenuis Mayer, Caprellidae Siboga-Exped., 1903, p. 68, pl. 2, figs. 34 & 35, pl. 7, figs. 51 & 58. "Wood's Holl" [Mass.].

Mass. — Woods Hole.

246. Caprella acutifrons Latreille.

Caprella acutifrons Latreille, Nouv. dict. hist. nat., 1816, nouv. éd., vol. 6, p. 433. "les côtes d'Angleterre."

CAPRELLIDAE.

Caprella geometrica Smith, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 567 [273], pl. 5, fig. 20.

Surface to 3 feet, especially among eel-grass.

ME.— Quahog Bay.

MASS.— Nahant; Provincetown; Woods Hole; Vineyard Sound; Wepecket; off Marthas Vineyard.

247. CAPRELLA LINEARIS (Linné).

Cancer linearis Linné, Syst. nat., ed. 12, 1767, vol. 1, pt. 2, p. 1056. "IN OCEANO EUROPÆO."

Caprella linearis G. O. Sars, Crust. Norway, 1894, vol. 1, p. 657, pl. 236.

From 15 to 32 fathoms, often on hydroids.

ME. — Eastport; off Head Harbor; Casco Bay.

N. H. — Portsmouth.

MASS. — Salem; off Cape Cod; off Nantucket Shoals.

248. CAPRELLA SEPTENTRIONALIS Kröyer.

Caprella septentrionalis Kröyer, Naturh. tidssk., 1843, vol. 4, p. 590, pl. 8, figs. 10–19. BELSUND, IN LAMINARIA, 10 FATHOMS OR A LITTLE MORE; GREENLAND; KATTEGAT AND WESTERN OCEAN. G. O. Sars, Crust. Norway, 1894, vol. 1, p. 659, pl. 237, fig. 1.

ME.— Eastport; Casco Bay. Low water to 15 fathoms.

249. CAPRELLA SEPTENTRIONALIS LONGICORNIS Boeck.

Caprella longicornis Boeck, Forh. vid.-selsk. Christiania, 1870 (1871), p. 274. "AD ORAS OCCIDENTALES NORVEGIÆ."

Caprella septentrionalis forma *β longicornis* Mayer, Caprelliden Golfes Neapel, nachtrag, 1890, p. 66, pl. 2, figs. 26, 27 & 33, pl. 4, fig. 31.

ARTHROSTRACA. AMPHIPODA.

CAPRELLIDAE.

Me.— Eastport, on *Diphasia fallax*; Portland.

250. Caprella septentrionalis polyceros Mayer.

Caprella septentrionalis polyceros Mayer, Caprelliden Golfes Neapel, nachtrag, 1890, pp. 66 & 68, pl. 2, fig. 32. "Eastport (44° 54′ N. br.) * * * Anticosti Expedition."

Me.—Bay of Fundy, from stomach of pollock; Eastport, on *Diphasia fallax.*

251. Caprella septentrionalis stimpsoni Bate.

Caprella stimpsoni Bate, Cat. Amphip. Crust. Brit. mus., 1862, p. 361. "12 fathoms, back of Duck Island Ledge, Grand Manan."

Me.— Eastport. (Determined by S. J. Holmes.)

252. Caprella unica Mayer.

Caprella unica Mayer, Caprellidae Siboga-Exped., 1903, p. 127, pl. 5, fig. 39, pl. 8, figs. 28 & 29. "40° 34′ 30″ N., 69° 50′ 45″ W. 32 faden" [off Nantucket Shoals].

Mass.— Off Nantucket Shoals, 32 fathoms.

ENTOMOSTRACA.

CIRRIPEDIA.

Barnacles.

TRYPETESIDAE.

253. Trypetesa lampas (Hancock).

Alcippe lampas Hancock, Ann. mag. nat. hist., 1849 (2), vol.

CIRRIPEDIA.

TRYPETESIDAE.

4, p. 314, pls. 8 & 9. In "*Fusus antiquus* * * * from the fishing boats at Whitburn, in the County of Durham, * * * boats at Cullercoats, * * * in *F. antiquus* [and] *Buccinum undatum*." Darwin, Mon. Cirrip., Balanidae, 1854, p. 530, pls. 22 & 23.

Bores in dead shells of *Lunatia heros* and *Neverita duplicata*, which are inhabited by hermit crabs (Genthe).

Mass.—Woods Hole.

CORONULIDAE.

254. Coronula diadema (Linné).

Lepas diadema Linné, Syst. nat., ed. 12, 1767, vol. 1, pt. 2, p. 1108. "ad Mare Mediterraneum & Indicum."

Coronula diadema Darwin, Mon. Cirrip., Balanidae, 1854, pp. 417 & 623, pl. 15, figs. 3, 3a, 3b, pl. 16, figs. 1, 2 & 7.

Attached to whales taken on the coast, both north and south of Cape Cod. Provincetown, on whale.

BALANIDAE.

Acorn shells.

255. Balanus tintinabulum (Linné).

Lepas tintinabulum Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 668. Locality not given until ed. 12, 1767, where it is "in O. Europaeo."

Balanus tintinnabulum, Darwin, Mon. Cirrip., Balanidae, 1854, pp. 194 & 611, pl. 1, figs. a–l, pl. 2, figs. 1a–1o.

Inhabits warmer seas. Often found on bottoms of ships on New England coast, but not living.

Mass. (Gould).

CIRRIPEDIA.

BALANIDAE.

256. Balanus tintinabulum zebra Darwin.

Balanus tintinnabulum var. (4) *zebra* Darwin, Mon. Cirrip., Balanidae, 1854, p. 195, pl. 1, fig. g. "Ships arriving from Bengal and China."

Mass.—Boston on vessel.

257. Balanus amphitrite Darwin.

Balanus amphitrite Darwin, Mon. Cirrip., Balanidae, 1854, pp. 240 & 614, pl. 5, figs. 2a–2o. Enumerates many localities in warmer temperate and tropical seas.

On whales and bottoms of ships, but probably does not live long after arriving on New England coast.

Mass.—Cape Cod; Vineyard Sound.

258. Balanus eburneus Gould.

Ivory barnacle.

Balanus eburneus Gould, Invert. Mass., 1841, p. 15, pl. 1, fig. 6. [Massachusetts.] Darwin, Mon. Cirrip., Balanidae, 1854, pp. 248 & 614, pl. 5, figs. 4a–4d.

In brackish and fresh water as well as salt.

From Salem, Mass., southward; Long Island Sound.

259. Balanus porcatus Costa.

Balanus porcatus Costa, Hist. nat. Test. Brit., 1778, p. 249. "British coasts."

Balanus porcatus Darwin, Mon. Cirrip., Balanidae, 1854, pp. 256 & 615, pl. 6, figs. 4a–4e.

Shallow water to 150 fathoms.

Me.—Eastport; Bay of Fundy; off Seguin Island; Casco Bay. Gulf of Maine; Jeffreys Bank; Cashes Ledge; Stellwagen Bank; Georges Bank.

CIRRIPEDIA.

BALANIDAE.

MASS.— Off Cape Ann; off Race Point; off Chatham; off Nobska.

R. I.— Off Watch Hill.

Long Island Sound.

260. BALANUS CRENATUS Bruguière.

Balanus crenatus Bruguière, Encyc. méth., hist. nat., vers, 1789, vol. 6, p. 168. "LES CÔTES DE L'ANGLETERRE & DANS LES MERS DU NORD." Darwin, Mon. Cirrip., Balanidae, 1854, pp. 261 & 615, pl. 6, figs. 6a–6g.

ME.— Casco Bay, 8–30 fathoms.

Georges Bank.

MASS.— East Boston; Vineyard Sound.

CONN.— Noank.

261. BALANUS BALANOIDES (Linné).

Rock barnacle; Common barnacle.

Lepas balanoides Linné, Fauna Svecica, ed. 2, 1761, p. 515. "IN MARI ATLANTICO."

Balanus balanoides Darwin, Mon. Cirrip., Balanidae, 1854, pp. 267 & 615, pl. 7, figs. 2a–2d.

The most common barnacle; abundant between tides. Inhabits the whole North Atlantic.

ME. — Casco Bay.

MASS. — Provincetown.

R. I. — Providence River.

CONN. — New Haven; Savin Rock.

262. BALANUS HAMERI (Ascanius).

Lepas hameri Ascanius, Icones rerum naturalium, Kjóbenhavn, 1767, ed. 1, vol. 1, col. 53, pl. 10. FINMARK.

CIRRIPEDIA.

BALANIDAE.

Balanus hameri Darwin, Mon. Cirrip., Balanidae, 1854, pp. 277 & 616, pl. 7, figs. 5a–5c.

From 16 to 141 fathoms.
Georges Bank.
Mass. — Off Chatham; off Marthas Vineyard.

263. Tetraclita squamosa (Bruguière).[1]

Balanus squamosus Bruguière, Encyc. méth., hist. nat., vers, 1789, vol. 6, p. 170. "Tranquebar."
Tetraclita porosa Darwin, Mon. Cirrip., Balanidae, 1854, p. 329 & 619, pl. 10, figs. 1a–1m.

Mass. — Boston, taken from bottom of ship.

POLLICIPEDIDAE.

264. Scalpellum stroemii M. Sars.

Scalpellum stroemii M. Sars, Forh. vid.-selsk. Christiania, 1858 (1859), p. 158. Söndmör on *Muricea placomus*. Bergen, 80 to 150 fathoms, on *Cidaris papillata* Leske. Finmark, near Hammerfaest, 40 to 50 fathoms, on *Eudendrium ramosum*. G. O. Sars, Some remarkable forms of animal life, 1872, pt. 1, p. 79, pl. 5, fig. 2.
Scalpellum stroëmi Verrill, Amer. journ. sci., 1874 (3), vol. 7, p. 498, pl. 8, fig. 7.
Scalpellum stroemi Smith, Trans. Conn. acad. sci., 1874, vol. 3, p. 35, pl. 3, fig. 9.

On stems of hydroids; 50 to 430 fathoms.
Mass. — Off Cape Race, Cape Cod.
Near Cashes Ledge; off Georges Bank.

[1] As *Lepas porosa* Gmelin was described in 1790, not 1789, the earlier name of *squamosa* Bruguière must be substituted.

CIRRIPEDIA.

LEPADIDAE.

Goose barnacles.

265. Lepas anatifera Linné.

Lepas anatifera Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 668. "Habitat in Pelago." Darwin, Mon. Cirrip., Lepadidae, 1851, p. 73, pl. 1, fig. 1.

Mass. — On a Swedish vessel (Gould); Gloucester, from Bark Richard after voyage from Cadiz; Boston, from vessel; Woods Hole, from German bark 73 days after cleaning hull; Gulf Stream, off Marthas Vineyard.

R. I. — Off Newport.

266. Lepas hillii (Leach).

Pentalasmis hillii Leach, Narr. exped. River Zaire, 1818, p. 413. Locality not given.

Lepas hillii Darwin, Mon. Cirrip., Lepadidae, 1851, p. 77, pl. 1, fig. 2.

Mass. — Gloucester, from Bark Richard after voyage from Cadiz; Woods Hole, from German bark 73 days after cleaning hull.

267. Lepas anserifera Linné.

Lepas anserifera Linné, Syst. nat., ed. 12, 1767, vol. 1, pt. 2, p. 1109. "in Pelago Americano." Darwin, Mon. Cirrip., Lepadidae, 1851, p. 81, pl. 1, fig. 4.

Mass. — On a Swedish vessel (Gould); Boston, on vessel; Cape Cod, on whales; Nobska beach.

268. Lepas pectinata Spengler.

Lepas pectinata Spengler, Skrivt. naturh. selsk., 1793, vol. 2, pt. 2, p. 106, pl. 10, fig. 2. "Mediterranean Sea near

CIRRIPEDIA.

LEPADIDAE.

CADIZ, ON A CURLY *Fucus*." Darwin, Mon. Cirrip., Lepadidae, 1851, p. 85, pl. 1, fig. 3.

Attached to ships' bottoms, but probably does not live long after arriving on our coast. Common in tropics.

MASS. (Gould).

269. LEPAS FASCICULARIS Ellis and Solander.

Lepas fascicularis Ellis and Solander, Nat. hist. zoophytes, 1786, p. 197, pl. 15, fig. 5. "ST. GEORGE'S CHANNEL." Darwin Mon. Cirrip., Lepadidae, 1851, p. 92, pl. 1, fig. 6.

On floating seaweeds and other small objects.

ME.— Bay of Fundy; Casco Bay.

MASS.— Long Point, Provincetown; Provincetown Harbor; Vineyard Sound.

270. CONCHODERMA AURITA (Linné).

Lepas aurita Linné, Syst. nat., ed. 12, 1767, vol. 1, pt. 2, p. 1110. "IN O. SEPTENTRIONALI."

Conchoderma aurita Darwin, Mon. Cirrip., Lepadidae, 1851, p. 141, pl. 3, fig. 4.

MASS.— (Gould); Gloucester, from Bark Richard after voyage from Cadiz; Provincetown, on *Coronula diadema* from humpbacked whale; Woods Hole, from German bark 73 days after cleaning hull.

271. CONCHODERMA VIRGATA (Spengler).

Lepas virgata Spengler, Skrivt. naturh. selsk., 1790, vol. 1, pt. 1, p. 207, pl. 6, fig. 9. Locality not given.

Conchoderma virgata Darwin, Mon. Cirrip., Lepadidae, 1851, p. 146, pl. 3, fig. 2, pl. 9, fig. 4.

On bottoms of vessels and on large sluggish fishes.

CIRRIPEDIA.

LEPADIDAE.

MASS.— Gloucester, from Bark Richard after voyage from Cadiz; Woods Hole, from German bark 73 days after cleaning hull.

COPEPODA. BRANCHIURA.

ARGULIDAE.

Fish lice.

272. ARGULUS LATUS Smith.

Argulus latus Smith, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 574 [280]. "AT THE SURFACE, IN VINEYARD SOUND." Wilson, Proc. U. S. nat. mus., 1902, vol. 25, p. 704, pl. 9.

ME.— Casco Bay; Quahog Bay.
MASS.— Vineyard Sound, surface.

273. ARGULUS LATICAUDA Smith.

Argulus laticauda Smith, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 574 [280]. "AMONG ALGAE IN VINEYARD SOUND." Wilson, Proc. U. S. nat. mus., 1902, vol. 25, p. 705, pl. 10, pl. 26, fig. 79.

Parasitic on skate, bonnet skate, eel, sculpin, blenny, tomcod flatfish, summer flounder, winter flounder; and among algae.

MASS.— Waquoit Harbor, Falmouth; Woods Hole; Vineyard Sound; Katama Bay; Buzzards Bay.
CONN.— Noank.

274. ARGULUS MEGALOPS Smith.

Argulus megalops Smith, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 575 [281]. "VINEYARD SOUND * * * SURFACE." Wilson, Proc. U. S. nat. mus., 1902, vol. 25, p. 706, pl. 11, pl. 26, fig. 81.

ARGULIDAE.

Parasitic on skate, minnow, sculpin, sea-robin, tomcod, flatfish, sand dab, summer flounder, winter flounder, spotted sand flounder, common flounder, orange file-fish, goosefish; also at surface.

MASS.— Provincetown; off Cape Cod; Woods Hole; Vineyard Sound; Menemsha Bight; Quicks Hole.

R. I.— Off Point Judith.

275. ARGULUS ALOSAE Gould.

Argulus alosae Gould, Invert. Mass., 1841, p. 340. "FROM THE GILLS OF THE ALEWIFE, (*Alosa vulgaris*)." [MASS. BAY, *teste* Smith.] Wilson, Proc. U. S. nat. mus., 1902, vol. 25, p. 707, pl. 12, pl. 26, fig. 80.

Parasitic on alewife, smelt, and cunner.

ME.— Casco Bay.

MASS.— Massachusetts Bay; Woods Hole.

276. ARGULUS CATOSTOMI Dana and Herrick.

Argulus catostomi Dana and Herrick, Amer. journ. sci., 1837, vol. 31, p. 298, plate. "MILL RIVER, NEAR WHITNEYVILLE," ON SUCKER, BRACKISH WATER.

Argulus catostomi Wilson, Proc. U. S. nat. mus., 1902, vol. 25, p. 709, pl. 13.

From sucker and chub sucker.

MASS.— Warren and Chicopee.

CONN.— Mill River, near Whitneyville.

277. ARGULUS FUNDULI Kröyer.

Argulus funduli Kröyer, Naturh. tidssk., 1863 (3), vol. 2, p. 94, pl. 2, figs. 1a–e. "UBESKREVEN FUNDULUS FRA OMEGNEN AF NY-ORLEANS." Wilson, Proc. U. S. nat. mus., 1902, vol. 25, p. 710, pl. 14.

COPEPODA. BRANCHIURA.

ARGULIDAE.

On *Fundulus*.
Mass.— Waquoit; Woods Hole.
Long Island Sound.

278. Argulus versicolor Wilson.

Argulus versicolor Wilson, Proc. U. S. nat. mus., 1902, vol. 25, p. 716, pl. 20, pl. 26, fig. 83. "upon some common pickerel * * * Powdermill Pond, Warren, Massachusetts."

On pickerel.
Mass.— Powder-mill Pond, Warren; Wickaboag and Podunk Ponds, Brookfield; Lake Lashaway, between Brookfield and Spencer; Ashley Ponds, Holyoke; Congamon Ponds, Southwick.

EUCOPEPODA.

ERGASILIDAE.

Parasitic copepods.

279. Bomolochus scomberesocis Kröyer.

Bomolochus scomberesocis Kröyer, Naturh. tidssk., 1863, (3), vol. 2, pp. 291 & 300, pl. 10, fig. 5a–f. "en *Scomberesox* fra det varmere Atlanterhav."

On *Scomber esox*.
Mass.— Woods Hole region (Wilson MS.).

280. Ergasilus funduli Kröyer.

Ergasilus funduli Kröyer, Naturh. tidssk., 1863, (3), vol. 2, pp. 302 & 312, pl. 11, fig. 1a–f. "en *Fundulus* (*F. limbatus mihi*) fra omegnen af New Orleans."

On *Fundulus heteroclitus*.
Mass.— Woods Hole region (Wilson MS.).

COPEPODA. EUCOPEPODA.

CALIGIDAE.

Parasitic copepods.

281. Caligus rufimaculatus Wilson.

Caligus rufimaculatus Wilson, Proc. U. S. nat. mus., 1905, vol. 28, p. 561, pl. 5. "From *Fundulus majalis* and *F. heteroclitus*."

On *Fundulus majalis*, *F. heteroclitus*, *Mugil cephalus* and also at surface.

Mass.— Woods Hole region.

282. Caligus schistonyx Wilson.

Caligus schistonyx Wilson, Proc. U. S. nat. mus., 1905, vol. 28, p. 564, pl. 6. "common menhaden (*Brevoortia tyrannus*) * * * outside of the body * * * a single female * * * from the outside surface of the blue-fish (*Pomatomus saltatrix*), and nine lots obtained from the tow." [Woods Hole region.]

On menhaden and bluefish and in tow-net.

Mass.— Waquoit Harbor, Vineyard Sound and Woods Hole.

283. Caligus bonito Wilson.

Caligus bonito Wilson, Proc. U. S. nat. mus., 1905, vol. 28, p. 589, pl. 13, figs. 151–153; figs. 5, 6d, 12, 13, 14, 15, 29, 30, 35, 37, 38, 40–45 in text. "common bonito (*Gymnosarda pelamys* Linnaeus) * * * Woods Hole * * * Vineyard Sound * * * Woods Hole and vicinity."

On bonito.

Mass.— Woods Hole and vicinity; Vineyard Sound.

284. Caligus rapax Milne Edwards.

Caligus rapax Milne Edwards, Hist. nat. Crust., 1840, vol. 3, p. 453, pl. 38, figs. 9–12. "sur la peau d'un squale."

CALIGIDAE.

Parasitic on sand shark, spiny dogfish, skate, big skate, barn-door skate, peaked-nosed skate, sting ray, sharp-nosed sturgeon, blunt-nosed sturgeon, long-nosed sturgeon, alewife, shad, sand launce, mackerel, cutlass fish, swordfish, rudderfish, crevalle, striped bass, scup, sculpin, lumpfish, remora, whiting, cod, pollock, haddock, hake, codling, flounder, 4-spotted flounder; also taken at surface and in trawl wings.

ME. — Treats Island, Eastport; Casco Bay.

MASS.— Off Cape Ann; off Cape Cod; Vineyard Sound; Woods Hole; off Nantucket and Nantucket Shoals; off Marthas Vineyard.

R. I.— Cox Ledge.

CONN.— Noank.

285. CALIGUS MUTABILIS Wilson.

Caligus mutabilis Wilson, Proc. U. S. nat. mus., 1905, vol. 28, p. 573, pl. 8; fig. 2 in text. "FROM THE MOUTH OF *Centropristes striatus*," [WOODS HOLE].

On sea-bass, *Centropristes striatus*, pollock and bonito, Woods Hole region.

MASS.— Woods Hole region.

286. CALIGUS CURTUS O. F. Müller.

Caligus curtus O. F. Müller, Entomostraca, 1785, p. 130, pl. 21, figs. 1 & 2. "PLURES GADO *Merlango* INHAERENTES REPERI, * * * STRÖM & MARTIN IN *Gadis & salmonibus*, OTHO FABRICIUS IN *Pleuronecte*, BAXTER IN GADO REPERERE." No locality given.

Caligus americanus Pickering & Dana, Amer. journ. sci., 1838, vol. 34, p. 225, pls. 3–5.

Parasitic on barn-door skate, cod, hake, pollock, haddock and halibut; also at surface.

ME.— Casco Bay; Harpswell; Brunswick.

CALIGIDAE.

Mass.— Off Cape Ann; Vineyard Sound; Woods Hole; off Marthas Vineyard; Cox Ledge, lat. 41° 11′ 30″ N., long. 71° 02′ W.; near lat. 40° 01′ 50″ N., long. 70° 59′ W., 117 fathoms.

287. Caligus chelifer Wilson.

Caligus chelifer Wilson, Proc. U. S. nat. mus., 1905, vol. 28, p. 582, pl. 11. "external surface of a menhaden at Woods Hole."

On menhaden, cutlass fish and swordfish.
Mass.— Woods Hole and off Gay Head.

288. Caligus belones Kröyer.

Caligus belones Kröyer, Naturh. tidssk., 1863, (3), vol. 2, pp. 155 & 178, pl. 7, fig. 1a–e. "hornfisk ved Nymindegab."

On dolphin.
Mass. — Woods Hole region.

289. Caligus pelamydis Kröyer.

Caligus pelamydis Kröyer, Naturh. tidssk., 1863, (3), vol. 2, pp. 124 & 171, pl. 4, fig. 4a–g. "*Pelamys sarda*."

On *Scomber scomber*.
Mass. — Woods Hole region.

290. Caligodes megacephalus Wilson.

Caligodes megacephalus Wilson, Proc. U. S. nat. mus., 1905, vol. 28, p. 609, pl. 16. "underside of the mouth of a silver gar (*Lepisosteus osseus*) at Woods Hole."

On *Lepisosteus osseus*.
Mass. — Woods Hole.

291. Lepeophtheirus nordmannii (Milne Edwards).

Caligus nordmannii Milne Edwards, Hist. nat. Crust., 1840, vol. 3, p. 455. "à Nice sur la peau d'une Mole."

Lepeoptheirus nordmannii Baird, Nat. hist. Brit. Entomostraca, 1850, p. 275, pl. 33, fig. 1.

On sunfish.
ME.— Casco Bay.
MASS.— Vineyard Sound; Woods Hole.

292. LEPEOPHTHEIRUS HIPPOGLOSSI (Kröyer).

Caligus hippoglossi Kröyer, Naturh. tidssk., 1837, vol. 1, p. 625, pl. 6, fig. 3. "HAVET OMKRING GRØNLAND PAA HELLEFLYDEREN * * * NORDLIGE KATTEGAT, OM JEG MINDES RET PAA EN HELLEFLYNDER."

On halibut.
MASS.— Off Cape Ann.

293. LEPEOPHTHEIRUS EDWARDSI Wilson.

Lepeophtheirus edwardsi Wilson, Proc. U. S. nat. mus., 1905, vol. 28, p. 627, pl. 21, pl. 22, fig. 258; figs. 1, 4a, 4b, 11, 31, 34, 39 in text. "WOODS HOLE, [ON 5 SPECIES OF FISH] GREAT EGG HARBOR, NEW JERSEY."

On summer skate, summer flounder, four-spotted flounder, horse crevalle, and garfish.
MASS.— Woods Hole.

294. LEPEOPHTHEIRUS THOMPSONI Baird.

Lepeoptheirus thompsoni Baird, Nat. hist. Brit. Entomostraca, 1850, p. 278, pl. 33, fig. 2. "FROM THE TURBOT."

On goosefish.
MASS.— Woods Hole.

295. LEPEOPHTHEIRUS SALMONIS (Kröyer).

Caligus salmonis Kröyer, Naturh. Tidssk., 1837, vol. 1, pl. 6, fig. 7 a–e; 1838, vol. 2, p. 13. ["DANSKE FAUNA"] * * * PAA LAXEN."

CALIGIDAE.

Lepeophtheirus salmonis Kröyer, Naturh. tidssk., 1863, (3), vol. 2, p. 211, pl. 17, fig. 1 a–b.

On salmon.
ME.— East Orland.

296. GLOIPOTES ORNATUS Wilson.

Gloiopotes ornatus Wilson, Proc. biol. soc. Wash., 1905, vol. 18, p. 127. "WOODS HOLL, MASSACHUSETTS. * * * OUTSIDE SURFACE OF SWORDFISH."

On swordfish.
MASS.— Woods Hole.

297. ALEBION GRACILE Wilson.

Alebion gracile Wilson, Proc. biol. soc. Wash., 1905, vol. 18, p. 128. "VINEYARD SOUND, MASSACHUSETTS. * * * OUTSIDE SURFACE OF THE SMOOTH DOG-FISH."

On smooth dog-fish.
MASS.— Woods Hole region.

298. ALEBION GLABRUM Wilson.

Alebion glabrum Wilson, Proc. biol. soc. Wash., 1905, vol. 18, p. 129. "WOODS HOLL, MASSACHUSETTS. * * * ON THE OUTSIDE SURFACE OF THE SAND SHARK * * * ON THE SMOOTH DOG-FISH."

On sand shark and smooth dog-fish.
MASS.— Woods Hole.

299. TREBIUS TENUIFURCATUS R. Rathbun.

Trebius tenuifurcatus R. Rathbun, Proc. U. S. nat. mus., 1887, vol. 10, p. 559, pl. 29, figs. 1–3. "FROM A STING RAY * * * VINEYARD SOUND."

From sting ray.
MASS.— Vineyard Sound.

COPEPODA. EUCOPEPODA.

CALIGIDAE.

300. Nesippus alatus Wilson.

Nesippus alatus Wilson, Proc. biol. soc. Wash., 1905, vol. 18, p. 130. "Buzzards Bay, Massachusetts. * * * females * * * upon the gill arches of the common sand-shark, rarely on the floor or roof of the mouth. * * * male * * * on the outside surface of the body."

On sand shark.
Mass.— Buzzards Bay.

301. Echthrogaleus coleoptratus (Guérin).

Dinemoura coleoptrata Guérin, Icon. règne Anim., Crust., 1829–45, p. 42, pl. 35, fig. 6. "dans la mer îles Mariannes."
Echthrogaleus coleoptratus Steenstrup & Lütken, K. Danske vid. selsk. skrift., 1861 (5), vol. 5, p. 380, pl. 8, fig. 15.

From dorsal fin of mackerel shark.
Mass.— Vineyard Sound.

302. Echthrogaleus denticulatus Smith.

Echthrogaleus denticulatus Smith, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 576 [282]. "Vineyard Sound, on Atwood's shark, (*Carcharias atwoodi*)."

On Atwood's shark.
Mass.— Vineyard Sound.

303. Perissopus communis R. Rathbun.

Perissopus communis R. Rathbun, Proc. U. S. nat. mus., 1887, vol. 10, p. 560, pl. 29, figs. 6–7, pl. 30, figs. 1–6. On "dusky shark * * * blue shark * * * shovel-head shark * * * sharp-nosed shark * * * Vineyard Sound * * * Noank * * * mouth of St. Mary's River, Florida * * * Pensacola, Fla."

From blue shark and dusky shark.
Mass.— Woods Hole; Vineyard Sound.
Conn.— Noank.

CALIGIDAE.

304. Pandarus cranchii Leach.

Pandarus cranchii Leach, Dict. sci. nat., 1819, vol. 14, p. 535. Lat. 1° S., long. 4° E. Milne Edwards, Règne anim. de Cuvier, disciples ed., pl. 78, fig. 2.

On *Carcharias obscurus.*

Mass. — Woods Hole region (Wilson, MS.).

305. Pandarus sinuatus Say.[1]

Pandarus sinuatus Say, Journ. acad. nat. sci. Phil., 1818, vol. 1, p. 436. "Inhabits dog fish, (*Squalus canis*? Mitchill.)." R. Rathbun, Proc. U. S. nat. mus., 1886, vol. 9, p. 310, pl. 5, fig. 2, pl. 6, figs. 1–8, pl. 7, figs. 1–8.

On dogfish, smooth dogfish, Atwoods shark, and sand shark.

Mass.— Muskeget Channel; Woods Hole; Vineyard Sound. Long Island Sound.

306. Pandarus smithii R. Rathbun.

Pandarus smithii R. Rathbun, Proc. U. S. nat. mus., 1886, vol. 9, p. 315, pl. 5, fig. 3, pl. 7, fig. 9. "from a dusky shark, *Carcharinus obscurus* * * * off Noank, Conn."

On dusky shark and sand shark.

Mass.— Woods Hole; Vineyard Sound.

Conn.— Off Noank.

Long Island Sound.

307. Dinematura lamnae (Johnston).

Pandarus lamnae Johnston, Mag. nat. hist., 1835, vol. 8, p.

[1] The species referred by authors to the genus *Nogaus* Leach (*Nogagus* Milne Edwards) are omitted, because, according to Dr. Wilson, they prove to be males of other genera and species, as *e. g.*, of *Pandarus sinuatus* and *Echthrogaleus denticulatus.*

CALIGIDAE.

203, fig. 22a, b. "FROM A BEAUMARIS SHARK * * * BERWICK BAY."

Dinemoura lamnae Baird, Nat. hist. Brit. Entomostraca, 1850, p. 286, pl. 33, fig. 8.

ME.— Casco Bay.

308. DINEMATURA LATIFOLIA Steenstrup & Lütken.

Dinematura latifolia Steenstrup & Lütken, K. Danske vid. selsk. skrift., 1861 (5), vol. 5, p. 378, pl. 8, fig. 16. "*Oxyrhina glauca Müll. Henl.* (ELLER I ALT FALD EN DENNE HAI OVERMAADE NAERSTAAENDE ART), TAGET PAA 27° NB. OG 23° VL."

On *Lamna cornubica*.
R. I. — Cox Ledge.

309. CECROPS LATREILLII LEACH.

Cecrops latreillii Leach, Encyc. Brit., suppl., 1816, vol. 1, p. 405, pl. 20, figs. 1–8. History unknown. Baird, Nat. hist. Brit. Entomostraca, 1850, p. 293, pl. 34, figs. 1 & 2.

On sunfish.
MASS.— Off Gay Head. Mass. (Gould).

310. LAEMARGUS MURICATUS (Kröyer).

Cecrops (? *Laemargus*) *muricatus* Kröyer, Naturh. tidssk., 1837, vol. 1, p. 487, pl. 5, figs. A–D. "(?*Orthagoriscus mola?*) I ATLANTERHAVET."

On sunfish.
Jeffrey's Bank.
MASS.— Massachusetts Bay; Woods Hole.

Parasitic copepods.

311. Eudactylina nigra Wilson.

Eudactylina nigra Wilson, Proc. biol. soc. Wash., 1905, vol. 18, p. 131. "Buzzards Bay, Massachusetts.* * * on the gills of the sand shark."

On sand shark.

Mass.— Buzzards Bay.

312. Dichelesthium sturionis Hermann.

Dichelesthium sturionis Hermann, Mémoire aptérologique 1804, p. 125, pl. 5, figs. 7 & 8. "sur des esturgeons * * * dans le Rhin."

Dichelestium sturionis Milne Edwards, Hist. nat. Crust., 1840, vol. 3, p. 485, pl. 39, fig. 4.

On sturgeon, blunt-nosed sturgeon, sharp-nosed sturgeon.

Mass.— Vineyard Sound; Woods Hole.

Conn.— Fishers Island Sound; off Noank.

313. Anthosoma crassum (Abildgaard).

Caligus crassus Abildgaard, Skrivt. naturh. selsk., 1794, vol. 3, pt. 2, p. 49, pl. 5, figs. 1–3. "paa Giellerne af en Hai ved Helgoland."

Anthosoma crassum Steenstrup & Lütken, K. Danske vid. selsk. skr., 1861 (5), vol. 5, p. 397, pl. 12, fig. 24.

From sand shark, mackerel shark, and spiny dog-fish.

Mass.— Vineyard Sound, 125 miles south of Marthas Vineyard. Mass. (Gould).

314. Lernanthropus brevoortiae R. Rathbun.

Lernanthropus brevoortiae R. Rathbun, Proc. U. S. nat. mus.,

DICHELESTHIIDAE.

1887, vol. 10, p. 563, pl. 30, figs. 7–8, pls. 31–32. "GILLS OF THE MENHADEN, *Brevoortia tyrannus* * * * VINEYARD SOUND."

Gills of menhaden.

MASS.— Waquoit Harbor; Vineyard Sound; Woods Hole.

315. LERNANTHROPUS POMATOMI R. Rathbun.

Lernanthropus pomatomi R. Rathbun, Proc. U. S. nat. mus. 1887, vol. 10, p. 567, pls. 33–35. "GILLS OF BLUEFISH (*Pomatomus saltator*),* * * VINEYARD SOUND."

Gills of bluefish.

MASS.— Vineyard Sound; Woods Hole.

PHILICHTHYIDAE.

Parasitic copepods.

316. PHILICHTHYS XIPHIAE Steenstrup.

Philichthys xiphiae Steenstrup, Overs. k. Dansk. vid. selsk. forh., 1861 (1862), p. 295, pl. 2, figs. A–E. "FLERE AF HOVEDETS KNOKLER HOS SVÆRDFISKEN (*Xiphias gladius Linn.*) * * * KULLEN." Bergsöe, Philichthys xiphiae Stp. Monographisk Fremstillet, Kjöbenhavn, 1864, 90 pp., 1 pl.; Ann. sci. nat., 1865 (5), Zool., vol. 3, pp. 213 & 252, pl. 1.

On *Xiphias gladius.*

MASS.— Woods Hole region (Wilson, MS.).

317. SPHAERIFER LINTONI Wilson, MS.

[Parasitic copepod], Linton, Bull. U. S. fish comm. for 1899 (1901), vol. 19, p. 285, pl. 33, figs. 1–5. "UNDER THE SKIN ON THE PREOPERCULAR BONE OF A SQUETEAGUE (*Cynoscion regalis*)", [WOODS HOLE].

On squeteague.

MASS.— Woods Hole.

Parasitic copepods.

318. Penella filosa (Linné).

Pennatula filosa Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 819. "in M. Mediterranei Xiphiis." Guérin, Icon. règne Anim., Zooph., pl. 9, fig. 3.

On sunfish.

Mass.

319. Penella costai Brian.

Pennella costaii [sp. n.] Richiardi, Catal. sez. Ital. esposiz. Berlino, Firenze, 1880, p. 150. "nelle masse muscolari del *Xiphias gladius*" [Italia]. No description.

Penella costai Brian, Atti soc. Ligustica sci. nat. e geogr., 1898, vol. 9, p. 218. "Sopra lo *Xiphias gladius* Lin. * * * Genova."

On swordfish.

Mass.— Woods Hole region (determined with doubt by C. B. Wilson).

320. Lernaeenicus radiatus (Lesueur).

Lerneocera radiata Lesueur, Journ. acad. nat. sci. Phil., 1824, vol. 3, p. 288, pl. 11, fig. 1. "Menhaden or bay alewife Clupea *tyrannus*, Latrobe."

Lerneonema radiata Smith, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 578 [284], pl. 7, fig. 30.

From menhaden.

Mass.— Vineyard Sound; Buzzard's Bay.

321. Lerneonema?, sp., Smith.

Lerneonema?, sp., Smith, Rept. U. S. commr. of fish & fisheries, pt. 1, for 1871–1872 (1873), p. 578 [284]. "upon a species of *Carangus* * * * Vineyard Sound."

LERNAEIDAE.

On a species of *Carangus*.
Mass. — Vineyard Sound.

322. Lernaeolophus sultanus (Milne Edwards).

Penellus sultana Milne Edwards. Hist. nat. Crust., 1840, vol. 3, p. 523. "dans la bouche du *Carenx ascensionis*."
Lernaeolophus sultanus Heller. Reise Novara. Crust., 1865, p. 251, pl. 25, fig. 7.

From orange file fish.
Mass. — Vineyard Sound.

323. Lernaea branchialis Linné.

Lernaea branchialis Linné, Syst. nat., ed. 12, 1767, vol. 1, pt. 2, p. 1092. "in Oceani Norvegici Gadis, ad branchias." Steenstrup & Lütken, K. Danske vid. selsk. skr., 1861 (5), vol. 5, p. 403, pl. 13, fig. 28; & var. *sigmoidea*, p. 404, pl. 13, fig. 29.

From cod.
Me.— Bay of Fundy; Harpswell; Casco Bay.
Mass. — Cohasset.
Georges Bank; Browns Bank.

CHONDRACANTHIDAE.

Parasitic copepods.

324. Chondracanthus cornutus (Müller).

Lernaea cornuta Müller, Zool. Dan. prod., 1776, p. 227. Locality not given.
Chondracanthus cornutus Nordmann, Mikrographische beiträge, 1832, vol. 2, p. 111, pl. 9, figs. 5–10.

On Pleuronectidae (Wilson, MS.).
Mass.

CHONDRACANTHIDAE.

325. Chondracanthus cottunculi R. Rathbun.

Chondracanthus cottunculi R. Rathbun, Proc. U. S. nat. mus., 1886, vol. 9, p. 322, pl. 11, figs. 1–7. "From *Cottunculus torvus* * * * *Cottunculus microps* * * * *Cottunculus*?, sp.?" [Off Georges Bank, off Marthas Vineyard and south of Block Island.]

On *Cottunculus*.

Mass.— Wood's Hole region (Wilson, MS.).

326. Chondracanthus galeritus R. Rathbun.

Chondracanthus galeritus R. Rathbun, Proc. U. S. nat. mus., 1886, vol. 9, p. 317, pl. 8, figs. 1–7, pl. 10, figs. 1–7, & 1 text-fig. "mouth of the common flounder, *Paralichthys dentatus*. * * * Wood's Holl."

Mouth of common flounder.

Mass. — Woods Hole; Menemsha Bight.

327. Chondracanthus phycidis R. Rathbun.

Chondracanthus phycidis R. Rathbun, Proc. U. S. nat. mus., 1886, vol. 9, p. 320, pl. 9, figs. 1–6, pl. 10, figs. 8–13. On gills "of the common hake, *Phycis tenuis* * * * off Martha's Vineyard."

On gills of hake.

Mass. — Off Marthas Vineyard.

328. Chondracanthus merluccii (Holten).

Lernaea merluccii Holten, Skrivt. naturh.-selsk., 1802, vol. 5, heft 2, p. 135, pl. 3, fig. 2. "In ore Gadi Merluccii" [Denmark].

On *Merluccius*, sp.

Mass.— Woods Hole region (Wilson, MS.).

Parasitic copepods.

329. Lernaeopoda fontinalis Smith.

Lernaeopoda fontinalis Smith, Rept. U. S. commr. of fish & fisheries, pt. 2, for 1872–1873 (1874), p. 663, pl. 3, figs. 12–14. "Found upon the brook-trout, (*Salmo fontinalis*), at Norway, Me."

On brook-trout.
Me. — Norway.

330. Brachiella ramosa Richiardi.

Brachiella ramosa Richiardi, Proc. verb. soc. Tosc. sc. nat. Pisa, Jan. 1880, p. 26. "Aderente alle arcate branchiali del pesce spada." Zool. anz., 1880, vol. 3, p. 69.

On swordfish.
Mass.— Woods Hole region (Wilson, MS.).

331. Brachiella rostrata Kröyer.

Brachiella rostrata Kröyer, Naturh. tidssk., 1837, vol. 1, p. 207, pl. 2, fig. 1. "af en Helleflynder fra Kattegattet. De sad paa Gjaellerne. * * * Grønland * * * af *Pleuronectes pinguis*." Naturh. tidssk., 1863 (3), vol. 2, p. 364, pl. 17, fig. 8 a–f.

On Pleuronectidae.
Mass.— Woods Hole region (Wilson, MS.).

332. Brachiella thynni Cuvier.

Brachiella thynni Cuvier, Règne Anim., ed. 2, 1830, vol. 3, p. 257, pl. 15, fig. 5. Locality not given. Steenstrup & Lütken, K. Danske vid. selsk. skr., 1861, (5), vol. 5, p. 420, pl. 15, fig. 36.

On *Thynnus vulgaris* (Wilson, MS.).
Mass.

LERNAEOPODIDAE.

333. Clavella uncinata (O. F. Müller).

Lernaea uncinata O. F. Müller, Zool. Dan. prod., 1776, p. 226. "Groenlandia."

Ancorella uncinata Nordmann, Mikrographische beiträge, 1832, vol. 2, p. 102, pl. 8, figs. 8–12, pl. 10, figs. 1–5 (*Anchorella* in explanation of plates).

On cod and haddock.
Me.— Casco Bay; Harpswell.
Georges Bank.
R. I.— Cox Ledge.
Conn.— New London.

CALANIDAE.

Free-swimming copepods.

334. Calanus finmarchicus (Gunnerus).

Brit; Food of pollock whale.

Monoculus finmarchicus Gunnerus, K. Danske vid. selsk. skrift., 1770, vol. 10, p. 175, plate, figs. 20–23. Reensholm, near Hammerfest [Vest-Finmarken].

Calanus finmarchicus G. O. Sars, Crust. Norway, 1901, vol. 4, p. 9, pls. 1–3.

Mass.— Vineyard Sound, near Gay Head.

335. Heterocope, sp.

Fresh water.
Mass.— Watertown (Cragin).

336. Diaptomus leptopus S. A. Forbes.

Diaptomus leptopus S. A. Forbes, Amer. nat., 1882, vol. 16, p.

646, pl. 8, figs. 17–19. "POOLS * * * NEAR WOOD'S HOLL, [MASS.] * * * AND * * * NORMAL, ILLINOIS."

MASS.— Pools near Woods Hole.

CENTROPAGIDAE.

Free-swimming copepods.

337. CENTROPAGES TYPICUS Kröyer.

Centropages typicus Kröyer, Naturh. tidssk., 1849 (2), vol. 2, pp. 588 & 603, pl. 6, figs. 22–26. "ATLANTERHAVET, NOGLE MILE FRA KAP FINISTERRE." G. O. Sars, Crust. Norway, 1902, vol. 4, p. 75, pls. 49–51.

MASS.— Plymouth Harbor; Vineyard Sound; Woods Hole Harbor; Gulf Stream, 70 miles south of Marthas Vineyard.

338. CENTROPAGES HAMATUS (Lilljeborg).

Ichthyophorba hamata Liljeborg [Lilljeborg], De Crustaceis ex ordinibus tribus, 1853, p. 185, pl. 21, figs. 1–5 & 7–9, pl. 26, figs. 9–12. "KULLABERG."

Centropages hamatus G. O. Sars, Crust. Norway, 1902, vol. 4, p. 76, pl. 52.

MASS.— Woods Hole and elsewhere in vicinity.

339. TEMORA LONGICORNIS (O. F. Müller).

Cyclops longicornis O. F. Müller, Entomostraca, 1785, p. 115, pl. 19, figs. 7–9. "IN MARI FINMARCHIAM ALLUENTE REPERIT IMMORTALIS GUNNERUS,[1] EGO POSTEA IN SINU DRÖBACHIENSI, AC IN VENTRICULO *Clypeae* CONGLOMERATOS ABSQUE INSTITUTO EXAMINE VIDI."

[1] As Müller in his synonymy of this species quotes *Cyclops finmarchicus*, which is in reality a *Calanus*, the locality "In mari Finmarchiam alluente" can hardly be considered as belonging to *Temora longicornis*.

CENTROPAGIDAE

Temora longicornis G. O. Sars, Crust. Norway, 1902, vol. 4, p. 97, pls. 65 & 66.

Mass.— Woods Hole. Common.

340. Metridia lucens Boeck.

Metridia lucens Boeck, Forh. vid.-selsk., Christiania, 1864 (1865), p. 238. "ved Karmøen," [Norway]. G. O. Sars, Crust. Norway, 1902, vol. 4, p. 113, pl. 77.

Mass.— Plymouth Harbor; Woods Hole.

PONTELLIDAE.

Free-swimming copepods.

341. Labidocera aestiva Wheeler.

Labidocera aestiva Wheeler, Bull. U. S. fish comm. for 1899 (1900), vol. 19, p. 178, text fig. 16. "Woods Hole."

Mass.— Woods Hole, at Fish commission wharf.

342. Pontella meadii Wheeler.

Pontella meadii Wheeler, Bull. U. S. fish comm. for 1899 (1900), vol. 19, p. 180, text fig. 17. "Woods Hole."

Mass.— Woods Hole, at Fish commission wharf.

343. Anomalocera pattersonii Templeton.

Anomalocera patersonii Templeton, Trans. entom. soc. London, 1837, vol. 2, p. 35, pl. 5, & figs. 13, 18 in text. (Name corrected to *pattersonii* in explanation of plate.) "mouth of Larne Lough, county Antrim," [Ireland].

Anomalocera patersoni G. O. Sars, Crust. Norway, 1902, vol. 4, p. 139, pls. 92–94.

Mass. — Woods Hole; Gulf Stream about 70 miles south of Marthas Vineyard.

PONTELLIDAE.

344. Acartia tonsa Dana.

Acartia tonsa Dana, Crust. U. S. expl. exped., 1853, pt. 2, p. 1122; atlas, 1855, pl. 79, fig. 4. "Port Jackson, New South Wales." Wheeler, Bull. U. S. fish comm. for 1899 (1900), p. 183, text fig. 20.

Mass. — Plymouth Harbor; Woods Hole, at Fish Commission wharf; Gulf Stream 70 miles south of Marthas Vineyard.

345. Tortanus bumpusii (Wheeler).

Corynura bumpusii Wheeler, Bull. U. S. fish comm. for 1899 (1900), vol. 19, p. 184, text fig. 21. "Vineyard Sound, near Gay Head * * * Woods Hole."

Mass. — Woods Hole; Vineyard Sound near Gay Head.

CYCLOPIDAE.

Free swimming copepods.

343. Oithona similis Claus.

Oithona similis Claus, Die Copepoden-Fauna von Nizza, 1866, p. 14. [Nizza.] Wheeler, Bull. U. S. fish comm. for 1899 (1900), vol. 19, p. 186, text fig. 23.

Mass. — Woods Hole at Fish commission wharf.

347. Cyclops viridis insectus S. A. Forbes.

Cyclops insectus S. A. Forbes, Amer. nat., 1882, vol. 16, p. 649, pl. 9, fig. 6. "Northern Illinois."

Cyclops viridis var. *insectus* E. B. Forbes, Bull. Ill. state lab. nat. hist., 1897, vol. 5, p. 41, pl. 11, figs. 3–6.

Mass. — Cambridge, from the pond in Botanic Garden, and pool near Museum of Comparative Zoölogy.

348. Cyclops bicuspidatus Claus.

Cyclops bicuspidatus Claus, Arch. f. Naturg., 1857, vol. 23, pt.

1, p. 209, pl. 11, figs. 6–7. "DIE EINHEIMISCHEN CYCLOPIDEN." E. B. Forbes, Bull. Ill. state lab. nat. hist., 1897, vol. 5, p. 44, pl. 12, figs. 1–4.

MASS. — Boston and Cambridge in the water-supplies, easily obtainable from the faucets in any house; Cambridge, in rain-pool near Museum of Comparative Zoölogy; Woods Hole.

349. CYCLOPS ALBIDUS (Jurine).

Monoculus quadricornis albidus Jurine, Histoire des Monocles, qui se trouvent aux environs de Genève, 1820, p. 44, pl. 2, figs. 10 & 11. "SURTOUT DANS LES MARES VOISINES DU CHÂTEAU-BLANC."

Cyclops albidus (subgenus *Macrocyclops*) E. B. Forbes, Bull. Ill. state lab. nat. hist., 1897, vol. 5, p. 47, pl. 13.

MASS. — About Cambridge. Quite common.

350. CYCLOPS SERRULATUS Fischer.

Cyclops serrulatus Fischer, Bull. soc. imp. nat. Moscou, 1851, vol. 24, no. 4, p. 423, pl. 10, figs. 22–23. "SERGIEFSKOJE," NEAR ST. PETERSBURG.

Cyclops serrulatus (subgenus *Eucyclops*) E. B. Forbes, Bull. Ill. state lab. nat. hist., 1897, vol. 5, p. 54, pls. 17 & 18, figs. 1–3.

ME.

MASS. — About Cambridge, common in ponds, ditches and rain-pools; Woods Hole.

351. CYCLOPS PRASINUS Fischer.

Cyclops prasinus Fischer, Abh. k. bayerisch. akad. wiss., 1860, vol. 8, p. 652, pl. 20, figs. 19–25, 26a. "FUNCHAL (MADEIRA), * * * BADEN-BADEN." E. B. Forbes, Bull. Ill. state lab. nat. hist., 1897, vol. 5, p. 57, pl. 19, figs. 1 & 2, pl. 20, figs. 1 & 2.

CYCLOPIDAE.

Mass. — Cambridge. Very abundant in the blind ditches connected with Glacialis Pond.

352. Cyclops phaleratus Koch.

Cyclops phaleratus Koch, Deutschlands Crustaceen, Myriapoden und Arachniden, 1838, Heft 21, pl. 9 and corresponding text. "Regensburg."

Cyclops phaleratus (subgenus *Paracyclops*) E. B. Forbes, Bull. Ill. state lab. nat. hist., 1897, vol. 5, p. 59, pl. 20, fig. 3.

Mass. — Glacialis Pond, Cambridge. Abundant.

353. Cyclops elongatus Claus.[1]

Cyclops elongatus Claus, Die freilebenden Copepoden, 1863, p. 97, pl. 11, figs. 1 & 2. Neighborhood of Cassel.

Mass. — Cambridge, sparingly in a rain-pool near the Museum of Comparative Zoölogy (Cragin).

CORYCAEIDAE.

Free-swimming copepods.

354. Sapphirina gemma Dana.

Sapphirina gemma Dana, Crust. U. S. expl. exped., 1853, pt. 2, p. 1252; atlas, 1855, pl. 88, figs. 1 & 2. "Lagulhas Bank, south of Cape of Good Hope." Wheeler, Bull. U. S. fish comm. for 1899 (1900), vol. 19, p. 191, text fig. 28.

Mass. — Off Gay Head; Gulf Stream, 70 miles south of Marthas Vineyard, with chains of *Salpa cordiformis*.

[1] Not listed in E. B. Forbes's Revision, 1897, nor given in synonymy.

STRACODA. EUCOPEPODA.

CYPRIDIDAE.

355. Cypris scabra Haldeman.

Cypris scabra Haldeman, Proc. acad. nat. sci. Phil., 1842, vol. 1, p. 184. "A small pond near Cambridge, Mass."

Mass.— Near Cambridge.

PHYLLOPODA. CLADOCERA.

Water fleas.

SIDIDAE.

356. Sida crystallina (O. F. Müller).

Daphne crystallina O. F. Müller, Zool. Dan. prod., 1776, p. 200. Exact locality not given.

Sida crystallina Herrick, Twelfth ann. rept. geol. & nat. hist. sur. Minnesota, 1883 (1884), p. 20, pl. N, figs. 13–15.

Mass.— Cambridge and Southampton. Quite plenty everywhere.

357. Daphnella brachyura (Liévin).

Sida brachyura Liévin, Neueste schriften naturf. gesell. Danzig, 1848, vol. 4, heft 2, p. 20, pl. 4, figs. 3–9. ["danziger gegend."]

Daphnella exspinosa Birge, Trans. Wisconsin acad. sci., 1876–77 (1878), vol. 4, p. 79 [3], pl. 2, figs. 1–4.

Mass.— Southampton. Common.

358. Latona setifera (O. F. Müller).

Daphne setifera O. F. Müller, Zool. Dan. prod., 1776, p. 200. Exact locality not given.

Latona setifera Herrick, Twelfth ann. rept. geol. & nat. hist. sur. Minnesota, 1883 (1884), p. 22, pl. N, fig. 8.

Mass.— In Cochituate water.

DAPHNIDAE.

359. Ceriodaphnia dentata Birge.

Ceriodaphnia dentata Birge, Trans. Wisconsin acad. sci., 1876–77 (1878), vol. 4, p. 80 [4], pl. 1, figs. 1–2. "Cambridge. Southampton and vicinity, Mass.; Madison, Wis."

Mass.— Cambridge; Southampton and vicinity.

360. Ceriodaphnia cristata Birge.

Ceriodaphnia cristata Birge, Trans. Wisconsin acad. sci., 1876–77 (1878) vol. 4, p. 82 [6], pl. 2, figs. 8 & 9. "Southampton, Mass."

Mass.— Southampton. Rare.

361. Scapholeberis mucronata (O. F. Müller).

Daphne mucronata O. F. Müller, Zool. Dan. prod., 1776, p. 200. Exact locality not given.

Scapholeberis mucronata Herrick, Twelfth ann. rept. geol. & nat. hist. sur. Minnesota, 1884, p. 42, pl. J, fig. 5.

Ranges over all Europe and eastern United States (Herrick).

362. Daphnia pulex denticulata Birge.

Daphnia pulex var. *denticulata* Birge, Trans. Wisconsin acad. sci., 1876–77 (1878), vol. 4, p. 87 [11], pl. 1, fig. 11. "Cambridge, Mass.; Madison, Wis."

Mass. — Cambridge.

363. Daphnia laevis Birge.

Daphnia laevis Birge, Trans. Wisconsin acad. sci., 1876–77. (1878), vol. 4, p. 88 [12], pl. 2, figs. 5–7. "in a small, muddy pool near Mt. Auburn Station, Watertown, Mass."

Mass. — Near Mt. Auburn Station, Watertown. In great numbers.

MACROTHRICIDAE.

364. Lathonura rectirostris (O. F. Müller).

Daphne recti-rostris O. F. Müller, Zool. Dan. prod., 1776, p. 199. Exact locality not given.

Lathonura rectirostris Liljeborg [Lilljeborg], De Crustaceis ex ordinibus tribus, 1853, p. 57, pl. 4, figs. 8–11, pl. 5, fig. 2, pl. 23, figs. 12–13.

Mass. — Cambridge. Rare.

335. Streblocerus serricaudatus (Fischer).

Dapnia serricaudata Fischer, Bull. soc. imp. nat. Moscou, 1849, vol. 22, pt. 2, p. 46. "im Bereiche von Sergiefskoje bei Peterhof."

Streblocerus serricaudatus Matile, Bull. soc. imp. nat. Moscou, 1890, n. s., vol. 4, p. 137, pl. 4, figs. 23 & 23a.

Mass. — Quissett.

BOSMINIDAE.

366. Bosmina longirostris (O. F. Müller).

Lynceus longirostris O. F. Müller, Zool. Dan. prod., 1776, p. 199. Exact locality not given.

Bosmina longirostris Herrick, Twelfth ann. rept. geol. & nat. hist. sur. Minnesota, 1883 (1884), p. 65, pl. J, fig. 2, pl. J1, fig. 2.

Mass. — Cambridge; Southampton. Rather rare.

367. Bosmina cornuta (Jurine).

Monoculus cornutus Jurine, Histoire des Monocles, qui se trouvent aux environs de Genève, 1820, p. 142, pl. 14, figs. 8-10. "dans les mares de Ch^telaine."

Bosmina cornuta Birge, Trans. Wisconsin acad. sci., 1876–77 (1878), vol. 4, p. 91 [15], pl. 2, fig. 10.

Mass. — Easthampton.

PHYLLOPODA. CLADOCERA.

BOSMINIDAE.

368. Bosmina obtusirostris G. O. Sars.

Bosmina obtusirostris G. O. Sars, Forh. vid.-selsk. Christiania, 1861 (1862), p. 153. "I Omegnen af Christiania." Birge, Trans. Wisconsin acad. sci., 1893, vol. 9, p. 300, pl. 12, figs. 10 & 11.

Mass. — Near Woods Hole, in a pool in Fay's Wood. Determined with doubt by Birge.

LYNCEIDAE.

369. Pleuroxus procurvus Birge.

Pleuroxus procurvus Birge, Trans. Wisconsin acad. sci., 1876–77 (1878), vol. 4, p. 92 [16], pl. 1, figs. 19–20. "Glacialis, Cambridge, Mass. * * * Southampton, Mass. * * * Madison, Wis."

Mass. — Glacialis, Cambridge; Southampton.

370. Pleuroxus straminius Birge.

Pleuroxus straminius Birge, Trans. Wisconsin acad. sci., 1876–77 (1878), vol. 4, p. 94 [18], pl. 2, fig. 11. "Cambridge, Mass."

Mass. — Cambridge. Common.

371. Pleuroxus insculptus Birge.

Pleuroxus insculptus Birge, Trans. Wisconsin acad. sci., 1876–77 (1878), vol. 4, p. 95 [19], pl. 2, fig. 12. "Cambridge, Mass. Glacialis, * * * Southampton, Mass."

Mass. — Glacialis, Cambridge (rather scarce); Southampton (not uncommon).

LYNCEIDAE.

372. Pleuroxus denticulatus Birge.

Pleuroxus denticulatus Birge, Trans. Wisconsin acad. sci., 1876–77 (1878), vol. 4, p. 96 [20], pl. 1, fig. 21. "Glacialis, Cambridge, Mass.; Madison, Wis."

Mass. — Glacialis, Cambridge.

373. Pleuroxus hamatus Birge.

Pleuroxus hamatus Birge, Trans. Wisconsin acad. sci., 1876–77 (1878), vol. 4, p. 98 [22], pl. 2, figs. 13 & 14. "Southampton, Mass."

Mass. — Southampton. Not rare.

374. Chydorus sphaericus (O. F. Müller).

Lynceus sphaericus O. F. Müller, Zool. Dan. prod., 1776, p. 199. Exact locality not given.

Chydorus sphaericus Herrick, Twelfth ann. rept. geol. & nat. hist. sur. Minnesota, 1884, p. 116, pl. F, figs. 4, 7, 8 & 10.

Common wherever I have collected (Birge).

[Mass.]

375. Graptoleberis testudinaria (Fischer).

Lynceus testudinarius Fisher, Mém. acad. Impér. sci. St.-Pétersbourg par divers savants, 1848, vol. 6, p. 191, pl. 9, fig. 12. "Sergiefskoje bei Peterhof."

Graptoleberis inermis Birge, Trans. Wisconsin acad. sci., 1876–77 (1878), vol. 4, p. 102 [26], pl. 1, fig. 17.

Mass. — Cambridge and Southampton.

376. Alona angulata Birge.

Alona angulata Birge, Trans. Wisconsin acad. sci., 1876–77 (1878), vol. 4, p. 104 [28], pl. 2, fig. 16. "Cambridge, Mass."

Mass. — Cambridge. Not rare.

LYNCEIDAE.

377. Alona porrecta Birge.

Alona porrecta Birge, Trans. Wisconsin acad. sci., 1876–77 (1878), vol. 4, p. 105 [29], pl. 1, fig. 16. "Cambridge, Mass. * * * Madison, Wis."

Mass.— Cambridge. Not common.

378. Alona glacialis Birge.

Alona glacialis Birge, Trans. Wisconsin acad. sci., 1876–77 (1878), vol. 4, p. 106 [30]. "Glacialis, Cambridge, Mass."

Alona glacialis Herrick, Twelfth ann. rept. geol. & nat. hist. sur. Minnesota, 1883 (1884), p. 100, pl. G, figs. 2, 3, & 8.

Mass.— Glacialis, Cambridge. Rare.

379. Alona spinifera Schödler.

Alona spinifera Schödler, Neue beitrage z. naturgesch. d. Cladoceren, Berlin, 1863, p. 18, pl. 1, figs. 17–22. "in der Spree bei Treptów; .... auch im Chariti-Graben."

Mass.— Southampton. Quite common.

380. Alona tuberculata Kurz.

Alona tuberculata Kurz, SB. math.-naturw. cl. k. akad. wiss., Wien, 1874, vol. 70, pt. 1, p. 51, pl. 2, fig. 3. "in das Seitenthal ober Deutschbrod und in einer Bucht des Sazava-Flusses" [Bohemia].

Mass.— Southampton. Rather common.

381. Alonella rostrata (Koch).

Lynceus rostratus Koch, Deutschlands Crustaceen, Myriapoden und Arachniden, 1841 (?), heft 36, pl. 12 and corresponding text. "In kleinen Weihern der hiesigen Gegend keine Seltenheit."

LYNCEIDAE.

Pleuroxus acutirostris Birge, Trans. Wisconsin acad. sci., 1876–77 (1878), vol. 4, p. 99 [23], pl. 2, fig. 15.

MASS.— Southampton; Easthampton. Very rare.

382. MONOSPILUS TENUIROSTRIS (Fischer).

Lynceus tenuirostris Fischer, Mém. acad. Impér. sci. St.-Pétersbourg par divers savants, 1848, vol. 6, p. 193, pl. 10, fig. 3. "IN DEM BEREICHE VON SERGIEFSKOJE." Bull. soc. nat. imp. Moscou, 1854, vol. 27, pt. 1, p. 427, pl. 3, figs. 7–10.

MASS.— Easthampton.

383. ACROPERUS LEUCOCEPHALUS (Koch).

Lynceus leucocephalus Koch, Deutschlands Crustaceen, Myriapoden und Arachniden, 1841 (?), heft 36, pl. 10 and corresponding text. "IN DEM GRABEN DES BRUDERWEHR NAHE BEI REGENSBURG."

Acroperus leucocephalus Herrick, Twelfth ann. rept. geol. & nat. hist. sur. Minnesota, 1884, p. 81, pl. E, fig. 5, pl. I, fig. 9.

MASS.— Cambridge (common); Easthampton.

384. CAMPTOCERCUS MACRURUS (O. F. Müller).

Lynceus macrourus O. F. Müller, Zool. Dan. prod., 1776, p. 199. Exact locality not given.

Camptocercus macrourus Baird, Nat. hist. Brit. Entomostraca, 1850, p. 128, pl. 16, fig. 9.

MASS.— Cambridge. Not common.

POLYPHEMIDAE.

385. POLYPHEMUS PEDICULUS (Linné).

Monoculus pediculus Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 635. "HABITAT IN EUROPAE AQUIS DULCIBUS."

PHYLLOPODA. CLADOCERA.

LYNCEIDAE.

Polyphemus pediculus Baird, Nat. hist. Brit. Entomostraca. 1850, p. 111, pl. 17, fig. 1.

MASS.— Cambridge. One specimen.

BRANCHIOPODA.

ESTHERIIDAE.

386. LIMNETIS GOULDII Baird.

Limnetis gouldii Baird, Ann. mag. nat. hist., 1862. (3), vol. 10, p. 393. "FRESH WATER AT ST. ANN'S, TWENTY MILES FROM MONTREAL, CANADA."

Limnetis gouldii Packard, Twelfth ann. rept. U. S. geol. & geogr. sur. for 1878 (1883), pt. 1, p. 299, text fig. 1.

In ponds.

N. H.— Hanover.

MASS.— Near Boston.

R. I.— Near Providence.

387. LIMNADIA AMERICANA Morse.

Limnadia americana Morse, Proc. Boston soc. nat. hist., 1868, vol. 11, p. 404. "IN THIS VICINITY."

[*Limnadia americana*] Morse, First book of Zoölogy, 1875, p. 148, fig. 138, L. "LYNN, MASS."

MASS.— Lynn; Woods Hole (determined with doubt).

388. EULIMNADIA AGASSIZII (Packard).

Limnadia agassizii Packard, Sixth ann. rept. Peabody acad. sci., Salem, 1874, p. 54. "POOL OF FRESH WATER ON PENIKESE ISLAND, BUZZARD'S BAY."

Eulimnadia agassizii Packard, Twelfth ann. rept. U. S. geol. & geogr. sur. for 1878 (1883), pt. 1, p. 311, pl. 7, figs. 5 & 6, text fig. 14.

Fresh-water pools.

MASS.—Woods Hole (determined with doubt); Penikese.

BRANCHIPODIDAE.

389. Artemia gracilis Verrill.

Artemia gracilis Verrill, Amer. journ. sci., 1869, (2), vol. 48, p. 248. "Near New Haven, in tubs of water from salt marsh." Proc. Amer. assoc. adv. sci., 1869 (1870), vol. 18, p. 235 [6], text figs. 1 & 2. Packard, Twelfth ann. rept. U. S. geol. & geogr. sur. for 1878 (1883), pt. 1, p. 330, pl. 8, pl. 22, figs. 1, 2, 2a, 2b, pl. 23, text figs. 17 & 18.

In salt and alkaline lakes, and in artificial bodies of salt water.
Mass.— Charlestown; Cape Cod; Falmouth.
Conn.— New Haven.

390. Eubranchipus vernalis (Verrill).

Branchipus vernalis Verrill, Amer. journ. sci., 1869, (2), vol. 48, p. 251. "New Haven, in stagnant pools * * * Salem * * * Cambridge." Packard, Twelfth ann. rept. U. S. geol. & geogr. sur. for 1878 (1883), pt. 1, p. 342, pl. 11, figs. 2–6; pl. 22, figs. 3–6.

Eubranchipus vernalis Verrill, Proc. Amer. assoc. adv. sci., 1869 (1870), vol. 18, p. 241 [12], text figs. 5 & 6.

In ponds and stagnant pools.
Mass.— Danvers; Salem; Waltham; Cambridge; Brookline; Dorchester; Seekonk.
R. I.— Pawtucket; Newport.
Conn.— New Haven.

Occasional Papers
OF THE
Boston Society of Natural History.
VII.

FAUNA OF NEW ENGLAND.

6.

LIST OF THE ODONATA.

By PHILIP P. CALVERT.

BOSTON:
PRINTED FOR THE SOCIETY FROM THE
GURDON SALTONSTALL FUND.
October, 1905.

	Me.	N. H.	Vt.	Mass.	R. I.	Conn.
Calopteryx amata		—				
dimidiata apicalis				+		
aequabilis	+		—	+		
maculata	—		—	+		
Hetaerina americana	—			+		
Lestes eurinus				+		
congener	—					
unguiculatus	—			—	+	
uncatus	—	—		—		
disjunctus	—	—				
forcipatus	—			—		—
rectangularis	—	—		+	+	
vigilax	—			+	—	
inequalis	—	—				
Argia moesta putrida	—			+		
violacea	—			+	—	—
apicalis	—					
Chromagrion conditum	—	—		—		
Nehalennia irene	—	—		—		
gracilis				—		
Amphiagrion saucium	—	—		+		
Enallagma durum				—	—	
doubledayi				—		
laterale				—		
cyathigerum	—	—		—		
calverti	+			—		
hageni	+			—		
ebrium	—	—		—		
civile	—			+	+	
minusculum				—		
aspersum		+		—		
traviatum				—		
geminatum	—					—
divagans				—		
exsulans	—					
signatum	—			+		
pictum				+		
pollutum	—					
Ischnura verticalis	+	+	—	—	+	—

	Me.	N. H.	Vt.	Mass.	R. I.	Conn.
Ischnura kellicotti	—				—	
ramburii					—	
posita	—			—	—	
Anomalagrion hastatum	—			—		
Tachopteryx thoreyi		—		—		
Hagenius brevistylus	+	—		—		
Progomphus obscurus				—		
Ophiogomphus anomalus	—					
mainensis	—	—				
carolus	—					
colubrinus	—	—				
johannus	—					
rupinsulensis	—	—				
aspersus	—					
Gomphus albistylus	—	—				
parvulus	—	—				
abbreviatus	—	—		—		
brevis	+					
quadricolor				—		
sordidus				—		
exilis	—	—		+		—
ventricosus				—		
scudderi	—					
vastus		—		—		
fraternus		—				
adelphus				—		
notatus				—		
spiniceps				—		
borealis		—				
spicatus	—	+		—		
furcifer				—		
pallidus				—		
Dromogomphus spinosus	—	—		—		
Cordulegaster diastatops	—	+		—		
maculatus	+	—		—		—
obliquus	—			+		—
Anax junius	—	—		+	—	
longipes				—		
Aeschna septentrionalis		—				
juncea		—				

	Me.	N. H.	Vt.	Mass.	R. I.	Conn.
Aeschna juncea verticalis	—	—		+		
clepsydra	—	+		—		
constricta	—	—	—	+		—
Epiaeschna heros	—	—		+	—	
Basiaeschna janata	—	—		+		
Boyeria vinosa	—			—		
Gomphaeschna furcillata	—		—	+		
Didymops transversa	—	—	—	+		
Macromia illinoiensis	—	—		—		
Neurocordulia obsoleta	—	—		+		
yamaskanensis	—					
Epicordulia princeps	—			+		—
Tetragoneuria cynosura	—			+		
cynosura semiaquea	—	—		+		
spinigera	—	—		—		
spinosa		—				
Helocordulia uhleri	—			—		
Somatochlora linearis	—					
septentrionalis	—					
forcipata	—	+				
elongata	—	—				
elongata minor	—	—				
walshii	+	+				
tenebrosa		—				
albicincta		+				
cingulata		—				
Cordulia shurtleffi	—	+				
Dorocordulia lepida	—	—		+		—
libera	—	—		—		
Libellula auripennis				+	+	
cyanea		—		+		
axillena vibrans				—		
axillena incesta	—	—		—		
exusta	—	—		+		—
quadrimaculata	—	+		+		
semifasciata	—	—		+		
pulchella	—	—		+	—	
Plathemis lydia	—	—		+	—	—
Erythrodiplax berenice				+		
Nannothemis bella	—	+		+		—

	Me.	N. H.	Vt.	Mass.	R. I.	Conn.
Pantala flavescens		—		—		
Tramea carolina				—		
abdominalis				—		
Sympetrum scoticum		—				
rubicundulum	—	—		+	—	
rubicundulum obtrusum	—	—		—		
albifrons				—		
semicinctum	—	—		+		
vicinum	—	—		+	—	
costiferum	—			—	+	
Leucorhinia frigida	—	—		—		
hudsonica	—	—		—		
proxima	+	—		+		
glacialis	—	+		—		
intacta	—	—		+		
Celithemis ornata	—	—		+		
elisa	—	—		+		
eponina				+		
Perithemis domitia tenera				+	—	
Erythemis simplicicollis		—		+	+	
Pachydiplax longipennis				—	+	

ODONATA.

ZYGOPTERA.

AGRIONIDAE. CALOPTERYGINAE.

1. Calopteryx amata Hagen.

Hagen, Psyche, 1889, vol. 5, p. 244. "Dublin, New Hampshire."

N. H. — June; Franconia (Mrs. Slosson), Dublin (Hagen), Peterboro (Cabot).

2. Calopteryx dimidiata apicalis (Burmeister).

Calopteryx apicalis Burm., Handb. ent., 1839, vol. 2, p. 827. "Vaterland unbekannt." [Apparently Philadelphia].

Calopteryx dimidiata race *apicalis* Hagen, Psyche, 1889, vol. 5, p. 246.

Mass. — June; Waltham, South Reading (Hagen), Carver (B. S. N. H. Coll.).

3. Calopteryx aequabilis Say.

Hagen, Psyche, 1889, vol. 5, p. 246. Howard, Insect book, 1901, pl. 46, fig. 14.

Calepteryx aequabilis Say, Journ. acad. nat. sci. Phila., 1839, vol. 8, p. 33. "Massachusetts."

Me. — June 6 to July 6; Foxcroft, South Lagrange, Orono, Bradley, Auburn (Harvey), Manchester (Miss Wadsworth), Bethel, Norway (Hagen).

Vt. — June; Newport (Mrs. Slosson).

Mass. — Worcester (Hitchings), Sherborn (Babcock), Lawrence, Brookline, Tyngsboro (Hagen).

4. Calopteryx maculata (Beauvois) Burm.

Agrion maculata Beauv., Ins. Afr. Amér., 1805, p. 85, Neur. pl. 7, f. 3. "États-Unis d'Amérique."

Calopteryx maculata Needham, Bull. 68, N. Y. st. mus., 1903, p. 224, fig. 3, pl. 14, fig. *a* (nymph), pl. 11 (imago).

Me. — June 6 to Aug. 27; N. E. Carry, Foxcroft, South Lagrange, Orono, Bradley, Farmington (Harvey), Manchester (Miss Wadsworth), Norway (Hagen), Mt. Desert (Bullock).

Vt. — June; Newport (Mrs. Slosson).

Mass. — June; "everywhere," Ipswich, Cambridge, Milton, Sutton, Northampton (Hagen), Sherborn (Babcock).

5. Hetaerina americana (Fabricius) Selys.

Agrion americana Fabr., Ent. syst. suppl., 1798, p. 287. "America."

Hetaerina americana Needham, Bull. 68, N. Y. st. mus., 1903, p. 226, text fig. 5a, pl. 12 (imago), text fig. 4, pl. 12, pl. 14, fig. *b* (nymph). Howard, Insect book, 1901, pl. 46, figs. 9, 11.

Me. — July to Sept.; Chemo Mills, Bradley, Winslow, Auburn (Harvey), Norway (Hagen).

Mass. — Salem, Weston (Hagen).

LESTINAE.

6. Lestes eurinus Say.

Say, Journ. acad. nat. sci. Phila., 1839, vol. 8, p. 36. "Massachusetts."

Calvert, Trans. Amer. ent. soc., 1893, vol. 20, p. 229, pl. 3, fig. 14.

Mass. — July; Sherborn (Babcock), Milton (Hagen), Woods Hole (Kellicott).

7. Lestes congener Hagen.

Hagen, Syn. Neur. N. Amer., 1861, p. 67. "New York; Texas."

Calvert, Trans. Amer. ent. soc., 1893, vol. 20, p. 229, pl. 3, fig. 15.

Me.—July, Aug.; N. W. Carry, Orono (Harvey), Manchester (Miss Wadsworth).

8. Lestes unguiculatus Hagen.

Lestes unguiculata Hagen, Syn. Neur. N. Amer., 1861, p. 70. "Chicago; Bergen Hill, New Jersey; New York; St. Louis; Wisconsin."

Calvert, Trans. Amer. ent. soc., 1893, vol. 20, p. 230, pl. 3, fig. 16.

Me.—July to Sept.; N. W. Carry, Orono (Harvey), Manchester (Miss Wadsworth), York Harbor (Moore).

Mass.—July; Worcester (Hitchings), Cuttyhunk Is. (Calvert), Martha's Vineyard (Moore).

R. I.—June; Providence (Davis).

9. Lestes uncatus Kirby.

Kirby, Cat. Odon., 1890, p. 160. Williamson, 24th Rep. geol. Indiana, 1900, p. 257, pl. 7, fig. 2.

Lestes forcipatus Hagen (nec Rambur), Syn. Neur. N. Amer., 1861, p. 71. "Chicago; Washington; Wisconsin."

Me.—June, July, Sept.; Orono (Harvey), Manchester (Miss Wadsworth).

N. H.—Franconia (Mrs. Slosson), N. Conway (Calvert).

Mass.—June, Aug.; Cambridge, Milton (Hagen), Worcester (Hitchings).

10. Lestes disjunctus Selys.

Selys, Bull. acad. Belg., 1862, (2) vol. 16, p. 210. "Nouvelle-Ecosse, Maine, Illinois, Chicago."

Calvert, Trans. Amer. ent. soc., 1893, vol. 20, p. 231, pl. 3, fig. 19.

Me.— July to Sept.; Orono (Harvey), Manchester (Miss Wadsworth), Fryeburg (Harvey).

N. H.— June, Aug.; Fabyan's (Calvert), Franconia (Mrs. Slosson).

11. Lestes forcipatus Rambur.

Lestes forcipata Ramb., Ins. Nevr., 1842, p. 246. "l'Amérique septentrionale."

Williamson, 24th rep. geol. Indiana, 1900, p. 258, pl. 7, fig. 3.

Me.— Aug.; Orono, Fryeburg (Harvey), Manchester (Miss Wadsworth).

Mass.— July; Sherborn (Babcock), Worcester (Hitchings), Cuttyhunk Is. (Calvert).

Conn.— June; New Haven (Moore).

12. Lestes rectangularis Say.

Say, Journ. acad. nat. sci. Phila., 1839, vol. 8, p. 34. "Indiana. Massachusetts."

Calvert, Trans. Amer. ent. soc., 1893, vol. 20, p. 232, pl. 3, fig. 17. Needham, Bull. 68, N. Y. st. mus. 1903, p. 233, text fig. 7, pl. 14, fig. *c* (nymph).

Me.— June to Sept.; Orono, Fryeburg (Harvey), Manchester (Miss Wadsworth).

N. H.— Franconia (Mrs. Slosson).

Mass.— June, July; Milton (Hagen), Worcester (Hitchings), Cuttyhunk Is. (Calvert).

R. I.— June, Aug.; Providence (Davis), Block Is. (Calvert).

AGRIONIDAE. LESTINAE.

13. Lestes vigilax Hagen.

Hagen in Selys, Bull. acad. Belg., 1862, (2) vol. 16, p. 214. "New-Jersey."

Williamson, 24th rep. geol. Indiana, 1900, p. 259, pl. 7, fig. 4.

Me.— July, Aug.; Manchester (Miss Wadsworth), Fryeburg (Harvey).

Mass.— Worcester (Hitchings).

R. I.— Aug.; Block Is. (Calvert).

14. Lestes inequalis Walsh.

Walsh, Proc. acad. nat. sci. Phila., 1862, p. 385. [Rock Island, Illinois.]

Kellicott, Odon. Ohio, 1899, p. 21, fig. 22. Williamson, 24th rep. geol. Indiana, 1900, p. 260, pl. 7, fig. 6.

Me.— June, July; Bradley, Orono (Harvey), Manchester (Miss Wadsworth).

N. H.— June; Franconia (Mrs. Slosson).

AGRIONINAE.

15. Argia moesta putrida (Hagen).

Agrion putridum Hagen, Syn. Neur. N. Amer., 1861, p. 96. "Wisconsin River; Berkeley Springs, Virginia; Maryland."

Argia putrida Williamson 24th rep. geol. Indiana, 1900, p. 261, pl. 4, fig. 2, pl. 7, fig. 7, (imago). Needham, Bull. 68, N. Y. st. mus., 1903, p. 240 (nymph).

Me.— June to Aug.; Orono (Harvey), Manchester (Miss Wadsworth).

Mass.— Worcester (Hitchings).

16. Argia violacea (Hagen) Selys.

Agrion violaceum Hagen, Syn. Neur. N. Amer., 1861, p. 90. "Maryland," etc. (ten localities in as many States).

Argia violacea Needham, Bull. 68, N. Y. st. mus., 1903, p. 242, pl. 13, figs. 4 (imago), 5 (nymph).

Me.— June to Sept.; Bradley, Orono (Harvey), Manchester (Miss Wadsworth), Mt. Desert (Bullock).

Mass.— (Hagen).

R. I.— Sept.; Providence (Davis).

Conn.— (Hagen).

17. Argia apicalis (Say) Selys.

Needham, Bull. 68, N. Y. st. mus., 1903, p. 242, pl. 17, fig. 1, (imago), text fig. 9 (nymph).

Agrion apicalis Say, Journ. acad. nat. sci. Phila., 1839, vol. 8, p. 40. "U. S."

Me.— Aug.; Orono (Harvey).

18. Chromagrion conditum (Hagen) Needham.

Needham, Bull. 68, N. Y. st. mus., 1903, p. 246, pl. 13, figs. 1, 2 (imago); p. 247, pl. 13, fig. 3, pl. 14, fig. *g*, pl. 15, fig. *b* (nymph).

Erythromma? *conditum* Hagen in Selys, Bull. acad. Belg., 1876, (2) vol. 41, p. 1305. "Maryland .... Washington."

Me.— May to July; Orono, Bradley (Harvey), Manchester (Miss Wadsworth).

N. H.— Franconia (Mrs. Slosson).

Mass.— Sherborn (Babcock).

19. Nehalennia irene (Hagen) Selys.

Needham, Bull. 68, N. Y. st. mus., 1903, p. 249, pl. 18, figs. 3, 4 (imago), pl. 14, fig. *i*, pl. 15, fig. *d* (nymph).

AGRIONIDAE. AGRIONINAE.

Agrion irene Hagen, Syn. Neur. N. Amer., 1861, p. 74. "Chicago .... Maine."

Me.—June, Aug.; Orono, Fryeburg, Westbrook (Harvey), Manchester (Miss Wadsworth), York Harbor (Moore).

N. H.—Mt. Washington, Franconia (Mrs. Slosson).

Mass.—Worcester (Hitchings).

20. Nehalennia gracilis Morse.

Morse, Psyche, 1895, vol. 7, p. 274. "Sherborn [and] Wellesley, Mass."

Mass.—June, July; Wellesley, Sherborn (Morse).

21. Amphiagrion saucium (Burmeister) Selys.

Selys, Bull. acad. Belg., 1876, (2) vol. 41, p. 285. Needham, Bull. 68, N. Y. st. mus., p. 247, pl. 18, figs. 1, 2 (imago), pl. 14, fig. *h*, pl. 15, fig. *c*, pl. 18, fig. 7 (nymph).

Agrion saucium Burm., Handb. ent., 1839, vol. 2, p. 819. "Süd-Karolina."

Me.—June, July; Orono, Bradley (Harvey), Manchester (Miss Wadsworth).

N. H.—Franconia (Mrs. Slosson).

Mass.—(Hagen).

22. Enallagma durum (Hagen) Selys.

Selys, Bull. acad. Belg., 1876, (2) vol. 41, p. 500. Calvert, Trans. Amer. ent. soc., 1893, vol. 20, p. 236, pl. 3, fig. 32.

Agrion durum Hagen, Syn. Neur. N. Amer., 1861, p. 87. "Maryland; Louisiana; Florida."

Mass.—July; Woods Hole, Cuttyhunk Is. (Calvert).

R. I.—Aug.; Watch Hill (Calvert).

23. Enallagma doubledayi Selys.

Kellicott, Odon. Ohio, 1899, p. 41, fig. 6. Williamson, Proc. Indiana acad. sci., 1901, pl. 1, figs. 8, 9.

Agrion doubledayi Selys, Rev. odon. Eur., 1850, p. 209. "St. John Bluff, en Floride."

Mass.— Aug.; Provincetown (Williamson), Nonamesset Is. (Calvert).

24. Enallagma laterale Morse.

Morse, Psyche, 1895, vol. 7, p. 274. "Wellesley, Mass."

Mass.— May, June; Wellesley (Morse).

25. Enallagma cyathigerum (Charpentier) Selys.

Selys, Bull. acad. Belg., 1876, (2) vol. 41, p. 505, also race *annexum* p. 506.

Agrion cyathigerum Charp., Lib. Eur., 1840, p. 163, pl. 42, fig. 1, "Silesia."

Enallagma annexum Williamson, Ent. news, 1900, vol. 11, p. 454, fig. *a*, pl. 9, figs. 3, 7.

Me.— June; Manchester (Miss Wadsworth).

N. H.— July; Hermit Lake (Selys), Franconia (Mrs. Slosson).

Mass.— (Selys).

26. Enallagma calverti Morse.

Morse, Psyche, 1895, vol. 7, p. 208. "Franktown, Nev."

Williamson, Ent. news, 1900, vol. 11, p. 455, fig. *b*, pl. 9, figs. 5, 9, 10.

Me.— June; Orono (Harvey).

Mass.— Wellesley (Morse), Sherborn (Babcock).

27. Enallagma hageni (Walsh) Selys.

Williamson, 24th rep. geol. Indiana, 1900, p. 269, pl. 5, fig. 1. Needham, Bull. 68, N. Y. st. mus., 1903, p. 254 (nymph).

Agrion hageni Walsh, Proc. ent. soc. Phila., 1863, vol. 2, p.

AGRIONIDAE. AGRIONINAE.

234. (Proc. acad. nat. sci. Phila., 1862, p. 386 [Rock Island, Illinois]).

Me.— June to Aug.; Foxcroft, Rangeley, Orono, Fryeburg, (Harvey), Mt. Desert (Bullock), Manchester (Miss Wadsworth), York Harbor (Moore).

Mass.— Worcester (Hitchings), Dedham (Selys).

28. Enallagma ebrium (Hagen) Selys.

Williamson, 24th rep. geol. Indiana, 1900, p. 270, pl. 5, figs. 3, 4.

Agrion ebrium Hagen, Syn. Neur. N. Amer., 1861, p. 89. "Chicago; North America; New Orleans."

Me.— June; Manchester (Miss Wadsworth).

N. H.— Aug.; Fabyan's (Calvert).

Mass.— June; West Bridgewater (Tower).

29. Enallagma civile (Hagen) Selys.

Williamson, 24th rep. geol. Indiana, 1900, p. 270, pls. 1, 5, figs. 5, 6. Needham & Cockerell, Psyche, 1903, vol. 10, p. 137 (nymph).

Agrion civile Hagen, Syn. Neur. N. Amer., 1861, p. 88. "New York," etc.

Me.— June to Aug.; Orono (Harvey), Manchester (Miss Wadsworth), York Harbor (Moore).

Mass.— July, Aug.; Sherborn (Babcock), Worcester (Hitchings), Woods Hole, Cuttyhunk Is. (Calvert), Martha's Vineyard (Moore).

R. I.— Aug.; Providence (Davis), Watch Hill, Block Is. (Calvert).

30. Enallagma minusculum Morse.

Morse, Psyche, 1895, vol. 7, p. 207. "Sherborn, Mass."

Mass.— July; Sherborn (Morse).

31. Enallagma aspersum (Hagen) Selys.

Calvert, Trans. Amer. ent. soc., 1893, vol. 20, p. 237, pl. 3, fig. 30.

Agrion aspersum Hagen, Syn. Neur. N. Amer., 1861, p. 97. "New York; Bergen Hill, New Jersey; Chicago."

N. H.— July; North Conway (Calvert).

Mass.— July, Aug.; Nonamesset Is., Woods Hole (Calvert).

32. Enallagma traviatum Selys.

Selys, Bull. acad. Belg., 1876, (2) vol. 41, p. 517. "Dedham, (Massachusetts)."

Williamson, 24th rep. geol. Indiana, 1900, p. 271, pl. 5, figs. 9, 10.

Mass.— July; Dedham (Selys), Sherborn (Morse).

33. Enallagma geminatum Kellicott.

Needham, Bull. 68, N. Y. st. mus., 1903, p. 254 (nymph), pl. 19, fig. *c* (imago).

Enallagma geminata Kellicott, Ent. news, 1895, vol. 6, p. 239. "Licking Reservoir, Ohio [etc.]..... Corunna, Mich."

Me.— July; Bradley (Harvey).

Conn.— June; Mt. Carmel, New Haven (Moore).

34. Enallagma divagans Selys.

Selys, Bull. acad. Belg., 1876, (2) vol. 41, p. 521. "Derdam, Massachusetts." [Error for Dedham].

Williamson, 24th rep. geol. Indiana, 1900, p. 273, pl. 5, figs. 15, 16.

Mass.— Dedham (Selys).

35. Enallagma exsulans (Hagen) Selys.

Needham, Bull. 68, N. Y. st. mus., 1903, pl. 16, fig. 2, pl. 19, fig. *f* (imago), p. 255 (nymph).

Agrion exsulans Hagen, Syn. Neur. N. Amer., 1861, p. 82. "Philadelphia; Berkeley Springs, Virginia; Pecos River, Western Texas."

Me.— June; Orono (Harvey), Manchester (Miss Wadsworth).

36. Enallagma signatum (Hagen) Selys.

Needham, Bull. 68, N. Y. st. mus., 1903, pl. 17, fig. 2, pl. 19, fig. *m* (imago), p. 258, text figs. 10, 12*a*, 12*b* (nymph).

Agrion signatum Hagen, Syn. Neur. N. Amer., 1861, p. 84. "Georgia; Louisiana."

Me.— July; Bradley (Harvey), Manchester (Miss Wadsworth).

Mass.— Worcester (Hitchings).

37. Enallagma pictum Morse.

Morse, Psyche, 1895, vol. 7, p. 274. "Sherborn, Mass."

Mass.— Sherborn (Babcock).

38. Enallagma pollutum (Hagen) Selys.

Williamson, 24th rep. geol. Indiana, 1900, p. 276, pl. 5, figs. 23, 24.

Agrion pollutum Hagen, Syn. Neur. N. Amer., 1861, p. 83. "Florida."

Me.— June, July; Bradley (Harvey), Manchester (Miss Wadsworth.

39. Ischnura verticalis (Say) Selys.

Calvert, Ent. news, 1898, vol. 9, pl. 11, figs. 1–4. Needham, Bull. 68, N. Y. st. mus., 1903, pl. 17, figs. 4, 5 (imago), p. 261, text figs. 12*c*, 12*d*, 13 (nymph).

Agrion verticalis Say, Journ. acad. nat. sci. Phila., 1839, vol. 8, p. 37. "Indiana."

Very common, May to Sept.

Me.— Orono, Fryeburg (Harvey), Mt. Desert (Bullock), Manchester (Miss Wadsworth), York Harbor (Moore).

N. H.— Fabyan's (Calvert).

Vt.— Newport (Mrs. Slosson).

Mass.— Worcester (Hitchings), Woods Hole, Cuttyhunk Is. (Calvert), Martha's Vineyard (Moore).

R. I.— Providence (Davis), Block Is. (Calvert).

Conn.— Poquonock (Britton), South Manchester (Sturgis), Mt. Carmel (Moore).

40. Ischnura kellicotti Williamson.

Williamson, Ent. news, 1898, vol. 9, p. 209. "Round and Shriner Lakes, Whitley County, Indiana."

Calvert, Ent. news, 1898, vol. 9, p. 211, pl. 11, figs. 5–13.

Me. — July; Manchester (Miss Wadsworth).

R. I.— Aug.; Block Is. (Calvert).

41. Ischnura ramburii Selys.

Calvert, Trans. Amer. ent. soc., 1893, vol. 20, p. 240.

Agrion ramburii Selys, Rev. odon. Eur., 1850, p. 186. "Yucatan."

R. I.— Aug.; Watch Hill (Calvert).

Note. The inclusion of this species by Harvey in his Catalogue, etc., of the Odonata of Maine, 1902, is evidently an error; *cf.* Ent. news, 1891, vol. 2, p. 51, footnote.

AGRIONIDAE. AGRIONINAE.

42. Ischnura posita (Hagen) Needham.

Needham, Bull. 68, N. Y. st. mus., 1903, p. 261 (nymph).

Agrion positum Hagen, Syn. Neur. N. Amer., 1861, p. 77. "Savannah, Dalton, Georgia; Washington."

Nehalennia posita Williamson, 24th rep. geol. Indiana, 1900, p. 266.

Me.—July; Orono, Penobscot River (Harvey).
Mass.— Salem (Selys).
R. I.— Aug.; Providence (Davis), Block Is. (Calvert).

43. Anomalagrion hastatum (Say) Selys.

Needham, Bull. 68, N. Y. st. mus., 1903, pl. 18, figs. 5, 6 (imago), p. 263, pl. 14, fig. *j*, pl. 15, fig. *e* (nymph).

Agrion hastata Say, Journ. acad. nat. sci., Phila., 1839, vol. 8, p. 38. "Indiana."

Me.— (Hagen).
Mass.— (Hagen).

ANISOPTERA.

AESHNIDAE. PETALURINAE.

44. Tachopteryx thoreyi (Hagen) Selys.

Williamson, 24th rep. geol. Indiana, 1900, p. 281 (imago); Ent. news, 1901, vol. 12, p. 2, pl. 1 (nymph).

Uropetala thoreyi Hagen, Monog. gomph., 1858, p. 373, pl. 19, fig. 3, pl. 23, fig. 14. "l'Amérique septentrionale?"

N. H.— June; Manchester (Burnham).
Mass.— (Hagen).

45. Hagenius brevistylus Selys.

Selys, Bull. acad. Belg., 1854, vol. 21, pt. 2, p. 82. "Colombie" [probably error for District of Columbia, U. S.].

Selys & Hagen, Monog. gomph., 1858, p. 241, pl. 13, fig. 2, pl. 23, fig. 6. Cabot, Mem. mus. comp. zoöl., 1872, vol. 2, no. 5, p. 9, pl. 3, fig. 4 (nymph).

Me.— June, July; N. E. Carry, Greenfield, Orono, Bradley (Harvey), Manchester (Miss Wadsworth).

N. H.— Manchester (Burnham), Peterboro (Cabot).

Mass.— Sherborn (Babcock), Sutton (Hagen).

46. Progomphus obscurus (Rambur) Selys.

Williamson, 24th rep. geol. Indiana, 1900, p. 283, pl. 4, figs. 3, 4. Needham & Hart, Bull. Ill. st. lab. nat. hist., 1901, vol. 6, p. 55, pl. 1, fig. 3 (nymph).

Diastatomma obscurum Ramb., Ins. Névr., 1842, p. 170. "l'Amérique septentrionale."

Mass.— Boston, Wareham (Hagen).

47. Ophiogomphus anomalus Harvey.

Harvey, Ent. news, 1898, vol. 9, p. 60, pl. 5, fig. 1, "Orono" [Maine].

Harvey, Ent. news, 1901, vol. 12, p. 240.

Me.— June; Orono (Harvey).

48. Ophiogomphus mainensis Packard.

Packard, Proc. ent. soc. Phila., 1863, vol. 2, p. 255, footnote. "northern part of the State of Maine."

Needham, Can. ent., 1899, vol. 31, p. 235, figs. 10, 19, 36.

Me.— (Packard).

N. H.— White Mts. (Selys), Franconia (Mrs. Slosson).

Note. In the present state of knowledge, the identification of the New Hampshire specimens must be considered as tentative only.

49. Ophiogomphus carolus Needham.

Needham, Can. ent., 1897, vol. 29, p. 183, pl. 7, figs. 1–4, 6, 7. "Ithaca, N. Y."

Needham, Can. ent., 1899, vol. 31, p. 236, figs. 1, 28. Needham & Hart, Bull. Ill. st. lab. nat. hist., 1901, vol. 6, p. 59, pl. 1, fig. 4 (nymph).

Me.— June; Greenfield, Bradley, Orono (Harvey).

50. Ophiogomphus colubrinus Selys.

Selys, Bull. acad. Belg., 1854, vol. 21, pt. 2, p. 40. "Territoire de la baie d'Hudson."

Selys and Hagen, Monog. gomph., 1858, p. 76, pl. 5, fig. 1. Hagen, Trans. Amer. ent. soc., 1885, vol. 12, p. 257 (nymph).

Me.— Orono (Hagen).
N. H.— (Banks).

51. Ophiogomphus johannus Needham.

Needham, Can. ent., 1897, vol. 29, p. 182, pl. 7, fig. 5. "Wilmurt, N. Y."

Needham, Can. ent., 1899, vol. 31, p. 235, figs. 9, 18, 27.

Me.— July; Bradley (Harvey).

52. Ophiogomphus rupinsulensis (Walsh) Hagen.

Needham, Can. ent., 1899, vol. 31, p. 236, figs. 3, 12, 21, 30. "[*H*]*erpetogomphus*? *rupinsulensis*" Walsh, Proc. acad. nat. sci. Phila., 1862, p. 388. [Rock Island, Illinois].

Me.— Aug.; Russell Stream (Harvey).
N. H.— Manchester (Burnham).

53. Ophiogomphus aspersus Morse.

Morse, Psyche, 1895, vol. 7, p. 209. "northeastern U. S."
Needham, Can. ent., 1899, vol. 31, p. 235, figs. 2, 11, 20, 29; Bull. 47, N. Y. st. mus., 1901, p. 437, pl. 18, fig. 5 (nymph).

Me.— Aug.; Russell Stream (Harvey).

54. Gomphus (Lanthus) albistylus (Hagen) Needham.

Gomphus albistylus, Hagen, Bull. acad. Belg., 1878, (2), vol. 46, p. 460. "Le Maine."
Gomphus naevius Hagen, Harvey, Ent. news, 1898, vol. 9, p. 63, pl. 5, figs. 2–5, 9, 10.

Me.— July; Bradley (Harvey).
N. H.— Manchester (Burnham).

55. Gomphus (Lanthus) parvulus (Selys) Needham.

Gomphus parvulus Selys, Bull. acad. Belg., 1854, vol. 21, pt. 2, p. 56. "Nouvelle-Écosse."
Selys & Hagen, Monog. gomph., 1858, p. 157, pl. 22, fig. 1.
Lanthus parvulus Needham, Bull. 47, N. Y. st. mus., 1901, p. 441, pl. 18, fig. 6, pl. 20, figs. 8–10 (nymph).

Me.—June; Manchester (Miss Wadsworth).
N. H.—June; White Mts. (Hagen), Franconia (Mrs. Slosson).

56. Gomphus abbreviatus Hagen.

Hagen, Bull. acad. Belg., 1878, (2) vol. 46, p. 464. "Provincetown (Massachusetts) .... Orono (Maine)."

Hine, Ohio nat., 1901, vol. 1, pl. 5, figs. 27–34. Needham, Bull. 47, N. Y. st. mus., 1901, p. 448 (nymph).

ME.— June; S. Lagrange, Orono (Harvey), Manchester (Miss Wadsworth).

N. H.— Manchester (Burnham).

MASS.— July; Provincetown (Hagen).

57. GOMPHUS BREVIS Hagen.

Hagen, Bull. acad Belg., 1878, (2) vol. 46, p. 462. "SCHOARIE (ÉTAT DE NEW-YORK) .... PORT-NEUF (CANADA)."

Hine, Ohio nat., 1901, vol. 1, pl. 5, figs. 19–26. Needham, Bull. 47, N. Y. st. mus., 1901, p. 449, pl. 18, fig. 3 (nymph).

ME.— June; Orono (Harvey).

58. GOMPHUS QUADRICOLOR Walsh.

Walsh, Proc. ent. soc. Phila., 1863, vol. 2, p. 246. [ROCK ISLAND, ILLINOIS].

Williamson, 24th rep. geol. Indiana, 1900, p. 288, pl. 6, figs. 7, 29.

MASS.— Mt. Tom (Hagen).

59. GOMPHUS SORDIDUS Hagen.

Hagen in Selys, Bull. acad. Belg., 1854, vol. 21, pt. 2, p. 54. "CAROLINE DU SUD."

Williamson, Ent. news, 1903, vol. 14, p. 255, pl. 12, figs. 1–3. Needham, Bull. 47, N. Y. st. mus., 1901, pp. 446, 454 (nymph).

MASS.— Natick (Hagen, as *lividus*).

60. GOMPHUS EXILIS Selys.

Selys, Bull. acad. Belg., 1854, vol. 21, pt. 2, p. 55. "ÉTATS-UNIS."

Williamson, 24th rep. geol. Indiana, 1900, p. 293, pl. 6, figs. 20, 21, 36. Needham & Hart, Bull. Ill. st. lab. nat hist., 1901, vol. 6, 1, p. 81 (nymph).

ME. — May, June; South Lagrange, Orono (Harvey), Mt. Desert (Bullock), Manchester (Miss Wadsworth).

N. H. — Manchester (Burnham).

MASS. — May, June; Salem, Brookline, Natick, Sutton (Hagen), Worcester (id., Hitchings).

CONN. — May; New Haven (Walden).

61. GOMPHUS VENTRICOSUS Walsh.

Walsh, Proc. ent. soc. Phila., 1863, vol. 2, p. 249. [ROCK ISLAND, ILLINOIS].

Williamson, 24th rep. geol. Indiana, 1900, p. 287.

MASS. — (Selys).

62. GOMPHUS SCUDDERI Selys.

Selys, Bull. acad. Belg., 1873, (2) vol. 35, p. 752. "ÉTATS-UNIS."

Harvey, Ent. news, 1898, vol. 9, p. 62, pl. 5, figs. 6–8. Needham, Bull. 47, N. Y. st. mus., 1901, p. 456, pl. 17, fig. 2 (imago), pl. 18, fig. 2 (nymph).

ME. — Aug.; N. E. Carry (Harvey).

63. GOMPHUS VASTUS Walsh.

Walsh, Proc. acad. nat. sci. Phila., 1862, p. 391. [ROCK ISLAND, ILLINOIS].

Williamson, 24th rep. geol. Indiana, 1900, p. 287, pl. 6, figs. 3, 5, 28.

Cabot, Mem. mus. comp. zoöl., 1872, vol. 2, no. 5, p. 3, pl. 2, fig. 4 (nymph).

N. H.—Manchester (Burnham).
Mass. — Tyngsboro (Hagen).

64. Gomphus fraternus (Say) Selys.

Calvert, Ent. news, 1901, vol. 12, p. 66, pl. 3, figs. 3, 6–9, 16.
Aeshna fraterna Say, Journ. acad. nat. sci. Phila., 1839, vol. 8, p. 16. "U. S."

N. H. — "Probably" (Hagen).

65. Gomphus adelphus Selys.

Selys. Monog. gomph., 1858, p. 413. "New York."

Mass.— (Hagen).

66. Gomphus notatus Rambur.

Ramb., Ins. Névr., 1842, p. 162 "sans indication de patrie."
Williamson, Trans. Amer. ent. soc., 1901, vol. 27, p. 210, pl. 8, figs. 9, 14, 17, pl. 9, figs. 25, 27, 28. Needham, Bull. 68, N. Y. st. mus., 1903, p. 267 (nymph).

Mass.— Crampton (Hagen).

67. Gomphus spiniceps (Walsh) Selys.

Williamson, Trans. Amer. ent. soc., 1901, vol. 27, p. 209, pl. 8, figs. 13, 18, pl. 9, figs. 22, 23, 29. Needham, Bull. 47, N. Y. st. mus., 1901, p. 447, pl. 20, figs. 15, 16 (nymph).
Macrogomphus ? spiniceps Walsh, Proc. acad. nat. sci. Phila., 1862, p. 389. [Rock Island, Illinois.]

Mass. — July; Lawrence (Hagen).

68. Gomphus borealis Needham.

Needham, Bull. 68, N. Y. st. mus., 1903, p. 265.
Gomphus descriptus borealis Needham, Bull. 47, N. Y. st.

mus., 1901, p. 453, text fig. 12 (imago), pl. 19, fig. 3 (egg). "Saranac Inn" [N. Y.], "Franconia, N. H."

N. H. — Franconia (Mrs. Slosson).

See the note under *spicatus*.

69. Gomphus spicatus Hagen.

Hagen in Selys, Bull. acad. Belg., 1854, vol. 21, pt. 2, p. 54, "New York."

Selys & Hagen, Monog. gomph., 1858, pp. 153, 414, pl. 9, fig. 2.

Me. — June, July; South Lagrange, Oldtown, Orono (Harvey) Manchester (Miss Wadsworth).

N. H. — Franconia (Mrs. Slosson).

Mass. — June; Natick (Hagen), Sherborn (Babcock).

Note. Prof. Needham's statement that the above quoted figure of *spicatus* is not this species but his *borealis* can not be correct, as the figure was made from the *unique* type of *spicatus*.

70. Gomphus furcifer Hagen.

Hagen, Bull. acad. Belg., 1878, (2) vol. 46, p. 458. "Natick (Massachusetts) .... Lanzing (Michigan)."

Hine, Ohio nat., 1901, vol. 1, pl. 5, figs. 2, 4, 6, 9, 10. Walker, Can. ent., 1904, vol. 36, p. 358, figs. 11, 12 (nymph).

Mass. — June; Natick (Hagen).

71. Gomphus pallidus Rambur.

Ramb., Ins. Névr., 1842, p. 163. "l'Amérique septentrionale."

Williamson, 24th rep. geol. Indiana, 1900, p. 291, pl. 6, fig. 13. Needham, Can. ent., 1897, vol. 29, pl. 7, figs. 13, 14 (nymph).

Mass. — Waltham (Hagen).

AESHNIDAE. GOMPHINAE.

72. Dromogomphus spinosus Selys.

Selys, Bull. acad. Belg., 1854, vol. 21, pt. 2, p. 59. "États-Unis, Géorgie."

Needham, Bull. 47, N. Y. st. mus., 1901, p. 461, pl. 18, fig. 1 (nymph).

Gomphus spinosus Selys & Hagen, Monog. gomph., 1858, p. 120, pl. 7, fig. 2 (imago).

Me.—June, July, Orono, Oldtown (Harvey), Manchester (Miss Wadsworth).

N. H.—Manchester, Lake Winipisauke (Burnham).

Mass.— Worcester (Hitchings).

CORDULEGASTERINAE.

73. Cordulegaster diastatops Selys.

Thecaphora diastatops Selys, Bull. acad. Belg., 1854, vol. 21, pt. 2, p. 101. "Colombie." [probably error for District of Columbia].

Selys & Hagen, Monog. gomph., 1858, p. 320, pl. 16, fig. 4.

Cordulegaster sayi Selys, Cabot, Mem. mus. comp. zoöl., 1872, vol. 2, no. 5, p. 13, pl. 3, fig. 2 (nymph).

Me.—June to Aug.; Greenfield, Bradley, Orono (Harvey), Manchester (Miss Wadsworth).

N. H.—July, Aug.; White Mts. (Selys), Franconia (Mrs. Slosson).

Mass.—June; Sherborn (Babcock), West Bridgewater (Tower).

74. Cordulegaster maculatus Selys.

Selys, Bull. acad. Belg., 1854, vol. 21, pt. 2, p. 105. "Géorgie américaine."

Calvert, Trans. Amer. ent. soc., 1893, vol. 20, p. 246. Needham, Bull. 47, N. Y. st. mus., 1901, p. 477, fig. 16 (nymph). Howard, Insect book, 1901, pl. 44, fig. 7.

Me.— June, July; Greenfield, Orono (Harvey), Manchester (Miss Wadsworth).

N. H.— Manchester (Burnham).

Mass.— Woburn (Hagen), Worcester (Hitchings), West Bridgewater (Tower).

Conn.— (Hagen).

75. Cordulegaster obliquus (Say) Selys.

Kellicott, Odon, Ohio, 1899, p. 75. Needham, Ent. news, 1905, vol. 16, p. 5 (nymph).

Aeshna obliqua Say, Journ. acad. nat. sci., Phila., 1839, vol. 8, p. 15. "Indiana."

Me.— June, July; Bradley, Orono (Harvey), Manchester (Miss Wadsworth).

Mass.— Andover (Selys), Brookline (Hagen).

Conn.— (Hagen).

76. Anax junius (Drury) Selys.

Hagen, Psyche, 1890, vol. 5, p. 305. Cabot, Mem. mus. comp. zoöl., 1881, vol. 8, no. 1, p. 15, pl. 1, fig. 2 (nymph).

Libellula junia Drury, Ill. nat. hist., 1770, vol. 1, p. 112 and index, pl. 47, fig. 5. "New York."

Me.— June to Sept.; Orono (Harvey), Manchester (Miss Wadsworth).

N. H.— Manchester (Burnham), Amherst (Cabot).

Mass.— Boston, Cambridge, Springfield (Cabot), Magnolia, Brookline, Milton (Hagen), Woods Hole, Cuttyhunk Is. (Calvert).

R. I.— Block Is. (Calvert).

77. ANAX LONGIPES Hagen.

Hagen, Syn. Neur. N. Amer., 1861, p. 118. "GEORGIA."
Hagen, Psyche, 1890, vol. 5, p. 303. Calvert, Biol. Cent.-Amer., Neur., 1905, p. 176, pl. 8, fig. 10.

MASS.— Woods Hole, Aug. 25, 1875 (Hagen).

78. AESHNA SEPTENTRIONALIS Burmeister.

Aeschna septentrionalis Burm., Handb. ent., 1839, vol. 2, p. 839. "LABRADOR."
Hagen, Psyche, 1890, vol. 5, p. 354.

N. H.— White Mts. (Hagen).

79. AESHNA JUNCEA (Linné.) Stephens.

Libellula juncea Linn., Syst. nat., 1758, vol. 1, p. 544. "EUROPA."
Aeschna picta Charp., Lib. Europ., 1840, p. 112, pl. 40.

N. H.— Aug.; White Mts. (Hagen), Franconia (Mrs. Slosson).

80. AESHNA JUNCEA VERTICALIS (Hagen).

Aeschna verticalis Hagen, Syn. Neur. N. Amer., 1861, p. 122 "WASHINGTON; NEW YORK."
Williamson, 24th rep. geol. Indiana, 1900, p. 304, pl. 7, figs. 10, 11.

ME.— July to Sept.; Orono, Bradley (Harvey), Manchester (Miss Wadsworth), Islesboro (Dixon).
N. H.— Manchester (Burnham).
MASS.— Worcester (Hitchings).

81. AESHNA CLEPSYDRA Say.

Say, Journ. acad. nat. sci. Phila., 1839, vol. 8, p. 12. "MASSACHUSETTS."

Aeschna clepsydra Calvert, Ent. news, 1894, vol. 5, p. 9, figs. 1–7.

Me.— Base of Mt. Ktaadn, South Lagrange, Greenfield, Bradley, Orono (Harvey).

N. H.— Aug.; Hermit Lake (Scudder), Fabyan's (Calvert), Manchester (Burnham).

Mass.— Sherborn (Babcock).

82. Aeshna constricta Say.

Say, Journ. acad. nat. sci. Phila., 1839, vol. 8, p. 11. "Indiana."

Aeschna constricta Williamson, 24th rep. geol. Indiana, 1900, p. 305, pl. 4, fig. 10, pl. 7, figs. 14, 15.

Cabot, Mem. mus. comp. zoöl., 1881, vol. 8, no. 1, p. 24, pl. 3, fig. 1 (nymph).

Me.— Aug. to Oct.; N. E. Carry, Mt. Kineo, base of Mt. Ktaadn, Orono, Fryeburg (Harvey), Manchester (Miss Wadsworth).

N. H.— Hermit Lake, Fabyan's (Calvert), Manchester (Burnham).

Vt.— Winooski (Davis).

Mass.— Boston (Cabot), Worcester (Hitchings).

Conn.— (Hagen).

83. Epiaeschna heros (Fabricius) Hagen.

Cabot, Mem. mus. comp. zoöl., 1881, vol. 8, no. 1, p. 30, pl. 1, fig. 3 (nymph).

Aeshna heros Fabr., Ent. syst. suppl., 1798, p. 285. "America boreali."

Aeschna heros Aaron, Dragonflies *vs.* mosquitoes, 1890, pl. 1, fig. 2.

Me.— June to Sept.; Bradley (Harvey), Manchester (Miss Wadsworth), Portland (Cabot), York Beach (Burnham).

N. H.— Manchester, Hampton (Burnham).

Mass.— Manchester, Nahant, Milton (Hagen), Worcester (Hitchings), Martha's Vineyard (Moore).

R. I.— Providence (Davis).

84. Basiaeschna janata (Say) Selys.

Williamson, 24th rep. geol. Indiana, 1900, p. 301. Howard, Insect book, 1901, pl. 44, fig. 1. Needham, Bull. 47, N. Y. st. mus., 1901, p. 466 (nymph).

Aeshna janata Say, Journ. acad. nat. sci. Phila., 1839, vol. 8, p. 13. "Massachusetts."

Me.— June, July; South Lagrange, Orono, Bradley, Westbrook (Harvey), Manchester (Miss Wadsworth).

N. H.— White Mts. (Hagen), Peterboro (Cabot).

Mass.— May, June; Roxbury, Milton, Carver Woods (Hagen), Worcester (Hitchings).

85. Boyeria vinosa (Say) McLachlan.

Williamson, 24th rep. geol. Indiana, 1900, p. 300. Howard, Insect book, 1901, pl. 44, fig. 4.

Aeshna vinosa Say, Jour. acad. nat. sci. Phila., 1839, vol. 8, p. 13. "Massachusetts."

Neuraeschna vinosa Cabot, Mem. mus. comp. zoöl., 1881, vol. 8, no. 1, pp. 29, 39, pl. 2, fig. 3 (nymph).

Me.— July to Sept.; N. E. Carry, Greenfield, Orono, Wissattiquoik River (Harvey), Mt. Desert (Bullock), Manchester (Miss Wadsworth).

Mass.— Cambridge (Hagen).

86. Gomphaeschna furcillata (Say) Selys.

Williamson, 24th rep. geol. Indiana, 1900, p. 302. Needham, Proc. U. S. nat. mus., 1903, vol. 26, pl. 37, fig. 1.

Aeshna furcillata Say, Journ. acad. nat. sci. Phila., 1839, vol. 8, p. 14. "Massachusetts."

AESHNIDAE. AESHNINAE.

Me.—June, July; Manchester (Miss Wadsworth).

Vt.—Newport (Mrs. Slosson).

Mass.—June, July; Manchester, Brookline, Milton, Sutton (Hagen).

LIBELLULIDAE. CORDULINAE.

87. Didymops transversa (Say) Hagen.

Williamson, 24th rep. geol. Indiana, 1900, p. 307, pl. 4, f. 5. Needham, Proc. U. S. nat. mus., 1903, vol. 26, pl. 41, fig. 2 (imago). Cabot, Mem. mus., comp. zoöl., 1890, vol. 17, no. 1, p. 14, pl. 14, fig. 3 (nymph).

Libellula transversa Say, Journ. acad. nat. sci. Phila., 1839, vol. 8, p. 19. "Massachusetts."

Me.—May to July; Foxcroft, South Lagrange, Rangeley, Orono (Harvey, Cabot), Manchester (Miss Wadsworth).

N. H.—Early June; Manchester (Burnham).

Vt.— (Hagen).

Mass.—May to Aug.; Salem, Woburn, Worcester (Cabot), Cambridge, Stow, Milton (Hagen), West Bridgewater (Tower).

88. Macromia illinoiensis Walsh.

Walsh, Proc. acad. nat. sci. Phila., 1862, p. 397. [Rock Island, Illinois].

Calvert, Trans. Amer. ent. soc., 1893, vol. 20, p. 251. Cabot, Mem. mus. comp. zoöl., 1890, vol. 17, p. 16, pl. 1, fig. 2, pl. 2, fig. 1 (nymph). Howard, Insect book, 1901, pl. 42, fig. 7.

Me.—June 15 to July 15; Orono, Bradley (Harvey), Manchester (Miss Wadsworth).

N. H.—Manchester (Burnham).

Mass.—Sherborn (Babcock), Worcester (Hitchings), Woods Hole (Hagen).

89. Neurocordulia obsoleta (Say) Selys.

Needham, Bull. 47, N. Y. st. mus., 1901, p. 486 (nymph).

Libellula obsoleta Say, Journ. acad. nat. sci. Phila., 1839, vol. 8, p. 28. "Indiana and Massachusetts."

Epitheca obsoleta Hagen, Psyche, 1890, vol. 5, p. 369, pl. 1, figs. 7–9.

Me.— July 5; Manchester (Miss Wadsworth).

N. H.— Manchester (Burnham).

Mass.— Milton (Hagen).

90. Neurocordulia yamaskanensis (Provancher) Selys.

Aeschna yamaskanensis Prov., Nat. canad., 1875, vol. 7, p. 248. "St. Hyacinthe" [Quebec].

Epitheca yamaskanensis Hagen, Psyche, 1890, vol. 5, p. 367, pl. 1, figs. 1–6.

Me.— June; Orono (Harvey).

91. Epicordulia princeps (Hagen) Selys.

Needham, Bull. 47, N. Y. st. mus., 1901, p. 488, pl. 22, fig. 1 (imago), pl. 21, fig. 2 (nymph).

Epitheca princeps Hagen, Syn. Neur. N. Amer., 1861, p. 134. "Pecos River, Western Texas; Georgia; Maryland."

Me.— June; Manchester (Miss Wadsworth).

Mass.— Cambridge (Cabot), Natick, Sherborn (Babcock), Worcester (Hitchings).

Conn.— New Haven (Hagen).

92. Tetragoneuria cynosura (Say) Selys.

Williamson, 24th rep. geol. Indiana, 1900, p. 311.

Libellula cynosura Say, Journ. acad. nat. sci. Phila., 1839, vol. 8, p. 30. "Massachusetts."

Epitheca cynosura Cabot, Mem. mus. comp. zoöl., 1890, vol. 17, no. 1, p. 28, pl. 4, fig. 1 (nymph).

Me.— Rangeley, Bradley (Harvey), Manchester (Miss Wadsworth).

Mass.— Wakefield, Boston (Cabot), Stow, Brookline, Canton (Hagen), Sherborn (Babcock), Worcester (Hitchings).

93. Tetragoneuria cynosura semiaquea (Burmeister).

Libellula semiaquea Burm., Handb. ent., 1839, vol. 2, p. 858. "Savannah."

Tetragoneuria semiaquea Calvert, Trans. Amer. ent. soc., 1893, vol. 20, p. 252. Needham, Bull. 47, N. Y. st. mus., 1901, p. 493 (nymph). Howard, Insect book, 1901, pl. 43, fig. 1.

Me.— May to July; Bradley (Harvey), Mt. Desert (Bullock) Manchester (Miss Wadsworth).

N. H.— Manchester (Burnham).

Mass.— Worcester (Hitchings), Martha's Vineyard (Moore).

94. Tetragoneuria spinigera (Selys) Selys.

Needham, Bull. 47, N. Y. st. mus., 1901, p. 493 (imago, nymph).

Cordulia spinigera Selys, Bull. acad. Belg., 1871, (2), vol. 31, p. 269. "Canada."

Tetragoneuria indistincta Morse, Psyche, 1895, vol. 7, p. 210.

Me.— June, July; Bradley (Harvey), Manchester (Miss Wadsworth).

N. H.— Manchester (Burnham, as *cynosura*), Peterboro (Cabot).

Mass.— Winchendon (Morse).

Note. The reference of *T. indistincta* Morse to this species is made after an examination of the type.

95. Tetragoneuria spinosa (Hagen) Selys.

Needham, Bull. 47, N. Y. st. mus., 1901, pp. 493, 495, pl. 22, fig. 2.

Cordulia spinosa Hagen, Bull. acad. Belg., 1878, (2) vol. 45, p. 188. "Géorgia (États-Unis)."

N. H.— Franconia (Mrs. Slosson).

96. Helocordulia uhleri (Selys) Needham.

Needham, Bull. 47, N. Y. st. mus., 1901, p. 497, text figs. 21*x*, *y*, *z* (imago), 22 (nymph).

Cordulia uhleri Selys, Bull. acad. Belg., 1871, (2) vol. 31, p. 274. "Randal, Maine .... New-Jersey."

Me.— May, June; Orono (Harvey), Manchester (Miss Wadsworth).

Mass.— Stow (Hagen), West Bridgewater (Tower).

Note. The first locality given by de Selys and quoted above is an error for "Randal[l], Stow, Mass.," Randall being the collector's name. See Hagen, Proc. Bost. soc. nat. hist., vol. 15, p. 269.

97. Somatochlora linearis (Hagen) Selys.

Needham, Bull. 47, N. Y. st. mus., 1901, p. 501, text fig. 25.

Somatochlora sp.? no. 2. Needham, Bull. 68, *l. c.*, 1903, p. 269 (nymph: *cf.* Ent. news, 1905, vol. 16, p. 6).

Cordulia linearis Hagen, Syn. Neur. N. Amer., 1861, p. 137. "St. Louis."

Me.— July 27; Manchester (Miss Wadsworth). Probably this species.

98. Somatochlora septentrionalis (Hagen) Selys.

Cordulia septentrionalis Hagen, Syn. Neur. N. Amer., 1861, p. 139. "Labrador."

Epitheca septentrionalis Selys, Bull. acad. Belg., 1871, (2) vol. 31, p. 298; 1878, (2) vol. 45, p. 195.

Me.— June 18; Orono (Harvey).

99. Somatochlora forcipata (Scudder) Selys.

Cordulia forcipata Scud., Proc. Bost. soc. nat. hist., 1866, vol. 10, p. 216. "The Glen, White Mts."

Me.— May to Aug.; Orono, Bradley (Harvey), Manchester (Miss Wadsworth).

N. H.— Mt. Washington (Mrs. Slosson), The Glen, White Mts. (Scudder).

100. Somatochlora elongata (Scudder) Selys.

Needham, Bull. 47, N. Y. st. mus., 1901, p. 499, text fig. 23 (imago), p. 500 (nymph).

Cordulia elongata Scud., Proc. Bost. soc. nat. hist., 1866, vol. 10, p. 218. "White Mts."

Me.— Aug.; at sea off Scoodic Point (Harvey).

N. H.— July, Aug.; Fabyan's, Hermit Lake, Mt. Washington (Scudder, Calvert), Franconia (Mrs. Slosson), Plymouth (Hagen).

101. Somatochlora elongata minor Calvert.

Somatochlora elongata var. *minor* Calvert, Ent. news, 1898, vol. 9, p. 87. "Bradley, Maine; Franconia, N. H."

Williamson, Ent. news, 1900, vol. 11, p. 457, pl. 9, figs. 11, 11*a*.

Me.— July 8; Bradley (Harvey).

N. H.— June 22; Franconia (Mrs. Slosson).

102. Somatochlora walshii (Scudder) Selys.

Needham, Bull. 47, N. Y. st. mus., 1901, p. 501, text fig. 26 (this fig. does not show the upcurved apex of the sup. apps. ♂).

Cordulia walshii Scud., Proc. Bost. soc. nat. hist., 1866, vol. 10, p. 217. "The Glen, White Mts."

Me.—June to Aug.; Orono, Bradley (Harvey), Manchester (Miss Wadsworth).

N. H.— Aug.; The Glen, White Mts. (Scudder).

103. Somatochlora tenebrosa (Say) Selys.

Needham, Bull. 47, N. Y. st. mus., 1901, p. 501, text fig. 27.

Libellula tenebrosa Say, Journ. acad. nat. sci. Phila., 1839, vol. 8, p. 19. "Indiana."

Epitheca tenebrosa Selys, Bull. acad. Belg., 1871, (2) vol. 31, p. 289.

N. H.— Aug. 1; Moat Mt. near North Conway (Calvert).

104. Somatochlora albicincta (Burmeister) Selys.

Epophthalmia albicincta Burm., Handb. ent., 1839, vol. 2, p. 847. "Labrador."

Cordulia eremita Scud., Proc. Bost. soc. nat. hist., 1866, vol. 11, p. 300.

N. H.—July, Aug.; Hermit Lake, Mt. Washington (Scudder, Calvert), Waterville (Hagen).

105. Somatochlora cingulata (Selys) Selys.

Epitheca cingulata Selys, Bull. acad. Belg., 1871, vol. 31, p. 302. "Terre-Neuve."

Selys, Ent. mo. mag., 1875, vol. 11, p. 241.

N. H.— White Mts. (Hagen).

106. Cordulia shurtleffi Scudder.

Scud., Proc. Bost. soc. nat. hist. 1866, vol. 10, p. 217. "Hermit Lake."

Needham, Bull. 47, N. Y. st. mus., 1901, pp. 502, 503 (nymph) pl. 19, fig. 4 (egg).

Me. — July; Orono, Bradley (Harvey).

N. H. — Aug.; Hermit Lake, Mt. Washington (Scudder, Calvert), Crawford Notch (Mrs. Slosson).

107. Dorocordulia lepida (Hagen) Needham.

Needham, Bull. 47, N. Y. st. mus., 1901, p. 505, text fig. 28, *x*, *y*, *z*.

Cordulia lepida Hagen, Bull. acad. Belg., 1871, vol. 31, p. 264. "Massachusetts,—New-Yorck, Albany,—Maryland,—New Jersay."

Somatochlora lepida Calvert, Trans. Amer. ent. soc., 1893, vol. 20, p. 253.

Me. — June, July; Greenfield, Orono, Bradley (Harvey), Manchester (Miss Wadsworth), Portland (Hagen).

N. H. — Manchester (Burnham).

Mass. — July; Cambridge, Stow, Natick, Brookline (Hagen), Sherborn (Babcock), West Bridgewater (Tower), Woods Hole (Kellicott).

Conn. — June, July; Hammond's Pond (Hagen).

108. Dorocordulia libera (Selys) Needham.

Needham, Bull. 47, N. Y. st. mus., 1901, p. 504, text figs. 28 *a*, *b*, *c* (imago), p. 505 (nymph).

Cordulia libera Selys, Bull. acad. Belg., 1871, vol. 31, p. 263. "Canada."

Me. — June, Aug.; Greenfield, Orono (Harvey), Manchester (Miss Wadsworth).

N. H. — Franconia (Mrs. Slosson).

Mass. — June 27; Sunderland (Dwyer).

109. Libellula auripennis Burmeister.

Burm., Handb. ent., 1839, vol. 2, p. 861. "Savannah."
Scudder, Proc. Bost. soc. nat. hist., 1866, vol. 10, p. 191. Howard, Insect book, 1901, pl. 45, fig. 6. Needham, Bull. 47, N. Y. st. mus., 1901, p. 533 (nymph).

Mass. — July; Provincetown (Sanborn), Woods Hole, Cuttyhunk Is. (Calvert), Martha's Vineyard (Moore).
R. I. — Aug.; Watch Hill, Block Is. (Calvert).

110. Libellula cyanea Fabricius.

Fabr., Syst. ent., 1775, p. 424. "America."
Williamson, 24th rep. geol. Indiana, 1900, p. 330. Needham, Bull. 47, N. Y. st. mus., 1901, p. 534 (nymph). Howard, Insect book, 1901, pl. 44, figs. 2, 3.

N. H. — Manchester (Burnham).
Mass. — June, July; Beverly, Woburn, Cambridge, Natick, Milton (Hagen), Worcester (Hitchings), West Bridgewater (Tower), Woods Hole (Kellicott).

111. Libellula axillena vibrans (Fabricius) Calvert.

Calvert, Trans. Amer. ent. soc., 1893, vol. 20, p. 257.
Libellula vibrans Fabr., Ent. syst., 1793, vol. 2, p. 380. "Habitat — —."
Howard, Insect book, 1901, pl. 40, fig. 11.

Mass. — July; Woods Hole (Kellicott).

112. Libellula axillena incesta (Hagen) Calvert.

Calvert, Trans. Amer. ent. soc., 1893, vol. 20, p. 257.
Libellula incesta Hagen, Syn. Neur. N. Amer., 1861, p. 155. "Carolina."

Hagen, Psyche, 1890, vol. 5, p. 384. Howard, Insect book, 1901, pl. 43, fig. 3.

Me. — June, July; Manchester (Miss Wadsworth).

N. H. —Manchester (Burnham).

Mass.— July; Saugus, Milton, (Hagen), Sherborn (Babcock), Worcester (Hitchings), West Bridgewater (Tower).

113. Libellula exusta Say.

Say, Journ acad. nat. sci. Phila., 1839, vol. 8, p. 29. "Massachusetts."

Howard, Insect book, 1901, p. 41, figs. 5, 6.

Ladona exusta Say, et *julia* Uhler, Needham, Bull. 47, N. Y. st. mus., 1901, pp. 529, 530, text fig. 31 (imagines), p. 530 (nymph of *julia*).

Me.— May to July; Bradley, Westbrook (Harvey), Manchester (Miss Wadsworth), Norway (Hagen).

N. H.— Franconia (Mrs. Slosson), Manchester (Burnham).

Mass.— June, July; Cambridge, Worcester, Sutton (Hagen, Hitchings).

Conn.— May; New Haven (Walden).

Note.— In a letter of Aug. 30, 1904, Prof. Needham writes "I now think these [*exusta* and *julia*] to be one species."

114. Libellula quadrimaculata Linné.

Linn. Syst. nat. 1758, vol. 1, p. 543. "Europa."

Charp., Lib. Eur., 1840, p. 60, pl. 3. Lucas, Brit. dragonfl., 1900, p. 107, pl. 5. Needham, Bull. 47, N. Y. st. mus., 1901, p. 534 (nymph). Howard, Insect book, 1901, pl. 40, fig. 3.

Me.— May to Sept.; Rangeley, Orono, Bradley (Harvey), Mt. Desert (Bullock), Manchester (Miss Wadsworth).

N. H.— Franconia (Mrs. Slosson), Manchester (Burnham).

Mass.— Stow (Hagen), Worcester (Hitchings).

115. Libellula semifasciata Burmeister.

Burm., Handb. ent., 1839, vol. 2, p. 862. "Nord-Amerika." Williamson, 24th rep. geol. Indiana, 1900, p. 332. Howard, Insect book, 1901, pl. 45, fig. 5.

Me.— June, July; Orono, Bradley (Harvey) Manchester (Miss Wadsworth).

N. H.— Manchester (Burnham).

Mass.— June, July; Manchester, Cambridge, Stow (Hagen), Woods Hole (Calvert).

116. Libellula pulchella Drury.

Drury, Ill. nat. hist., 1770, vol. 1, p. 115 and index, pl. 48. fig. 5. "New York."

Needham, Bull. 47, N. Y. st. mus., 1901, p. 536, (nymph), pl. 23, fig. 2 (imago). Howard, Insect book, 1901, pl. 40, fig. 7.

Me.— June to Aug.; Orono, Bradley, Auburn, Fryeburg, Westbrook (Harvey), Andover, Brunswick (Hagen), Manchester (Miss Wadsworth).

N. H.— Franconia (Mrs. Slosson), Manchester (Burnham).

Mass.— July, Aug.; Milton (Hagen), Worcester (Hitchings), Woods Hole, Cuttyhunk Is. (Calvert).

R. I.— Aug.; Providence (Davis), Block Is. (Calvert).

117. Plathemis lydia (Drury) Hagen.

Needham, Bull. 47, N. Y. st. mus., 1901, p. 536, text fig. 32 (nymph), pl. 24, fig 1 (imago).

Libellula lydia Drury, Ill. nat. hist., 1770, vol. 1, p. 112 and index, pl. 47, fig. 4. "Virginia."

Plathemis trimaculata De Geer. Calv., Trans. Amer. ent. soc., 1893, vol. 20, p. 259.

Me.— June to Sept.; Orono, Bradley (Harvey), Manchester (Miss Wadsworth), Mt. Desert (Bullock).

N. H.— Franconia (Mrs. Slosson), Manchester (Burnham).

Mass.— June to Aug.; Cambridge (Hagen), Worcester (Hitchings), Woods Hole (Calvert).

R. I.— Aug.; Block Is. (Calvert).

Conn.— May; Hartford.

118. Erythrodiplax berenice (Drury) Ris.

Libellula berenice Drury, Ill. nat. hist., 1770, vol. 1, p. 114 and index, pl. 48, fig. 3. "Virginia, New York, and Maryland."

Diplax berenice Packard, Amer. nat., 1867, vol. 1, p. 311, pl. 9, figs. 3, 4.

Micrathyria berenice Calv., Ent. news, 1904, vol. 15, p. 174 (nymph).

Mass.— June to Aug.; Milton (Hagen), Woods Hole (Calvert).

119. Nannothemis bella (Uhler) Brauer.

Williamson, 24th rep. geol. Indiana, 1900, p. 327. Needham, Bull. 47, N. Y. st. mus., 1901, p. 509, text fig. 29 (nymph, eggs); Proc. U. S. nat. mus., 1903, vol. 26, pl. 43, fig. 2 (wings).

Nannophya bella Uhler, Proc. acad. nat. sci. Phila., 1857, p. 87. "Baltimore."

Me.— June, July; Mt. Desert (Bullock), Manchester (Miss Wadsworth).

N. H.— Manchester (Burnham).

Mass.—(specimens. in Acad. nat. sci. Phila.)

Conn.— (Hagen).

120. Pantala flavescens (Fabricius) Hagen.

Kellicott, Odon. Ohio, 1899, p. 93. Cabot, Mem. mus. comp. zoöl., 1890, vol. 17, p. 43, pl. 6, f. 5 (nymph). Howard, Insect book, 1901, pl. 42, fig. 1.

Libellula flavescens Fabr., Ent. syst. suppl., 1798, p. 285. "India."

N. H.— Sept.; Amoskeag Falls (Burnham).
Mass.— Boston (Cabot).

121. Tramea carolina (Linné) Hagen.

Williamson, 24th rep. geol. Indiana, 1900, p. 316. Cabot, Mem. mus. comp. zoöl., 1890, vol. 17, p. 46, pl. 6, fig. 2 (nymph). Howard, Insect book, 1901, pl. 43, fig. 8.

Libellula carolina Linn., Amoen. acad. 1763, vol. 6, p. 411. "Carolina."

Mass.— June 4; Natick (Hagen).

122. Tramea abdominalis (Rambur) Hagen.

Hagen, Syn. Neur. N. Amer., 1861, p. 145. Cabot, Mem. mus. comp. zoöl., 1890, vol. 17, no. 1, p. 45 (nymph).

Libellula abdominalis Ramb., Ins. Névr., 1842, p. 37. "des Antilles .... l'Amérique septentrionale .... Cuba."

Mass.— Aug. 30; Nantucket (Hagen).

123. Sympetrum scoticum (Donovan) Newman.

Williamson, Ent. news, 1900, vol. 11, p. 457, pl. 9, figs. 8, 12, 14.

Libellula scotica Donov., Brit. ins., 1811, vol. 15, pl. 523. "bogs of Scotland."

Hagen, Stett. ent. zeit., 1853, vol. 14, p. 262 (nymph).

N. H.— Franconia (Mrs. Slosson).

124. Sympetrum rubicundulum (Say) Kirby.

Needham, Bull 47, N. Y. st. mus., 1901, pp. 521, 524, text fig. 30 (imago), p. 522 (nymph).

Libellula rubicundula Say, Journ. acad. nat. sci. Phila., 1839, vol. 8, p. 26. "Indiana and Massachusetts."

Diplax rubicundula Hagen, Psyche, 1890, vol. 5, p. 385.

Me.— June to Aug.; N. W. Carry, Mt. Kineo, Rangeley, South Lagrange, Greenfield, Bradley, Orono, Fryeburg (Harvey), Manchester (Miss Wadsworth), York Harbor (Moore).

N. H. — July to Sept.; Mt. Washington, Hermit Lake, Fabyan's, North Conway (Hagen, Calvert), Franconia (Mrs. Slossom), Manchester (Burnham).

Mass. — July, Aug., Oct.; Worcester (Hitchings), Woods Hole, Cuttyhunk Is. (Calvert).

R. I.— June, Aug.; Providence (Davis), Block Is. (Calvert).

125. Sympetrum rubicundulum obtrusum (Hagen).

Needham, Bull. 47, N. Y. st. mus., 1901, pp. 521, 525, text. fig. 30 (imago), pp. 521, 522 (nymph).

Diplax obtrusa Hagen, Stett. ent. zeit., 1867, vol. 28, p. 95; Syn. Neur. N. Amer., 1861, p. 177, note. "Chicago."

Me. — Aug.; King & Bartlett Lake (Laurent), Fryeburg (Harvey), York Harbor (Moore).

N. H. — Aug.; Fabyan's (Calvert).

Mass. — (Hagen.)

126. Sympetrum albifrons (Charpentier) Kirby.

Needham, Bull. 47, N. Y. st. mus., 1901, pp. 521, 525, text. fig. 30.

Libellula albifrons Charp., Libel. Eur., 1840, p. 81, pl. 11, fig. 3. "e regione Basileensi." [Locality erroneous, teste Hagen, 1861].

Mass. — June 20, 1821; Milton (Hagen).

127. Sympetrum semicinctum (Say) Kirby.

Needham, Bull. 47, N. Y. st. mus., 1901, pp. 521, 523, text. fig. 30 (imago), p. 524, pl. 25, fig. 2 (nymph).

Libellula semicincta Say, Journ. acad. nat. sci. Phila., 1839, p. 27. "Indiana and Massachusetts."

Me. — July to Oct.; Orono, Bradley (Harvey), Manchester (Miss Wadsworth), York Harbor (Moore).

N. H. — White Mts. (Hagen), Franconia (Mrs. Slosson), Manchester (Burnham).

Mass. — Milton (Hagen), Worcester (Hitchings).

128. Sympetrum vicinum (Hagen) Kirby.

Needham, Bull. 47, N. Y. st. mus., 1901, pp. 521, 522, text fig. 30 (imago), p. 523 (nymph).

Diplax vicina Hagen, Syn. Neur. N. Amer., 1861, p. 175. "Bergen Hill, New Jersey; Pennsylvania; Washington.

Me. — Aug. to Nov.; Orono, Bradley, Fryeburg, Ktaadn Iron Works (Harvey), Manchester (Miss Wadsworth), Brunswick (Hagen), York Harbor (Moore).

N. H. — Franconia (Mrs. Slosson), Fabyan's (Calvert), Manchester (Burnham).

Mass. — Milton (Hagen).

R. I. — Providence (Davis).

129. Sympetrum costiferum (Hagen) Kirby.

Needham, Bull. 47, N. Y. st. mus., 1901, pp. 521, 522, text fig. 30 (imago), p. 522 (nymph).

Diplax costifera Hagen, Syn. Neur. N. Amer., 1861, p. 175. "Massachusetts; New York."

Me. — Aug., Sept.; Orono, Bradley (Harvey), Manchester (Miss Wadsworth), York Harbor (Moore).

Mass. — Worcester (Hitchings).

R. I. — Aug.; Watch Hill, Block Is. (Calvert).

130. Leucorhinia frigida Hagen.

Hagen, Trans. Amer. ent. soc., 1890, vol. 17, p. 231, pl. 10, figs. 2, 17, 20. "Massachusetts; N. Red River, British America; Ontario; Dakota."

ME. — July; Bradley (Harvey), Mt. Desert (Bullock).
N. H. — Franconia (Mrs. Slosson).
MASS. — Sherborn (Babcock).

131. LEUCORHINIA HUDSONICA (Selys) Hagen.

Libellula hudsonica Selys, Rev. odon. Eur., 1850, p. 53. "LE NOUVEAU BRUNSWICK, PRÈS DE LA BAIE D'HUDSON."
Leucorhinia hageni Calvert, Trans. amer. ent. soc., 1890, vol. 17, p. 36, pl. 5, figs. 2–4, 10.

ME. — June; Oldtown, Orono (Harvey).
N. H. — Mt. Washington, Franconia (Mrs. Slosson).
MASS. — (Hagen).

132. LEUCORHINIA PROXIMA Calvert.

Calvert, Trans. Amer. ent. soc., 1890, vol. 17, p. 38, pl. 5, figs. 5, 6. "MANCHESTER, KENNEBEC Co., MAINE .... PICTOU, NOVA SCOTIA."
Hagen, Trans. Amer. ent. soc., 1890, vol. 17, p. 232, pl. 10, figs. 1, 4, 9, 22.

ME. — June, July; Oldtown, Orono (Harvey), Manchester (Miss Wadsworth).
N. H. — Mt. Washington (Mrs. Slosson), White Mts. (Hagen).
MASS. — Worcester (Hitchings).

133. LEUCORHINIA GLACIALIS Hagen.

Hagen, Trans. Amer. ent. soc., 1890, vol. 17, p. 234, pl. 10, figs. 3, 14. "MASSACHUSETTS" etc.
Needham, Bull. 47, N. Y. st. mus., 1901, p. 518, pl. 10, figs. 3–5 (imago), 1–2 (nymph), pl. 19, fig. 6 (egg).

ME. — June; Orono, Bradley (Harvey).
N. H. — Mt. Washington, Franconia (Mrs. Slosson), White Mts. (Hagen).
MASS. — (Hagen.)

134. Leucorhinia intacta (Hagen) Hagen.

Hagen, Trans. Amer. ent. soc., 1890, vol. 17, p. 235, pl. 10, figs. 6, 8, 15, 16, 23. Needham, Bull. 47, N. Y. st. mus., 1901, p. 517 (nymph); Proc. U. S. nat. mus., 1903, vol. 26, pl. 46, fig. 3 (wings).

Diplax intacta Hagen, Syn. Neur. N. Amer., 1861, p. 179. "Wisconsin; Chicago; Ohio; Massachusetts."

Me. — May to July; Orono, Bradley, Westbrook (Harvey) Manchester (Miss Wadsworth).

N. H. — Mt. Washington, Franconia (Mrs. Slosson), Manchester (Burnham).

Mass. — (Hagen).

135. Celithemis ornata (Rambur) Kirby.

Calvert, Trans. Amer. ent. soc., 1893, vol. 20, p. 261. Howard, Insect book, 1901, pl. 42, figs. 2, 3.

Libellula ornata, Ramb., Ins. Névr., 1842, p. 96. "l'Amérique septentrionale."

Me.— July, Aug.; Bradley (Harvey), Manchester (Miss Wadsworth).

N. H.— Manchester (Burnham).

Mass. — Dracut (B. S. N. H. Coll.).

136. Celithemis elisa (Hagen) Walsh.

Howard, Insect book, 1901, pl. 40, fig. 14.

Needham, Bull. 47, N. Y. st. mus., 1901, p. 515 (nymph).

Diplax elisa Hagen, Syn. Neur. N. Amer., 1861, p. 182. "Bergen Hill, New Jersey; Chicago; New York."

Me. — June, July; Bradley (Harvey), Mercer (Davis), Manchester (Miss Wadsworth), Mt. Desert (Bullock).

N. H. — Derry (Burnham).

Mass. — May to Aug.; Concord (A. N. S. Phila.), Cambridge, Natick (Hagen), Worcester (Hitchings), Woods Hole (Calvert).

137. Celithemis eponina (Drury) Hagen.

Needham, Bull. 47, N. Y. st. mus., 1901, p. 514, pl. 24, fig. 2 (imago), p. 515 (nymph), pl. 19, fig. 7 (egg).

Libellula eponina Drury, Ill. nat. hist., 1773, vol. 2, p. 86 and index, pl. 47, fig. 2. "Boston in New England."

Mass. — Aug.; Saugus, Boston, Natick (Hagen), Sherborn (Babcock), Worcester (Hitchings).

138. Perithemis domitia tenera (Say).

Libellula tenera Say, Journ. acad. nat. sci. Phila., 1839, vol. 8, p. 31. "Indiana, Pennsylvania, and Massachusetts."

Perithemis domitia Needham, Bull. 47, N. Y. st. mus., 1901, p. 512, pl. 24, figs. 3, 4 (imago), p. 513 (nymph), pl. 19, fig. 8 (egg).

Mass. — Milton (Hagen), Sherborn (Babcock), Worcester (Hitchings).

R. I. — Providence (Davis).

139. Erythemis simplicicollis (Say).

Libellula simplicicollis Say, Journ. acad. nat. sci. Phila., 1839, vol. 8, p. 28. "Indiana and Massachusetts."

Mesothemis simplicicollis Williamson, 24th rep. geol. Indiana, 1900, p. 325. Needham, Bull. 47, N. Y. st. mus., 1901, p. 527 (nymph). Howard, Insect book, 1901, pl. 41, figs. 8, 9.

N. H. — June; Manchester (Burnham).

Mass. — July, Aug.; Natick (Hagen), Worcester (Hitchings), Woods Hole, Cuttyhunk Is. (Calvert).

R. I. — Block Is. (Calvert).

140. Pachydiplax longipennis (Burmeister) Brauer.

Williamson, 24th rep. geol. Indiana, 1900, p. 326. Needham, Bull. 47, N. Y. st. mus., 1901, p. 526 (nymph). Howard, Insect book, 1901, pl. 40, fig. 9.

Libellula longipennis Burm., Handb. ent., 1839, vol. 2, p. 850. "Mexico."

Mass. — July, Aug.; Natick (Hagen), Worcester (Hitchings), West Bridgewater (Tower).

R. I. — Aug.; Providence (Davis), Block Is. (Calvert).

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Occasional Papers
OF THE
Boston Society of Natural History
VII.

FAUNA OF NEW ENGLAND.

7.

LIST OF THE FORMICIDAE.

By WILLIAM MORTON WHEELER.

BOSTON:
PRINTED FOR THE SOCIETY FROM THE
GURDON SALTONSTALL FUND.
July, 1906.

FORMICIDAE.

	Me.	N.H.	Vt.	Mass.	R.I.	Conn.
Stigmatomma pallipes		—		—		—
Ponera coarctata pennsylvanica			—	—		—
Myrmicina graminicola americana				—		
Myrmicina graminicola americana var. brevispinosa				—		—
Monomorium pharaonis				—		
Monomorium minutum var. minimum				—	—	—
Solenopsis molesta		—		—		—
Pheidole pilifera				—		
Cremastogaster lineolata		—		—	—	—
Cremastogaster lineolata var. cerasi	—					—
Stenamma brevicorne			—	—		—
Stenamma brevicorne diecki var. impressum			—			
Stenamma (Aphaenogaster) tennesseense				—		—
Stenamma (Aphaenogaster) tennesseense var. ecalcaratum		—				
Stenamma (Aphaenogaster) treatae						—
Stenamma (Aphaenogaster) mariae						—
Stenamma (Aphaenogaster) fulvum		—	—		—	—
Stenamma (Aphaenogaster) fulvum aquia				—		—
Stenamma (Aphaenogaster) fulvum aquia var. piceum				—		—
Myrmica punctiventris						—
Myrmica rubra brevinodis		—		—		—
Myrmica rubra brevinodis var. sulcinodoides	—			—		
Myrmica rubra laevinodis var. bruesi				—		
Myrmica rubra scabrinodis var. fracticornis						—
Myrmica rubra scabrinodis var. sabuleti	—			—		—
Myrmica rubra scabrinodis var. schencki	—	—		—	—	—
Myrmica rubra scabrinodis var. detritinodis			—			
Leptothorax acervorum canadensis		—	—			—
Leptothorax emersoni				—		—
Leptothorax longispinosus				—		—

	Me.	N.H.	Vt.	Mass.	R. I.	Conn.
Leptothorax curvispinosus				—		—
Leptothorax curvispinosus ambiguus						—
Tetramorium caespitum				—		
Strumigenys pergandei				—		
Dolichoderus mariae						—
Dolichoderus taschenbergi var. gagates		—		—		
Dolichoderus plagiatus				—	—	—
Tapinoma sessile		—		—	—	—
Brachymyrmex heeri depilis				—		—
Prenolepis imparis				—		—
Prenolepis imparis var. minuta						—
Prenolepis parvula				—		
Lasius niger var. neoniger	—	—		—		—
Lasius niger var. americanus	—	—		—	—	—
Lasius brevicornis				—		—
Lasius flavus var. nearcticus		—		—		—
Lasius umbratus mixtus var. aphidicola	—	—		—		—
Lasius umbratus minutus	—			—		
Lasius (Acanthomyops) interjectus				—		—
Lasius (Acanthomyops) claviger		—		—	—	—
Lasius (Acanthomyops) latipes				—		—
Formica pergandei				—		
Formica sanguinea aserva		—				—
Formica sanguinea rubicunda		—		—		—
Formica sanguinea rubicunda var. subintegra				—		—
Formica rufa obscuriventris				—		—
Formica rufa integra		—		—	—	—
Formica difficilis var. consocians				—		—
Formica nepticula						—
Formica impexa				—		
Formica dryas var. gymnomma				—		—
Formica exsectoides	—	—		—		—
Formica pallide-fulva schaufussi	—			—	—	—
Formica pallide-fulva schaufussi var. incerta				—		—
Formica pallide-fulva nitidiventris				—		—
Formica pallide-fulva nitidiventris var. fuscata				—		
Formica morsei				—		
Formica fusca var. subsericea		—		+	—	—
Formica fusca var. argentata				—		
Formica fusca var. subaenescens	—	—	—	—		—

	Me.	N.H.	Vt.	Mass.	R.I.	Conn.
Formica fusca var. neoclara				—		
Formica fusca subpolita				—		—
Formica fusca subpolita var. neogagates				—		—
Formica fusca subpolita var. picea			—	—		—
Polyergus rufescens lucidus				—		—
Camponotus castaneus				—		—
Camponotus castaneus americanus				—		
Camponotus herculeanus			—			
Camponotus herculeanus pennsylvanicus	—	—	—	+		—
Camponotus herculeanus pennsylvanicus var. ferrugineus				—		—
Camponotus herculeanus ligniperdus var. novaeboracensis	—	—	—	—	—	—
Componotus herculeanus ligniperdus var. rubens	—					
Camponotus marginatus var. nearcticus				—	—	—
Camponotus marginatus var. minutus				—		

FORMICIDAE.

FORMICIDAE. PONERINAE.

1. Stigmatomma pallipes (Haldeman) Emery.

Emery, Zool. Jahrb. Syst., 1894, vol. 8, 261, 262, ☿ ♀ ♂.
Wheeler, Biol. bull., 1900, vol. 2, p. 56 *et seq.*, figs. 5–7, ☿ ♀ ♂.
Typhlopone pallipes Haldeman, Proc. acad. nat. sci. Phila., 1844, vol. 2, p. 54, ☿. "in old stumps in June."

N. H.— Canobie Lake (King).
Mass.— Springfield (Dimmock); Naushon Island (Wheeler).
Conn.— Suffield (Dimmock); Colebrook (Wheeler).

2. Ponera coarctata pennsylvanica (Buckley) Emery.

Wheeler, Biol. bull., 1900, vol. 2, p. 44 *et seq.*, ☿ ♀ ♂, figs. 1–3.
Ponera pennsylvanica Buckley, Proc. ent. soc. Phila., 1866, vol. 6, p. 171, ☿. "vicinity of Philadelphia."
Ponera coarctata Latr. subsp. *pennsylvanica* Emery, Zool. jahrb. Syst., 1894, vol. 8, p. 267, 268, ☿ ♀ ♂.

Vt.— Lyndon (Melander).
Mass.— Springfield (Dimmock); Mt. Tom (King); Woods Hole (Wheeler).
Conn.— Colebrook (Wheeler).

MYRMICINAE.

3. Myrmecina graminicola americana Emery.

Myrmecina latreillei Curtis subsp. *americana* Emery, Zool. jahrb. Syst., 1894, vol. 8, p. 271, ☿. "D[istrict of] Columbia."

Mass.— (King.)

4. Myrmecina graminicola americana Emery var. brevispinosa Emery.

Myrmecina latreillei Curtis subsp. *americana* Emery var. *brevispinosa* Emery, Zool. jahrb. Syst., 1894, vol. 8, p. 271, ☿. "D[istrict of] Columbia."

Mass.— (King.)
Conn.— Colebrook (Wheeler).

5. Monomorium pharaonis (Linné).

Mayr, Verh. zool. bot. ges. Wien., 1886, vol. 36, p. 359.
Riley, Insect life, 1889, vol. 2, p. 106, fig. 18.
Formica pharaonis Linné, Syst. nat. ed. 10, 1758, vol. 1, p. 580, ☿. "Aegypto."

Mass.— (Dimmock); Boston (Wheeler).

6. Monomorium minutum Mayr. var. minimum (Buckley) Emery.

Emery, Zool. jahrb. Syst., 1894, vol. 8, p. 274, 275, ☿ ♀ ♂.
Myrmica minima Buckley, Proc. ent. soc. Phila., 1867, vol. 6, p. 338, ☿ "Central Texas."
Myrmica atra Buckley, *ibid.*, p. 342, ♀. "near Georgetown, D. C."

Mass.— Wellesley (Morse); Woods Hole (Miss Fielde).
R. I.— Providence (Davis).
Conn.— New Haven and North Haven (Viereck).

7. Solenopsis molesta (Say) Emery.

Emery, Zool. jahrb. Syst., 1894, vol. 8, p. 277, 278.
Myrmica molesta Say, Bost. journ. nat. hist., 1836, vol. 1, p. 293, 294, ♀.——
? *Myrmica minuta* Say, *ibid.*, p. 294, ☿, "Indiana."

Solenopsis debilis Mayr, Verh. zool. bot. ges. Wien, 1886, vol. 36, p. 461, ☿ ♀ ♂.

N. H.— Canobie Lake and West Ossipie (King).

Mass.— Wellesley and Sherborn (Morse); Cambridge (Mus. Comp. Zoöl.).

Conn.— New Haven (Whittlesey); North Haven (Viereck); Colebrook (Wheeler).

8. Pheidole pilifera (Roger) Emery.

Emery, Zool. jahrb. Syst., 1894, vol. 8, p. 290.

Leptothorax pilifer Roger, Berl. entom. zeitschr., 1863, vol. 7, p. 180, 181, ☿. "Pennsylvanien."

Pheidole pennsylvanica Roger, *ibid.*, p. 199, ☿. "Pennsylvanien."

Pheidole pennsylvanica Mayr., Verh. zool. bot. ges. Wien, 1886, vol. 36, p. 455–457, ☿ ☿ ♀ ♂.

Mass.— Essex County (King); West Springfield (Morse); Naushon Island (Wheeler).

9. Cremastogaster lineolata (Say) Emery.

Mayr, Verh. zool. bot. ges. Wien, 1886, vol. 36, p. 462, 463, ☿.

Emery, Zool. jahrb. Syst., 1894, vol. 8, p. 281, 282, ☿, ♀ ♂.

Myrmica lineolata Say, Bost. journ. nat. hist., 1836, vol. 1, p. 290, 291, ☿ ♀ ♂. "United States."

N. H.— Holderness (Morse); Canobie Lake (King).

Mass.— Cambridge (Miss Clark); Sherborn, Middlesex Fells (Morse); Woods Hole (Miss Fielde, Wheeler); Medford, (Dall) Springfield, West Springfield, Belchertown, Mt. Tom (King); Concord (Mann).

R. I.— Lonsdale (Davis).

Conn.— (Mayr); Branford and West Haven (Viereck); New Haven and New Canaan (Britton); Suffield (Dimmock); Colebrook (Wheeler).

10. Cremastogaster lineolata Say var. cerasi (Fitch) Emery.

Emery, Zool. jahrb. Syst., 1894, vol. 8, p. 282, 283, ☿.

Myrmica cerasi Fitch, N. Y. state agr. soc., 1855, vol. 14, p. 834, 835, ☿. "New York."

Me.— (Emery.)
Conn.— Colebrook (Wheeler).

11. Stenamma brevicorne (Mayr) Emery.

Emery, Zool. jahrb. Syst., 1894, vol. 8, p. 299, ☿ ♀ ♂.
Wheeler, Psyche, 1903, vol. 10, p. 166–168, ☿ ♀ ♂.
Aphaenogaster brevicornis Mayr, Verh. Zool. bot. ges. Wien, 1886, vol. 36, p. 447, 448, ☿ ♀. "Virginia."

Vt.— Lyndon (Melander).
Mass.— Essex Co. (King).
Conn.— Colebrook (Wheeler).

12. Stenamma brevicorne diecki Emery var. impressum Emery.

Wheeler, Psyche, 1903, vol. 10, p. 167, ☿.
Stenamma brevicorne subsp. *diecki* Emery var. *impressum* Emery, Zool. jahrb. Syst., 1894, vol. 8, p. 301, ☿. "Richs Spring, N. York."

Vt.— (Forel.)

13. Stenamma (Aphaenogaster) tennesseense (Mayr) Emery.

Emery, Zool. jahrb. Syst., 1894, vol. 8, p. 301.
Atta tennesseensis Mayr, Verh. zool. bot. ges. Wien, 1862, vol. 12, p. 743, ☿. "Tennessee."
Atta laevis Mayr, *ibid.*, p. 743, 774, ♀.
Aphaenogaster tennesseensis Mayr, Verh. zool. bot. ges. Wien, 1886, vol. 36, p. 443, 446, ☿.

Mass.— Essex County and Mt. Tom (King).
Conn.— Colebrook (Wheeler).

14. Stenamma (Aphaenogaster) tennesseense Mayr var. ecalcaratum Emery.

Emery, Zool. jahrb. Syst., 1894, vol. 8, p. 301, ☿. "N[ew] Hampshire."

N. H.— (Emery.)

15. Stenamma (Aphaenogaster) treatae (Forel) Emery.

Emery, Zool. jahrb. Syst., 1894, vol. 8, p. 302.

Aphaenogaster treatae Forel, Ann. soc. ent. Belg., 1886, vol. 30, C. R. p. xl–xli, ☿ ♀ ♂. "Vineland, N[ew] Jersey."

Conn.— Poquonock (Viereck).

16. Stenamma (Aphaeogaster) mariae (Forel) Emery.

Emery, Zool. jahrb. Syst., 1894, vol. 8, p. 301.

Aphaenogaster mariae Forel, Ann. soc. ent. Belg., 1886, vol. 30, C. R. p. xli, ☿. "Floride."

Conn.— Colebrook (Wheeler).

17. Stenamma (Aphaenogaster) fulvum (Roger) Emery.

Emery, Zool. jahrb. Syst., 1894, vol. 8, p. 303, 304, ☿ ♀ ♂.

Aphaenogaster fulva Roger, Berl. ent. zeitschr., 1863, vol. 7. p. 190, 191, ☿. "Nord-Amerika."

Aphaenogaster fulva Mayr, Verh. zool. bot. ges. Wien, 1886, vol. 36, p. 443, 445–446, ☿ ♀ ♂.

N. H.— Canobie Lake and West Ossipie (King).

Vt.— Bay (Davis).

Mass.— Springfield and Mt. Tom (King); Danvers (Emerton).

Conn.— (Mayr); Colebrook (Wheeler).

18. Stenamma (Aphaenogaster) fulvum aquia (Buckley) Emery.

Myrmica (Monomorium) aquia Buckley, Proc. ent. soc. Phila.,

1867, vol. 6, p. 341, ☿ ♀. "Aquia, Virginia, * * * Western New York."

Stenamma (Aphaenogaster) fulvum Roger subsp. *aquia* Emery, Zool. jahrb. Syst., 1894, vol. 8, p. 304, 305, ☿ ♀ ♂.

Mass.— Andover, Sherborn, Needham and Weston (Morse); Woods Hole (Miss Fielde, Wheeler).

Conn.— Branford (Viereck, Winkley); New Haven (Viereck); Colebrook (Wheeler).

19. Stenamma (Aphaenogaster) fulvum aquia Buckley var. piceum Emery.

Emery, Zool. jahrb. Syst., 1894, vol. 8, p. 305, 306, ☿ ♀ ♂. "Canada, Connecticut, Pennsylvania, D. Columbia, N. York, N. Jersey."

Mass.— Sherborn (Morse); Medford (Dall); Woods Hole (Miss Fielde, Wheeler); New Boston (Wheeler).

Conn.— (Emery); Colebrook (Wheeler).

20. Myrmica punctiventris Roger.

Roger, Berl. ent. zeitschr., 1863, vol. 7, p. 190, ☿. "Nord-Amerika." Mayr, Verh. zool. bot. ges. Wien., 1886, vol. 36, p. 450, ☿ ♀.

Emery, Zool. jahrb. Syst., 1894, vol. 8, p. 312, ♂.

Conn.— Colebrook (Wheeler).

21. Myrmica rubra brevinodis Emery.

Myrmica rubra L. subsp. *brevinodis* Emery, Zool. jahrb. Syst., 1894, vol. 8, p. 312, 313, ☿. "Utah, Salt Lake." Wheeler, Amer. nat., 1901, vol. 35, p. 433, Fig. 1, ☿.

N. H.— Mt. Washington (Mrs. Slosson).

Mass.— New Boston (Wheeler).

Conn.— Colebrook (Wheeler).

22. Myrmica rubra brevinodis Emery, var. sulcinodoides Emery.

Emery, Zool. jahrb. Syst., 1894, vol. 8, p. 313, ☿. "S[outh] Dakota, Utah, und Maine."

Me.— (Emery); Ogunquit (Pratt).
Mass.— Essex County (King); Naushon Island (Wheeler).

23. Myrmica rubra laevinodis Nyl. var. bruesi Wheeler.

Wheeler, Psyche, 1906, vol. 13, p. 38, ☿ ♀ ♂. "Woods Hole, Mass."

Mass.— Woods Hole (Brues, Wheeler).

24. Myrmica rubra scabrinodis Nyl. var. fracticornis Emery.

Emery, Zool. jahrb. Syst., 1894, vol. 8, p. 313, 314, ☿. "Connecticut * * * Buffalo, N. York."

Conn.— (Pergande, Emery); Colebrook (Wheeler).

25. Myrmica rubra scabrinodis Nyl. var. sabuleti (Meinert).

Myrmica sabuleti Meinert, Vidensk. selsk. skr., 1861, ser. 5, vol. 5, p. 327, 328, ☿ ♀, "Buurkrat ved Norre-Vosborg."
Myrmica rubra subsp. *scabrinodis* var. *sabuleti* Emery, Zool. jahrb. Syst., 1894, vol. 8, p. 314, ☿ ♀ ♂.

Me.— Mt. Desert (Hagen).
Mass.— Essex County (King); Wellesley (Morse); Cambridge (Mus. Comp. Zoöl.).
Conn.— Branford (Viereck); New Haven (Britton); West Haven (Viereck); Colebrook (Wheeler).

26. Myrmica rubra scabrinodis Nyl. var. schencki Emery.

Emery, Zool. jahrb. Syst., 1894, vol. 8, p. 315, 316, ☿ ♀ ♂. "Maine und N[ew] Jersey."

Myrmica lobicornis Förster, Hymenopt. studien 1850, p. 69, ☿ ♀.

Myrmica lobicornis Schenck, Jahrb. vr. naturk. Nassau, 1852, vol. 8, p. 82–84, ☿ ♀ ♂.

Myrmica lobicornis Mayr, Verh. zool. bot. ges. Wien, 1855, vol. 5, p. 412–413.

ME.— (Emery.)
N. H.— (Emery); Mt. Washington (Mrs. Slosson).
MASS.— Essex County (King); New Boston (Wheeler).
R. I.— Providence (Davis).
CONN.— Stafford (Britton); Colebrook (Wheeler).

27. MYRMICA RUBRA SCABRINODIS Nyl. var. DETRITINODIS Emery.

Emery, Zool. jahrb. Syst., 1894, vol. 8, p. 316, ☿, "KITTERY POINT, MARYLAND."

VT.— Jay Peak, summit, 4018 ft. (Morse).

28. LEPTOTHORAX ACERVORUM CANADENSIS (Provancher).

Leptothorax canadensis Provancher, Add. Faun. Canad. Hymén., 1887, p. 245, ☿ ♀ ♂. "CANADA."

Leptothorax canadensis Emery, Zool. jahrb. Syst., 1894, vol. 8, p. 317, 318, 319.

Leptothorax acervorum subsp. *canadensis* Wheeler, Proc. acad. nat. sci. Phila., 1903, p. 225–227, ☿ ♀.

N. H.— Mt. Washington and Franconia (Mrs. Slosson).
VT.— (Davis); Jay Peak, summit, 4018 ft. (Morse).
CONN.— Colebrook (Wheeler).

29. LEPTOTHORAX EMERSONI Wheeler.

Wheeler, Amer. nat., 1901, vol. 35, p. 433–436, fig. 2–3, ☿ ♀ ♂. "COLEBROOK, CONN." Wheeler, Proc. acad. nat. sci. Phila., 1903, p. 230–232, ☿ ♀ ♂.

MASS.— New Boston (Wheeler).
CONN.— Colebrook (Wheeler).

FORMICIDAE. MYMICINAE.

30. Leptothorax longispinosus Roger.

Roger, Berl. ent. zeitschr., 1863, vol. 7, p. 180, ☿. "America." Emery, Zool. jahrb. Syst., 1894, vol. 8, p. 318, 321, ☿ ♀.
Wheeler, Proc. acad. nat. sci. Phila., 1903, p. 236–239, ☿ ♀ ♂.

Mass.— Cambridge (Mus. Comp. Zoöl.).
Conn.— Colebrook (Wheeler).

31. Leptothorax curvispinosus Mayr.

Mayr, Sitzber. k. k. akad. wiss. Wien, 1866, vol. 53, p. 508, ☿. "Nord-amerika." Emery, Zool. jahrb. Syst., 1894, vol. 8, p. 317, 320. Wheeler, Proc. acad. nat. sci. Phila., 1903, p. 239–241, ☿ ♀.

Mass.— Cambridge (Mus. Comp. Zoöl.).
Conn.— Branford and Rockville (Viereck).

32. Leptothorax curvispinosus ambiguus Emery.

Emery, Zool. jahrb. Syst., 1894, vol. 8, p. 317, 320, ☿. "Hill City, S[outh] Dakota * * * Cleveland, Ohio * * * N[ew] York." Wheeler, Proc. acad. nat. sci. Phila., 1903, p. 241, ☿.

Conn.— West Haven (Viereck); Stafford (Britton); Colebrook (Wheeler).

33. Tetramorium caespitum (Linné) Mayr.

Mayr, Verh. zool. bot. ges. Wien, 1855, vol. 5, p. 426–429, ☿ ♀ ♂.
Ed. André, Spec. Hymén. Eur., 1883, vol. 2, p. 285, 288, 290, No. 1, ☿ ♀ ♂.
Formica caespitum Linné, Syst. nat. ed. 10, 1758, vol. 1, p. 581, ♀. "Europae."
Mass.— Springfield (Dimmock).

34. Strumigenys pergandei Emery.

Emery, Zool. jahrb. Syst., 1894, vol. 8, p. 264, t. 8, fig. 4, ☿.

"Aus Pennsylvanien und D[istrict of] Columbia." Forel, Ann. soc. ent. Belg., 1901, vol. 45, p. 339.

Mass.— Boston (Forel).

DOLICHODERINAE.

35. Dolichoderus mariae Forel.

Forel, Bull. soc. vaud. sci. nat., 1885, vol. 20, p. 349, 350, ☿. "Vineland, [N. J.]" Wheeler, Bull. Amer. mus. nat. hist., 1905, vol. 21, p. 306–308, fig. A, ☿ ♀ ♂.

Conn.— (Emery).

36. Dolichoderus taschenbergi Mayr. var. gagates Wheeler.

Wheeler, Bull. Amer. mus. nat. hist., 1905, vol. 21, p. 310, ☿. "Lakehurst, New Jersey."

N. H.— Mt. Washington, summit (Mrs. Slosson).
Mass.— Magnolia (Deane).

37. Dolichoderus plagiatus (Mayr).

Mayr, Verh. zool. bot. ges. Wien, 1886, vol. 36, p. 436, ☿. Wheeler, Bull. Amer. mus. nat. hist., 1905, vol. 21, p. 310–312, fig. C, ☿ ♀ ♂.

Hypoclinea plagiata Mayr, Verh. zool. bot. ges. Wien., 1870, vol. 20, p. 960, ☿. "Illinois."

Mass.— Cambridge and Waverley (Mus. Comp. Zoöl.).
R. I.— Newport (Leidy).
Conn.— Rockville (Viereck); Colebrook (Wheeler).

38. Tapinoma sessile (Say) Emery.

Emery, Zool. jahrb. Syst., 1894, vol. 8, p. 332, 333, ☿ ♀ ♂.

Formica sessilis Say, Bost. journ. nat. hist., 1836, vol. 1, p. 287, 288, ☿ ♀. "Indiana."

N. H.— Franconia (Mrs. Slosson).

Mass.— Weston, Andover and Winchendon (Morse); Essex Co. (King); Woods Hole (Wheeler).

R. I.— Providence (Davis).

Conn.— Branford, New Haven, Stony Creek and Double Beach (Viereck); Orange (Britton); Colebrook (Wheeler).

CAMPONOTINAE.

39. Brachymyrmex heeri depilis Emery.

Emery, Zool. jahrb. Syst., 1893, vol. 7, p. 635, ☿. "D[istrict of] Columbia, Dakota, N[ew] Jersey, und Virginia."

Mass.— Springfield (Dimmock); Essex County (King).

Conn.— Colebrook (Wheeler).

40. Prenolepis imparis (Say) Emery.

Emery, Zool. jahrb. Syst., 1893, vol. 7, p. 635, 636, ☿ ♀ ♂.

Formica imparis Say, Bost. journ. nat. hist., 1836, vol. 1, p. 287, ♀ ♂. "Indiana."

Mass.— Milton (Morse); Essex County and Springfield (King); Warwick (Miss Edmonds).

Conn.— New Haven and Yalesville (Viereck); Branford (Winkley); New Haven (Britton).

41. Prenolepis imparis Say var. minuta Emery.

Emery, Zool. jahrb. Syst., 1893, vol. 7, p. 636, ☿ ♂. "D[istrict of] Columbia."

Conn.— New Haven and Yalesville (Viereck).

42. Prenolepis parvula Mayr.

Mayr, Verh. zool. bot. ges. Wien, 1870, vol. 20, p. 948–949,

☿ ☽ ☾. "New-York." Emery, Zool. jahrb. Syst., 1893, vol. 7, p. 636.

Mass.— (King).

43. Lasius niger L. var. neoniger Emery.

Emery, Zool. jahrb. Syst., 1893, vol. 7, p. 639, ☿. [Northern States.] Wheeler, Bull. Amer. mus. nat. hist., 1905, vol. 21, p. 396.

Me.— Norway (S. I. Smith); Bethel (Mus. Comp. Zoöl.).

N. H.— Canobie Lake (King).

Mass.— West Springfield (King); Ipswich (Emerton); Cambridge (Mus. Comp. Zoöl.); Needham, Amherst, Wellesley, South Natick, and Sherborn (Morse); Medford (Mus. Comp. Zoöl.); Warwick (Miss Edmonds).

Conn.— New Hartford and Stafford (Britton); Colebrook, Winsted and Norfolk (Wheeler).

44. Lasius niger L. var. americanus Emery.

Emery, Zool. jahrb. Syst., 1893, vol. 7, p. 639, ☿. "östliche und centrale staaten." Wheeler, Bull. Amer. mus. nat. hist., 1905, vol. 21, p. 393–396.

Me.— Bridgeport (Miss Edmonds).

N. H.— Canobie Lake (King); Franconia and Mt. Washington (Mrs. Slosson).

Mass.— Mt. Tom and Springfield (King); Boston (Bost. Soc. Nat. Hist. and Amer. Mus. Nat. Hist.); Wellesley, Sherborn and Dover (Morse); Brookline (Miss Abbott); Cambridge, Chelsea Beach and Cambridgeport (Mus. Comp. Zoöl.); Woods Hole and New Boston (Wheeler).

R. I.— Providence (Davis).

Conn.— Branford, West Haven and New Haven (Viereck); New Haven (Britton and Walden); Colebrook, Winsted and Norfolk (Wheeler).

45. Lasius brevicornis Emery.

Emery, Zool. jahrb. Syst., 1893, vol. 7, p. 639, 640, taf. 22, fig. 22, ☿ ♀ ♂. "D[istrict of] Columbia, N[ew] Jersey, Dakota, Virginia, Florida." Wheeler, Bull. Amer. mus. nat. hist., 1905, vol. 21, p. 396.

Mass.—Andover (Morse); New Boston and Woods Hole (Wheeler).

Conn.— Branford (Winkley); Colebrook, Winsted and Norfolk (Wheeler).

46. Lasius flavus L. var. nearcticus Wheeler.

Psyche, 1906, vol. 13, p. 38, ☿ ♀ ♂. "Illinois, Massachusetts, Connecticut, New York and New Jersey."

Lasius flavus Emery, Zool. jahrb. Syst., 1893, vol. 7, p. 640, ☿ ♀.

Lasius flavus subsp. *myops* Emery, *ibid.*, 1894, vol. 8, p. 334.

Lasius myops Wheeler, Bull. Amer. mus. nat. hist., 1905, vol. 21, p. 397.

N. H.— Canobie Lake and West Ossipie (King).

Mass.— Andover (Morse); Mt. Tom (King); Woods Hole (Miss Fielde).

Conn.— (Mayr); Colebrook (Wheeler).

47. Lasius umbratus mixtus Nyl. var. aphidicola (Walsh).

Emery, Zool. jahrb. Syst., 1893, vol. 7, p. 640, 641, ☿ ♀ ♂.

Formica aphidicola Walsh, Proc. ent. soc. Phila., 1862, vol. 1, p. 310, ☿ ♀ ♂. "near Rock Island, Illinois."

Me.— (Emery); Elms (Deane).

N. H.— Mt. Washington (Mrs. Slosson).

Mass.— Essex County (King); Medford (Mus. Comp. Zoöl.).

Conn.— Westport (Britton); Colebrook (Wheeler).

48. Lasius umbratus minutus Emery.

Lasius umbratus var. *bicornis* Mayr, Verh. zool. bot. ges. Wien, 1886, vol. 36, p. 430. "New Jersey, Virginia."

Lasius umbratus subsp. *minutus* Emery, zool. Syst., 1893, vol. 7, p. 641, ☿ ♀ ♂.

ME.— (Emery.)
MASS.— Medford (Dall).

49. LASIUS (ACANTHOMYOPS) INTERJECTUS Mayr.

Mayr, Verh. zool. bot. ges. Wien, 1866, vol. 16, p. 888, taf. 20, fig. 3, ♀. "NEW-JERSEY." Emery, Zool. jahrb. Syst., 1893, vol. 7, p. 642. Wheeler, Bull. Amer. mus. nat. hist., 1905, vol. 21, p. 397–398.

MASS.— Wellesley (Morse); Boston (Amer. Mus. Nat. Hist.); New Boston (Wheeler).
CONN.— (Mayr); Colebrook (Wheeler).

50. LASIUS (ACANTHOMYOPS) CLAVIGER (Roger).

Emery, Zool. jahrb. Syst., 1893, vol. 7, p. 642.
Formica clavigera Roger, Berl. ent. zeitschr., 1862, vol. 6, p. 241, 242, taf. 1, fig. 13, ♀. "PENNSYLVANIEN."
Lasius claviger Mayr, Verh. zool. bot. ges. Wien, 1870, vol. 20, p. 950, ☿ ♀ ♂.

N. H.— Canobie Lake (King).
MASS.— Mt. Tom and Springfield (King); Wellesley, Weston, Andover, Needham, and South Natick (Morse).
R. I.— Providence (Davis).
CONN.— (Mayr); Colebrook (Wheeler).

51. LASIUS (ACANTHOMYOPS) latipes (Walsh) Emery.

Emery, Zool. jahrb. 1893, vol. 7, p. 638, 642. ☿ ♀.
Formica latipes Walsh, Proc. ent. soc. Phila., 1862, vol. 1, p. 311, ☿ ♀ ♂. "NEAR ROCK ISLAND, ILLINOIS."
Lasius latipes Wheeler and McClendon, Biol. bull., 1903, vol. 4, p. 149–163, 3 Figs.

Mass.— Weston, Andover and Needham (Morse); Woods Hole (Miss Fielde, Wheeler); Hyannisport (Zabriskie).

Conn.— Colebrook (Wheeler).

52. Formica pergandei Emery.

Emery, Zool. jahrb. Syst., 1893, vol. 7, p. 646, 647. taf. 22, fig. 1, ☿. "Washington D. C." Wheeler, Amer. nat., 1901, vol. 35. p. 722.

Mass.— (Jack).

53. Formica sanguinea aserva Forel.

Forel, Ann. soc. ent. Belg., 1901, vol. 45, p. 395, 396, ☿ ♀. "Toronto, en Canada."

N. H.— Franconia (Mrs. Slosson); Mt. Washington (Bacon, Bost. Soc. Nat. Hist. and Mrs. Slosson).

Conn.— Colebrook (Wheeler).

54. Formica sanguinea rubicunda Emery.

Emery, Zool. jahrb. Syst., 1893, vol. 7, p. 647, 648, taf. 22, fig. 2, ☿ ♀. "Labrador * * * Pennsylvanien." Wheeler, Amer. nat., 1901, vol. 35, p. 711, 712.

N. H.— Canobie Lake (King).

Mass.— Essex County, Springfield and Holyoke (King); Woods Hole (Wheeler).

Conn.— New Haven (Walden); Colebrook (Wheeler).

55. Formica sanguinea rubicunda Emery var. subintegra Emery.

Emery, Zool. jahrb. Syst., 1893, vol. 7, p. 648, taf. 22, fig. 3, ☿. "District [of] Columbia." Wheeler, Amer. nat., 1901, vol. 35, p. 713.

Mass.— Sherborn (Morse); Springfield (Allen); Cambridge (Mus. Comp. Zoöl.); Essex County (King).

Conn.— New Haven (Viereck); Colebrook (Wheeler).

56. Formica rufa obscuriventris (Mayr).

Formica truncicola var. *obscuriventris* Mayr, Verh. zool. bot. ges. Wien, 1870, vol. 20, p. 951, ☿. "Connecticut."

Formica rufa subsp. *obscuriventris* Emery, Zool. jahrb. Syst., 1893, vol. 7, p. 649.

Mass.— Wellesley (Morse).

Conn.— (Mayr.)

57. Formica rufa integra (Nylander).

Formica integra Nylander, Ann. sci. nat. Zool., 1856, ser. 4, vol. 5, p. 62 *nota*, ☿. "Amérique du Nord."

Formica integra var. *similis* Mayr, Verh. zool. bot. ges. Wien, 1886, vol. 36, p. 425, ☿ ♀ ♂. "New-Jersey und Californien."

Formica rufa subsp. *integra* Emery, Zool. jahrb. Syst., 1893, vol. 7, p. 652, taf. 22, fig. 4, 8, ☿ ♀ ♂.

N. H.— Canobie Lake (King); Hampton (Mus. Comp. Zoöl.).

Mass.— Essex County and Springfield (King); Winchendon (Morse); Medford (Mus. Comp. Zoöl.).

R. I.— Providence and Kingston (Davis).

Conn.— (Mayr); Colebrook and Norfolk (Wheeler).

58. Formica difficilis Emery var. consocians Wheeler.

Wheeler, Bull. Amer. mus. nat. hist., 1904, vol. 20, p. 371–373, ☿ ♀ ♂. "Colebrook, Litchfield County, Connecticut."

Mass.— Sherborn (Morse).

Conn.— North Windham (Morse); Colebrook (Wheeler).

59. Formica nepticula Wheeler.

Wheeler, Bull. Amer. mus. nat. hist., 1905, vol. 21, p. 270–272, ☿ ♀ ♂. "Colebrook, Litchfield County, Conn."

Conn.— Colebrook (Wheeler).

60. Formica impexa Wheeler.

Wheeler, Bull. Amer. mus. nat. hist., 1905, vol. 21, p. 273–274, ☿. "Porcupine Mountains in northern Michigan."
Wheeler, Psyche, 1906, vol. 13, p. 40, ♀.

Mass.— Sherborn (Morse).

61. Formica dryas Wheeler var. gymnomma Wheeler.

Wheeler, Bull. Amer. mus. nat. hist., 1905, vol. 21, p. 269–270, ☿. "Cold Spring Harbor, Long Island, N. Y., and * * * near Rockford, Ill."

Mass.— Cambridge (Mus. Comp. Zoöl.).
Conn.— Colebrook (Wheeler).

62. Formica exsectoides Forel.

Forel, Ann. soc. ent. Belg., 1886, vol. 30, C. R. p. xxxviii, xxxix, ☿ ♀. "N[ew] Hampshire * * * Connecticut * * * Alleghanys." Emery, Zool. jahrb. Syst., 1893, vol. 7, p. 653, taf. 22, fig. 6.
Formica integra Nyl. Mayr, Verh. zool. bot. ges. Wien, 1862, vol. 12, p. 701, 702.

Me.— Ogunquit (Pratt).
N. H.— (Forel); Canobie Lake (King); Franconia (Mrs. Slosson).
Mass.— Sherborn and Wellesley (Morse); Essex County and Mt. Tom (King); Lowell (Blanchard); Woods Hole (Wheeler); Lake Pleasant (Carey); Warwick (Miss Edmonds).
Conn.— (Mayr); Branford, North Haven and New Haven

(Viereck); New Hartford and Stafford (Britton); Cromwell and Hartford (Forel); Colebrook (Wheeler).

63. Formica pallide-fulva schaufussi (Mayr).

Wheeler, Bull. Amer. mus. nat. hist., 1904, vol. 20, p. 370.

Formica schaufussi Mayr, Sitzber. k. akad. wiss. Wien, 1866, vol. 53, p. 493–494, taf. fig. 6, ☿. "Nordamerika."

Formica pallide-fulva Latr. subsp. *schaufussi* Emery, Zool. jahrb. Syst., 1893, vol. 7, p. 654, 655.

Me.— Ogunquit (Pratt).

Mass.— Andover, South Natick and Sherborn (Morse); Boston (Amer. Mus. Nat. Hist.); Mt. Tom (King); Woods Hole (Wheeler).

R. I.— Providence (Davis).

Conn.— (Mayr and Emery); New Haven (Britton, Butrick and Viereck); Salisbury and Stafford (Britton); Winsted, Norfolk and Colebrook (Wheeler).

64. Formica pallide–fulva schaufussi Mayr. var. incerta Emery.

Emery, Zool. jahrb. Syst., 1893, vol. 7, p. 655, 656, ☿ ♀ ♂. "D[istrict of] Columbia, und Virginia." Wheeler, Bull. Amer. mus. nat. hist., 1904, vol. 20, p. 370.

Mass.— Wellesley and Sherborn (Morse).

Conn.— Branford (Winkley); Rockville (Viereck); Winsted, Norfolk and Colebrook (Wheeler).

65. Formica pallide-fulva nitidiventris Emery.

Emery, Zool. jahrb. Syst., 1893, vol. 7, p. 656, ☿ ♀ ♂. Wheeler, Bull. Amer. mus. nat. hist., 1904, vol. 20, p. 370.

Formica schaufussi Mayr, Verh. zool. bot. ges. Wien, 1886, vol. 36, p. 427–428, ♀ ♂. "Massachusetts, Connecticut, New-York, New-Jersey, D. Columbia, Virginia, Colorado, Californien, Neu-mexico."

Mass.— Wellesley (Morse); Essex County (King); Boston

(Amer. Mus. Nat. Hist.); Arlington (Mus. Comp. Zoöl.); Woods Hole (Wheeler).

Conn.— New Haven (Butrick); Salisbury, New Haven and Orange (Britton); Colebrook (Wheeler).

66. Formica pallide-fulva nitidiventris Emery var. fuscata Emery.

Wheeler, Bull. Amer. mus. nat. hist., 1904, vol. 20, p. 370.

Formica pallide-fulva Latr. subsp. *fuscata* Emery, Zool. jahrb. Syst., 1893, vol. 7, p. 656, ☿. "Beatty, (Pennsylvanien)."

Mass.— Essex County (King); South Natick (Morse).

67. Formica morsei Wheeler.

Wheeler, Psyche, 1906, vol. 13, p. 39, pl. 4, ☿. "South Natick, Massachusetts."

Mass.— South Natick (Morse).

68. Formica fusca Linné var. subsericea (Say) Emery.

Emery, Zool. jahrb. Syst., 1893, vol. 7, p. 659, ☿ ♀ ♂.

Formica subsericea Say, Boston journ. nat. hist., 1836, vol. 1, p. 289, 290, ♀ ♂. "Indiana."

Formica fusca Mayr, Verh. zool. bot. ges. Wien, 1886, vol. 36, p. 426, 427.

N. H.— Holderness (Morse); Canobie Lake and West Ossipie (King).

Mass.— Sherborn, Wellesley and Andover (Morse); Essex County, Mt. Tom and Springfield (King); Springfield (Allen); Arlington and Cambridge (Mus. Comp. Zoöl.); Readville (Amer. Mus. Nat. Hist.); Medford (Dall); Woods Hole (Miss Fielde, Wheeler).

R. I.— Providence (Davis).

Conn.— Suffield (Dimmock); Branford, Cheshire, Mt. Carmel and New Haven (Viereck); New Haven and Salisbury (Britton);

Cromwell and Hartford (Forel); Winsted, Norfolk and Colebrook (Wheeler).

69. Formica fusca Linné var. argentata Wheeler.

Wheeler, Amer. nat., 1902, vol. 36, p. 952, *note*. ☾. "Rockford, Illinois."

Mass.— Woods Hole (Miss Fielde).

70 Formica fusca Linné var. subaenescens Emery.

Emery, Zool. jahrb. Syst., 1893, vol. 7, p. 659, 660, ☾. "S[outh] Dakota und Connecticut."

Me.— Norway (S. J. Smith); Bethel (Mus. Comp. Zoöl.).
N. H.— Franconia (Mrs. Slosson).
Vt.— Wolcott (Morse); Lyndon (Melander).
Mass.— Sherborn (Morse); Essex County (King).
Conn.— (Emery); Colebrook (Wheeler).

71. Formica fusca Linné var. neoclara Emery.

Emery, Zool. jahrb. Syst., 1893, vol. 7, p. 661, ☾. "Colorado."

Mass.— Essex County (King).

72. Formica fusca subpolita (Mayr).

Formica fusca var. *subpolita* Mayr, Verh. zool. bot. ges. Wien, 1886, vol. 36, p. 426, 427, ☿ ☽. "Connecticut, Colorado und Californien."
Formica fusca subsp. *subpolita* Emery, Zool. jahrb. Syst., 1893, vol. 7, p. 661, ☿ ♀.

Mass.— Lynn (Davis).
Conn.— (Mayr.)

73. Formica fusca subpolita Mayr. var. neogagates Emery.

Emery, Zool. jahrb. Syst., 1893, vol. 7, p. 661, 662, ☿ ♀ ♂. "Pennsylvanien, N[ew] York, Dakota, Utah, Louisiana, Maryland."

Mass.— Essex County (King).

Conn.— Kent and Salisbury (Britton); Norfolk and Colebrook (Wheeler).

74. Formica fusca subpolita Mayr. var. picea (Emery).

Formica lasioides Emery var. *picea* Emery, Zool. jahrb. Syst., 1894, vol. 8, p. 335, ☿. "Hill City, S[outh] Dakota."

Vt.— Lyndon (Melander).

Mass.— Wellesley (Morse); Essex County (King); Woods Hole (Miss Fielde).

Conn.— Colebrook (Wheeler).

Note.— The worker of this form differs from that of the preceding variety merely in having erect hairs on the antennal scapes.

75. Polyergus rufescens lucidus (Mayr).

Polyergus lucidus Mayr, Verh. zool. bot. ges. Wien, 1870, vol. 20, p. 952–953, ☿ ♀ ♂. "Connecticut."

Polyergus lucidus McCook, Proc. acad. nat. sci. Phila., 1880, p. 376–384, pl. 19.

Polyergus rufescens st. *lucidus* Forel, Ann. soc. ent. Belg., 1886, vol. 30, p. 200–201.

Polyergus rufescens subsp. *lucidus* Emery, Zool. jahrb. Syst., 1893, vol. 7, p. 666.

Polyergus rufescens subsp. *lucidus* Wheeler, Amer. nat., 1901, vol. 35, p. 713, 714.

Mass.— (King.)

Conn.— (Mayr.)

76. Camponotus castaneus (Latreille) Mayr.

Formica castanea Latreille, Hist. nat. des Fourmis, 1802, p. 118, tab. 3, fig. 11, 12, ☿ ♀ ♂. "caroline et pensylvanie."

Formica mellea Say, Bost. journ. nat. hist., 1836, vol. 1, p. 286, ♂.

Camponotus castaneus Mayr, Verh. zool. bot. ges. Wien, 1886, vol. 36, p. 420–422.

Mass.— (King); Cambridge (Mus. Comp. Zoöl.).

Conn.— (Mayr and Coe); Westville (Britton).

77. Camponotus castaneus americanus (Mayr).

Camponotus americanus Mayr, Verh. zool. bot. ges. Wien, 1862, vol. 12, p. 661, 662, ☿ ♀. "Neu-Orleans."

Camponotus castaneus subsp. *americanus* Emery, Zool. jahrb. Syst., 1893, vol. 7, p. 674.

Mass.— Weston, Natick, and Middlesex Fells (Morse); Middlesex Fells (Fielde); Essex County and Mt. Tom (King); Sutton (Bost. Soc. Nat. Hist.); Andover (Morse and King); Medford (Dall).

78. Camponotus herculeanus (Linné).

Formica herculeana Linné, Syst. nat., ed. 10, 1758, vol. 1, 579–580. "Europae * * * America septentrionali."

Camponotus herculeanus Forel, Denkschr. Schweiz. Ges. Naturw., 1874, vol. 26, p. 39, 41, 42 and 213. ☿ ♀ ♂.

Camponotus herculeanus Mayr, Verh. zool. bot. ges. Wien, 1886, vol. 36, p. 419–420.

Vt.— Jay Peak, summit, 4018 ft. (Morse).

79. Camponotus herculeanus pennsylvanicus (DeGeer).

Formica pennsylvanica DeGeer, Mém. serv. hist. insect, 1773, vol. 3, p. 603, taf. 31, fig. 9–10, ☿ ♀ ♂. "Pensylvanie."

Camponotus pennsylvanicus Mayr, Verh. zool. bot. ges. Wien, 1862, vol. 12, p. 666, 667, ☿ ♀.

Camponotus herculeanus st. *pennsylvanicus* Forel, Bull. soc. vaud. sci. nat., 1879, ser. 2, vol. 16, p. 56–58.

Me.— Mt. Katahdin (Hamlin); Bethel (Mus. Comp. Zoöl.).

N. H.— Canobie Lake (King); Exter (Mus. Comp. Zoöl.).

Vt.— Jay Peak (Morse).

Mass.— Sherborn, Natick, Winchendon, Palmer, Needham, Wellesley and West Roxbury (Morse); Worcester, Haverill, Cambridge. and Brookline (Mus. Comp. Zoöl.); Boston and Blue Hills (Am. Mus. Nat. Hist.); Springfield and Essex County (King); Milton (Bost. Soc. Nat. Hist.); Warwick (Miss Edmonds); Woods Hole (Miss Fielde and Wheeler).

Conn.— (Mayr); Woodmont (Butrick); New Haven and Branford (Viereck); Colebrook (Wheeler).

80. Camponotus herculeanus pennsylvanicus DeGeer var. ferrugineus (Fabricius).

Formica ferruginea Fabricius, Suppl. ent. syst. 1798, p. 279, ☿. "America."

Camponotus ferrugineus Mayr, Verh. zool. bot. ges. Wien, 1863, vol. 13, p. 399.

Camponotus herculeanus r. *pennsylvanicus* var. *ferrugineus* Forel, Bull. soc. vaud. sc. nat., 1879, ser. 2, vol. 16, p. 56–58.

Mass.— Sherborn (Morse); Medford (Mus. Comp. Zoöl.).

Conn.— New Haven (Moore & Viereck); Orange and New Canaan (Britton).

81. Camponotus herculeanus ligniperdus Latreille var. novaeboracensis (Fitch).

Formica novaeboracensis Fitch, Trans. New York state agr. soc., 1855, vol. 14, p. 766–767, ☿. "New York."

Camponotus herculeanus r. *ligniperdus* var. *pictus* Forel, Bull. soc. Vaud. sc. nat., 1879, vol. 16, p. 56, 59, ☿ ♀ ♂.

Camponotus herculeanus subsp. *ligniperdus* var. *pictus* Emery, Zool. jahrb. Syst., 1893, vol. 7, p. 674.

ME.— West Beach (Mus. Comp. Zoöl.).

N. H.— Mt. Washington (Mrs. Slosson and Bacon); Canobie Lake (King); Exeter (Mus. Comp. Zoöl.).

VT.— Jay (Morse).

MASS.—Winchendon, Wellesley, Needham and Sherborn (Morse); Malden, Warwick, Cambridge and Medford (Mus. Comp. Zoöl.); Essex County and Mt. Tom (King); Eastport (Mus. Comp. Zoöl.); Lynn (Davis); Woods Hole (Wheeler).

R. I.— Providence (Davis).

CONN.— New Hartford and Orange (Britton); Colebrook (Wheeler).

82. CAMPONOTUS HERCULEANUS LIGNIPERDUS Latreille var. RUBENS Wheeler.

Wheeler, Psyche, 1906, vol. 13, p. 41, ♀ ♂. "NORWAY, * * * BETHEL, MAINE * * * MICHIGAN."

ME.— Norway (S. I. Smith); Bethel (Edwards).

83. CAMPONOTUS MARGINATUS Latr. var. NEARCTICUS Emery.

Emery, Zool. jahrb. Syst., 1893, vol. 7, p. 675, ♀ ☿. "N[EW YORK], D[ISTRICT OF] COLUMBIA, PENNSYLVANIA, FLORIDA UND CALIFORNIEN."

MASS.— Nahant (Möring); Cambridge (Jack); Essex County and Springfield (King); Warwick (Miss Edmonds).

R. I.— Providence (Davis).

CONN.— (Mayr); Colebrook (Wheeler).

84. CAMPONOTUS MARGINATUS Latreille var. MINUTUS Emery.

Emery, Zool. jahrb. Syst., 1893, vol. 7, p. 676, ☿ ♀. "D[ISTRICT OF] COLUMBIA, MARYLAND, MISSOURI, N[EW] JERSEY."

MASS.— (King.)

Occasional Papers
OF THE
Boston Society of Natural History
VII.

FAUNA OF NEW ENGLAND.

9.

LIST OF THE ARANEIDA.

By ELIZABETH B. BRYANT

BOSTON:
PRINTED FOR THE SOCIETY FROM THE
GURDON SALTONSTALL FUND.
April, 1908.

	Me.	N.H.	Vt.	Mass.	R. I.	Conn.
Uloborus plumipes	—	—	—	—	—	—
Hyptiotes cavatus	—	—	—	—	—	—
Amaurobius americana		—				—
ferox		—		—	—	—
sylvestris	—	—	—	+	—	—
tibialis		—				
Dictyna bostoniensis				—		
cruciata			—	—		—
foliacea		—				
frondea	—	—	—	—	—	—
longispina						—
maxima		—				
minuta		—		—	—	—
muraria	—	—	—	—		—
rubra				—		—
sublata		—				
volucripes	—	+	—	—	—	—
volupis	—	—	—	—	—	—
Scotolathys pallidus		—				—
Scytodes thoracica				—		—
Orchestina saltitans				—		
Dysdera crocata				—		
Ariadna bicolor	—			—	—	—
Drassodes neglectus	—	—	—	+		—
robustus				—		—
Melanophora atra	—	—		+		
bimaculata				—		
depressa				—		
rufula						—
Herpyllus ecclesiasticus	—	—		—	—	—
Sergiolus montana		—		—		
variegatus		—		—		—
Cesonia bilineata		—		—		
Gnaphosa brumalis		—				
conspersa	—	—	—	+	—	—
parvula		—		—		
Callilepis imbecilla		—		—		—
Pholcus phalangioides				—	—	—
Sphermophora meridionalis				—		—

	Me.	N.H.	Vt.	Mass.	R. I.	Conn.
Rhomphaea fictilia				—		
Argyrodes cancellatus						—
trigonum	—	—		—		—
Spintharus flavidus				—		—
Euryopis argentea				—		—
funebris		—		—		—
Theridion differens	—	—	—	—	—	—
frondeum	—	—	—	—	—	—
globosum	—	—		—		—
kentuckyense		—				—
lineatum				—		
montanum		—				
murarium	—	—	—	—	—	—
puncto-sparsum	—			—		—
rupicola	—	—		—		—
spirale	—	—		—		—
sexpunctatum	—	—				
tepidariorum	—	—		+	—	—
unimaculatum	—			—		—
zelotypum	—	—				
Theridula sphaeula	—	—	—	—	—	—
Ulesanis americana				—		—
Latrodectus mactans		—		—		
Crustulina guttata				—		—
Steatoda borealis	—	—	—	—	—	—
nigra	—	—		—		—
Teutana triangulosa				—		—
Lithyphantes corallatus		—		—		
Asagena americana	—		—	—		—
Enoplognatha mormorata	—	—		—	—	—
Pedanostethus riparius	—	—	—	—		—
Histagonia rostrata				—		
Ancylorrhanis hirsutum		—				—
Ceratinella atriceps	—	—		—		—
brunnea		—		—		—
bulbosa						—
emertoni	—	—	—	—		—
fissiceps	—	—	—	—		—
formosa	—	—				—
laeta				—		
laetabilis		—		—		—
micropalpis		—		—		
minuta		—		—		—

	Me.	N.H.	Vt.	Mass.	R. I.	Conn.
Ceratinella parvula		—				
pygmaea		—				—
Ceratinopsis interpres		—		—		—
laticeps				—		—
nigriceps		—	—	—		—
nigripalpis				—		—
Grammonota gigas				—		
inornata	—			—		—
ornata					—	
pictilis	—	—	—	—		—
Spiropalpus spiralis				—		—
Cornicularia auranticeps		—		—		
brevicornis				—		—
clavicornis		—				
communis		—		—		—
directa		—		—	—	—
indirecta				—		—
minuta		—		—		—
pallida				—		—
tibialis				—		
tricornis		—				
Lophomma cristata				—		
elongata				—		
Gonatium rubens		—		—		—
Exechophysis palustris		—				
Hypomma trilobata		—		—		
Dismodicus alpinus		—				
Lophocarenum castaneum				—		
crenatum				—		—
decem-oculatum		—	—			
depressum		—				
erigonoides		—		—		
florens		—		—		—
latum		—		—		—
longitarsum		—				
longitubum		—		—		
montanum		—				
montiferum				—		
quadricristatum		—				
pallidum		—				
rostratum				—		—
scopuliferum				—		
simplex		—		—		

	Me.	N.H.	Vt.	Mass.	R. I.	Conn.
Lophocarenum spiniferum						
vernale						—
Tmeticus bidentatus						
bostoniensis						
brunneus		—				
concavus						
contortus				—		
debilis				—		
flaviolus		—				
longisetosus						—
maximus		—				
microtarsus		—				
montanus		—				
pallidus						—
pertinens	—			—		
plumosus		—		—		
probatus		—		—		—
terrestris		—		—		
tibialis		—				
tridentatus				—	—	—
trilobatus		—		—		—
truncatus		—		—		
Erigone autumnalis		—		—		—
dentigera		—		—		—
longipalpis	—	—		—		—
Linyphia clathrata				—		
communis	—	—	—	—	—	—
conferta	—			—		—
mandibulata	—	—	—	—	—	—
marginata	—	—	—	—	—	—
phrygiana	—	—	—	—	—	—
variabilis		—				
Stemonyphantes bucculentus				—	—	—
Diplostyla concolor	—			—		—
nigrina	—	—		—	—	
Drapetisca socialis	—	—		—		—
Helophora insignis		—		—		
Bathyphantes alpina	—	—				
angulata				—		—
bihamata		—				
complicata		—				
formica				—		—
micaria	—	—		—		—

	Me.	N.H.	Vt.	Mass.	R. I.	Conn.
Bathyphantes minuta		—		—		
nebulosa		—		—		—
subalpina		—		—		
zebra	—	—		—		—
Bolyphantes drassoides						—
Tapinopa bilineata				—		
Microneta cornupalpis	—			—		—
crassimanus		—				
discolor		—		—		—
furcata		—				
latidens		—				—
longibulbus				—		
olivacea		—				
persoluta		—		—		
quinquedentata		—		—		
viaria		—		—		—
Pachygnatha autumnalis				—		—
brevis		—		+		—
tristriata	—			—		
Tetragnatha caudata	—			—		
extensa	—	—	—	—	—	—
grallator	—	—		+		
laboriosa	—	—	—	—	—	—
straminea	—		—	—		—
Eucta vermiformis				—		—
Meta menardi	—	—		+		
Argyroepeira hortorum				—		—
Argiope aurantia	—	—	—	+	—	—
trifasciata	—	—	—	+	—	—
Cyclosa conica	—	—	—	—		—
Mangora gibberosa	—	—	+	—	—	—
placida	—	—	—	—	—	—
Larinia borealis		—				
Acacesia foliata						—
Eustalia prompta	+	—		—		—
Araneus stellatus	—	—	—	+	—	—
angulatus	—			—		
cavaticus	—	—		+		
corticarius	—	+		—		
insularis		—		+		—
marmoreus	—	—		—		
nordmanni	—	—		—		—

	Me.	N.H.	Vt.	Mass.	R. I.	Conn.
Araneus patagiatus	—	—	—	+		
sclopetarius	+	—	—	+	—	—
silvaticus		—	—	—		
solitarius		—		—		
strix	—	—	—	+	—	—
trifolium	—	—	—	+	—	+
alboventris	—			—		—
Araneus displicatus	—	—	—	—	—	—
domiciliorum	—	—	—	+	—	—
globosus				—		—
juniperi	—	—		—		—
labyrintheus				—		+
pratensis		—		—		
thaddeus		—		—		+
trivittatus	—	—	—	+	—	—
atrica				—		
montanus	—	—				
x-notatus				—		
carbonarius		+				
infumatus						—
prominens		—				
maculatus		—		—		—
praticola				+		—
variabilis	—	—		—		—
Micrathena gracile						—
reduvianum						—
sagittatum				—		—
Glytocranium bisaccatum						—
Theridosoma gemmosum		+	—	—		—
Ero furcata		—		—		—
Mimetus interfector				—		—
Tmarus caudatus	—	—		+		—
Misumena aleatoria	—		—	—		—
asperata				+	—	—
oblonga				—		—
vatia	—	—	—	+	—	—
Oxyptila conspurcata		—				
Xysticus cinerea		—				
elegans		—				
emertoni		—				
formosus	—	—		—		
graminis	—	—		—		
gulosus	—	—		—		—

	Me.	N.H.	Vt.	Mass.	R. I.	Conn.
Xysticus limbatus	—	—		+		—
nervosus				—		—
quadrilineatus	—	—		—		—
stomachosus	—	—		+		—
triguttatus	—	—	—	—	—	—
versicolor	—	—		—		—
Synaema bicolor		—		—		
obscura		—				
Philodromus bidentatus	—			—		—
brevis				—		
lineatus	—	—	—	—	—	—
ornatus	—	—	—	—	—	—
pictus	—	—	—	—	—	—
robustus				—		
vulgaris	—	—	—	—	—	—
Ebo latithorax				—	—	—
Thanatus coloradensis	—	—	—	—	—	—
rubicundus	—	—				
Tibellus oblongus	—	—	—	+		
Clubiona abbotii	—	—	—	—	—	—
canadensis		—				
crassipalpis		—		—		—
minuta	—			—		
mixta	—			—		
pallens		—		—		—
pusilla		—		—		
riparia	—	—		—		
tibialis				—		
Chiracanthium viride				—		—
Anyphaena calcarata						—
incerta				+	—	—
rubra		—		+	—	—
saltabunda				—		—
Agroeca pratensis	—	—		+	—	
repens				—		
Micariosoma alarium	—	—		—	—	—
pugnatum	—	—		—		—
Castaneira bivittata	—	—		—		—
crocata	—			—		—
pinnata	—	—	—	—		
Micaria aurata		—		—		
gentilis		—				
montana		—				

	Me.	N.H.	Vt.	Mass.	R. I.	Conn.
Trachelas ruber						
Agelena naevia		—	—	+	—	—
Coras medicinalis	—	—		+	—	—
Tegenaria domestica						
Coelotes calcaratus						
montanus		—		—		
Cicurina arcuata						
brevis	—					
pallida						
Hahnia agilis	—					
cinerea		—		—		
radula	—	—				
Pisaurina mira						—
Dolomedes fontanus	—			+		
idoneus			—			
sexpunctatus		—		+		—
urinator				—		—
Lycosa albohastata	—	—				
avara	—			—		
baltimoriana				—		—
bilineata						
carolinensis	+	—		—		+
cinerea				+		—
contestata				—		
erratica		—		—		
frondicola	—	—	—	+		+
kochii	—	—		+		—
lepida	—		+	+	—	—
nidicola	—		—	+	—	—
nidifex				+		—
ocreata	—			—		—
pictilis		+				
pratensis	—	—		+		—
punctulata				—	—	—
relucens		—	—	+		—
rubicunda	—		—	+		—
Lycosa scutulata				—		—
tigrina		—		—		—
Pirata insularis		—				
minutus		—	—	—		—
montanus	—	+	—			
piraticus				—		—
Trabaea aurantiaca				+		—

	Me.	N.H.	Vt.	Mass.	R. I.	Conn.
Pardosa glacialis	—	+	—	—		—
groenlandica	—	+				
lapidicina	—			—		—
littoralis				—		
luteola	—	—	—			
minima	—	—		+		—
nigropalpis	—		—	+		—
pallida	+	—	—	—		—
tachypoda	—	—	+	—		
uncata	—	+	—			
Oxyopes scalaris		—				
Peckhamia picata		—				—
scorpiona				+		—
Synemosyna formica				+		—
Evophrys cruciatus		—				
monadnock	—	—				
Neon nelli	—	—		—		
Attus palustris	—	—		+		—
sylvestris				—		
Salticus ephippiatus				—		—
scenicus	—	—		—	—	—
Hyctia pikei				+		
Marpissa familiaris				+		—
Pseudicius binus						—
lineatus				—		—
Admestina tibialis				—		
Wala mitratus				—		
palmarum				—		—
Icius elegans				+		—
formicarius				—		—
hartii				+		
montanus		—				
similis		—				
Phidippus borealis		—				
brunneus				+		—
comatus				—		—
multiformis	—	—	—	+		—
mystaceus	—	—		—	—	—
ruber		—		—		
tripunctatus	—	—	—	+	—	—
Dendryphantes capitatus	—	—	—	+	—	—
flavipedes	—					
militaris	—	—	—	+	—	—

	Me.	N.H.	Vt.	Mass.	R. I	Conn.
Dendryphantes montanus		—		—		
rufus				+		
Rhene cyanea				—		—
Habrocestum pulex		—		—	—	—
Phlegra leopardus				—		
Pellenes auratus				—		—
borealis						
cristatus				—		
howardii				—		
peregrinus				—		—
roseum				—		
splendens				—		
Evacha hoyi	—	—		+		—
Maevia vittata		—		+		—
Zygoballus bettini				+		—
iridescens		—				
terrestris				—	—	—

ARANEIDA.

ULOBORIDAE.

1. Uloborus plumipes Lucas.

Lucas, Explor. Algerie. Anim., 1849, vol. 1, p. 252, pl. 15, fig. 8. "Sous des pierrs humides pres les marais du lac Tonga, dans les environs du cercle de Lacalle." [Algeria.] Emerton, Trans. Conn. acad., 1888, vol. 7, p. 454, pl. 11, fig. 1.

Phillyra riparia Hentz, Bost. journ. nat. hist., 1848, vol. 6, p. 26, pl. 3, fig. 17; ed. Burgess, p. 130, pl. 14, fig. 17.[1]

Me. to Conn.

2. Hyptiotes cavatus (Hentz) Emerton.

Emerton, Trans. Conn. acad., 1888, vol. 7, p. 456, pl. 11, fig. 2.

Cyllopodia cavata Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 466, pl. 30, fig. 3; ed. Burgess, p. 104, pl. 12, fig. 3, pl. 18, fig. 80, pl. 20, fig. 21. "Alabama."

Hyptiotes americanus Wilder, Pop. sci. month., 1875, vol. 6, p. 642.

Me. to Conn.

DICTYNIDAE.

3. Amaurobius americana (Emerton) Emerton.

Titanoeca americana Emerton, Trans. Conn. acad., 1888, vol. 7, p. 453, pl. 10, fig. 4. "under loose stones under the trap hills around New Haven and Meriden, Conn. .... Mt. Monadnock, N. H."

[1] The spiders of the United States, by Nicholas M. Hentz. Edited by Edward Burgess. Occ. papers, Bost. soc. nat. hist., 1875, vol. 2.

DICTYNIDAE.

Titanoeca brunnea Emerton, Trans. Conn. acad., 1888, vol. 7, p. 453, pl. 10, fig. 5.

N. H.— Mt. Monadnock, Durham.
Conn.— New Haven, Meriden, Simsbury.

4. Amaurobius ferox (Walckenaer) C. Koch.

Emerton, Trans. Conn. acad., 1888, vol. 7, p. 451, pl. 10, fig. 3.
Clubiona ferox Walck., Faune française, 1830, p. 150, pl. 7, fig. 7. "dans les caves."

N. H.— Franconia.
Mass.— Boston, Salem, Beverly.
R. I.— Providence.
Conn.— New Haven.

5. Amaurobius sylvestris Emerton.

Emerton, Trans. Conn. acad., 1888, vol. 7, p. 451, pl. 10, fig. 1. "All over New England."

Me. to Conn.

6. Amaurobius tibialis Emerton.

Emerton, Trans. Conn. acad., 1888, vol. 7, p. 452, pl. 10, fig. 3. "on Mt. Washington, N. H., up to the highest trees."

N. H.— Mt. Washington.

7. Dictyna bostoniensis Emerton.

Emerton, Trans. Conn. acad., 1888, vol. 7, p. 447, pl. 9, fig. 3. "the public garden in Boston, ... in Beverly and Brookline."

Mass.— Boston, Brookline, Beverly, Ipswich.

DICTYNIDAE.

8. Dictyna cruciata Emerton.

Emerton, Trans. Conn. acad., 1888, vol. 7, p. 448, pl. 9, fig. 6. "Eastern Mass.; New Haven, Conn."

Vt.— Mt. Mansfield.
Mass.— Eastern part.
Conn.— New Haven, Meriden.

9. Dictyna foliacea (Hentz) Banks.

Theridion foliaceum Hentz, Bost. journ. nat. hist., 1850, vol. 6, p. 277, pl. 9, fig. 14; ed. Burgess, p. 149, pl. 16, fig. 14. "Alabama."

N. H.— Franconia.

10. Dictyna frondea Emerton.

Emerton, Trans. Conn. acad., 1888, vol. 7, p. 449, pl. 9, fig. 9. "all over New England."

Me. to Conn.

11. Dictyna longispina Emerton.

Emerton, Trans. Conn. acad., 1888, vol. 7, p. 446, pl. 9, fig. 4. "Meriden, Conn."

Conn.— Meriden.

12. Dictyna maxima Banks.

Banks, Proc. acad. nat. sci. Phil., 1892, p. 28, pl. 1, fig. 79, pl. 4, fig. 79. [Upper Cayuga Lake basin.]

N. H.— Franconia.

DICTYNIDAE.

13. Dictyna minuta Emerton.

Emerton, Trans. Conn. acad., 1888, vol. 7, p. 447, pl. 9, fig. 5. "from Hamden, Conn., and Providence, R. I."

N. H.— Lake Winnepesaukee.
Mass.— Boston, Hyde Park.
R. I.— Providence.
Conn.— Mt. Carmel, Hamden.

14. Dictyna muraria Emerton.

Emerton, Trans. Conn. acad., 1888, vol. 7, p. 445, pl. 9, fig. 1. "all over New England."

Me.— Portland.
N. H.— Mt. Washington, Lake Winnepesaukee.
Vt.— Mt. Mansfield.
Mass.— Salem, Boston, Wood's Hole.
Conn.— New Haven.

15. Dictyna rubra Emerton.

Emerton, Trans. Conn. acad., 1888, vol. 7, p. 448, pl. 9, fig. 7. "Common in eastern Massachusetts and around New Haven, Conn."

Mass.— Brookline, Milton, West Roxbury.
Conn.— New Haven.

16. Dictyna sublata (Hentz) Banks.

Theridion sublatum Hentz, Bost. journ. nat. hist., 1850, vol. 6, p. 276, pl. 9, fig. 10; ed. Burgess, p. 147, pl. 16, fig. 10, pl. 19, fig. 113. "Alabama."

N. H.— Franconia.

DICTYNIDAE.

17. Dictyna volucripes Keyserling.

Keys., Verh. zool.-bot. ges. Wien, 1882, vol. 31, pl. 286, pl. 11, fig. 11. "Massachusetts." Emerton, Trans. Conn. acad., 1888, vol. 7, p. 446, pl. 9, fig. 2, pl. 11, fig. 3.

Me. to Conn.

18. Dictyna volupis Keyserling.

Keys. Verh. zool.-bot. ges. Wien, 1882, vol. 31, p. 285, pl. 11, fig. 10. "Massachusetts." Emerton, Trans. Conn. acad., 1888, vol. 7, p. 448, pl. 9, fig. 8.

Me. to Conn.

19. Scotolathys pallidus (Marx) Simon.

Neophantes pallidus Marx, Proc. ent. soc. Wash., 1891, vol. 2, p. 34, pl. 1, fig. 4. "District of Columbia, Long Island, N. Y., New Hampshire and Tennessee."

N. H.—Lake Winnepesaukee.
Conn.— New Haven.

SICARIIDAE.

20. Scytodes thoracica (Latreille) Walckenaer.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 31, pl. 6, fig. 4.
Aranea thoracica Latr., Nouv. diction. hist. nat., 1804, vol. 24, p. 134. ——
Scytodes cameratus Hentz, Bost. journ. nat. hist., 1848, vol. 6, p. 35, pl. 4, fig. 17; ed. Burgess, p. 141, pl. 15, fig. 17.

Mass.— Boston.
Conn.— New Haven.

OONOPIDAE.

21. Orchestina saltitans Banks.

Banks, Ent. news, 1894, vol. 5, p. 300. "Sea Cliff, N. Y."

Mass.— Boston.

DYSDERIDAE.

22. Dysdrea crocata C. Koch.

C. Koch, Die arachniden, 1839, vol. 5, p. 81, pl. 166, figs. 392, 393, 364. "Die Halbinsel Morea." [Greece.]

Dysdera interrita Hentz, Bost. journ. nat. hist., 1842, vol. 4, p. 224, pl. 8, fig. 2; ed. Burgess, p. 20, pl. 2, fig. 2. Emerton, Trans. Conn. acad., 1890, vol. 8, p. 200, (36), pl. 8, fig. 2.

Mass.— Swampscott, Brookline, Roxbury, Milton.

23. Ariadna bicolor (Hentz) Emerton.

Emerton, Trans. Conn. acad., 1890, vol. 8, p. 201, (37), pl. 8, fig. 3.

Pylarus bicolor Hentz, Bost. journ. nat. hist., 1842, vol. 4, p. 225, pl. 8, fig. 3; ed. Burgess, p. 21, pl. 2, fig. 3. "North Alabama."

Me.— Monhegan.
Mass.— Salem, Woods Hole.
R. I.— Providence.
Conn.— New Haven.

DRASSIDAE.

24. Drassodes neglectus (Keyserling) Comstock.

Drassus neglectus Keys., Verh. zool. bot. ges. Wien, 1887, vol. 37, p. 434, pl. 6, fig. 10. "aus den Vereinigten Staaten."

Drassus saccatus Emerton, Trans. Conn. acad., 1889, vol. 8, p. 178, (14), pl. 4, fig. 7.

DRASSIDAE.

ME.— Portland.
N. H.— White Mountains, Lake Winnepesaukee.
Vt.— Mt. Mansfield.
MASS.— Blue Hill, Brookline, Hyde Park.
CONN.— New Haven.

25. DRASSODES ROBUSTUS (Emerton).

Drassus robustus Emerton, Trans. Conn. acad., 1889, vol. 8, p. 179, (15), pl. 4, fig. 8. "MEDFORD, MASS."

MASS.— Blue Hills, Stony Brook (woods), Medford.
CONN.— Simsbury.

26. MELANOPHORA ATRA (Hentz) Simon.

Herpyllus ater Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 455, pl. 24, fig. 3; ed. Burgess, p. 91, pl. 11, fig. 3. "PENNSYLVANIA, NEW ENGLAND."
Prothesima atra (Hentz). Emerton, Trans. Conn. acad., 1889. vol. 8, p. 172, (8), pl. 3, fig. 6.

ME.— Eastport, Monhegan, Mt. Katahdin.
N. H.— Mt. Washington, Franconia, Lake Winnepesaukee.
MASS.— Boston, Salem, Ipswich, Sharon, Milton, Brookline.

27. MELANOPHORA BIMACULATA (Keyserling).

Prothesima bimaculata Keys., Verh. zool. bot. ges. Wien, 1887, vol. 37, p. 433, pl. 6, fig. 9. "DIE UNIVERSITAT CAMBRIDGE BESITZT EIN EXAMPLAR AUS DER UMGEGEND."

MASS.

28. MELANOPHORA DEPRESSA (Emerton).

Prothesima depressa Emerton, Trans. Conn. acad., 1889, vol. 8, p. 173, (9), pl. 3, fig. 8. "MEDFORD, MASS."

MASS.— Medford, Ipswich.

DRASSIDAE.

29. Melanophora rufula (Banks).

Prothesima rufula Banks, Proc. acad. nat. sci. Phil., 1892, p. 17, pl. 1, fig. 55. "South Hill, Heustis St." [Upper Cayuga Lake basin.]

Conn.— New Haven.

30. Herpyllus ecclesiasticus Hentz.

Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 455, pl. 24, fig. 2; ed. Burgess, p. 90, pl. 11, fig. 2. "The United States."

Prothesima propinqua Keyserling, Verh. zool. bot. ges. Wein, 1887, vol. 37, p. 430, pl. 6, fig. 7.

Prothesima ecclesiastica (Hentz). Emerton, Trans. Conn. acad., 1889, vol. 8, p. 173, (9), pl. 3, fig. 7.

Me.— Monhegan.
N. H.— Franconia.
Mass.— Beverly, Salem, Boston, Woods Hole.
R. I.— Providence.
Conn.— New Haven, Plainville.

31. Sergiolus montana (Emerton) Simon.

Poecilochroa montana Emerton, Trans. Conn. acad., 1889, vol. 8, p. 175, (11), pl. 4, fig. 2. "Mt. Washington, N. H., on the road to Gorham."

N. H.— Mt. Washington, Franconia.
Mass.— Blue Hill, Waltham.

32. Sergiolus variegatus (Hentz) Simon.

Herpyllus variegatus Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 458, pl. 24, fig. 12; ed. Burgess, p. 94, pl. 11, fig. 12. "Massachusetts?"

Poecilochroa variegata (Hentz). Emerton, Trans. Conn. acad., 1889, vol. 8, p. 174, (10), pl. 4, fig. 1.

N. H.— Dublin, Lake Winnepesaukee.
Mass.— Cambridge, Salem, Brookline.
Conn.— New Haven.

33. Cesonia bilineata (Hentz) Simon.

Herpyllus bilineatus Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 456, pl. 24, fig. 5; ed. Burgess, p. 92, pl. 11, fig. 5. "North Carolina, Alabama."
Poecilochroa bilineata (Hentz). Emerton, Trans. Conn. acad., 1889, vol. 8, p. 175, (11), pl. 4, fig. 3.

N. H.— Lake Winnepesaukee.
Mass.— Brookline, Dedham, Sharon.

34. Gnaphosa brumalis Thorell.

Thorell, Proc. Bost. soc. nat. hist., 1875, vol. 17, p. 497. "Strawberry Hill, Labrador." Emerton, Trans. Conn. acad., 1889, vol. 8, p. 175, (11), pl. 4, fig. 5.

N. H.— Mt. Washington, Franconia.

35. Gnaphosa conspersa Thorell.

Thorell, Bull. U. S. geol. surv. 1877, vol. 3, p. 489, "Kelso Cabin, Colo., Gray's Peak. . . . Idaho." Emerton, Trans. Conn. acad., 1889, vol. 8, p. 176, (12), pl. 4, fig. 4.

Me. to Conn.

36. Gnaphosa parvula Banks.

Banks, Trans. Amer. ent. soc., 1896, vol. 23, p. 61. "Hanover, N. H., Franconia."

N. H.— Hanover, Franconia.
Mass.— Ipswich.

DRASSIDAE.

37. Callilepis imbecilla (Keyserling) Comstock.

Pythonissa imbecilla Keys. Verh. zool. bot. ges. Wien, 1887, vol. 37, p. 427, pl. 6, fig. 5. "Bee Spring, Kentucky." Emerton, Trans. Conn. acad., 1889, vol. 8, p. 177, (13), pl. 4, fig. 6.

N. H.— Dublin, Franconia.
Mass.— Blue Hill, Milton, Dedham, Sharon.
Conn.— Simsbury.

PHOLCIDAE.

38. Pholcus phalangioides (Fuesslin) Walckenaer.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 30, pl. 6, fig. 2.
Aranea phalangioides Fuesslin, Verseich. schweizer insekten, 1775, p. 61. ——
Pholcus atlanticus Hentz, Bost. journ. nat. hist., 1850, vol. 6, p. 284, pl. 10, fig. 7; ed. Burgess, p. 157, pl. 17, fig. 7.

Mass.— Eastern part.
R. I.— Providence.
Conn.— New Haven.

39. Sphermophora meridionalis Hentz.

Hentz, Amer. journ. sci., 1841, vol. 41, p. 116, ed. Burgess, p. 15. "Alabama." Emerton, Trans. Conn. acad., 1882, vol. 6, p. 31, pl. 6, fig. 3.
Oophora meridionalis Hentz, Bost. journ. nat. hist., 1850, vol. 6, p. 286, pl. 10, fig. 9; ed. Burgess, p. 159, pl. 17, fig. 9.

Mass.— Boston, Salem.
Conn.— New Haven.

THERIDIIDAE.

40. Rhomphaea fictilia (Hentz) Simon.

Theridion ? fictilium Hentz, Bost. journ. nat. hist., 1850, vol. 6, p. 282, pl. 10, fig. 4; ed. Burgess, p. 155, pl. 17, fig. 4. "Alabama."

Argyrodes fictilium (Hentz). Emerton, Trans. Conn. acad., 1882, vol. 6, p. 24, pl. 5, fig. 2.

Mass.— Essex, Danvers, Salem.

41. Argyrodes cancellatus (Hentz) Keyserling.

Theridion cancellatum Hentz, Bost. journ. nat. hist., 1850, vol. 6, p. 278, pl. 9, fig. 17; ed. Burgess, p. 149, pl. 16, fig. 17. "Alabama."

Lasaeola cancellata (Hentz), Emerton, Trans. Conn. acad., 1882, vol. 6, p. 26, pl. 5, fig. 4.

Conn.— New Haven.

42. Argyrodes trigonum (Hentz) Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 23, pl. 5, fig. 1.

Theridion trigonum Hentz, Bost. journ. nat. hist., 1850, vol. 6, p. 280, pl. 9, figs. 24, 25; ed. Burgess, p. 152, pl. 16, figs. 24, 25. "Alabama."

Me.— Eastport, Portland.
N. H.— Franconia.
Mass.— Beverly, Holyoke, Salem.
Conn.— New Haven.

43. Spintharus flavidus Hentz.

Hentz, Bost. journ. nat. hist., 1850, vol. 6, p. 284, pl. 10, fig. 8; ed. Burgess, p. 156, pl. 17, fig. 8. "Alabama." Emerton, Trans. Conn. acad., 1882, vol. 6, p. 28, pl. 5, fig. 7.

Mass.— Boston, Malden.
Conn.— New Haven, Meriden.

THERIDIIDAE.

44. Euryopis argentea Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 27, pl. 5, fig. 5. "Beverly and Milton, Mass., and New Haven, Conn."

Mass.— Beverly, Milton.
Conn.— New Haven.

45. Euryopis funebris (Hentz) Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 27, pl. 5, fig. 6. *Theridion funebre* Hentz, Bost. journ. nat. hist., 1850, vol. 6, p. 276, pl. 9, fig. 11; ed. Burgess, p. 148, pl. 16, fig. 11. "Alabama."

N. H.— Franconia, Mt. Washington.
Mass.— Swampscott, Mt. Tom, Holyoke, Brookline, Sharon.
Conn.— New Haven.

46. Theridion differens Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 9, pl. 1, fig. 1. "Mt. Washington, N. H., Portland, Me., Eastern Massachusetts; Mt. Tom, Mass.; New Haven, Conn."

Me. to Conn.

47. Theridion frondeum Hentz.

Hentz, Bost. journ. nat. hist., 1850, vol. 6, p. 275, pl. 9, fig. 7; ed. Burgess, p. 146, pl. 16, fig. 7. "Alabama." Emerton, Trans. Conn. acad., 1882, vol. 6, p. 15, pl. 3, fig. 1.

Me. to Conn.

48. Theridion globosum Hentz.

Hentz, Bost. journ. nat. hist., 1850, vol. 6, p. 279, pl. 9, fig. 23; ed. Burgess, p. 151, pl. 16, fig. 23. "Alabama." Emerton, Trans. Conn. acad., 1882, vol. 6, p. 14, pl. 2, fig. 3.

ME.— Portland.
N. H.— Lake Winnepesaukee.
MASS.— Medford, Beverly, Readville.
CONN.— New Haven, Simsbury.

49. THERIDION KENTUCKYENSE Keyserling.

Keys., Die spinnen Amerikas. Theridiidae, 1884, vol. 2, pt. 1, p. 78, pl. 4, fig. 47. "KENTUCKY."

N. H.— Jaffrey, Hollis.
CONN.— New Haven.

50. THERIDION LINEATUM (Linné) Walckenaer.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 16, pl. 3, fig. 2.
Aranea lineata Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 620. "IN NEMORIBUS."

MASS.— Beverly, Salem.

51. THERIDION MONTANUM Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 10, pl. 1, fig. 3. "WHITE MOUNTAINS."

N. H.— White Mountains.

52. THERIDION MURARIUM Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 11, pl. 1, fig. 5. "SALEM, BEVERLY AND DANVERS, MASS.; NEW HAVEN, CONN.; AND PROVIDENCE, R. I."

ME. to CONN.

53. THERIDION PUNCTO-SPARSUM Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 12, pl. 1, fig. 6. "SALEM AND BOSTON,. . . .NEW HAVEN, CONN."

THERIDIIDAE.

ME.— Portland.
MASS.— Salem, Beverly, Boston, Waverley, Sharon.
CONN.— New Haven.

54. THERIDION RUPICOLA Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 14, pl. 2, fig. 2. "EASTERN MASSACHUSETTS AND NEW HAVEN, CONN."

ME.— Portland.
N. H.— Jaffrey, Franconia.
MASS.— Sharon, Woods Hole, Mt. Tom.
CONN.— New Haven.

55. THERIDION SPIRALE Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 10, pl. 1, fig. 2. "NEAR BOSTON AND SALEM, MASS.; FROM WILLIAMSTOWN, MASS.; AND NEW HAVEN, CONN."

ME.— Bangor, Monhegan, Portland.
N. H.— Lake Winnepesaukee.
MASS.— Salem, Boston, Brookline, Williamstown.
CONN.— New Haven.

56. THERIDION SEXPUNCTATUM Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 12, pl. 2, fig. 5. "ENGLISH HEAD, ANTICOSTI I., ... MT. WASHINGTON, N. H."

ME.— Monhegan.
N. H.— Mt. Washington, Franconia.

57. THERIDION TEPIDARIORUM C. Koch.

C. Koch, Die arachniden, 1841, vol. 8, p. 75, pl. 273, fig. 646, pl. 274, figs. 647, 648. "IN GLAS UND TREIBHÄUSERN." [GERMANY.] Emerton, Trans. Conn. acad., 1882, vol. 6, p. 13, pl. 2, fig. 1.

THERIDIIDAE.

Theridion vulgare Hentz, Bost. journ. nat. hist., 1850, vol. 6, p. 271, pl. 9, fig. 1; ed. Burgess, p. 142, pl. 16, fig. 1.

Me.— Bangor, Portland.
N. H.— Franconia, Amherst, Lake Winnepesaukee.
Mass. to Conn.

58. Theridion unimaculatum Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 15, pl. 2, fig. 4. "Eastern Massachusetts and Connecticut.".

Me.— Portland.
Mass.— Salem, Mt. Tom, Dedham.
Conn.— New Haven.

59. Theridion zelotypum Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 11, pl. 1, fig. 4. "Eastport and Portland, Me."

Me.— Eastport, Monhegan, Bangor, Moosehead Lake, Portland.
N. H.— Base of Mt. Washington.

60. Theridula sphaerula (Hentz) Emerton.

Theridion sphaerula Hentz, Boston journ. nat. hist., 1850, vol. 6, p. 279, pl. 9, fig. 22; ed. Burgess, p. 151, pl. 16, fig. 22, pl. 21, fig. 17. "Alabama." Emerton, Trans. Conn. acad., 1882, vol. 6, p. 25, pl. 5, fig. 3.

Me. to Conn.

61. Ulesanis americana Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 28, pl. 6, fig. 1. "Beverly and Danvers, Mass., and New Haven, Conn."

Mass.— Beverly, Danvers, Peabody, Milton.
Conn.— New Haven.

THERIDIIDAE.

62. Latrodectus mactans (Fabricus) Walckenaer.

Keyserling, Die spinnen Amerikas. Theridiidae, 1884, vol. 2, pt. 1, p. 145, pl. 7, fig. 91.

Aranea mactans Fabr., Ent. syst., 1793, vol. 2, p. 410. "America."

Theridion verecundum Hentz, Bost. journ. nat. hist., 1850, vol. 6, p. 280, pl. 10, figs. 1, 2; ed. Burgess, p. 153, pl. 17, figs. 1, 2.

Common spiders, 1902, p. 123. figs. 288, 289, 290, 291.

N. H.— Dublin, Jaffrey.

Mass.— Sharon, Hyde Park, Blue Hill, Milton.

63. Crustulina guttata (Wider) Thorell.

Theridion guttata Wider Reuss's Zool. misc., Arachn. mus. Senkenbergianum, 1834, vol. 1, p. 241, pl. 16, fig. 7. "in der Gegend von Beerfelden." [Hesse, Germany.]

Steatoda guttata (Reuss). Emerton, Trans. Conn. acad., 1882, vol. 6, p. 20, pl. 4, fig. 2.

Mass.— Ipswich, Beverly, Salem, Cambridge, Brookline, Milton.

Conn.— New Haven.

64. Steatoda borealis (Hentz) Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 19, pl. 4, fig. 1.

Theridion boreale Hentz, Bost. journ. nat. hist., 1850, vol. 6, p. 274, pl. 9, fig. 4; ed. Burgess, p. 145, pl. 16, fig. 4, pl. 21, fig. 13. "The United States."

Me. to Conn.

65. Steatoda nigra Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 21, pl. 4, fig. 4. "Portland, Me.; Beverly, Mass., and Holyoke, Mass."

THERIDIIDAE.

ME.— Portland.
N. H.— Gorham.
MASS.— Dedham, Beverly, Holyoke.
CONN.— New Haven.

66. TEUTANA TRIANGULOSA (Walckenaer) Simon.

Aranea triangulosa Walck., Faune parisienne, 1802, vol. 2, p. 207. "TROUVÉE UNE SEULE FOIS DANS UNE ARMOIRE DE MA DEMEURE À PARIS."
Theridion zerpentinum Hentz, Bost. journ. nat. hist., 1850, vol. 6, p. 273, pl. 9, fig. 2; ed. Burgess, p. 144, pl. 16, fig. 2.
Steatoda triangulosa (Walck.). Emerton, Trans. Conn. acad., 1882, vol. 6, p. 22, pl. 3, fig. 6.

MASS.— Boston.
CONN.— New Haven.

67. LITHYPHANTES CORALLATUS (Linné) Thorell.

Aranea corallatus Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 621. "IN PLANTIS."
Steatoda corallatus (Linné), Emerton, Trans. Conn. acad., 1882, vol. 6, p. 21, pl. 4, fig. 5.

N. H.— Jaffrey, Dublin, Franconia.
MASS.— Ipswich, Malden.

68. ASAGENA AMERICANA Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 23, pl. 4, fig. 6. "EASTERN MASS.; WILLIAMSTOWN, MASS., SCHOHARIE, N. Y.; NEW HAVEN, CONN.; WASHINGTON, D. C."

ME.— Portland.
VT.— Stowe.
MASS.— Blue Hill, Salem, Swampscott, Hoosac Mt.
CONN.— New Haven.

THERIDIIDAE.

69. Enoplognatha marmorata (Hentz) Simon.

Theridion marmoratum Hentz, Bost. journ. nat. hist., 1850, vol. 6, p. 273, pl. 9, fig. 3; ed. Burgess, p. 144, pl. 16, fig. 3, pl. 21, fig. 6. "Alabama."

Steatoda marmorata (Hentz). Emerton, Trans. Conn. acad., 1882, vol. 6, p. 20, pl. 4, fig. 3.

Me.— Portland.
N. H.— Franconia.
Mass.— Ipswich, Salem, Cambridge, Brookline, Woods Hole.
R. I.— Providence.
Conn.— New Haven.

70. Pedanostethus riparius Keyserling.

Keys. Die spinnen Amerikas. Theridiidae, 1886, vol. 2, pt. 2, p. 265, pl. 21, fig. 313. "Eagle Harbor, Lake Superior."

Me.— Moosehead Lake.
N. H.— Mt. Washington, Lake Winnepesaukee.
Vt.— Stowe, Mt. Mansfield.
Mass.— Brookline, Clarendon Hills, Lexington, Carlisle Pines.
Conn.— New Haven.

71. Histagonia rostrata (Emerton) Simon.

Pholcomma rostratum Emerton, Trans. Conn. acad., 1882, vol. 6, p. 30, pl. 6, fig. 5. "Waltham and Watertown, Mass."

Mass.— Watertown, Waltham.

72. Ancylorrhanis hirsutum (Emerton) Simon.

Pholcomma hirsutum Emerton, Trans. Conn. acad., 1882, vol. 6, p. 29, pl. 6, fig. 6. "Mt. Carmel, Hamden, Conn.; found in the neighborhood of New Haven."

N. H.— Lake Winnepesaukee.
Conn.— Mt. Carmel, New Haven.

73. Ceratinella atriceps (Cambridge) Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 34, pl. 7, fig. 5. *Erigone atriceps* Cambridge, Proc. zool. soc. Lond., 1874, p. 436, pl. 55, fig. 7. "Cambridge, Massachusetts."

Me.— Portland.
N. H.— Mt. Washington.
Mass.— Cambridge, Salem, Quincy.
Conn.— New Haven.

74. Ceratinella brunnea Emerton.

Emerton, Trans. Conn. acad , 1882, vol. 6, p. 36, pl. 8, fig. 3. "Mt. Washington, from Glen to highest trees, Salem.... Saugus Marsh,....New Haven, Conn."

N. H.— Mt. Washington.
Mass.— Salem.
Conn.— New Haven.

75. Ceratinella bulbosa Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 33, pl. 7, fig. 3. "Pine Swamp, New Haven, Conn."

Conn.— New Haven.

76. Ceratinella emertoni (Cambridge) Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 32, pl. 7, fig. 1. *Erigone emertoni* Cambridge, Proc. zool. soc. Lond., 1874, p. 435, pl. 55, fig. 6. "Amesbury, Massachusetts, U. S. A."

Me.— Dexter, Portland.
N. H.— Franconia.

ARGIOPIDAE.

LINYPHIINAE. ERIGONEAE.

VT.— Stowe, Essex.

MASS.— Danvers, Cambridge, Boston, Sharon, Milton, Mt. Tom.

CONN.— New Haven.

77. CERATINELLA FISSICEPS (Cambridge) Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 33, pl. 7, fig. 2.

Erigone fissiceps Cambridge, Proc. zool. soc. Lond., 1874, p. 438, pl. 55, fig. 8. ——

ME.— Moosehead Lake, Dexter, Portland.

N. H.— Franconia, Jaffrey, Lake Winnepesaukee, Crawford's Notch.

VT.— Mt. Mansfield.

MASS.— Woods Hole, Sharon, Blue Hill, Brookline, Carlisle Pines, Lexington, Clarendon Hills, Northfield.

CONN.— New Haven.

78. CERATINELLA FORMOSA Banks.

Banks, Proc. acad. nat. sci. Phil., 1892, p. 33, pl. 2, fig. 55. "Fall Creek." [UPPER CAYUGA LAKE BASIN.]

ME.— Portland.

N. H.— Glen, Mt. Washington.

CONN.— Woodbridge.

79. CERATINELLA LAETA (Cambridge) Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 35, pl. 8, fig. 1.

Erigone laeta Cambridge, Proc. zool. soc. Lond., 1874, p. 433, pl. 55, fig. 4. "CAMBRIDGE, MASS."

MASS.— Cambridge, Clarendon Hills, Waltham, Boston, Carlisle Pines, Carlisle.

ARGIOPIDAE.

LINYPHIINAE. ERIGONEAE.

80. Ceratinella laetabilis (Cambridge) Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 35, pl. 8, fig. 2. *Erigone laetabilis* Cambridge, Proc. zool. soc. Lond., 1874, p. 435, pl. 55, fig. 5. "found among E. laeta." [Cambridge, Mass.]

N. H.— Mt. Washington, Jaffrey, Lake Winnepesaukee.
Mass.— Woods Hole, Cambridge, Beverly, Carlisle Pines, Carlisle; Sudbury.
Conn.— New Haven.

81. Ceratinella micropalpis Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 36, pl. 8, fig. 5. "West Quincy, Mass."

N. H.— Franconia.
Mass.— West Quincy.

82. Ceratinella minuta Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 36, pl. 8, fig. 4. "common at New Haven, Conn.,. . . . West Quincy, Mass."

N. H.— Franconia, Lake Winnepesaukee.
Mass.— West Quincy, Brookline, Carlisle Pines.
Conn.— New Haven.

83. Ceratinella parvula Fox.

Erigone (*Ceratinella*) *parvula* Fox, Proc. ent. soc. Wash., 1891, vol. 2, p. 45. "Hollis, N. H."

N. H.— Hollis.

ARGIOPIDAE.

LINYPHIINAE. ERIGONEAE.

84. Ceratinella pygmaea Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 34, pl. 7, fig. 4. "Pine Swamp, New Haven, Conn."

N. H.— Franconia.
Conn.— New Haven.

85. Ceratinopsis interpres (Cambridge) Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 37, pl. 9, fig. 1. *Erigone interpres* Cambridge, Proc. zool. soc. Lond., 1874, p. 430, pl. 55, fig. 1. "Holyoke, Mass."

N. H.— Jaffrey, Lake Winnepesaukee.
Mass.— Brookline, Forest Hills, Holyoke, Mt. Tom.
Conn.— New Haven.

86. Ceratinopsis laticeps Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 37, pl. 9, fig. 3. "Danvers, Mass., and New Haven, Conn."

Mass.— Danvers.
Conn.— New Haven.

87. Ceratinopsis nigriceps Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 37, pl. 9, fig. 2. "New Haven, Conn., and Dedham, Mass."

N. H.— Jaffrey, Franconia, Lake Winnepesaukee.
Vt.— Stowe.
Mass.— Sharon, Milton, Salem.
Conn.— New Haven.

ARGIOPIDAE.

LINYPHIINAE. ERIGONEAE.

88. Ceratinopsis nigripalpis Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 38, pl. 9, fig. 4. "New Haven, Conn."

Mass.— Blue Hill, Milton, Boston.
Conn.— New Haven.

89. Grammonota gigas (Banks).

Erigonophis gigas Banks, Can. ent., 1896, vol. 28, p. 65. "near Ithaca, N. Y."

Mass.— Ipswich Bluff.

90. Grammonota inornata Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 39, pl. 10, fig. 5, "Saugus, Mass.,....New Haven, Conn.,....Wood's Hole. Mass."

Me.— Portland.
Mass.— Saugus, Cambridge, Boston, Woods Hole.
Conn.— New Haven.

91. Grammonota ornata (Cambridge) Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 39, pl. 10, fig. 3. *Erigone ornata* Cambridge, Proc. zool. soc. London, 1875, p. 395, pl. 46, fig. 3. "Providence, Mass., [Rhode Island,], U. S. A."

R. I.— Providence.

92. Grammonota pictilis (Cambridge) Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 38, pl. 10, fig. 4. *Erigone pictilis* Cambridge, Proc. zool. soc. London, 1875, p. 396, pl. 46, fig. 4. "Beverly, Swampscott, Boston, Massachusetts, U. S. A."

ME.— Monhegan, Portland.
N. H.— Mt. Washington, Lake Winnepesaukee.
VT.— Stowe.
MASS.— Sharon, Quincy, Milton, West Roxbury, Mt. Tom.
CONN.— New Haven.

93. SPIROPALPUS SPIRALIS Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 39, pl. 10, fig. 6. "DANVERS, ESSEX AND CAMBRIDGE, MASS., AND NEW HAVEN, CONN."

MASS.— Danvers, Beverly, Brookline, Boston, Hyde Park.
CONN.— New Haven.

94. CORNICULARIA AURANTICEPS Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 43, pl. 8, fig. 6. "EASTERN MASSACHUSETTS AND WHITE MOUNTAINS, NEW HAMPSHIRE."

N. H.— Mt. Washington.
MASS.— Clarendon Hills, Saugus.

95. CORNICULARIA BREVICORNIS Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 42, pl. 11, fig. 5. "PINE ROCK, NEW HAVEN, CONN."

MASS.— Brookline.
CONN.— New Haven.

96. CORNICULARIA CLAVICORNIS Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 43, pl. 8, fig. 7. "MT. WASHINGTON, N. H."

N. H.— Mt. Washington.

ARGIOPIDAE.

LINYPHIINAE. ERIGONEAE.

97. Cornicularia communis Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 41, pl. 11, fig. 3. "Mt. Washington, New Hampshire and Eastern Massachusetts, ... New Haven, Conn."

N. H.— Mt. Washington.
Mass.— Brookline, Cambridge, Clarendon Hills, Carlisle Pines, Salem.
Conn.— New Haven.

98. Cornicularia directa (Cambridge) Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 40, pl. 11, fig. 1.
Erigone directa Cambridge, Proc. zool. soc. Lond., 1874, p. 439, pl. 55, fig. 9. "Providence, R. I., ... Cambridge, Mass."
Erigone provida Cambridge, Proc. zool. soc. Lond., 1875, p. 398, pl. 46, fig. 5.

N. H.— Jackson, Franconia.
Mass.— Beverly, Carlisle Pines, Cambridge, Brookline, Northfield.
R. I.— Providence.
Conn.— New Haven.

99. Cornicularia indirecta (Cambridge) Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 41, pl. 11, fig. 4.
Erigone indirecta Cambridge, Proc. zool. soc. Lond., 1874, p. 440, pl. 55, fig. 10. ——

Mass.— Lexington, Malden, Watertown, Cambridge.
Conn.— New Haven.

100. Cornicularia minuta Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 42, pl. 11, fig. 6. "Mt. Carmel, Hamden, Conn., and Mt. Washington, N. H."

N. H.— Mt. Washington, Lake Winnepesaukee.
Mass.— Brookline.
Conn.— New Haven.

101. Cornicularia pallida Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 42, pl. 11, fig. 7. "New Haven, Conn."

Mass.— Boston Common.
Conn.— New Haven.

102. Cornicularia tibialis Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 41, pl. 11, fig. 2. "Mt. Tom, Holyoke, Mass."

Mass.— Holyoke.

103. Cornicularia tricornis Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 43, pl. 11, fig. 8. "Mt. Washington, N. H."

N. H.— Mt. Washington.

104. Lophomma cristata (Blackwall) Menge.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 44, pl. 10, fig. 1. *Walckenaëria cristata* Blackwall, Lond. Edinb. phil. mag., 1833, (3), vol. 3, p. 107. "under stones in the township of Cheetham, near Manchester."

Mass.— Cambridge, Brookline.

ARGIOPIDAE.

LINYPHIINAE. ERIGONEAE.

105. Lophomma elongata Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 44, pl. 10, fig. 2. "Salem, near floating bridge; Boston, swamp at Clarendon Hills; and Mt. Tom, Mass."

Mass.— Brookline, Salem, Clarendon Hills, Mt. Tom.

106. Gonatium rubens (Blackwall) Simon.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 60, pl. 23, fig. 6. *Neriene rubens* Blackwall, Lond. Edinb. phil. mag., 1833, (3), vol. 3, p. 189. "among heath, in Trafford Park, near Manchester." Spiders of Great Britain and Ireland, 1864, pt. 2, p. 270, pl. 18, fig. 184.

N. H.— Jackson, Lake Winnepesaukee.
Mass.— Beverly, Salem, Lexington, Brookline, Sharon, Forest Hills, Clarendon Hills.
Conn.— Meriden.

107. Exechophysis palustris Banks.

Banks, Proc. ent. soc. Wash., 1905, vol. 7, p. 97. "Ellis Hollow Swamp, and Fall Creek, Ithaca, N. Y."

N. H.— Lake Winnepesaukee.

108. Hypomma trilobata (Banks) Crosby.

Dicyphus trilobatus Banks, Can. ent., 1896, vol. 28, p. 64. "Ithaca, N. Y."

N. H.— Franconia.
Mass.— Clarendon Hills.

ARGIOPIDAE.

LINYPHIINAE. ERIGONEAE.

109. Dismodicus alpinus Banks.

Banks, Can. ent., 1896, vol. 28, p. 63. "Mt. Washington."

N. H.— Mt. Washington.

110. Lophocarenum castaneum Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 45, pl. 12, fig. 1. "Beverly, Swampscott, and Milton, Mass."

Mass.— Salem, Swampscott, Brookline, Milton.

111. Lophocarenum crenatum Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 51, pl. 14, fig. 7. "Beverly, Mass., ...New Haven, Conn."

Mass.— Beverly.
Conn.— New Haven.

112. Lophocarenum decem-oculatum Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 46, pl. 12, fig. 4. "Mt. Washington."

N. H.— Mt. Washington, Crawford's Notch.
Vt.— Essex.

113. Lophocarenum depressum Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 50, pl. 14, fig. 6. "Mt. Washington, N. H."

N. H.— Mt. Washington.

ARGIOPIDAE.

LINYPHIINAE. ERIGONEAE.

114. Lophocarenum erigonoides Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 50, pl. 14, fig. 3. "Beverly, Mass."

N. H.— Crawford's Notch.
Mass.— Beverly.

115. Lophocarenum florens (Cambridge) Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 46, pl. 12, fig. 3. *Erigone florens* Cambridge, Proc. zool. soc. Lond., 1875, p. 403, pl. 46, fig. 10. "Ipswich, near Boston, Massachusetts, U. S. A."

N. H.— Franconia.
Mass.— Ipswich, Beverly, Swampscott, Cambridge, Mt. Tom.
Conn.—New Haven.

116. Lophocarenum latum Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 50, pl. 14, fig. 4.[1] "Watertown, Mass."

Mass.— Boston, Watertown, Sharon.
Conn.— New Haven.

117. Lophocarenum longitarsum Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 48, pl. 13, fig. 4. "White Mountains, near Mt. Washington."

N. H.— White Mountains.

[1] On plate Lophocarenum breve.

ARGIOPIDAE.

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118. Lophocarenum longitubum Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 49, pl. 13, fig. 6. "east side of Mt. Washington."

N. H.— Mt. Washington, Lake Winnepesaukee.
Mass.— Brookline.

119. Lophocarenum montanum Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 45, pl. 12, fig. 2. "Mt. Washington, N. H."

N. H.— Mt. Washington, Crawford's Notch.

120. Lophocarenum montiferum Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 47, pl. 13, fig. 2. "Brookline, Mass.; and Salem, Mass."

Mass.— Lynn (marshes), Salem, Brookline.

121. Lophocarenum quadricristatum Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 48, pl. 13, fig. 3. "Mt. Washington, N. H."

N. H.— Mt. Washington.

122. Lophocarenum pallidum Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 48, pl. 13, fig. 5. "White Mountains, near Mt. Washington."

N. H.— White Mountains.

123. Lophocarenum rostratum Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 49, pl. 14, fig. 1. "New Haven, Conn."

Mass.— Boston Common, Brookline.
Conn.— New Haven.

124. Lophocarenum scopuliferum Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 49, pl. 14, fig. 2. "Cambridge, Waltham and Roxbury, Mass."

Mass.— Watertown, Clarendon Hills, Cambridge.

125. Lophocarenum simplex Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 50, pl. 14, fig. 5. "near floating bridge, Salem, Mass."

N. H.— Lake Winnepesaukee.
Mass.— Salem.

126. Lophocarenum spiniferum (Cambridge) Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 47, pl. 13, fig. 1. *Erigone spinifera* Cambridge, Proc. zool. soc. London, 1874, p. 432, pl. 55, fig. 3. "Milton, Mass."

Mass.— Beverly, Salem, Cambridge, Boston Common, Forest Hills, Milton.

127. Lophocarenum vernale Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 51, pl. 14, fig. 8. "Pine Rock, New Haven, Conn."

N. H.— Lake Winnepesaukee.
Conn.— New Haven.

ARGIOPIDAE.

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128. Tmeticus bidentatus Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 56, pl. 17, fig. 2. "Mt. Washington, N. H."

N. H.— Mt. Washington.

129. Tmeticus bostoniensis Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 56, pl. 17, fig. 1. "Boston."

Mass.— Boston, Brookline, Clarendon Hills.

130. Tmeticus brunneus Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 58, pl. 17, fig. 7. "Mt. Washington."

N. H.— Mt. Washington.

131. Tmeticus concavus Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 57, pl. 17, fig. 3. "Clarendon Hills, near Boston,....Pine Swamp, New Haven."

Mass.— Clarendon Hills.
Conn.— New Haven.

132. Tmeticus contortus Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 54, pl. 15, fig. 5. "Cambridge and Waltham, Mass."

Mass.— Waltham, Cambridge, Medford, Boston Common.

ARGIOPIDAE.

LINYPHIINAE. ERIGONEAE.

133. TMETICUS DEBILIS Banks.

Banks, Proc. acad. nat. sci. Phil., 1892, p. 40, pl. 4, fig. 20. "Inlet Marsh, Primrose Cliff, Butternut Creek." [UPPER CAYUGA LAKE BASIN.]

MASS.— Carlisle Pines, Brookline, Clarendon Hills.

134. TMETICUS FLAVEOLUS Banks.

Banks, Proc. acad. nat. sci. Phil., 1892, p. 39, pl. 4. fig. 15. 'South Hill; Fall Creek." [UPPER CAYUGA LAKE BASIN.]

N. H.— Hanover.

135. TMETICUS LONGISETOSUS Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 54, pl. 16, fig. 1. "NEW HAVEN, CONNECTICUT."

CONN.— New Haven.

136. TMETICUS MAXIMUS Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 55, pl. 16, fig. 5. "MT. WASHINGTON, NEW HAMPSHIRE."

N. H.— Mt. Washington.

137. TMETICUS MICROTARSUS Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 57, pl. 17, fig. 4. "MT. WASHINGTON, N. H."

N. H.— Mt. Washington.

ARGIOPIDAE.

LINYPHIINAE. ERIGONEAE.

138. Tmeticus montanus Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 55, pl. 16, fig. 3. "Mt. Washington, New Hampshire, from Hermit Lake to the highest trees."

N. H.— Mt. Washington, Crawford's Notch.

139. Tmeticus pallidus Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 55, pl. 16, fig. 4. "New Haven, Conn."

Conn.— New Haven.

140. Tmeticus pertinens (Cambridge) Emerton.

Emerton, Trans. Conn. Acad., 1882, vol. 6, p. 54, pl. 16, fig. 2. *Erigone pertinens* Cambridge, Proc. zool. soc. Lond., 1875, p. 399, pl. 46, fig. 6. "Peak's Island, Boston, Massachusetts, [Portland, Maine], U. S. A."

Me.— Portland.
Mass.— Boston.

141. Tmeticus plumosus Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 53, pl. 15, fig. 3. "Montreal, Canada; Mt. Washington, N. H.; and Beverly, Mass."

N. H.— Mt. Washington.
Mass.— Boston Common, Beverly.

142. Tmeticus probatus (Cambridge) Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 52, pl. 15, fig. 1. *Erigone probatus* Cambridge, Proc. zool. soc. Lond., 1874, p. 431, pl. 55, fig. 2. "Oregon Territory."

N. H.— Durham.
Mass.— Ipswich, Carlisle Pines, Salem, Medford, Boston, Brookline, Blue Hill, Clarendon Hills, Sharon.
Conn.— New Haven.

143. Tmeticus terrestris Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 57, pl. 17, fig. 6. "Mt. Tom, Holyoke, Mass., and Salem, Mass."

N. H.— Lake Winnepesaukee.
Mass.— Salem, Brookline, Boston, Clarendon Hills, Blue Hill, Lexington, Mt. Tom.

144. Tmeticus tibialis Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 56, pl. 16, fig. 6. "Upper part of Mt. Washington."

N. H.— Mt. Washington.

145. Tmeticus tridentatus Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 53, pl. 15, fig. 2. "Providence, R. I., and New Haven, Conn."

Mass.— Boston, Franklin Park, Blue Hill.
R. I.— Providence.
Conn.— New Haven.

146. Tmeticus trilobatus Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 53, pl. 15, fig. 4. "near Fresh Pond, Cambridge, Mass., ...New Haven, Conn."

N. H.— Lake Winnepesaukee.
MASS.— Boston Common, Franklin Park, Brookline, Cambridge.
CONN.— New Haven.

147. TMETICUS TRUNCATUS Emerton.
Emerton, Trans. Conn. acad., 1882, vol. 6, p. 57, pl. 17, fig. 5. MT. WASHINGTON."

N. H.— Mt. Washington, Crawford's Notch.
MASS.— Boston Common, Carlisle Pines, Northfield.

148. ERIGONE AUTUMNALIS Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 58, pl. 17, fig. 8. "BOSTON, MASS., AND NEW HAVEN, CONN."

N. H.— Dublin.
MASS.— Boston Common.
CONN.— New Haven.

149. ERIGONE DENTIGERA Cambridge.

Cambridge, Proc. zool. soc. Lond., 1874, p. 429. "BEVERLY, U. S. A."
Erigone longipalpis? Emerton, Trans. Conn. acad., 1882, vol. 6, p. 59, pl. 17, figs. 9, 10. (ad part.)

N. H.— Shelburne.
MASS.— Ipswich, Boston, Brookline, Cambridge.
CONN.— New Haven.

150. ERIGONE LONGIPALPIS (Sundevall) Menge.
Linyphia longipalpis Sundevall, Kongl. Vet. akad., handl. Stockholm, 1830, vol. 50, p. 212. "SCANIA, BLEKINGIA."

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Neriëne longipalpis Blackwall, Spiders of Great Britain and Ireland, 1864, pt. 2, p. 274, pl. 19, fig. 188.

Erigone atra (Westr.) Cambridge, Proc. zool. soc. Lond., 1874, p. 429.

Erigone longipalpis? Emerton, Trans. Conn. acad., 1882, vol. 6, p. 59, pl. 17, figs. 9, 10. (ad part.)

ME.— Portland.
N. H.— Franconia.
MASS.— Boston, Cambridge.
CONN.— New Haven.

LINYPHIEAE.

151. LINYPHIA CLATHRATA Sundevall.

Sundevall, Kongl. vet. akad. handl. Stockholm, 1830, vol. 50, p. 218. "GÖTHEBORG." [SWEDEN.] Emerton, Trans. Conn. acad., 1882, vol. 6, p. 62, pl. 18, fig. 3.

Linyphia? autumnalis Hentz, Bost. journ. nat. hist., 1848, vol. 6, p. 30, pl. 4, fig. 9; ed. Burgess, p. 135, pl. 15, fig. 9, pl. 21, fig. 15.

MASS.— Salem, Ipswich, Swampscott, Allston, West Roxbury, Sharon.

152. LINYPHIA COMMUNIS Hentz.

Hentz, Bost. journ. nat. hist., 1848, vol. 6, p. 28, pl. 4, fig. 4; ed. Burgess, p. 132, pl. 15, fig. 4, pl. 18, fig. 104, pl. 19, fig. 118, pl. 21, fig. 9. "UNITED STATES, THOUGH SOMEWHAT RARE IN THE NORTH." Emerton, Trans. Conn. acad., 1882, vol. 6, p. 62, pl. 18, fig. 2.

ME. to CONN.

ARGIOPIDAE.

LINYPHIINAE. LINYPHIEAE.

153. Linyphia conferta Hentz.

Linyphia conferta Hentz, Bost. journ. nat. hist., 1848, vol. 6, p. 30, pl. 4, fig. 7; ed. Burgess, p. 135, pl. 15, fig. 7, pl. 19, fig. 115. "Alabama." Banks, Proc. acad. nat. sci. Phil., 1892, p. 42, pl. 2, fig. 38.

Me.—Portland.
Mass.—Blue Hills, Milton; Clarendon Hills.
Conn.—New Haven.

154. Linyphia mandibulata Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 64, pl. 19, fig. 2. "Peak's Island, near Portland, Me.: Mt. Washington, N. H.; Quincy, Mass.; and Albany, N. Y."

Me. to Conn.

155. Linyphia marginata C. Koch.

C. Koch Herrich-Schaeffer's Deutschl. insect., 1834, p. 127, figs. 21, 22. "gern Heidekraut oder Heidelbeerstauden in grossern Waldungen und kommt bei Regensburg." [Bavaria.] Emerton, Trans. Conn. acad., 1882, vol. 6, p. 61, pl. 18, fig. 1.

Linyphia scripta Hentz, Bost. journ. nat. hist., 1848, vol. 6, p. 29, pl. 4, fig. 6; ed. Burgess, p. 134, pl. 15, fig. 6.

Me. to Conn.

156. Linyphia phrygiana C. Koch.

C. Koch, Die Arachniden, 1836, vol. 3, p. 83, pl. 100, figs. 229, 230. "Bei Regensburg." [Bavaria.] Emerton, Trans. Conn. acad., 1882, vol. 6, p. 63, pl. 19, fig. 1.

Linyphia? costata Hentz, Bost. journ. nat. hist., 1848, vol. 6, p. 31, pl. 4, fig. 11; ed. Burgess, p. 136, pl. 15, fig. 11, pl. 18, fig. 24, pl. 21, fig. 11.

Me. to Conn.

157. Linyphia variabilis Banks.

Banks, Proc. Phil. acad., 1892, p. 42, pl. 2, fig. 28. "Round marshes, Fall Creek, Six Miles Creek." [Upper Cayuga Lake Basin, N. Y.]

N. H.— Franconia.

158. Stemonyphantes bucculentus (Clerck).

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 64, pl. 20, fig. 1.

Araneus bucculentus Clerck, Svenska spindlar, 1757, p. 63, pl. 4, fig. 1. "arbore." [Sweden.]

Mass.— Salem, Brookline.

R. I.— Providence.

Conn.— New Haven.

159. Diphostyla concolor (Wider) Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 66, pl. 20, fig. 3.

Linyphia concolor Wider, Reuss's Zool. misc., Arachn. mus. Senkenbergianum, 1834, vol. 1, p. 267, pl. 18, fig. 3. "Gegend von Beerfelden." [Hesse, Germany.]

Me.— Portland.

Mass.— Salem, Danvers, Gloucester, Medford, Cambridge, Brookline, Woods Hole.

Conn.— New Haven.

160. Diplostyla nigrina (Westring) Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 65, pl. 20, fig. 2.

Linyphia nigrina Westring, Kongl. vet. och villerhets samhälles handl., Götheborg, 1851, vol. 2, p. 38.

ARGIOPIDAE.

LINYPHIINAE. LINYPHIEAE.

ME.— Portland.
N. H.— Mt. Washington, Franconia.
MASS.— Salem, Boston, Brookline, Waltham, Clarendon Hills, Quincy.
R. I.— Providence.

161. DRAPETISCA SOCIALIS (Sundevall) Menge.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 67, pl. 21, fig. 2.
Linyphia socialis Sundevall, Kongl. vet. akad. handl. Stockholm, 1833, vol. 53, p. 260. "IN SILVIS SCANIAE."

ME.— Eastport, Brunswick.
N. H.— Mt. Washington, Franconia, Lake Winnepesaukee.
MASS.— Danvers, Brookline.
CONN.— Simsbury.

162. HELOPHORA INSIGNIS (Blackwall) Menge.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 67, pl. 21, fig. 3.
Linyphia insignis Blackwall, Trans. Linn. soc. Lond., 1841, vol. 18, p. 662. "TRAFFORD, NEAR MANCHESTER."

N. H.— Franconia, Lake Winnepesaukee.
MASS.— Beverly, Salem, Clarendon Hills, Northfield.

163. BATHYPHANTES ALPINA Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 70, pl. 22, fig. 4. "MT. WASHINGTON, N. H., FROM HERMIT LAKE UP TO THE HIGHEST TREES."

ME.— Bayville, Moosehead Lake.
N. H.— Mt. Washington, Franconia.

164. Bathyphantes angulata Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 71, pl. 22, fig. 5. "Mt. Carmel, Hamden, Conn., and Mill Rock, New Haven."

Mass.— Brookline.
Conn.— New Haven.

165. Bathyphantes bihamata Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 72, pl. 23, fig. 4. "Lower part of Mt. Washington, N. H."

N. H.— Mt. Washington.

166. Bathyphantes complicata Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 72, pl. 24, fig. 8. "Half way up Mt. Washington, N. H."

N. H.— Mt. Washington.

167. Bathyphantes formica Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 71, pl. 22, fig. 7. "New Haven, Conn."

Mass.— Ipswich.
Conn.— New Haven.

168. Bathyphantes micaria Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 71, pl. 22, fig. 6. "New Haven, Conn."

Me.— Portland.
N. H.— Lake Winnepesaukee.
Mass.— Waverly, Cambridge.
Conn.— New Haven.

ARGIOPIDAE.

LINYPHIINAE. LINYPHIEAE.

169. Bathyphantes minuta (Blackwall) Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 68, pl. 21, fig. 4. *Linyphia minuta* Blackwall, Lond. Edinb. phil. mag., 1833, (3), vol. 3, p. 191. "in little frequented rooms in Crumpsall Hall."

N. H.— Franconia, Lake Winnepesaukee.
Mass.— Ipswich, Beverly, Salem, Cambridge, Boston, Sharon.

170. Bathyphantes nebulosa (Sundevall) Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 69, pl. 22, fig. 1. *Linyphia nebulosa* Sundevall, Kongl. vet. akad. handl. Stockholm, 1830, vol. 50, p. 218. "in Scania."

N. H.— Franconia.
Mass.— Danvers, Salem, Cambridge, Waltham, Sharon.
Conn.— Simsbury.

171. Bathyphantes subalpina Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 70, pl. 22, fig. 3. "Mt. Adams, Mt. Washington, N. H."

N. H.— Mt. Adams, Mt. Washington.
Mass.— Brookline.

172. Bathyphantes zebra Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 69, pl. 22, fig. 2. "Eastern Massachusetts and New Haven, Conn."

Me.— Portland.
N. H.— Franconia.
Mass.— Cambridge, Brookline, Carlisle Pines, Northfield, Williamstown.
Conn.— New Haven.

ARGIOPIDAE.

LINYPHIINAE. LINYPHIEAE.

173. Bolyphantes drassoides Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 72, pl. 23, fig. 5. "Mt. Carmel, Hamden, Conn."

Conn.— Mt. Carmel.

174. Tapinopa bilineata Banks.

Banks, Journ. N. Y. ent. soc., 1893, vol. 1, p. 128. "Sea Cliff, N. Y., and Washington, D. C."

Mass.— Sudbury, Clarendon Hills, Wood's Hole.

175. Micronета cornupalpis (Cambridge) Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 74, pl. 23, fig. 2. *Erigone cornupalpis* Cambridge, Proc. zool. soc. Lond., 1875, p. 401, pl. 46, fig. 8. "Brookline, Massachusetts, U. S. A."

Me.— Portland.

Mass.— Lynn (marshes), Waltham, Brookline, Milton, Clarendon Hills.

Conn.— New Haven.

176. Micronета crassimanus Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 75, pl. 24, fig. 3. "Hermit Lake, Mt. Washington, N. H."

N. H.— Mt. Washington.

177. Micronета discolor Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 75, pl. 24, fig. 1. "Waltham, Mass., and New Haven, Conn."

ARGIOPIDAE.

LINYPHIINAE. LINYPHIEAE.

N. H.— Franconia, Jackson, Lake Winnepesaukee.
Mass.— Waltham, Brookline, Carlisle pines, Williamstown, Northfield.
Conn.— New Haven.

178. Micronetta furcata Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 76, pl. 24, fig. 5. "White Mountains, N. H., on the ridge between Mt. Washington and Mt. Clay."

N. H.—White Mountains.

179. Micronetta latidens Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 76, pl. 24, fig. 4. "New Haven, Conn."

N. H.— Lake Winnepesaukee.
Conn.— New Haven.

180. Micronetta longibulbus Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 76, pl. 24, fig. 6. "Milton, Mass."

Mass.— Milton, Clarendon Hills, Northfield.

181. Micronetta olivacea Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 77, pl. 24, fig. 7. "the upper part of Mt. Washington, N. H., between it and Mt. Clay."

N. H.— Franconia, Mt. Washington.

ARGIOPIDAE.

LINYPHIINAE. LINYPHIEAE.

182. MICRONETA PERSOLUTA (Cambridge) Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 74, pl. 23, fig. 3.
Erigone persoluta Cambridge, Proc. zool. soc. Lond., 1875, p. 400, pl. 46, fig. 7. "SWAMPSCOTT, NEAR BOSTON, U. S. A."

N. H.—Mt. Washington.
MASS.— Beverly, Lynn, Saugus, Brookline.

183. MICRONETA QUINQUEDENTATA Emerton.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 75, pl. 24, fig. 2. "MONTREAL, CANADA; MT. WASHINGTON, N. H.; BEVERLY, SWAMPSCOTT AND QUINCY, MASS."

N. H.— Mt. Washington, Franconia.
MASS.— Beverly, Swampscott, Brookline, Clarendon Hills, Quincy, Sharon.

184. MICRONETA VIARIA (Blackwall) Simon.

Emerton, Trans. Conn. acad., 1882, vol. 6, p. 73, pl. 23, fig. 1.
Neriene viaria Blackwall, Trans. Linn. soc. Lond., 1841, vol. 18, p. 645. "OAKLAND, NEAR LLANRWST." [DENBIGHSHIRE, WALES.]
Neriene viaria Blackwall, Spiders of Great Britain and Ireland, 1864, pt. 2, p. 255; pl. 18, fig. 171.

N. H.— Mt. Washington, Jackson, Dublin, Lake Winnepesaukee.
MASS.— Waltham, Cambridge, Brookline, Clarendon Hills, Woods Hole, Northfield.
CONN— New Haven.

ARGIOPIDAE. TETRAGNATHINAE.

185. PACHYGNATHA AUTUMNALIS Keyserling.

Keys. Verh. zool.-bot. ges. Wien., 1884, vol. 33, p. 660, pl. 21, fig. 10. "HARRISBURG IN PENNSYLVANIEN." Emerton, Trans. Conn. acad., 1884, vol. 6, p. 337, pl. 34, fig. 22, pl. 40, fig. 9.

Mass.— Lexington, Cambridge, Beverly, Clarendon Hills.
Conn.— New Haven.

186. Pachygnatha brevis Keyserling.

Keys. Verh. zool. bot. ges. Wien, 1884, vol. 33, p. 658. Emerton, Trans. Conn. acad., 1884, vol. 6, p. 336, pl. 34, fig. 21, pl. 40, figs. 8, 10.

Pachygnatha tristriata Keys. (nec C. Koch.) Verh. zool.-bot. Ges. Wien, 1882, vol. 32, p. 209. "Boston."

N. H.— Franconia.
Mass.— Swampscott, Lexington, Boston, Clarendon Hills.
Conn.— New Haven.

187. Pachygnatha tristriata C. Koch.

C. Koch, Die arachniden, 1845, vol. 12, p.145, pl. 430, fig. 1066. "Nordamerika, Pennsylvanien." Keyserling, Verh. zool.-bot. ges. Wien, 1884, vol. 33, p. 656, pl. 21, fig. 8. McCook, American spiders, 1893, [1894!] vol. 3, p. 270, pl. 26, fig. 6, pl. 28, fig. 1.

Me.— Orono.
Mass.— Gloucester, Salem, Cambridge.

188. Tetragnatha caudata Emerton.

Emerton, Trans. Conn. acad., 1884, vol. 6, p. 335, pl. 39, figs. 16, 22. "Malden and Dedham, Mass."

Me.— Dexter.
Mass.— Malden, Dedham.

189. Tetragnatha extensa (Linné) Walckenaer.

Emerton, Trans. Conn. acad., 1884, vol. 6, p. 333, pl. 39, figs. 9, 10.

Aranea extensa Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 621. "ULIGINOSIS."

ME. TO CONN.

190. TETRAGNATHA GRALLATOR Hentz.

Hentz, Bost. journ. nat. hist., 1848, vol. 6, p. 26, pl. 4, figs. 1, 2; ed. Burgess, p. 131, pl. 15, figs. 1, 2. "PENNSYLVANIA, NORTH AND SOUTH CAROLINA, ALABAMA, ETC." Emerton, Trans. Conn. acad., 1884, vol. 6, p. 334, pl. 39, figs. 1, 2, 3, 4, 5, 6.

Tetragnatha elongata Walckenaer. McCook, American spiders, 1893, [1894!], vol. 3, p. 260, pl. 25, figs. 1, 2.

ME.— Portland.
N. H.— Lake Winnepesaukee, Franconia.
MASS.— Beverly, Peabody, Sharon, Mt. Tom, Warwick.

191. TETRAGNATHA LABORIOSA Hentz.

Hentz, Bost. journ. nat. hist., 1848, vol. 6, p. 27, pl. 4, fig. 3; ed. Burgess, p. 131, pl. 15, fig. 3. "UNITED STATES." Emerton, Trans. Conn. acad., 1884, vol. 6, p. 334, pl. 39, figs. 7, 8, 11, 19, pl. 40, fig. 7. McCook, American spiders, 1893, [1894!], vol. 3, p. 262, pl. 25, figs. 7, 8.

ME. TO CONN.

192. TETRAGNATHA STRAMINEA Emerton.

Emerton, Trans. Conn. acad., 1884, vol. 6, p. 335, pl. 39, figs. 15, 17, 20, 21. "EASTERN MASSACHUSETTS; NEW HAVEN, CONN."

ME.— Portland.
VT.— Stowe, Essex.
MASS.— Boston, Cambridge, Ipswich.
CONN.— New Haven.

193. Eucta vermiformis (Emerton) Marx.

Tetragnatha vermiformis Emerton, Trans. Conn. acad., 1884, vol. 6, p. 333, pl. 39, figs. 12, 13, 14. "Beverly and Middleton, Mass."

Eugnatha vermiformis (Emerton). McCook, American Spiders, 1893, [1894!], vol. 3, p. 264, pl. 25, fig. 9.

Mass.— Beverly, Cambridge, Middleton, Woods Hole.
Conn.— New Haven.

194. Meta menardi (Latreille) Simon.

Emerton, Trans. Conn. acad., 1884, vol. 6, p. 328, pl. 34, fig. 18, pl. 37, fig. 33.

Aranea menardi Latr., Hist. nat. crust. et ins., 1804, vol. 7, p. 266. "dans toutes les caves de la ville du Mans."

Me.— Monhegan.
N. H.— Franconia, Berlin Falls, Lake Winnepesaukee, Crawford's Notch.
Mass.— Boston, Milton, Sharon, Waverly, Chelmsford.

195. Argyroepeira hortorum (Hentz) Emerton.

Emerton, Trans. Conn. acad., 1884, vol. 6, p. 332, pl. 37, figs. 29, 30, 31, 32.

Epeira hortorum Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 477, pl. 31, fig. 19; ed. Burgess, p. 118, pl. 13, fig. 19, pl. 18, fig. 10. "All the United States."

Mass.— Milton.
Conn.— New Haven.

196. Argiope aurantia Lucas.

Lucas, Ann. ent. soc. France, 1833, vol. 2, p. 87.——

Epeira riparia Hentz. Bost. journ. nat. hist., 1847, vol. 5, p. 468, pl. 30, fig. 5; ed. Burgess, p. 106, pl. 12, fig. 5, pl. 19, fig. 121, pl. 21, fig. 1.

Argiope riparia (Hentz). Emerton, Trans. Conn. acad., 1884, vol. 6, p. 329, pl. 34, fig. 19, pl. 38, figs. 13, 14, 19.

Me. to Conn.

197. Argiope trifasciata (Forskål) Savigny.

Aranea trifasciata Forskål, Descriptiones animalium, 1775, p. 86. "Kahirae." [Cairo.]

Epeira fasciata? Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 468, pl. 30, fig. 8; ed. Burgess, p. 107, pl. 12, fig. 8, pl. 21, fig. 2.

Epeira transversa Emerton, Trans. Conn. acad., 1884, vol. 6, p. 330, pl. 34, fig. 20, pl. 38, figs. 15, 16, 17, 18.

Me. to Conn.

198. Cyclosa conica (Pallas) Simon.

Emerton, Trans. Conn. acad., 1884, vol. 6, p. 321, pl. 34, fig. 3, pl. 38, fig. 11.

Aranea conica Pallas, Spicileg. zoolog., 1772, vol. 1, p. 48, pl. 1, fig. 16. "in nemorosis Germaniae."

Epeira caudata Hentz, Bost. journ. nat. hist., 1848, vol. 6, p. 23, pl. 3, fig. 14; ed. Burgess, p. 126, pl. 14, fig. 14, pl. 18, fig. 54, pl. 19, fig. 116, pl. 21, fig. 7.

Me.— Eastport, Portland, Monhegan.
N. H.— Mt. Washington, Franconia, Lake Winnepesaukee.
Vt.— Stowe.
Mass.— Beverly, Sharon.
Conn.— New Haven.

199. Mangora gibberosa (Hentz) Simon.

Epeira gibberosa Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 477, pl. 31, fig. 20; ed. Burgess, p. 119, pl. 13, fig. 20, pl. 18, fig. 11, pl. 21, fig. 6. "Alabama." Emerton, Trans. Conn. acad., 1884, vol. 6, p. 317, pl. 34, fig. 1, pl. 36, fig. 17.

Me. to Conn.

200. Mangora placida (Hentz) Simon.

Epeira placida Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 475, pl. 31, fig. 12; ed. Burgess, p. 115, pl. 13, fig. 12, pl. 18, fig. 30. "Alabama." Emerton, Trans. Conn. acad., 1884, vol. 6, p. 316, pl. 34, fig. 2, pl. 36, figs. 10, 13.

Me. to Conn.

201. Larinia borealis Banks.

Banks, Ent. news, 1894, vol. 5, p. 8. "Olympia, Wis., and Franconia, N. H." McCook, American Spiders, 1893, [1894!], vol. 3, p. 247, pl. 22, figs. 1, 2.

N. H.— Franconia.

202. Acacesia foliata (Hentz) Simon.

Epeira foliata Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 475, pl. 31, fig. 14; ed. Burgess, p. 116, pl. 13, fig. 14, pl. 18, fig. 50. "Alabama." Emerton, Trans. Conn. acad., 1884, vol. 6, p. 318, pl. 37, figs. 6, 7, 8, 9, 10.

Conn.— New Haven.

203. Eustalia prompta (Hentz) Banks.

Epeira prompta Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 472, pl. 31, fig. 4; ed. Burgess, p. 112, pl. 13, fig. 4, pl. 18, fig. 47. "Massachusetts. Alabama."

Epeira parvula Keyserling, Sitzung. nat. ges. Isis Dresden, 1863, [1864!], p. 131, pl. 6, figs. 9, 10. Emerton, Trans. Conn. acad., 1884, vol. 6, p. 317, pl. 34, fig. 12, pl. 37, figs. 1, 2.

Me.— Rangely, Portland.
N. H.— White Mts., Franconia.
Mass.— Ipswich, Milton, Woods Hole.
Conn.— New Haven.

204. Araneus stellatus (Walckenaer) Simon.

Plectana stellata Walckenaer, Ins. aptères, 1837, vol. 2, p. 171. "Caroline."
Epeira stellata? Bosc. Hentz, Bost. journ. nat. hist., 1848, vol. 6, p. 22, pl. 3, fig. 12; ed. Burgess, p. 125, pl. 14, fig. 12, pl. 18, fig. 89.
Epeira stellata Hentz. Emerton, Trans. Conn. acad., 1884, vol. 6, p. 319, pl. 34, fig. 17, pl. 37, figs. 3, 4, 5.

Me. to Conn.

205. Araneus angulatus Linne.

Aranea angulata Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 620. "Arboribus."
Epeira angulata (Clerck). Emerton, Trans. Conn. acad., 1884, vol. 6, p. 299, pl. 33, fig. 12, pl. 35, fig. 2.

Me.— Portland, Mt. Katahdin.
Mass.— Beverly, Saugus, Mt. Tom.

206. Araneus cavaticus (Keyserling) Simon.

Epeira cavatica Keys., Verh. zool.-bot. ges., Wien, 1882, vol. 31, p. 269, pl. 11, fig. 1. "aus den Höhlen in Kentucky."
Epeira cinerea Emerton, Trans. Conn. acad., 1884, vol. 6, p. 302, pl. 33, fig. 10, pl. 35, figs. 7, 8.

ME.— Portland, Upton, Bethel, Bayville, Greenville, Norway.
N. H.— Franconia, Milford, Lake Winnepesaukee.
MASS.— Ipswich, Salem.

207. ARANEUS CORTICARIUS (Emerton) Comstock.

Epeira corticaria Emerton, Trans. Conn. acad., 1884, vol. 6, p. 300, pl. 33, fig. 14, pl. 35, fig. 9. "BEVERLY, MASS., AND ADIRONDACK MTS., N. Y."

ME.—Moosehead Lake, Portland.
N. H.— Franconia.
MASS.— Beverly, Milton.

208. ARANEUS INSULARIS (Hentz) Simon.

Epeira insularis Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 470, pl. 30, fig. 10; ed. Burgess, p. 109, pl. 12, fig. 10, pl. 21, fig. 3. "FOUND ON AN ISLAND OF THE TENNESSEE." Emerton, Trans. Conn. acad., 1884, vol. 6, p. 309, pl. 33, fig. 1, pl. 35, fig. 18.

N. H— Franconia, Lake Winnepesaukee.
MASS— Beverly, Cambridge, Readville, Sharon, Sherborn.
CONN.—New Haven.

209. ARANEUS MARMOREUS Fabricius.

Aranea marmorea Fabr., Ent. syst., 1793, vol. 2, p. 415. "IN EUROPA NIDUM IN FRUTICIBUS & GRAMINIBUS STRUENS."
Epeira marmorea (Clerck). Emerton, Trans. Conn. acad., 1884, vol. 6, p. 307, pl. 33, fig. 2, pl. 35, fig. 17.

ME.— Eastport, Moosehead Lake, Portland, Gilead.
N. H.—Jaffrey, Mt. Washington.
MASS.— Beverly, Woods Hole, Hinsdale, Williamstown.

210. Araneus nordmanni (Thorell) Comstock.

Epeira nordmanni Thorell, Remarks on synonyms of European spiders 1870, p. 4. "Upland, ... Finnland." Emerton, Trans. Conn. acad., 1884, vol. 6, p. 301, pl. 33, fig. 6.

Me.— Eastport, Mt. Katahdin, Moosehead Lake, Portland.
N. H— Franconia, Mt. Washington, Jaffrey.
Mass.— Mt. Tom, Hunting.
Conn.— Meriden, New Haven.

211. Araneus patagiatus Clerck.

Clerck, Svenska spindlar, 1757, p. 38, pl. 1, fig. 10. —— *Epeira patagiata* (Clerck). Emerton, Trans. Conn. acad., 1884, vol. 6, p. 305, pl. 33, fig. 3, pl. 35, fig. 11.

Me.— Eastport, Moosehead Lake, Portland.
N. H.— White Mountains, Franconia, Lake Winnepesaukee.
Vt.— Lake Champlain.
Mass.— Newton, Cambridge, Ipswich.

212. Araneus sclopetarius Clerck.

Clerck, Svenska spindlar, 1757, p. 43, pl. 2, fig. 3. —— *Epeira sclopetaria* (Clerck). Emerton, Trans. Conn. acad., 1884, vol. 6, p. 303, pl. 33, fig. 4, pl. 35, fig. 10.

Me. to Conn.

213. Araneus silvaticus (Emerton) Comstock.

Epeira silvatica Emerton, Trans. Conn. acad., 1884, vol. 6, p. 300, pl. 33, fig. 13, pl. 35, figs. 1, 4, 5, 6. "Beverly, Mass., Mt. Jefferson, N. H., Chateaugay Lake, Adirondack Mts., N. Y., Ithaca, N. Y."

N. H.— Mt. Jefferson, Franconia, Compton.
Vt.— Bredport.
Mass.— Woburn, Beverly, Sharon, Warwick.

214. Araneus solitarius (Emerton) Comstock.

Epeira solitaria Emerton, Trans. Conn. acad., 1884, vol. 6, p. 299, pl. 33, fig. 11, pl. 35, fig. 3. "Peabody, Mass."

N. H.— Franconia.
Mass.— Sharon, Peabody.

215. Araneus strix (Hentz) Simon.

Epeira strix Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 473, pl. 31, fig. 5; ed. Burgess, p. 112, pl. 13, fig. 5 "Pennsylvania, Alabama." Emerton, Trans. Conn. acad., 1884, vol. 6, p. 305, pl. 33, fig. 5, pl. 35, fig. 12.

Me to Conn.

216. Araneus trifolium (Hentz) Simon.

Epeira trifolium Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 471, pl. 31, fig. 1; ed. Burgess, p. 110, pl. 13, fig. 1. "Maine." Emerton, Trans. Conn. acad., 1884, vol. 6, p. 306, pl. 33, fig. 8, pl. 35, figs. 13, 14, 21, 22.

Epeira obesa Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 471, pl. 30, fig. 11; ed. Burgess, p. 110, pl. 12, fig. 11, pl. 18, fig. 46.

Epeira aureola Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 471, pl. 31, fig. 2; ed. Burgess, p. 111, pl. 13, fig. 2.

Me. to Conn.

217. Araneus alboventris (Emerton).

Epeira alboventris Emerton, Trans. Conn. acad., 1884, vol. 6, p. 314, pl. 34, fig. 5, pl. 36, fig. 12. "Peabody, Mass., near Shiprock, one from Maine."

Me.— Portland, Rangely.
Mass.— Peabody, Sharon.
Conn.— Pine Rock, New Haven.

218. Araneus displicatus (Hentz) Simon.

Epeira displicata Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 476, pl. 31, fig. 17; ed. Burgess, p. 117, pl. 13, fig. 17, pl. 18, fig. 51. "Alabama." Emerton, Trans. Conn. acad., 1884, vol. 6, p. 313, pl. 34, fig. 4, pl. 36, fig. 20.

Me. to Conn.

219. Araneus domiciliorum (Hentz) Simon.

Epeira domiciliorum Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 469, pl. 30, fig. 7; ed. Burgess, p. 108, pl. 12, fig. 7, pl. 19, fig. 123. "Alabama." Emerton, Trans. Conn. acad., 1884, vol. 6, p. 312, pl. 33, fig. 17, pl. 36, figs. 1, 4.

Me. to Conn.

220. Araneus globosus (Keyserling) Simon.

Epeira globosa Keys. Verh. zool. bot. Ges. Wien, 1865, vol. 15, p. 820, pl. 18, figs. 19, 20, 21. "N. Granada.... Baltimore."

Epeira triaranea McCook, Emerton, Trans. Conn. acad., 1884, vol. 6, p. 315, pl. 34, fig. 9, pl. 36, figs. 6, 7.

Epeira pegnia Walck. McCook, American spiders, 1893, [1894!] vol. 3, p. 170, pl. 7, figs. 8, 9.

Mass.— Ipswich, Salem, Milton, Woods Hole.
Conn.— New Haven, Simsbury.

221. Araneus juniperi (Emerton).

Epeira juniperi Emerton, Trans. Conn. acad., 1884, vol. 6, p. 313, pl. 34, fig. 6, pl. 36, figs. 14, 15, 16. "Peak's Island, near Portland, Me., ... Wood's Hole, Mass."

Me.— Portland.
N. H.— Milford.
Mass.— Woods Hole.
Conn.— New Haven.

222. Araneus labyrintheus (Hentz) Simon.

Epeira labyrinthea Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 471, pl. 31, fig. 3; ed. Burgess, p. 111, pl. 13, fig. 3, pl. 18, figs. 25, 93, pl. 19, figs. 124, 133. "North Carolina, Alabama." Emerton, Trans. Conn. acad., 1884, vol. 6, p. 314, pl. 34, fig. 8, pl. 36, fig. 11.

Mass.— Lynn, Brookline, Cambridge, Salem.
Conn.— New Haven.

223. Araneus pratensis (Hentz) Simon.

Epeira pratensis Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 475, pl. 31, fig. 11; ed. Burgess, p. 115, pl. 13, fig. 11. "Massachusetts." Emerton, Trans. Conn. acad., 1884, vol. 6, p. 310, pl. 33, fig. 15, pl. 36, fig. 9.

N. H.— Franconia.
Mass.— Lynn, Chelsea (marshes), Cape Cod.

224. Araneus thaddeus (Hentz) Simon.

Epeira thaddeus Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 473, pl. 31, fig. 6; ed. Burgess, p. 113, pl. 13, fig. 6. "Alabama." Emerton, Trans. Conn. acad., 1884, vol. 6, p. 309, pl. 33, fig. 9. McCook, American spiders, 1893, [1894!], vol. 3, p. 169, pl. 7, figs. 3, 4, 5.

N. H.— Lake Winnepesaukee.
Mass.— Brookline, Sharon.
Conn.— New Haven.

225. Araneus trivittatus (Keyserling) Comstock.

Epeira trivittata Keys., Sitz. nat. ges. Isis Dresden, 1863, [1864!], p. 95, pl. 5, figs. 6, 7, 8, 9. "N.-Amerika . . . . N. Orleans." Emerton, Trans. Conn. acad., 1884, vol. 6, p. 311, pl. 33, fig. 16, pl. 36, figs. 2, 3, 5, 8.

Me. to Conn.

226. Araneus atrica (C. Koch) Simon.

Eucharia atrica C. Koch, Die arachniden, 1845, vol. 12, p. 103, pl. 419, figs. 1030, 1031. "Deutschland und Frankreich. In heisiger Gegend selten."

Zilla atrica C. Koch. McCook, American spiders, 1893, [1894!], vol. 3, p. 238, pl. 18, figs. 7, 8. Emerton, Common spiders, 1902, p. 185, fig. 431.

Mass.— Ipswich, Beverly, Salem, Lynn, Annisquam, Woods Hole.

227. Araneus montanus (C. Koch) Simon.

Zilla montana C. Koch, Herrich-Schaeffer's, Deutschl. insect., 1834, p. 125, fig. 19. "In den Nassfelder-Alpen im Salzburgischen keine Seltenheit." Emerton, Trans. Conn. acad., 1884, vol. 6, p. 323, pl. 34, fig. 14, pl. 37, figs. 22, 23, 26, 28.

Me.— Moosehead Lake.

N. H.— White Mountains, Franconia.

228. Araneus x-notatus Clerck.

Araneus litera x-notata Clerck, Svenska spindlar, 1757, p. 46, pl. 2, fig. 5.——

Zilla x-notata (C. Koch). Emerton, Trans. Conn. acad., 1884, vol. 6, p. 324, pl. 34, fig. 13, pl. 37, figs. 24, 25, 27, pl. 40, fig. 2.

Mass.— Woods Hole.

229. Araneus carbonarius (L. Koch) Simon.

Epeira carbonaria L. Koch, Zeitschr. Ferdinandeum Innsbruck, 1869, vol. 14, p. 168. "Finsterthale." [Tyrol.] Emerton, Trans. Conn. acad., 1884, vol. 6, p. 315, pl. 33, fig. 18, pl. 36, figs. 18, 19.

N. H.— Mt. Washington.

230. Araneus infumatus (Hentz) Simon.

Epeira infumata Hentz, Bost. journ. nat. hist., 1850, vol. 6, p. 19, fig. 4; ed. Burgess, p. 122, pl. 14, fig. 4, pl. 18, fig. 52. "North Carolina; Alabama." Emerton, Trans. Conn. acad., 1884, vol. 6, p. 319, pl. 37, figs. 11, 12, 13.

Wixia ectypa (Walckenaer). McCook, American spiders, 1893, [1894!], vol. 3, p. 205, pl. 13, figs. 4, 5.

Conn.— New Haven.

231. Araneus prominens (Westring) Simon.

Epeira prominens Westring, Kongl. vet. och villerhets samhälles handl. Götheborg, 1851, vol. 2, p. 35. "Söderto i Skåne."

Cercida prominens (West.), Banks, Ent. news, 1894, vol. 5, p. 9.

N. H.— Franconia.

232. Araneus maculatus (Emerton) Simon.

Singa maculata Emerton, Trans. Conn. acad., 1884, vol. 6, p. 323, pl. 37, fig. 18. "New Haven, Conn."

N. H.— Franconia.
Mass.— Quincy.
Conn.— New Haven.

233. Araneus praticola E. Simon.

Singa pratensis Emerton, Trans. Conn. acad., 1884, vol. 6, p. 322, pl. 34, fig. 15, pl. 37, figs. 14, 15, 16, 17. "Salem and Holyoke, Mass., and New Haven, Conn."

Araneus pratensis E. Simon, Hist. nat., Avaignées, 1895, vol. 1, p. 807.

Mass.— Salem, Hyde Park, Holyoke.
Conn.— New Haven.

234. Araneus variabilis (Emerton) Simon.

Singa variabilis Emerton, Trans. Conn. acad., 1884, vol. 6, p. 322, pl. 34, fig. 16, pl. 37, figs. 19, 20, 21. "Peak's Island, Portland, Me.; Eastern Massachusetts; New Haven, Conn."

Me.— Portland, Monhegan, Moosehead Lake.
N. H.— Franconia.
Mass.— Ipswich, Blue Hill, Hyde Park, Sharon.
Conn.— New Haven.

235. Micrathena gracile (Walckenaer) Simon.

Plectana gracilis Walckenaer, Ins. aptères, 1837, vol. 2, p. 193. "Caroline, Georgie."

Epeira rugosa Hentz, Bost. journ. nat. hist., 1848, vol. 6, p. 21, pl. 3, fig. 10; ed. Burgess, p. 124, pl. 14, fig. 10, pl. 19, fig. 122.

Acrosoma rugosa (Hentz). Emerton, Trans. Conn. acad., 1884, vol. 6, p. 326, pl. 38, fig. 10.

Conn.— New Haven.

236. Micrathena reduvianum (Walckenaer) Simon.

Plectana reduviana Walckenaer, Ins. aptères, 1837, vol. 2, p. 201, "Géorgie — Marais de Papaw."

Epeira mitrata Hentz, Bost. journ. nat. hist., 1848, vol. 6, p. 22, pl. 3, fig. 11; ed. Burgess, p. 125, pl. 14, fig. 11, pl. 18, fig. 22.

Acrosoma mitrata (Hentz). Emerton, Trans. Conn. acad., 1884, vol. 6, p. 327, pl. 38, fig. 9.

Conn.— New Haven.

237. Micrathena sagittatum (Walckenaer) Simon.

Plectana sagittata Walckenaer, Ins. aptères, 1837, vol. 2, p. 174. "Géorgie. Prise dans un champ de riz près de Briar-Creek-Swamp."

ARGIOPIDAE. ARGIOPINAE.

Epeira spinea Hentz, Bost. journ. nat. hist., 1848, vol. 6, p. 21, pl. 3, fig. 9; ed. Burgess, p. 123, pl. 14, fig. 9.

Acrosoma spinea (Hentz) Emerton, Trans. Conn. acad., 1884, vol. 6, p. 326, pl. 38, figs. 5, 6, 7, 8.

Mass.— Dedham, Sharon, Woods Hole, Mt. Tom.
Conn.— New Haven.

238. Glytocranium bisaccatum (Emerton) Simon.

Cyrtarachne bisaccata Emerton, Trans. Conn. acad., 1884, vol. 6, p. 325, pl. 34, fig. 11, pl. 38, fig. 12. "New Haven, Conn."

Ordgarius bisaccatus (Emerton). McCook, American spiders, 1893, [1894!] vol. 3, p. 198, pl. 12, figs. 2, 3.

Conn.— New Haven.

239. Theridiosoma gemmosum (L. Koch).

Theridium gemmosum L. Koch, Abhandl. nat. ges. Nürnberg, 1877, vol. 7, p. 181, pl. 1, figs. 2, 6, 7, 8. [Nürnberg.]

Epeira radiosa McCook, Proc. acad. nat. sci. Phil., 1881, p. 163.

Microepeira radiosa (McCook). Emerton, Trans. Conn. acad., 1884, vol. 6, p. 320, pl. 34, fig. 7, pl. 38, figs. 1, 2, 3, 4.

Theridiosoma radiosum McCook, American spiders, 1893, [1894!] vol. 3, p. 257, pl. 27, figs. 8, 9.

N. H.— White Mountains, Franconia, Jaffrey.
Vt.— Mt. Mansfield.
Mass.— Waverly, Beverly.
Conn.— New Haven.

MIMETIDAE.

240. Ero furcata (Villers) Simon.

Aranea furcata Villers, Linne, entom. Faunae Suecicae, 1789, vol. 4, p. 129.

MIMETIDAE.

Theridion leoninum Hentz, Bost. journ. nat. hist., 1850, vol. 6, p. 276, pl. 9, fig. 12; ed. Burgess, p. 148; pl. 16, fig. 12.

Ero thoracica (Reuss). Emerton, Trans. Conn. acad., 1882, vol. 6, p. 18, pl. 3, fig. 5.

N. H.— Lake Winnepesaukee.
MASS.— Boston, Cambridge, Brookline, Clarendon Hills.
CONN.— New Haven.

241. MIMETUS INTERFECTOR Hentz.

Hentz, Bost. journ. nat. hist., 1848, vol. 6, p. 32, pl. 4, figs. 12, 13; ed. Burgess, p. 138, pl. 15, figs. 12, 13, pl. 18, fig. 33, pl. 19, fig. 127. "ALABAMA." Emerton, Trans. Conn. acad., 1882, vol. 6, p. 16, pl. 3, fig. 3.

Mimetus epeiroides Emerton, Trans. Conn. acad., 1882, vol. 6, p. 17, pl. 3, fig. 4.

MASS.— Boston, Cambridge, Essex, Beverly, Sharon.
CONN.— New Haven.

THOMISIDAE.

242. TMARUS CAUDATUS (Hentz) Keyserling.

Emerton, Trans. Conn. acad., 1892, vol. 8, p. 376, pl. 32, fig. 3.

Thomisus caudatus Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 447, pl. 23, fig. 9; ed. Burgess, p. 80, pl. 10, fig. 9, pl. 18, figs. 60, 100. "ALABAMA."

ME.— Portland.
N. H.— Franconia.
MASS.— Boston, Brookline, Readville, Beverly.
CONN.— New Haven.

243. MISUMENA ALEATORIA (Hentz) Emerton.

Emerton, Trans. Conn. acad., 1892, vol. 8, p. 369, pl. 30, fig. 2,

Thomisus aleatorius Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 444, pl. 23, fig. 2; ed. Burgess, p. 77, pl. 10, fig. 2, pl. 18, fig. 39. "ALABAMA."

ME.— Portland.
VT.— Essex.
MASS.— Beverly, Salem, Danvers, Milton, Readville.
CONN.— Windham, New Haven.

244. MISUMENA ASPERATA (Hentz) Emerton.

Emerton, Trans. Conn. acad., 1892, vol. 8, p. 370, pl. 30, fig. 3.
Thomisus asperatus Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 447, pl. 23, fig. 7; ed. Burgess, p. 79, pl. 10, fig. 7, pl. 18, fig. 41. "ALABAMA."

MASS.— Ipswich, Brookline, Sharon.
R. I.— Providence.
CONN.— New Haven.

245. MISUMENA OBLONGA Keyserling.

Keyserling, Die spinnen Amerikas, 1880, vol. 1, p. 79, pl. 2, fig. 41. "AUS BALTIMORE UND AUS PEORIA IM STAATE ILLINOIS." Emerton, Trans. Conn. acad., 1892, vol. 8, p. 371, pl. 30, fig. 4.

MASS.— Brookline, Blue Hills.
CONN.— Simsbury, New Haven.

246. MISUMENA VATIA (Linné) Thorell.

Emerton, Trans. Conn. acad., 1892, vol. 8, p. 368, pl. 30, fig. 1.
Aranea viatica Linné, Syst. nat., 10 ed., 1758, vol. 1, p. 623, "IN ARBORIBUS, LIGNIS."
Thomisus fartus Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 445, pl. 23, fig. 4; ed. Burgess, p. 78, pl. 10, fig. 4, pl. 18, fig. 69.

ME. TO CONN.

247. OXYPTILA CONSPURCATA Thorell.

Thorell, Bull. U. S. geol. surv., 1877, vol. 3, p. 496. "MANITOU SPRINGS, COLO."

THOMISIDAE.

Oxyptilla georgiana Keyserling, Die spinnen Amerikas, 1880, vol. 1, p. 52, pl. 1, fig. 26.
Oxyptilla americana Banks, Psyche, 1895, vol. 7, p. 242.

N. H.— Franconia.

248. Xysticus cinerea (Emerton) Banks.

Emerton, Trans. Conn. acad., 1892, vol. 8, p. 366, pl. 29, fig. 6. "White Mountains, New Hampshire."

N. H.— White Mountains.

249. Xysticus elegans Keyserling.

Keyserling, Die spinnen Amerikas, 1880, vol. 1, p. 31, pl. 1, fig. 14. "N. Amerika, Georgia."

N. H.— Franconia.

250. Xysticus emertoni Keyserling.

Keyserling, Die spinnen Amerikas, 1880, vol. 1, p. 39, pl. 1, fig. 18. "aus Georgia, vom Mount Washington und Tuckermanns ravin in den Whit Mountains."

N. H.— Franconia, Mount Washington.

251. Xysticus formosus Banks.

Banks, Proc. acad. nat. sci. Phil., 1892, p. 56, pl. 3, fig. 9. "Varna," [Upper Cayuga Lake basin]. Emerton, Trans. Conn. acad., 1892, vol. 8, p. 365, pl. 29, fig. 3.

Me.— Greenville.
N. H.— Franconia.
Mass.— Brookline, Sharon, Roxbury.

THOMISIDAE.

252. Xysticus graminis Emerton.

Emerton, Trans. Conn. acad., 1892, vol. 8, p. 364, pl. 29, fig. 2. "Peabody and Saugus, ... Brookline, Mass."

Me.— Portland.
N. H.— Franconia.
Mass.— Peabody, Saugus, Salem, Brookline, Blue Hill.

253. *Xysticus gulosus* Keyserling.

Keyserling, Die Spinnen Amerikas, 1880, vol. 1, p. 43, pl. 1, fig. 21. "aus Georgia, vom Mount Washington und aus Peoria im Staate Illinois." Emerton, Trans. Conn. acad., 1892, vol. 8, p. 361, pl. 28, fig. 2.

Me.— Portland.
N. H.— Franconia.
Mass.— Ipswich, Beverly, Salem, Lexington.
Conn.— New Haven.

254. Xysticus limbatus Keyserling.

Keyserling, Die Spinnen Amerikas, 1880, vol. 1, p. 35, pl. 1, fig. 19. "aus Colorado und Texas .... aus Peoria im Staate Illinois." Emerton, Trans. Conn. acad., 1892, vol. 8, p. 360, pl. 28, fig. 1.

Me.— Portland.
N. H.— Franconia, Lake Winnepesaukee.
Mass.— Peabody, Salem, Malden, Carlisle Pines, Brookline, Dedham, Mt. Tom.
Conn.— Simsbury.

255. Xysticus nervosus Banks.

Banks, Proc. acad. nat. sci. Phil., 1892, p. 55, pl. 3, fig. 8, pl. 4, fig. 84. "meadows," ["Upper Cayuga Lake basin."] Emerton, Trans. Conn. acad., 1892, vol. 8, p. 362, pl. 28, fig. 4.

THOMISIDAE.

Mass.— Medford, Readville, Sharon.
Conn.— New Haven.

256. Xysticus quadrilineatus Keyserling.

Keyserling, Die spinnen Amerikas, 1880, vol. 1, p. 42, pl. 1, fig. 20. "aus Peoria im Staate Illinois." Emerton, Trans. Conn. acad., 1892, vol. 8, p. 365, pl. 29, fig. 4.

Me.— Portland.
N. H.— Franconia.
Mass.— Beverly, Swampscott, Medford, Sharon.
Conn.— New Haven.

257. Xysticus stomachosus Keyserling.

Keyserling, Die spinnen Amerikas, 1880, vol. 1, p. 7, pl. 1, fig. 1. "aus Baltimore, ... aus Peoria. Colorado." Emerton, Trans. Conn. acad., 1892, vol. 8, p. 362, pl. 28, fig. 3.

Xysticus hamatus Keyserling, Verh. zool.-bot. ges., Wien, 1885, vol. 34, p. 521, pl. 13, fig. 22.

Me.— Portland.
N. H.— Franconia.
Mass.— Swampscott, Saugus, Brookline, Readville, Sharon, Warwick.
Conn.— New Haven.

258. Xysticus triguttatus Keyserling.

Keyserling, Die Spinnen Amerikas, 1880, vol. 1, p. 12, pl. 1, figs. 3, 6. "Boston, Colorado, Georgia." Emerton, Trans. Conn. acad., 1892, vol. 8, p. 363, pl. 29, fig. 1.

Xysticus feroculus Keyserling, Verh. zool.-bot. ges., Wien, 1882, vol. 31, p. 305, pl. 11, fig. 24.

Me. to Conn.

THOMISIDAE.

259. Xysticus versicolor (Keyserling) Simon.

Coriarachne versicolor Keyserling, Die spinnen Amerikas, 1880, vol. 1, p. 53, pl. 1, fig. 27. "aus Mariposa in California, aus Boston, Georgia, und Peoria im Staate Illinois." Emerton, Trans. Conn. acad., 1892, vol. 8, p. 367, pl. 29, fig. 7.

Me.— Brunswick.
N. H.— Lake Winnepesaukee.
Mass.— Danvers, Boston, Brookline, Readville, Sharon.
Conn.— New Haven, Durham.

260. Synaema bicolor Keyserling.

Keyserling, Verh. zool.-bot. ges. Wien, 1884, vol. 33, p. 667, pl. 21, fig. 16. "Enterprise, Florida."
Xysticus inornatus Emerton, Trans. Conn. acad., 1892, vol. 8, p. 366, pl. 29, fig. 5.

N. H.— Durham.
Mass.— Lynn, Hyde Park, Sharon.

261. Synaema obscura Keyserling.

Keyserling, Die spinnen Amerikas, 1880, vol. 1, p. 64, pl. 1, fig. 32. "Mount Washington."

N. H.— Mt. Washington, Franconia.

262. Philodromus bidentatus Emerton.

Emerton, Trans. Conn. acad., 1892, vol. 8, p. 375, pl. 31, fig. 5. "New Haven, Conn.; . . . . Mt. Tom, Massachusetts."

Me.— Peak's Island, Portland.
Mass.— Blue Hill, Brookline, Mt. Tom.
Conn.— New Haven, Simsbury.

THOMISIDAE.

263. Philodromus brevis Emerton.

Emerton, Trans. Conn. acad., 1892, vol. 8, p. 375, pl. 32, fig. 2. "Readville, Mass."

Mass.— Readville.

264. Philodromus lineatus Emerton.

Emerton, Trans. Conn. acad., 1892, vol. 8, p. 374, pl. 31, fig. 4. "New England."

Me. to Conn.

265. Philodromus ornatus Banks.

Banks, Proc. acad. nat. sci. Phil., 1892, p. 61, pl. 3, fig. 24. [Upper Cayuga Lake basin, N. Y.] Emerton, Trans. Conn. acad., 1892, vol. 8, p. 374, pl. 31, fig. 3.

Me. to Conn.

266. Philodromus pictus Emerton.

Emerton, Trans. Conn. acad., 1892, vol. 8, p. 373, pl. 31, fig. 2. "New England."

Me. to Conn.

267. Philodromus robustus Emerton.

Emerton, Trans. Conn. acad., 1892, vol. 8, p. 376, pl. 32, fig. 1. "Beverly, Mass."

Mass.— Beverly.

268. Philodromus vulgaris (Hentz), Keyserling.

Emerton, Trans. Conn. acad., 1892, vol. 8, p. 372, pl. 31, fig. 1.

THOMISIDAE.

Thomisus vulgaris Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 444, pl. 23, fig. 1; ed. Burgess, p. 76, pl. 10, fig. 1, pl. 18, fig. 77. "UNITED STATES."

ME. TO CONN.

269. EBO LATITHORAX Keyserling.

Keyserling, Verh. zool.-bot. ges. Wien, 1884, vol. 33, p. 678, pl. 21, fig. 26. "RICHMOND, VIRGINIA." Emerton, Trans. Conn. acad., 1892, vol. 8, p. 377, pl. 32, fig. 4.

MASS.— Medford, Brookline, Franklin Park.
R. I.— Providence.
CONN.— New Haven.

270. THANATUS COLORADENSIS Keyserling.

Keyserling, Die spinnen Amerikas, 1880, vol. 1, p. 206, pl. 5, fig. 113. "COLORADO."
Thanatus lycosoides Emerton, Trans. Conn. acad., 1892, vol. 8, p. 379, pl. 32, fig. 6.

ME. TO CONN.

271. THANATUS RUBICUNDUS Keyserling.

Keyserling, Die spinnen Amerikas, 1880, vol. 1, p. 204, pl. 5, fig. 112. "GEORGIA."

ME.— Portland.
N. H.— Franconia.

272. TIBELLUS OBLONGUS (Walckenaer), Simon.

Keyserling, Die spinnen Amerikas, 1880, vol. 1, p. 196.
Philodromus oblongus Walckenaer, Ins. aptères, 1837, vol. 1, p. 558. ——

THOMISIDAE.

Thomisus ? duttoni Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 448, pl. 23, fig. 10; ed. Burgess, p. 81, pl. 10, fig. 10, pl. 18, fig. 79.

Tibellus duttoni (Hentz). Emerton, Trans. Conn. acad., 1892, vol. 8, p. 378, pl. 32, fig. 5.

Me.— Bayville, Portland.
N. H.— Mt. Washington, Franconia.
Vt.— Essex, Stowe.
Mass.— Ipswich, Cape Cod.

CLUBIONIDAE.

273. Clubiona abbotii L. Koch.

L. Koch, Die arachniden fam. Drassiden, 1866–67, p. 303, pl. 12, fig. 193. "Baltimore."

Clubiona rubra Keyserling. Emerton, Trans. Conn. acad., 1890, vol. 8, p. 182, (18), pl. 5, figs. 6, 7, 8.

Me. to Conn.

274. Clubiona canadensis Emerton.

Emerton, Trans. Conn. acad., 1890, vol. 8, p. 181, (17), pl. 5, fig. 4. "on Mt. Washington, N. H., from Glen to the highest trees, ... Montreal, Canada."

N. H.— Mt. Washington, Franconia, Lake Winnepesaukee.

275. Clubiona crassipalpis Keyserling.

Keyserling, Verh. zool.-bot. ges. Wien, 1887, vol. 37, p. 438, pl. 6, fig. 13. "Cambridge, Massachusetts." Emerton, Trans. Conn. acad., 1889, vol. 8, p. 180, (16), pl. 5, fig. 1.

N. H.— Franconia, Lake Winnepesaukee.
Mass.— Brookline, Milton, Sharon.
Conn.— New Haven.

CLUBIONIDAE.

276. Clubiona minuta Emerton.

Emerton, Trans. Conn. acad., 1890, vol. 8, p. 181, (17), pl. 5, fig. 11. "Readville, Mass."

Me.—Portland.
Mass.— Readville.

277. Clubiona mixta Emerton.

Emerton, Trans. Conn. acad., 1889, vol. 8, p. 180, (16), pl. 5, fig. 2. "Salem and Marblehead."

Me.—Portland.
Mass.— Salem, Marblehead.

278. Clubiona pallens Hentz.

Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 449, pl. 23, fig. 13; ed. Burgess, p. 83, pl. 10, fig. 13, pl. 18, fig. 7. "North Carolina, Alabama."

Clubiona excepta L. Koch. Emerton, Trans. Conn. acad., 1890, vol. 8, p. 183, (19), pl. 5, fig. 10.

N. H.— Lake Winnepesaukee.
Mass.— Salem, Swampscott, Brookline, Clarendon Hills, Sharon.
Conn.— New Haven.

279. Clubiona pusilla Emerton.

Emerton, Trans. Conn. acad., 1890, vol. 8, p. 181, (17), pl. 5, fig. 5. "Salem and Beverly, Mass."

N. H.— Lake Winnepesaukee.
Mass.— Salem, Beverly.

280. Clubiona riparia L. Koch.

L. Koch, Die arachniden fam. Drassiden, 1866–67, p. 294, pl. 12, fig. 187. "Baltimore."

CLUBIONIDAE.

Clubiona ornata Emerton, Trans. Conn. acad., 1890, vol. 8, p. 183, (19), pl. 5, fig. 9.

ME.— Bayville, Portland.
N. H.— Mt. Washington, Franconia, Dublin.
MASS.— Sharon, Brookline.

281. CLUBIONA TIBIALIS Emerton.

Emerton, Trans. Conn. acad., 1889, vol. 8, p. 180, (16), pl. 5, fig. 3. "EASTERN MASSACHUSETTS AND IN N. PIKE'S LONG ISLAND COLLECTION."

MASS.— Cambridge, Franklin Park.

282. CHIRACANTHIUM VIRIDE Emerton.

Emerton, Trans. Conn. acad., 1890, vol. 8, p. 184, (20), pl. 5, fig. 12. "DEDHAM . . . . SAUGUS, MASS."

MASS— Blue Hill, Sharon, Dedham, Saugus.
CONN.— New Haven.

283. ANYPHAENA CALCARATA Emerton.

Emerton, Trans. Conn. acad., 1890, vol. 8, p. 187, (23), pl. 6, fig. 3. "WEST HAVEN, CONN., ... AND IN N. PIKE'S LONG ISLAND COLLECTION."

CONN.— West Haven.

284. ANYPHAENA INCERTA Keyserling.

Keyserling, Verh. zool.-bot. ges. Wien, 1887, vol. 37, p. 452, pl. 6, fig. 22. "MASSACHUSETTS." Emerton, Trans. Conn. acad., 1890, vol. 8, p. 186, (22), pl. 6, fig. 2.

MASS.— Salem, Cambridge, Blue Hill, Sharon.
R. I.— Providence.
CONN.— New Haven.

CLUBIONIDAE.

285. Anyphaena rubra Emerton.

Emerton, Trans. Conn. acad., 1890, vol. 8, p. 186, (22), pl. 6, fig. 1. "Massachusetts and Connecticut."

N. H.— Lake Winnepesaukee.
Mass.— Boston, Brookline, Sharon.
R. I.— Providence.
Conn.— New Haven, Simsbury.

286. Anyphaena saltabunda (Hentz) Emerton.

Emerton, Trans. Conn. acad., 1890, vol. 8, p. 187, (23), pl. 6, fig. 4.

Clubiona ? saltabunda Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 453, pl. 23, fig. 23; ed. Burgess, p. 89, pl. 10, fig. 23, pl. 18, fig. 19. "Alabama."

Mass.— Brookline, Blue Hill, Sharon.
Conn.— Meriden.

287. Agroeca pratensis Emerton.

Emerton, Trans. Conn. acad., 1890, vol. 8, p. 190, (26), pl. 6, fig. 7. "Eastern Massachusetts; Providence, Rhode I.; Albany, N. Y."

Me.— Moosehead Lake.
N. H.— Lake Winnepesaukee.
Mass.— Malden, Boston, Brookline, Dedham, Milton, Northfield, Williamstown.
R. I.— Providence.

288. Agroeca repens Emerton.

Emerton, Trans. Conn. acad., 1894, vol. 9, p. 412, pl. 2, fig. 6. "Laggan." [Alberta.]

Mass.— Brookline.

CLUBIONIDAE.

289. Micariosoma alarium (Hentz) Simon.

Herpyllus alarius Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 461, pl. 24, fig. 20; ed. Burgess, p. 98, pl. 11, fig. 20, pl. 21, fig. 14. "Alabama."

Phrurolithus alarius (Hentz). Emerton, Trans. Conn. acad., 1890, vol. 8, p. 189, (25), pl. 6, fig. 5.

Me.— Portland.
N. H.— Franconia, Lake Winnepesaukee.
Mass.— Ipswich, Swampscott, Brookline, Blue Hill, Northfield.
R. I.— Providence.
Conn.— New Haven.

290. Micariosoma pugnatum (Emerton) Simon.

Phrurolithus pugnatus Emerton, Trans. Conn. acad., 1890, vol. 8, p. 188, (24), pl. 6, fig. 6. "Massachusetts and Connecticut."

Me.— Portland.
N. H.— Franconia.
Mass.— Swampscott, Cambridge, Hyde Park, Northfield.
Conn.— New Haven.

291. Castaneira bivittata Keyserling.

Keyserling, Verh. zool.-bot. ges. Wien, 1887, vol. 37, p. 442, pl. 6, fig. 16. "Cambridge, (Mass.)."

Geotrecha bivittata (Keys.). Emerton, Trans. Conn. acad., 1889, vol. 8, p. 169, (5), pl. 3, fig. 3.

Me.— Bayville, Portland.
N. H.— Franconia, Three Mile Island, Lake Winnepesaukee.
Mass.— Beverly, Salem, Cambridge, Brookline, Hyde Park.
Conn.— Woodbridge, New Haven.

CLUBIONIDAE.

292. Castaneira crocata (Hentz) Simon.

Herpyllus crocata Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 457, pl. 24, fig. 8; ed. Burgess, p. 93, pl. 11, fig. 8. "Alabama."

Herpyllus discriptus Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 456, pl. 24, fig. 7; ed. Burgess, p. 92, pl. 11, fig. 7.

Geotrecha crocata (Hentz). Emerton, Trans. Conn. acad., 1889, vol. 8, p. 171, (7), pl. 3, fig. 5.

Me.— Eastport, Dexter, Bayville, Portland.
Mass.— Beverly, Brookline, Middleton, Williamstown.
Conn.— Simsbury.

293. Castaneira pinnata (Emerton).

Geotrecha pinnata Emerton, Trans. Conn. acad., 1889, vol. 8, p. 170, (6), pl. 3, fig. 4. "Medford. . . . Topsfield, Mass.; . . . . N. Pike's Long Island collection."

Me.— Moosehead Lake.
N. H.— Franconia.
Vt.— Mallet's Bay, Lake Champlain.
Mass.— Gloucester, Medford, Brookline, Sharon.

294. Micaria aurata (Hentz) Simon.

Herpyllus ? auratus Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 459, pl. 24, fig. 15; ed. Burgess, p. 96, pl. 11, fig. 15. "Alabama."

Micaria longipes Emerton, Trans. Conn. acad., 1889, vol. 8, p. 167, (3), pl. 3, fig. 1.

Micaria formicoides Banks, Proc. acad. nat. sci. Phil., 1892, p. 14, pl. 1, fig. 51.

N. H.— Franconia.
Mass.— Salem, Medford, Waltham, Sharon.

295. Micaria gentilis Banks.

Banks, Can. ent., 1896, vol. 28, p. 62. "Franconia, N. H."

N. H.— Franconia.

CLUBIONIDAE.

296. Micaria montana Emerton.

Emerton, Trans. Conn. acad., 1889, vol. 8, p. 168, (4), pl. 3, fig. 2. "Mt. Washington, N. H."

N. H.— Mt. Washington, Franconia.

297. Trachelus ruber Keyserling.

Keyserling, Verh. zool.-bot. ges. Wien, 1887, vol. 37, p. 439, pl. 6, fig. 14. "Die Universität Cambridge, (Mass.) besitzt mehere Exemplare aus der Umgegend." Emerton, Trans. Conn. acad., 1890, vol. 8, p. 184, (20), pl. 5, fig. 13.

Mass.— Cambridge, Waverly, Salem, Allston, Sharon.
R. I.— Providence.
Conn.— New Haven.

AGELENIDAE.

298. Agelena naevia Walckenaer.

Agelena naevia Walckenaer, Ins. aptères, 1837, vol. 2, p. 24. "en Caroline et en Géorgie."

Agelena naevia? Bosc. Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 465, pl. 30, fig. 1; ed. Burgess, p. 102, pl. 12, fig. 1, pl. 20, fig. 20.

Agalena naevia Walck. and Bosc. Emerton, Trans. Conn. acad., 1890, vol. 8, p. 197, (33), pl. 8, fig. 1.

Me. to Conn.

299. Coras medicinalis (Hentz) Simon.

Tegenaria medicinalis Hentz, Journ. acad. nat. sci. Phil., 1821, vol. 2, p. 53, pl. 5, fig. 1; ed. Burgess, p. 162. —— Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 462, pl. 24, fig. 21; ed. Burgess, p. 99, pl. 11, fig. 21, pl. 18, fig. 110, pl. 20, fig. 19.

AGELENIDAE.

Coelotes medicinalis (Hentz). Emerton, Trans. Conn. acad., 1890, vol. 8, p. 191, (27), pl. 7, fig. 1.

ME.— Moosehead Lake, Monhegan.
N. H.— Lake Winnepesaukee.
MASS.— Swampscott, Carlisle Pines, Brookline, Sharon, Northfield.
R. I.— Providence.
CONN.— New Haven.

300. TEGENARIA DOMESTICA (Clerck) C. Koch.

Araneus domesticus Clerck, Svenska spindlar, 1757, p. 76, pl. 2, fig. 9. "IN FENESTRIS RAEDIUM ANGULIS."
Tegenaria derhamii Scopoli. Emerton, Trans. Conn. acad., 1890, vol. 8, p. 193, (29), pl. 7, fig. 6.

ME.— Monhegan, Dexter, Moosehead Lake.
N. H.— Franconia.
MASS.— Boston, Cambridge, Sharon.
CONN.— Simsbury.

301. COELOTES CALCARATUS Keyserling.

Keyserling, Verh. zool.-bot. ges., Wien, 1887, vol. 37, p. 470, pl. 6, fig. 32. "WASHINGTON, D. C., VALMONT, (COLORADO), BRIDGER, WYOMING, MINNESOTA."
Coelotes longitarsus Emerton, Trans. Conn. acad., 1890, vol. 8, p. 192, (28), pl. 7, fig. 2.

N. H.— Jaffrey, Lake Winnepesaukee, Crawford's Notch.
MASS.— Hyde Park, Mt. Tom.
CONN.— Mt. Carmel, New Haven.

302. COELOTES MONTANUS Emerton.

Emerton, Trans. Conn. acad., 1890, vol. 8, p. 192, (28), pl. 7,

fig. 3. "Chateaugay Lake, Adirondacks, N. Y.; . . . . New Haven, Conn."

N. H.— Lake Winnepesaukee.
Conn.— New Haven.

303. Cicurina arcuata Keyserling.

Keyserling, Verh. zool.-bot. ges. Wien, 1887, vol. 37, p. 460, pl. 6, fig. 25. "Clear Creek Co. (Colorado), Rock Island, (Illinois), Washington, Minnesota, Lake Superior."
Circurina complicata Emerton, Trans. Conn. acad., 1890, vol. 8, p. 195, (31), pl. 7, fig. 7.

N. H.— Jackson, Lake Winnepesaukee.
Mass.— Salem, Carlisle Pines, Cambridge, Brookline, Milton, Northfield.
Conn.— New Haven.

304. Cicurina brevis (Emerton) Bryant.

Tegenaria brevis Emerton, Trans. Conn. acad., 1890, vol. 8, p. 194, (30), pl. 7, fig. 5." Mt. Washington, N. H.; Massachusetts; New Haven, Conn."
Cicurina creber Banks, Proc. acad. nat. sci. Phil., 1892, p. 26, pl. 1, fig. 76.

Me.— Moosehead Lake.
N. H.— Mt. Washington, Franconia, Lake Winnepesaukee.
Vt.— Stowe, Mt. Mansfield.
Mass.— Brookline, Sharon, Northfield.
R. I.— Providence.
Conn.— New Haven.

305. Cicurina pallida Keyserling.

Keyserling, Verh. zool.-bot. ges., Wien, 1887, vol. 37, p. 462, pl. 6, fig. 76. "Washington."

AGELENIDAE.

N. H.— Mt. Washington.
Mass.— Brookline, Northfield.

306. Hahnia agilis Keyserling.

Keyserling, Verh. zool.-bot. ges., Wien, 1887, vol. 37, p. 465, pl. 6, fig. 29. "Washington, Fort Stevenson (Dakota)."
Hahnia bimaculata Emerton, Trans. Conn. acad., 1890, vol. 8, p. 196, (32), pl. 7, fig. 8.

Me.— Moosehead Lake, Bayville.
N. H.— Jackson, Franconia, Mt. Washington, Lake Winnepesaukee.
Vt.— Stowe.
Mass.— Salem, Brookline, Sharon.
Conn.

307. Hahnia cinerea Emerton.

Emerton, Trans. Conn. acad., 1890, vol. 8, p. 197, (33), pl. 7, fig. 9. "Salem, Beverly, Swampscott, Cambridge, Roxbury. Mt. Tom, Mass., and New Haven, Conn."

N. H.— Lake Winnepesaukee.
Mass.— Salem, Brookline, Clarendon Hills.
Conn.— New Haven.

308. Hahnia radula Emerton.

Emerton, Trans. Conn. acad., 1890, vol. 8, p. 196, (32), pl. 7, fig. 10. "Jaffrey, N. H."

Me.— Bayville.
N. H.— Jaffrey.

PISAURIDAE.

309. Pisaurina mira (Walck.) Simon.

Montgomery, Proc. acad. nat. sci. Phil., 1904, p. 320.

Dolomedes mirus Walckenaer, Ins. aptères, 1837, vol. 1, p. 357, "Georgia."

Micrommata undata Hentz, Bost. journ. nat. hist., 1845, vol. 5, p. 192, pl. 16, fig. 7; ed. Burgess, p. 42, pl. 6, fig. 7, pl. 18, fig. 98.

Micrommata carolinensis Hentz, Bost. journ. nat. hist., 1845, vol. 5, p. 194, pl. 16, fig. 9; ed. Burgess, p. 44, pl. 6, fig. 9, pl. 20, fig. 4.

Ocyale undata (Hentz). Emerton, Trans. Conn. acad., 1885, vol. 6, p. 499, pl. 49, fig. 7.

N. H.— Franconia, Lake Winnepesaukee.

Mass.— Beverly, Brookline, Hyde Park. Woods Hole, Mt. Tom, Warwick.

Conn.— New Haven.

310. Dolomedes fontanus Emerton.

Emerton, Trans. Conn. acad., 1885, vol. 6, p. 502, pl. 49, fig. 10. "Dublin, N. H."

Dolomedes tenebrosus Emerton (pars ♀), Trans. Conn. acad., 1885, vol. 6, p. 501, pl. 49, fig. 9.

Me.— Poland.

N. H.— Franconia, Dublin, Three Mile Island, Lake Winnepesaukee.

Vt.— Lake Champlain.

Mass.— Melrose.

311. Dolomedes idoneus Montgomery.

Montgomery, Proc. acad. nat. sci. Phil., 1902, p. 588, pl. 30, fig. 51. "West Chester, Pa."

Vt.— Lake Champlain.

Mass.— Blandford.

Conn.— New Haven, Simsbury.

PISAURIDAE.

312. Dolomedes sexpunctatus Hentz.

Hentz, Bost. journ. nat. hist., 1845, vol. 5, p. 191, pl. 16, figs. 5, 6; ed. Burgess, p. 41, pl. 6, figs. 5, 6, pl. 18, fig. 55. "North Carolina."

Emerton, Trans. Conn. acad., 1885, vol. 6, p. 501, pl. 49, fig. 8.

N. H.— Franconia.
Mass.— Ipswich, Riverside, Wellesley, Dedham.
Conn.— New Haven.

313. Dolomedes urinator Hentz.

Hentz, Bost. journ. nat. hist., 1845, vol. 5, p. 190, pl. 16, fig. 3; ed. Burgess, p. 40, pl. 6, fig. 3. "North Carolina, Alabama." Montgomery, Proc. acad. nat. sci. Phil., 1904, p. 317.

Dolomedes tenebrosus Emerton (pars ♂), Trans. Conn. acad., 1885, vol. 6, p. 501, pl. 49, fig. 9.

Mass.— Beverly, Medford, Bedford.
Conn.— New Haven.

LYCOSIDAE.

314. Lycosa albohastata Emerton.

Emerton, Trans. Conn. acad., 1894, vol. 9, p. 423, pl. 3, fig. 3. "Laggan." [Alberta.]

Me.— Portland, Mt. Katahdin.
N. H.— Mt. Washington.

315. Lycosa avara (Keyserling), Montgomery.

Montgomery, Proc. acad. nat. sci. Phil., 1904, p. 304, pl. 20, fig. 42.

Trochosa avara Keyserling, Verh. zool.-bot. ges. Wien, 1877, vol. 26, p. 661, (55), pl. 8, (2), figs. 38, 39. "Nordamerika."

LYCOSIDAE.

Lycosa rufiventris Banks, Proc. acad. nat. sci. Phil., 1892, p. 65, pl. 3, fig. 35.

ME.— Portland.
MASS.— Allston.

316. LYCOSA BALTIMORIANA (Keyserling).

Tarentula baltimoriana Keyserling, Verh. zool.-bot. ges. Wien, 1877, vol. 26, p. 632, (26), pl. 7, (1), fig. 16. "NORDAMERIKA."
Geolycosa baltimoriana (Keys.) Montgomery, Proc. acad. nat. sci. Phil., 1904, p. 297, pl. 19, fig. 19.

MASS.— Feltonville, Springfield, Woods Hole.
CONN.— Simsbury.

317. LYCOSA BILINEATA (Emerton) Montgomery.

Pardosa bilineata Emerton, Trans. Conn. acad., 1885, vol. 6, p. 496, pl. 49, fig. 4. "EAST ROCK, NEW HAVEN, CONN."
Lycosa ocreata-pulchra Montgomery, Proc. acad. nat. sci. Phil., 1902, p. 540, pl. 39, figs. 3, 4.

CONN.— New Haven.

318. LYCOSA CAROLINENSIS Walckenaer.

Montgomery, Proc. acad. nat. sci. Phil., 1904, p. 299.
Lycosa tarentula carolinensis Walckenaer, Ins. aptères, 1837, vol. 1, p. 285. "CAROLINE."
Lycosa carolinensis? Bosc Ms., Hentz, Bost. journ. nat. hist., 1842, vol. 4, p. 230, pl. 8, fig. 9; ed. Burgess, p. 27, pl. 2, fig. 9. Emerton, Trans. Conn. acad., 1885, vol. 6, p. 486, pl. 47, fig. 1.

ME.— Paris, Portland.
N. H.— Dublin, Amherst, Compton, Franconia, Jaffrey, Lake Winnepesaukee.

MASS.— Ipswich, Beverly, Salem, Swampscott, Nahant, Lowell, Springfield, Wellfleet.

CONN.— Pomfret.

319. LYCOSA CINEREA (Fabricius).

Emerton, Trans. Conn. acad., 1885, vol. 6, p. 488, pl. 47, fig. 3.

Aranea cinerea Fabricius, Ent. syst., 1793, vol. 2, p. 423. "HABITAT AD LITTOREA MARIS BALTHICI."

Lycosa maritima Hentz, Bost. journ. nat. hist., 1844, vol. 4, p. 389, pl. 17, fig. 10; ed. Burgess, p. 30, pl. 3, fig. 10.

Trochosa cinerea (Fabr.). Montgomery, Proc. acad. nat. sci. Phil., 1904, p. 305, pl. 20, fig. 43.

MASS.— Ipswich, Salisbury Beach, Martha's Vineyard.

CONN.— New Haven.

320. LYCOSA CONTESTATA Montgomery.

Montgomery, Proc. acad. nat. sci. Phil., 1903, p. 649, pl. 29, fig. 4. "WOOD'S HOLE, MASS."

Trochosa contestata Montgomery, Proc. acad. nat. sci. Phil., 1904, p. 303.

MASS.— Woods Hole.

321. LYCOSA ERRATICA Hentz.

Lycosa erratica Hentz, Bost. journ. nat. hist., 1844, vol. 4, p. 388, pl. 17, fig. 8; ed. Burgess, p. 29, pl. 3, fig. 8. "MASSACHUSETTS, ALABAMA."

N. H.— Franconia, Compton.

MASS.— Springfield, Salisbury Beach.

322. LYCOSA FRONDICOLA Emerton.

Emerton, Trans. Conn. acad., 1885, vol. 6, p. 484, pl. 46, fig. 3. "NEW ENGLAND."

LYCOSIDAE.

Lycosa nigroventris Emerton, Trans. Conn. acad., 1885, vol. 6, p. 488, pl. 47, fig. 5.

Trochosa frondicola Emerton. Montgomery, Proc. acad. nat. sci. Phil., 1904, p. 306.

ME.— Brunswick, Portland.

N. H.— Franconia, Lake Winnepesaukee.

VT.— Essex, Mt. Mansfield.

MASS.— Beverly, Salem, Waltham, Cambridge, Brookline, Blue Hill, Sharon, Cohasset, Springfield.

CONN.— New Haven.

323. LYCOSA KOCHII (Keyserling) Emerton.

Emerton, Trans. Conn. acad., 1885, vol. 6, p. 485, pl. 46, fig. 6.

Tarentula kochii Keyserling, Verh. zool.-bot. ges. Wien, 1877, vol. 26, p. 636, (30), pl. 7, (1), fig. 18. "NORDAMERIKA."

Lycosa purcelli Montgomery, Proc. acad. nat. sci. Phil., 1902, p. 566, pl. 30, figs. 30, 31.

ME.— Poland.

N. H.— Lake Winnepesaukee.

MASS.— Salem, Boston, Brookline, Blue Hill, Hyde Park, Sharon, Springfield.

CONN.— New Haven.

324. LYCOSA LEPIDA (Keyserling) Montgomery.

Montgomery, Proc. acad. nat. sci. Phil., 1902, p. 562, pl. 29, figs. 26, 27, 1904, p. 287.

Tarentula lepida Keyserling, Verh. zool.-bot. ges. Wien, 1877, vol. 26, p. 631, (25), pl. 7, (1), fig. 15. "NORDAMERIKA."

Lycosa communis Emerton, Trans. Conn. acad., 1885, vol. 6, p. 489, pl. 47, fig. 6.

ME.— Monhegan, Birch Island, Casco Bay.

LYCOSIDAE.

VT.—
MASS.— Ipswich, Salem, Lynn, Brookline, Woods Hole.
R. I.— Providence.
CONN.— New Haven.

325. LYCOSA NIDICOLA Emerton.

Emerton, Trans. Conn. acad., 1885, vol. 6, p. 482, pl. 46, fig. 1. "MASSACHUSETTS; PROVIDENCE, R. I.; NEW HAVEN AND NOANK, CONN.; INDIANAPOLIS, INDIANA." Montgomery, Proc. acad. nat. sci. Phil., 1903, p. 647.

ME.— Portland.
VT.— Essex, Lake Champlain.
MASS.— Ipswich, Blue Hill, Woods Hole.
R. I.— Providence.
CONN.— Simsbury, New Haven.

326. LYCOSA NIDIFEX (Marx) Emerton.

Emerton, Trans. Conn. acad., 1885, vol. 6, p. 487, pl. 47, fig. 4.
Tarentula nidifex Marx, Amer. nat., 1881, vol. 15, p. 396. "VIRGINIA SHORE OF THE POTOMAC, NEAR THE AQUEDUCT BRIDGE."
Lycosa arenicola Scudder, Psyche, 1877, vol. 2, p. 7.
Geolycosa arenicola (Scudd.). Montgomery, Proc. acad. nat. sci. Phil., 1904, p. 299.

MASS.— Nantucket, Cape Cod, Ipswich, Salisbury Beach, Springfield.
CONN.— New Haven.

327. LYCOSA OCREATA Hentz.

Hentz, Bost. journ. nat. hist., 1844, vol. 4, p. 391, pl. 18, fig. 5; ed. Burgess, p. 33, pl. 4, fig. 5. "NORTH CAROLINA." Emerton, Trans. Conn. acad., 1885, vol. 6, p. 491, pl. 48, fig. 6.
Lycosa stonei Montgomery, Proc. acad. nat. sci. Phil., 1902, p. 546, pl. 29, figs. 9, 10.

Me.— Amherst.
Mass.— Readville.
Conn.— New Haven.

328. Lycosa pictilis Emerton.

Emerton, Trans. Conn. acad., 1885, vol. 6, p. 485, pl. 46, fig. 5. "Mt. Washington, N. H."

N. H.— Mt. Washington.

329. Lycosa pratensis Emerton.

Emerton, Trans. Conn. acad., 1885, vol. 6, p. 483, pl. 46, fig. 4. "Eastern Mass.; Mt. Tom, Mass.; New Haven, Conn.; Mt. Washington, N. H."

Trochosa pratensis (Emerton). Montgomery, Proc. acad. nat. sci. Phil., 1904, p. 303.

Me.— Rangeley, Moosehead Lake, Bethel, Portland.
N. H.— Franconia, Mt. Washington, Lake Winnepesaukee.
Mass.— Salem, Lynn, Brookline, Cambridge, Hyde Park, Sharon, Woods Hole, Warwick.
Conn.— New Haven.

330. Lycosa punctulata Hentz.

Hentz, Bost. journ. nat. hist., 1844, vol. 4, p. 390, pl. 17, figs. 16, 17; ed. Burgess, p. 31, pl. 3, figs. 16, 17. "Pennsylvania." Emerton, Trans. Conn. acad., 1885, vol. 6, p. 490, pl. 48, fig. 1. Montgomery, Proc. acad. nat. sci. Phil., 1904, p. 288.

Mass.— Sherborn, Sharon, Wellesley, Waltham, Worcester.
R. I.— Providence.
Conn.— Woodbridge, New Haven.

331. Lycosa relucens Montgomery.

Montgomery, Proc. acad. nat. sci. Phil., 1902, p. 542, pl. 29, figs. 5, 6. "Germantown, Philadelphia."

N. H.— Lake Winnepesaukee.
Vt.— Lake Champlain.
Mass.— Waltham, Brookline, Sharon.
Conn.— New Haven.

332. Lycosa rubicunda (Keyserling) Montgomery.

Trochosa rubicunda Keyserling, Verh. zool.-bot. ges. Wien, 1877, vol. 26, p. 663, (57), pl. 8, (2), fig. 40. "Baltimore." Montgomery, Proc. acad. nat. sci. Phil., 1904, p. 307, pl. 20, fig. 30.

Lycosa polita Emerton, Trans. Conn. acad., 1885, vol. 6, p. 484, pl. 46, fig. 2.

Me.— Bayville.
Vt.— Lake Champlain.
Mass.— Ipswich, Hyde Park.
Conn.— New Haven.

333. Lycosa scutulata Hentz.

Hentz, Bost. journ. nat. hist., 1844, vol. 4, p. 390, pl. 18, figs. 1, 2; ed. Burgess, p. 32, pl. 4, figs. 1, 2. "Alabama." Emerton, Trans. Conn. acad., 1885, vol. 6, p. 491, pl. 48, fig. 2. Montgomery, Proc. acad. nat. sci. Phil., 1904, p. 289.

Mass.— Woods Hole.
Conn.— New Haven.

334. Lycosa tigrina McCook.

McCook, Trans. Amer. ent. soc., 1878, vol. 7, p. xi. "Vineland, N. J."

Lycosa vulpina Emerton, Trans. Conn. acad., 1885, vol. 6, p. 487, pl. 47, fig. 2.

N. H.— Lake Winnepesaukee.
Mass.— Blue Hill, Brookline, Mt. Tom.
Conn.— New Haven.

LYCOSIDAE.

335. Pirata insularis Emerton.

Emerton, Trans. Conn. acad., 1885, vol. 6, p. 492, pl. 48, fig. 8. "Long Lake, Adirondack Mountains, N. Y."

N. H.— Franconia.

336. Pirata minutus Emerton.

Emerton, Trans. Conn. acad., 1885, vol. 6, p. 493, pl. 48, fig. 10. "Salem and Roxbury, Mass.; Meriden, Conn."

N. H.— Franconia.
Vt.— Stowe.
Mass.— Salem, Sharon.
Conn.— Meriden, New Haven.

337. Pirata montanus Emerton.

Emerton, Trans. Conn. acad., 1885, vol. 6, p. 493, pl. 48, fig. 9. "White Mountains, Long Lake, Adirondack Mountains, N. Y."

Me.— Portland.
N. H.— White Mountains, Franconia.
Vt.— Stowe.

338. Pirata piraticus (Clerck) Thorell.

Emerton, Trans. Conn. acad., 1885, vol. 6, p. 492, pl. 48, fig. 7.
Araneus piraticus Clerck, Svenska spindlar, 1757, p. 102, pl. 5, fig. 4. "in aquas sinuum juncos litusque interjacentium excurventem marem."

Mass.— Sharon, Clarendon Hills, Brookline.
Conn.— New Haven.

LYCOSIDAE.

339. Trabaea aurantiaca (Emerton) Simon.

Aulonia aurantiaca Emerton, Trans. Conn. acad., 1885, vol. 6, p. 499, pl. 49, fig. 6. "Eastern Massachusetts; New Haven, Conn."

Mass.— Readville, Brookline, Waltham.
Conn.— New Haven.

340. Pardosa glacialis (Thorell) Emerton.

Emerton, Trans. Conn. acad., 1894, vol. 9, p. 424, pl. 4, fig. 2.
Lycosa glacialis Thorell, Ofvers. vet.-akad. förh. Stockholm, 1872, vol. 29, p. 159. [Greenland.]
Pardosa brunnea Emerton, Trans. Conn. acad., 1885, vol. 6, p. 495, pl. 48, fig. 4.

Me.— Rangely, Monhegan, Bayville, Portland.
N. H.— Mt. Washington, Dublin, Franconia.
Vt.— Mt. Mansfield.
Mass.— Ipswich, Salem, Forest Hills.
Conn.— New Haven.

341. Pardosa groenlandica (Thorell) Emerton.

Emerton, Trans. Conn. acad., 1894, vol. 9, p. 423, pl. 4, fig. 1.
Lycosa groenlandica Thorell., Ofvers. vet.-akad. förh. Stockholm, 1872, vol. 29, p. 157. [Greenland.]
Pardosa albomaculata Emerton, Trans. Conn. acad., 1885, vol. 6, p. 495, pl. 48, fig. 3.

Me.— Portland, Bayville, Mt. Katahdin.
N. H.— Mt. Washington.

342. Pardosa lapidicina Emerton.

Emerton, Trans. Conn. acad., 1885, vol. 6, p. 494, pl. 48, fig. 5. "Salem, Mass.; Meriden, Conn."

Me.— Moosehead Lake, Poland, Portland.
Mass.— Salem, Hyde Park, Cohasset, Woods Hole.
Conn.— Meriden, New Haven, Simsbury.

343. Pardosa littoralis Banks.

Banks, Journ. N. Y. ent. soc., 1896, vol. 4, p. 192. "Mill Neck." [Long Island, N. Y.]

Mass.— Ipswich.

344. Pardosa luteola Emerton.

Emerton, Trans. Conn. acad., 1894, vol. 9, p. 427, pl. 3, fig. 7. [Laggan Alberta.]

Me.— Eastport.
N. H.— Mt. Washington.
Vt.— Mt. Mansfield.

345. Pardosa minima (Keyserling) Montgomery.

Montgomery, Proc. acad. nat. sci. Phil., 1904, p. 273.
Lycosa minima Keyserling, Verh. zool.-bot. ges. Wien, 1877, vol. 26, p. 614, (8), pl. 7, (1), fig. 3. "Nordamerika . . . . aus Peoria im Staata Illinois."
Pardosa albopatella Emerton, Trans. Conn. acad., 1885, vol. 6, p. 497, pl. 49, fig. 2.

Me.— Portland.
N. H.— Lake Winnepesaukee, Mt. Washington.
Mass.— Ipswich, Medford, Milton, Hyde Park, Sharon.
Conn.— New Haven.

346. Pardosa nigropalpis Emerton.

Emerton, Trans. Conn. acad., 1885, vol. 6, p. 497, pl. 49, fig. 1. "Massachusetts and Connecticut." Montgomery, Proc. acad. nat. sci. Phil., 1904, p. 275.

Me.— Bayville.
Vt.— Mt. Mansfield.
Mass.— Brookline, Allston, Milton, Sharon.
Conn.— New Haven.

347. Pardosa pallida Emerton.

Emerton, Trans. Conn. acad., 1885, vol. 6, p. 496, pl. 49, fig. 3. "New Hampshire; Massachusetts; New Haven, Conn."

Me.— Monhegan, Bayville, Bethel, Birch Island, Portland.
N. H.
Vt.— Stowe, Mt. Mansfield, Essex.
Mass.— Beverly, Sharon.
Conn.— New Haven.

348. Pardosa tachypoda (Thorell) Emerton.

Emerton, Trans. Conn. acad., 1894, vol. 9, p. 427; pl. 3, fig. 1.
Lycosa tachypoda Thorell, Amer. nat. 1878, vol. 12, p. 395.
Lycosa impavida Thorell, Bull. U. S. geol. sur. 1877, vol. 3, p. 513. "Manitou, Colo."
Pardosa montana Emerton, Trans. Conn. acad., 1885, vol. 6, p. 498, pl. 49, fig. 5.

Me.— Moosehead Lake, Poland Springs, Portland.
N. H.— Mt. Washington, Lake Winnepesaukee.
Vt.— Mt. Mansfield, Stowe.
Mass.— Mt. Tom.

349. Pardosa uncata (Thorell).

Emerton, Trans. Conn. acad., 1894, vol. 9, p. 425, pl. 3, fig. 8.
Lycosa uncata Thorell, Bull. U. S. geol. surv., 1877, vol. 3, p. 508. "Georgetown, Blackhawk, Mt. Gray, Col., Idaho."

LYCOSIDAE.

Me.— Moosehead Lake.
N. H.— Mt. Washington.
Vt.— Mt. Mansfield.

350. Oxyopes scalaris Hentz.

Hentz, Bost. journ. nat. hist., 1845, vol. 5, p. 196, pl. 17, fig. 4; ed. Burgess, p. 47, pl. 7, fig. 4, pl. 19, fig. 120. "North Carolina." Emerton, Trans. Conn. acad., 1885, vol. 6, p. 502, pl. 49, fig. 11.

N. H.— Durham, Nashua.

SALTICIDAE.

351. Peckhamia picata (Hentz) Simon.

Synemosyna picata Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 370, pl. 22, fig. 21; ed. Burgess, p. 75, pl. 9, fig. 21. "North Carolina, Alabama."
Synageles picata (Hentz). Emerton, Trans. Conn. acad., 1891, vol. 8, p. 250, (32), pl. 21, fig. 3. Peckham, Occ. papers Wisc. nat. hist. soc., 1892, vol. 2, p. 64, pl. 5, fig. 2.

N. H.— Lake Winnepesaukee.
Conn.— New Haven.

352. Peckhamia scorpiona (Hentz) Simon.

Synemosyna scorpiona Hentz, Bost. journ. nat. hist., 1846, vol. 5, p. 369, pl. 22, fig. 19; ed. Burgess, p. 74, pl. 9, fig. 19, pl. 18, fig. 67. "North Carolina."
Synageles scorpiona (Hentz). Peckham, Occ. papers Wisc. nat. hist. soc.; 1892, vol. 2, p. 63, pl. 5, fig. 1.

Mass.— Ipswich, Cambridge, Allston.
Conn.— New Haven.

SALTICIDAE.

353. Synemosyna formica Hentz.

Hentz, Bost. journ. nat. hist., 1846, vol. 5, p. 368, pl. 22, fig. 18; ed. Burgess, p. 73, pl. 9, fig. 18, pl. 20, fig. 9. "North Carolina, Alabama." Emerton, Trans. Conn. acad., 1891, vol. 8, p. 248, (30), pl. 21, fig. 5. Peckham, Occ. papers Wisc. nat. hist. soc., 1892, vol. 2, p. 77, pl. 6, fig. 4.

Mass.— Boston, Readville.
Conn.— New Haven.

254. Evophrys cruciatus Emerton.

Emerton, Trans. Conn. acad., 1891, vol. 8, p. 241, (23), pl. 20, fig. 8. "Dublin, N. H."

N. H.— Dublin.

355. Evophrys monadnock Emerton.

Emerton, Trans. Conn. acad., 1891, vol. 8, p. 241, (23), pl. 20, fig. 2. "Monadnock, N. H."

Me.— Monhegan.
N. H.— Monadnock, Lake Winnepesaukee.

356. Neon nellii Peckham.

Peckham, Trans. Wisc. acad. sci., 1888, vol. 7, p. 88, pl. 1, fig. 65, pl. 6, fig. 65. "Pennsylvania, Canada." Emerton, Trans. Conn. acad., 1891, vol. 8, p. 240, (22), pl. 20, fig. 1.

Me.— Monhegan, Portland.
N. H.— Lake Winnepesaukee.
Mass.— Sharon, Brookline.

357. Attus palustris Peckham.

Peckham, Desc. new or little known Attidae U. S. 1883, p. 25, pl. 3, fig. 20. "Wisconsin." Peckham, Trans. Wisc. acad. sci.,

1888, vol. 7, p. 43, pl. 1, fig. 30, pl. 3, fig. 30. Emerton, Trans. Conn. acad., 1891, vol. 8, p. 247, (29), pl. 20, fig. 3.

ME.— Portland, Moosehead Lake.
N. H.— Franconia, Mt. Washington.
MASS — Beverly, Brookline (marshes), Sharon.
CONN.— New Haven.

358. ATTUS SYLVESTRIS Emerton.

Emerton, Trans. Conn. acad., 1891, vol. 8, p. 247, (29), pl. 20, fig. 4. "BEVERLY AND MIDDLETON, MASSACHUSETTS."

MASS.— Beverly, Middleton.

359. SALTICUS EPHIPPIATUS (Hentz).

Emerton, Trans. Conn. acad., 1891, vol. 8, p. 249, (31), pl. 21, fig. 4. Peckham, Occ. papers Wisc. nat. hist. soc., 1892, vol. 2, p. 18, pl. 1, fig. 2.

Synemosyna ephippiata Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 369, pl. 22, fig. 20; ed. Burgess, p. 74, pl. 9, fig. 20, pl. 18, fig. 68, pl. 19, fig. 114. "ALABAMA."

MASS.— Peabody Boston, Sharon.
CONN.— New Haven.

360. SALTICUS SCENICUS (Clerck) Latreille.

Araneus scenicus Clerck, Svenska spindlar, 1757, p. 117, pl. 5, fig. 13. ——

Epiblemum faustum Hentz, Amer. journ. sci., 1832, vol. 21, p. 108; Bost. journ. nat. hist., 1846, vol. 5, p. 367, pl. 22, fig. 17; ed. Burgess, p. 71, pl. 9, fig. 17, pl. 20, fig. 8.

Epiblemum scenicum (Clerck). Peckham, Trans. Wisc. acad. sci., 1888, vol. 7, p. 76, pl. 1, fig. 57, pl. 4, fig. 57. Emerton, Trans. Conn. acad., 1891, vol. 8, p. 238, (20), pl. 19, fig. 2.

ME.— Monhegan, Dexter; Portland.
N. H.— Lake Winnepesaukee.
MASS.— Boston, Cambridge, Williamstown.
R. I.— Providence.
CONN.— Noank.

361. HYCTIA PIKEI Peckham.

Peckham, Trans. Wisc. acad. sci., 1888, vol. 7, p. 79, pl. 1, fig. 59, pl. 5, fig. 59. "NEW YORK, SOUTH CAROLINA, GEORGIA, FLORIDA."

MASS.— Ipswich, Chelsea, Cape Cod.

362. MARPISSA FAMILIARIS (Hentz), Simon.

Attus familiaris Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 354, pl. 21, fig. 7; ed. Burgess, p. 56, pl. 8, fig. 7, pl. 18, figs. 74, 99. "THROUGHOUT THE UNITED STATES."

Marptusa familiaris (Hentz). Peckham, Trans. Wisc. acad. sci., 1888, vol. 7, p. 80, pl. 1, fig. 60, pl. 4, fig. 60. Emerton, Trans. Conn. acad., 1891, vol. 8, p. 237, (19), pl. 19, fig. 3.

MASS.— Salem, Worthington, Sharon.
CONN.— Simsbury.

363. PSEUDICIUS BINUS (Hentz) Peckham.

Attus binus Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 352, pl. 21, fig. 2; ed. Burgess, p. 54, pl. 8, fig. 2. "SULLIVAN'S ISLAND, SOUTH CAROLINA."

Mememerus binus (Hentz) Peckham, Trans. Wisc. acad. sci., 1891, vol. 8, p. 239, (2), pl. 19, fig. 4.

CONN.— Meriden.

364. PSEUDICIUS LINEATUS (C. Koch) Peckham.

Maevia lineatus C. Koch, Die arachniden, 1848, vol. 14, p. 77, pl. 479, fig. 1332. "PENNSYLVANIEN."

Attus quadrilineatus Peckham, Desc. new or little known Attidae, U. S., 1883, p. 19, pl. 2, fig. 15.

Mememerus lineatus (C. Koch) Emerton, Trans. Conn. acad., 1891, vol. 8, p. 239, (21), pl. 19, fig. 5.

Mass.— Ipswich, Manchester, Medford, Cambridge, Hyde Park.

Conn.— New Haven.

365. Admestina tibialis (C. Koch) Peckham.

Maevia tibialis C. Koch, Die arachniden, 1848, vol. 14, p. 78, pl. 479, fig. 1333. "Pennsylvanien."

Admestina wheelerii Peckham, Trans. Wisc. acad. sci., 1888, vol. 7, p. 78, pl. 1, fig. 58, pl. 5, fig. 58.

Mass.— Blue Hills, Cambridge.

366. Wala mitratus (Hentz) Peckham.

Attus mitratus Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 363, pl. 22, fig. 9; ed. Burgess, p. 68, pl. 9, fig. 9. "Alabama."

Icius mitratus (Hentz). Emerton, Trans. Conn. acad., 1891, vol. 8, p. 232, (14), pl. 18, fig. 2.

Mass.— Saugus, Blue Hills, Sharon, Cohasset.

367. Wala palmarum (Hentz) Peckham.

Epiblemum palmarum Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 366, pl. 22, fig. 16; ed. Burgess, p. 71, pl. 9, fig 16. "South and North Carolina."

Wala albovittata Keyserling, Verh. zool.-bot. ges. Wien, 1885, vol. 34, p. 517, pl. 13, fig. 20.

Icius palmarum (Hentz) Emerton, Trans. Conn. acad., 1891, vol. 8, p. 232, (14), pl. 17, fig. 1.

Mass.— Ipswich, Dedham.

Conn.— New Haven.

SALTICIDAE.

368. Icius elegans (Hentz) Emerton.

Emerton, Trans. Conn. acad., 1891, vol. 8, p. 233, (15), pl. 18, fig. 3.

Attus elegans Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 353, pl. 21, fig. 6; ed. Burgess, p. 56, pl. 8, fig. 6, pl. 18, fig. 2. "Southern States."

Attus superciliosus Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 364, pl. 22, fig. 11; ed. Burgess, p. 68, pl. 9, fig. 11, pl. 18, fig. 5.

Dendryphantes elegans (Hentz). Peckham, Trans. Wisc. acad. sci., 1888, vol. 7, p. 37, pl. 3, fig. 26, pl. 4, fig. 26.

Mass.— Peabody, Middlesex Fells, Sharon.
Conn.— New Haven.

369. Icius formicarius Emerton.

Emerton, Trans. Conn. acad., 1891, vol. 8, p. 235, (17), pl. 18, fig. 6. "Salem and Medford, Mass., and New Haven, Conn."

Mass.— Salem, Brookline.
Conn.— New Haven.

370. Icius hartii Emerton.

Emerton, Trans. Conn. acad., 1891, vol. 8, p. 235, (17), pl. 18, fig. 5. "Medford, Mass."

Mass.— Medford.

371. Icius montanus Banks.

Banks, Can. ent., 1896, vol. 28, p. 62. "Mt. Washington, N. H."

N. H.— Mt. Washington.

372. Icius similis Banks.

Banks, Can. ent., 1895, vol. 27, p. 100. "Olympia, Washington and from Ft. Collins, Colo."

N. H.— Franconia.

SALTICIDAE.

373. PHIDIPPUS BOREALIS Banks.

Banks, Can. ent., 1895, vol. 27, p. 96. "CRAWFORD NOTCH, N. H."

N. H.— Crawford's Notch, Franconia.

374. PHIDIPPUS BRUNNEUS Emerton.

Emerton, Trans. Conn. acad., 1891, vol. 8, p. 225, (7), pl. 16, fig. 2. "SALEM AND WALTHAM, MASS."

MASS.— Waltham, Hyde Park, Sharon.
CONN.— New Haven.

375. PHIDIPPUS COMATUS Peckham.

Peckham, Trans. Wisc. acad. sci., 1901, vol. 13, p. 291, pl. 23, fig. 8. "LAS VEGAS, NEW MEXICO."

MASS.— Sharon.
CONN.— New Haven.

376. PHIDIPPUS MULTIFORMIS Emerton.

Emerton, Trans. Conn. acad., 1891, vol. 8, p. 224, (6), pl. 16, fig. 1. "MT. WASHINGTON, DUBLIN, N. H., EASTERN MASS., NEW HAVEN, CONN."

ME.— Portland.
N. H.— Jaffrey, Lake Winnepesaukee.
VT.— Lake Champlain.
MASS. — Winchester, Salem, Malden, Woods Hole, Sharon, Mt. Tom.
CONN.— New Haven.

377. PHIDIPPUS MYSTACEUS (Hentz) Emerton.

Emerton, Trans. Conn. acad., 1891, vol. 8, p. 297, (9), pl. 16, fig. 3.

SALTICIDAE.

Attus mystaceus Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 355, pl. 21, fig. 9; ed. Burgess, p. 58, pl. 8, fig. 9, pl. 18, fig. 76, pl. 19, fig. 119. "North Carolina."

Phidippus albomaculatus Keyserling, Verh. zool.-bot. ges. Wien, 1885, vol. 34, p. 491, pl. 13, fig. 2.

Phidippus purpuratus Keyserling, Verh. zool.-bot. ges. Wien, 1885, vol. 34, p. 489, pl. 13, fig. 1.

Me.— Dexter, Norway, Monhegan.

N. H.— Compton, Mt. Washington.

Mass.— Blue Hills, Sharon, Woods Hole, Mt. Holyoke, Warwick, Salem.

R. I.— Providence.

Conn.— New Haven.

378. Phidippus ruber Keyserling.

Keyserling, Verh. zool.-bot. ges. Wien, 1885, vol. 34, p. 493, pl. 13, fig. 4. "Massachusetts." Emerton, Trans. Conn. acad., 1891, vol. 8, p. 226, (8), pl. 16, fig. 4.

N. H.— Lake Winnepesaukee.

Mass.— Sharon, Topsfield.

379. Phidippus tripunctatus (Hentz) Emerton.

Emerton, Trans. Conn. acad., 1891, vol. 8, p. 227, (9), pl. 16, fig. 5.

Attus tripunctatus Hentz, Bost. journ. nat. hist., 1847 vol. 5, p. 355, pl. 21, fig. 8; ed. Burgess, p. 58, pl. 8, fig. 8, pl. 18, fig. 75. "The United States."

Attus audax Hentz, Bost. journ. nat. hist., 1845, vol. 5, p. 199, pl. 17, figs. 6, 7; ed. Burgess, p. 50, pl. 7, figs. 6, 7.

Phidippus morsitans (Walck.). Peckham, Trans. Wisc. acad. sci., 1888, vol. 7, p. 11, pl. 1, fig. 1, pl. 2, fig. 1.

Me. to Conn.

SALTICIDAE.

380. Dendryphantes capitatus (Hentz) Simon.

Attus capitatus Hentz, Bost. journ. nat. hist., 1845, vol. 5, p. 200, pl. 17, fig. 15; ed. Burgess, p. 51, pl. 7, fig. 15, pl. 18, fig. 26. "Georgia."

Attus parvus Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 358, pl. 21, fig. 17; ed. Burgess, p. 62, pl. 8, fig. 17.

Attus octavus Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 365, pl. 22, fig. 15; ed. Burgess, p. 70, pl. 9, fig. 15.

Icius crassiventer Keyserling, Verh. zool.-bot. ges. Wien, 1885, vol. 34, p. 503, pl. 13, fig. 11.

Dendryphantes aestivalis (Peck.). Emerton, Trans. Conn. acad., 1891, vol. 8, p. 228, (10), pl. 17, fig. 2.

Me. to Conn.

381. Dendryphantes flavipedes Peckham.

Peckham, Trans. Wisc. acad. sci., 1888, vol. 7, p. 42, pl. 3, fig. 29. "Canada."

Me.— Portland.

382. Dendryphantes militaris (Hentz) Emerton.

Emerton, Trans. Conn. acad., 1891, vol. 8, p. 230, (12), pl. 17, fig. 1.

Attus militaris Hentz, Bost. journ. nat. hist., 1845, vol. 5, p. 201, pl. 17, figs. 10, 11; ed. Burgess, p. 52, pl. 7, figs. 10, 11. "North Carolina, Alabama."

Icius albovittatus Keyserling, Verh. zool.-bot. ges. Wien, 1885, vol. 34, p. 502, pl. 13, fig. 10.

Me.— Dexter, Brunswick, Portland.
N. H.— Durham, Lake Winnepesaukee.
Vt.— Lake Champlain.
Mass.— Cambridge, Sharon.
R. I.— Providence.
Conn.— New Haven.

SALTICIDAE.

383. Dendryphantes montanus Emerton.

Emerton, Trans. Conn. acad., 1891, vol. 8, p. 229, (11), pl. 17, fig. 3. "Mt. Washington; N. H."

N. H.— Mt. Washington.
Mass.— Sharon.

384. Dendryphantes rufus (Hentz) Peckham.

Attus rufus Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 356, pl. 21, fig. 12; ed. Burgess, p. 60, pl. 8, fig. 12, pl. 18, fig. 37. "United States."

N. H.— Franconia, Lake Winnepesaukee.
Mass.— Salem, Bedford, Hyde Park, Sharon.

385. Rhene cyanea (Hentz) Peckham.

Attus cyaneus Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 365, pl. 22, fig. 13; ed. Burgess, p. 69, pl. 9, fig. 13, pl. 18, fig. 66. "North Carolina, Alabama."

Homalattus septentrionalis Keyserling, Verh. zool.-bot. ges. Wien, 1885, vol. 34, p. 515, pl. 13, fig. 19.

Homalattus cyaneus (Hentz). Peckham, Trans. Wisc. acad. sci., 1888, vol. 7, p. 86, pl. 1, fig. 64, pl. 6, fig. 64.

Mass.— Sharon.
Conn.— New Haven.

386. Habrocestum pulex (Hentz) Simon.

Attus pulex Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 361, pl. 22, fig. 3; ed. Burgess, p. 65, pl. 9, fig. 3. "Alabama."

Saitis pulex (Hentz). Emerton, Trans. Conn. acad., 1891, vol. 8, p. 246, (28), pl. 20, fig. 7.

N. H.— Franconia, Lake Winnepesaukee.
Mass.— Sharon, Cambridge, Williamstown.
R. I.— Providence.
Conn.— Meriden, New Haven.

SALTICIDAE.

387. PHLEGRA LEOPARDUS (Hentz) Emerton.

Emerton, Trans. Conn. acad., 1891, vol. 8, p. 242, (24), pl. 21, fig. 1.

Attus leopardus Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 359, pl. 21, fig. 21; ed. Burgess, p. 63, pl. 8, fig. 21. "ALABAMA."

MASS.— Sharon, Mt. Tom.

388. PELLENES AURATUS (Hentz) Peckham.

Peckham, Bull. Wisc. nat. hist. soc., 1901, vol. 1, pp. 202, 208.

Attus auratus Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 362, pl. 22, fig. 6; ed. Burgess, p. 66, pl. 9, fig. 6, pl. 18, figs. 65, 92. "SOUTH CAROLINA."

Habrocestum auratum (Hentz). Peckham, Trans. Wisc. acad. sci., 1888, vol. 7, p. 63, pl. 1, fig. 46, pl. 4, fig. 46.

MASS.— Chelsea, Ipswich.

CONN.— Simsbury.

389. PELLENES BOREALIS (Banks) Peckham.

Habrocestum borealis Banks, Can. ent., 1895, vol. 27, p. 101. "FRANCONIA, N. H."

N. H.— Franconia.

390. PELLENES CRISTATUS (Hentz) Peckham.

Attus cristatus Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 363, pl. 22, fig. 8; ed. Burgess, p. 67, pl. 9, fig. 8, pl. 19, fig. 112. "ALABAMA."

Habrocestum cristatum (Hentz). Peckham, Trans. Wisc. acad. sci., 1888, vol. 7, p. 62, pl. 1, fig. 45, pl. 4, fig. 45.

MASS.— Cohasset, Ipswich.

391. PELLENES HOWARDII Peckham.

Peckham, Bull. Wisc. nat. hist. soc., 1901, vol. 1, p. 209, pl. 1, fig. 1. "WISCONSIN."

MASS.— Hyde Park, Sharon.

SALTICIDAE.

392. Pellenes peregrinus (Peckham) Peckham.

Peckham, Bull. Wisc. nat. hist. soc., 1901, vol. 1, pp. 203, 207.

Attus peregrinus Peckham, Desc. new or little known Attidae U. S., 1883, p. 17, pl. 2, fig. 13. "Connecticut."

Habrocestum peregrinum (Peck.). Peckham, Trans. Wisc. acad. sci., 1888, vol. 7, p. 61, pl. 1, fig. 44, pl. 4, fig. 44.

Habrocestum peregrinum (Peck.). Emerton, Trans. Conn. acad., 1891, vol. 8, p. 245, (27), pl. 20, fig. 6.

Mass.— Hyde Park.
Conn.

393. Pellenes roseum (Hentz) Peckham.

Attus roseus Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 362, pl. 22, fig. 4; ed. Burgess, p. 66, pl. 9, fig. 4, pl. 18, fig. 15. "Massachusetts."

Mass.— Ipswich.

394. Pellenes splendens (Peckham) Simon.

Attus splendens Peckham, Desc. new or little known Attidae U. S., 1883, p. 4, pl. 1, fig. 3. "Wisconsin."

Pellenes nigroceps Keyserling, Verh. zool.-bot. ges. Wien, 1885, vol. 34, p. 512, pl. 13, fig. 17.

Habrocestum splendens Peckham, Trans. Wisc. acad. sci., 1888, vol. 7, p. 65, pl. 1, fig. 48, pl. 4, fig. 48. Emerton, Trans. Conn. acad., 1891, vol. 8, p. 244, (26), pl. 20, fig. 5.

Mass.— Brookline, Beverly.

395. Evarcha hoyi (Peckham) Simon.

Attus hoyi Peckham, Desc. new or little known Attidae U. S., 1883, p. 7, pl. 1, fig. 5. "Pennsylvania, Wisconsin."

Attus pinnus Peckham, Desc. new or little known Attidae U. S., 1883, p. 20, pl. 2, fig. 16.

SALTICIDAE.

Hasarius hoyi Peckham, Trans. Wisc. acad. sci., 1888, vol. 7, p. 57, pl. 1, fig. 40, pl. 4, fig. 40. Emerton, Trans. Conn. acad., 1891, vol. 8, p. 243, (25), pl. 21, fig. 2.

Me.— Moosehead Lake, Bangor.
N. H.— Mt. Washington, Lake Winnepesaukee, Jaffrey.
Mass.— Medford, Waltham, Ipswich, Wood's Hole, Western Mass.
Conn.— New Haven.

396. Maevia vittata (Hentz) Emerton.

Emerton, Trans. Conn. acad., 1891, vol. 8, p. 236, (18), pl. 19, fig. 1.
Attus vittatus Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 360, pl. 21, fig. 23; ed. Burgess, p. 64, pl. 8, fig. 23. "North Carolina, Alabama."
Attus niger Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 359, pl. 21, fig. 19; ed. Burgess, p. 63, pl. 8, fig. 19, pl. 18, fig. 4.

N. H.— Lake Winnepesaukee.
Mass.— Beverly, Cambridge, Waltham, Brookline, Blue Hills, Sharon.
Conn.— Meriden, Plainville.

397. Zygoballus bettini Peckham.

Peckham, Trans. Wisc. acad. sci., 1888, vol. 7, p. 89, pl. 1, fig. 68, pl. 6, fig. 68. "Wisconsin, Missouri, Georgia, Florida. Emerton, Trans. Conn. acad., 1891, vol. 8, p. 230, (12), pl. 17, fig. 4.

Mass.— Beverly.
Conn.— Meriden.

398. Zygoballus iridescens Banks.

Banks, Can. ent., 1895, vol. 27, p. 102. "Franconia, N. H."

N. H.— Franconia.

SALTICIDAE.

399. Zygoballus terrestris Emerton.

Emerton, Trans. Conn. acad., 1891, vol. 8, p. 231, (13), pl. 17, fig. 5. "Boston and Cambridge, Mass., and New Haven, Conn."

Mass.— Cambridge, Boston, Blue Hills.
R. I.— Providence.
Conn.— New Haven.

LIST OF UNRECOGNIZED SPECIES.

1. Theridion roscidum Hentz, Bost. journ. nat. hist., 1850, vol. 6, p. 277, pl. 9, figs. 15, 16; ed. Burgess, p. 149, pl. 16, figs. 15, 16.
   Charlestown, Mass.

2. Thomisus celer Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 446, pl. 23, fig. 5; ed. Burgess, p. 78, pl. 10, fig. 5. Found in South Carolina, North Carolina, Massachusetts, Alabama, Ohio, etc.

3. Thomisus ferox Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 445, pl. 23, fig. 3; ed. Burgess, p. 77, pl. 10, fig. 3. "United States" Mass.

4. Atypus niger Hentz, Bost. journ. nat. hist., 1842, vol. 4, p. 224, pl. 8, fig. 1; ed. Burgess, p. 19, pl. 2, fig. 1. "Massachusetts."

5. Clubiona obesa Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 450, pl. 23, fig. 14; ed. Burgess, p. 84, pl. 10, fig. 14. "Massachusetts, North Carolina, Alabama."

6. Clubiona inclusa Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 451, pl. 23, fig. 18; ed. Burgess, p. 85, pl. 10, fig. 18. "South Carolina, North Carolina, etc."
   Charlestown, Mass., ♀ Hyde Park, Mass. J. H. Emerton.

7. Clubiona gracilis Hentz, Bost. journ. nat. hist., 1847, vol. 5, p. 452, pl. 23, fig. 19; ed. Burgess, p. 86, pl. 10, fig. 19. "North Carolina, Alabama." Saugus, Mass.; June 12, Boston, Mass., Oct., Providence, R. I., J. H. Emerton.

8. Dolomedes lanceolatus Hentz, Bost. journ. nat. hist., 1845, vol. 5, p. 191, pl. 17, fig. 12; ed. Burgess, p. 40, pl. 7, fig. 12. "North and South Carolina, Massachusetts, Alabama."

9. Dolomedes tenebrosus Hentz, Bost. journ. nat. hist., 1844, vol. 4, p. 396, pl. 19, figs. 10, 13; ed. Burgess, p. 38, pl. 5, figs. 10, 13. "Carolina, Alabama, Massachusetts?" not Dolomedes tenebrosus Emerton.

10. Lycosa fatifera Hentz, Bost. journ. nat. hist., 1842, vol. 4, p. 229, pl. 8, fig. 8; ed. Burgess, p. 26, pl. 2, fig. 8. "Massachusetts, North Alabama."

11. Attus canonicus Hentz, Bost. journ. nat. hist., 1846, vol. 5, p. 365, pl. 22, fig. 14; ed. Burgess, p. 70, pl. 9, fig. 14. "Cambridge, Massachusetts."

12. Attus fasciolatus Hentz, Bost. journ. nat. hist., 1846, vol. 5, p. 356, pl. 21, fig. 11; ed. Burgess, p. 60, pl. 8, fig. 11. "South Carolina, Massachusetts."

13. Attus hebes Hentz, Bost. journ. nat. hist., 1846, vol. 5, p. 358, pl. 21, fig. 16; ed. Burgess, p. 62, pl. 8, fig. 16. "Massachusetts."

14. Attus nuttallii Hentz, Bost. journ. nat. hist., 1846, vol. 5, p. 352, pl. 21, fig. 3; ed. Burgess, p. 55, pl. 8, fig. 3. "Massachusetts."

Occasional Papers
OF THE
Boston Society of Natural History
VII.

FAUNA OF NEW ENGLAND.

10.

LIST OF THE PHALANGIDA, PSEUDOSCORPIONIDA, AND ACARINA.

By NATHAN BANKS.

BOSTON:
PRINTED FOR THE SOCIETY FROM THE
GURDON SALTONSTALL FUND.
August, 1908.

	Me.	N.H.	Vt.	Mass.	R. I.	Conn.
Piona debilis				—		
inconstans				—		
Limnesia histrionica				—		
maculata				—		
undulata				—		
Atax ypsilophorus						—
Hydrachna pyriformis						—
tricolor						—
Thalassarachna verrillii	—					
Hæmaphysalis chordeilis			—	—		
Ixodes cookei	—			—		
brunneus				—		
Dermacentor variabilis			—	—		
albipictus		—				
Amblyomma americanum				—		
Dermanyssus gallinae				—	—	
Liroaspis americana		—				
Echinomegistus wheeleri						—
Laelaps cuneifer americanus						—
Galumna emarginata				—		
slossonae		—				
unimaculata		—				
nitidula		—				
persimilis		—				
Oribatella bidentata		—				
Cepheus lamellatus				—		
Liacarus nitidus		—				
Oppia montana		—				
Oribata puritanica				—		
Nothrus ovivorus				—		
Tyroglyphus farinae				—		
heteromorphus				—		
lintneri	—					
Rhizoglyphus rhizophagus	—					
phylloxerae				—		
Analges pici-pubescentis						—
Cnemidocoptes mutans					—	
Eriophyes abnormis			—			
crumena				—		
pruni-crumena			—			
pyri	—					
quadripedes	—					—
serotinae	—					
ulmi						—

	Me.	N.H.	Vt.	Mass.	R. I.	Conn.
Liobunum calcar	—					
formosum				—		
longipes	—	—	—			
politum		—				
ventricosum	—	—	—	—		
verrucosum					—	
vittatum	—	—	—	—	—	
Phalangium cinereum		—	—	—		
Oligolophus pictus	—	—		—		
Mitopus montanus	—	—				
Phlegmacera cavicolens	—	—				
Caddo agilis	—					
Chelifer muricatus				—		
cancroides				—		
Chelanops oblongus		—				
sanborni				—		
Obisium brunneum				—		
Rhagidia pallida		—		—		
Linopodes antennaepes		—		—		
Bdella cardinalis		—				
marina				—		—
peregrina		—				
Cheyletus ferox				—		
seminivorus				—		
Anystis agilis		—		—		
Bryobia pratensis				—		—
Tetranychus bicolor						—
bimaculatus	—					
telarius				—		
Trombidium giganteum		—				
scabrum		—				
sericeum		—				
bulbipes				—		
Microtrombidium locustarum		—				
Rhyncholophus maculatus		—				
montanus		—				
parvus		—				
Limnochares aquaticus	—	—				
Arrenurus birgei				—		
globator				—		
parallellatus				—		
securiformis				—		
Koenikea concava				—		

PHALANGIDA.

PHALANGIDAE.

1. Liobunum calcar (Wood).

Crosby, Journ. N. Y. ent. soc., 1904, vol. 12, p. 256.
Phalangium calcar Wood, Comm. Essex inst., 1868, vol. 6, p. 26, fig. 6. "South-western Virginia."

Me.— Brunswick, Norway.

2. Liobunum formosum (Wood).

Phalangium formosum Wood, Comm. Essex inst., 1868, vol. 6, p. 30, fig. "District of Columbia * * * vicinity of Philadelphia."
Forbesium formosum Wood. Weed, Amer. nat., 1890, vol. 24, p. 916, pl. 30.

Mass.— Salem.

3. Liobunum longipes Weed.

Weed, Amer. nat., 1890, vol. 24, p. 866, pl. 29. "Illinois." Trans. Amer. ent. soc., 1892, vol. 19, p. 265, pl. 14, fig. 1.

Me.— Mt. Katahdin, Warwick.
N. H.— Hanover, Mt. Washington. Franconia.
Vt.— Hartland.

4. Liobunum politum Weed.

Weed, Bull. Ill. state lab. nat. hist., 1889, vol. 3, p. 89. "Champaign Co., Ill." Trans. Amer. ent. soc., 1892, vol. 19, p. 266, pl. 15, figs. 1–2.

N. H.— Hanover, Franconia.

PHALANGIDAE.

5. Liobunum ventricosum (Wood).

Weed, Trans. Amer. ent. soc., 1892, vol. 19, p. 264, pl. 5.
Phalangium ventricosum Wood, Comm. Essex inst., 1868, vol. 6 p. 32, fig. 7. "Pennsylvania."

Me.— Warwick, Norway.
N. H.— Hanover, Dover, Franconia.
Vt.— Pompanoosuc.
Mass.— Fultonville.

6. Liobunum verrucosum (Wood).

Weed, Trans. Amer. ent. soc., 1892, vol. 19, p. 189, pl. 6.
Phalangium verrucosum Wood, Comm. Essex inst., 1868, vol. 6, p. 29, fig. ——

R. I.— Providence.

7. Liobunum vittatum (Say).

Phalangium vittatum Say, Journ. acad. nat. sci. Phil., 1821, vol. 2, p. 65. "Southern States." Ed. Lec., vol. 2, p. 13.
Liobunum vittatum dorsatum (Say). Weed, Trans. Amer. ent. soc., 1892, vol. 19, p. 263, pls. 12, 13, 14, fig. 2.

Me.— Warwick, Norway, Brunswick.
N. H.— Hanover, Keene, Mt. Washington, Amherst.
Vt.— Hartland.
Mass.— Salem, Nahant, Wenham.
R. I.— Providence.

8. Phalangium cinereum Wood.

Wood, Comm. Essex inst., 1868, vol. 6, p. 25, fig. 5. "Elizabethtown, * * * New York." Weed, Trans. Amer. ent. soc., 1892, vol. 19, p. 269, pl. 16.

PHALANGIDAE.

N. H.— Hanover, Franconia.
VT.— Hartland,
MASS.— Brookline.

9. OLIGOLOPHUS PICTUS (Wood).

Phalangium pictum Wood, Comm. Essex inst., 1868, vol. 6, p. 30, fig. "NEAR SALEM, MASS."
Mitopus pictus (Wood). Weed, Trans. Amer. ent. soc., 1892, vol. 19, p. 267, fig. 2.

ME.— Chimney Lake, Brunswick.
N. H.— Hanover, Franconia.
MASS.— Near Salem.

10. MITOPUS MONTANUS (Banks).

Oligolophus montanus Banks, Can. ent., 1893, vol. 25, p. 252. "MT. WASHINGTON, N. H."

ME.— Chimney Lake.
N. H.— Mt. Washington.

11. PHLEGMACERA CAVICOLENS Packard.

Packard, Amer. nat., 1884, vol. 18, p. 203. "BAT CAVE, CARTER CO., KY." Mem. nat. acad. sci., 1887, vol. 4, p. 54, pl. 14, fig. 5.
Sabacon spinosus Weed, Amer. nat., 1893, vol. 27, p. 575, fig. 1.

ME.— Chimney Lake.
N. H.— Hanover.

12. CADDO AGILIS BANKS.

Banks, Proc. ent. soc. Wash., 1892, vol. 2, p. 250, fig. — "LONG ISLAND, N. Y."

ME.— Mt. Katahdin.

PSEUDOSCORPIONIDA

CHERNETIDAE.

13. Chelifer muricatus Say.

Say, Journ. acad. nat. sci. Phil., 1821, vol. 2, p. 63; Ed. Lec., vol. 2, p. 11. "North America."

Mass.

14. Chelifer cancroides Latreille.

Latreille, Hist. nat. Crust. Ins., 1804, vol. 7, p. 141, pl. 6, fig. 2.

——.

Mass.— Cambridge, Everett.

15. Chelanops oblongus (Say).

Chelifer oblongus Say, Journ. acad. nat. sci. Phil., 1821, vol. 2, p. 64; Ed. Lec., vol. 2, p. 12. "North America."

N. H.— Franconia.

16. Chelanops sanborni (Hagen).

Chernes sanborni Hagen, Record Amer. ent. for 1868, 1869, p. 51. "Massachusetts."

Mass.— Cambridge.

17. Obisium brunneum Hagen.

Hagen, Record Amer. ent. for 1868, 1869, p. 52. "Massachusetts."

Mass.— Cambridge.

ACARINA.

EUPODIDAE.

18. Rhagidia pallida Banks.

Banks, Trans. Amer. ent. soc., 1894, vol. 21, p. 222. "Sea Cliff, N. Y., Washington, D. C., Franconia, N. H." Proc. U. S. nat. mus., 1904, vol. 28, p. 14, fig. 9.

N. H.— Franconia.
Mass.— Middlesex Fells.

19. Linopodes antennaepes Banks.

Banks, Trans. Amer. ent. soc., 1894, vol. 21, p. 221. Sea Cliff, N. Y.; Ft. Lee, N. J.; Chicago, Ill.; Franconia, N. H." Proc. U. S. nat. mus., 1904, vol. 28, p. 14, fig. 8.

N. H.— Franconia.
Mass.— Middlesex Fells.

BDELLIDAE.

20. Bdella cardinalis Banks.

Banks, Trans. Amer. ent. soc., 1894, vol. 21, p. 219. "Sea Cliff, N. Y.; Ft. Lee, N. J."

N. H.— Franconia, Mt. Washington.

21. Bdella marina Packard.

Packard, Rept. U. S. comm. fish, 1873, p. 544. "Savin Rock, near New Haven." Banks, Trans. Amer. ent. soc., 1894, vol. 21, p. 220.

Mass.
Conn.— Near New Haven.

BDELLIDAE.

22. Bdella peregrina Banks.

Banks, Trans. Amer. ent. soc., 1894, vol. 21, p. 219. "Sea Cliff, N. Y."

N. H.— Mt. Washington.

CHEYLETIDAE.

23. Cheyletus ferox Banks.

Banks, Proc. ent. soc. Wash., 1906, vol. 7, p. 134. "Marblehead, Mass." Proc. U. S. nat. mus., 1904, vol. 28, p. 18, fig. 18.

Mass.— Marblehead.

24. Cheyletus seminivorus Packard.

Packard, Guide to the study of insects, ed. 2, 1870, p. 665, pl. 11, fig. 6. "Marblehead, Mass."

Mass.— Marblehead.

ERYTHRAEIDAE.

25. Anystis agilis (Banks).

Actineda agilis Banks, Trans. Amer. ent. soc., 1894, vol. 21, p. 211. "Sea Cliff, Long Island, N. Y.; Ft. Lee, N. J.; Chicago, Ill.; Franconia, N. H."

N. H.— Franconia.
Mass.— Middlesex Fells.

TETRANYCHIDAE.

26. Bryobia pratensis Garman.

Garman, 14th Rept. Illinois state ent., 1885, p. 73, pl. 6, fig. 7.

TETRANYCHIDAE.

"Normal, Illinois." Riley & Marlatt, Insect life, 1890, vol. 3, p. 45, fig. 4, 5.

Mass.— Waltham.
Conn.— Thompson, Warehouse Point.

27. Tetranychus bicolor Banks.

Banks, Trans. Amer. ent. soc., 1894, vol. 21, p. 218. "Long Island." Tech. bull. 8, Div. ent. U. S. dept. agric., 1900, p. 72, fig. 8.

Conn.— New Haven, Meriden, Marbledale.

28. Tetranychus bimaculatus Harvey.

Harvey, Ann. rept. Maine agric. exper. station for 1892, 1893, p. 133. "Orono, Me." Banks, Tech. bull. 8, Div. ent. U. S. dept. agric., 1900, p. 73, fig. 1, 10.

Me.— Orono.

29. Tetranychus telarius (Linné).

Berlese, Acari, Myriopoda, et scorpiones Italia, Prostigmata, 1889, fasc. 56, no. 5.
Acarus telarius Linné, Fauna Svecica, 1761, p. 481. "Sweden."

Mass.— Melrose Highlands.

TROMBIDIIDAE.

30. Trombidium giganteum Riley.

Riley, First rept. U. S. ent. comm., 1878, p. 312, fig. 41. "United States."

N. H.— Franconia.

TROMBIDIIDAE.

31. Trombidium scabrum Say.

Say, Journ. acad. nat. sci. Phil., 1821, vol. 2, p. 69; Ed. Lec, vol. 2, p. 16. "United States."

N. H.— Franconia.

32. Trombidium sericeum Say.

Say, Journ. acad. nat. sci. Phil., 1821, vol. 2, p. 70; Ed. Lec., vol. 2, p. 16. "United States."

N. H.— Franconia.

33. Trombidium (?) bulbipes Packard.

Packard, 20th rept. Mass. state board agric., 1873, p. 264, fig. 18. [Salem, Mass.].

Mass.— Salem.

34. Microtrombidium locustarum (Walsh).

Astoma locustarum Walsh, Pract. ent., 1866, vol. 1, p. 126. "Canada West."

Trombidium locustarum Riley. Banks, Proc. U. S. nat. mus., 1904, vol. 26, p. 32, fig. 49.

N. H.— Franconia.

RHYNCHOLOPHIDAE.

35. Rhyncholophus maculatus Banks.

Banks, Trans. Amer. ent. soc., 1894, vol. 21, p. 216. "Sea Cliff, N. Y.; Washington, D. C., and Florida." Proc. U. S. nat. mus., 1904, vol. 28, p. 29, fig. 40.

N. H.— Franconia.

RHYNCHOLOPHIDAE.

36. Rhyncholophus montanus Banks.

Banks, Trans. Amer. ent. soc., 1894, vol. 21, p. 216. "Mt. Washington, N. H."

N. H.— Mt. Washington.

37. Rhyncholophus parvus Banks.

Banks, Trans. Amer. ent. soc., 1894, vol. 21, p. 216. "Ithaca, N. Y.; Franconia, N. H."

N. H.— Franconia.

HYDRACHNIDAE.

38. Limnochares aquaticus (Linné).

Piersig, Das tierreich, 1901, lief. 13, p. 13, fig. 1.
Acarus aquaticus Linné, Fauna Svecica, 1761 p. 482. "Sweden."

Me.— North Windham.
N. H.— Franconia.

39. Arrenurus birgei Marshall.

Marshall, Trans. Wis. acad., 1903, vol. 14, p. 158, pl. 16, fig. 10, pl. 17, fig. 10. "Lake Wingra, Mirror Lake, border's of Green Lake and Lake Spooner, pond at Tarpaulin Cove near Wood's Hole."

Mass.— Wood's Hole.

40. Arrenurus globator (Müller).

Marshall, Trans. Wis. acad., 1903, vol. 14, p. 148, pl. 14, fig. 1, pl. 15, fig. 1.

HYDRACHNIDAE.

Hydrachna globator Müller, Zool. Danicae prodr. 1776, p. 188. "Denmark."

Mass.— Wood's Hole.

41. Arrenurus parallellatus Marshall.

Marshall, Trans. Wis. acad., 1903, vol. 14, p. 154, pl. 16, fig. 18, pl. 18, fig. 6. "Wood's Hole, Mass."

Mass.— Wood's Hole.

42. Arrenurus securiformis Piersig.

Piersig, Zool. anz., 1894, vol. 17, p. 378. "Germany." Marshall, Trans. Wis. acad., 1903, vol. 14, p. 152, pl. 18, fig. 4.

Mass.— Wood's Hole.

43. Koenikea concava Wolcott.

Wolcott, Trans. Amer. micros. soc., 1900, vol. 21, p. 190, pl. 11, fig. 15–22. "Lake Saint Clair, Michigan * * * Susan and '26' Lakes, Northern Michigan * * * Reed's, Fisk's, Lamberton, Power's, and Dean's Lakes, near Grand Rapids, Michigan."

Mass.— Cranberry Lake, Wood's Hole.

44. Piona debilis (Wolcott).

Curvipes debilis Wolcott, Trans. Amer. Micros. soc., 1902, vol. 23, p. 234, pl. 32, fig. 44–46. "Cranberry Lake, Wood's Hole, Mass."

Mass.— Cranberry Lake, Wood's Hole.

HYDRACHNIDAE.

45. Piona inconstans (Wolcott).

Curvipes inconstans Wolcott, Trans. Amer. Micros. soc., 1902, vol. 23, p. 241, pl. 32, fig. 47, pl. 33 fig. 48–50. "Cranberry Lake, Wood's Hole, Mass. * * * High Highland Harbor, northern Lake Michigan * * * Columbia, Mo. * * * Circle Lake, Decatur, Neb. * * * Slidell, La. * * * Audubon Park, New Orleans, La. * * * near Havana, Ill."

Mass.— Cranberry Lake, Wood's Hole.

46. Limnesia histrionica (Hermann).

Wolcott, Trans. Amer. micros. soc., 1903, vol. 24, p. 146, pl. 12, fig. 6, 7.

Hydrachna histrionica Hermann, Mém. Aptèrol., 1804, p. 35. "Europe."

Mass.— Wood's Hole.

47. Limnesia maculata (Müller).

Wolcott, Trans. Amer. micros. soc., 1903, vol. 24, p. 146, pl. 13, fig. 14, 15.

Hydrachna maculata Müller, Zool. Danicae prodr., 1776, p. 191. "Denmark."

Mass.— Wood's Hole.

48. Limnesia undulata (Müller).

Wolcott, Trans. Amer. micros. soc., 1903, vol. 24, p. 149, pl. 12, fig. 8, pl. 13, fig. 9.

Hydrachna undulata Müller, Hydrachnae * * * Daniae, 1781, p. 80, pl. 11, fig. 1. "In aquosis."

Mass.— Wood's Hole.

HYDRACHNIDAE.

49. Atax ypsilophorus (Bonz).

Acarus ypsilophorus Bonz, Nova acta acad. Leop. Carol. nat. cur., 1783, vol. 7, p. 52, fig. "Europe."
Hydrachna formosa Dana & Whelpley, Amer. journ. sci., 1836, vol. 30, p. 357, pl.—, fig. 1–8. "Near New Haven," Conn.

Conn.— New Haven.

50. Hydrachna pyriformis Dana & Whelpley.

Dana & Whelpley, Amer. journ. sci., 1836, vol. 30, p. 358, pl.— fig. 9. "Near New Haven," Conn.

Conn.— New Haven.

51. Hydrachna tricolor Packard.

Packard, Amer. journ. sci., 1871, ser. 3, vol. 1, p. 108. "New Haven," Conn.

Conn.— New Haven.

52. Thalassarachna verrillii Packard.

Packard, Amer. journ. sci., 1871, ser. 3, vol. 1, p. 107, fig. 5. "Eastport Harbor," Me.

Me.— Eastport Harbor.

IXODIDAE.

53. Haemaphysalis chordeilis (Packard).

Ixodes chordeilis Packard, 1st. ann. rept. Peabody acad. sci. 1869, p. 67. "Mass."

Vt.— Taftsville.
Mass.— Salem.

IXODIDAE.

54. Ixodes cookei Packard.

Packard, 1st. ann. rept. Peabody acad. sci., 1869, p. 67. "Salem," Mass.

Ixodes hexagonus longispinosus Neumann, Mém. soc. zool. France, 1901, vol. 14, p. 283.

Me.— Skowhegan, Norway.
Mass.— Amherst, Sherborn, Salem.

55. Ixodes brunneus Koch.

Koch, Archiv f. naturgesch., 1844, jahrg. 10, bd. 1, p. 232. "Nordamerika." Übersicht. Arachn. syst., 1847, vol. 4, p. 101, pl. 20, fig. 74.

Mass.— Amherst.

56. Dermacentor variabilis (Say).

Ixodes variabilis Say, Journ. acad. nat. sci. Phil. 1821, vol. 2, p. 77; Ed. Lec., vol. 2, p. 21. "United States."

Dermacentor electus Koch, Archiv f. naturgesch., 1844, jahrg. 10, bd. 1, p. 235. Salmon & Stiles, 17th ann. rept. bur. anim. indust., 1902, p. 455, pl. 88–92.

Vt.— Bellows Falls.
Mass.— Nantucket, Wood's Hole.

57. Dermacentor albipictus (Packard).

Ixodes albipictus Packard, Guide study insects, 1869, p. 662. [Nova Scotia].

Dermacentor variegatus Neumann, Mém. soc. zool. France, 1897, vol. 10, p. 367, fig. 22–24. Salmon & Stiles, 17th ann. rept. bur. anim. industr., 1902, p. 452, pl. 86–87.

N. H.— Blue Mts.

IXODIDAE.

58. Amblyomma americanum (Linné).

Acarus americanus Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 615. "America."

Ixodes unipunctata Pack., 1st ann. rept. Peabody acad. sci., 1869, p. 66. Salmon & Stiles, 17th ann. rept. bur. anim. industr., 1902, p. 473, pl. 96–98.

Mass.

GAMASIDAE.

59. Dermanyssus gallinae (DeGeer).

Mégnin, Parasites artic., 1880, p. 115, pl. 1.

Acarus gallinae DeGeer, Mém. hist. ins., 1778, vol. 7, p. 111, pl. 6, fig. 13, 14. "Europe."

Mass.— Salem, Stony Bridge.
R. I.— Kingston, on poultry.

60. Liroaspis americana Banks.

Banks, Can. ent., 1902, vol. 34, p. 174, fig. 7. "Olympia, Washington, and from St. Croix Falls, Wisconsin."

N. H.— Franconia.

91. Echinomegistus wheeleri (Wasmann).

Berlese, Redia, 1904, vol. 1, p. 398, pl. 13, fig. 103, pl. 14, fig. 103, 104.

Anntennophorus wheeleri Wasmann, Zool. Anz., 1902, vol. 25, p. 72. "Colebrook, Conn."

Conn.— Colebrook.

GAMASIDAE.

62. Laelaps cuneifer americanus Berlese.

Berlese, Redia, 1904, vol. 1, p. 418, pl. 14, fig. 123. "Colebrook, Conn."

Conn.— Colebrook.

ORIBATIDAE.

63. Galumna emarginata (Banks).

Oribata emarginata Banks, Trans. Amer. ent. soc., 1895, vol. 22, p. 7. "Sea Cliff, N. Y.; Chicago, Ill.; Brazos County, Texas."

Mass.— Middlesex Fells.

64. Galumna slossonae Banks.

Banks, Proc. acad. nat. sci. Phil., 1906, p. 490. "Franconia, N. H."

N. H.— Franconia.

65. Galumna unimaculata Banks.

Banks, Proc. acad. nat. sci. Phil., 1906, p. 490. "Franconia, N. H."

N. H.— Franconia.

66. Galumna nitidula Banks.

Banks, Proc. acad. nat. sci. Phil., 1906, p. 491. "Franconia, N. H."

N. H.— Franconia.

ORIBATIDAE.

67. Galumna persimilis Banks.

Banks, Proc. acad. nat. sci. Phil., 1906, p. 491. "Franconia, N. H."

N. H.— Franconia.

68. Oribatella bidentata Banks.

Banks, Trans. Amer. ent. soc., 1895, vol. 22, p. 8. "Sea Cliff, N. Y."

N. H.— Franconia.

69. Cepheus lamellatus Banks.

Banks, Proc. acad. nat. sci. Phil., 1906, p. 497. "Blue Hill, Mass."

Mass.— Blue Hill.

70. Liacarus nitidus (Banks).

Cephus nitidus Banks, Trans. Amer. ent. soc., 1895, vol. 22, p. 10. "Sea Cliff, N. Y.; Ft. Lee, N. J.; Washington, D. C."

N. H.— Franconia.

71. Oppia montana Banks.

Banks, Proc. acad. nat. sci. Phil., 1906, p. 497. "Franconia, N. H."

N. H.— Franconia.

72. Oribata puritanica Banks.

Banks, Proc. acad. nat. sci. Phil., 1906, p. 498. "Middlesex Fells, Mass."

Mass.— Middlesex Fells.

ORIBATIDAE.

73. Nothrus ovivorus Packard.

Packard, Guide to the study of insects, ed. 2, 1870, p. 664, fig. 639. "Salem, Mass."

Mass.— Salem.

TYROGLYPHIDAE.

74. Tyroglyphus farinae (DeGeer).

Banks, Tech. bull. 13, Bur. ent. U. S. dept. agric., 1906, p. 14, pl. 2, fig. 14.

Acarus farinae DeGeer, Mém. hist. ins., 1778, vol. 7, p. 97, pl. 5, fig. 15. "Europe."

Mass.— Marblehead.

75. Tyroglyphus heteromorphus Felt.

Felt, 11th rept. N. Y. state ent., 1896, p. 254. "Berlin, Mass."

Banks, Tech. bull. 13 Bur. ent. U. S. dept. agric., 1906, p. 18, pl. 4, fig. 37–39.

Mass.— Berlin.

76. Tyroglyphus lintneri Osborn.

Osborn, Science, 1893, vol. 22, p. 360, fig. [Jamesport, N. Y.] Lintner, 10th rept. N. Y. state ent., 1895, p. 452, fig. 21. Banks, Tech. bull. 13 Bur. ent. U. S. dept. agric., 1906, p. 15, pl. 3, fig. 23–25, 29.

Me.— York Corner.

77. Rhizoglyphus rhizophagus Banks.

Banks, Tech. bull. 13, Bur. ent. U. S. dept. agric., 1906, p. 21,

TYROGLYPHIDAE.

pl. 6, fig. 50–52. "Missoula, Mont., * * * Missouri, * * * Glenellen, Cal."

Me.— Twin Pines.

78. Rhizoglyphus phylloxerae (Riley).

Banks, Tech. bull. 13 Bur. ent. U. S. dept. agric., 1906, p. 20, pl. 6, fig. 57, 59–61.

Tyroglyphus phylloxerae Riley, 6th rept. Missouri state ent., 1874, p. 52, fig. 16. [Missouri].

Mass.— Lawrence.

ANALGESIDAE.

79. Analges pici-pubescentis (Packard).

Dermaleichus pici-pubescentis Packard, Amer. nat., 1869, vol. 3, p. 493, pl. 6, fig. 1–3. ——

Conn.— Ansonia, on fish-hawk.

SARCOPTIDAE.

80. Cnemidocoptes mutans (Robin).

Canestrini, Atti istit. Veneto, 1894, ser. 7, vol. 5, p. 1232, pl. 14, fig. 1–3, pl. 15, fig. 14.

Sarcoptes mutans Robin, Bull. soc. Moscou, 1860, vol. 33, p. 198, pl. 5, fig. 3. "Europe."

R. I.— Kingston, on poultry.

ERIOPHYIDAE.

81. Eriophyes abnormis (Garman).

Phytoptus abnormis Garman, 12th rept. Illinois state ent., 1883, p. 134. "Bloomington, Illinois."

Vt.— Wells River.

82. Eriophyes crumena (Riley).

Acarus aceris crumena Riley, Amer. ent. & bot., 1870, vol. 2, p. 339. "Danville, Ind."

Phytoptus acericola, Garman, 12th rept. Illinois state ent., 1883, p. 135.

Mass.— Belchertown.

83. Eriophyes pruni-crumena (Walsh).

Acarus pruni-crumena Walsh, 1st. rept. Illinois state ent., 1868, p. 43; ed. 2, 1903, p. 55. [Illinois].

Vt.— Pompanoosuc.

84. Eriophyes pyri Pagenstecher.

Pagenstecher, Verh. ver. Heidelberg, 1857, vol. 1, p. 48. "Europe."

Phytoptus pyri Slingerland, Bull. 61, Cornell univ. agric. exper. station, 1893, p. 317, fig. 5.

Me.— North Haven.

85. Eriophyes quadripedes (Shimer).

Vasates quadripedes Shimer, Trans. Amer. ent. soc., 1869, vol. 2, p. 319. [Illinois].

Me.— Orono.

Conn.— Hartford, Litchfield.

ERIOPHYIDAE.

86. Eriophyes serotinae (Beutenmüller).

Acarus serotinae Beutenmüller, Bull. Amer. Mus. nat. hist., 1892, vol. 4, p. 278, pl. 16, fig. 4. "Vicinity of New York city."

Me.— Orono.

87. Eriophyes ulmi (Garman).

Phytoptus ulmi Garman, 12th rept. Illinois state ent., 1883, p. 137. "Normal, Illinois, * * * Bloomington."

Conn.— Greenwich.

Occasional Papers
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Boston Society of Natural History.
VII.

FAUNA OF NEW ENGLAND.

12.

LIST OF THE MEDUSAE CRASPEDOTAE, SIPHONOPHORAE, SCYPHOMEDUSAE, CTENOPHORAE.

By HENRY B. BIGELOW.

BOSTON:
PRINTED FOR THE SOCIETY FROM THE
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Announcement.

Fauna of New England.

The Library and Publishing Committee will issue, as volume seven of the Occasional Papers, a Catalogue of the animals of New England.

Parts will be published at irregular intervals, and though the details of the several lists will vary somewhat in the different groups, each list will include: 1st, the accepted name (scientific and vernacular); 2d, reference to the original description, with record of locality; 3d, reference to an authentic description and illustration; and 4th, habitat and occurrence.

The Committee considers these lists a necessary preliminary to a series of comprehensive, illustrated monographs, the publication of which it is hoped the Society will at some later time take upon itself. The Committee also believes that these lists will aid in the accumulation of valuable material for the New England collection of the Society. With this in view a check list of names will accompany each part, to show the representation of the group in the Society's New England collection. A price list of the parts already published will be found on the back cover page.

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FAUNA OF NEW ENGLAND.

12.

LIST OF THE MEDUSAE CRASPEDOTAE, SIPHONOPHORAE, SCYPHOMEDUSAE, CTENOPHORAE.

By HENRY B. BIGELOW.

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MEDUSAE CRASPEDOTAE.

ANTHOMEDUSAE.

SARSIIDAE.

1. Sarsia mirabilis L. Agassiz.

L. Agassiz, Mem. Amer. acad. arts and sci., 1850, new ser., vol. 4, p. 228, pls. 4, 5. "Boston Harbour."

Coryne mirabilis L. Agassiz, Contr. nat. hist. U. S., 1860, vol. 3, pl. 11c, figs. 14, 15; *ibid.*, 1862, vol. 4, p. 185, pl. 20, fig. 1–9; pl. 23a, fig. 12.

New England coast.

Me.— Eastport region, Penobscot bay.

N. H.— Portsmouth.

Mass.— Gloucester, Nahant, Boston, Cohasset, Woods Hole region.

R. I.— Newport.

Probably the same as the European *S. tubulosa* Allman.

2. Sarsia reticulata (A. Agassiz) Hartlaub.

Syndictyon reticulatum A. Agassiz, in L. Agassiz, Contr. nat. hist. U. S., 1862, vol. 4, p. 340, footnote. "Nahant, near Boston." A. Agassiz, Mem. Mus. comp. zoöl., 1865, vol. 1, no. 2, p. 177, fig. 290–300.

Sarsia mirabilis var. *reticulata* Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 1, p. 57, pl. 4, figs. 3, 4; pl. 5, fig. 6.

New England coast, April to June.

Mass.— Massachusetts Bay, Nahant, Boston Harbor.

May be a variety of *S. mirabilis*.

3. Sarsia hargitti Mayer.

Coryne producta Hargitt, Amer. nat., 1902, vol. 36, p. 551, fig. 3. [Woods Hole, Mass.]

Syncoryne producta Hargitt, Bull. U. S. bureau of fisheries, 1905, vol. 24, p. 30, pl. 1, fig. 1. [Non *Sarsia producta* (Wright) Mayer.]

Sarsia hargitti Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 1, p. 63.

Mass.— Woods Hole.

4. Sarsia haeckeli (Hargitt).

Protiara haeckeli Hargitt, Biol. bull., 1902, vol. 4, p. 17, fig. 4. "Near No Mans Land, [Mass.]."

Mass.— "Off Gay Head and No Mans Land, Vineyard Sound" (Hargitt).

Known from only one record. This species may prove to be identical with *Protiara borealis* (Wagner) Mayer.

5. Slabberia strangulata (McCrady) Hartlaub.

Dipurena strangulata McCrady, Proc. Elliott soc. nat. hist., 1857, vol. 1, p. 135, pl. 9, figs. 1, 2. [Charleston Harbor, South Carolina.]

Dipurena conica A. Agassiz, Mem. Mus. comp. zoöl., 1865, vol. 1, no. 2, p. 181, fig. 301–305.

Slabberia strangulata Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 1, p. 76, pl. 7, fig. 1–3.

A southern species not known north of Cape Cod.

Mass.— Naushon, Buzzards Bay, Woods Hole.

R. I.— Newport (Fewkes).

6. Hydrichthys mirus Fewkes.

Fewkes, Bull. Mus. comp. zoöl., 1888, vol. 13, p. 224, pls. 4, 5. "Surface fishing carried on at the Newport Marine Laboratory."

R. I.— Newport.

7. Corynitis agassizii McCrady.

McCrady, Proc. Elliott soc. nat. hist., 1857, vol. 1, p. 132, pl. 9, fig. 3–8. [Charleston Harbor, South Carolina.] Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 1, p. 72, pl. 5, fig. 2.

A southern species not known north of Cape Cod.

Mass.— Woods Hole.

8. Pennaria tiarella (Ayres) McCrady.

Globiceps tiarella Ayres, Proc. Boston soc. nat. hist., 1852, vol. 4, p. 193. "Sag Harbor, L[ong] I[sland, New York]."

Pennaria tiarella Hargitt, Bull. U. S. bureau of fisheries, 1905, vol. 24, p. 32, pl. 3. Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 1, p. 25, pl. 1, fig. 2–5.

West Indies to Maine.

Me.
Mass.— Massachusetts Bay, Woods Hole, Buzzards Bay.
R. I.— Newport.

9. Steenstrupia virgulata (A. Agassiz) Mayer.

Euphysa virgulata A. Agassiz, Mem. Mus. comp. zoöl., 1865, vol. 1, no. 2, p. 189, fig. 316–319. "Massachusetts Bay, Nahant."

Mass.— Massachusetts Bay, Woods Hole.
Probably the same as the European *S. aurata* Forbes.

10. Hybocodon pendula (L. Agassiz) Haeckel.

Corymorpha pendula L. Agassiz, Contr. nat. hist. U. S., 1862, vol. 4, pp. 276, 343, pl. 26, fig. 7–17. "Massachusetts Bay."

Hybocodon pendula Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 1, p. 41, pl. 2, fig. 2.

Me.— Eastport, 5 to 20 fathoms (hydroid); Kittery.
N. H.— Portsmouth.

Mass.— Nahant, Race Point, Chatham, Vineyard Sound, 10 to 100 fathoms (hydroid). Medusa, April and May.

11. Hybocodon prolifer L. Agassiz.

L. Agassiz, Contr. nat. hist. U. S., 1862, vol. 4, pp. 243, 343, pl. 23a, figs. 10, 11; pl. 25. "Nahant."

Boreal, widely distributed in the North Atlantic.

Mass.— Massachusetts Bay, Nahant, Woods Hole, Vineyard Sound.

Georges Bank.

12. Ectopleura ochracea A. Agassiz.

A. Agassiz, in L. Agassiz, Contr. nat. hist. U. S., 1862, vol. 4, p. 343, footnote. "Naushon, Buzzard's Bay."

Ectopleura dumortieri Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 1, p. 69, pl. 5, figs. 4, 5; pl. 6, figs. 1, 1′, 2.

Cape Cod southward, summer and autumn. Not known from north of Cape Cod.

Mass.— Naushon, Woods Hole, Buzzards Bay.

R. I.— Newport.

Probably the same as the European *E. dumortieri*.

CLADONEMIDAE.

13. Zanclea gemmosa McCrady.

McCrady, Proc. Elliott soc. nat. hist., 1857, vol. 1, p. 151, pl. 8, figs. 4, 5. [Charleston Harbor, South Carolina.] Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 1, p. 88, pl. 6, fig. 7; pl. 7, fig. 5; pl. 8, figs. 4, 5.

A southern species unknown north of Cape Cod. West Indies to southern New England.

Mass.— Buzzards Bay, Naushon, Woods Hole.

R. I.— Newport, common in late summer.

14. Zanclea cladophora (A. Agassiz) Hartlaub.

Gemmaria cladophora A. Agassiz, Mem. Mus. comp. zoöl., 1865, vol. 1, no. 2, p. 184, fig. 307–310. "Massachusetts Bay, Nahant."

Mass.— Massachusetts Bay, Woods Hole.
R. I.— Newport.

CYTAEIDAE.

15. Podocoryna carnea M. Sars.

M. Sars, Fauna littoralis Norvegiae, 1846, pt. 1, p. 4, pl. 1, fig. 7–18. "bei Floröe und Manger."
Podocoryne carnea Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 1, p. 136, pl. 14, fig. 2–6; pl. 15, fig. 14; p. 138, fig. 74.
Atlantic coasts of Europe, the Mediterranean and South Africa. The American records are limited to southern New England, in late summer.

Mass.— Woods Hole region.
R. I.— Newport.

16. Podocoryna fulgurans (A. Agassiz) Mayer.

Dysmorphosa fulgurans A. Agassiz, Mem. Mus. comp. zoöl., 1865, vol. 1, no. 2, p. 163, figs. 259, 260. "Massachusetts Bay, Nahant. . . . Buzzard's Bay, Naushon."
Podocoryne fulgurans Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 1, p. 139, pl. 12, fig. 5–9; pl. 13, fig. 3–5.
North Carolina to southern New England.

Mass.— Massachusetts Bay, Vineyard Sound, Woods Hole region.
R. I.— Newport, abundant in late summer in Narragansett Bay.

17. Lymnorea borealis Mayer.

Mayer, Bull. Mus. comp. zoöl., 1900, vol. 37, p. 6, pl. 5, fig. 16–18.

"Eastport Harbor, Maine." Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 1, p. 154, pl. 15, fig. 1–3.

Me.— Eastport.

18. Turritopsis nutricula (McCrady).

Oceania (*Turritopsis*) *nutricula* McCrady, Proc. Elliott soc. nat. hist., 1856, vol. 1, pp. 55, 58, pls. 4, 5. [Charleston Harbor, South Carolina.]

Turritopsis nutricula Brooks, Mem. Boston soc. nat. hist., 1886, vol. 3, p. 388, pl. 37. Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 1, p. 143, pl. 14, fig. 10–13; pl. 15, fig. 10–13.

Various localities from Cuba and the Bahamas to southern New England; not known north of Cape Cod.

Mass.— Woods Hole, Vineyard Sound, Naushon, Buzzards Bay.

R. I.— Newport.

19. Stylactis hooperi Sigerfoos.

Sigerfoos, Amer. nat., 1899, vol. 33, p. 806, fig. 1–5. "Coldspring Harbor, Long Island, [New York]."

Mass.— Woods Hole.

BOUGAINVILLIIDAE.

20. Bougainvillia superciliaris (L. Agassiz).

Hippocrene superciliaris L. Agassiz, Mem. Amer. acad. arts and sci., 1850, new ser., vol. 4, p. 273, pl. 1–3. "Massachusetts."

Boreal, widely distributed in North Atlantic and Arctic waters. The medusa appears in April south of Cape Cod; north of that point in summer.

Me.— Eastport.

Mass.— Massachusetts Bay, Woods Hole region, Vineyard Sound.

R. I.— Newport.

21. Bougainvillia gibbsi Mayer.

Mayer, Bull. Mus. comp. zoöl., 1900, vol. 37, p. 5, pl. 4, figs. 14 15. "Newport Harbor, Rhode Island."

R. I.— Newport.
Probably the same as the European *B. autumnalis* Hartlaub.

22. Bougainvillia carolinensis (McCrady) Allman.

Hippocrene carolinensis McCrady, Proc. Elliott soc. nat. hist., 1857, vol. 1, p. 164, pl. 10, fig. 8–10. [Charleston Harbor, South Carolina.]
Bougainvillia carolinensis Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 1, p. 165, pl. 16, fig. 7–9; pl. 17, fig. 7.
A southern species known from the Tortugas, South Carolina, and southern New England; rare north of Cape Cod.

Me.— Casco Bay.
Mass.— Woods Hole region, Vineyard Sound, Naushon.
R. I.— Newport.

23. Nemopsis bachei L. Agassiz.

L. Agassiz, Mem. Amer. acad. arts and sci., 1850, new ser., vol. 4, p. 289, text-fig. "In the harbour of Nantucket."
Numerous localities, Florida to southern New England. Not known north of Cape Cod.

Mass.— Nantucket, Vineyard Sound, Naushon, Woods Hole.

24. Rathkea blumenbachii (Rathke) Brandt.

Oceania blumenbachii Rathke, Mém. Acad. sci. St. Pétersbourg, mém. des sav. étrang., 1835, vol. 2, p. 321, pl. 1, fig. 1–4. "Sevastopol."
Rathkea octopunctata and var. *grata* Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 1, pp. 177, 179, pl. 18, fig. 5; pl. 20, fig. 11.
Widely distributed in the North Atlantic, and in the Labrador current.

Mass.— Massachusetts Bay (February to June). Woods Hole region (April to August).

R. I.— Newport (February to June).

AMPHINEMIDAE.

25. Amphinema apicata (McCrady) Haeckel.

Saphenia apicata McCrady, Proc. Elliott soc. nat. hist., 1857, vol. 1, p. 129, pl. 8, figs. 2, 3. [Charleston Harbor, South Carolina.]

Stomotoca dinema [American Medusa], Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 1, p. 110, pl. 9, fig. 8–10; pl. 10, fig. 2–4.

A southern species not known north of Cape Cod.

R. I.— Newport, July 15 to September.

Probably the same as the European *A. dinema* (Péron and Lesueur) Browne.

26. Amphinema rugosa (Mayer) Bigelow.

Stomotoca rugosa Mayer, Bull. Mus. comp. zoöl., 1900, vol. 37, p. 4, pl. 2, fig. 5. "Newport, Rhode Island, and . . . . Charleston, South Carolina." Publ. Carnegie inst., 1910, no. 109, vol. 1, p. 112, pl. 10, figs. 5, 6; pl. 11, figs. 1, 2.

Florida to southern New England.

R. I.— Newport, summer.

PANDEIDAE.

27. Leuckartiara octona (Flemming) Hartlaub.

Geryonia octona Flemming, Edinburgh philos. journ., 1823, vol. 8, p. 299.

Leuckartiara octona Hartlaub, Nordisches plankton, 1914, pt. 17, no. 12, p. 285, fig. 238–253.

Widely distributed on both sides of the North Atlantic.

Me.— Eastport region; Grand Manan.

R. I.— Newport.

28. Catablema vesicaria (A. Agassiz) Haeckel.

Turris vesicaria A. Agassiz, Proc. Boston soc. nat. hist., 1862, vol 9, p. 97. "Nahant, [Massachusetts]." A. Agassiz, Mem. Mus. comp. zoöl., 1865, vol. 1, no. 2, p. 164, fig. 261–268.

Catablema vesicaria Bigelow, Proc. U. S. nat. mus., 1909, vol. 37, p. 304, pl. 30, figs. 3, 4; pl. 31, fig. 6.

Catablema vesicarium Hartlaub, Nordisches plankton, 1914, pt. 17, no. 12, p. 315, fig. 263–267.

An Arctic species seldom taken south of Cape Cod.

Me.— Eastport.
Mass.— Nahant.
R. I.— Newport (young).

WILLIIDAE.

29. Proboscidactyla ornata (McCrady) Browne.

Willsia ornata McCrady, Proc. Elliott soc. nat. hist., 1857, vol. 1, p. 149, pl. 9, fig. 9–11. [Charleston Harbor, South Carolina.]

Willia ornata A. Agassiz, Mem. Mus. comp. zoöl., 1865, vol. 1, no. 2, p. 171, fig. 274a–279.

Proboscidactyla ornata Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 1, p. 189, pl. 20, fig. 1–10.

A southern species not recorded north of Cape Cod.

Mass.— Naushon, Woods Hole, Buzzards Bay.
R. I.— Newport.

LEPTOMEDUSAE.

THAUMANTIIDAE.

30. Melicertum campanula (Fabricius) A. Agassiz.

Medusa campanula Fabricius, Fauna Groenlandica, 1780, p. 366. [West Greenland.]

Melicertum campanula A. Agassiz, Mem. Mus. comp. zoöl., 1865,

vol. 1, no. 2, p. 130, fig. 202–214. Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 2, p. 207, pl. 23, figs. 4, 5; pl. 24, fig. 5.

Boreal; New England coast north of Cape Cod.

Me.— Eastport, Grand Manan, Penobscot Bay, summer.

N. H.— Portsmouth, July.

Mass.— Massachusetts Bay, Salem, Nahant, Cohasset (May and June), Cape Cod.

31. Stomobrachium tentaculatum L. Agassiz.

L. Agassiz, Contr. nat. hist. U. S., 1862, vol. 4, p. 361. "Massachusetts Bay, Nahant." A. Agassiz, Mem. Mus. comp. zoöl., 1865, vol. 1, no. 2, p. 98, fig. 140–142.

Mass.— Nahant. Not recorded since 1865.

32. Orchistoma tentaculata Mayer.

Mayer, Bull. Mus. comp. zoöl., 1900, vol. 37, p. 8, pl. 5, fig. 19. "Newport, Rhode Island."

R. I.— Newport.

33. Laodicea calcarata A. Agassiz.

A. Agassiz, in L. Agassiz, Contr. nat. hist. U. S., 1862, vol. 4, p. 350, footnote. "Naushon, Buzzard's Bay."

Lafoea calcarata A. Agassiz, Mem. Mus. comp. zoöl., 1865, vol. 1, no. 2, p. 122, fig. 184–194.

Atlantic coast of the United States, south of Cape Cod.

Mass.— Naushon, Vineyard Sound, Woods Hole, summer.

Probably the same as the European *L. cruciata*.

34. Staurophora mertensii Brandt.

Brandt, Mém. Acad. sci. St. Pétersbourg, 1838, ser. 6, sci. math. phys. et nat., vol. 4, pt. 2, sci. nat., p. 400, pls. 24, 25. "Nordfolksunde."

Staurophora laciniata L. Agassiz, Mem. Amer. acad. arts and sci.,

1850, new ser., vol. 4, p. 308, pl. 7. A. Agassiz, Mem. Mus. comp. zoöl., 1865, vol. 1, no. 2, p. 136, figs. 215a, 216a–219.

Abundant north of Cape Cod, occasional in spring off southern New England.

Me.— Grand Manan, Eastport, summer; off Casco Bay, July.

Mass.— Boston Harbor, Nahant, April to July, Cape Cod, Vineyard Sound, Woods Hole.

Gulf of Maine; German Bank; Platt's Bank.

35. Ptychogena lactea A. Agassiz.

A. Agassiz, Mem. Mus. comp. zoöl., 1865, vol. 1, no. 2, p. 137, fig. 220–224. "Massachusetts Bay, Nahant."

A boreal species not known south of Cape Cod.

Mass.— Nahant.

MITROCOMIDAE.

36. Halopsis ocellata A. Agassiz.

A. Agassiz, Proc. Boston soc. nat. hist., 1863, vol. 9, p. 220. "Nahant." Mem. Mus. comp. zoöl., 1865, vol. 1, no. 2, p. 99, fig. 143–150.

Not recorded south of Cape Cod.

Me.— Grand Manan.

Mass.— Massachusetts Bay, Nahant.

Gulf of Maine, off Casco Bay.

37. Tiaropsis diademata L. Agassiz.

L. Agassiz, Mem. Amer. acad. arts and sci., 1850, new ser., vol. 4, p. 298, pl. 6, fig. 1–18; pl. 8, fig. 11. "Along the wharves of Boston harbour." L. Agassiz, Contr. nat. hist. U. S., 1862, vol. 4, p. 308, pl. 31, fig. 9–15.

Boreal, common on the northern New England coast March to May; occasional south of Cape Cod.

Me.— Eastport region, Casco Bay.

Mass.— Massachusetts Bay, Nahant, Boston, Cohasset, Cape Cod, Woods Hole.

38. Mitrocoma cruciata (A. Agassiz) Mayer.

Halopsis cruciata A. Agassiz, Mem. Mus. comp. zoöl., 1865, vol. 1, no. 2, p. 102, figs. 151, 152. "Massachusetts Bay, Nahant."

Mass.— Massachusetts Bay.

Gulf of Maine, northeast part.

Probably the same as the European *M. annae* Haeckel.

EUCOPIDAE.

39. Obelia geniculata (Linné) Allman.

Sertularia geniculata Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 812. "In Oceano."

Eucope diaphana A. Agassiz, Mem. Mus. comp. zoöl., 1865, vol. 1, no. 2, p. 83, fig. 115–125.

Obelia sp. (*geniculata?*) Böhm, Jena. zeitschr., 1878, vol. 12, p. 174, pl. 3, fig. 1–34.

A world-wide species, abundant on the New England coast.

Me.— Penobscot Bay, Casco Bay.

Mass.— Massachusetts Bay, Woods Hole region.

R. I.— Newport.

40. Obelia plana (M. Sars) Haeckel.

Thaumantias? plana M. Sars, Beskrivelser og jagttagelser, 1835, p. 28, pl. 5, fig. 13a–13g. "Floröen om Foraaret," Norway.

Obelia flabellata Hincks, British hydroid zoophytes, 1868, p. 157, pl. 29.

Rocky tide-pools on both sides of the North Atlantic.

Mass.— Nahant, off Thimble Island, 4 to 5 fathoms, Woods Hole.

41. Obelia longissima (Pallas) Hincks.

Sertularia longissima Pallas, Elenchus zoophytorum, 1766, p. 119. "Oceanus Europaeus. . . . in Mari Belgium."

Obelia longissima Hincks, British hydroid zoophytes, 1868, p. 154, pl. 27.

Common on both sides of the North Atlantic.

Me.— Casco Bay.

Mass:— Woods Hole, and 40 miles southeast of No Man's Land.

42. Obelia gelatinosa (Pallas) Hincks.

Sertularia gelatinosa Pallas, Elenchus zoophytorum, 1766, p. 116. "Mare Belgium alluens."

Obelia gelatinosa Hincks, British hydroid zoophytes, 1868, p. 151, pl. 26, figs. 1, 1′, 1a.

Abundant in the Mediterranean, and both sides of the North Atlantic. Not known north of Cape Cod.

Mass.— Vineyard Sound.

R. I.— Coast.

Conn.— New Haven.

43. Obelia commissuralis McCrady.

McCrady, Proc. Elliott soc. nat. hist., 1857, vol. 1, p. 197, pl. 11, fig. 5–7. "Sullivan's Island, [South Carolina]." A. Agassiz, Mem. Mus. comp. zoöl., 1865, vol. 1, no. 2, p. 91, figs. 134, 135.

Abundant along the New England coast.

Me.— Eastport region.

Mass.— Massachusetts Bay, Woods Hole region.

R. I.— Newport.

44. Obelia dichotoma (Linné) Hincks.

Sertularia dichotoma Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 812. "In Oceano."

Obelia dichotoma Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 2, p. 246, pl. 30, fig. 1–4.

Common on both sides of the North Atlantic.

Me.— Eastport region, Casco Bay.

Mass.— Massachusetts Bay, Nahant, Marthas Vineyard, Woods Hole region.

R. I.— Newport.

45. Clytia volubilis (Ellis and Solander) Lamouroux.

Sertularia volubilis Ellis and Solander, Nat. hist. zoophytes, 1786, p. 51, pl. 4, figs. e, f, E, F. "coast of Sussex."

Clytia bicophora A. Agassiz, Mem. Mus. comp. zoöl., 1865, vol. 1, no. 2, p. 78, fig. 108–111.

Clytia volubilis Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 2, p. 262, pl. 32, fig. 1–7.

Widely distributed on the northern coasts of Europe and the United States.

Me.— Eastport region.

Mass.— Massachusetts Bay, Vineyard Sound, Woods Hole, Buzzards Bay.

R. I.— Newport.

46. Clytia folleata (McCrady) Mayer.

Epenthesis folleata McCrady, Proc. Elliott soc. nat. hist., 1857, vol. 1, p. 191. "Charleston Harbor, [South Carolina]."

Clytia folleata Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 2, p. 264, pl. 31, figs. 9, 10; pl. 33, fig. 1–3.

Coast of the United States from southern New England to the West Indies. Not known north of Cape Cod.

Mass.— Vineyard Sound, Woods Hole, summer.

R. I.— Newport, summer.

47. Eucheilota ventricularis McCrady.

McCrady, Proc. Elliott soc. nat. hist., 1857, vol. 1, p. 187, pl. 11,

fig. 1–3; pl. 12, figs. 1, 2. [Charleston Harbor, South Carolina.] Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 2, p. 282, pl. 37, fig. 5; pl. 38, fig. 1–1″.

Atlantic coast of the United States between southern New England and the Tortugas. Not recorded north of Cape Cod.

Mass.— Naushon, Woods Hole, Buzzards Bay, Vineyard Sound.
R. I.— Newport.

48. Phialium duodecimalis (A. Agassiz) Haeckel.

Eucheilota duodecimalis A. Agassiz, in L. Agassiz, Contr. nat. hist. U. S., 1862, vol. 4, p. 353, footnote. "Naushon." A. Agassiz, Mem. Mus. comp. zoöl., 1865, vol. 1, no. 2, p. 75, figs. 106, 107, 107a. Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 2, p. 283, pl. 36, fig. 6; pl. 37, figs. 1, 2.

A southern species not known north of Cape Cod.

Mass.— Naushon, Woods Hole.
R. I.— Newport.

49. Phialidium languidum (A. Agassiz) Haeckel.

Oceania languida A. Agassiz, in L. Agassiz, Contr. nat. hist. U. S., 1862, vol. 4, p. 353, footnote. "Nahant and Naushon." A. Agassiz, Mem. Mus. comp. zoöl., 1865, vol. 1, no. 2, p. 70, fig. 94–102.

Phialidium languidum Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 2, p. 269, pl. 33, fig. 4–8; pl. 34, fig. 5.

Abundant in summer on the New England coast, and in the Gulf of Maine near land; occasional as far south as South Carolina.

Me.— Eastport, Mt. Desert, Penobscot Bay, Casco Bay.
N. H.— Portsmouth.
Mass.— Massachusetts Bay, Nahant, Gloucester, Cohasset, Vineyard Sound, Buzzards Bay, Woods Hole.
R. I.— Newport.

50. Phialidium singularis (Mayer).

Oceania singularis Mayer, Bull. Mus. comp. zoöl., 1900, vol. 37, p. 7, pl. 4, figs. 12, 13. "Newport Harbor, Rhode Island."

R. I.— Newport.

51. Tima formosa L. Agassiz.

L. Agassiz, Contr. nat. hist. U. S., 1862, vol. 4, p. 362, footnote. "Massachusetts Bay." A. Agassiz, Mem. Mus. comp. zoöl., 1865, vol. 1, no. 2, p. 113, fig. 164–172. Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 2, p. 315, pl. 41, fig. 1–3.

General on the southern New England coast in early spring; recorded in Massachusetts Bay, March to May, and September.

Mass.— Nahant, Gloucester (winter), Cape Cod, Vineyard Sound, Woods Hole, Buzzards Bay.

R. I.— Newport.

52. Eutima mira McCrady.

McCrady, Proc. Elliott soc. nat. hist., 1857, vol. 1, p. 190, pl. 11, figs. 8, 9. [Charleston Harbor, South Carolina.] Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 2, p. 295, pl. 39, fig. 1; pl. 40, figs. 3, 3′; p. 297, fig. 160.

Coast of the United States between the West Indies and southern New England; not known north of Cape Cod.

Mass.— Woods Hole region, Vineyard Sound, late summer.

R. I.— Newport.

AEQUOREIDAE.

53. Aequorea aequorea var. albida A. Agassiz.

Aequorea albida A. Agassiz, in L. Agassiz, Contr. nat. hist. U. S., 1862, vol. 4, p. 359, footnote. "Naushon." A. Agassiz, Mem. Mus. comp. zoöl., 1865, vol. 1, no. 2, p. 110, fig. 160–162. Mayer,

Publ. Carnegie inst., 1910, no. 109, vol. 2, p. 331, pl. 43, fig. 1–5; pl. 44, fig. 5; p. 329, fig. 189.

New England coast, June to October.

Me.— Eastport region.
Mass.— Buzzards Bay, Woods Hole, Naushon.
R. I.— Newport.

54. Aequorea tenuis (A. Agassiz) Bigelow.

Rhegmatodes tenuis A. Agassiz, in L. Agassiz, Contr. nat. hist. U. S., 1862, vol. 4, p. 361, footnote. "Naushon, Buzzard's Bay." A. Agassiz, Mem. Mus. comp. zoöl., 1865, vol. 1, no. 2, p. 95, fig. 136–138.

Southern New England in summer and early autumn; not known north of Cape Cod.

Mass.— Woods Hole, Naushon, Buzzards Bay.
R. I.— Newport.

55. Aequorea groenlandica Péron and Lesueur.

Medusa aequorea Fabricius, Fauna Groenlandica, 1780, p. 364. [West Greenland.]

Aequorea groenlandica Péron and Lesueur, Ann. Mus. d'hist. nat. Paris, 1809, vol. 14, p. 339. "la mer du Groënland."

Zygodactyla groenlandica A. Agassiz, Mem. Mus. comp. zoöl., 1865, vol. 1, no. 2, p. 103, fig. 153–155 (*non* fig. 156). Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 2, p. 335, pl. 44, fig. 1–4.

A northern species, known as far south as Newport, R. I., and represented by a distinct variety to North Carolina.

Me.— Eastport region.
Mass.— Massachusetts Bay, Vineyard Sound, Buzzards Bay, summer and autumn.
R. I.— Newport.

TRACHOMEDUSAE.

PETASIDAE.

56. Gonionemus murbachii Mayer.

Mayer, Sci. bull. Brooklyn inst. arts and sci., 1901, vol. 1, p. 5. "Woods Holl, Massachusetts." Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 2, p. 343, pl. 45, fig. 1–4; pl. 46, fig. 1–3.

Mass.— Woods Hole, Vineyard Haven, Muskeget.

Conn.— Noank.

TRACHYNEMIDAE.

57. Aglaura hemistoma Péron and Lesueur.

Péron and Lesueur, Ann. Mus. d'hist. nat. Paris, 1809, vol. 14, p. 351. "côtes de Nice." Haeckel, System der medusen, in Denkschr. med.-nat. ges. Jena, 1879, vol. 1, p. 275, pl. 16, figs. 1 ("*A. nausicaa*"), 2 ("*A. laterna*"), 3, 4. Bigelow, Mem. Mus. comp. zoöl., 1909, vol. 37, p. 119, pl. 2, fig. 6.

Tropical; all oceans.

Gulf Stream, 60 miles south of Marthas Vineyard.

58. Aglantha digitale (Fabricius) Haeckel.

Medusa digitale Fabricius, Fauna Groenlandica, 1780, p. 366, [West Greenland.]

Trachynema digitale A. Agassiz, Mem. Mus. comp. zoöl., 1865, vol. 1, no. 2, p. 57, fig. 81–86.

Aglantha digitale Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 2, p. 402, pl. 49, figs. 2, 2′.

North Atlantic north of lat. 40°.

Me.— Eastport region, summer.

Mass.— Massachusetts Bay, Chatham, Nantucket, Woods Hole region, chiefly in early spring.

Gulf of Maine.

59. Rhopalonema velatum Gegenbaur.

Gegenbaur, Zeitschr. wiss. zool., 1856, vol. 8, p. 251, pl. 9, fig.

1–5. [Messina.] Vanhöffen, Wiss. ergebn. deutschen tiefsee-exp., "Valdivia," 1902, vol. 3, p. 59, pl. 10, figs. 16, 28; pl. 11, fig. 32.
Tropical waters of all oceans.

Mass.— Vineyard Sound, Gulf Stream south of Nantucket.

GERYONIIDAE.

60. Liriope scutigera McCrady.

McCrady, Proc. Elliott soc. nat. hist., 1857, vol. 1, p. 208. [Charleston Harbor, South Carolina.] Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 2, p. 421, pl. 50, fig. 7–10; pl. 51, fig. 1; p. 422, fig. 278.
A southern species not recorded north of Cape Cod.

R. I.— Newport.

61. Liriope tetraphylla (Chamisso and Eysenhardt) Gegenbaur.

Geryonia tetraphylla Chamisso and Eysenhardt, Nova acta Acad. Leop.-Carol., 1821, vol. 10, p. 357, pl. 27, fig. 2. "In Oceano indico."
Liriope tetraphylla Bigelow, Mem. Mus. comp. zoöl., 1909, vol. 37, p. 112, pl. 3, figs. 6, 7; pl. 4, figs. 2, 3.
Tropical and subtropical regions of all oceans.

Mass.— Gulf Stream, south of Marthas Vineyard.

NARCOMEDUSAE.

SOLMARIDAE.

62. Pegantha clara R. P. Bigelow.

R. P. Bigelow, Biol. bull., 1909, vol. 16, p. 80, figs. 1, 2. "Near the border of the Gulf Stream, off the southern coast of New England."

Mass.— Borders of Gulf Stream, south of Woods Hole.

SIPHONOPHORAE.

CALYCOPHOREA.

SPHAERONECTIDAE.

1. Sphaeronectes truncata (Will) Schneider.

Ersaea truncata Will, Horae tergestinae, 1844, p. 82, pl. 2, fig. 28. [Triest.]

Monophyes gracilis Claus, Schriften zoöl. inhalts, Wien, 1874, p. 29, pl. 4, fig. 8–14.

R. I.— Newport.

Only eudoxids have been recorded from New England.

DIPHYIDAE.

2. Diphyes appendiculata Eschscholtz.

Eschscholtz, System der Acalephen, 1829, p. 138, pl. 12, fig. 7. "Nördlichen stillen Meere." Bigelow, Mem. Mus. comp. zoöl., 1911, vol. 38, p. 248, pl. 7, figs. 5, 6; pl. 8, figs. 7, 8; pl. 9, fig. 6; pl. 10, fig. 6; pl. 11, fig. 1.

Warmer parts of all oceans.

Mass.— South of Marthas Vineyard.

R. I.— Newport, late summer.

3. Diphyopsis dispar (Chamisso and Eysenhardt) Haeckel.

Diphyes dispar Chamisso and Eysenhardt, Nova acta Acad. Leop.-Carol., 1821, vol. 10, p. 365, pl. 33, fig. 4. "In mare pacifico aequinoctialis."

Diphyopsis compressa Haeckel, Rep. sci. results....H. M. S. Challenger, 1888, Zoöl., vol. 28, Siphonophorae, p. 153, pls. 33, 34.

A southern species; accidental on the New England coast south of Cape Cod.

Mass.— Nantucket, and south of Marthas Vineyard; surface waters of the Gulf Stream.

PHYSOPHORAE.

AGALMIDAE.

4. AGALMA ELEGANS (M. Sars) Fewkes.

Agalmopsis elegans M. Sars, Fauna littoralis Norvegiae, 1846, pt. 1, p. 32, pls. 5, 6 *partim*. "FLORÖE."

Agalma elegans Fewkes, Bull. Mus. comp. zoöl., 1881, vol. 8, p. 163, pls. 9, 10.

Atlantic and Indo-Pacific.

ME.— Eastport region (?).

R. I.— Newport; Gulf Stream south of Newport.

Gulf of Maine, eastern part.

5. STEPHANOMIA CARA (A. Agassiz) Metschnikoff.

Nanomia cara A. Agassiz, Proc. Boston soc. nat. hist., 1863, vol. 9, p. 181. "NAHANT." A. Agassiz, Mem. Mus. comp. zoöl., 1865, vol. 1, no. 2, p. 200, fig. 331–350. Fewkes, Bull. Mus. comp. zoöl., 1888, vol. 13, p. 213, pl. 1–3.

ME.— Eastport region.

MASS.— Massachusetts Bay; off Cape Ann; off Cape Cod.

R. I.— Newport.

Gulf of Maine, central part; Georges Bank.

PHYSOPHORIDAE.

6. PHYSOPHORA HYDROSTATICA Forskål.

Physsophora hydrostatica Forskål, Descriptiones animalium.... quae in itinere orientali observavit, post mortem edidit Carsten Niebuhr, Hauniae, 1775, p. 119; Icones....1776, pl. 33, fig. e. No locality. Claus, Zeitschr. wiss. zool., 1860, vol. 10, p. 295–332, pl. 25–27.

Physophora borealis M. Sars, Fauna littoralis Norvegiae, 1877, pt. 3, p. 32, pl. 5; pl. 6, fig. 1–8.

Oceanic.

Gulf of Maine, eastern part.

ANTHOPHYSIDAE.

7. Anthophysa formosa (Fewkes) Haeckel.

Athorybia formosa Fewkes, Bull. Mus. comp. zoöl., 1882, vol. 9, p. 271, pl. 5, figs. 3, 4; pl. 6, fig. 7–14. "Tortugas."

Anthophysa formosa Bedot, Résultats des campagnes sci. Monaco, 1904, fasc. 27, p. 5, pl. 1, fig. 4–15.

Mass.— South of Marthas Vineyard.

PHYSALIIDAE.

8. Physalia physalis (Linné) Schneider.

Portuguese Man-o'-War.

Holothuria physalis Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 657. "In Pelago."

Physalia arethusa L. Agassiz, Contr. nat. hist. U. S., 1862, vol. 4, pp. 335, 367, pl. 35.

A southern species often recorded from southern New England.

Me.— Eastport region (one record).

Mass.— Vineyard Sound and adjacent waters; Nantucket, Tuckernuck.

R. I.— Newport.

PORPITIDAE.

9. Porpita umbella (O. F. Müller) Eschscholtz.

O. F. Müller, Beschaft. Berlin ges. naturforsch. freunde, 1776, vol. 2, p. 295, pl. 9, figs. 2, 3. [Equatorial Atlantic.]

Porpita linnaeana A. Agassiz, Mem. Mus. comp. zoöl., 1883, vol. 8, no. 2, p. 12, pl. 7–12.

A southern species, not recorded north of Cape Cod.

Mass.— Vineyard Sound, Woods Hole, Nantucket.

R. I.— Newport.

VELELLIDAE.

10. VELELLA VELELLA (Linné) Schneider.

Medusa velella Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 660. "IN PELAGO. . . . IN MARI MEDITERRANEO."

Velella mutica A. Agassiz, Mem. Mus. comp. zoöl., 1883, vol. 8, no. 2, p. 2, pl. 1–6.

A southern species not recorded north of Cape Cod.

MASS.— Vineyard Sound, Buzzards Bay, Nantucket.

R. I.— Newport.

SCYPHOMEDUSAE.

CHARYBDEIDA.

CHARYBDEIDAE.

1. TAMOYA HAPLONEMA F. Müller.

F. Müller, Abh. naturf. ges. Halle, 1859, vol. 5, p. 1, pl. 1; pl. 2, fig. 15–17; pl. 3, fig. 30–31. "DAS MEER VON SANTA CATHARINA [BRASILIENS]. . . . BEI DESTERRO." Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 3, p. 513, pl. 57, fig. 2–2'''.

Coasts of America between Brazil and southern New England.

CONN.— Branford Harbor.

STAUROMEDUSAE.

LUCERNARIIDAE.

2. HALICLYSTUS AURICULA H. James-Clark.

H. James-Clark, Journ. Boston soc. nat. hist., 1863, vol. 7, p. 559. "ANTICOSTI Is." Smithson. contr. knowledge, 1878, vol. 23, p. 13–92, pl. 1–11.

Common from Massachusetts Bay northward to Labrador, not known south of Cape Cod.

ME.— Eastport region, Mt. Desert Id., Casco Bay.

MASS.— Massachusetts Bay, Nahant, Cohasset.

3. Haliclystus salpinx H. James-Clark.

H. James-Clark, Journ. Boston soc. nat. hist., 1863, vol. 7, p. 563. "Mt. Desert Is., Maine." Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 3, p. 535, pl. 56, fig. 1–4.

Me.— Mt. Desert Id.
Mass.— Ram. Id., Manchester.

4. Lucernaria quadricornis O. F. Müller.

O. F. Müller, Prodrom. zool. Danicae, 1776, p. 227. [Christiania, Norway.] M. Sars, Fauna littoralis Norvegiae, 1846, pt. 1, p. 20, pl. 3, fig. 1–7. H. James-Clark, Journ. Boston soc. nat. hist., 1863, vol. 7, p. 552.

Northern Europe, Greenland to northern New England; not recorded south of Cape Cod.

Me.— Eastport region, Owl's Head, Casco Bay.
Mass.— Massachusetts Bay.

5. Halimocyathus platypus H. James-Clark.

H. James-Clark, Journ. Boston soc. nat. hist., 1863, vol. 7, p. 537. "Chelsea Beach, Mass."

One record only.

Mass.— Massachusetts Bay.

6. Halimocyathus lagena (O. F. Müller) Haeckel.

Holothuria lagenam referens O. F. Müller, Prodrom. zool. Danicae, 1776, p. 232. "Gr[oenland,] Unneraisuk."

Lucernaria auricula Milne-Edwards, Régne animal, zoophytes, 1849, pl. 63, 9 figs.

Manania auricula H. James-Clark, Journ. Boston soc. nat. hist., 1863, vol. 7, p. 542.

Atlantic coasts of Europe, Greenland, and northern New England.

Me.— Eastport.
Mass.— Massachusetts Bay.

CORONATA.

PERIPHYLLIDAE.

7. Periphylla hyacinthina Steenstrup.

Steenstrup, Acta et cat. Mus. Hafniensis, 1837. "Greenland." Vanhöffen, Wiss. ergebn. deutschen tiefsee-exp., "Valdivia," 1902, vol. 3, p. 23, pl. 2, fig. 9. Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 3, pp. 545, 546, figs. 342, 343.

Intermediate depths of all oceans.

Mass.— Georges Bank.

DISCOPHORA.

PELAGIIDAE.

8. Pelagia cyanella Péron and Lesueur.

Péron and Lesueur, Ann. Mus. d'hist. nat. Paris, 1809, vol. 14, p. 349. "Océan Atlantique septentrional." L. Agassiz, Contr. nat. hist. U. S., 1860, vol. 3, pls. 12, 13, 13a; *ibid.*, 1862, vol. 4, pp. 128, 164.

A southern species, occasionally taken in the Gulf Stream south of Marthas Vineyard; not recorded north of Cape Cod.

Mass.— Off Marthas Vineyard.

9. Dactylometra quinquecirrha (Desor) L. Agassiz.

Pelagia quinquecirrha Desor, Proc. Boston soc. nat. hist., 1848, vol. 3, p. 76. "Nantucket Bay."

Dactylometra quinquecirrha Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 3, p. 585, pl. 62–64A.

Tropics to southern New England; not recorded north of Cape Cod.

Mass.— Buzzards Bay, Woods Hole, Nantucket.

R. I.— Newport.

CYANEIDAE.

10. Cyanea capillata (Linné) Eschscholtz.

Medusa capillata Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 660. "Oceano septentrionali."

Cyanea capillata Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 3, p. 596, pl. 65, figs. 3, 4.

Cyanea arctica L. Agassiz, Contr. nat. hist. U. S., 1860, vol. 3, pl. 3–5a; pl. 10, fig. 1–17, 19–21, 23–30, 33–35, 37; 38; pl. 10a, fig. 1–4a, 5–12a, 14, 15; *ibid.*, 1862, vol. 4, pp. 87, 162.

Me.— Eastport region, Penobscot Bay, Casco Bay, August and September.

N. H.— Isles of Shoals.

Mass.— Nahant, Boston, Cohasset, Cape Cod, Woods Hole region.

R. I.— Newport, spring and early summer.

AURELIIDAE.

11. Phacellophora ornata (Verrill) Haeckel.

Callinema ornata Verrill, Amer. journ. sci., 1869, ser. 2, vol. 48, p. 117. "Eastport Harbor." Fewkes, Bull. Mus. comp. zoöl., 1888, vol. 13, p. 235, pl. 6.

Me.— Eastport.

Probably the same as the European *P. sicula* Haeckel, and the North Pacific *P. ambiguum* Brandt.

12. Aurelia aurita (Linné) Lamarck.

Medusa aurita Linné, Syst. nat., ed. 10, 1758, vol. 1, p. 660. "in Mari Balthico, Oceano."

Aurelia flavidula L. Agassiz, Contr. nat. hist. U. S., 1860, vol. 3,

pl. 6–9; pl. 10, figs. 18, 22, 31, 32, 36; pl. 10a, figs. 4b, 13, 15a, 16–41; pl. 11–11b; pl. 11c, fig. 1–13; *ibid.*, 1862, vol. 4, pp. 10, 160.

Cosmopolitan.

New England coast, Maine to Rhode Island, spring and summer.

ME.— Eastport region, Mt. Desert, Blue Hill Bay, Penobscot Bay, Casco Bay, Kittery.

N. H.— Portsmouth Harbor, Isles of Shoals.

MASS.— Gloucester, Nahant, Boston Harbor, Cohasset, Marthas Vineyard, Woods Hole region.

R. I.— Newport.

RHIZOSTOMIDAE.

13. RHOPILEMA VERRILLI (Fewkes) Mayer.

Nectopilema verrilli Fewkes, Amer. journ. sci., 1887, ser. 3, vol. 33, p. 120, pl. 4. "NEW HAVEN HARBOR."

Rhopilema verrillii Mayer, Publ. Carnegie inst., 1910, no. 109, vol. 3, p. 707, pl. 74, figs. 1, 1′; p. 708, fig. 424.

Coast of the United States between North Carolina and southern New England.

CONN.— New Haven, Thimble Id.; Branford Harbor.

CTENOPHORAE.

CYDIPPIDA.

MERTENSIIDAE.

1. MERTENSIA OVUM (Fabricius) Moerch.

Beroe ovum Fabricius, Fauna Groenlandica, 1780, p. 362. [WEST GREENLAND.]

Mertensia ovum A. Agassiz, Mem. Mus. comp. zoöl., 1865, vol. 1, no. 2, p. 26, fig. 29–37.

A common Arctic species.

In winter the young is recorded from New Jersey; but the adult is not known south of Marthas Vineyard.

ME.— Eastport.

MASS.— Massachusetts Bay, Woods Hole (?).

PLEUROBRACHIIDAE.

2. PLEUROBRACHIA PILEUS (Fabricius) Vanhöffen.

Beroe pileus Fabricius, Fauna Groenlandica, 1780, p. 361. [WEST GREENLAND.]

Pleurobrachia rhododactyla L. Agassiz, Mem. Amer. acad. arts and sci., 1850, new ser., vol. 4, p. 317, pl. 1–5. A. Agassiz, Mem. Mus. comp. zoöl., 1865, vol. 1, no. 2, p. 30, fig. 38–51.

Probably cosmopolitan.

ME.— Bay of Fundy, Casco Bay, Penobscot Bay (?).

N. H.— Isles of Shoals.

MASS.— Massachusetts Bay, Woods Hole.

R. I.— Newport.

Gulf of Maine in general.

CESTIDA.

CESTIDAE.

3. CESTUM VENERIS Lesueur.

Venus girdle.

Lesueur, Nouv. bull. soc. philom. Paris, 1813, vol. 3, p. 282, pl. 5, fig. 1, A, B. "NICE."

Cestus veneris Chun, Fauna und flora d. Golfes von Neapel, 1880, Monogr. 1, p. 301, pl. 11, fig. 1–3; pl. 12.

A southern species not recorded north of Cape Cod.

MASS.— Georges Bank.
R. I.— Newport.

LOBATA.

BOLINOPSIDAE.

4. BOLINOPSIS INFUNDIBULUM (O. F. Müller) Mayer.

Beroe infundibulum O. F. Müller, Prodrom. zool. Danicae, 1776, p. 232. "GR[OENLAND,] IKPIARSURSAK."

Bolinopsis infundibulum Mayer, Publ. Carnegie inst., 1912, no. 162, p. 21, pl. 4, fig. 12–15.

Arctic Ocean and North Atlantic, south to Germany, and New England; possibly to the Mediterranean.

ME.— Eastport region, Penobscot Bay, Casco Bay.
MASS.— Nahant, Cohasset, Woods Hole.
Gulf of Maine in general.

5. MNEMIOPSIS LEIDYI A. Agassiz.

A. Agassiz, Mem. Mus. comp. zoöl., 1865, vol. 1, no. 2, p. 20, fig. 22–24. "NAUSHON, BUZZARD'S BAY." Mayer, Publ. Carnegie inst., 1912, no. 162, p. 26, pls. 6, 7; pl. 8, fig. 46.

Coast of the United States between North Carolina and New England; not recorded north of Cape Cod.

MASS.— Naushon, Vineyard Sound, Buzzards Bay, Woods Hole.
R. I.— Newport.

BEROIDA.

BEROIDAE.

6. BEROË OVATA Bosc.

Bosc, Hist. nat. des vers, 1809, p. 149, pl. 18, fig. 1. [JAMAICA.] Chun, Fauna und flora d. Golfes von Neapel, 1880, Monogr. 1, p. 308, pl. 14, figs. 1, 2.

Mass.— Woods Hole.
Probably the same as the following species.

7. Beroë cucumis Fabricius.

Fabricius, Fauna Groenlandica, 1780, p. 361. [West Greenland.] Mayer, Publ. Carnegie inst., 1912, no. 162, p. 52, pl. 15, fig. 67; pl. 17, fig. 76.
North Atlantic; probably cosmopolitan.

Me.— Eastport, Penobscot Bay, Casco Bay.
Mass.— Vineyard Sound; Crab Ledge, off Chatham.
Gulf of Maine in general.

Doubtful List.

MEDUSAE CRASPEDOTAE.

CAMPANELLA PACHYDERMA A. Agassiz.

A. Agassiz, Mem. Mus. comp. zoöl., 1865, vol. 1, no. 2, p. 52, fig. 70–75. "FOUND AT NAHANT."

This species is probably founded on a young stage of one of the Aeginidae.

SOLMARIS TETRANEMA Hargitt.

Hargitt, Biol. bull., 1902, vol. 4, p. 18, fig. 5. "NEAR THE GULF STREAM."

Probably the young of Solmissus.

CUNINA DISCOIDES Fewkes.

Fewkes, Bull. Mus. comp. zoöl., 1881, vol. 8, p. 161, pl. 2, fig. 8; pl. 4, figs. 1, 2. "NARRAGANSETT BAY."

Probably the young of Solmissus.

SCYPHOMEDUSAE.

CHARYBDEA VERRUCOSA Hargitt.

Charibdea verrucosa Hargitt, Amer. nat., 1902, vol. 36, p. 559, fig. 4. "WOODS HOLE."

Charybdea verrucosa Hargitt, Bull. U. S. bureau of fisheries, 1905, vol. 24, p. 65, pl. 5, fig. 5.

Too young for determination.

CTENOPHORAE.

LESUEURIA HYBOPTERA A. Agassiz.

A. Agassiz, Mem. Mus. comp. zoöl., 1865, vol. 1, no. 2, p. 23, fig. 25–28. "MASSACHUSETTS BAY, AND NEWPORT, R. I."

MASS.— Massachusetts Bay, Woods Hole (?).

R. I.— Newport.

Probably regenerated *Bolinopsis infundibulum.*

In this check list the + indicates a specimen in the Society's Museum; the — that a trustworthy record exists.

Medusae Craspedotae.

	Page.	Me.	N. H.	Mass.	R. I.	Conn.	Gulf of Maine, etc.
Aequorea aequorea var. albida	18	—		—	—		
groenlandica	19	—		—	—		
tenuis	19			—	—		
Aglantha digitale	20	—		—			—
Aglaura hemistoma	20						—
Amphinema apicata	10				—		
rugosa	10				—		
Bougainvillia carolinensis	9	—		—	—		
gibbsi	9				—		
superciliaris	8	—		—	—		
Campanella pachyderma	33			—			
Catablema vesicaria	11	—		—	—		
Clytia folleata	16			—	—		
volubilis	16	—		—	—		
Corynitis agassizii	5			—			
Cunina discoides	33				—		
Ectopleura ochracea	6			—	—		
Eucheilota ventricularis	16			—	—		
Eutima mira	18			—	—		
Gonionemus murbachii	20			—		—	
Halopsis ocellata	13	—		—			—
Hybocodon pendula	5	—	—	—			
prolifer	6			—			—
Hydrichthys mirus	4				—		
Laodicea calcarata	12			—			
Leuckartiara octona	10	—			—		
Liriope scutigera	21				—		
tetraphylla	21			—			
Lymnorea borealis	7	—					
Melicertum campanula	11	—	—	—			
Mitrocoma cruciata	14			—			—
Nemopsis bachei	9			—			
Obelia commissuralis	15	—		—	—		
dichotoma	15	—		—	—		
gelatinosa	15			—	—	—	

	Page.	Me.	N. H.	Mass.	R. I.	Conn.	Gulf of Maine, etc.
Obelia geniculata	14	—		+	—		
longissima	15	—		—			
plana	14			—			
Orchistoma tentaculata	12				—		
Pegantha clara	21			—			
Pennaria tiarella	5	—		+	—		
Phialidium languidum	17	—	—	—	—		—
singularis	18				—		
Phialium duodecimalis	17			—	—		
Podocoryna carnea	7			—	—		
fulgurans	7			—	—		
Proboscidactyla ornata	11			—	—		
Ptychogena lactea	13			—			
Rathkea blumenbachii	9			—	—		
Rhopalonema velatum	20			—			
Sarsia haeckeli	4			—			
hargitti	3			—			
mirabilis	3	—	—	—	—		
reticulata	3			—			
Slabberia strangulata	4			—	—		
Solmaris tetranema	33			—			
Staurophora mertensii	12	—		—			—
Steenstrupia virgulata	5			—			
Stomobrachium tentaculatum	12			—			
Stylactis hooperi	8			—			
Tiaropsis diademata	13	—		—			
Tima formosa	18			+	—		
Turritopsis nutricula	8			—	—		
Zanclea cladophora	7			—	—		
gemmosa	6			—	—		
Siphonophorae.							
Agalma elegans	23	—			—		—
Anthophysa formosa	24			—			
Diphyes appendiculata	22			—	—		
Diphyopsis dispar	22			—			
Physalia physalis	24	—		+	—		
Physophora hydrostatica	23						—
Porpita umbella	24			—	—		
Sphaeronectes truncata	22				—		
Stephanomia cara	23	—		—	—		—
Velella velella	25			—	—		

Scyphomedusae.

	Page.	Me.	N. H.	Mass.	R. I.	Conn.	Gulf of Maine, etc.
Aurelia aurita	28	—	—	+	—		
Charybdea verrucosa	33			—			
Cyanea capillata	28	—	—	—	—		
Dactylometra quinquecirrha	27			—	—		
Haliclystus auricula	25	—		—			
salpinx	26	—		—			
Halimocyathus lagena	26	—		—			
platypus	26			—			
Lucernaria quadricornis	26	—		—			
Pelagia cyanella	27			—			
Periphylla hyacinthina	27			—			
Phacellophora ornata	28	—					
Rhopilema verrilli	29					+	
Tamoya haplonema	25					+	

Ctenophorae.

Beroë ovata	31			—			
cucumis	31	—		—			—
Bolinopsis infundibulum	31	—		—			—
Cestum veneris	30			—	—		
Lesueuria hyboptera	33			—	—		
Mertensia ovum	30	—		—			
Mnemiopsis leidyi	31			—	—		
Pleurobrachia pileus	30	—	—	—	—		—

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