

## XVII.—LIST OF DEEP-WATER MOLLUSCA DREDGED BY THE UNITED STATES FISH COMMISSION STEAMER FISH HAWK IN 1880, 1881, AND 1882, WITH THEIR RANGE IN DEPTH.

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The following list is intended to include all the Mollusca dredged by the Fish Hawk in the region of the Gulf Stream that have been determined.\* In general only those species that have been taken below 60 fathoms are included, except the surface species inhabiting the same region.

References are given to descriptions and figures of those species not contained in Binney's edition of Gould's Invertebrata of Massachusetts, but no complete synonymy is attempted.

The bathymetrical range includes all stations between the southern slope of George's Bank on the north and the region off Chesapeake Bay on the south, unless otherwise stated. Many of the species occur farther north, and in such cases frequently in shallower water than here indicated, but no attempt has been made to show the entire distribution, except in a few instances where the vertical range is given for the specimens taken north of Cape Cod by the Fish Commission, and in the Cephalopods, where some of the "Blake Expedition" specimens are included. The later dredgings of the Albatross, in 1883, have in many cases increased the vertical range of the species and added many others to the fauna.

The sign (\*) indicates that the specimens were taken alive; those that were dead are designated by a dagger (†); when no special mark is given the specimens were living.

### CEPHALOPODA.

#### DECACERA.

*Lestoteuthis Fabricii* (Licht.) Verrill.

*Gonatus Fabricii* Verrill, Trans. Conn. Acad., vol. v, p. 291, 1881.

*Lestoteuthis Fabricii* Verrill, Trans. Conn. Acad., vol. v, p. 390, pl. 45, figs. 1-2d; pl. 49, figs. 1-1f; pl. 55, figs. 1-1d, 1881.

Range, 255-724 fathoms; northern, in shallow water.

\*The number of undetermined species is not large. They are mostly young, or small species belonging to *Turbanilla*, *Bullidae*, *Yoldia*, *Cryptodon*, *Montacuta*, &c., or else larger specimens too much eroded for accurate identification.

*Abralia megalops* Verrill.

Amer. Journ. Sci., vol. xxiv, p. 364, Nov., 1882; Bull. Mus. Comp. Zool., vol. xi, p. 105, pl. 3, fig. 4, 1883; Trans. Conn. Acad., vol. vi, pl. 28, fig. 2, 1884.

Range, 173 fathoms; Blake Exp., 137 fathoms, West Indies.

*Ommastrephes illecebrosus* (Les.) Verrill.

Trans. Conn. Acad., vol. v, pp. 268, 403, pl. 28; pl. 29, figs. 5, 5a; pl. 37, fig. 8; pl. 38, fig. 2; pl. 39, figs. 2-3b, 1880 and 1881.

Range, shore to 640 fathoms.

*Chiroteuthis lacertosa* Verrill.

*Chiroteuthis Bonplandi* Verrill, Trans. Conn. Acad., vol. v, p. 229, 1881.

*Chiroteuthis lacertosa* Verrill, Trans. Conn. Acad., vol. v, p. 408, pl. 47, figs. 1-1b; pl. 55, fig. 5; pl. 56, figs. 1-1f, 1881.

Range, 435 fathoms.

*Brachiotheuthis Beanii* Verrill.

Trans. Conn. Acad., vol. v, p. 406, pl. 55, figs. 3-3b; pl. 56, figs. 2, 2a, 1881.

Range, 183-368 fathoms.

*Calliteuthis reversa* Verrill.

Trans. Conn. Acad., vol. v, p. 295, pl. 46, figs. 1-1b, 1881; vol. vi, p. 243, 1884.

Range, 365 fathoms.

*Histioteuthis Collinsii* Verrill.

Trans. Conn. Acad., vol. v, p. 234, pl. 22, Feb., 1879; pp. 300, 404, pl. 27, figs. 3-5; pl. 37, fig. 5; pl. 55, figs. 6, 6a, 1881.

Range, 372 fathoms +.

*Desmoteuthis tenera* Verrill.

Trans. Conn. Acad., vol. v, p. 412, pl. 55, figs. 2-2d; pl. 56, fig. 3, 1881.

Range, 396 fathoms.

*Stoloteuthis leucoptera* Verrill.

*Sepiola leucoptera* Verrill, Trans. Conn. Acad., vol. v, p. 347, 1881.

*Stoloteuthis leucoptera* Verrill, Trans. Conn. Acad., vol. 5, p. 418, pl. 31, figs. 4, 5; pl. 54, fig. 4, 1881.

Range, 182-640 fathoms; north of Cape Cod, 94-122 fathoms.

*Rossia megaptera* Verrill.

Trans. Conn. Acad., vol. v, p. 349, pl. 38, fig. 1; pl. 46, fig. 6, 1881; vol. vi, p. 245, 1884.

Range, 640 fathoms.

*Rossia Hyatti* Verrill.

Trans. Conn. Acad., vol. v, p. 351, pl. 27, figs. 8, 9; pl. 30, fig. 1; pl. 31, figs. 1, 2; pl. 46, fig. 5, 1881.

Range, 317? fathoms; east and north of Cape Cod, 42-101 fathoms.

*Rossia sublevis* Verrill.

Trans. Conn. Acad., vol. v, pp. 354, 419, pl. 30, fig. 2 ♀; pl. 31, fig. 3 ♀; pl. 46, fig. 4; pl. 47, figs. 2, 3 ♀, 4 ♂ (variety), 1881.

Range, 115–640 fathoms; north of Cape Cod, 45–110 fathoms.

*Heteroteuthis tenera* Verrill.

Trans. Conn. Acad., vol. v, pp. 357, 419, pl. 46, figs. 2–3b; pl. 47, figs. 5–5b, 1881.

Range, 18–301 fathoms (317 fathoms, eggs).

## OCTOPODA.

*Argonauta argo* Linné.

Verrill, Trans. Conn. Acad., vol. 5, pp. 364, 420, 1881; vol. vi, p. 247, pl. 28, figs. 1–1b, 1884.

Range, 64–487 fathoms.† Surface.

*Alloposus mollis* Verrill.

Trans. Conn. Acad., vol. v, pp. 366, 420, pl. 50; pl. 51, figs. 3, 4, 1881; vol. vi, p. 247, 1884.

Range, 238–724 fathoms; Blake Exp., 197 fathoms.

*Octopus Bairdii* Verrill.

Trans. Conn. Acad., vol. v, pp. 368, 421, pl. 33, figs. 1, 1a; pl. 34, figs. 5, 6; pl. 36, fig. 10; pl. 38, fig. 8; pl. 49, figs. 4, 4a; pl. 51, figs. 1, 1a (variety), 1881.

Range, 85–640 fathoms; east and north of Cape Cod, 28–110 fathoms.

*Eledone verrucosa* Verrill.

Trans. Conn. Acad., vol. v, p. 380, pls. 52, 53, 1881; vol. vi, p. 248, 1884.

Range, 787 fathoms; Blake Exp., 466–810 fathoms.

## GASTEROPODA.

## TOXOGLOSSA.

*Pleurotoma Dalli* Verrill and Smith. MSS.

Verrill, Trans. Conn. Acad., vol. v, p. 451, pl. 57, figs. 1, 1a, 1882.

Range, 94–120 fathoms \*; 136–146 fathomst.

*Pleurotoma Carpenteri* Verrill and Smith. MSS.

Verrill, Trans. Conn. Acad., vol. v, p. 452, pl. 57, fig. 2, 1882.

Range, 86 fathoms †; 100–155 fathoms \*.

*Pleurotoma comatotropis* Dall.

*Pleurotoma (Mangilia) comatotropis* Dall, Bull. Mus. Comp. Zool., vol. ix, p. 58, 1881.

*Pleurotoma comatotropis* Verrill, Trans. Conn. Acad., vol. v, p. 452, 1882.

Range, 100 fathoms †.

*Daphnella limacina* Dall.

*Pleurotoma (Bela) limacina* Dall, Bull. Mus. Comp. Zool., vol. ix, pp. 55, 102, 1881.

*Daphnella limacina* Verrill, Trans. Conn. Acad., vol. v, p. 452, 1882.

Range, 368 fathoms.

*Pleurotomella Packardii* Verrill.

Amer. Journ. Sci., vol. v, p. 15, Jan., 1873; Trans. Conn. Acad., vol. v, p. 453, pl. 43, fig. 9; pl. 57, fig. 5, 1882.

Range, 193 fathoms †; north of Cape Cod, 85–110 fathoms.

*Pleurotomella Agassizii* Verrill and Smith. MSS.

Verrill, Trans. Conn. Acad., vol. 5, p. 454, pl. 57, figs. 3, 3a, 1882.

Range, 39–787 fathoms.

*Pleurotomella Pandionis* Verrill.

Trans. Conn. Acad., vol. v, p. 456, pl. 57, figs. 4, 4a, 1882.

Range, 238–310 fathoms †; 319 fathoms \*.

*Gymnobela hebes* Verrill.

Trans. Conn. Acad., vol. v, p. 459, pl. 57, fig. 7, 1882.

Range, 252–487 fathoms.

*Bela (?) tenuilirata* Dall.

Dall, Amer. Journ. Conch., vol. vii, p. 98, 1871.

Verrill, Trans. Conn. Acad., vol. v, p. 463, 1882.

Range, 365 fathoms †.

*Bela pygmaea* Verrill.

Trans. Conn. Acad., vol. v, p. 460, pl. 57, fig. 8, 1882.

Range, 312–487 fathoms.

*Bela incisula* Verrill.

Trans. Conn. Acad., vol. v, p. 461, pl. 43, fig. 12; pl. 57, fig. 14, 1882.

Range, 18–480 fathoms †.

*Bela Gouldii* Verrill.

Trans. Conn. Acad., vol. v, p. 465, pl. 57, figs. 6, 6a, 1882.

Range, 300 fathoms †. (6½–122 fathoms, N. of Cape Cod.)

*Bela mitrula* Lovén, var. *concinnula* Verrill.

*Bela concinnula* Verrill, Trans. Conn. Acad., vol. v, p. 468, pl. 43, fig. 15; pl. 57, fig. 11, 1882.

*Bela mitrula*, var. *concinnula* Verrill, Trans. Conn. Acad., vol. vi, p. 249, 1884.

Range, 100 fathoms †; 252½–487 fathoms \*.

*Bela harpularia* (Couth.) H. and A. Adams.

Verrill, Trans. Conn. Acad., vol. v, p. 473, pl. 43, fig. 14; pl. 57, fig. 9, 1882.

Range, 18–28½ fathoms \*; 368 fathoms †.

*Bela cancellata* (Mighels) Stimpson.

Verrill, Trans. Conn. Acad., vol. v, p. 475, pl. 43, figs. 10, 11; pl. 57, fig. 13, 1882.  
Range, 126–319 fathoms †.

*Bela pleurotomaria* (Couthouy) Adams.

Verrill, Trans. Conn. Acad., vol. v, p. 478, 1882.  
Bush, Proc. U. S. Nat. Mus., vol. vi, p. 238, pl. 9, fig. 7, 1883.  
Range, 16–208 fathoms †.

*Taranis Mörchii* (Malm) Jeffreys.

Verrill, Trans. Conn. Acad., vol. v, p. 486, pl. 57, fig. 18, 1882; vol. vi, p. 251, 1884.  
Range, 365 fathoms †; 368 fathoms \*.

*Taranis pulchella* Verrill.

Trans. Conn. Acad., vol. v, p. 487, pl. 57, fig. 17, 1882; vol. vi, pl. 29, fig. 8, 1884.

Range, 349–487 fathoms.

*Admete Couthouyi* (Jay) Ad. (= *A. viridula* Gld.).

Range, 155–487 fathoms.

## RACHIGLOSSA.

*Marginella borealis* Verrill.

*Marginella carnea* Verrill, Trans. Conn. Acad., vol. v, p. 489, 1882.  
*Marginella borealis* Verrill, Trans. Conn. Acad., vol. vi, p. 165, pl. 29, fig. 4, 1884.

Range, 64–100 fathoms †.

*Buccinum undatum* Linne.

Verrill, Trans. Conn. Acad., vol. v, pl. 58, fig. 10, 1882.  
Range, 11–55 fathoms \*; 57½–312 fathoms †.

*Buccinum Sandersoni* Verrill.

Trans. Conn. Acad., vol. v, p. 490, pl. 58, fig. 9, 1882.  
Range, 156 fathoms †; 208–264 fathoms \*.

*Sipho Stimpsonii* Mörch. (= *Fusus Islandicus* Gould.)

Verrill, Trans. Conn. Acad., vol. v, p. 499 (note), pl. 57, fig. 24, 1882.  
Range, 16–300 fathoms.

*Sipho Stimpsonii* Mörch, var. *liratulus* Verrill.

*Neptunea* (*Sipho*) *arata* Verrill, Proc. U. S. Nat. Mus., vol. iii, p. 370, 1880.  
*Sipho Stimpsonii*, var. *liratulus* Verrill, Trans. Conn. Acad., vol. v, p. 500 (note), 1882.

Range, 56–115 fathoms †; 120–319 fathoms \*.

*Sipho pubescens* Verrill.

Trans. Conn. Acad., vol. v, p. 501, pl. 43, fig. 6; pl. 57, fig. 25, 1882.  
Range, 56–640 fathoms †; 192–435 fathoms \*.

*Sipho pygmæus* Gld.

Verrill, Trans. Conn. Acad., vol. v, p. 501 (note), pl. 57, fig. 21, 1882.

Range, 12-374 fathoms\*; 435 fathoms†.

*Sipho pygmæus* Gld., var. *planulus* Verrill.

Trans. Conn. Acad., vol. v, p. 505 (note), 1882.

Range, 20-350 fathoms.

*Sipho parvus* Verrill and Smith. MSS.

Verrill, Trans. Conn. Acad., vol. v, p. 504, pl. 57, figs. 20, 20a, 20b, 1882.

Range, 192-616 fathoms.

*Sipho glyptus* Verrill.

Trans. Conn. Acad., vol. v, p. 505, pl. 57, fig. 22; pl. 58, figs. 1, 1a, 1882.

Range, 193-458 fathoms.

*Sipho calatus* Verrill.*Neptunea* (*Sipho*) *calata* Verrill, Proc. U. S. Nat. Mus., vol. iii, p. 369, 1880.*Sipho calatus* Verrill, Trans. Conn. Acad., vol. v, p. 506, pl. 57, figs. 19, 19a, 1882.

Range, 302-487 fathoms\*; 616 fathoms†.

*Sipho leptaleus* Verrill.

Trans. Conn. Acad., vol. vi, p. 175, pl. 31, fig. 16, 1884.

Range, 452 fathoms†.

*Neptunca despecta* Linné, var. *tornatus* Gld.

Range, 100 fathoms†. Northern.

*Neptunea decemcostata* (Say) H. & A. Ad.

Range, 6-322 fathoms†; 41-61½ fathoms\*.

*Nassa nigrolabra* Verrill.

Proc. U. S. Nat. Mus., vol. iii, p. 371, 1880; Trans. Conn. Acad., vol. v, p. 512, pl. 58, fig. 12, 1882.

Range, 155 fathoms\*; 349 fathoms†.

*Trophon Lintoni* Verrill and Smith. MSS.

Verrill, Trans. Conn. Acad., vol. vi, p. 176, pl. 29, fig. 1, 1884.

Range, 70 fathoms†.

*Anachis Haliæti* (Jeff.) Verrill.*Anachis Haliæti* Verrill, Amer. Journ. Sci., vol. vii, p. 405, 1874.*Anachis costulata* Verrill, Trans. Conn. Acad., vol. v, p. 513, pl. 43, fig. 7, 1882.*Anachis Haliæti* Verrill, Trans. Conn. Acad., vol. vi, p. 252, 1884.

Range, 79 fathoms†; 115-640 fathoms\*.

*Astyris diaphana* Verrill.

Trans. Conn. Acad., vol. v, p. 513, pl. 58, fig. 2, 1882.

Range, 64 fathoms†; 100-487 fathoms\*.

*Astyris zonalis* (Lins.) Verrill.

Verrill, Report Invert. Anim. Vineyard Sd., p. 351 (auth. copy), pl. 21, fig. 111,  
1874.

Range, 19–202 fathoms.

*Astyris pura* Verrill.

Trans. Conn. Acad., vol. v, p. 515, 1882.

Range, 71 fathoms †; 100–487 fathoms \*.

## TÆNIOGLOSSA.

*Dolium Bairdii* Verrill and Smith. MSS.

Verrill, Amer. Journ. Sci., vol. xxii, p. 299, Oct., 1881; Trans. Conn. Acad.,  
vol. v, p. 515, 1882; vol. vi, p. 253, pl. 29, figs. 2, 2a, 2b, 1884.

Range, 89–234 fathoms; † 104–202 fathoms \*.

*Natica clausa* Brod. & Sowerby.

Range, 18–193 fathoms †; 238–487 fathoms \*.

*Lunatia heros* (Say) H. & A. Ad.

Range, 0–238 fathoms.

*Lunatia Grænlandica* (Möll.) Ad.

Range, 12½–368 fathoms †; 301–365 fathoms \*.

*Lunatia nana* (Möll.) Sars.

Verrill, Proc. U. S. Nat. Mus., vol. ii, p. 197, 1879; Trans. Conn. Acad., vol.  
v, p. 516, pl. 42, fig. 9, 1882.

Range, 27–28 fathoms \*; 30 fathoms †; north of Cape Cod, 15–190  
fathoms \*; 430 fathoms †.

*Lamellaria pellucida* Verrill.

Proc. U. S. Nat. Mus., vol. iii, p. 372, 1880; Trans. Conn. Acad., vol. v, p. 518,  
pl. 58, figs. 4, 5, 5a, 1882.

Range, 86–787 fathoms.

*Lamellaria pellucida*, var. *Gouldii* Verrill.

Trans. Conn. Acad., vol. v, p. 518, pl. 58, fig. 3, 1882.

Range, 44–458 fathoms.

*Velutina levigata* (L.) Gould.

Range, 15½–71 fathoms \*; 100–130 fathoms †.

*Crepidula plana* Say.

Range, 3½–31 fathoms \*; 155–487 fathoms †.

*Crucibulum striatum* (Say) Ad.

Range, 5–65 fathoms \*; 110 fathoms †.

*Capulus Hungaricus* (Linné).

Verrill, Trans. Conn. Acad., vol. v, p. 519, 1882; vol. vi, pl. 29, fig. 6, 1884.

Range, 71-458 fathoms.

*Torellia fimbriata* Verrill and Smith. MSS.

Verrill, Trans. Conn. Acad., vol. v, p. 520, pl. 57, figs. 27, 27a, 1882.

Range, 142½-321 fathoms.

*Torellia fimbriata*, var. *tiarella* Verrill.

Trans. Conn. Acad., vol. v, p. 521, 1882.

Range, 182 fathoms.

*Torellia vestita* Jeffreys.

Verrill, Amer. Journ. Sci., vol. v, p. 15, Jan., 1873; Trans. Conn. Acad., vol. v, p. 521, pl. 42, fig. 5, 1882.

Range, 4½-86 fathoms†; 146-317 fathoms\*.

*Cerithiella Whiteavesii* Verrill.*Lovenella Whiteavesii* Verrill, Proc. U. S. Nat. Mus., vol. iii, p. 375, 1880.*Cerithiella Whiteavesii* Verrill, Trans. Conn. Acad., vol. v, p. 522, pl. 42, fig. 7, 1882.

Range, 238-487 fathoms.

*Aporrhais occidentalis* Beck.

Range, 34½-640 fathoms†; 115-349 fathoms\*.

*Fossarus elegans* Verrill and Smith. MSS.

Verrill, Trans. Conn. Acad., vol. v, p. 522, pl. 57, fig. 28, 1882.

Range, 100 fathoms†.

*Litiopa bombix* Rang.

Verrill, Trans. Conn. Acad., vol. v, p. 523, 1882.

Surface.

*Cingula harpa* Verrill.*Rissoa (Cingula) harpa* Verrill, Proc. U. S. Nat. Mus., vol. iii, p. 374, 1880.*Cingula harpa* Verrill, Trans. Conn. Acad., vol. v, p. 523, pl. 58, fig. 6, 1882.

Range, 319-487 fathoms†.

*Cingula turgida?* (Jeff.) Verrill.

Verrill, Trans. Conn. Acad., vol. v, p. 524, 1882.

Range, 487 fathoms†.

*Cingula areolata* (Stimp.) Verrill.

Verrill, Amer. Journ. Sci., vol. xvii, p. 311, April, 1879; Trans. Conn. Acad., vol. v, p. 524, pl. 43, fig. 2, 1882.

Range, 134-349 fathoms.

*Cingula Jan-Mayeni* (Friele) Verrill.

Verrill, Amer. Journ. Sci., vol. xvii, p. 311, April, 1879; Trans. Conn. Acad., vol. v, p. 524, p. 42, fig. 8, 1882.

Range, 238-487 fathoms.

*Cingula brychia* Verrill.

Trans. Conn. Acad., vol. vi, p. 179, pl. 32, fig. 9, 1884.

Range, 349-487 fathoms.

*Cingula carinata* Migh.

Range, 18-335 fathoms†.

*Cingula aculeus* Gld.

Range, 4-349 fathoms‡.

*Cithna (?) olivacea* Verrill.

Trans. Conn. Acad., vol. vi, p. 185, pl. 29, fig. 5, 1884.

Range, 193 fathoms†.

## PTENOGLOSSA.

*Scalaria Dalliana* Verrill and Smith. MSS.

Verrill, Amer. Journ. Sci., vol. xx, p. 395, Nov., 1880; Trans. Conn. Acad., vol. v, p. 527, pl. 57, fig. 33, 1882.

Range, 85 fathoms†; 115-193 fathoms\*.

*Scalaria Pourtalesii* Verrill and Smith. MSS.

Verrill, Amer. Journ. Sci., vol. xx, p. 395, Nov., 1880; Trans. Conn. Acad., vol. v, p. 527, pl. 57, fig. 32, 1882.

Range, 85-146 fathoms.

*Scalaria (Cirsotrema) Lecana* Verrill.

Trans. Conn. Acad., vol. v, p. 526, pl. 57, fig. 34, 1882.

Range, 146 fathoms†.

*Scalaria (Opalia) Andrewesi* Verrill.

Trans. Conn. Acad., vol. v, p. 526, pl. 57, fig. 35, 1882.

Range, 100 fathoms†.

*Acisra gracilis* Verrill.

Proc. U. S. Nat. Mus., vol. iii, p. 377, 1880; Trans. Conn. Acad., vol. v, p. 528, pl. 57, fig. 31, 1882.

Range, 349-452 fathoms†; 487 fathoms\*.

*Actis striata* Verrill.

Proc. U. S. Nat. Mus., vol. iii, p. 377, 1880; Trans. Conn. Acad., vol. v, p. 528, pl. 58, fig. 13, 1882.

Range, 100 fathoms.

*Actis Walleri* Jeffreys.

Verrill, Trans. Conn. Acad., vol. v, p. 528, pl. 57, fig. 36, 1882.

Range, 349 fathoms†; 365-487 fathoms\*.

*Aclis tenuis* Verrill.

Trans. Conn. Acad., vol. v, p. 528, pl. 58, fig. 19, 1882.

Range, 100 fathoms.

*Solarium boreale* Verrill and Smith. MSS.

Verrill, Proc. U. S. Nat. Mus., vol. iii, p. 376, 1880; Trans. Conn. Acad., vol. v, p. 529, pl. 57, figs. 29, 30, 1882.

Range, 115 fathoms\*; 146-193 fathoms†.

## RHIPHIODGLOSSA.

*Calliostoma Bairdii* Verrill and Smith. MSS.

Verrill, Amer. Journ. Sci., vol. xx, p. 396, Nov., 1880; Trans. Conn. Acad., vol. v, p. 530, pl. 57, fig. 26, 1882.

Range, 56-640 fathoms†; 64-192 fathoms\*.

*Calliostoma occidentale* (Migh.).

Range, 207 fathoms†; 365-640 fathoms\*.

*Margarita regalis* Verrill and Smith. MSS.

Verrill, Amer. Journ. Sci., vol. xx, p. 397, Nov., 1880; Trans. Conn. Acad., vol. v, p. 530, pl. 57, fig. 37, 1882; vol. vi, p. 254, pl. 29, fig. 14, 1884.

Range, 64-173 fathoms†; 193-787 fathoms\*.

*Margarita lamellosa* Verrill and Smith. MSS.

Verrill, Amer. Journ. Sci., vol. xx, p. 397, Nov., 1880; Trans. Conn. Acad., vol. v, p. 530, pl. 57, fig. 38, 1882.

Range, 100-192 fathoms†.

*Machæroplax obscura* (Couth.) Friese.

Range, 12½-487 fathoms.

*Machæroplax obscura*, var. *carinata* Verrill.

Trans. Conn. Acad., vol. v, p. 532, 1882.

Range, 100-208 fathoms†; 266-335 fathoms\*.

*Cyclostrema Dalli* Verrill.

Trans. Conn. Acad., vol. v, p. 532, pl. 57, fig. 39, 1882; vol. vi, p. 255, pl. 29, fig. 15; pl. 32, fig. 17 (variety), 1884.

Range, 487 fathoms.

*Cyclostrema affine* Verrill.

*Cyclostrema rugulosum* Verrill, Trans. Conn. Acad., vol. v, p. 533, 1883 (*non* Sars).

*Cyclostrema affine* Verrill, Trans. Conn. Acad., vol. vi, p. 199, pl. 32, fig. 15, 1884.

Range, 365 fathomst.

*Scissurella crispata* Flem.

Verrill, Trans. Conn. Acad., vol. v, p. 533, 1882.

Range, 238 or 365 fathoms.

*Fissurella Tanneri* Verrill.

Proc. U. S. Nat. Mus., vol. v, p. 333, 1882; Trans. Conn. Acad., vol. vi, p. 255, pl. 29, figs. 13, 13a, 1884.

Range, 104 fathoms.

*Puncturella noachina* (L.) Lowe.

Range, 16 fathoms†; 34–640 fathoms\*.

*Propilidium pertenne?* Jeff.

Verrill, Trans. Conn. Acad., p. 262, 1884.

Range, 640 fathoms, in egg-case of *Raia*.

*Addisonia paradoxa* Dall.

Dall, Proc. U. S. Nat. Mus., vol. iv, p. 405, 1882.

Verrill, Trans. Conn. Acad., vol. v, p. 533, 1882; vol. vi, p. 256, pl. 29, figs. 10, 11, 11a, 11b, 1884.

Range, 71–640 fathoms.

*Cocculina Beanii* Dall.

Dall, Proc. U. S. Nat. Mus., vol. iv, p. 403, 1882.

Verrill, Trans. Conn. Acad., vol. v, p. 533, 1882; vol. vi, pl. 29, fig. 12, 1884.

Range, 365 fathoms†.

*Cocculina spinigera* Jeffreys.

Verrill, Trans. Conn. Acad., vol. vi, p. 203, 1884.

Range, 335 fathoms, in bored wood.

*Cocculina Dalli* Verrill.

Trans. Conn. Acad., vol. vi, p. 203, 1884.

Range, 317 fathoms†.

*Cocculina Rathbuni* Dall.

Dall, Proc. U. S. Nat. Mus., vol. iv, p. 403, 1882.

Verrill, Trans. Conn. Acad., vol. v, p. 534, 1882.

Range, 100–616 fathoms.

## DOCOGLOSSA.

*Lepetella tubicola* Verrill and Smith. MSS.

Verrill, Proc. U. S. Nat. Mus., vol. iii, p. 375, 1880.

Dall, Proc. U. S. Nat. Mus., vol. iv, p. 408, 1882.

Verrill, Trans. Conn. Acad., vol. v, p. 534, pl. 58, figs. 29, 29a, 1882.

Range, 134–396 fathoms.

## POLYPLACOPHORA.

*Trachydermon exaratus* (G. O. Sars).

Verrill, Trans. Conn. Acad., vol. vi, p. 208, pl. 30, figs. 2, 2a, 2b, 1884.

Range, 194 fathoms.

*Leptochiton alveolus* (Sars) Lovén.

Verrill, Trans. Conn. Acad., vol. v, p. 534, 1882.

Range, 291-640 fathoms.

*Hanleyia mendicaria* (Migh.) Carp.

Range, 317 fathoms.

*Placophora (Euplacophora) Atlantica* Verrill and Smith. MSS.

Verrill, Trans. Conn. Acad., vol. vi, p. 206, pl. 30, figs. 1, 1a, 1b, 1884.

Range, 640 fathoms.

## GYMNOGLOSSA.

*Stilifer Stimpsonii* Verrill.

Verrill, Amer. Journ. Sci., vol. iii, p. 283, April, 1872; Trans. Conn. Acad., vol. v, p. 535, fig. 2, 1882.

Range, 6-410 fathoms.

*Stilifer curtus* Verrill.

Trans. Conn. Acad., vol. v, p. 535, 1882.

Range, 410 fathoms.

*Eulima intermedia* Cantraine.

Verrill, Proc. U. S. Nat. Mus., vol. iii, p. 379, 1880; Trans. Conn. Acad., vol. v, p. 535, pl. 58, fig. 20, 1882.

Range, 85-155 fathoms.

*Eulima distorta* Deshayes.

Verrill, Trans. Conn. Acad., vol. v, p. 536, 1882.

Range, 115 fathoms.

*Turbonilla nivea* (Stimp.) Ad.

Verrill, Proc. U. S. Nat. Mus., vol. iii, p. 379, 1880.

Range, 100-157 fathoms †.

*Turbonilla Emertoni* Verrill.

Trans. Conn. Acad., vol. v, p. 536, pl. 58, figs. 14, 14a, 1882.

Range, 238 fathoms.

*Turbonilla Rathbuni* Verrill and Smith. MSS.

Verrill, Amer. Journ. Sci., vol. xx, p. 398, Nov., 1880; Trans. Conn. Acad., vol. v, p. 536, pl. 58, fig. 15, 1882.

Range, 64-452 fathoms †; 100-365 fathoms \*.

*Turbonilla Bushiana* Verrill.

Trans. Conn. Acad., vol. v, p. 537, pl. 58, fig. 16, 1882.

Range, 365-487 fathoms.

*Eulimella Smithii* Verrill.

*Turbanilla Smithii* Verrill, Proc. U. S. Nat. Mus., vol. iii, p. 380, 1880.

*Eulimella Smithii* Verrill, Trans. Conn. Acad., vol. v, p. 538, pl. 58, fig. 18, 1882.

Range, 85–120 fathoms\*; 146 fathoms†.

*Odostomia unidentata* (Mont.)

G. O. Sars, Moll. Reg. Aret. Norvegiae, p. 201, pl. 11, figs. 6–8, 1878.

Range, 100–115 fathoms†.

*Odostomia*, sp.

Verrill, Trans. Conn. Acad., vol. v, p. 539, 1882.

Range, 365 fathoms†.

*Menestho sulcata* Verrill.

*Odostomia (Menestho) sulcata* Verrill, Proc. U. S. Nat. Mus., vol. iii, p. 380, 1880.

*Menestho sulcata* Verrill, Trans. Conn. Acad., vol. v, p. 539, pl. 58, fig. 17, 1882.

Range, 115–365 fathoms†.

*Menestho Bruneri* Verrill.

Trans. Conn. Acad., vol. v, p. 539, 1882.

Range, 487 fathoms.

## TECTIBRANCHIATA.

*Actaeon nitidus* Verrill.

Trans. Conn. Acad., vol. v, p. 540, pl. 58, fig. 21, 1882.

Range, 238–487 fathoms.

*Ringicula nitida* Verrill.

Trans. Conn. Acad., vol. iii, p. 48, pl. 1, fig. 2, 1874; vol. v, p. 540, 1882.

Range, 100–115 fathoms†; 120–487 fathoms\*.

*Choristes elegans* Carp., var. *tenera* Verrill.

Trans. Conn. Acad., vol. v, p. 541, pl. 58, figs. 27, 27a, 1882; vol. vi, p. 256, pl. 29, figs. 9, 9a, 9b, 1884.

Range, 193 fathoms†; 255–640 fathoms\*.

*Cylichna Dalli* Verrill.

Trans. Conn. Acad., vol. v, p. 542, 1882; vol. vi, pl. 29, fig. 15, 1884.

Range, 452 fathoms†.

*Cylichna alba* (Brown) Lovén.

Range, 12–487 fathoms.

*Cylichna occulta* (Migh.) Ad.

Range, 100–480 (?) fathoms\*; 487 fathoms†.

*Diaphana gemma* Verrill.

Proc. U. S. Nat. Mus., vol. iii, p. 382, 1880; Trans. Conn. Acad., vol. v, p. 543, pl. 58, fig. 22, 1882.

Range, 100–115 fathoms\*; 322 fathoms†.

*Diaphana conulus* (Desh.) Verrill.

Verrill, Trans. Conn. Acad., vol. v, p. 543, pl. 58, fig. 25, 1882.

Range, 100 fathoms †; 155 fathoms \*.

*Diaphana nitidula* (Lovén) Verrill.

Verrill, Proc. U. S. Nat. Mus., vol. iii, p. 381, 1880; Trans. Conn. Acad., vol. v, p. 543, 1882.

Range, 155–487 fathoms.

*Diaphana pertenuis* (Mighels) Verrill.

Range, 319–386 fathoms.

*Amphisphyra globosa* Lovén.

Verrill, Trans. Conn. Acad., vol. v, p. 543, 1882.

Range, 115–365 fathoms †; 319 fathoms \*.

*Amphisphyra pellucida* (Brown) Lovén.

Verrill, Proc. U. S. Nat. Mus., vol. iii, p. 382, 1880.

Range, 120 fathoms †; 365 fathoms \*.

*Scaphander puncto-striatus* (Migh.) Ad.

Range, 46–787 fathoms.

*Philine quadrata* (Wood) Forb. & Han.

Range, 28–266 fathoms †; 20–480 fathoms \*.

*Philine amabilis* Verrill.

Proc. U. S. Nat. Mus., vol. iii, p. 383, 1880; Trans. Conn. Acad., vol. v, p. 544, pl. 58, figs. 23, 24, 1882.

Range, 120–156 fathoms.

*Philine cingulata* G. O. Sars.

Verrill, Trans. Conn. Acad., vol. v, p. 544, 1882.

Range, 155–487 fathoms.

*Philine Finmarchica* M. Sars.

Verrill, Trans. Conn. Acad., vol. v, p. 544, 1882.

Range, 86 fathoms.

*Philine tincta* Verrill.

Trans. Conn. Acad., vol. v, p. 544, 1882.

Range, 67 fathoms.

*Koonsia obesa* Verrill.

Trans. Conn. Acad., vol. v, p. 545, 1882; vol. vi, pl. 28, fig. 7, 1884.

Range, 192–312 fathoms.

*Pleurobranchia tarda* Verrill.

Proc. U. S. Nat. Mus., vol. iii, p. 384, 1880; Trans. Conn. Acad., vol. v, p. 546, pl. 58, fig. 26, 1882.

Range, 28–640 fathoms.

## NUDIBRANCHIATA.

*Heterodoris robusta* Verrill and Emerton. MSS.

Verrill, Trans. Conn. Acad., vol. v, p. 549, pl. 58, figs. 35, 35a, 35b, 1882; vol. vi, pl. 28, figs. 5, 5a, 1884.

Range, 458 fathoms.

*Issa ramosa* Verrill and Emerton. MSS.

Verrill, Amer. Journ. Sci., vol. xxii, p. 301, Oct., 1881; Trans. Conn. Acad., vol. v, p. 547, pl. 58, figs. 36, 36a, 1882.

Range, 100-321 fathoms.

*Doris complanata* Verrill.

Proc. U. S. Nat. Mus., vol. iii, p. 386, 1880; Trans. Conn. Acad., vol. v, p. 549, pl. 58, figs. 34, 34a, 34b, 1882; vol. vi, pl. 28, fig. 6, 1884.

Range, 86-194 fathoms.

*Dendronotus robustus* Verrill.

Amer. Journ. Sci., vol. l, p. 405, fig. 1, Nov., 1870; Trans. Conn. Acad., vol. v, p. 550, 1882.

Range, 28-317 fathoms.

*Dendronotus arborescens* Ald. & Han.

Range, 13-351 fathoms.

*Doto coronata* (Gm.) Ald. & Han.

Surface.

*Fiona nobilis* Ald. & Han.

Verrill, Trans. Conn. Acad., vol. v, p. 551, 1882.

Surface, on timber.

*Coryphella*, sp.

Range, 30-168 fathoms.

*Facelina pilata* (Gld.) Verrill.

Verrill, Proc. U. S. Nat. Mus., vol. iii, p. 389, 1880.

Range, low water to 146 fathoms.

*Eolis papillosa* (Linné) Forb. & Han.

Range, 13-208 fathoms.

*Tergipes despectus* (Johnst.) Ald. & Han.

Verrill, Report Invert. Anim. Vineyard Sd., p. 373 (auth. copy), 1874; Proc. U. S. Nat. Mus., vol. iii, p. 391, 1880.

Range, shore to 8 fathoms; also at surface.

## HETEROPODA.

*Carinaria Atlantica* Ad. & R.

Verrill, Trans. Conn. Acad., vol. v, p. 529, 1882.

Not taken living, 65 fathoms†.

*Atlanta Peronii* Lesueur.

Verrill, Trans. Conn. Acad., vol. v, p. 529, 1882; vol. vi, pl. 28, figs. 4, 4a, 1884.

Not obtained living, 317 fathoms†.

## PTEROPODA.

*Cymbulia calceolus* Verrill.

Proc. U. S. Nat. Mus., vol. iii p. 391, 1880; Trans. Conn. Acad., vol. v, p. 553, pl. 58, fig. 33, 1882.

Range, 18-487 fathoms†; surface\*.

*Cavolina tridentata* (Forskal) H. & A. Ad.

Verrill, Trans. Conn. Acad., vol. v, p. 554, figs. 6, 7, 1882.

Range, 45-487 fathoms†; surface\*.

*Cavolina uncinata* (D'Orb.) Gray.

Verrill, Trans. Conn. Acad., vol. v, p. 554, 1882.

Range, 64-487 fathoms†; surface\*.

*Cavolina longirostris* (Les.)

Verrill, Trans. Conn. Acad., vol. v, p. 555, 1882.

Range, 64-487 fathoms†; surface\*.

*Cavolina gibbosa* (Rang).

Verrill, Trans. Conn. Acad., vol. vi, p. 213, 1884.

Range, 193 fathoms†.

*Cavolina inflexa* (Les.) Gray.

Verrill, Trans. Conn. Acad., vol. v, p. 555, 1882.

Range, 487 fathoms†.

*Diacria trispinosa* Gray.

Range, 64-487 fathoms†.

*Olio pyramidata* Linné.

Verrill, Trans. Conn. Acad., vol. v, p. 555, 1882.

Range, 64-487 fathoms†.

*Balantium recurvum* Children.

Verrill, Trans. Conn. Acad., vol. v, p. 556, 1882.

Range, 64-238 fathoms†.

*Triptera columnella* (Rang).

Verrill, Trans. Conn. Acad., vol. v, p. 557, 1882; vol. vi, p. 214, 1884.

Range, 319-321 fathoms†.

*Spiriales Gouldii* St. (? *S. balea* Möll., var.).

Surface.

*Spirialis retroversus* Flem., var. *MacAndrei* Forbes & Han.

*Spirialis MacAndrei* Verrill, Trans. Conn. Acad., vol. v, p. 557, 1882.

Range, 319-386 fathoms †; surface \*.

*Cione papilionacea* Pallas.

Verrill, Report Invert. Anim. Vineyard Sd., p. 374 (auth. copy), 1874.

Range, surface to 389 fathoms (?) .

#### SOLENOCHONCHA OR SCAPHOPODA.

*Dentalium striolatum* Stimp.

Range, 20-115 fathoms †; 146-487 fathoms \*.

*Dentalium occidentale* Stimp.

Verrill, Proc. U. S. Nat. Mus., vol. iii, p. 394, 1880; Trans. Conn. Acad., vol. v, pl. 42, figs. 16a, b, 17, 18, 1882.

Range, 26-115 fathoms †; 146-487 fathoms \*.

*Cadulus Pandionis* Verrill and Smith, MSS.

Verrill, Amer. Journ. Sci., vol. xx, p. 399, Nov., 1880; Trans. Conn. Acad., vol. v, p. 558, pl. 58, figs. 30, 30a, 1882.

Range, 85-487 fathoms.

*Cadulus propinquus* ? G. O. Sars.

Verrill, Trans. Conn. Acad., vol. v, p. 558, pl. 58, figs. 31, 32, 1882; vi, p. 257, 1884.

Range, 100-115 fathoms.

*Cadulus Jeffreysii* ? Monterosato.

Verrill, Trans. Conn. Acad., vol. v, p. 559, 1882; vi, p. 257, 1884.

Range, 115 fathoms.

*Siphonodentalium vitreum* M. Sars.

Verrill, Proc. U. S. Nat. Mus., vol. iii, p. 394, 1880; Trans. Conn. Acad., vol. v, p. 557, pl. 42, fig. 19, 1882.

Range, 100 fathoms †; 349-487 fathoms \*.

*Siphonentalis affinis* (Sars).

Verrill, Trans. Conn. Acad., vol. v, p. 558, pl. 42, figs. 20a, b, 1882.

Range, 349-365 fathoms †.

*Siphonentalis Lofotensis* (M. Sars).

Verrill, Trans. Conn. Acad., vol. v, p. 558, 1882.

Range, 115 fathoms \*; 365-480 fathoms †.

#### LAMELLIBRANCHIATA.

*Teredo megotara* Hanley.

Range, 55 fathoms †; 100-358 fathoms \*, in wood; surface \*.

*Xylophaga dorsalis* (Turton) Forbes & Hanley.

Verrill, Trans. Conn. Acad., vol. v, p. 559, pl. 44, fig. 9, 1882.

Range, 32-374 fathoms.

*Ensatella Americana* (Gld.) Verrill.

Verrill, Report Invert. Anim. Vineyard Sd., p. 380 (auth. copy), pl. 26, fig. 182; pl. 32, fig. 245, 1874.

Range, 0-28½ fathoms\*; 64-89 fathoms†.

*Mya truncata* Linné.

Range, 34-110 fathoms†.

*Saxicava Norvegica* (Speng.) Woodw.

Range, 20-506 fathoms†; 300 fathoms\*.

*Cyrtodaria siliqua* (Speng.) Woodw.

Range, 28-258 fathoms†.

*Poromya granulata* (Nyst) F. & Han.

Verrill, Proc. U. S. Nat. Mus., vol. iii, p. 396, 1880; Trans. Conn. Acad., vol. v, p. 564, pl. 44, figs. 3, 4, 1882.

Range, 64-146 fathoms†; 93-120 fathoms\*.

*Poromya granulata*, var. *rotundata* (G.) Verrill.

Poromya rotundata Verrill, Proc. U. S. Nat. Mus., vol. iii, p. 396, 1880.

Poromya granulata, var. rotundata Verrill, Trans. Conn. Acad., vol. v, p. 565, 1882.

Range, 64-115 fathoms.

*Neæra obesa* Lovén.

Verrill, Trans. Conn. Acad., vol. v, p. 563, pl. 44, fig. 10a, 1882.

Range, 192-487 fathoms; 20 to 150 fathoms, north of Cape Cod.

*Neæra glacialis* G. O. Sars.

Verrill, Trans. Conn. Acad., vol. v, p. 562, pl. 44, figs. 10a, b, 1882.

Range, 64-487 fathoms.

*Neæra rostrata* (Speng.) Lovén.

Verrill, Trans. Conn. Acad., vol. v, p. 562, pl. 58, fig. 39, 1882.

Range, 67-487 fathoms†; 85-155 fathoms\*.

*Neæra lamellosa* M. Sars.

Verrill, Trans. Conn. Acad., vol. v, p. 561, 1882; vol. vi, pl. 30, fig. 3, 1884.

Range, 319-487 fathoms.

*Neæra multicostata* Verrill and Smith. MSS.

Verrill, Trans. Conn. Acad., vol. v, p. 559, pl. 58, fig. 40, 1882.

Range, 85-158 fathoms.

*Neara multicostata*, var. *curta* Jeffreys.

Verrill, Trans. Conn. Acad., vol. v, p. 560, 1882.

Range, 115–120 fathoms †.

*Neara perrostrata* Dall.

Verrill, Trans. Conn. Acad., vol. v, p. 561, 1882.

Range, 85–325 fathoms.

*Pecchiolia abyssicola* G. O. Sars.

Verrill, Trans. Conn. Acad., vol. v, p. 565, 1882.

Range, 192–487 fathoms.

*Pecchiolia gemma* Verrill.

Trans. Conn. Acad., vol. v, p. 565, 1882; vol. vi, p. 258, pl. 30, figs. 7, 8, 1884.

Range, 349–487 fathoms.

*Verticordia cælata* Verrill.

Trans. Conn. Acad., vol. v, p. 566, 1882; vol. vi, pl. 30, figs. 9, 9a, 1884.

Range, 100 fathoms †.

*Mytilimeria flexuosa* Verrill and Smith. MSS.

Verrill, Amer. Journ. Sci., vol. xxii, p. 302, 1881; Trans. Conn. Acad., vol. v, p. 567, pl. 58, fig. 38, 1882; vol. vi, p. 258, 1884.

Range, 319 fathoms †; 349 fathoms \*.

*Kennerlia glacialis* (Leach) Carp.

Verrill, Trans. Conn. Acad., vol. v, p. 567, 1882.

Bush, Proc. U. S. Nat. Mus., vol. vi, p. 245, pl. 9, figs. 1, 1a, 1883.

Range, 63–100 fathoms.

*Clidiophora trilineata* (Say) Carp.

Range 0–29 fathoms \*; 45–126 fathoms †.

*Periploma papyracea* (Say) Verrill.

Verrill, Amer. Journ. Sci., vol. iii, p. 285, pl. 7, figs. 1, 1a, 1b; pl. 8, fig. 1, April, 1872.

Range, 7–321 fathoms.

*Thracia Conradi* Couth.

Range, 4½–193 fathoms †; 34 fathoms \*.

*Pholadomya arata* Verrill and Smith. MSS.

Verrill, Amer. Journ. Sci., vol. xxii, p. 301, Oct., 1881; Trans. Conn. Acad., vol. v, p. 567, pl. 58, fig. 37, 1882; vol. vi, pl. 30, figs. 4, 5, 6, 1884.

Range, 71–134 fathoms †.

*Spisula solidissima* (Dillw.) Gray.

Range, 0–192 fathoms †; 0–18 fathoms \*.

*Spisula ovalis* Gld.

Range, 5-71 fathoms †; 8½-15 fathoms \*.

*Ceronia arctata* (Con.) Ad.

Range, 0-183 fathoms †; 0-2 fathoms \*.

*Macoma subulosa* (Speng.) Mörch.

Verrill, Report Invert. Anim. Vineyard Sd., p. 383 (auth. copy), 1874.

Range, 30-410 fathoms †; 29-266 fathoms \*.

*Abra lioica* (Dall) V.

*Syndosmya lioica* Dall, Bull. Mus. Comp. Zool., vol. ix, p. 133, 1881.

Verrill, Trans. Conn. Acad., vol. v, p. 568, 1882; vol. vi, p. 224.

Range, 100 fathoms \*; 115 fathoms †.

*Callista convexa* (Say) Ad.

Range, 0-21 fathoms \*; 85 fathoms †.

*Cyprina Islandica* (Linné) Lam.

Range, 8-128 fathoms \*; 130-349 fathoms †.

*Cardium pinnulatum* Conrad.

Range, 1-266 fathoms.

*Cardium (Fulvia) peramabilis* Dall.

Dall, Bull. Mus. Comp. Zool., vol. ix, p. 132, 1881.

Verrill, Trans. Conn. Acad., vol. v, p. 569, 1882.

Range, 115 fathoms †.

*Diplodonta turgida* Verrill and Smith. MSS.

Verrill, Amer. Journ. Sci., vol. xxii, p. 303, Oct., 1880; Trans. Conn. Acad., vol. v, p. 569, pl. 58, fig. 42, 1882; vol. vi, pl. 30, figs. 10, 11, 1884.

Range, 71-89 fathoms †.

*Loripes lens* Verrill and Smith. MSS.

Verrill, Proc. U. S. Nat. Mus., vol. iii, p. 400, 1880; Trans. Conn. Acad., vol. v, p. 569, 1882; vol. vi, p. 259, 1884.

Range, 5-192 fathoms †; 120 fathoms \*.

*Lucina filosa* Stimp.

Range, 4-349 fathoms †.

*Cryptodon obesus* Verrill.

Amer. Journ. Sci., vol. iii, p. 287, pl. 7, fig. 2, April, 1872; Trans. Conn. Acad., vol. v, p. 569, 1882.

Range, 10-365 fathoms †; 115-349 fathoms \*.

*Cryptodon Gouldii* (Phil.) Stimp.

Range, 6-335 fathoms.

*Cryptodon subovatus* (Jeff.) Verrill.

Verrill, Trans. Conn. Acad., vol. v, p. 570, 1882.

Range, 480 fathoms †.

*Cryptodon ferruginosus* (Forbes).

Verrill, Trans. Conn. Acad., vol. v, p. 570, 1882.

Range, 100-487 fathoms.

*Montacuta ovata* Jeffreys.

Verrill, Trans. Conn. Acad., vol. v, p. 571, 1882.

Range, 8½-157 fathoms.

*Solemya velum* Say.

Range, 0-115 fathoms †; 0-10 fathoms \*.

*Solemya velum*, var. *borealis* (Totten).

Range, 28-349 fathoms †; 56-300 fathoms \*.

*Venericardia granulata* (Say) = *V. borealis* (Conrad).

Verrill, Trans. Conn. Acad., vol. vi, p. 258, 1884.

Range, 8-435 fathoms †; 9-192 fathoms \*.

*Astarte castanea* Say.

Range, 0-100 fathoms \*; 435 fathoms †.

*Astarte quadrans* Gld.

Range, 11-100 fathoms.

*Astarte undata* Gld.

Verrill, Report Invert. Anim. Vineyard Sd., p. 390 (auth. copy), pl. 29, fig. 203, 1874.

Range, 8-480 fathoms.

*Astarte crenata* Gray.

Verrill, Proc. U. S. Nat. Mus., vol. iii, p. 399, 1880.

Range, 34½-640 fathoms.

*Nucula proxima* Say.

Range, 3½-302 fathoms \*; 310-365 fathoms †.

*Nucula delphinodonta* Mighels.

Range, 9-487 fathoms.

*Nucula granulosa* Verrill..

Verrill, Trans. Conn. Acad., vol. vi, p. 280, 1884.

Range, 487 fathoms.

*Nucula tenuis* (Mont.) Turton.

Range, 75-487 fathoms †; 302-349 fathoms \*.

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*Yoldia limatula* (Say) Woodw.

Range, 3½–252 fathoms.

*Yoldia sapotilla* (Gld.) Stimp.

Range, 4½ fathoms†; 12½–321 fathoms\*.

*Yoldia expansa* Jeff.

Range, 365 fathoms.

*Yoldia lucida* Lovén.

*Yoldia obesa* Gould, Invert. Mass., ed. ii, p. 155, 1870.

*Yoldia lucida* Verrill, Trans. Conn. Acad., vol. v, pl. 44, fig. 1, 1882.

Range, 29–100 fathoms†; 115–480 fathoms\*.

*Yoldia regularis* Verrill.

Trans. Conn. Acad., vol. vi, p. 228, 1884.

Range, 349 fathoms †.

*Yoldia Jeffreysii* (Hidalgo).

Verrill, Trans. Conn. Acad., vol. vi, p. 229, 1884.

Range, 349 fathoms.

*Yoldia frigida* Torell.

Verrill, Trans. Conn. Acad., vol. v, p. 573, pl. 44, fig. 2, 1882.

Range, 157–374 fathoms.

*Yoldia thraciformis* (Storer) Stimp.

Range, 29–182 fathoms †; 192–435 fathoms\*.

*Leda acuta* (Conrad).

*Leda unca* Verrill, Proc. U. S. Nat. Mus., vol. iii, p. 401, Jan., 1881; Trans. Conn. Acad., vol. v, p. 572, pl. 58, fig. 41, 1882.

*Leda acuta* Verrill, op. cit., vol. vi, p. 259, pl. 30, fig. 15, 1884.

Range, 64–225 fathoms†; 65–115 fathoms\*.

*Leda pernula* (Müller).

Verrill, Proc. U. S. Nat. Mus., vol. iii, p. 401, Jan., 1881; Trans. Conn. Acad., vol. v, p. 572, 1882; vol. vi, pl. 30, figs. 14, 14a, 1884.

Range, 216 fathoms†; 300–349 fathoms\*.

*Leda tenaisulcata* (Couth.) Stimp.

Range, 25–120 fathoms†.

*Arca pectunculoides* Scacchi.

Verrill, Trans. Conn. Acad., vol. v, p. 573, pl. 44, fig. 6, 1882.

Range, 79–640 fathoms.

*Arca pectunculoides*, var. *septentrionalis* (Sars) Jeff.

Verrill, Trans. Conn. Acad., vol. v, p. 573, 1882.

Range, 79–640 fathoms.

*Arca pectunculoides*, var. *Frielei* (Jeff.) Verrill.

Verrill, Trans. Conn. Acad., vol. v, p. 574, 1882.

Range, 156–487 fathoms.

*Arca pectunculoides*, var. *crenulata* Verrill.

Trans. Conn. Acad., vol. v, p. 575, 1882.

Range, 85–120 fathoms.

*Limopsis minuta* (Phil.)

Verrill, Trans. Conn. Acad., vol. v, p. 576, 1882.

Range, 64–100 fathoms†; 120–724 fathoms\*.

*Modiola modiolus* (Linné) Turton.

Range, 0–115 fathoms\*; 202 fathomst.

*Modiolaria nigra* (Gray) Lovén.

Range, 1–27½ fathoms\*; 31–65 fathomst.

*Modiolaria discors* (Linné) Lovén.

Range, 15–90 fathoms.

*Modiolaria corrugata* (Stimp.) Mörch.

Range, 18–45 fathoms.

*Modiolaria polita* Verrill and Smith. MSS.

*Modiola polita* Verrill, Amer. Journ. Sci., vol. xx, p. 400, Nov., 1880.

Dall, Bull. Mus. Comp. Zool., vol. ix, p. 116, 1881.

Verrill, Trans. Conn. Acad., vol. v, p. 578, 1882; vol. vi, pl. 30, fig. 12, 1884.

Range, 238–321 fathoms.

*Crenella glandula* (Totten) Ad.

Range, 0–11 fathoms†; 5–100 fathoms\*.

*Crenella decussata* (Mont.) Macg.

Verrill, Trans. Conn. Acad., vol. v, p. 578, pl. 44, fig. 7, 1882.

Range, 5 fathoms†; 11–115 fathoms\*.

*Dacrydium vitreum* (Möller) Torell.

Verrill, Trans. Conn. Acad., vol. v, p. 579, pl. 44, figs. 8, 8a, 1882.

Range, 300 fathoms†; 312–487 fathoms\*.

*Idas argenteus* Jeffreys.

*Idas argenteus* J., var. *lamellosus* Verrill, Trans. Conn. Acad., vol. v, p. 579, 1882; vol. vi, pl. 30, figs. 16, 16a, 1884.

Range, surface (on wood).

*Limæa subovata* (Jeff.) Monteros.

Verrill, Proc. U. S. Nat. Mus., vol. iii, p. 402, Jan., 1881; Trans. Conn. Acad., vol. v, p. 580, 1882.

Range, 100 fathoms†; 252–487 fathoms\*.

*Pecten Clintonius* Say = *P. tenuicostatus* Mighels; Gould.

Verrill, Trans. Conn. Acad., vol. vi, p. 261, 1884.

Range, 8-349 fathoms †; 13-146 fathoms \*.

*Pecten Islandicus* Müller.

Range, 33-90 fathoms \*; 100-194 fathoms †.

*Pecten glyptus* Verrill.

Trans. Conn. Acad., vol. v, p. 580, 1882.

Range, 85-156 fathoms †.

*Pecten vitreus* (Gmel.) Wood.

Verrill, Amer. Journ. Sci., vol. xvi, p. 378, 1878; Trans. Conn. Acad., vol. 4, p. 580, pl. 42, fig. 21, 1882.

Range, 57½-64 fathoms †; 100-787 fathoms \*.

*Pecten pustulosus* Verrill.

Amer. Journ. Sci., vol. v, p. 14, Jan., 1873; Trans. Conn. Acad., vi, p. 261, 1884.

*Pecten Hoskynsi* Forbes, var. *pustulosus* Verrill, Trans. Conn. Acad., vol. v, p. 581, pl. 42, figs. 22, 22a, 1882.

Range, 120-321 fathoms \*; 365 fathoms †.

*Pecten striatus* Müller.

Verrill, Trans. Conn. Acad., vol. vi, p. 233, 1884.

Range, 100 fathoms †.

*Amussium*, sp. nov.

*Pecten fenestratus* Verrill, Proc. U. S. Nat. Mus., vol. iii, p. 403, Jan., 1881 (*non* Forbes).

*Amussium fenestratum* Verrill, Trans. Conn. Acad., vol. v, p. 582, 1882.

*Amussium*, sp., Verrill, Trans. Conn. Acad., vol. vi, p. 261, 1884.

Range, 79 fathoms †; 86-317 fathoms \*.

*Avicula hirundo* (Linné).

Verrill, Trans. Conn. Acad., vol. v, p. 582, 1882.

Range, 71 fathoms \*; 89 fathoms †.

*Avicula hirundo*, var. *nitida* Verrill.

Proc. U. S. Nat. Mus., vol. iii, p. 402, Jan., 1881; Trans. Conn. Acad., vol. v, p. 582, pl. 58, fig. 43, 1882.

Range, 64-192 fathoms.

*Anomia aculeata* Müller.

Range, shore—640 fathoms.

#### BRACHIOPODA.

*Terebratulina septentrionalis* (Couth.) Gray.

Range, 16-396 fathoms.

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