

EUDORELLA HISPIDA Sars.

Loc. cit., p. 80.

Rare in 30 to 35 fathoms, with the other species mentioned, off the coast of New Jersey, (Sars.)

AMPHIPODA.

ORCHESTIA AGILIS Smith, sp. nov. Plate IV, fig. 14. (p. 314.)

Male: Antennula not quite reaching the distal extremity of the penultimate segment of the antenna; second and third segments of the peduncle about equal in length, and each slightly longer than the first; flagellum about as long as the two last segments of the peduncle. Antenna less than half as long as the body; segments of the peduncle stout and swollen, the ultimate longer than the penultimate; flagellum stout, compressed vertically, much shorter than the peduncle, composed of twelve to fifteen segments. Propodus in the second pair of legs short and thickened laterally, the palmary margin with a small prominence on the outer edge of the posterior angle, behind which the tip of the dactylus closes, and along the inner edge, inside the dactylus, with a thin ridge, which is broken by a small notch near the posterior angle, so that the margin when viewed laterally shows a broad lobe next the base of the dactylus and two small, rounded lobes next the posterior angle, the tip of the dactylus resting between the small lobes; dactylus slender, curved so as to fit closely the palmary margin, and furnished with very minute setæ along the prehensile margin. Posterior thoracic legs slightly longer than the preceding; carpus in full-grown specimens short, much swollen, and thickened so as to be nearly cylindrical.

Female: Carpus and hand in the second pair of legs unarmed; propodus short, slightly spatulate in outline, with a pair of minute setæ at the base of the dactylus, which is very short, not reaching the extremity of the propodus.

Length: male, 10–15^{mm}; female, 10–14.

Bay of Fundy to New Jersey.

ORCHESTIA PALUSTRIS Smith, sp. nov. (p. 468.)

Male: Antennulæ reaching slightly beyond the distal extremity of the penultimate segment of the peduncle of the antennæ. Antennæ less than half as long as the body; peduncle slender; flagellum slender, longer than the peduncle, composed of eighteen to twenty-six segments. Propodus in the second pair of legs nearly oval in outline, the palmary margin spinous, regularly curved to the posterior angle, which projects on the outer edge in a slight, rounded prominence, within which the tip of the dactylus closes; dactylus slender, curved so as to nearly fit the palmary margin, and furnished with minute setæ along the prehensile margin. Posterior thoracic legs slightly longer than the preceding; carpus and propodus both long and slender.

The female differs from the male as in the last species.

Length, male, 15–22^{mm}; female, 12–18^{mm}.

Cape Cod to New Jersey, and very likely farther north and south.

TALORCHESTIA LONGICORNIS Smith. (p. 336.)

Talitrus longicornis Say, loc. cit., p. 384, 1818. *Orchestia longicornis* Edwards, His. nat. des. Crust., tome iii, p. 18, 1840; De Kay, op. cit., p. 36, Pl. 7, fig. 19.

Cape Cod to New Jersey, and probably farther south.

TALORCHESTIA MEGALOPHTHALMA Smith. (p. 336.)

Orchestia megalophthalma Bate, Catalogue Amphip. Crust., British Museum, p. 22, 1862.

Cape Cod to New Jersey, and probably farther south.

Talitrus quadrifidus, De Kay, (op. cit., p. 36, Pl. 14, fig. 27,) may be based on the female of one of the preceding species, but it so is badly described and figured as to be indeterminable.

HYALE LITTORALIS Smith. (p. 315.)

Allorchestes littoralis Stimpson, Marine Invertebrata of Grand Manan, p. 49., Pl. 3, fig. 36, 1853; Bate, Catalogue Amphip. Crust., British Museum, p. 48, Pl. 8, fig. 2, 1862.

This species was found at New Haven, Connecticut., by Professor Verrill, May 5, 1873, and is one of the inhabitants of rocky shores, piles of wharves, &c. I have found it at Provincetown, Massachusetts, and it is abundant in the Bay of Fundy. It is undoubtedly abundant on the whole New England coast, but its station upon the shore is so high up on the beach that it is likely to be overlooked.

LYSIANASSA, species. (p. 431.)

A species of this genus, as restricted by Boeck, was several times dredged in Vineyard Sound and Buzzard's Bay.

Several other species of *Lysianassinae* were taken in Vineyard Sound and the neighboring region, but they have not yet been sufficiently studied to be enumerated. The species of this group are much less common and the individuals smaller on the coast of Southern New England than they are upon the coast of Maine and farther north.

LEPIDACTYLIS DYTISCUS Say. (p. 339.)

Loc. cit., p. 380, 1818.

Georgia to Cape Cod.

PHOXUS KROYERI Stimpson. (p. 501.)

Marine Invertebrata of Grand Manan, p. 58, 1853.

Rare in Vineyard Sound and usually in deep water. Common in the Bay of Fundy.

UROTHOË, species. (p. 452.)

A species with long, slender antennæ and very large black eyes, and apparently belonging to this genus, was taken in great numbers at the surface at Wood's Hole, on the evening of July 3, and on one or two other occasions. In life it was whitish, slightly tinged with orange-yellow.

MONOCULODES, species. (p. 452.)

A single specimen taken at the surface in Vineyard Sound, December 21, by Mr. V. N. Edwards.

LAPHYSTIUS STURIONIS Kroyer. (p. 457.)

Nat. Tidsskrift, vol. iv, p. 157, 1842. *Darwinia compressa* Bate, Report Brit. Assoc., 1855, p. 58; Catalogue Amphip. Crust., Brit. Mus., p. 108, Pl. 17, fig. 7; Bate and Westwood, Brit. Sessile-eyed Crust. vol. i, p. 184, wood cut.

A parasitic amphipod, apparently quite identical with this species of Europe, was found in the mouth of a goose-fish (*Lophius Americanus*) taken in Vineyard Sound. A species, apparently the same, was also taken from the back of a skate (*Raia lævis*) in the Bay of Fundy the past summer. It is readily distinguished by its broad depressed form, and by having the third to fifth pairs of legs very stout and their distal segments forming powerful talon-like claws, while the first and second pairs are small and slender.

CALLIOPIUS LÆVIUSCULUS Boeck. (p. 315.)

Crust. Amphipoda borealia et arctica, p. 117, 1870. *Amphithoë lavinscula* Kroyer Grönlands Amphipoder, p. 53, Pl. 3. fig. 13, 1838. *Calliope lavinscula* Bate, Catalogue Amphip. Crust. Brit. Mus., p. 148, Pl. 28, fig. 2, 1862; Bate and Westwood, op. cit., vol. i, p. 156, wood cut.

Vineyard Sound and northward to Greenland, Northern Europe, and Spitzbergen.

PONTOGENEIA INERMIS Boeck. (p. 452.)

Op. cit., p. 114, 1870. *Amphithoë inermis* and *crenulata*, Kroyer, Grönlands Amphipoder, pp. 47, 50, Pl. 3, figs. 11, 12, 1838. *Iphimedia vulgaris* Stimpson, Marine Invertebrata of Grand Manan, p. 53, 1853. *Atylus inermis*, *crenulatus*, and *vulgaris* Bate, Catalogue Amphip. Crust. Brit. Mus., pp. 138, 139, 142, Pl. 27, figs. 5, 6, 1862. *Atylus vulgaris* Packard, Memoirs Boston Soc. Nat. Hist., vol. i, p. 298, 1867. (Not *Atylus (Paramphithoë) inermis* Packard, loc. cit., p. 298, Pl. 8, fig. 3.)

Taken at the surface in Vineyard Sound, in March, by Mr. V. N. Edwards. It is abundant, in company with *Calliopius læviusculus*, about the Bay of Fundy in pools left by the tide, and ranges north to Labrador and Greenland.

GAMMARUS ORNATUS Edwards. Plate IV, fig. 15. (p. 314.)

Annales des Sci. nat., tome xx, 1830, p. 367, Pl. 10, figs. 1-10; Hist. nat. des Crust., tome iii, p. 47; Bate, op. cit., p. 212, Pl. 37, fig. 8. *Gammarus locusta* Gould, op. cit., p. 334. *Gammarus pulex* Stimpson, Marine Invert. Grand Manan, p. 55.

New Jersey to Greenland.

GAMMARUS ANNULATUS Smith, sp. nov. (p. 314.)

Anterior margin of the head produced each side beneath the antennulæ into a truncated lobe, which extends farther forward than in *G. ornatus*; eyes scarcely reniform, less elongated than in *G. ornatus*, and their lower margins not reaching, by considerable, the anterior border of the truncated lobe. Antennæ longer than the antennulæ; the ultimate segment of the peduncle longer than the penultimate; the flagellum much more slender, the segments more elongated and with fewer hairs, than in *G. ornatus*. Hands of the first pair of legs more elongated than in *G. ornatus*, and the palmary margins very oblique. Propodus in

the second pair very narrow and elongated, subcylindrical, slightly flattened on the inner side, the palmary margin longitudinal, and scarcely distinct from the posterior margin. Fourth segment of the abdomen with a median fascicle of two large and two small spines, but no lateral fascicles. Fifth and sixth segments with both median and lateral fascicles of spines.

Color in life grayish white, the posterior margins of the segments bordered with brown, giving the body an annulated appearance.

Length, 12–18^{mm}.

New Haven, Connecticut, and Eastport, Maine, and doubtless abundant at other points on the coast.

This species closely resembles the fresh-water *G. fasciatus*, but is distinguished from it by the proportions of the segments of the peduncles of the antennæ, and by wanting the lateral fascicles of spines upon the fourth segment of the abdomen.

GAMMARUS NATATOR Smith, sp. nov. (p. 439.)

Male: Eyes large, elongated, but only slightly reniform. Antennula short and stout, about three-sevenths as long as the body; flagellum but little longer than the peduncle; secondary flagellum nearly half as long as the primary. Antenna considerably longer than the antennula; penultimate segment of the peduncle reaching to the extremity of the peduncle of the antennula; ultimate segment of the peduncle longer than the penultimate; flagellum about two-thirds as long as the peduncle. Both antennulæ and antennæ are furnished with very long hairs, of which many on the antennulæ are plumose. First, second, and third epimera margined on the inferior edges with long cilia. First pair of legs more slender than the second; propodus oval, twice as long as broad, palmary margin continuous with the inferior, with a very narrow lamellar edge, a stout obtuse spine in the middle, and two smaller ones at the inferior angle; dactylus strongly curved. In the second pair the propodus is more than half as broad as long, and somewhat rectangular in outline, except that the palmary margin is slightly oblique; the palmary margin has a narrow lamellar edge, with a slight emargination in the middle, from which a stout obtuse spine arises, and at the inferior angle there are two or three smaller spines, as in the first pair. The inferior edges of the carpi and propodi of both pairs of legs are thickly clothed with long hairs. Natatory legs reaching to the tips of the telson. Second and third segments of the abdomen with the sides produced backward, and the postero-inferior angle acute. Fourth segment with only a median fascicle of spines; fifth and sixth segments with median and lateral fascicles. Rami of the posterior caudal stylets lanceolate, five or six times as long as broad, the outer extending beyond the inner by the length of its terminal article, which is very slender, almost spiniform, the edges of both rami clothed with long plumose hairs. Each division of the telson nearly three times as long as broad.

In the female the hands of the first and second pairs of legs are smaller and slenderer, and the propodi somewhat oval and nearly alike in both pairs; otherwise the females do not differ from the males, except that the rami of the posterior caudal stylets are, perhaps, a very little shorter and broader in proportion.

Length, 10–12^{mm}.

Vineyard Sound, in vast numbers at the surface of the water, usually among floating sea-weeds and eel-grass. Also from stomach of mackerel, May 20.

GAMMARUS MARINUS Leach. (p. 486.)

Trans. Linnean Soc., London, vol. xi, p. 359, 1815; Bate, Catalogue Amphip. Crust., Brit. Mus., p. 215, Pl. 38, fig. 4; Bate and Westwood, Brit. Sessile-eyed Crust., vol. i, p. 370, wood-cut.

A species which I cannot distinguish, by the published figures and descriptions, from this common species of Europe, was not uncommon, associated with *Amphithoë maculata*, under stones at the Wepecket Islands, Gull Island, Cuttyhunk Island, and at other places on Vineyard Sound and Buzzard's Bay. It has also been found at Watch Hill, Rhode Island, and at New Haven, Connecticut, by Professor Verrill. It is at once distinguished from all the other species of our coast by its slender form, slender antennæ, by having the sides of the second and third segments of the abdomen narrow and not produced or acute at the postero-inferior angle, and by having the outer rami of the posterior caudal stylets four or five times as long as the inner.

GAMMARUS MUCRONATUS Say. (p. 479.)

Loc. cit., p. 376, 1818; De Kay, op. cit., p. 37. *Gammaracanthus mucronatus* Bate, op. cit., p. 203.

Readily distinguished from the other species of the coast by having the posterior margin of each of the anterior segments of the abdomen produced into a slender, spiniform, dorsal tooth. In life, it is translucent, tinged with green, or yellowish green, minutely specked with brown or black; these black or brown markings and the green color being frequently so arranged as to give the antennæ and legs a banded appearance. Our species cannot be referred to Bate's genus *Gammaracanthus*, for the dorsal margin is not distinctly carinated, and the third, fourth, and fifth segments of the abdomen are furnished with fascicles of spines.

Usually in brackish water, North Carolina to Cape Cod, and, according to Say, from Florida also.

MCERA LEVIS Smith, sp. nov. (p. 315.)

Eyes nearly round; black in alcoholic specimens. Antennula two-thirds as long as the body; first and second segments of the peduncle equal in length, third about two-thirds as long as the second; flagellum about as long as the peduncle. Antenna about as long as the peduncle of the antennula; ultimate and penultimate segments equal in length, antepenultimate very short; flagellum much shorter than the peduncle. Legs of the first pair small; carpus as broad as the propodus, but little

longer than broad, the posterior margin straight and furnished with fascicles of stout hairs; palmary margin nearly transverse, slightly arcuate, and armed with short setæ; dactylus slender and fitting closely the palmary margin. Legs of the second pair larger; carpus short, as broad as the base of the propodus, the posterior angle thickly clothed with stout hairs; propodus in the male stout, broadest distally, the palmary margin expanded toward the inferior angle and excavated on the inner side to receive the long and strongly curved dactylus; in the female, elongated, slightly narrowed distally, the posterior margin continuous and nearly parallel with the palmary, and furnished with fascicles of stout hairs. Fifth pair of legs but little longer than the third or fourth; sixth and seventh much longer than the fifth, subequal, stout, their meral and carpal segments considerably expanded, especially in the male. Ultimate caudal stylets projecting a little beyond the preceding pairs; rami short, broad, and with spinous tips; the outer ramus slightly longer and broader than the inner, and its outer margin armed with a very few fascicles of spinules. Telson reaching to the bases of the rami of the posterior caudal stylets, nearly as broad as long, and cleft two-thirds of the way to the base.

Length, 5-7^{mm}.

New Jersey, Long Island Sound, Vineyard Sound.

MELITA NITIDA Smith, sp. nov. (p. 314.)

Eyes small, round, black. Antennula about two-thirds as long as the body; first segment of the peduncle slightly shorter than the second, which is nearly twice as long as the last; flagellum longer than the peduncle. Antenna shorter than the antennula, but the peduncle considerably longer than the peduncle of the antennula, the penultimate segment being scarcely shorter than the penultimate segment of the antennula, while the ultimate segment is subequal with it. First pair of legs with the carpus longer and broader than the propodus; propodus oblong, slightly curved; dactylus very small but stout, curved, and attached in a notch in the middle of the extremity of the propodus, not closing upon the extremity of the propodus but projecting inward. Second pair of legs stout; carpus short, triangular; propodus somewhat oval, the palmary margin oblique, arcuate, continuous with the posterior margin, and armed with a series of minute spines and with numerous stiff hairs, the clothing of hairs continuing round upon the posterior margin to the carpus; dactylus curved, tip resting within the palmary margin. Third pair of legs slightly longer than the fourth. Three posterior pairs slender, the fifth somewhat shorter than the sixth and seventh, which are subequal, and have the anterior margins of the bases armed with small spines and the posterior margins minutely serrate. None of the dorsal margins of the segments of the abdomen serrate or emarginate, but the margin of the fifth segment armed with several slender spines on each side near the median line of the dorsum. Penultimate caudal stylets not quite reaching the tip of the preceding

pair. The ultimate pair very long and armed with fascicles of spines along the margins. Divisions of the telson slender, spinous at the tips.

In life dark greenish slate-color, changing in alcohol to dark slate.

Length, 7–9^{mm}.

New Jersey to Cape Cod.

AMPELISCA. Plate IV, fig. 17. (pp. 431, 507.)

The species of this genus found upon our coast have not yet been carefully studied. At least two species were taken in Vineyard Sound and Buzzard's Bay. The genus is readily recognized, but the species are difficult to distinguish.

BYBLIS SERRATA Smith, sp. nov. (p. 501.)

Female: Dorsum rounded above, with no trace of a longitudinal carina upon the abdomen; third segment of the abdomen broadly rounded at the postero-lateral angle. Antennula about as long as the peduncle of the antenna; fourth segment of the peduncle of the antenna longer than the fifth. Inferior margins of the epimera of the first and second pairs of legs serrate, with slender and acute teeth alternating with the marginal cilia; carpus in the first pair scarcely if any longer than the propodus; carpus in the second pair very much longer than the propodus. In the third and fourth pairs of legs the dactylus as long as the propodus. Basal segment in the seventh pair of legs expanding distally, the posterior margin nearly straight, the anterior and inferior margins evenly arcuated, and reaching as far as the distal end of the carpus; carpus about as long as the ischium and merus together, a little less than twice as long as broad, and armed with long spines upon the anterior and distal margins, but the posterior margin wholly unarmed; propodus almost as long as the carpus, and nearly four times as long as broad, anterior margin unarmed, the posterior armed upon the outside with two transverse rows of three or four spines, decreasing in size as they recede from the margin, the distal end with a spine each side the slender dactylus. Rami of the first pair of caudal stylets equal, as long as the base; outer rami of the second pair shorter than the inner; rami of the posterior pair equal, longer than the bases, reaching to the tips of the rami of the first pair. Telson as long as the breadth at base, cleft rather more than half its length, the lateral margins arcuate, and rapidly converging toward the evenly rounded extremity.

Alcoholic specimens are pale yellowish, the epimera, bases of the posterior legs, and the sides of the abdomen specked and mottled with numerous points of dark pigment crowded irregularly together.

Length, 10–12^{mm}.

Deep water off Vineyard Sound and Buzzard's Bay.

PTILOCHEIRUS PINGUIS Stimpson. (p. 431.)

Marine Invertebrata of Grand Manan, p. 56, 1853. *Protomeia pingus* Bate,

Catalogue Amphip. Crust. Brit. Mus., p. 170, Pl. 31, fig. 2, 1862.

Common on the whole coast of New England upon muddy bottoms

and north to Labrador. In depth it extends down to 150 fathoms, and probably much farther.

MICRODEUTOPUS MINAX Smith, sp. nov. (p. 479.)

Antennula about two-thirds as long as the body; first segment of the peduncle stout, about as long as the head; second segment a little longer and much more slender; third segment nearly half as long as the first; flagellum slender, about a third longer than the peduncle; secondary flagellum very small, consisting usually of but one segment. Antenna about two-thirds as long as the antennula; ultimate and penultimate segments of the peduncle equal in length, and each fully twice as long as the antepenultimate; flagellum scarcely as long as the last segment of the peduncle. Hands of the first pair of legs in the male greatly developed; carpus very large, scarcely longer than the breadth in the middle; superior margin strongly arcuate, the inferior angle produced into a stout process opposed to the propodus, and the inferior margin arcuate and armed distally with two teeth, a large and prominent one at the base of the terminal process, the other small, obtuse, or even obsolete; propodus not more than half as long as the carpus, much longer than broad, the inferior margin with two broad obtuse teeth; dactylus stout, a little shorter than the propodus. Legs of the second pair with the basal segment broad and squamiform; carpus elongated; propodus as long as the carpus and as broad as its distal portion, rectangular, about two and a half times as long as broad; dactylus short and hooked at the tip. In the female the hands of the first pair of legs are only moderately developed; carpus broad; propodus scarcely as broad as the carpus, rectangular, the palmary margin somewhat oblique, and the inferior margin armed with a spine at the obtusely rounded inferior angle. In the second pair the basal segment is not expanded but narrow; the carpus and propodus much as in the male, except that they are clothed with numerous long, plumose hairs. The bases of the first and second pairs of caudal stylets are armed with a long, slender, spiniform process, arising from the distal end just below the bases of the rami. The outer rami of the posterior stylets are a little longer than the inner. All the stylets extend to the same point.

Length, about 4^{mm}.

Long Island Sound and Vineyard Sound.

Another species of *Microdeutopus* was collected in Vineyard Sound, but it was not abundant.

AUTONOE, species. (p. 415.)

A species belonging apparently in this genus, as defined by Boeck, was common in Vineyard Sound, living in tubes in masses of a compound Ascidian (*Amouroucium pellucidum* Verrill) in 3 to 8 fathoms. It is 6 or 7^{mm} in length, and in life the antennulæ and antennæ are obscurely banded and specked with pink; the body above, except upon the fifth segment and the posterior part of the abdomen, is almost black, the

color extending down upon the epimera, while the legs and caudal appendages are semi-translucent. The eyes are large and black.

AMPHITHOË MACULATA Stimpson. Plate IV, fig. 16. (p. 315.)

Marine Invertebrata of Grand Manan, p. 53, 1853.

Vineyard Sound to the Bay of Fundy and Labrador.

AMPHITHOË VALIDA Smith, sp. nov. (p. 315.)

Male: Eyes round, black in alcoholic specimens. Antennulæ and antennæ subequal in length. Peduncle of the antennula extending scarcely beyond the distal extremity of penultimate segment of the peduncle of the antenna; the second segment but little longer than the first; ultimate segment short and slender. Ultimate and penultimate segments of the peduncle of the antenna subequal in length. First pair of legs short, compressed; carpus as broad as the propodus; propodus broad, oval in outline, the posterior and palmary margins forming a continuous, nearly semicircular curve; dactylus fitting closely the palmary margin. Second pair of legs very large; carpus small; propodus oblong, broadest at the distal extremity, very large and thickened, the outer surface convex, the inner flattened, palmary margin transverse, with a broad, low, median tooth, and a rounded prominence at the inferior angle, within which the tip of the very stout and strongly curved dactylus closes.

The female differs in having the hands of the first pair of legs slightly more elongated, and those of the second pair smaller than in the male, and the palmary margin slightly oblique.

Color in life, bright green.

Length, 10–13^{mm}.

New Jersey and Long Island Sound.

AMPHITHOË LONGIMANA Smith, sp. nov. (p. 370.)

Male: Eyes round, and, in specimens preserved in alcohol, black. Antennula slender and as long as the body; second segment of the peduncle a little longer than the first; third segment about half as long as the second; flagellum about twice as long as the peduncle. Antenna considerably stouter and slightly shorter than the antennula, the peduncle about twice as long as the flagellum; third segment of the peduncle a little more than half as long as the first segment of the peduncle of the antennula; fourth segment nearly three times as long as the third; fifth considerably longer than the fourth; flagellum a little longer, or sometimes only as long, as the fifth segment of the peduncle. Hands of the first and second pairs of legs stout and much elongated. Carpus in the first pair nearly as long as the first segment of the peduncle of the antennula, narrow; propodus much more than twice as long as broad, as wide and long as the carpus, of the same width throughout, slightly curved, and the very short palmary margin transverse; dactylus stout, very little curved, more than half as long as the propodus, and projecting far beyond its inferior edge; the posterior margins of

both propodus and carpus densely clothed with long, stiff hairs. Carpus in the second pair of legs short, with an angular prominence upon the posterior side; propodus as long as in the first pair, and much broader, the palmary margin oblique, projecting at the inferior angle, just inside of which there is a deep sinus in the margin. Posterior edges of the bases of the sixth and seventh pairs of legs unarmed.

In the female the antennæ are shorter and not quite as stout, and the hands of the first and second pairs of legs are very much shorter, smaller, and much less hairy; in the first pair the carpus and propodus are very much shorter and proportionally broader, and the palmary margin of the propodus more oblique; in the second pair the propodus is short and somewhat oval, with a slight prominence at the inferior angle of the palmary margin.

Length, 6-9^{mm}.

New Jersey; Great South Bay, Long Island; Vineyard Sound. Common among eel-grass in sheltered situations. The young, even 5 or 6^{mm} long, were taken at the surface in Vineyard Sound several times.

AMPHITHOË COMPTA Smith, sp. nov. (p. 370.)

Eyes small, round, red in life, but fading in alcohol to whitish. Antennula slender, as long as the body; first segment of the peduncle as long as the head; second slightly longer than the first; last a third as long as the second; flagellum very slender, nearly three times as long as the peduncle. There is a rudimentary secondary flagellum, not longer than the first two segments of the primary flagellum and very slender. Antenna a little shorter than the antennula; the peduncle very little shorter than that of the antennula; last two segments about equal in length, the penultimate reaching as far as the same segments of the antennula; flagellum about as long as the peduncle. First and second pairs of legs, in the male, about equal in size, as long as the head and thorax together, and clothed on both margins with long, plumose hairs. Carpus in the first pair longer than, and as broad as, the propodus, the distal extremity truncate and right-angled at the inferior margin; the propodus much longer than broad, the palmary margin oblique, very nearly straight, and armed at the inferior angle upon the inner side with a stout spine. Carpus in the second pair narrower than in the first, the distal extremity obliquely rounded at the inferior angle; propodus as long as the carpus and no broader, the palmary margin less oblique than in the first pair, without any spine, and the inferior angle slightly projecting; dactylus, strongly curved and closing by the margin of the propodus. In the female the legs of the first and second pairs are nearly alike in form, very much smaller and weaker than in the male, and only sparsely clothed with mostly simple hairs, except upon the inferior margin of the carpus in the second pair. In both pairs the carpus is about as long and broad as the propodus; the propodus is short, narrowed toward the carpus, the palmary margin oblique, convex in outline, with the inferior angle rounded and armed with a stout spine on the inside. Second

and third segments of the abdomen produced into a slight angular prominence at the postero-inferior angle. The posterior edges of the bases of the sixth and seventh pairs of legs not serrated but armed with two to four small spines. First and second pairs of caudal stylets extending scarcely beyond the posterior pair. In the first pair there is a long, slender spine projecting from the distal extremity of the base beneath the rami.

Length of largest specimen examined, 13^{mm}.

North Carolina to Cape Cod. Common among eel-grass. Taken at surface in Vineyard Sound.

PODOCERUS FUCICOLA Smith. (p. 493.)

Cerapus fucicola Stimpson, Marine Invertebrata of Grand Manan, p. 48, Pl. 3, fig. 34, 1853.

This species was dredged by Professor Verrill, in 4 to 5 fathoms, off Watch Hill, Rhode Island, in April, 1873. It is common in the Bay of Fundy.

PODOCERUS, species. (p. 494.)

Another species of the same genus was taken in abundance with the last. It is a large and dark-colored species.

CERAPUS RUBRICORNIS Stimpson. Plate IV, fig. 18.

Marine Invertebrata of Grand Manan, p. 46, Pl. 3, fig. 33, 1853; Bate, Catalogue Amphip. Crust. Brit. Mus., p. 256, Pl. 45, fig. 4.

Not common south of Cape Cod, but very abundant in the Bay of Fundy and north to the coast of Labrador. In depth it extends down to 100 fathoms at least.

CERAPUS MINAX Smith, sp. nov.

Antennulæ and antennæ about equal in length, rather more than half as long as the body. Second pair of legs greatly developed in the male, the hand nearly half as long as the body; carpus elongated, narrow, nearly three times as long as the breadth in the middle, the posterior angle projecting into a broad process about as long as the dactylus, and armed on the inside with a tooth nearly as stout as the distal part of the process itself, but projecting only about half as far; propodus about half as long as the carpus, twice as long as broad; dactylus considerably shorter than the propodus, the tip in most of the larger specimens furnished with a pencil of long hairs. In the female the hand in the second pair of legs is small; the carpus produced into a long process on the inferior edge of the propodus to the palmary margin; propodus short, broad, somewhat oval, the palmary margin arcuate and armed with several short spines on the portion next the carpal process.

Length, about 4^{mm}.

Long Island Sound, Vineyard Sound.

? **CERAPUS TUBULARIS** Say. (p. 396.)

Loc. cit., p. 49, Pl. 4, fig. 7-11, 1817.

Several specimens of a small amphipod, dredged, June 27, in Vineyard

Sound, among masses of a large compound Ascidian, (*Amouroucium pelucidum*), in eight to ten fathoms, off Nobska Point, are probably this species, but unfortunately females only were obtained, while Say describes and figures the male alone. In our specimens, the antennulæ and antennæ are spotted with very dark purplish-brown, the anterior part of the body almost black, the middle and posterior portions spotted with black, or very dark purplish brown. They are between 4 and 5^{mm} long and inhabit unattached tubes as described by Say. The tubes are regularly cylindrical, quite thin and delicate, black, about 5^{mm} long, and 0.4^{mm} in diameter, and are carried about by the animal very much as the larvæ of some of the Phryganeidæ carry about their tubes in fresh water. In the structure of the caudal appendages, our specimens are quite different from the species usually referred to *Cerapus*, but I have not thought best to make any changes in nomenclature until the discovery of the male shall make it certain whether our specimens belong to the species described by Say.

COROPHIUM CYLINDRICUM Smith. (p. 370.)

Podocerus cylindricus, Say loc. cit., p. 387, 1818, (not of Bate, Catalogue Amphip. Crust. Brit. Mus., p. 256.)

New Jersey to Vineyard Sound. Very abundant among weeds and hydroids about piles of wharves, and almost everywhere in shallow water.

Length, about 4^{mm}.

SIPHONÆCETES CUSPIDATUS Smith, sp. nov. (p. 501.)

Male: Head produced into a long, slender, acute rostrum, and each side between the antennula and antenna into a long lobe rounded at the end where the eye is situated, and contracted toward the base. Antennula reaching about to the middle of the fourth segment of the peduncle of the antenna; segments of the peduncle equal in length; flagellum scarcely longer than a segment of the peduncle, and composed usually of five segments. Antenna a little longer than the body; third segment of the peduncle a little longer than any segment of the peduncle of the antennula; fourth segment nearly twice as long as the third; last segment nearly one-half longer than the third; flagellum a little shorter than the last segment of the peduncle. Legs much like Kroyer's figures of *S. typicus*, those of the first pair with the carpus twice as long as broad; propodus slightly narrower and a little longer than the carpus, the posterior edge furnished with long hairs and several stout spines. Legs of the second pair much stouter. Posterior caudal stylets with the terminal process fully as long as the ramus itself, the ramus as broad as long, the extremity obtusely rounded and furnished with very long hairs. Telson broader than long, transversely elliptical.

In the female the antennæ and second pair of legs are more slender than in the male.

In alcoholic specimens the antennulæ are marked with narrow bands of black or dark brown upon each segment of the flagellum and at

both ends of the second and third segments of the peduncle, and the antennæ are obscurely banded and tinged with a lighter color.

Length, about 6^{mm}.

It inhabits tubes constructed of grains of sand.

In deep water off Vineyard Sound and Buzzard's Bay.

UNCIOLOA IRRORATA Say. Plate IV, fig. 19. (p. 340.)

Loc. cit., p. 389, 1818; Stimpson, Marine Invertebrata of Grand Manan, p. 45.

This species grows to a much larger size than described by Say, being frequently 15^{mm} in length.

New Jersey to the Bay of Fundy, and probably much farther north, and from low water to more than 400 fathoms in depth.

HYPERIA, species. (p. 439.)

A large species of *Hyperia* was several times found upon the large red jelly-fish (*Cyanea*) in Vineyard Sound. The same species is common in the Bay of Fundy, but has not been identified with certainty.

Another species of *Hyperia* was taken at the surface, in company with *Salpa*, in Vineyard Sound, early in September.

PHRONIMA, species. (p. 439.)

A species of this peculiar genus was taken at the surface, in company with *Salpa*, off Gay Head, early in September. It is closely allied to the *P. Atlantica* of Guérin. According to Professor Verrill's notes it is, in life, translucent, scarcely tinged with yellowish white, and nearly invisible in the water; the eyes red.

Another form allied to the last was taken with it, and is possibly the male of the same species, but differs from it, and from the characters usually assigned to the genus, in possessing well-developed antennulæ. In life, according to Professor Verrill, it was translucent whitish, the body spotted with dark brown, and the eyes blackish.

THYROPUS, species.

A single specimen of a species of this genus was taken with the *Phronima* and *Salpa*, off Gay Head, early in September.

CAPRELLA GEOMETRICA Say. Plate V, fig. 20. (p. 480.)

Loc. cit., p. 390, 1818; Bate, Catalogue Amphip. Crust. British Mus., p. 357, Pl. 56, fig. 8.

North Carolina to Vineyard Sound, especially among eel-grass; very abundant in Great Egg Harbor, New Jersey, April, 1871.

CAPRELLA, species. (p. 316.)

A larger species of *Caprella*, which is common in the Bay of Fundy, was frequently dredged in Vineyard Sound.

ISOPODA.

SCYPHACELLA Smith, gen. nov.

Near *Scyphax*, Dana.* Antenna composed of eight distinct segments,

* U. S. Exploring Expedition, Crust., p. 734, Pl. 48, fig. 5.

with a geniculation at the articulation of the fourth with the fifth segment; terminal portion, corresponding to the flagellum, composed of three closely articulated segments, besides a minute apical one; mandibles slender, without palpi; exposed portion of the maxillipeds formed of only two segments; the basal one with a narrow, elongated portion, which is abruptly narrowed at the articulation of the terminal segment, and sends a slender process beneath it to the middle of its inner margin; the terminal segment much narrower than the basal, and tapering toward the extremity; legs subequal, the posterior not shorter than the others; terminal segment of the abdomen produced between the posterior caudal appendages, which are short and essentially as in the allied genera.

This genus differs from *Scyphax* most notably in the form of the maxillipeds, which in *Scyphax* have the terminal segment broad and serrately lobed, while in our genus it is elongated, tapering, and has entire margins. In *Scyphax*, also, the posterior pair of thoracic legs are much smaller than the others, and weak; the last segment of the abdomen is truncated at the apex, and the articulations between the segments of the terminal portion of the antennæ are much more complete than in our species. The general form and appearance of the genera are the same, and the known species agree remarkably in habits, the *Scyphax*, according to Dana, occurring on the beach of Parua Harbor, New Zealand, and found in the sand by turning it over for the depth of a few inches.

SCYPHACELLA ARENICOLA Smith, sp. nov. (p. 337.)

Body elliptical; abdomen not abruptly narrower than the thorax; the whole dorsal surface, except the extremity of the abdomen, covered with small, depressed tubercles, which give rise to minute spinules; eyes prominent, round; antenna a little longer than the breadth of the body; first and second segments short, equal; third, fourth, and fifth successively longer, the fifth being rather longer than the terminal portion, which is more slender than the fifth segment, tapers regularly to the tip, and is composed of three successively much shorter segments, and a very short, somewhat spiniform, but obtuse, terminal one; all the segments, except the minute terminal one, scatteringly beset with spinules; legs beset with small spines; the ischial, meral, carpal, and propodal segments subequal; terminal process of the last segment of the abdomen narrow, triangular, with the apex slightly rounded, and the dorsal surface a little concave; posterior caudal appendages much shorter than the abdomen; rami slightly unequal, the outer stout, spinulose, the inner a little shorter and much more slender.

Color, in life, nearly white, with chalky white spots and scattered, blackish dots arranged irregularly. Eyes black.

Length, 3-4^{mm}.

Found at Somers's and Beesley's Points, on Great Egg Harbor, New Jersey, in April, 1871, burrowing in the sand of the beaches, just above

ordinary high-water mark, in company with several species of *Staphylinidæ*, and will very likely be found on Long Island and the southern coast of New England.

PHILOSCIA VITTATA Say.

Jour. Acad. Nat. Sci., Philadelphia, vol. i, p. 429, 1818.

Under rubbish below high-water mark, Connecticut and New Jersey.

SPHÆROMA QUADRIDENTATA Say. Plate V, fig. 21. (p. 315.)

Jour. Acad. Nat. Sci. Philadelphia, vol. i, p. 400, 1818.

Massachusetts to Florida.

IDOTEA CÆCA Say. Plate V, fig. 22. (p. 340.)

Loc. cit., p. 424, 1818. Gould, Invertebrata of Massachusetts, p. 337, 1841.

Massachusetts to Florida.

IDOTEA TUFTSII Stimpson. (p. 340.)

Marine Invertebrata of Grand Manan, p. 39, 1853.

Bay of Fundy and off New London, Connecticut.

IDOTEA IRRORATA Edwards. Plate V, fig. 23. (p. 316.)

Hist. nat. des Crust., vol. iii, p. 132, 1840. *Stenosoma irrorata* Say, loc. cit., p. 423, 1818; Gould, Invertebrata of Massachusetts, p. 338, 1841.

Bay of Fundy to Great Egg Harbor, New Jersey.

IDOTEA ROBUSTA Kroyer. Plate V, fig. 24. (p. 439.)

Naturhist. Tidssk., 2d R., Bind ii, p. 108, 1846; Stimpson, Proceedings Acad. Nat. Sci., Philadelphia, 1862, p. 133.

South shore of Long Island to the Arctic Ocean. A pelagic species.

IDOTEA PHOSPHOREA Harger, sp. nov. (p. 316.)

Resembling *I. irrorata* in size and shape, but easily distinguished from that species by the pointed abdomen.

Antennæ less than half the length of the body, antennulæ attaining the end of the third segment of the antennæ. Front slightly excavated with the lateral angles salient. Head about twice as broad as long, turgid, and usually with a pair of tubercles on the vertex. Eyes placed a little before the middle of the lateral margin, hemispherical, black. First segment of thorax produced laterally around the back part of the head nearly to the eyes, showing no epimeral sutures. Second segment much longer on the median line, but shorter at the sides than the first; the epimera occupy the anterior two-thirds of the lateral margin. Third segment slightly longer than the second; the epimera occupying still more of the lateral margin. Fourth segment of about the same length as third; the epimera occupying nearly or quite all the lateral margin. The remaining three thoracic segments gradually decrease in size; the epimera occupy the whole lateral margin and increase in size posteriorly. The first two abdominal segments are distinct and acute at the sides. The third is similar to these at the sides, but is only separated

from the last by an incision reaching about half way to the median line, Last segment entire, ovate behind, and cuspidate. The style on the second pair of branchial plates in the male is slender, surpasses the laminae, and reaches the middle of the terminal cilia; it is obliquely truncated at the end.

Many of the specimens, especially the smaller ones, are furnished with a row of prominent tubercles along the back, and sometimes with lateral rows.

Length, 10–25 mm; breadth, 3–7.5 mm.

Long Island Sound to Bay of Fundy.

ERICHSONIA FILIFORMIS Harger. Plate VI, fig. 26. (p. 316.)

Stenosoma filiformis Say, loc. cit., p. 424, 1818.

Small, slender, and nearly linear in outline. Antennulae not quite attaining the fourth segment of the antennae, which are six-jointed, and more than half as long as the body, with the first segment short, second and third increasing in length, last three segments about equal; head elevated between the eyes, where it is surmounted by a bifid tubercle; first and second thoracic segments with a lateral salient angle behind the evident angulated epimera; third and fourth segments with their lateral borders emarginate, and the epimera concealed or rarely visible from above at the emargination; last three thoracic segments angulated in front of the epimera, which are also angular. This arrangement, especially in the smaller specimens, gives the appearance of fourteen serrations on each side of the thorax. There is a row of tubercles along the median line. Abdominal segments consolidated into a single piece, which is furnished with a divergent tooth on each side near the base, and is expanded and obtusely triangular at the apex. The style on the second pair of branchial plates in the male is strong and curved, surpasses the cilia, and is acute and sharply serrate near the end.

Length, 5–9 mm.

Vineyard Sound to Great Egg Harbor, New Jersey.

ERICHSONIA ATTENUATA Harger, sp. nov. Plate VI, fig. 27. (p. 370.)

Body smooth, narrowly linear in outline. Antennulae slightly surpassing the second segment of the antennae, which are more than half the length of the body, and have the last segment longest. Head excavated in front; eyes small, black, prominent; first thoracic segment short; second, third, and fourth segments about equal in length, twice as long as the first; third segment broadest, last three segments gradually decreasing in length. Epimera visible from above only in the last two or three segments, but the sutures are evident, except in the first segment, and their position moves gradually from the anterior portion of the segment in the second to the posterior in the seventh segment. Abdominal segments consolidated into a single piece, which is slightly dilated laterally near the base, and obtusely triangular at the tip. The

style on the second pair of branchial plates in the male is straight, slightly surpasses the cilia, and is acute at the end.

The color in life is usually uniform dark green, sometimes with an obscure dorsal stripe of a lighter color.

Length, 15^{mm}.

Abundant among eel-grass at Great Egg Harbor, New Jersey, and also found at New Haven, Connecticut.

EPELYS TRILOBUS Smith. Plate VI, fig. 28. (p. 370.)

Idotea triloba Say, loc. cit., p. 425, 1818.

Great Egg Harbor, New Jersey to Vineyard Sound.

EPELYS MONTOSUS Harger. (p. 370.)

Idotea montosa Stimpson, Marine Invert., Grand Manan, p. 40, 1853.

Bay of Fundy to Long Island Sound.

JÆRA COPIOSA Stimpson. (p. 315.)

Loc. cit., p. 40, Pl. 3, fig. 29, 1853. *J. nivalis* Packard, Memoirs Boston Soc. Nat. Hist., vol. i, 296, (*non* Kroyer.)

Long Island Sound to Labrador.

LIMNORIA LIGNORUM White. Plate VI, fig. 25. (p. 379.)

Pop. Hist. Brit. Crust., p. 227, Pl. 12, fig. 5. *Cymothoa lignorum* Rathke, Skrivt. af Naturh. Selsk., vol. 101, t. 3, f. 14, 1799, (teste Batè and Westwood.) *Limnoria terebrans* Leach, Trans. Linn. Soc., London, vol. xi, p. 371, 1815. Gould, Invertebrata of Massachusetts, p. 388, 1841.

Great Egg Harbor, New Jersey, to the Bay of Fundy and Europe.

NEROCILA MUNDA Harger, sp. nov. (p. 459.)

Elongated, oval, smooth, and polished. Antennæ and antennulæ nearly equal in length, about as long as the head. Head flattened, about one-third broader than long, slightly narrowing anteriorly, produced and broadly rounded in front, subequally trilobed behind, the middle lobe largest. Eyes black, consisting of an irregularly rounded patch of rather indistinct ocelli visible both above and below. First thoracic segment longer than the others, excavated in front for the three lobes of the head; epimeral sutures of this segment indistinct, but the posterior lateral angles of the segment are somewhat produced and broadly rounded. The next three segments have this angle produced so as to become a small tooth in the fourth thoracic segment; in the last three segments it is much produced, becoming a long acute tooth in the seventh. The epimera of the second segment are rounded behind; the remaining epimera are slightly angular behind, becoming more acute posteriorly; those of the second, third, and fourth segments extend backward about as far as the segment to which they belong, but in the last three segments the produced angles of the segments surpass the epimera, so that the angle of the sixth segment nearly attains the end of the seventh epimeron.

The abdomen is composed of six segments, the first five short and about equal in length; the sixth equal in length to the other five, truncate in front and rounded behind. The spines beneath the abdomen, or "abdominal epimera," are acute, the second a little more slender than the first, and extending not quite to the posterior angle of the fourth abdominal segment. The internal plate of the caudal stylets is oval and obliquely truncate, shorter than the external, which is narrow, ovate, acute behind, extending about half its length beyond the tip of the abdomen and longer than the preceding segment of the stylet. Claws of the anterior feet strongly hooked, those of the posterior feet feebly so.

Color, in alcohol, brown, with two narrow dorsal bands of lighter color.

Length, 15^{mm}; breadth, 7^{mm}.

This species is allied to *N. bivittata*, but differs from that species as figured by Milne Edwards, (Atlas du Règne animal de Cuvier, Crust., Plate 66, fig. 5,) in the shortness of three posterior epimera, the regularly rounded terminal segment of the abdomen, and the shape of the caudal stylets.

A single specimen was obtained on the dorsal fin of *Ceratacanthus aurantiacus*.

CONILERA CONCHARUM Harger. (p. 459.)

Aga concharum Stimpson, Marine Invert. Grand Manan, p. 42, 1853.

Vineyard Sound; Charleston, South Carolina.

LIVONECA OVALIS Harger. Plate VI, fig. 29. (p. 457.)

Cymothoa ovalis Say loc. cit., p. 394, 1818.

These animals are usually distorted, and not, as represented in the figure, symmetrical on the two sides.

The specimen figured was taken from a blue-fish near the gill.

ANTHURA BRUNNEA Harger, sp. nov. (p. 426.)

Nearly uniform in size throughout, but slightly narrower anteriorly. Antennulæ and antennæ nearly equal in length, scarcely longer than the head. Front projecting between and each side of the bases of the antennulæ into prominent angles. Eyes small and situated in the sides of the lateral prominences. Thoracic segments smooth and shining above; the third with a slight semicircular depression on the middle of the anterior margin. This depression is still more strongly marked on the three following segments. First segment slightly longer and narrower than the others; second to fifth about equal; sixth and seventh considerably shorter; the seventh about three-fourths the length of the sixth; all the segments carinated below. Dorsal surface of the basal portion of the abdomen similar to the posterior segment of the thorax, showing no indication of segments. Terminal portion flat, smooth, and narrowly ovate at tip. Appendages of the penultimate segment lamelliform, similar in form to the terminal plate but not quite equaling it. First pair of feet short and thickened. All the feet slightly hairy.

In life whitish mottled with dull, purplish brown above. Eyes black, retaining their color in alcohol. Length, 14–15^{mm}.

Great Egg Harbor, New Jersey, and Vineyard Sound.

ANTHURA BRACHIATA Stimpson. (p. 511.)

Marine Invertebrata of Grand Manan, p. 43, 1853.

This species is greatly constricted at the articulations of the second thoracic segment, and by that character is easily distinguished from *A. brunnea*.

Bay of Fundy to Vineyard Sound.

TANAIS FILUM Stimpson. (p. 381.)

Marine Invertebrata of Grand Manan, p. 43, 1853.

Bay of Fundy to Vineyard Sound.

CEPON DISTORTUS Leidy. (p. 557.)

Jour. Acad. Nat. Sci. Phila., vol. iii, p. 149, Pl. 11, figs. 26–32, 1855.

Branchial cavity of *Gelasimus pugilator*, Atlantic City, New Jersey.

ENTOMOSTRACA.

The Ostracoda and the minute Copeopoda of our coast have not yet been sufficiently studied by any one for us to attempt to enumerate even the more common species.

COPEPODA.

SAPPHIRINA, species. Plate VII, fig. 33. (p. 439.)

A beautiful species of this remarkable genus was taken off Gay Head, Martha's Vineyard, September 2 and 8.

PHYLLOPODA.

ARTEMIA GRACILIS Verrill.

Amer. Jour. Sci., 2d series, vol. xlviii, p. 248, 1869; Proceedings Amer. Assoc. Adv. Sci., vol. xviii, p. 235, figs. 1 and 2, 1870.

In tubs of concentrated sea-water at New Haven, Connecticut; Charlestown, Massachusetts; and in salt-vats at Falmouth, Massachusetts.

SIPHONOSTOMA.

ERGASILUS LABRACES Kroyer. (p. 459.)

Nat. Tidsskrift, 1863-'64, p. 303, Pl. 11, fig. 2, (teste Zoological Record for 1865.)

According to Kroyer, found upon the striped bass (*Roccus lineatus*) from Baltimore, and liable, therefore, to occur on the coast of New England.

ARGULUS CATOSTOMI Dana and Herrick. (p. 459.)

Amer. Jour. Sci., 1st series, vol. xxx, p. 383, 1836, and vol. xxxi, p. 297, plate, 1837.

Parasitic on the "sucker" (*Catostomus*) in Mill River, near New Haven, Connecticut.

ARGULUS LATICAUDA Smith, sp. nov. (p. 452.)

Carapax orbicular, longer than broad; antero-lateral margin with a deep sinus from which a deep sulcus extends to the center of the carapax; sinus of the posterior margin about twice as deep as broad, extending a little less than a third of the length of the carapax. Eyes large. Body scarcely projecting beyond the posterior margin of the carapax. Tail orbicular, slightly longer than broad, its posterior sinus narrow, extending scarcely a fourth the length. Antennulæ and antennæ much as in *A. Catostomi*, to which the species bears considerable resemblance. The squamiform appendage upon the base of the prehensile legs expands into a broad posterior margin, which is divided into three broad, closely approximated lobes, of which the extremities are broad, truncated, and slightly and irregularly excavated; the terminal portion of the leg is much as in *A. Catostomi*, the ultimate segment longer than the penultimate and armed at the tip with two claws. Natatory legs short, the anterior ones not projecting beyond the carapax.

In alcoholic specimens most of the carapax is opaque and black with a thick deposit of pigment.

Length of entire animal, in the largest specimen, 5^{mm}; length of carapax, 3.7; breadth of carapax, 3.2; length of tail, 1.3; breadth of tail, 1.1.

Found among algæ in Vineyard Sound.

A small specimen taken at surface early in September had the opaque portions of the carapax dark brown in life, and in alcohol it retains about the same color.

ARGULUS LATUS Smith, sp. nov. (p. 452.)

Carapax large, orbicular, broader than long; the antero-lateral border with a broad shallow sinus; the sinus of the posterior margin not deeper than broad, its depth scarcely more than a fifth of the length of the carapax. Body projecting considerably beyond the posterior margin of the carapax. Tail a third as long as the carapax, about two-thirds as broad as long, the lateral margins slightly curved and nearly parallel, the sinus very broad and extending more than a third of the whole length. Disks of the sucking legs about a fourth as wide as the carapax. Squamiform appendage upon the base of the prehensile legs with a papillose area upon the expanded distal portion, the posterior margin without teeth or lobes, but the outer margin of the expanded portion armed with numerous very small teeth; ultimate segment longer than the penultimate, and apparently without any hooks at the tip. Natatory legs all long, even the anterior projecting beyond the sides of the carapax.

Color of alcoholic specimens yellowish white.

Length, 3.0^{mm}; length of carapax, 2.2; breadth of carapax, 2.5; length of tail, 0.7; breadth of tail, 0.45.

Taken at the surface, in Vineyard Sound, July 1.