

large reef corals. It has been recorded from Florida and through the West Indies to Brazil. Fernando de Noronha (Pocock). Colon (Stimpson). Porto Rico (Rathbun).

Actæa setigera (M.-Edw.) A. M.-Edw.

Xantho setiger M.-Edw., Hist. Crust., i, p. 390, 1834.

Actæa setigera A. M.-Edw., Nouv. Arch. Mus., i, p. 271, pl. xviii, fig. 2, 1865; Miss. Sci. Mex., v, p. 244, 1879. Rankin, op. cit., p. 529, 1900. M. J. Rathbun, Brach. and Macr. Porto Rico, p. 34, 1901.

FIGURE 11.

While living this small crab is densely covered with short hairs to which fine white shell-mud adheres, often effectually concealing it when resting on the bottom. When cleaned the color is reddish brown to purplish red, with paler legs. The carapace and legs are closely granulated beneath the hairs; the dactylus of the chelæ is deeply grooved and hairy.

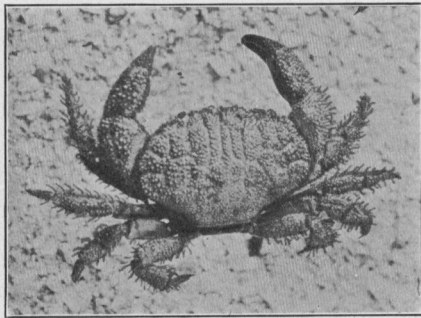


Figure 11.—Hairy Crab, *Actæa setigera*, nat. size. Phot. A. H. V.

Measurements of Bermuda specimens.

No.	Sex	Carapace		Front width	Chelæ	
		length	breadth		length	height
812a	♂	19	30	6	{ r. 16	9
812b	♂	12	18	4	{ l. 16	9
29a	♂	20	29	5	{ r. 10	5
0b	♀	21	31	5.7	{ l. 17	9.5
					{ r. 15	8
					{ 16	8

It occurs in shallow water bays and on the reefs. Taken by nearly all Bermuda collectors. Good specimens were in the collection of J. M. Jones (812, a, b). We found it common on rocky shores, usually under stones or in crevices. A small specimen was taken on

the Challenger Bank in 28 fathoms, by the party from the Field Museum Nat. Hist., Oct. 1905.

It ranges from Florida to the Lesser Antilles. It is common in the West Indies. Colon (Yale Mus.).

Cycloxanthops denticulatus (White) Rathbun.

Xantho denticulata White, Ann. Mag. Nat. Hist., 2d s., ii, p. 285, 1848 (non Stimpson). Smith, Proc. Boston Soc. Nat. Hist., vol. xii, p. 274, 1869 (descr.): these Trans., ii, pp. 3 and 33, 1869 (Bermuda, Colon, and Brazil). A. M.-Edw., Miss. Sci. Mexico, Crust., p. 252, pl. xlv, figs. 2-26, 1879. Rankin, op. cit., p. 529, 1900.

Cycloxanthops denticulatus M. J. Rathbun, Ann. Inst. Jamaica, i, p. 14, 1897; Proc. U. S. Nat. Mus., xxi, p. 590, 1898; Proc. Wash. Acad. Sci., ii, p. 138, 1900; Brach. and Maer. Porto Rico, p. 27, 1901.

PLATE XIV, FIGURE 8. PLATE XXVII, FIGURE 7.

In life this species is generally some shade of red, purplish red or salmon. "Our specimens are usually reddish salmon, or pink; on the front part of the carapace there is often a red spot. Under surfaces whitish, with some pale brown spots on the abdomen. Chelae pinkish brown, their tips dark brown or nearly black." (C. S. V.)

The carapace of an unusually large specimen from Brazil, was 16.6^{mm} long, by 26.5^{mm} broad; ratio, 1 : 1.6. (Smith.)

Measurements of Bermuda specimens.

No.	Sex	Carapace		Front width	Chelæ	
		length	breadth		length	height
3137a	♂	16	25	6	r. 17	9
					l. 16.5	7.3
3137b	♂	14.5	22	5	r. 15	8
					l. 14.5	6
4014	♂	15	24	6	r. 18.5	9.5
4013	♀	14	22	5	r. 13	7
					l. 12	6.5

In all our specimens the right chela is the larger. It is easily distinguished by the small, sharp marginal denticles.

We found this species rather rare at Bermuda. It lives under stones at low tide and among dead corals on the reefs. It was also in the early collections of J. M. Jones and G. B. Goode (Yale Mus.), and in the collection made by the Bermuda Biological Station, 1903.

Its range extends from South Carolina and Florida through the West Indies to Colon (Smith), and Rio Janeiro (Dana). Abrolhos Is., Brazil (Smith); Maceio (Rathbun); Cumana (Stimpson). Near Vera

Cruz (Edwards). According to Stimpson it makes a nest of mud among the roots of mangroves.

Xanthodius parvulus (Fabr.) M. J. Rathbun.

Cancer parvulus Fabr., Entomol. Syst., ii, p. 451, 1793 (*t.* Rathbun). (Not *Xantho parvulus* M.-Edw., nor *Panopeus parvulus* Ben. and Rath.)

Chlorodius americanus Saussure, Mem. de la Soc. Phys. et d'Hist. Nat. Genève, vol. xiv, p. 430, pl. i, fig. 5, 1857.

Xanthodius americanus Stimp., Notes on N. Amer. Crust., Ann. Lyc. Nat. Hist., N. York, vii, p. 209 [81], 1860.

Leptodius americanus A. Milne-Edw., Miss. Sci. Mex., v, i, p. 269, 1880. M. J. Rathbun, Proc. U. S. Nat. Mus., xvi, p. 536, 1893.

Xanthodius parvulus M. J. Rathbun, Brach. and Macr. of Porto Rico, p. 27, 1901. Verrill, Trans. Conn. Acad., xi, p. 576, 1901.

FIGURE 12. PLATE XIV, FIGURE 4.

Average size of adults: carapace about 15^{mm} long; 24.5^{mm} wide; front 6^{mm} wide.

The single adult specimen in the Museum of Yale University, from the collection of Dr. F. V. Hamlin, 1877, has been determined by Miss Rathbun by direct comparison with a photograph of the original type of Fabricius. It is evidently a rare species at the Bermudas, for it was not found in any of the later collections. Probably it lives under stones or in burrows.

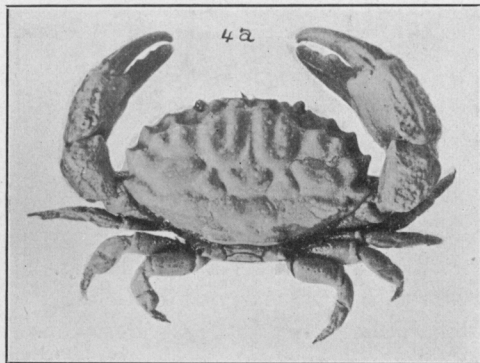


Figure 12.—*Xanthodius parvulus* from Bermuda. \times about 2. Phot. A. H. V.

It ranges from the Florida Keys and West Indies to Brazil. Florida and Barbados (Stimpson); Hayti (Saussure); Bahamas, Porto Rico, Curacao, etc. (Rathbun); Fernando Noronha (Pocock).

Heteractæa ceratopus (Stimp.) A. M.-Edw.

Pilumnus ceratopus Stimpson, Annals Lyc. Nat. Hist., New York, vii, p. 215 [87], 1860; and vol. x, p. 109, 1871.

Heteractæa ceratopus A. Milne-Edw., Sci. Miss. Mexico, part v, i, p. 300, pl. lii, figs. 3-3d, 1880. Kingsley, op. cit., 1879, p. 396. Rankin, Crust. Bahamas, Annals N. Y. Acad. Sci., xi, p. 232, 1898. Verrill, Trans. Conn. Acad., x, p. 575, 1900 (Bermuda).

FIGURE 13.

This is easily recognized by the very spinose character of the marginal teeth of the carapace and the spiniform tubercles of the chelipeds. The dactylus and thumb are black; the distal part of the manus light red.

Measurements.

No.	Sex	Carapace length	Carapace width	Front between orbits	Chelæ length	Chelæ height	Locality
3145	♂	17	28	10.5	r. 20 l. 17	12 8	Bermuda
4067	♂	9	13	5.0	l. 8.5	5	Dominica

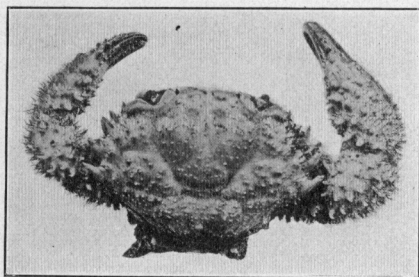


Figure 13.—*Heteractæa ceratopus*, ♂ from Bermuda, about nat. size. Phot. by A. H. V.

This species is apparently very rare at the Bermudas. It is not contained in any of the recent collections examined, nor was it in the early collections of Jones and Goode. One adult specimen was taken by our party in 1898.

It ranges from Florida to Antilles. Florida (Stimpson). Bahamas (S. I. Smith, coll. Bryant). Guadeloupe (Stimpson). Dominica I. (A. H. Verrill, 1906.)

Leptodius floridanus (Gibbes) A. M.-Edw.

Chlorodius floridanus Gibbes, Proc. Am. Assoc. Adv. Sci., iii, p. 175, 1850.

Stimpson, Notes on N. Amer. Crust., Annals Lye. Nat. Hist. N. York, vii, p. 209. S. I. Smith, Crust. Brazil, these Trans., ii, p. 3, 1869 (measurements).

Kingsley, Proc. Acad. Nat. Sci., Philad., for 1879, p. 395. Rankin, Ann. N. York Acad., xi, p. 231, 1898.

Leptodius floridanus A. M.-Edw., Miss. Sci. Mex., v. vol. i, p. 268, pl. xlix, figs. 2, 2a, 1880. M. J. Rathbun, Proc. Wash. Acad. Sci., ii, p. 139, 1900 (Brazil); Proc. U. S. Nat. Mus., xvi, p. 536; Brachyura and Macr. Porto Rico, p. 27, 1901. Verrill, these Trans. x, p. 575, 1900 (Bermuda).

Chlorodius limosus Desb. and Schramm, Crust. Guadeloupe, p. 30 (t. A. M.-Edw.).

PLATE XIV, FIGURE 7.

This is easily distinguished from most of the allied species by the strongly areolated carapace, large lateral teeth, and prominent bilobed front. The upper side of the chelæ is rough with irregular elevations and small rounded tubercles. The smaller specimens often closely resemble *Eupanopeus bermudensis* of similar size, and the young of *E. serratus*, but the areolations of the carapace are stronger and the frontal lobes are more prominent, with a deep notch between them, while the tubercles appear on the chelæ in very young individuals. The tips of the chelæ are excavate or spoon-like even when very young. It is variable in color, but is usually mottled or varied with dull red or reddish brown.

Measurements of Bermuda specimens.

No.	Sex	Carapace		Front width	length	Chelæ	
		length	breadth			height	height
4000a	♀	20	28.5	8	{ r. 19 l. 17	{ 10 8	
4001	♀	20	29.5	8	{ 1. 18 r. 17	{ 9.5 8	
4002a	♂	18	27	7	1. 19	10	
4004	♂	18	27	7	{ r. 18 l. 20	{ r. 9 l. 11	
4019	♂	18	26	9	{ r. 17 l. 16	{ 6 8	
3030	♂	17	25	6.5	1. 17	9	

No. 4001 was carrying eggs April, 1901.

This species is common on rocky shores under stones and on the reefs in the crevices and beneath dead corals. Many specimens were taken by the Yale parties in 1898 and 1901. Several taken in April were carrying eggs. Others taken in midsummer by the Bermuda Biol. Station also had eggs. It has been obtained by nearly every collector in Bermuda (J. M. Jones, Mr. Goode, Professor Kincaid, Dr. T. H. Bean, etc.).

Its range is from Florida to Colon and through the West Indies to Brazil. New Providence in pools and under stones on the shore (Rankin); Florida, Colon, and Abrolhos Is. (Smith); Maccio, Brazil (Rathbun); Barbados (Benedict).

Liomera dispar (Stimp.) Rathbun.

Chlorodius dispar Stimp., Prelim. Rep. on Crust. Gulf Stream, Bull. Mus. Comp. Zoöl., ii, p. 140, 1870. Kingsley, Proc. Acad. Nat. Sci., Philad., for 1879, p. 395 (descr.).

Leptodius dispar A. M.-Edw., Miss. Sci., Mex., v, i, p. 271, 1880.

Liomera dispar M. J. Rathbun, Ann. Inst. Jamaica, i, p. 13, 1897; Brachyura and Macr. of Porto Rico, p. 25, 1901. Verrill, Trans. Conn. Acad., x, p. 577, 1900 (Bermuda).

PLATE XIV, FIGURE 5.

A small and very rare species. Easily recognizable by its transversely elliptical and smooth carapace. The tips of the chelæ are jet black. The carapace in our specimens, preserved in alcohol for many years, is plain dull yellowish brown. Doubtless it has changed very much. Length of carapace about 8^{mm}, breadth 13.5^{mm}.

This has not been found in any recent collection. Two specimens in the Yale Museum were collected before 1877, by J. M. Jones (No. 3176). One has been given to the U. S. Nat. Museum. They were identified by Miss M. J. Rathbun.

Key West (Kingsley); Cuba (Stimpson); Bahamas; Porto Rico and Jamaica (Rathbun).

Eupanopeus M. J. Rathbun, 1898.

Panopeus (pars) H. M.-Edw., Hist. nat. Crust., 1834, and most subsequent writers. Benedict and Rathbun, The Genus Panopeus, 1891.

Eupanopeus M. J. Rathbun, Bull. Labr. Nat. Hist. State Univ., Iowa, iv, p. 273, 1898.

Artificial key to the Bermuda species of Eupanopeus.

- A. No well-defined transverse groove near the distal margin of the carpus of the chelipeds.
- B. Marginal teeth with front edge inclined forward; ratio of length to breadth of carapace about 1:1.35 to 1:1.50 *Herbstii*
- c. Last three marginal teeth acute, subequal in size, cusps of first two, or coalesced tooth, nearly equal in height. Flanks of carapace not convex Var. *Herbstii*
- c'. Last three marginal teeth unequal in breadth, not all divergent; cusps of first and second unequal in height. Flanks usually convex.
- d. Third tooth notably large, and broadly rounded outwardly. Flanks convex, in a dorsal view. Front 4-lobed. Legs elongated. Var. *minax*
- d'. Third tooth not greatly enlarged; tip incurved or obtuse. Flanks usually somewhat convex. Legs not so elongated. Var. *obesus*

- B'. Marginal teeth thickened, with front edge not much inclined forward; 4th and 5th squarrose. Ratio of length to breadth of carapace about 1:1.30. Edge of front thickened, distinctly four-lobed *americanus**
- A'. A distinct transverse groove near distal end of carpus of chelipeds.
- C. Third segment of male abdomen reaches coxal joint of 5th pair of legs; front not grooved. Fingers dark. Size rather large.
- D. Third marginal tooth broadest, arcuate posteriorly; carpus of chelipeds smooth with deep groove *occidentalis*
- D'. Third marginal tooth dentiform, acute; carpus of chelipeds roughened. *serratus*
- C'. Third segment of male abdomen does not reach the coxal joint of 5th pair of legs. Front prominent, 4-lobed, grooved. Fingers pale; size small *bermudensis*

Eupanopeus Herbstii (Milne-Edwards), M. J. Rathbun.

Cancer panope Say, Jour. Acad. Nat. Sci. Phila., i, pp. 58, 447, pl. 4, fig. 3, 1817.

Panopeus Herbstii H. M.-Edwards, Hist. Nat. Crust., i, p. 403, 1834. DeKay, Crust. of N. Y., p. 5, pl. ix, fig. 26 (poor), 1844. Gibbes, Proc. Boston Soc. Nat. Hist., ii, pp. 63, 69, 1845. Stimpson, Amer. Jour. Sci. (2), xxix, p. 444, 1860. Smith, Proc. Boston Soc. Nat. Hist., xii, p. 276, 1869; these Trans., ii, p. 34, 1869; Rept. U. S. Comm. Fisheries for 1871-72 (1874), p. 547. Verrill, op. cit., p. 472 [178], 1874. A. M.-Edwards, Miss. Sci. Mexique, pt. 5, i, p. 308, pl. lvii, fig. 2, 1880. R. Rathbun, Fishery Industries of U. S., section i, p. 772, 1884. Benedict and M. J. Rathbun, The Genus Panopeus, Proc. U. S. Nat. Museum, xiv, p. 358, pl. xix, figs. 1, 2; pl. xxiii, figs. 10-12, 1891.

Eupanopeus herbstii M. J. Rathbun, Bull. Labr. Nat. Hist. State Univ. of Iowa, iv, p. 273, 1898; Proc. Wash. Acad. Sci., ii, p. 140, 1900; Amer. Naturalist, xxxiv, p. 138, 1900; Brach. and Macr. Porto Rico, p. 28, 1901.

FIGURES 14, b, 15. PLATE XV, FIGURES 1, 2, 3; VARIETIES.

The common and more typical form of this species, which is generally distributed along the eastern coast of the United States, south of Cape Cod, especially on oyster beds, seems to be rather common in Bermuda. Most of the specimens that I have seen belong to this variety. This form, or variety, regarded as typical (var. *Herbstii*) usually has the postero-lateral margins or flanks of the carapace either straight or slight concave, and convergent, while in the other varieties they are usually distinctly convex, giving the posterior half of the outline a more elliptical form. The legs are rather short. The marginal teeth are inclined forward and acute, the third tooth being only a little broader and less acute than the rest, with the

* Not positively known from Bermuda, but perhaps confused with *Herbstii*, from which it differs but slightly.

posterior edge more convex; the coalesced first and second teeth have the two cusps prominent and nearly equal in height; the second is obtuse and broader. The front is somewhat produced and is distinctly 4-lobed or sinuous; the edge is often upturned and granulated in the adults.

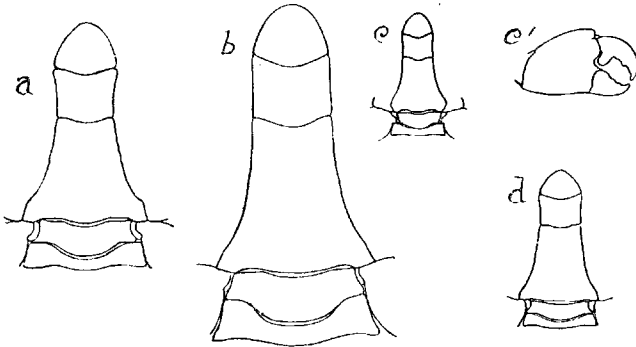


Figure 14.—Male abdomens of *Eupanopeus*: a, *E. occidentalis*; b, *E. Herbstii*; c, *E. bermudensis*; c', its larger chela; d, *E. serratus*. All enlarged, after Benedict and Rathbun.

The carpus of the chelipeds is granulated, but nearly smooth to the naked eye, usually with a slight undulation or depression in place of the distal groove, but in some this is entirely obsolete. The carapace is somewhat uneven, with the areolation not much raised but well marked; slight transverse rugae are usually present; the surface is usually finely punctate and granulate, but in some examples it is transversely rugose and more granulose. The color is variable, but usually is yellowish or olive-yellow, mottled more or less thickly with red or red-brown. The fingers are blackish, varying to dark liver-brown, and below, the dark color is apt to extend backward on the manus, a little beyond the base of the dactylus.

A specimen (No. 4016) taken at Long Bird Island, April 19, 1901, in life had the carapace curiously variegated with gray, white, and blackish brown, and with patches of orange in the middle, near the front edge. Chelipeds thickly spotted and specked with bluish gray, and with a patch of orange on the back of the carpus and chela.

The ratio of length to breadth of the carapace, according to the measurements of Prof. S. I. Smith,* varies from 1:1.33 to 1:1.48.

* Proc. Bost. Soc. Nat. History, xii, p. 277.

Our No. 470, which was labelled as *E. Herbstii* by Miss Rathbun, has the ratios 1:1.33. Therefore it has nearly the same proportions as *E. americanus*, in which they are usually about 1:1.3. The difference in form is, therefore, not very reliable. The largest example mentioned by Benedict and Rathbun had the carapace 40^{mm} long and 62^{mm} wide, ratio 1:1.55. It was about the same size as the type of our var. *minuta*.

Measurements.

No.	Sex	Carapace		Front between orbits	Chelæ		Locality
		length	breadth		length	height	
470	♂	21	28	10	{ l. 21 r. 19	{ 14 10	Colon
Figd.*	♂	26	35.5	12.5	{ r. 29 l. 21	{ 18 12	Egmont Key
4042	♀	20	28	11	{ r. 17 l. 18	{ 7.5 10	Bermuda
4043	♀	17	22.5	9	{ r. 15 l. 16	{ 10 10	..
4018	♂	16	22	9	{ r. 15 l. 16	{ 10 10	..
4016		15.5	20.5	8.5	r. 14	8.5	..
416	♂	34.8	50.5	—	{ r. 35 l. 39	{ 12 22	..

* This belongs to the var. *obesus*. It is the figured specimen, pl. xv, fig. 1.

This is much more active than most species of *Eupanopeus*. In some cases it may be seen actively running about on the stony beaches, as at Spanish Point, in March, 1901, where it was found in considerable numbers and "very lively" by A. H. Verrill. It was not found at any other place in such numbers. These were of medium size and rather bright colors (Nos. 4042, 4043). They were purplish, varied with yellow and yellowish white; on the under side, pale yellow mottled with bright lavender. (A. II. V.)

In the Bermudas it occurs mostly under stones and dead corals on rocky shores and on the reefs. It was obtained by Jones, Goode, Kincaid, and by the Yale parties of 1898 and 1901, but usually in small numbers or singly. This species, as a whole, ranges from Southern New England to Florida, Texas, Colon, and through the West Indies to Brazil (coll. Yale Mus.). It is abundant from Cape Hatteras southward. The typical variety seems to occur, as well as the var. *obesus*, throughout its entire range.

Eupanopeus Herbstii, var. **obesus** (Smith).

Panopeus herbstii, var. *obesus* S. I. Smith, Proc. Boston Soc. Nat. Hist., xii, p. 278, 1869. Coles, Proc. Acad. Nat. Sci. Philad. (3), i, p. 120, 1871. Kingsley, Proc. Acad. Nat. Sci. Philad., p. 318, 1878. A. M. Edwards, Miss. Sci. Mexique, pt. 5, i, p. 309, 1880, pl. lvii, figs. 2, 2a. Benedict and Rathbun, The Genus *Panopeus*, op. cit., p. 359, 1891, pl. xix, fig. 2; pl. xxiii, fig. 11.

FIGURE 14, b. PLATE XV, FIGURE 1.

This is an unusual form in collections from Bermuda. It differs from the preceding chiefly in its more elliptical form, due to the convexity of the flanks or posterior branchial areas, a character indicating, perhaps, enlarged gill-chambers and gills. Benedict and Rathbun (op. cit., 1891) state that this variety was found commonly on the Carolina coasts in holes above high tide, and not extending into the water, while the common form was found in the same vicinity on the oyster beds and below tide. This difference in habit may well be associated with a change in the capacity of the branchial chambers. Other characters are found mainly in the marginal teeth. In this form the teeth are broader, blunter, and less prominent; the coalesced first two are more unequal in size and prominence; the third tooth is broader and more arcuate posteriorly.

Measurements of Eupanopeus Herbstii, var. obesus, from Bermuda.

No.	Sex	Carapace		Front between orbits	Chelæ	
		length	breadth		length	height
1903a	♂	28	39	14	l. 28	15
1903b	♀	23.5	33	12	r. 25	12.5
4023		30	42	14	----	----

Prof. Smith's original description was as follows :

“Carapax strongly convex. Front broad, deflexed, not prominent, the edges as seen from above nearly straight, and not at all four-lobed. Post-orbital tooth not prominent, slightly separated from the second normal tooth of the antero-lateral margin by a very shallow sinus; remaining teeth of the margin not very prominent; the third broad, and its outer edge truncate; fourth broad, the anterior edge very short, but slightly hooked forward at the apex, and the outer edge slightly arcuate; last tooth very short, but acute, and its apex slightly curved forward. Inferior regions, chelipeds, etc., very nearly as in *Herbstii*. Color of alcoholic specimens, brownish olive, clouded and spotted with dull red on the anterior part of the carapax, and on the upper side of the chelipeds; fingers black or dark brown, lighter at the tips. In all the specimens the hands are spotted externally with red.”

"Length of carapax in a male, 23.6^{mm}; breadth, 33.4^{mm}; ratio, 1:1.41."

"Egmont Key, Fla.; Col. E. Jewett. Aspinwall; F. H. Bradley.

Specimens from Egmont Key appear quite distinct from specimens of *Herbstii* from the same locality, having the carapax broader and much more convex, the teeth of the antero-lateral margin less prominent and somewhat different in form, and the coloration quite different; but specimens of *Herbstii*, in the Society's collection, from Bahama and Florida, approach quite closely to the variety, in the breadth and convexity of the carapax, the form of the teeth of the antero-lateral margin of the carapax, and even slightly in coloration."

The following measurements of three specimens from Maranhao, Brazil (coll. C. F. Hartt, 1870), occur in Prof. Smith's MSS. notes:

No.	Sex	Carapace		Ratio
		length	breadth	
236b	♂	23.7	35.1	1:1.48
232a	♀	22.0	33.3	1:1.51
232b	♀	18.5	26.9	1:1.45

I have personally examined the original specimens described by Professor Smith (Yale Mus. coll.) and numerous others from various localities, which were also studied by Benedict and Rathbun.

Its range is essentially the same as that of var. *Herbstii*.

Eupanopeus Herbstii, var. or subspecies, **minax**, nov.

PLATE XV, FIGURE 2.

A single large male was taken by us in 1901. This is a large, stout crab, for one of this group. Its legs appear to be relatively longer than in var. *obesus* and other allied forms. Its carapace is convex and more swollen on the flanks, with the postero-marginal outlines decidedly convex, when seen from above. Its antero-marginal teeth are relatively large and more prominent than in the related forms. The coalesced first and second teeth are not very unequal; the first is smaller, short, acute, triangular; the second, which is separated half way to base by a broad, regularly curved notch, is rather larger and broader, concave in front and convex posteriorly. On the left side these teeth are much more unequal, apparently due to some injury to the first. The notch between the second and third is narrow at bottom. The third tooth is especially large, wide, and broadly rounded, or arcuate outwardly; the fourth and fifth teeth have acute tips, directed obliquely outward and upward; the fourth has the anterior edge subtruncate and but little inclined forward, with the posterior edge arcuate; the fifth is a little shorter and narrower, thickened and triquetral at base, with a sharp tip

directed slightly forward. All the teeth have the outer edge thickened and granulous, curved upward. The front is distinctly four-lobed, the outer lobes much the smaller, separated from the inner by a sinuous curve ; inner lobes broadly arcuate, separated by a narrow deep notch ; the edges are thickened and rather coarsely granulous.

The areolation of the carapace is well marked with the areas convex. The surface is rather finely granulose. The chelipeds are very large and strong, with massive unequal chelæ, appearing nearly smooth to the naked eye, but closely and rather finely granulous under a lens, with numerous small shallow unequal pits on the chelæ, which, on the carpus, become shallow transverse or wavy furrows, separated by very slightly elevated finely granulous rugæ. The distal transverse groove is indicated only by a very shallow, ill-defined wave-like depression. The carpal tooth is large and conical. No perceptible dorsal carina on the manus.

The male abdomen differs somewhat from that of var. *Herbstii*, as figured. The penultimate segment is relatively shorter ; it is wider than long, so that the suture between it and the last segment is behind the sternal suture, instead of coincident with it. Its sides and the sides of the distal portion of the preceding segment are nearly parallel ; last segment broad ovate, rounded at the end, about as broad as long.

Fingers dark horn-color, the dark color of the propodus terminating in a regular curve, convex proximally, a little back of the articulation of the dactylus.

The general color of the upper surface of the dry specimen is dull red, becoming brownish red on the chelæ, and brighter orange-red on the carapace ; under surface dull yellow.

Measurements of type.

Length of carapace.....	41
Breadth of carapace.....	62
Front, between orbits.....	18
Length of right chela.....	53
Height of right chela.....	30
Length of merus, right chela.....	26
Length of left chela.....	51
Height of left chela.....	24
Length of merus, left chela.....	23
Total length of 1st pereiopods.....	76
Length of merus, 1st pereiopods.....	25
Length of carpus, extreme.....	13
Length of propodite, extreme.....	14
Length of dactylus.....	17