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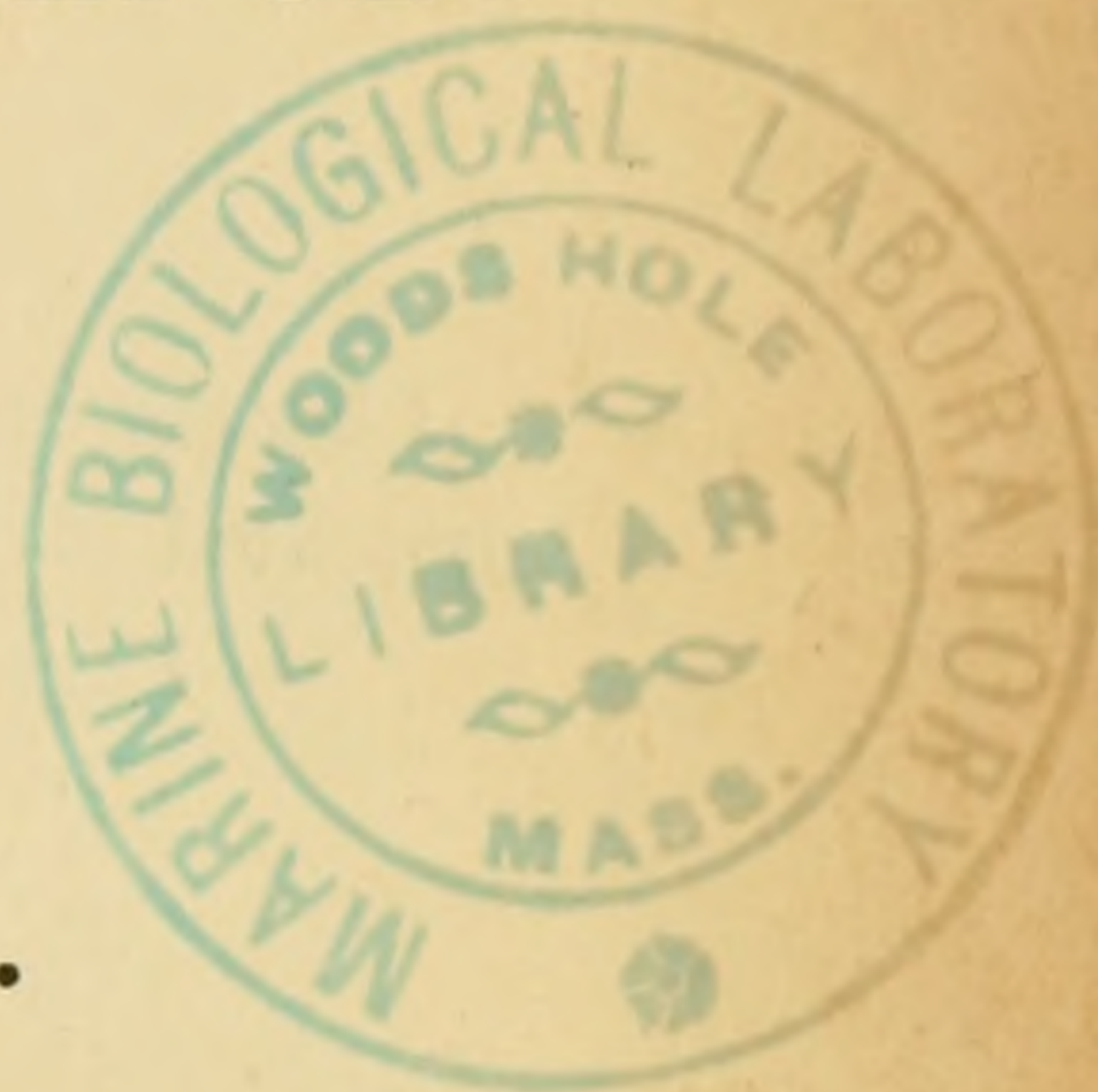
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CATALOGUE OF CRUSTACEA FROM THE ISTHMUS OF PANAMA.  
COLLECTED BY J. A. McNEIL.

BY T. HALE STREETS.

**BRACHYURA.**

**MAICIDEA.**

FAMILY MAIDEA.

Subfamily PISINAE.

*Omalacantha*, nov. gen.

Carapax pyriform as in *Pisa*. Orbit complete above and below, oval, superior border armed with a triangular tooth. Eye very small; peduncle short. Rostrum well developed, bifurcated nearly to base, horns divergent, apices convergent; præorbital tooth flattened, obtuse; external antennæ not hidden by rostrum, but completely exposed, on same level as rostrum; first and second articles broad, flattened, clubbed at distal extremity.

This genus is very closely allied to that little known genus, *Microphrys*,<sup>1</sup> M. Edw. It is readily distinguished from *Microphrys* by its greater triangular form (not being broader than long); by the broad, club-shaped articles of external antennæ (in *Microphrys* they are cylindrical), and by the antero-lateral border of carapax being less inflated.

*Omalacantha hirsuta*, nov. sp.

Carapax triangular, convex, tuberculated, pilose; hairs hooked at extremity; prominent spine projecting from junction of antero-lateral with postero-lateral border; another smaller spine below, and in front of this on branchial region; spine on hepatic region below and behind external angle of orbit; one on side of branchial region, near the groove separating it from hepatic; row of five small tubercles on inferior border of hepatic region; on gastric region tubercles arranged in the form of the letter T; an arcuate row of four tubercles on intestinal region; another single one below these at posterior extremity of same region. Longitudinal row of hairs on horn of rostrum, and continuing on lateral portion

<sup>1</sup> For description, see "Zoologie Expedition dans l'Amérique du Sud, par Castlenau."



of branchial region. Tooth on superior margin of orbit obtuse; orbit obtuse at external angle. External antennæ ciliated; rostrum slightly reflexed, more so in female than in male. The chelipeds larger in male than in female, smooth, with exception of arm, which presents a row of tubercles on upper surface; covered with rounded spots of a violet-red color. Fingers closely approximated and finely denticulated at extremity; in female approximated along their whole length. Two or three rudimentary tubercles on third article of second pair of feet. A deep red spot at the projecting lateral angle of carapax. Color reddish shade. Length, 1.37 inch; breadth, .94 inch.

Subfamily MITHRACINÆ.

*Mithraculus coronatus*, Stimpson. An. Lyc. Nat. Hist. N. Y., vol. VII., p. 186.

**CANCROIDEA.**

FAMILY CANCRIDÆ.

Subfamily XANTHINÆ.

*Carpilius corallinus*, M. Edw. Hist. Nat. des Crust., tom. I., p. 381.

*Actæa labyrinthica*, Stimpson, An. Lyc. Nat. Hist. N. Y., vol. VII., p. 204.

*Menippe mercenaria*, Stimpson. *Cancer mercenaria*, Say. Journ. Acad. Nat. Sci. Phila., vol. I., p. 448.

*Panopæus chilensis*, Edw. et Lucas. D'Orbigny's Voy. en Am. Mérid., Crust., p. 16; pl. VIII., fig. 1.

FAMILY ERIPHIDÆ.

Subfamily ERIPHINÆ.

*Eriphia gonagra*, M. Edw. Hist. Nat. des Crust., tom. I., p. 426, pl. XVI., figs. 16 and 17. Dana. U. S. Expl. Exped., Crust., vol. I., p. 250.

FAMILY PORTUNIDÆ.

Subfamily LUPINÆ.

*Lupa dicantha*, M. Edw. Hist. Nat. des Crust., tom. I., p. 451. Dana, U.S. Expl. Exped., Crust., vol. I., p. 272, pl. XVI., fig. 7.

*Lupa rubra*, M. Edw. Hist. Nat. des Crust., tom. I., p. 454.



## OCYPODOIDEA.

## FAMILY MACROPHTHALMIDÆ.

## Subfamily OCYPODINÆ.

*Ocypoda Gaudichaudii*, Edw. et Lucas. D'Orbigny's Voy. en Am. Mérid., Crust., p. 26, pl. XI., fig. 4.

*Ocypoda rhombea*, M. Edw. Hist. Nat. des Crust., tom. II., p. 46.

## FAMILY GRAPSIDÆ.

## Subfamily GRAPSINÆ.

*Grapsus pictus*, Latr. ; M. Edw. Hist. Nat. des Crust., tom. II., p. 86.

## FAMILY GACARCINIDÆ.

## Subfamily UCAINÆ.

*Uca lavis*, M. Edw. Hist. Nat. des Crust., tom. II., p. 22.

## ANOMOURA.

## FAMILY HIPPIDÆ.

*Hippa emerita*, Fabr. : M. Edw. Hist. Nat. des Crust., tom. II., p. 209.

## FAMILY PORCELLANIDÆ.

*Petrolisthes armatus*, Stimpson. An. Lyc. Nat. Hist. N. Y., vol. II., p. 73. *Porcellana armata*, Gibbes, Proc. Am. Assoc., 1850, p. 176.

*Petrolisthes occidentalis*, Stimpson. An. Lyc. Nat. Hist. N. Y., vol. VII., p. 73.

## FAMILY PAGURIDÆ.

## Subfamily PAGURINÆ.

*Aniculus longitarsis*, nov. sp.

This species is very closely allied to *A. typicus*, Dana, but differs from it in the greater length of the tarsus of the ambulatory feet. In *Pagurus aniculus* (*Aniculus typicus*, Dana), Milne Edwards describes the tarsus as being "extremely short." No statement is made as to its length in comparison with the preceding article; but in Dana's figure, and in that figured in Quoy and Gaymard, Voy. de l'Urania, it is shorter than the preceding article. In *A. longitarsis* it is always longer. The median areolet is distinct, trapezium-shaped, and is not produced to the posterior edge of the gastric region.

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## FAMILY CENOBITIDÆ.

*Cenobita diogenes*, Latr. M. Edw. Hist. Nat. des Crust., tom. II., p. 240, pl. XXII., figs. 11 and 13.

*Cenobita intermedia*, nov. sp.

Anterior portion of carapax convex, narrowed in front, granulated. Differs from *C. purpurea*, Stm., in not being more granulated posteriorly than anteriorly, nor are the granules acute and setous. Lateral portion pilous; margin of branchial region projecting, prominent. Eyes compressed, triangular, acute; peduncles nearly as high as long, finely granulated on superior surface.

Tibia of the third pair of legs, left side, produced at inferior border; ultimate and penultimate articles convex externally, smooth and punctate as in *C. purpurea*; tarsus irregularly quadrilateral, longer than right; inferior surface concave; fine, close-set row of black-tipped spinules on inferior surface of tarsi of second and third legs, left side. Legs spinulose (with exception mentioned), hairy; tarsi triangular, concave on inferior surface. External surface of larger hand sparsely granulated; granules of a pearly appearance. Coxæ of fifth pair produced in male. Length of carapax .94 inch.

*Cenobita panamensis*, nov. sp.

Carapax as in *C. intermedia*. Eyes also similar. Tibia of third leg, left side, slightly produced at inferior angle; penultimate article convex externally and granulated, in this respect differing from *C. purpurea* and *C. intermedia*; tarsus irregularly quadrilateral, shorter than right, thereby differing from *C. perlata* and *C. intermedia*; row of spinules on supero-lateral margin; row on superior surface; spinules sparsely on external surface; denticulated ridge on inferior surface of tarsi of second and third pairs; spinules black-tipped; inferior surface not so much evacuated as in *C. intermedia*, triangular. Larger hand granulated; granules acute, except on external surface, black-tipped. Coxæ of fifth pair produced in male.

Length of carapax 1.62 inch.



**MACROURA.**

## FAMILY GEBIDÆ.

*Gebia longipollex*, nov. sp.

Front tridentate; middle tooth largest, and presents at its extremity two small obtuse teeth, which give to it a bifid appearance when looked at from above; furrowed in the median line; small spine on antero-lateral margin of carapax just over the external antennæ; anterior portion of carapax rough and hirsute; scabrous surface reaching about half way to the dorsal suture. Hands equal, smooth, without spines or teeth, marked with longitudinal rows of hair; row on inferior margin very long; thumb long, reaching almost to extremity of finger, slightly incurved; movable finger very pilose, with two teeth on inferior margin—one near base, and one near apex; latter receives point of thumb; two very small teeth situated together near base of thumb; spine on upper and lower apex of carpus, and two small ones on antero-lateral margin; spine on distal extremity of arm. Second pair of legs ciliate above and below at extremity; tarsus smooth; third article ciliate below, and armed with spine above at distal extremity; remaining pairs unarmed. Caudal segment rectangular.

Length, 1.12 inch.

## FAMILY PALINURIDÆ.

*Panulirus guttatus*, Gray. *Palinurus guttatus*, Latr. Ann. du Mus., tom. III., p. 393; M. Edw. Hist. Nat. des Crust., tom. II., p. 297, pl. XXII., fig. 1.

*Panulirus americanus*. *Palinurus americanus*. Lamarek. M. Edw. Hist. Nat. des Crust., tom. II., p. 298.

## FAMILY PALÆMONIDÆ.

## Subfamily ALPHEINÆ.

*Alpheus bispinosus*, nov. sp.

Carapax compressed; rostrum short, acute; surface between the eyes carinated; anterior border of eye-shields rounded, and without spines. Lamelliform appendages of external antennæ not quite as long as base, little longer than base of internal antennæ. Second article of internal antennæ twice as long as first and third; basal tooth of inner antennæ not longer than first article; basal spine of outer antennæ short, and hooked inward. Hands of first pair of feet unequal; margins of larger hand indented near the

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fingers; lower indentation deep; surfaces sulcated, uneven; margins of the fingers beset with long hairs; movable finger considerably hooked at extremity; smaller hand cylindrical and regular; fingers longer than palmar portion of the hand; inner edges of approximated borders pubescent; no spines on arm. Feet of second pair but little longer than third; first joint of carpus as long as second and third, and little longer than third, fourth, and fifth; fifth not as long as third and fourth, and shorter than hand; third article of following pairs of legs devoid of spine at inferior apex.

Length, 1.5 inch.

FAMILY PENÆIDÆ.

*Panæus occidentalis*, nov. sp.

Rostrum longer than the lamelliform appendages of the outer antennæ, recurved, pointed at extremity. In the examination of a number of specimens the majority presented ten teeth on the superior margin of the rostrum, and four on the inferior; may vary from eight to eleven on the upper, and from four to five on the lower border. Carapax carinated almost to posterior edge; sulcus on each side of rostrum terminating about midway the carapax; spine situated on lateral portion near anterior border, opposite the insertion of superior antennæ; ridge running from this spine obliquely downward and backward; second spine behind, and on a lower level than the first, and separated from it by a sulcus; two smaller sulci forming two sides of a triangle around base of second spine. Eye large and rounded; sulcus on external border of peduncle. Flagella of superior antennæ usually shorter than antennary peduncle (in one large specimen they were longer). Bases of two first pairs of legs armed with three spines—two on first pair, and one on second; terminal segment of abdomen sulcated, pointed, devoid of lateral spines; penultimate and antepenultimate segments carinated—the ridge commencing on the segment before the antepenultimate, and terminating at the end of penultimate in an acute spine. Length of large specimen five inches.

The greatest affinities of this species are with *P. indicus*, Edw.