PROCEEDINGS

OF THE

ACADEMY OF NATURAL SCIENCES

OF

PHILADELPHIA.

1880.

PHILADELPHIA:
ACADEMY OF NATURAL SCIENCES,
S.W. Corner Nineteenth and Race Streets.
1881.

ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA,
March, 1881.

I hereby certify that printed copies of the Proceedings for 1880 have been presented at the meetings of the Academy, as follows :—

Pages	9 to 56	March	23, 1880.
"	57 to 88	March	30, 1880.
"	89 to 120	April	6, 1880.
"	121 to 152	June	1, 1880.
"	153 to 200	July	27, 1880.
"	201 to 216	August	10, 1880.
"	217 to 232	August	17, 1880.
"	233 to 248	September	7, 1880.
"	249 to 280	September	28, 1880.
"	281 to 328	October	12, 1880.
"	329 to 352	November	9, 1880.
"	353 to 384	February	22, 1881.
"	385 to 416	March	1, 1881.

EDWARD J. NOLAN,
Recording Secretary.

PHILADELPHIA
W. P. KILDARE, PRINTER

LIST OF CONTRIBUTORS.

With reference to the several articles contributed by each.

For Verbal Communications see General Index.

PROCEEDINGS

OF THE

Academy of Natural Sciences

OF

PHILADELPHIA.

PART II.—APRIL to SEPTEMBER, 1880.

PHILADELPHIA:
ACADEMY OF NATURAL SCIENCES,
S. W. Cor. of 19th and Race Streets.
1880.

PUBLICATIONS OF THE ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA.

Seven volumes of the New Series of the JOURNAL, and Vol. VIII, Part III (Quarto) have been issued—1847 to 1877. The price per volume of four parts is $10, or $3 per part, to subscribers; and to others, $12.50 per volume, or $3.75 per part. Vol. VII contains "The Extinct Mammalian Fauna of Dakota and Nebraska, with a Synopsis of the Mammalian Remains of North America." Illustrated with thirty plates. By JOSEPH LEIDY, M.D., LL.D.

The FIRST SERIES OF THE JOURNAL, 1817 to 1842, in eight volumes, octavo, may be obtained at $40 to members, and to the public, $48.

The FIRST SERIES OF THE PROCEEDINGS of the Society, published in octavo, 1841 to 1856, of which eight volumes were completed Dec. 31, 1856, may be obtained at $24 to members; and to the public, $30.

The SECOND SERIES OF THE PROCEEDINGS, commencing January 1, 1857 (of which fourteen volumes were completed Dec. 31, 1870), may be obtained at $42 to members, or $3 per volume separately; and to the public, $3.75 per volume.

The THIRD SERIES OF THE PROCEEDINGS, ILLUSTRATED, commencing January 1, 1871, (of which nine volumes were completed Dec. 31), 1879, is published at $5 per annum, payable in advance, to subscribers; single volumes, $6.25.

AMERICAN JOURNAL OF CONCHOLOGY, 1865–71. Seven vols., 8vo. Containing 2500 pages, illustrated by one hundred and fifty plates, many of them colored, besides about a thousand wood engravings. Published at $70. Price reduced to $42 for the set. Separate volumes, $10 each.

BOOKS FOR SALE.

The ACADEMY has the following works for sale at the prices affixed:

DESCRIPTION OF SHELLS OF NORTH AMERICA, with 68 colored plates. By THOMAS SAY. 1830–34. $10.50.

MONOGRAPH OF THE UNIONIDÆ OF NORTH AMERICA. By T. A. CONRAD. 60 uncolored plates, octavo, 1840. $8.

MONOGRAPH OF THE TERRESTRIAL MOLLUSCA OF THE UNITED STATES. With illustrations of all the species. By GEO. W. TRYON, JR. Fine edition, plate paper, with duplicate plates, colored and tinted, $20; colored edition, $13.50; plain edition, $8.50. Only one hundred copies printed, which have been mostly sold.

MONOGRAPH OF THE FRESH WATER UNIVALVE MOLLUSCA OF THE UNITED STATES. By S. S. HALDEMAN, 1840–44. With CONTINUATION to 1871. By GEORGE W. TRYON, JR. 2 vols., with many colored plates. Fine edition, duplicate plates, $40; with colored plates, $25; with plain plates, $18.

Either the original work or the continuation furnished separately, if desired.

SYNONYMY OF THE SPECIES OF STREPOMATIDÆ (Melanians) OF THE UNITED STATES. By GEO. W. TRYON, JR. Cloth, $2; paper, $1.75.

LIST OF AMERICAN WRITERS ON RECENT CONCHOLOGY, with the Titles of their Memoirs and Dates of Publication. By GEO. W. TRYON, JR. Cloth, $2; paper, $1.75.

MONOGRAPH OF THE ORDER PHOLADACEA and other Papers. By GEO. W. TRYON, JR. Cloth, $2; paper, $1.75.

COMPLETE WRITINGS ON RECENT AND FOSSIL CONCHOLOGY OF C. S. RAFINESQUE. Edited by WM. G. BINNEY and G. W. TRYON, JR. $2.50.

OBSERVATIONS ON THE GENUS UNIO. By ISAAC LEA, LL. D. 4to, Vols. 1 to 13. With Index, Nos. 1, 2 and 3, complete. Illustrated with several hundred fine lithographic plates. $60.

Same, Vols. 2 to 13 inclusive, except Vols. 4 and 12. Each volume separately, $5.

SYNOPSIS OF GENUS UNIO. By ISAAC LEA, LL. D. Fourth edition. $3.

CONTRIBUTIONS TO GEOLOGY. By ISAAC LEA. $5.

FOSSIL FOOT-MARKS. By ISAAC LEA. Large folio, text and plate. $2.

Same, plate alone. 50 cents.

NOTICE TO BOOKSELLERS.—All the publications of the Society will be supplied to Booksellers at a discount of 20 per cent. on the prices charged to the public.

Application to be made to WM. S. VAUX, Chairman of the publication Committee, 1702 Arch Street, or to EDWARD J. NOLAN, M.D., Librarian, at the Hall of the Academy, corner of Nineteenth and Race Streets.

AGENTS, *London*, TRUBNER & CO., No. 60 Paternoster Row.

Salem, Mass., NATURALIST'S AGENCY.

Nov., 1880.

CONTENTS.

W. P. KILDARE, PR., 734 & 736 SANSOM ST., PHILADA.

CARCINOLOGICAL NOTES, No. 3.—REVISION OF THE GENUS OCYPODA.

BY J. S. KINGSLEY.

The following paper is based on the Collections of the Academy. I have observed the rule adopted in previous papers of following the locality from which I have seen specimens, by an exclamation point. In all other cases the name of the person who has reported a species from any place follows that of the locality. The same conservative spirit which pervades my paper on the "Fiddler Crabs" (*Gelasimi*) will be found in this. Many of the characters given by authors prove to be of no specific value, but I have not ventured to unite forms unless I had specimens which corresponded to each nominal species.

OCYPODA Fabricius.

Cancer l. c., Fabr. *Ocypoda* Fabr., Suppl. Ent. Syst., 347 (1798); Edw., Hist. Nat. Crust., ii, p. 41 (1837); Dana, U. S. Ex. Ex. Crust., p. 324 (1852).

Carapax transverse, rhomboidal or nearly square. Eyes stout, the cornea occupying the larger portion. Meros of external maxillipeds shorter than ischium. Chelipeds unequal.

In many species there is a stridulating organ composed of a row of tubercles on the inner surface of the palm, which, by being drawn across a ridge on the ischium of the cheliped, produces a noise.

§ 1. *Ocular pedicels prolonged beyond the cornea as a spine or style.*

1. O. ceratophthalma Fabr.

Cancer ceratophthalmus Pallas, Spicelegia, p. 83, Pl. V, f. 17 (1772). *Ocypoda ceratophthalma* Fabr., l. c., 347 (1788); Latreille, Hist. Crust. et Ins., vi, 47 (1803-4); Encyc. Meth., x, Pl. 274, f. 1; Lamarck, Hist. Animaux sans Vert., v, 252 (1818); Desmarest, Consid. sur le Crustaces, 121, Pl. XII, f. 1 (1825); Edw., Hist. Nat. Crust., ii, p. 48 (1837); III. Edit. Regne Animal, Pl. XVII, f. 1; Ann. Sci. Nat., III, xviii, p. 141 (1852); Krauss, S. African Crust., p. 41 (1843); Stimpson, Proc. Phila. Acad., 1858, p. 100; Hess, Archiv. für Naturgeschichte, XXXI, 143 (1865); Martens, Verhandl. Zool. Bot. Gesellsch. Wien, 1866, p. 381; Heller, Reise Novara, Crust., p. 42 (1867); Hilgendorf in v. Decken's Reise, Crust., p. 82, 1867; A. M.-Edw., Nouv. Arch. du Mus., ix, p. 270 (1873). *Cancer cursor* Herbst., Pl. I, f. 8-9 (1790). *Ocypoda brevicornis* Edw.,

Hist. Crust., ii, 48 (1837); Ann. Sci. Nat., III, xviii, 142 (1852); Dana, U. S. Ex. Ex. Crust., p. 326, Pl. XX, f. 3 (1852). *Ocypoda brevicornis var longicornuta* Dana, l. c., 327, Pl. XX, f. 4 (1852). *Ocypoda ægyptica* Gerstaecker, Archiv. fur Naturgeschichte, xxii, 134 (1856); Heller, Sitzungsberichte Wien Akad., xliii, p. 361 (1861); Hoffmann, Rech. Fauna Madagascar Crust., p. 14 (1874 teste Zool. Record); Miers, Ann. and Mag. Nat. Hist., V, ii, 409 (1878).

Carapax nearly square, granulate, front strongly deflexed, orbits sinuate, oblique, the lateral angles being far behind the front. These angles are nearly right angles. Orbits with an indistinct fissure below. Eyes terminated with a style which in most cases is long and cylindrical, extending far beyond the orbits. In the young, however, it is small and in some cases even wanting; that form, when small and conical, characterizes the nominal species *brevicornis;* maxillipeds granulate. Meros of larger cheliped, with the margins armed with spiniform tubercles, more prominent on the anterior margins. Carpus granulate, with internally one or two teeth. Hand externally acute, tuberculate, serrate below, the inner surface with scattered tubercles. Stridulating ridge at some distance from the base of the fingers, straight and composed of rounded tubercles. Ambulatory feet with acute granules, which exhibit a tendency to arrange themselves in rugæ.

Natal! (E. Wilson); *Mauritius*! (Guerin's Collection); *Anjir, Ternate, Amboina, Adenare, Zanzibar, Benkula* (Hilgendorf); *Sandwich Is., Tahiti, Bonin, Loo Choo, Hong Kong Ouisma* (Stm.); *Egypt, Mauritius, Bombay, Australia* (Edw.); *Ceylon* and *Nicobars* (Heller); *Madagascar* (Hoffmann); *Tongatabu* (Dana).

A specimen collected by the Wilkes Expedition ("East Indies") has the carapax intermediate between this species and *cursor*. The ocular styles are wanting. Milne-Edwards' figure in the Regne Animal is different from any specimens that I have seen. I agree with Kossmann in considering *ægyptica* as but a variety of *ceratophthalma*.

2. O. platytarsis Edw.

Ocypoda platytarsis Edw., Ann. Sci. Nat., III, xviii, p. 141 (1852); Heller, Reise Novara Crust., p. 42 (1867).

Carapax wider than is usual in this genus and covered with large granules. Superior margin of orbit sinuate, the external angles rounded; sides parallel about one-fourth of their length. Orbits with an indistinct fissure below. Eyes spined as in *ceratoph-*

thalma (*teste* Edw., the single specimen I have seen has the eyes broken). External maxillipeds granulate; meros of larger cheliped with the upper margin produced and dentate, the lower spined, the posterior with transverse granular rugæ, carpus granulate; hand with large granules, serrate below, stridulating ridges carved and composed of crowded granules. Ambulatory feet with rugæ and subspiniform tubercles, dactyli broad.

Pondicherry! Guerin's Collection (labelled by Guerin "Ocypoda platytarsis, Edw., Cat. Mus., Paris") and probably one of the original specimens). *Tahiti* and *Nicobars* (Heller).

3. O. urvillei Guerin.

Ocypoda urvillei Guerin, Voyage Coquille, Crust. p. 9, Pl. I, f. 1 (1836), Edw. Hist. Crust., II, p. 49 (1837), Ann. Sci. Nat. III, xviii, p. 141 (1852), Owen in Beechey's Voyage Crust., p. 80 (1839), Dana, U. S. Ex. Exp. Crust., 328, Pl. XX, f. 5 (1852).

Carapax wider than long, superior margin of orbit sinuate, angles acute. Eyes moderate, ocular spines short, extending only to angles of orbit. Meros of larger cheliped rounded above, its two other margins denticulate. Carpus with a strong internal spine. Hand externally granulate, serrate above and below; the stridulating ridge nearly straight, a little remote from the fingers and extending from the lower margin of the hand two-thirds of the way to the upper. (Guerin.)

Tahiti (Guerin); *Isle Bouron* (Edw.); *Sandwich Is.* (Dana).

4. O. macrocera Edw.

Ocypoda macrocera Edw. Hist. Nat. Crust., II, 49 (1837), Ann. Sci. Nat. IV, xviii, p. 142 (1852), Heller, Novara Crust., p. 142 (1867).

Orbits wide, oblique, angle obtuse, eyes with a spine as in *O. ceratophthalma*. Larger hand very short, broad and a little spinose above; its palmar portion broader than long. The fingers of the smaller hand lamellate and very broad at their extremities. Ambulatory feet roughened above. (Edw.)

E. Indies, Pondicherry, [?] *Brazil* (Edw.); *Tahiti, Nicobars* (Heller).

5. O. gaudichaudi Edwards et Lucas.

Ocypoda gaudichaudi Edw. et Lucas in D'Orbigny's Voyage, Crust., p. 26, Pl. XI, f. 4 (1843), Edw. Ann. Sci. Nat. III, xviii, 142 (1852), Nicollet in Gay's Chili, Zool. III, p. 163 (1849), Stimpson, Ann. N.Y. Lyc. Nat. Hist., VII, p. 61 (1859); Smith, Rep. Peab. Acad. Sci., III, p. 91 (1871); Streets, Proc. Phila. Acad., 1872, p. 240.

Carapax longitudinally strongly arcuate, distal portion of front nearly vertical. Superior border of orbit sinuate internally, its

external three-fourths nearly straight and directed slightly backwards. Lateral angles nearly right angles, the sides behind them being concave for about a fifth of the length of the carapax; orbits with a deep median fissure below. Eyes with a short conical style reaching to, or slightly beyond, the angle of the orbit. External maxillipeds nearly smooth, or with a few inconspicuous granules. Meros of larger cheliped with the upper and lower margins spino-tuberculate, the posterior with transverse rugæ. Carpus granulate; hand subspinose above, finely serrate below, internally granulate and with a well-marked transverse stridulating ridge, fingers lamellate, the extremities truncate.

Chili! Guerin; *Panama*! Capt. Field and McNiel (Phila. Acad.); *Gulf of Fonseca*! McNiel (Peab. Acad.); *Callao* (Edw. et Lucas); *Valparaiso* (Dana).

6. O. fabricii Edw.

Ocypoda fabricii Edw., Hist. Nat. Crust., II, p. 47 (1837), Ann. Sci. Nat. XVIII, p. 142 (1852), Hilgendorf in Decken's Reise Crust., 82, Pl. III, f. 1 (1867).

Carapax convex, finely granulate, front strongly deflexed, orbits strongly sinuate; lateral angles acute and some distance posterior to the base of the rostrum; sides parallel for about a third of the length of the carapax. Orbits without emargination below; eyes with a short conical style, not reaching beyond the orbital angle. Anterior margin of meros of larger cheliped crenulate, distally spinose, posterior margin rounded, rugose. Carpus granulate, as is the outside of the hand; inner surface of the hand polished, with minute scattered granules; stridulating ridge straight, composed of small, closely set granules; lower margin of hand finely serrate; fingers of moderate length. Joints of ambulatory feet with transverse rugæ.

Australia! E. Wilson; *Natal*! E. Wilson; *Oceanica* (Edw.); *Zanzibar* (Hilgendorf).

7. O. cursor.

Cancer cursor Linn., Syst. Nat. Edit., xii, p. 1039 (1766). *Ocypoda ippeus* Olivier, Voyage, p. 234, Pl. XXX, f. 1 (1807); Savigny, Egypt, Pl. I, f. 1; Lamarck, An. sans Vert., v, p. 252 (1817); Desm., Consid. Crust., p. 121 (1825); Edw., Hist. Crust., ii, p. 47 (1837); Moseley, Notes by a Naturalist on the Challenger, pp. 48–49, woodcut, 1879. *Ocypoda cursor* DeHaan, Fauna Japonica, Crust., p. 29; Edw., Ann. Sci. Nat., III, xviii, p. 142 (1852); Stm., Proc. Phila. Acad., 1858, p. 100; Heller, Crust. S. Europa, p. 99 (1863).

Carapax arcuate, front strongly depressed. Upper margin of orbits but slightly sinuate and nearly transverse. Lateral angles acute, the sides converging posteriorly, making the carapax widest at the angles. Orbits below with a slight median fissure. Eyes terminated by a short conical style armed with pencil of hairs. Meral joint of cheliped with the spines and rugæ much less prominent than in *O. ceratophthalma*. Carpus internally with a denticulated tooth. Hands small, externally with depressed granules, the lower margin finely serrate, the upper rounded and without spiniform tubercles. Internally the hand is nearly smooth except below where there are granules similar to those of the outside. The stridulating ridge is very near the fingers and is crossed by numerous fine striæ. The propodal joints of the ambulatory feet spined below, the dactyli of the second pair hairy.

Senegal! (Guerin); *Syria, Egypt* (Edw.); *Cape Verdes* (Auct.); *Greece* (Guerin).

This is probably the species described by Hasselquist (Iter Palestinum, p. 433, 1757) under the name *Cancer anomalus*, but he gives many characters which will apply to no known decapod and so to avoid confusion I refrain from applying his name to this species. McLeay, in Smith's Zoology of South Africa, mentions "*Ceratophthalma cursor* DeHaan," an expression not to be found in the pages of that Dutch Carcinologist.

8. **O. ryderi** Nov.

Carapax coarsely granulate, the upper margins of the orbits sinuate, transverse, lateral angles acute, sides arcuate, the carapax being widest at the anterior third, as in *O. arenaria*, the lateral margins anteriorly finely serrate.

Eyes not reaching the extremities of the orbits, terminated by a minute spine. Chelipeds like those of *O. arenaria;* ambulatory feet roughened by subspiniform granules.

Natal! (E. Wilson).

This species is closely allied to the *Ocypoda arenaria* of the coasts of America, but is readily separated by the ocular spines and the granulations on the ambulatory feet. It is dedicated to my friend, John A. Ryder, of the Academy of Natural Sciences of Philadelphia.

§ II. *Eyes without an ocular spine.*

9. O. arenaria Say.

Cancer arenarius Catesby, History of the Carolinas, ii, Pl. 35 (1731 and 1771*). *Cancer quadratus* Fabr., Ent. Syst., ii, p. 439 (1793). *Ocypoda quadrata* Fab., Suppl., p. 347 (1798); Bosc. Edit., I, "i, p. 194;" (teste Auct.) Edit., II, i, p. 247 (1828); Latr., Hist. Crust. et Ins., vi, p. 49 (1803–4). *Ocypoda arenaria* Say, Jour. Acad. Nat. Sci., Phila., i, p. 69 (1817); Edw., Hist. Nat. Crust., ii, p. 44, Pl. XIX, f. 13–14 (1837); DeKay, N. Y. Fauna, Crust., p. 13 (1841); Gibbes, Proc. Am. Assoc., iii, p. 180 (1851); Gerstäcker, Arch. für Naturg., xxii, p. 36 (1856); Guerin in La Sagra's Hist. Cuba, Crust., p. 7 (1857); Martens, Arch. für Naturges., xxxviii, p. 103 (1872); Smith. U. S. Fish Comm. Report for 1871–72, p. 545 (1875); Kingsley, Proc. Phila. Acad., 1878, p. 322. *Ocypoda albicans* Latr., Encyc. Méth., x, Pl. 285, f. 1 (after Catesby vix *O. albicans* Bosc.). *Ocypoda rhombea* Edw., Hist. Nat. Crust., ii, p. 46 (1837); Ann. Sci. Nat., III, xviii, p. 143 (1852); Gibbes, l. c., p. 180 (1851); Dana, U.S. Ex. Exp. Crust., p. 322, Pl. XIX, f. 8 (1852); Heller, Reise Novara, Crust., p. 42 (1867); Smith, Trans. Conn. Acad., ii, p. 135 (1870); Streets, Proc. Phila. Acad., 1872, p. 240. *Monolepis inermis* Say, l. c., p. 157 (Megalops).

Carapax convex, granulate above, front but little deflexed; lateral angles of carapax acute, extending as far forward as the middle of the front. Lateral margin crenulate, arcuate, the carapax being widest at the anterior third. Orbits below with spiniform tubercles and occasionally a distinct emargination. Eyes with the extremities rounded and not reaching to the extremity of the orbit. Chelipeds with spines and tubercles; the meros with the upper and lower margins spined, the posterior rounded and crossed by tubercular rugæ. Carpus with the tubercles obsolete above but pronounced near the margins, the inner margin armed with one or more strong spiniform teeth. Hands tuberculate, the upper margin spined, the lower serrate. A tubercular stridulating ridge on the inside near the fingers. Fingers strongly inflexed. Ambulatory feet compressed, hairy, their sides smooth, the upper portion margined and crossed by transverse rugæ.

* There were at least two editions of Catesby published, bearing dates respectively as above and as the second is post-Linnean, the names employed by him must hold. I think that another edition exists in the library of the Essex Institute at Salem, Mass., the date of which is between those quoted above, but I have nothing at hand by which to decide the matter.

Young specimens (less than 10 mm. broad) have the lateral angle further back than in the adult, while the spines of the chelipeds are wanting or but faintly indicated.

The *O. albicans* of Bosc, Lamarck and Desmarest has the eyes terminated by a style, a feature I have never observed in any specimen of *O. arenaria*. The locality given is South Carolina. The *O. rhombea* of Fabricius is *not* this species, as his expression "*Carpus utrinque unidentatis, manibus sublaevis*" will not apply to this form, but agrees better with *O. cordimana*. Fabricius gives no locality for his specimens. The Brazilian forms (*rhombea* Auct.) show no differences from northern specimens. I have seen specimens from over thirty localities embraced in the limits of Great Egg Harbor, N. J. (Say's types), to Rio Janeiro, Brazil, and also specimens from the west coast of Mexico (Dr. W. H. Jones).

10. O. convexus Quoy and Gaimard.

Ocypoda convexus Quoy et Gaimard, Voy. Uranie, Zool., iii, p. 525, Pl. LXXVII, f. 2 (1828); Edw., Hist. Crust., ii, p. 49 (1837).

Carapax granulate, sides arcuate, front deflexed, orbits sinuate, lateral angles behind the base of the rostrum, acute. Meros internally entire, distally tuberculate; carpus tuberculate, its inner surface with a bifid tubercle. Hands cordate, externally granulate, serrate above and below.

This brief description is taken from the figure of MM. Quoy and Gaimard. I have never seen the species. It is said to have come from Australia.

11. O. cordimana Desm.

? Ocypoda rhombea Fabr., Suppl. Ent. Syst., p. 348 (1798). *Ocypoda cordimana* Desm., Consid. sur les Crustaces, p. 121 (1825); Edw., Hist. Nat. Crust., ii, p. 45 (1837); Ann. Sci. Nat. III, xviii, p. 143 (1852); Jacquinot et Lucas, Voy. Astrolabe et Zelee, p. 64; Heller, Reise Novara Crust., p. 42 (1867); A. M. Edw., Nouv. Arch. Mus., ix, p. 271 (1873). *Ocypoda rhombea ?* Desmarest, l. c., p. 122; Randall, Jour. Phila. Acad., viii, p. 123. *Ocypoda pallidula* Jacquinot et Lucas, l. c., Pl. VI. f. 4. *Ocypoda laevis* Dana, U. S. Expl. Exped., Crust., p. 325, Pl. XX, f. 2 (1852). *? Ocypoda convexa* Stm., Proc. Phila. Acad., 1858, p. 100.

Carapax arcuate, evenly granulate. Front strongly deflexed. Orbits sinuate above; lateral angles acute, but not extending as far forward as the base of the front. Sides in the adult slightly

arcuate, but in the young they are parallel or even concave, converging behind. Eyes, without styliform process, and extending nearly or quite to the orbital angle. Meros of chelipeds with its anterior margin crenulate in the young, in the adult with spiniform tubercles. Carpus externally granulate. Hand short, broad, cordate, granulate internally and externally, its lower margin serrate, the stridulating ridge nearly obsolete. Fingers short, compressed, the thumb slightly hooked at the extremity. Meral joints of the ambulatory feet with transverse rugæ. Carpal and propodal joints similarly roughened and covered with a short pubescence.

New Zealand! *Mauritius*! (Guerin); *Australia*! (E. Wilson); *Sandwich Is.*! (J. K. Townsend); *Tahiti*! (A. Garrett); *Mozambique* and *Zanzibar* (Hilgendorf); *Red Sea, Manilla, Nicobars* (Heller): *Hong Kong, Loo Choo* (Stm.); *Japan* (Edw.).

The following are not true members of the genus:

O. angulatus Latr.	= *Gonoplax angulatus.*
O. aurantia Bosc. ex Herbst	= *Thelphusa aurantia.*
O. carnifex Latr. ex Herbst	= *Cardiosoma carnifex.*
O. heterochelos Bosc.	= *Gelasimus heterochelos.*
O. hispana Bosc. ex Herbst	= *Sesarma sp.*
O. hydrodromus Latr. ex Herbst	= *Thelphusa hydrodromus.*
O. longimana Latr.	= *Gonoplax rhomboidalis.*
O. maracoani Latr.	= *Gelasimus maracoani.*
O. macrocheles Bosc.	= *? Macrophthalmus* sp.
O. pugillator Bosc.	= *Gelasimus pugillator.*
O. quadrata Bosc.	= *Sesama sp.*
O. rufopunctata Latr. ex Herbst	= *Trapezia rufopunctata.*
O. senex Latr. ex Fabr.	= *Thelphusa sp.*
O. tetragonon Bosc. ex Herbst	= *Gelasimus tetragonon.*
O. tridens Latr. ex Fabr.	= *? Pachygrapsus sp.*
O. vocans Latr.	= *Gelasimus sp.*

I have not been able to identify

O. granulata Bosc. (Edit. ii) p. 247.

O. macleayana Hess, Archiv. für Naturgesch., XXXI, p 143, Pl. VI, f. 8 (1865). *Australia.*

O. unispinosa Rafinesque, Precis de découvertes Semiologiques, p. 21, No. 35 (1814).