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teriolem inermis. Pedes antici mediocres, carpo inermi, manu paulo tumidâ, supra subgibbosâ, digitis hiantibus, apice inflexis et acutis. Pedes 2di 3tii 4tique subæqui, tarsi fere rectis, longis, articulo penultimo longioribus. *Hab.* in mari Atlantico juxta "Rio Negro" Patagoniæ, et in mari Pacifico prope "Valparaiso." *Long.* carapacis 3—4'''.

CYLLENE FURCIGER.—Rostrum elongatum, spiniforme, frontis latitudine non brevior. Thorax infra ad extremitatem posteriorem duabus spinis longis divergentibus postice productis armatus. Pedes antici angusti, carpo articuloque secundo spinâ brevi curvatâ armatis, brachio inermi. Tarsi 2di 3tii 4tique parce armati, styliformes.—*Hab* in mari Suluensi.

TRIBOLA LATA.—Carapax late ovatus non pubescens, paulo longior quam latus, lateribus pone oculos parce undulatis, rostro lineari, dentibus frontis lateralibus rostro remotis, apice acutis et paulo divaricatis. Pedes antici parvuli, tenues, manu pedibus sequentibus vix crassiore. *Hab.* in mari Atlantico, prope insulas "Canary;" e stomacho piscis "Bonito" lecta. *Long.* corporis fere ½''.

TRIBOLA PUBESCENS.—Carapax oblongus, subovatus, pubescens, lateribus pone oculos undulatis, rostro lineari, dentibus frontis lateralibus rostro minus remotis. Pedes toti densè brevissimèque pubescentes; antici rostrum paulo superantes, angusti, inæqui, manu dextrâ non latiore quam carpus. Pedes 8 sequentes fere duplo longiores, 2dis brevioribus quam 3tii. *Hab.* in Archipelago "Paumotu" mari Pacifico.

Conspectus Crustaceorum, &c. Conspectus of the Crustacea of the Exploring Expedition under Capt. C. Wilkes, U. S. N. By JAMES D. DANA.

MACROURA.

We follow De Haan in placing the genus *Galathæa* with the *Anomoura*; and near it we arrange *Æglea*, which widely differs from most other related species in having penicillate instead of foliose branchiæ.

The *Macroura*, excluding these groups, includes three distinct sections or subtribes.

One, the "Fossores" of authors, or the *THALASSINIDEA*, has close relations on one side with the *Paguri*, and on the other with the *Squillidæ*. They constitute a line of gradation between these extremes, independent mostly of the other *Macroura*, and osculating only with the *Astaci*, although removed from them in general habit and structure. There is a diversity among the legs as to form and position, which is not found in any other *Macroura*, and calls to mind the *Paguri*. Moreover, there is in general a looseness of structure, a length of abdomen, and sluggish habit of body, unlike the trim compact forms of the typical *Macroura*. The anterior feet are thrown directly forward and are thus fitted for the burrowing habits of the species.

The *second* subtribe—the *ASTACIDEA*—is composed of the highest grade of *Macroura*, approaching in some points of structure the *Brachyura*. This is seen in the fact that the sides of the carapax fold under and unite to the epistome, as is well shown in *Scyllarus* and less perfectly in *Astacus*; also in the absence or small size of the basal scale of the outer antennæ. The *Astaci* are the transition species between the other *Astacidea* and the *Caridea*, and in the genus *Paraneuphrops*, White, the antennary scale is not smaller than is common in the latter group. Yet they properly form part of the same section with the *Scyllari* and *Palinuri*, rather than a separate division as made by Milne Edwards; they differ from all the *Caridea* in the transverse suture across the carapax near its middle.

The *third* section—the *CARIDEA*—includes the typical *Macroura*, which have the sides of the carapax not soldered to the epistome, and a large basal scale to the outer antennæ.*

* The *Cumæ* would constitute another section—*Cumidea*—if mature animals. But according to recent researches of Prof. Agassiz, as he has informed the author, they are in some cases, and probably in all, immature forms of *Palæmon*, *Crangon*, and other known *Macroural* genera.

These subtribes may be divided into families.

Subtribe 1. Thalassinidea. This section, as Milne Edwards observes, includes two strongly marked divisions; *one*, with only the ordinary thoracic branchiæ, and a *second* with the addition of *abdominal* branchial appendages, as in the Squillidæ. The former we name the *Thalassinidea Eubranchiata*, the latter, the *Thalassinidea Anomobranchiata*. The first group embraces three families, differing strikingly in outer maxillipeds and abdomen, as explained beyond. The second contains only two genera, *Callianidea*, Edw., and *Isæa*, Guerin—the last name was changed by Edwards to *Callianisea*; but as this word is so near Callianassa and Callianidea, a contraction to *Callisea* would be preferable.

Subtribe 2. Astacidea.—In this subtribe, we adopt De Haan's sections, except that we exclude the Megalopidea, and we do not associate the Thalassinidea with the Astacidea. The sections or families are *Scyllaridæ*, *Palinuridæ*, *Eryonidæ* and *Astacidæ*.

Leach in 1819 divided the old genus *Astacus*, naming the marine species (*Homarus Edw.*) *Astacus*, and the fresh water (*Astacus, Edw.*) *Potamobius*. Edwards' division, of like character, now generally accepted, was not published till 1837. Leach hence has the priority. But according to Leach, the name *Astacus* is appropriated, not to the typical part of the group, that including the *Astacus fluviatilis* of old authors, or *Cancer Astacus* of Linnæus, and which embraces at the present time numerous species, but to that including the *Cancer Gammarus* of Linnæus, still but a small group. There is hence much objection to the names of Leach, and moreover much confusion would now ensue from their adoption. There seems therefore to be sufficient reason for rejecting them, if it be of no weight that they have remained for 30 years unrecognised by British authors. They are adopted in the Catalogue of British Crustacea of the British Museum, published in 1850, but not in the general catalogue of 1847.

Subtribe 3. Caridea.—In arranging the Caridea into groups, much stress is usually laid upon external form and length of beak. The unimportance of these characters is inferrible from the fact that they involve no essential variations of structure. Moreover, in a single natural group we may find both the long and short beak. In the Crangon group, for instance, in which the beak is usually very short and the body depressed, we have a species with the beak and habit of a Hippolyte.

There are other characters of more fundamental value; and these have been brought forward by De Haan. The mandibles afford the distinctions alluded to. In one section they are very slender and are bent nearly at a right angle, without enlargement at the crown. In another they are very stout, and somewhat bent above with a broad dilated crown. In a third, they are stout, but not bent, and have a dentate summit. In a fourth they have, in addition to a projecting lateral crown, a large summit process, which is often oblong and very prominent. These forms are characteristic of different sections of the Caridea.

The fact that the mandibles bear a palpus or not is of much less importance; for the portion of the mandible which is most essential to its functions is the crown. Among the Palæmoninæ, there are genera having a mandibular palpus, and others without one; while the two kinds in other respects are remarkably close in their relations. We have found moreover that in this group, the length of the palpus varies with the disjunction of the 2d and 3d flagella of the inner antennæ. If these flagella are separate to their bases nearly, (as in Palæmon,) the palpus is long and 3-jointed; if united for some distance up, the palpus becomes short and finally only 2-jointed (Palæmonella;) if united nearly or quite to their summits, there is no palpus.*

In the arrangement of the genera into families, the fact *whether the 1st or 2d*

* In our genus *Palæmonella*, the palpus of the mandible is 2-jointed, and in *Anchistia*, which is closely like Palæmon in habit in some of its species, there is no palpus, as in the Pontoniæ; and thus the transition to the Pontoniæ from Palæmon is exceedingly gradual. Harpilius and Cædipus (Pontoniæ of authors) fill up the interval between Anchistia and the true Pontoniæ. They are all similar in having the 2d pair of legs largest, and in other prominent characteristics.

dair of legs is the stouter, is of great weight, much greater than previous authors have recognised. In the Brachyura, the anterior pair is uniformly the strong pair; and this uniformity through so extensive a group shows that the variations from it must be of importance in classification. This peculiarity of the Brachyura is a consequence of the concentration of force in the cephalic or anterior portion of the cephalothorax; and the diffusion of this force posteriorly, which in different degrees marks the Macroura, is especially exhibited in the legs. It is therefore of no little interest to observe whether the first or the second pair is the larger, or whether the degradation is still greater and the 3d pair is chelate like the 2d and even stouter, as in the Penæi. By regarding this character we are led to place Hippolyte and Rhyncocinetes with Alpheus, instead of with Palæmon; also Hymenocera and Pontonia with Palæmon, instead of with Alpheus; Pasi-phæa in a distinct group from the Penæi, &c. Moreover, the Penæinea, viewed in this light and stripped of some unrelated genera, make a natural group, for they are characterized by having the third pair of legs *like the second*, instead of like the fourth. In the lowest forms among the Penæinea, there are *no* chelate or didactyle legs, and the species approach the Schizopods.

In the preceding paragraphs we have but hinted at some of the more prominent principles involved in the classification of the Macroura here presented, a fuller exposition of which will be given in another place. Below is a synopsis of the arrangement thus arrived at, and following this synopsis, are our descriptions of new species.

Synopsis Familiarum Crustaceorum Macrourorum.

I. THALASSINIDEA, vel MACROURA PAGURO-SQUILLIDICA.

Carapax suturâ transversâ notatus, posticeque sæpe suturis duabus longitudinalibus. Abdomen sæpius multo elongatum. Antennæ externæ squamâ basali sive nullâ sive parvulâ instructæ. Pedes 2 antici prorsum projecti; 6 postici habitu raro consimiles. *Species fossores.*

Legio I. THALASSINIDEA EUBRANCHIATA.

Branchiis thoracicis instructa tantum.

Fam. 1. GEBIDÆ.—Maxillipedes externi pediformes. Appendices caudales et aliæ abdominales latæ.

Fam. 2. CALLIANASSIDÆ.—Maxillipedes externi operculiformes. Appendices caudales latæ.

Fam. 3. THALASSINIDÆ.—Maxillipedes externi pediformes. Appendices caudales lineares.

Legio II. THALASSINIDEA ANOMOBRANCHIATA.

II. ASTACIDEA vel MACROURA SUPERIORA.

Carapax suturâ transversâ sæpius notatus, lateribus anterioribus epistomate connatis. Antennæ externæ squamâ basali sive nullâ sive parvâ instructæ. Abdomen sat breve vel mediocre. Branchiæ penicillatæ. Pedes 2 antici oblique projecti; 6 postici directione consimiles.

1. *Antennæ externæ squamâ basali non instructæ. Pedes antici monodactyli.*

Fam. 1. SCYLLARIDÆ.—Carapax valde depressus, marginibus lateralibus sat tenuibus, carapace lateraliter subito inflexo. Antennæ externæ laminatæ, breves. Sternum trigonum.

Fam. 2. PALINURIDÆ.—Carapax subcylindricus, lateraliter late rotundatus. Antennæ externæ basi subcylindricæ, longæ. Sternum trigonum.

2. *Antennæ externæ squamâ basali instructæ. Pedes antici didactyli.*

Fam. 3. ERYONIDÆ.—Carapax non oblongus, depressus, lateribus subito inflexis, abdomine multo angustiore.

Fam. 4. ASTACIDÆ.—Carapax oblongus, subcylindricus, abdomine parce angustiore. Sternum angustum.

III. CARIDEA.

Carapax suturâ transversâ non notatus, cephalothoracem plerumque tegens, lateribus anterioribus liberis, epistomate non connatis. Antennæ externæ squamâ basali grandi instructæ. Corpus sive subcylindricum sive paulo compressum. Branchiæ sæpius foliosæ.

Legio I. PALÆMONINEA.

Pares 1mi 2dique pedum, unus vel ambo, chelati; 3tii 4tis similes. Maxillipedes 2di breves, lamellatæ.

Fam. 1. CRANGONIDÆ.—Mandibulæ graciles, valde incurvatæ, non palpigeræ, coronâ angustâ et non dilatatâ. Pedum pares 1mi 2di inter se valde inæqui.

Fam. 2. ATYIDÆ.—Mandibulæ crassæ, non palpigeræ, coronâ latâ, parce bipartitâ, processu terminali brevi et dilatato. Pedum pares 1mi 2dique inter se æqui, carpo nunquam annulato.

Fam. 3. PALÆMONIDÆ.—Mandibulæ crassæ, sive palpigeræ sive non palpigeræ, supra profunde bipartitæ, processu apicali oblongo, angusto.

Legio II. PASIPHÆINEA.

Pedes 1mi 2dique chelati, 3tii 4tis similes. Maxillipedes 2di tenuiter pediformes.

Fam. 1. PASIPHÆIDÆ.—Mandibulæ uti in *Atyidis*.

Legio III. PENÆINEA.

Pedes 3tii 2dis similes, sæpius chelati, 3tiis majoribus; nisi chelati, toti vergiformes et debiles.

Fam. 1. PENÆIDÆ.—Pedes 3tii bene didactyli, validiores, 2dis similes. Palpus mandibularis latus.

Fam. 2. SERGESTIDÆ.—Pedes 3tii 2dique sive vergiformes sive obsolete chelati, 1mis vergiformibus. Palpus mandibularis gracilis.

Fam. 3. EUCOPIDÆ.—Pedes 3tii 2dique vergiformes; 1mi maxillipedesque externi æque monodactyli et subprehensiles, digito in articulum penultimum claudente. Palpus mandibularis gracilis.

Synopsis Subfamiliarum Generumque Crustaceorum Macrourorum Viventium.

Subtribus I. THALASSINIDEA.

Legio I. THALASSINIDEA EUBRANCHIATA.

Fam. 1. GEBIDÆ.

G. 1. GEBIA, *Leach*.—Digitus manus inferior obsolescens. Pedes 2di 3tii 4ti 5tique monodactyli. Rostrum tridentatum. Antennæ externæ squamâ basali carentes.

G. 2. AXIUS, *Leach*.—Manus lata, digito inferiore elongato. Pedes 2di minores, sublamellati, didactyli; 3tii 4ti 5tique monodactyli. Rostrum simplex, triangulatum. Oculi pigmento perfecti. Antennæ externæ squamâ basali parvâ instructæ.

G. 3. CALOCARIS, *Bell*.*—Manus gracilis, digito inferiore elongato. Pedes 2di minores, cheliformes, 3tii 4ti 5tique monodactyli. Rostrum ac in *Axio*. Oculi pigmento corneâque carentes. Antennæ externæ squamâ basali parvâ instructæ. Segmentum caudale oblongum.

G. 4. LAOMEDIA, *De Haan*.†—Manus ac in *Axio*. Pedes 2di monodactyli, quoque 3tii et 4ti; 5ti obsoleti.

* "British Crustacea," p. 231.

† Faun. Japon. Crust., p. 162.

- G. 5. *GLAUCOTHOE*, *Edw.*—Manus ac in *Axio*. Pedes 2di 3tisque pediformes ac in *Paguro*; 4ti 5tique subcheliformes. Antennarum internarum flagella articulo precedente breviora.

Fam. 2. *CALLIANASSIDÆ*.

- G. 1. *CALLIANASSA*, *Leach.*—Oculi sublamellati, corneâ medianâ et non marginali. Flagella antennarum internarum articulo precedente longiora. Pedes 1mi grandes, bene didactyli; 2di didactyli minores, 3tii articulo penultimo late lamellati.
- G. 2. *ΤΡΥΠÆΑ*, *Dana.*—Pedibus *Callianassæ* affinis. Flagella antennarum internarum articulo precedente breviora, antennis subpediformibus.

Fam. 3. *THALASSINIDÆ*.

- G. 1. *THALASSINA*, *Latreille.*—Manus validæ, multo inæquæ, digito immobili majoris brevi. Pedes 2di articulo penultimo lamellati, 3tii 4ti 5tique angusti, monodactyli.

Legio 2. *THALASSINIDEA ANOMOBRANCHIATA*.

- G. 1. *CALLIANIDEA*, *Edw.*—Pedibus *Callianassæ* affinis, anticis bene didactylis, 2dis et 3tiis minoribus, didactylis, compressis, 4tis 5tisque subcylindricis. Oculi ac in *Callianassa*.
- G. 2. *CALLISEA*.—(*Isæa*, *Guerin*. *Callianisea*, *Edw.*) Forsan a *CALLIANIDEA* nihil differt, teste Edwardsio (*Crust.* ii. 321.)

Subtribus II. *ASTACIDEA*.

Fam. 1. *SCYLLARIDÆ*.

1. *Carapax oblongus vel subquadratus, non transversus. Oculi versus cephalothoracis angulos externos insiti.*
- G. 1. *SCYLLARUS*, *Fabr.*—Rostrum valde saliens. Latera carapacis non incisa. Antennæ externæ inter se fere contiguæ. Palpus maxillipedis externi flagello confectus. Branchiæ numero 21. Species, *Sc. sculptus, latus, squamosus, equinoxialis, Haanii, Sieboldi*.
- G. 2. *ARCTUS*, *Dana*, (*Scyllari* subgenus 5tum, *De Haan.*)—Rostrum perbreve, truncatum. Antennæ externæ inter se remotæ. Palpus maxillipedis flagello carens. Branchiæ 19. Sp. *A. ursus*, *D.* (*Scyllarus arctus*, *Auct.*)
2. *Carapax plus minusve transversus, lateribus non incisus. Oculi in angulis externis.*
- G. 3. *THENUS*, *Leach.*—Oculi oblongi. Rostrum bilobatum. Branchiæ 21. Species. *T. orientalis*.
3. *Carapax plus minusve transversus, lateribus incisus. Oculi angulis externis valde remoti.*
- G. 4. *PARRIBACUS*, *Dana*, (*Scyllari* subgenus 2dum, *De Haan.*)—Rostrum subtriangulatum. Antennæ externæ inter se fere contiguæ. Oculi fere in medio inter antennas internas et angulos cephalothoracis externos. Branchiæ 21. Species. *P. antarcticus et P. Parræ* (*Ibacus antarcticus et I. Parræ*, *Auct.*)
- G. 5. *IBACUS*, *Leach.*—Rostrum bilobatum. Antennæ externæ inter se paulo remotæ. Oculi versus rostrum insiti. Branchiæ 21. Species. *I. Peronii, I. ciliatus*, *De Haan*, et *I. novemdentatus*, *Gibbes*.*

* Species Scyllaridarum enumeratæ in "Hist. Nat. des Crustacés," Edwardsii editæ, sequentibus exceptis: *Sc. Haanii*, Siebold (*Faun. Japon.* 152, pl. 38, f. 1,) *Sc. Sieboldi*, *De Haan* (*Faun. Jap.* 152, pl. 36, f. 1,) *Ibacus ciliatus*, Siebold, (*Faun. Jap.* 153, pl. 36, f. 2,) *Ibacus novemdentatus*, *Gibbes*, (*Nuntiis Assoc. Sci. Amer.* 1850, *Charleston*; iii, 193.)

Fam. 2. PALINURIDÆ.

- G. 1. PALINURUS, *Fabr.* (Palinuri communes, *Edw.*)—Carapax vix rostratus. Annulus antennalis supra angustissimus, curvatus. Antennæ externæ basi fere contiguæ. Antennæ internæ flagellis breves.—*Linuparus*, Gray, hic inclusus.
- G. 2. PANULIRUS, *Gray*, (Palinuri longicornes, *Edw.*)—Carapax rostratus. Annulus antennalis supra latus, subquadratus et horizontalis. Antennæ externæ basi non contiguæ; antennæ internæ flagellis longæ.

Fam. 3. ERYONIDÆ.

Genus ERYON, *Desmarest*.

Fam. 4. ASTACIDÆ.

1. *Manus crassæ et latæ, marginibus arcuatæ, superficie convexæ* (ASTACINÆ.)
A. Branchiæ 19. Segmentum thoracis ultimum non mobile—Species marinæ.
- G. 1. HOMARUS, *Edw.*—Rostrum tenue, utrinque paucidentatum. Squama basalis antennarum externarum perbrevis.
- B. Branchiæ 17—18. Segmentum thoracis ultimum mobile. Rostrum integrum vel utrinque unidentatum.—Species fluviales.
- G. 2. ASTACOIDES, *Guerin*.—Segmentum abdominis *maris* 1mum appendicibus carens.—Hic referemus subgenera *Erichsoni Astacoides*, *Engæus* et *Cheraps*.*
- G. 3. ASTACUS.—Segmentum abdominis *maris* 1mum appendicibus instructum. Hic referemus subgenera *Erichsoni Astacus* et *Cambarus*, illo branchiis 18, hoc branchiis 17, instructo.
2. *Manus prismaticæ lateribus fere rectæ.* (NEPHROPINÆ.)
- G. 4. NEPHROPS, *Leach*.—Rostrum utrinque dentatum vel spinosum. Squama basalis antennarum externarum basi vix longiores.—Species marinæ.
- G. 5. PARANEPHROPS, *White*.†—Rostrum uti in *Nephrope*. Squama basalis antennarum externarum basi dimidio longiores.—Species fluviales?

Subtribus III. CARIDEA.

Legio I. PALÆMONINEA.

Fam. I. CRANGONIDÆ.

- Subfam. 1. CRANGONINÆ.—Pedes 1mi 2dis crassiores. Maxillipedes externi pediformes. Digitus mobilis in palmam claudens, immobilis spiniformis. Pedes 2di non annulati.
- G. 1. CRANGON, *Fabr.*—Rostrum brevissimum. Oculi liberi. Pedes 2di chelis armati, 4ti 5tique acuminati, gressorii.

* *Archiv. f. Nat.* 1846, p. 86 et 375. Astaci Subgenera *Erichsoni* instituta sequentia sunt.

1. ASTACOIDES. Pedes abdominales ramis membranacei, 1mis *maris* obsoletis. Antennæ externæ internis exteriores.

2. ASTACUS. Pedes abdominales (lamellis caudalibus inclusis) calcarei, 1mis *maris* elongatis. Antennæ externæ internis exteriores. Pedes 5ti branchias gerentes, branchiis numero 18.

3. CAMBARUS. Pedes abdominales (lamellis caudalibus inclusis) calcarei, 1mis *maris* elongatis. Antennæ externæ internis exteriores. Pedes 5ti branchias non gerentes, branchiis numero 17.

4. CHERAPS. Pedes abdominales calcarei, 1mis *maris* obsoletis; lamellæ caudales partim membranacei. Antennæ externæ internis exteriores. Pedes 5ti branchias non gerentes, branchiis numero 17.

5. ENGÆUS. Antennæ externæ sub internis. Pedes 5ti branchias gerentes, branchiis numero 18.

Textura appendicium abdominalium discrimen genericum justum non videtur, necque situs antennarum externarum. An auctoritatis gravis numerus branchiarum? non credimus

† A. White, in *Misc. Zool. Gray* 79, 1842 et "Voy. Erebus and Terror," pl. 3, f. 1.

- G. 2. *SABINEA*, Owen.*—Rostrum brevissimum. Oculi liberi. Pedes 2di chelis carentes; 4ti 5tique acuminati, gressorii.
- G. 3. *ARGIS*, Kröyer.†—Rostrum nullum. Oculi sub carapace fere occulti. Pedes 2di chelis armati.
- G. 4. *PARACRANGON*, Dana.—Rostrum elongatum. Oculi liberi. Pedes 2di obsoleti, 4ti 5tique acuminati, gressorii.

Subfam. 2. *LYSMATINÆ*.—Pedes 1mi 2dis crassiores. Maxillipedes externi pediformes. Digiti alter ad alterum claudentes. Pedes 2di annulati.

- G. 1. *NIKA*, Risso.—Rostrum breve. Antennæ internæ duobus flagellis confectæ. Pedes antici impares, uno chelato, altero monodactylo. Carpus paris 2di elongatus annulatus.
- G. 2. *LYSMATA*, Risso.—Rostrum elongatum, subensiforme. Antennæ internæ tribus flagellis confectæ. Pedes antici ambo chelati. Carpus paris 2di elongatè filiformis.
- G. 3. *CYCLORHYNCHUS*, De Haan.‡—Rostrum sat breve, compressum et suborbiculare. Carpus 2dus brevis, pauci-annulatus.

Subfam. 3. *GNATHOPHYLLINÆ*.—Pedes 2di 1mis crassiores. Maxillipedes externi lati, operculiformes.

- G. 1. *GNATHOPHYLLUM*, Latreille.

Fam. 2. *ATYIDÆ*.

Subfam. 1. *ATYINÆ*.—Pedes thoracici palpo non instructi.

- G. 1. *ATYA*, Leach.—Rostrum breve, depressum. Antennæ internæ flagellis duobus confectæ. Pedes 4 antici sat breves, carpis sublunatis, cuspidate inferiore manum ferente, digitis penecillo setarum longo ad apicem armatis; 3tii 5tis multo longiores et crassiores.
- G. 2. *ATYOIDA*, Randall.§—Rostro, antennis pedibusque anticis *Atyæ* affinis. Pedes 3tii tenues, 5tis breviores. [An distinctio valida?]
- G. 3. *CARIDINA*, Edwards.—Rostrum sat breve sat longum. Antennæ internæ flagellis duobus confectæ. Pedes 2di 1mis longiores, digitis parium amborum apice penecillatus, carpis 1mis perbrevis et antice excavatis, 2dis subcylindricis, oblongis.

Subfam. 2. *EPHYRINÆ*.—Pedes thoracici palpo instructi.

- G. 1. *EPHYRA*, Roux, De Haan.||—Rostrum dentatum. Antennæ internæ flagellis duobus confectæ. Pedes 4 antici parvi, nudi vel nudiusculi. Pedes 6 postici graciles.

Fam. 3. *PALÆMONIDÆ*.

Subfam. 1. *ALPHEINÆ*.—Pedes 1mi crassiores, chelati, 2di filiformes, carpo sæpius annulati et chelati. Mandibuli palpigeri.

- G. 1. *ALPHEUS*, Fabr.—Rostrum brevissimum. Antennæ internæ flagellis duobus confectæ. Oculi sub carapace occulti. Manus paris 2di major non inversa, digito mobili superiore. Pedes 2di carpo filiformes, annulati. Maxillipedes externi subtenuis, mediocres. Species maris calidioris.
- G. 2. *BETÆUS*, Dana.—Rostrum nullum. Oculis et ceteris *Alpheo* plerumque affinis. Manus paris 2di major fere inversa, digito mobili inferiore vel exteriori.—Species maris frigidioris.

* Owen, Append. "Voy. Capt. Ross," p. 82.—*Crangon septemcarinatum*, Sabine.

† Tidsskrift, iv. 1843, p. 217.

‡ Faun. Japon. Crust., p. 174.

§ Journ. Acad. Nat. Sci. Philad. viii, p. 140.

|| De Haan, Faun. Japon. p. 185, pl. 46, f. 7.

- G. 3. *ALOPE*, *White*.^{*}—Rostrum breve, inter spinas duas longas insitum hisque sæpe partim celatum. Antennæ internæ flagellis duobus confectæ. Maxillipedes externi longissimi. Oculi paulo salientes.
- G. 4. *ATHANAS*, *Leach*.—Rostrum breve. Antennæ internæ flagellis tribus confectæ. Oculi paulo salientes. Pedes 2di carpo annulati.
- G. 5. *HIPPOLYTE*, *Leach*.[†]—Rostrum sat longum, plus minusve ensiforme, non mobile. Abdomen medio deflexum. Antennæ internæ flagellis duobus confectæ. Oculi salientes. Pedes 2di carpo annulati.
- G. 6. *RHYNOCINETES*, *Edw*.—Rostrum ensiforme, mobile, fronte articulo conjunctum. Oculi antennæque uti in Hippolyte. Pedes 2di carpo non annulati.

[Ubi pertinet genus sequens ?

- G. *AUTONOMEA*, *Risso*.—Pedes antichi crassi, chelati. Pedes 2di non chelati et carpo non annulati, 3tiis similes. Maxillipedes externi tenues. Rostrum breve. Oculi salientes. Antennæ internæ flagellis duobus confectæ; externæ squamâ basali non instructæ.]

Subfam. 2. *PANDALINÆ*.—Pedes antichi gracillimi, non chelati, 2di filiformes, carpo annulati.

G. *PANDALUS*, *Leach*.—

Subfam. 3. *PALÆMONINÆ*.—Pedes 4 antichi chelati, 2di 1mis crassiores. Carpis nullis annulatis. Pedes nulli palpigeri.

1. *Antennæ internæ duobus flagellis confectæ. Mandibulæ non palpigeræ.*

- G. 1. *PONTONIA*, *Latr*.—Corpus depressum. Rostrum breve. Oculi parvuli. Maxillipedes suboperculiformes, articulo 2do lato, 3tio 4toque simul sumtis longiore, his subcylindricis.
- G. 2. *ÆDIPUS*, *Dana*.—(*Pontonia*, *Auct.*) Corpus plus minusve depressum. Rostrum longitudine mediocri. Oculi permagni. Maxillipedes externi latiusculi, articulis totis latitudine fere æquis. Tarsi infra elongatè gibbosi.
- G. 3. *HARPILIUS*, *Dana*. (*Pontonia*, *Auct.*)[‡]—Corpus non depressum. Rostrum longitudine mediocri. Oculi magni. Maxillipedes suboperculiformes, articulo 2do lato, 3tio 4toque simul sumtis brevior, his subcylindricis. Tarsi uncinati, infra non gibbosi.
- G. 4. *ANCHISTIA*, *Dana*.—Rostrum tenue, sæpius ensiforme et elongatum. Corpus vix depressum, sæpe compressum. Oculi mediocres; antennæ duobus flagellis instructæ, unâ parce bifidâ. Maxillipedes externi omnino tenues, pediformes.
2. *Mandibulæ palpigeræ.*
- a. Oculi aperti.
- G. 5. *PALÆMONELLA*, *Dana*.—Corpus non depressum. Rostrum sat longum, dentatum. Oculi mediocres. Mandibularum palpus bi-articulatus, perbrevis. Antennæ internæ flagellis duobus confectæ, uno apicem bifido. Maxillipedes externi tenues.
- G. 6. *PALÆMON*, *Fabr.*^{||}—Corpus non depressum. Rostrum longum, dentatum. Oculi mediocres. Palpus mandibularum 3-articulatus. Antennæ internæ flagellis tribus confectæ. Maxillipedes externi tenues. Pedes 2di nunquam lamellati.

* Ann. and Mag. Nat. Hist. [2], i, 225.

† Periclimenes, *Costa*, (Ann. dell' Acad. degli Aspir. Nat. di Napoli, ii, 1844,) Hippolyto affinis et vix differt, teste Erichsono. Arch. f. Nat. 1846, p. 310.

‡ Pontoniæ veræ Ædipis et Harpiliis habitu multo differt; Pontoniarum oculis parvulis, abdomine valde inflexo, et modo vitæ sæpius uti in Pinnotheris: aliorum oculis pergrandibus, abdomine minus inflexo, animalibus modo vitæ liberis, inter ramos corallorum sæpe natantibus. *Pontonia macrophthalma*, *Edw.*, Ædipo pertinet.

|| *Leander*, *Desmarest*, (Ann. Ent. Soc. France, 1849, p. 87,) a *Palemone* vix differt, abdomine ad articulationem 3-tiam inflexo non discrimine valido.

G. 7. HYMENOCERA, *Latr.*—Corpus non depressum. Rostrum sat longum. Oculi mediocres. Pedes 2di tenuiter laminati, latissimi; 1mi tenuissimi, manu minutâ. Maxillipedes externi subfoliacei.

b. Oculi sub carapace celati.

G. 8. CRYPHIOPS, *Dana.*—Rostrum longitudine mediocre. Oculi parvuli, omnino occulti. Antennæ internæ flagellis tribus confectæ. Maxillipedes externi subtenuis.

[Ubi pertinet Genus TYPTON, *Costa*, (Annal. dell' Acad. degli Aspir. Nat. di Napoli, ii, 1844); squamâ basali antennarum externarum carens; Pontoniæ affinis.]

Subfam. 4. OPLOPHORINÆ.—Pedes 1mi sive didactyli sive vergiformes; 2di chelati, crassiores. Squama antennarum externarum acuminata, extus spinis armata.

G. 1. OPLOPHORUS, *Edw.*—Corpus non compressum. Rostrum longum, dentatum. Antennæ internæ flagellis duobus confectæ. Pedes toti palpigeri, 4 antichi chelati. [Abdominis dorsum processibus spiniformibus uno vel pluribus armatum.]

G. 2. REGULUS, *Dana.*—Rostrum longum, dentatum. Antennæ internæ flagellis duobus confectæ. Pedes nulli palpigeri, 2 antichi non chelati, 2di crassè chelati. Mandibularum palpus 3-articulatus. [Abdominis segmentum 3tium dorso postico instar spinæ longæ productum.]

Legio II. PASIPHÆINEA.

Fam. I. PASIPHÆIDÆ.

G. 1. PASIPHÆA, *Savigny.*—Rostrum obsolescens. Antennæ internæ flagellis duobus confectæ. Pedes palpigeri, palpis elongatis. Pedes 4 antichi subæqui, manubus gracilibus.

Legio III. PENÆINEA.

Fam. 1. PENÆIDÆ.

G. 1. SICYONIA, *Edw.*—Pedes 6 antichi lineares, 4 postici non annulati. Carapax breviter rostratus, semicalcareus, dorso carinato. Pedes abdominales laminâ unâ instructi. Maxillipedes 2di 3tiique non palpigeri. Antennæ internæ perbreves.

G. 2. PENÆUS, *Latr.*—Pedes 6 antichi lineares, 4 postici non annulati. Carapax elongato-rostratus, rostro ensiformi. Pedes abdominales laminis duabus instructi. Maxillipedes externi bene palpigeri.—Hic referemus genus "*Aristæus*" [Duvernoy, Ann. des Sci. Nat. xv, 1841, pl. 4.]

G. 3. STENOPUS, *Latr.*—Pedes 6 antichi lineares, 3 postici longi, annulati. Rostrum longitudine mediocre. Maxillipedes externi brevissimè palpigeri.

G. 4. SPONGICOLA, *DeHaan.**—Pedes 4 antichi filiformes, 2 sequentes unus vel ambo crassissimi; 4 postici non annulati. Carapax bene rostratus, rostro subensiformi. Maxillipedes externi non palpigeri.

Fam. 2. SERGESTIDÆ.

G. 1. SERGESTES, *Edw.*—Carapax brevissime rostratus. Pedes thoracis non palpigeri, 2di 3tiique obsoletè didactyli, 5ti parvuli.

G. 2. ACETES, *Edw.*—Carapax minute rostratus. Pedes thoracis non palpigeri, 2di 3tiique obsoletè didactyli, 5ti obsoleti.

G. 3. EUPHEMA, *Edw.*—Carapax bene rostratus. Pedes thoracis elongato-palpigeri, 6 antichi didactyli, manubus parvulis, 4 postici filiformes, ciliati, non annulati. Branchiæ foliosæ. Abdomen dorso uni-spinosum—An hujus sedis est?

* Faun. Japon. Crust p. 189, tab. 46, f. 9.

Fam. 3. EUCOPIDÆ.

G. 1. EUCOPIA, Dana.—Carapax non rostratus, fronte integro. Pedes thoracis elongato-palpigeri, palpis natatoriis. Maxillipedes 2di 3tii et pedes 1mi monodactyli et prehensiles, unguiculo ad articulum precedens claudente.

Descriptiones Crustaceorum Macrourorum adhuc ineditæ.

Subtribus I. THALASSINIDEA.

Legio I. THALASSINIDEA EUBRANCHIATA.

Fam. GEBIDÆ.

GEBIA PUGETTENSIS.—Frons tridentatus, dente mediano triangulatus, superficie supernâ usque ad suturam dorsi transversam scabrâ et hirsutâ. Manus marginibus pilosa, non spinulosa nec dentata, superficie externâ lævis non costata, lineâque densè hirsutâ longitudinaliter notata, digito inferiore dentiformi, crasso, acuto, non incurvato, digito mobili elongato, inermi, margine piloso. Pedes 2di infra longissimè ciliati. Antennæ externæ quoad basin partim pilosæ, flagellis paulo hirsutis. Segmentum caudale transversum, rectangulatum, integrum. *Hab.* in freto Pugettensi, Oregoniæ. *Long.* 2".

Fam. CALLIANASSIDÆ.

CALLIANASSA GIGAS.—Frons paulo triangulatus. Oculi complanati. Manus major valde compressa, lævis, carpo non duplo longior, digitis brevibus, dimidio manus brevioribus, sparsim hirsutis, consimilibus, non hiantibus, superiore arcuato, acuto, brachio angusto, ad basin infra dentigero sed vix latiore, paululo longiore quam corpus, intus vix dentato. Segmentum caudale appendicibus caudalibus vix brevius. *Hab.* in freto Pugettensi, Oregoniæ. *Long.* 4½".

TRYPÆA AUSTRALIENSIS.—Frons non triangulatus. Pedes antici valde compressi, brachio carpo manūque pedis majoris supra acutis. Manus major lata, lævis, carpo paululo longior; digitis fere dimidii manus longitudine, non hiantibus, intus subtiliter denticulatis, superiore paulo longiore, arcuato, carpo paulo minore quam manus, brachio cum processu cultriformi juxta basin infra armato. Segmentum caudale non longius quam latum, postice arcuatum. *Hab.* in oris Illawarræ Australiæ orientalis. *Long.* 2¼".

Fam. THALASSINIDÆ.

THALASSINA GRACILIS.—Carapax lævis, rostro perbrevis, acuto, margine extra-orbitali acuto. Abdomen sparsim pubescens, marginibus integris, segmento caudali paulo oblongo, postice bene rotundato, non longiore quam appendices caudales. Pedes 1mi subæqui, valde compressi, manu angusto-elongatâ, margine superiore subacuto, breviter spinoso, inferiore integro et inermi, digito mobili paulo brevior quam pars manus anterior, angusto, fere recto, seriatim pubescente, digito immobili plus dimidio brevior, acuto. Pedes 6 postici tenues; 5ti paulo breviores. *Hab.* in oris insulæ "Telegraph," juxta "Singapore." *Long.* 2½".

Subtribus II. ASTACOIDEA.

Fam. SCYLLARIDÆ.

ARCTUS VITIENSIS.—Carapax subtilissimis plumulis pubescens, spinâ pone medium frontis et alterâ gastricâ armatus, versus orbitam utrinque subcarinatus et 1—2-dentatus. Antennæ internæ nudiusculæ, articulo basis penultimo fere duplo longiore quam ultimus. Antennæ externæ extremitate truncatæ, articulo ultimo apice 5-lobato, lobis oblongis, interno brevior, articulo 2do ultimum

fere superante, extus unidentato, intus 3-dentato, superficie carinatâ, carinâ integrâ. Pedes nudi, subteretes, inermes, 2dis pergracilibus, tarso 2do duplo longiore quam 3tius. *Hab.* in archipelago Vitiensi ("Fejee"). *Long.* 1".

Fam. ASTACIDÆ.

ASTACUS LENIUSCULUS.—Rostrum tridentatum, dentibus acutis, medio tenuiter elongato. Carapax lævis, punctulatus, lateraliter pone rostrum utrinque 2-spinosus; areolâ inter suturas longitudinales post-dorsales latâ. Pedes antici compressi, inermes, non tuberculati, manu lævi, punctulatâ, carpo paulo oblongo, intus recto, inermi, apice interno acuto excepto, brachio antice denticulato, apice interno elongate acuto, dorso unispinoso. Pedes sequentes nudiusculi. Segmentum caudale parce oblongum, lateribus fere parallelis. Pedes 5ti branchias parvas gerentes. *Hab.* flumine "Columbia," Oregoniæ. *Long.* 4".

ASTACOIDES NOBILIS.—Rostrum sat longum fere integrum, apice obtusum, utrinque obsolete unidentatum, basi antennarum externarum paulo brevius. Carapax lateraliter infra basin rostri obsolete utrinque armatus. Abdominis segmenta utrinque paulo uni-tuberculata, *junioris* tuberculis obsolescentibus; segmentum 2dum prope marginem lateralem spinis brevibus armatum; segmentum caudale paulo oblongum. Pedes antici æqui, crassi, carpo intus valde trispinoso, manu infra supraque marginatâ et breviter dentatâ, superficie fere lævi, nudâ. Epistomatis processus medianus anticus triangulatus et valde elongatus, et perangustus. *Hab.* Australiâ orientali? *Long.* 5".

PARANEPHROPS TENUICORNIS.—Rostrum elongatum, acuminatum, tenue, bases antennarum longitudine superans, utrinque 4-spinosum et posterius super carapacem utrinque aliis spinis duabus. Pedes 8 postici gracillimi. Pedes antici longi, manu vix crassiore quam carpus, margine superno biseriatim spinoso, superficiebus internâ externâque uniseriatim spinosis, margine inferiore et superficie proximâ spinuli-scabris et non seriatim spinosis. *Hab.* in fluminibus prope portum "Bay of Islands," Novi-Zealandiæ.

Subtribus III. CARIDEA.

Legio I. PALÆMONINEA.

Fam. CRANGONIDÆ.

Subfam. CRANGONINÆ.

CRANGON MUNITUS.—Rostrum brevissimum, rotundatum. Carapax partim 7-carinatus, carinâ mediâ vel primâ bispinosâ, 2dâ utrinque unispinosâ, brevi, 3tiâ nudâ, 4tâ unispinosâ, brevi. Abdomen læve, inerme. Manus nuda. Pedes 2di 3tiis vix breviores, 4ti 5tique paulo hirsuti, 5tis minoribus. Maxillipedes externi utrinque valde ciliati. Segmentum caudale apice subacutum et quatuor setis instructum. *Hab.* in freto Pugettensi. *Long.* 1" 10'''.

PARACRANGON ECHINATUS.—Rostrum elongatum, porrectum, apice bidentatum, dorso unidentatum, juxta basin infra unispinosum, spinâ longâ porrectâ. Carapax multispinosus, medio dorso inæque 4-dentatus, utrinque 5—7-spinosus. Abdomen superne partim carinatum superficie paulo scalptum, lateribus acutis. Manus elongata, digito immobili longo et gracillimo. Pedes 4ti 5tique fere nudi, subæqui. *Hab.* in freto Pugettensi. *Long.* 1½".

Subfam. LYSMATINÆ.

NIKA HAWAIIENSIS.—Rostrum brevissimè triangulatum, oculis multo brevius, latius quam longum. Squama antennarum externarum basi internarum parce brevior. Pedes antici subæqui, dexter chelatus nudiusculus. Articulus pedis 2di 4tus 3tio vix longior, non annulatus; carpus 11-articulatus, articulis quatuor 1mis vix disjunctis. Pedes 6 postici subæqui, nudiusculi, gracillimi. *Hab.* prope insulam "Maui" Hawaiensem. *Long.* 8'''.

Fam. PALÆMONIDÆ.

Subfam. ALPHEINÆ.

Genus ALPHEUS.

I. *Rostrum margine frontis ortum, superficie inter oculos sæpius leviter carinatâ.*

A. Antennarum articulus 1mus externarum spinâ externâ sive nullâ sive obsolescente armatus.

1. *Manus marginibus inferiore superioreque versus digitos excavata. Dens antennarum internarum basalis articulo 1mo non longior. Articulus pedum 3tiorum 4torum 3tius omnino inermis.*

a. Orbitæ margo inermis.

ALPHEUS STRENUUS.—Rostrum elongatum, acutum, superficie inter oculos leviter carinatâ. Squama antennarum externarum basalis basi non longior. Articulus antennarum internarum 2dus 1mo fere duplo longior. Pedes antici multo inæqui, manus majoris sinu infero-marginali concavo et non triangulato, brachio ad apicem internum acute uni-dentato; manu minore angusto-oblongâ, paulo pubescente, digitis intus dense hirsutis, pilis apicem digiti mobilis omnino celantibus. Pedes 2di 3tiis multo longiores, carpi articulis 1mo 2doque fere æquis, 2do longiore quam 5tus. *Hab.* insulâ Tongatabu. *Long* 1 $\frac{3}{4}$ ".

ALPHEUS PACIFICUS.—Rostrum breve, acutum, superficie inter oculos breviter carinatâ. Squama antennarum externarum basalis basi planè brevior; articulus antennarum internarum 2dus 1mo duplo longior. Pedes antici multo inæqui; manus majoris sinu infero-marginali profundè triangulato, brachio apicem internum inermi; manu minore angusto-oblongâ, paulo pubescente, digitis intus dense hirsutis, apicibus apertis. Pedes 2di 3tiis parce longiores, carpi articulo 2do multo brevior quam 1mus, vix longiore quam 5tus. *Hab.* insulis Hawaiensibus. *Long.* 1 $\frac{3}{4}$ ".

b. Orbitæ margo spinulâ armatus.

ALPHEUS EUCHIRUS.—Rostrum paulo elongatum, superficie inter oculos carinatâ. Squama antennarum externarum basalis basi non longior. Articulus antennarum internarum 2dus 1mo paulo longior. Pedes antici multo inæqui; manus majoris sinu infero-marginali concavo; brachio apicem non spinigero; manu minore oblongâ, crassiusculâ, lævi, digitis extus et intus leviter laxèque pubescentibus. Pedes 2di 3tiis paulo longiores, carpi articulo 1mo duplo longiore quam 2dus, manu vix brevior quam tres articuli precedentes simul sumti. Pedes 3tii 4tive parce criniti, articulo 3tio apicem internum brevissimè acuto, 5to intus 7—8-setuloso, setulis paulo confertis. *Hab.* in freto "Balabac." *Long.* 9'''.

2. *Manus margine inferiore integer. Dens antennarum internarum basalis articulo primo vix longior.*

a. Orbitæ margo inermis.

ALPHEUS OBESO-MANUS.—Rostrum brevissimum, in carinam paulo postice productum. Squama antennarum externarum basalis basi non brevior, basi internarum multo brevior; dens internarum basalis perbrevis; articulus 2dus 1mo plus duplo longior. Pedes antici valde inæqui, manu *major* lævi, elongatâ, obesâ, non compressâ, versus apicem angustiore, digito mobili perbrevis, malleiformi, *minore* lineari, digitis brevissimis. Pedes 2di portentose elongati, 3tiis plus duplo longiores, carpi articulo 1mo quadruplo brevior quam 2dus, 3tio 4to 5toque brevibus, subæquis. Articulus pedis 3tii 3tius apice inferiore acutus. *Hab.* in archipelago "Viti." *Long.* 9'''.

ALPHEUS CRINITUS.—Rostrum acutum, superficie inter oculos carinatâ. Squama antennarum externarum basalis basi harum parce brevior, basi internarum paulo brevior; dens internarum basalis perbrevis. Articulus antennarum internarum 2dus 1mo duplo longior. Pedes antici multo inæqui; manu *major* obesâ, parce compressâ, infra rotundatâ, omnino lævi, partim leviter pubescente,

digitis perbrevibus, (manu quadruplo brevioribus), digito mobili arcuato; *minore* oblongâ, leviter crinitâ, digitis parte manus ante digitos paulo brevioribus. Pedes 2di valde elongati, 3tiis sesquolongiores, articulo carpi 2do parce longiore quam 1mus, 3tio 4to 5tove oblongo, uno alterum fere æquante. Pedes 3tii 4tive leviter criniti, articulo 3tio apicem inferiorem dentigero. *Hab.* in freto "Balabac." *Long.* 10'''.

ALPHEUS MITIS.—Rostrum acutum, superficie inter oculos carinatâ. Squama antennarum externarum basalis basi harum internarumve parce longior. Articulus antennarum internarum 2dus 1mo paulo longior, densque basalis articulo 1mo fere longior. Pedes antichi inæqui; manu majore lævi, paulo compressâ, marginibus rotundatâ, digitis regularibus, manu fere triplo brevioribus; minore simili, angustiore. Pedes 2di 3tiis multo longiores, articulo carpi 2do 1mum longitudine æquante, 3tio 4tove oblongo, parce brevior quam 5tus, manu perbrevis. Pedes 3tii 4tique fere nudi, articulo 3tio apicem internum non acuto. *Hab.* in freto "Balabac." *Long.* 9'''.

b. Orbitæ margo spinulâ denteve armatus.

ALPHEUS ACUTO-FEMORATUS.—Rostrum acutum postice inter oculos productum. Squama antennarum externarum basalis basibus antennarum non longior. Dens basalis antennarum internarum brevis, articulus 2dus 1mo parce longior. Orbitæ margo acutus sed spinâ non productus. Pedes 2di 3tiis sat longiores, carpi articulo 1mo brevi, 2do plus duplo longiore quam 1mus. Pedes 3tii, 4tique crassiusculi, articulo 2do 3tioque apicem inferiorem instar spinæ elongate acuto. [Pedibus anticis specimen nobis mutilatum.] *Hab.* in freto "Balabac." *Long.* 9'''.

B. Articulus antennarum externarum 1mus spinâ externâ armatus.

a. Orbitæ margo inermis.

ALPHEUS PARVI-ROSTRIS.—Corpus nudum. Rostrum acutum, breve, superficie inter oculos carinatâ. Squama antennarum externarum basalis basi utroque paulo longior; spina basalis mediocris; dens internarum basalis brevis; articulus 2dus 1mo vix longior. Pedes antichi valde inæqui, manu majore crassissimâ, marginibus ambobus indentatâ, superficie externâ partim sulcatâ, digitis perbrevibus, digito mobili extus arcuato; manu minore regulari, pubescente. Pedes 2di 3tiis paulo longiores, articulo carpi 1mo fere duplo longiore quam 2dus, manu brevi. Pedes 3tii 4tique crassiusculi, articulo 3tio apicem inferiorem unidentato. *Hab.* in freto "Balabac." *Long.* 8'''.

b. Orbitæ margo spinulâ denteve armatus vix brevior quam rostrum.

ALPHEUS TRIDENTULATUS.—Rostrum perbreve, dentiforme. Squama antennarum externarum basalis basi brevior, basi internarum vix brevior, spina externarum basalis mediocris, spina internarum longissima, articulo 1mo multo longior; articulus 2dus 1mo non longior. Pedes antichi valde inæqui, manu majore lævi, paulo compressâ, marginibus latè rotundata, digitis perbrevibus, manu triplo brevioribus. Pedes 2di 3tiis paulo longiores, articulo carpi 1mo quadruplo longiore quam 2dus, 2do perbrevis, vix longiore quam 3tius. Articulus pedum 3tiorum 4torumve 3tius apice interno inermis. *Hab.* in portu "Rio Janeiro"? *Long.* 10'''.

ALPHEUS NEPTUNUS.—Frons elongate trispinosus, rostro spinisque orbitalibus prælongis, æquis. Squama antennarum externarum basalis basi brevior et spina externa elongata; spina internarum basalis longa, articulo 2do brevior quam 1mus. Pedes antichi multo inæqui, manu majore lævi, paulo compressâ, marginibus rotundatâ, digitis brevibus, manu triplo brevioribus, digito mobili supra arcuato; manu minore angustâ. Pedes 2di 3tiis longiores, articulo carpi 1mo quadruplo longiore quam 2dus, 2do 3tio 4toque inter se fere æquis, non oblongis. Articulus pedum sequentium 3tius apice inferiore inermis. *Hab.* in mari Suluensi. *Long.* 8—9'''.

II. *Rostrum inter oculorum bases ortum, sulco profundo in carapace utrinque juxta rostrum excavato.*

a. *Orbitæ margo inermis.*

ALPHEUS PUGNAX.—Rostrum acutum, anguste triangulatum, planum, inter oculorum bases ortum. Spina antennarum externarum basalis parva; squama basi paulo longior. Spina antennarum externarum basalis articulo 1mo non brevior, articulus 2dus brevis, 3tius squamam externarum non superans. Pedes antici inæqui; majore elongatâ, lævi, marginibus rotundatâ, supra angustè emarginatâ, digitis brevibus (manu triplo brevioribus), brachio apicibus instar spinæ acuto. Pedes 2di longi, articulo carpi 1mo dimidio brevior quam 2dus. Pedes 3tii 4tisque graciles, articulo 3tio apicem inferiorem uni-dentato. *Hab.* ad insulam "Maui" Hawaiensem. *Long.* 12'''.

ALPHEUS DIADEMA.—Rostrum latum, apice triangulatum et acutum, inter oculorum bases ortum, lateribus concavis. Spina basalis antennarum omnium brevis; squama externarum basi utroque longior. Pedes 2di 3tiis parce longiores, articulo carpi 1mo paulo longiore quam 2dus vel 5tus, 3tio 4tove parce oblongo. Pedes 3tii 4tive 5tis valde crassiores, articulo 3tio apicem inferiorem unidentato. *Hab.* ad insulam "Maui" Hawaiensem. *Long.* 10'''.

b. *Orbitæ margo spinulâ denteve armatus.*

ALPHEUS LÆVIS.—(Randall, Jour Acad. Nat. Sci. Philad. viii.)

ALPHEUS MALLEATOR.—Rostrum perbreve, triangulatum, inter oculorum bases ortum. Spina orbitalis brevis. Squama antennarum externarum basalis basi brevior; spina basalis externarum mediocris, internarum brevissima; articulus 2dus internarum 1mo sesqui longior. Pedes antici inæqui; manus majoris superficie supernâ et internâ partim minutè tuberculatâ, margine superiore sulcato, juxta articulationem digiti 2—3-inciso, digitis perbrevibus, mobili malleiformi, obtuso. Pedes 2di 3tiis parce longiores, articulo carpi 1mo duplo longiore quam 2dus. Pedes 3tii crassiusculi, articulo 3tio apicem inferiorem obtuso. *Hab.* in portu Rio Janeiro? *Long.* 2½''.

Genus BETÆUS.

BETÆUS TRUNCATUS.—Frons truncatus, medio non emarginatus. Squama antennarum externarum basi non longior; spina externa brevis; spina internarum basalis prælonga, articuli basales elongati, subæqui. Pedes antici multo inæqui, manu majore longâ, sublineari, valde compressâ, fere lævi, scabriculâ, digitis longis, fere dimidii manus longitudine, mobili terete. Pedes 2di 3tiis sat longiores, carpo sat brevi, articulo carpi 1mo plus duplo longiore quam 2dus, 2do 3tio 4toque brevibus. Articulus pedum sequentium 3tius omnino inermis. *Hab.* Fuegiâ in mari prope insulam "Hermite," pedibus sexaginta altitudine. *Long.* 15'''.

BETÆUS ÆQUIMANUS.—Frons medio profundè incisus. Squama antennarum externarum basalis basi paulo brevior; spina externa perbrevis; spina internarum basalis prælonga, articulo 2do multo brevior quam primus. Pedes antici æqui, manu lævi, compressâ, digitis perbrevibus. Pedes 2di 3tiis sat longiores, articulo carpi 1mo plus duplo longiore quam 2dus, 2do 3tio 4toque perbrevibus. Articulus pedum sequentium 3tius omnino inermis. *Hab.* in portu "Bay of Islands," ad insulas "Black Rocks," Novi-Zealandiæ.

BETÆUS SCABRO-DIGITUS.—Frons leviter arcuatus, medio obsolete excavatus. Squama antennarum externarum basalis mediocris, basi parce brevior, basin internarum fere æquans; flagellum latè compressum; spina externa brevis; spina internarum basalis longa. Pedes antici *feminae* valde inæqui, manu majore mediocri, leviusculâ, compressâ, margine inferiore rotundatâ, digitis scabriculis, dimidio manus paulo brevioribus, vix dentigeris; *maris* æqui, crassiores, digitis brevibus, valde incurvatis, immobili crassè unidentato. Pedes 2di 3tiis paulo longiores, articulo carpi 1mo plus duplo longiore quam 2dus, 2do 3tio 4toque brevibus. Articulus pedum sequentium 3tius extus prope basin spinâ armatus. *Hab.* juxta urbem "Valparaiso" Chilensem. *Long.* 1½''

Genus HIPPOLYTE.

I. *Rostrum in dorsum non productum.*

HIPPOLYTE ACUMINATUS.—Rostrum elongatè acuminatum, subensiforme, apice parce recurvatum, squamâ antennali non brevius, medio margine supra infraque unidentatum. Carapax supra oculus unispinosus. Antennarum flagellum brevius internarum 5—6-articulatum, apicem rostri non superans. Pedes antici perbreves, manu ovatâ. Pedes 2di 3tiis breviores, carpo 3-articulato. Maxillipedes externi basin antennarum externarum superantes, pubescentes. Tarsi pedum 6 posticorum infra spinulosi. *Hab.* in mari Atlantico cum *Sargasso* lat. bor. 36° 07'—4° 07', long. occid. 20° 43'—71° 36'. A *tenuirostrato Edw.* differt, dorso in regione gastrico spinâ non armato, margine rostri inferiore unidentato tantum.

HIPPOLYTE EXILIROSTRATUS.—Rostrum longum, omnino angustissimum, versus apicem non latior, rectum, apice acutum, supra 4-spinosum, infra rectum, integrum. Antennarum flagellum brevius internarum apicem rostri multum superans, multiarculatum. Maxillipedes externi elongati, apicem basis antennarum externarum multum superantes. Pedes antici perbreves, manu subovatâ, fere per ejus latus carpo articulata. Pedes 2di 3tiis breviores, carpo 3-articulato; 6 sequentes nudiusculi, tarsi infra spinulosi, spinulis apicis longis reliquis brevissimis. *Hab.* in portu "Rio Janeiro." *Long.* 6—8".

HIPPOLYTE OBLIQUIMANUS.—Rostrum longum, tenuiter laminatum, rectum, versus apicem verticaliter latior, infra non rectum 2-dentatum, supra 4-dentatum, apice bifidum. Flagellum antennarum internarum minus apicem rostri superans, majus paulo longius. Pedes antici perbreves, manu subovatâ carpo manu multo brevior, vix oblongo. Pedes 2di 3tiis breviores, carpo 3-articulato. Tarsi pedum 6 sequentium infra spinulosi, spinulis apicis longis, deinde sensim brevioribus. *Hab.* in portu Rio Janeiro. *Long.* 8".

2. *Rostrum in dorsum productum.*

HIPPOLYTE BREVIROSTRIS.—Rostrum breve (basi antennarum internarum multo brevius) acutum, spiniforme, dorso breviter productum, supra 4-spinosum, spinis inter se æque remotis. Maxillipedes externi longi, squamam antennalem longe superantes. Pedes antici crassiusculi, manu oblongâ. Pedes 2di 3tiis longiore, carpo elongato, 7-articulato. *Hab.* in freto "de Fuca," juxta portum "Dungeness." *Long.* 1½".

HIPPOLYTE LAMELLICORNIS.—Rostrum longum verticaliter latissimum, fere ad thoracis basin productum, apice bifidum, supra sinuosum, super cephalothoracem 4-spinosum, anterius 6-spini-dentatum, spinulis inæquis, totis inter se subæque remotis, infra triangulatum, 2-dentatum. Antennæ internæ rostro parce longiores. Pedes antici gracillimi, 2dis paulo crassiores. Pedes 2di 3tiis vix breviores, carpo elongato, 7-articulato, articulo carpi 3tio longo. Tarsi pedum sequentium fere inermes, spinulis versus basin subtilissimis. Maxillipedes externi apice spinulosi, articulo ultimo supra pubescente. *Hab.* in freto "de Fuca" Oregoniæ, juxta portum "Dungeness." *Long.* 1½—2".

Subfam. PANDALINÆ.

PANDALUS PUBESCENTULUS.—Carapax dense brevissimeque pubescens, margine infra oculus bispinoso. Rostrum squamâ antennali longius, ensiforme, paulo recurvatum sed apice non altius quam dorsum, supra 16—18-dentatum, dentibus parvulis et fere ad dorsi medium continuatis, versus apicem edentulum, infra 7-dentatum, apice bifidum. Pedes toti nudiusculi, 3tii 4ti 5ti longitudine sensim decrescentes, 3tii longi, 1mi articulis 2dorum tribus primis longiores. *Hab.* in freto "de Fuca" Oregoniæ, juxta portum "Dungeness." *Long.* 5".

Subfam. PALÆMONINÆ.

PONTONIA TRIDACNÆ.—Corpus depressum. Carapax nudus, lævis, paulo oblongus, rostro triangulato, obtuso. Antennæ internæ perbreves, flagellis subæquis, articulis duobus precedentibus non oblongis. Squama antennarum exter-

narum basalis apicem rostri non superans; flagellum rostro paulo longius. Pedes antici longiores, tenues, digito dimidio brevioribus quam manus; 2di crassiusculi, breves, subæqui, manu oblongâ, digitis manu plus dimidio brevioribus, brachio ultra carapacem parce saliente. Pedes 6 postici breves, æqui, nudi. *Hab.* in conchâ Tridacnæ maris juxta insulam "Tutuila" Samoensen (vel "Navigator's.") *Long.* fere 8''; vel abdomine inflexo, 4''.

ÆDIPUS SUPERBUS.—Corpus paulo depressum. Rostrum horizontaliter latum, oblongo-triangulatum, rectum, supernè medio costatum et 5-serratum, infra prope apicem 2-serratum, squamâ basali antennarum externarum plus duplo brevius, basi internarum paulo brevius. Pedes antici tenues, manu breviter villosâ, proximi æqui, crassissimi, manu magnitudine portentosâ, plus dimidio longiore quam carapax, tumidâ, versus basin crassiore, digito mobili plus quadruplo brevioribus quam manus, angusto, tenuiore quam immobilis et margine externo angulate sinuoso. Oculi magni. *Hab.* insulâ "Tongatabu." *Long.* 10''.

ÆDIPUS GRAMINEUS.—Corpus paulo depressum. Rostrum angustum, rectum, squamâ basali antennarum externarum fere dimidio brevius, basin internarum longitudine æquans, supra 4-dentatum, infra prope apicem 1-dentatum. Oculi magni. Pedes antici elongati, antennis internis non breviores. Pedes 2di æqui, crassissimi, manu magnitudine portentosâ, plus dimidio longiore quam carapax, inflatâ, versus basin crassiore, digito plus quadruplo brevioribus quam manus, sublunato, extus integro, arcuato. *Hab.* archipelago "Viti." *Long.* 8''.

HARPILIUS LUTESCENS.—Corpus paulo depressum. Rostrum angustum, parce recurvatum, squamâ antennali paulo brevius, basi internarum multo longius, supra 7—8-dentatum, infra prope medium 1-dentatum. Pedes antici manu sparsim pubescentes; 2di angusti, manu gracili, fere lineari, digitis linearibus vix dimidii manus longitudine. *Hab.* insulâ "Tongatabu." *Long.* 7''.

ANCHISTIA GRACILIS.—Rostrum tenue, rectum, acutum, longum, squamâ antennali fere brevius, basi antennarum internarum longius, supra 6-dentatum, dente postico inter oculos, infra unidentatum. Antennarum internarum articuli 2dus 3tiusque perbreves. Pedes 2di longi, carpo perbrevis, apice acuto, brachio apice externo acuto, manu subcylindricâ, digitis manu fere triplo brevioribus. *Hab.* in mari Suluensi. *Long.* 9''.

ANCHISTIA LONGIMANA.—Rostrum elongatum, acutum, basi angustum, tenue, supra 6-dentatum, dente postico oculis posteriore. Antennæ internæ elongatæ, articulis basalibus 2do 3tioque longissimis, apice 2di extremitatem rostri fere attingente, 3tio dimidii rostri longitudine. Pedes 2di prælongi, æqui, brachio apicem rostri multo superante, carpo elongatè obconico, apice interno spinigero, manu longâ angustâ, digitis dimidio manus multo brevioribus. *Long.* 6—8''.

ANCHISTIA ENSIFRONS.—Rostrum ensiforme, valde recurvatum, squamâ antennali non longius, apice bifidum, supra 6—7-dentatum, infra paulo dilatatum et 3-dentatum. Carapax super orbitam spinâ armatus, infra orbitam spinis duabus in eâdem lineâ horizontali. Antennæ internæ rostrum parce superantes. Pedes antici graciles, apicem carpi 2di non attingentes; 2di crassiusculi, subcylindrici, per carpum manumque rostrum superantes, carpo longo, apice inermi, obtuso, manu prælongâ, lineari, digitis dimidio manus paulo brevioribus. Pedes 6-sequentes gracillimi, longi, fere nudi. *Hab.* in freto "Balabac." *Long.* 8—9''.

ANCHISTIA AURANTIACA.—Corpus vix depressum. Rostrum angustum, integrum, basis antennarum internarum longitudine, squamâ externarum paulo brevius. Pedes antici superficie manus internâ prope basin densè laxèque pubescentes. Pedes 2di graciles, manu parce crassiore quam carpus, fere lineari, digitis dimidio manus multo brevioribus, parce pubescentibus, angustis. *Hab.* archipelago "Viti." *Long.* 6''.

PALEMONELLA TENUIPES.—Rostrum rectum, non reflexum, squamâ antennali non longius, supra 6—7-dentatum, dentibus inter se fere æquè remotis, infra 2-dentatum et non dilatatum, apice acutum. Pedes 2di valde elongati, apice brachii apicem rostri vix superante et infra supraque acuto, carpo dimidii manus longitudine, apice spinâ armato, digitis dimidio manus brevioribus. Pedes 6 postici gracillimi fere nudi. *Hab.* in mari Suluensi. *Long.* 8''.

PALÆMONELLA ORIENTALIS.—Rostrum rectum, non recurvatum, squamâ antennali non longius, apice acutum, supra 6-dentatum, dentibus inter se fere æque distantibus, infra 1-dentatum. Pedes 2di crassiusculi, subcylindrici, apice brachii apicem rostri non attingente et non acuto, carpo brevior quam dimidium manus, apice non acuto, digitis dimidio manus brevioribus. Pedes 6 postici fere nudi, graciles. *Hab.* in mari Suluensi. *Long.* 8'' (feminæ ovigeræ.)

Genus PALÆMON.

1. *Carapax margine antico infra oculum spinis duabus armatus.*

PALÆMON DEBILIS.—Rostrum prælongum, gracile, paulo recurvatum, squamâ antennali multo longius, apice bifidum, dimidio apicali supra integro, basali 4—6-dentato, margine inferiore 6—9-dentato. Antennarum internarum flagella duo longè conjuncta. Pedes nudi, inermes; 1mi 2dique inter se subæquales, parvuli, gracillimi, manu dimidio carpi paulo longiore, non incrassatâ. Flagellum antennarum internarum minus perbreve. *Var. α*, Rostrum supra 4-dentatum, infra 6-dentatum; *var. β*, *attenuatus*—Rostrum longissimum, supra 6-dentatum et infra 9-dentatum. *Hab.* insulis Hawaiensibus. *Long.* 12—15''.

PALÆMON EXILIMANUS.—Rostrum lanceolatum, apice brevi deflexum, supra paulo arcuatum et 6-serratum, infra 3-serratum, squamam antennalem non superans. Flagella duo antennarum internarum parce conjuncta. Pedes antichi gracillimi, manu plus duplo brevior quam carpus; 2di non crassiores, nudi, manu duplo longiore, carpo dimidio longiore quam manus, digitis dimidio manus paulo brevioribus. Pedes duo postici tenuissimi, prorsum porrecti apicem rostri superantes. *Hab.* archipelago "Viti." *Long.* 1½''.

PALÆMON CONCINNUS.—Rostrum gracillimum, squamâ antennali vix longius, basi antennarum internarum multo longius, ensiforme, fere rectum, apice bifidum vel trifidum dorsoque non altius, infra remotè minutèque 5-serratum, supra 5—6-serratum, dente 1mo vel externo a extremitate rostri remoto, penultimo inter oculos. Maxillipedes externi apicem basis antennarum externarum paulo superantes, hirsuti. Pedes 1mi apicem squamæ antennalis fere attingentes. Pedes duo postici prælongi, tenuissimi, articulo 4to apicem maxillipedis externi fere attingente. *Hab.* archipelago "Viti." *Long.* 1¾''.

2. *Carapax margine antico infra oculum spinâ unâ armatus, poneque hanc alterâ minore.*

PALÆMON GRANDIMANUS.—*Randall*, Jour Acad. Nat. Sci. viii. 142.

PALÆMON LANCEIFRONS.—Rostrum late elevatum, lanceolatum, supra arcuatum et 12-serratum, apice vix recurvatum, infra 3-serratum, squamam antennalem longitudine non superans. Pedes antichi gracillimi, carpo plus duplo longiore quam manus. Pedes 2di longissimi (corpore longiores), fere cylindrici, manu graciliore et non brevior quam carpus, scabriculâ, digitis brevibus, superiore hirsuto. Pedes postici si prorsum porrecti apicem rostri superantes. *Hab.* insulâ "Luzon," archipelagi Phillipensis, prope portum "Manila." *Long.* 2''.

PALÆMON ACUTIROSTRIS.—Rostrum lanceolatum, apice non recurvatum, squamâ antennali non longius, supra 14—16-dentatum, dentibus confertis, et usque ad apicem continuatis, infra 4—5-dentatum. Maxillipedes externi mediocres. Pedes antichi gracillimi, manu dimidii carpi longitudine. Pedes 2di longi, tenues, omnino bene scabri, manu parce crassiore et duplo longiore quam carpus, digitis dimidio manus brevioribus, apice carpi rostrum paulo superante. Pedes sequentes inermes. *Hab.* insulis Hawaiensibus. *Long.* 2½—3''.

PALÆMON EQUIDENS.—Rostrum rectè ensiforme, verticaliter sat latum, apice parce reflexum, squamâ antennali non brevius, supra rectiusculum et 10—11-dentatum, dentibus inter se fere æque remotis, et supra tertiam partem dorsi carapacis continuatis, duobus terminalibus minoribus et fere apicalibus; infra arcuatum et 6-dentatum. Pedes 1mi rostrum multo superantes. Pedes 2di longi, subcylindrici, subtilissimè spinulosi, brachii apice apicem rostri attingente. *Hab.* in mari prope portum "Singapore." *Long.* 4¾''.

CRYPHIOPS SPINULOSO-MANUS.—Rostrum triangulatum, squamâ antennali bre-

vius, basin antennarum internarum superans, supra æque 7-dentatum, infra prope apicem unidentatum. Pedes 2di 1mos vix superantes, minute spinulosi, manu plus duplo longiore quam carpus, digitis dimidio manus longioribus, apice minutè cochleari-excavatis. Pedes antici nudiusculi, manu infra hirsutâ. Pedes 6 postici quoque nudiusculi, articulo 5to infra parce armato, tarsis unguiculatis. *Hab.* in fluminibus Chilensibus mari remotis. *Long.* 3 $\frac{3}{4}$ ".

Subfam. OPLOPHORINÆ.

REGULUS LUCIDUS.—Rostrum prælongum recurvatum, longè acuminatum, versus basin horizontaliter sensim latius deinde lateribus subparallelum, supra 8—9-dentatum infra 3-dentatum. Squama antennalis perangusta, rostro paulo brevior, dentibus tribus externis parvulis. Pedes 2di crassi, manu oblongâ, digitis dimidio manus brevior, parce hiantibus. Pedes 6 postici sparsim laxèque pubescentes. *Hab.* in mari Pacifico, prope insulas "Ladrone." *Long.* 9"'.
 REGULUS CRINITUS.—Rostrum longiusculum, non recurvatum, supra 9—10-dentatum, infra prope apicem 2-dentatum, versus basin super oculos subito valde latior deinde posterius parce angustans. Squama antennalis rostro non brevior, paulo lata, dentibus tribus externis prominentibus. Pedes 2di crassè chelati, manu oblongâ, digitis brevibus, hiantibus. Pedes 6 postici laxè criniti, articulo 3tio parium 3tii 4tique infra 3—4-serrato. *Hab.* in mari Suluensi. *Long.* 10"'.
 Legio III. PENÆINEA.
 Fam. PENÆIDÆ.
 PENÆUS CARINATUS.—Rostrum squamâ antennali parce longius, paulo sinuosum, extremitate styliforme, parce recurvatum, apice vix altius quam dorsum, supra 7—8-dentatum, infra 3-dentatum. Flagella antennarum internarum articulis duobus precedentibus non longiora. Pedes 5ti 4tis non graciliores.—*Hab.* in mari prope portum "Singapore.—*Long.* 7". *P. setifero* affinis, sed rostrum infra 3-dentatum.
 PENÆUS AVIROSTRIS.—Rostrum rectum, extremitate anguste styliforme, et edentatum, non recurvatum, basi supra prominenter dilatatum et 6-dentatum, infra rectissimum, integrum, longitudine squamam antennalem non superans. Carapax dorso postico non carinatus nec sulcatus. Flagella antennarum internarum articulis duobus precedentibus non longiora. Oculi breves. Pedes 5ti 4tis multo graciliores. *Hab.* in mari prope urbem "Singapore." *Long.* 5".
 PENÆUS VELUTINUS.—Carapax abdomenque omnino breviter velutini. Rostrum rectum, bene lanceolatum, e basi ascendens, usque ad apicem supra denticulatum, dentibus septem æque dispositis, altero paulo posteriore, infra integrum, ciliatum, rectum. Dorsum carapacis posticum non carinatum nec sulcatum. Pedes 2di 3tiique subæqui. Maxillipedes externi longi, pubescentes. Segmentum caudale utrinque minutè armatum. Flagella antennarum internarum brevissima, articulum ultimum parce superantia. *Hab.* insulâ "Maui Hawaiensi.—" *Long.* 1 $\frac{1}{4}$ ".
 PENÆUS TENUIS.—Rostrum supra multidentatum (dentibus novem vel pluribus,) parce sinuosum. Carapax dorso postice non carinatus nec sulcatus. Oculi sat longi. Flagella antennarum internarum subæqua, carapace vix breviora. *Hab.* in mari Atlantico prope portum "Rio Negro" Patagoniæ.—*Long.* 1 $\frac{1}{2}$ ".
 PENÆUS GRACILIS.—Gracillimus. Rostrum rectum, sat breve, oculis vix longius, supra 5-dentatus. Antennarum internarum basis tenuis, longissimus, carapacem longitudine æquans. Manus pedum sex anticorum carpo vix longior, apice parce pubescens; digiti dimidii manus longitudine. Segmentum caudale margine tri-spinulosum; lamella externa non articulata.—*Hab.* in mari Suluensi. *Long.* 8—9"'.
 STENOPUS ENSIFERUS.—Carapax plerumque lævis, 2—3 sulcis obliquis intersectus, uno validiore e dorsi medio fere ad angulum antero-lateralem producto et margine spinuloso, superficie carapacis antero-laterali spinulis armatâ; rostro ensiformi, paulo longiore quam basis antennarum internarum, fere recto, apicem

vix recurvato, supra 10-dentato, infra 3-dentato. Abdomen inerme.—*Hab.* archipelago "Viti."—Long. 6'''.

FAMILY EUCOPIDÆ.

EUCOPIA AUSTRALIS.—Carapax fronte truncato-rotundatus, margine postico profunde excavatus. Segmentum abdominis penultimum ultimo longius, ultimum subulatum, lamellis caudalibus vix longius. Antennæ internæ externis paulo breviores, dimidii corporis longitudine, flagello uno brevi; externarum squama basalis basi internarum multo longior. Maxillipedes 2di et 3tii et pedes 1mi formâ consimiles, sensim increscentes, articulo penultimo angustè oblongo, digito plus dimidio brevior quam articulus precedens. Pedes reliqui gracillimi, criniti, palpo longo, natatorio.—*Hab.* in mari antarctico, lat. aust. 66° 12' long. occ. 149° 24'; e stomacho Penguini lecta.—*Long.* 1''.

The Third Resolution of the Committee appointed to inquire into the expediency of enlarging the Hall of the Academy, the consideration of which had been deferred until the present meeting, was then taken up, and adopted as follows:

Resolved,—That all subscribers of One Hundred dollars and upwards, who are not members of the Academy, shall have, during their lives, the right to visit the Collections of the Academy, and to give orders of admission to the Museum on public days.

The Report of the Publication Committee for 1851, was read and adopted.

The Corresponding Secretary read his Report for the last two months, which was adopted.

The Recording Secretary read the Annual Report for 1851, which was ordered to be published.

REPORT

OF THE RECORDING SECRETARY

For 1851.

During the past year twelve Members and eight Correspondents have been elected.

Five members have died, to wit: Dr. Samuel George Morton, late President of the Academy; Mr. William Hembel, formerly President of the Academy; Dr. John K. Townsend, Dr. Mark M. Reeve, and Mr. Richard C. Taylor.

The present number of Members of the Society is 187. The whole number of Correspondents elected up to the present time is 551.

Besides minor and verbal communications, the following written communications have been presented for publication in the Proceedings and Journal of the Academy.

By Louis Berlandier, M. D.—Descriptions of two new species of Mexican Wolves.

By Mr. John Cassin, seven; to wit: 1. Sketch of the Birds composing the genera *Vireo*, Viell., and *Vireosylva*, Bonap., with a list of those previously known, and descriptions of three new species. 2. Descriptions of new species of Birds of the genera *Galbula* and *Bucco*, Briss., specimens of which are in the collection of the Academy of Natural Sciences of Philadelphia. 3. Notes of an examination of the Birds composing the family *Caprimulgidæ*, in the collection of the Academy of Natural Sciences of Philadelphia. 4. Descriptions of new species of Birds of the family *Laniadæ*, specimens of which are in the collection of the Academy of Natural Sciences of Philadelphia. 5. Note on the Cicada