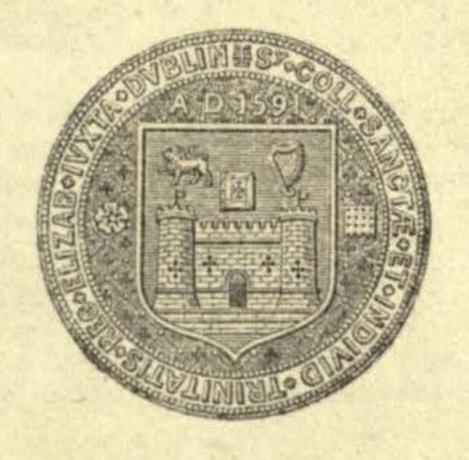
PROCEEDINGS

OF THE

DUBLIN UNIVERSITY

ZOOLOGICAL & BOTANICAL ASSOCIATION.

VOLUME I.





Mith Thirty-one Lithographic Plates.

DUBLIN:

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1859.

Total number of species, 26, or about half the number recorded as occurring in England and Scotland. This difference will, I trust, be greatly diminished in a few years.

Lucernariadæ.

Lucernia auricula.—Occurs on various parts of the coast. It is mentioned as found in the county of Antrim by Thompson. I have taken it at Portrush, near the Giant's Causeway, and at different parts of the coasts of Cork and Kerry.

L. fascicularis.—Donaghadee (W. Templeton), along the shores of Ventry Bay. It is rather common.

L. campanulata.—Miltown Malbay (Professor Harvey); Bray (Dr. Ball); Kerry (E. P. W.).

Hydra tuba. Galway (Professor J. Reay Greene); Dublin Bay (E. P. W.).

The Lucernariadæ have such undoubted affinities to the Hydrozoa, that I could not include them in my list of Zoantharia. I hope on a future occasion to lay before the Association a more carefully compiled list of our Irish habitats, with an account of a new species that occurred to me on the shores of Ventry Bay.

Dr. Kinahan read the following paper-

ON THE GENUS PLATYARTHRUS (BRANDT); WITH NOTICES OF ALLIED UNDE-SCRIBED GENERA. (WITH PLATE XIX.)

The genus Platyarthrus, established by Brandt in 1833,* has been hitherto very imperfectly characterized. With the exception of Brandt's original and imperfect description given below (vide note), there is no published description of either genus or species, unless Itea crassicornis (Koch), described in Panzer's "Fauna Germanica." I, therefore, take the opportunity of the discovery of this animal in England, by the Rev. A. R. Hogan, to draw up a full description of it, and also of other imperfectly known or new genera of the same great family, Oniscoidea.

^{*} Genus Platyarthrus (Brandt).—"Ultimus antennarum articulus, conicus, penultimus oblongus, dilatatus, compressus. Antennæ sexarticulatæ.

[&]quot;Platyarthrus Hoffmannseggii (nobis). Patria. Germania. Conspectus monographiæ Crustaceorum Oniscodorum Latreillii. Mosquæ, p. 12."

Shortly after the communication of this species to me by its discoverer in England, the Rev. Mr. Hogan, M. H. Lucas showed me, at the Jardin des Plantes in Paris, specimens taken by him at Fontainbleau, with the remark that the species appeared to him to be undescribed. These specimens he had obtained from ants' nests; he also informed me that in Algeria he had met with an Oniscoid having the same habits, of which he kindly gave me specimens for description, and which I have named Lucasius myrmecophilus (Lucas' sp).

The singularity of the usual habitat of these animals may well excite attention. It is true that many other isopods are occasionally found in ants' nests. Thus, last month, in the nests of Myrmica rubra, fusca and nigra, at Bray Head, I met Porcellio scaber, Philoscia muscorum, Oniscus fossor, and Armadillium vulgare, but all appeared to be only accidental visitors, not regular denizens, as Platyarthrus is stated to be. On the occasion just noted, I searched upwards of seventy ants' nests, but unsuccessfully, for Platyarthrus Hoffmannseggii; the season may have been too late.

In Brandt's description, given before, the number of articulations in the tige of the external antennæ is incorrectly given, but this organ is so often inaccurately described by the older authors, that the discrepancy need not excite any surprise.

The affinities of the genus would lead me to place it near Porcellio, from which genus it differs chiefly in the shortness of the external antennæ, the shape of the fifth joint of that organ, the remarkable mode in which the posterior pleopods and the telson are articulated together, and in the form of the head. However, I think the genera may very judiciously be placed in the same family as I before suggested in my paper, read before the British Association in 1857,* forming, along with Oniscus, Porcellio, and Deto, a well-marked natural family.

The arrangements of the parts of the head and its lobes are unique in the family, though at first sight obscure, requiring a skilful manipulation of the light, &c., to make out; and in a short notice of this species, communicated by me to the "Zoologist" for 1858, I fell into the error of supposing that the same arrangement prevailed here as in Porcellio. The fact is, that in this genus these parts approach more closely in arrange-

[&]quot;"An Analysis of certain allied Genera of Terrestrial Isopoda," &c., "Nat. Hist. Rev.," vol. iv., Proc. of Soc., p. 274, et seq.

ment to Armadillium, the lobes, both lateral and frontal, being derived from the cephalic or mandibular (i. e. fourth) somite, and not from the third, or second antennary. This latter is but badly developed here, and small; but at the same time, the distinctions between it and the fourth somite are distinctly appreciable on a careful examination.

The articulation between the posterior pleopod and the telson (last ring) is very remarkable. The telson is totally devoid of coxæ, and the ring continued beneath the body terminates abruptly on either side in a rounded lobe, so that the central portion of the body underneath is unprotected, the ring being wanting in the median line. The posterior pleopods are articulated to the superior border of the inferior (sternal?) part of the ring, a little internal to the external lateral angle, by a well-marked ball and socket joint, so that at first sight it appears as though these appendages were derived from the penultimate (fifth) somite, and not from the telson.

The internal antennæ are three-jointed, i. e. a peduncle and a two-jointed filament. I find this arrangement of parts in nearly all the Oniscoids I have examined, and therefore conclude that it is the normal arrangement of parts in this group, and characteristic of them.

Family.—PORCELLIONIDÆ.

Genus 3.—Platyarthrus (Brandt).
(Πλατυς αρθρος.)

Telson (cingulum ultimum) coxis obsoletis. Pleopoda posteriora (pedes spurii) sub nuda, ad telson angulum superiorem externo-latera-lem, articulata, basis subrotundus; Ischium trigonum, satis appendiculatum. Antennæ internæ 3-articulatæ. Antenn. extern. basîs, articulus 2dus minute-lobatus, articulus 5tus dilatatus compressus. Filamentum 2-articulatum. Abdominis cingulûm, coxæ 1mi et 2di obsoletæ, 3tii, 4ti, 5tique magnæ. Carapax frontaliter et lateraliter lobatus. Species, una, P. Hoffmannseggii.

1.—Platyarthrus Hoffmannseggii (Br.).

Corpore omnino dense scabro; cingulûm marginibus tuberculis scabris crenulatis. Fronte arcuato, lobato; lobis lateralibus, prominentibus; lobo frontali arcuato setis crassis ornato. Antennis ut genus, scabris et hirtis. Cephalothorax: cingulûm coxis bene productis.

Abdominis coxis ut genus. Telson (cing. ult.) triangulare; lateribus excavatis, superne sub-sulcato; setis tuberculisque marginato.

Habitat: in formicariis ad "Lulworth Cove, Sussex," Angliâ, Rev. A. R. Hogan. Et Gallia in formicariis ad Fontainbleau, Paris, M. H. Lucas.

PLATYARTHRUS (Brandt).

Body flattened; head transverse; lateral and rontal lobes strongly marked, arising from frontal margin, which passes deeply down into the third ring. Third ring reduced to a small triangular plate on each side.

Internal antennæ three-jointed.

External antennæ: peduncle five (5) jointed, second joint slightly lobed internally, fifth broad and flattened. Tige two-jointed, rounded, scabrous.

Cephalothorax: coxæ well developed, somewhat squared. Abdomen: coxæ of first and second somites obsolete; coxæ of third, fourth, and fifth well developed, curved downwards. Telson (last somite): coxæ obsolete.

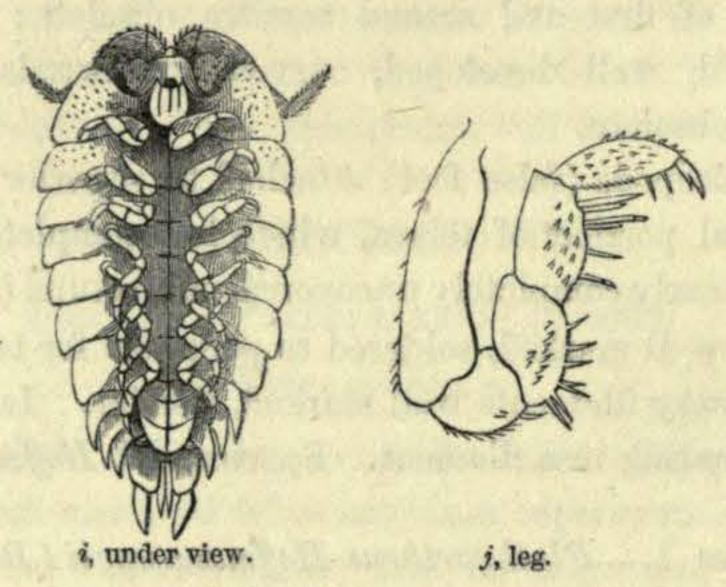
Posterior pleopods (false feet) attached to superior external lateral angle of ventral portion of telson, which is incomplete beneath. Peduncle (basis) nearly completely uncovered, sub-rotund (?), sides parallel. Accessory lobe well marked, soldered to peduncle for two-thirds of its length. Accessory filaments well marked, slender. Ischium flattened, trigonal, terminating in a filament. Species, *Pl. Hoffmannseggii*.

Species 1 .- Plathyarthrus Hoffmannseggii (Brandt).

Body scabrous, covered with compressed, scale-like, club-shaped prominences. The posterior margins of the cephalothoracic and abdominal somites edged with similar prominences, so as to appear crenulated; on the lateral borders of the coxæ these become converted into curved bristle-like hairs, best marked on the abdominal somite.

Head densely scabrous, somewhat triangular, deeply embedded in the fifth ring of the cephalothorax, arched in front. Lateral lobes prominent. Frontal lobe continuous across forehead, arcuate, fringed with coarse hairs. Internal antennæ inconspicuous. External antennæ densely scabrous. Peduncle: 1st joint short; 2nd, with a small lobe on inner edge; 3rd, triangular and short; 4th, superior border deeply emarginate, lobed; 5th, at its origin narrow, then suddenly enlarging its sides, becoming parallel. Tige two-jointed, equal in length to the fifth joint of the peduncle, which nearly conceals the basal articulation of tige, which is very short; terminal articulation conical, terminating in a bristle, and densely hairy.

Coxe of cephalothoracic rings well developed, and, except that of head, quadrate, the posterior angles directed downwards. Coxe of abdominal rings well developed. Telson triangular, excavate at the side, a shallow pit on its upper surface, the posterior border margined with hairs and tubercles. Posterior pleopods scabrous. Peduncle subrotund, somewhat quadrilateral, sides parallel, the inferior articulation crenulated on its margin. Accessory lobe well marked, though small, arising from inferior border of peduncle. Accessory appendage slightly curved, rounded, scarcely attaining to apex of peduncle. Ischium flattened. Trigonal scabrous, equal to peduncle in length.



Pl. Hoffmannseggii.

Colour: dead white, the intestinal band showing through.

Habitat: nests of ants.

Localities: Lulworth Cove, Sussex; Rev. A. R. Hogan. Fountainbleau; Paris, M. H. Lucas.

This interesting animal has much the aspect of a Porcellio; the character of the antennæ, however, easily distinguishes it generically, as well as the mode of attachment of the false feet of the last pair.

From Mr. Hogan's description (vide p. 170, ante), its habits appear to resemble those of Porcellio.

The only detailed description that I can find at all approaching the

species here given is Henrich Schæffer's continuation of Koch's "Fauna Germanica,"* and is here quoted:—

Itea crassicornis.

"T. alba, dorso subflavescens, antennis pedibusq; crassis, Koch Dtschl. Crust. Myr. u. Arachn. h. 36. n. 5.

"Nearly the shape and size of Itea rosea (Philougria rosea), but the last ring of the tail (telson) short, and the tail appendages (schwanzgabel) shorter and thicker. The surface of the body-rings dull, and very finely rippled, that of the last ring (schwanzringe) somewhat glossy; the three front (anterior?) (vordern) joints of the antennæ short and narrow at the base; the fourth, thick, somewhat long, enlarged into a belly behind (das vierte dick, ziemlich lang, hinten bauchig erweitert). The filament (Endglied) somewhat shorter than the fourth articulation; conical, passing into a point, small, bristle-like, and point much drawn out.

"The head and antennæ, body, tail, and legs, white, streaked on the back with yellowish; the track of the intestine brown.

"Found in the neighbourhood of small water-cisterns, and other wet places,—the borders of castle ponds, where it is somewhat common."

The figure which accompanies this description is characteristic, and, as has been before observed in treating of the genus Philougria,† differs altogether from the other forms associated as Itea. The description of the antennæ is very characteristic, bearing in mind that Koch has overlooked the existence of the first joint of the peduncle of the external antennæ; so that the joint described by him as the fourth is really the fifth, or that on the form of which Brandt has founded the genus. The habitat assigned to this species alone makes me hesitate, though perchance it will be found that this discrepancy is more apparent than real.

Itea crassicornis, or, at least, a species under this name, is also described by A. M. Stein in his "Catalogue of the Crustacea and Myriapoda of the Grisons," published in the "Annual Report of the Natural History Society of the Grisons," 1855. I have not seen this notice, and

^{* &}quot;Deutschlands Crustaceen, Myriapoden u: Arachniden herausg: von Herr-Schäffer, 186, 5."

^{† &}quot;Proc. Nat. Hist. Soc. Dublin," vol. ii., p. 112.

am indebted to my friend, A. H. Haliday, Esq., for the note of its occurrence. Fifteen species of Oniscoids are there described, including this species and *Trichoniscus roseus*. This last, I suspect, is *Itea rosea* of Koch—my *Philougria rosea*—a species, by the way, which, although wanting in the Museum of the Jardin des Plantes, I found (August, 1858) to be exceedingly common on the quays, and in other places in the neighbourhood of Dieppe, replacing, in a great degree, *Philougria riparia* of the British shores. Possibly this species may have been introduced from some of the French ports into Plymouth.

In the "Revue et Magazine de Zoologie, 1853," in some "Observations on two new Genera of Coleoptera, inhabitants of Ant-hills," by M. H. Lucas, mention is made of an Oniscoid found by M. Lucas, according to a note he kindly furnished me with, "in the neighbourhood of Medeah, in Algeria, under moist stones in ant-hills of Myrmica testaceopilosa," and which M. Lucas, but without description, has named Porcellio myrmecophila. Examination of specimens kindly communicated to me by the discoverer proves that the species belongs to a genus nearly allied, in some characters, to Trichoniscus, as described by that author. I have therefore constituted for it a genus, to which I would, from the discoverer of the species, append the name of Lucasius.

Family.—LUCASIDÆ.

Genus.—Lucasius (n. g.) (a M. H. Lucas).

Telson (cingulum ultimum) coxis obsoletis. Pleopoda posteriora (pedes spurii), duas partes longitudinis telson celata, ad telson marginem exteriorem articulata, basis quadrilateralis. Ischium trigonum nudum, lobus accessorius satis magnus. Appendix crassus. Antenn. extern. terarticulata. Antenn. extern. basis lobatus, filamentum bi-articulatum; articuli inter se valde inæquantes. Abdominis cingulûm coxæ, 1mi et 2di absunt, 3tii, 4ti, 5tique satis magnæ. Carapacis lobi laterales magni, lobus frontalis abest. Species una. (Lucasius myrmecophilus.)

1.—Lucasius myrmecophilus (Lucas' sp.).

Corpore, toto sub piloso, carapace granulato. Fronte arcuato. Telson triangulare subsulcato apice acuto, nitido. Pleopodis posterioribus setis sparsis obsessis. Ischio trigono. Appendice accessorio pilis validis

ornatis; vix basis longitudinem æquante. Habitat in formicariis. Myr-micæ testaceo-pilosæ, ad Medea Algeriam in Africam (teste M. H. Lucas).

The affinities of this genus are not so easy of solution as those of the last; for whilst in the characters of its antennæ it approaches somewhat the Philougridæ, in those of the telson and its appendages it comes nearer to the Porcellionidæ. Unwilling to include in that family a genus having no frontal lobe to the carapace, and the absence of coxæ to the first and second abdominal rings, separating it from Philoscidæ, for the present I prefer to refer it to the same group as Trichoniscus, which, as I find by examination of the specimens in the Paris Museum, has the same peculiarities. Whether the species to which I refer has been correctly referred by M. H. Lucas, in his "Exploration Scientifique de l'Algerie," to Brandt's genus, it is impossible to tell, as Trichoniscus, like all the genera established in the "Conspectus Oniscodorum," is most imperfectly described; whilst the species in M. Lucas's work is both described and figured in detail, and may therefore justly stand for the type of the genus.

Trichoniscus pusillus of Brandt, the original type species, appears to be hitherto undescribed, and unfigured, at least under this name. In one respect there is a discrepancy between Brandt's generic description and the species described by M. Lucas—viz., in the characters of the tige of the external antennæ, which are thus given by Brandt:—"Antennæ six-jointed, last joint setaceous, penultimate, cylindrical, slender."—Conspectus, p. 12. But as Brandt has also, and most incorrectly, as shown in a former part of this paper, included under his Hexarthrica the genus Platyarthrus, he is probably in error here also, especially as in M. Lucas's type specimens of Trichoniscus, which the authorities of the Jardin des Plantes liberally permitted me to examine, I found that the basal joint of the tige was minute, and easily overlooked by the naked eye. I question the existence of an Oniscoid with a single joint only in the tige; for though such, doubtless, might exist, none is at present known.

The genus Trichoniscus, as thus established, differs from my new genus Lucasius in having the lateral lobes of carapace less prominent and continuous in front of the orbits, though not prominently so. The form of the body and posterior pleopod resembles Porcellio. The telson approximates that of Lucasius, with which other characters point out a close affinity.

LUCASIUS (n. g.).

Body flattened; head transverse; no frontal lobe; lateral lobes well marked, arising from third segment beneath orbits.

Internal antennæ three-jointed.

External antennæ: peduncle, second articulation squared, lobed; fifth, scarcely broader than filament; tige two-jointed; articulations conical, very unequal in length.

Cephalothorax: coxæ well developed.

Abdomen: coxæ of first and second somites obsolete; coxæ of third, fourth, and fifth, narrow, curved backwards. Telson (last somite): coxæ nearly obsolete.

Posterior pleopods (false feet) arising from inner margin of telson. Peduncle nearly completely concealed by last ring; quadrilateral. Accessory lobe well marked, arising from base of peduncle. Accessory filament slender; blunted at the apex. Ischium trigonal, uncovered for two-thirds its length. Species: L. myrmecophilus.

Lucasius myrmecophilus (Lucas' sp.).

Synonyms: Porcellio myrmecophilus (Lucas, "Revue de Zoologie"). Body covered sparingly with tufts of hair shining, head granulated. Granulations continued down on first, second, and third cephalothoracic segments. Internal antennæ inconspicuous. External antennæ: peduncle hairy, five-jointed. First articulation short and linear; second, squared, twice the length of first; third, short and triangular; fourth, triangular; fifth, nearly twice the length of fourth; the superior margins of all the articulations deeply emarginate. Tige: first joint extremely short; second joint equal to second, third, fourth, and fifth of peduncle, conical, surrounded by regular circlets of hairs.

Telson triangular, apex acute, sides straight, a shallow pit marking its upper surface. Sparsely covered with hairs, but shining. Posterior pleopods covered with scattered hairs. Basis flattened, quadrilateral, hairy. Accessory lobe short. Accessory appendage scarcely attaining apex of basis, stout, hairy, blunt-pointed. Ischium trigonal, hairy.

Habitat: the nests of Myrmica testaceo-pilosa (Luc.).

Locality: Medeah, Algeria, Africa, where it was discovered by M. H. Lucas, Membre de la Commission Scientifique l'Algerie, after whom I have named the genus.

For the means of describing the following genera I am indebted to the courtesy of Adam White, Esq., of the British Museum, who kindly permitted me to take the necessary notes and figures from specimens in that collection.

Genus.—Acanthoniscus (A. White; Gosse's "Jamaica").

Body somewhat globose; head rounded; no true median or lateral lobes; a pair of small spurious lateral lobes beneath orbits, arising from production of antennary ring; external antennæ (?); internal antennæ three-jointed.

Cephalothorax: coxæ well marked. Abdomen: coxæ of first and second somite obsolete; third to fifth narrow.

Telson: coxæ obsolete; posterior pleopods (false feet) nearly uncovered; peduncle (basis) somewhat triangular, broad; accessory lobe badly marked; accessory appendage inserted nearly on same line with ischium, flattened, rounded at the extremity; ischium long subulate. Species, A. spiniger.

Acanthoniscus spiniger. (A. White, "Brit. Mus. Cat.," p. 99.)

Body covered over with long spines arranged in a double longitudinal row, one spine to each ring. In cephalothorax a second row of shorter spines (two to each ring) on each side at junction of coxæ and body.

Head covered with coarse knobs; two minute spines behind; a raised emarginate ridge marks out front.

Coxæ of first cephalothoracic somite expanded into a circular lobe; coxæ of second to sixth somite narrow; seventh, somewhat quadrilateral.

Abdominal somites: coxæ, first and second, obsolete; third, fourth, and fifth, narrow, curved, triangular.

Telson cordato-panduriform, apex deeply notched, its extremities triangular, produced, acuminate; sides of telson deeply incurved at base, and then broadly convex. Posterior pleopods: accessory filament somewhat flattened; rounded at the extremity, about half length of ischium, and arising from a point distant from apex about a third of total length of peduncle. Ischium long and subulate. Peduncle prolonged as a spine external to origin of ischium.

Colour: deep chocolate brown black, with lighter patches.

Locality: Jamaica.

The specimen in the British Museum, the only one I have seen, wants the external antennæ; but from the fragments of those that remain, and other characters, an affinity can be traced between this genus and the Porcellionidæ. See remarks on Deto, infra.

The form of the telson is unique; the posterior pleopods show an approximation to Deto; but in the absence of the antennæ it is impossible to speak positively.

Family.—PORCELLIONIDÆ.

Genus.—Ourachærus (A. White, "Brit. Mus. Cat.," p. 100.)

Body flattened; head transverse; lateral and frontal lobes well developed. Internal antennæ three-jointed. External antennæ: peduncle five-jointed; tige two-jointed, conical. Cephalothorax: coxæ well developed. Abdomen: coxæ, first and second somite obsolete; third to fifth, narrow, curved, and long. Telson: coxæ obsolete. Posterior pleopods: peduncle quadrilateral. Accessory lobe extremely minute, arising from posterior margin of peduncle. Accessory filament minute, subtrigonal. Ischium long, flattened, and spathulate. Species, O. caudatus.

Ourachærus caudatus. (A. White.)

Body oval, shining, covered with smooth granules. Head transverse, faintly tuberculated. External antennæ: peduncle longitudinally sculptured; first articulation, short; second, broader, its margins produced, and angular; third, same length as second, but somewhat narrowed; fourth, three times length of second, its upper margin furnished with a moderate-sized tooth; fifth, twice length of fourth, slender and narrow. Tige two-jointed; basal articulation, four times length of terminal, which is conical.

Telson triangular, acuminate. Posterior pleopods as genus. Accessory filament barely attaining to apex of peduncle. Ischium lamellar, spoon-shaped, flattened, nearly six times as long as peduncle.

Locality unknown.

The general outline and appearance of the surface of the body of this strange species closely resembles *Oniscus murarius*, as well as the form and development of the coxæ and telson. The characters of the ischium of the posterior pleopods, as regards form, separate it from all known genera, but the agreement in characters of the posterior pleopods (this alone excepted), telson, and arrangement of parts of the head, induce me to place it in the Porcellionidæ, as an osculant genus to Scyphax of the Philoscidæ. *Porcellio Wagneri (Brandt)* shows an approximation to the form of the posterior pleopods.

Family.—PORCELLIONIDÆ.

Genus .- Deto (Guerin Meneville).

Body convex. Head: lateral lobes well developed. Internal antennæ three-jointed. External antennæ: peduncle five-jointed; second articulation rounded, unlobed; tige four-jointed. Posterior pleopods: peduncle triangular, lamellar; accessory lobe well marked, arising from base of peduncle. Ischium compressed, trigonal, acuminate. Accessory appendage trigonal, slender. Species, Deto echinata (Guerin Meneville) Deto Whitei (n. s.).

- 1. Deto echinata (Guerin) ("Mag. Zoolog." Cl. vii., Plate xxiv., Figs. 1-4).—Head and cephalothorax granular, and clothed with a double longitudinal line of strong spines. Abdomen smooth; telson triangular-acute at the apex.
- 2. Deto Whitei (n. s.).—Cephalothorax spined: abdomen: first somite smooth; second to fifth spined. Telson smooth, rounded at the apex. The spines on the second and fifth abdominal rings are sometimes replaced by rounded granules.

I have named this well-marked new species after Adam White, Esq. The examination, through the kindness of that gentleman, of the typical specimen on which M. Guerin Meneville founded this genus, enables me to refer this genus positively to the family Porcellionidæ, the number and form of the joints in the tige, and the spiny armature of the body, alone separating it. Porcellio echinatum (Lucas) approaches it very closely in this last character. It also displays considerable affinity to the genus Acanthoniscus, (White), but at present it would be unadvisable to unite the two in the one family.

Genus .- Pyrgoniscus. (A. White in lit.)

Body flattened. Head transverse; frontal lobes cleft in centre, arising from cephalic ring, broad, squared, passing out on each side, and zool. & bot. soc. proc.—vol. I. 2 E

concealing lateral lobes and peduncle of external antennæ. Lateral lobes small, arising internal to external antennæ. Internal antennæ three-jointed. External antennæ(?). Cephalothorax: coxæ well developed. Abdomen: coxæ of first and second somite obsolete; coxæ of third to fifth well marked. Telson: coxæ obsolete; posterior pleopods uncovered; peduncle triangular, truncate at apex; accessory lobe minute, arising from superior border of peduncle. Accessory appendage subulate. Ischium arising from inner margin near apex of peduncle, short and conical.

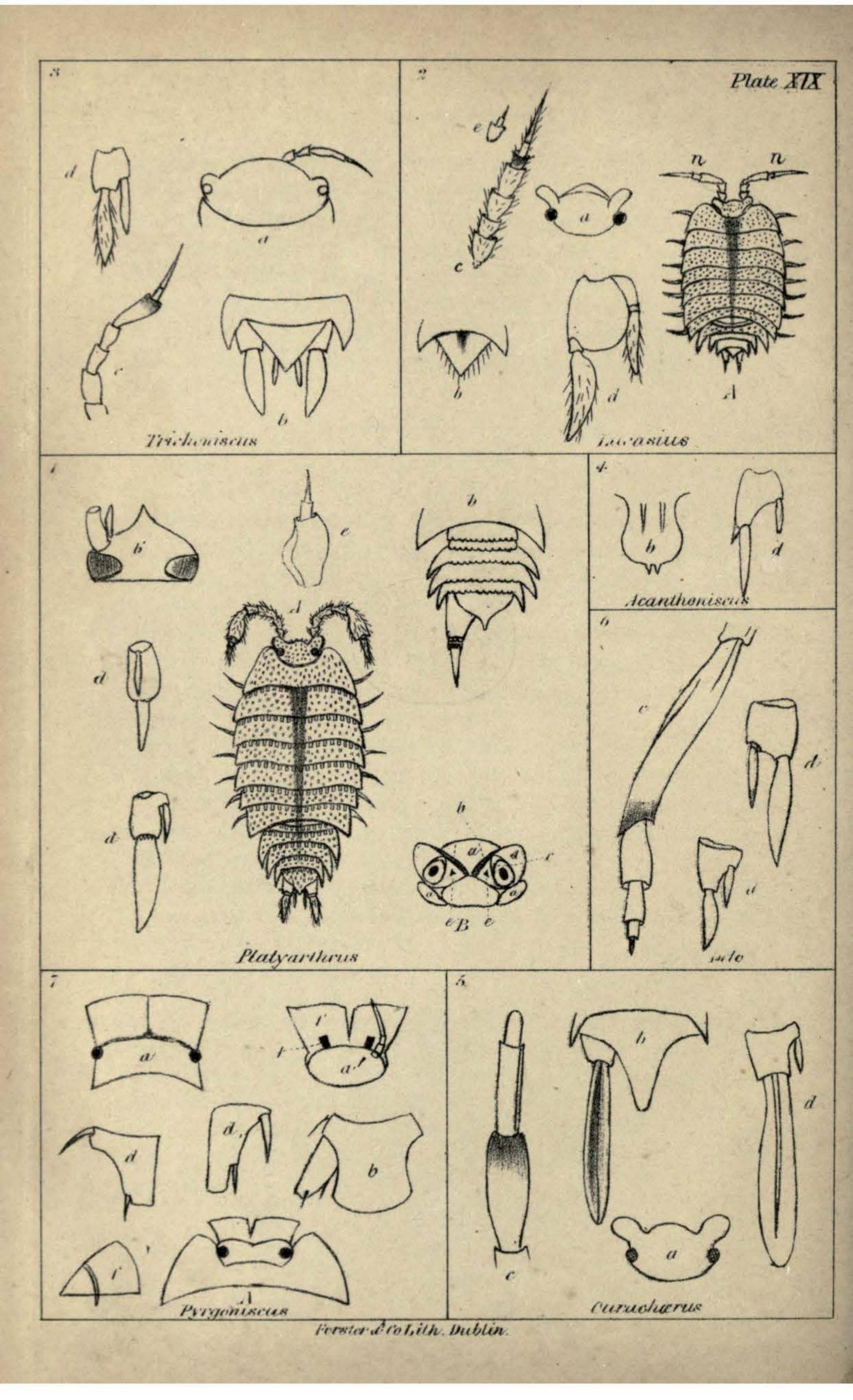
Species.—Pyrgoniscus cinctutus.

Body broadly oval, smooth. Head deeply embedded in coxæ of first cephalothoracic ring; frontal lobe cleft in the median line, broad, flattened, and squared, completely concealing lateral lobes; lateral lobes small, quadrilateral. Cephalothorax: coxæ of first somite irregularly quadrilateral, expanded in front, and touching produced frontal lobes; coxæ of second to seventh somites quadrilateral, a raised transverse median ridge marking each somite. Abdomen: coxæ, third to fifth somite curved backwards. Telson deeply excavate at sides; apex broadly, truncately rounded. Posterior pleopods: peduncle broad, filling space between telson and fifth somite, inner border excavate at base, outer border straight, apex rounded, the whole representing a right-angled triangle, with truncate apex. Accessory appendage about one-third length of peduncle, which conceals it. Ischium arising from inner margin of peduncle a little below its apex, subulate, minute, scarcely attaining apex of peduncle, which is squared.

A narrow raised ridge marks insertion of legs beneath cephalothoracic somite, this is produced backwards, as a tooth, passing beyond posterior margin of somite.

Locality: Eastern Seas.

In many of its characters this genus approaches the Armadillidæ, near which family it should doubtless stand. The characters of the lobes of the head are but an exaggeration of the form of arrangement prevailing in some of that group. Unfortunately, in the specimen shown me the external antennæ were injured. Mr. White informs me it was procured in the Eastern Seas during the exploration of H. M. S. Herald.



DESCRIPTION OF PLATE XIX.

No. 1 .- A. Platyarthrus Hoffmannseggii, much enlarged.

- B, details of under side of head; a, frontal ring; b, suture; c, external antennary plate; d, lateral lobes; e, internal antennary plate.
- b, abdominal rings &, showing absence of coxæ in first and second rings.
- b', under view of telson, showing attachment of posterior pleiopod.
- d, d, back and lateral view of posterior pleiopods.
- e, internal antennæ.

No 2.—A. Lucasius myrmecophilus, enlarged.

a, back view of head; b, telson; c, external antennæ; d, posterior pleiopod; e, internal antennæ.

No. 3 .- Trichoniscus.

a, back view of head; b, last abdominal ring, telson, and appendages; c, external antennæ; d, posterior pleiopods.

No. 4.—Acanthoniscus spiniger.

b, telson; d, posterior pleiopod.

No. 5.—Ourachærus caudatus.

a, head; b, telson; c, fourth and fifth joint and tige of external antennæ; d, posterior pleiopods.

No. 6.—Deto Whitei.

c, fourth and fifth joint and tige of external antennæ; d, d, front and back view of posterior pleiopods.

No. 7.—Pyrgoniscus cinctutus.

- A, head and first ring; a, back view of head, showing frontal lobes; a', under view of head, showing—(1) lateral lobes, and (1') frontal lobes and external antennæ.
- b, telson and posterior pleiopods.
- d, d, frontal and back view of posterior pleiopods.
- f, under view of coxæ of cephalothoracic ring, showing transverse ring and process.