

Attached to the exterior of several shells were some curious dull green objects resembling fronds of *Fucus*. These consisted of a thallus-like expansion firmly adherent to the shell, ending in a free vesicle, the contents of which resemble yolk of egg; they are perhaps eggs of some fish.

Family *Mytilidæ*.

10. *Modiola*, sp.

An almost characteristic inhabitant of the mud of the Bay of Bengal, as at present explored, in and near 100 fathoms, is a species of *Modiola* with a very thin, transparent, polished shell of an olive or dull yellow colour. The byssus is a large bunch of fine silky threads saturated with fine mud usually. Met with in beds in thick mud in 89 to 93 fathoms, and on sand in 98 to 102 fathoms.

[To be continued.]

II.—*Notes on Longicorn Coleoptera of the Group Cerambycinae, with Descriptions of new Genera and Species.* By CHARLES J. GAHAN, M.A., Assistant in the Zoological Department, British Museum.

[Continued from vol. vi. p. 261.]

SINCE the first part of these notes was written Professor Chr. Aurivillius, of Stockholm, has called my attention to two species belonging to the group, which were described by Dalman in Schönher's 'Synonymia,' and which have apparently been omitted from the Catalogue of Gemminger and Harold. The first species—*Lamia serricornis*—is considered by Prof. Aurivillius to be identical with *Prospilus pilosicollis*, Thoms.; and with this conclusion I quite agree. The synonymy of the species will accordingly read:—

Prospilus serricornis, Dalm.

= *Lamia serricornis*, Dalm. Schönh. Synon. i. 3, Appendix, p. 160.

= *Prospilus pilosicollis*, Thoms.

Prof. Aurivillius was good enough to send me for examination some specimens of the second species mentioned above—*Lamia umbrina*, Dalm. These were found to agree quite well

with typical specimens of *Plocederus nitidus*, a species which I regard as synonymous with *Plocederus ferrugineus*, Linn. (see Ann. & Mag. Nat. Hist. ser. 6, vol. v. p. 51). The species with its synonyms and varieties may therefore be written as follows:—

Plocederus ferrugineus, Linn.

= *Cerambyx ferrugineus*, Linn., Oliv., et Fabr.

= *Cerambyx gigas*, Fabr.

= *Lamia unbrina*, Dalm. in Schönh. Synonym. i. 3, Appendix, p. 161.

= *Hammaticherus nitidus*, White.

Var. *P. versutus*, Pasc. (*Cerambyx*).

Var. *P. niger* (Chevr. MS.), Gahan, l. c. p. 51.

I have to thank Prof. Aurivillius for also pointing out that *Cælodon rusticum*, Fähr., is a species of *Taurotagus*, very closely allied to *T. Klugii*, Lac.

To Dr. Fr. Meinert, of Copenhagen, I am indebted for information concerning the type specimens of *Cerambyx holosericeus*, Fabr. Two specimens from Tranquebar are ticketed as types; in one the *intergenal* groove is straight, in the other it is distinctly bowed backwards. I do not believe that these two conditions occur in the same species; and I take therefore as representing *holosericeus*, Fabr., that specimen in which the intergenal groove is straight. The amended synonymy of the species may thus be written:—

Æolesthes holosericeus, Fabr.

= *Cerambyx holosericeus*, Fabr. (nec Oliv.).

= *Pachydissus velutinus*, Thoms.

= *Pachydissus similis*, Gahan.

= *Neocerambyx holosericeus*, Cotes, Ind. Mus. Notes, vol. i. no. 2, pl. v. fig. 3.

To the synonymy of *Plocederus fulvicornis*, Guér. (= *ruficornis*, Newm.), may, I think, be added *P. pruinosis*, Pasc. (*Cerambyx*).

In Lacordaire's subdivision of the genus *Plocederus* (Genera 8, p. 255) there is a misleading error with regard to the type species, *P. cyanipennis*, Thoms. This species is placed in the first division of Section A, whereas it should come in the second division of the same section. *P. nitidipennis*, Chevr., was in all probability the species mistaken by Lacordaire for *cyanipennis*, Thoms.

Neocerambyx grandis, sp. n.

Magnus, sericeo-aurato dense pubescens; capite supra inter oculos leviter angustumque sulcato, sulco inter antennis descendente;

prothorace lateraliter in medio obtuse angulato, dorso omnino fortiter irregulariterque rugoso; elytris pube sericeo-aurata non-nihil mutabile obteetis, apicibus rotundatis, inermibus; processu prosterni postice verticali, acetabulis anticis extus angulatis; antennis (σ) corpore multo longioribus, articulis tertio quartoque valde inerassatis, tertio quam primo paullo longiore et crassiore, primo et quarto subæqualibus, quinto minus fortiter incrassato, tertio subæquali.

Long. 56, lat. 17 mm.

Hab. N. India, Allahabad (*J. C. Bowring, Esq.*).

The single specimen (in the Museum collection) of this distinct and magnificent species is in a rather damaged condition. There are but ten complete joints to the antennæ, and these together surpass the body by about a third part. The fine silky golden-yellow pubescence gives rather feeble *moiré* reflexions on the elytra. Owing to the shortness and great thickness of the third and fourth joints of the antennæ I was at first inclined to place the species in *Pachydissus*; but the size and remaining characters seem to fit it better for *Neocerambyx*. As in the true *Pachydissus*, we see that even amongst evidently nearly related species of the same genus the third joint may vary considerably in length and thickness. It must be admitted that *Neocerambyx*—taking *N. paris*, Wied., as the type—cannot by any hard-and-fast characters be differentiated from *Pachydissus*. The eyes offer no distinguishing character, and the anterior cotyloid cavities may in some species of *Pachydissus*, and even in some specimens of the same species, e. g. *P. picipennis*, be angulate externally, while in others they are completely closed. It was unfortunate that Lacordaire should have taken the characters of the eyes and of the anterior coxal cavities as the basis of his subdivision of this group.

Imbrius? mandibularis, sp. n.

Fuscus, griseo-cinereo-pubescentis; mandibulis longis, valde curvatis; oculis supra approximatis, subtus late distantibus; capite pone oculos gradatim angustato; prothorace latitudine paullo longiore, utrinque leviter rotundato, supra transversim irregulariterque plicato; elytris minute confertimque punctulatis, cinereo-pubescentibus, singulis lineis tribus vel quatuor glabris, obsolete elevatis, apicibus conjunctim et subacuminatè rotundatis; antennis (σ) corpore duplo longioribus, articulis a tertio ad decimum (quarto multo brevioribus excepto) subæqualibus, articulo undecimo longissimo; antennis (ρ) corpore paullo longioribus.

Long. (σ) 24, lat. $5\frac{3}{4}$; long. mandib. $3\frac{1}{2}$ mm.

Hab. Penang.

By the long, strongly curved, and acutely pointed mandibles this species may be distinguished from any other in the whole group. Whether this character and one or two others of minor importance are in themselves sufficient to raise the species to the rank of a genus I am at present unable to decide. Though the mandibles are much longer than in the typical species of *Imbrius*, they seem to be of much the same form. The head is more elongate and more gradually narrowed behind the eyes than in *Imbrius lineatus*; but this difference is not so evident in the female, in which also the mandibles are much less developed. The prosternal process is feebly tubercled behind. The first joint of the posterior tarsus is almost equal in length to the two following joints combined.

The genus *Imbrius* ought, I think, to be retained, though it would be hard to give characters of importance separating it from *Dymasius*. The most essential difference lies in the truncate and spinose apices of the elytra in the latter. The antennæ of the male in both genera are much longer than those of the female. In *I. ephebus*, Pasc. (♂), the antennæ are half as long again as the body; and in *E. lineatus*, Pasc. (♂), they are almost twice as long as the body.

DYMASIUS, Thoms.

Lacordaire's characterization of this genus is inaccurate. Though he has described the male as well as the female, he probably had only specimens of the latter sex before him.

In the male the antennæ are about twice as long as the body, with the eleventh joint much longer than the tenth, with the third and fifth joints subequal, each longer than the fourth. (Lacordaire says "3 égal à 4-5 réunis;" but this is not true even of the female, in which the third joint is distinctly longer than the fifth, but is certainly not equal to the fourth and fifth united.) The first joint of the posterior tarsus is not quite as long as the two succeeding joints combined.

In referring to the elytra Lacordaire says these organs present no trace of punctuation. In the five or six specimens that I have seen the longitudinal subglabrous lines of the elytra exhibit a fine punctuation made up of close unequal-sized punctures.

Cerambyx macilentus, Pasc. (*Pachydissus* in Cat. Gem. et Har.), must be referred to this genus. The male type of this species differs from males of *D. strigosus*, Thoms., only in that the third and fifth joints of the antennæ are relatively shorter and the external apical spines of the elytra are directed

more obliquely outwards. These differences may perhaps be little more than individual.

ELYDNUS, Pasc.

This genus is even more nearly allied to *Dymasius* than is *Imbrius*. It will be best perhaps to consider it as a distinct section of *Dymasius*, characterized by the unspined apices of the elytra and the prothorax almost equally contracted at the base and apex. I can find nothing in the characters of the antennæ and sternal processes by which it can be distinguished generically from *Dymasius*. In addition to the species placed in it by Mr. Pascoe, the section will include *D. strigosus*, Pasc. I propose to alter the name of this species to

Dymasius (Elydnus) Pascoei, n. n.

= *Dymasius strigosus*, Pasc. (nec Thoms.).

Dialeges undulatus, sp. n.

D. pauperi subsimilis, sed differt inter alia capite pone oculos minus elongato; oculis valde emarginatis, haud divisis; articulo antennarum quinto quam tertio longiore, articulo undecimo (σ) longissimo; elytris apice conjunctim rotundatis, inermibus. Long. (σ ♀) 16-21, lat. $3\frac{1}{4}$ -5 mm.

Hab. Siam, Burmah, and Ceylon.

Head but slightly elongated behind the eyes; the latter deeply enough emarginate in front. Prothorax somewhat longer than broad, constricted at the base and apex, slightly rounded at the sides; transversely and not very strongly wrinkled above; covered, with the exception of a line along the middle of the disk, with a silky greyish pubescence. Elytra clothed with a dense silky pubescence, giving *moiré* reflexions; where rubbed the reddish-brown derm is seen to be closely and very finely punctulate; apices conjointly rounded and unarmed. Head transversely wrinkled below between the eyes. Antennæ in the male more than twice as long as the body, with the third and succeeding joints villose underneath, with the third joint shorter than the fifth, the fifth, sixth, and seventh subequal, the fifth to tenth gradually decreasing and, taken together, scarcely longer than the eleventh: antennæ in the female a little longer than the body, with the eleventh joint scarcely longer than the tenth.

This species has at first sight a rather strong resemblance to *D. pauper*, Pasc., and allied species, but is to be distinguished by characters that may almost be considered generic in their importance.

Lachnopterus socius, sp. n.

Ater: prothorace supra nitido, fere omnino transversim plicato, sulcis duobus longitudinalibus antice conjunctis impresso; elytris rufescentibus, confertissime punctulatis, pube breve fulvo-aurantiaca sparsim obtectis; antennis (σ) subgracilibus, corpore paullo longioribus.

Long. 16, lat. 5 mm.

Hab. Philippine Islands. In the collection of Mr. Alexander Fry.

Deep black. Prothorax broadest just behind the middle, somewhat glossy and almost wholly transversely wrinkled above; the disk without smooth tubercles and with two longitudinal impressions which anteriorly become more oblique and unite at some distance before the apex. Elytra reddish, with a short tawny-orange pubescence not thick enough to conceal the very close and fine punctuation beneath it. Antennæ in the male rather slender, a little longer than the body.

In *L. auripennis*, Newm., the only hitherto described species of the genus, the prothorax is broadest at or a little before the middle, is covered above by a dull black tomentum, and, on the disk, bears three usually smooth tubercles. The elytra are more thickly pubescent than in *socius*, and the antennæ are in both sexes shorter than the body.

PACHYDISSUS, Newm.

Some of the species previously included in this genus I have placed in *Æolesthes*, some I have removed to *Plocederus*. Those that remain form a heterogeneous collection, which may for the sake of convenience be arranged in sections. These sections are so distinct as to be almost equivalent to genera, and names will therefore be proposed for them. The antennæ of the male are in no case longer than twice the length of the body, and are usually much shorter than this; the joints are never spined at their outer apex; the third and fourth joints are usually, though sometimes very feebly, thickened at the apex. The pubescence is usually somewhat silky, sometimes with feeble *moiré* reflexions on the elytra. The head is nearly always grooved between the upper lobes of the eyes, though the groove is in many cases very shallow. The eyes vary in the extent to which they are produced in front. The head generally carries underneath one or more transverse grooves, in addition to a postocular sulcate constriction.

In the following synopsis the references to the antennæ are

to those of the male. The antennæ in the female are in nearly every case shorter than the body.

§ A. Antennæ variable. Femora without carinae. Prosternum subtruncate behind. Elytra usually spinose at the apex. (*Pachydissus verus*.)

Antennæ shorter than the body, with the third to fifth joints strongly thickened, subequal. Apices of the elytra transversely truncate, each briefly bispinose. Head with a single transverse groove underneath

1. *P. brevicornis*, sp. n.

Antennæ slightly surpassing the elytra, with the third and fourth joints strongly thickened, the third but little longer than the fourth. Apices of elytra obliquely truncate, each bispinose. Head underneath with two distinct transverse grooves separated by a prominent ridge

2. *P. sericus*, Newm.

Antennæ (♂)? Prothorax wholly irregularly wrinkled above. Apices of elytra transversely truncate, each moderately bispinose. Head with a single transverse groove underneath. Prosternal process slightly bifid behind

3. *P. rugosicollis*, sp. n.

Antennæ (♂) almost half as long again as the body, with the third and fourth joints slightly nodose at the apex, the third half as long again as the fourth. Apices of elytra obliquely truncate, each bispinose. Head with two distinct transverse grooves underneath

4. *P. intermedius*, sp. n.

Antennæ half as long again as the body, with the third and fourth joints very slightly thickened at the apex, the third twice as long as the fourth. Apices of elytra transversely truncate, each bispinose. Head with a single transverse groove underneath

5. *P. nubilus*, Pasc.

Antennæ a little longer than the body, with the third and fourth joints strongly thickened, subequal. Apices of the elytra rounded or subtruncate, each briefly mucronate at the suture. Head with a single transverse groove underneath

6. *P. picipennis*, Germ.

Antennæ nearly twice as long as the body, with the third and fourth joints and some of the following slightly nodose at the apex, the third much longer than the fourth. Prothorax narrowed anteriorly and posteriorly, somewhat angulately dilated in the middle. Apices of the elytra truncate, each briefly spined at the suture

7. *P. parricollis*, sp. n.

Antennæ nearly twice as long as the body, with the third and fourth joints scarcely thickened at the apex, the third much longer than the fourth. Prothorax very slightly rounded at the sides. Elytra with slight *moiré* reflexions. Apices somewhat obliquely truncate, each briefly spinose at the suture. Intermediate cotyloid cavities narrowly open externally 8. *P. natalensis*, White.

Pachydissus elongatus, Harold, may perhaps come into this section. According to Harold it is very near *P. natalensis*, and differs chiefly by its slightly curved posterior tibiæ. The third joint of the antennæ is scarcely longer than the first, while in *P. natalensis* the third joint is nearly twice as long as the first.

§ B. Antennæ (♂) longer than the body, with the third and fourth joints more or less thickened, the third scarcely longer than the fourth. Elytra rounded or subtruncate, and unarmed at the apex. Femora without carinæ. Prosternum simple, not very strongly arched. Head without a distinct transverse groove underneath. (*Margites*, Pasc., MS.)

Antennæ with the third and fourth joints strongly thickened, obconical. Prothorax slightly uneven at the sides. Elytra with a grey pubescence 9. *P. egenus*, Pasc.

Antennæ (♂)? Prothorax somewhat uneven at the sides. Elytra with a fulvous pubescence 10. *P. fulvidus*, Pasc.

Antennæ a little longer than the body, with the first to fifth joints subequal, the third and fourth thickened, subcylindrical. Prothorax evenly and not very strongly rounded at the sides. Elytra with a greyish tawny or fawn pubescence 11. *P. humilis*, sp. n.

§ C. Eyes large, not very widely separated below. Antennæ in the male longer than the body, with the third and fourth joints slightly thickened at the apex, the third distinctly longer than the fourth. Apices of the elytra truncate or subtruncate, dentate or unarmed. Femora feebly carinate on each side below. Prosternal process not strongly raised, subtruncate or tuberculate near its posterior extremity. Metasternum usually provided with a small anterolateral process, which partly cuts off the epimeron from the intermediate cotyloid cavity. (*Derolus*.)

Antennæ about half as long again as the

body, with the third joint much longer than the fourth. Prothorax with a broad, smooth, excised space on each side. Elytra truncate at the apex, dentate at the suture. Antero-lateral process of metasternum very feeble 12. *P. mauritanicus*, Bur.

Antennæ a little longer than the body, with the third joint not much longer than the fourth. Eyes in the male almost contiguous above. Prothorax with a narrower excised smooth space on each side. Apices of elytra subtruncate or almost rounded, and unarmed. Antero-lateral process of metasternum distinct 13. *P. demissus*, Pasc.

Antennæ (♂)? Prothorax with a narrow canaliculate excised space on each side, the disk with two oblique impressions, anteriorly widely diverging. Apices of elytra subtruncate, and unarmed. Pubescence with faint *moiré* reflexions. Antero-lateral process of metasternum distinct 14. *P. arciferus*, sp. n.

Antennæ nearly half as long again as the body, with the third and fourth joints scarcely thickened at the apex, the third almost twice as long as the fourth. Prothorax obtusely bituberculate on each side, without excised smooth space. Apices of the elytra truncate, dentate externally, briefly spined at the suture. Prosternal process somewhat strongly and obtusely tubercled behind. Antero-lateral process of metasternum distinct 15. *P. femorellus*, Chev.

Pachydissus incultus, Gerst., probably belongs to this section.

§ D. Of relatively shorter and stenter form than the species of the preceding sections. Antennæ in the male nearly twice as long as the body, with a short delicate fringe of hairs underneath; with the scape cicatrized, the cicatrice limited by an incomplete carina. Elytra truncate at the apex. Femora feebly carinate on each side below. Prosternal process subtruncate behind. (*Diorthus*.)

Pubescence less dense. Antennæ with the third joint much longer than the fourth . . . 16. *P. simplex*, White.

Pubescence denser. Antennæ with the third joint but little longer than the fourth. . 17. *P. vagus*, sp. n.

Pachydissus brevicornis, sp. n.

Grisco dense pubescens; antennis corpore brevioribus, articulis a

tertio ad quintum (σ) fortiter incrassatis; elytris apice truncatis, breviter quadrispinosis.

Long. 26, lat. 8 mm.

Hab. West Australia. Male in British Museum, male and female in Mr. Fry's collection.

Clothed with a dense ashy-grey pubescence, giving on the elytra slight silky reflexions. Antennæ in both sexes shorter than the body, in the male a little longer than in the female, and with the third to fifth joints very much thickened; the third joint, conical in form, about equal in length to the scape, the fourth scarcely shorter than the third or fifth. Prothorax slightly angulate at the middle of each side, with the rugosity of its upper surface almost concealed by the pubescence; the disk with an apparently smooth space just in front of the basal transverse groove. Elytra transversely truncate and briefly quadrispinose at the apex. Head underneath with a single transverse groove in addition to the postocular constriction.

Pachydissus sericus, Newm.

Antennæ in the male barely surpassing the elytra, with the third and fourth joints much thickened and the third but little longer than the fourth. Elytra obliquely truncate and quadrispinose at the apex, prolonged more at the outer than at the inner angles, and with the outer spines a little longer and stronger than the inner ones. Prothorax feebly tubercled on each side, somewhat regularly transversely wrinkled above, with two longitudinal impressions uniting anteriorly and limiting a subcentral smooth space. Head underneath with two distinct transverse grooves, separated by a median ridge, in addition to the sulcate constriction immediately behind the eyes.

Pachydissus rugosicollis, sp. n.

Piceo-fuscus, griseo subtiliter pubescens; prothorace lateraliter in medio obtuse angulato, supra intricato-rugoso sine impressionibus longitudinalibus; elytris fuscis, pube grisea subsericea subtiliter obtectis; apicibus recte truncatis, quadrispinosis; processu prosterni postice leviter bifido. ♀.

Long. 33, lat. $9\frac{1}{2}$ mm.

Hab. Australia.

Prothorax intricately wrinkled above, without longitudinal impressions. Apices of the elytra transversely truncate, with all the angles distinctly spined. Head underneath with a

single transverse groove in addition to the postocular constriction.

The species somewhat resembles *P. sericus*, but may be easily distinguished by the characters given.

Pachydissus intermedius, sp. n.

P. serico verisimilis, sed differt prothorace lateraliter in medio obtusius tuberculato, et antennis corpore sesqui-longioribus, articulis tertio quartoque apice minus fortiter nodosis, articulis tertio quintoque plus elongatis. ♂.

Long. 27, lat. $7\frac{1}{2}$ mm.

Hab. South Australia (*Bakewell*).

Without the distinct difference in the antennæ this species might well be placed with *sericus*. The antennæ are, however, much longer (surpassing the elytra by about the last three joints); the third joint is about half as long again as the fourth, and both these joints are only slightly nodose at the apex. The prothorax is more obtusely tubercled at the sides.

Pachydissus parvicollis, sp. n.

Badius, pube aureo-flava sericea leviter obtectus; prothorace antice posticeque gradatim angustato, medio utrinque obtuse angulato, supra irregulariter et minus fortiter plicato; elytris elongatis, leviter sericeo-pubescentibus; apicibus truncatis, sutura spinosis; antennis (♂) corpore duplo fere longioribus, articulo tertio quam primo multo longiore, (♀) corpore brevioribus.

Long. (♂) 32, lat. $8\frac{1}{2}$ mm.

Hab. N. India.

Prothorax somewhat obtusely dilated or angulated at the middle of each side, and from thence gradually narrowed to the base and apex, irregularly and not very strongly wrinkled above. Elytra rather long, gradually and slightly narrowed posteriorly for about four fifths of their length, and then more quickly narrowed towards the apex, where they are truncate, with a short spine at the suture on each side; with a not very dense yellowish-tawny silky pubescence, which veils a reddish-brown derm, the pubescence giving faint wavy reflexions in certain lights. Antennæ in the male not quite twice as long as the body, with the third and fifth joints subequal, each much longer than the first or fourth, and with the third and fourth and some of the succeeding joints slightly nodose at the apex. Antennæ in the female a little shorter than the body.

Pachydissus (Margites) humilis (Chevr., MS.), sp. n.

Fuscus; prothorace supra et lateraliter punctato-rugoso, pube grisea plagiatis disposita; lateribus leviter et subæqualiter rotundatis; elytris piceo-rufis, ruguloso-punctatis, pube cervina vel griseo-fulva dense obtectis; apicibus subtruncato-rotundatis, inermibus; pedibus antennisque piceo-rufis, illis ruguloso-punctatis, leviter pubescentibus, his (♂) corpore paullo longioribus, articulis a primo ad quintum subæqualibus, ceteris gradatim crescentibus, articulis tertio et quarto crassatis, subcylindricis.

Long. 14-15, lat. 3½ mm.

Hab. Senegal.

This species may be easily distinguished from *P. egenus* or *P. fulvidus* by the more evenly rounded sides of the prothorax, the greatest width of the latter being just behind the middle, and by the relatively narrower elytra. The antennæ in the male are shorter than in *P. egenus*, with the third and fourth joints much less strongly thickened.

In one (female) specimen the pubescence of the elytra is fawn-coloured and somewhat glossy; in the other two (in Mr. Fry's collection) it is dull and grey or fulvous; but in these I believe that it is faded.

Pachydissus (Derolus) demissus, Pasc.

? *Cerambyx volvulus*, Fabr. Syst. Eleuth. ii. p. 271.

Hamaticherus volvulus, Dej. Cat.

Piceus, griseo tenuiter pubescens; oculis magnis, supra (♂) fere contiguus; prothorace lateribus in medio rotundatis singulisque spatio angusto exciso, glabro; dorso transversim plicato, in medio raro levi; elytris tenuiter sat denseque punctulatis, subtiliter pubescentibus; apicibus subtruncatis, iuermibus; processu antero-laterali metasterni distincto: antennis (♂) corpore paullo longioribus, subserratis, articulis tertio et quarto apice leviter nodosis, quarto quam tertio paullo brevioribus.

Long. 15-17, lat. 4-4½ mm.

Hab. India (Tranquebar, Nilghiris, Silhet), Philippines, and China.

This species was included by Mr. Pascoe in his proposed genus *Margites*, but it seems better placed in Section C of the preceding arrangement. The species is quoted by Dejean in his Catalogue as the *Cerambyx volvulus* of Fabr., and it certainly agrees very well with Fabricius's description.

Pachydissus (Derolus) arciferus (Chevr., MS.), sp. n.

Niger, griseo-pubescentibus; capite supra inter oculos sat distincte

angustumque sulcato; prothorace supra transversim leviterque plicato, disco impressionibus duabus obliquis postice transversim connexis, antice late divergentibus; clytris pube grisea sericea, nonnihil mutabile, obtectis, dimidio basali sparsim punctulato, apicibus subtruncatis, muticis; processu prosterni postice subverticali; parte laterali metasterni antice in processu parvo producta; antennis (♀) corpore brevioribus.

♀. Long. 17-19, lat. $4\frac{1}{2}$ -5 mm.

Hab. Senegal, Port Natal.

Head with a distinct but narrow groove between the eyes above, with the eyes rather large, not very widely separated below, with the underside not distinctly grooved. Prothorax somewhat irregularly, transversely, and not strongly wrinkled above; the disk with two oblique slightly arcuate impressions, joined by means of the bisinuate basal transverse groove behind, and anteriorly widely diverging, with the space between less distinctly wrinkled than the parts external to them. Elytra with a silky grey pubescence giving rather feeble *moiré* reflexions. The antero-lateral process of the metasternum is distinct enough, without completely cutting off the epimeron from the intermediate cotyloid cavity.

This species, of which I have only seen female specimens, seems somewhat nearly allied to a South-African species which I believe to be very near, if not the, *Tupinoluchnus Gyllenhali* of Fähræus.

Pachydissus (Diorthus) simplex, White.

Cerambyx holosericeus, Oliv. (nec Fabr.).

Hammaticherus simplex, White.

Cerambyx vernicosus, Pasc.

Pachydissus inclemens, Thoms.

Hammaticherus heterocerus, Dup. Dej. Cat.

Hammaticherus sericeus, Dej. Cat.

Head feebly grooved above between the eyes. Antennæ in the male more than half as long again as the body, with the third and most of the following joints fringed with short and delicate grey hairs underneath; with the third joint much longer than the fourth, both these joints nodose at the apex; with the cicatrice of the scape limited by an incomplete carina. Prothorax rounded at the sides, irregularly and not very strongly rugose above; the disk with some not very distinct longitudinal and oblique grooves, together forming a somewhat crown-shaped impression. Elytra with a unicolorous, greyish, slightly glossy pubescence, somewhat thinner on each side before the middle, and there revealing a reddish-brown or dark brown derm; apices truncate, shortly spined at the suture. Femora feebly carinate on each side.

The types of all the species quoted above (with the exception of *P. inclemens*, Thoms., which I have had an opportunity of examining) are contained in the British Museum collection, and, after careful comparison, I have come to the conclusion that they represent but a single species. The types of *simplex* (White) and *sericeus* (Dej.) differ from the others in having the elytral derm reddish brown rather than dark brown. The distribution of the species, so far as it at present is known, is somewhat strange, and has caused me to hesitate before arriving at the conclusion stated above. The specimens named *simplex* and *heterocerus* are from West Africa, the types of *holosericeus* (Oliv.), *vernicosus*, and *inclemens* are from India, and *sericeus* is from Java. There are also in the Museum collection dark-coloured specimens from Siam.

To avoid the confusion which might arise by adopting Olivier's name I have taken as the name of the species the one which comes next in order of priority.

Pachydissus (Diorthus) vagus, sp. n.

P. simplici affinis et similis, sed differt pube grisea densiore, articulo antennarum tertio quam quarto paullo longiore.
Long. 25, lat. $7\frac{1}{2}$ mm.

Hab. "Senegal?"

Clothed with a dense ashy-grey pubescence, somewhat thinner on each side of the elytra before the middle. Antennæ (in the single male before me) about half as long again as the body, with the third joint not much longer than the fourth, with the scape cicatrized as in *P. simplex*. Femora feebly carinate on each side. The sculpturing of the prothorax is apparently almost exactly the same as in *P. simplex*, but, owing to the denser covering of pubescence, is not so easily seen.

This species has a strong resemblance and an evident affinity to *P. simplex* (White), and its habitat might have thrown some light upon the distribution of the latter. Unfortunately, however, of the two specimens one (the male type) is ticketed "Senegal?," the other (a female, in Mr. Fry's collection) is ticketed "Nov. Holland." The latter locality can scarcely be correct.

Xoanodera laticornis, sp. n.

Nigro-fusca; prothorace supra irregulariter corrugato, dorso utrinque fulvescente bivittato; elytris maculis lineisque fulvescentibus,

postice crebre punctatis, lateraliter ab humeris usque ad medium reticulato-corrugatis, disco versus basin irregulariter rugoso, apicibus oblique truncatis, singulisque breviter bispinosis; antennis articulis a quarto unilateraliter compressis et valde dilatatis; femoribus haud carinatis.

Long. 25, lat. $8\frac{1}{2}$ mm.

Hab. Sarawak.

Blackish brown. Head with a sparse fulvous-white pubescence in front, and with two indistinct fulvous-white vittæ on each side above. Prothorax coarsely and irregularly rugose above, with two fulvous-white vittæ towards each side. Elytra each with a sutural line, a series of spots external to it, a short line from the base along the middle of the disk, and lines and spots on the posterior half fulvous-white; with the sides from the shoulders to a little beyond the middle coarsely and reticulately corrugate, with the disk also somewhat irregularly rugose, with the posterior half and the sutural region just in front of the middle closely punctured where not covered by pubescence. The apices obliquely truncate and each furnished with two short spines directed somewhat obliquely outwards. Body underneath with a sparse tawny pubescence. Legs very thinly pubescent; femora without carinæ. Prosternal process strongly arched in the middle, gradually declivous posteriorly. Antennæ greyish pubescent, equal in length to the body, with the joints from the fourth compressed and dilated on the inner side, with the sixth, seventh, and eighth joints most strongly dilated, the antennæ thus being broadest about the middle.

A single specimen in the British Museum collection.

In the greater width of the antennæ and the absence of carinæ from the legs this species differs from all the others included in the genus.

Xoanodera? vitticollis, sp. n.

Nigro-fuscus; capite fulvo-albo-pubescente, oculis magnis, supra approximatis; prothorace latitudine vix longiore, supra irregulariter rugoso, vittis quinque longitudinalibus, albo-pubescentibus — una media, duabus versus singulum latus; elytris fortiter confertissimeque punctatis, maculis albo-pubescentibus prope suturam et apicem nonnihil spissis et ad marginem lineam formantibus, apicibus rotundatis; antennis corpore paullo longioribus, articulis a quinto ad decimum intus compressis et ad apicem angulato-productis. ♂.

Long. 20, lat. 6 mm.

Hab. Borneo.

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Dark brown, nearly black. Head with a fulvous-white pubescence. Prothorax about as long as it is broad in the middle, feebly rounded at the sides, irregularly rugose above, with five pubescent whitish lines, one median and two towards each side. Elytra very strongly and very closely punctured, with whitish pubescent spots somewhat irregularly and thickly spread on the sutural region, arranged in a row at the lateral margin, and forming a few short lines towards the apex. Body underneath with a slight greyish pubescence. Prosternal process strongly arched, posteriorly declivous. Mesosternal process almost horizontal, feebly declivous anteriorly. Antennæ surpassing the elytra by about the last joint, with the third and fifth joints subequal, each barely longer than the scape, the fourth shorter, the sixth to tenth gradually increasing, the eleventh about half as long again as the tenth, with the joints from the fifth to the tenth compressed on the inner side and each angulately produced at the apex.

I have placed this species in *Xoanodera*, rather to indicate its affinities than because I believe it to strictly belong to that genus. With but a single specimen before me I should not feel justified in creating a new genus in such a group as the present.

Rhytidodera robusta, sp. n.

Pubes grisea fulvaeque sat dense obtecta; prothorace supra valde irregulariterque rugoso, disco tuberculis duobus aculeatis; elytris pube subplagiatis disposita, apicibus subrotundatis, sutura spinosis; antennis (♀) dimidium corporis vix excedentibus. Long. (♀) 34, lat. 9 mm.

Hab. Bombay.

Prothorax strongly and irregularly rugose above, with two of the short ridges, just in front of the middle of the disk, so much raised as to appear like two wedge-shaped tubercles, very slightly constricted at the apex, with an obtuse tubercle on each side close to the anterior border. Elytra with a pubescence partly fulvous, partly grey, somewhat denser in places, with the apices rounded or subtruncate and each with a moderately strong spine at the suture.

This species most nearly resembles *R. integra*, Kolbe, but is much larger, and is distinguished by the structure of the prothorax and the more prominent spine at the sutural apex of the elytra.

[To be continued.]