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III.

Descriptions

of

some new genera and species of Scarabaeidae

from tropical Asia and Malasia.

By D. Sharp.

Part II.

Onitis Lansbergei (n. sp.): *Oblongus, fulvus; capite subtiliter punctulato; prothorace basi medio dense punctato, foveolis minutis valde distantibus; elytris subtiliter striatis, impunctatis, sutura angustissime viridi; metasterno parcius pubescente, late, obsolete canaliculato.* — Long. 14, lat. 7 1/2 mill.

Mas: *Femoribus anterioribus tuberculatis; tibiis brevibus fere rectis, mucrone brevi, crasso, dense ciliato, subtus tuberculis quatuor minus elevatis armatis.*

Of a dull yellowish colour. Raised margin of head very narrowly black; clypeal carina straight, rather broad, distant from the interrupted frontal carina, the front of the clypeus impunctate, the parts behind the clypeal carina finely punctured. Thorax 5 1/2 mill. long, 7 1/2 broad, distinctly rounded at the sides in front, very slightly sinuate behind the middle, the hind angles obtuse and rounded, the front and the sides smooth, the base, for a broad space, densely punctured in the middle, the punctures along the middle extending nearly to the front, the basal foveae very distant and very small, the

part of the base between them only very slightly produced. Elytra rather dull, the suture very narrowly brassy, the striae rather fine, the interstices flat and entirely impunctate. Pygidium smooth. Metasternum with very fine, scattered hairs, and along the middle with a broad, shallow impression. The legs are slender, the anterior tibiae pitchy.

In the male the front femora bear each a small tubercle on the front near the extremity, the tibiae are short, slender and but little curved, externally tridentate, the usual fourth upper tooth being quite obsolete, underneath they are furnished with four tubercles the first and last of which are very indistinct, the mucro is abrupt, (the apical tooth which precedes it being sharp and prominent), short and stout and densely furnished with fulvous ciliae; the middle and hind legs are simple.

Lombock, a single male; (Wallace!).

This species is closely allied to *O. Corydon*, but is smaller, the foveae on the thorax are very minute, the metasternum bears fine sparing hairs, and in the male the hind femora are simple. I have much pleasure in naming the species in honour of M. van Lansberge, the author of the „Monographie des Onitides".

Onitis crassus (n. sp.): *Convexus, niger, clypeo lato, rotundato, carina clypeali lata, recta, frontali integra, vertice tuberculato; prothorace dense punctato, opaco; elytris striatis, interstitiis internis convexis, apice fulvo-ciliatis.* ♀. — Long. corp. 14 mill., prothoracis 8 mill.

Head broad, finely granulate all over, clypeus rounded, scarcely truncate in front, its carina broad and straight, much nearer to the frontal line than to the front margin; frontal line not interrupted, slightly curved; tubercle of vertex moderately elevated, quite separate from the frontal line, but nearer to it than to the vertex. Thorax broad, rounded and dilated at the sides, sinuate behind the middle, hind angles depressed and but little marked; the surface coarsely punctured, the punctures on the front part dense and rugose, towards the base more distant but distinct, basal foveae rather large, moderately distant, in front of them the surface is slightly depressed and on each side of this impression is a small obscure space free from punctures, in front of the middle are two indistinct foveae; the base is distinctly margined for a little distance internal to the hind angles,

and is much produced in front of the scutellum. Scutellum small, but quite visible. Elytra rather deeply striated, the striae simple, the internal interstices distinctly convex, the outer ones quite flat, finely but distinctly punctured, the suture shining, the other internal interstices also a little shining especially towards the extremity, which is provided with fulvous setae; the base, within the humeral callus, is depressed. Pygidium obscurely punctured. Metasternum shining, only sparingly and finely punctured, and almost free from pubescence, it is without channel, but transversely depressed or constricted in the middle towards the front, in a peculiar manner. Legs and abdomen pitchy, the former rather slender, the tarsi long and slender; the antennae red.

India, a single female.

This species has exactly the facies of a female *Bubas*, and must be placed at the extremity of the genus *Onitis*, next to *Bubas*. It is allied to *O. castaneus* Redt. but is readily distinguished by its black colour, and the more convex interstices of the elytra. As I am only acquainted with the female, and as the two individuals of *O. castaneus* in my collection are both males, I cannot give fully its distinctive characters.

Onthophagus discedens (n. sp.): *Elongatus, angustulus, nigerrimus, nitidus, supra nudus, subtus parce fulvo-setosus, antennis rufo-piceis, clava minus abrupta flavescente; clypeo margine anteriore unidentato, disco mutico; prothorace magno fere laevi; elytris crenato-striatis, glaberrimis.* — Long. 12 mill., (prothoracis 6 1/2 mill.).

Front of the clypeus emarginate in the middle, in the centre of the emargination with a slightly recurved tooth, the front part is rather densely but not coarsely punctured, the punctuation towards the back parts becomes gradually more indistinct, so as to quite disappear on the summit of the vertex. Labial palpi with a distinct small third joint. Antennae with the 5th and 6th joints rather large, the club small. Thorax large, broader than the elytra, with the anterior angles rounded, the posterior scarcely visible, it is smooth, shining and impunctate, except for a small punctuation at the front angles. Elytra about as long as the thorax, with seven well marked crenate striae, the interstices impunctate. Pygidium large, shining, rather coarsely punctured. Metasternum conically projecting in front

in the middle, its extreme front part punctured and with fulvous setae, its posterior part finely chanelled, the portion between the legs shining and impunctate, the sides densely punctured and furnished with fulvous setae: the segments of the abdomen punctured and setigerous at the sides, smooth in the middle. Teeth of the front tibiae short and stout; the spur of the hind tibiae elongate, longer than the basal joint of the tarsus.

The only specimen I have seen of this remarkable species was found at Sarawak by Mr. Wallace.

Onthophagus dux (n. sp.): *Clypeo thoraceque cupreis, illo anterius nigrescente; elytris opacis nigris, pygidio corporeque subtus leviter metallescentibus, pedibus superne nigris; clypeo margine anteriore unidentato, vertice tuberculato-cornuto; prothorace anterius medio lobato-producto, densius granulato, granulis minus elevatis; elytris crenato-striatis, interstitiis subtiliter punctatis; corpore supra nudo, subtus fulvo-setigero.* — Long. 15, lat. 9 mill.

Antennae red, with the third joint small, the seventh large, its under part produced so as to form a half cup, the 8th joint on the undersurface with its margin cut away, so as to be concealed there between the 7th and 9th joints. Labial palpi with a minute third joint. Clypeus with a short tooth in the middle in front, the extreme vertex furnished with a laterally compressed tubercle or short horn which projects forwards rather than upwards; its surface is densely and rugosely though not coarsely punctured, the front part is black, the hinder part coppery. Thorax with the front angles rather produced, the hind ones extremely obtuse, the sides abruptly narrowed behind the middle, the whole of its upper surface is densely covered with flat scale-like granulations, the front part is produced in the middle as an obtusely pointed lobe, directed forwards. The elytra are distinctly crenate-striate, the interstices are quite flat and finely punctured, and are also finely coriaceous, which gives them a dull silky appearance. Pygidium densely, confluently punctured. Metasternum very conically protuberant in the middle in front, finely channelled along the middle, the front part with long fulvous setae, the sides densely punctured and setigerous; the anterior tibiae large and short, with long and stout, but not very pointed teeth. The under surface of the femora punctured.

Found by Mr. Wallace at Sarawak; I do not know the sex of the only individual I possess.

Onthophagus crassus (n. sp.): *Niger, subopacus, antennis rufis clava flava; clypeo margine anteriore unidentato, disco tuberculo obsoleto, vertice carina elevata utrinque in cornu breve, erectum, acutum terminata; prothorace crebre granulato, granulis squamiformibus, anterius medio lobo producto; elytris crenato-striatis, interstitiis subtiliter punctatis.* — Long. 15—17½ mill.

Antennae red with the club yellow. Clypeus with the front margin toothed in the middle, the disc with a very small tubercle, the vertex with an erect transverse lamina which at each end is produced into a short horn; the upper surface is densely rugose, with the exception of the space immediately in front of the lamina, where the punctuation is less distinct. Thorax with the sides abruptly narrowed behind so that the hind angles are scarcely to be detected, its surface densely covered with scale-like granulations, the middle part produced over the head as a pointed lobe. Elytra distinctly crenate striate, the interstices finely punctured, and also very finely coriaceous so as to render the surface opaque. Pygidium large, very densely punctured. Sides of prosternum punctured and finely pubescent. Metasternum conically protuberant in front, its front angles punctured and setigerous, the extremity also distinctly punctured, but the middle part almost impunctate; its sides very densely punctured and pubescent. Sides of the abdomen punctured and setigerous. Anterior tibiae short, their teeth rather long, the lower one not so stout as the others; the four hinder femora rather closely punctured on their lower face.

Laos and Cambodia (Mouhot!).

This species appears to be closely allied to *O. dux*, it has the peculiar scale-like granulations of the thorax in common with that species and the club of the antennae is similarly formed. Besides the two specimens from Mouhot I have a third, perfectly agreeing with them, from the Lafertean collection, where it stood with a label in the hand writing of Dejean „*Onthophagus bison* mihi, h. in Insula Java". I think that locality however doubtfully correct.

Onthophagus Mouhoti Harold: *Viridis, sericeo-opacus, pedibus*

superne nigris, antennis flavis, articulo primo piceo; clypeo antice pubescente; elytris obsolete striatis. — Long. 16—17 mill.

O. Mouhoti Harold. Col. Heft. XIII. p. 88 (1875).

Mas: *Vertice bicorni, cornubus valde elongatis, divergentibus; prothoracc cornu compresso, oblique erecto, infra cornu profunde excavato, laevi.*

Fem.: *Vertice cornubus brevibus; prothorace disco carinis duabus, brevibus, antice retuso, lateribus granulatis.*

Clypeus in the ♂ with the surface rugose and in front pubescent, the vertex with an erect lamina which is produced on each side as a very long horn, the horns are directed outwards and a little curved, seen laterally their extremity though rather slender is obliquely truncate, they extend backwards over the thorax, but stand up at a distance from its surface, in front of the base of the horn is a curved line, continous with which at each end is a raised line extending along the outer edge of the horn, on the inner and posterior edge of the horn is a raised crenate or serrate line. The thorax has a laterally compressed lobe or horn extending forwards and upwards, the upper edge of which is channelled, in front of the horn it is so retuse as to form quite a deep transverse cavity, its surface is impunctate, and is of a silky green colour and opaque, with the exception of the retuse part which is shining.

Clypeus in the ♀ as in the male, except that the vertical lamina is produced at each end only into a very short horn; thorax a little retuse in the middle in front and in the middle with two short longitudinal cariniform prominences, the sides are granulated, the middle between the prominences being almost without sculpture.

In both sexes the elytra are of a green colour with a silky dullness, the suture slightly raised and shining, they are extremely finely striate, and almost without punctuation, The pygidium is rather coarsely, but indistinctly and sparingly punctured. The metasternum is a little compressed or carinate along the middle in front, and on each side of this it is punctured, the punctured part as well as the sides bearing a fine pale pubescence.

Siam and Laos (Mouhot!).

This fine species is closely allied to the *O. Elliotti*, but it is considerably smaller, the elytra are concolorous with the thorax, the male has no longitudinal carina on the lamina between the horns;

while the female has the horns short and not branched, and the granulation of the thorax much finer than in *Elliotti*.

Onthophagus amplexus (n. sp.): *Chalybeo-niger, elytris chalybeo-piceis; antennis obscure rufis, clava fusca; thorace rugoso-punctato; elytris evidenter striatis et punctatis; vertice cornubus duobus valde elongatis, curvatis; prothorace medio in cornu elongatum, rugosum, lateraliter compressum producto, infra cornu profunde excavato.* ♂. — Long. 15 mill.

Clypeus rounded, rather roughly granulated, the vertex with an erect lamina produced at each end into a very long curved horn, at the summit of the lamina between the base of the horns there is an erect, acuminate, triangular projection; at the base of the lamina there is a straight, elevated, transverse line. Thorax scabrously punctured in the middle, granulated at the sides, the sculpture absent at the extreme base, the disc produced as a long laterally compressed horn, directed forwards over the head, and beneath this very deeply excavate, the excavation polished and shining; the basal margin is distinct and is a little produced backwards in the middle. Elytra of a peculiar pitchy colour with blue reflection, distinctly striated, the outer striae less distinct than the internal ones, they are also rather strongly punctured, some of the punctures on the disc taking the form of oblique scratches, the suture is rather strongly elevated. The pygidium is rather coarsely, but sparingly punctured. The under surface is of a shining blue or green colour, the middle of the metasternum is punctured in front, at the sides and the extremity leaving the centre smooth, the sides of the metasternum are rather closely punctured, the punctures bear a fine erect pubescence, the sides of the abdomen are but little punctured; the under surface of the femora sparingly punctured.

This species was standing in the Lafertean collection as *O. amplecticornis* Reiche and indicated as coming from India, and I have also a specimen from China. In the Laferté collection there was also besides the ♂ individual a female standing to represent the species, but as I am inclined to believe the specimen to be the female of a closely allied but distinct species, I think it advisable to leave it without further remark than it differs from the females of the allied species *O. Mouhoti*, *victor*, *Ellioti*, by having the thorax retuse in front in the middle, and a little projecting over this as a curved

lobe; the vertex is provided mith a lamina produced at each end into a short straight horn, and there is an impression on each side of the retuse part of the thorax to receive these horns.

Onthophagus victor (n. sp.): *Niger, opacus, antennis flavis, basi piceis; clypeo antice pubescente; elytris obsolete striatis, interstitiis externis subtiliter punctatis; metasterno medio fortiter parcius punctato.* — Long. 16—17 mill.

Mas: *Vertice bicorni, cornubus elongatis, divergentibus; prothorace cornu vel lobo lateraliter compresso, porrecto, vix ascendente, infra cornu profunde excavato, laevi, versus angulos anteriores obsolete punctato.*

Fem.: *Vertice lamina erecta, medio bituberculata et emarginata, utrinque in cornu breve terminata; prothorace retuso, disco carinis duabus brevibus, lateribus granulato, granulis angustis, elongatis.*

This species is closely allied to *O. Mouhoti* in size, form and structure; it differs by its black colour, and by the metasternum strongly punctured in the middle, and the more coarsely punctured pygidium; the sexual characteristics are also a little different, the male has a slight longitudinal carina on the vertex between the horns, the lobe of the thorax is broader and deeply channelled, and not directed so much upwards; in the female the lamina on the vertex is emarginate on its upper edge in the middle, the emargination being bounded on each side by a tubercular elevation.

Java.

I have the female of a closely allied species from Sarawak, it is of a blue colour, and has the elytra more closely punctured.

Onthophagus Iris (n. sp.): *Capite thoraceque aeneis, elytris rufobrunneis, maculis irregularibus iridescentibus; corpore subtus nigro; antennis rufis, clava fusca.* — Long. 9 mill.

Mas(?): *Clypeo disco linea transversa, vertice breviter bicornuto, cornubus intus dentatis, thorace anterius bituberculato.*

Clypeus brassy, the front part nearly black, rather elongate and a little truncate in front in the middle, along the centre with a nearly straight, raised line, the vertex with two short straight upright horns, each of which is toothed at the base on the inside, it is densely punctured. Thorax convex, unequal, the surface being in some places a little depressed, and in others raised, it is brassy and

iridescent, its punctuation moderately close, rather coarse in front, finer behind, in the middle near the front are two conical tubercles. Elytra of a peculiar dark red colour with undulating patches of iridescence which appear to change their position as the light varies, they are very finely striated, the suture and humeral tubercles blackish, the interstices are without any trace of punctuation. The pygidium is reddish, pitchy towards the extremity, the basal part is dull and indistinctly punctured, the apical part shining and more distinctly punctured. The under surface is black, with the sides of the abdomen in immediate contact with the elytra reddish; the sides of the sternum bear a rather long pale pubescence, the metasternum is punctured at its front angles, the under surface of the anterior femora coarsely punctured, middle ones with coarse punctures at the extremity only; the front tibiae are moderately stout, their teeth rather long; the legs are black with the tarsi pitchy.

Waigiou (Wallace!).

This species extremely remarkable in its colour, presents so far as I see no corresponding peculiarities of structure.

Onthophagus quaestus (n. sp.): *Oblongus, niger, nitidus, antennis flavis, pedibus piceis; clypeo vix emarginato, margine anteriore medio incrassato, vertice summo carinato; thorace mutico; elytris striatis, interstitiis punctatis; tibiis anterioribus gracilibus, paulo elongatis, dentibus extus truncatis, calcari apicali crasso, intus porrecto, deorsum curvato.* — Long. $6\frac{1}{2}$ mill.

Clypeus rounded in front, the middle slightly prolonged and reflexed, evenly, moderately finely and not closely punctured, the disc with an indistinct obtuse transverse elevation, the summit of the vertex carinate. Thorax rather closely and distinctly punctured at the basis, more finely and sparingly on the disc, the sides distinctly margined, the basal margin indistinct except in the middle. Scutellum with its apex reaching the level of the surface of the elytra but not prolonged between the suture. Elytra rather long, distinctly crenate-striate, the interstices distinctly punctured, not so shining as the thorax. Pygidium closely and rather coarsely punctured. Sides of prosternum depressed in front (subfoveolate). Metasternum conically prominent in the middle in front, all the middle part evenly and distinctly, not densely punctured, the sides coarsely punctured, the epi-

sterna with a short but little notable pubescence. Femora distinctly punctured beneath. Anterior tibiae rather long, a good deal curved inwards towards the extremity, with three short, stout, obtuse or rather truncate teeth, and with a very small fourth upper tooth, the apical spur remarkably stout and directed abruptly inwards.

The only specimen I have seen I obtained with the Laferteau collection in which it was labelled „nov. gen. *Oniticelloides* Reiche. India or." Though I have no doubt it will ultimately be considered a distinct genus, and a very important one for study in connection with the genera *Onthophagus* and *Oniticellus*, I have thought it advisable to place it for the present as a member of the former genus, rather than establish a new genus for it.

Onthophagus orientalis Harold: *Niger, densius setosus, antennis rufis; prothorace crebre fortiter punctato, basi indistincte sulcato; elytris striatis, interstitiis convexis, fortiter irregulariter punctatis.* — Long. 9—9 ½ mill.

Mas: *Clypeo disco unilineato, vertice carina elevata recta, utrinque in cornu erectum, breve, retusum terminata; prothorace antice retuso, parte declivi pone cornua leviter biimpressa.*

Fem.: *Clypeo bicarinato, carina postica elevata; prothorace antice retuso, supra partem declivem sinuatim prominente.*

O. orientalis Harold. Col. Heft. IV. p. 83 (1868).

O. subsulcatus Dej. Cat. 3. ed. p. 157.

Clypeus evenly margined, quite rounded in front, with a straight line on the disc, and with a strongly elevated carina on the vertex, at each end of which in the male is a short, stout, erect, straight horn; in front it is rugosely punctate, between the two carinae there are only a few punctures. Thorax closely and strongly punctured, and clothed with a short erect pubescence the front part is retuse and in the male is a little depressed on each side of the middle in adaption to the vertical horns, the middle part very slightly lobed; in the female there is in front of the middle a sinuate line, which is almost angularly prominent on each side at its commencement, and is emarginate in the middle, in front of this the surface falls abruptly. The elytra are deeply striated, the first interstice is broad as is also the external one, the others are narrow, especially towards their extremity where they are elevated and in some parts shining

and free from punctures, where the interstices are broad they are closely punctured, the surface bears a short erect pubescence; the pygidium is closely punctured and is very pubescent. The sides of the prosternum are punctured and pubescent up to the front angles. The metasternum is prominent in front in the middle, and is rather closely punctured except just on the prominent part; the abdomen also bears a short rigid pubescence. The legs are black or pitchy black with the tarsi reddish, the under surface of the femora strongly punctured.

Singapore (Wallace!), also from China and Java.

Harold's description of this species being rather short, I have thought it useful to give here a more full one. It was contained also in Dejean's collection where it was labelled „*O. subsulcatus* mihi, *caprcolus* Latreille. Java."

Onthophagus pedator (n. sp.): *Elongatus, longius densiusque pubescens, nigro-fuscus, prothorace obscure aenescente, antennis femoribusque quatuor posterioribus fere omnino, anterioribus subtus metasternoque ex parte rufo-testaceis; prothorace dense fortiter punctato; elytris striatis denseque punctatis.* — Long. 8 1/2, lat. elytrorum 4 mill.

Mas: *Clypeo leviter producto, disco linea minus elevata, vertice cornubus duobus rectis sat elongatis, inter qua lamina brevi truncata; prothorace antice perpendiculari et biimpresso; tibiis anterioribus subelongatis.*

Fem.: *Clypeo rotundato, bicarinato, carina posteriore triacuminata, acumine medio altiore; prothorace antice binoduloso.*

Clypeus in the male shining and almost impunctate in front, in the female rugose. Thorax coarsely and very densely punctured, like the clypeus with a faint metallic tinge, and bearing a long, fine upright pubescence, the basal margin is almost absent, along the middle in the hinder part there is a not very distinct longitudinal channel. The elytra are distinctly striated with the interstices closely punctured and pubescent. The pygidium is closely punctured but the punctuation is concealed by the long and dense pubescence. The side of the prosternum is punctured up to the front angle, which is not foveolate, though a little depressed internally. The metasternum is a little elevated along the middle, the elevation being most distinct in the anterior part, it is sparingly and coarsely punctured behind, more finely

and closely towards the front which bears a long fine pubescense; the hind tibiae are short, and very broad at the extremity, their tarsi as long as the tibiae, on their underside densely set with fine ciliae, on the upper side with longer and less regular hairs, the basal joint as long as the other four together. The front femora are yellowish in their lower part; the four hinder femora bright reddish yellow, except at the extreme base; the metasternum is also in part reddish, and the epipleurae of the elytra are indistinctly tinged with the same colour.

Singapore (Wallace!).

This is a peculiar species, and I know of no close ally to it, its form is narrow for an *Onthophagus*, the colour of the underside varies as to the extent of the yellowish spots, and it is very likely that the colour of the femora may not be very constant.

Onthophagus rudis (n. sp.): *Obscure aenescens, opacus, antennis flavis; supra dense granuloso-punctatus, brevissime setulosus; clypeo mutico anterius leviter producto; prothoracc elongato, basi utrinque fovcola parva; elytris subtiliter striatis.* — Long. $5\,^1/_4$, lat. $2\,^3/_4$ mill.

Clypeus not rounded in front, but a little prolonged in the middle in front, the disc quite even, the vertex elevated in accurate adaptation to the front of the thorax, its surface is metallic, the front part being purple brassy or dark copper, the hind part brassy like the thorax, it is covered with coarse irregular rugose punctuation. The thorax is very convex, it is rather longer in the middle than are the elytra along the suture, it is margined at the base, of a dull brassy colour and densely covered with coarse granulations, except that on each side near the base there is a small smooth and shining space, which is a little depressed so as to look like a fovea. The elytra are striated, but the striae are rendered indistinct by the coarse granular sculpture, the granules are not all arranged in one direction, so that the dull surface has an obscure maculated appearance; the surface like that of the thorax bears short depressed setae. The pygidium is densely and coarsely granulated. The front angles of the prosternum are granulated and punctured; the metasternum is coarsely punctured in the middle and prominent in front. The femora are strongly punctured beneath, the hinder pair more densely than the middle. The

tibiae are short and stout, the hind tarsi are quite as long as the tibiae and rather stout.

Siam (Mouhot!).

A single specimen which I believe to be a female; I have also among Mouhot's insects a second specimen which I believe to be the female of a closely allied but distinct species. This peculiar *Onthophagus* is best placed near the african *O. maculatus*, to which it is closely allied, and which species Erichson proposed to separate from *Onthophagus* as a distinct genus with the name *Chalcoderus;* though the species I here describe is undoubtedly an ally of the african insect, yet it differs therefrom by its more distinctly margined base of the thorax, and the mentum though elongate and channelled along the middle, appears to be scarcely so long at the sides as in *O. maculatus*, but as to this I do not speak very positively owing to the difficulty of seeing it accurately without dissection.

Onthophagus aper (n. sp.): *Obscure viridi-aeneus, subopacus, antennis rufis, clava rufo-fusca; supra dense fortiterque granulatus; prothorace basi medio depresso; elytris aeneo-fuscis, striatis.* — Long. 7 mill.

Clypeus rounded in front, greenish brassy with the front margin narrowly purple, its surface rugose, on the middle with an obsolete line. Thorax only slightly convex in the longitudinal direction, coarsely and densely granulate punctate, the basal margin almost wanting, the apex in the middle distinctly depressed. Elytra of a more obscure colour than the head and thorax, distinctly striate, coarsely granulate. Pygidium convex, roughly granulated. Metasternum and femora beneath coarsely punctured, the former prominent in the middle in front.

Menado (Wallace!).

A single individual which I have no doubt is a male. The species is closely allied to *O. rudis*, but is larger and broader, the clypeus is shorter, the thorax less convex and without the lateral impressions of *rudis*.

Onthophagus ovilis (n. sp.): *Niger, subopacus, supra nudus; antennis rufis clava picescente, articulo basali margine antico laminato et crenulato; prothorace anterius crebre sed obsolete punctato, basin versus*

fere impunctato; elytris evidenter subtiliter striatis, interstitiis crebre obsoletius punctatis. — Long. 12 – 13 mill.

Mas: *Clypeo elongato, apice reflexo, lamina verticali reclinata, brevi, apicem versus attenuata; tibiis anterioribus gracilibus, elongatis.*

Fem.: *Clypeo bicarinato, carina verticali medio indistincte elevata.*

About the size of *O. austriacus;* clypeus with the surface entirely punctured in the female, in the male with the lamina smooth. Antennae obscure reddish with the club in part darker, the basal joint with the front margin produced so as to form an edge, which is marked with deep lines so as to give it a crenulate appearance. Thorax with a dense fine punctuation in front which becomes obsolete at the base in the middle, the hind angles are indistinct, the basal margin is concealed; in the female it is quite simple, in the male just behind the front margin, it is perpendicular, and very slightly impressed in the middle for the vertical lamina. The elytra are finely striated, the striae being simple, the punctuation of the interstices very obsolete. The pygidium coarsely but not deeply sculptured. The front angles of the prosternum are punctured and not impressed; the metasternum a little carinate in the middle towards the front*).

Celebes (Wallace!).

I have also a variety with the thorax rather more distinctly punctured from Menado, and a closely allied but probably distinct species from Sula Island.

Onthophagus simulans (n. sp.): *Niger, vix nitidus, antennis rufis; prothorace dense, basi medio obsoletius punctato, margine basali medio bene discreto; interstitiis internis opacis, externis crebre subtiliter punctatis.* — Long. 11 mill.

Mas: *Clypeo leviter producto, medio subreflexo, lamina verticali brevi medio cornu brevi acuminato, tibiis anterioribus gracilibus elongatis.*

This species is very closely allied to *O. ovilis* but differs in the form of the vertical lamina, as well as by the more distinct punctuation of the thorax, and by its basal margin, which is less obsolete

*) This species may possibly be my *O. Wallacei* (Col. Heft. VIII. p. 114), but as there seems to be in these islands a whole group of closely allied species, it would be premature at present to declare it as such.

Harold.

and becomes quite distinct in the middle; the punctuation of the external interstices of the elytra appears a little more distinct.

Menado (Wallace!).

I have from the same locality the female of I believe a closely allied species in which the thorax is a little metallic, and a second female belonging I believe to yet annother species from Celebes (Pfeiffer!), so that it is clear there is in these islands a little group of species closely allied to *O. ovilis*, the chief characteristic of the group being the peculiar structure of the basal joint of the antennae.

Onthophagus imbutus (n. sp.): *Cinnamomeus, nigro-irroratus, pedibus antennisque testaceis, tibiis anterioribus piceis, femoribus intermediis supra medio nigro-plagiatis; corpore subtus parce breviter pubescente.* — Long. 9 mill.

Mas: *Clypeo medio prolongato leviterque reflexo, vertice medio cornu laminato, apice acuminato; prothorace anterius medio impresso; tibiis anterioribus gracilibus subelongatis.*

Fem.: *Clypeo subrotundato, bicarinato; prothorace anterius subbinoduloso.*

Clypeus almost impunctate in the male, rugose in front in the female, a little prolonged and reflexed in the middle in the male, and with the vertex produced into an acuminate horn, somewhat as in *O. vacca*, in the female short and with two strongly elevated transverse carinae. Thorax with the front angles very little produced, the basal margin almost absent, it is channelled along the middle, distinctly moderately closely punctured, from each puncture rises a short black hair, the colour is almost cinnamon, but as each puncture is placed in a small black spot, this is much obscured. The elytra are distinctly striate, the interstices distinctly but rather sparingly punctured, coloured as the thorax, but the black points fewer. Pygidium yellowish, moderately punctured, with a rather long pubescence. Prosternum with the angles not foveolate, metasternum nearly flat, of a yellowish colour, with a metallic tinge and spotted with black. Front tibiae pitchy, with their femora pitchy in front, yellowish behind; four posterior femora yellow, sparingly and coarsely punctured beneath, the middle ones with a large dark mark on the middle of the upper side; the knees a little infuscate.

Menado (Wallace!).

Allied to the chinese (and australian) *O. luridus* Dej., but distinguished by the form of the head and horn in the male.

Onthophagus rutilans (n. sp.): *Nitidus, supra nudus, clypeo thoraceque laete aureo-cupreis; elytris nigris, profunde striatis; antennis rufis; clypeo in utroque sexu bicarinato, carina superiore a vertice remota.* — Long. 9 – 10 1/2 mill.

Clypeus broad and short, very rounded in front, along the middle with two elevated lines, the anterior slightly curved, the posterior quite straight and placed not on the vertex but in front of the eyes, the front part is rugosely, the other parts finely and not closely punctured. The thorax is of a brilliant copper or golden copper colour, it is finely punctured, the punctuation being distinct near the front angles, but nearly entirely wanting at the base in the middle, the basal margin is wanting; there is a fine channel along the middle in the posterior part. The elytra are shining black and contrast strongly with the thorax, they are deeply striated, the striae are obsoletely punctured, the interstices finely rather closely punctured. The pygidium is without pubescence and is moderately closely punctured, the outer angles more distinctly than the other parts. The sides of the prosternum are rather strongly punctured; the metasternum has a channel along the middle, and is only very slightly prominent in the middle in front; the general colour of the underside is pitchy with a slight metallic tinge; the legs are pitchy, the femora short and stout, and almost impunctate beneath, the anterior tibiae short and very stout.

Tringano, Singapore (Wallace!).

Also from Lafertés collection, where it was labelled „*rutilicollis* Reiche". The species is remarkable in that sexual characters on the head and thorax appear to be entirely wanting.

Onthophagus fulvus (n. sp.): *Ex affinitate O. ovati, fulvus, vertice obscure metallescente, mesosterno prosternique parte posteriore infuscatis, supra crebre punctatus, vix nitidus breviterque pubescens.* — Long. 4 1/2—5 1/2 mill.

Mas: *Fronte bicarinata, carina posteriore brevi, bene elevata.*

Fem.: *Fronte bicarinata, carina posteriore humili.*

About the size of *O. ovatus*, but flatter, narrower and more parallel in form. Clypeus completely rounded in front, along the middle with a curved line, and between the eyes with a shorter straight line, which in the ♂ is elevated as a narrow lamina, the front part is reddish brown, the hinder part has a metallic lustre, the punctuation is of the same character as that of *O. ovatus*, but rather coarser and closer. The thorax is quite simple and closely covered with setigerous punctures, there is a channel in the middle behind, the basal margin is not visible. The elytra are distinctly striated, the striae being deeper than in *O. ovatus*, the interstices are rather closely punctured and would be shining but for the punctuation and pubescence. The pygidium is rather coarsely, moderately closely punctured. The angles of the prosternum are not foveolate; the metasternum is rather coarsely but not closely punctured, it is channelled in the middle behind, and protuberant in front, the middle femora are moderately closely, the hind ones sparingly punctured. The anterior tibiae are short and stout, with their teeth directed outwards, their apex nearly truncate.

Menado (Wallace!), also a specimen from Celebes, which may be an individual of a variety of this species.

Synarmostes puncticollis (n. sp.): *Nigro-piceus, breviter parcius setulosus, capite thoraceque omnino dense, fortiter profundeque ocellato-punctatis; elytris crebre seriatim punctatis, punctis apicem versus ocellatis.* — Long. $4^3/_4$ mill.

Head and thorax very densely punctured and not shining, the punctures are coarse and the interstices very narrow, even the punctures at the base of the thorax in the middle, are coarse and deep, and the interstices very small; the surface is sprinkled with fine short setae, which are very scanty at the lateral margins. The elytra are rather closely punctured, the punctures being at the extremity coarse and dense, and each puncture there distinctly ocellated; the punctures become fine towards the base, and consist on the basal portion of alternate series of very fine and of coarser punctures. The antennae, legs and under surface are obscure reddish.

This species is closely allied to *S. Gestroi*, but is rather broader and may be readily distinguished from it, as well from the other species here described, by the very coarse thoracic punctuation.

I am indepted to the Museo civico di storia naturale of Genova for my specimen of this species. It was captured at Jeibodas Java, at an elevation of 4500 ft. by Dr. Beccari in October 1874.

Synarmostes Haroldi (n. sp.): *Nigro-piceus, subnitidus, brevissime setulosus; capite thoraceque dense fortiter ocellato-punctatis; elytris subseriatim crebre punctatis, punctis apicem versus ocellatis; antennis rufis.* — Long. 5 mill.

When unrolled, narrow, elongate and subparellel. Clypeus very coarsely punctured, distinctly angulate in the middle in front, thorax densely and coarsely punctured, its sides margins set with ciliae which are not crowded together. Elytra with the punctures at the base of peculiar form, each puncture being effaced on one side (somewhat thus ☾), towards the apex they are entire.

Singapore.

Very closely allied to *S. Gestroi* Harold, but I think a distinct species, it is rather longer, has the ciliae at the sides of the thorax less crowded together, and has the punctures at the base of the elytra not so deep, and different in form. The other characters mentioned by Harold are quite similar in this species.

Synarmostes brevis (n. sp.): *Niger, sat nitidus, omnino brevissime setulosus, capite thoraceque dense fortiter ocellato-punctatis; elytris seriatim punctatis, punctis basi simplicibus, apicem versus ocellatis; antennis rufis.* — Long. $4^{3}/_{4}$ mill.

Extremely close to *S. Gestroi*, but rather shorter and broader, with the setae very inconspicous, and with the ocellated punctures near the extremity of the elytra effaced on one side.

Mysol (Wallace!).

Synarmostes picinus (n. sp.): *Piceus, sat nitidus, evidenter subtiliter setulosus, thorace elytrisque crebre sat fortiter punctatis; antennis rufis.* — Long. $5^{1}/_{2}$ mill.

Larger and broader than *S. Gestroi*, similar thereto in structure and the points described by Harold, but differing a little in sculpture, the punctures on the thorax and elytra being less deeply impressed, and the ocellated punctures towards the extremity of the elytra are smaller, and most of them are effaced on one side.

Philippine Islands.

Synarmostes latus (n. sp.): *Niger, nitidus, brevissime setulosus; antennis rufis; capite thoraceque crebre punctatis, punctis minutis distincte ocellatis; elytris parcius simpliciter punctatis.* — Long. 5 1/2 mill.

Very closely allied to *S. Gestroi* but larger, and twice as broad when unrolled, withe the sculpture of the elytra different. Head coarsely punctured, but the punctures not so crowded as in *S. Gestroi;* the thorax coarsely but not altogether densely punctured. Elytra much more sparingly punctured than in *S. Gestroi;* the punctures scarcely visibly ocelluted, and the seta springing from each excessively short.

Singapore (Wallace!).

The above five species are extremely closely allied to one another and to the *S. Gestroi:* the two following species are very different in appearance, and will probably ultimately be considered a distinct genus.

Synarmostes crux (n. sp.): *Fulvus, nitidus, obsolete punctatus, elytris minus discrete piceo-signatis.* — Long. 3 mill. (capite thoraceque extensis).

Clypeus forming an acute angle on each side, external to the eyes, shining and almost impunctate, with some fine transverse rugae en the front part; the sides slope on each side so that the front part forms a distinct rather rounded angle in the middle. The antennae are palle yellow. The thorax is very short, the front angles are distinct and slightly obtuse, the sides are very much rounded and no trace of the hind angles exists, it is moderately closely, very finely punctured, the middle is a little paler in colour than the sides. The scutellum is very large, very pointed at the apex, yellow in colour, obsoletely punctured. The elytra are short and broad, their pleural portion contracted so that their width is considerably less there than it is higher up, the suture is strongly elevated towards the apex but there is no distinct sutural stria, they are rather closely sculptured with a peculiar obsolete granular punctuation, they are blackish in colour with five large yellowish marks occupying the greater part of the surface, one discoidal, and on each elytron a humeral and an apical one. The front tibiae are slender and their outer edge presents no trace of teeth: the hind tibiae are moderately broad, their outer apical angle very acute, they are almost impunctate on their

lower face, their tarsi reach just to the outer angle. All the legs and the under surface are yellow.

Sarawak (Wallace!).

Synarmostes amphicyllis (n. sp.): *Fulvus, minus nitidus, crebre punctatus.* — Long. $3^1/_4$ mill.

Head with distinct rugae on the front part. Thorax rather closely punctured, its sculpture rather coarse but with very shallow punctures. Scutellum punctured like the thorax, but not quite so distinctly. Elytra closely punctured with a flat granular punctuation. Hind tibiae very broad, obsoletely sculptured on their lower face.

New Guinea (Wallace!).

Very closely allied to *S. crux*, rather larger, much more distinctly punctured, and with broader posterior tibiae; in other respects it seems quite similar.

[The species described by the author as *Onthophagus crassus* is, I have no doubt, the *O. tricornis* Wiedem. Zool. Mag. II. 1. p. 10 (1823). The species stands in my collection with the habitat Java and Lilong, near Hongkong. From the last locality I received also the curious *O. discedens*. — Harold.]

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