NOTE XXXVI.

DESCRIPTIONS OF NEW SPECIES OF MELOLONTHINI AND RUTELINI, COLLECTED IN THE ISLAND OF SUMATRA DURING THE SCIENTIFIC SUMATRA-EXPEDITION.

BY

D. SHARP.

1. Dicheloplia crassa, n. sp.

Sat convexa, pallide grisescens, supra vage albido-vittata, squamulis acuminatis, suberectis, subtus squamulis setiformibus vestita, antennis rufis, tibiis posterioribus brevibus, crassiusculis. — Long. 7, lat. 4 m.m.

Antennae pale red, 10-jointed, the leaves of the club rather short, about as long as joints 3—7 together. Head short, clothed with pale, erect, narrow, acuminate scales. Thorax convex, much narrowed in front and behind, densely clothed with grey scales, of nearly uniform colour, but these are mixed with darker scales, these latter becoming near the front numerous; the scales are acuminate, subcrect and dense, and among them are a very few more elongate pale setae. Scutellum densely clothed with pale scales. Elytra clothed with scales similar to those of the thorax, with a sutural, and two or three other very indistinct stripes a little paler; the scales on these paler stripes are rather coarser than the darker ones. Undersurface densely clothed with a pale, uniform pubescence, consisting

of very long, acuminate scales, or setae. Anterior legs reddish, their tibiae bidentate. Middle legs rather short. Hind legs except the tarsi short, and thick.

The species is remarkable on account of its clothing, which is intermediate between scales and hairs. The tooth, or division, of the posterior claws, is placed at some little distance from the apex.

The specimen described (probably a female) was captured in May 1877 at Loeboekh Tarab.

2. Apogonia brevis, n. sp.

Brevis, latiuscula, sat convexa, sine pubescentia, nitida ferruginea, elytris pallidioribus; capite angusto; prothorace lateribus cum basi rotundatis, sat crebre punctato; elytris parce, fortiter, parum profunde punctatis, seriebusque punctorum parum distinctis; tibiis anterioribus conspicue tridentatis, dente intermedio per prominulo. — Long. $7\frac{1}{4}$, lat. $4\frac{2}{3}$ m.m.

Head about half as wide as the thorax, the margin of the clypeus, nearly straight in front, just visibly emarginate however in the middle, the surface coarsely but not densely punctate, the clypeus more densely than the other part. Thorax short, the sides greatly rounded, so that the hind angles have quite disappeared, the front angles rather prominent, but the side not in the least flattened out there, the surface rather coarsely but somewhat sparingly punctate. Scutellum large, with distant punctures. Elytra rather paler than the rest of the surface, sparingly but rather coarsely punctured, and also with some not very distinct series of punctures, viz a sutural rather distinct series, then outside this two series which are moderately close together at the base, but become divergent as they proceed backwards, but again slightly approach one another at the extremity; outside these, just internal to the humeral callus a second pair, parallel and rather approximate but indistinct, and between this pair and the outer margin, a third quite indistinct pair. There are no deeply

impressed punctures near the outer margin. Anterior tibiae short and broad, distinctly tridentate, the upper tooth quite definite, the middle one elongate, and the apical one also elongate and much directed outwards.

A single specimen was captured in May 1877 at Loebookh Tarab, whereas several (13) specimens were captured in June and July of the same year at Silago.

3. Apogonia simplex, n. sp.

Parum lata, sat convexa, sine pubescentia, cupreo-nigra, supra cuprea, pernitida, antennis rufis, pedibus nigricantibus; prothorace parum crebre punctato, lateribus posterius cum basi fortiter rotundatis; elytris parum crebre et parum fortiter punctatis, indistincteque bigeminato-striatis; tibiis anterioribus bidentatis, dentibus elongatis; labro sublevigato. — Long. 9, lat. 5½ m.m.

Head rather narrow, densely and coarsely, almost rugo-sely punctate, its surface a little uneven, the clypeus faintly emarginate in front. Thorax but little narrowed behind, but with the hind angles extremely rounded, the anterior angles but little prominent, the surface rather sparingly punctate. Scutellum very sparingly punctured. Elytra rather sparingly punctate, with a sutural series of punctures, and with a series of distant punctures on the sutural interstice, between this and the shoulder with a widely separated pair of series of punctures, and with their interstice sparingly punctate, just internal to the shoulder with a second pair of series of punctures, their interstice bearing a series of a few distant punctures, near the outer margin the punctures are also arranged in series. Labrum destitute of large punctures.

Two specimens in 1878 in the district of Rawas: one of these in May, the other (at Soeroelangoen) in July.

This species is found also at Malacca.

4. Apogonia fulgida, n. sp.

Lata, sat convexa, sine pubescentia, nigro-cuprea, supra cupreo-aenea, fulgida, antennis rufo-obscuris; pro-

thorace brevi, parum crebre punctato, lateribus posterius cum basi fortiter rotundatis; elytris sat crebre et sat fortiter punctatis, indistincteque bigeminato-striatis; tibiis anterioribus gracilibus, apice bidentatis, dentibus parum prominulis, margine exteriore superne quasi crenulato. — Long. $10\frac{1}{3}$, lat. 7 m.m.

Head much narrower than the thorax; clypeus rounded in front, and almost completely without emargination in the middle, coarsely and densely punctured, forehead rather coarsely and not densely punctured. Thorax short, the sides much rounded behind so that the hind angles have completely disappeared, the front angles rather prominent, the surface rather coarsely, moderately closely punctured, the punctures on the middle finer and more distant. Scutellum sparingly and obsoletely punctured, sometimes almost without punctuation. Elytra not closely punctured, the punctuation more distant near the suture, the sutural series of punctures not very distinct, and its interstice bearing a series of punctures, two indistinct series of punctures between the suture and the shoulder, the two being widely separated, and their interstice punctured, just inside the shoulder is a second pair of series of punctures, but this pair is not readily distinguished, and its interstice bears a series of punctures, the punctures near the outer margin are more regular and deeper. The legs are rather long and slender. The labrum bears numerous conspicuous coarse puncture

The species varies somewhat in colour, the coppery tinge of the uppersurface being sometimes not very remarkable.

Two specimens in April 1877: one at Soepajang, the second at Solok; a single one in May at Ajer Boesoek; two in June and one in July at Silago, and two in November at Moeara Laboe.

5. Apogonia scutellaris, n. sp.

Convexa, punctatissima, sine pubescentia, subopaca, nigra, elytris cupreo-nigris, antennis rufis; scutello dense

punctato; tibiis anterioribus submuticis obsolete bidentatis. — Long. 9, lat. 6 m.m.

Head very densely punctured, margin of clypeus faintly emarginate in front. Thorax densely, deeply, and regularly punctured, the sides but little rounded behind, the hind angles obtuse. Scutellum densely punctured, moderately large. Elytra very densely, deeply and regularly punctured so that the longitudinal series of punctures are rendered indistinct, near the outer margins however the punctures are separated by two or three distinct longitudinal interstices. Pygidium very deeply punctate, the punctures bearing short pale setae. Undersurface densely punctate. Anterior tibiae rather elongate and slender, the apex inconspicuously bidentate.

The dense punctuation of the scutellum distinguishes this from all other species that bear no clothing on the upper surface.

Only a single specimen (the described one) was captured in April 1877 at Soepajang.

6. Apogonia setulosa, n. sp.

Lata, convexa, fuscula, obscura, in thorace et pectore vix metallescens, opaca, densissime punctata, breviter setulosa; tibiis anterioribus submuticis. — Long. 10, lat. 6 mm.

Clypeus rounded in front; head densely and coarsely punctured, the clypeus not more densely but even slightly less densely than the rest of the surface. Thorax rather narrower than the elytra, with the hind angles not rounded, but very obtuse, the surface is excessively densely punctured, the punctures being in fact somewhat confluent in the longitudinal direction, like the rest of the body it bears short, erect, rather scanty, pale setae, and has a faint metallic lustre. Scutellum very densely punctured. Elytra very coarsely and densely punctate, so that the series of punctures, can scarcely be traced, the punctuation near the outer margin differs but little from that

of 'the other parts. Undersurface densely punctate. The anterior tibiae are rather elongate and slender, and almost without tooth on the outer margin.

The individual described which was captured at Padang, is in very bad condition, the hind legs and the greater part of the antennae being absent.

7. Lachnosterna sumatrensis, n. sp.

Elongata, parallela, supra opaca, pruinosa, opalescens, subtus rufo-testacea; antennis pedibusque rufis, pectore piloso, capite lato, clypeo in medio leviter emarginato; prothorace lato, sat crebre punctato, margine laterali anterius serrato, posterius integro; elytris conspicue costatis, inter costas evidenter punctatis. — Long. 23, lat. 11 m.m.

Antennae 10-jointed, the 4th joint angulate in front, the 5th acutely angulate, the 6th and 7th very short, with elongate prolongations, club rather elongate (2 m.m. long). Clypeus rounded on each side, somewhat emarginate in the middle in front; the surface of the head approaches to black in colour, is opaque coarsely, evenly, moderately closely punctured, the clypeal suture deep, slightly sinuate in the middle, the vertex without any transverse elevation. Thorax about as broad as the elytra, the hind angles very obtuse but quite distinct, the front angles but little produced, the lateral margin is rather fine, and from the front to behind the middle is interrupted here and there, a seta being planted in each interruption, these about eight or nine in number; the surface somewhat sparingly and finely, but quite distinctly punctured; scutellum rather sparingly punctured, the punctures wanting about the middle. Elytra not so dark in colour as the head and thorax, reddish, but with a varying glance, either purplish and dull, or opalescent, with the longitudinal costae broad and distinct, between the costae sparingly punctured. Anterior femora with the free basal extremity elongate; lower spur of hind tibiae much dilated at the extremity.

The specimen described (captured in March 1877 at Soepajang) is probably a male; the species is not at all closely allied to any other known to me; perhaps it comes near to (*Holotrichia*) puberina Blanch., if I may judge from description.

8. Lachnosterna pumila, n. sp.

Suboblonga, angustula, rufescens vel picescens, antennis pedibusque rufis, fortiter fere dense punctata, haud opaca; pectore nudo. — Long. 10-11, lat. $4\frac{2}{3}-5\frac{1}{3}$ m.m.

Antennae 10-jointed, but with the 3rd, 4th and 5th joints anchylosed, the 6th and 7th without distinct prolongations, the club rather small. Head small, the clypeus rather deeply emarginate in front, with the lateral angles completely rounded, the surface coarsely and densely punctate, a little shining, the punctures on the clypeus not quite so dense as on the hinder part; the vertex indistinctly angulate. Thorax strongly transverse, its greatest width about the middle, the hind angles obtuse but distinct, the front angles nearly rectangular, slightly obtuse, very little produced, the lateral margin fine, with two or three very minute indistinct interruptions in front of the middle, the surface coarsely and closely punctured, but the interstices shining. Scutellum with a very few punctures. Elytra coarsely and rather closely punctate. so that the costae can, with the exception of the sutural one, scarcely be detected. Pygidium coarsely and closely punctured. Undersurface without pubescence, the breast punctate, its sides opaque, the middle shining; ventral segments equally but somewhat distantly punctured, opaque at the sides, shining in the middle. Spurs of hind tarsi rather slender, acuminate.

One specimen from Silago (July 1877), and three specimens from the district of Rawas: two in May 1878, the third (from Soeroelangoen) in July of the same year.

This species is found also in Java. The specimens from

Sumatra do not differ in any important respect from those from Java. The mentum in this species is small, and is very deeply impressed along the middle; the tooth of the claws is very large, and curved, it is indeed even larger than the apical portion of the claw, to which it is similar in form. Rhizotrogus exactus Walk. from Ceylon is I believe an allied species. A still more closely allied, but distinct, species occurs in Borneo (Sarawak).

9. Lachnosterna barbata, n. sp.

Sat elongata, posterius latior, supra opaca, pruinosa nigricans, elytris sanguineo-nigris, pectore villoso, abdomine pallido, antennis rufis, pedibus piceo-rufis; clypeo anterius emarginato; prothoracis margine laterali vix interrupto; elytris late sed obsolete costatis. — Long. 20, lat. 9 m.m.

Antennae 10-jointed, 5th and 6th joints angulate in front, 7th with a short prolongation, club quite small. Head much narrower than the thorax, the surface coarsely and closely punctate, clypeus moderately long, emarginate in front in the middle, its margin but little reflexed. Thorax rather narrower than the elytra, a good deal broader in the middle than in front and behind, the hind angles very obtuse, the surface moderately closely punctured and quite dull, the punctures more scanty on the middle, each puncture is sharp and well defined in front, but is not so definitely limited but rather as it were slightly prolonged behind, so that at the sides where they are most dense there is a slight strigose appearance; the lateral margin about the middle almost severed by three or four setigerous punctures. Elytra somewhat sparingly and not coarsely punctate, and with broad, impunctate, but scarcely elevated costae. Pygidium closely punctate. Ventral segments finely and sparingly punctured. Spurs of hind tibiae rather broad.

This is an ordinary species in appearance, but has the Notes from the Leyden Museum, Vol. III.

parts of the mouth furnished with very long setae; the very deeply cleft labrum has on each side very long setae, the base of the mentum in the middle has a large puncture bearing two very long setae, and on the middle has two shorter setae, the sides of the mentum are on a different plane to the middle and are coarsely punctate, and bear very long setae. The base of the front femur is entirely without any prolongation.

A single specimen was captured in May or June 1878 in the Highlands of Palembang.

10. Lachnosterna gravida, n. sp.

Robusta, piceo-rufa, capite thoraceque piceis, abdomine dilutiore, nitida, dense punctata, pectore pubescente; clypeo in medio emarginato, utrinque rotundato, vertice carinato; prothoracis margine laterali tenui integro, lateribus ad angulos anteriores, parum explanatis. — Long. 27, lat. 12½—13¼ m.m.

Head densely and coarsely punctate, and consequently but little shining, the vertex strongly carinate, behind the carina densely and rather finely punctate. Thorax rather large, broad, the base slightly sinuate on each side near the hind angles so that these are very obscurely produced backwards, but they are very obtuse, almost rounded, the surface is densely punctate, the punctuation being especially dense on the front, towards each side there is a space on which the punctuation is scanty or absent. Scutellum with a patch of punctuation on each side. Elytra shining, at the base rather closely, towards the apex more sparingly punctured, with narrow indistinct costae, and with the suture more broadly raised. Pygidium moderately close punctured. Second joint of posterior tarsi not quite so long as the basal one.

This species is closely allied to the Javanese Melolontha leucophthalma Wied., but it is more closely and finely punc-

tate, and the sides of the thorax are less explanate at the front angles.

Two specimens were captured in January 1878 at Soerian.

11. Lachnosterna convexa, n. sp.

Elongata, fere angustula, subparallela, transversim valde convexa, dense punctata, subnitida, pectore breviter hirsuto; clypeo in medio fortiter emarginato, utrinque subrotundato, vertice carinato; elytris fere ecostatis. — Long. 19, lat. 9 m.m.

Head closely punctate, the vertex strongly carinate, behind the carina almost impunctate, clypeus rather broadly, and somewhat deeply emarginate in the middle, the lobes on each side of the emargination nearly but not quite rounded. Thorax broad, dilated at the sides in the middle, the base scarcely sinuate on each side, the hind angles rounded, the lateral margin scarcely distinctly crenulate, and not distinctly explanate in front, the anterior margin truncate, the surface very densely, evenly, and not coarsely punctured. Scutellum punctate. Elytra closely punctate, the punctuation not so dense towards the apex as at the base, appearing almost without costae, but the lateral one distinct, the sutural one, broad, but little elevated, punctate and so indistinct. Ventral segments somewhat coarsely punctate; breast with short pubescence; base of anterior femora with short, free angular prominence; hind tibiae coarsely punctate externally; 2nd joint of hind tarsi as long as the preceding one.

This species appears intermediate between Melolontha leucophthalma Wied. and Ancylonycha bidentata Burm.

A single specimen, captured in April 1878 at Socroelangoen, has been brought home by the Expedition.

12. Lachnosterna discedens, n. sp.

Crassiuscula, parum elongata, convexa, nigro-picea,
Notes from the Leyden Museum, Vol. III.

elytris dilutioribus, nitida, pectore haud villoso, subtilius squamoso; capite brevi, clypeo in medio emarginato, vertice carinato; elytris nitidis, fortiter punctatis, sat distincte costatis; prosterni processu post-coxali libero erecto, apice sub-emarginato. — Long. 20, lat. 10 m.m.

Antennae 10-jointed, the club appearing 5-jointed in consequence of the 6th and 7th joints being provided with prolongations as long as the leaves of the club, the 5th joint also with an angulor projection from the front. Sides of the mentum much raised, bearing elongate, erect setae. Head short, and broad, the vertex strongly carinate, the clypeus a good deal emarginate in the middle in front, the surface coarsely and closely punctate. Thorax broad, front angles obtuse, hind angles very obtuse, lateral margin fine, crenulate, surface rather coarsely somewhat sparingly punctured, the punctures rather irregularly distributed. Scutellum punctate. Elytra rather coarsely punctate, the punctures so formed and placed that when magnified they give rise to an obscurely appearance of the surface being transversely rugose, the costae rather narrow and somewhat indistinct, the sutural costa broad and very little elevated, punctured. Pygidium broad, coarsely punc-Breast furnished at the sides with depressed scales, instead of hairs. Anterior femora with very short free angular prominence behind.

I have preferred in the present condition of the genus Lachnosterna, to place this insect therein, rather than to give it a distinct generic name; the structure of the antennae and of the prosternal process will allow it to be identified with ease.

One specimen in March 1877 at Agam, several ones (7) in January 1878 at Padang, and one in May 1878 in the district of Rawas.

13. Lachnosterna marmorata, n. sp.

Elongata, fusco-rufa, subopaca, antennis pedibusque Notes from the Leyden Museum, Vol. III. rufo-testaceis, corpore squamulis minutissimis, supra parcius, subtus crebrius adsperso; elytris vix inæqualibus, coloribus indeterminatis marmoratis. — Long. 28, lat. 13½ m.m.

Antennae 10-jointed. Head rather small, of a dark vinous red colour, coarsely punctate, the punctures rather widely separated, and each bearing a very minute pale scale; clypeus not in the least emarginate in the middle, on the contrary with a tendency to form a very slight minute projection there. Thorax similar in colour to the head. and punctate and squamose in a similar manner, with the sides not greatly rounded, broader at the base than in front, the hind angles obtuse, the base scarcely sinuate on each side near the hind angles. Scutellum large, with a few squamigerous punctures, and at each angle in front with a very small patch of minute white scales. Elytra of a very peculiar vinous red colour, the colour forming very irregular transverse patches of different shades, the surface not quite even, but with the paler portions slightly depressed, the very minute scales are placed rather more densely on the pale portions, and so increase the appearance of irregularity, before the apex there is a waved mark more conspicuous than the rest, there are no elevated costae, and the waved marks do not extend to the sides. Pygidium with very minute white scales. Undersurface more closely clothed than the upper with pale scales. Breast without pubescence. Legs yellowish red, elongate and rather slender. Anterior tibiae tridentate.

This remarkable insect will no doubt form a distinct genus, but in the present extremely unsatisfactory condition of the classification of the larger Melolonthini it is not desirable to make isolated new genera. The following however are some of the peculiarities which distinguish it, independently of its remarkable colour and appearance, from the ordinary Lachnosternae. Labrum rather prominent, its dependent front margin with very largely developed ciliae. Mandibles projecting at their extremity as a rounded plate; extremity of labium greatly notched on each side, so that

the front margin stretches outwards on each side as an acute, slender angle. Middle and hind tibiae with a single short carina in the middle, without the least trace of a second, upper carina; outer hind angle of posterior coxae rounded.

A single specimen captured by Mr. I. C. van Hasselt at Boenga Maas, province of Palembang

14. Lachnosterna miranda, n. sp.

Parum elongata, squamis pallidis crebre adspersa, nigricans, elytris rufo-nigris, pruinosis, costatis; antennis pedibusque piceis. — Long. 20, lat. 10½ m.m.

Clypeus quite rounded in front; surface of head dull, rather sparingly, and coarsely punctured, each puncture bearing a small very pale vellow scale. Thorax narrower in front than at the base, front angles rather prominent. hind angles very obtuse, surface quite dull nearly black, covered not very closely with punctures each of which bears a fine pale scale. Scutellum also squamigerous, the scales on each side in front denser so as to form a small patch. Elytra with an obscure reddish tint, opalescent or pruinose in a certain light, regularly covered with squamigerous moderately distant punctures, and each with a sutural and four other costae, which although but slightly elevated, are rendered more distinct, by the presence of some larger pale scales, very distant from one another. Undersurface clothed moderately closely with pale scales; breast pubescent, squamose at the sides. Legs moderately long; front tibiae tridentate; middle and hind ones unicarinate; middle and hind legs clothed with pale squamiform setae, not scales.

This is another very peculiar species, agreeing with Lachnosterna marmorata and Lepidiota gracilipes Sharp in the horned condition of the front of the labium, so that the three might be united in one genus by this character and the squamigerous surface. L. miranda agrees with

L. marmorata in the prominent labrum; and in the fact that the prosternum is slightly protuberant in immediate contiguity with the coxae, with Lepidiota gracilipes.

The described unique specimen was captured in March 1877 at Soepajang.

15. Tricholepis vestita, n. sp.

Nigricans, supra fusco-rufa, pube tenue depressa sat dense vestita, parum nitida, abdomine segmentis 2—4 medio nudis, antennis pedibusque piceo-rufis; elytris callo apicali distincto. — Long. 32—38, lat. 15½—19 m.m.

Closely allied to Rhizotrogus grandis Cast. (Ancylonycha puberina Blchd), but a little larger, and distinguished by the coarser punctuation, and more scanty clothing. Clypeus not emarginate in front. Prothorax closely and not altogether finely punctured, closely clothed with very fine short hairs, which however allow the punctuation to be detected. Elytra at the base densely punctured, towards the apex with a scanty punctuation, the punctuation at the base is quite fine, but towards the apex it is coarse although of a peculiar nature, each puncture being in fact a kind of indefinite impression; at the base where the punctuation is dense there is a dense clothing of short pale hairs like those on the thorax, but towards the apex, this clothing becomes scanty so as to allow the shining surface to be perceived. The undersurface is clothed in a similar manner to the upper, except that the middle of the ventral segments is bare, and on the breast the hairs are fine, rather longer and less regular.

One specimen was captured in April 1877 at Soepajang a second in the same month at Solok, a third in May 1877 at Loeboekh Tarab and a fourth at Boenga Maas.

In one of these four individuals (that from Boenga Maas, and captured by Mr. I. C. van Hasselt), the punctuation and clothing of the elytra become still more scanty than

in the others, so that it has almost the appearance of being a distinct species.

16. Leucopholis cingulata, n. sp.

Şubtus nigricans, supra brunnescens squamis niveis dense vestita, elytrorum marginibus lateralibus nudis; subtus lateribus densissime niveo-squamosis, pectore lateribus tenuiter pubescentibus, medio cum pedibus abdomineque parce squamoso. — Long. 32, lat. 18 m.m.

Antennae pitchy; clypeus scarcely emarginate in the middle; surface of the head rather coarsely punctured, covered with white scales (in the only specimen before me the scales are absent from the middle of the head but this is probably the result of abrasion). Thorax sinuate at the base on each side with the hind angles acute, and prolonged a little backwards outside the shoulders of the elytra, the front angles prominent and acute, but quite short, the surface rather coarsely punctate, but quite covered with white scales. Scutellum and elytra densely covered with white scales, but the latter with lateral band free from scales. Pygidium densely clothed with white scales which are smaller and narrower than those on the elytra. Sides of the body beneath denselv clothed with white scales forming a conspicuous lateral band.

This species is not at all closely allied to any other known to me, but may perhaps be allied to *L. lactea* Burm., and *L. molitor* Burm. with which I am unacquainted. The individual described is no doubt a female; the anterior tibiae are bidentate, and the mesosternal process is quite short, and stout.

It was captured in September 1877 at Alahan pandjang.

17. Anomala sordidula, n. sp.

Parvula, testacea, prothorace tarsisque rufescentibus, Notes from the Leyden Museum, Vol. III. illo plagis duabus plus minusve indistinctis fuscis; elytris circa suturam infuscatis, indistincte puntato-striatis, interstitiis punctatis, setulis erectis sat crebre munitis. — Long. 7—8 m.m.

. This is one of the smallest and most obscure species of the genus, and has the appearance of a Melolonthid rather than of a Rutelid. From the structure of its claws it should be placed in Burmeister's subgenus Rhinoplia. The head is pale, the eyes moderately large, the surface rather closely and coarsely punctured. The thorax is quite shining, moderately coarsely and not closely punctured, on each side of the middle is a variable, indistinct, darker mark. The elytra are more or less broadly infuscate along the suture, the punctures are arranged in rather indistinct rows, and the interstices are rather irregularly punctate, from each puncture there springs a fine hair. The legs are rather slender; the front tibiae bidentate; on the front and middle feet the larger claw is distinct bifid at the apex; the claws of the hind feet are comparatively little unequal. The sexual distinctions are very slight.

Described from individuals found at Perak. The Dutch expedition found only three specimens (in May 1878 in the district of Rawas); they are rather more elongate than the Perak specimens, the elytra have no infuscation along the suture, and their punctuation is rather more regular and distant.

18. Anomala rotundiceps, n. sp.

Pallide testacea, capite picea, antice dilutior, elytris anguste nigro-cinctis, prothorace in medio nigro-bimaculato; clypeo anterius omnino rotundato; elytris conspicue punctatis. — Long. 16 m.m.

This species may be placed near Burmeister's A. fraterna and dorsalis, which form his subgenus Heteroplia, but it is distinguished from the species just named by the completely rounded front of the head; this is of a pitchy colour

but becomes much paler in front, it is coarsely and rugoselv punctured, but the punctures on the vertex are much more distant than they are in front. The thorax is shining, and is moderately coarsely, rather sparingly punctured, in the middle is a more or less distinct dark mark, divided in the middle so as to form two or more nearly united spots. The scutellum is finely and sparingly punctured and is margined with black. The elytra are also narrowly margined with black, and may have a humeral and sub-apical black spot, they are very distinctly punctured, the punctures consisting of a sutural series, and four or five pairs of lines of punctures, the spaces between these are also punctate, so that the serial punctuation is not very distinct. The pygidium is rather coarsely and sparingly punctured. The hind legs are rather short and stout, their tibiae are infuscate at the extremity, and the tarsi also are darker; the tibiae are a good deal dilated in front of the middle, and bear externally only a single transverse carina. The front tibiae bidentate without trace of a third tooth.

Two specimens: one from Silago (July 1877), the other from the district of Rawas (May 1878).

A specimen from Sarawak agrees with one from Sumatra (the Silago specimen), except that it is narrower, and has the black spots on the elytra distinct; the second individual from Sumatra (the Rawas specimen), has the elytra less distinctly punctured, and the hind tibiae have the rudiments of a second carina on the outside.

19. Anomala breviceps, n. sp.

Parvula, testacea, nitida, elytrorum sutura angustius infuscato; capite crebre, haud rugulose punctato, oculis majoribus; prothorace crebre punctato; elytris fortiter regulariterque lineato-punctatis; pedibus crassiusculis, tarsis posterioribus piceis. — Long. 10 m.m.

Allied to A. ypsilon, and A. communis, but of only half
Notes from the Leyden Museum, Vol. III.

their size. Antennae testaceous, with elongate club. Head short, with convex eyes, the surface rather coarsely punctate, but the punctures not confluent. Thorax rather coarsely, moderately closely punctured. Scutellum sparingly punctate. Elytra yellow, with the suture narrowly and indistinctly paler; they have very distinct regular lines of punctures, the interstices being, with the exception of the outer ones, destitute of punctures. The pygidium is coarsely, rather closely punctured. The breast is almost without setae; the ventral segments rather coarsely punctate. The legs including the tarsi are rather stout; the front tibiae are tridentate but the upper tooth is indistinct. The hind tibiae have two carinae on their outer face.

Three specimens have been brought home, one captured in March 1877 at Fort de Kock, a second in July of the same year at Sidjoendjoeng, the third at Padang.

20. Anomala fuscula, n. sp.

Fusco-aenea, nitida, pectore piloso, antennis rufis; prothorace crebrius punctato; elytris dense punctatis, punctis subregularibus, haud striatis; pygidio opaco, ruguloso, parce piloso. Ex affinitate A. sulcatulae Burm., sed corpore supra minus dense et profunde punctato. — Long. 13—15 m.m.

Rather narrow; head and thorax brassy, coarsely and closely punctured, the punctures more distant on the middle of the thorax; scutellum rather finely and sparingly punctured. Elytra densely punctured, the punctuation having a somewhat regular appearance, and yet not consisting of regular series, or striae, of punctures, about the base and along the suture, the punctuation is less coarse and dense, but towards the sides it becomes somewhat rugulose; the colour is rufescent or fuscescent, with a strong brassy reflection. The pygidium is densely rugose, and bears fine, short, pale hairs, becoming longer towards the hind margin. Beneath the breast bears a dense pale pubescence, which however leaves the middle bare; the lateral accumu-

lations of setae on the ventral segments are conspicuous. The front tibiae are slender with elongate apical, and obsolete middle tooth. The hind tibiae are very coarsely punctate externally.

This species appears to differ from A. sulcatula only by the sculpture. It occurs also in Java, from whence it was procured by Dr. Horsfield.

Several individuals have been brought home by the Sumatra-Expedition: two from Silago (June and July 1877), four from Moeara Laboe (November 1877), two from Loeboekh Gadang (December 1877) and one from the district of Rawas (May 1878).

21. Anomala chalcites, (Dej.) n. sp.

Ex affinitate A. viridis, sed multo minor. Supra viridis, nitida, subtus cum pedibus rufo-cuprea, tibiis posterioribus tarsisque obscurioribus, metallescentibus; elytris aequaliter, sat fortiter, vix crebre punctatis; pygidio viridi, dense aequaliterque ruguloso, opaco, nudo. — Long. 18—21 m.m.

Above of an uniform, rather dark green colour; head rugosely punctured in front, more sparingly on the vertex. Thorax shining, very distinctly, evenly, moderately closely punctured; scutellum punctured like the elytra. Elytra distinctly and evenly, but not densely punctured, quite shining, the serial punctures similar to the others, and thus indistinct, although their linear arrangement allows them to be perceived. Pygidium entirely dull green, densely and evenly rugose, quite dull, and without any pubescence; the exposed part of the propygidium also dull green. Undersurface entirely rufous, more or less distinctly tinged with brassy; the posterior tibiae and tarsi always darker and more metallic than the rest of the legs.

Specimens from Silago, Moeara Laboe, Loeboekh Gadang, Peak of Indrapoera (at an altitude of about 1000 M.), Padang and the district of Rawas. A specimen of a

variety in which the elytra are more strongly punctured was captured in April 1877 at Solok.

This appears to be a common species, and is found in Java and Borneo, as well as in Sumatra: Dejean's specimens are labelled as being from the former of these localities. Burmeister's few words of description of A. semi-purpurea (Handbuch IV, 2, p. 505) can scarcely apply to this species.

22. Anomala flagellata, n. sp.

Ex affinitate A. bicoloris Burm. et A. xanthopterae Blchd.; supra viridis, plus minusve testaceo-diluta, nitida, fortiter punctata, pygidio fere opaco, dense subtiliter parum profunde ruguloso, parce piloso; subtus (cum pedibus) testaceo-virescens, antennis rufescentibus, flabello (in mare) elongato. — Long. 16—17 m.m.

This is of the size and form of A. xanthoptera Blchd. It is of a green colour but more or less diluted with testaceous, so as to have in some lights a more or less purple appearance, below yellow, more or less tinctured with green; the colour no doubt a good deal variable. Head green, its punctuation coarse, dense and rugose. Thorax rather coarsely and closely, evenly punctured. Elytra rather rough, the punctuation being uneven so as to cause in some parts rugosities, and the serial punctures, though only indistinct, more or less deeply impressed, so as to give rise to an obscure appearance of striation. On the undersurface the setae and pubescence of the breast and legs are, as in A. xanthontera. rather longer and more conspicuous than in the allied species.

The four individuals are all males, and have the club of the antennae of unusual length, viz 2½ m.m. They were captured in September and October at Alahan Pandjang.

23. Anomala chalcescens, n. sp.

A. cupreae Hope colore subsimilis, sed multo brevior; nigro-Notes from the Leyden Museum, Vol. III. aenea sat nitida, crebre punctata, elytrorum punctis seriatis sat conspicuis; antennis rufo-piceis; pygidio opaco, nudo, dense, aequaliter, parum fortiter ruguloso. — Long. 17 m.m.

Very similar in form to the European A. vitis (A. aenea Mun. Cat.) but a little smaller, and similar in colour to the Japanese A. cuprea. Head very densely but not coarsely punctured. Thorax shining, very evenly, but neither closely nor coarsely punctured. Elytra with the rows of punctures distinct, though not differing much from the interstitial punctuation, this latter similar to that of the thorax; the epipleural margin distinct till it reaches the propygidium, the membranous border rather broad as in A. vitis; by this character the species may be considered intermediate between A. severa Burm. and A. cuprea Hope.

Five specimens have been brought home: one was captured in March 1877 at Agam, an other in the same month at Paja Koemboeh, and three in May 1878 in the district of Rawas.

24. Mimela debilis, n. sp.

Pallide testacea, vix metallescens, prothorace crebre punctato; elytris seriebus regularibus circiter decem punctorum, interstitio primo solum punctato. — Long. 9—11 m.m.

Antennae entirely pale, with rather short club. Head coarsely punctate in front, the vertex coarsely punctate. Thorax yellow, but more distinctly tinted with a golden or metallic reflection than the rest of the surface, moderately coarsely and closely punctured. Elytra with ten or eleven rows of rather coarse punctures, which are somewhat deeply impressed so that the interstices are a little convex, the first of these interstices bears on the basal portion an irregular punctuation which ceases before the extremity. Pygidium coarsely punctate. Breast only very sparingly pubescent. Legs rather short and stout, pale yellow, except the tarsi, which are more or less infuscate or obscure.

I am not aware that any species nearly allied to this has been yet described, but I have three or four closely allied forms from other localities in Asia and Malasia.

Three specimens from Padang and one from Doesoen Tengah (November 1877).

25. Popilia foveolata, n. sp.

Nigra, nitida, pedibus pygidioque colore variabilibus, interdum rufis; subtus conspicue albido-setosa, pygidio basi utrinque macula parva albida; elytris quadrifoveolatis, seriebus punctorum subtilibus. — Long. 8—8½, lat. 5 m.m.

Head black, clypeus strongly margined, densely rugosepunctate, vertex sparingly punctured. Thorax black, but with a more or less indistinct red spot on each side, very shining, at the front and sides with some coarse punctures, and just within the lateral margin with a very few white setae. Elytra shining black, with a very large impression on each near the scutellum, and a second smaller, but very distinct, at the shoulder, and with six or seven more or less incomplete rows of somewhat obsolete punctures. Pygidium sparingly rugose, sometimes nearly black, sometimes nearly red, at the base on each side with a small but distinct patch of white hairs. Undersurface and femora with conspicuous white setae arranged in the usual manner. Hind legs short and very stout, their tarsi unusually short; the femora and tibiae are sometimes reddish yellow, sometimes nearly or quite black.

This distinct species may be placed near *P. adamas* Newm. The eleven specimens brought home by the Expedition were captured at Paja Koemboeh and Agam (March 1877), Silago (July 1877), Moeara Laboe (November 1877), Loeboekh Gadang (December 1877), in the district of Rawas (May 1878) and at Koetoer (June 1878).

Found also at Sarawak in Borneo, by Marquis Doria in 1865—6: the specimen from there quite agrees with a series from Sumatra.

26. Parastasia nigripennis, n. sp.

Brevis, nitida, rufa, capite, elytris, trochanteribus, tibiarum apicibus tarsisque, etiam tibiis anterioribus externe nigris; prothorace elytrisque subtiliter punctatis, pygidio longius piloso. — Long. $12\frac{1}{2}$, lat. $6\frac{1}{2}$ m.m.

Head black, in front coarsely but not deeply punctate, clypeal margin reflexed, obscurely bidentate. Thorax shining, red, sparingly and rather finely punctate. Scutellum red almost impunctate. Elytra blue-black, shining, with numerous series of fine almost obsolete punctures, the first and second series rather widely separated and their interstice with numerous irregularly placed, similar punctures. Pygidium tawny-red, dull, with erect, elongate, yellow pubescence. Beneath red, with the trochanters black, the breast with rather dense yellow pubescence. Legs red, the knees with a very small black spot, the apices of the tibiae black, as also are the tarsi. Middle tarsi very stout, their anterior claw, with large very stout tooth.

A single specimen captured by Mr. I. C. van Hasselt at Boenga Maas, province of Palembang.

27. Parastasia sordida, n. sp.

Brevis, opaca, dilute brunnea, thorace elytrisque vage fusco-signatis, subtus fusco-brunnea, pedibus testaceis; prothorace magno, fortiter punctato; elytris fortiter, sub-obsolete, seriatim punctatis, punctis ocellatis. — Long. 11, lat. 6 m.m.

Head very coarsely punctate, the clypeus in front with two very short reflexed teeth, mandibles prominent, with broad extremity, but prominent acute outer angle. Thorax large very dull, with numerous indefinite dark marks, and with numerous coarse deep punctures. Scutellum impunctate. Elytra with rows of large, but not deeply impressed punctures, each of which has a large central spot;

not only are the punctures thus occilated, but when highly magnified it is seen that the central spot of each itself consists of an elevated portion surrounded by a margin; the wing cases are of a brownish or cinnamon colour, and have behind the scutellum an indistinct transverse dark mark extending forwards on each side towards the shoulder. Pygidium very coarsely punctured especially towards the extremity.

A single specimen from the district of Rawas (May 1878). Found also by A. R. Wallace on the same island.

This species and *P. nigripennis* are very distinct from any others of the genus known to me, and are remarkable by their very thick, and short middle tarsi, the front claw of which bears an enormous tooth; the middle tibiae are short and thick, but a good deal narrower at the extremity; the ligular portion of the labium is larger than in the other species.

Thornhill, August 1881.