

4. Description des espèces nouvelles de la collection péruvienne de M. le Dr. Raimondi de Lima. Par L. TACZANOWSKI, C.M.Z.S.

[Received February 20, 1883.]

(Plate XVII.)

Dans une riche collection d'oiseaux péruviens que M. le docteur Raimondi, le savant explorateur du Pérou, a eu l'obligeance de me communiquer, pour m'en servir au travail sur la faune ornithologique de la République péruvienne, dont je suis occupé depuis plusieurs années, j'ai trouvé 7 espèces qui me paraissent être inédites. Je m'empresse donc à présenter leurs diagnoses.

1. *CARENOCHROUS SEEBOHMI*, sp. nov.

C. supra ardesiacus; fronte, superciliis latissimis lorisque nigris; pileo cum nucha fusco-castaneo; macula postnasali alba; regione auriculari ardesiaca; gula cum collo antico pectoreque superno latissime albis; mystacibus tenuissimis nigris; pectore infero, hypochondriisque griseo-ardesiaceis; abdomine medio albido, postice ochraceo perfuso; subcaudalibus ochraceis; alis caudaque schistaceis, plumis colore dorsi externe limbatis; subalaribus, remigum marginibus internis et primi remigis margine externo albis. Rostrum supra brunneum, subtus flavidum; pedes brunnei; iris brunnea. Long. alæ 76, caudæ 71, rostri 17, tarsi 29 mm.

Hab. Cajacay, provinciæ Cajatambo.

Espèce la plus voisine des *C. schistaceus*, *castaneifrons*, et *taczanowskii*, mais se distinguant de toutes par le front noir, la couleur blanche largement disposée sur le devant des parties inférieures du corps, par les moustaches noires beaucoup plus fines et beaucoup plus courtes, les sous-caudales ocreuses, la couleur du dos moins foncée, la queue non étagée et distinctement rayée à travers d'une nuance plus foncée et le bec plus long. En outre du premier par le manque complet du miroir blanc; du deuxième par la présence de la tache blanche sur les deux côtés du front; du dernier par la région auriculaire non noire.

2. *CARENOCHROUS DRESSERI*, sp. nov.

C. supra ex brunneo griseus; fronte, superciliis latissimis lateribusque colli nigris; pileo medio pallide rufo; loris et regione suboculari nigricantibus; macula magna postnasali alba; regione auriculari grisea; gula latissime isabellino-albida, mystace nigro tenui utrinque marginata; pectore abdomineque medio isabellinis, hypochondriis late griseis, subcaudalibus ochraceis; alis caudaque ardesiaceis, speculo alari magno, subalaribus et marginibus internis remigum albis. Rostrum fusco-corneum; pedes pallide brunnei. Long. alæ 61, caudæ 62, rostri 13, tarsi 23 mm.

Hab. Montaña (forêt) de Nancho (coll. Jelski).

Espèce la plus voisine du *C. leucopterus* de l'Équateur, mais di-



J. Smitth.

Hanhart imp

PHYTOTOMA RAIMONDII.

stincte parfaitement par le front noir, la région auriculaire non noire, la couleur des parties supérieures moins foncée, celle du dessous non blanche, le miroir alaire moins volumineux.

Un autre exemplaire de la même localité est en général plus foncé, et a le dessous du corps d'une couleur ocreuse; mais comme il a été envoyé en alcool, on ne peut pas répondre s'il n'a pas changé ses nuances.

3. PHYTOTOMA RAIMONDII, sp. nov. (Plate XVII.)

Ph. supra griseo-cinerea, plumis disco fusco; uropygio immaculato; margine frontali tenuissimo, rufo; subtus gula pallide ochracea, rufo varia; collo antico hypochondriisque cinereis; fascia lata abdominalisubcaudalibusque vivide cinnamomeo-rufis; alis nigricantibus albo oblique bifasciatis; remigibus cinereo limbatis; cauda nigricante, apice albo. Rostrum fusco-corneum; pedes brunnei. Long. alæ 88, caudæ 82, rostri 17, tarsi 13 mm.

Hab. Tumbez (coll. Jelski).

Espèce la plus voisine de la *Ph. angustirostris*, distincte de toutes les *Phytotomes*; connue par le roux de la tête réduit à une fine bordure sur le devant même du front, et le roux occupant seulement le milieu même de tout l'abdomen, interrompu longuement de la couleur de la gorge par le cendré occupant le cou antérieur dans toute sa hauteur.

4. OCHTHŒCA JELSKII, sp. nov.

O. supra castaneo-brunnea; subtus cinerea; pileo fusco; fronte flava; superciliis albis; ventre medio albo; alis brunneis, rufo late bifasciatis; cauda brunnea, unicolori. Rostrum nigrum; pedes nigricantes; iris fusco-brunnea. Long. alæ 67, caudæ 61, rostri 14, tarsi 22 mm.

Hab. Montaña de Nancho, 7700' au dessus du niveau de la mer (coll. Jelski).

Espèce voisine de la *O. citrinifrons* de l'Écuadeur, mais distincte parfaitement par la nuance des parties supérieures du corps, et par la présence des deux larges bandes rousses à travers de l'aile.

5. UPUCERTHIA PALLIDA, sp. nov.

U. supra terreno-grisea, unicolor, cauda rufescente, superciliis albidis; subtus isabellino-albida; crisso subcaudalibusque isabellinis; gula subundulata; subalaribus ochraceis. Rostrum capite longius, gracile, corneum; pedes brunnei; iris fusco-castanea. Long. alæ 92, caudæ 71, rostri 34, tarsi 27, rectrice externa ad apicem caudæ 13 mm.

Hab. Junin (coll. Jelski).

Voisine à l'*U. jelskii*, Cab., et provenant de la même localité, mais parfaitement distincte par une taille plus forte; la couleur des parties supérieures du corps moins foncée et d'une autre nuance; queue beaucoup plus rousse; les sous-alaires plus rousses; la gorge et le devant du cou moins ondulés, la poitrine pure.

6. CYNANTHUS GRISEIVENTRIS, sp. nov.

C. supra viridis, fronte longissime squamosa, splendidissima; subtus totus pallide cinereus, gula splendide cœrulea, plumis basi albis; crisso albo; tectricibus alarum dorso concoloribus, campterio albo, remige primo externe albo marginato; cauda profunde emarginata, splendide viridi, rectricibus mediis splendore apicali latissime rubro-cupreo; rectricibus externis cyaneo-nigris viridi terminatis; cauda subtus cœruleo-virente. Rostrum nigrum; pedes nigricantes. Long. alæ 81, cauda 90?, rostri 25 mm.

Hab Paucal (coll. Jelski).

L'exemplaire unique, et comme il paraît non adulte, dans un état endommagé, manquant surtout de l'extrémité des rectrices latérales, ne donne pas une idée exacte de la beauté de l'espèce. Le défaut de sa queue ne m'a pas permis de donner la dimension exacte de cet organe, la différence de la longueur entre la rectrice subexterne et l'externe, et la parure de l'extrémité de cette dernière; ce qu'il y a cependant montre que la rectrice externe dépasse la dimension que j'ai donnée. La deuxième et la troisième paire des rectrices, en les comptant du milieu de la queue, présentent aussi un peu d'éclat rouge cuivreux près de l'extrémité des plumes, ce qui ne se voit plus sur les subexternes.

7. PSITTACULA CRASSIROSTRIS, sp. nov.

P. cyanopterae simillima, sed crassitie minore, rostro robustiore, coloribus supra obscurioribus, remigibus primariis et secundariis magis cœruleis, et subalaribus viridibus distinguenda. Long. alæ 77, caudæ 40, rostri 13, tarsi 12 mm.

Hab. Yurimaguas (Stolzmann).

Le mâle unique, que M. Stolzmann a recueilli à Yurimaguas, me paraît constituer une forme bien distincte par les détails indiqués dans sa diagnose.

5. Notice sur la différence sexuelle entre les crânes de la *Rhytina stelleri*. Par le Docteur DYBOWSKI¹.

[Received February 15, 1883.]

Pendant mon séjour aux îles Comandores, en examinant les nombreux débris, et surtout les crânes de ces animaux exterminés, j'ai conçu le projet de présenter une relation détaillée sur leur différence sexuelle. Dans ce but nous avons avec M. le docteur Steineger pris les mesures détaillées de huit crânes, et j'ai photographié deux d'entre elles, dans les différentes positions; mais d'autres occupations m'ont forcé à retarder ce projet. Pour que ces observations ne soient pas perdues, je me suis décidé à communiquer le résumé de mes remarques les plus frappantes, en y ajoutant quelques-unes des photographies.

¹ Communicated by M. L. Taczanowski, C.M.Z.S.

Le crâne du mâle est en général beaucoup plus massif que celui de la femelle; presque chacune de ses parties diffère de celle de la femelle. Surtout la différence est frappante dans l'angle de la partie antérieure de la tête; le processus dentiformis est plus robuste, ainsi que l'éminence sur la limite entre les os pariétaux et les frontaux.

La surface du crâne de la femelle est lisse; les parties antérieures moins épaisses, la carène supérieure sur les os intermaxillaires plus aiguë, la hauteur moins grande de ces os, une forme différente de l'os zygomatique, et des processus zygomatiques, des os de la mâchoire et des temporales. La mandibule de la femelle est moins large sur sa surface antérieure, plus courbée sur la supérieure, les angles postérieurs plus rapprochés entre eux.

Me basant sur l'analogie avec les autres mammifères voisins, je suppose que les mâles étaient plus gros et d'une structure plus forte, à os plus développés. Les Aléoutes distinguent ces crânes en donnant le nom de "Byk" (taureau) à ces crânes d'une construction plus forte, à os plus développés, ou simplement "bytschutsche" (ceux du taureau).

Les squelettes que se trouvent dans les musées sont composés d'os pris pour la plupart des différents individus, et je suppose que quelques-uns des mâles portent une tête de femelle et *vice versa*¹.

March 6, 1883.

Prof. Flower, LL.D., F.R.S., President, in the Chair.

The Secretary read the following report on the additions made to the Society's Menagerie during the month of February 1883.

The total number of registered additions to the Society's Menagerie during the month of February was 88, of which 16 were by birth, 30 by presentation, 23 by purchase, 1 was received in exchange, and 18 on deposit. The total number of departures during the same period by death and removals was 92.

The following additions are of special interest:—

1. A female Panolia Deer (*Cervus eldi*) from Siam, received in exchange from the Jardin d'Acclimatation, Paris, February 10th.

The only previous specimen of this Deer in the Society's collection was the male presented by Mr. A. Grote, F.Z.S., in 1867 (see P. Z. S. 1867, p. 821).

2. A young male Thar (*Capra jemlaica*), presented by Lieut.-Col. Alex. A. A. Kinloch, C.M.Z.S., February 17th.

We are specially obliged to Col. Kinloch for sending us this animal, as we have two females, mother and young², already in the collection, and a male is consequently most acceptable.

¹ [Nous nous sommes convaincus avec M. Slosarski d'après les figures et cette courte description du Dr. Dybowski, que le beau crâne qu'il a envoyé précédemment au Musée de Varsovie est d'un mâle avec la mandibule de la femelle.—L. T.]

² See P. Z. S. 1880, p. 186.

3. A male Blyth's Tragopan (*Ceriornis blythi*), presented by Capt. W. Brydon, of the 42nd Assam Light Infantry, and received through the kind mediation of the Zoological Gardens, Calcutta, February 17th.

The only example of this splendid species previously received was that presented by Major Montagu in 1870¹.

The Secretary exhibited, on behalf of the Rev. F. O. Morris, a drawing of a bird shot in Hampshire in November 1882, and lately described in 'Land and Water' (vol. xxxv. p. 90, 1883), and remarked that, as there suggested, it certainly represented a Tinamou, (perhaps *Nothura boraquira*), which must have escaped from captivity.

Mr. J. E. Ady exhibited some microscopical preparations of bone, in one case showing the growth of blood-vessels into cartilage previous to ossification, and in another case presenting a hard section in which the lacunæ and canaliculi were extremely well shown.

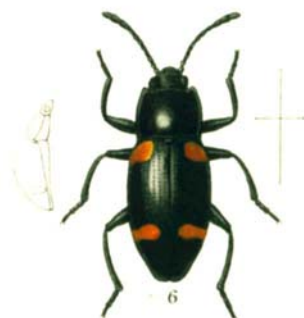
Dr. Hans Gadow, C.M.Z.S., communicated an outline of a series of observations, which he is now undertaking, on the arrangement and disposition of the muscles of the avian syrinx. He directed especial attention to the fact that there is an absolute continuity between these muscles and those of the upper larynx and the hyoid apparatus. The innervation of all these parts was found to be hypoglossal pharyngeal, the special nerve-branches accompanying the trachea throughout its length. He pointed out that the conclusion to be drawn from these facts was that the syringeal muscles are derived from the system of sternohyoid muscles.

The stages intermediate between the arrangement seen in certain birds, where some of the muscles of the upper larynx have no connexion with the skin, and in others, in which the same muscles come into close relation with the integument, were explained with the aid of diagrams. Dr. Gadow had, in consequence, been led to believe that at least such of the cutaneous muscles in the cervical region as are striped belonged primitively to the common layer of skeletal muscles.

Some difficulties in the characters of the nerve-supply of these parts, cervical as well as hypoglossal nerves taking a share in this duty, were pointed out; and further investigations on this obscure point were said to be in hand.

The following papers were read:—

¹ P. Z. S. 1870, p. 162, pl. xv.



W. Purkiss lith.

Hanhart imp.

NEW SPECIES OF EROTYLIDÆ.

1. ENCAUSTES CROTCHI. (Plate XVIII. fig. 7.)

Niger, nitidus; capite distincte parce punctato, prothorace subquadrato immaculato, elytris levibus punctis haud discretis, interstitiis obsoletissime costatis, macula humerali transversa alteraque triente ante apicem fulvis.

Long. 22 millim. ♀.

Hab. Philippine Isles, Bohol (*Semper*).

The wholly black thorax will separate this from any of its allies: the species to which it comes nearest is *E. humeralis*, Crotch, with which it agrees in having a red spot on each shoulder, touching the base of the elytra. Crotch's specimen of *E. humeralis* is from New Guinea; I have a second specimen from the Philippine Islands taken by Semper at Pulobatu, which I have compared with the type at Cambridge and believe to be identical.

2. MICRENCAUSTES TORQUATUS. (Plate XVIII. fig. 5.)

Niger, nitidus, verticis puncto, prothoracis macula irregulari, elytrorum annulo humerum subcingente retrorsum ramos duos emittente, lunulaque infra medium fulvis.

Long. 16 millim.

Hab. Africa occid., Old Calabar (*coll. Murray*).

Allied to *M. sinuatus*, Lac., but differing in being rather longer and narrower, in having the sides of the thorax scarcely rounded but narrowing a little in front, the disk distinctly punctured (in some examples of *M. sinuatus* a fine sparse puncturing is visible), and especially in the form of the humeral ring, which surrounds a much smaller space, in fact only the humeral callus, and emits a branch backwards towards the scutellum, and another obliquely towards the middle of the elytra. The posterior crescent is strongly recurved. The elytra exhibit very obsolete fine rows of punctures, which are quite invisible in *M. sinuatus*. A single specimen, marked *Encaustes* n. sp. by Crotch, from Murray's collection, now in my possession.

3. MICRENCAUSTES PLAGIATUS.

Niger, parum nitidus, capitis vertice, thoracis macula utrinque difformi, elytrorumque basi indeterminate, vitta submarginali, et macula apicali intra marginem sanguineis; prothorace valde convexo, angulis anticis acutis paululum productis, posticis subrectis.

Long. 17 millim.

Hab. Java?

Allied to, but amply distinct from, *M. lituratus*, MacLeay. The prothorax is quite of a different shape, not narrowed in front, the base not wider than the front, but the sides more rounded; the red mark on each side is also different in shape, having three distinct branches like that in *Encaustes verticalis*.

The elytra are not punctured in series, and the red patch at the base united with the apical patch by a stripe along (but not touching) the margin will readily separate this species from *M. lituratus* or any other described species.

There is a single example in my own collection ; but I am not certain of the locality.

HYBOSOMA.

Genus inter Coptengem et Triplatomam quasi intermedium.

Antennæ quam caput et thorax longiores, articulo tertio, quarto æquali; clava longa; oculi fere integri. Prothorax lateribus paululum incrassatis, subquadratus, basi bisinuata haud emarginata; prosternum latum, apice truncato depresso, haud declivo; mesosternum quadratum. Elytra gibbosa, apicibus subdepressis subtruncatis.

This is a genus apparently resembling *Plagiopisthen*, differing from it in having much longer antennæ, in the eyes being not so strongly margined, and the angles of the thorax in front not being so produced. Its nearest ally is really *Coptengis*, from which it differs in its less cylindrical form, in the eyes not having a keeled process of the head in front, rendering their edge emarginate, in the proportion of the third joint of their antennæ, in the prosternum being simply truncate instead of its apex having two blunt lanceolate points, and in having strongly convex gibbous elytra.

The prothorax is sometimes (*H. striatum*) wider than the elytra ; the latter are four-spotted in all the species yet known to me ; and these have a strong likeness to those species of *Eumorphus* which have unmargined elytra. I cannot at present observe the sexual difference.

I have only seen it from the Philippine Isles.

4. HYBOSOMA HYDROPICUM. (Plate XVIII. fig. 6.)

Nigrum nitidissimum, confertim subtiliterque punctatum, elytris tenuiter striato-punctatis, macula transversa humerali fasciæque arcuata pone medium, nec marginem nec suturam attingente, aurantiacis, abdomine crebre haud profunde punctato.

Long. 15 millim.

Hab. Philippine Isles, Bohol (*Semper, Cuming, Thelland?*).

Head, thorax, and prosternum very finely and very thickly covered with fine punctures, only visible under a strong lens. Thorax wide, in one example rather wider than the elytra ; the latter strongly bulged and longitudinally gibbous, attenuated towards the tip. Antennæ longer than the head and thorax, their club quite as long as the five preceding joints. Legs long, femora not very clavate, much as in *Coptengis*.

5. HYBOSOMA STRIATUM.

Nigrum, nitidissimum, crebre confertim punctatum, elytris fortius punctato-striatis; macula humerali fasciæque arcuata nec marginem nec suturam attingente aurantiacis; antennæ thoracem vix superantes.

Long. 15 millim.

Hab. Philippine Isles, E. Mindanao (*Semper*).

Closely allied to the preceding, perhaps not distinct ; the elytra,

however, are very much more distinctly punctate-striate, and the antennæ are not so long. The head is distinctly punctured, with deeply impressed but irregularly shaped points, the interspaces being finely alutaceous; there is a semicircular impression between the bases of the antennæ, and two wide foveæ behind. The mentum is wide and but little rounded, subtruncate in front. The thorax is rather longer than wide, of nearly equal width in front and behind, varying in this respect probably sexually; both front and hind angles are acute, but not much produced. The elytra have the striae arrested on the yellow spots, and the basal ones are a little tumid. The underside is scarcely punctured; but the prosternum is very finely transversely wrinkled. I have seen this species in the British Museum.

6. *HYBOSOMA TETRASTICTUM*.

Nigrum, nitidissimum, omnino confertim subtiliter punctatum, antennis thoracem haud superantibus; elytris convexis gibbosis, subtilissime punctatis, haud striatis, macula humerali lunulaque pone medium aurantiacis.

Long. 15 millim.

Hab. Philippine Islands, Leyte (*Semper*).

This species is allied rather closely to both those preceding, but has no trace of striation, and the elytra are more inflated behind the middle than in either of them. The thorax is slightly narrowed behind, so that both the basal and front margins are narrower than the middle. The sculpture of the underside is similar to that of *H. striatum*.

I have only seen two specimens—the one in my own collection, which I consider referable to this species, taken in the island of Leyte, and one which I obtained from Mr. Higgins, but without any other locality than Philippine Islands.

7. *MEGALODACNE IMPERATRIX*. (Plate XVIII. fig. 8.)

Nigra, nitida, elongato-ovata, thorace utrinque litura fulva, elytris annulo lato humerum subcingente, extus quadridentato, fasciæ interruptæ pone medium, parum curvata, utrinque dentata, fulvis.

Long. 22–28 millim.

Hab. S.E. Africa, Mamboia.

Head and thorax very finely punctured, the base of the head more sparsely and deeply so; club of the antennæ obliquely rounded at the apex; the third joint equal to the three following.

Thorax transverse, front and hind angles acute but not produced; a triangular fossa on each side of the base is rugose; the surface between the scattered punctures is finely alutaceous, sides finely margined, as is the base as far as the fossa. Elytra with three or four series of punctures visible at the base. Prosternum keeled but not acutely, nor produced in front, not punctured, but finely wrinkled throughout.

8. MEGALODACNE FURCATA.

Nigra, nitida, capitis basi parce sat profunde punctata, elytris obsolete punctato-striatis, singulis maculis duabus flavis, una humerum subcingente, extus denticulis duobus parvis ramoque parvo, altera versus apicem arcuata, apicibus et dente in medio retrorsum acute productis.

Long. 18-19 millim.

Hab. W. Africa : Isabu, Old Calabar, &c.

Closely allied to *M. grandis*, and equal to the smaller individuals of that species in size, but easily distinguished by the colour of the markings on the elytra being pale yellow instead of orange-red, and by their form: they are much less diffused, and narrower; of the humeral one the "ramus" or branch which turns towards the suture is much less developed, being in fact only a tooth-like projection; the hinder one is an arcuate fascia, much produced behind at the margin, and with two teeth on the apical side near the suture. The basal side of this fascia is almost even.

The thorax is rather more opaque than in *M. grandis*, the elytral puncturing rather more definite.

9. TRIPLATOMA PHILIPPINENSIS. (Plate XVIII. fig. 3.)

Nigra, nitida, vix punctata, prothorace oblongo, parum attenuato, ad angulos anticos guttis duabus sinuatis postice acuminatis rubris; elytris singulis striis tenuissimis obsolete punctatis septem, fasciis duabus ad suturam late interruptis, haud profunde dentatis, maculaque parva ante apicem rubris.

Long. 16-18 millim.

Hab. Philippine Islands, Mindanao (*Semper*).

The only species to which this can well be compared is *T. attenuata*, Crotch, from which it differs by its smaller size, by the form of the thoracic stripe near the front angles, which is here curved, wide in front and acuminate behind. The third or apical fascia is here reduced to an indented triangular spot. I have only received two specimens.

10. TRIPLATOMA ANDAMANENSIS. (Plate XVIII. fig. 2.)

Nigra, parum nitida, subparallela, capite prothoraceque minute punctatis, hoc basi apiceque æqualiter latis, ad angulos anticos macula rufa trapeziformi, retrorsum exciso; elytris fasciis duabus rectis, una basilari, altera subapicali, utrinque dentatis, rufis, singulis striis tenuissime punctatis fere obsoletis sex.

Long. 15 millim.

Hab. Andaman Isles.

Readily distinguished by its small size, and by the two fasciæ similar to those in *T. sexnotata*, but which are yellow instead of blood-red, by the thoracic angular mark being a squarish spot indented on its posterior margin, and by its punctured striæ, which are more deeply impressed upon the elytra than in *T. sexnotata*.

In my own and Mr. G. Lewis's collections.

11. *TRIPLATOMA GESTROI*. (Plate XVIII. fig. 1.)

Triplatoma gestroi, Bedel, Ann. del Mus. Civ. di Genova, 1882, p. 440, t. x. f. 4.

Nigra, parum nitida, prothorace subquadrato limbo laterali subincrassato, rubro variegato, subopaco; elytris distincte striatis, striis obsolete punctatis, striga subhumerali fasciisque tribus valde undulatis haud bene discretis rufis; femoribus rufo-cinctis.

Long. 15-17 millim. ♂ ♀.

Mas. *tibiis anticis sinuatis, ad apicem torsis, intus carinatis.*

Hab. Borneo, Sarawak (Wallace, coll. Lewis and Gorham, ♂). Sumatra (*Leyden Mus.*, ♀).

[Since this paper has been read, and the plate drawn, I have received one by M. Louis Bedel, published in the 'Annals of the Civic Museum of Natural History of Genoa' in December 1882, in which he has submitted the genera *Coptengis*, *Triplatoma*, and *Plagiopisthen* to revision. The genus *Triplatoma* is subdivided and its form changed to *Triplotoma*, which is retained for *T. picta*, *gestroi*, and *cypræa*. *T. gestroi* appears to be identical with the species which I have described and figured here, and to which I had given another name. I have seen specimens of this species since in the British Museum and in the possession of Mr. S. Olliff. The new genera proposed are *Trichulus* for *pubescens*, Cr., *Eudytus* for *bizonatus*, Cr., *Nesitis* for *attenuata*, Cr., *Linodesmus* for *cæcus*, F. *Trichulus* and *Linodesmus* are certainly geographical forms and better separated; but the remainder seem formed rather on specific than generic differences, a process of subdivision to which most genera of moderate size are equally liable, without any evident advantage being secured.—H. S. G., April 10th, 1883.]

12. *TRIPLATOMA BRAHMINICA*.

Nigra, parum nitida, supra opaca; prothorace oblongo, crebre et distincte punctato; elytris fortiter sulcatis, interstitiis costatis, sulcis punctatis, fasciis duabus angustis, undulatis, rufis, una subbasilari, altera subapicali.

Long. 21 millim.

Hab. India, Assam.

Head and thorax opaque, thickly covered with shallow but distinct round impressed points, under surface of the thorax nearly smooth, but the prosternum transversely wrinkled, its apex foveate. Elytra evenly and deeply sulcate, the intervening costæ smooth and shining, eight in number, uniting near the apex, the fifth and sixth costæ uniting some distance higher up, and also joining the fourth. The humerus obsolete, the apex expanded, subtruncate. Allied to *T. picta*, Perty; distinguished immediately by the black thorax and two fasciæ, deeper sulcation, &c.

13. *TRIPLATOMA SIVA*.

Nigra, parum nitida, capite prothoraceque vix punctatis, fere alutaceis; elytris subsulcatis, sulcis obsolete punctatis, annulo

humerali fasciæque subapicali, ramos undique emittentibus per costas protractos et ad apicem conjunctos, flavis.

Long. 21 millim.

Hab. India, Assam.

The head and thorax in this species are very much less opaque, and not punctured as in *T. brahminica*. The thorax is shorter, and its sides more rounded. The elytra are sulcate; but the punctures, which in *T. brahminica* are very distinct, are here obsolete; the costæ are rounded. The variegated appearance is formed by long branches from the humeral and subapical fasciæ which run along the alternate costæ; they do not unite in the single example I have seen, except at the apex, where three unite in an indistinct way, but are no doubt subject to variation. The black round humeral spot is distinct; but the shoulder itself is obsolete as in the allied species.

14. EPISCAPHA SEMPERI.

Nigra, nitida; capite obsolete punctato, prothorace subtilius minus distincte punctato; elytris tenuiter minute punctato-striatis, macula humerali subtrapeziformi fasciæque pone medium suturam non attingente leviter arcuata late aurantiacis, callo humerali nigro.

Long. 15 millim.

Hab. Philippine Isles, E. Mindanao (*Semper*).

Very near *E. sublavis*, Crotch; but the punctured striæ will distinguish it. The prosternum is broadly expanded behind, and excavated (but not so deeply as in *E. octonotata*) at its apex; it is also rather strongly margined behind the middle; it is punctured on each side, but the ridge is smooth. The meso- and metasternum and the abdomen are free from punctuation.

There are two specimens in my collection, taken by Mr. Semper from East Mindanao, and a third, smaller specimen from Luzon, which is I believe referable to the same species.

15. EPISCAPHA CORDATA.

Nigra, subnitida, antice posticeque attenuata, infra rufo-picea, capite prothoraceque crebre et minute punctatis; elytris obsolete substriatis, fascia humerali subrecta interne attenuata, utrinque dentata, alteraque ante apicem leviter arcuata flavis.

Long. 8 millim.

Hab. West Africa, Old Calabar (*coll. Murray*).

From *E. piciventris* this differs in its smaller size, in being more pointed behind, in the whole of the underside being more or less pitchy, which colour extends even to the legs and antennæ, and in the form of the fasciæ, the basal one being straighter and the hinder one less arcuate, and not produced at the suture or margin. It is observable that the hind fascia in *E. senegalensis* is nearer the apex and broader than in either of these species, and is moreover of a deeper blood-red colour. The posterior process of the prosternum is more elongate; and its marginal lines meet in front, whereas in *E. piciventris* they are lost in the side of the ridge before meeting.

16. *EPISCAPHA DIFFICILIS*.

Nigra, nitida; capite prothoraceque parcius et sat profunde punctatis; elytris singulis striis septem, leviter impressis, crebre minute punctatis, fasciis duabus interruptis, una basali utrinque dentata, altera ante apicem, læte rufis.

Long. 7-8 millim.

Hab. Andaman Islands (*coll. Gorham*).

This species at first sight so very closely resembles *E. senegalensis*, Lap., = *E. interrupta*, Lac., that it will suffice to point out the distinction. The head and thorax are more shining and more sparsely and more deeply punctured. The elytra have seven distinct although very fine punctured striæ; in *E. senegalensis* striæ are not visible, but the elytra are punctured all over, and are subsulcate only at the apex. The basal fascia does not run obliquely up to the shoulder, where in *E. senegalensis* it is widest, but runs straight across, emitting a single tooth towards the base. It is more convex than the African species, and is more brightly coloured.

A third species even more closely allied to *E. senegalensis*, if not the same, occurs in India.

17. *EPISCAPHA OCTOPUSTULATA*. (Plate XVIII. fig. 4.)

Nigra, nitida, supra valde convexa; capite sat fortiter crebre punctato; prothorace parcius et subtilius punctato, ad angulos anticos macula rotundata aurantiaca; elytris sublævibus, maculis duabus subhumeralibus (interiore majore) alteraque magna transversa ante apicem aurantiacis.

Long. 15 millim.

Hab. Philippine Isles, E. Mindanao (*Semper*).

This is unlike any other *Episcapha* known to me, in having the thorax spotted; and its convex look would have led to me to make a new genus for it, but I fail to find any valid characters by which to separate it. The prosternum is almost angularly cut out at its posterior margin, but it is almost equally so in *E. semperi*; it is compressed in front into a blunt point, and is roughly punctured, but the epipleuræ are smooth. The form of the mesosternum is somewhat peculiar: it is compressed in front so as to form a sub-triangular table, with its apex in front, and rounded, fitting the excavation of the prosternum. Metasternum obsoletely punctate.

18. *EPISCAPHA PICIVENTRIS*.

Nigra, subnitida; capite prothoraceque subtiliter alutaceis, crebre et minute punctatis; elytris obsolete striato-punctatis, fascia humerali subobliqua, sutura interrupta, utrinque dentata, lunulaque subapicali valde arcuata flavis; abdomine rufo-piceo.

Long. 10-11 millim.

Hab. Old Calabar (*coll. Murray*).

This species is a little larger than any *E. senegalensis* I have seen, and is at once separable from that species by the delicate punctured striæ, as well as the narrow fascia and by the hinder one being arcuate. It is more nearly allied to the species standing in

Murray's collection and named by Crotch *E. obliquata*: it is only half the size of that species; the striæ are much more obsolete. The whole of the abdomen is rufous; and the posterior fascia is recurved more on the margin and less on the suture. The distinction of the alutaceous surface of the thorax appears to me also to be a good character.

Two specimens in Murray's collection, purchased by me, are labelled n. sp. in Crotch's handwriting.

19. AULACOCCHILUS INCLYTUS.

Niger, supra cærulescens, nitidus, capite thoraceque fere glabris; elytris valde convexis, singulis maculis duabus magnis subrotundatis fulvis, striis obsoletissime punctatis, fere oblitteratis.

Long. $10\frac{1}{2}$ –11 millim.

Hab. Philippine Islands, Panaon (*Semper*).

This species is distinguished from all its congeners (except *A. doriae*) by having four large subquadrate or roundish red spots, of which the hinder one is not arcuate, on its elytra. Of these this one is separable by the blue shining thorax, which is scarcely visibly punctate; the head has a few scattered punctures, which are distinct under a good glass. The elytra are somewhat cordate; the front spot touches the base and just reaches the scutellum, it leaves the humeral callus and margin black; the hind spot is squarish, sometimes transverse, very nearly reaching the suture and margin. The underside is almost or quite black, without any of the blue tint observable in the whole upper surface.

This species is not in the Crotch collection at Cambridge.

20. AULACOCCHILUS AGABOIDES. (Plate XVIII. fig. 10.)

Ovatus, niger, nitidus; capite distincte, thorace minute haud profunde punctatis; elytris tenuiter punctato-striatis, singulis maculis duabus, una basilari intus tridentata, altera ante apicem valde arcuata; abdomine rufo, segmento basali nigro.

Long. 8 millim.

Hab. Philippine Islands, E. Mindanao, N. Luzon (*Semper, Cuming*).

The ground-colour of this species is quite black; the basal spot occupies the whole base, extending in an oblique direction from the scutellum across the shoulder, but leaving the reflexed edge of the margin black; it emits three rather long denticulations, between the first and second of which it is excavated rather deeply; the hind spot is undulated on its basal, produced on each side of its apical margin; both the spots are usually pale yellow. The elytra are finely punctate-striate, the interstices very finely, scarcely visibly punctate; the abdomen pitchy-red excepting its basal segment, or very nearly quite black. I have seen one specimen of this in the Crotch collection at Cambridge.

The specimens taken by Cuming were obtained by me from Mr. Waterhouse's collection.

21. *AULACOCCHILUS AGABOIDES*, var.? *FURCIFERUS*. (Plate XVIII. fig. 11.)

A. agaboidi similis at paullo major, macula basali cum lunula subapicali per vittam discoidalem conjuncta.

Long. $9\frac{1}{2}$ millim.

Hab. Philippine Islands, N.W. Luzon (*Semper*).

If this is only a variety of the species already described as *A. agaboides*, it would still be an advantage that it should have a separate designation; but I think it will very probably prove to be a constant form. The basal yellow mark is of the same shape; but its second and third teeth are lost in the conspicuous vitta which unites it with the posterior lunule. This mark has its points so strongly recurved as to form three quarters of a ring. A single specimen is in my collection; and I have not seen it elsewhere.

22. *AULACOCCHILUS EPISCAPHOIDES*. (Plate XVIII. fig. 12.)

Oblongo-ovatus, parum nitidus, nigro-subcyaneus; capite profunde, thorace obsolete sed crebre punctato, alutaceis, hoc antice angustato lateribus paululum reflexis; elytris tenuiter punctato-striatis, interstitiis obsolete crebre punctatis, macula magna baseos, punctum nigrum includente, fasciæque lunulata nec suturam nec marginem attingente sanguineis.

Long. 9 millim.

Hab. Andaman Isles.

Less convex than usual for the species in the genus, nor so much attenuated in front and behind as is generally the case. The general form is that of *A. sericeus*, Bedel, to which section of the genus the present species belongs. It may be recognized from any described species by the black round spot, which is surrounded by the red basal patch. This patch has three short branches externally, one towards the base and one towards the outer margin, between which is the callus; there is a third short branch at the outer posterior angle. The posterior lunule has rather the appearance of a double united spot, both sides being indented.

23. *PSSELAPHACUS MYSTICUS*.

Niger, nitidus, thorace seriebus duabus punctorum; elytris fortiter punctato-striatis, macula basali bifida, fasciis tribus undulatis, posteriore ramum ad apicem emittente et cum fascia secunda conjuncta lineæque submarginali fulvis; tibiis anterioribus curvatis, ad apicem ampliatis, intus crenulatis.

Long. 14–17 millim.

Hab. Peru, Chancomayo. ♂.

Allied to *P. curvipes*, but very much more shining, and differing in pattern, having three transverse fasciæ besides the basal bidentate mark, of which the two posterior are joined near the suture by a straight band. In some varieties of *P. curvipes*, viz. in my examples of the variety named *gracilis*, the third fascia has a stripe uniting it with the apex; but this stripe (which is present in *P. mysticus*)

starts from the middle of the fascia, which is there angulated *towards the apex*. The abdomen is not punctured as in *P. curvipes*, on each side. The front tibiæ in the male are more suddenly dilated below the middle, and their inner sides above the middle are distinctly crenulated. Three specimens.

24. MEGISCHYRUS ELONGATUS.

Saturate sanguineus, parum nitidus; prothorax subopacus limbo laterali nigro; elytris postice gradatim attenuatis, callo humerali, maculis duabus obliquis (interiore majore in medio constricto) dimidioque apicali nigris.

Long. 15–17 millim.

Var. *Supra totus saturate rufus, elytris callo humerali maculisque duabus obliquis tantum nigris.*

Long. 17 millim.

Hab. Peru, Chancomayo.

A very distinct species, to be recognized by its very narrow elongate form. It is widest at the shoulders, the thorax narrowing in front with nearly straight sides, and the elytra gradually tapering behind. The colour appears variable: in the three specimens before me two have the apical half of the elytra black. In one of these the head and body beneath is *almost* black, while the thorax is very obscurely red, yet with black lateral margins. In the other the head and thorax are more decidedly red; while in the third example the colour above is light brown, with only the three elytral spots and the lateral margin narrowly black. The tibiæ and extreme tips of the femora are black in all of these three specimens.

It should be placed near *M. bellicosus*.

25. MEGISCHYRUS BARTLETTI. (Plate XVIII. fig. 9.)

Niger, subnitidus; elytris striatis, striis obsolete punctatis, fasciis quatuor maculis alternis distinctis lineaque submarginali flavis.

Long. 17 millim.

Hab. Peru, Chamicuro (Bartlett).

Elongate, sides of the elytra rather parallel; head and prothorax slightly shining but without punctures, the latter with four deep impressions upon its disk, possibly accidental. The elytra have four fasciæ—one basal, the second and third nearly straight, the fourth formed of longer spots and diverging at the suture. These fasciæ are formed of five or six elongate square marks separated by the obsolete punctures, which are indicated by fuscous marks. There is a sutural yellow line at the base and apex.

This species somewhat resembles *M. bogotæ*, Crotch: it is more shining; and the fourth fascia will distinguish it at once. I have only seen a single specimen, which was sent me by Mr. E. Bartlett, by whom it was collected in Peru.

26. ISCHYRUS PERUVIANUS.

Elongatus, subcylindricus, nitidus, flavus, subtus nigro et ferrugineo variegatus; capite, thoracis disco punctis quatuor transversim dis-

positis, duobus in margine antico, elytrorum macula magna scutellari, altera parva infra humerum, puncto huic approximato, fascia pone medium in sutura lata, ad marginem attenuata, limbo tenuiter, apice latius nigris; pedibus fulvis, femorum basi et genibus nigris.

Long. $9\frac{1}{2}$ millim.

Hab. Peru.

This species so far resembles *I. 4-punctatus* that it will be sufficient to mention the characters which amply justify its distinction from that North-American species. Its form is longer, and its size larger; the thorax, in addition to four spots, has two on the front margin, and its base is not black.

The elytral markings, though similar, are all different in shape; the narrow mark below the callus is on the margin; and a round spot in a line with the callus is in addition. The suture is more widely black; and the wide fascia has a projection in front on each side of it.

This insect was captured in Peru, but whether at Chancamayo or not I am not certain.

27. *ISCHYRUS GRAMMICUS.*

Oblongus, subparallelus, nitidus, subtus rufo-piceus, supra rufo-testaceus, capite nigro; thoracis limbo tenuissimo maculis quatuor transversis, duabus basalibus triangularibus; elytrorum maculis duabus baseos, una subscutellari, altera subhumerali, plagiis duabus rectis interstitialibus in medio maculisque tribus oblongis (duabus sublateralibus, una ante apicem), limbo toto tenuiter, sutura et maculis duabus suturalibus (una oblonga, altera pone medium rotundata) nigris; antennarum clava, tibiis geniculisque nigro-piceis.

Long. $9\frac{1}{2}$ millim.

Hab. Peru, Chancamayo.

Punctuation fine but distinct under a strong glass, both on the head and thorax; the latter transverse with the sides rounded, and contracted near the front angles. Elytral striæ rather distinct; the black lines are between the first and the second, a short one close to the suture, often confluent, between the third and fourth and between the fifth and sixth of equal length, in the middle or nearly so and about equal to a third of the length of an elytron. The eighth stria is not visible; but following the seventh and hence in a line with the subhumeral spot, are two spots parallel to the median line.

28. *LYBAS? DORSALIS.*

Læte ferrugineus, prothoracis disco elytrorumque fascia lata communi marginem haud attingente nigris, antennis fuscis, basi rufis.

Long. $5\frac{1}{2}$ millim.

Hab. Peru, Chamicuros (*Bartlett*).

Short, broad, and convex; thorax with a few scattered punctures

on its disk; elytra rather deeply striated at their bases, but the striæ not continued to the middle. The black patch on the elytra leaves only a narrow band at the base, the entire margin as far as the last stria, and about two fifths at the apex, red.

The thorax has a distinct fovea on each side of the base, in which are a few larger punctures. The elytra are gibbous, depressed at the base, and with a deeply impressed marginal line.

I have seen one specimen in the collection of the late Mr. Crotch at Cambridge; and there is one in my own, given me by Mr. Bartlett.

29. PALEOLYBAS CYCHRAMOIDES.

Ovatus, minus convexus, rufus; capite prothoraceque minute sed distincte punctatis, illo epistomate nigrescente; elytris minutissime punctatis, fere lævibus, callo humerali margineque (ad apicem latius) nigris.

Long. 8 millim.

Hab. Africa occid., Camaroon Mountains.

Broadly ovate; elytra without striæ, punctuation scarcely visible under a strong lens; tibiæ very broadly dilated; club of the antennæ dark. This is an insect allied to *P. humeralis*, Crotch; and I should hardly have ventured to assert its distinctness, the description of that species being so brief, but that fortunately the unique type from Murray's collection is now in my own.

It differs from *P. humeralis* in being less convex, in wanting any trace of striæ, and in the black margin which surrounds the elytra except at their bases, and which is very distinct. The rest of the insect, with the exception of the club of the antennæ and the epistoma in front, is deep brick-red. A single example.

EXPLANATION OF PLATE XVIII.

- Fig. 1. *Triplatoma gestroi*, p. 80.
 2. — *andamanensis*, p. 79.
 3. — *philippinensis*, p. 79.
 4. *Episcapha octopustulata*, p. 82.
 5. *Micrencaustes torquatus*, p. 76.
 6. *Hybosoma hydropicum*, p. 77.
 7. *Encaustes crotchii*, p. 76.
 8. *Megalodacne imperatrix*, p. 78.
 9. *Megischyrus bartletti*, p. 85.
 10. *Aulacochilus agaboides*, p. 83.
 11. — —, var. *furciferus*, p. 84.
 12. — *episcaphoides*, p. 84.