## VI.

# Notes <br> on Genera and Species of Copridae. 

By<br>H. W. Bates,<br>Pres. Ent. Soc. Lond., \&c.

1. Scarabaeus gigas Olivier. Ent. I. 3. p. 132. t. 14. f. 137.

This magnificent Copride is certainly not the Scarabaeus gigas of Linnaeus, neither is it a variety of the female of $\boldsymbol{S}$. Antenor, as Olivier himself suggested, but an entirely distinct species from Western Equatorial Africa, belonging to the modern genus Heliocopris. I have frequently examined the type in the Banksian collection. It is a female and the British Museum has recently received the male of the same species, of which I hope to be able to give a description in a continuation of these notes. According to the excellent description of the $\boldsymbol{S c}$, gigas given in the Mus. Lud. Ulr., Linnaeus must have had before him a female of what is known in collections as Heliocopris Isidis. My excellent friend the Baron de Harold informs me in a letter that he believes $\boldsymbol{H}$. Midas Fabr. and H. Isidis Latr. to be varieties of one and the same widely-diffused species. According to the examples I have examined, there appears to be a constant difference between these two in the $\delta$, in the shape of the antero-lateral projections of the prothorax; indeed I am inclined to admit a third species in individuals I have received from the vicinity of Lake N'Gami.

Heliocopris gigas Linné．Syst．Nat． 10 Ed．p．348．nr． 25. －Mus．Lud．Ulr．p．16．（虽）．
Isidis Latr．Mém．Mus．V．1819．p． 249.
＂Isidis Latr．Mem．Mus．Isidis Bohem．Ins．Caffr．II．p． 214.
Egypt，Caffraria．
2．Heliocopris Midas Fabr．Syst．Ent．p．21．84．－Oliv． Ent．I．．．p．99．t．20．f． 183.

The type in the Banksian Collection is an undeveloped $t$ ，with a broad horn on the vertex，narrowed to the summit and truncated， and the angles prolonged into acute points．It has a short erect tooth on the lateral margins of the clypeus．India．

3．Heliocopris Audersoni nov．spec．
丈．H．giganti simillima，major，rlytrorum striis minus di－ stinctis，clypei cormubus lateratious retrorsum spectantibus，prope apicem dilatatis et compressis，apice valde obtusis；angulis preo－ cularibus mullis．Thorax processu medio subhoriঞontali，apice integro；cormubus lateralibus rectis，divergentibus，apice latis bifidis．

ち．Minor：statu correspondenti $\boldsymbol{H}$ ．gigantis differt carina frontali tridentata，nec bidentata．－$\ddagger$（ignota．）

Prope Lacum N＇Gami，（Anderson！）
4．Heliocopris Colossus Nobis（Vide supra）．
Sc．gigas Oliv．Ent．I．3．p．132．t．14．f．137．${ }^{\circ}$ ．
5．Heliocopris domina nov．spec．
† major：Figura H．gigantis，multo major，piceo－nigra， polita，elytris castaneis，distincte striatis，interstitiis subconvexis sparsim punctatis．Caput valde expansum，angulis preocularibus mullis，clypeo antice late leviter emarginato，lateribus medio utrinque cornu suberecto armatis，vertice etiam bicornuto，cor－ nubus paullo minoribus；clypeo subtiliter transverse plicato，ver－ tice postice rugose－punctato．Thorax quadratus，lateribus antice imprimis paullo obliquis，dein dente brevi retrocurvato armatis， post hoc breviter sinuatis，dein paullo rotundatis，ante angulos posticos sinuato－angustatis；supra antice retusus et confertim granulatus，rufo－pilosus，medio valde elevatus，flexuoso－carina－
tus, carina medio dente lato, acuto, depresso, subhorizontali armata, dorso postice elcvato-reticulato.
© minor: A majore differt capite magis angulato, clypei dentibus lateralibus nullis; carina thoracica medio paullo producta; angulis preocularibus nullis. - Long. $27-30$ lin., Lat. prothor 15 lin.

ㅇ (ignota).
Assan. Allied to $\boldsymbol{H}$. Dilloni Guér., from which it differs in the four horns of the head being in a transverse line, two on the vertex an two on the lateral nargins.
6. Synapsis Nov. Gen.

Corpus late oblongum vix convexum. Caput late triangulare, genis prolongatis acutis, in thoracis emurginatione receptis. Thorax brevis, inermis, elyfris angustior, lateribus bicarinatis, carinis mox pone angulos anticos conjunctis. Elytra octo-striata, inter strias 7 et 8 carinata; epipleuris latis bistriatis. Tibiae anticae valde tridentatae, intermediis posticisque sensim a basi usque ad apicem dilatatis, carinis exterioribus multidentatis, apice ut in Heliocopride obliquis, tritentatis.

A genus formed for the reception oft the very peculiar Copris brahminus of Hope (Gray. Zool. Miscell. p. 22). I have two examples before me which I believe to be d and $f$. In both, the posterior tibiae have the two longitudinal carinae wide apart, as in Heliocopris, the lower one only being dentate, but in the $\delta$ the upper carina has a long dense fringe of hairs, whilst in the $f$ it is naked.

Synapsis brahmina Норе. l. с.
Subdepressa, piceo-nigra. Clypeus antice obtuse bidentatus, dentibus incisione profunda separatis, rugis brevibus transeersis sculptus; vertice unituberculato cumb genis granulato. Thorax confertim granulatus, medio sublaevis. Elytra subtilissime strigosa, striis subtiliter crenato-punctatis. Nigra, minus nitida. Long. $13-14$ lin., lat. $7-7 \frac{1}{2}$ lin. N. India, Assam.
7. Phanaeus bispinus nov. spec.

Oblongus, aento-obscurus, opacus, clypeo antice vix bidentato transverse strigoso; thorace laevissimo, opaco, lateribus vi-
ridi-aeneis nitidis, margine postico medio bipunctato; elytris grosse striato-punctatis, interstitiis laevissimis opacis; pygidio viridi, grosse punctato.

む: Cornu frontali subrecto, basi paullo dilatato, apice leviter dilatato obtusissimo. Thorace regulariter convexo antice vix perspicue retuso, dorso antico stylis obtusis duobus rectis, parallelis, subhori玉ontalibus, marginem anticum pronoti haud superantibus armato. - Long. $6 \frac{1}{2}$ lin., lat. 4 lin.

This extraordinary and beautiful little Phanaeus was taken in one example only, by my friend Dr. Spruce at Canelos on the Pastaza, in Ecuador. - Collect. nostr.
8. Phanaeus chalcomelas Perty. Delect. anim p. 40 t. 8. fig. 9 . 9.

Perty states that his species was taken in Southern Brazil. I believe this locality is erroneous like many others given by this author. The species is found at most places on the banks of the Upper Amazons, whence Spix and Martius obtained it. It is also found at Cayenne. It belongs to the group of $\boldsymbol{P}$. carnifex, the $\delta$ having the surface of the prothorax flattened. The frontal horn is wide and plane (in front) at the base, and becomes suddenly narrowed before the middle.

Taken by myself at Ega and S. Paulo, Upper Amazons.
9. Phanaeus lautus Mace Leay. Hor. ent. I. p. 131.

Mac Leay's description of this species like that of most of the Copridae he attempted, is full of errors and misconceptions. In describing the $\delta$, he clearly describes the head of a $\delta$ and the thorax of a $\$$. His description of the $q$ is certainly not that of a $\$$ at all but of an undeveloped $\delta$. The two forms most probably belong to separate species. In such a case, I think it is better for the interest of science to set aside his description all together.
10. Phanaeus hilaris Mac Leay. l. c.

Oxysternon hilare Casteln. Hist. nat. II. p. 82.
Mac Leay in this species also describes an undeveloped for the $q$; in which mistake he is followed by Castelnau. I think I
recognize in these descriptions a species which I met with sparingly on the Upper Amazons and have also received from Cayenne. All my specimens however are ,,rubro-aeneus", only on the front and sides of the prothorax and on the pygidium; the sides and apex of the elytra are also sometimes coppery. The species probably varies greatly in colour. It is of the same broad form as $\boldsymbol{P}$. festivus, but much smaller ( $7-8$ lin.). Very feeble males are without cephalic horn, but have a bituberculate frontal carina. The prothorax has a broad fovea near its anterior margin, having a tubercle on each side, which structure distinguishes them at once from the $o f$ which has the usual short curved carina. The cephatic horn of the fully-developed $\delta$ differs from that of all the allied species being straight, dilated in the middle and narrowed towards the apex.

## 11. Pharaeus Silenus Casteln.

Oxysternon Silenus Cast. Hist. nat. Col. II. p. 82.
The expression: ,tête ayant une carène transversale bituberculée dans les $\wp$ " shows that the author mistook undeveloped males for females. Fully developed males appear to be very rare; although I frequently took the species on the Amazons I never met with these males. I have since received one from Bolivia. The species has the narrower form of $\boldsymbol{P}$. floriger. Cephalic born of the t long, perfectly straight and truncated at the apex. Undeveloped males have a short bituberculate carina on the vertex, the same carina being trituberculate in the $\%$. Colour extremely variable. Thorax brilliant coppery, green or light blue; elytra generally black, with coppery margins.

## ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database
Digitale Literatur/Digital Literature
Zeitschrift/Journal: Coleopterologische Hefte
Jahr/Year: 1876
Band/Volume: 4
Autor(en)/Author(s): Bates H. W.
Artikel/Article: VI. Notes on Genera and Species of Copridae. 87-
91

