

radially arranged mesenterial sacs, tentacles with urticating capsules, and indifferent aquiferous pores. Although in certain Sponges at an early period radial diverticula surround a central cavity, there are also Sponges, such as the Ascones, which never develop such diverticula, and others (the Sycones) in which they only originate as sacculations of the wall. But that the Ascones are not retrograde forms may be inferred from the circumstance that the Sycones, long before they form radial tubes, present the pure Ascon type. It is therefore very probable that the oldest Sponges possessed no radial diverticula of their central cavity, but, like *Olynthus* among the Calcispongiæ, had a simple sac-like form.

XXXIII.—*New Coleoptera recently added to the British Museum.* By CHARLES O. WATERHOUSE.

Scarabæidæ.

Scarabæus Thomsoni, Bates, in litt.

Supra cupreus, subtus olivaceus nitidus; tibiis nigris.
Long. 16 lin.

Somewhat bright uniform copper-colour above, very dark olive-green below. Thorax very convex, obliquely narrowed in front and posteriorly; densely asperate at the sides; the disk strongly punctured, the punctures moderately large, each with a minute puncture in the middle; the punctures on the posterior part of the disk are irregularly placed, but are generally separated from each other by about the diameter of a single puncture; the surface between the punctures shining, with a few minute punctures here and there. There is an irregular smooth median line. The sides are very regularly crenulate, somewhat angular at the middle, very gently sinuate behind the middle. Elytra distinctly narrower than the thorax, moderately convex, considerably sloping down behind the middle; the suture shining, with a few small punctures; the rest of the surface dull, especially towards the sides, densely and finely rugulose; the rugæ having a tendency to run longitudinally produces an appearance of the surface being scratched; the first interstice has a few shallow punctures; the second, third, fourth, and fifth interstices have more numerous, moderately

large, very shallow, dull punctures, which have a tendency to form two lines on each interstice. The space between the sixth stria and the margin is somewhat flat, without large punctures; behind the middle there are several short oblique impressed lines, visible only in certain lights. Sternum smooth and shining in the middle, closely punctured at the sides. Abdomen dull but smooth; the first segment with some large punctures at the sides, the second and third segments densely and very finely punctured at the sides, the fourth and fifth segments very strongly punctured. The epipleural fold of the elytra has numerous distinct transverse folds, giving the appearance of a ladder.

Hab. Taveta, Masai country, at the south-east foot of Kilimanjaro (*J. Thomson*).

This fine species is closely related to *S. cupreus*, Casteln., but may be distinguished by the rather coarser sculpture, by the oblique striation on the margin of the elytra, which, although apparently a slight character, is very constant; and by the granules on the sides of the thorax being confluent instead of isolated.

Trichiidæ.

Agenius suturalis, n. sp.

♂. Black, the elytra testaceous, with the suture and margin black. Head, thorax, and the body beneath clothed with rather long pale pubescence. Clypeus as in *A. limbatus*, but more finely punctured. Thorax scarcely broader in the middle than at the base, more gradually narrowed in front than in *A. limbatus*, and beginning to narrow from rather behind the middle; shining, very closely and rather strongly punctured; the base sinuate on each side. Scutellum dull, a little longer than in *A. limbatus*. Elytra a little more narrowed at the apex than in *A. limbatus*, not so dull as in that species, the punctuation similar, except that there is a series of very closely-placed punctures along each side of the suture, not quite reaching the scutellum; the apex rugose. Metasternum moderately thickly punctured in the middle, very closely and more finely punctured towards the sides. Abdomen not very closely punctured in the middle (but the punctures three times as numerous as in *A. limbatus*), closely punctured at the sides. Pygidium closely rugulose.

Length 13 millim.

♀. Entirely black, shining, the elytra dull. Much broader than *A. limbatus*; the thorax rather more convex,

less narrowed at the base, less angular at the sides; rather more strongly but a little less closely punctured. The elytra are rather strongly but obscurely punctured; much less suddenly deflexed at the sides, with no distinct sublateral ridge except at the shoulder.

Length 17 millim., width 8 millim.

Hab. Cape of Good Hope (*R. Trimen*).

Myoderma rufa, n. sp.

Near to *M. alutacea*, but rather more robust and more convex. Red, clothed with red pubescence, the sterna and legs black. The front margin of the clypeus is a little less prominent in the middle. Thorax more convex, very closely and rather more strongly punctured; the sides more rounded, not sinuate before the hind angles, which are consequently more obtuse. The costæ of the elytra are broader and more strongly punctured; the pubescence is finer. The anterior tibiæ are rather broad, with three strong acute teeth. All the underside of the insect is closely and rather strongly punctured.

Length 13–14 millim.

Hab. Zulu.

Buprestidæ.

Chrysodema occulta, n. sp.

Æneo-viridis, aureo-viridi-punctata, nitida; thorace linea mediana distincta, lateribus impressione magna cuprascenti; elytris multcostatis, costis basi obsoletis, interstitiis fortiter punctatis.

Long. 14–15 lin.

The thorax has the large golden-coppery impressions bounded on the outside by a straight ridge, somewhat as in *C. radians*, but sharper. Each elytron has eight costæ, of which the alternate ones are somewhat indistinct, and none of the costæ are distinct at the base. Behind the middle, between the fourth and sixth costæ, there is a rather indistinct golden impression. The usual apical golden impressions are very narrow.

This species is very near to *C. Jansoni*, Deyr., and is difficult to distinguish by the upper side. The thoracic impressions are rather more clearly defined. The elytra have no impression before the middle, and the apical longitudinal impressions are much narrower.

The apical segment of the abdomen in the female in *C. Jansoni* has a small but rather deep incision at the apex, the

sides of the incision being parallel. In *C. occulta* there is a smaller incision in the form of an acute triangle.

I have not seen the male of either of these species.

Hab. Santa Anna, Solomon Is. (*Dr. Guppy*).

Chrysodema Brownii, n. sp.

C. smaragdulae approximans, æneo-viridis, nitida; thorace disco utrinque fovea sat magna crebre punctulata impresso, lateribus fortiter punctatis; elytris costis interruptis cyaneis parum elevatis, interstitiis fortiter punctatis viridi-auratis, plagisque nonnullis igneo-cupreis ornatis.

Long. 14 lin.

Very near to *C. smaragdula*, but (even uniting all the varieties usually placed together under this name) distinct by its more robust form, strong punctuation of the elytra, which are less narrowed at the apex, &c. The thorax has the punctuation on each side of the median line very fine, at the sides it is very coarse. The discoidal impressions are round and coppery. Each elytron has three small impressions at the base; there is a coppery impression on the disk before the middle, between the first and second costæ, and interrupting the second costa; there are two small impressions between the first and second costa just before they unite posteriorly *not* diverting the costæ, as is usually the case in *C. smaragdula*. On the side there are three large impressions, the first and second elongate, the third round and dividing the third costa near its apex. The surface between this last impression, and the apex of the elytra is more or less golden. The apical segment of the abdomen has a small but wide triangular emargination at the apex.

This species differs from *C. proxima*, Saund., in having the space on each side of the median line much less punctured; the impressions on the elytra are more coppery, and the posterior lateral impression is not united to the posterior impression, which is between the first and second costa.

Hab. Duke-of-York Island (*Rev. G. Brown*).

NOTE.—The males of the species of this genus appear to be rare. Of *C. aurofoveata* there are in the British Museum three males and thirteen females; of *C. radians* one male and eleven females; of *C. occulta*, ten females, no male, &c. The males are easily distinguished by the broad triangular emargination of the fifth abdominal segment, which leaves the sixth pubescent segment exposed below. The thorax is generally rather narrower, and the impressions are less marked.

Chrysodema ventralis, n. sp.

Læte aureo-viridis, nitida; thorace crebre punctato, lateribus impressione sat magna aurea ornatis, angulis posticis acutis paulo divergentibus; elytris multicostatis, costis lævibus, interstitiis crebre punctatis; apice ipso cupreo; corpore subtus pedibusque cupreis.

Long. 10 lin.

A very distinct species by its elongate elliptical form. The thorax is obliquely narrowed in front, broadest at the posterior angles, which are more diverging than in any species known to me. The surface is closely and not very finely punctured, with a slight smooth line in the middle; on each side there is a rather large, shallow, golden, punctured impression, which touches the margin. Each elytron has eight nearly equal rather strong costæ; the third costa is obliterated at the base by some very coarse punctures; the fifth does not reach the shoulder or the apex; the interstices are narrow and somewhat irregular. The whole of the under side of the body (except the sides of the sterna) is coppery.

Hab. Guam, Ladrone Is.

Cyphogastra terminata, n. sp.

Viridis, nitida; thorace aureo-impresso; elytris sat fortiter punctatis, ante apicem cupreis, apice ipso nigro-violaceo; tarsis flavis.

Long. 15 lin.

Allied to *C. punctipennis*, Deyr., but broader and more robust. The thorax has the median line and two small round impressions in front golden; the rather large lateral impressions are deep, golden, densely and finely punctured, and filled with dark yellow tomentum. The elytra are nearly parallel for more than half their length and then are gradually narrowed to the apex, and not compressed, as is so frequently the case in this genus; the punctuation is strong, rather more uniform than in *C. punctipennis*. The tarsi are yellow, except the last joint, which is green.

This species is also near *C. satrapa*, Sch. (*suturalis*, F.), but the two impressions in the front of the thorax are more distinct; the lateral impressions are larger; the punctuation of the elytra is more uniformly strong, the copper colour is less extended at the apex, and the apex is more acute.

Hab. Santa Anna, Solomon Is. (*Dr. Guppy*).

Cyphogastra abdominalis, n. sp.

Olivaceo-viridis, parum nitida; elytris sat fortiter punctatis, apice obscure cupreo tincto; abdomine cupreo-nitido.

Long. 15-17 lin.

Resembles *C. Mnischeii*, Deyr., in colour, but the form is different; the elytra are more convex posteriorly, less compressed before the apex, and the apex is more acute. The thorax has the sides very coarsely punctured. The punctuation of the elytra is strong, much stronger than in *C. Mnischeii*, and is distinct even to the apex. The process on the basal segment of the abdomen is very finely punctured, and more closely than in *C. Mnischeii*.

Hab. Duke-of-York Island (*Rev. G. Brown*).

Cyphogastra Macfarlani, n. sp.

Nigra, nitida, subtus olivaceo tincta; elytris cæruleo-viridibus, postice aureo tinctis, apice nigris, singulo elytro postice sulcis duabus leviter impresso.

Long. 14 lin.

Very close to *C. venerea*, Th., but, I think, must be considered distinct. The punctuation of the elytra is rather less strong, and the surface is almost smooth posteriorly; the longitudinal impression near the suture is less strong and much less punctured, and there is a well-marked lateral golden impression which is finely punctured. There is also an indication of a small impression below the shoulder.

Hab. Torres Straits, Murray Is. (*Rev. S. J. McFarlane*).

Cyphogastra sodalis, n. sp.

This species differs from *C. venerea* in the absence of the sutural impression of the elytra, and in the presence of an oblique shallow lateral impression, which is golden green and very slightly punctured.

Hab. Torres Straits, Cornwallis Is. (*Rev. S. J. McFarlane*).

Brachyceridæ.

Rhinoscapa uniformis, n. sp.

Nigra, pallide viridi-aureo-squamosa; thorace linea elevata mediana, guttisque parvis nigris; elytris striatis, interstitiis convexis, guttis minutissimis numerosis nigris.

Long. 9 lin., lat. $3\frac{1}{2}$ lin.

Of a uniform very pale green, with a slight golden tint in some lights, but there is no opalescence. The rostrum is longitudinally grooved, but the groove is broad and shallow. Antennæ long and slender. Thorax very convex, not impressed on the back, with some small irregular raised black marks on each side of the raised middle line. Striæ of the elytra rather deeply impressed, the punctures hidden by the scales; the

interstices convex, especially the third and fifth ; with numerous minute black dots, those near the base a little more conspicuous.

Hab. Aneiteum (*J. Brechley*).

In the British Museum there is a specimen found in Santa Anna, in the Solomon Islands, by Dr. Guppy, which appears to be referable to this species, but which differs in having a slight bluish tint on the suture of the elytra, and on the base of the elytra there are numerous small, transverse, shining, raised spots. Probably these differences are due to the specimen being slightly rubbed and in less good condition than the type.

Prionidæ.

Xixuthrus costatus, n. sp.

Fusco-piceus, sordide flavo-pubescens ; thorace transverso, lateribus crenulatis parallelis, angulis anticis late rotundatis, disco tuberculis nonnullis ornato ; singulo elytro costis quatuor instructo, costa tertia brevi, interstitio quarto tertio multo angustiori ; pedibus rugosis vix spinosis. ♂.

Long. 35 lin.

Antennæ reaching to the apex of the elytra, nearly black at the base, pitchy red beyond the third joint. The first joint 12 millim. long, subparallel, closely and very rugosely punctured ; the third and following joints beset with very short acute tubercles ; the eleventh joint longitudinally grooved. Thorax closely and finely rugose and finely punctured, with some shallow larger punctures intermixed. On the disk there are some slightly raised smooth lines, which together form the letter M, and on each there is an oblique interrupted raised line. The irregular teeth on the sides are very short and rather blunt. The first and second costæ of the elytra are very strong, thicker in the middle than at the apex ; the third is very short and much finer, and is much closer to the fourth than to the second. The reflexed margin is rather broad when compared with that in allied species. The legs are long ; the anterior femora and tibiæ are very rough, closely beset with short tubercles, those on the underside of the tibiæ acute. The intermediate and posterior femora are comparatively smooth, with a series of scarcely noticeable acute spines beneath ; the tibiæ are longitudinally rugose, with some acute tubercles on the inner side, but not spinose ; third joint of the tarsi very broad, the fulvous fringe on the margins of the anterior tarsi long.

Hab. Santa Anna, Solomon Is. (*Dr. Guppy*).