Size: maj. diam. 1.5, alt. axis 2.0 millim.

Operculum smooth, semicircular in form, and straight on

the columellar or inner side.

This species is nearest to *G. laratula*, from near Moulmein, described and figured by Stoliczka in J. A. S. B. 1871, p. 157, pl. vi. fig. 5; but the ribbing is not so coarse and strong as in *G. laratula*.

IX.—On new Longicorn Coleoptera from China. By C. J. Gahan, M.A., Assistant, Zoological Department, British Museum.

Most of the species described in this paper have been represented for some time in the British-Museum collection, but only by single or poor specimens. The addition of fresh specimens, presented by Mr. J. H. Leech, and the access which I have had to the collection of this gentleman, have enabled me now for the first time to describe them. Some of the species, duplicates of which have been presented by Mr. Leech, are quite new.

Trachylophus, n. g.

Head slightly projecting; the front vertical, impressed; the antennal tubercles somewhat depressed, separated by only a narrow groove; the vertex with a short median sulcus. Antennæ a little longer than the body in the male, about equal in length to the body in the female, with the third and fourth joints cylindrical, scarcely thickened at the apex, the fourth much shorter than the third, the fifth joint appreciably longer than the third, cylindrical at the base, compressed and angulate on its inner side at the apex; joints sixth to tenth subequal, compressed, and each angulate on its inner side at the apex; eleventh joint in the male a little longer, in the female scarcely longer than the tenth. Prothorax broader than long, narrow in front, dilated, but not armed at the sides in the middle, strongly rugose above. Elytra elongate, subparallel in their anterior four fifths. Legs long, femora linear, the posterior scarcely surpassing the third abdominal segment in the male, somewhat shorter in the female. Prosternum vertical and with a median keel or tubercle behind.

The position of this genus is between Mallambyx, Bates,

and Xoanodera, Pascoe. With the head of the former, it has antennæ more like those of the latter genus.

Trachylophus sinensis, n. sp.

Fuscus, pubescentia grisea subsericea omnino indutus; capite supra sulco brevi impresso; prothorace antice angustato, lateribus in medio paulo dilatato, supra fortiter rugoso, rugis prominulis, intricatis; elytris minutissime et dense punctulatis, apicibus suboblique truncatis, angulis internis breviter spinosis; antennis (\mathcal{J}) corpore paulo longioribus, (\mathcal{Q}) corpore subæqualibus, articulo quinto quam tertio longiore.

Long. 25-38 mm. ♂♀.

Hab. China.

Dark brown, the whole body with the legs and antennæ clothed with a uniform, greyish, somewhat silky pubescence. The vertex of the head between the eyes with a short longitudinal sulcus. The thorax very rough above, the convolutions of the ridges forming an intricate pattern. Two of the ridges, separated posteriorly by a median longitudinal furrow, run up to the middle, where they are widest apart, and then, running together, meet a little in front of the middle, and again separate anteriorly; the ridges next on the outside of these are also more or less regular, and have a somewhat longitudinal course; the other ridges are very irregular. Elytra very minutely and thickly punctured, with their apices slightly obliquely truncate and their sutural angles each armed with a very short spine. The prosternum moderately broad, with a faint median carina, which ends behind in a more or less prominent posteriorly directed tubercle.

There is a second species from Java which is closely allied to this, and which can only be distinguished from it by the broader and more distinct sulcus on the vertex of the head, by the different pattern of the sculpturing on the thorax, and by its narrower prosternum. As this species is undescribed, I give a short Latin diagnosis of its characters in a footnote*.

Callichroma? bimaculatum, White.

The series of this species from Kiu Kiang in Mr. Leech's

Trachylophus approximator, n. sp.

T. sinensi valde affinis, sed differt prosterno paulo angustiore; prothorace rugis medio disco nec longitudinaliter dispositis.

Long. 30-37 mm., ♂♀.

Hab. Java. Brit. Mus. Collection.

collection shows every change from those specimens in which there is a simple spot on each elytron to those in which the elytra are completely banded. The latter form, described by Deyrolle as *Callichroma? Davidis*, cannot therefore be regarded as even a local variety, much less a distinct species.

Sympiezocera sinensis, n. sp.

S. japonicæ affinis, nigra, hirsuta; prothorace dorso calloso; elytris punctatis, fulvo-testaceis, macula magna transversa singulo ad medium et tertio apicali, nigris; antennis corpore (3), vel corporis dimidio (2), paulo longioribus.

Long. 20 mm., lat. 6 mm.

Hab. China.

Black, with fine and sparse greyish-fulvous hairs everywhere, very sparse on the elytra. Prothorax broadest a little before the middle, narrowest at the base, less expanded at the sides in the female, with five smooth callosities on the disk. The elytra fulvous testaceous, and having an incomplete fascia across the middle, made up of two large, black, transverse spots, which extend, one on each side, from the margin almost up to the suture. The apical third of the elytra is also black. Antennæ in the male black, a little longer than the body, in the female dark brown and reaching about the middle of the elytra. Posterior thighs in the male a little shorter than the elytra, in the female much shorter.

A single female in the British-Museum collection; two

males in Mr. Leech's collection.

Purpuricenus Pratti, n. sp.

Niger; prothorace sanguineo, dorso maculis quinque nigris—duabus antice et tribus postice, lateribus medio spinosis; elytris sanguineis, maculis tribus nigris, duabus ante medium, tertia communis, maxima, rotundata, pone medium; antennis (2) corporiæqualibus, (3) duplo longioribus.

Long. 18-20 mm.

Hab. China.

Black, excepting the prothorax and elytra, which are red; the former is sometimes almost wholly red on the underside, sometimes the intercoxal process and the parts surrounding the coxal cavities are black. There are five black spots on the disk of the thorax, two anterior and three posterior, of which the median one marks the position of a small tubercle. The lateral spines are in the middle, and the thorax is slightly

narrower behind than in front of them. The elytra are marked with three black spots, one on each near the base, the third, very large and round, common to both and extending from a little in front of the middle to near the apex. The prosternum and mesosternum are both slightly tubercled. The antennæ of the female are about as long as the body, those of the male twice as long.

In a good series of specimens, nearly all of which, however, are from Kiu Kiang, the markings of the elytra are subject to very little variation, and this only in the size of

the basal spots.

In a variety of this species represented in the British-Museum collection by a single female example from Chowsan, the basal spots of the elytra are absent and the large post-median spot is replaced by four spots—two oblong, sutural, and two smaller, external to them.

Monohammus albisparsus, n. sp.

Omnino pubescens, infra griseus, supra grisco-brunneus; scutello et macula media ad marginem posticam thoracis fulvis; elytris maculis albis irregulariter dispersis; antennis scapo fusco, ecteris articulis griseis, apicibus fuscis; mesosterno tuberculato. Long. 15–18 mm.

Hab. China (Kiu Kiang).

A species which may be recognized by the fulvous seutellum with a spot of the same colour at the base of the thorax, by the elytra with a close pubescence of a dark greyish or brownish colour, with a large, very irregular, broken, dirty white spot on the middle of each, and smaller spots of the same colour scattered over their surface.

The antennæ with the scape narrowly but completely cicatrized at the apex, with this joint dark brown in colour, the remaining joints grey at their base and more or less fuscous towards their apex. The mesosternum conically tubercled

in the middle.

Haplohammus contemptus, n. sp.

Fuscus, viridi-grisco pubescens; capite punctato; prothorace supra convexo, æquali, dense punctato; elytris punctatis, brunneo-griscis, pallide grisco mixtis; scapo antennarum vix cicatricoso. Long. 10-14 mm.

Hab. China.

A small obscure-looking species, with the head punctate,

only slightly concave between the antennal tubercles, the

latter not at all prominent.

The prothorax is almost or entirely without transverse grooves, is somewhat convex on the disk, and is very closely punctured both above and at the sides. The scutellum is pale grey. The elytra are punctate, of a brownish grey mixed with a paler grey, the latter appearing mostly as a very indefinite broken band on each elytron extending from the shoulders obliquely towards the suture and thence along to the apex. The elecatrice of the scape is searcely apparent in fresh specimens, in which it is covered by the pubescence; it is incomplete. The joints of the antennæ from the third are testaceous and pale grey pubescent at their bases.

Melanauster Leechi, n. sp.

Niger, nitidus; capite inter tuberculos antenniferos valde concavo; prothorace impunctato, nitidissimo, dorso inæquali, lobo mediano postice emarginato; elytris nigris, minutissime exsculptis, sine granulis et fere impunctatis; antennis articulo secundo griseo-cæruleo, ceteris nigris; tarsis supra griseo-cæruleis.

Long. 30-40 mm.

Hab. China (Kiu Kiang).

Head minutely and sparsely punetured, deeply and triangularly concave between the antennal tubercles, with the front somewhat depressed in the middle. Prothorax impunetate, very shiny, somewhat constricted in front of and behind the lateral tubercles; these with a slightly posteriorly-directed curvature and sharply pointed at their ends. The disk somewhat obtusely tubercled or raised across the middle, the median lobe or tubercle projecting a little on the posterior transverse groove and triangularly notched behind. Elytra black, very finely and minutely sculptured, so as to have a coriaceous appearance, with a few minute scattered punctures behind the shoulders. Body black and glossy below; the legs with a faint greyish pile; the tarsi with a pale greyish-blue pubescence above. Antennæ with the second joint and the extreme base of the third joint bluish grey, the remaining joints black.

I have named this fine species after Mr. J. H. Leech, to whom the British Museum is indebted for its specimens of

this and other species described in the present paper.

Uracha punctata, n. sp.

U. angusta, Pasc., affinis, sed latior; capite, articulis antennarum

basalibus, pedibus et corpore subtus cupreo-brunneo pubescentibus; prothorace supra griseo, ferrugineo-maculato et minute granuloso; scutello ferrugineo; elytris, antice fortiter punctatis, fuscis, sparse ferrugineo-pubescentibus, singulo apice subrotundato, lateraliter plagiato, parte plagæ ante medium majore, alba, minus dense punctata, parte pone medium minore, brunneo-nigra, valde et dense punctata.

Long. 14-20 mm., lat. 4-6 mm.

Hab. China.

The underside of the body, the legs, head, and antennæ at the base of a somewhat dull bronze colour. The apices of the third to the last antennal joints fuscous; the last few joints almost completely so. Two distinct ferruginous spots on the disk of the thorax near its anterior margin, and one or two spots of the same colour on each side. The large patch on the side of each elytron touches the margin, but does not reach the suture; it is white and closely pubescent in its anterior two thirds, and dark brown, almost black, in its posterior third. The elytra are strongly and thickly punctured at the base and along the suture between the lateral plagæ, as well as on the black parts of the latter; on the white parts the punctures appear smaller and more distant, but this is doubtless due to the closer pubescence which covers them; towards the apex the punctures are smaller and fewer.

This species is broader than *Uræcha* (Monohammus) angusta, Pascoc; the elytra also are more punctate, but in other respects (the colour excepted) it agrees so well with that species that it must be placed close to it. There are three

female specimens in the British-Museum collection.

Saperda simulans, n. sp.

S. carchariæ simillima, sed angustior; antennis gracilioribus, unicoloribus.

Long. (3) 21 mm., (Q) 24-26 mm.; lat. (3) 6 mm., (Q) 8 mm.

Hab. China.

In colour and punctuation this species has a very close resemblance to the well-known S. carcharias, but may be easily distinguished by its smaller and narrower form, and by its antennæ, which are slenderer and covered throughout with a tawny pubescence like that of the body. The elytra are less attenuated posteriorly than in carcharias, and each ends in a very short but distinct tooth. The antennæ are about equal in length to the body in the male, and somewhat shorter in the female.

The measurements given above are taken from a limited

number of specimens, of which one only is a male; this male specimen is in Mr. Leech's collection.

Saperda brunnipes, n. sp.

Capitis lateribus et fronte, prothoracis lateribus et corpore subtus sulphureo-pubescentibus; capitis vertice, lata vitta longitudinali in medio thoracis, elytrisque nigris, leviter griseo-pubescentibus; antennis, pedibus tarsisque brunneis, leviter pubescentibus. Long. 14 mm., lat. 4 mm.

Hab. China (Kiu Kiang).

Head with the front and sides yellowish pubescent, the vertex black, with a faint greyish pile. The thorax yellow at the sides and beneath, with a broad longitudinal band on the middle of the disk, the band (with the exception of a faint median carina) covered with a greyish pile. There are two very faint tubercles, one each side of the thorax, and each marked out by a small black spot. The elytra are black, punctate throughout, and clothed with a greyish pile. The legs and antennæ are light brown and faintly pubescent, the latter are somewhat fuscous towards the tip.

GLENIDA, n. g.

Head flat or nearly so between the antennal tubercles. The lower lobes of the eyes rather large and reaching about two thirds of the way to the base in the male, distinctly smaller in the female, and reaching scarcely halfway to the base. The cheeks in the female prominent, so that the head is broadest across the base; in the male the cheeks are not at all prominent. The antennæ nearly as long as the body in the male, shorter in the female; the third joint longest, the first and fourth subequal, the others gradually decreasing in length. Thorax obtusely conically tubercled at the sides. Elytra moderately long, sharply carinate for two thirds their length at the sides, somewhat oblique at the shoulders, slightly narrowed posteriorly, with the apex broadly rounded. Intermediate tibiæ entire, the claws of the tarsi simple and divaricate.

This new genus of the Saperditæ is created for two pretty species from China. It is closely allied to *Neoxantha*, Pascoe, from which it is distinguished by its more elongated form, by the less parallel elytra, as well as by the more prominent cheeks and larger mandibles in the female. It approaches the genus *Glenea* in appearance, but differs by its broader form, tubercled thorax, and entire median tibiæ.

Glenida suffusa, n. sp.

Capite punctato, cæruleo-griseo squamose pubescente; prothorace lateribus ante medium obtuse tuberculato, ochraceo-pubescente, dorso medio macula nigra griseo marginata, postice carina mediana dorsali; scntello griseo-albo; elytris nigro-velutinis, cæruleo suffusis, ad basin ochraceis; corpore subtus pedibusque fulvo-ochraceis; tarsis et tibiarum apicibus nigris; antennis fuscis, articulis tertio et quarto pallidis.

Long. 17-21 mm., lat. $6\frac{3}{4}$ - $8\frac{3}{4}$ mm. 3 \circ

Hab. China (Kiu Kiang).

Head punetate, black, with a squamous pubescence, which is pale blue on the front and round the eyes and yellowish on the cheeks. Prothorax obtusely tubereled at the sides in front of the middle; an oblique groove separates each of the lateral tubereles from a tubereular swelling in front of and below it, close to the anterior margin. The thorax is of a reddish oehraeeous eolour, with a black spot margined with grey on the middle of the disk, and with a faint grey spot on each side just behind the lateral tubereles. A short longitudinal keel extends from the posterior margin about halfway along the middle of the thorax. Elytra very slightly projecting on each side of the scutchlum, with a triangular basal area reddish ochraceous, like the thorax, the rest of a deep black suffused with pale blue, punctured near the base and along the lateral earinæ. The underside of the body and the legs fulvous, eovered with a yellowish pubescence. tarsi and apiees of the tibiæ black, slightly mixed with grey. Antennæ with the third and fourth joints testaceous, the scape black, and the remaining joints dark brown.

Glenida cyaneipennis, n. sp.

Capite, articulis antennarum basalibus, thorace (tuberculis lateralibus et maculis duabus medio disco, fuscis, exceptis), pedibus et corpore subtus ochraceo-fulvis; elytris glabris, cyaneis, punctatis; tarsis apicibusque tibiarum nigro-fuscis.

Long. $19\frac{1}{2}$ mm., lat. $7\frac{1}{2}$ mm. 9.

Hab. China.

A very pretty species, which I believe to be eongeneric with the last. The head is of a rich fulvous colour, the front impunetate, with a median longitudinal groove which extends on to the vertex. The prothorax is ochraceously pubescent, with a distinct conical tubercle on each side very little in front of the middle; these tubercles and two triangular spots on the middle of the disk are of a dark brown

colour. The scutellum is ochraceous. The elytra, glabrous and punctate throughout nearly their whole extent, are of a fine metallic blue. The lateral carinæ are sharp and distinct and extend about two thirds the length of the elytra. The whole underside of the body, the femora, and bases of the tibiæ are of a bright ochraceous colour. The tarsi and the tibiæ are of a bright ochraceous colour. apices of the tibiæ are of a very dark brown.

Two females of this species only are known to me; they

are in the British-Museum collection.

Thyestes funebris, n. sp.

Niger, pubescens; capite punctato, nigro pubescente, fronte ad basin obscure griseo; prothorace supra dense punctato, omnino nigro; elytris antice punctatis, omnino nigris, pubescentibus; antennis nigris, articulis quarto ad octavum, ad basin et subtus griseis. Long. $11\frac{1}{2}$ -13 mm.

Hab. China (Kiu Kiang). Of the size and form of T. Gebleri, Falderm., the only other described species of the genus, but very distinct by the absence of any white stripes. It is wholly black with the exception of an obscure greyish patch on the front of the head at its base, and of some of the joints of the antennæ, which are greyish at their base and underside.

X.—The Adhesive Disk of Echeneis. By R. Storms, Brussels.

The singular disk covering the head of Echeneis has, since ancient times, attracted the attention of naturalists, and more recently its structure and morphological interpretation have been several times investigated. Notwithstanding this, there still remains a certain amount of divergence of opinion and uncertainty as to the nature of the organ as a whole or of its constituent parts. In the present paper an endeavour will be made to solve the different questions pertaining to this subject.

I.

MORPHOLOGICAL VALUE OF THE DISK AS A WHOLE.

Two interpretations of the morphological value of the disk have been given. 5*