In illustration of this new genus, I have thought it would be interesting to add figures of three of the allied genera above commented upon, of which no satisfactory representations have hitherto appeared. Figures of *Torneutes* and *Erichsonia* will be found in the 'Transactions of the Entomological Society' above referred to; of *Thaumasus*, in the French 'Annales;' of *Hypocephalus*, in my 'Arcana Entomologica,'—Scaphinus and Mysteria being still unrepresented.

Plate VII. fig. 2. SYPILUS D'ORBIGNII, Guérin, Rev. Zool. p. 276; Icon. Règne An., texte; Blanchard in Voy. d'Orbigny, Crust. et Ins. p. 206, pl. 20. f. 1 (mala).

Habitat in Patagonia. In Mus. Hopeiano Oxoniæ.

2 a. Head, seen in front; 2 b. Palpi; 2 c. Two of the middle joints of the antennæ; 2 d. Anterior tarsus, showing the very narrow, lobeless state of the three basal joints.

Plate VII. fig. 3. Anoploderma bicolor, Guérin, Rev. Zool. 1840, p. 278; Blanchard, in Voyage d'Orbigny, Crust. et Ins., texte, p. 206, pl. 20. f. 2 (mala).

Habitat the Andes. In Mus. Guérin. Ex individuo typico delineatum. 3 a. Head, seen in front; 3 b. Tarsus.

Plate VII. fig. 4. CANTHABOCNEMIS SPONDYLOIDES, Serville, Ann. Soc. Ent. France, i. p. 192.

4a. The clypeus, labrum, and mandibles of the male; 4b. Mandible of female; 4c. Labrum and palpus, with maxillary palpus; 4d. Two of the middle joints of the antennæ.

Habitat in Senegallia. In Mus. Hopeiano Oxonise.

XII.—List of the Colydiidæ collected in the Indian Islands by Alfred R. Wallace, Esq., and Descriptions of new Species. By Francis P. Pascor, F.L.S., &c.

With the exception of a few species described by me in the previous Numbers of this work, the whole of the Colydians collected by Mr. Wallace, and enumerated in this paper, are entirely new to science. They are fifty in number, belonging to twenty-four genera, of which eight are now for the first time characterized. Of the older genera, Bothrideres is universal, and Cerylon scarcely less so, except that it has not yet been detected in Australia; besides these, the only genus represented in Europe is Colobicus. Of the Asiatic, or rather of the Indian genera (for we scarcely know anything of this family beyond the two peninsulas), we find exponents of six in this collection, viz. Phormesa, Machlotes, Dastarcus, Petalophora, Gempylodes, and Trachypholis, while the only known Indian genus not found in it is

Tarphiosoma. If we except Bothrideres, Penthelispa, and Phormesa (the two former almost universally distributed), we have no genus common to the Indian islands and to Australia. This is the more remarkable, as we are now acquainted with eleven genera from that division of the world, all very distinct, and some of them rich in species. It is perhaps still more remarkable that four of the Indian genera, viz. Distaphyla, Minthea, Nematidium, and Ocholissa, have representatives in Tropical America, and nowhere else.

With regard to the distribution of the Colydide in the Indian Islands there is nothing, so far as this collection is concerned, to call for any particular remark. Nine genera were found in New Guinea, three of which only are peculiar, viz. Bupala, Caprodes, and Eba. Few of the species appear to have been met with in more than one island. The exceptions were Ocholissa humeralis, which was found at Saylee (New Guinea), in Morty, Mysol, and Batchian; Dastarcus confinis at Dorey, Macassar, and Aru; Chorites oblongus at Macassar, Ceram, and Batchian: Minthea simillima at Saylee, Ceram, and Macassar; Hyberis araneiformis at Sarawak and Singapore; Phormesa heros at Dorey and Morty; Nematidium posticum at Sarawak and Amboyna; and Dastarcus vetustus at Ceram and Batchian: The little island of Mysol furnished eight species, only one of them, Ocholissa humeralis, having being detected elsewhere. It must be observed, however, that Mr. Wallace did not trouble himself with these "small game," except when he had nothing else to do; consequently many of the islands, such as Bouru, Gilolo, Aru, Key, Waigiou, and others, are not represented at all, or only by a single specimen. In the following table I have adhered to the five subfamilies into which Erichson has divided this family:-

SYNCHITINÆ.

Antennæ clavate.	
Prothorax entire anteriorly.	
Antennæ eleven-jointed.	
Prothorax and elytra not carinate.	
Tibiæ fusiform	Caprodes, n. g.
Tibiæ linear or subtrigonate.	
Prothorax dilated at the sides	
Prothorax not dilated	Cebia, n. g.
Prothorax and elytra carinate.	
With antennary grooves	Phormesa, Pasc.
Without antennary grooves	Xuthia, n. g.
Antennæ ten-jointed	Bupala, n. g.
Prothorax with two projecting lobes anteriorly	Distaphyla, Pasc
Antennæ not clavate	Eba, n. g.

COLYDINE. Antennæ free at the base	Nematidium, Er.	
Antennæ clavate.		
Prothorax and elytra smooth	Ocholissa, Pasc.	
Prothorax and elytra carinate		
Antennæ not clavate	Gempylodes, n. g.	
Bothriderinæ.		
Basal joint of the tarsi elongate.		
Club of the antennæ transverse	Petalophora, Westw	
Club of the antennæ ovate or round		
Basal joint of the tarsi short.	- /	
Prothorax with a deep transverse cleft posteriorly	Machlotes, Pasc.	
Prothorax not cleft transversely.	·	
Posterior coxæ widely remote.		
Prothorax with a central impression	Bothrideres, Er.	
Prothorax without a central impression	Dastarcus, Walk.	
Posterior coxe moderately remote.		
Body ovate.		
Tibiæ sublinear.		
Interfemoral process broadly triangular.	Trachypholis, Er.	
Interfemoral process truncate	Chorites, Pasc.	
Tibiæ fusiform.		
Sides of the prothorax nearly entire		
Sides of the prothorax denticulate	Hyberis, Pasc.	
Body cylindrical	Minthea, Pasc.	
Pycnomerinæ.		
Antennæ eleven-jointed	Penthelispa, Pasc.	
Ceryloninæ,		
Antennæ ten-jointed	Cerylon, Latr.	

Colobicus parilis.

Pascoe, huj. op. i. p. 102.—Batchian.

Of the five species of this genus now in my collection, this and Colobicus conformis agree with the European Colobicus emarginatus in having the third antennal joint as long or longer than the three succeeding joints together, while in the other two species* it scarcely

* One of these species I owe to the kindness of Dr. Schaum. The following is its diagnosis and principal characters:—

Colobicus rugosulus.

C. oblongus, rugosus, fuscus, opacus, ferrugineo anguste marginatus; elytris confertim granulatis.
Hab. Ceylon.

exceeds more than one of them. They are all alike in habit (except that *Colobicus limbatus* is proportionally broader), and have the prothorax and elytra more or less bordered with ferruginous.

Colobicus conformis.

C. oblongus, fuscus; capite angusto, antice rotundato; prothorace confertim punctato.

Hab. Lombok.

Oblong, dark brown, the prothorax broadly margined with ferruginous, the elytra with a much narrower margin; head rather narrow, rounded anteriorly, covered with whitish setose scales, the lip very short; prothorax coarsely punctured, the punctures more or less confluent, with scattered setose scales, the sides not fringed with setæ; elytra punctate-striate, the punctures with whitish setæ; legs and antennæ ferruginous; body beneath chestnut-brown, without setæ. Length 1½ line.

This differs from *Colobicus parilis* in the closely punctured prothorax, so closely indeed as to give it a granular appearance, while in that species the punctures are, as it were, occilated or ringed, caused apparently by a kind of protuberance at the base of each puncture. In both species the head is narrower and more elongate than in *Colobicus emarginatus*.

Colobicus limbatus.

C. rugosus, brunneus, ferrugineo late marginatus; elytris seriato-granulatis, interspatiis nitidis.

Hab. Sarawak.

Reddish brown, with a broad ferruginous border fringed with fine setse to the prothorax and elytra, and covered with coarse granulations, which are most crowded on the head and prothorax, but are arranged in regular lines on the elytra, the intervals nitid, each granulation tipped with a semierect black seta; eyes with squamose setse; head short, transverse, entire anteriorly, with a moderately long lip; legs and antennse ferruginous, third joint of the latter not longer than the second, and much shorter than the two following joints together; body beneath dark ferruginous, with scattered greyish setse. Length 11 line.

Oblong, dark brown, opake, with a very narrow ferruginous border fringed with strong setse to the prothorax and elytra, and covered with coarse, crowded granulations, which are arranged on the elytra in irregular rows; head moderately transverse, slightly emarginate anteriorly, with a short lip; body beneath, legs, and antenne dull ferruginous. Length 2 lines.

CEBIA.

Caput receptum, subquadratum, sulcis antennariis brevibus. Antennæ basi tectæ, 11-articulatæ, clava biarticulata. Prothorax transversus, antice sinuatus, lateribus serrulatis haud dilatatis. Elytra convexa, parallela, haud marginata. Tibiæ sublineares, breviter calcaratæ; tarsis brevibus. Corpus subangustatum, convexum.

This genus has very nearly the characters of *Colobicus*, but it is a narrower and more convex form, and differs essentially in the margins of the prothorax and elytra not being dilated.

Cebia rugosa. (Pl. VIII. fig. 6.)

C. fusca; corpore infra, antennis, labro pedibusque ferrugineis.

Hab. Mysol.

Dark brown, with a few whitish scattered setæ; head sparingly punctured, its anterior border and tip ferruginous; antennæ ferruginous, with the two basal joints incrassate, the third nearly as long as the following three joints together, the last two joints forming a loose rounded club; prothorax very coarsely and closely punctured, the sides serrulate and not dilated; elytra convex, striate-punctate, the punctures large and confluent, the interstices with a smaller line of punctures, which are not confluent except in a slight degree with those in the striæ; body beneath ferruginous, rather sparsely punctured; legs ferruginous; tibiæ sublinear, shortly spurred; tarsi short. Length 1½ line.

BUPALA.

Caput breve, ab oculis rotundatum. Antennæ basi tectæ, 10-articulatæ, clava articulo unico rotundato. Prothorax quadratus, haud marginatus. Elytra parallela. Tibiæ anticæ et intermediæ subtrigonatæ, posticæ fusiformes, breviter calcaratæ. Tursi breves. Corpus angustum, parallelum, setosum.

A narrower and more convex form than Synchita, Hellw., to which it is very nearly allied, but without the marginal dilatation of the prothorax of that genus. The posterior coxe are rather more remote than usual, but the triangular form of the interfemoral process leaves no doubt as to its subfamily. There is no antennal groove.

Bupala pullata. (Pl. VIII. fig. 3.)

B. rufo-brunnea, opaca, elytris pedibusque dilutioribus. Hab. Saylee.

Reddish brown, opake; elytra, legs, and antennæ pale; head short, transverse, rounded anteriorly, rough with short scaly setæ; lip transverse, rounded in front; mandibles entire at the apex; maxillary lobes subequal; mentum quadrangular, narrower anteriorly; labrum subqua-

drate, narrowed behind, fringed with short hairs anteriorly, its palpi inserted towards the centre; antennæ ten-jointed, slightly concealed at the base, the first and second joints incrassate, the remainder to the ninth shortly transverse, the tenth forming a solid, rounded club; prothorax quadrate, or nearly so, with short, erect setæ; scutellum small, punctiform; elytra not broader than the prothorax, alightly depressed, the sides parallel, each with five rows of erect setæ, between each of which are two other rows of smaller setæ; body beneath reddish brown, the abdomen with short scattered hairs; tibæ subtrigonate, shortly spurred; tarsi very short, especially of the anterior pair. Length 1½ line.

CAPRODES.

Caput breve, transversum. Antennæ basi tectæ, 11-articulatæ, articulis duobus basalibus incrassatis, clava biarticulata, sulcis antennariis brevibus. Prothorax convexus, subquadratus, lateribus dentato-setosis. Elytra convexa, parallela. Tibiæ fusiformes, inermes. Corpus breviter convexum, parallelum, setosum.

A more convex form than Synchita, to which it appears to me to be the most nearly related of all the genera of this subfamily, but from which it differs in the eleven-jointed antennæ and in the fusiform tibiæ. The head in both is very short, a little elevated before the eyes, above the insertion of the antennæ, and then terminating in a straight line, to which the narrow but well-developed lip is attached. The specimen now in my collection is the only one I have seen. Mr. Wallace informs me that it was taken at the lamp.

Caprodes asper. (Pl. VIII. fig. 4.)

C. fuscus, rude punctatus; prothoracis lateribus, labro, antennis pedibusque ferrugineis.

Hab. Saylee.

Dark brown, coarsely punctured and covered with rather long, stiff, erect sets; head short, transverse, very rugose; lip narrow, smooth; mandibles simple at the apex, but with a strong tooth internally; antennse ferruginous, only slightly covered at the base, 11-jointed, the two basal joints incrassate, the remainder, except the two last, which form a rounded, depressed club, shortly obconical; antennary grooves short; prothorax convex, subquadrate, slightly transverse, the sides ferruginous anteriorly, not dilated, but very distinctly toothed, each tooth bearing a slender seta; scutellum punctiform; elytra scarcely broader than the prothorax, short, convex, rugosely impressed, the sides very slightly rounded; body beneath chestnut-red, sparingly punctured, those on the metasternum fewer and longer, fourth abdominal segment shorter than the three preceding segments; legs ferruginous; tibiæ fusiform, sparingly setose; tarsi rather slender. Length 1½ line.

Distaphyla Wallacei.

D. cylindrica, obscure fusca; prothorace lobis irregulariter divisis; spatio discali angusto, lævissimo, postice canaliculato.
Hab. Mysol.

Cylindrical, dull brown, covered with scattered, whitish, setose scales; head subtriangular, very concave above and behind the eyes; antennas short, pitchy; prothorax covered with large, coarse tubercles, the lobes strongly separated in front, but slightly separated above; a narrow and very smooth and glossy space on the disk, which is drawn out or becomes canaliculate behind, and extends nearly to the base; an elliptic, shining excavation on each side, which communicates with the transverse fissure behind the lobes; elytra seriate-punctate, with the scales in lines; body beneath dark brown, with large coarse punctures, each containing a whitish scale, the last two abdominal segments smooth; legs pitchy. Length 2½ lines.

I have already stated that Distaphyla is synonymous with Ogcodera (Dej.). Two species are mentioned in that author's "Catalogue," from Cayenne and Carthagena respectively; whether either of these is referable to any of the three species described by me from the Amazon valley I do not know, but, as one of the most remarkable genera among the Coleoptera, we might have expected it would have had a comparatively limited range. I was therefore somewhat surprised to find this very distinct species in Mr. Wallace's collection from Mysol, an island about one degree west of the northern portion of New Guinea. Motschoulsky, in his 'Etudes' for 1855, p. 13, mentions "a very singular genus of Colydiidse with the cylindrical habit of Anobium, and the tuberculate and rugose sculpture of Dictyalotus; the posterior part of the head is marked with two large protuberances:" he calls it Colydodes gibbiceps. As he refers the two "protuberances" to the head, we cannot in charity suppose that it has anything to do with Distaphyla. I only allude to it here to inquire if the sort of "honourable mention" quoted above is sufficient to constitute a description giving it the right to the protection of the law of priority? Distaphyla Wallacei is at once distinguished by the sides of its prothorax being parallel; this gives it a more perfectly cylindrical outline than is possessed by the other species. It has also a more triangular head; and the deep excavation at the inner side and behind the eye forms a sort of peduncle to that organ—a structure which is remarkably developed in the allied genus Acropis. Distaphyla speculifera makes also a slight approach to the same structure.

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XUTHIA.

Coput insertum, transversum, antice rotundatum. Antennæ basi tectæ, 11-articulatæ, clava biarticulata, sulcis antennariis nullis. Prothorax subquadratus, utrinque bicostatus, lateribus anguste marginatis, crenulatis. Elytra costata, parallela, convexa. Tibiæ trigonatæ, calcaratæ. Tarsi breves. Corpus angustum, subcylindricum.

There is very little to distinguish this genus from Bitoma, with which indeed it agrees in all its essential characters; but the narrower and more cylindrical form, stronger and more trigonate tibiæ, and shorter tarsi give it an aspect so different as, it appears to me, to warrant its generic separation. It is difficult to distinguish the species by description beyond the colour, which appears, in several specimens of two of the species, to be pretty constant; of the third species (Xuthia maura) I have only one specimen. The prothorax appears to have been clothed with fine, numerous but scattered hairs.

Xuthia siccana. (Pl. VIII. fig. 1.)

X. vix elongata, fusco-ferruginea; elytris dilutioribus; antennis pedibusque rufo-ferrugineis.
Hab. Macassar.

Scarcely elongate, dull brownish ferruginous, much lighter on the elytra; head transverse, rounded anteriorly, coarsely granulate, lip very transverse, slightly emarginate; mandibles bifid at the apex; mentum transverse, labrum roundish anteriorly and fringed; maxillary lobes small, the inner very narrow; labial palpi with the terminal joint stout, truncate, the maxillary palpi with the terminal joint short and obliquely truncate; antennæ as long as the head, ferruginous, shining, the first two joints incressate, the last two forming a compact, shortly ovate club; prothorax nearly quadrate, coarsely granulate, with two rather slightly elevated costs on each side, the inner very much converging at the base and hooked inwards anteriorly; scutellum small, quadrate; elytra with five well-marked carinæ (including the sutural), the intervals with a double row of deep, square punctures; body beneath dark ferruginous, very coarsely punctured; legs reddish ferruginous; tibise short, trigonate, calcarate; tarsi with the three basal joints very short. Length 11 line.

Xuthia rufina.

X. modice elongata, ferruginea; antennis pedibusque concoloribus. Hab. Macassar.

Closely resembles the last; but the elytra are decidedly longer and concolorous, and the body beneath is a little more finely punctured.

Xuthia maura.

X. angustior, fusca; antennis pedibusque ferrugineis. Hab. Morty.

Also very nearly allied to the first species, but considerably narrower, with the costs on the prothorax and elytra more decided, the colour a very dark brown, nearly black, with the antennæ and legs ferruginous.

These three forms of Xuthia are much too nearly allied to be considered "undoubtedly distinct," but, in the absence of intermediate varieties, they are sufficiently marked to deserve a place in our catalogues.

EBA.

Caput breve, transversum, antice marginatum. Antennæ basi tectæ, 10-articulatæ, articulo basali incrassato, cæteris sensim crassioribus, ultimo rotundato compresso. Prothorax subquadratus, antice paulo sinuatus. Elytra parallela. Tibiæ subtrigonatæ, calcaratæ; tarsis gracilibus. Corpus oblongum, subdepressum, lævigatum.

A single minute species, having a strong general resemblance to Cerylon, constitutes this genus. Its characters, however, place it with the Synchitina, from all the genera of which it differs in its ten-jointed antennæ, gradually enlarging upwards. For the present its affinities must be left in doubt.

Eba cerylonoides. (Pl. VIII. fig. 7.)

E. rufo-testaceum, nitidum; oculis nigris. Hab. Saylee.

Oblong, subdepressed, reddish testaceous, shining; head strongly punctured, short, transverse, with a margin which is somewhat reflected anteriorly and hiding the lip; eyes black; antennæ 10-jointed, alightly covered at the insertion, the basal joint slightly incrassate, the remainder to the ninth inclusive shortly obconical and gradually increasing in breadth, the tenth paler, about equal in length and breadth, and slightly pointed; prothorax nearly quadrate, not very closely punctured; scutellum very transverse; elytra as wide as the prothorax, strongly scriate-punctate; body beneath testaceous, shining; tibies subtrigonate, shortly spurred; tarsi rather slender. Length § line.

Phormesa prolata.

Pascoe, huj. op. i. p. 102 (Bitoma).—Batchian.

The addition of five new species to this genus (*Phormesa*) brings the number up, with those previously published belonging to Mr. Wallace's collections, to eight. The following table will show their principal distinctive characters.

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With two costse on each side of the prothorax, the
inner forming a loop posteriorly.
Outer costa entire, strongly marked.
Space between the two inner coste and the pos-
terior loops simply granulate.
Margins of the prothorax regularly crenate P. heros, n.s.
Margins of the prothorax irregularly rugose.
Coste of the elytra strongly crenate P. prolata, Pasc.
Costæ of the elytra feebly crenate P. varia, n. s.
Space between the two inner costs and the loops
with two longitudinal raised lines P. nana, n. s.
Outer costs interrupted, feebly marked.
Prothorax broadest before the middle P. kmaris, Pasc.
Prothorax broadest behind the middle.
Margins of the prothorax regularly lobed P. inornata, Pasc
Margins of the prothorax nearly entire P. detracta, n. s.

I have four more species belonging to this genus in my collection; in none of these does the inner costa form a complete loop, although in all it doubles back more or less posteriorly. All the species have five costs on each elytron, the intervals being marked with a double row of large, squarish punctures.

Phormesa heros.

P. fusca; prothorace marginibus regulariter crenatis, utrinque bicostato, costa exteriore integra, valida; elytris obscure luteo maculatis.
Hab. Dorey; Morty.

Moderately broad, dark brown, opaque; head thickly granulose; prothorax roughly granulate, the sides slightly rounded, the margins minutely but very distinctly and regularly crenate, the external costa strongly marked, the inner forming a large loop posteriorly which extends nearly to the base; scutellum punctiform; elytra oblong, scarcely broader than the prothorax, the costse strongly marked and crenate, with large, deep punctures in a double row between them; body beneath chestnut-brown, granulate; legs and antennæ dark chestnut-red. Length 2½ lines.

The largest of the genus, and best distinguished from *Phormesa* prolata by the regular crenatures of the margins of the prothorax, contrasted with their confusedly rugose appearance in that species.

Phormesa varia.

P. fusco-ferruginea; prothorace marginibus lineato-rugosis, utrinque bicostato, costa exteriore integra; elytris ferrugineo variegatis, costis leviter crenatis.

Hab. Amboyna.

Moderately broad, ferruginous brown; head rather narrow, closely granulate; prothorax ferruginous at the sides, rather finely granulate, the margin slightly rounded, with a narrow elevated rugose line, as if composed of small confluent granules, the external costa entire, the inner forming an oblong loop posteriorly; scutellum punctiform; elytra oblong, not broader than the prothorax, the costs finely crenate, a large, irregular ferruginous patch occupying nearly the whole of the basal half, and an irregular curved band near the apex of the same colour; body beneath reddish chesnut with closely-set oblong granulations; legs and antennse ferruginous. Length 1½ line.

In addition to the characters given in the table, this species is further distinguished from its allies by its smaller size, lighter colour, and the lengthened loop of the inner costs of the prothorax, which is fully one-half as long as the enclosed space formed by those inner costs.

Phormesa nana.

P. subfusca; prothorace marginibus crenatis, costa exteriore integra, interiore antice incurva.

Hab. Amboyna.

Moderately broad, dusky brown; head scarcely dilated below the eyes, granulate; prothorax scarcely granulate, the margins finely crenate and scarcely rounded at the sides, the external costa very strongly marked, the inner in addition to the posterior loop incurved anteriorly, so as to form a second loop, both loops distinct from those of the opposite side; elytra with slightly crenate costs, the intervals with a double row of punctures; body beneath dark ferruginous, minutely punctured; legs and antennss ferruginous. Length 1 line.

This is the smallest species of the genus, and well distinguished by the prothoracic costs.

Phormesa lunaris.

Pascoe, ante, p. 32.—Dorey.

Phormesa inornata.

Pascoe, ante, p. 32.—Dorey.

Phormesa detracta.

P. fusca; prothorace marginibus subintegris, utrinque bicostato, costa exteriore interrupta, haud distincta.

Hab. Mysol.

Moderately broad, dark brown; head granulate, broad, expanding below the eyes; prothorax rather finely granulate, the sides not lobed although somewhat irregular, the external costa reduced to a line of slightly elevated granules, which is interrupted in the middle, the inner costa forming posteriorly a triangular loop, the interval between the two loops forming a lozenge-shaped space; scutellum punctiform; elytra as broad as the prothorax, with crenate costs, the intervals so impressed as to form three lines of oblong elevations; body beneath rufous brown, finely punctured; antennæ and legs ferruginous. Length 1½ line.

The triangular form of the posterior loops, which are confluent at one of their angles, thus forming a lozenge-shaped space at the base, will readily distinguish this species.

Phormesa elevata.

P. fusca; prothorace costa exteriore obsoleta, interiore postice breviter incurva.

Hab. Macassar.

Rather broad and convex, especially posteriorly, dark brown; head broad, dilated below the eyes, granulate; prothorax granulate, rounded at the sides with an obscurely rugose margin, no external costa, internal costa simply incurved posteriorly, not forming a loop; scutellum punctiform; elytra rather broader than the prothorax, strongly costate, the inner and second costse depressed near the base, the intervals with obscure transverse impressions, three or four ill-defined luteous bands on the disk; body beneath dark ferruginous; legs and antennæ ferruginous. Length 1½ line.

A very distinct species. The absence of the external costa, together with the internal costa not forming a loop, will distinguish it from all *Phormesæ* hitherto described, as well as some others in my collection, in which the last-mentioned character is also present.

GEMPYLODES.

Cuput exsertum, oblongum. Antennæ basi tectæ, 11-articulatæ, haud clavatæ, articulo basali brevi, vix incrassato, tertio longiore, cæteris gradatim crassioribus. Oculi prominuli, integri. Prothorax elongatus, basi constrictus, medio canaliculatus vel sulcatus. Elytra cylindrica, carinata, apice declivia. Tibiæ trigonatæ, calcaratæ. Tarsi elongati. Corpus angustum, elongatum.

Erichson has described in very few words a genus from Madagascar named *Mecedanum*, evidently allied to this, but which, I think, will be found to differ in the character of its prothorax; and, according to the description, in the antennæ fringed with fine hairs, and in the greater length of the basal joint of the tarsi. *Colydium* is also another genus to which this is allied. I have another species, from Siam, for which I am indebted to the kindness of W. Wilson Saunders, Esq., which is one of the finest of the Colydians.

Gempylodes macer. (Pl. VIII. fig. 2.)

G. rufo-brunneus; prothorace vage punctato, latissime sulcato. Hab. Batchian.

Rufous brown, clearer on the elytra except towards the apex; head rather finely punctured, the side reflected upwards over the insertion of the antennæ; eyes rather prominent, transversely oblong, entire; antennæ slightly compressed, 11-jointed, the basal joint short, thick, the second shorter but less robust, the third twice as long as the second, the fourth to the tenth gradually becoming shorter and more and more transverse, the eleventh broadly subovate; prothorax about twice and a half as long as broad, rather loosely punctured, a broad groove extending longitudinally the whole length, but rather narrower anteriorly; scutellum punctiform; elytra strongly ribbed, the intervals with two rows of large, deeply impressed punctures, but in the sutural interval one row only; body beneath yellowish ferruginous, with small distant punctures on the propectus, coarser on the abdomen, basal segment with a strong longitudinal keel; antennæ brown; legs ferruginous. Length 2‡ lines.

The Siam Gempylodes mentioned above, besides many other characters, has only a very narrow impressed line on the prothorax.

Ocholissa humeralis.

O. atra, nitida, macula humerali crocea; antennis tarsisque ferrugineis.
 Hab. Saylee; Morty; Mysol; Batchian.

Black, shining; head rather rounded anteriorly, moderately punctured; prothorax nearly quadrate, rather distantly punctured; scutellum broadly transverse; elytra not broader than the prothorax, seriate-punctate, a large dark-yellow spot on each shoulder; body beneath dark brown, shining, remotely punctured; legs dark ferruginous brown, the tarsi and antennæ a pale ferruginous. Length 1 line.

Extremely like Ocholissa lota (ante, p. 85) from the Amazons. Besides the difference in colour (and this is variable inasmuch as the elytra are sometimes entirely black), the head is more rounded in front, and the prothorax is slightly contracted posteriorly.

Nematidium posticum.

N. ferrugineum; fronte leviter convexa; elytris singulis postice bicristatis.

Hab. Sarawak.

Linear, ferruginous; head slightly convex, finely punctured; eyes of moderate size, not prominent; prothorax twice as long as broad, the sides nearly parallel, the disk with many oblong punctures; scutellum triangular; elytra elongate, punctate-striate, the third and seventh

strise respectively rising posteriorly into a short but strongly marked ridge, the outermost only extending to the apex; body beneath pitchy brown, moderately punctured; antennæ, palpi, and legs ferruginous. Length 3 lines.

The two very prominent ridges on the declivous apex of each elytron at once separate this species from its Brazilian congeners.

ITHRIS.

Caput subquadratum, lateribus elevatis. Antennæ basi tectæ, 11-articulatæ, clava triarticulata, submoniliformi. Palpi breves, apice truncato. Prothorax subquadratus, quadricostatus. Elytra parallela, carinata. Tibiæ trigonatæ, breviter calcaratæ. Tarei articulis tribus primis brevissimis. Corpus breviter subcylindricum.

This genus has a very close general resemblance to *Eulachus*, Er., and appears to differ from it only in the three-jointed club of the antennæ and in the very short basal joints of the tarsi. From *Colydium*, which has also a three-jointed club, it is separated by its ribbed prothorax, short tarsi, and other characters.

Ithris decisa. (Pl. VIII. fig. 9.)

I. rufo-brunnea, opaca; antennis pedibusque ferrugineia.
Hab. Sarawak.

Reddish brown, opaque; head subquadrate, raised at the side anteriorly, and forming a thin plate over the antennæ, the front remotely granulate; eyes rather large, prominent; antennæ 11-jointed, the two basal joints incrassate, the six following more or less transverse, the last three forming a stout submoniliform club, which is above a third of the length of the antenna; prothorax subquadrate, a little longer than broad, the front somewhat produced, the posterior margin rounded, the sides nearly parallel, crenate, the disk with four longitudinal costse, the two central approximating at the base, the intervals remotely granulate; elytra not broader than the prothorax, the sides parallel, with four stout carinse on each, their edges crenate, the intervals with a double row of squarish punctures; tibise trigonate, shortly spurred; tarsi with the first three joints very short; body beneath ferruginous, slightly punctured, the abdomen with short elevated lines. Length 1 line.

Petalophora brevimana.

Pascoe, ante, p. 37.—Sarawak.

Metopiestes hirtifrons.

Pascoe, ante. p. 38.—Dorey.

Metopiestes castaneus.

M. rufo-castaneus, nitidus; fronte subplana, punctata; prothorace distincte punctato.

Hab. Mysol.

Subcylindrical, reddish chestnut, shining; head rather flattish in front, with closely set, small, round punctures; prothorax rather longer than broad, very concave, contracted posteriorly, with small, oblong, rather distant punctures, a short semicircular elevated line at the base; scutellum rounded or punctiform, small, but very distinct; elytra parallel, with five very strongly marked carinæ on each, the interstices nearly impunctate; antennæ and legs ferruginous. Length 2½ lines.

Differs from *Metopiestes hirtifrons* in being smaller and less robust, without hairs on the front, and in its rounded (not oblong or ovate) scutellum.

Metopiestes erosus. (Pl. VIII. fig. 11.)

M. fuscus, subopacus; fronte excavata, griseo hirta; prothorace leviter oblongipunctato.

Hab. Batchian.

Subcylindrical, dark brown, nearly opaque; head hollowed out in front, the hollow very clearly limited above by a rounded line separating it from the vertex, the interior irregularly granulated and filled with scattered greyish hairs; prothorax considerably longer than broad, convex, scarcely contracted behind, covered with closely set, minute, oblong punctures; scutellum punctiform; elytra parallel, with five rather strongly marked carinse on each, the interstices impunctate; legs and antennse reddish chestnut, shining. Length 1½ line.

The smallest and, proportionally, the slenderest of the three species, and otherwise well characterized by its longer and finely-punctured prothorax, and the very remarkable excavation which occupies nearly the whole of the space between the eyes and the lip. This character is probably sexual, the presence of hairs distinguishing only the males.

Machlotes incisus.

M. rufo-fuscus, opacus; prothorace utrinque tricostato, sulcis nitidis, basi costis duabus latis; elytris sulcatis, sulcis biseriatim punctatis.
Hab. Morty.

Dull reddish brown; head coarsely punctured; prothorax half as long again as broad, narrowed behind, truncate and a little gibbous in front, slightly rounded at the sides, the anterior angles prominent, the disk with three very broad costse on each side, which are interrupted posteriorly by a deep irregular cleft completely dividing all but the external costs on each side, the two intermediate costse of the basal

portion as broad as the corresponding costs of the anterior portion, the sulci between them smooth and shining; scutellum punctiform; elytra elongate-ovate, broadly sulcated, the sulcations with a double row of strong punctures, the interstices sharply raised; body beneath chestnut-brown, with large, crowded, shallow punctures, each furnished with a greyish seta; palpi pale ferruginous. Length 1½ line.

The principal differences between this species and Machlotes porcatus (ante, p. 36) are, that in the latter the posterior portion of the two intermediate costse is contracted, so as to form a sort of bifid or bilobed tubercle, the costse being also much narrower and the intervals between them opaque, and the single row of squarish punctures pitting the sulcations on the elytra. My specimen is the only one I have seen.

Bothrideres marginatus.

B. elongato-ovatus, fuscus, subopacus; prothorace reticulato-punctato, disco linea parallelogrammum includente impressa, lateribus canaliculatis.

Hab. Sarawak.

Elongate-ovate, dark brown, subopaque; head convex in front, closely punctured; prothorax about equal in length and breadth, rounded at the sides, contracted posteriorly, very closely punctured, the punctures rather large and having a reticulated appearance, the disk with an impressed line, including a squarish space, and opening out into three short canals posteriorly, a narrow groove on each side near the margin; scutellum small, triangular; elytra with five raised lines on each, the intervals with two lines of punctured strise; body beneath dark brown, coarsely punctured on the sterna, more finely and remotely on the abdomen; antennæ and legs dark brown; palpi inclining to testaceous. Length 2½ lines.

The impressed line including a parallelogrammical space on the prothorax, and the reticulated appearance caused by the closely-set punctures around it will readily distinguish this species, which otherwise has a considerable resemblance to *Bothrideres illusus*, Newm., an Australian form.

Bothrideres insularis.

B. subangustus, fusco-castaneus, nitidus; prothorace subtilissime punctato, disco linea parallelogrammum includente impressa, lateribus marginatis.

Hab. Mysol.

Rather narrowly oblong, dark chestnut, shining; head convex in front, moderately punctured; prothorax about equal in length and breadth, the sides rounded, and contracted behind, minutely punctured,

the disk with a strongly impressed line, including a squarish space, and opening out into three short canals posteriorly, the side slightly margined and terminating behind in a nearly acute angle; scutellum triangular; elytra with five narrow raised lines on each, the sutural one nearly obliterated, the interval with two slightly punctured lines; body beneath dark chestnut-brown, with small scattered punctures; palpi and antennæ at the base ferruginous. Length 2 lines.

Though this species has the same impressed line on its prothorax as the last, in its outline and glossy surface it is more akin to the Australian *Bothrideres anaglypticus*, Germ., but is less depressed, and the sides of the elytra more parallel. The two following species are provisionally assumed to be aberrant members of the group.

Bothrideres rhysodoides. Pascoe, ante, p. 35.—Dorey.

Bothrideres nocturnus. Pascoe, ante, p. 35.—Dorey.

Dastarous confinis.

Pascoe, huj. op. i. p. 108.—Dorey.

Dastarcus vetustus.

D. oblongo-ovatus, fuscus; prothorace antice subrotundato, postice paulo constricto; elytris punctato-sulcatis, punctis magnis, interstitiis seriatim griseo squamosis, postice obsolete emarginatis.
Hab. Ceram.

Oblong-ovate, dark brown; head small, rather remotely punctato-squamose; basal joint of the antennes ferruginous; prothorax gradually rounded anteriorly, slightly contracted at the base, covered with erect greyish scales; elytra moderately convex, very slightly emarginate posteriorly, punctato-sulcate, the punctures large and oblong, the interstices with mostly a single row of greyish scales; body beneath dark brown, subnitid, with coarse remote punctures; tarsi ferruginous, shining. Length 4 lines.

Smaller and less robust than *Dastarcus confinis*, the scales on the elytra mostly in single rows, and with only a faint trace of the deep emargination which characterizes that species.

Dastarous pusillus.

D. oblongo-ovatus, fuscus; prothorace lateribus subrotundatis, postice vix constricto; elytris basin versus elevatis, postice obsolete emarginatis, punctato-striatis, interstitiis seriatim griseo squamosis.
Hab. Ceram.

Oblong-ovate, dark brown; head punctato-squamose; antennæ and palpi ferruginous; prothorax slightly rounded at the sides, scarcely contracted at the base, covered with erect greyish scales; elytra a little raised towards the base, very slightly emarginate near the apex, punctato-sulcate, the interstices with scattered greyish scales; body beneath dark brown, subnitid, with a few large punctures; legs reddish pitchy. Length 21 lines.

The small size and "peaked" elytra will distinguish this species. Besides the three members of this genus described in this work and the typical *Dastarcus porosus* of Mr. Walker, I have also three very distinct species from India, and a fourth, which, however, departs in some respects from the usual characters of the genus, from Fiji.

Trachypholis æqualis.

T. parallelo-oblonga, fusca, opaca, squamis albescentibus parce tecta; antennis pedibusque ferrugineis.
Hab. Timor.

Parallelo-oblong, dark brown, opaque, rather sparsely covered with very small, erect whitish scales; head rounded anteriorly; prothorax very transverse (twice as broad as long); elytra with the scales scarcely arranged in lines; body beneath black, subopaque, with appressed, greyish setse; antennæ and legs ferruginous, covered with pale greyish-white setse. Length 3 lines.

Trachypholis, Er. (Naturg. Ins. Deutschl. iii. p. 257) is synonymous with Tarphiodes, § I., Woll. (huj. op. i. p. 372). The firstmentioned author compares it to Colobicus, the latter to Tarphius, at the same time placing with it, but under another section ("subgenus" Tarphiosoma), Tarphiodes Indicus, which I regard as being generically very distinct, and to which the name of Tarphiosoma may be applied. It will be seen that I have placed Trachypholis with the Bothriderinæ, although the posterior coxæ are only moderately apart and the basal segment of the abdomen is only a degree larger than the second; but its affinity to Dastarcus on the one hand, and through Tarphiosoma to Tarphius on the other, is too evident to admit of any other location. It is, however, to be observed that Erichson places the latter genus with the Synchitine, notwithstanding that its posterior coxe are widely remote. The species described above is characterized principally by its dull, opaque colour and the more regular distribution of its scales, which are scarcely arranged in lines on the elytra as in four other species now before me. The late M. Mouhot sent to this country a considerable number of individuals of a species of this genus, which, through the kindness of

Dr. Schaum in transmitting the original specimen, I have been able to identify with the *second* species from Siam mentioned by Erichson. The *Opatrum hispidum*, Weber, the type of the genus, is unknown to me, but may possibly be identical with *T. Bowringii*, Woll.

Chorites aspis *.

Pascoe, huj. op. i. p. 115 .- Sarawak.

Chorites latus.

C. late ellipticus, niger, griseo-nigro squamatus; prothoracis lateribus integris; elytris medio elevatis vel gibbosis.

Hab. Singapore.

Broadly elliptic, black, with greyish and black erect scales; prothorax entire towards the side or only very slightly concave; elytra strongly elevated or gibbous in the middle; legs and antennæ dark ferruginous. Length 2½ lines.

Very nearly allied to *Chorites aspis*, differing principally in its greater breadth, more entire prothorax, and elytra culminating less obtusely in the centre.

Chorites oblongus.

C. oblongo-ovatus, niger, griseo squamatus; prothorace utrinque excavato, margine reflexo.

Hab. Macassar.

Oblong-ovate, black, with mostly greyish scales; prothorax very concave at the sides, the margin reflexed; scutellum small, triangular; elytra moderately convex, and only slightly gibbous in the middle; antennæ and legs dark ferruginous. Length 2‡ lines.

This species approaches *Trachypholis* in its oblong outline and margined prothorax, but in other characters it agrees better with *Charites*.

Hyberis araneiformis.

Pascoe, huj. op. i. p. 113.—Sarawak.

Hyberis Wallacei. (Pl. VIII. fig. 5.)

H. oblongo-ovatus, niger, subnitidus, tuberculo-setosus; prothorace haud fasciculato, lateribus dentato-serratis.

Hab. Sarawak.

Oblong-ovate, black, somewhat shining, roughly tuberculate with short black setose hairs; head with very large closely-set tubercles; prothorax rather broader than long, with about a dozen short teeth on

^{*} The following diagnosis will serve for this species:-

C. elliptico-ovatus, niger, griseo squamatus; prothorace utrinque leviter excavato, margine haud reflexo.

each side, the disk simply tuberculate-setose; elytra broadest in the middle, the edges tuberculate, the tubercles arranged in rows on the disk, two small buff-coloured fascicles of hairs at the base of each elytron and two more towards the apex; body beneath dull black, with grey setse; antennse and legs black, setose, tarsi ferruginous. Length 3½ lines.

A fine and very distinct species, differing in many respects from *Hyberis araneiformis*, as a comparison of the descriptions of the two will show. I have another species, from Java.

ATYSCUS.

Coput immersum, subquadratum. Antenna setigerae, basi tectae, 10-articulatae, articulis basalibus haud incrassatis, clava articulo unico ovato. Prothorax transversus, antice bisinuatus postice constrictus, lateribus rotundatis, crenato-setosis. Elytra ovata, convexa. Pedes elongati, tibiis fusiformibus, setigeris, tarsis gracilibus. Corpus ovatum, convexum, setoso-squamosum.

The club of the antennæ in this genus appears to be composed of only one joint, as in Apeistus and Hyberis. From the latter of these genera Atyscus differs in the margins of the prothorax not being toothed, in its setæ assuming more the character of scales, and in the absence of tubercles. The eyes, as in Hyberis, are not, or only very sparsely, setose. In Trachypholis and Chorites they are completely so.

Atyscus argutus. (Pl. VIII. fig. 8.)

A. latus, fuscus, griseo squamatus; elytris breviter ovatis, basi vix constrictis, lateribus subparallelis.
 Hab. Tondano.

Broadly ovate, dark brown, covered with small, greyish, squamiform hairs; head subquadrate; antennæ 10-jointed, the first three joints of nearly equal size, the remainder, except the last, shorter and more or less obconic, furnished with a whorl of stiff setæ, the tenth ovate, but not thicker than the others; eyes round, not setose; prothorax transverse, the sides rounded, with a fringe of stiff scales; scutellum small, distinct; elytra short, scarcely contracted at the base, the sides nearly parallel, the disk with the scales arranged in rows; body beneath dark brown, subnitid, with small oblong raised lines; legs dark brown, fringed; tarsi slender, ferruginous. Length 2½ lines.

Atyscus squalidus.

A. oblongus, fuscus, griseo squamatus; elytris ovatis, lateribus rotundatis. Hab. Sarawak.

Oblong-ovate, dark brown, with small squamiform hairs; head with

small, flattish granules in front; prothorax short and very transverse, much contracted behind, the sides rounded, closely fringed with stout, stiff setæ; scutellum very small but distinct; elytra ovate, contracted at the base, rounded at the sides, the squamæ arranged in lines; body beneath dark brown, closely punctured; legs and antennæ ferruginous. Length 12 line.

A much narrower insect than the last, the elytra more rounded at the sides, &c. In both the scales or setæ are arranged in rather numerous lines on the elytra.

Minthea similata.

M. brunnea; capite lateribus integris; prothorace medio depresso; elytris vage seriatim squamosis.

Hab. Saylee.

Reddish brown; head broadly triangular with greyish scales, the sides entire; prothorax somewhat broader than the head anteriorly, narrower behind, depressed in the middle, with scattered greyish scales; scutellum minute; elytra a little broader than the prothorax, with greyish erect scales arranged in a few distant but very distinct rows; body beneath reddish brown, finely punctured; legs and antennæ reddish brown. Length 1 line.

The characters of *Minthea* are given at page 97 of this volume. The species there described from the Amazons is exceedingly like the present, differing principally in the longer terminal joint of the antennæ and more convex prothorax.

Minthea dentata. (Pl. VIII. fig. 10.)

M. fulvo-brunnea; capite lateribus tridentatis; elytris subtiliter squamosis.

Hab. Xulla.

Pale reddish or fulvous brown; head broadly triangular, the side above and below the eye terminating in three large recurved teeth; prothorax broader than the head, covered with small, erect, greyish scales; elytra slightly broader than the prothorax, rather closely covered with small greyish scales not arranged in definite lines; body beneath finely punctured; legs and antennæ yellowish ferruginous. Length 1½ line.

A very remarkable species on account of the singular toothed sides of the head; the first of these teeth is directly above the eye, the two others occupying the rest of the space below it. In *Minthea similata* the club is about a quarter of the entire length of the antenna, in this species it is at least a third of the length.

Penthelispa morio.

P. fusca, nitida; prothorace subdepresso, medio longitudinaliter lævigato, modice punctato, angulis anticis haud productis, lateribus leviter rotundatis.

Hab. Mysol.

Dark brown, shining (in one specimen ferruginous); head moderately punctured; prothorax rather depressed, a smooth longitudinal space on the posterior two-thirds of the disk, each side of this space with a concave line with moderate-sized but very distinct punctures, the anterior angles not produced, the sides slightly rounded; scutellum small, triangular; elytra striato-punctate, the punctures oblong, the sides nearly parallel; body beneath dark brown, shining with coarse scattered punctures; antennæ dark brown; legs dark ferruginous. Length 14 line.

I only know of one other Asiatic *Penthelispa* (an undescribed species from Ceylon), which, *inter alia*, differs in having no smooth space on the prothorax.

Cerylon punctipenne.

C. oblongum, convexum, rufo-ferrugineum; prothorace antrorsum angustato, lateribus rotundatis, vage et fortiter punctato; elytris ovatis, fortiter seriatim punctatis.

Hab. Morty.

Size and form of Cerylon histeroides, but more convex, and reddish ferruginous, the prothorax strongly and remotely punctured, the scutellum transversely triangular; elytra more ovate and bearing a smaller proportion to the rest of the body, the punctures very coarse and arranged in rather distant lines; the tibise, especially the anterior, very much dilated at the distal extremity. Differs from Cerylon orientale, Motsch., in its greater convexity, larger prothorax more rounded at the sides, elytra more ovate and more coarsely punctured, &c. Length 11 line.

Cerylon pusillum.

C. oblongum, subparallelum, ferrugineum, nitidum; prothorace amplo, modice punctato; elytris striato-punctatis, striis basin versus incurvatis. Hab. Mysol.

Oblong, nearly parallel, ferruginous, shining; head rather finely punctured; prothorax moderately punctured, as broad as the elytra at the base, the sides rounded; scutellum transversely scutiform; elytra nearly parallel at the sides, striate-punctate, the strise at the base curving inwards towards the scutellum; body beneath ferruginous, nearly impunctate; tarsi much dilated at the distal extremity, antennæ and legs pale ferruginous. Length $\frac{2}{3}$ line.

The strike of the elytra curving gradually inwards towards the scutellum will readily distinguish this species from any other known to me.

EXPLANATION OF PLATE VIII.

- Fig. 1. Xuthia siccana. 1 a, trophi.
 - " 2. Gempylodes macer.
 - " 3. Bupala pullata.
 - " 4. Caprodes asper.
 - " 5. Hyberis Wallacei.
 - " 6. Cebia rugosa. 6 a, trophi.
- Fig. 7. Eba cerylonoides.
 - , 8. Atyscus argutus.
 - 9. Ithris decisa.
 - ., 10. Minthea dentata.
 - , 11. Metopiestes erosus.
 - ,, 12. Trophi of Hyberis araneiformis.

XIII.—An attempt at a Classification of the Eumolpidæ. By J. S. Balt.

MANY of the families belonging to the great tribe of Phytophagous insects are in such a confused and unarranged state as doubtless to deter many persons from their study; they contain, however, equally with those better known and more commonly studied, numberless beautiful and striking forms, which will quite as amply repay patient investigation. Hoping to draw the attention of other entomologists to the study of these beautiful insects, I shall attempt, in the present series of papers, to draw up diagnostic characters of the numerous genera belonging to the Eumolpida, a group of Phytophaga in which (with the exception, perhaps, of the Gallerucidæ) less has been done than any other. The possession of a very large collection of my own, together with the power of access to the cabinet of the Rev. H. Clark, who now possesses the fine collections formerly belonging to MM. Chevrolat and Thomson of Paris, in addition to those collected by himself in Brazil, places a vast store of materials within my reach, the whole probably comprising, with few exceptions, all the known species. With the exception of a small number of genera formed by Fabricius, Laporte, and other entomologists, and also a few more recently established by myself in the first volume of this Journal, scarcely anything has been done to reduce the group into order or arrangement—all the large collections that I have had the opportunity of examining having had their species (nearly all undescribed) placed at random under one or other of the uncharacterized genera created by Chevrolat and Dejean in the 3rd edition of the Catalogue published by the latter, a single genus often containing insects belonging to four or five others, and, on the other hand, the species belonging to the same genus scattered about and placed under eight or ten different generic names, no two collections agreeing either in their nomenclature or arrangement.

The Eumolpidæ are most nearly allied to the true Chrysomelidæ, vol. 11.

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