of *Megalurus* from the Lower Kimmeridgian (Lithographic Stone) of Bavaria *. Its pelvic fins are also fringed with fulcra, which have only been observed in one species, *M. altivelis* †. The so-called *Megalurus Damoni* and *M. Austeni*, from the English Purbeck Beds, have the vertebral centra pitted at the sides, and so ought perhaps to be referred to *Amiopsis*.

The occurrence of another European Upper Jurassic fish in the Cretaceous of Brazil becomes less remarkable when it is remembered that a typical *Lepidotus* is one of the commonest fossils in the same formation ‡.

EXPLANATION OF PLATE II.

Megalurus Mawsoni, sp. n.; fish, wanting head, right lateral aspect, nat. size.—Cretaceous; Bahia, Brazil. *a.*, anal fin; *c.*, caudal fin; *plv.*, pelvic fins.

XIX.—On Rutelid and Melolonthid Beetles from Mashonaland and East Africa. By GILBERT J. ARROW.

THE following notes and descriptions deal with a collection sent to the British Museum from Salisbury, Mashonaland, by Mr. Guy A. K. Marshall, together with a few other species which have presented themselves in the course of work upon that collection. These consist of insects from East Africa, Mr. Marshall's collection showing a much closer connexion with the fauna of the regions north and east of Mashonaland than with that of South Africa. A very large proportion, however, of the species of these two families have not been hitherto recorded at all. I have not described the representatives of certain large genera in which it seems to me undesirable to characterize isolated species without being able at least to give a careful comparison with the nearest allied form; and others I have omitted because Mr. Péringuey has informed me of his intention to describe them shortly.

Rutelidæ.

Anomala ustulatipes, Fairm. (*rufa*, Kolbe).—Mr. Marshall

* A. Smith Woodward, Catal. Foss. Fishes B. M. pt. iii. (1895) pp. 363–367.

† A. Wagner, Abhandl. k. bay. Akad. Wiss., math.-phys. Cl. vol. ix. (1863) p. 717.

‡ *Lepidotus Mawsoni*, A. S. Woodward, Ann. & Mag. Nat. Hist. [6] vol. ii. (1888) p. 135.

has sent specimens of both sexes of this insect, of which the female has a divided claw on each of the four anterior legs and the male on the two front ones only, as described by Herr Kolbe. Although M. Fairmaire's description applies in this respect to the male only, the remainder of the characters enumerated can leave no doubt, I think, as to my correctness in regarding it as identical with the later-described *A. rufa*.

Anomala pinguis, Péring., also found at Salisbury, appears to be nearly related to the above species, but I do not yet know the female of it. The male has the outer claw divided in the front pair of legs only.

Anomala tolerata, Péring.—I had drawn up a description of this species, but suppress it as Mr. Péringuey has sent it to me under this name. It may be useful, however, to state that it is not readily distinguishable from my *A. Distanti* except by the difference of the claw-division, this in the new species being alike in both sexes.

Anomala dorsata, Fåhr.—This appears to be subject to very great local variation. The specimens from Salisbury seem to be nearly always of the variety *vittipennis*, Fåhr., and my *marginicollis* must also, I think, be regarded as a variety of the same species. Specimens from Nyasaland and Zanzibar agree with this and differ from the Mashonaland representatives and those described by Fåhræus in having a distinctly metallic upper surface. They also agree in having no trace of a third tooth upon the front tibia, whereas this is present in all Mr. Marshall's specimens.

Anomala basalis, Blanch., another very widely distributed species, seems not uncommon at Salisbury. It also is very variable in colouring, and the orange-coloured patches may even disappear entirely. If it has been generically separated on insufficient grounds, it is at least an isolated form, having nearer affinity with some of the Oriental species than with any other African *Anomala*.

Popillia eupyga, sp. n.

Elongata, nigra, nitida, hirta, elytris testaceis, marginibus infuscatis; capite supra undique rugoso, clypei margine perpaulo elevato; prothorace longitudine fere ad latitudinem æquali, antice valde angustato, angulis posticis obtusis, margine postico ante scutellum late exciso, disco grosse strigoso-punctato, capillis albidis haud dense tecto, linea media areisque duabus lateralibus (fascicula

punctiformi media excepta) denudatis; elytris glabris, postice valde attenuatis, striis sex distantibus ornatis, stria secunda medio fortiter excurvata; pygidio punctato, fasciculis albis quatuor ornato, propygidio fasciculis transversis duobus; pectore toto abdominisque segmentis omnibus postice albo-hirtis; pedibus nigris, tibiis anticis acute bidentatis, mesosterno antice quadrato, haud producto; antennis nigris.

Long. 10 mm.

Hab. MASHONALAND, Salisbury.

A single female (taken in November) has been sent by Mr. Marshall. It is entirely different from all other known African species by its hairy pronotum and the pygidium decorated with four hairy patches. In these respects, as well as its unmetallic black ground-colour, it resembles the Philippine *P. scalpta*, Newm. It is a more elongate insect, however, and, so far as I know, the striation of its elytra is of a pattern not observed in any other species. There are six coarsely punctured striæ forming dorsally three very broad intervals, resulting from the disappearance of the intermediate striæ.

Phænomeris rufipennis, Brancs.—Dr. Ohaus has sunk this name as denoting only a variety of *P. Beschkei*, Mann.; but a specimen found at Beira, in Portuguese East Africa, which I have identified as *P. rufipennis*, is undoubtedly distinct specifically, and Mr. Marshall, who has sent me the specimen, and who has seen in all six specimens, tells me in reply to my inquiry that, although it is variable in colour, he has no doubt as to its distinctness from *P. Beschkei*. *P. rufipennis* has a fine puncturation over the thorax, scutellum, and elytral interstices which is entirely absent from the other species; the antennal club (in the male at least) is considerably longer and the legs in our individual are entirely dark metallic green, whereas in *P. Beschkei* the pale testaceous colour is always visible through the superficial metallic gloss, when that is present.

Adoretus uniformis, sp. n.

Elongato-ovatus, pallide testaceus, undique et uniforme albo-pilosus; capite magnitudine mediocri, clypeo semicirculari; prothoracis disco crebre punctato, angulis anticis acutis, posticis arcuatis, lateribus modice curvatis, longe ciliatis; elytris subtilissime punctatis, vix perspicue costatis; corpore subtus similiter albo-piloso, segmentis abdominalibus areolis denudatis uniseriatim ornatis, singula areola setam validam ferente; pedibus antennisque pallidis, tarsis brunneis, tibiis anticis fortiter tridentatis, dente supero fere ante medium posito.

Long. 13 mm.

Hab. MASHONALAND, Salisbury; NYASALAND; BRIT. E. AFRICA, Samburu.

This is one of the larger African *Adoreti*, distinguished by its uniform clothing of whitish hairs, without interposed erect setæ upon the elytra. The head is of medium size and the male is without spurs on the hind femora or trochanters.

Adoretus variegatus, Boh.—Mr. Péringuey has called my attention to the identity of his *Adoretus melanoleucus* and my *A. decoratus* with the *Eriesthis variegata* of Boheman. It was thus placed by that author in another family, and although a comparison of authentic specimens has decided the above synonymy, I believe my description will still be found to furnish the best means of identification. The species ranges from Bulawayo, Mashonaland, to Pretoria.

Adoretus ovatus, sp. n.

Breviter ovatus, rufo-testaceus, undique grosse punctatus, parum dense albo-pilosus, elytrorum pilis postice aggregatis maculas quatuor apicales aliasque minores formantibus; capite parvo, clypeo lato, semicirculari; prothorace convexo, angulis anticis acutis, posticis obtusis, lateribus arcuatis, haud ciliatis; elytris postice ampliatis, leviter costatis, grosse punctatis; corpore subtus undique griseo-piloso; tibiis anticis acute tridentatis, dente superno vix post medium posito.

Long. 10 mm.

Hab. MASHONALAND, Salisbury, Umtali.

This is a short and stout species, noticeably broader behind than in front, and allied to the insect just mentioned, which it resembles in having pubescent patches upon the elytra formed by the segregation of the hairs. These patches, however, are much less regular and conspicuous in the present species, only the four apical ones, which are situated upon the posterior calluses, being invariably well defined.

Adoretus albolepidus, sp. n.

Breviter ovatus, rufo-testaceus, sat crebre albo-squamosus, capitis, linearum thoracalium trium, scutelli segmentorumque abdominalium squamis densioribus; capite parvo, clypeo lato, semicirculari; prothorace brevi, angulis anticis acutis, posticis multo obtusis, lateribus valde arcuatis, haud ciliatis, lineis tribus longitudinalibus squamarum majorum et densiorum; scutello densissime squamoso; elytris postice paulo ampliatis, sat dense pallide flavo-squamosis, squamis nonnullis majoribus albidis interspersis, singuli disco

calloque apicali squamis majoribus albidis densius vestitis; corpore subtus pedibusque fusco-rufis, parum dense (abdominis lateribus dense) setosis; tibiis anticis bidentatis.

Long. 9-10 mm.

Hab. MASHONALAND, Salisbury; BRIT. CENT. AFRICA, Mpeta, &c.

This has been found by various collectors, but apparently nowhere in any numbers. Specimens from Mpeta, on the Loangwa River, have been received by Dr. Ohaus, of Hamburg. This species also is related to *A. variegatus*, in which the prothorax is similarly decorated. But it is more closely connected with another *Adoretus* occurring in Natal which Mr. Péringuey has identified as the *Eriesthis hoplioides* of Boheman. *A. albolepidus* differs from that form (of which I have examined three specimens taken by different collectors in Natal) only in the nature of its clothing and the more conspicuous white ornamentation. The covering of the new species consists of creamy-white scales, of which some are larger and whiter than the rest, while *A. hoplioides*, Boh., is clothed with a uniform fine grey pubescence, nowhere assuming the form of scales.

Adoretus plumbicollis, sp. n.

Cylindricus, angustus, niger, elytris rufis; clypeo magno, semicirculari, griseo hirto, fronte pilis erectis aurantiacis vestita; prothorace elytrisque griseo-pubescentibus, pilis longioribus erectis interpositis, illo valde transverso grosse punctato, lateribus angulato-arcuatis, angulis anticis acutis, posticis obtusis; elytris punctato-rugosis; corpore subtus pedibusque nigris, sparse griseo-hirtis, tibiis anticis acute tridentatis.

Long. 10 mm.

Hab. MASHONALAND, Salisbury, Arlington (*Coryndon*); Lake Nyasa (*Thelwall*).

This insect is also represented in Dr. Ohaus's collection as well as in that sent to us by Mr. Marshall, while two specimens from Lake Nyasa have been in the British Museum since 1877. It may be readily identified by several very distinctive features. Its long narrow form, the stiff golden hairs upon the head, the narrow black thorax (to which, with the under surface, the thin clothing of grey hairs gives a leaden appearance) are all peculiar to it and separate it rather widely from all other known species of the genus.

Melolonthidæ.*Apogonia* (subgen. *Ceratogonia*) *Marshalli*, sp. n.

Pallide testacea, subtiliter metallico-nitens; capite leviter punctato, clypeo bilobato; prothorace convexo, haud dense punctato, quam longitudine duplo latiore, lateribus valde arcuatis, angulis anticis acutis, posticis obtusis; scutello lævissime punctato; elytris dense punctatis, disco lineis duabus geminato-punctatis instructo; pygidio et propygidio grosse punctatis.

♂, capite quam prothorace longiore, cornubus duobus longissimis, irregulariter triangularibus antice munito; tarsorum omnium articulis tribus anterioribus valde dilatatis, articulo secundo maximo.

Long. 8.5 mm.

♀, clypeo triangulariter emarginato, lobis obtuse angulatis, prothorace minus convexo; tarsi haud dilatatis.

Long. 6.5 mm.

Hab. MASHONALAND, Salisbury.

This is the second species discovered of this remarkable subgenus. It is larger than the typical species, *C. bicornuta*, Kolbe, and paler in colour, that insect being described as ferruginous. It has the ordinary form of the species of *Apogonia* except for the remarkable prolongation of the clypeus in the male and the greatly dilated tarsi of the same sex. Herr Kolbe mentions the first joint of the front tarsi and the second of the posterior pairs as most dilated; but in the new species the second joint of all, and of the front tarsi in particular, shows the greatest development.

Apogonia (subgen. *Catagonia*) *Kolbei*, Kraatz. — The species, placed by Dr. Kraatz in the subgenus *Ceratogonia*, was found by Mr. Marshall at Umtali, Mashonaland. The clypeus is considerably produced in the male, but is only angularly emarginated and not cleft down to the frontal suture as in *Ceratogonia*.

The following new species from British East Africa is described here because it typifies another subgenus (for which I propose the name of *Rhynchogonia*), showing yet another type of clypeal formation. In this the clypeus in both sexes is produced into a single acute angle.

Apogonia (subgen. *Rhynchogonia*) *acuminata*, sp. n.

Angusta, ferruginea, grosse punctata; capite sparse punctato, clypeo acuminato, apice paulo recurvato, lateribus rectis; prothorace

haud dense punctato, linea media lævi, lateribus valde arcuatis, antice contractis, angulis anticis acutis, posticis fere oblitteratis; scutello sat subtiliter punctato; elytris longiusculis, grosse punctatis, lineis duabus geminato-punctatis parum perspicuis; pygidio magnitudine mediocri, perpendiculari, grosse sat sparse punctato, longe hirsuto; tibiis anticis fortiter tridentatis, unguibus omnibus longis, profunde fissis: ♂, tarsis dilatatis, pedum anticorum præcipue.

Long. 6.5 mm.

Hab. BRIT. EAST AFRICA, Nairobi.

This interesting form was found by Mr. C. Stuart Betton. It is one of the smallest of its genus, and is rather more elongate than usual. The prothorax is convex, strongly rounded at the sides and much narrowed in front. The head from the tip of the clypeus to the level of the eyes forms a triangle of which the sides are straight and the apex almost a right angle, but very slightly produced and curved upwards at its extreme tip. The peculiar form of the clypeus is not, as in the subgenera *Ceratogonia* and *Catagonia*, a mark of the male, being the same in both sexes.

Empecamenta nigra, sp. n.

Elongata, nigra, nitida; capite vix carinato, undique punctato-rugoso, brunneo-hirto, clypeo lato, margine reflexo, fere recto, lateribus sinuatis, oculis magnis, grosse granulatis; prothorace crebre et grosse punctato, brunneo-hirto, sat brevi, angulis nullis; elytris grosse punctato-rugosis, breviter haud dense setosis; pygidio grosse punctato, longe brunneo-hirto; corpore subtus pedibusque nigris, parce brunneo-setosis, tibiis anticis acute bidentatis, unguibus valde curvatis et laminatis; antennis 10-articulatis, articulis 3 et 4 elongatis, 6 minuto, 7-10 clavam ferrugineam, haud longam formantibus.

Long. 6.5 mm.

Hab. MASHONALAND, Salisbury.

This is the only black species of *Empecamenta* at present described. It is also more thinly clothed with hairs than any other species known to me, and the elytra, instead of being simply irregularly punctured, are very coarsely rugose. The eyes also separate it sharply from its congeners, being large, prominent, opaque, and coarsely faceted. In other species they are very shining, the facets being so small as to be hardly visible under a simple lens.

To this genus also belongs *Ablabera variabilis*, Fähr., perhaps the nearest ally of *E. nigra*; but, in addition to its orange-coloured markings, it has paired rows of punctures upon the elytra.

SPATHOSCHIZA, gen. nov.

Gen. *Schizonychæ* affine, sed clypeo subquadrato, excavato, antice late emarginato, unguium latere inferiore quadripartito. Caput parvum, bicarinatum, carina frontali arcuata, parum elevata. Oculi magni, haud subtiliter reticulati. Clypeus productus, subquadratus, excavatus, margine antico concavo. Palpi maxillares longi, articulo ultimo naviculiformi, supra excavato. Antennæ longæ, 10-articulatæ, articulis 3-6 subæqualibus, clava triphylla elongata. Prothoracis margo anticus fere rectus. Tibiæ anticæ tridentatæ, dente tertio minuto. Tarsi omnes longi. Ungues quadripartiti, lamina quadrata basale, secunda elongata divisionibusque apicalibus duabus, quarum inferiore longiore et latiore. Epimera metathoracalia posteriora punctata.

Spathoschiza debilis, sp. n.

Elongata, cylindrica, pallide testacea, capite rufo, undique breviter haud dense pilosa, subtus paulo longius; capite parvo, grosse punctato, oculis magnis, singulo latitudine supra fere ad spatium interpositum æquali, clypeo producto, antice emarginato, lateribus ante oculos angulatis, deinde ad angulos anticos recte contractis; prothorace crebre punctato, antice quam postice haud angustiore, margine antico haud sinuato, lateribus subtiliter crenulatis, ad post medium rectis, tum fortiter angulatis, angulis posticis obtusis, disco ante marginem posticum lateraliter subtiliter carinato; elytris longis, lateribus fere parallelis, æqualiter punctatis, punctis setiferis; pygidio pedibusque longe ac sparse hirtis, tarsorum posticorum articulo primo quam reliquis brevior.

Long. 9 mm.

Hab. MASHONALAND, Salisbury.

This new genus of Schizonychinae, although its affinities are sufficiently obvious, has a number of peculiar features which quite clearly separate it from the numerous and rather slightly differentiated genera of which that section now consists. The form of the clypeus is the most conspicuous of these. It is produced considerably beyond the mouth, angular and rather deeply hollowed, with the front margin concave. The structure of the claws is also peculiar, approaching the pectinate type. There are three deep clefts, which divide the lower edge of each claw into four lobes, the apical one being the least. The general form and sculpture are those characteristic of the entire subfamily, the elytra as well as the head and thorax being thickly pitted with setiferous punctures and showing no trace of striæ or costæ.

Spathoschiza debilis is a small and very narrow insect of pale colour, the prothorax being slightly and the head con-

siderably darker than the rest of the body. The short bristles with which the surface is covered are so fine as to be only visible under a lens.

Nearly a dozen specimens have been sent to us by Mr. Marshall.

Asthenopholis subfasciatus, Blanch.—A specimen of this insect from Grahamstown has been sent by Mr. Marshall. The species was assigned to *Ancylonycha* by its author, but has hitherto been included in the genus *Hoplochelus*, to which it was assigned by Burmeister. Herr Kolbe, in his classification of African Melolonthidæ, has included a genus under the name of *Hoplochelus*, but without mentioning from what species his characters were drawn. They do not apply to the true *Hoplochelus*, but appear to me to apply to the *Asthenopholis* of Brenske, the type of which, *A. transvaalensis*, Brenske, I believe to be *Ancylonycha adspersa*, Bohem., also referred by Gemminger and Harold's Catalogue to *Hoplochelus*. To this species *A. subfasciatus*, Blanch., is closely related.

The true *Hoplochelus* (*rhizotrogoides*, Blanch.) is a Madagascan insect, which Lacordaire was unable to distinguish from *Rhizotrogus*. It appears, however, to be related to *Empecta piligera*, Blanch., which, as Herr Brenske has pointed out to me, is the *Hoplochelus obesus*, Burm. The genus should, I think, be retained for the present, the claws being much more slender than those of *Empecta* and having the tooth placed very obliquely near the apex.

Asthenopholis minor, Brenske.—Mr. Marshall has also sent specimens of this from Malvern, Natal. By Herr Brenske's kindness I have been able to make sure of my determination both of this species and *A. transvaalensis*, specimens of which I have seen from Natal, by comparison with the types.

Asthenopholis crassus, sp. n.

Forma *A. transvaalensis*, sed crassior, nitidior, setis aut squamis majoribus vestitus. Niger, flavo-vestitus, capite grosse rugoso-punctato, clypeo lato, parce setoso, utrinque arcuato, medio paulo emarginato, fronte setis et pilis intermixtis flavis vestita; prothorace valde convexo, crebre rugoso-punctato et squamoso, squamis ovalibus flavis, lateribus paulo crenulatis, longe pilosis, medio valde angulatis, angulis anticis fere productis, posticis obtusis, margine postico medio late lobato; scutello polito, nudo; elytris politis, vage costatis, haud crebre punctatis et flavo-setosis, lateraliter ab humero ad medium impunctatis, nudis, lateribus

undique curvatis, postice ampliatis, angulis suturalibus obtusis; propygidio subtilissime rugoso atque flavo-hirto, medio longitudinaliter recte canaliculato, pygidio subtiliter punctato-rugoso, breviter hirto; corpore subtus dense, pectore sat longe, abdomine breviter, hirtis; pedibus antennisque nigris, harum clava flava, tibiis anticis fortiter tridentatis, unguibus medio longe dentatis. Long. 28 mm.

Hab. BRIT. EAST AFRICA, Nengia.

This is the largest of these beetles and is clothed above with scales of larger size, and therefore closer together, than in the others. These scales are of a bright yellow colour and the surface beneath them is quite black and much more shining than in the other species. The scutellum and a large patch extending from the shoulder to the middle of each elytron are smooth and bare of scales. There is also in our specimen a very minute bare spot upon each side of the prothorax. The lateral margins of the latter are more strongly angulated behind the middle and the front angles also are more acute than in the remaining species. A noteworthy feature is the bright yellow club of the antenna.

I would add to the generic characters given by the original describer an interesting one, only noticed by him cursorily as occurring in *A. transvaalensis*, but which affords perhaps the best means of recognizing all the members of the genus, viz. the sharply-cut channel upon the propygidium, which serves evidently to hold the elytra in position by the fitting into it of projecting ridges upon their inner margins.

Herr Brenske tells me that he has yet another representative of *Asthenopholis* from Bechuanaland, making in all five known species (assuming the identity of *A. adspersa* and *transvaalensis*).

Eulepida mashona, sp. n.

Ovata, robusta, nigra, supra rufescens, dense fulvo-squamosa, pectore hirto, capite crebre punctato; squamis setiformibus dense vestito, oculis haud magnis, clypeo paulo bilobato; prothorace scutelloque subtiliter punctatis, squamis minutis decumbentibus tectis; elytris convexis, haud longis, vage costatis, grosse punctatis, interstitiis minutissime sed haud dense punctulatis, squamis minoribus et magis setiformibus tectis, callis apicalibus paulo prominentibus inconspicue albo-setosis, angulis suturalibus fere rectis, haud curvatis; pygidio utriusque sexus fere aequaliter trilaterali, nigro, fulvo-hirto; corpore subtus nigro, pectore fulvo-villoso, abdomine parum dense griseo-setoso; tibiis anticis acute bidentatis; maris clava antennali fere ad stipitem longitudine aequali.

Long. 25-29 mm.

Hab. MASHONALAND, Salisbury.

This species should be placed after *E. montana*, Kolbe, in the table given by that entomologist in the Ann. Soc. Ent. Belg. 1894, p. 555. It is closely related to that species and to *E. Mamboïæ*, Kolbe, subsequently described, but is rather smaller and stouter than either. Its scaly covering most resembles that of *E. Mamboïæ*, which, however, has larger eyes and a more elongate pygidium, especially in the male (which was unknown to the describer of the species). The pygidium of *E. mashona* is practically the same in both sexes. There are no larger isolated scales upon the elytra and those of the prothorax are not erect as in *E. montana*.

Hypopholis conspurcata, Gerst. — Two specimens from Mazoe, Mashonaland, appear to belong to this species, although no metallic lustre is perceptible and there are two large dark patches upon the pronotum. As our two specimens differ somewhat in coloration, however, the species is probably a very variable one.

Clitopa capra, sp. n.

Breviter ovata, nigro-picea, undique albo- vel albo-fulvo-pilosa; capite supra ubique dense et longe setoso, clypeo antice late arcuato; prothorace vix duplo latiore quam longitudinem, cum scutello longe et dense villosa, lateribus regulariter arcuatis, antice multo, postice minus contractis, margine postico medio paulo lobato; elytris latis, punctato-rugosis, leviter costatis, undique breviter pilosis, callis humeralibus lævibus, denudatis, angulis suturalibus separatim arcuatis; corpore subtus cum pygidio brevius pilosis, hoc parvo; pedibus omnibus gracilibus, tibiis anticis longe et distanter bidentatis, singula calcare minutissimo munita; antennis nigris, articulo tertio ad quartum et quintum longitudine vix æquali, clava triphylla, parum elongata.

Long. 17 mm.

Hab. MASHONALAND, Salisbury.

This is a rather short and broad beetle of uniformly dark colour and thickly clothed with a pale yellow pubescence, which becomes almost white on the lower surface. The head is so densely clothed above with erect bristles as to conceal entirely its form and sculpture, and the antennæ are smaller than usual in the species of this group. Although Lacordaire has mentioned as a feature of the present genus that the third joint of the antenna is as long as the rest of the stipes, I do not yet know any species in which it is so; but the characters of this and the allied genera need considerable revision, for the species show so great a variety of form that almost every

one shows distinctive features as important as the majority of those regarded as sufficient for the separation of the genera.

Clitopa nitidipennis, sp. n.

Læte testacea, capite, prothorace, scutelloque fusco-brunneis, capillis pallide flavis vestita, elytrorum minutissimis, vix perspicuis, reliquis longis et densibus; clypeo parvo, semicirculari, nudo, polito, grosse punctato, a fronte carina valde elevata separato, hac cum parte postica tota longe et dense setosa; antennis rufo-testaceis, articulis 2°, 4°, 5° et 6° fere æqualibus, 3° paulo longiore, clava triphylla, quam stipitem longiore; prothorace brevi, lateribus regulariter curvatis, antice multo, postice minus contractis, margine postico medio lobato; elytris sat latis, nitidis, minutissime flavo-hirtis, rugoso-punctatis, costa suturali aliisque obsoletis, angulis suturalibus separatim arcuatis; pygidio parvo, haud dense piloso; tibiis anticis longe et distanter bidentatis, singula calcare tenue munita.

Long. 18.5 mm.

Hab. PORTUGUESE EAST AFRICA.

This species is rather longer than the one described immediately before, but the thorax is shorter. The posterior part only of the head is covered with erect setæ, the clypeus being naked, shining, and very narrow. The antennæ, like the elytra and the lower surface of the body, are of a bright reddish-testaceous colour and the antennal club is long. The legs and claws are of the normal form.

The following species belongs to the recently formed genus *Diaclaspus* of Brenske, differing from *Clitopa* chiefly by the form of the front tibiæ, which have three teeth, and the absence of sharp ridges on the head.

Diaclaspus crinitus, sp. n.

Cylindricus, rufo-fuscus, capite, prothoracis medio elytrisque magis fuscis, undique fulvo-hirtus (elytris breviter); capite ecostato, sed clypeo linea recta a fronte separato, semicirculari, margine valde elevato, clypeo subtiliter, fronte longe et dense, hirtis; antennarum clava triphylla, ad stipitem longitudine æquali, articulis duobus præcedentibus compressis, dentatis; prothorace medio quam longitudinem duplo latiore, cum scutello longe fulvo-hirto, lateribus regulariter arcuatis, margine postico medio paulo lobato; elytris rugulosis, costa suturali distincta aliisque obsoletis, angulis suturalibus vix rotundatis; pygidio fere polito, leviter piloso; pedibus corporeque subtus, pectoreque longius, fulvo-hirtis;

pedibus omnibus gracilibus, tibiis anticis fere æqualiter tridentatis, femoribus posticis paulo inflatis.

Long. 15.5 mm.

Hab. BRIT. EAST AFRICA, Mombasa.

This is a considerably smaller insect than *D. delagoensis*, Brenske, and of broader, less convex form. Its pubescence also is less uniform, being short and inconspicuous upon the clypeus, elytra, and pygidium, and long and dense upon the vertex and pronotum, whereas in the type species it is short and velvety over the whole upper surface. The teeth of the anterior tibiæ are rather less strong in the new species, but the hind femora are rather bulbous, as in *D. delagoensis*. The antennæ are similar in both species, but the maxillary palpi of *D. crinitus* are rather longer and more slender than in the other.

A single male specimen was brought from the Rabbai Hills, Mombasa, by the Rev. W. W. Taylor.

XX.—*North-American Bees of the Genus Andrena.*

By T. D. A. COCKERELL.

Andrena medionitens, sp. n.

♀.—Length 8–9½ millim.

Black; head ordinary, facial quadrangle nearly square; antennæ short, faintly brownish beneath, first joint of flagellum a little longer than the next two united; facial foveæ broad throughout, white, separated from the eyes by only a linear interval; sides of face, vertex, and occiput covered with fulvous hair (no black hair anywhere about head or thorax); clypeus shining, with rather close large punctures and a median impunctate line; process of labrum broad, concavely truncate; thorax rather densely covered with erect stiff fulvous hair, except the middle of mesothorax and scutellum, which are bare and shining; mesothorax where covered with hair dull and tessellate, with rather sparse shallow (but quite distinct) punctures; the shining part is also sparsely punctured; metathorax dull and roughened, the enclosure ill-defined and without any ridge or plicæ; tegulæ dark brownish; wings yellowish, faintly dusky at apex; stigma and nervures clear orange ferruginous; legs black, with pale fulvous hair; middle tarsi dark reddish; hind tibiæ and tarsi ferruginous, the former stained with black on the inner face;

Arrow, G. J. 1902. "XIX.—On rutelid and melolonthid beetles from Mashonaland and East Africa." *The Annals and magazine of natural history; zoology, botany, and geology* 9, 89–101.

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