II. On the Cossonidæ of Japan.

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[Read 6th January, 1873.]

Having been requested by Mr. G. Lewis to draw up a paper on the various members of the Cossonidæ which he obtained during his late residence in Japan, and which form an important (though perhaps not very considerable) item of his Coleopterous gleanings, I have done so,—though not without some slight degree of regret at the large number of new genera which I have found it necessary to establish. I say "regret," because where species are comparatively small in size, and present no modifications of structure which are at once striking and conspicuous, and where moreover external characters can alone be employed for the purposes of classification, one would far rather admit them into groups which are already recognized than propose additional ones for their reception. Yet, after a very careful examination of Mr. Lewis's material, I feel convinced that the ordinary European types do not prevail in that particular portion of the Japanese empire to which his researches have been confined,—their places being manifestly taken by kindred, and to some extent representative, forms, which have geographically too much importance not to be acknowledged as distinct. What the case may be in the northern and central parts of the archipelago I have no means of ascertaining,—for, unless I am much mistaken, Mr. Lewis's explorations were prosecuted chiefly in the island of Kushiu and the southern division of Nipon; but it is not improbable that the large island of Yesso, and the still larger and more northern one of Saghalien (which nevertheless is not, I believe, regarded as an integral portion of the Japanese empire), would have, to a considerable extent, faunas of their own. Be this however as it may, I would desire to state that it is to the south of Japan that the present memoir must be considered as more properly to pertain.

Glancing at the 18 species described below (and which are embodied in 15 genera), there are a few points which strike one as requiring comment,—amongst which stands

TRANS. ENT. SOC. 1873.—PART I. (MAR.)
pre-eminent the remarkable fact that they appear to be all of them undescribed,* and that most probably, therefore, if they are not absolutely endemic, their areas of distribution are exceedingly limited in extent. This however is nothing more than what my own experiences in the Madeiran, Canarian, and Cape Verde archipelagos would have led me to anticipate, for in each of those groups their respective Cossonidae are almost wholly peculiar; and the same is equally the case at St. Helena, and will perhaps be found to be so in most remotely-situated islands and archipelagos. But what surprises me more is that there does not appear to be any particular type (judging at least from the material to which I have had access) which, like Microxylobius at St. Helena and Caulotrupis in Madeira, would seem as it were to reign supreme, and to be par excellence prolific in its modifications; for, on the contrary, by far the greater number of the species which I have examined appear to belong to genera which are unmistakeably different from each other. Still, much allowance must doubtless be made for the limited size of the region which Mr. Lewis had the opportunity of investigating; and I would conjecture, therefore, that if any very numerous additions to the Cossonideous fauna of Japan are ultimately made they will probably pertain for the most part to the genera Philcaphagosoma, Pseudocossonus, and Heterarthrus, each of which have two representatives here enumerated, and the last of which appears to occur likewise in Ceylon.

One of the most salient facts is the discovery by Mr. Lewis of a new Pentarthrum, and also of two very distinct and well-marked genera (Pentacoptus and Tychiodes) in the small subfamily of which Pentarthrum is now recognized as the type, and in which the funiculus is composed of only five articulations. One of these genera, however, namely, Tychiodes, although communicated by Mr. Lewis, was in reality detected, I believe, by Dr. A. Adams,—who found several examples of it in the island of Awasima, near Sado, on the north-west coast of Nipon,

* The only one which I feel might possibly prove to be an exception to this statement is the first species on the list,—the Tetracemnus sculpturatus,—which seems to have a rather wider geographical range, and which may perhaps have been characterized as a Dryophthorius. Still I cannot satisfy myself that it will quadrat with the diagnosis of any described species; though it is certain that several closely allied forms have been published (I believe erroneously) as Dryophthorius.
and consequently at a rather higher latitude than the area which was explored by Mr. Lewis. The Pentarthrum itself is peculiarly interesting, since the only two exponents of its group which had hitherto been brought to light are (respectively) from England and the island of Ascension; and I have remarked, in the proper place, on the affinity which it possesses, both in structure and habits, with those two species.

Amongst the Cossonides proper, Pholidoforus is unusually aberrant on account of the robust scales (so familiar, and ordinary, in certain other departments of the Rhynchophora) with which it is clothed; and Xenomimetes is noteworthy from representing, as it seems to me, in Japan, the genus Eremites (or Syntomocerus) which infests the pine trees of the Canarian archipelago. Spharocorynes introduces us to another sub-Hylastideous form (yet nevertheless strictly Curculionideous), of a very marked character; whilst Stenoscelis, which is still nearer to the Hylastidae (being indeed the nearest to that family of all known Rhynchophorous types), has an interest, from a geographical point of view, emphatically its own, on account of the single exponent as yet described (the S. hylastoides, Woll., Journ. of Ent. i. 142, t. 11, f. 1) being a native of St. Helena and the Cape of Good Hope. Indeed Stenoscelis, Pentarthrum and Hexarthrum are the only genera, out of the 15 enumerated in this paper, which do not appear to be absolutely new.

In order to make the various forms, and their classification, intelligible, I have compiled, as a slight aid to the eye, the following tabular synopsis:

**Sectio Rhynchophora.**

**Fam. Cossonidae.**

a. Funiculus 4-art. . . . . Subfam. Dryophthorides.

Genus 1. (Corpus parallelo-fusiforme, opacum, grossis-sime sculpturatum, parce lutosum) . . . . Tetranemnus.

b. Funiculus 5-art. . . . . Subfam. Pentarthrides.

Genus 2. (Corpus breviter parallelo-oblongum, opa-cum, grosse sculpturatum, parce nutosum). Pentacoptus.

Genus 3. (Corpus angustum, subcylindricum, subniti-dum, calvum) . . . . . . Pentarthrum.

Genus 4. (Corpus oblongo-ellipticum, latum, nitidius-culum, calvum; rostro gracillo; prothorace transverso; metasterno brevisculo). Tychiades.
c. Puniculus 7- (in Hexarthro 6-) art. . . . . . . . . . . Subfam. Cossonides.

* Rostrum vel plus minus elongatum, vel breve.

† Corpus opacum, plus minus squamosum, aut lutosum.


†† Corpus plus minus nitidum, calvum.

x. Corpus plus minus cylindrico-fusiforme; elytris integris.


Genus 11. (Rostrum breve, crassum. Antennae subcrassae, capitulo fundo abrupto. Pedes breves, crassii; tarsis breviusculis, crassiusculis, art.º 3º vix bilobo) . . . Macrorhyncolus.

xx. Corpus cylindricum; elytris apice ipsa subdilvicatoris.


** Rostrum brevissimum, crassum (aut paralellum, aut triangulare).

Genus 14. (Rostrum parallelum, oculis prominentibus. Antennae longissimae, crassae, capitulo magno. Pedes ad basin subequaliter distantes ; tarsis robustus, art.\textsuperscript{3}o 3\textsuperscript{10}o bilobo). \textit{Sphaecorynes}.

Genus 15. (Rostrum triangulare, oculis demissis. Antennae brevissimae, graciles. Pedes antici ad basin contigui; tarsis graecillimis, longissimis, art.\textsuperscript{3}o 3\textsuperscript{40}o fere simplici. Metasternum paulo minus elongatum) \textit{Stenoscelis}.

\textit{SphincBocorynes}.

Genus 15. (Rostrum triangulare, oculis demissis. Antennae brevissimae, graciles. Pedes antici ad basin contigui; tarsis graecillimis, longissimis, art.\textsuperscript{3}o 3\textsuperscript{40}o fere simplici. Metasternum paulo minus elongatum) \textit{Stenoscelis}.

Genus 1. \textit{Tetratemnus} (nov. gen.).

\textit{Corpus} parallelo-subfusiforme, \textit{Calandra} formam simulans, valde profunde et grossissime sculpturatum, hinc inde parce subsquamoso-lutosum: rostro brevi, crasso, lineari; serobe profundâ, usque ad oculum currente; oculis sat magnis, obliquis, transversis (sed infra nullo modo etiam subcontiguis), omnino demissis, longe ante marginem prothoracis sitis: \textit{prothorace} ovato, antice et postice truncate: \textit{scutello} minutissimo, punctiformi, vix observando: \textit{metasterno} elongato: \textit{elytris} antice subparallelis, postice ad utrumque latus (a medio usque ad apicem) oblique sectis, margine ipso versus apicem acute cariniformi. Antennae breves, crassae, pone medium rostri inseritae; \textit{scapo} curvato, gradatim clavato; \textit{funiculo} 4-articulato, art.\textsuperscript{3}o 1\textsuperscript{mo} reliquis majore, sequentibus longitudine subequalibus, latitudine crescentibus, 2\textsuperscript{do} obtriangulari, 3\textsuperscript{4o} 4\textsuperscript{vo} que transversis, hoc ad \textit{capitulum} (magnum, ovalem, corneum, solidum, apice solum spongiosum pubescentem) arcte adpresso. Pedes breves, validi, \textit{antiores} ad basin parum distantes, \textit{postici} magis, sed haud valde (ut in \textit{Dryophthoro}) separati: \textit{femoribus} muticis: \textit{tibias} ad apicem externum in uncum robustum productis: \textit{tarsis} brevissimis, filiformibus, distincte 5-articulatis, art.is 1\textsuperscript{mo}, 2\textsuperscript{do} 3\textsuperscript{10}o que subequalibus (3\textsuperscript{10}o simplici, nec dilatato, nec bilobo), 4\textsuperscript{vo} minore sed valde conspicuo, ult.\textsuperscript{mo} \textit{unguiculis} parvis armato.

\textit{Obs.}—Genus \textit{Dryophthoro} (teste generis typo—sc. \textit{D. lymexylone}, europæo) affinitate proximum, et illo entomologicis adhuc confusum; sed certe distinctum, nisi fallor. A \textit{Dryophthoro} differt rostro pedibusque (præcipe tarsis) brevioribus, necnon coxis anticis inter se parum distantibus (nec subcontiguis), sed tamen coxis posticis conspicue minus quam in \textit{Dryophthoro} separatis.

\textit{Stenoscelis}. a. \textit{Funiculus} 4-art. . . . (Subfam. \textit{Dryophthorides}).
Dryophthoro aliter discedit elytris angustioribus, magis parallelis, lateraliter compressis, utrinque ad apicem multo magis cariniformibus, unoque tibiali minus elongato.

A τετάχα, quatuor, et τέμνω, scindo.

There can be no doubt that the weevil from which the above characters have been drawn out, if not already described as a Dryophthorus, is congeneric with several which have been referred to that group. Yet a careful comparison of it with the European D. lymexylon (which is stated expressly to be the type, and for examples of which, from Finland, I am indebted to Mr. E. W. Janson) is abundantly sufficient to show that it cannot in reality be admitted into the same actual genus with that insect,—its shorter rostrum and legs, and (above all) the fact of its anterior coxae being comparatively wide apart from each other (instead of nearly contiguous), whilst the posterior pair, on the other hand, are not so distantly separated as is the case in Dryophthorus proper, being differences of the utmost importance in this particular department of the Rhynchophora. As regards its less essential details, I may observe that its elytra are narrower and more parallel (or laterally-compressed) than in Dryophthorus, and have their keeled apical margin very much more prominent and developed; and that its antennae are implanted a little further behind the middle of the rostrum, whilst its tibial hook and feet are considerably more abbreviated.

In other respects (and which it retains in common with Dryophthorus), I will merely mention that its 4-jointed funiculus and transverse eyes, and the fact of its abbreviated feet being distinctly pentamerous (the fourth articulation, although smaller than the preceding ones, being quite conspicuous and exposed—an almost unique feature, if not indeed entirely so, in the Rhynchophora), will combine to separate it from every other Cossonideous form with which we are here concerned.*

* In its shorter rostrum, antennae, legs, and feet, as well as in the proportions of its funicular-joints, Tetratemmis would appear (judging at least from the published diagnosis) to agree better with the genus Chororhinus, Fairm., from the south of Europe, than with Dryophthorus; but from that group its eyes and tarsi will (apart from all other differences) at once separate it,—the former being transverse and depressed, instead of rounded and prominent, whilst the latter are filiform and conspicuously 5-articulate; whereas the feet in Chororhinus are said to be (vide Fairmaire, in the French Annales for 1857, p. 742, and also Lacordaire, Gen. vii. 323) on the ordinary pseudotetramerous type, with their third joint
1. *Tetratemnus sculpturatus*, n. sp.

*T. parallelo-subfusciformis*, niger, opacus, squamis cincere-fuscis lutosis plus minus obtectus; capite rostroque (præsertim in fronte foveolata) valde inaequalibus, grosse punctato-rugosis; prothorace ovato, antice et postice truncato, mox pone apicem profunde transversim constricto, foveam latam medium fere efficiente, profunde, dense et grosse punctato; elytris valde profunde punctato-sulcatis, interstitiis alte costato-elevatis; antennis pedibusque brevibus, crassis, rufescientioribus. Subtus (capite excepto) grosse sed parce punctatus.

Long. corp. lin. 1½—1¾.


Its dark hue, in conjunction with its opaque and very deeply and coarsely sculptured surface, which is more or less sparingly besmeared with a kind of *mud*-like scaly deposit, and which tends to fill up the various inequalities and punctures, will serve additionally to distinguish the present insect; though it is true that these particular characters exist likewise, to an almost equal extent, both in *Pentacoptus* and *Coprodema*. Nevertheless the structural details which I have given above (par excellence of funiculus, eyes, elytra, and feet) will suffice at once to separate the *T. sculpturatus* from the members of those two genera.

Judging from the comparatively large number of individuals now before me, and which Mr. Lewis would appear to have taken principally at Hiogo, in the island of Nipon, ("in old fungus-covered pines bordering a water-course"), I think it is very likely that the present *Tetratemnus* is (if not common) at least widely spread; for it is remarkable that I had already an example of it in my collection which I captured a few years ago (dead) out of a cup of tea, while in the island of Jersey,—a fact which would perhaps indicate that the species occurs equally in China, and that the example alluded to was accidentally imported (much after the fashion which we are accustomed
dilated and bilobed. By-the-by, it is much to be regretted that the generality of the continental Coleopterists still persist in characterising the tarsi of the *Rhynchophora* as *tetramerous* (which it is perfectly well known that they are not), and that too while the more correct term "*pseudotetramerous*" (proposed by Westwood upwards of thirty years ago,—*vide* Introd. p. 44) so exactly expresses their real structure.
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to observe in such forms as Silvanus and Calandra,—to the latter of which indeed it bears at first sight a considerable resemblance).

b. *Funiculus 5-art.* . . . (Subfam. Pentarthrides.)

Genus 2. Pentacoptus (nov. gen.).

Corpus parvum, breviter parallelo-oblongum, opacum, grosse sculpturatum, hinc inde parce subsquamoso-lutosum: rostro brevi (sed lineari), lato, depresso; oculis parvis, rotundatis, valde prominentibus; scrobo brevi, prouflamâ, mox infra oculum desinente et ibidem terminatâ: prothorace elongato-subquadrate, elytris sensim angustiore: scutello minutissimo, punctiformi: metasterno elongato. Antennae brevissimae, in medio rostri insertae; scapo brevi, clavato; funiculo 5-articulato, art. 1 mo reliquis majore crassiore, sequentibus brevibus, latitudine vix crescentibus; capitulo parvo, solido, ad apicem obscure annulato et ibidem subspongioso subpiloso. Pedes breves, validi, crassi, antici ad basin fere approximati, intermedii paulo distantiiores, postici valde distantes: femoribus laticis: tibiis brevibus, robustis, ad apicem externum in uncum magnum productis: tarsis brevibus, crassiusculis, art. 3 mo paulo dilatato et bilobo, ult. mo longiore (sed brevi), unguiculis minutissimis armato.

A πέντε, quinque, et κοπτός, sectus.

At first sight the opaque and coarsely sculptured little weevil for the reception of which the above genus is proposed has much the outline and aspect of a small Gronops; though of course, when closely inspected, every one of its characters (more especially as regards its rostrum, antennae, and tibial hooks, and the soldered first and second segments of its abdomen) will instantly remove it from the entire section of the Byrsopsides. Yet, despite its peculiarities of outline and sculpture, and the mud-like scales (so unusual in the present sub-family) with which its surface is partially clothed, there can be no doubt that its 5-jointed funiculus will assign it a place amongst the

* Judging from the published diagnoses, this insect appears to be distinct both from the Dryophthorius bituberulentus, Fab. (which seems to occur in New Zealand, various islands of the Pacific, California, &c.), as well as from the excavatus, Dej. (which is registered as a Madagascar species).
Pentarthrvides of the Cossonidae; whilst its fully developed eyes, and medially inserted antennae, in conjunction with its just appreciable scutellum and elongate metasternum, will tend still further to retain it in the immediate vicinity of Pentarthrum proper.

2. Pentacoptus gronopiformis, n. sp.

P. breviter parallelo-oblongus, piceo-niger, opacus, squamis fusco-cinercis lutosis plus minus obtectus; capite prothoraceque profunde et dense punctatis, rostro (brevi, parallelo, latiusculo, depresse) grosse longitudinaliter stri-goso, oculis parvis sed valde prominentibus, hoc elongato-subquadrate, max pone apicem profunde transversim constricto; elytris parallelis, prothorace latioribus, grosse et confluent punctato-sulcatis, interstitiis alte costato-elevatis; antennis pedibusque (præsertim illis) brevibus, rufescen-tioribus, illarum capitulo parvo. Subtus profunde et grosse punctatus.

Long. corp. lin. 1½


Apart from the features (some of them generic ones) above alluded to, the excessive shortness of the limbs of this coarsely sculptured and somewhat Gronops-shaped little Cossonid, added to the fact that its elongate-squarish prothorax (which is deeply constricted just behind the front margin) is appreciably narrower than the elytra, whilst its longitudinally strigulose rostrum is short and broad, but nevertheless linear and comparatively depressed, will all combine to give it a character which, when once seen, it is impossible to mistake. It appears to have been taken by Mr. Lewis at Nagasaki, in the island of Kushiu,—“out of an old Camellia tree in the garden of the British Consulate.”

Genus 3. Pentarthrum.


Corpus lineari-cylindricum, angustum, sculpturatum, calvum: rostro lineari, vel (ut in P. angustissimo) sub-gracili, vel crassiore; oculis rotundatis, prominentibus; scrobe brevi, leviter decurvâ, infra oculum vix currente: prothorace vel (ut in specie nostrâ) ovali, vel (ut in P. Huttoni) ovato, vel (ut in P. cylindrico) ovato-cylindrico,
antice et postice truncato, mox pone apicem transversim constricto: scutello subrotundato, parvo sed conspicuo: metasterno valde elongato: elytris parallelis. Antennae breviusculae, in medio (aut potius mox ante medium) rostri inserte; seco robusto, gradatim clavato; funiculo 5-articulato, art.° 1°o reliquis paulo majore, sequentibus brevibus subaequalibus (tamen in P. Huttoni, britannico, 2°o sensim paulo elongato); capitulo parvo, ovali. Pedes subrobusti, antici ad basin parum, intermedii paulo magis, et postici remote inter se distantæ: femoribus muticis: tibii ad apicem externum in uncum producti: tarsis art.° 1°o, 2°o 3°oque longitudine subaequalibus, 3°o vel (ut in specie nostra atque in P. Huttoni) sensim latiore et paululum bilobo, vel (ut in P. cylindrico) fere simplici, ult.° o clavato unguiculis parvis armato.

Although Pentarthrum is not a new genus (it having been established by myself in 1854), I have nevertheless given a full diagnosis of it in order to point out the exact particulars in which it differs from the other groups of the Cossonidæ with which we are here concerned; and it will perhaps be sufficient therefore to remark that the comparatively narrow, parallel, and elongate bodies of the few species which have as yet been ascertained to compose it, in conjunction with their but very slightly shining, piceous and rather closely sculptured surfaces (which are entirely free from both scales and pubescence), their almost medially inserted antennæ, their 5-jointed funiculi, and their linear but somewhat robust rostra, will suffice to distinguish it from its immediate allies.

3. Pentarthrum angustissimum, n. sp.

P. lineare, angustissimum, depressiusculum, subnitudinum, clare piceum; rostro lineari, punctulato, oculis rotundatis, prominentibus; prothorace ovale, antice posticeque truncato, mox pone apicem profunde transversim constricto, paulo grossius punctato, postice in medio late sed leviter depresso; elytris prothorace paulo angustioribus, parallelis, profunde et confertim sulcato-punctatis, interstitiis sensim elevatis; antennis pedibusque breviusculis, rufescientioribus, illarum capitulo parvo, ferragineo. Subtus profunde et argate punctatum.

Long. corp. lin. 1½—1¾.

The structural characters of this narrow and linear little Cossonid shew it to be a true *Pentarthurum,*—its 5-jointed funiculus, medially-inserted antennæ, and its developed eyes and scutellum, added to its colour, outline, and sculpture, being in entire accordance with the two hitherto described members of that group. I say "two," because a more careful examination of the unique weevil from St. Helena, which I enunciated nearly three years ago under the title of *Pentarthurum subaeæcum,* has recently convinced me that it is the type of a new genus allied to *Mesoxenus* (well characterized not only by its obsolete eyes and scutellum and its more apically-implanted antennæ, but likewise by its convex, largely-developed prothorax and general aspect and sculpture), and not an "aberrant *Pentarthurum.*" So that, up to the present date, only two veritable *Pentartha* had been brought to light,—namely, the English *P. Huttoni* (for the reception of which, in 1854, I originally proposed the genus), and the *P. cylindricum,* which was detected by the late Mr. Bewicke in the island of Ascension; and I need scarcely add therefore that a third representative, from Japan, and one so remarkably well defined, is a fact of considerable importance geographically. As elsewhere stated, however, there is a peculiarity about the *modus vivendi* of the *Pentartha* which renders it highly probable that the group will be found eventually to have a very wide range,—their habits being, apparently, to follow in the wake of civilization by attaching themselves to old planks, boards, rafters, casks, &c., on the rotten (and often tinder-like) wood of which they more especially subsist. Thus the English *P. Huttoni* was obtained originally amongst logs of wood which had been long laid up in an out-house, and it was subsequently met with in a decayed cask near Plymouth, and by myself in portions of an ancient plank adjoining my house and conservatory at Teignmouth; and, in like manner, the *P. cylindricum,* at Ascension, was captured abundantly by Mr. Bewicke in the broken-up wood of a worn-out box in which plants had been cultivated. It is consequently quite in accordance with what I may perhaps be permitted to call their generic mode of life that the present *Pentarthurum* should have been discovered by Mr. Lewis, in Japan, "by beating the straw roofing of old cottages near Nagasaki;" and I may further remark that I believe him to be perfectly correct when he

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conjectures that “in all probability it really lived in the rafters.”

The *P. angustissimum* is more nearly allied to the *P. cylindricum* from Ascension than to the English *P. Huttoni*, but it is relatively very much narrower than either, its rostrum is a little longer, and its prothorax is more constricted behind the front margin, and more depressed (as in *Mesites*) down its posterior disc. Its elytra also are more closely sculptured, and have their interstices more raised. In its short antennae and small club it is more in accordance with the Ascension species than with the English one.

**Genus 4. Tychiodes (nov. gen.).**

*Corpus* oblongo-ellipticum, latum, depressum, sculpturatum, calvum: capite parvo; rostro elongato, gracillimo, lineari, tereti; oculis sat magnis, rotundatis, paulo prominulis; scrobe subrectâ, vix ad oculum currente: prothorace brevi, rotundato-ovato, antice et presertim postice valde truncato: scutello subrotundato, valde conspicuo; metasterno longiuscule (vix elongato): elytris oblongo-ellipticis, basi late truncatis. *Antennae* longiusculi, subgraciles, mox pone medium rostri insertae; *scapo* flexuoso, clavato; *funiculo* 5-articulato, art.¹ 1° sat magnio rotundato-ovobato, sequentibus inter se laxis, subperfoliatis, 2do elongato, obconico, 3td, 4to 5to que longitudine subaequalibus, latitudine crescentibus, 5to ad *capitulum* magnum ovalem abruptum distincte annulatum haud adpresso. *Pedes* crassi, antici ad basin parum, intermedii paulo magis, et postici remote inter se distantes: *femoribus* muticis, et (presertim anticis) crassis: *tibiis* ad apicem externum in uncum brevem productis: *tarsis* elongatis, art.¹ 1°, 2do 3to que longitudine subaequalibus (1° paululum longioris), 3to reliquis multo latiore et distincte profundeque bilobo, ult.º° elongato clavato, unguiculis sat magnis armato.

**Obs.**—Genus inter *Cossonidas* valde anomalum, distinctum; conspicuum est rostro elongato gracillimo lineari tereti, pedibus crassi, tarsorum elongatorum articulo tertio lato necnon conspiciue profundeque bilobo, metasterno minus elongato (sed vix brevissimo ut in gen. *Microxylobio*), abdominis segmento primo breviusculo, corpore oblongo-elliptico latiuscule depresso (prothoraceque lato, brevi, transverso), etiam *Tychii* formam fere simulante. Aliter exstat capite parvo, scutello valde distincto, antennis longi-
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usculis subgracilibus (funiculi 5-articulati articulo secundo elongato) et mox pone medium rostri insertis, necnon pedibus (præsertim anticis) incrassatis.

A *Tychius* et sīōz, aspectus.

The very anomalous little Cossonid (several examples of which were taken by Dr. Adams in the island of Awasima, near Sado, off the north-west coast of Nipon) from which I have compiled the above generic diagnosis is one of the most remarkable members of the family which has hitherto been brought to light, and one which is especially important as adding another and most well-defined form to that particular section which is characterized by *Pentarthis*, *Pentacoptus*, the Atlantic *Pentatemnus* and *Mesoxenus*, the south-European *Amaurorhinus* (if indeed it be truly distinct from *Mesoxenus*), and the St. Helena *Microxylobius*—in all of which the funiculus is composed of only five joints. *Prima facie* indeed its aspect is so remarkable (from its rather depressed, wide, oblong-elliptic body, short, transverse prothorax, and extremely slender, linear rostrum) as to be slightly suggestive of a large *Tychius* and other members of the *Erirhinidae*; nevertheless the structure of its abdomen, tibiae, and other details, show it to be an unmistakeable Cossonid. In other respects it is conspicuous for the smallness of its head, and for its antennae (which are rather long and slender) being implanted a trifle behind the middle of its very narrow rostrum, with their scape flexuose, and their funiculus-articulations (the second of which is comparatively elongate and subconical) somewhat loosely connected together. Its metasternum and the basal segment of its abdomen are both of them rather shorter than is the case in the ordinary members of this family (though the former is not so abbreviated as in the *Microxylobius* of St. Helena); its scutellum is very apparent; its legs are a good deal thickened, especially the anterior pair; and its feet are considerably developed, with their third joint widened and deeply bilobed.


* T. oblongo-ellipticus, latus, depressus, nitidus, brunneo-piceus; capite parvo, rostro lineari, angustissimo, nitidissimo, fere impunctato, fronte foveolata et punctulis perpaucis adpersa; prothorace brevi, transverso, rotundato-

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ovato, antice et præsertim postice valde truncato, distinctius sed hand dense punctato, postice in medio foveâ rotundatâ leviter impresso; elytris oblongo-ellipticis, basi late truncatis, sat profunde punctato-striatis, interstitiis latis, convexiusculis et parissime minutissimeque (sub lente) punctulatis; antennis clarioribus, capitulo magno pallidior. Subtus paulo levius, et subremote punctatus, necnon minutissime pubescens.

Long. corp. lin. 1\textfrac{1}{2}—2.


Apart from the features already pointed out, and which are principally structural ones, the present peculiar and somewhat Tychius-like Cossonid may be known by its rather shining and brownish-piceous surface,—the prothorax of which is sharply, but not very deeply or closely, punctulated, whilst the punctures of its deep and wide elytral striae are distinct and large. I have much pleasure in dedicating it to its discoverer, Dr. A. Adams,—through whose kindness I have received several examples, for inspection, which have been transmitted to me by Mr. G. Lewis.

c. *Funiculus* 7-art. . . . (Subfam. *Cossonides*).

*Rostrum vel plus minus elongatum, vel breve.*

Genus 5. *Pholidoforus* (nov. gen.).

Corpus angustulum, fusiformi-elongatum (sc. in medio parallellum, antice et postice attenuatum), sculpturatum, squamosum: rostro longiuseculo, angustulo, subteretì; scrobe profundâ, curvatâ, longe infra oculum desiliente; oculis parvis, rotundatis, prominentibus, longe ante marginem prothoracis sitiis: prothorace elongato-ovato, antice et postice truncato: scutello subrotundato, distincto: metasterno elongato: elytris antice parallelis, postice acutissule productis. Antennæ elongatae, graciles, mox ante medium rostri insertæ; scapo recto, leviter clavato; *funiculo* 7-arti-culato, art. 1\textsuperscript{mo} subquadrato-obconico (reliquis majore, sed vix magno), sequentibus longitudine subÆqualibus, latitudine paulo crescentibus; capitulo sat magno, ovali, distincte annulato. Pedes elongati, antici ad basin parum approximati, intermedii paulo distantiiores, postici valde distantes;
femoribus muticis: tibiis ad apicem in uncum inflexum, necon ad internum in spinulam parvam productis: tarsis longiusceulis, art. 1° secundo sensim longiore, 3° latiusculo et evidenter bilobo, ult. 3° elongato clavato, unguiculis sat magnis armato.

Obs.—Genus inter Cossonidas corpore dense squamoso insignum. Aliter conspicuum est forma subangusta, in medio parallelâ, antice et postice attenuata, antennis longiusculis, gracilibus, mox ante medium rostri insertis, oculis parvis sed prominetibus, tarsorum articulo secundo tertio viz longiore, tarsorumque articulo tertio preceedentibus evidenter latiore atque bilobo.

A φολίες, squama, et φΘως, fero.

In its densely scaly surface the present insect affords a curious exception to what is usual amongst the Cossonidae; for although it is true that Tetratemnus, Pentacoptis, Coprodema and Exodema are likewise remarkable for the few mud-like scales with which they would seem to be more or less partially incrusted, in Pholidoforus the body is regularly and somewhat closely beset with short, thick, fulvo-cinereous scaliform setae,—a portion of which are slightly erected, and the others altogether decumbent. Yet the structure of its abdomen, tibiæ, eyes, rostrum, and 7-jointed funiculus show it to be an unmistakeable member of this subfamily. In other respects it may be known by its narrowish and fusiform outline (it being parallel in the middle, but acute both before and behind), by its rather long and slender antennæ being inserted just before the middle of its appreciably curved rostrum, by its eyes being small and rounded but very prominent, by its funiculus having the second joint scarcely at all longer than the third, and by its feet being a good deal developed and lengthened,—their third articulation being rather broad (for the Cossonidae) and bilobed.

5. Pholidoforus squamosus, n. sp.

P. angustulus, elongato-subfusiformis (antice posticeque acutus), brunneo-niger, opacus, squamisque fusco-cinereis (suberectis et demissis, necon interdum fulvescenti-tinctis) plus minus dense tectus; capite prothoraceque (subter squamis) profunde et rugose punctatis, rostro longiuseulo, subarcuato, oculis parvis, rotundatis, prominentibus; elytris antice parallelis, postice acutis, (subter squamis) profunde, confertim et grosse sulcato-punctatis, interstitiis seriatim
squamosis; antennis elongatis, picco-ferrugineis, capitulo sat magno, pallidiore. Subtus profunde et grosse punctatus.

Long. corp. lin. circa 1 ½.

Captus prope Nagasaki, in ins. Kushiu.

Not to mention the many features to which I have above alluded, the present fusiform (or somewhat anteriorly and posteriorly acute) Cossonid may be known from the other species described in this paper by the dirty, yellowish-brown hue of the short setae and mud-like scales with which its opake and coarsely-sculptured surface is rather densely clothed. There are eleven examples of it amongst the Coleoptera which were collected by Mr. Lewis in Japan, which (judging from an appended label) appear to have been beaten out of “old hedges” near Nagasaki in the island of Kushiu.

Genus 6. Coprodema (nov. gen.).

Corpus subfusiforme (in medio subparallelum, antice et postice leviter attenuatum), profunde sculpturatun, hinc inde parce subsquamoso-lutosum; rostro longiuscule, angustulo, subtereti; scrobe curvata, infra oculum desiliente; oculis subrotundatis, demissis, longe ante marginem prothoracis sitis: prothorace ovato, antice et postice truncato: scutello rotundato, distincto: metasterno elongato: elytris antice subparallelis, postice acutiusculis sed ad apicem ipsum truncatis. Antenna in medio rostri inserta; scapo breviusculo, clavato; funiculo 7-articulato, art. 1° reliquis paulo majore, sequentiibus longitudine subaequalibus, latitudine paulo crescentibus; capitulo sat magno, ovali, distincte annulato. Pedes breviusculi, validi, antici ad basin fere approximati, intermedii paulo distantes, postici valde distantes: femoribus muticis: tibiis ad apicem externum in uncum magnum valde inflexum, necnon ad internum in spinulum minutum productus: tarsis brevibus, filiformibus, art. 1 ½, 2o, 3o, 4o latitudine longitudine subaequalibus (3o fere simplici, i.e. precedingus vix latiore et vix bilobo), ult. vix clavato, unguiculis parvis armato.

Obs.—Genus staturà sculpturâque etiam Calandram primà facie simulans, et aliquo modo Pholidoforo congruens; sed ab hoc distinguitur corpore grossius sculpturato, antice et postice minus acuto, et multo minus squamoso (squamis quasi luteis solum, nec setiformibus, parciusque adspersis), necnon elytris ad apicem sensim
truncatis, antennis pedibusque brevioribus,—illis in medio (nec ante medium) rostri insertis, et his paulo valoribus, unco tibiali longiore robustiore ac magis curvato, tarsisque multo brevioribus ac fere simplicibus (articulo tertio præcedentibus vix majore et vix bilobo).

A κόπρος, lutum, et δέμας, corpus.

The primà facie aspect and outline of the opake and deeply sculptured little weevil for which I have been compelled to establish the present genus is a good deal suggestive of Calandra; but its 7-jointed funiculus, medially-inserted antennae, widely separated eyes, and short, filiform feet, apart from the other details of its structure, show it to be an undoubted Cossonid. Indeed, in the tendency of its surface to become unequally incrusted with mud-like scales (or which, perhaps, has more the appearance of a kind of scaly deposit) it approaches Pholidoforus; but in that genus the clothing is not only very much denser and more regular, but the scales are of an ordinary character, many of them being suberect (though short) and setiform. In other respects Coprodema differs from Pholidoforus in being rather smaller, and less acute both before and behind, and more coarsely and conspicuously sculptured, in having its elytra appreciably truncated at their hinder apex (though perhaps not sufficiently so to expose any decided portion of the pygidium), and in its limbs being very considerably shorter,—the antenna, moreover, being implanted in the middle of the rostrum (instead of somewhat before it), whilst its tibial hook is more largely developed and its feet very much less so (the third joint being small and almost simple, and the terminal one comparatively abbreviated and but little clavate, with the claws smaller).

6. Coprodema calandraeformis, n. sp.

C. subfusciformis, nigra, opaca, parce inæqualiter subcinereo-squamoso-lutosa; capite prothoraceque profunde, rugose et confertim punctatis (punctis in hoc grossis), rostro versus apicem rufescentiore et ibidem vix sculpturato, oculis omnino demissis; prothorace mox pone apicem transversim constricto; elytris profunde, confertim et grosse punctato-sulcatis, interstititis alte et argute costatis ac (oculo fortissime armato) minutissime et vix perspicue seriatim setulosis, ad apicem ipsum truncatis; antennis pedibusque brevibus, robustis, rufescentioribus, capitulo sat magno,
pallidiore, tarsis parvis, brevisbus. Subtus profunde et grosse punctata.

Long. corp. lin. circa 1½.


I have already so fully pointed out the structural peculiarities of this insect that I need scarcely do more than call attention to its very coarsely sculptured surface, the elytral interstices being likewise raised into conspicuous ridges or costae. There are thirteen examples of it now before me, amongst Mr. Lewis's Coleoptera, a portion of which have the label appended to them of "Nagasaki;" and others were taken "in deciduous trees near the watercourse at Hiogo, in the island of Nipon."

Genus 7. Exodema (nov. gen.).

Corpus et structura generalis fere ut in Coprodema, sed illud paulo majus ac paulo magis parallellum (i.e. minus fusiforme), rostro paululum crassiore, oculis vix majoribus, antennis sensim longioribus, capitulo submajore, necnon mox ante medium (nec omnino in medio) rostri insertis, elytris integris (nec ad apicem subtruncatis), metasterno sublongiore, pedibusque conspice longioribus, —femoribus sensim minus clavatis, et tarsis (multo longioribus) haud filiformibus, art.° 3°° evidenter latiore ac bilobo.

Ab ἐξω, extra, et ἐπιρας, corpus.

In its general outline, and opaque, densely sculptured surface (which is more or less sparingly besmeared with dirty, whitish scales (or, as it were, a kind of mud-like deposit), the unique insect from which the above characters have been taken so closely resembles Coprodema that it might well be regarded, at first sight, as another member of that group; yet when accurately inspected it differs so essentially in the structure of its feet, which are not only much longer but have their third joint (instead of small and simple) appreciably widened and bilobed, that I cannot but treat it as the type of a nearly-allied but probably distinct genus. As regards its less important particulars, its antennæ are a trifle more elongate, and not quite so medially inserted, being implanted just perceptibly before the middle of its (rather thicker) rostrum, its eyes are a little more developed, its elytra are not at all truncated at their apex, and its metasternum and legs
(especially the latter) are appreciably longer. Its femora also (at any rate the anterior pair) are, proportionately, not quite so clavate.

7. Exodema sublutosa, n. sp.

E. parallelo-subfusiformis, piceo-nigra, opaca, parce inqualiter subcinereo-squamoso-lutosa; capite prothorace profunde, rugose et confertim punctatis (punctis in hoc grossis), oculis subprominulis; prothorace mox pone apicem transversim consticto; elytris profunde, confertim et grosse punctato-sulcatis, interstittis dense transversim rugulosis, costatis, ac (oculo fortissime armato) minutissime et vix perspicue seriatis setulosis; antennis pedibusque rufescentioribus, capitulo magno, pallidiore, tarsis longiusculis. Subtus profunde et grosse punctata.


Capta cum specie praecedenti ad Hiogo in ins. Nipon, hactenus unica.

Apart from the characters above enumerated, the present insect differs from the Coprodema calandræformis (which primà facie it very closely resembles) in being a trifle larger and more parallel, and in its elytral interstices being less sharply costate and more transversely-rugulose. The single example from which the diagnosis has been compiled is also a little more piceous in hue, and not quite so densely besmeared with mud-like scales; but this may be merely accidental. It was mixed-up with Mr. Lewis's specimens of the Coprodema calandræformis (captured at Hiogo, in the island of Nipon), and from which indeed I did not at first sight distinguish it.

Genus 8. Phléophagosoma (nov. gen.).

Corpus angustulum, elongatum, plus minus lineari-fusiforme, calvum, profunde sculpturatum: rostro elongato, angustulo, tereti, arcuato; scrobe profundâ, curvâ, infra oculum desiliente; oculis longe ante marginem prothoracis sitis, plus minus demissis: prothorace elongato-ovato, antice et postice truncato, fere integro (i.e. pone apicem vix consticto); scutello rotundato, valde distincto: metasterno elongato: elytris elongatis, nunc ovato-subcylindricis, nunc subcylindricis. Antennæ elongatæ, in medio rostri insertæ; scapo subrecto, leviter clavato; funiculo 7-articulato, art.° I° subquadrato-obconico (reliquis majore, sed vix magno),sequentibus
latitudine paulo crescentibus; capitulo sat magno, ovali, distincte annulato. Pedes validi, antici ad basin fere approximati, intermedii distantiore, postici valde distantes: femoribus muticus: tibiis ad apicem externum in uncum magnum productis: tarsis brevibus, art. is 1°, 2°, 3° longitudine subequalibus (nec 1° elongato), 3° fere simplici (i.e. vix dilatato, vix bilobo), ult. 3° unguiculis minutissimis armato.

Obs.—Genus Phlœophago et Rhyncolo affinitate proximum, sed corpore angustiore, magis fusiformi, minus convexo, prothorace magis elongato, rostro longiore graciliore, tarsisque sensim brevioribus (art. 1°, 2°, 3° longitudine subaequalibus, nec 1° elongato) facile distinguitur.

A Phlœophagus, et σωμα, corpus.
(Typus.—P. minutum.)

The two insects from which the above structural diagnosis has been compiled are so dissimilar in size, and are so distinct in several points of their structure (albeit not very important ones), that I cannot feel entirely satisfied that they should be looked upon as members of the same actual group; yet, being unwilling to multiply genera unnecessarily, and thinking it far from improbable that species of intermediate stature will ultimately be brought to light, I prefer to treat them as congeneric,—premising only that I would desire to regard the P. minutum as the type.

In their primâ facie aspect these two insects have more perhaps in common with the European Phlœophagi and Rhyncoli than any other of the species which were obtained by Mr. Lewis in Japan; and yet from both of those (nearly allied, and not very satisfactorily separated) forms they are, I think, manifestly distinct,—differing in being not only narrower and more fusiform and less convex, but likewise in their prothorax and rostrum being proportionately more elongate, whilst their tarsi are appreciably shorter, the first joint being (instead of produced) subequal in length with the second and third.

Although, however, the antennæ of both of the species described below are inserted medially, there is a slight disparity in the structure of those organs, as well as in that of their tibiae,—the second funiculus-joint being no longer than the following ones in the P. minutum, and
the tibiae being armed at their inner apex with an evident minute spinule; whilst in the *P. cuvirostre* the tibiae have their inner angle almost simple, and the second articulation of the funiculus appreciably a little elongated and obconic. Moreover in the first of the species the body is very minute and fusiform, whereas that of the second is *comparatively* large, and more depressed and parallel. Yet these discrepancies are very likely, after all, no more than specific ones.

a. *Corpus minutum; scutello distincto; antennis gracilibus, funiculi art.° 2° sequentibus non longiore; tibiis ad apicem internum in spinulum parvam productis.*

8. *Phloeophagosoma minutum*, n. sp.

*P. elongatum*, ovato-fusiforme, gracile, angustulum, subnitudum, piceum; rostro elongato, angustulo, tereti, subcurvato, versus apicem rufescentiore, magis polito ac minute parceque punctulato, oculis demissis; prothorace elongato-ovato, antice posticeque truncato, convexo, sat grosse sed leviter punctato; elytris elongate subcylindrico-ovatis basi truncatis, profunde et confertim sulcato-punctatis (aut forsan crenatis), interstitiis costato-elevatis et subrugulosis, ante apicem conspicue constrictis; antennis pedibusque clare rufo-piceis (aut fere piceo-ferrugineis), illarum capitule pallide. Subtus subparce punctatum, punctis vix profundis.

Long. corp. lin. circa 1¼.

*Captum* ad radices graminis, per oram arenosam maritimam; ad Simabara, in ins. Kushiu.

Apart from its characters of comparatively minute size, narrow, fusiform outline, rather elongate rostrum, and deeply sculptured, convex upper surface, the present interesting little Cossonid may be further known by its piceous hue and brightly rufescent limbs, as well as by its (elongate-ovate) prothorax being almost unconstricted behind the apex, and by its eyes being hardly at all prominent. It is the smallest member of the family which was brought by Mr. Lewis from Japan. Six examples of it are now before me, which Mr. Lewis states were captured by a native collector, at the roots of a wild grass, on the sandy coast of Simabara, in the island of Kushiu.
b. *Corpus majus; scutello valde distincto; antennis robustis, funiculi art.° 2° sequentibus distincte paulo longiore; tibiis ad apicem internum fere simplicibus.*


*P. elongatum, parallelo-fusiforme, subtitidum, nigrum; rostro elongato, tereti, convexo, curvato, antice gradatim paulo angustiore, magis polito ac minute parceque punctulato, oculis minus demissis (sed vix prominentibus); prothorace elongato-ovato, antice posticeque truncato, subdepresso, grosse et valde profunde punctato; elytris subparallelis, postice gradatim subattenuatis, depressis, valde profunde et grosse sulcato-punctatis, interstitialis costato-elevatis et minutissimae (vix perspicue) subseriatim punctulatis; antennis tarsisque piceis, illarum capitulo magno, pallidiore. Subtus profunde punctatum (punctis in medio metasterni obsoletis).

Long. corp. lin. 2.

*Captum ad Hiogo, in ins. Nipon, haecensus unicum.*

As already implied, I do not feel absolutely certain that this insect is congeneric with the preceding one; yet, judging from the single example from which the diagnosis has been drawn out, I scarcely think that its points of discrepancy are of sufficient importance to indicate generic separation,—for in their antennae being inserted medially, as well as in their rostra being *comparatively* long and slender, their scutella conspicuous, and their feet short and subfiliform (the first joint of which is *not* elongated), they are *inter se* on much the same type. Yet the present species is *prima facie* exceedingly different from the *P. minutum,—being not only very much larger, darker, less narrowed, more parallel, more deeply sculptured and more depressed, but likewise with its scutellum larger, and its antennae more robust, the second funiculus-joint of which is (although short) appreciably longer and more obconical than those which follow it. Its elytra also, instead of being elongate-ovate (or a little widened behind the middle), are more decidedly parallel, or, if anything, perhaps a trifle *narrowed* (gradually) behind; and its tibiae do not appear to be armed with a little spinule at their inner apex. In addition to which its rostrum is somewhat thicker (especially towards the base), as well as convexer and more arcuate; and its eyes are less depressed.
Cossonidae of Japan.

Judging from an appended label, the single example from which the above description has been drawn out appears to have been captured by Mr. Lewis at Hiogo, in the island of Nipon.

Genus 9. Pseudocossonus (nov. gen.).

Corpus angustum, elongatum, plus minus fusiformi-cylindricum, calvum, minus profunde (saltém antice et subtus) sculpturaturn: rostro parum elongato, robusto, tereti; scrobe profundià, curvata, infra oculum desilente; oculis longe ante marginem prothoracis sitis, rotundatis, prominulis: prothorace magnō, elongato-ovato, antice et postice truncato, ad latera rotundato-ampliato, mox pone apicem leviter constricto: scutello rotundato, valde distincto: metasterno elongato: elytris subcilindrico-paral-lelis. Antennae aut longissimae, aut breviusculae, vix pone medium rostri insertae, crassae; scapo subflexuoso, gradatim valde clavata; funiculo 7-articulato, crasso, art. 1° subquadrato, sequentibus brevibus, latitudine paulo crescentibus, inter se sat arcte applicatis; capitulo parvo, ovali, minus abrupto, distincte annulato. Pedes validissimi, erissi, breves, antici ad basin fere approximati, intermedii distantiiores, postici valde distantes: femoribus muticis: tibiis latis, ad apicem externum in uncem magnum inflexum, necnon ad internum in spinam robustam distinctam productis, anticis versus apicem internum insectoribus distinctius pilosis: tarsi crassis, tibiis ad apicem conspicue armatis, tarsis minutissimis munito. Aliter conspicuum est prothorace magnō, in medio rotundate ampliato (sed ibidem vix elytris latiore), minus profunde sculpturatō, antennis (vix pone medium rostri insertis) incrassatis, funiculo crasso, articulis inter se subarcte adpressissimis, capitulo parvo atque minus abrupto, scutello valde distincto, necon corpore elongato, fere parallelo, depressisculo, nitido, Cossoni formam aliquo modo simulante.

A ψευδόξ, falsus, et Cossonus.

The present genus, the two representatives of which,
described below, have much the primâ facie appearance of small Cossoni, is well characterized by its extremely robust legs and abnormally short and incrassated feet, the apical joint of which is unusually abbreviated and (instead of being clavate) conical.* Its claws are excessively minute; and its antenna, which are a good deal thickened, are implanted immediately behind the middle of the rostrum. In other respects it is remarkable for its broad funiculus-joints, which are closely compacted together (the second, moreover, not being at all longer than those which follow it), and for its rather small and but very slightly widened capitulum, as well as for its greatly developed prothorax, distinct scutellum, elongate, parallel outline, and the comparative robustness of the hook and spine at apex of its tibiae,—the front pair of which, moreover, are densely fulvo-pubescent towards their inner extremity.

a. Rostrum elongatum, antennis longiusculis: tibiarum spina apicalis interna valde distincta.

10. Pseudocossonus brevitarsis, n. sp.

P. linearis, nitidus, niger, depressissculus; capite prothoraceque parce et minute punctulatis (punctulis in medio rostri elongati evanescentibus), hoc magno, rotundato-ovato, ad latera in medio valde rotundato-ampliato; elytris elongatis, parallelis, subdepressis, parum profunde punctato-striatis, interstitiis latis convexis et parcissime minutiissimeque (sub lente) punctulatis; antennis tarsisque crassis, robustis, piceis, illis (scapo excepto) tibiasque anticas versus apicem internum griseo-pubescentibus, capitulo parvo pallidiore. Subtus fere haud sculpturatus (tantum punctulis minutis obsoletis, tamen versus utrumque latus distinctioribus, adspersus).


Captus prope Yokohama, adhuc unicus.

Both of the Pseudocossoni here described agree in their parallel outline and dark, shining surface, as well as in the fact of their head and prothorax being more finely and sparingly punctuated than in any of the other members of the family with which we are concerned; but the present

* Judging from the analogy of the genus Heterarthrus, it is not impossible that the conical structure of the last joint of the feet may prove to be a sexual character; but until further material, of the two species now under consideration, has been obtained, this point cannot be settled.
species is considerably larger, and a trifle less depressed, than the *P. brachypus*, and its rostrum and antennae are longer. The former is likewise a little narrower (relatively) and more arcuate, its prothorax is more rounded-outwards in the middle, its elytra are unmargined at their extreme base, and the hook and spine at the apex of its tibiae are somewhat more powerfully developed. The unique example from which the diagnosis has been compiled appears to have been captured by Mr. Lewis near Yokohama.

b. *Rostrum breviusculum, antennis brevibus: tibiarum spina apicalis minus elongata.*

11. *Pseudocossonus brachypus*, n. sp.

*P. præcedenti minor et paulo depressior, rostro anten-nisque brevioribus (illo sensim latioribus), prothorace magis triangulari-ovato (i. e. pone medium, nec in medio, rotundate ampliato), elytris paulo brevioribus, ad humeros obsolete subrufescentibus, necon ad basin ipsam propo scutellum evidenter marginatis, tibiis ad apicem internum minus elongate spinosis.

Long. corp. lin. 2.

*Captus*, semel tantum, ad Tomatzu, prope Nagasaki, in ins. Kushiu.

As already implied, the present *Pseudocossonus* is a little smaller and more depressed than the preceding one, and its rostrum and antennae are shorter. The former, too, would seem to be a trifle broader, relatively, and less convex.

The prothorax, moreover, of the *P. brachypus* is more triangular (its widest point being behind, instead of at the middle): its elytra are distinctly margined at their extreme base (particularly on either side of the scutellum), with their humeral angles appreciably subrufescent; and the spinule at the inner apex of its tibiae is not quite so powerfully developed. Like the *P. brevitarsis* it is unique, the single example having been taken by Mr. Lewis, at Tomatzu, near Nagasaki, in the island of Kushiu.

**Genus 10. Heterarthrus (nov. gen.).**

*Corpus angustum, cylindrico-fusiforme, calvum, minus profunde sed supra dense sculpturatum, laetius in elytris coloratum (nec omnino nigrum): rostro breviusculo, ro-
busto, parallelo, apice recte truncato et interdum paulatim etiam sublatiore; scrobe antice brevi latâ profundâ auriculiformi, dein subito angulatim deflexâ et usque ad marginem oculi inferiorem currente; oculis longe ante marginem prothoracis sitis, rotundatis, prominulis: prothorace elongato-ovato, antice et postice truncato, mox pone apicem constricto: scutello subrotundato, distincto: metasterno elongato: elytris fusiformi-cylindricis, basi truncatis et ibidem anguste marginatis. Antennae longiusculae, aut mox ante medium aut in medio rostri insertae; scapo gradatim clavato; funiculo 7-articulato, art. 1 mo subquadrato, vix incrassato, sequentibus brevibus, latitudine paulo crescentibus; capitulo magno, ovali, abrupto, distincte annulato. Pedes longiusculi, minus robusti: femoribus muticis, basi gracilioribus: tibiis ad apicem externum in uncum inflexum, necon ad internum in spinam (in anticus distinctam, sed in posticus ægre observandam) productis, posterioribus subflexuosus, versus basin gracilioribus: tarsis elongatis, art. 1 mo, 2 de 3 tieque longitudine subæqualibus (nec 1 mo elongato), 3 mo leviter dilatato et distincte bilobo, ult. mo longiusculo, in maribus clavato sed in feminis (supérne observando) fusiformi-conico (i.e. versus basin, nec versus apicem, subclavato), unguiculis sat magnis armato.

Obs.—Genus conspicuum colore elytrorum plus minus pallidiore, corpore angustulo cylindrico-fusiformi, antice conflertim punctulato, rostro brevissulo crasso parallelo, ad apicem recte truncato, pedibus longiusculis subgracilibus, tibiis posterioribus subflexuosus, tarsisque elongatis, articulo ultimo secundum sexum diverso.

A ἔρηφος, diversus, et ἀγρήφον, articulus.

The narrowish, elongate-fusiform outline, and the rather short and thick (though parallel, and apically truncated) rostrum of the insects which compose the present genus, added to their slenderer and less abbreviated legs and their comparatively lengthened feet (the terminal articulation of which differs in shape, apparently, according to the sex), will serve to distinguish it from the allied groups. Indeed, the sexual peculiarity of the apical tarsal joint is very curious, and one which I do not remember to have observed in any other Rhynchophorous form,—it being ordinary and clavate in the males, but conical (or, rather, fusiform-conical) in the females, the widest part being
towards the base instead of towards the apex.* And *Heterarthrus* is further remarkable for the punctuation of its head and prothorax being dense but at the same time fine, and for its elytra being more or less of a pallid hue (sometimes ornamented with a black patch),—an arrangement of colour which gives the insects a totally different aspect from any of the other *Cossonidæ* with which we have here to do. As regards the antennae, they are inserted either in the middle or just before the middle of the rostrum; and the four posterior tibiae are subflexuose and slender (particularly at their base), and less evidently armed at their inner apex. Their second funiculus-joint is (like the succeeding ones) short, and their club is large and abrupt.


12. *Heterarthrus Lewisii*, n. sp.

*H.* elongato-fusiformis, submitidus, convexiusculus; capite prothoraceque vel nigris vel brunneo-nigris, dense sed argute punctulatis, hoc elongato-ovato, elytris vix angustiore; elytris fusiformi-cylindricis, basi anguste marginitatis, rufo-ferrugineis (interdum negro-pictis), striato-punctatis (striis versus suturam profundioribus), interstitiis latis depressis subrugulosis et parissime minutissimeque (sub lente) punctulatis; antennis tarsisque plus minus piceo-ferrugineis, femoribus tibiisque plus minus piceis. Subtus leviter punctatus (punctis in abdomine fere obsoletis).

*Variat* elytris plaga magnâ suffusâ post mediâ (antice per suturam versus scutellum angustius currente) nigrescenti-ornatis.

Long. corp. lin. 2½.

*Captus* prope Nagasaki, in ins. Kushiu.

Species valde distincta, ornata, et in honorem cl. G. Lewis, insularum Japonicarum scrutatoris oculatissimi indefessi, citata.

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* This character, although real, is not a very easy one to observe,—inasmuch as when viewed laterally the joint seems to be equally clavate, and similar, in both sexes; and it is only when inspected carefully from above, and beneath a high magnifying power, that the conical outline, in that of the females, becomes evident. And I may add that, since writing the above, I have remarked the same peculiarity of tarsal articulation in a *Cossonid* from Ceylon, which has been communicated to me by Mr. Janson, and which indeed I have every reason to suspect (without further examination) is a true *Heterarthrus*. 
Being precisely similar in colour and sculpture, I should certainly have regarded this *Heterarthrus* as the other sex of the following one had not the more numerous examples of the latter revealed the fact that both males and females (as proved by the construction of their tarsi) are undoubtedly present. Hence I have no choice but to treat the two female individuals from which the above diagnosis has been drawn out as specifically distinct from the *H. pallidipennis*. Regarding this conclusion, therefore, as almost unavoidable, I may add that the *H. Lewisii* is not only larger than its ally, and with appreciably longer legs and antennae, but that its rostrum likewise is a little more lengthened (with the antennae implanted just before, instead of at, the middle point), and its third tarsal joint is just perceptibly more expanded and bilobed. It was taken by Mr. Lewis near Nagasaki, in the island of Kushiu, by beating old hedges.

b. *Antennae in medio rostri (paulo brevioris) insertae. Pedes paulo breviores.*

13. *Heterarthrus pallidipennis*, n. sp.

*H. formâ, sculpturâ coloreque ut in specie præcedenti; sed corpus paulo minus, rostro, antennis pedibusque sensim brevioribus, antennis in medio (nec mox ante medium) rostri insertis.*

*Captus prope Nagasaki, in ins. Kushiu; cum specie præcedenti degens.*

I have already implied that the present *Heterarthrus* is so like the preceding one that I should have taken it for a mere sexual form of the latter, had I not found a structural difference in the tarsi of the few examples now before me, which would seem to imply that both males and females are undoubtedly indicated; and I am therefore constrained to look upon the *H. pallidipennis* as specifically distinct from the *H. Lewisii*. The former may consequently be defined as being merely a little smaller than its ally, and in having its legs, rostrum, and antennae appreciably shorter,—the latter, moreover, being implanted more strictly medially than ante-medially. Mr. Lewis appears to have captured his specimens, along with those of the last species, out of old hedges, near Nagasaki, in the island of Kushiu.
Genus 11. MACRORHYNCOLOUS (nov. gen.).

Corpus fusiformi-cylindricum, angustum, subdepressum, calvum, nitidum, profunde sculpturatum: rostro brevi, crasso, lineari, arcuato; scrobe antice latâ profundâ brevi auriculiformi, dein subito angulatim deflexâ et usque ad marginem oculi inferiorim currente; oculis sat magnis, rotundatis, paulo prominentibus et longe ante marginem prothoracis sitis: prothorace elongato-ovato, antice et postice truncato: scutello rotundato, valde distincto: metasterno elongato: elytris parallelis, postice vix attenuatis. Antennae crassae, pone medium rostri insertae; scapo curvato, gradatim valde clavato; funiculo 7-articulato, art. 1° reliquis paulo magiore, sequentibus subæqualibus, latitudine vix crescentibus, inter se argute divisis sed hand laxis; capitulo ovato, apicem versus conspicue 3-annulato. Pedes breves, validi, crassi, antici ad basin parum approximati, intermedii distantiore, postici valde distantes: femoribus muticis: tibiis ad apicem externum in uncum acutum, necnon ad internum in spinam minorem productis: tarsis brevisculis, crassiusculis, art. 1”°, 2”°, 3”°que longitudine subaequalibus (nee 1”° elongato), 3”° fere simplici (i.e. vix dilatato, vix bilobo), ult. ”° unguiculis parvis armato.

Obs.—Rhyncolo affinitate proximum, sed differt corpore majore, longiore, ac magis cylindrico, rostro (licet brevi, crasso) conspicue parallelo, nec triangulari, scrobe aliter formatâ, oculis majoribus ac magis prominentibus, antennis pone (nee ante) medium rostri insertis, prothorace longiore, tibiisque (præsertim anticis) ad angulum internum in spinam majorem productis. A Cossono differt corpore minore, angustiore, magis fusiformi, rostro breviore latiore ac magis parallelo, oculis omnino rotundatis, antennis pedibusque plus minus brevioribus crassioribus, funiculi articulo secundo nullo modo sequentibus longiore, tarsorumque articulo primo minus evidentem elongato, et tertio sensim latiore ac magis cordato.

A μαξός, longus, et Rhyncolus.

The four individuals from which the above structural diagnosis has been drawn out might seem at first sight to represent an unusually large and elongate species of Rhyncolus; but a more critical examination will show that they cannot be associated with that group. Not to
Mention their larger size, more parallel outline, and more elongate prothorax, they differ considerably in the formation of their rostrum, which is neither thick and triangular like that of the typical Rhyncolus, nor comparatively slender and linear as in the normal members of Philæophagus, but somewhat intermediate between the two,—being short and incrassated, but nevertheless conspicuously parallel throughout (though not quite so short and broad, nor so depressed, as in Xenomimetes). Its scrobes, too, is very differently constructed from that of Rhyncelus,—being short, deep, wide, and auriculiform at its base, and then suddenly narrowed and bent downwards, at a sharp angle, beneath the eye. In addition to this, its eyes are larger and more prominent than those of the Rhyncolus (and the Philæophagus), its antennæ are implanted behind (instead of before) the middle of the rostrum, and its tibiiæ are produced at their inner angle into a more distinct spinule. In its thickened antennæ and limbs, and short feet, it is more, perhaps, on the Rhyncolus than the normal Philæophagus type.

14. Macrorhyncolus crassiusculus, n. sp.

M. angusto-linearis, parallelus, subdepressus, calvus, niger, nitidus; capite argute punctulato rostroque arcuatis convexis, oculis prominentibus; prothorace elogato-ovato, antice et postice truncato, mox pone apicem transversim constricto, profundius punctato, in medio obsolete carinato; elytris profunde arguteque striato-punctatis, interstitiis convexis et minutissime (vix perspicue) uniseriatim punctulatis; antennis pedibusque brevibus crassiusculis, rufo-piceis, illarum capitulo ferrugineo. Subtus sat dense profundeque punctatus.

Long. corp. lin. 1⅓—2⅓.

Captus inter fungus pinosque ad Hiogo, in ins. Nipon, mense Augusto, A.D. 1870.

The black hue and shining (though nevertheless deeply sculptured) surface of this beautiful Cossonid, added to its structural features to which I have above alluded, will suffice to distinguish it from everything else with which we are here concerned. The four examples from which the description has been drawn were taken amongst fir-trees and funguses, by Mr. Lewis, at Hiogo, in the island of Nipon.
Cossonidæ of Japan.

Genus 12. Xenomimetes (nov. gen.).

Corpus cylindricum, calvum, dense et profunde sculpturatum: capite convexo; rostro brevi, lato, sed capite sensim angustiore, et parallelo (nee triangulari), depresso; scrobe brevi, profundâ, curvâ, infra oculum desiliente; oculis longe ante marginem prothoracis sitis, rotundatis, valde prominentibus: prothorace subcylindrico, pone marginem anticum transversim constricto: scutello rotundato, distincto: metasterno elongato: elytris cylindricis, ad apicem ipsum paulo singulatim divaricatis. Antennæ breviusculæ, crassiusculæ, in medio (aut forsan mox ante medium) rostri insertæ; scapo recto, leviter clavato; funiculo 7-articulato, art.9 1sto subquadrato (reliquis majore, sed haud magno), sequentibus transversis, latitudine paulo crescentibus; capitulo abrupto, ovato, apice obscure annulato. Pedes validi, antici ad basin fere approximati, intermedii distantiores, postici valde distantes: femoribus muticis: tibiis subflexuosis (extus quasi paululum excavatis), ad apicem externum in uncum magnum inflexum, neon ad internum in spinam parvam productis: tarsi elongati, gracilibus, art.9 1sto longiusculo, 330 fere simplici (i.e. vix dilatato et vix bilobo), ult.90 elongato, graciusculo, unguiculís parvis armato.

Obs.—Corpus Hylurgi formam simulans, sed rostro, tibiiis abdomeque Cossonidis omnino congruit. A Syn-tomocero (= Eremotes, olim) ac Stenoscelide differt, inter alia, rostro (quamvis brevi) conspicue longiore, minus incassato, et lineari (nee triangulari), antennis aliter constitutis, elytrisque ad apicem sensim divaricatis.

A ἡβος, extraneus, et μυρτῆς, imitator.

The facies and sculpture of the remarkable Cossonid from which the above structural diagnosis has been compiled have so much in common, at first sight, with certain sub-Curculionideous forms (like Hylastes) of the Scolytide, that it must clearly be regarded as the type of another group in the vicinity of Eremotes (or Syntomocerus), which infests the pine trees at a high elevation in the Canarian archipelago. Yet its rostrum, although short and broad, is neither so short nor so broad as in that genus, and, moreover (instead of being thick and triangular), it is parallel and depressed, and appreciably narrower than the head. Its antennæ, also, are very different from what obtains in that group, being less thickened; and there is not that peculiarity, which forms so marked
a feature in *Eremotes*, as regards the diminished (and almost concealed) second funiculus-joint. Its elytra, moreover, are curiously rounded off separately, and sub-divaricate, at their apex,—much after the fashion we see in various *Apions* of the *vernale* type. Yet, in spite of these discrepancies (especially as concerns the breadth and outline of its rostrum), I feel satisfied that its real affinities are more with the particular genus to which I have just called attention, than with the *Rhyncoli*; though since it cannot be admitted into the section of the family, characterized by *Eremotes* and *Stenoscelis*, in which the rostrum is *excessively* abbreviated, thick, and triangular, I have placed it thus far towards the close of the present division.

15. *Xenomimetes destructor*, n. sp.

*X. cylindrica, atra, subnitida*; capite dense rugulosopunctato, rostro depressiusculo, in medio leviter canaliculato, oculis valde prominentibus, fronte convexâ; prothorace cylindrico, grosse punctato (punctis suboblongis ac longitudinaliter subconfluentibus), carinulâ mediâ laevi instructo; elytris transversim rugulosis, profunde crenato-striatis, regione scutellari desiliente, interstitione rugulosis ac minutissime subseriatim punctulatis, mox ante apicem utrinque plicato-subconstrictis necnon ad apicem ipsum singulatim divaricatis; antennis rufo-piceis, capitulo ferrugineo; pedibus nigro-piceis, tarsis rufescientioribus. Subtus grosse, sed leviter et vix dense, punctata.

*Long. corp. lin. 1 ¼-2.*

*Capta* inter pinos prope Nagasaki, in ins. Kushiu, hinc inde vulgaris.

The deep-black, cylindric, and coarsely, densely sculptured body of this insect, added to its short and broad, yet parallel, rostrum, and its very prominent eyes, will, in conjunction with the various characters to which I have above alluded, abundantly distinguish it from every other member of the *Cossonidae* with which we are here concerned. It was captured in considerable abundance by Mr. Lewis, on various occasions, amongst old pine trees near Nagasaki, in the island of Kushiu.


Corpus breviter cylindricum, postice obtuse terminatum, ( nisi oculo fortissime armato) calyum, vix nitidiusculum, profunde sculpturatum; rostro brevi, angustulosubtriangulari; scrobe fere versus medium oculi ascendentis; oculis rotundatis sed valde demissis: prothorace ovato basi truncato: scutello valde distincto: metasterno haud valde elongato: elytris parallelis, et (oculo fortissime armato) minutissime parcissime asperatis. Antennae brevissimae, glabrae, circa (aut vix pone) medium rostri insertae; scapo brevissimo; funiculo 6-articulato, art.° 1° latto (reliquis multo majore), antice recte truncato, sequentibus brevibus, latitudine paulo crescentibus, inter se arcte adpressis; capitulo abrupto, compresso, subrotundato, solido. Pedes breves, antiores fere contigui, et etiam postici haud late distantes: femoribus (præsertim antecis) incrassatis, muticis: tibis ad apicem externum in unicum acutum minus curvatum productis: tarsis longiusculis, gracilibus, filiformibus, art.° 1° longiusculo, 3° simplici (nee dilatato, nec bilobo).

The genus Hexarthrum (which, in the size and facies of its exponents, has much the primâ facie aspect of Rhyncolus) is at once remarkable amongst the Cossonides for its 6-articulated funiculus, its extremely abbreviated antennae, and its rather shortly-cylindric outline,—the elytra (which are very minutely and remotely asperated, when viewed beneath a high magnifying power) being obtusely rounded behind. It is also further distinguished by its shortened rostrum and legs, by its first funicular-joint being wide, and very straightforwardly lopped-off (or truncated) in front, by its club being rounded, compressed, and exceedingly solid, by its four anterior coxae being very nearly contiguous, by its femora (particularly the front pair) being a good deal thickened, and by its tarsi (the basal joint of which is appreciably elongated, and the third one simple) being slender and filiform. The only species of it which had hitherto been made known occurs at Madeira,—where I have met with it (though very rarely) crawling on the inner walls of houses (where I have little doubt that it fed upon the old planks and rafters), and where the late Mr. Bewicke formerly captured several examples of it amongst decayed, tinder-like
wood in a neglected out-house. I believe, therefore, that its mode of life is very similar to that of Pentarthrum and Mesoxenus; and if this be the case, I am the less surprised that Mr. Lewis should have detected a second representative of the genus in so distant a region as the Japanese archipelago.

16. Hexarthrum brevicorne, n. sp.

H. breviter cylindricum, vix nitidiusenulum, piceo-nigrum, et ( nisi oculo fortissime armato) calvum; rostro minute et dense punctulato; prothorace ovato basi truncato, dense, valde profunde, et argute punctato; elytris ( oculo fortissime armato) minutissime parciissimeque aspersatis, grosse sulcato-punctatis ( punctis magnis), interstititis minutiissime seriatis punctulatis; antennis ( brevissimis) tarsisque piceo-ferrugineis, femoribus tibisque nigro-piceis. Subtus grosse et profunde punctatum, et ( oculo fortissime armato) parce fulvo-sericatum.

Long. corp. lin. 1\4.

Captus ad Hiogo, in ins. Nipon.

The present Hexarthrum very closely resembles the H. capitulum, which has been observed hitherto only in Madeira; it is, however ( judging from the single example now before me), a little smaller and darker, its rostrum is not quite so thickened, its limbs are ( if anything) even more abbreviated still, its elytra ( which, when viewed beneath a high magnifying power, are not quite so appreciably asperate) have their striae deeper and their punctures somewhat larger; and its first and second abdominal segments are not quite so distinctly separated from each other by a sutural line. The unique example from which the diagnosis has been compiled was captured by Mr. Lewis at Hiogo, in the island of Nipon.

** Rostrum brevissimum, crassum ( aut parallellum, aut triangulare).

Genus 14. Sphilærocorynes (nov. gen.).

Corpus subcylindricum, supra fere calvum, subtus breviter pilosum, dense sed haud grosse sculpturatum: rostro brevissimo, crasso, sed tamen parallelo ( nec triangulari); scrobe antice brevissimâ latâ profundâ auriculiformi, dein subito angulatim deplexâ et mox obliteratâ; oculis longe ante marginem prothoracis sitis, rotundatis, valde promi-
A well-defined genus, which may at once be recognized by the shortness and thickness of its rostrum (which is nevertheless parallel, and not triangular as in *Stenoscelis*), by its thickened antennae having their scape elongate and very robust, their funiculus short, and their club extremely large, rounded, and abrupt, by its tarsi (the first joint of which is lengthened, and the third bilobed) being rather broad and pubescent, and by the fact of its legs being subequally distant at their base,—the anterior pair being less approximated, and the hinder ones more so, than is usually the case in the *Cossonidae*. And it is further remarkable for its body (which is nearly cylindrical, and with the eyes prominent) being sparingly clothed beneath with a fine and short pile; and for its front tibiae being somewhat widened, flexuose, and robust, with their apical hook largely developed.

17. *Sphærocorynes Lewisianus*, n. sp.

*S. subcylindricus, convexus, supra (nisi oculo fortissime armato) calvus, niger, subopacus; capite prothoraceque
Mr. T. Vernon Wollaston on the
subtilissime alutaceis et dense punctatis, rostro brevissimo, crasso in medio profunde canaliculato, oculus prominentibus, hoc cylindrico-ovato, convexo, in medio obsolete carinato; elytris parallelis, paulo picescentioribus, transversim rugulosis, subpunctato-sulcatis, interstitiis latiusculus convexus (presertim postice) et argute seriati punctulati; antennis tarsisque incrassatis, rufescientioribus, illarum capitulo magno, rotundato, obscuriore, pubescenti; tibiis anticus intus versus apicem fulvo-pubescentibus. Subtus convexus, dense sed leviter punctatus, necnon breviter fulvo-pubescentis. Subtus convexus, dense sed leviter punctatus, necnon breviter fulvo-pubescentis.

Long. corp. lin. 1\(\frac{1}{2}\).


In addition to the characters to which I have just called attention, the present somewhat Hylastes-like Cossonid may be further known by its dark hue, and by its opaque and closely, but not very coarsely, sculptured surface (the head and prothorax of which are minutely alutaceous, as well as punctured), and by its elytral striae being deep, but rather lightly punctured, with the interstices broad in front, narrower and more convex behind, transversely rugulose, and branded with a longitudinal row of very distinct punctules,—a type of sculpture with which we are very familiar in certain members of the Hylastinae. Two examples of it were beaten by Mr. Lewis, “out of brushwood,” near Nagasaki, in the island of Kushiu, on the 22nd of April, 1870.

Genus 15. Stenoseelis.

Wollaston, Journ. of Ent. i. 141 (1861).

Corpus ovato-cylindricum, crassiusculum, calvum, grosse sculpturatum, postice etiam asperatum, Hylastes aut Dendroctonus primâ facie simulans: capite subgloboso, crasso; rostro brevissimo, subtriangulari, crasso; scrobe fere nullo (antennis ad basin in impressione brevi mox ante medium oculi inseritis); oculus magnis, rotundatis, sed omnino demissis: prothorace breviter subcylindricovato, antice et postice truncato, pone apicem transversim constricto: scutello minutissimo, punctiformi: metasterno haud valde elongato: elytris ovato-cylindricis, postice obtuse desilientibus et asperatis: abdominis segm.\(\text{tis}^{\text{1}^\text{mo}}\) et
2° magis evidenter separatis quam in Cossonidis typicis, neenon inter se subæqualibus. Antennæ brevissimæ subgraciles, prope medium rostri brevissimi insertæ; scapo brevissimo, clavato; funiculo 7-articulato, art. 1° magno, lato, transverso-quadратo, sequentibus (a 2° parvo, brevissimo, transverso) longitudine paulo sed latitudine valde paulatim crescentibus, inter se argute separatis, ult. 3° ad capitulum magnum solidum subglobosum haud arcte applicato. Pedes subgraciles, antiores ad basin approximati, postici parum (sed hand valde) distantes: femoribus muticis, tibii rectis, subgracilibus, ad apicem externum in unicum magnum deflexum elongatum productis: tarsis longissimis, gracilibus, art. 1° elongato, 3° reliquis vix latiore sed evidenter minute bilobo, ult. 3° elongato, clavato, unguiculis magnis armato.

Obs.—Formá generali breviter ovato-cylindricâ, rostro brevissimo crasso subtriangulari, scrobe nullo, elytris postice obtuse desilientibus neenon ibidem etiam asperatis, coxisque anterioribus approximatis genus inter Cossonidas anomalum, et Hylastes, aut potinès Dendroctonus, Scolytidarum, primâ facie simulans. Præterea conspicuum est corpore calvo, crasso, rugose sculpturato, oculis magnis sed omnino demissis, antennis brevissimis, scapo praecipue brevissimo, funiculi articulo primo magno, transversim quadrate, reliquis (a 2° minutissimo, transverso) gradatim conspicue latoriibus, capitulo magno rotundato solido, metasterno haud valde elongato, etiam coxis posticis haud late separatis, pedibus subgracilibus, tarsisque (longissimis) praecipue gracilibus, art. 3° et ult. 3° elongatis, hoc unguiculis magnis munito.

The unique example from which I have drawn the above structural characters is one of the most important and interesting of all the Japanese Cossonidae which were collected by Mr. Lewis, as supplying a second representative of a remarkable group which has hitherto been observed only at St. Helena and the Cape of Good Hope; and it is the nearest true member of the Rhyncephora (as yet made known) to the closely-allied Hylastideous forms of the Scolytidae,—its somewhat short, ovate-cylindric outline, and excessively abbreviated, thick, subtriangular rostrum, in conjunction with its obsolete scrobs, its approximated four anterior coxae, and the fact of its elytra being rather obtusely-shortened, or bent down, behind, where they are besprinkled with tuberculiform asperities,
being strongly suggestive, at first sight, of such groups as *Hylastes* and *Dendroctonus*. In other respects it may be known by its bald, but coarsely sculptured, surface; by its eyes being large, yet entirely sunken or depressed; by its antennæ being excessively short (more particularly as regards the scape, which projects very little beyond the lateral edge of the rostrum), with their first funiculus-joint large and transverse-quadrato, whilst the rest are very abbreviated, though increasing gradually (from the excessively minute basal one) in breadth, and with their club rounded, solid, and abrupt; by its metasternum and first abdominal segment being less elongated than is usual amongst the *Cossonidae*; by even its hinder coxae being but slightly separated; by its legs being rather slender, with their tibial hooks elongate and powerfully developed; and by its tarsi being likewise much lengthened, but at the same time extremely thin,—with the basal and apical articulations comparatively long, the third one hardly at all expanded, but nevertheless minutely bilobed, and the claws very conspicuous.

18. *Stenoscelis gracilitarsis*, n. sp.

S. ovato-cylindricus, convexus, calvus, niger, subnudus; capite rotundato, crasso, dense punctulato, punctis in rostro (brevissimo, subtriangulari) longitudinaliter sub-confluentibus, oculis omnino depressis; prothorace breviter subcylindrico-ovato, pone medium ad latera rotundato-ampliato sed tamen ibidem sinuato, profunde et grosse (sed vix densissime) punctato, paullum malleato-inæquali; elytris ovato-parallelis, vix picescentioribus, profunde et grosse crenato-striatis, interstitiis latis, costato-elevatis et minute seriatim punctulatis, necnon versus apicem (obtuse-desilientem) tuberculis parvis parce asperatis, regione scutellarì desiliente; antennis tarsisque gracilibus, picescentioribus, illis brevissimis, his elongatis. Subtus grosse punctatus.

Long. corp. lin. 1½.

*Captus* (semel tantum) in pino quodam antiquo, Augusto A.D. 1870, ad Hiogo, in ins. Nipon.

Although in its generic details unmistakeably identical with the *Stenoscelis hylastoides*, from St. Helena and the Cape of Good Hope, the present insect is a little blacker and less picescent than that species, its prothorax is not only more shining but very much more deeply and coarsely
(and not so closely) punctured, and the sculpture of its elytra (which have their region immediately surrounding the scutellum depressed into a sort of abbreviated, posteriory-evanescent channel) is quite different,—their striae (instead of being obsolete) forming deep crenated grooves, with the interstices consequently (although broad) costate and convex; and there is no appearance of the coarse transverse rugae which roughen their anterior half in that insect. The underside moreover is very much more grossly punctured, with the first abdominal segment a trifle shorter (it being subequal in length to the second); and its antennae are even still more abbreviated than those of the S. hylastoides (particularly as regards their scape), with the first funiculus-joint broader and shorter, and the remaining six gradually more widened and transverse, whilst the capitulum is perhaps (if anything) even larger, and more rounded and abrupt.

The unique specimen from which the description has been compiled was taken by Mr. Lewis, during August, 1870, off an old fir-tree at Hiogo, in the island of Nipon.