

VI. *Synopsis of the Coleopterous Family Paussidæ ; with Descriptions of a new Genus and some new Species.* By J. O. WESTWOOD, Esq., F.L.S., &c.

Read June 1st and 15th, 1841.

**E**LEVEN years ago I had the pleasure of submitting to this Society a monograph of the remarkable family of beetles named *Paussidæ*, which was honoured by publication in the 16th volume of the Society's Transactions. Since that period numerous additions have been made to the list of species, and even of genera, and our acquaintance with the structure of some of the previously described species has been rendered more perfect. I avail myself, therefore, of the opportunity offered by the occasion of presenting to the Society the description of several additional new species, to add an entire synopsis of the species now known, feeling convinced that the extreme rarity of the insects, of many of which we are still acquainted with only single specimens, will render this supplement to my former memoir acceptable.

Of the genera regarded in my monograph as belonging to this family, one, *TROCHOIDEUS*, must be removed, as an examination of its cibarian organs has proved that it belongs to the *Endomychidæ*. I am now acquainted with four, if not five species of this genus.

Sp. 1. *Tr. cruciatus*, Dalm. [Linn. Trans. xvi. p. 675.]

In Gum Copal.

Sp. 2. *Tr. Dalmanni*, Westw. in Trans. Ent. Soc. ii. p. 96. pl. 10. f. 8.

Madagascar.

Sp. 3. *Tr. Desjardinii*, Guér., Rev. Zool., No. 2. p. 22. Westw. in Trans. Ent. Soc. ii. p. 97.

Island of Mauritius.

Sp. 4. *Tr. Americanus*, Buquet in Guér. Rev. Zool., June 1840, p. 174.

Bogota, Columbia.

Sp. 5.? *Tr. Hopei*, Westw. ined. Possibly identical with *T. Americanus*.

New Granada. In Mr. Hope's Collection.

The following is a synopsis of the genera really belonging to the family, two additional ones being introduced, which have been discovered since the publication of my monograph.

*Antennæ quasi biarticulatæ :*

*Caput* thorace haud immersum, collo distincto, ocellis nullis.

*Palpi* labiales articulo ultimo elongato . . . . . 1. PAUSSUS.

*Palpi* labiales articulis æqualibus . . . . . 2. PLATYRHOPALUS.

*Caput* immersum, ocellis duobus . . . . . 3. HYLOTORUS.

*Antennæ quasi 6-articulatæ :*

*Prothorax* angulis anticis valdè productis . . . . . 4. PENTAPLATARTHUS.

*Prothorax* transversus, angulis anticis rotundatis, posticis  
valdè emarginatis . . . . . 5. LEBIODERUS.

*Prothorax* truncato-cordatus . . . . . 6. CERATODERUS.

*Antennæ quasi 10-articulatæ . . . . . 7. CERAPTERUS.*

Genus 1. PAUSSUS, *Linn.*

The species of this genus might be formed into subgenera from the variations in the formation of the club of the antennæ, the joints of the maxillary palpi, the form of the thorax and of the feet, the number of spurs to the tibiæ, and the geographical distribution. I shall, however, in this place divide them only as heretofore into two primary groups from the form of the thorax.

A. Thorax quasi bipartitus.

a. Antennarum clava posticè haud excavata.

Sp. 1. *Paussus microcephalus*, Linn. [Linn. Trans. xvi. p. 631.]

Africa?

Sp. 2. *P. Jousselinii*, Guér., Rev. Zool., No. 2. p. 21. Trans. Ent. Soc. ii.  
p. 90.

Near Rangoon.

Sp. 3. *P. Linnæi*, Westw. [Linn. Trans. xvi. p. 634.]

*Habitat* unknown.

Sp. 4. *P. Burmeisteri*, Westw., Trans. Ent. Soc. ii. p. 86. pl. 9. f. 3.  
Cape of Good Hope.

Sp. 5. *P. rufitarsis*, Westw. [Linn. Trans. xvi. p. 638.]

*Habitat* unknown.

Sp. 6. *P. pilicornis*, Donovan. [Linn. Trans. xvi. p. 643.]

Bengal.

Sp. 7. *P. turcicus*, Frivaldsk. Hung. Trans., 1835. Westw. in Trans. Ent.

Soc. ii. pl. 10. f. 2.

Balkan Mountains.

*b. Antennarum clava posticè excavata.*

Sp. 8. *P. thoracicus*, Donovan. [Linn. Trans. xvi. p. 640.]

Bengal.

Sp. 9. *P. Fichtelii*, Donovan. [Linn. Trans. xvi. p. 641.] Saunders, in Trans.

Ent. Soc. vol. ii. pl. 9. f. 1.

Bengal.

Sp. 10. *P. fulvus*, n. sp.

Luteo-fulvus subopacus, elytris magis rufescentibus, antennarum articulo basali thoracis lateribus posticè femoribusque obscurioribus, capite suprâ profundè impresso.

Long. corp. lin. 3.

*Habitat* in Indiâ Orientali.

*Caput* pone oculos thorace paullò angustius, luteo-fulvum, subopacum, tenuiter punctatum, lineâ impressâ medianâ e margine antico ad verticem ductâ, in impressionem magnam orbicularem lateribus elevatam desinente; antennarum articulus basalis punctatus; clavâ magnâ, latâ, ovatâ, depressâ, luteâ, margine antico parùm irregulari, postico dilatato profundè excavato, margine omni sinuato, angulo externo basali valdè obtuso. *Prothorax* bipartitus; parte anticâ paullò latiori, lateribus angulariter productis; mediâ profundè transversim impressus, lateribus utrinque elevatis. *Elytra* prothorace multò latiora, rugosula, opaca. *Pedès* valdè compressi; tibiis calcaratis, posticis latioribus.

Sp. 11. *P. tibialis*, n. sp.

Castaneus nitidus, elytris singulis plagâ magnâ nigrâ, tibiis 4 anterioribus elongatis; posticis multò latioribus compressis, antennarum clavâ posticè profundè excavatâ.

Long. corp. lin.  $2\frac{3}{4}$ .

*Habitat* in Bengaliâ. In Mus. D. Westermann.

Castaneus; caput thorace paullò angustius, lateribus pone oculos obliquis punctatis, lineâ impressâ longitudinali medianâ ad verticem ductâ; antennarum clavâ subovatâ, margine antico acuto curvato, parte posticâ incrassatâ et profundè excavatâ, sinûs marginibus

ferè integris; angulo basali externo subacuto. *Palpi* maxillares articulo 2<sup>do</sup> maximo, rotundato-dilatato, apice emarginato, articulis 3<sup>tio</sup> 4<sup>toque</sup> minutis. *Prothorax* capite paullò latior, bipartitus; parte anticâ, lateribus obtusè angulatis, in medio transversè elevatâ; parte posticâ in medio profundè impressâ, lateribus tenuibus, elevatis. *Elytra* thorace latiora, posticè sensim dilatata, fulvo-castanea, disco nigro nitido. *Tibiæ* 4 anteriores tenues, subcylindricæ; 2 posticæ breviores, latiores, compressæ.

Sp. 12. *P. excavatus*, Westw. [Linn. Trans. xvi. p. 637.]

Senegal.

Sp. 13. *P. ruber*, Thunb. [Linn. Trans. xvi. p. 635.]. Westw. in Trans. Ent. Soc. vol. ii. pl. 9. f. 5.

Cape of Good Hope.

Sp. 14. *P. Stevensianus*, n. sp.

*P.* pallide luteus, capite rugosulo; tuberculis duobus elevatis inter oculos, antennarum clavâ magnâ posticè excavatâ, elytris apicem versus fasciculis duobus minutis pilorum instructis.

Long. corp. lin.

*Habitat* in Indiâ Orientali. In Mus. D. Stevens.

*Caput* thoracis ferè latitudine, pallidè luteum, rugosulum, angulis posticis pone oculos parùm rotundatis, collo distincto, lineâ longitudinali impressâ e fronte ad verticem capitis ductâ, tuberculis duobus elevatis summo apice excavatis, inter quæ et oculos utrinque linea tenuis impressa. *Antennæ* punctatæ; clavâ magnâ, margine antico acuto, curvato, postico valdè excavato, marginibus excavationis sinuato-tuberculatis, angulo basali externo in dentem obtusum producto. *Prothorax* bipartitus, partis anticæ lateribus acutè angulatis, carinâ transversâ elevatâ, in medio interruptâ; parte posticâ utrinque elevatâ, in medio depressâ. *Elytra* pallidè luteo-subnitida, posticè obscuriora, parùm rugosula, thorace ferè duplò latiora, posticè utrinque versus angulos posticos fasciculo pilorum rigidorum parvo. *Pedes* elongati, tenues, punctati; tibiis posticis parùm latioribus; tarsis distinctè 5-articulatis. *Palpi* maxillares articulo 2<sup>do</sup> latissimo. *Calcaria* obsoleta, setis nonnullis brevibus tamen ad apicem tibiæ internum, ut et in apice articulorum tarsi. *Abdominis* articulo penultimo in medio fisso. *Caput* et *thorax* subtùs pallida; mesosterno abdomineque obscurioribus.

I have only seen a single specimen of this species in the collection of Samuel Stevens, Esq., who obtained it, together with specimens of *Platyrhopalus denticornis* and *P. aplustrifer*, in a small collection of Indian insects, without any indication of its precise locality.

Sp. 15. *P. cochlearius*, Westw. in Trans. Ent. Soc. vol. ii. pl. 9. f. 6.  
South Africa.

Sp. 16. *P. Klugii*, Westw. in Trans. Ent. Soc. vol. ii. pl. 9. f. 2.  
Cape of Good Hope.

B. Thorax subcontinuus.

a. Species Africanæ.

Sp. 17. *P. sphærocerus*, Afzel. [Linn. Trans. xvi. p. 643.]  
Sierra Leone.

Sp. 18. *P. armatus*, Dej. [Linn. Trans. xvi. p. 644.]. Westw. in Trans. Ent.  
Soc. vol. ii. p. 89. pl. 9. f. 7. *a, b, c.* *P. cornutus*, Chevrolat in Guér.  
Mag. Zool., Ins. pl. 49. and details 1 *b.* and 1 *c.*  
Senegal.

Sp. 19. *P. curvicornis*, Chevrolat in Guér. Icon. R. An., Ins., pl. 40. f. 8; and Rev.  
Zool., No. 2. p. 21. Westw. in Trans. Ent. Soc., vol. ii. p. 89. *P. cor-*  
*nutus*, var. ? Chevr. in Guér. Mag. Zool., Ins. pl. 49. f. 1 *a2.* and 2 *a.*  
Senegal.

Sp. 20. *P. Shuckardi*, Westw. in Trans. Ent. Soc., vol. ii. p. 87. pl. 9. f. 4.  
South Africa.

Sp. 21. *P. lineatus*, Thunb. [Linn. Trans. xvi. p. 647.]  
Cape of Good Hope.

Sp. 22. *P. affinis*, Westw. [Linn. Trans. xvi. p. 646.]  
Africa\*.

b. Species Indicæ.

Sp. 23. *P. cognatus*, n. sp.

Rufo-castaneus nitidus punctatus, elytris singulis plagâ magnâ nigrâ, capite  
anticè lineâ tenui impressâ; vertice impressionibus duabus semicircula-  
ribus, antennarum clavâ subovatâ basi extûs in hamum productâ.

Long. corp. lin. 4.

*Habitat* in Bengaliâ. In Mus. DD. Melly et Westermann.

*P. affini*, W. valdè affinis; differt magnitudine majori, impressionibus verticalibus, abdomi-

\* On the authority of the British Museum Catalogue I am now able to give *Africa* as the habitat of *P. affinis*. If it were possible that a mistake had been made as to this locality, I should consider the species to be Indian, and that it and *P. cognatus* are not specifically distinct.

nis formâ, ut et loco natali. *Caput* trigonum, punctatum, lineâ tenui impressâ abbreviatâ, e margine antico verticem versus ductâ, vertice ipso impressionibus duabus semicircularibus in medio conjunctis; antennarum clavâ parvâ, thorace haud longiori, ovatâ, angulo basali externo in hamum producto. *Prothorax* cordato-truncatus, parte anticâ capite paullo latiori, lateribus rotundatis, dorso in medio impresso; margine postico parùm latiori. *Elytra* fulvo-castanea, nitida, disco nigro. *Abdomen*, segmento penultimo in medio paullò fisso; apicali brevissimo, transverso, utrinque tuberculo minuto instructo. *Pedes* subbreves, parùm compressi; tibiis breviter bicalcaratis.

Sp. 24. *P. Saundersii*, n. sp.

Fulvo-rufescens subnitidus punctatus, capite thoraceque obscurioribus, antennarum clavâ oblongo-ovatâ basi extùs in hamum setigerum productâ.

Long. corp. lin.  $3\frac{1}{2}$ .

*Habitat* in Indiâ Orientali. In Mus. D. W. W. Saunders.

Affinis *P. cognato*; differt tamen clavâ antennarum longiori, elytris unicoloribus, &c. *Caput* inter oculos impressionibus duabus semicircularibus notatum. *Antennarum* clava obscura, luteo-setosa, oblongo-ovata, margine carinato, angulo basali externo in hamum setigerum producto. *Prothorax* cordato-truncatus, in medio transversè impressus, impressione utrinque in tuberculum parvum laterale desinente; parte anticâ paullò elevatâ, lateribus rotundatis; margine postico parùm latiori. *Elytra* thorace multò latiora, sensim dilatata, fulvo-rufescentia, subnitida, punctata, setosa. *Pedes* longitudine mediocres; tibiis subcylindricis apice breviter bicalcaratis, tarsis distinctè 5-articulatis. *Palpi* maxillares articulo 2do magnitudine mediocri.

Sp. 25. *P. Hardwickii*, Westw. [Linn. Trans. xvi. p. 649.]

Nepaul.

Sp. 26. Sp. inedit. *Latr.* [Linn. Trans. xvi. p. 651.]

Isle of France.

*Obs.* *P. ruficollis*, Fabr. [Linn. Trans. xvi. p. 650.] is given by Dr. Erichson as one of the *Malachii*, and as identical with his *Collops 4-maculatus* (M. 4-maculatus, Fabr.).

#### Genus 2. PLATYRHOPALUS. *Westw.*

Sp. 1. (27.) *P. denticornis*, Donovan. [Linn. Trans. xvi. p. 657.]

East Indies.

Sp. 2. (28.) *P. unicolor*, Westw. [Linn. Trans. xvi. p. 659.] *P. denticornis*,

Gyll., Schönh.

East Indies.

Sp. 3. (29.) *P. acutidens*, Westw. [Linn. Trans. xvi. p. 661.]

Nepaul.

Sp. 4. (30.) *P. Westwoodii*, Saunders in Trans. Ent. Soc., vol. ii. p. 84. pl. 10.

f. 5.

East Indies.

Sp. 5. (31.) *P. angustus*, Westw. in Trans. Ent. Soc., vol. ii. p. 92. pl. 10.

f. 6.

East Indies.

Sp. 6. (32.) *P. Melleii*, Westw. [Linn. Trans. xvi. p. 683.]; and in Trans. Ent.

Soc., vol. ii. pl. 10. f. 4. Guérin, Icon. R. An., Ins. pl. 40. f. 11.

Malabar.

Sp. 7. (33.) *P. aplustrifer*, Westw. [Linn. Trans. xvi. p. 664.]

Bengal. Also in M. Westermann's Collection; and certainly belonging to this genus.

Sp. 8. (34.) *P. ? lævifrons*, Dej. [Linn. Trans. xvi. p. 661.]

Senegal.

Sp. 9. (35.) *P. ? dentifrons*, Dej. [Linn. Trans. xvi. p. 662.]

Senegal.

### Genus 3. HYLOTORUS. *Dalm.*

Sp. 1. (36.) *H. bucephalus*, Gyll. [Linn. Trans. xvi. p. 654.]

Sierra Leone.

### Genus 4. PENTAPLATARTHUS. *Westw.*

Sp. 1. (37.) *P. Paussoides*, Westw. [Linn. Trans. xvi. p. 619.]

South Africa. I have seen specimens in the Royal Collection at Berlin, and in the Cabinets of Messrs. Shuckard and Children.

### Genus 5. LEBIODERUS. *Westw.*

Sp. 1. (38.) *L. Goryi*, Westw. in Trans. Ent. Soc., vol. ii. p. 94. pl. 9. f. 8.

Java.

### Genus 6. CERATODERUS, *n. g.*

*Corpus* oblongum, depressum. *Caput* transverso-quadratum, posticè collo instructum, disco inter oculos bi-impresso. *Antennæ* quasi 6-articulatæ, articulis 4 intermediis transversis, planis, ultimo semicirculari. *Maxillæ* minutæ, planæ, corneæ, apice acutæ, curvatæ, intus sub apice dente acuto armatæ. *Palpi* maxillares 4-articulati, articulo 2do

magno ovali, 3tio 4toque minoribus subcylindricis; *palpi labiales* articulo ultimo præcedenti haud multo majori, ovato, apice truncato. *Prothorax* capite vix latior, cordato-truncatus, trans medium lineâ impressâ. *Elytra* oblongo-ovata, depressa. *Pedes* breviusculi; femoribus tibiisque compressis, his apice haud calcaratis; tarsis distinctè 5-articulatis, articulo basali sequenti longiori.

Sp. 1. (39.) *C. bifasciatus*.

*P. bifasciatus*, Kollar in Ann. Wien. Mus. 1836, t. 31. f. 7. *a, b*.

Westw. in Trans. Ent. Soc., vol. ii. p. 91. pl. 10. f. 3.

East Indies.

Genus 7. CERAPTERUS. *Swederus*.

Sp. 1. (40.) *C. latipes*, Swed. [Linn. Trans. xvi. p. 669; and xviii. p. 582.]

Bengal.

Sp. 2. (41.) *C. Horsfieldii*, Westw. [Linn. Trans. xvi. p. 670; and xviii. p. 583.]

Java.

Sp. 3. (42.) *C. 4-maculatus*, Westw. [Linn. Trans. xviii. p. 583.]

Java.

Sp. 4. (43.) *C. (ORTHOPTERUS, MacL.) Smithii*, MacL. [Linn. Trans. xviii. p. 583.]

South Africa.

Sp. 5. (44.) *C. (ARTHROPTERUS, MacL.) MacLeaii*, Donovan. [Linn. Trans. xvi. p. 672; and xviii. p. 584.]

New Holland.

Sp. 6. (45.) *C. (PHYMATOPTERUS, Westw.) piceus*, Westw. [Linn. Trans. xviii. p. 584.]

New Holland.

Sp. 7. (46.) *C. (HOMOPTERUS, Westw.) Brasiliensis*, Miers. [Linn. Trans. xviii. p. 584.]

Brazil.

Sp. 8. (47.) *C. (PLEUROPTERUS, Westw.) Westermanni*, Westw. [Linn. Trans. xviii. p. 585.]

Java.