CATALOGUE
OF
HYMENOPTEROUS INSECTS
IN
THE COLLECTION
OF THE
BRITISH MUSEUM.

PART I.
ANDRENIÆ AND APIDÆ.

LONDON:
PRINTED BY ORDER OF THE TRUSTEES.
1853.
PREFACE.

THE principal object of the present Catalogue has been to give a complete list of all the known species of Andre
nidae and Apidae, at the same time indicating those at present contained in the Collection of the British Museum.

This part of the Catalogue has been prepared by Mr. Frederick Smith, who has taken every care in the determination of the species, the references to the synonyma, and in the descriptions of such species as hitherto are apparently undescribed.

The remaining Parts will follow as soon as they can be completed.

JOHN EDWARD GRAY.

24th May, 1853.
CATALOGUE

OF

HYMENOPTERA.

Order HYMENOPTERA.

Tribe 4. ANTHOPHILA.


Fam. 1. ANDRENIDÆ.

Andrenides, Leach, Edinb. Enc. 1812.
Andrenidæ, Leach, Sam. Comp. 1819.
Andrenites, Newm. Ent. Mag. 1834.
Brachyglossa, Prosopidæ et Andrenidæ, Kirby, Faun. Bor. Amer.
p. 266, 267, 1837.

Subfam. 1. OBTUSILINGUES.


Genus 1. COLLETES.

Apis, pt., Linn. Syst. Nat. i. 953, 1766.

(Plate I. Details.)
1. Colletes succincta. B.M.

Apis succincta, Linn. Syst. Nat. i. 955. 18, & Cab. Mus. Linn. Soc.

Grisi. Hym. p. 185. t. 15. f. 7?


Rossi, Faun. Etrus. ii. 98. 899.


Apis calendarum, Panz. Faun. Germ. lxxxiii. 19, ♂ ?


Colletes succinctus, Smith, Zool. iv. 1276. 1.


Panz. Faun. Germ. 21 ♂, 22 ♀.

St. Farg. Hym. ii. 298. 3.


Hab. England; France; Germany; Sweden; Finland.

2. Colletes fodiens. B.M.

Melitta fodiens, Kirby, Mon. Ap. Angl. ii. 34. 2. t. 15. f. 1, 2,

♂, ♀.


Apis fodiens, Fourc. Ent. Par. ii. 444. 7.

Colletes fodiens, Smith, Zool. iv. 1277. 2.


Hab. Britain; France; Germany; Turkey; Africa.

3. Colletes marginata. B.M.

Apis marginata, Linn. MSS. Cab. Mus. Linn. Soc. ♂.

Colletes marginata, Smith, Zool. iv. 1277. 3, ♂, ♀.


Hab. Britain; Sweden.

4. Colletes balteata.


St. Farg. Hym. ii. 297. 2.


Hab. France.
5. **Colletes impunctata**.


*Hab.* Finland.

6. **Colletes Daviesana**.

*Melitta Daviesana, Kirby, MSS.*


*Hab.* Britain; France; Finland.

7. **Colletes cunicularia**.

*Apis cunicularia, Linn. Faun. Suec.* p. 422, 1698; *Syst. Nat.* i. 957. 23.


*St. Farg. Hym.* ii. 296. 1. t. 15. f. 2 ♀, 3 ♂.


*Hab.* France; Sweden; Algeria.

8. **Colletes nasuta, n. s.**

*Female.* Length 5 lines.—Black, head and thorax coarsely punctured; the clypeus very much produced, and slightly rounded at the apical margin; the labrum has five deep longitudinal impressions; the mandibles at two-thirds of their length are bent abruptly, forming sharp angles at their outer margins; the face is clothed with long white pubescence; the thorax above clothed with long pale pubescence, slightly tinged with fulvous; that on the sides, beneath, and on the femora white; the tibiae and tarsi have a short silvery pubescence, that on the basal joint of the tarsi beneath yellow; the claws ferruginous. The abdomen has the basal segment roughly punctured, the following segments each successively more finely so; the apical margins depressed and having a band of white pubescence, that on the basal segment being the narrowest; beneath, the margins are fringed with white pubescence.

*Male.*—Closely resembles the female, but the clypeus not so much produced, and the face clothed with white pubescence.

*Hab.* Polish Ukraine.

9. **Colletes dimidiata**.

Colletes dimidiata, *Brullé, Hist. Nat. II. Canar.* ii. 86. 23. t. 3. f. 9.

*Hab.* Canary Islands.
10. **Colletes pilosa.**


*Hab.* Egypt.

11. **Colletes intricans.**

Colletes intricans, *Spin. Ann. Soc. Ent. Fr. 2me ser. i. 507. 52.*

*Hab.* Egypt.

12. **Colletes canescens, n. s.**

Female. Length 5½ lines.—Black, the face clothed with white pubescence; the anterior margin of the clypeus reflexed and deeply furrowed, the head closely punctured; the disk of the thorax coarsely punctured and clothed with pubescence of a dirty white colour, at the sides and beneath it is white; the wings hyaline, not clouded at their apex; the abdomen closely punctured, the basal segment coarsely so; the apical margins of all the segments have a continuous fascia of snow-white pubescence.

*Hab.* Algeria.

13. **Colletes fasciata, n. s.**

Female. Length 6 lines.—The face thinly clothed with ochraceous pubescence; the clypeus rugose, with elongate punctures which run into irregular striae; thorax strongly punctured, its pubescence ochraceous, intermixed with fuscous hairs on the disk; beneath the post-scutellum is a rugose enclosed space; wings fusco-hyaline, the tegulae and nervures rufo-testaceous; the legs are dark rufo-testaceous, their pubescence ochraceous; the floculus is of the same colour, and also the scopa on the posterior tibiae. Abdomen obconical; the apical margins of the segments have a broad fascia of short orange-coloured pubescence; beyond the third, covering the entire exposed part; the sixth segment covered with black pubescence, beneath black, the margins of the segments narrowly testaceous.

*Hab.* Cape of Good Hope. (Coll. F. Smith.)

14. **Colletes nigriventris, n. s.**

Female. Length 6½ lines.—Black, the face and the thorax above clothed with fulvous pubescence; on the latter beneath as well as the head it is a little paler; the anterior and intermediate femora have beneath a long fringe of pale fulvous pubescence; that on the posterior femora, as well as that on the legs, otherwise is black, excepting on the tarsi beneath, where it is ferruginous; all the claws ferruginous; the wings hyaline, their mar-
gins having a fuscous cloud, the tegulae testaceous. The basal segment of the abdomen has a thin fringe of pale fulvous pubescence, that on the other segments above and beneath is black; the abdomen is very black and shining, and delicately punctured. 

_Hab._ Chili.

15. _Colletes occidentalis._

Colletes occidentalis, Halid. Linn. Trans. (1837) xvii. 322.

_Hab._ Chili. (Coll. W. Wilson Saunders, Esq.)

16. _Colletes cyanescens._


_Hab._ Chili. (Coll. W. Wilson Saunders, Esq.)

17. _Colletes ursina, n. s._

_Female._ Length 5 lines.—Black, entirely clothed with sooty black pubescence; on the face and cheeks it is silvery, as well as on the tarsi beneath; the latter has in certain lights a golden tinge; the wings subhyaline and beautifully iridescent, their nervures black; the legs very dark rufo-piceous, the claws ferruginous.

_Hab._ Columbia.

18. _Colletes mandibularis, n. s._

_Male._ Length 3 lines.—Black; the face, thorax and legs clothed with bright lemon-yellow-coloured pubescence; the antennae beneath, except the two basal segments, fulvous; the mandibles bright ferruginous; the wings hyaline, iridescent, and having their tegulae and nervures ferruginous; all the tarsi and the calcariae pale ferruginous; the basal segment of the abdomen fringed with long pubescence, and all the apical margins of the segments banded with pubescence of a lemon-yellow colour.

_Hab._ Georgia.

19. _Colletes thoracica, n. s._

_Female._ Length 6 lines.—Black, the clypeus coarsely punctured, the face thinly clothed with pale pubescence, that on the disk more dense and fulvous; the thorax above clothed with bright fulvous pubescence, beneath it is nearly white; on the posterior femora and tibiae beneath, the pubescence is of changing golden yellow, the floccus palest, on the legs above it is fuscous; the claws ferruginous; the tegulae ferruginous, as well as the neuration of the wings, the wings being hyaline, and having
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a slight cloud on their apical margins. The abdomen very shining, and delicately punctured; the base has a thin long pale pubescence; on the apical margins of the first and two following segments laterally is a narrow fringe of white pubescence; on the margin of the fourth segment it is usually continuous beneath; the margins have a fringe of white pubescence.

Male. Length 5 lines.—Closely resembles the female, but has the face densely clothed with long bright fulvous pubescence; the apical margins of the segments of the abdomen have continuous white bands, usually more or less interrupted on the first and second.


Genus 2. PARACOLLETES.

Paracolletes, F. Smith’s MSS.

Head not so wide as the thorax, eyes lateral, elongate-ovate; the stemmata placed in a curve on the front of the vertex; antennæ subclavate, the third joint longer than the second or fourth; labrum concealed, rounded in front; mentum elongate, gradually narrowing towards its base, which is conical, in front produced into a sharp angle, from the point of which descends an abbreviated channel; anteriorly rounded; the paraglossae obtuse, short, and placed laterally; labial palpi four-jointed, the basal joint as long as the two following united; third and fourth joints of equal length. Maxillary palpi six-jointed, the basal joint a little the longest, the rest of about equal length, each joint much narrower than the preceding, all being conical. Thorax, superior wings having one oblong marginal cell, truncate at the apex, from which emanates an abbreviated nervure; three submarginal cells, the first as long as the two following united; the second a little longer than broad, the transverse nervures parallel, oblique; the third narrowed nearly one-half towards the marginal; the first recurrent nervure received by the second submarginal cell about the middle, the second received by the third submarginal near its apex. Legs short, stout, posterior tibie slightly curved, and the basal joint of the tarsi as broad as the tibia, and three-fourths of its length. Abdomen elongate-ovate, furnished with an anal fimbria. (Plate I. Details.)

1. PARACOLLETES CRASSIPES, n. s. B.M.

Female. Length 7 lines.—Black, the head clothed with ochraceous pubescence, palest on the face and cheeks; the basal joint of the antennæ black, the following joints ferruginous beneath; the clypeus coarsely punctured; the labrum and apex of
the mandibles rufo-piceous. Thorax above clothed with ochraceous pubescence, beneath and on the femora it is of a paler hue; on the metathorax and on the basal segment of the abdomen it is nearly white; the legs rufo-piceous, above clothed with fusco-pubescent; the posterior tibiae and basal joint of the tarsi dilated, the former bent inwardly; the anterior tibiae bright ferruginous in front; on the metathorax below the post-scutellum is a smooth shining enclosed space; the wings hyaline, their nerves and tegulae rufo-testaceous. Abdomen dark rufo-testaceous, having a green metallic tinge, finely punctured, the basal segment slightly sinuated at its anterior margin; the fifth and sixth segments clothed with black pubescence, the latter has a central longitudinal smooth space. The margins of the segments beneath are fringed with pale ochraceous pubescence. The pubescence on the thorax viewed under a moderate magnifying power is beautifully plumose. 

Hab. Swan River.

Genus 3. PTILOGLOSSA.

Ptiloglossa, F. Smith's MSS.

Head transverse, much narrower than the thorax; eyes slightly approximating at their vertex, ocelli placed in a triangle. The third joint of the antennæ clavate, about the same length as the scape, the fourth very short, the rest of about equal length. The mentum elongate, narrowed towards the base, which is rounded; the apex blunted; the labium very short, densely pubescent; the paraglossæ elongate, very pubescent; the labial palpi four-jointed, short and stout; the basal joint cylindric, as long as the two following; maxillary palpi six-jointed, gradually attenuating to the apex; the second to the fourth joints slightly narrowed at their base; the labrum rounded. Thorax rounded; the anterior wings having one elongate marginal cell pointed at the base, the extreme apex truncate, the first submarginal cell rather longer than the two following, the second very narrow, attenuated towards the marginal; the first recurrent nervure uniting with the first, and the second uniting with the third transverse nervure. Abdomen nearly conical, emarginate at the base. (Plate I. Details.)

1. PTILOGLOSSA DUCALIS.

Female. Length 8 lines.—Head and thorax black, the clypeus very convex, naked; the face otherwise clothed with short griseous pubescence intermixed with long black hairs; the cheeks clothed with white pubescence. Thorax densely clothed above
with sooty black pubescence, palest on the sides and beneath; the legs dark fusco-ferruginous, above clothed with dark fuscous pubescence; the floccus on the posterior femora long, thick and of a pale yellow; the fringe on the tibiae pale; the tibiae much dilated, slightly bent inwards; the basal joint of the tarsi broadly dilated, the second heart-shaped, the third narrower, but of the same length and shape, the fourth very small; claws short, stout and somewhat blunt; anterior wings having one marginal cell, the radial nervure of which curves inwardly to the point of union with the transverse nervure of the second submarginal cell, from whence it is straight to the transverse nervure of the third submarginal, whence it passes obliquely upwards to the apex of the costal nervure; the second submarginal cell not more than one-fifth as wide as the first submarginal, the third slightly narrowed towards the marginal. Abdomen delicately punctured, green, the base of the first segment and its sides densely covered with pale, nearly white pubescence, the apex clothed with sooty black hairs; beneath the abdomen is fulvous, except towards the apex, the margins of the segments depressed and fringed with fulvous pubescence, the fourth and fifth with black.

*Hab.* Not known. (Coll. W. Wilson Saunders, Esq.)

**Genus 4. LEIOPROCTUS.**

*Leioproctus, F. Smith's MSS.*

Head transverse, nearly orbicular, of about the width of the thorax; antennae placed in a slight curve on the vertex; mentum of moderate length, about three-fourths longer than the labium; the latter emarginate at the apex, and having at about half its length a transverse process notched in the middle and sinuated on each side; at the lateral extremities of this process are placed the paraglossae, dilated and pubescent at their apex; the labial palpi four-jointed, the basal joint about equal in length to the two following; the maxillary palpi six-jointed, the three basal ones of equal length, the following gradually a little shorter, the apical one very slender. Thorax ovate, the superior wings having one elongate marginal cell, rounded at its apex, and three submarginal cells; the first about equal in length to the two following, the second narrowed towards the marginal, receiving the first recurrent nervure in the middle, the third also much narrowed towards the marginal, receiving the second recurrent nervure near its apex; spurs of the posterior tibiae simple. Abdomen elongate-ovate, having an anal fimbrina on the fifth segment; the sixth pubescent at the sides, naked down the centre. (Plate I. Details.)
1. Leioproctus imitatus, n. s. B.M.

Female. Length 4½ lines.—Black, at the base of the antennae a little pale yellow pubescence; the clypeus bright, smooth, and having deep punctures; the antennae testaceous beneath. Thorax very smooth and shining above, having a few scattered punctures; the metathorax has an enclosed smooth shining space below the post-scutellum; the disk is thinly clothed with pale yellow pubescence, that on the sides, beneath, and on the femora trochanters and coxae is nearly white; the legs dark rufotestaceous, their claws ferruginous; the scopa of the posterior tibiae fulvous; the nervures of the wings ferruginous; the wings hyaline, and beautifully iridescent. Abdomen nigro-aeneous, the margins of the segments piceous; the fourth and fifth segments have a thin fringe of pale fulvous pubescence, the sixth clothed with the same, but having a smooth longitudinal space in the centre, widest at the base.

Hab. New Zealand.

2. Leioproctus elegans, n. s.

Female. Length 4½ lines.—Blue-green, the face and cheeks thinly covered with cinereous pubescence; head strongly punctured, the flagellum beneath testaceous towards the apex. Thorax above strongly and not very closely punctured, thinly covered with cinerous pubescence, intermixed with black on the disk and slightly ochraceous at the sides, the enclosed space at the base of the metathorax immediately beneath the post-scutellum impunctate and highly polished; the wings subhyaline, slightly clouded at their apex, the nervures dark brown; legs dark rufotestaceous; all the femora beneath fringed with silvery white hairs, flocus and the scopa beneath of the same colour, the latter fuscous above towards the base of the tibiae, the tarsi beneath fulvous, the claw-joints ferruginous. Abdomen rather strongly punctured, sparingly at the base; margins of the segments slightly depressed, the apical fimbria bright fulvous.

Hab. Adelaide. (Coll. F. Smith.)

3. Leioproctus frontalis, n. s.

Female. Length 4 lines.—Black, head shining, the punctures deep and not very close, those on the clypeus large and deeply impressed; the clypeus rounded in front and strongly marginate; at the base of the clypeus is a triangular elevation, from which a sharp elevated carina passes upwards, terminating a little before the anterior ocellus, at the termination commences a deep channel which runs up to and encircles the ocellus; the antennae test-
taceous beneath; the pubescence thin on the face, and griseous; that on the vertex fusco-ferruginous, as well as that on the disk of the thorax, which is very sparing; on the sides it is more dense, also on the femora, where it is nearly white, a tuft of pure white on the tubercles; the legs fusco-ferruginous, their tarsi palest; the scopa is white, having a beautiful golden reflection above; the wings hyaline. Abdomen closely punctured, and having a tinge of metallic green, the margins broadly depressed, the depressions rufo-piceous as well as the sixth segment above, which is longitudinally striate: the sides of the abdomen have a little scattered white pubescence as well as the sides of the sixth; beneath, the abdomen is rufo-piceous, the apical segment smooth and shining at its base, having on each side an impressed line running its entire length.

Male closely resembling the female, its mandibles bright ferruginous, its face densely covered with silvery white hair; the general colouring darker, or more matured than in the female; the abdomen beneath has a thick fringe of suberect hair on the margins of the third and fourth segments.

Hab. New Holland. (Coll. F. Smith.)

Genus 5. LAMPROCOLLETES.

Lamprocolletes, F. Smith's MSS.

Head transverse, nearly rounded in front; ocelli placed in a slight curve. Mentum rather more than twice the length of the labium, which is situated on each of its anterior margins, thickly fringed with pubescence; the paraglossae longer than the tongue, dilated and pubescent at the apex; labial palpi four-jointed, the basal one bent, about the length of the two following, the apical joint very slender; maxillary palpi six-jointed, the three basal joints of about equal length, the following gradually a little shorter, the apical one very slender. Thorax nearly ovate, the wings having one elongate marginal cell, twice the length of the second and third submarginal cells, the first submarginal being of equal length to the two following; the second submarginal cell narrowed towards the marginal, receiving the first recurrent nervure in the middle, the second recurrent nervure uniting with the apical nervure of the third submarginal cell; one of the spines at the apex of the posterior having on one side a row of bent teeth or hooks resembling a comb; the pubescence of the scopa beautifully pectinate or feathery. Abdomen ovate, furnished with an anal fimbria, and the sixth segment with a naked space margined laterally. (Plate I. Details.)
1. **Lamprocolletes chalybeatus**. B.M.


*Hab.* Van Diemen's Land.

2. **Lamprocolletes obscurus**, n. s. B.M.

Female. Length 5 lines.—Black, head strongly punctured, particularly on the clypeus; apex of the mandibles ferruginous; a few scattered griseous hairs on the face below the insertion of the antennæ, above it is fuscous. Thorax, the disk shining, sparingly punctured, and clothed with fuscous pubescence, at the sides and beneath; on the coxae, fringe of the femora and the floccus, it is of a dirty white; the scopa above fuscous, beneath of a pale golden yellow; all the tarsi beneath fulvous, the claws ferruginous, as well as the calcaræ; the wings subhyaline, having a prismatic reflection, their nervures and stigma fusco-ferruginous. Abdomen smooth and shining, the fifth segment clothed with sooty-black pubescence; beneath, the margins fringed with pale hairs, which have a golden tinge.

*Hab.* Van Diemen's Land.

3. **Lamprocolletes cristatus**, n. s.

Female. Length 4½ lines.—Black, the face covered with griseous pubescence, the clypeus covered with large punctures. Thorax shining, sparingly punctured; the collar has a fringe of fulvous pubescence, the tubercles, scutellum and post-scutellum have dense tufts of the same colour; wings subhyaline, slightly clouded at the apical margins, the nervures fuscous, the scopa on the posterior tibiae fuscous intermixed with silvery white hairs; the abdomen very shining, the second and following segments finely punctured at their base, the anal fimbria black; beneath, the segments have a pale marginal fringe.

*Hab.* N. Holland. (Coll. W. Wilson Saunders, Esq.)

4. **Lamprocolletes carinatus**, n. s. B.M.

Female. Length 5 lines.—Head and thorax bright green, with shades of purple on the clypeus and disk of the thorax; strongly punctured, particularly on the clypeus and scutellum; the face thinly covered with short white pubescence; the thorax
above thinly clothed with fuscous pubescence, beneath it is nearly white, as well as that on the coxae and trochanters; on the legs it is black, except that on the tarsi beneath, which is fuscous; the claws ferruginous. Wings hyaline; below the post-scutellum is a transverse elevated carina, beneath which the metathorax is coarsely punctured. Abdomen blue, with a greenish tinge; sparingly punctured above, more closely so at the sides and beneath; the pubescence at the apex black; the second and third segments beneath are fringed with pale pubescence, on the following it is fuscous.

_Hab._ New Holland.

5. **Lamprocolletes plumosus**, n. s. **B.M.**

_Female._ Length 5 lines.—Head and thorax of a metallic green, covered, but not closely, with deep punctures; the apical joints of the antennae beneath fulvous; the pubescence on the face is short and silvery, on the vertex it is fuscous. The thorax beneath is opaque, above bright and shining; the pubescence is fuscous or dirty white, rather palest beneath; each hair under a low magnifying power is beautifully plumose, as well as that on other parts of the insect; the legs rufo-piceous; the scopae on the posterior tibia is dark fuscous above, beneath it is silvery white; the wings clear hyaline, their tegulae rufo-piceous. Abdomen blue, with scattered punctures, the margins of the segments smooth and shining; the pubescence on the apical segment black; beneath, the basal half of abdomen is rufo-piceous, the margins of the segments fringed with long pale hair.

_Hab._ Swan River.

6. **Lamprocolletes irroratus**, n. s.

_Female._ Length 4 lines.—Black, the face above finely striate, the clypeus having scattered deep punctures; the thorax above very delicately punctured; the shoulders have a broad epaulet of scale-like pubescence; the floccus silvery grey; the scopae beneath of the same colour, above fuscous. Abdomen black with an olive reflection, the anal fimbria black; beneath, the margins of the segments are fringed with silvery grey pubescence.

_Hab._ Port Philip. (Coll. W. Wilson Saunders, Esq.)

7. **Lamprocolletes cinereus**, n. s. **B.M.**

_Female._ Length 5 lines.—Black, the pubescence on the face cinereous, the clypeus coarsely punctured, apex of the mandibles ferruginous. Thorax closely and moderately punctured, the pu-
bescence cinereous, most dense at the sides of the metathorax, the enclosed space at the base of the latter smooth, shining and transversely striate at the base; wings hyaline, slightly clouded at the apex; nervures black, the pubescence on the femora and posterior tibiae beneath silvery white, fulvous on the tarsi beneath and fuscous on the tibiae above, the claws ferruginous. Abdomen ovate, shining, the segments at and towards their base closely punctured, their apex smooth and impunctate; the apical margins depressed and having laterally a short fringe of white pubescence, the anal fimbria black.

Hab. South Australia.

8. Lamprocolletes aurifrons.
   Male. Length 4 lines.—Black, head a little wider than the thorax, the face thickly covered with bright golden-coloured pubescence; the antennaæ testaceous beneath, the scape black. Thorax, the pubescence on the disk fulvous, that on the sides, beneath and on the legs is pale golden yellow; the tibiae and tarsi pale ferruginous; the tegulae testaceous; wings hyaline, splendidly prismatic, their nervures ferruginous. Abdomen conical, nigro-œneous, and having the margins of all the segments testaceous; beneath, the fourth and fifth segments have a short, thick fringe of bright golden yellow-coloured pubescence.
   Hab. Adelaide. (Coll. F. Smith.)

9. Lamprocolletes cupreus, n. s.
   Female. Length 5 lines.—Head and thorax bright green, the abdomen coppery; the pubescence on the face and cheeks white, slightly fuscous on the vertex; the clypeus coarsely punctured; the antennaæ ferruginous beneath except the three basal joints, which are black. Thorax, above the pubescence is sparing and slightly fuscous, beneath and on the coxae and femora it is dense, long and white, above strongly punctured; the tegulae rufo-testaceous as well as the stigma, the nervures of a little darker red; the wings clear hyaline, beautifully prismatic; the anterior and intermediate tarsi and the posterior tibiae and tarsi ferruginous, their pubescence pale fulvous; at the base of the abdomen is a little white pubescence, the rest of the upper surface is thinly covered with short pale fulvous pubescence, the fifth segment is clothed with long pubescence of the same colour, the margins of the segments beneath are fringed with similar long hair; above the abdomen is very delicately and beneath strongly punctured.
   Hab. Adelaide. (Coll. F. Smith.)
10. Lamprocolletes punctatus.

Female. Length 4 lines.—Black, the face clothed with hoary pubescence, the vertex with dirty white, the clypeus deeply punctured, rounded in front, antennae beneath testaceous. Thorax above smooth, shining and distantly punctured, clothed thinly with pale ochraceous pubescence, palest and most dense on the sides, particularly of the metathorax, which is rounded and very delicately punctured; wings hyaline, nervures pale testaceous; legs rufo-piceous fringed with pale bright yellow pubescence, that on the tarsi within is fulvous, the floccus nearly white; the scopa has a pale golden lustre beneath, above it is fuscous, the claws ferruginous. Abdomen depressed, shining, closely and rather finely punctured, margins of the segments depressed and thinly fringed with pale fulvous pubescence; the fifth segment has a pale fulvous fimbria intermingled with fuscous hairs which clothe the sides of the sixth, its centre being occupied by a naked longitudinal space.

Hab. Adelaide. (Coll. F. Smith.)

11. Lamprocolletes versicolor.

Female. Length 4 lines.—Black, the head closely punctured, deeply and distantly so on the clypeus, which is smooth, shining and rounded in front; on the face a little griseous pubescence, that on the vertex fuscous. Thorax very smooth and shining, with distant fine punctures; metathorax rounded; tegulae shining nigro-piceous; the wings subhyaline, iridescent; beneath is a thin pale pubescence, as well as on the sides of the metathorax; legs dark rufo-piceous, apical joints of the tarsi ferruginous, the floccus on the posterior legs white, the scopa silvery white beneath, fuscous above, the tarsi within fulvous. Abdomen depressed, oval, of a blue-green with a silken gloss; the apical segment clothed with fuscous pubescence; beneath, the margins of the segments have a long fringe of pale yellow pubescence.

Hab. Adelaide. (Coll. F. Smith.)

Genus 6. DASYCOLLETES.

Dasycolletes, F. Smith's MSS.

Head transverse, rounded in front; antennæ, the basal joint elongate arcuate, about one-third of the entire length; the stemmata placed in a slight curve; the mentum short and broad, anteriorly pointed in the middle, recurved on each side; the labium deeply emarginate at the extremity; the paraglossæ
scarcely longer than the labium, broad and rounded at their apex; the labial palpi four-jointed, each joint slightly narrower. Maxillary palpi six-jointed, the two basal ones of equal length; the third, two-thirds of the length of the second, the three apical ones being of about equal length, each gradually narrower than the preceding joint, apical joint filiform. Thorax ovate, the superior wings having one elongate marginal cell rounded at its extremity and emitting a short appendicular nervure; submarginal cells three, the first equal to the two following in length, the second equally narrowed on each side towards the marginal, receiving the first recurrent nervure in the middle; the third submarginal cell narrowed about one-third towards the marginal, the apical transverse nervure curved outwardly. (Plate I. Details.)

1. DASYCOTELITES METALLICUS, n. s. B.M.  
Female. Length 5 lines.—Black, the face thickly clothed with ochraceous pubescence, that on the vertex is fuscous; the antennæ testaceous beneath, the disk of the thorax shining, sparingly punctured, and thinly clothed with ochraceous pubescence, which is more dense on the sides, metathorax, and beneath; the pubescence beautifully plumose viewed under a moderate magnifying power; the legs very pubescent; the scopæ on the posterior tibiae pale fulvous; the wings hyaline. Abdomen metallic green, the margins of the segments testaceous, covered with a thin, short, ochraceous pubescence, most dense on the sides and at the apex; beneath, the segments have a marginal fringe of long, pale, fulvous pubescence.

The male closely resembles the female, but is rather smaller.  
Hab. New Zealand.

2. DASYCOTELITES PURPUREUS, n. s. B.M.  
Male. Length 3 lines.—Dark purple, the face clothed with griseous pubescence, the vertex with fuscous; on the thorax above it is also fuscous, but at the sides and on the legs it is griseous; the legs dark fusco-ferruginous, the apical joints of the tarsi ferruginous; on the metathorax, beneath the post-scutellum is an enclosed smooth shining space; the wings hyaline, beautifully iridescent, their nervures and tegulae fusco-ferruginous. Abdomen shining, and having a little fuscous pubescence at the apex; beneath slightly piceous.  
Hab. New Zealand.
Genus 7. ANTHOGLOSSA.

Anthoglossa, F. Smith’s MSS.

Head transverse, ocelli placed in a triangle on the vertex; antennæ geniculated, the flagellum subclavate, truncate at the apex, in the male the apical joint dilated at the apex and hollowed out; the clypeus rounded anteriorly; labrum concealed, rounded anteriorly; mandibles compressed or flattened, slightly curved inwardly, dilated at their apex into an oblique obtuse tooth, furnished with a minute one within; the mentum elongate, the labium being about one-fourth of its length; the labium slightly rounded at its apex, which is ciliated with short hairs; the paraglossae nearly as long as the labium, dilated and rounded at their apex; the labial palpi four-jointed, the basal joint being nearly as long as the three following united; the maxillary palpi six-jointed, each joint gradually decreasing in length, the apical one cylindric. Thorax rotundate, the superior wings having one marginal and three submarginal cells, the former truncate at the apex; the first submarginal not quite so long as the two following, the second longer than broad, its transverse nervures oblique, nearly parallel, the third narrowed by one-half towards the marginal cell. Abdomen elongate-ovate, the fifth segment furnished with an anal fimbria. (Plate IV. Details.)

1. Anthoglossa plumata. B.M.

Female. Length 6½ lines.— Black, the face on each side clothed with hoary pubescence, gradually becoming darker towards the vertex, on which the hairs are pale at their base and black at their apex; the clypeus closely and strongly punctured, above which is a smooth and shining triangular prominence; the labrum and mandibles ferruginous. Thorax clothed with pubescence of dark hue, being pale at the base and black at the apex of the hairs; beneath it is fulvous; the legs dark ferruginous, the anterior and intermediate trochanters compressed; the apex of the anterior coxae armed with long obtuse spines, or processes rounded at their apex; all the legs covered with fulvous pubescence, the posterior pair densely; tegulae nigro-piceous, very smooth and shining; the wings fusco-hyaline, slightly clouded at their apex. Abdomen oblong-ovate, the basal segment thinly clothed with pubescence similar to that on the thorax; the second, third and fourth segments have a narrow white fascia on their apical margins, the fifth densely fringed with fulvous pubescence; the apical segment ferruginous, having a central naked space, the margins of which are raised, smooth and shining, the centre closely covered with deep elongate punctures.
Male.—Resembling the female, the face densely clothed with long fulvous pubescence, the basal segment of the antennæ bright ferruginous, the flagellum moniliform, the apical segment dilated, truncate, the truncation hollowed out. Thorax, the pubescence pale fulvous at the base, becoming darker at its apex; on the metathorax it is of a pale fuscous; beneath, anteriorly pale fulvous, posteriorly white; all the tibiae and tarsi bright ferruginous. Abdomen elongate-ovate, having a silky gloss, the margins of the segments white; the two basal segments have a thin pale fulvous pubescence, on the three following it is black; the apical segment ferruginous, rugose; beneath rufo-piceous, the segments fringed with white pubescence. The pubescence in both sexes of this species is beautifully plumose; each individual hair, particularly on the thorax and posterior tibia, is feathered, which is observable under a moderate magnifying power.

Hab. W. Australia.

Genus 8. EURYGLOSSA.

 EURyglossa, F. Smith's MSS.

Head transverse, in front orbicular, antennæ inserted about the middle of the face, flagellum subclavate, eyes lateral elongate-ovate; ocelli placed forwards on the vertex in a triangle; mentum moderate in length, broad, rounded at the base; the labium broad, slightly emarginate in front, its sides rounded; paraglossae short and rounded; the labial palpi four-jointed, the two basal joints much stouter than the two following, the third and fourth joints longer than the second, the third clavate, the fourth subcylindric; the basal portion of the maxillæ twice as long as the lobe, the lobe rounded and broad at its apex, its apical margin ciliated; the maxillary palpi six-jointed, the basal joint stout, gradually tapering to the apical joint, which is cylindric, the labrum angulated, its margin ciliated. The superior wings have one marginal and two submarginal cells, the former not quite so long as the two latter united; the first recurrent nervereceived just within the second submarginal, the second recurrent nervereuniting with the second transverse nerver. Abdomen depressed, subovate. (Plate II. Details.)

1. EURYGLOSSA CUPREO-CHALYBEA, n. s. B.M.

Female. Length 4 lines.—Head and thorax nigro-aeneous, deeply but not closely punctured, clypeus subconvex. Thorax, the disk shining; the enclosed space on the metathorax very smooth and shining; wings fuscous, the apical margins palest; beneath closely punctured, the legs nigro-piceous, having a scat-
tered hoary pubescence, most dense above, on the tarsi beneath pale fulvous, apical joints of the tarsi ferruginous. Abdomen chalybeous, very closely punctured, margins of the segments smooth and shining, beneath they are rufo-piceous.

_Hab._ N. Holland.

2. **Euryglossa terminata.**

   Female. Length 4 lines.—Black, head strongly punctured, the face rather convex; the clypeus shining, the punctures scattered; the antennæ nigro-piceous, the apex of the joints of the flagellum beneath testaceous. Thorax, the disk shining, the punctures large but scattered, interspersed with finer ones; the metathorax above smooth and shining; the legs dark ferruginous, their pubescence very thinly scattered, except that on the tarsi and posterior tibia, which is silvery white. Abdomen impunctate, having a silken gloss, the margins of the segments narrowly testaceous, the fifth segment bright fulvous, its pubescence being of the same colour.

_Hab._ New Holland. (Coll. W. Wilson Saunders, Esq.)

3. **Euryglossa depressa, n. s.**

   Female. Length 4½ lines.—Head and thorax black, the former closely punctured; the clypeus convex, shining, having large deep punctures not so dense as on the rest of the head; on each side of the face close to the margin of the eyes a broad depression commencing in a line with the insertion of the antennæ and terminating opposite the posterior stemmata; margin of the vertex fringed with pale yellow hairs. Thorax, above shining, the punctures fine and distant; the enclosed space on the metathorax very smooth and shining, sides of the metathorax fringed with white pubescence; the tarsi rufo-piceous, clothed beneath with pale fulvous pubescence. Abdomen dark green, having a satiny gloss, the margins of the segments black and shining; the base of the abdomen deeply sinuated; beneath, the basal margin of the segments highly polished and shining.

_Hab._ New Holland. (Coll. F. Smith.)

**Genus 9. PROSOPIS.**

Sphex, pt., _Panz. Faun. Germ._
Hymenoptera.

A. The first recurrent nervure not entering the second submarginal cell. (Plate I. Wing.)

1. Prosopis annulata.


Hab. Sweden; Finland.

2. Prosopis communis.

Hylaeus annulatus, Fab. Ent. Syst. ii. 305. 12, ♀.

Panz. Faun. Germ. 55. 3.


Smith, Trans. Ent. Soc. iv. 29. 1; Zool. vi. 2202. 2, ♂ ♀.


f. 3, ♀.


Spin. Ins. Lig. i. 112. 3.


Prosopis signata, St. Farg. Hym. ii. 537. 4, var.


Hab. Britain; France; Germany; Finland; Denmark; Sweden.

3. Prosopis annularis.


Brullé, Expéd. de Morée, iii. 359. 793, ♂.

Prosopis annularis, Brullé, Expéd. de Morée, iii. 359. 794, ♀?

Hylaeus annularis, Smith, Trans. Ent. Soc. iv. 30. 2; Zool. vi. 2202. 3.


Hab. Britain; France; Germany; Denmark; Sweden.

4. Prosopis signata.


Prosopis signata, St. Farg. Hym. ii. 537. 4.
Hylæus signatus, Smith, Trans. Ent. Soc. iv. 30. 3; Zool. vi. 2206. 9, ♂ ♀.

Hab. Britain; France; Germany; Denmark; Sweden; Finland.

5. PROSOPIS DILATATA. B.M.

Curt. Brit. Ent. viii. t. 373, ♀.
Smith, Trans. Ent. Soc. iv. 31. 4. t. 3. f. 1; Zool. vi. 2204. 4.


Hab. England; France; Germany; Sweden; Finland.

6. PROSOPIS CONFUSA.


Hab. Sweden; Denmark; Finland.

7. PROSOPIS TUBERCULATA, n. s. B.M.

Male. Length 3 lines.—Black; head and thorax deeply punctured, the face below the insertion of the antennæ cream-colored; scape of the antennæ black, much dilated, the flagellum beneath rufous. Thorax, a spot on each side of the collar, the tubercles, and the tegulae anteriorly cream-coloured; the enclosed space on the metathorax below the post-scutellum very rugose; the anterior tibia in front and the tarsi ferruginous, the latter stained with fuscous above. Abdomen shining, distinctly punctured, the third and fourth segments beneath, each having at their base an elevated compressed tubercle, their margin rounded; the posterior tubercle much smaller than the anterior, sometimes nearly obsolete.

This species is very like P. signata, but differs in the following particulars: the scape is much more dilated, the wings are fusco-hyaline, and the recurrent nervures unite with those of the second submarginal cell, which is wider than in P. signata; the abdomen has no white pubescence at the sides of the margin of the basal segments, and is more strongly punctured; the tubercles beneath much more elevated.

Hab. France.

8. PROSOPIS HYALINATA. B.M.

Hylæus hyalinatus, Smith, Trans. Ent. Soc. iv. 33. 9; Zool. vi. 2206. 8.

Hab. Britain.
9. **Prosopis rubicola.**


*Hab.* Albania.

10. **Prosopis versicolor.**


*Hab.* Albania.

11. **Prosopis gibba.**


*Hab.* Albania.

12. **Prosopis variipes, n. s.**

*Female.* Length 1½ line.—Black, head and thorax closely punctured, the antennæ yellow beneath, scape black; a spot on the clypeus touching its apical margin and a triangular spot on each side yellow. Thorax, the collar, tubercles, tegulae in front, and the basal half of the tibiæ yellow; the tarsi fusco-ferruginous; the metathorax covered with short white pubescence, except the enclosed portion below the post-scutellum, which is deeply rugose. Abdomen short, rounded, smooth and shining. The spots on the face sometimes nearly or quite obsolete.

*Male.*—Black, the face below the insertion of the antennæ and their scape in front pale yellow; the flagellum orange-yellow beneath. Thorax, the collar, tubercles, tegulae in front, tibiæ and tarsi bright yellow; a spot on all the tibiæ behind and the apical joints of the tarsi ferruginous; wings hyaline, splendidly iridescent. Abdomen closely and finely punctured.

*Hab.* Britain.

13. **Prosopis propinqua.**


*Hab.* Finland.

14. **Prosopis cornuta.**


Hylæus plantaris, *Smith, Trans. Ent. Soc.* iv. 32. 7. t. 3. f. 2; *Zool.* vi. 2205. 6, ♂.

*Hab.* Britain.
15. **Prosopis punctulatissima.**

_Hylaeus punctulatissimus, Smith, Trans. Ent. Soc. iv. 33. 8; Zool. vi. 2205. 7._

_Hab._ Britain.

16. **Prosopis punctata.**

_Prosopis punctata, Brullé, Expéd. Sc. Morée, Zool. iii. 359. 795. t. 49. f. 12._

_Hab._ Messina; Morea.

17. **Prosopis angulata.**

_Male. Length 1½ line.—Black, strongly punctured; a line on each side of the elypeus continued a little above the insertion of the antennæ; a spot at the base of the elypeus, angular in front, of a yellowish white; the scape and following joint of the antennæ black, the rest pale testaceous beneath. Thorax, the collar, tegulae in front, tubercles, wings at their extreme base, anterior tibiae in front, the intermediate and posterior pairs at their base, as well as the basal joint of the tarsi, pale yellow; the wings clear hyaline and beautifully iridescent._

_Hab._ Portugal.

18. **Prosopis variegata.**

_Mellinus variegatus, Fabr. Ent. Syst. Supp. 265. 1—2._
_Prosopis variegata, Fabr. Syst. Piez. p. 295. 9._
_S. Farg. Hist. Nat. Ins. ii. 534. 1._
_Luc. Expéd. Sc. Alger. iii. 223. 169._
_Prosopis colorata, Panz. Faun. Germ. 89. 14._
_Hylaeus variegatus, Smith, Zool. vi. 2202. 1._

_Hab._ England; France; Germany; Italy; Algeria.

19. **Prosopis bifasciata.**

_Procopis bifasciata, Jurine, Hym. p. 220. t. 11. f. 30._
_S. Farg. Hym. ii. 536. 2._

_This species closely resembles variegata, but is very distinct; the sculpture of the thorax is rugulose and shining; the scutellum has deep separate punctures; the wings are clouded at their apex; the anterior tibiae are only ferruginous towards their base, where there is a minute white spot; all the tarsi are nearly black, the anterior pair being stained at their joints with ferruginous; the abdomen is coarsely punctured, and all the margins of the segments depressed, the depressions smooth and shining, the first and second segments being red._ The foregoing description
HYMENOPTERA.

appears to be of a variety, the insect being usually entirely black.
Hab. Albania; S. France; Italy.

20. Prosoiis Anthracina, n. s.

Female. Length 2½ lines.—Entirely black, head and thorax very finely punctured, the apical joints of the antennae testaceous beneath. Thorax, the tegulae testaceous, the wings hyaline, the nervures dark testaceous; the enclosed portion of the metathorax longitudinally irregularly sulcate at its base. Abdomen very smooth and shining, beneath it is dark fusco-ferruginous, as well as the legs; the claws ferruginous.

Male.—The clypeus and a space on each side not touching the eyes, forming together an oval, bright yellow; the scape dilated, triangular; the flagellum testaceous beneath. Thorax, the anterior tibiae in front and the claws testaceous; otherwise as in the other sex.
Hab. Sandwich Islands.


Male. Length 2½ lines.—Black; the face yellow, the colouring is continued upwards on each side nearly to the vertex of the eyes; the scape cylindrical, black, the rest of the antennae orange-yellow beneath. Thorax, the metathorax has no distinctly enclosed space, and is subrugose; the wings hyaline, the nervures dark fuscous; all the tibiae and tarsi bright yellow, the former have a ferruginous stain behind. Abdomen smooth and shining, the margins of the segments narrowly rufo-testaceous.
Hab. Sandwich Islands.

22. Prosoiis Basalis, n. s.

Female. Length 3½ lines.—Entirely black, the face thickly covered with elongate punctures, and having a longitudinal smooth furrow a little within the orbits of the eyes and terminating in a line with their vertex. Thorax finely and very closely punctured; at the sides of the post-scutellum and of the metathorax a little white pubescence; the claws bright ferruginous; the wings clear hyaline at their base, fuscous towards their apex; the basal segment of the abdomen very smooth and shining, and having laterally on its apical margin a little fringe of white pubescence.

Male.—The face below the insertion of the antennae bright yellow, as is also the frontal half of the scape, which is broadly dilated, heart-shaped, and concave beneath; the flagellum inserted exactly in the middle of the scape. Thorax very pu-
bescent, particularly the metathorax; the anterior tibiae in front, the intermediate and posterior pairs at their base, as well as the basal joints of the tarsi of the latter, yellow; apical joints of the tarsi ferruginous. Abdomen as in the other sex.

Hab. Hudson's Bay. (G. Barnston, Esq.)

23. Prosopis affinis, n. s.

Female. Length 2 lines.—Black, head and thorax closely and strongly punctured; the clypeus has some irregular longitudinal depressions; the face has on each side of the clypeus a triangular yellow spot touching the eyes, the angle of which is at the exact line of the base of the clypeus; the apical joints of the antennae beneath fulvous. Thorax, the collar, tubercles, tegulae in front, and all the tibiae at their base bright yellow. Abdomen ovate, smooth and shining, the sides having a little silvery pile observable in certain lights.

Male.—The face below the insertion of the antennae yellow; the tubercles, tibiae at their base and the tarsi yellow; apical joints of the intermediate and posterior pairs ferruginous. Abdomen as in the other sex.

Hab. North America. (E. Doubleday, Esq.)

24. Prosopis confluent, n. s.

Female. Length 3 lines.—Black, the face on each side of the clypeus yellow, terminating obliquely upwards. Thorax covered entirely with deep punctures, which are confluent; the enclosed space below the post-scutellum rugose; the collar, interrupted in the middle, the tubercles in front, and all the tibiae at their base, yellow; apical joints of the tarsi rufopiceous; the base of the wings hyaline, including the first discoidal cell, beyond which they are fuscous. Abdomen oblong-ovate, very smooth and shining, covered, except the basal segment, with a short white pile.

Hab. St. John's Bluff, East Florida. (E. Doubleday, Esq.)

25. Prosopis elliptica.


Hab. Hudson's Bay. (G. Barnston, Esq.)

26. Prosopis variolosa, n. s.

Female. Length 3 lines.—Black, the face yellow on each side of the clypeus, the coloured portion continuing along the margin of the eyes, but not reaching their vertex; down the centre of the clypeus a broad yellow line; the labrum and mandibles ferruginous; the cheeks behind the eyes flat. The thorax covered
with deep punctures, those on the metathorax oblong and placed transversely, interspersed with fine punctures; metathorax truncate, the enclosed portion below the post-scutellum deeply rugose; the sides of the metathorax covered thinly with white pubescence; the collar, tubercles and tegulae in front, the anterior tibiae in front, as well as the intermediate and posterior pairs at their base above yellow; the tarsi rufou-piceous. Abdomen conical, highly polished, covered with scattered slightly impressed punctures, except the margins, which are very smooth and shining.  

_Hab._ Santarem, Brazil. (Coll. H. W. Bates, Esq.)

27. **Protopis scutellata.**


_Hab._ Egypt.

28. **Protopis fulvipes.**


_Hab._ Europe.

29. **Protopis heraldica, n. s.**  

_Female._ Length 3½ lines.—Black, head and thorax strongly punctured, the clypeus, a transverse spot above, and an angulated one on each side reaching a little above the insertion of the antennæ pale yellow; the margin of the clypeus, forming an angular patch on each side, the labrum, mandibles and scape bright ferruginous; the flagellum testaceous beneath. Thorax, the collar yellow, having on each side a ferruginous stain; the tegulae, tubercles and legs bright ferruginous, the posterior coxae and femora fusco-ferruginous; the legs have a silvery-white pubescence, particularly on the tarsi above; the thorax on the sides has also a thin clothing of white pubescence. Abdomen, the sides of the basal segment ferruginous, and having on its apical margin a broadly interrupted band of white pubescence; the margins of the second, third, fourth and fifth segments narrowly ferruginous, the sixth entirely so; beneath, the margins broadly piceo-ferruginous.  

_Hab._ Cape of Good Hope.

30. **Protopis picta, n. s.**  

_Female._ Length 3 lines.—Black, the face below the insertion of the antennæ and a little above on each side, as well as the
scape in front, yellow; the flagellum beneath testaceous; the labrum and mandibles ferruginous. Thorax closely punctured; the collar, tubercles, tegulae in front, scutellum and post-scute-llum, as well as the legs, bright yellow; the coxae, trochanters and apical joints of the tarsi stained with ferruginous; the wings fusco-hyaline, splendidly iridescent. Abdomen finely punctured, the apical margins of the segments broadly testaceous, and having a band of pale yellow pubescence, that on the basal segment broadly interrupted; beneath, the margins are also testaceous.

Male.—Closely resembling the female, but narrower, and having the labrum and mandibles bright yellow.

_Hab._ Spain and Portugal.

31. _Prosoptis cyanura._


_Hab._ Swan River.

32. _Prosoptis similis, n. s._

_Female._ Length 3½ lines.—Black, entirely, closely and finely punctured, a large triangular spot on each side of the face, a spot on each side of the collar, the tubercles, scutellum and post-scutellum bright yellow; metathorax opake; thorax beneath coarsely punctured; wing hyaline, the second submarginal cell subquadrate, narrowed towards the marginal. Abdomen a little elongated, obscurely tinged with blue and covered with a changeable white pile, observable in certain lights, the apex thinly covered with black pubescence; beneath, the second segment at the base covered with deep punctures, its apical margin smooth; the second segment finely punctured at the base, more coarsely towards its apical margin; otherwise closely and finely punctured.

_Hab._ New Holland.

33. _Prosoptis violacea, n. s._

_Female._ Length 3 to 4 lines.—Head and thorax black, closely and rather strongly punctured; the face on each side of the clypeus with a lunate yellow patch reaching a little above the insertion of the antennæ, which are testaceous beneath; the tubercles, a half-circular spot on the scutellum, a smaller similar one on the post-scutellum bright yellow; beneath the latter is the enclosed segment of a circle, the upper portion of which is rugose, the under quite smooth; beneath the enclosed portion the metathorax is transversely striate. Abdomen violet, closely and rather strongly punctured. Wings hyaline, brilliantlly iridescent, the
second submarginal cell receiving both recurrent nervures a little within at each extremity.

Male.—Agrees with the female in sculpture, with the following differences in coloration; the face below the insertion of the antennæ entirely yellow, the anterior tibia in front, as well as the basal joint of the tarsi, yellow.

_Hab._ Swan River.

34. _Prosopis sulcifrons_, n. s.

Male. Length 3½ lines.—Black, closely punctured, clypeus bell-shaped, white, above which is an elevated carina more or less yellow, which terminates opposite the insertion of the antennæ; above, the face is deeply depressed; on each side of the clypeus is a deep sulcation, smooth and shining, which terminates a little above the insertion of the antennæ, sometimes a yellow spot at the apex; the tubercles, a large patch behind the scutellum and post-scutellum bright yellow; wings hyaline, splendidly iridescent, their extreme apex slightly clouded.

_Hab._ New Holland. (Coll. F. Smith.)

35. _Prosopis bicolorata_, n. s.

Female. Length 1½ line.—Black, the face below the insertion of the antennæ and a little above on each side, a line passing a little upwards between them and the antennæ fulvous. Thorax finely punctured; beneath, as well as the legs fulvous; the disk has also a fulvous stain; the tegulae and extreme base of the wings pale fulvous; wings hyaline, splendidly iridescent; the basal segment of the abdomen bright fulvous-red, the apical segments black.

_Hab._ Adelaide. (Coll. F. Smith.)

36. _Prosopis rufipes_, n. s. B.M.

Female. Length 2½ lines.—Black, head and thorax closely punctured, a minute white lunate spot on each side of the clypeus; the mandibles, labrum, apex of the clypeus and flagellum of the antennæ beneath fulvous. Thorax, a spot on each side of the collar white, the tibiae and tarsi fulvous. Abdomen, the basal segment and the basal half of the second segment fulvous-red.

_Hab._ New Holland.

37. _Prosopis fulvicornis_, n. s.

Female. Length 2½ lines.—Head and thorax black, the latter coarsely punctured; the face below the insertion of the antennæ c 2
bright yellow; the labrum and scape in front yellow; the mandibles ferruginous; antennae fulvous. Thorax, the collar on each side, the tubercles and a patch behind uniting, the tegulae in front, the scutellum and post-scutellum, the anterior femora at their base beneath the tibiae and tarsi, yellow; the tibiae have a ferruginous stain behind; the intermediate and posterior tarsi ferruginous; the scutellum is sculptured with large shallow punctures. Abdomen purple or deep blue, closely and finely punctured; the margins of the segments sometimes rufo-piceous, as well as the abdomen beneath.

**Hab.** Adelaide. (Coll. J. S. Baly, Esq.)

38. **Protopis quadrata, n. s.**

Male. Length 3 lines. — Black, face below the antennae yellow, the antennae luteous beneath. Thorax as well as the head very closely and finely punctured; the tubercles, scutellum and post-scutellum forming a quadrate patch, yellow; below which is an enclosed space, beautifully and delicately reticulated; wings hyaline, splendidly iridescent; the anterior and intermediate tibia in front, as well as the tarsi of the former, pale ferruginous. Abdomen elongate-ovate, closely punctured; the margins of the two basal segments constricted.

**Hab.** New Holland. (Coll. J. S. Baly, Esq.)

39. **Protopis bidentata, n. s.**

Male. Length 3½ lines. — Black, face below the insertion of the antennae, and a narrow line between not reaching the anterior stemma, a line along the margin of the eyes, as well as a line behind them, yellow. Thorax opaque; the collar, tubercles, the knees of the anterior and intermediate legs, as well as the basal half of the posterior tibia, pale yellow; anterior tibiae and basal joint of the tarsi ferruginous; wings hyaline, the two recurrent nervures uniting with the nervures of the second submarginal cell. Abdomen punctate, shining; beneath, the third segment is produced into a transverse elevated ridge, having a stout tooth at each extremity.

**Hab.** New Holland. (Coll. J. S. Baly, Esq.)

40. **Protopis elegans, n. s.**

Female. Length 3½ lines. — Head and thorax black; the face with three broad yellow stripes, terminating in a line with the anterior stemma; the labrum yellow, the mandibles ferruginous; antennae fusco-ferruginous above, pale beneath, their scape yellow in front. Thorax closely punctured, the scutellum and post-
scutellum, the tegulae and a broad epaulet over them, the tubercles and legs, bright yellow; the coxae and trochanters dark ferruginous, the apical joints of the tarsi pale ferruginous. Abdomen red, having a black spot in the centre of the basal segment.

Male. In general colouring agreeing with the other sex, but has the face entirely yellow below the insertion of the antennae; the epaulet narrow, the post-scutellum black. Abdomen having only the two basal segments and a line down their centre black, the posterior margin of the second black.

*Hab.* Adelaide.

### 41. Protopsis ruficeps, n. s. B.M.

Female. Length 3 lines.—Head red, coarsely punctured, the space between the clypeus and the eyes yellow, between the insertion of the antennae and the stemmata black. Thorax black shining, covered with deep punctures; the collar slightly interrupted, the tubercles and a lunate shape behind them, the scutellum and post-scutellum yellow; the metathorax truncate behind; the anterior tibiae have a rufous stain in front, the claws rufous. Abdomen of a metallic blue, in certain lights rufipiceous, delicately punctured.

*Hab.* Adelaide.

### 42. Protopsis alcyonea. B.M.


*Hab.* Van Diemen's Land.

### 43. Protopsis vidua, n. s. B.M.

Male. Length 5 lines.—Head and thorax black, the face on each side of the clypeus below the insertion of the antennae yellow, continued so upwards, gradually attenuating towards the vertex of the eyes, not quite reaching it; from the anterior stemma a channel passes forwards towards the clypeus, in which is sometimes a minute yellow spot; the clypeus on each side, as well as the anterior margin, bordered with black; a transverse yellow line on the labrum; the flagellum of the antennae testaceous beneath. Thorax strongly punctured, the tubercles yellow; the sides of the metathorax pubescent; above, at the margin of the post-scutellum, produced into a somewhat sharp shining angular point; the first recurrent nervure uniting with the apical nerve of the first submarginal cell, the second recurrent nervure received one-third from the apex of the second submarginal cell, which is also one-third narrower at its radial than at its inferior margin. Abdomen deep blue, having a scattered white pu-
nescence, most dense at the sides; on the apical margin it is black.

This is probably the male of *P. alcyonea* of Erichson.

*Hab.* New Holland.

44. **Prosopis mixta.**


*Hab.* India. (Mus. Hon. East India Company.)

**B. The first recurrent nervure entering the second submarginal cell.**

45. **Prosopis confusa, n. s.**

*Head and thorax black, closely punctured, the punctures on the face elongate, running into grooves at the margin of the clypeus, which is smooth and slightly elevated; the face on each side of the clypeus yellow. Thorax, the tubercles, scutellum and post-scutellum yellow; wings hyaline, slightly clouded towards their apical margins, the second recurrent nervure uniting with the apical one of the second submarginal cell, the first recurrent nervure received a little within the second submarginal cell; beneath, nigro-aeneous, coarsely punctured, and thinly covered with short white pubescence, the tibiae and tarsi clothed with similar pubescence, the claws ferruginous. Abdomen, of a blue green, closely and rather strongly punctured; the margins of the segments violet, smooth and shining; the anterior margin of the basal segment produced in the centre, forming the apex of a shining carina, which runs a short distance down the truncation of the segment; beneath coarsely punctured.*

*Hab.* New Holland.

**C. Both the recurrent nervures entering the second submarginal cell.**

46. **Prosopis nigrifrons, n. s.**

*Female. Length 4 lines.—Black, the clypeus finely aciculate, interspersed with distinct punctures. Thorax strongly punctured, the tubercles and a larger patch behind, the scutellum and post-scutellum yellow; the enclosed space below the post-scutellum has the upper half longitudinally strigose; wings subhyaline, the first recurrent nervure received about one-third from the base of the second submarginal cell, the second nearly at the apex. Abdomen closely punctured, more strongly so towards the apex;*
beneath coarsely punctured; the margins of the segments smooth, shining and piceo-ferruginous.

_Hab._ New Holland.

47. _Prosopis impressifrons_, n. s. **B.M.**

_Male._ Length 4½ lines.—Black, head and thorax strongly punctured, the clypeus and a small angular elevation above, as well as a narrow stripe along the inner orbits of the eyes, bright yellow; a smooth, elongate, deep sulcation on each side of the clypeus; the scape dilated, concave behind; the flagellum fulvous beneath; the mandibles grooved exteriorly, the stemmata placed in a curve. Thorax, the collar slightly interrupted, a spot on the tegulae in front, the tubercles, a lunate-shaped patch behind, the scutellum and post-scutellum bright yellow; the enclosed space beneath smooth and shining; wings fusco-hyaline; both the recurrent nervures received about one-fourth within the second submarginal cell; beneath very coarsely punctured; anterior tibiae in front and the claws ferruginous; posterior tibiae and all the tarsi clothed with short white pubescence. Abdomen, the basal segment finely, the rest much more strongly punctured, all the margins smooth and shining; beneath covered with large elongate scattered punctures.

_Hab._ New Holland.

48. _Prosopis despansa_, n. s. **B.M.**

_Female._ Length 4½ lines.—Black, a broad yellow stripe down the centre of the clypeus, on each side of which is a smooth impressed line; above, on each side is a deep depression. Thorax strongly punctured, the collar, tubercles, and a lunate-shaped spot behind the scutellum and a large spot on the post-scutellum, yellow; the enclosed space beneath smooth and shining; wings subhyaline; all the tarsi and posterior tibiae clothed with white pubescence; claws ferruginous. Abdomen, the basal segment more finely punctured than the rest, and having laterally on its apical margin a small patch of white pubescence, a little scattered white pubescence along the sides of the abdomen, that on the apical segments black; beneath coarsely punctured.

This is probably the female of _P. impressifrons._

_Hab._ New Holland.

49. _Prosopis nubilosa_, n. s. **B.M.**

_Female._ Length 3½ lines.—Black, the head more elongate than in _P. nigrifrons_, the clypeus beautifully aciculate, interspersed with elongate punctures, having a spot near the anterior margin and a narrow line along the margins of the eyes, yellow. Thorax
very closely and delicately punctured, the tubercles, scutellum and post-scutellum yellow; the colouring on the scutellum waved at the anterior margin; wings subhyaline; the marginal cell has a narrow fuscous cloud passing along the costal nervure to the apex of the wing; the second submarginal cell quadrate, receiving the first recurrent nervure about one-fourth within, the second at its apex nearly uniting with the apical nervure. Abdomen shining, closely punctured, the basal segment most strongly so.

_Hab._ Port Philip.

**Genus 10. HYLEOIDES.**

_F. Smith’s MSS._ (Details, Plate II.)

Head not so wide as the thorax, transverse, subtriangular in front; eyes lateral, elongate-ovate, narrowest at their vertex; the mentum shorter than the labium, which is produced at the apex into elongate lobes rounded at their extremities; the paraglossae one-third shorter than the labium; labial palpi four-jointed, the basal joint as long as the three following, and having above a number of erect stiff hairs, the apical joint short, cylindrical. The maxillary palpi six-jointed, the basal joint very stout, the two following subclavate, about the same length as the basal joint; the three apical joints of about equal length, and about two-thirds the length of the third joint; the stemmata placed in a triangle on the vertex. Thorax ovate, the superior wings having one marginal cell, one-fourth longer than the first submarginal cell, the extreme apex rounded, and having a short appendiculate nervure; the submarginal cells of about equal length, the second widest at its apex. Abdomen elongate-ovate.

1. _HYLEOIDES CONCINNA_.

_Vespa concinna, Fabr. Ent. Syst. ii. 263, 38; Cab. Banks. Mus._

_Linn. Soc. Syst. Piez. p. 259. 30._

_Hab._ New Holland; Port Philip.

2. _HYLEOIDES ZONALIS_, n. s.

_Female._ Length 5½ lines.—Black, the clypeus finely aciculate, and having a central yellow stripe, broadest at the base; mandibles very broad at the base, forcipate, deeply grooved exteriorly, bidentate at the apex, apical tooth rounded; antennae subclavate, stemmata placed in a triangle on the vertex; on each side, close to the margin of the eyes, a smooth impressed line. Thorax oval, the collar slightly interrupted in the middle, the
tubercles and two ovate spots on the scutellum yellow; the superior wings have a dark fuscous cloud on their anterior margin, extending from base to apex, the width of the marginal and second submarginal cells, a little palest towards the base of the wings; legs ferruginous, anterior pair darkest; the anterior tibiae at their apex furnished exteriorly with a stout bent tooth rather more than one-third the length of the basal joint of the tarsi; the tarsi densely ciliated; the intermediate and posterior legs have a silvery-white pubescence, most dense on the tarsi and on the posterior femora and tibiae within. Abdomen, the apical margin of the basal segment has a broad yellow band, dilated laterally; a similar band, continued beneath, occupies the third segment a little before its apical margin; beneath, the second segment is produced at its base into a conical tubercle.

_Hab._ New Holland (Hunter River).

**Genus 11. MEROGLOSSA.**

_F. Smith's MSS._ (Details, Plate II.)

Head transverse, face elongate; ocelli placed in a slight curve on the vertex. Antennae filiform in the male, 13-jointed, the seventh joint more slender than the others. Mentum elongate-conic, about thrice the length of the labium; the labium lanceolate, of about the same length as the paraglossae, which are broad, and as well as the labium very pubescent. Maxillary palpi six-jointed. Thorax ovate, superior wings having one marginal cell acuminate at its apex; submarginal cells two, the first twice the length of the second, the second receiving both the recurrent nervures. Abdomen elongate-ovate.

1. _Meroglossa canaliculata_, n. s. 

_Male._ Length 4½ lines.—Black, ocelli large and prominent, the face deeply canaliculate, smooth and shining; the canaliculation occupying the whole of the face above the insertion of the antennae and extending on each side of the clypeus nearly to its anterior margin; a raised yellow line traverses the inner orbits of the eyes; the clypeus yellow, angular above; the labrum, mandibles and antennae ferruginous, the scape broadly dilated, yellow in front. Thorax, the prothorax slightly elongated, the collar narrowly yellow, the disk strongly punctured; the metathorax rounded and covered with griseous pubescence; the tegulae have a minute white dot in front, and are, as well as the nervures of the wings, rufo-piceous; the legs rufo-piceous; the anterior tibia piceous in front. Abdomen cylindrical, closely

"c 5"
punctured, covered sparingly with hoary pubescence, particularly at the sides.

_Hab._ Port Essington.

**Subfam. 2. ACUTILINGUES.**


**Genus 12. SPHECODES.**

_(Details, Plate III.)_

_Sphex, pt., Linn. Syst. Nat._ i. 941, 1766.

1. **SPHECODES GIBBUS.**

_Sphex gibba, Linn. Syst. Nat._ i. 946. 33, & _Cab. Mus. Linn._
_Soc._

_Rossi, Faun. Etrus._ ii. 63. 816.
_Apis rufa, Christ. Hym._ p. 201. t. 17. f. 12, _♀_.
_Melitta specocoides, Kirby, Mon. Ap. Angl._ ii. 46. 9, _♀_.
_Melitta monilicornis, Kirby, Mon. Ap. Angl._ ii. 47. 10 _♂, &
_t. 15. f. 6._
_Sphecodes piceus, Wesm. Obs._
_p. 193. 2._
_Sphecodes specocoides, Smith, Zool._ iii. 1013. 2. f. 34.
_Hab._ Europe.

2. **SPHECODES RUFESCENS.**

_Apis rufescens, Fourc. Ent. Par._ ii. 447. 17.
_Apis gibba, Christ. Hym._ p. 183. t. 15. f. 3.
_Nomada gibba, Fabr. Ent. Syst._ ii. 348. 12, & _Cab. Banks. Mus._
_Linn. Soc._
_St. Farg. Hist. Nat. Ins._ ii. 542. 3. t. 24. f. 1 _♀, 2 _♂._
_Smith, Zool._ iii. 1012. 1.
_Sphecodes pellucidus, Smith, Zool._ iii. 1014. 3, _♂ _♀, var. — ?
_Reaum. Mem._ vi. 96. t. 9. f. 4. 7.
_Proabeille noire et rousse, De Geer, ii. 7. 55. t. 32. f. 6.
_Hab._ Europe.
3. **Sphecodes subquadratus.**


Sphecodes subquadratus, *Smith, Zool.* iii. 1014. 5, ♂ ♀.

*Hab.* Charlton, Kent, and Camberwell.

4. **Sphecodes ephippia.**


Apis fulviventris, *Scop. Ent. Carn.* 807, ♀ ?


Sphecodes divisus, *Smith, Zool.* iii. 1015. 6, ♂ ♀.


*Hab.* Europe.

5. **Sphecodes Geoffrellus.**


*Smith, Zool.* iii. 1014. 5, ♂ ♀.


*Hab.* Britain.

6. **Sphecodes fuscipennis.**


Apis rufa, *Sulz. Hist. Ins.* p. 198. t. 27. f. 14?

*Hab.* England; France; Germany; Greece.

7. **Sphecodes collaris.**


*Hab.* Spain.
8. **Sphecodes semi-aeneus.**


*Hab.* Canary Islands.

9. **Sphecodes alternatus, n. s.**

Female. Length 4 lines.—Head and thorax black; sides of the face below the antennae covered with silvery-white pubescence, mandibles in middle ferruginous; the head shining and strongly punctured. Thorax shining, the punctures scattered on the disk; metathorax truncate, above rugose; the outer margins of the tegulae pale testaceous; wings fusco-hyaline, their apical margins darkest; the first recurrent nervure received in the middle of the second submarginal cell; all the tibiae and tarsi ferruginous, the tibiae having a fuscous stain behind. Abdomen shining red, the extreme base impunctate, becoming gradually closely punctured at the apical margin of the basal segment; the following segments each in succession more closely and much more finely punctured.

Resembling *S. Africanus,* but in that species the first recurrent nervure is received at the extreme apex of the second submarginal cell.

*Hab.* Albania. (Coll. W. W. Saunders, Esq.)

10. **Sphecodes fumipennis, n. s.**

Female. Length 5 lines.—Head and thorax black, the face on each side of the clypeus clothed with white pubescence; the mandibles dark ferruginoous, antennae rufo-piceous beneath; the puncturing on the vertex very deep and close, on the disk of the thorax the punctures are large and confluent; the metathorax truncate, the sides and upper portion coarsely rugose; wings dark fuscous; legs fusco-ferruginoous, the tibiae and tarsi clothed with silvery-white pubescence. Abdomen covered with large distant punctures, the apical margin of the basal segment constricted, the following depressed, smooth and shining.

*Hab.* N. India. (Coll. J. S. Baly, Esq.)

11. **Sphecodes apicatus, n. s.**

Female. Length 4 lines.—Head and thorax black, the former strongly and closely punctured, the face covered with white pubescence, most sparing on the clypeus. Thorax, the disk very smooth and shining, having a few large distant punctures; metathorax coarsely rugose; wings fusco-hyaline, their apical margins darkly clouded; apical joints of the tarsi ferruginous; all
the tarsi and the intermediate and posterior tibiae covered with silvery pubescence. Abdomen red, the apical segment black, punctures fine and distant.

Hab. India. (Coll. J. S. Baly, Esq.)

12. **Sphecodes rufipes**, n. s.

Female. Length 3½ lines. — Head and thorax black, their pubescence black; mandibles ferruginous. Thorax strongly punctured, the tegulae rufo-piceous, the wings fusco-hyaline, all the tibiae and tarsi bright ferruginous, their pubescence white; that on the femora is black. Abdomen red, smooth and shining, the basal margins sparingly punctured; the apex clothed with fuscos pubescence.

Male. — Closely resembles the female; head rather wider than the thorax, the face covered with white pubescence, the antennæ moniliform. Abdomen elongate-ovate, closely and distinctly punctured.

Hab. Algeria.

13. **Sphecodes rubripes**.


Hab. Egypt.

14. **Sphecodes hispanicus**.


Hab. Egypt; South of France.

15. **Sphecodes antipodes**, n. s.

Female. Length 3½ lines. — Head and thorax black, closely and strongly punctured; mandibles deeply grooved exteriorly, their apex broad and ferruginous; the stemmata placed in a curve on the vertex; the flagellum of the antennæ nigro-piceous beneath. Thorax, the upper portion of the metathorax grooved longitudinally; beneath the post-scutellum is a half-circular space enclosed by an elevated carina; thence to its base truncated, the sides of the truncation produced into two pointed tubercles; wings fusco-hyaline, palest towards their base; the posterior legs clothed with silvery white pubescence, particularly within; apical joints of the tarsi ferruginous. Abdomen red, shining, distinctly but sparingly punctured; the base black, the margins
of the segments more or less nigro-piceous; beneath, the margins of the segments fringed with pale hairs.

_Hab._ Sydney. (Coll. F. Smith.)

16. **Sphecodes dichroa.**

Sphecodes dichroa, *Harris's Catalogue*.

Female. Length 4½ lines.—Head and thorax black, strongly punctured; on the disk of the thorax, which is shining, the punctures are more distant, as also on the clypeus; tegulae rufo-piceous, the nervures dark ferruginous; wings hyaline, having a fuscous cloud at their apex; the metathorax truncate, the enclosed space below the post-scutellum rugged, as well as the sides beyond, the truncation not so coarsely rugose. Abdomen entirely red, strongly punctured, the margins of the segments depressed, apical segment rufo-testaceous; beneath more strongly but not so closely punctured.

Male.—Closely resembling the female, but more coarsely sculptured and more pubescent; the antennae submoniliform; the margins of the abdominal segments very smooth and shining.

_Hab._ United States. (E. Doubleday, Esq.)

**Genus 13. TEMNOSOMA.**

*F. Smith's MSS.* (Details, Plate II.)

Head subquadrate, as wide as the thorax, stemmata placed in a triangle on the vertex, the posterior pair on a line with the vertex of the eyes; eyes lateral, elongate-ovate; antennae filiform. Mentum elongate, labium short, narrow and acuminate, paraglossae broader than the labium, a little shorter, and pointed at their apex; labial palpi four-jointed. Maxillary palpi six-jointed, the apical lobe short and rounded, the palpi twice the length of the lobe; the joints about equal in length. Thorax ovate, rounded posteriorly, anterior wings having one marginal and three submarginal cells; the marginal cell equal in length to the three submarginals, wide at the base and gradually narrowing towards the apex; the first submarginal cell longer than the second and third, the second very narrow, the transverse nervures in the males nearly coalescing, the third narrowed towards the marginal.

1. **Temnosoma metallicum, n. s.**

Female. Length 3 lines.—Metallic green, head strongly punctured; antennae labrum and mandibles black, the latter ferruginous at their apex; the clypeus prominent. Thorax strongly
but distantly punctured on the disk; metathorax rounded and having a deep longitudinal channel; beneath the post-scutellum is a row of radiating sulcations, beyond which is a space transversely strigose, the remaining portion covered with deep punctures; wings hyaline, splendidly iridescent, slightly clouded at their apical margins; the tarsi rufo-piceous. Abdomen, the margins of the two basal segments much depressed, that of the third moderately so; all the margins above and beneath smooth and shining, the abdomen otherwise covered with large deep punctures; margins of the segments beneath nigro-piceous.

Male.—Corresponds with the female, the abdomen being less deeply punctured.

_Hab._ & Para.  δ Jamaica? (H. W. Bates, Esq.)

Genus 14. PARASPHECODES.

_F. Smith’s MSS._  (Details, Plate III.)

The species of this subdivision closely resemble in general appearance those of the genus _Sphecodes_, but the females possess the characteristic anal rima and also the appendage to the labrum of the females of the genus _Halictus_; the males also have an elongate cylindrical abdomen, and have the clypeus produced and yellow at the apex, as is usual in the same genus; the tongue offers no positive distinction from some of the species of _Halictus_, which differ in having that organ more or less elongate and acute, but the superior wings have always the first recurrent nervure united to the second transverse-cubital nervure. All the species are from Australia and Van Diemen’s Land.

1. _Parasphecodes Hilactus_, n. s.  B.M.

Male. Length 4 to 4½ lines.—Head and thorax black, the clypeus moderately produced, yellow at the apex, antennae as long as the head and thorax. Thorax strongly and closely punctured, the base of the metathorax enclosed by a sharp arched elevation which is more or less waved on each side and forming a point in the centre, the enclosure deeply rugose-striate, slightly radiating; tegulae rufo-testaceous, wings slightly rufo-hyaline, iridescent and faintly clouded at their apex, nervures ferruginous; legs red, or sometimes rufo-testaceous. Abdomen elongate, closely and finely punctured, the fourth and following segments black, margins of the three basal ones fuscous.

_Hab._ Swan River; Adelaide.

2. _Parasphecodes Hilactus_, n. s.  B.M.

Female. Length 3½ lines.—Head and thorax black, opaque, thinly covered with hoary pubescence, most dense on the sides
of the metathorax, both very finely and very closely punctured; the base of the metathorax enclosed by a raised, smooth ridge behind, the enclosure has a series of radiating striae; metathorax behind smooth and shining; tegulae rufo-testaceous; wings hyaline, iridescent, clouded at their apex; legs black or dark rufo-testaceous, their pubescence above fuscous, beneath of a changeable silvery brightness. Abdomen red, very finely punctured, the base and sides have a hoary pubescence.

\textit{Hab.} New Holland.

3. \textit{Parasphecodes Sulthica, \textit{n. s.}} \textit{B.M.}

\textbf{Male.} Length 3\textfrac{1}{2} lines.—Head and thorax black, apex of the clypeus yellow, the face covered with fulvous pubescence, the antennae longer by one-third than the head and thorax; the latter finely and very closely punctured, the base of the metathorax enclosed by an arched ridge, the enclosure rugose-striate, sides of the metathorax as coarsely sculptured as the enclosed space; the thorax thinly covered with fulvous pubescence, most dense on the sides of the metathorax; tibiae and tarsi ferruginous, the posterior tibiae more or less stained outside; tegulae pale rufo-testaceous; wings hyaline, faintly clouded at their apex, iridescent, the nervures ferruginous. Abdomen elongate, red, slightly fuscous at the apex, very finely and closely punctured.

\textit{Hab.} New Holland.

4. \textit{Parasphecodes Lacthius, \textit{n. s.}} \textit{B.M.}

\textbf{Female.} Length 4 lines.—Head and thorax black, very finely and closely punctured, opake; clypeus shining, having scattered deep punctures; flagellum fulvo-testaceous beneath. Thorax, the base of the metathorax not distinctly enclosed, irregularly longitudinally rugose; tegulae rufo-testaceous; wings slightly fulvo-hyaline, iridescent, very slightly clouded at their apical margins; legs rufo-testaceous. Abdomen ovate, red, the basal segment more or less fuscous at the base, the fourth and following segments fuscous, thinly covered with a short hoary pubescence.

\textit{Hab.} New Holland.

5. \textit{Parasphecodes Lichatus, \textit{n. s.}} \textit{B.M.}

\textbf{Female.} Length 5 lines.—Head and thorax black, the clypeus produced, shining, strongly punctured, slightly impressed longitudinally. Thorax strongly and very closely punctured, the base of the metathorax enclosed by a sharp ridge or carina,
straight behind, from which it is continued on each side obliquely
to the post-scutellum, which is densely covered with hoary pu-
bescence, as well as the whole thorax on the sides and beneath;
the legs beneath fringed with hoary pubescence, tinged with
yellow in certain lights, on the tibiae above it is fuscous; wings
subhyaline, their apex clouded, the nervures dark fusco-ferru-
ginous. Abdomen ovate, red, closely and very finely punctured,
the fourth and following segments black.

Hab. Western Australia.

6. **Parasphecodes Tuchilas**, n. s. B.M.

Female. Length 4 lines.—Head and thorax black, clypeus
shining and strongly punctured; the disk of the thorax strongly
and very closely punctured, the base of the metathorax enclosed
by a sharp curved elevated ridge, the enclosure longitudinally
rugose; sides of the metathorax and the whole of the thorax
beneath thinly covered with hoary pubescence; on the tibiae
above fuscous, in certain lights having a silvery brilliancy. Ab-
domen elongate-ovate, red, finely and not very closely punctured,
the extreme base black, as well as the fourth and following seg-
ments, beneath coarsely punctured.

Hab. New Holland.

7. **Parasphecodes Tilachus**, n. s. B.M.

Female. Length 4½ lines.—Head and thorax black, the cly-
peus produced, and having a number of large deep somewhat
elongate punctures; the face has a little scattered yellow pubes-
cence, the flagellum obscurely testaceous towards the apex;
 thorax coarsely punctured; base of the metathorax enclosed by
a smooth ridge, the enclosure concave and roughly striated, the
irregular stration slightly radiating; wings subhyaline, fusco-
ferruginous, nervures ferruginous; the legs, and thorax on its
sides and beneath have a pale fulvous pubescence. Abdomen red,
the base rather strongly punctured, the fourth and following seg-
ments black.

Hab. Van Diemen’s Land.

8. **Parasphecodes Lithusca**, n. s.

Female. Length 3½–4 lines.—Head and thorax black, the
clypeus not produced, shining, and having large scattered punc-
tures, the head very closely punctured, the flagellum nigro-piceous
beneath. Thorax, the disk shining, finely and distantly punct-
tured, the base of the metathorax not enclosed, but finely rough-
ened and opake; wings ferrugineo-hyaline, iridescent and
clouded at their apex; legs rufo-testaceous, the tibiae and tarsi
palest, their pubescence fulvous. Abdomen red, the extreme base black, apex slightly fuscous, the anal rima ferruginous.

_Hab._ Van Diemen's Land.

9. _Parasphecodes Talchius._

**Male.** Length 4 lines.—Head and thorax black, apex of the clypeus yellow; the face thickly covered with yellow pubescence; antennæ as long as the head and thorax, the latter closely punctured; the base of the metathorax enclosed by an arched ridge, the enclosure coarsely rugose; legs black, the tibiae and tarsi more or less rufo-piceous; wings subhyaline, clouded at their apex. Abdomen very closely and finely punctured, black at the base, the apex more or less fuscous, basal margins of the second and third segments depressed.

_Hab._ Van Diemen's Land.

10. _Parasphecodes Stuchila, n. s._

**Male.** Length 4 lines.—Head and thorax black, antennæ as long as the head and thorax, the apex of the clypeus yellow. Thorax very minutely punctured; the base of the metathorax enclosed by an arched elevated ridge, the enclosure finely reticulate; wings subhyaline, their apex clouded; the tibiae, tarsi and posterior femora above ferruginous. Abdomen ferruginous, the basal half of the first segment black, slightly fuscous; basal margins of the second and third segments depressed.

_Var._ Legs and abdomen black, the claw-joint of the tarsi alone ferruginous. Abdomen black, tibiae and tarsi testaceo-ferruginous.

_Hab._ Van Diemen's Land.

11. _Parasphecodes Altichus, n. s._

**Male.** Length 4½ lines.—Head and thorax black, antennæ as long as the head and thorax, the face covered with ochraceous pubescence, the apex of the clypeus yellow, which in the centre is produced upward in an angular shape; margin of the clypeus, the labrum and mandibles dark ferruginous, the flagellum fulvous beneath. Thorax, the disk closely and strongly punctured; at the base of the metathorax is an enclosed space coarsely rugose; the sides of the truncation have a raised carina, the sides of the metathorax covered with ochraceous pubescence thinly scattered over the whole thorax beneath; wings subhyaline, nervures ferruginous; the apex of the wings fuscous; legs black, claw-joint of the tarsi ferruginous. Abdomen elongate-ovate, closely and finely punctured, most strongly at the base; the third segment
HYMENOPTERA.

more or less in the middle and the whole of the following segments black.

*Hab.* Van Diemen's Land.

12. **Parasphecodes Taluchis**, n. s.

Female. Length 3 lines.—Head and thorax black, the clypeus slightly produced and roughly punctured at the apex, flagellum rufo-testaceous towards the apex. Thorax very finely and closely punctured; the base of the metathorax enclosed by a sharp arched ridge, the enclosure strongly longitudinally rugose; tegulae rufo-testaceous; wings rufo-hyaline, beautifully iridescent, their nerves ferruginous; legs dark rufo-testaceous, the tarsi palest. Abdomen red, slightly fuscoustowards the apex.

*Hab.* Van Diemen's Land.

Genus 15. **HALICTUS**.

(Details, Plate II.)


*Lasioglossum*, *Curtis, Brit. Ent.* x. 418, 1834.

1. **Halictus quadrirstrigatus**. B.M.


*St. Farg. Hym.* ii. 265. 1.


*Schaff. Icon. Ins. Ratisb.* t. 32. f. 19, 3.

*Andrena quadrirstrigata*, *Spin. Ins. Lig.* fasc. 1. p. 123. 11, male.


*Hab.* France; Italy; Germany; Belgium; Algeria.

2. **Halictus sexcinctus**. B.M.

*Apis sexcincta*, *Fab. Syst. Ent.* ii. 387. 54; *Sp. Ins.* p. 485. 73; *Mantiss.* i. 305. 84.

*Hyleus sexcinctus*, *Fab. Ent. Syst.* ii. 304. 6, 3; *Syst. Piez.* p. 320. 4.
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St. Farg. Hym. ii. 268. 4.
Hab. France; Italy; Germany; Greece; Spain; Polish Ukraine.

3. HALICTUS ZEBRUS.

Apis scabiosa, Rossi, Faun. Etrus. ii. 105. 916, ♀ ?
St. Farg. Hym. ii. 266. 3.
Halictus scabiosa, Brullé, Hist. Nat. II. Canar. ii. 87. 30.
Hab. France; Germany; Italy; Syria; Canary Islands.

4. HALICTUS QUADRICINCTUS.

Apis quadricincta, Fab. Mantiss. i. 305. 85.
Hylæus quadricinctus, Fab. Ent. Syst. ii. 303. 3, ♀ .
Smith, Zool. vi. 2040. 1.
Hab. Britain; France; Italy; Germany; Sweden; Canary Islands.

5. HALICTUS XANTHOPUS.

Lasioglossum tricingulum, Curtis, Brit. Ent. x. t. 418, ♀ .
Halictus xanthopus, Brullé, Exp. de Morée, iii. 349. 769.
St. Farg. Hym. ii. 273. 10, ♀ ♀ .
Smith, Zool. vi. 2173. 25.
Hab. Britain; France.

6. HALICTUS LUGUBRIS.

Halictus lugubris, Smith, Zool. vi. 2169. 19, ♀ ♀ .
Hab. Britain; France; Dalmatia.
7. Halictus sexnotatus. B.M.

Melitta sexnotata, Kirby, Mon. Ap. Angl. ii. 82. 37. t. 15. f. 7, 8, δ ♀.


Nyland. Revis. Apum Boreal. p. 239. 5.

Hab. Britain; France; Belgium; Jersey; Sweden.

8. Halictus quadrintatus. B.M.


Halictus quadrintatus, Brullé, Exp. de Morée, iii. 350. 773.

Smith, Zool. vi. 2173. 24.


Hab. Britain; France; Belgium; Denmark.

9. Halictus maculatus. B.M.

Halictus maculatus, Smith, Zool. vi. 2172. 23, ♀.


Hab. Britain; France.

10. Halictus interruptus. B.M.


Halictus interruptus, St. Farg. Hym. ii. 288. 32.

Smith, Zool. vi. 2167. 16.

Hab. Britain; France; Germany; Italy; Portugal.

11. Halictus elegans. B.M.

Halictus elegans, St. Farg. Hym. ii. 286. 29.

Hab. South of France; Italy.

12. Halictus prasinus.

Halictus prasinus, Smith, Zool. vi. 2169. 18.


Hab. Britain; France.

13. Halictus abdominalis. B.M.

Hylæus abdominalis, Panz. Faun. Germ. 53. 18, δ.


Andrena vulpina, Fab. Syst. Piez. p. 326. 19, ♀?

Panz. Faun. Germ. 97. 18, ♀.
Halictus vulpinus, St. Farg. Hym. ii. 276. 15.

Halictus abdominalis, Smith, Zool. vi. 2106. 15.
Halictus malachurus, Kirby’s Copy, Mon. Apum Angl. note.

Smith, Zool. vi. 2106. 14, var.

Hab. Britain; France; Germany; Italy; Belgium; Portugal;
Algeria; S. Africa; Finland; Lapland; Polish Ukraine; Nova Scotia.

14. HALICTUS FULVIPES. B.M.

t. 15.

Hab. Germany.

15. HALICTUS VULPINUS.


Hab. France.

16. HALICTUS ALBIPES. B.M.

Apis albipes, Fab. Mant. Ins. i. 306. 92, ♂.

Panz. Faun. Germ. 7. 15.

Hylaeus albipes, Fab. Ent. Syst. ii. 306, ♂.
Halictus albipes, St. Farg. Hym. ii. 287. 31, ♂.

Smith, Zool. vi. 2167. 17, ♂ ♀.

var.

Hab. Britain; France; Germany; Portugal.

17. HALICTUS SUBFASCIATUS. B.M.

i. 200. 5; Revis. Apum Boreal. p. 245. 17.

Hab. North of England; Sweden; Finland.

18. HALICTUS LONGULUS. B.M.

Halictus longulus, Smith, Zool. vi. 2104. 11, ♀.

Hab. Britain; Italy.
19. **Halictus laevis.**


*Halictus laevis, St. Farg. Hym. ii. 277. 16.*

*Smith, Zool. vi. 2104. 12, ♀.*


*Hab. Britain; France.*

20. **Halictus rufitarsis.**


*Hab. France; Lapland; Finland.*

21. **Halictus minutissimus.**


*Halictus minutissimus, Smith, Zool. vi. 2103. 9.*


*Hab. Britain; France; Belgium.*

22. **Halictus nitidiusculus.**


*Halictus nitidiusculus, Smith, Zool. vi. 2103. 10, ♂ ♀.*


*Hab. Britain; Denmark; Sweden; Italy; Algeria.*

23. **Halictus minutus.**


*Halictus minutus, St. Farg. Hym. ii. 227. 17, ♂ ♀.*


*Smith, Zool. vi. 2102. 8.*

*Hab. Britain; France; Denmark; Finland.*

24. **Halictus villosulus.**


*Halictus villosulus, Smith, Zool. vi. 2105. 13, ♂ ♀.*


*Hab. Britain; France.*
25. **HALICTUS LEUCOPUS.**


*Smith, Zool. vi. 2100. 5.*

*Hab. Britain; France; Finland.*

26. **HALICTUS SMEATHMANELLUS.**


*Halictus Smeathmanellus, Smith, Zool. vi. 2101. 7.*

*Hab. Britain; France; Denmark; Belgium.*

27. **HALICTUS PARVULUS.**


*Andrena pulchella, Jurine, Hymenopt. t. 11. gen. 32.*


*Hab. South of France; Italy; Greece.*

28. **HALICTUS FLAVIPES.**

*Hylæus flavipes, Fab. Ent. Syst. ii. 305. 11, ♂.*


*Panz. Faun. Germ. 56. 4.*


*Apis seladonia, Fab. Ent. Supp. p. 276. 120.*


*Halictus virescens, St. Farg. Hym. ii. 279. 19?*

*Halictus flavipes, Smith, Zool. vi. 2042. 3, ♂ ♂.*

*Hab. Britain; France; Germany; Greece; Sweden; Finland; Nova Scotia; Mount Pleasant, Ohio.*

*Obs. The specimens of this species from America are larger than any yet observed from other localities, but in other respects no difference has been detected; the sculpture of the metathorax, a strong character, is the same, as is also the neuration of the wings.*

29. **HALICTUS MORIO.**

*Hylæus morio, Fab. Ent. Syst. ii. 306. 16, ♂.*

*Coqueb. Illustr. Ins. p. 25. t. 6. f. 5, ♂.*
Hymenoptera.

30. **Halictus æratus.**
   
   *Smith, Zool.* vi. 2101. 6.
   
   Hab. Britain; France; Italy; Finland.

31. **Halictus tumulorum.**

   
   Hab. Britain; Sweden; Finland.

32. **Halictus fulvicornis.**

   
   Hab. Britain.

33. **Halictus major.**

   
   Hab. France; Russia.

34. **Halictus lineolatus.**

   
   Hab. France.

35. **Halictus leucozonius.**

   *Rossi, Mant.* p. 319.
   *Smith, Zool.* vi. 2171. 21.
   
   Hab. Britain; France; Italy; Germany; Belgium.
36. Halictus rubicundus. B.M.
Apis rubicundus, Christ. Hym. p. 190. t. 16. f. 10, ♀.
Apis flavipes, Panz. Faun. Germ. 56. 17, ♀.
Curtis, Brit. Ent. x. t. 449.
Halictus nidulans, St. Farg. Hym. ii. 269. 5.
Halictus rubicundus, Kirby, Faun. Boreal. Amer. p. 267. 1 ?
Smith, Zool. vi. 2041. 2.
Hab. England; France; Germany; Finland; America?

37. Halictus zonulus. B.M.
Halictus zonulus, Smith, Zool. vi. 2171. 22, ♂ ♀.
Hab. England; Denmark; Sweden.

38. Halictus bifasciatus.
771. t. 49. f. 4.
Hab. Morea.

39. Halictus pallens.
Hab. Morea.

40. Halictus lateralis.
Hab. Morea.

41. Halictus semiæneus. B.M.
776. t. 49. f. 6.
Hab. Morea; Spain.

41*. Halictus rufipes.
Andrena rufipes, Fabr. Ent. Syst. ii. 308. 2; Syst. Piez. 324. 9.
Coqueb. Illus. t. 25. f. 10.
Hab. Barbary.

42. Halictus viridis. B.M.
Halictus viridis, Brullé, Hist. Nat. II. Canar. ii. 88. 32.
Hab. Canary Islands; Madeira.
43. **Halictus laetus**.


*Hab.* Canary Islands.

44. **Halictus concinnus**.

*Halictus concinnus*, Brullé, *Hist. Nat. II. Canar.* ii. 88. 34. t. 3. f. 13.

*Hab.* Canary Islands.

45. **Halictus unicolor**.

*Halictus unicolor*, Brullé, *Hist. Nat. II. Canar.* ii. 88. 35.

*Hab.* Canary Islands; Madeira.

46. **Halictus chalcodes**.


*Hab.* Canary Islands.

47. **Halictus cylindricus**.


*Hab.* Germany; Morea.

48. **Halictus implicatus**, n. s.

*Male.* Length 4 lines.—Black, the clypeus much produced, its anterior margin broadly yellow, with a central angular stripe above, the labrum yellow; antennae as long as the head and thorax, fulvous beneath. Thorax very finely and closely punctured on the disk, covered on the sides and beneath with long white pubescence; the anterior tibiae and tarsi, and apical joints of all the tarsi, ferruginous; wings hyaline, nervures fuscous, the enclosed space at the base of the metathorax rugose. Abdomen elongate, shining, minutely punctured, the base thinly covered with long white pubescence.

*Hab.* Canary Islands. (Coll. W. W. Saunders, Esq.)

49. **Halictus facilis**, n. s.

*Male.* Length 1¾ line.—Head and thorax of a metallic blue, the former obscure; the face below the insertion of the antennæ, the labrum, mandibles, palpi, tongue, and the flagellum beneath, yellow, the latter ferruginous above; the legs yellow, the femora...
and posterior tibiae have a ferruginous stain, the posterior pair being yellow merely at the apex; the wings splendidly iridescent and clear hyaline, the tegulae and nervures pale testaceous. Abdomen testaceous, margins of the segments pale rufo-testaceous.

_Hab._ Malta.

50. **HALICTUS MARGINATUS.**

_Halictus marginatus_, Brullé, Expéd. Sc. Morée, iii. 351. 774. t. 49. f. 5.


_Hab._ Morea; Algeria.

51. **HALICTUS PAUPERATUS.**


_Hab._ Morea; Algeria.

52. **HALICTUS ALBO-MACULATUS.**


_Hab._ Algeria.

53. **HALICTUS ALBO-CINCTUS.**


_Hab._ Algeria.

54. **HALICTUS FASCIALIS, n. s.**

_Male._ Length 3 lines.—Black, the face covered with hoary pubescence, the antennæ submoniliform, thorax closely and finely punctured, below the post-scutellum a space finely longitudinally rugose, behind which is an abbreviated shining ridge; the anterior tibiae in front and the apical joints of the tarsi ferruginous; the posterior tibiae and tarsi covered with short silvery pubescence; wings subhyaline, the nervures ferruginous, tegulae rufo-piceous. Abdomen elongate, the margins of the two basal segments depressed and bright rufo-testaceous, as is the entire abdomen beneath, above closely and finely punctured.

_Hab._ Cape of Good Hope. (Coll. W. W. Saunders, Esq.)

55. **HALICTUS PALLIDIPENNIS, n. s.**

_Female._ Length 2½ lines.—Black, the face thinly covered with short griseous pubescence, the flagellum beneath pale ful-
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vous, tips of the mandibles ferruginous; the disk of the thorax has similar pubescence to the face, the sides of the metathorax clothed with rather long white pubescence, tegulae of a testaceous yellow; wings clear hyaline, nervures very pale, the apical ones nearly obliterated; the tibiae and tarsi pale fulvous; abdomen ovate, margins of the segments broadly testaceous; the basal segment of the abdomen smooth and shining, the rest densely covered with short griseous pubescence.

Hab. Cape of Good Hope. (Coll. W. W. Saunders, Esq.)

56. Halictus vittatus, n. s.

Female. Length 5 lines.—Black, the face and vertex have a thin pale fulvous pubescence, on the cheeks it is paler, the clypeus shining, coarsely sculptured at the apex and ciliated with ferruginous hairs; the antennæ beneath rufo-piceous towards their apex; the thorax clothed with pale fulvous pubescence, most thinly so on the disk; base of the metathorax enclosed by an elevated ridge; wings rufo-hyaline, nervures ferruginous; tarsi ferruginous, beneath clothed with bright ferruginous hair, above with fulvous; abdomen ovate, delicately punctured, the apical margins of the segments cream-coloured, in some specimens having a reddish hue, and also varying a little in width in different specimens.

Hab. Cape of Good Hope. (Coll. W. W. Saunders, Esq.)

57. Halictus deceptus, n. s.

Female. Length 4 lines.—Black, head and thorax moderately punctured, the face covered with griseous pubescence; clypeus strongly punctured, the anterior margin truncate, the lateral angles produced, forming blunt teeth. Thorax thinly clothed with fulvous pubescence, palest beneath; the legs clothed with fulvous pubescence above, the apical joints of the tarsi ferruginous; wings subhyaline, nervures ferruginous. Abdomen shining, very minutely and closely punctured, the first segment with a patch of white pubescence at its base laterally, another on each side of the basal margin of the second, and a subinterrupted one on the third, the anal rima ferruginous, margined with fulvous pubescence; beneath, the margins thinly fringed with long pale pubescence.

Hab. Cape of Good Hope. (Coll. F. Smith.)

58. Halictus frontalís, n. s.

Male. Length 5 lines.—Black, head and thorax closely punctured, the clypeus much produced, coarsely punctured, the face below the insertion of the antennæ covered with fulvous pubes-
cence; the flagellum beneath fulvous towards the base. The thorax covered with fulvous pubescence, most thinly so on the disk; wings subhyaline, nervures testaceous, the stigma palest, the second submarginal cell quadrate; the tibiae and tarsi, as well as the femora beneath, fulvous. Abdomen elongate, the apical margins of the segments having a band of white pubescence, the first interrupted; at the apex a few long fulvous hairs.

Hab. Africa.

59. **Halictus terminalis**, n. s. B.M.

Female. Length 2½ lines.—Black, head and thorax very closely and finely punctured, the antennæ rufo-testaceous beneath. Thorax, the sides and beneath have a thin griseous pubescence, the enclosed space at the base of the metathorax finely reticulate; wings hyaline, iridescent, the tegulae and nervures very pale testaceous; the tarsi ferruginous, their pubescence fulvous. Abdomen ovate, smooth and shining, having a thin griseous pubescence towards the apex, which is bright ferruginous at the sides of the anal rima.

Hab. South Africa.

60. **Halictus rufo-marginatus**, n. s. B.M.

Female. Length 4½ lines.—Black, the head and thorax closely and strongly punctured, the clypeus shining, coarsely punctured, the flagellum testaceous beneath towards the apex, a little pale fulvous pubescence on the face. The thorax thickly covered with pale fulvous pubescence, most sparing on the disk; the tegulae nigro-piceous; wings subhyaline, iridescent, the nervures pale ferruginous. Abdomen ovate, closely and finely punctured, the apical margins of the first and second segments smooth and shining, the first bright rufo-piceous, the second piceous; the base of the second and third segments depressed and covered with a short white dense pubescence.

Hab. South Africa.

61. **Halictus iridipennis**, n. s. B.M.

Male. Length 2½ lines.—Black, head and thorax very finely and very closely punctured, the apex of the clypeus, the labrum and tips of the mandibles yellow, flagellum beneath fulvous. Thorax, the base of the metathorax coarsely sculptured, not enclosed; the post-scutellum covered with white pubescence, also a patch on each side behind the wings; the tegulae pale testaceous, the wings splendidly iridescent, nervures ferruginous; the knees and the tarsi pale ferruginous. Abdomen shining, margins slightly depressed, at the basal margin of the second
segment laterally a patch of griseous pubescence; the sides have a scattered griseous pubescence; beneath, the margins of the segments piceous.

_Hab._ Sierra Leone.

62. _Halictus aurifrons_, n. s. B.M.

_Male._ Length 2½ lines.—Black, the face covered with a golden pubescence, the flagellum fulvous beneath, mandibles ferruginous at their apex, the clypeus not produced. Thorax, above a thinly scattered golden-coloured pubescence, the postscutellum and sides of the metathorax covered with white pubescence; beneath, the pubescence is pale yellow; the wings hyaline, iridescent, the tegulae and nervures pale testaceous; legs rufo-piceous, the tarsi and knees pale ferruginous. Abdomen ovate, nigro-piceous, on the apical margins of the three basal segments laterally an angular patch of white pubescence.

_Hab._ Sierra Leone.

63. _Halictus productus_, n. s. B.M.

_Male._ Length 4 lines.—Black, head and thorax closely and moderately punctured, sides of the face covered with a downy pale fulvous pubescence, the clypeus very much produced, extending beyond the eyes half their length, and having a number of large punctures; the antennæ subclavate; the front of the thorax covered with a yellow downy pubescence; wings subhyaline, their apex fuscous, nervures pale ferruginous; beneath, the thorax has large scattered punctures, and is covered with an ashy pile; legs dark rufo-testaceous, the apical joints of the tarsi ferruginous, their pubescence pale fulvous, the basal joint of the tarsi beneath is bright fulvous. Abdomen clavate, rufo-fuscous towards the base, the apical margins of the segments pale testaceous and having a silvery pubescence placed transversely, crossing which are a few long pale hairs.

*Obs._ The single specimen from which the above description was drawn, differs from the typical neuration of the genus, but possibly it may be merely a variety; both the recurrent nervures are received by the third submarginal cell.

_Hab._ Sierra Leone.

64. _Halictus clavatus_, n. s. B.M.

_Male._ Length 2½ lines.—Head and thorax black, closely and finely punctured, antennæ fulvous beneath, the face covered with a silvery white pubescence. Thorax, the wings hyaline, their apex having a fuscous cloud, the tegulae and nervures rufo-
piceous; the legs rufo-piceous, the tarsi and anterior tibiae paler. Abdomen nigro-piceous, clavate, the basal segment subpetiolate.

Hab. Sierra Leone.

65. Halictus jucundus, n. s. B.M.

Female. Length 3½ lines.—Brassy green, very finely and closely punctured, the face and cheeks covered with pale pubescence, that on the vertex fulvous; the flagellum rufo-testaceous beneath. The disk of the thorax thinly clothed with fulvous pubescence; the wings hyaline, the nervures and tegulae pale testaceous; the tarsi ferruginous, as well as the anterior tibiae in front, the pubescence on the tibiae and tarsi pale fulvous. Abdomen ovate, thinly covered with pale pubescence, margins of the segments depressed and having a band of pale yellow pubescence, the anal rima fulvous.

Male.—Closely resembles the female; the apex of the clypeus, labrum and mandibles yellow, the latter ferruginous at their apex; the flagellum fulvous beneath; the tibiae and tarsi of a reddish yellow, the margins of the segments of the abdomen much depressed.

Hab. Cape; Sierra Leone.

66. Halictus sordidus, n. s.

Female. Length 2½ lines.—Black, head and disk of the thorax obscurely green, very delicately and closely punctured, the flagellum testaceous beneath, mandibles ferruginous; the base of the metathorax covered with irregular radiating delicate striae; tegulae testaceous, wings subhyaline, iridescent, nervures ferruginous; legs dark testaceous, the tarsi palest; the tibiae and tarsi have silvery glittering pubescence, in some lights partaking of a golden lustre; the flocuss silvery white. Abdomen fuscous, oblong-ovate, smooth, shining and impunctate; anal rima ferruginous; beneath testaceous, the margins of the segments thinly fringed with pale pubescence.

Hab. New Zealand. (Coll. F. Smith.)

67. Halictus rufipes, n. s.

Female. Length 4½ lines.—Black, the face closely and finely, the vertex distantly, and the clypeus distantly but deeply punctured; the apex of the clypeus and mandibles, the scape and apical joints of the antennae rufo-piceous. The thorax shining on the disk, sparingly but finely punctured; the metathorax opake and having a lateral thin fringe of white pubescence; the scales
of the wings rufo-testaceou:; a small patch of fulvous pubes-
cence on the collar laterally, as well as a fringe behind the tuber-
cles; the wings subhyaline, their anterior margins fuscous; all
the femora, tibiae and tarsi rufous, the latter having a thick
fulvous pubescence; the floccus on the posterior femora beneath
white; a fascia of fulvous pubescence at the base of the second
and third abdominal segments, the apical margins of the follow-
ingen narrowly piceous.

*Hab.* Melbourne, Australia. (Coll. W. H. L. Walcott, Esq.)

68. *Halictus* *floralis*, n. s. B.M.

Female. Length 2 lines.—Brassy green, the flagellum ful-
vous, slightly fuscous above, mandibles ferruginous. Thorax
very closely and finely punctured, base of the metathorax finely
reticulate, margin of the truncation smooth and shining; wings
hyaline, splendidly iridescent, the nervures and tegulae pale tes-
taceou:; the tibiae, tarsi and knees fulvous. Abdomen shining,
very delicately punctured, the anal rima fulvous.

*Hab.* New Holland.

69. *Halictus* *bicingulatus*, n. s.

Female. Length 4 lines.—Black, the head and thorax very
closely punctured, a patch of pale fulvous pubescence on each
side of the collar, and the post-scutellum clothed with the same;
the tegulae rufo-testaceou:, the wings rufo-hyaline, their nerv-
ures ferruginous; the apex of the anterior and intermediate
femora, the whole of the posterior pair, and all the tibiae and
tarsi rufo-fulvous. Abdomen elongate-ovate, the apical margins
of all the segments rufo-piceous; a band of yellowish white
pubescence at the base of the second and third segments; mar-
gins of the anal rima ferruginous; beneath, all the margins rufo-
testaceou:

*Hab.* Melbourne, Australia. (Coll. W. H. L. Walcott, Esq.)

70. *Halictus* *lanarius*, n. s. B.M.

Female. Length 4½ lines.—Black, head very closely and
finely punctured, the clypeus coarsely punctured. Thorax
strongly and closely punctured on the disk; the base of the
metathorax finely reticulate and enclosed by a smooth elevation;
the sides have a thin griseous pubescence; wings subhyaline,
their nervures ferruginous; the tibiae and tarsi above clothed
with fulvous pubescence, the tarsi ferruginous. Abdomen very
closely and finely punctured; at the basal margin of the second,
third and fourth segments a fascia of white downy pubescence, interspersed with long pale hairs, the apex of the abdomen fulvous; beneath, the segments are smooth at their base and punctured towards their apical margins, which are more or less testaceous.

_Hab._ Hunter River, Australia.

71. _Halictus specioides_, n. s. B.M.

Female. Length 2 lines.—Head black, with a green hue in some specimens, the flagellum nigro-piceous beneath, mandibles ferruginous at their apex. Thorax black, the disk green; the tegulae pale testaceous, nervures ferruginous, the stigma fuscous; wings subhyaline, beautifully iridescent; the anterior tibiae, the knees of the intermediate and posterior pairs, and the tarsi, ferruginous; the anterior tibiae frequently black or fuscous above. Abdomen ferruginous, smooth and shining, the base black; sometimes the apex fuscous.

_Hab._ New Holland.

72. _Halictus carbonarius_, n. s.

Female. Length 4 lines.—Jet-black, head rather finely rugose, the clypeus having large deep punctures. Thorax shining, strongly, but not very closely punctured; the enclosed space at the base of the metathorax has a short rugose striation, the metathorax truncate, the truncation smooth and shining; wings slightly fusco-hyaline; legs clothed with dark fuscous pubescence, the fuscus nearly white. Abdomen elongate-ovate, closely and finely punctured, the apical margins of the segments smooth and shining, the anal rima fuscous, margined with black pubescence.

_Hab._ Sydney, New South Wales. (Coll. F. Smith.)

73. _Halictus orbatus_, n. s.

Female. Length 3 lines.—Black, head very minutely and closely punctured, the clypeus coarsely punctured and ciliated with fulvous hairs, thinly covered with pale pubescence. Thorax thinly clothed with pale pubescence, the disk strongly punctured, the enclosed space at the base of the metathorax covered with radiating rugose sculpture; the wings hyaline, their extreme base, the nervures and tegulae pale testaceous; the tibiae and tarsi covered above with silvery white pubescence, tarsi beneath pale fulvous, apical joints of the tarsi ferruginous. Abdomen globose, shining at the base, finely and closely punctured, the margins of the segments narrowly rufo-piceous, a patch of white pubescence at the base of the second segment.
laterally, the following segments thinly covered with white pubescence; beneath, the margins fringed with long pale pubescence. 

_Hab._ Van Diemen’s Land. (Coll. J. S. Baly, Esq.)

74. **HALICTUS COGNATUS, _n. s._**

Male. Length 2 lines.—Black, the disk of the thorax _æneous_, the flagellum _fulvous_ beneath, the face clothed with white pubescence, the apex of the clypeus, labrum and mandibles _yellow_, the latter _ferruginous_ at the tips. Thorax shining, finely but not very closely punctured, thinly covered with white pubescence, the enclosed space at the base of the metathorax rugose, beyond which the sides are shining and smooth; the tegulae _yellow_ anteriorly and _rufo-piceous_ behind; the wings _hyaline_ and splendidly iridescent, the nervures and stigma pale _testaceous_, the tarsi pale _testaceous_. Abdomen globose, the basal margin of the second segment much depressed, the whole finely punctured.

_Obs._ This is probably the male of _H. globosus_; specimens have been received on two or three occasions in company.

_Hab._ Van Diemen’s Land.

75. **HALICTUS LIMATUS, _n. s._**

Female. Length 2½ lines.—Black, except the disk of the thorax, which is _brassy green_; mandibles _ferruginous_. Thorax having scattered shallow punctures; the base of the metathorax covered with radiating striae, which become obsolete at the margin of the truncation which is smooth and shining; wings _hyaline_, splendidly iridescent, nervures _ferruginous_, stigma _fuscous_, tegulae _pale testaceous_. Abdomen ovate, highly polished, smooth and impunctate, the anal rima _fulvous_.

_Hab._ Van Diemen’s Land.

76. **HALICTUS GLOBOSUS, _n. s._**

Female. Length 2½ lines.—Black, the disk of the thorax having an _æneous_ tinge; flagellum _fulvous_ beneath, mandibles _ferruginous_ at their apex. Thorax very closely and finely punctured, the base of the metathorax finely reticulate, at its sides a tuft of white pubescence; the sides of the thorax have a white pubescence, most dense at the shoulders; the legs _rufo-testaceous_, tarsi _ferruginous_; wings _hyaline_, iridescent, nervures and tegulae _pale testaceous_; beneath, covered with _fulvous_ pubescence; the _tibiae_, particularly the posterior pair, covered with a changeable _silvery white_ pubescence. Abdomen subglobose, nigro-
piceous, margins of the segments palest, towards the apex covered with a short silvery pubescence.

_Hab._ Van Diemen's Land. (Coll. J. S. Baly, Esq.)

77. **Halictus representans**, n. s. B.M.

Female. Length 4 lines.—Black, head closely punctured, the antennæ nigro-piceous towards their apex. Thorax, the disk closely and moderately punctured; at the base of the metathorax a somewhat concave space, enclosed by an arched elevation, sub-sinuated at the sides, the space covered by smooth radiating grooves; wings subhyaline, the nervures and stigma ferruginous; the legs covered above with a pale pubescence, which has in certain lights a silvery brightness; the tarsi beneath fulvous, the apical joints ferruginous. Abdomen ovate, shining, very closely and finely punctured; on the basal margins of the second, third and fourth segments a snow-white band, the two first interrupted and forming lateral angular patches of downy pubescence, the anal rima ferruginous.

Male.—Has a general resemblance to the female; neuration of the wings the same, the whole insect thinly sprinkled with griseous pubescence, dense and white on the face and shoulders; apex of the clypeus white; the base of the metathorax is finely longitudinally rugose; abdomen somewhat globose in appearance from being incurved, the pubescence thicker on the basal margins of the segments, but not forming patches or decided fasciae.

_Hab._ New Holland; Van Diemen's Land.

_Obs._ This species very closely resembles the _H. leucozonius_ of Kirby, but differs in the sculpture of the metathorax, and also in having the second submarginal cell broader. From an examination of a large number of this apparently abundant species, it is found to vary in the grooving of the enclosed space at the base of the metathorax, the grooving not being always smooth or equally deeply sculptured; the abdominal fasciae are frequently nearly obsolete, in others broader, sometimes narrower; thus in its varieties resembling those of the _H. leucozonius_. The male is united, from the fact of their having been received together from both localities on numerous occasions.

78. **Halictus propinquus**, n. s. B.M.

Male. Length 3–3 ½ lines.—Bronze-green, closely and finely punctured, extreme apex of the clypeus yellow, antennæ fulvous beneath; the face has a hoary pubescence, the clypeus produced, shining and strongly punctured. Thorax clothed in front as
well as on the sides and beneath with a thin hoary pubescence, the enclosed space at the base of the metathorax longitudinally rugose, surrounded by a shining ridge; the tegulae, nervures, tibiae and tarsi fulvous yellow; the intermediate and posterior tibiae have a dark stain in the middle, sometimes only the base and apex yellow; wings subhyaline. Abdomen elongate-ovate, margins of the segments deeply constricted and having a fascia of white pubescence.

_Hab._ Northern India.

79. **Halictus Agrestis**, n. s.

Female. Length 3 lines.—Black, head above the insertion of the antennæ closely and finely punctured; the clypeus produced, shining, having a few deep punctures, on each side the face is roughly sculptured; antennæ beneath testaceous. The disk of the thorax strongly punctured; at the base of the meta-thorax is a narrow arched space, which is longitudinally rugose, reaching on each side nearly to the base of the hinder wings; the sides of the metathorax have a longitudinal ridge; wings hyaline, the nervures ferruginous, stigma palest. Abdomen very finely punctured and very highly polished at the base, the following segments covered with a short griseous pubescence, more or less obliterated on the second segment.

_Hab._ Northern India. (Coll. J. S. Baly, Esq.)

80. **Halictus Albo-scens**, n. s. **B.M.**

Female. Length 3 lines.—Black, the face covered with a short hoary pubescence. Thorax, the disk shining, punctured, the sides and beneath covered with hoary pubescence, most dense on the sides of the metathorax, the enclosed space rugose; the post-scutellum covered with a hoary down, and a short stripe or patch of the same at the base of the posterior wings, the latter hyaline and beautifully prismatic, the nervures rufo-testaceous; legs covered with hoary pubescence, the apical joints of the tarsi ferruginous. Abdomen ovate, an oblique stripe at the base laterally, and a fascia at the basal margin of all the segments white, the fascia on the second and third frequently obliterated in the middle.

The male very closely resembles the female, differing only in being as usual more elongate; the antennæ rufo-testaceous, not so long as the head and thorax; in both sexes the abdomen is frequently more or less testaceous.

_Hab._ Northern India.
81. **Halictus rugolatus**, n. s.

Female. Length 3½ lines.—The head and disk of the thorax nigro-aeneous, the metathorax black; head closely and finely punctured, the clypeus black, shining and deeply punctured. Thorax more strongly punctured than the head, the metathorax truncate, roughly and irregularly sculptured, the sides and beneath rugose; the tibiae and tarsi above clothed with pale fulvous pubescence, that beneath is deeper in colour; the wings subhyaline, iridescent, on the fourth a more or less interrupted fascia; the apex covered with fulvous pubescence.

*Hab.* Northern India. (Coll. W. W. Saunders, Esq.)

82. **Halictus lucidipennis**, n. s.

Female. Length 2½ lines.—Brassy green, head and thorax closely and finely punctured, antennae wanting; the face covered with short white pubescence and the clypeus ciliated with white hairs. Thorax, the post-scute covered with a short downy white pubescence, on the sides it is longer but of the same colour, the enclosed space at the base of the metathorax finely reticulate, the sides smooth and shining; wings clear hyaline and beautifully iridescent, nervures and tegulae very pale testaceous; legs rufo-testaceous, the anterior tibiae, the intermediate and posterior tarsi, pale rufo-testaceous, their pubescence white. Abdomen ovate, finely punctured, the apical margins narrowly testaceous and having pale marginal fasciae; the anal rima slightly fulvous; beneath, testaceous.

Male.—Sculptured and coloured as in the female; the antennae pale fulvous, about the length of the head and thorax, fuscous above; all the tibiae pale, and the margins of the abdominal segments much depressed.

*Hab.* Northern India. (Coll. J. S. Baly, Esq.)

83. **Halictus xanthognathus**, n. s.

Male. Length 3½ lines.—Head and thorax black, very closely and moderately punctured, the face thickly covered with short white pubescence, the apex of the clypeus, the labrum, mandibles, palpi and flagellum beneath, yellow; the tubercles, tegulae, tibiae and tarsi yellow; the posterior and intermediate tibiae have a ferruginous stain in front; wings subhyaline, nervures pale fer-
ruginous; the three basal segments of the abdomen red; the first segment is black at the sides of the extreme base, and has two fuscospots above; the second and third segments at the sides have a black spot; the fourth and following segments black, the apical margins pale testaceous, each successive one more broadly so.

Hab. Northern India. (Coll. J. S. Baly, Esq.)

84. Halictus fimbriatus, n. s.

Male. Length 5 lines.—Black, distinctly and not very closely punctured, the clypeus much produced and coarsely punctured, antennæ as long as the head and thorax, the joints subarcuate, rufo-piceous beneath. The sides of the thorax and beneath covered with long white pubescence; the legs have a clothing of similar but shorter pubescence; the anterior tibias in front, the intermediate pair at their apex beneath, and the claw-joint of the tarsi ferruginous; wings subhyaline, their apical margins clouded, nervures ferruginous. Abdomen elongate, the apical margins of the segments have a fringe of white pubescence, more or less interrupted in the middle; the apical segment has laterally a tuft of fuscos pubescence; beneath, all the margins fringed with short white pubescence.

Hab. Northern India. (Coll. J. S. Baly, Esq.)

85. Halictus constictus, n. s.

Male. Length 3—3½ lines.—Black, the head and thorax closely punctured, the face clothed with fulvous pubescence in recent specimens, fading to white; apex of the clypeus yellow. The pubescence on the thorax fulvous, thinly scattered on the disk, more dense on the sides and beneath; the anterior tibias, the apex of the intermediate and posterior pair, and all the tarsi, of a fulvous yellow; wings subhyaline, nervures ferruginous, tegulae rufo-piceous. Abdomen closely punctured, elongate-ovate, the margins of the segments much depressed, the apical margins of the segments fringed with pale pubescence, more or less interrupted in the middle; beneath rufo-piceous, the margins of the segments palest, the second and third fringed with pale pubescence, the apical ones with fulvous. In specimens which have been exposed the pubescence becomes white.

Hab. Northern India.

86. Halictus subopacus, n. s.

Female. Length 4 lines.—Black, the head closely and strongly punctured, the thorax coarsely and the abdomen very
finely and very closely punctured, giving it an opaque appearance; the clypeus has some deep elongate punctures, and is ciliated with ferruginous hairs; the thorax clothed with fulvous pubescence, thickly so on the sides; disk naked in all the specimens, probably rubbed; the metathorax truncate, the base coarsely rugose; wings subhyaline, nervures ferruginous, the legs clothed with fulvous pubescence, the apical joints of the tarsi ferruginous. Abdomen ovate, the base thickly covered with fulvous pubescence, the apical margins of the segments depressed, a band of fulvous pubescence at the base of the second and third segments, the anal rima fulvous.

Hab. Foo-cho-foo, North China.

87. Halictus ordinarius, n. s.

Female. Length 4 lines.—Black, head closely and finely punctured, clypeus shining and deeply punctured, ciliated with fulvous hairs; antennae beneath rufo-piceous, the face clothed with hoary pubescence. Thorax shining and strongly punctured, the pubescence is pale fulvous, thinly scattered in front, on the sides and beneath; the post-scutellum fringed with the same, beneath which the enclosed space is longitudinally rugose, the metathorax rounded at its sides, smooth and regularly punctured; wings subhyaline, fulvous at their base, the tegulae rufo-piceous; the tibiae and tarsi above clothed with pale fulvous pubescence, the claw-joints ferruginous. Abdomen ovate, closely and finely punctured, the apical margins of the segments sub-depressed and having fasciae of white pubescence, the anal rima fulvous.

Hab. North China. (Coll. J. S. Baly, Esq.)

88. Halictus affinis, n. s. B.M.

Male. Length 4 lines.—Black, head and thorax finely and closely punctured, the face covered with fulvous pubescence, the clypeus produced, its apex white. The thorax clothed with fulvous pubescence, sparingly so on the disk; the enclosed space at the base of the metathorax longitudinally rugose, beyond which the sculpture is rugged; the tarsi and extreme base and apex of the tibiae yellow, apical joints of the tarsi ferruginous. Abdomen elongate-ovate, very finely and closely punctured; the base, the sides and margins of the segments have a thin fulvous pubescence.

Obs. This is probably the male of H. subopacus.

Hab. Foo-cho-foo, North China.
89. Halictus rubellus.


_Hab._ Chili. (Coll. W. W. Saunders, Esq.)

90. Halictus insignis, n. s.

_Male._ Length 5½ lines.—Black, except the head, which is dark green; the clypeus very convex, not much produced; the eyes subemarginate, the ocelli large and brilliant. Thorax clothed with fulvous pubescence, sparingly so on the disk, most dense on the shoulders; the base of the metathorax very smooth and shining; tegulae rufo-piceous; wings rufo-hyaline, nervures ferruginous; legs dark rufo-testaceous, tarsi ferruginous, clothed with fulvous pubescence, which is also thinly scattered on the tibiae and femora. Abdomen elongate-ovate, very delicately punctured, except the basal segment, which is impunctate and highly polished; towards the apex the abdomen has a green tinge, and a short hoary pubescence intermixed with long fulvous hairs; beneath, rufo-piceous.

_Hab._ South America. (Coll. W. W. Saunders, Esq.)

91. Halictus Leprieurii.


_Hab._ Cayenne.

92. Halictus gemmatus, n. s. B.M.

_Female._ Length 2 lines.—Head and thorax coppery green, head very finely and closely punctured, the antennae, apex of the clypeus, labrum and mandibles rufo-piceous; legs rufo-piceous, the tarsi palest; disk of the thorax shining, very delicately and distantly punctured; the enclosed space at the base of the metathorax on each side irregularly but finely rugose-striate; the tegulae testaceous; wings hyaline and splendidly iridescent. Abdomen rufo-testaceous, the margins of the segments palest, thinly covered with a scattered white pubescence, principally towards the apex.

_Hab._ Jamaica.

93. Halictus modestus, n. s.

_Female._ Length 3½ lines.—The head and thorax green, the disk of the latter sometimes brassy, both very delicately and very closely punctured; antennae, mandibles and apex of the clypeus black; the mandibles nigro-piceous towards their apex; the head has a long thin fuscous pubescence, which clothes it entirely, co-
vering the eyes; it is palest on the cheeks. Thorax, beneath the post-scutellum the metathorax is very finely granulated, the margins of the truncation polished; the tegulae and nervature of the wings piceous, the latter splendidly hyaline; the legs black, the pubescence fuscous. Abdomen olive-green, the margins of the segments highly polished, darker than the intervening portions, the first and second depressed; margins of the anal rima fuscous.

Male.—Coloured and sculptured as in the other sex, the eyes more densely pubescent, antennæ elongate, the flagellum testaceous beneath the apex of the clypeus and the labrum white; abdomen elongate, subcylindric, narrowed towards the base.

*Hab.* Columbia. (Coll. W. W. Saunders, Esq.)

94. **Halicrtus maculosus**, n. s.

Female. Length 4½ lines.—Black, the face covered with a thin ochraceous pubescence; the clypeus truncate, and having large scattered punctures; the flagellum testaceous towards the apex. Thorax, the disk smooth, shining, and very delicately punctured, the enclosed space at the base of the metathorax smooth and shining; wings hyaline, fulvous towards their base, the tegulae and nervures fulvo-testaceous; the femora, tibiae and tarsi bright fulvo-testaceous, the anterior femora black towards the base. Abdomen ovate, subdepressed, on the basal margins of the second and third segments laterally a snow-white angular spot; apex of the abdomen fulvous; anal rima ferruginous.

*Hab.* Chili. (Coll. F. Smith.)

95. **Halicrtus cristatus**, n. s.

Female. Length 4 lines.—Black, the head dark green, delicately and very closely punctured; the clypeus shining black, having large deep punctures; the antennæ rufo-piceous towards their apex beneath. Thorax, the disk shining, covered with very delicate and close punctures interspersed with a few larger ones; a tuft of fulvous pubescence on each side covering the tubercles; wings subhyaline, prismatic, nervures testaceous, the stigma palest; the pubescence on the legs pale fulvous, claws ferruginous. Abdomen shining, very delicately punctured, except the sides of the two basal segments, which are covered with large coarse punctures, a row of punctures along the basal margin of the segment, the apical margins of the second and third segments broadly pale testaceous, the apex fulvous, beneath coarsely punctured.

*Hab.* Chili? (Coll. W. W. Saunders, Esq.)
96. **Halictus capitosus**, n. s. B.M.

Female. Length 4 lines.—Black, the head wider than the thorax, the face nearly quadrate, the clypeus very slightly produced, shining and deeply punctured, the rest of the face and vertex very finely and closely punctured, the flagellum piceous beneath. Thorax very finely and closely punctured, the pubescence pale fulvous; legs dark ferruginous, apical joints of the tarsi brighter, their pubescence fulvous; the tegulae pale testaceous, wings fusco-hyaline, the nervures testaceous. Abdomen ovate, delicately but very closely punctured, margins of the segments testaceous, each having a band of white pubescence more or less interrupted on the basal segment, the two first bands cover narrowly the base of the subsequent segment; apex of the abdomen fulvous.

*Hab.* St. John's Bluff, East Florida; Georgia. (Coll. E. Doubleday, Esq.)

97. **Halictus fuscipennis**, n. s.

Female. Length 4 lines.—Black, the head and thorax closely punctured, the clypeus having a few elongate deep punctures at its base, the anterior margin fringed with ferruginous hairs. Thorax, the wings fusco-ferruginous, the posterior pair paler at their base, all the tibiae and tarsi ferruginous, the metathorax truncate, the superior margin of the truncation ridged, the enclosed space below the post-scutellum rugose. Abdomen very finely and closely punctured, the basal segment shining; the basal margins of the second, third and fourth segments have an interrupted fascia of pale fulvous pubescence.

Male closely resembles the female; the posterior legs and the apex of the femora, the tibiae and tarsi bright ferruginous; the clypeus has a white spot, its margin as well as the mandibles at their apex ferruginous. Abdomen elongate-ovate.

This species closely resembles *H. coriaceus*, but the colour of the wings is different, and the second and third submarginal cells are of about equal width, the second not being narrowed towards the marginal as in that species.

*Hab.* St. John's Bluff, East Florida. (Coll. E. Doubleday, Esq.)

98. **Halictus fulvipes**, n. s.

Female. Length 3 lines.—Head and thorax brassy green, punctured, the labrum and apex of the mandibles ferruginous; the flagellum testaceous beneath. Thorax more coarsely punctured than the head, having a thin pale fulvous pubescence on the disk, most dense on the sides of the metathorax, which is
truncate behind; the wings splendidly iridescent, having a broad fuscous cloud at their apex, testaceous at their extreme base, as well as the nervures and tegula; the tibiae and tarsi bright fulvous, their pubescence pale. Abdomen ovate, the two basal segments highly polished, the following segments thinly clothed with pale pubescence, at the basal margins of the second and third a patch of white pubescence; the apex fulvous.

Hab. St. John's Bluff, East Florida. (Coll. E. Doubleday, Esq.)

99. HALICTUS NYMPHALIS, n. s. B.M.

Female. Length 2 lines.—Head and thorax brassy green, very delicately and closely punctured, more strongly so on the clypeus, which has its anterior margin testaceous, as are also the labrum and mandibles, the latter ferruginous at their apex, the flagellum testaceous beneath; the tegulae pale testaceous, the wings hyaline, splendidly iridescent, the nervures and stigma pale; the femora and tibiae at their apex and all the tarsi pale rufo-testaceous; the legs have a pale pubescence. Abdomen pale ferruginous, the third and fourth segments broadly fuscous at their base, the whole thickly clothed with pale pubescence.

Hab. St. John's Bluff, East Florida. (Coll. E. Doubleday, Esq.)

100. HALICTUS ZEPHYRUS, n. s. B.M.

Male. Length 2½ lines.—Head and thorax brassy green, delicately and very closely punctured, the antennae elongate, fulvous, above fuscous; the margin of the clypeus and mandibles ferruginous. Thorax brilliantly glossy above, the punctures scattered and minute; the wings splendidly iridescent, the tegulae and nervures pale testaceous; the tibiae and tarsi testaceous, the former stained more or less on each side. Abdomen elongate, subclavate, highly polished, rufo-testaceous, and having a splendid green reflection; the margins of the two basal segments depressed, the second and third having laterally a patch of white pubescence at their base; beneath rufo-testaceous.

Hab. St. John's Bluff, East Florida. (Coll. E. Doubleday, Esq.)

101. HALICTUS PECTORALIS, n. s. B.M.

Female. Length 3 lines.—Black, the head closely and finely punctured, the clypeus more coarsely so, its apical margin smooth and ciliated with fulvous hairs; flagellum testaceous beneath. Thorax strongly punctured on the disk; metathorax truncate, the enclosed space beneath the post-scutellum rugose, as well as the sides and the entire thorax beneath; the legs have a pale fulvous pubescence, most dense on the intermediate and pos-
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terior tibiae and tarsi; wings subhyaline, the tegulae and nervures testaceous, iridescent. The two basal segments of the abdomen highly polished, impunctate; the following segments delicately punctured and thinly covered with hoary pubescence.

Hab. St. John's Bluff, East Florida. (Coll. E. Doubleday, Esq.)

102. Halictus farinosus, n. s.

Female. Length 5 lines.—Black, very closely and finely punctured; the vertex rather broad behind the eyes, the stemmata placed forwards in a line with the eyes, the head covered with a short hoary pubescence; the thorax is similarly clothed, most sparsely on the disk; a carina which encloses the space below the post-scutellum is interrupted in the middle; the tegulae testaceous, the wings subhyaline, the nervures ferruginous; the legs have a pale fulvous pubescence above, the tarsi ferruginous; the floccus very pale fulvous. Abdomen ovate, thinly covered with hoary pubescence; the apical margins depressed, each having a broad white fascia; the anal rima fulvous. The entire insect has a powdery or dusty appearance.

Hab. California.

103. Halictus ligatus.


Hab. United States.

104. Halictus crassicornis.


Hab. North America.

105. Halictus similis, n. s.

Female. Length 3–3½ lines.—Black, head closely and finely punctured, the clypeus shining, coarsely punctured, very slightly produced. Thorax closely and finely punctured, the enclosed space on the metathorax longitudinally sculptured with radiating striae, the sides have a little pale fulvous pubescence; the legs clothed with pale fulvous pubescence, the apical joints of the tarsi ferruginous; the wings hyaline, iridescent, the nervures pale testaceous. Abdomen very smooth and shining at the base, the margins of the segments narrowly testaceous; a patch of white pubescence at the basal margins of the second and third segments.

Obs. This species closely resembles H. leucozonius, but differs in the clypeus being less produced, in the colour of the neuration
of the wings, and in the margins of the abdominal segments not being thickened as in that species.

_Hab._ North America; Hudson's Bay. (Coll. E. Doubleday and G. Barnston, Esqs.)

106. _Halictus discus_, n. s.  
Female. Length 4 llines.—Black, head closely punctured, the clypeus produced and ciliated with pale ferruginous hairs. Thorax, the disk shining, having large scattered punctures; metathorax truncate, above coarsely grooved longitudinally; the tegulae testaceous, wings subhyaline, the nervures ferruginous; the legs have a silvery pubescence, tinged with yellow in certain lights. Abdomen ovate, shining at the base, finely and closely punctured, except on the basal segment, where they are more scattered; on the basal margins of the second, third and fourth segments a more or less interrupted white fascia; the apical margins thickened.

_Hab._ North America.

107. _Halictus coriaceus_, n. s.  
Female. Length 3½–4 lines.—Black, finely and very closely punctured, giving the abdomen a subopake appearance; the clypeus produced, shining, and having some large scattered punctures, its anterior margin fringed with fuscous pubescence; on the head, thorax and legs the pubescence is pale fulvous, brightest on the posterior tibæ; the floccus is of the same colour, but paler; the legs dark ferruginous, varying in some specimens in being of a brighter hue; apical joints of the tarsi bright ferruginous; wings hyaline. Abdomen, the basal margins of the second, third, and sometimes of the fourth segments have an uninterrupted band of white pubescence, the apical margins coriaceous; beneath rufo-testaceous, the margins of the segments pale testaceous, and having a narrow white marginal fringe.

_Hab._ North America; Nova Scotia. (Coll. E. Doubleday and G. Barnston, Esqs.)

108. _Halictus confusus_, n. s.  
Female. Length 3 lines.—Head and thorax olive-green, finely and very closely punctured; the clypeus usually has a purple tinge and is deeply punctured, its margin ciliated with pale fulvous hairs, the apex of the flagellum beneath testaceous. Thorax, the enclosed space beneath the post-scutellum has deep radiating rugose striae at the base, the margin smooth, sides of the metathorax and the entire thorax beneath roughened, the punctures
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uniting; wings hyaline, splendidly iridescent, the tegulae and nervures pale testaceous; legs nigro-piceous, the apical joints of the tarsi ferruginous, the pubescence pale fulvous, brightest on the basal joint of the tarsi within. Abdomen ovate, nigro-seneous, delicately and closely punctured, at the sides and towards the apex having a thin griseous pubescence; anal rima slightly fulvous.

Male.—Colouring and sculpture as in the female; antennae elongate, the flagellum fulvous beneath, the margin of the enclosed space on the metathorax ridged. Abdomen elongate, slightly narrowed at the base.

Hab. Trenton Falls, New York; Hudson’s Bay. (Coll. E. Doubleday and G. Barnston, Esqs.)

109. HALICTUS IMITATUS, n. s. B.M.

Male. Length 2 lines.—Head brassy green, very finely and closely punctured, the flagellum fulvous beneath. Thorax blue-green, shining, not so closely punctured as the head; wings hyaline, splendidly iridescent, tegulae testaceous, the nervures fuscous; legs rufo-testaceous, tarsi and knees pale testaceous. Abdomen elongate, subclavate, rufo-fuscous, varying in depth of colouring, smooth, shining and impunctate.

Obs. In general appearance resembling H. Zephyrus, but, independent of size, differs in the colour of the thorax, and in the second submarginal cell being proportionably narrower and much more contracted towards the marginal.

Hab. North America. (Coll. E. Doubleday, Esq.)

110. HALICTUS PILOSUS, n. s. B.M.

Female. Length 3 lines.—Bright brassy green, head and thorax finely and very closely punctured, the former thinly covered with fulvous pubescence, the flagellum testaceous towards the apex beneath. Thorax in front thickly clothed with a short fulvous pubescence, the enclosed space beneath the post-scutellum longitudinally rugose, the pubescence on the sides of the metathorax pale fulvous; wings hyaline, splendidly iridescent, the tegulae and nervures pale testaceous; legs rufo-piceous, clothed with fulvous pubescence. The basal segment of the abdomen naked, the remaining segments densely covered with a short fulvous pilosity; the second segment usually has the pubescence more or less obliterated on the disk.

Hab. North America. (Coll. E. Doubleday, Esq.)
111. Halictus parallelus. B.M.

Halictus parallelus, Say, Bost. Journ. i. 397. 6.
Halictus Lerouxi, St. Farg. Hym. ii. 372. 9.

Closely resembles _H. rubicundus_; differs from that species in having the abdomen less shining, caused by its more closely and distinctly punctured abdomen, and by having four uninterrupted white bands; the first covers the basal margin of the second segment, though less defined, as well as the apical margin of the first.

_Hab._ N. America; Trenton Falls; Hudson's Bay; Nova Scotia; Arctic America, South of Lake Winnepeg. (Coll. Dr. Richardson.)

112. Halictus laevissimus, n. s. B.M.

Female. Length 2½ lines.—Head and thorax green, finely and closely punctured, the face thinly covered with a short hoary pubescence, the same also covers the sides of the thorax and the legs above; the floccus at the base of the posterior femora white; the apical joints of the tarsi and also the tegulae testaceous; wings hyaline, their nervures pale testaceous; the enclosed space beneath the post-scutellum is longitudinally rugose-striate. Abdomen oblong-ovate, very smooth and shining, impunctate, the fourth segment covered with short white pubescence, the fifth more densely so, the sides of the anal rima pale fulvous; beneath, the apical segments are fringed with long pale hairs.

_Hab._ Arctic America, South of Lake Winnepeg. (Coll. Dr. Richardson.)

113. Halictus subquadratus, n. s. B.M.

Male. Length 3½ lines.—Black, head subquadrate, the clypeus very slightly produced, its apical half pale yellow; the antennæ beneath testaceous, the two basal joints black; the face clothed with griseous pubescence, which also thinly clothes the sides of the thorax, the metathorax, and the legs; disk of the thorax shining, finely punctured; wings hyaline, their apical margins slightly clouded, beautifully iridescent. Abdomen elongate-ovate, a patch of white pubescence on the basal margins of the second and third segments.

This is probably the male of _H. coriaceus_.

_Hab._ Trenton Falls, North America. (Coll. E. Doubleday, Esq.)

114. Halictus creberrimus, n. s.

Female. Length 2 lines.—Head and thorax bronzed-green, extremely closely and finely punctured, the clypeus much pro-
duced; the antennae testaceous beneath. The base of the meta-
 thorax has a number of irregular radiating elevations becoming
 obsolete at the margin of the truncation of the metathorax, the
 sides of which as well as the whole thorax beneath is rugose;
tegulae pale testaceous; wings hyaline, beautifully iridescent;
the legs testaceous, the knees and tarsi palest; abdomen testa-
ceous, having an ãeneous reflection, apex covered with white pu-
bescence, the anal rima ferruginous.

Obs. This species closely resembles H. inconspicuus, but is
much more delicately sculptured and the clypeus more produced.

Hab. N. America. (Coll. F. Smith.)

115. Haucrus mcousmcuuS, n. s. B.M.

Female. Length 1½ line.—Head and thorax brassy-green,
finely and closely punctured, the former rounded; the enclosed
space beneath the post-scutellum roughly granulated; the wings
hyaline, splendidly iridescent, the nervures and tegulae pale tes-
taceous; the legs pale testaceous. Abdomen rufo-testaceous,
smooth and shining; the apex pale testaceous.

Hab. North America.

Genus 16. AUGOCHLORA, n. g.

F. Smith's MSS. (Details, Plate III.)

Head usually about the width of the thorax, the eyes subemar-
ginate, in some species distinctly reniform. Thorax globose,
 anterior wings having one marginal and three submarginal cells;
the first submarginal cell as long as the second and third united,
the first recurrent nervure uniting with the second transverse
cubital nervure. Abdomen ovate, in the females subelongate-
 ovate:—all the species brilliant metallic green.

1. AUGOCHLORA DIVERSIPENNIS. B.M.


Male.—Brilliant golden-green, head closely and finely punc-
tured, the clypeus very convex, coarsely punctured, its anterior
margin with a narrow yellow fascia, the labrum and mandibles
yellow, the third joint of the antennæ yellow beneath. Thorax
rather strongly punctured, wings hyaline, tegulae and nervures
pale testaceous; the knees, extreme apex of the tibiae and the
tarsi yellow testaceous. Abdomen ovate, thinly covered at the
base and sides with fulvous pubescence, the apical margins of
the segments fringed with fulvous pubescence, apex of the ab-
domen beneath ferruginous.

Hab. Para, Brazil.
2. Augochlora Electra, n. s. B.M.

Male. Length 4—4½ lines.—Brilliant golden-green, the head closely and finely punctured, the clypeus coarsely punctured, antennæ black, mandibles dark rufo-testaceous. Thorax strongly punctured, the punctures sometimes uniting; the enclosed space at the base of the metathorax concave, smooth and shining, the thorax beneath and sides of metathorax strongly punctured; wings subhyaline, nervures and outer margin of the tegulae rufo-testaceous, the tarsi rufo-testaceous. Abdomen oblong-ovate, having a thinly scattered fulvous pubescence, the apical margins of the segments fringed with short fulvous pubescence; the apical segments beneath ferruginous.

Hab. Brazil.

3. Augochlora Pandora, n. s. B.M.

Female. Length 4 lines.—Brilliant golden-green, head and thorax very finely and very closely punctured, the face and vertex have a thin pale ochraceous pubescence, that on the cheeks and clypeus white, the latter covered with large coarse punctures; the flagellum fulvous beneath, the margin of the clypeus, labrum and mandibles dark rufo-piceous; the metathorax truncate behind, the enclosed space at its base rugose, enclosed by an elevated margin; tegulae and nervures rufo-testaceous; wings hyaline, very faintly clouded towards their apical margins; legs rufo-testaceous, tibiae above brilliant golden-green, the coxae and femora more or less so in certain lights; the floccus cinereous, as well as the pubescence of the legs, which however varies in certain lights, to golden on the tarsi, which are ferruginous, and to silvery on the posterior tibiae. Abdomen covered with a short fulvous pubescence; the margins of the segments are of a purple coppery colour, beneath strongly punctured.

Hab. Brazil.

4. Augochlora Bucephala, n. s. B.M.

Female. Length 5—5½ lines.—Brilliant golden-green; head very finely and closely punctured, wider than the thorax; clypeus broadly truncate, not produced, ciliated with ferruginous hairs; antennæ black, testaceous beneath; disk of the thorax very finely punctured, having larger punctures interspersed; base of the metathorax very finely punctured, not enclosed; the outer margin of the tegulae broadly pale testaceous, wings rufo-hyaline, legs green, the tarsi ferruginous; the pubescence of the legs fulvous, having on the posterior legs a silvery hue in certain
lights. Abdomen ovate, very convex, the fifth segment covered with fulvo-fuscous pubescence, the anal rima fulvous.

Hab. Brazil.

5. Augochlora Graminea. B.M.


Male.—Closely resembling the female, but more elongate, very closely and finely punctured throughout, the clypeus produced, the margin of the clypeus, labrum and mandibles yellow, the antennae fulvous beneath; the tegulae pale testaceous, the knees and apical joints of the tarsi testaceous. Abdomen, the apical margins of the segments black; beneath they are rufo-testaceous, as well as the apical segments.

Hab. Brazil; Cayenne.

6. Augochlora Titania, n. s. B.M.

Female. Length 2 lines.—Head and thorax bright golden-green, closely and finely punctured. Thorax, the base of the metathorax has a radiating finely rugose striation, not distinctly enclosed; wings rufo-hyaline; legs rufo-testaceous, the anterior tibiae and the tarsi palest. Abdomen clavate, purple metallic, being much narrowed at the base, which is highly polished, reflecting the bright green of the thorax; the apical margin of the basal segment depressed.

Hab. Para.

7. Augochlora Urania, n. s.

Female. Length 3 lines.—Head and thorax brassy-green, very finely and closely punctured, the apex of the clypeus very coarsely punctured and of a purple metallic hue; labrum and mandibles of an obscure rufo-testaceous colour, nearly black; legs black; the coxae alone have a metallic tinge, the tarsi lighter, their pubescence fuscosus, in certain lights having a silvery reflection, on the tarsi beneath fulvous; wings rufo-hyaline, iridescent; the enclosed space at the base of the metathorax covered with radiating striae, enclosed by a shining ridge. Abdomen blue-green, the margins of the segments black, smooth and shining, covered with a thin short griseous pubescence, interspersed with fuscosus pubescence, beneath dark rufo-testaceous.

Obs. Very similar to A. Floralia, differing chiefly in the colour of the legs, abdomen and wings.

Hab. Brazil. (Coll. W. W. Saunders, Esq.)
8. **Augochlora Paphia, n. s.**

Female. Length 4 lines.—Head and thorax golden-green; head very closely punctured, the vertex fringed with fuscous pubescence, a few scattered hairs of the same on the face; antennæ black, the flagellum beneath testaceous; the disk of the thorax finely punctured and roughened by an intermixture of large shallow punctures; base of the metathorax smooth and shining, not enclosed; legs dark rufo-testaceous, the coxe, femora and tibiae being tinged with green, perceptible in certain lights, clothed with fuscous pubescence above, with fulvous on the tarsi beneath, the flocus griseous; wings rufo-hyaline. Abdomen finely and distantly punctured, of a blue-green, the margins purple, fringed with short fulvous hairs.

_Hab._ Brazil. (Coll. W. W. Saunders, Esq.)

9. **Augochlora Cytherea, n. s.**

Female. Length 4 lines.—Brilliant golden-green, head very finely and closely punctured, the clypeus coarsely punctured and of a purple metallic colour at the apex, labrum and mandibles dark rufo-piceous; antennæ black, the flagellum testaceous towards the apex beneath; disk of the thorax covered with punctures of various sizes, most strongly so anteriorly; wings hyaline; legs green, tarsi rufo-testaceous, their pubescence pale fulvous above, bright fulvous on the tarsi beneath. Abdomen ovate, very finely punctured, the margins of the first and second segments depressed; thinly covered with pale fulvous pubescence; the fifth segment covered with dark fuscous pubescence; the anal rima ferruginous.

_Hab._ Brazil; Banks of the Amazon. (Coll. W. W. Saunders, Esq.)

10. **Augochlora Tarpeia, n. s.**

Female. Length 3 lines.—Black, with a purple metallic hue, brassv on the cheeks, vertex and basal margin of the second abdominal segment; the sides of the clypeus brassy; the flagellum fulvous beneath; thorax very closely and delicately punctured; wings fusco-hyaline, their apical margins clouded. Abdomen somewhat brassy towards the apex, which is clothed with a thin fulvous pubescence.

Male.— Entirely of a purple metallic colour, the head covered with erect fuscous pubescence, the eyes densely pubescent, apex of the clypeus and labrum yellow; mandibles ferruginous, the cheeks and thorax beneath have a long hoary pubescence. Thorax thinly covered with long fuscous pubescence; wings as in the
other sex; the legs, particularly the posterior pair, elongate. Abdomen incurved, and of a dark rufo-testaceous colour beneath. 

_Hab._ Brazil. (Coll. W. W. Saunders, Esq.)

11. **Augochlora Daphnis, n. s.**

   Male. Length 3 lines.—Brilliant green, head very minutely and closely punctured, the clypeus much produced, coarsely punctured and shining, its anterior margin, the labrum and mandibles yellow, as well as the flagellum beneath. The disk of the thorax not so finely punctured as the thorax; the base of the metathorax enclosed by a sharp curved carina, the enclosure has a rugose radiating striation, the sides and truncation closely punctured; tegulae pale testaceous, wings hyaline, tibiae and tarsi rufo-piceous. Abdomen finely punctured, thinly covered with short pale pubescence, the apical margins of the segments dark rufo-piceous, very smooth and shining.

   _Obs._ Most closely resembling _A. diversipennis_, male, but distinguished by the striation of the enclosure of the base of the metathorax.

   _Hab._ Monte Video. (Coll. W. W. Saunders, Esq.)

12. **Augochlora Artemisia.**

   Female. Length 5 lines.—Brilliant golden-green, head and thorax very finely and closely punctured, head as wide as the thorax, face broad subquadrate, the eyes scarcely approaching at the base; clypeus broad, coarsely punctured; base of the metathorax not enclosed, smooth and shining, the sides of the truncation have a sharp carina; wings fusco-hyaline; legs green; tarsi testaceous, tinged with green, their pubescence fulvous. Abdomen delicately punctured, the fifth and sixth segments fusceous; beneath rufo-testaceous, tinged with green lustre.

   _Obs._ This species most closely resembles _A. cuprea_, but is at once distinguished by the form of the head and broad face.

   _Hab._ Rio. (Coll. F. Smith.)

13. **Augochlora Regina, n. s.**

   Female. Length 5 lines.—Bright green, partaking of different shades of blue on the head, of gold on the vertex and disk of the thorax, of blue or golden on the abdomen, as seen in different lights; the clypeus very brilliant, deeply punctured, the rest of the head very finely and closely punctured; margin of the clypeus, labrum and mandibles dark rufo-piceous, nearly black; antennae black, the flagellum beneath subtestaceous. Thorax, the tegulae and nervures of the wings, which are sub-
hyaline, dark fuscous, the legs dark metallic green, the tibiae and tarsi dark rufo-piceous, clothed with black pubescence; the apex of the abdomen covered with black pubescence; the abdomen is highly polished and brilliant, and very closely delicately punctured.

_Hab._ Jamaica.

14. **Augochlora Vesta**, n. s. **B.M.**

_Female._ Length 3¼ lines.—Head and thorax golden-green, very closely and rather strongly punctured, the clypeus has large deep punctures, the flagellum beneath testaceous towards the apex. The base of the metathorax not enclosed, slightly roughened, the truncation shining and having a few scattered punctures, the sides closely and strongly punctured; the outer margin of the tegulae dark piceous, wings fulvo-hyaline, the nervures testaceous; legs obscure metallic green, covered with dark fuscous pubescence. Abdomen coppery-red, shining and strongly punctured, the apical margins of the segments fringed with short fulvous pubescence; a longer pubescence of the same colour is thinly scattered over the whole abdomen; beneath more or less of a brassy-green, sometimes rufo-testaceous, not metallic.

_Hab._ Columbia.

15. **Augochlora Metallica.** **B.M.**


_Hab._ Columbia.

16. **Augochlora Floralia**, n. s.

_Female._ Length 3½ lines.—Splendid blue-green, the disk of the thorax having a golden tinge; head very finely and closely punctured; antennae black, the flagellum fulvous beneath, the mandibles, labrum and margin of the clypeus very dark rufo-testaceous; disk of the thorax finely punctured, interspersed with larger punctures, the anterior portion roughly punctured; tegulae dark rufo-testaceous; nervures testaceous; wings hyaline, splendidly iridescent; the enclosed space at the base of the metathorax has a number of irregular short shallow radiating striae, enclosed by a smooth shining ridge; the truncation smooth and shining; the tibiae and tarsi rufo-testaceous, covered with ochraceous pubescence, beneath with fulvous. Abdomen, towards the apex is a thin scattered ochraceous pubescence, most dense at the sides of the anal rima.

_Hab._ South America. (Coll. W. W. Saunders, Esq.)
17. Augochlora semiaurata.


18. Augochlora cuprea.

Female. Length 4 lines.—Bright green, the vertex finely punctured, the face rugose, and the clypeus covered with large distinct punctures and ciliated with fulvous hairs, the flagellum subtestaceous beneath. Thorax, the disk very closely punctured, the punctures uniting; and having a scattered pale pubescence, longer and denser on the post-scutellum and sides of the metathorax; the base of the metathorax not enclosed, a little roughened below the post-scutellum, beyond which it is smooth and shining; in the middle of the truncation a longitudinal depression, sides of the truncation rounded; wings hyaline, slightly clouded at their apical margins, nervures testaceous, tegulae dark rufo-testaceous, with a tinge of green; legs green, tarsi ferruginous, their pubescence fulvous. Abdomen ovate, the sides and base covered with long pale pubescence; on the other part it is shorter, the two basal segments fringed with fulvous hairs.


19. Augochlora fulgida, n. s.

Female. Length 4½ lines.—Brilliant metallic-green, having a blue tinge on the abdomen. Head very closely punctured, the clypeus coarsely punctured, the face below the insertion of the antennae more deeply punctured than the vertex. Thorax, the disk closely punctured, the punctures large and shallow in the centre; base of the metathorax enclosed, the enclosed space finely roughened, the truncation covered with large shallow punctures; the tegulae dark testaceous, having a green reflection; wings fulvo-hyaline, nervures ferruginous; legs green, covered above with a fulvo-fuscous pubescence, bright fulvous on the tarsi beneath. Abdomen finely but distantly punctured; beneath green, the margins of the segments dark rufo-fuscous.

Hab. St. John’s Bluff, East Florida. (E. Doubleday, Esq.)

20. Augochlora splendida, n. s.

Female. Length 3½ lines.—Golden-green, antennæ and eyes black, the clypeus and lower parts of the face coarsely sculptured, towards the vertex more finely so, the punctures running into each other. Thorax, similarly sculptured to the vertex of the head, and having a few scattered fulvous hairs; metathorax not distinctly enclosed at the base, the sides roughly sculptured; apical joints of the tarsi testaceous, the posterior tibiae, the in-
termediate and posterior tarsi, covered above with fuscous pubescence, beneath it is fulvous; wings hyaline, the tegulae testaceous on the outer margin, the nervures pale testaceous, costal nervure ferruginous. Abdomen ovate, thinly scattered over with griseous pubescence; at the basal margins of the second and third segments a fascia of yellow pubescence; the basal segment more strongly punctured than the rest of the abdomen.

Obs. This species most closely resembles *A. diversipennis*, but independent of other differences, the legs are black and the basal segment of the abdomen is longer.

*Hab.* Mexico.

21. **Augochlora labrosa.**


*Hab.* Mexico; North America.

22. **Augochlora radiata.**


*Hab.* United States.

23. **Augochlora festiva, n. s.**

Female. Length 3½ lines.—Brilliant green, having a golden tinge on the face and disk of the thorax, the abdomen blue-green; head and thorax closely and finely punctured, the clypeus coarsely so; at the base of the metathorax an enclosed space, the space covered with radiating striae, margined by a sharp bent ridge; the wings fulvo-hyaline, iridescent, nervures ferruginous; coxae green, the femora dark rufo-testaceous, the tibiae and tarsi bright ferruginous, their pubescence fulvous, in certain lights having a silvery brightness. Abdomen beneath dark rufo-piceous.

*Hab.* St. John's Bluff, East Florida. (E. Doubleday, Esq.)

24. **Augochlora gratiosa, n. s.**

Female. Length 3 lines.—Brilliant green, the head closely and finely punctured, the clypeus much produced and coarsely punctured at the apex, flagellum fulvous beneath; disk of the thorax strongly and very closely punctured; the base of the metathorax not distinctly enclosed, rugose-striate, having behind a waved ridge, the truncation transversely roughened. Thorax beneath roughened with uniting punctures; wings subhyaline, nervures rufo-testaceous; legs testaceous, the coxae and femora having a green reflection; apical joints of the tarsi ferruginous,
the pubescence pale, having a silvery brightness in certain lights; base of the abdomen covered with a white pubescence, which is also very thinly scattered over the whole abdomen.

_Hab._ Georgia.

25. _Augochlora viridula_, n. s. B.M.

Male. Length 3½ lines.—Golden-green, head very closely and finely punctured, the clypeus coarsely so, labrum and mandibles rufo-piceous, flagellum testaceous beneath. Thorax, the outer margin of the tegulae and nervures of the wings pale testaceous, the wings hyaline, iridescent; base of the metathorax roughened by an irregular radiating striation, not distinctly enclosed, sides of metathorax closely and strongly punctured, as well as the disk of the thorax; legs green, the tarsi pale testaceous yellow. Abdomen strongly but not closely punctured, particularly at the base, very thinly covered with short pale yellow pubescence; margins of the two basal segments slightly depressed and ciliated with short pale yellow hairs.

_Obs._ From the close similarity this is probably the male of _A. lucidula._

_Hab._ Trenton Falls, N. America. (E. Doubleday, Esq.)

26. _Augochlora fervida._ B.M.

Male. Length 3–4 lines.—Blue-green, head very finely and closely punctured, having large deep punctures on the clypeus, flagellum subtestaceous beneath. Thorax strongly and very closely punctured; wings hyaline, the nervures and outer margin of the tegulae pale testaceous; base of the metathorax roughened, not distinctly enclosed, the sides strongly punctured; legs green, the tarsi pale testaceous and covered with pale yellow pubescence; the legs fringed with long white pubescence; the tubercles behind, the post-scutellum, and sides of the metathorax covered with white pubescence. Abdomen elongate-ovate, strongly punctured and covered with short pale pubescence, the margins of the two basal segments fringed with the same.

_Obs._ This species resembles _A. viridula_; it is however very distinct, the colour of the pubescence is different and much more dense, the abdomen is much more closely punctured, and the golden colouring is absent in this species.

_Hab._ North America.

27. _Augochlora lucidula_, n. s. B.M.

Female. Length 3½ lines.—Golden or blue-green, head very closely and finely punctured, some large deep punctures on the
clypeus, its anterior margin, labrum and mandibles dark rufo-piceous, the flagellum testaceous beneath. Thorax, the disk very closely covered with punctures of different sizes, towards the sides being finer than those down the centre; metathorax at the base shining, slightly roughened immediately below the post-scutellum, the sides strongly punctured and covered with long pale pubescence; wings hyaline, the nervures and outer margin of the tegulae pale testaceous; legs golden-green, with a testaceous hue; tarsi testaceous, the basal joint having a green tinge above, covered with pale pubescence, the posterior pair densely covered with pale pubescence, the floccus white. Abdomen thinly covered with pale pubescence, beneath rufo-testaceous, the second, third and fourth segments having a bright golden hue.

_Hab._ North America.

28. **Augochlora pura**.  
_Halictus purus, Say, Bost. Journ. Nat. Hist. i. 395. 4._  
_Hab._ United States; Trenton Falls; Mount Pleasant, Ohio; Nova Scotia. (E. Doubleday and G. Barnston, Esqrs.)

29. **Augochlora aurata**, n. s.  
_Female._ Length 2½ lines.—Green, the thorax and abdomen having a golden lustre; the face finely rugose; the vertex closely and finely punctured; the clypeus produced, covered with large punctures; the apex, labrum, and mandibles at their apex ferruginous, the flagellum beneath testaceous. Thorax very closely and finely punctured; base of the metathorax has an enclosed space finely granulated and surrounded by a sharp curved ridge; wings hyaline and iridescent, nervures and tegulae pale testaceous; legs rufo-testaceous. Abdomen thinly covered with short pale pubescence, beneath rufo-testaceous.

_Hab._ St. John’s Bluff, East Florida. (E. Doubleday, Esq.)

30. **Augochlora sumptuosa**, n. s.  
_Female._ Length 4½ lines.—Bright golden-green, head and thorax very closely and finely punctured, the clypeus covered with large deep punctures, labrum and mandibles rufo-piceous, the latter tinged with green at their base; the base of the metathorax enclosed by an arched ridge, the enclosed space granulated, the sides of the truncation margined by sharp carinae; wings subhyaline, nervures testaceous, tegulae coppery-green; legs green, tarsi fulvo-testaceous, the pubescence fulvous. Ab-
HYMENOPTERA.

Domen of a silky texture, thinly covered with a short indistinct pale pubescence; beneath rufo-testaceous, tinged with green. 

Hab. North America. (E. Doubleday, Esq.)

Genus 17. OXYSTOGLOSSA, n. g.

_F. Smith’s MSS._ (Details, Plate III.)

The eyes emarginate or subreniform; thorax globose; superior wings having one marginal and three submarginal cells, the first submarginal cell as long as the second and third, the first recurrent nervure uniting with the second transverse cubital nervure. Mentum elongate, one-fifth shorter than the labium, paraglossae short and obtuse at their apex; labium very long and spiral, pointed at the apex; labial palpi four-jointed, first joint about the length of the two following, the apical joint clavate, obtuse at the apex. Maxillae elongate, the terminal lobe about one-fourth of its entire length. Maxillary palpi six-jointed, terminal joint obtuse:—other characters as in the genus Augochlora.

1. **Oxytoglossa decorata**, n. s. B.M.

Female. Length 2½ lines.—Head and thorax green, very finely and closely punctured; clypeus very convex, much produced, truncate and rugose towards the apex. Thorax closely and finely punctured; base of the metathorax not enclosed, transversely roughened in the middle and obliquely striated on each side, beyond which is a smooth shining space; wings subhyaline, iridescent, nervures testaceous; legs testaceous, coxae tinged with blue. Abdomen bright violet, margins of the segments slightly piceous, beneath rufo-testaceous. 

_Hab._ Jamaica.

Genus 18. **MEGALOPTA**, n. g.

_F. Smith’s MSS._ (Details, Plate III.)

Head as wide as the thorax, eyes emarginate, ocelli very large, placed in a triangle on the vertex, the posterior pair on a line with the vertex of the eyes; the basal joint of the antennae more than one-third of the entire length, or as long as the seven basal joints of the flagellum; tongue elongate, the apex acute, about one-third longer than the mentum; labial palpi four-jointed, the basal joint as long as the two following, the apical joint cylindric and acute at the apex; the paraglossae lanceolate, about the same length as the labial palpi. Maxillary palpi six-jointed, nearly one-third longer than the apical lobe of the maxillae. Labrum
nearly triangular, produced in the form of a beak, having a convex space at the base, from which an elevated carina passes forwards to the apex; the carina broadest at its base, in which is a deep fossule. Thorax globose, the superior wings having one marginal and three submarginal cells, the second being in the form of an oblong square placed a little obliquely and receiving the first recurrent nervure near or at its apex; the second submarginal cell also receives near its apex the second recurrent nervure. Abdomen ovate, the fifth segment having a central rima in the female.

1. Megalopta bituberculata.

Male. Length 4½ lines.—Head, the vertex black, the face below the insertion of the antennae rufo-testaceouses and covered with pale fulvous pubescence, the mandibles rufo-testaceous, their apex ferrugineous; antennae fulvous, slightly fuscos above. Thorax testaceo-ferruginous, having two longitudinal pale distinct stripes on the disk; the scutellum on each side raised into a somewhat conical tubercle; beneath the post-scutellum the base of the metathorax has a space enclosed by an arched carina; beneath covered with pale pubescence; wings hyaline, nervures ferruginous; legs pale testaceous. Abdomen ferrugineo-testaceous, smooth and shining, the margins of the segments paler; at the base and towards the apex is a little pale fulvous pubescence.

Hab. Brazil. (Coll. F. Smith.)

2. Megalopta Idalia, n. s.

Female. Length 5–6 lines.—Head and disk of the thorax brassy-green; antennæ, margin of the clypeus, labrum and mandibles ferruginous, the latter black at their tips, the clypeus roughly, but the head otherwise finely and closely punctured. Thorax very finely punctured; the metallic portion of the disk extends to the post-scutellum, beyond which the thorax is ferruginous, the sides beneath the wings being suffused with metallic green; the tegulae and legs testaceo-ferruginous, the neuration of the wings of the same colour; wings hyaline. Abdomen testaceo-ferruginous, having a scattered fulvous pubescence, and being of a paler colour beneath.

Male.—This sex corresponds in every particular of colour and sculpture, the apical joints of the antennæ being fuscos above, the extreme apex ferruginous, the basal joint being pale testaceous beneath.

Hab. Brazil; banks of the Amazon and Para.
Genus 19. CALLOMELITTA, n. g.

*F. Smith's MSS.* (Details, Plate IV.)

Head transverse, the ocelli placed in a slight curve on the vertex; labium obtuse, the paraglossæ very short and rounded; the labial palpi four-jointed, the joints nearly of equal length, the basal joint a little the longest; the maxillary palpi six-jointed, elongate, being three-fourths of the length of the maxillæ, exclusive of the terminal lobe; the latter being short, somewhat heart-shaped, its margin ciliated with long hairs. Mandibles short, stout and tridentate; the superior wings having one marginal and three submarginal cells, the first submarginal cell as long as the two following, the marginal cell nearly as long as the three submarginal cells united; the posterior legs furnished with a flocculus and scopa and the abdomen with an anal fimbria.

1. **CALLOMELITTA PICTA, n. s.** B.M.

Female. Length 5 lines.—Head dark blue, coarsely punctured; antennæ black, the flagellum rufo-testaceous beneath. Thorax black, the disk, scutellum and a large patch beneath the wings red, the punctures distant; at the base of the metathorax is a large enclosed smooth space, which has some short striae at the anterior margin; wings fusco-ferruginous, subhyaline, and having a purple lustre, the pubescence on the legs silvery-white, the spines at the apex of the tibiae white. Abdomen bright shining blue, having a purple tinge, the anal fimbria black.

Male very similar to the female, but differs in having the antennæ nearly as long as the head and thorax, in the absence of the red spot beneath the wings, in having the scutellum black and a broad black stripe down the middle of the disk of the thorax; abdomen elongate and black.

*Hab.* Van Diemen's Land.

Genus 20. AGAPOSTEMON.

(Details, Plate IV.)

Head subtriangular; antennæ elongate in the males; the labrum transverse and concave in the females, produced into an elongated lobe, which is sublanceolate and closely fringed at the sides with stout flat hairs; the apical half of the lobe is produced into an elevated carina, which passes off in an oblique direction to the margin on each side; the labrum of the males transverse, very convex and divided by a shallow groove in the centre, produced in front into an angular lobe distantly ciliated on its anterior margin. Mentum elongate, in the females more than four times the length of the labium; in the males the labium is about
half the length of the mentum; the paraglossæ about half the length of the labium; labial palpi four-jointed; maxillary palpi six-jointed, the basal joint of the former as long as the three following; the maxillary have all the joints of about equal length; the wings as in the genus Halictus. Abdomen in the females furnished with an anal rima.

Obs. M. Guérin has indicated the separation of these insects from the genus Halictus, and has proposed the name Agapostemon, but without giving the generic characters.

1. **AGAPOSTEMON NIGRICORNIS.** B.M.

Cocqueb. Illus. t. 25. f. 7.
Hab. Mount Pleasant, Ohio; Wilmington, Delaware. (E. Doubleday, Esq.)

2. **AGAPOSTEMON TRICOLOR.** B.M.

Hab. N. America; Mount Pleasant, Ohio. (E. Doubleday, Esq.)

3. **AGAPOSTEMON AERUGINOSUS, n. s.** B.M.

Female. Length 5 lines.—Golden-green, the abdomen more or less tinged with blue; the face roughened with confluent punctures; the clypeus most strongly rugose, its apical margin as well as the labrum and mandibles rufo-testaceous, the latter ferruginous at the tips; the flagellum rufous beneath. Thorax truncate, finely roughened by confluent punctures; base of the metathorax not enclosed, strongly rugose; wings rufo-hyaline, the tegulae and nervures pale testaceous, the inner margins of the former green, apex of the wings clouded; legs rufo-testaceous, their pubescence beneath fulvous, on the intermediate and posterior tibiae above fuscous. Abdomen ovate, very minutely and closely punctured; the basal margins of the second, third and fourth segments depressed, sparingly covered with short gris- seous downy pubescence, which is longest and most dense at the sides; the fifth and apical segment covered with dark fuscous pubescence; beneath rufo-testaceous, having a green tinge, margins of the segments fringed with fulvous pubescence.
Hab. St. John's Bluff, East Florida. (E. Doubleday, Esq.)
4. **Agapostemon pulchra**, n. s.  

Female. Length 4 lines.—Entirely of bright golden-green, the head and thorax finely roughened with confluent punctures, and thinly covered with griseous pubescence, most dense on the sides of the metathorax; the wings hyaline, nervures and tegulae testaceous; base of the metathorax rugose, truncate; legs rufotestaceous, covered with a griseous pubescence, the tarsi beneath with fulvous. Abdomen finely and closely punctured, the margins of the segments depressed; sides of the abdomen covered with long griseous pubescence, the apex dark fuscous.

*Obs.* This species closely resembles *A. aeruginosus*, but is uniformly of a smaller size, its wings are hyaline, and the abdomen is not tinged with blue.

*Hab.* North America; California.

5. **Agapostemon rhopalocera**, n. s.

Male. Length 3½ lines.—Head and thorax golden-green, covered with minute confluent punctures, the face, cheeks and sides of the thorax thickly covered with pale yellow pubescence; the scape in front, the labrum and mandibles yellow, the flagellum beneath pale fulvous; antennae longer than the head and thorax, the two apical joints clavate, the inner margin of the club being sharp or carinate; above the four or five basal joints have more or less of a fuscous stain, the club black, the intermediate joints ferruginous; the tegulae, extreme base of the wings and stigma yellow; the legs yellow, the base of the femora and knees more or less ferruginous, posterior coxae green above. Abdomen black above, yellow beneath, on the middle of the basal segment and at the base of the second and third a transverse yellow band, scarcely visible at the base of the fourth segment, the extreme apex yellow.

*Hab.* Mexico. (Coll. F. Smith.)

6. **Agapostemon nasutus**, n. s.  

Male. Length 3½ lines.—Head and thorax golden-green, covered with minute confluent punctures, the antennae as long as the head and thorax, the scape yellow in front, the flagellum pale fulvous beneath, the anterior margin of the clypeus bent under, notched in the middle, very pale testaceous, rounded on each side; the labrum and mandibles yellow, the latter ferruginous at their apex. Wings hyaline, the tegulae, extreme base of the wings and the stigma yellow; base of the metathorax rugose; legs yellow, the intermediate and posterior coxae, trochanters and base of the femora black. Abdomen black, on the middle of the
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basal segment a broad pale yellow fascia, the base of all the segments yellow; base and sides of the abdomen covered thinly with pale yellow pubescence.

Hab. Mexico.

7. AGAPOSTEMON FEMORALIS.

Andrena femoralis, Guérin, Icon. R. Anim. p. 447. t. 73. f. 1.

Hab. Cuba.

Genus 21. NOMIA.

(Details, Plate IV.)

Andrena, pt., Fabr. Ent. Syst. ii. 311, 1793.

Obs. Only twenty-three species are enumerated in the present Catalogue, although there are about twenty in the Museum Collection alone undescribed, and probably as many more in other cabinets; but these will be included in a forthcoming Monograph on the Genus by Mr. Westwood, and given in a Supplement to this Catalogue.

1. NOMIA DIVERSIPES.

St. Farg. Hym. ii. 293. 3.
Hab. South of France; Italy.

2. NOMIA DIFFORMIS.

Lasius difformis, Panz. Faun. Germ. 89. 15.
Jurine, Hym. 3.
Andrena humeralis, Jurine, Hym. t. 14.
Hab. Germany.

3. NOMIA BISPINOSA.

Hab. The Morea.

4. NOMIA ARMATA.

Hab. Arabia.
5. Nomia unidentata.
Hab. Arabia.

Hab. Hamadan, Persia.

7. Nomia ruficornis.
Hab. Egypt.

8. Nomia rufiventris.
Hab. Egypt.

Hab. Algeria.

10. Nomia perforata.
Hab. Algeria.

11. Nomia flavilabris.
Hab. Algeria.

Nomia nasalis, *Westw. MSS. ined.* (type ♂).
Hab. India.

Hab. East India.

Hab. India.
15. **Nomia crassipes.**
*Hab.* India; Tranquebar.

16. **Nomia curvipes.**
*Hab.* Tranquebar.

17. **Nomia oxybeloides.**
*Hab.* India.

18. **Nomia strigata.**
Andrena strigata, *Fabr. Ent. Syst.* ii. 311. 16.
*Hab.* India; Java.

19. **Nomia silhetica.**
*Hab.* Northern India.

20. **Nomia capitata.**
*Hab.* N. India.

21. **Nomia rustica.**
*Hab.* Ceylon.

22. **Nomia dorsalis.**
*Hab.* China.

23. **Nomia? heteropoda.**
*Hab.* North America.
HYMENOPTERA.

Genus 22. ANCYLA.

Ancyla, St. Farg. Hym. ii. 294.

1. ANCYLA ORANIENSIS.

Ancyla Oraniensis, St. Farg. Hym. ii. 294. 1.

Lucas, Explo. Sc. Alger. iii. 188. 103.

Hab. Algeria.

Genus 23. ANDRENA.

(Details, Plate V.)

Apis, pt., Linn. Syst. Nat. i. 953, 1766.


1. ANDRENA HATTORFIANA.

Nomada Hattorfiana, Fabr. Ent. Syst. ii. 349. 14, ♂.

Andrena equestris, Panz. Faun. Germ. 46. 17.


Spin. Ins. Ligur. fasc. 1. p. 121. 7.

St. Farg. Hym. ii. 254. 25.


Andrena hemorrhoidalis, Smith, Zool. v. 1664. 1.


Hab. Britain; France; Germany; Albania; Polish Ukraine; Denmark; Sweden; Finland.

2. ANDRENA ROSÆ.


Smith, Zool. v. 1665. 2.


Andrena florea, St. Farg. Hym. ii. 259. 32?

Hab. Britain; France; Germany.
3. **Andrena eximia.**


*Hab.* Britain; France; Germany.

4. **Andrena rubricata.**


*Hab.* Britain; France.

5. **Andrena ferox.**


*Hab.* Britain. (Coll. F. Smith.)

6. **Andrena Cetii.**


*Andrena Cetii*, Smith, *Zool.* v. 1668. 6, ♀ ♂.

*Hab.* Britain; France; Germany; Austria; Denmark; Sweden.

7. **Andrena cingulata.**


*Rossi, Mant.* p. 326.


*Smith, Zool.* v. 1668. 5.

*Hab.* Britain; France; Sweden; Denmark.
8. **ANDRENA DECORATA.**

Andrena decorata, *Smith, Zool. v. 1667. 4.*

*Hab.* Britain. (Coll. F. Smith.)

9. **ANDRENA SPINIGERA.**


Andrena spinigera, *Smith, Zool. v. 1669. 7, not var. 3, ♂ ♀.*

*Hab.* Britain.

10. **ANDRENA CINERARIA.**


*Linn. Soc.*

*Fabr. Ent. Syst. ii. 329. 67.*


*Panz. Faun. Germ. 56. 14.*


*Spin. Ins. Lig. fasc. 1. p. 117. 51.*

*St. Farg. Hym. ii. 238. 6.*


*Smith, Zool. v. 1735. 14.*


*Hab.* Britain; France; Italy; Germany; Finland; Sweden; Algeria.

11. **ANDRENA FLESSÆ.**


*St. Farg. Hym. ii. 249. 19.*


*Hab.* France; Germany; Portugal.

12. **ANDRENA BARBAREA.**


*Hab.* Barbary.

13. **ANDRENA PILIPES.**


*Rossi, Faun. Etrus. ii. 98. 898.*

*Spin. Ins. Lig. fasc. 3. p. 191. 17.*

*St. Farg. Hym. ii. 236. 3.*


*Hab.* Britain; France; Germany; Italy; Albania; Austria; Denmark; Sweden; Finland; The Canaries; Algeria.

14. **Andrena collaris.**

*Andrena collaris, St. Farg. Hym.* ii. 237. 4. t. 22. f. 3 ♀, 4 ♂.

*Andrena holomelana, St. Farg. Hym.* ii. 234. 1 (var. ?).

*Hab.* France; Albania; Italy; Sicily; Algeria.

15. **Andrena funebris.**

*Andrena funebris, Panz. Faun. Germ.* fasc. 64. t. 5.

*St. Farg. Hym.* ii. 247. 16.


*Hab.* Europe; Algeria.

16. **Andrena bicolor.**

*Andrena bicolor, Fabr. Ent. Syst.* ii. 310. 12, ♀.

*St. Farg. Hym.* ii. 243. 12, ♀.


*Andrena Clarkella, Smith, Zool.* v. 1747. 36, ♂ ♀.


*Hab.* Britain; France; Germany; Lapland; Denmark; Sweden; Nova Scotia; Algeria.

*Obs.* The specimens from Nova Scotia differ from our British examples in having the pubescence of the thorax less brightly fulvous and that of the face not so intensely black.

17. **Andrena fulva.**


Spin. Ins. Lig. ii. 191. 4, ♂.
Andrena fulva, St. Farg. Hym. ii. 245. 14, ♂.
Revis. p. 252. 8.
Smith, Zool. v. 1746. 35, ♂ ♂.
Hab. Britain; France; Italy; Germany; Austria; Finland; Sweden.

18. ANDRENA GWYNANA. B.M.
Melitta Gwynana, Kirby, Mon. Ap. Angl. ii. 120. 60.
Hab. Britain; France; Denmark; Sweden.

19. ANDRENA æSTIVATA. B.M.
Andrena proxima, Smith, Zool. v. 1743. 28, not of Kirby.
Andrena consimilis, Smith, Zool. vi. 2214.
Hab. Britain.

20. ANDRENA PILOSULA.
Andrena pilosula, Smith, Zool. v. 1926. 65.
Hab. Britain. (Coll. F. Smith.)

21. ANDRENA LACINIA.
Andrena lacinia, Smith, Zool. v. 1751. 44.
Hab. Britain. (Coll. F. Smith.)

22. ANDRENA APRILINA.
Andrena Aprilina, Smith, Zool. vi. 2211.
Hab. Britain. (Coll. J. C. Dale, Esq.)

23. ANDRENA TRIMMERANA. B.M.
Andrena Trimmerana, Smith, Zool. v. 1740. 23.
Hab. Britain; France; Belgium; Denmark.
24. **Andrena longipes.**

*Andrena longipes*, Shuck. MSS.; *Smith, Zool.* v. 1740. 24, ♀ ♂.


*Hab. Britain.*

25. **Andrena megacephala**, n. s.

**Male.** Length 5 lines.—Black, head quadrat,e twice the width of the thorax; sides of the thorax parallel from the collar to the hinder wings; disk of the thorax smooth and shining, the punctures very delicate and distant; legs nigro-piceous; tarsi rufotestaceceous; wings subhyaline, nervures and stigma dark ferruginous; abdomen wider than the thorax, acute at the base and apex, highly polished and delicately punctured: the margins of the segments laterally have a thin fringe of griseous pubescence.

*Hab. South of France.* (Coll. F. Smith.)

26. **Andrena nitida.**


*St. Farg. Hym.* ii. 237. 5.

*Smith, Zool.* v. 1736. 16.


*Andrena consimilis*, *Smith, Zool.* v. 1736. 17 (var.).

*Hab. Britain; France; Sweden.*

27. **Andrena thoracica.**


*Andrena thoracica*, *Fabr. Syst. Piez.* p. 322. 3.

*Spin. Ins. Lig.* i. 120. 5.

*St. Farg. Hym.* ii. 239. 7.

*Smith, Zool.* v. 1735. 15.

*Hab. Britain; France; Germany; Austria; Denmark; Sweden.*

28. **Andrena vitrea.**

*Andrena vitrea*, *Smith, Zool.* v. 1737. 18.

*Hab. Britain.* (Coll. F. Smith.)
HYMENOPTERA.

29. ANDRENA CONJUNCTA.

Andrena conjuncta, Smith, Zool. v. 1744. 31.
Hab. Britain. (Coll. F. Smith.)

30. ANDRENA BIMACULATA.

Andrena bimaculata, Smith, Zool. v. 1739. 22.
Hab. Britain.

31. ANDRENA MOUFFETELLA.

Hab. Britain. (Coll. Entomological Society.)

32. ANDRENA NIGROÆNEA.

Melitta nigroænea, Kirby, ii. 109. 54, ♀.
Andrena nigroænea, Smith, Zool. v. 1739. 21, ♂ ♀.
Hab. Britain; France.

33. ANDRENA VARIANS.

Apis varians, Rossi, Mant. p. 317.
Andrena Lapponica, Zett. Ins. Lapp. p. 460. 4?
Smith, Zool. v. 1741. 25.
Hab. Britain; France; Germany; Lapland; Denmark; Sweden; Nova Scotia.

34. ANDRENA HELVOLA.

Andrena helvola, Rossi, Faun. Etrus. ii. 97. 895.
Smith, Zool. v. 1742. 26, ♂ ♀.
Hab. Britain; France; Germany; Italy; Sweden; Finland; Finland.
35. **Andrena angustior.**  
*Andrena angustior, Smith, Zool. v. 1745. 32.*  
*Hab. Britain; France; Belgium.*

36. **Andrena cinerascens.**  
*Hab. Sweden.*

37. **Andrena obscurata.**  
*Andrena distincta, Smith, v. 1744. 30 (nec Lucas, Explo. Sc. Alger.).*  
*Hab. Britain.*

38. **Andrena fulvago.**  
*Smith, Zool. v. 1732. 9.*  
*Hab. Britain; France; Sweden.*

39. **Andrena ruficrus.**  
*Hab. Finland; Lapland; Sweden.*

40. **Andrena polita.**  
*Andrena polita, Smith, Zool. v. 1733. 11.*  
*Hab. Britain. (Coll. F. Smith.)*

41. **Andrena albicans.**  
*Apis hæmorrhoidalis, Christ. Hym. p. 189. t. 16. f. 8?*  
*Smith, Zool. v. 1734. 12.*  
*Hab. Britain; France; Finland; Nova Scotia; Denmark; Sweden; Lapland.*
42. **ANDRENA FULVESENCENS.**

*Melitta fulvescens, Kirby, MSS.*
*Andrena fulvescens, Smith, Zool. v. 1732. 10.*
*Hab. Britain; France; Albania; Portugal.*

43. **ANDRENA PICIPES.**

*Andrena picipes, Smith, Zool. v. 1746. 34.*
*Hab. Britain. (Coll. Entomological Society.)*

44. **ANDRENA CONVEXIUSCULA.**

*Andrena convexiuscula, Smith, Zool. v. 1927. 66.*
*Hab. Britain; Denmark; Sweden; Finland.*

45. **ANDRENA PICICORNIS.**

*Andrena picicornis, Smith, Zool. v. 1745. 33.*
*Hab. Britain. (Coll. Entomological Society.)*

46. **ANDRENA NIGRICEPS.**

*Andrena nigriceps, Smith, Zool. v. 1749. 40, ǂ.*
*Hab. Britain.*

47. **ANDRENA SIMILIS.**

*Hab. Britain.*

48. **ANDRENA SMITHELLA.**

*Andrena Smithella, Smith, Zool. v. 1748. 37.*
*Hab. Britain. (Coll. Entomological Society.)*

49. **ANDRENA DENTICULATA.**

*Andrena Listerella, Smith, Zool. v. 1752. 45, ♂ ǂ.*
Hab. Britain. (Coll. Entomological Society.)
50. **Andrena pubescens.**

Andrena fusiceps, *Smith, Zool.* v. 1751. 43, ♂ ♀.
   18, ♂ ♀.
Melitta rufitarsis, *Kirby (var.); Kirby's MSS. Note, in his own

_Hab._ Britain; France; Sweden; Finland.

51. **Andrena atriceps.**


_Hab._ Britain.

52. **Andrena tridentata.**


_Hab._ Britain. (Coll. Entomological Society.)

53. **Andrena lapponica.**


_Hab._ Britain; Lapland; Sweden; Finland.

54. **Andrena fucata.**


_Hab._ Britain; Denmark; Sweden; Finland.

55. **Andrena vaga.**


_Hab._ Austria.

56. **Andrena flavipes.**


_Hab._ Austria.
57. **Andrena lucida**

_Hab._ Germany.

58. **Andrena dispar**

_Hab._ Lapland; Sweden; Denmark.

59. **Andrena Wilkella**

_Hab._ Britain. (Coll. Entomological Society.)

60. **Andrena constricta**

_Hab._ Britain. (Coll. F. Smith.)

61. **Andrena fulvicrus**

_Hab._ Britain; France; Germany; N. India.

62. **Andrena extricata**

_Hab._ Britain. (Coll. F. Smith.)

63. **Andrena dorsata**

_Hab._ Britain. (Coll. Ent. Soc.)

64. **Andrena Kirbii**

_Hab._ Britain. (Type sp.)

65. **Andrena argentata**

Andrena barbatula, *Zett. Ins. Lapp.* p. 461. 5?
_Hab._ Britain; Sweden; Lapland.
66. *Andrena barbatula*.


*Hab.* Lapland.

67. *Andrena albo-cincta*.


*Hab.* Lapland.

68. *Andrena Collinsonana*.

Andrena nitida, *Panz. Faun. Germ.* 56. 2?

*Hab.* Britain; France; Belgium.

69. *Andrena Lewinella*.


*Hab.* England. (Coll. Ent. Soc.)

70. *Andrena combinata*.

Andrena combinata, Smith, *v.* 1923. 58.

*Hab.* Britain.

71. *Andrena albicrus*.


*Hab.* Britain; Sweden; Finland; Lapland.

72. *Andrena connectens*.

Andrena connectens, Smith, *Zool.* v. 1924. 60.

*Hab.* Britain. (Coll. Ent. Soc.)

73. *Andrena xanthura*.


*Hab.* Britain; France; Sweden; Finland; Siberia.

### 74. *Andrena fuscata.*


*Hab.* Britain.

### 75. *Andrena Afzeliiella.*


*Hab.* Britain; France; Belgium; Finland.

### 76. *Andrena chrysoseleus.*


*Hab.* Britain; France; Finland.

### 77. *Andrena labialis.*


Andrena separata, *Smith, Zool.* v. 1922. 55, var. ♀.

*Hab.* Britain; France; Sweden.

### 78. *Andrena Coitana.*


Andrena Shawella, *Smith, Zool.* v. 1926. 64.

*Hab.* Britain; Finland.

### 79. *Andrena clypearis.*


*Hab.* Finland; Sweden.
80. **Andrena frontalis.**

*Hab.* Britain. (Coll. F. Smith.)

81. **Andrena analis.**  


*Hab.* Britain; France; Germany; Finland.

82. **Andrena rufitarsis.**

*Hab.* Lapland.

83. **Andrena nana.**  


*Hab.* Britain; Finland; Sweden; Greece.

84. **Andrena parvula.**  


*Hab.* Britain; France; Belgium; Finland; Denmark; Sweden.

85. **Andrena cyanescens.**

*Hab.* Finland.

86. **Andrena Hesperia, n. s.**  

Female. Length 4 lines.—Black, the face longitudinally striate, the clypeus rugose, thinly covered on the face and vertex with pale fulvous pubescence, the flagellum rufo-testaceous, slightly fuscous above; thorax thinly covered with pale fulvous pubescence, particularly the disk; tegule and nervures of the wings rufo-testaceous; wings hyaline, iridescent and slightly
clouded at their apical margins; legs rufo-piceous, the posterior 
tibiae and all the tarsi pale rufo-testaceous, clothed with fulvous 
pubescent. Abdomen ovate, delicately punctured; apical mar-
gins of the segments testaceous, and having a fascia of pale ful-
vous pubescence, the first and second usually interrupted, on the 
Fifth and sixth segments it is bright fulvous.

Hab. Italy.

87. ANDRENA capitata, n. s.

Male. Length 4 lines.—Head as wide as the thorax, densely 
covered with long erect black hair; the thorax above covered 
with black hair, that on the sides of the thorax is ochraceous; 
wings hyaline, the apical margins very slightly clouded, the ner-
vures and stigma ferruginous; all the femora fringed with sooty 
black pubescence, as well as the anterior tibiae and the interme-
diate pair at their base; the legs otherwise covered with pale ful-
vous pubescence, the apical joints of the tarsi ferruginous. Ab-
domen ovate, the apex acute; shining and clothed with black 
pubescent, which is long at the base and apex; the second, 
third and fourth segments have a little white pubescence on their 
apical margins laterally; beneath, the margins have a thin fringe 
of long black hairs.

Hab. Malta.

88. ANDRENA spectabilis, n. s.

Female. Length 7 lines.—Black, on each side of the face a 
line of white pubescence, the clypeus coarsely punctured. 
Thorax, the middle portion from the collar to the post-scutellum 
shining and coarsely punctured, on each side of which it is much 
more closely and finely so, giving the sides a subopaque appear-
ance; on the metathorax at its base a triangular defined space, 
coarsely rugose; sides of the metathorax finely roughened with 
confluent punctures and fringed with sooty-black pubescence; 
wings dark fuscous having a purple reflection; legs usually black, 
or dark rufo-piceous, the claws ferruginous; the pubescence of 
the legs sooty-black, on the tarsi beneath it is fulvous; the flocc-
cus and scopo on the posterior tibiae in front cinereous or silvery 
in certain lights. Abdomen shining, particularly at the base, 
which is less closely punctured than the rest of the abdomen, 
the apical margins of the segments broadly depressed, the de-
pressed portion being delicately, whilst the intervening space is 
strongly, punctured; on the apical margins of the second, third 
and fourth segments laterally a narrow white marginal fringe, 
the anal fimbria sooty-black.

Hab. Albania.
89. **Andrena nigrifrons**, n. s.

Female. Length 5½ lines.—Black, the head thickly clothed with black pubescence. Thorax, above clothed with fulvous pubescence, thinly so on the disk, thickly on the sides of the meta-thorax; the pubescence on the anterior femora and tibiae is black and on the tarsi beneath fulvous; on the intermediate and posterior legs it is fulvous, all the tarsi and the posterior tibiae are fulvous; wings hyaline, their apical margins slightly clouded, the nervures ferruginous. Abdomen ovate, the two basal segments clothed with fulvous pubescence, the following with black; the second, third and fourth segments have a marginal fringe of fulvous pubescence, the anal fimbria black.

Male.—Head as wide as the thorax, the clypeus white and having two minute black spots, and a long beard of white pubescence; on the face above, the pubescence is pale fulvous, and close to the margins of the eyes is a little which is black; the thorax is clothed as in the female, but the pubescence is longer and the posterior tibiae are only ferruginous at their apex; the four basal segments of the abdomen are covered with long pale fulvous pubescence, on the fifth and following segments it is black; on the cheeks, coxae and trochanters the pubescence is long and pale.

*Hab.* Albania. (Coll. W. W. Saunders, Esq.)

90. **Andrena concinna**, n. s.

Female. Length 6½ lines.—Black, the face below the insertion of the antennæ covered with a griseo-fulvous pubescence, the longitudinal depressions at the margins of the eyes covered with a whitish pile; the margin of the vertex fringed with fulvous hairs. Thorax, the disk covered with short fulvous pubescence, at the sides and beneath it is much paler, the tegulae and nervures of the wings rufo-piceous; wings hyaline and having a slight fulvous tinge, their apical margins faintly clouded; the tibiae and tarsi above clothed with fulvous pubescence, the apical joints of the tarsi ferruginous, the floccus on the posterior trochanters nearly white. Abdomen elongate-ovate, the apical margins of the segments depressed, and having a fascia of pale fulvous pubescence, the apical fimbria bright fulvous, the segments beneath have an irregular fringe of pale pubescence; the abdomen above is exceedingly closely and finely punctured, giving it a subopake appearance.

*Hab.* Albania. (Coll. W. W. Saunders, Esq.)
91. **Andrena variabilis**, n. s.  
**B.M.**

Female. Length 5½–6 lines.—Black, the head finely and closely punctured, flagellum ferruginous beneath, the face has a griseous pubescence, the clypeus being naked and strongly punctured. Thorax, above shining, strongly but not very closely punctured, in front and on the margins of the scutellum and post-scutellum a fringe of short ochraceous pubescence, the legs have a pale pubescence having more or less of a yellow tinge; the floccus and scopa on the posterior pair have a glittering silvery lustre, on the tarsi beneath it is fulvous, the apical joints of the tarsi pale rufotestaceous, as are also the tegulae and nervures of the wings, the latter hyaline; the apical margins of the abdominal segments have a fascia of white pubescence, usually interrupted on the first; the anal fimbria has an intermixture of reddish brown hairs.

Male. Length 5 lines.—Black, the clypeus and a large patch at the sides white; the face broad, and having a thin hoary pubescence. The antennae ferruginous, more or less fusceous above, in other respects resembling the female.

**Obs.** Both the sexes of this species vary in being sometimes more or less red, the female is sometimes entirely so, or having only a dark stain on the disk of the thorax; the dark specimens usually have the clypeus red, and are sometimes reddish beneath. The male varies in having the abdomen sometimes entirely red, or having only one or two apical segments dark with the base more or less also dark; these varieties have the legs red.

**Hab.** Albania.

92. **Andrena lanuginosa**.

*Andrena lanuginosa*, *Spin. Ann. Soc. Ent. Fr.* 2me ser. i. 137. 25.  
**Hab.** Spain.

93. **Andrena cinerea**.

**Hab.** Morea; Algeria.

94. **Andrena clypeata**.

**Hab.** Morea; Algeria.

95. **Andrena dimidiata**.

**Hab.** Morea.
96. **Andrena dorsalis**.

*Andrena dorsalis*, *Brullé*, *Expéd. Sc. Morée*, iii. 358. 79.


*Hab*. Morea; Algeria.

97. **Andrena fulvitarsis**.


*Hab*. Morea.

98. **Andrena tricincta**.


*Hab*. Morea; Algeria.

99. **Andrena pallidi-cincta**.


*Hab*. Morea.

100. **Andrena pallens**.


*Hab*. Morea.

101. **Andrena morio**.


*Hab*. Morea.

102. **Andrena fimbriata**.


*Hab*. Morea.

103. **Andrena bicolorata**.

*Andrena bipartita*, *Brullé*, *Hist. Nat. Il. Canar*. ii. 87. 27. t. 3.

f. 11 (nec *St. Farg.*).

*Hab*. Canary Islands.

104. **Andrena chalcogastra**.


*Hab*. Canary Islands.
HYMENOPTERA.

105. ANDRENA XANTHOSCELIS.
Andrena xanthoscelis, Brullé, Hist. Nat. II. Canar. ii. 86. 25. t. 3.
f. 10.
Hab. Canary Islands.

106. ANDRENA RUFICORNIS, n. s.
Female. Length 6½ lines.—Black, the antennæ bright ferruginous, the face below the insertion of the antennæ clothed with ferruginous pubescence, the clypeus naked; the thorax has a little ferruginous pubescence in front, at the sides of the metathorax it is sooty-black; the wings dark fusco-hyaline, having a purple reflection, the externo- and interno-medial and first discoidal cell subhyaline, the apical half of the inferior wings clouded; the anterior and intermediate femora, tibiae and tarsi ferruginous, posterior tarsi ferruginous, the posterior tibiae and tarsi clothed with ferruginous pubescence. Abdomen very delicately and closely punctured, the margins of the segments slightly ferruginous.
Hab. Canary Islands. (Coll. W. W. Saunders, Esq.)

107. ANDRENA MACRÆ.
Andrena mactae, St. Farg. Hym. ii. 251. 22.
Brullé, Hist. Nat. II. Canar. ii. 86. 26.
Lucas, Explor. Sc. Algér. iii. 173. 68. t. 5. f. 9.
Hab. North Africa; Algeria (Macta); Canary Islands.

108. ANDRENA LEPELETIERI.
Andrena dorsalis, St. Farg. Hym. ii. 235. 2 (nec Brullé).
Andrena Lepeletieri, Lucas, Explor. Sc. Algér. iii. 168. 56. t. 5.
f. 2.
Hab. Algeria.

109. ANDRENA VELUTINA.
Andrena velutina, St. Farg. Hym. ii. 240. 8.
Luc. Explor. Algér. iii. 170. 59. t. 5. f. 3.
Hab. Algeria.

110. ANDRENA LUGUBRIS.
Andrena lugubris, St. Farg. Hym. ii. 248. 17.
Luc. Explor. Sc. Algér. iii. 171. 63. t. 5. f. 6.
Hab. Algeria.
111. **Andrena limata.**

*Andrena lucida, St. Farg. Hym. ii. 241. 9 (nec Panz.).*

*Lucas, Explo. Sc. Algér. iii. 170. 60. t. 5. f. 3.*

*Hab. Algeria.*

112. **Andrena Oraniensis.**

*Andrena Oraniensis, St. Farg. Hym. ii. 245. 13.*


*Hab. Algeria.*

113. **Andrena bipartita.**

*Andrena bipartita, St. Farg. Hym. ii. 246. 15.*

*Lucas, Explo. Sc. Algér. iii. 171. 61. t. 5. f. 5.*

*Hab. Algeria.*

114. **Andrena vetula.**

*Andrena vetula, St. Farg. Hym. ii. 250. 20.*

*Luc. Explo. Sc. Algér. t. 5. f. 8.*

*Hab. Algeria.*

115. **Andrena russula.**

*Andrena russula, St. Farg. Hym. ii. 251. 21.*

*Luc. Explo. Sc. Algér. t. 5. f. 10.*

*Hab. Algeria; Italy.*

116. **Andrena sardoa.**

*Andrena sardoa, St. Farg. Hym. ii. 256. 28.*

*Luc. Explo. Sc. Algér. iii. 177. 74. t. 6. f. 9.*

*Hab. Algeria.*

117. **Andrena rufi-ventris.**

*Andrena rufi-ventris, St. Farg. Hym. ii. 255. 27.*

*Luc. Explo. Sc. Algér. iii. 175. 71. t. 6. f. 3.*

*Hab. Algeria.*

118. **Andrena fusca.**

*Andrena fusca, St. Farg. Hym. ii. 253. 24.*

*Luc. Explo. Sc. Algér. iii. 174. 70. t. 6. f. 2.*

*Hab. Algeria.*
119. **Andrena numida.**


*Hab.* Algeria.

120. **Andrena leucophaea.**


*Hab.* Algeria.

121. **Andrena binominata.**

Andrena bimaculata, *St. Farg. Hym.* ii. 258. 31 (nee Kirby).


*Hab.* Algeria.

122. **Andrena compta.**


*Luc. Explo. Sc. Algér.* iii. 172. 64. t. 5. f. 7.

*Hab.* Algeria.

123. **Andrena cirtana.**


*Hab.* Algeria.

124. **Andrena distincta.**


*Hab.* Algeria.

125. **Andrena melanosoma.**


*Hab.* Algeria.

126. **Andrena quadricincta.**


*Hab.* Algeria; Morea.

127. **Andrena Savignyi.**


*Hab.* Egypt.
128. Andrena ephippium.
Hab. Egypt.

129. Andrena rutila.
Hab. Egypt.

130. Andrena hilaris, n. s.  
_B.M._

Female. Length 6½ lines.—Black, the face has on each side a little pale fulvous pubescence, the clypeus shining and deeply punctured, its anterior margin narrowly ferruginous, as well as the mandibles in the middle, being black at their base and apex. Thorax clothed with fulvous pubescence, palest and most dense at the sides of the metathorax, the tegulae and nervures of the wings rufo-testaceous; wings fulvo-hyaline, their apical margins clouded; legs rufo-testaceous, the apical joints of the tarsi palest, clothed with fulvous pubescence. Abdomen ovate, delicately punctured, the apical margins of the segments have laterally a narrow fringe of pale pubescence, the anal fimbria fulvous.
Hab. Georgia.

131. Andrena vicina, n. s.  
_B.M._

Female. Length 5 lines.—Black, the face clothed with ochraceous pubescence, the vertex and cheeks with the same; the thorax entirely covered with pubescence similar to that on the face, but of a rather brighter colour on the disk; wings hyaline, faintly clouded at their margins, tegulae and nervures rufo-testaceous; the legs entirely covered with dark fuscous or sooty-black pubescence, the floccus being of the same colour, on the anterior tibiae and tarsi in front it is somewhat ochraceous, the apical joints of the tarsi ferruginous. Abdomen ovate, the base has a few scattered ochraceous hairs, the anal fimbria sooty-black.

Obs. This species closely resembles the *A. nitida*, only differing in the following particulars: it has no black hairs on the face, the floccus and scopæ are not pale, and the abdomen has no patches of white pubescence at the sides: these differences hold good in series of specimens.
Hab. United States; Nova Scotia.

132. Andrena placida, n. s.  
_B.M._

Female. Length 5 lines.—Black, the face on each side has a
thin hoary pubescence, the clypeus strongly punctured, the apical joints of the antennae ferruginous beneath; the thorax thinly clothed with pale ochraceous pubescence; the wings subhyaline, nervures pale ferruginous, tegulae rufo-testaceous, the floccus, and scopa beneath, white, the latter fuscous above; the tarsi fulvous beneath, their apical joints ferruginous. Abdomen oblong-ovate, smooth and shining, highly polished at the base, the apical margins of the second, third and fourth segments have laterally a narrow marginal fringe of white pubescence, the anal fimbria fuscous; beneath, the segments have a narrow white marginal fringe.

Hab. United States. (E. Doubleday, Esq.)

133. **ANDRENA ALIENA, n. s.**

Female. Length 4 lines.—Black, the face on each side of the clypeus covered with silvery-white pubescence, above the insertion of the antennae the pubescence is slightly ochraceous and thinly scattered, flagellum beneath ferruginous towards the apex, tips of the mandibles ferruginous. Thorax, the disk shining and thinly covered with dirty ochraceous pubescence, the enclosed space at the base of the metathorax transversely striate, beyond which it is smooth and shining; wings hyaline and iridescent, the nervures dark fuscous; the coxae and femora beneath fringed with white pubescence, above it is of a dirty white; the scopa has silvery lustre in certain lights, and on the tarsi beneath fulvous, the claws pale ferruginous. Abdomen ovate, somewhat acuminate at the apex, smooth and shining, the apical margins of the second, third and fourth segments having a fascia of dirty white pubescence, the anal fimbria of the same colour.

Obs. This species closely resembles *A. argentata*, but is easily distinguished by the sculpture of the metathorax.

Hab. St. John's Bluff. (E. Doubleday, Esq.)

134. **ANDRENA VICTIMA, n. s.**

Female. Length 5 lines.—Black, the face thinly clothed with pale fulvous pubescence, the pubescence of the thorax and legs is similar to that on the face, being deeper-coloured on the disk of the former; the thorax is covered with minute shallow punctures, the metathorax rounded and finely roughened; wings subhyaline, the tegulae and nervures rufo-testaceous; the apical joint of the tarsi ferruginous, clothed beneath with fulvous pubescence, floccus and scopa pale fulvous. Abdomen ovate, and having a thinly scattered short fulvous pubescence, most dense
towards the apex; the margins of the segments narrowly testaceous.

Obs. All the specimens of this species which have been examined are much infested by a species of *Stylops*, three or four infesting each individual; it closely resembles the *A. convexiuscula*, which is usually attacked in a similar manner.

*Hab.* Nova Scotia.

135. **Andrena desponsa**, n. s. B.M.

**Male.** Length 4½ lines.—Black, the face and disk of the thorax clothed with pale fulvous pubescence, as well as the legs and thorax beneath, the latter being rather lighter coloured; legs rufo-testaceous, the tarsi being paler, and having a bright fulvous pubescence beneath; wings hyaline, iridescent, the nervures pale testaceous. Abdomen sublanceolate, the base has a little thin pale fulvous pubescence, the apex fulvous, margins of the segments narrowly rufo-piceous.

Obs. This male probably belongs to *A. victima*, to which it bears a strong resemblance, and like that insect is frequently attacked by *Stylops*.

*Hab.* Nova Scotia. (Lieut. Redman.)

136. **Andrena integrata**, n. s. B.M.

**Female.** Length 4 lines.—Black, the face thinly clothed with pale fulvous pubescence, the mandibles ferruginous and ciliated with ferruginous hairs. Thorax, the disk thinly covered with fulvous pubescence, on the sides and beneath it is of a much paler tint, the metathorax very finely granulated and having at the base an enclosed space; the wings subhyaline, tegulae testaceous, nervures pale ferruginous; legs dark rufo-testaceous, the tarsi palest, their pubescence pale fulvous; the floccus and scopo beneath of a glittering whiteness, above of a golden lustre. Abdomen oblong-ovate, shining, and having on each side of the second and third segments on their apical margins a short fringe of white pubescence, margins obscurely rufo-piceous; anal fimbria fulvous.

*Hab.* United States. (E. Doubleday, Esq.)

137. **Andrena simplex**, n. s. B.M.

**Female.** Length 4 lines.—Black, the head above the insertion of the antennæ covered with irregular striae inclining inwards towards the anterior stemma, the clypeus having a few large scattered punctures, and transversely sculptured with a fine
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striation, sides of the face covered with hoary pubescence. Thorax very minutely punctured, and having a few scattered distinct punctures, the pubescence hoary; the wings hyaline, faintly clouded at their apical margins; legs dark rufo-testaceous, the tarsi pale; the flocculus and scopa silvery white. Abdomen very closely and delicately punctured, the apical margins of the segments have a narrow white marginal fringe, the first and second more or less interrupted, the apical fimbria fusco-ferruginous.

Hab. United States. (E. Doubleday, Esq.)

This species resembles the A. fuscata, but is at once distinguished by the sculpture of the thorax.

138. ANDRENA CLYPEATA, n. s. B.M.

Male. Length 2½ lines.—Black, the clypeus yellow and having two minute black spots; the head and thorax have a thin clothing of ochraceous pubescence; the wings subhyaline, splendidly iridescent, the nervures pale testaceous; the legs have thin ochraceous or pale fulvous pubescence, the apical joints of the tarsi rufo-testaceous. Abdomen oblong-ovate, the apex has a little pale fulvous pubescence.

Hab. St. John's Bluff, East Florida. (E. Doubleday, Esq.)

139. ANDRENA FRAGILIS, n. s. B.M.

Male. Length 3½ lines.—Black, the face broad and thinly covered with ochraceous pubescence, the cheeks much swollen and produced beneath; the disk of the thorax and the scutellum smooth and shining; wings subhyaline and iridescent, the nervures pale testaceous; the legs have a pale ochraceous pubescence, the tarsi pale rufo-testaceous. Abdomen lanceolate, highly polished, the apex fulvous.

Hab. United States. (E. Doubleday, Esq.)

140. ANDRENA FRIGIDA, n. s. B.M.

Female. Length 4 lines.—Black, the head and thorax covered with long griseous-yellow pubescence, yellowest on the disk of the thorax; the depressions on each side of the face along the margins of the eyes covered with short dark brown pubescence, the mandibles ferruginous at their extreme apex and ciliated with long ferruginous hairs; the disk of the thorax opake; wings subhyaline, faintly clouded at their apical margins, tegulae and nervures testaceous; legs dark rufo-testaceous, the apical joints of the tarsi ferruginous; the flocculus and scopa beneath silvery-white, the latter pale fulvous above, the tarsi beneath fulvous.

Abdomen nigro-aeneous, the margins of the segments testaceous,
ciliated with long griseous pubescence, the third, fourth and fifth segments have a few scattered erect black hairs, the anal fimbria slightly fulvous; beneath, the margins of the segments are ciliated with fuscous pubescence.

**Hab.** Nova Scotia.

141. *ANDRENA FIMBRIATA*, n. s. B.M.

**Female.** Length 5 lines.—Black, the face thinly covered with ochraceous pubescence, the depressions along the margins of the eyes covered with a pale yellow pile, the flagellum beneath ferruginous. Thorax thickly covered with ochraceous pubescence; the tegulae rufo-testaceous, the nervures of the same colour, wings subhyaline; legs dark rufo-testaceous, the pubescence on the coxae and femora pale, that on the tibiae and tarsi above dark fuscous, the scopa dirty white. Abdomen ovate, the base and margins of all the segments have a long fringe of pale yellow pubescence, the apical fimbria fuscous.

**Male.**—This sex closely resembles the female, the face having a long yellow beard.

**Hab.** United States. (E. Doubleday, Esq.)

142. *ANDRENA HIRTICEPS*, n. s. B.M.

**Male.** Length 4 lines.—Black, head and thorax densely pubescent, on the vertex and along the margins of the eyes it is black, from the insertion of the antennæ to the anterior margin of the clypeus it gradually becomes snow-white; the mandibles fringed with long white hair. Thorax, above clothed with griseous pubescence; the legs, beneath, have a thin scattered white pubescence, above it is of the same colour, but short and silvery, the apical joints of the tarsi ferruginous and having beneath a pale fulvous pubescence; wings hyaline and iridescent, nervures ferruginous. Abdomen shining and having a thin scattered griseous pubescence, the extreme apex has a few silvery hairs; beneath, the margins of the segments have a white marginal fringe.

**Hab.** Hudson’s Bay. (Coll. H. Barnston.)

143. *ANDRENA ALGIDA*, n. s. B.M.

**Female.** Length 4 lines.—Black, the head covered with hoary pubescence, slightly ochraceous on the vertex, the basal joint of the antennæ fringed with the same; the disk of the thorax has a similar pubescence to the vertex, on the sides and beneath it is hoary; the legs beneath have a thin fringe of white pubescence, the scopa beneath silvery, above tinged with yellow; the tarsi
beneath pale fulvous, apical joints of the tarsi ferruginous; wings subhyaline, iridescent, and faintly clouded at their apex, nervures ferruginous. Abdomen ovate, shining, the apical margins of the second, third and fourth segments are fringed with white pubescence, the anal fimbria slightly fulvous.

Male.—This sex is clothed similarly to the female, but the pubescence is longer, the clypeus having a long white beard, and a few black hairs at the margin of the eyes, the pubescence on the legs is entirely hoary; the abdomen elongate-ovate, without marginal fasciae; the pubescence at the extreme apex pale fulvous. 

Hab. Hudson’s Bay. (G. Barnston, Esq.)

144. ANDRENA NUBECULA, n. s.

Female. Length 3½ lines.—Black, the face above the insertion of the antennæ finely longitudinally striate, the vertex smooth, below the antennæ thinly covered with hoary pubescence, flagellum beneath rufo-testaceous, mandibles ferruginous at their apex. Thorax, the disk smooth and shining, the sides of the metathorax have a long curled floccus of pale ochraceous hair; wings fusco-hyaline, the anterior wings having a dark cloud occupying the apical margin and also the marginal cell, the posterior wings have their marginal cell clouded; tegulae testaceous, the nervures dark brown; legs rufo-testaceous, their pubescence pale, the floccus white, apical joints of the tarsi pale ferruginous. Abdomen oblong-ovate, shining and very closely and delicately punctured, apical margins of the second, third and fourth segments having a fascia of white pubescence, the anal fimbria pale fulvous.


145. ANDRENA FULVIPENNIS, n. s.

Female. Length 4 lines.—Black, the face on each side, the vertex and cheeks thickly covered with pale fulvous pubescence, the mandibles ferruginous. Thorax and legs clothed with fulvous pubescence; wings fulvo-hyaline, tegulae and nervures rufo-testaceous; the tibiae and tarsi fulvous. Abdomen elongate-ovate; black, with a silken gloss, the margins of the segments have a fascia of pale fulvous pubescence, the anal fimbria ferruginous, beneath rufo-testaceous.

Hab. East Florida. (E. Doubleday, Esq.) (Coll. F. Smith.)

146. ANDRENA VALIDA.


Hab. United States.
147. **Andrena obscuripennis**, n. s.  
**B.M.**  
Female. Length 7½ lines.—Black, the face clothed with fulvous pubescence, the clypeus ferruginous towards the anterior margin, closely punctured and having smooth central longitudinal lines. Thorax clothed with fulvous pubescence, it is short and deepest coloured on the disk, on each side of the metathorax forming a dense floccus of a paler colour; wings reddish-brown, having a violet reflection, tegulae fulvous, nervures dark brown; legs pale ferruginous, clothed with fulvous pubescence. Abdomen ovate, shining and finely punctured, having merely a few short scattered fulvous hairs at the sides and towards the apex, the anal fimbria fulvous; beneath, the margins of the segments narrowly testaceous and ciliated with fulvous hairs.  
*Hab.* Georgia.

148. **Andrena perplexa**, n. s.  
**B.M.**  
Female. Length 6 lines.—Black, the pubescence on the face pale fulvous, the clypeus strongly punctured; the thorax clothed with fulvous pubescence, which is palest on the sides of the metathorax and beneath; wings subhyaline, their apical margins clouded, the nervures rufo-testaceous; the legs rufo-testaceous, their pubescence fulvous, the floccus pale fulvous, the tarsi ferruginous. Abdomen ovate, shining, finely and closely punctured; the apical margins of the segments rufo-testaceous, smooth, shining and impunctate; sides of the abdomen and towards the apex covered with fine griseous pile, anal fimbria fusco-ferruginous.  
*Obs.* In general appearance much resembling *A. nitida*, but differs in having the head entirely clothed with pale hair, the legs are of a different colour as well as their pubescence, the abdomen is also of a more elongate form.  
*Hab.* Georgia.

149. **Andrena nivalis**, n. s.  
**B.M.**  
Female. Length 6 lines.—Black, the pubescence on the face pale fulvous, the clypeus deeply punctured; the thorax clothed with fulvous pubescence, palest on the sides and beneath; wings rufo-hyaline, nervures and tegulae ferruginous; the legs have a reddish-brown pubescence, the scopa beneath fulvous; apical joints of the tarsi ferruginous. Abdomen ovate, shining, the apical fimbria sooty-black intermixed with ferruginous hairs; beneath rufo-testaceous.  
*Hab.* Hudson’s Bay; United States.
Genus 24. STENOTRITUS, n. g.

F. Smith’s MSS.

Head transverse, eyes lateral, elongate; ocelli placed forwards on the vertex in a curve; the antennae inserted in the middle of the face, the basal joint short and stout; the superior wings having one marginal and three submarginal cells, the first recurrent nervure received in the middle of the second submarginal cell, the second recurrent nervure received in the middle of the third submarginal; the inner spine at the apex of the posterior tibiae, as well as the single one at the apex of the anterior and intermediate pairs, toothed like a comb, and very long, bent and acute at the apex; the posterior legs furnished with a floccus and scopa; the abdomen having an anal fimbria.

Obs. The above characters it is hoped will serve to distinguish this fine genus; unfortunately the tongue had been extracted on some previous occasion.

1. STENOTRITUS ELEGANS.

Female. Length 6½ lines.—Head and thorax black, the former closely punctured; the face and cheeks thickly covered with ochraceous pubescence, the vertex with black. Thorax clothed with a pale ochraceous pubescence, intermixed with fuscous on the disk; metathorax rounded behind; wings fusco-hyaline, clearer towards their base; legs, above clothed with dark fuscous pubescence, beneath it is of a silvery-white, very bright on the scopza and floccus. Abdomen dark olive-green, the base fringed with a nearly white pubescence; on the three following segments it is black, short and thinly scattered; the anal fimbria bright fulvous; beneath, the margins of the segments are fringed with long fulvous pubescence.

Hab. Sydney, New South Wales.

Genus 25. MELLITIDIA.


1. MELLITIDIA AUSTRALIS.


Hab. Australia.
Genus 26. SCRAPTER.

(Details, Plate IV.)


Body similar in form to the species of *Andrena*, but differing in having the ocelli more nearly in a straight line or slight curve; the labium elongate-lanceolate, the paraglossæ about half its length; labial palpi four-jointed, being nearly as long as the labium, the basal joint as long as the three following; the terminal lobe of the maxillæ nearly half their entire length, the lobe acute at the apex. The superior wings having one marginal and two submarginal cells, the second submarginal cell receiving both the recurrent nervures a little within.

1. SCRAPTER BICOLOR.


*Hab.* Africa.

2. SCRAPTER PUNCTATUS.


*Hab.* Africa.

3. SCRAPTER NIGER.


*Hab.* Africa.

4. SCRAPTER LAGOPUS.


*St. Farg. Hym.* ii. 261. 2.

*Hab.* South of France.

5. SCRAPER Brulleei.


*Hab.* The Canary Islands.

6. SCRAPTER ANNULIPES.


*Hab.* Algeria.
7. Scaperter Albo-pilosus.


Hab. Algeria.

8. Scaperter striatus, n. s.

Male. Length 3 lines.—Black, head as wide as the thorax, the vertex longitudinally striate, the face covered with ochraceous pubescence, disk of the thorax strongly punctured and thinly covered with ochraceous pubescence; the thorax beneath the legs, the sides and the abdomen towards the apex covered with cinereous pubescence, at the apex of the abdomen mixed with fulvous hairs; abdomen very shining at the base, the anterior tibiae in front, the anterior and intermediate tarsi and apical joints of the posterior tarsi testaceous.

Hab. Cape. (Coll. F. Smith.)


Female. Length 3 lines.—Black, the head closely punctured, most strongly so on the clypeus and lower part of the face; antennae short, scarcely reaching the tegulae, testaceous beneath; on each side of the face near the margin of the eyes a smooth impressed line. Thorax shining, finely punctured; the metathorax at its base immediately beneath the post-scutellum has a few short striae, beyond which it is smooth and rounded; wings subhyaline, tegule pale testaceous, nervures and stigma fuscous; legs rufotestaceous, the posterior tibiae clothed with long silvery hairs. Abdomen elongate-ovate, acute at the apex, the extremity of which is rufotestaceous; margins of the segments subdepressed and faintly rufotestaceous, which is the colour of the abdomen beneath.

Obs. This species in general appearance much resembles Andrena parvula.

Hab. Mount Pleasant, Ohio.

Genus 27. Camptopœum.

Camptopœum, Spin. Ann. Soc. Ent. Fr. 2me ser. i. 139.
1. **Camptopoeum frontalis.**

*Camptopoeum frontalis, Spin. Ann. Soc. Ent. Fr. 2**ème** ser. i. 139.*

_Hab._ Germany.

2. **Camptopoeum interruptum.**

Camptopoeum interruptum, _Spin. Ann. Soc. Ent. Fr. 2**ème** ser. i._ 139. 28.

_Hab._ Spain.

Genus 28. **Ciliissa.**

_(Details, Plate IV.)_

**Andrena, pt., Fabr. Ent. Syst. ii. 307 (1793)._**
**Melitta, pt., Kirby, Mon. Ap. Angl. i. 140, **e (1802)._**
**Ciliissa, Leach, Edin. Enc. 9 (1812)._**
**Kirby, St. Farg. Hym. ii. 145 (1841)._**
**Melitta, St. Farg. Hym. ii. 213._**

1. **Ciliissa haemorrhoidalis.**

_Andrena haemorrhoidalis, Fabr. Ent. Syst. ii. 313. 25 ; Syst. Piez. p. 327. 24._
*Panz. Faun. Germ. 65. 20.*

*St. Farg. Hym. ii. 214. 2._

_Ciliissa haemorrhoidalis, Leach, Edin. Enc. ix. 155._
*Smith, Zool. vi. 2207. 1._

_Kirbya chrysura, St. Farg. Hym. ii. 146. 2!!_

_Hab._ Britain; France; Germany; Switzerland; Denmark; Sweden; Finland; Lapland.

2. **Ciliissa tricincta.**

*St. Farg. Hym. ii. 213. 1._

_Apis leporina, Panz. Faun. Germ. 63. 22._
_Anthophora leporina, Fabr. Syst. Piez. p. 374. 7._

_Ciliissa tricincta, Leach, Edin. Enc. ix. 155._
*Smith, Zool. vi. 2208. 2._
Kirbya tricincta, *St. Farg. Hym.* ii. 145. 1!!


_Hab._ Britain; France; Germany; Sweden; Denmark; Finland.

3. **Ciliissa melanura.**


_Hab._ Finland; Gothland.

4. **Ciliissa Americana, n. s.**

_B.M._

_Female._ Length 5 lines.—Black, the face thinly covered with griseous pubescence; the clypeus is minutely punctured, interspersed with larger punctures, and has a central longitudinal smooth line, the flagellum of the antennae rufo-testaceous beneath. Thorax, the disk closely covered with shallow punctures, and clothed with ochraceous pubescence, at the sides and beneath it is pale; wings subhyaline, the tegulae and nervures rufo-testaceous, the legs beneath fringed with pale hairs, on the scopa above it is pale fuscous, apical joints of the tarsi ferruginous. Abdomen closely punctured, margins of the segments testaceous and having a fascia of pale pubescence; the anal fimbria fuscous.

_Hab._ United States. (E. Doubleday, Esq.)

Genus 29. **MEGACILI SS A, n. g.**

_Megacilissa, F. Smith's MSS._ (Details, Plate IV.)

_Head transverse, ocelli placed in a triangle on the vertex, eyes lateral, oblong; mandibles stout, slightly curved, deeply grooved exteriorly, and having three teeth at the apex; the labrum produced, somewhat ovate in front, and much swollen above at its base; the labial palpi four-jointed, the joints short and thick, the basal joint as long as the two following, the latter as well as the apical joint of equal length; at the apex of the mentum the paraglossae are produced parallel with it, densely pubescent; labium folded. Maxillary palpi six-jointed, the basal joint as long as the two following, the three apical ones of equal length, nearly as long as the basal one; anterior wings having one marginal and three submarginal cells, the marginal cell narrow, elongate, and truncate at the apex; the first submarginal cell as long as the two following, the first recurrent nervure uniting with the first transverse cubital nervure. The outer spine at the base of the posterior tibiae serrate. Abdomen broad at
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the base, narrowing towards the apex, which is furnished with an anal fimbria.

Obs. The situation of this fine insect is not probably that at present assigned to it; but the only specimen known is in the National Collection, and those parts of the oral organs which might determine it could not be sufficiently examined. The name of the genus sufficiently indicates its general appearance, and seems to point out its situation.

1. Megacilissa superba, n. s. B.M.

Female. Length 9½ lines.—Black, the face densely clothed with white pubescence, on the vertex it is black, and the posterior margin of the vertex is fringed with white; the apex of the labrum ferruginous, and covered with stiff ferruginous hairs. Thorax above clothed with bright fulvous pubescence; on the sides, beneath, and on the anterior femora beneath it is white, there is also a little white on the intermediate tibia, the scopæ very dense and of a dull brown, otherwise the legs are thickly covered with short black pubescence; the basal segment of the abdomen clothed with fulvous pubescence, that on the three following segments is short and black, having a white fascia on their apical margins, the fifth and sixth covered with long black pubescence, the latter naked in the middle; beneath black.

Hab. Not known.

Genus 30. DASYPODA.

Apis, pt., Fabr. Ent. Syst. ii. 335.

1. DASYPODA HIRTIPE8. B.M.

Apis hirta, Fabr. Ent. Syst. ii. 335. 92.
Andrena plumipes, Panz. Faun. Germ. 46. 16, ♀.

St. Farg. Hym. ii. 229. 1. t. 22. f. 1 ♂, 2 ♂.
Smith, Zoologist, vi. 2241. 1.
HYMENOPTERA.

Trachusa hirtipes, Jurine, Hym. p. 250.
Dasypoda Swammerdamella, Curtis, Brit. Ent. viii. t. 367.
Hab. Britain; France; Germany; Sweden.

2. DASYPODA PLUMIPES. B.M.
St. Farg. Hym. ii. 230. 2.
Hab. France; Germany; Tunis.

3. DASYPODA GRÆCA. B.M.
Dasypoda Græca, St. Farg. Encyl. Méth. ii. 405. 1, & Hym. ii. 231. 3.
Hab. Albania; South of France; Malaga.

4. DASYPODA SUBINTERRUPTA. B.M.
779. t. 49. f. 7, ♀.
Hab. The Morea; Albania.

5. DASYPODA BÆTICA.
Dasypoda bética, Spin. Ann. Soc. Ent. Fr. 2me ser. i. 139. 27.
Hab. Spain.

6. DASYPODA ALBIPILA.
Hab. Egypt.

7. DASYPODA PANZERI.
Andrena succincta, Panz. Faun. Germ. 46. 10.
Hab. Egypt.

Genus 31. MACROPIS.

(Details, Plate VI.)

1. MACROPIS LABIATA. B.M.


Smith, Zool. iv. 1279. 1.


Hab. Britain; France; Germany; Denmark; Sweden; Finland.

Fam. 2. APIDÆ.


Apida, Leach, Edin. Encycl. (1812).

Apides, Leach, Edin. Encycl. (1812).


Subfam. 1. ANDRENOIDES.


Panurgides, Westw. Int. Class. Ins. (1840).

Genus 1. PANURGUS.

(Details, Plate V.)


1. PANURGUS CALCULARATUS. B.M.


Trachusa lobata, Panz. Faun. Germ. 96. 18, 3.
HYMENOPTERA.

Panurgus unicolor, *Spin. Ins. Lig.* fasc. 2. p. 54. 42?
Panurgus lobatus, *Latr. Enc. Méth.* viii. 719. 3, ♂♀

*St. Farg. Hym.* ii. 225. 2, ♂♀
*Nylander. Act. Soc. Sc. Fenn.* i. 225. 2, ♂♀

Panurgus calcaratus, *Smith, Zool.* iv. 1452. 2, ♂♀

Hab. Britain; France; Italy; Germany; Switzerland; Denmark; Sweden; Finland; Algeria.

2. PANURGUS BANKSIANUS. B.M.


Trachusa atra, *Panz. Faun. Germ.* 96. 19, ♂

Panurgus ater, *Latr. Enc. Méth.* viii. 720. 5, ♂♀

*Spin. Ins. Lig.* fasc. 3. p. 196. 1

*St. Farg. Hym.* ii. 226. 4.


*Smith, Zool.* iv. 1051. 1.

Hab. Britain; France; Germany; Italy.

3. PANURGUS CEPHALOTES. B.M.


*St. Farg. Hym.* ii. 223. 1


Hab. Algeria.

4. PANURGUS DENTIPES.

Panurgus dentipes, *St. Farg. Hym.* ii. p. 224. 2. t. 19. f. 3 ♂♀, 4 ♂

Hab. France.

Genus 2. PANURGINUS.


1. PANURGINUS NIGER.


Hab. Siberia.
Genus 3. PERDITA, n. g.

Perdita, F. Smith's MSS. (Details, Plate V.)

Antennæ inserted in the middle of the face, approximating at their base; eyes lateral, elongate-ovate, ocelli placed in a triangle on the vertex; mandibles slightly bent and without teeth; the labrum produced angularly in front; tongue elongate, twice the length of the mentum (labial and maxillary palpi wanting); superior wings having one short marginal cell rounded on its inferior margin, and broadly truncate at the apex, the first submarginal cell more than twice the length of the second.

1. PERDITA HALICTOIDES.

Female. Length 2 lines.—Head and thorax above nigro-aeneous, shining; the antennæ at their extreme base and the flagellum beneath pale testaceous; the clypeus much produced and having a few scattered punctures; mandibles pale rufo-testaceous, ferruginous at their tips; the metathorax of a blue-green, disk of the thorax somewhat brassy, the former smooth, truncated behind; tegulae and extreme base of the wings pale testaceous; wings hyaline, their nervures fuscous; legs rufo-testaceous, the tarsi pale. Abdomen dark testaceous, the apex covered with cinereous pubescence.

Hab. N. America. (Coll. F. Smith.)

Genus 4. CALLIOPSIS.

Calliopsis, F. Smith's MSS. (Details, Plate V.)

Head as wide as the thorax, ocelli placed in a triangle on the vertex; the labium about equal in length to the mentum, long and slender towards the apex, which is pubescent; the first joint of the labial palpi, which are four-jointed, longer than the three following; the maxillary palpi six-jointed; the labrum rounded in front; the anterior wings having one marginal cell, rounded at its apex, two submarginal cells, the first rather longer than the second, which is narrowed towards the marginal cell.

1. CALLIOPSIS ANDRENIFORMIS. B.M.

Female. Length 3½ lines.—Black, a line down the centre of the clypeus united to a half-circular spot between the antennæ, and an oblong macula on each side of the face touching the eyes, yellow; the flagellum beneath beyond the fourth joint.
yellow, the mandibles ferruginous, rounded, their apex edentate. Thorax, the sides have a short pale pubescence, most dense on the collar and post-scutellum; wings subhyaline, iridescent, their apical margins slightly clouded; the tibiae and tarsi above rather densely covered with a short pale fulvous or yellow pubescence, the tarsi fulvous beneath, claws ferruginous. Abdomen ovate, delicately punctured; all the segments have a narrow white marginal fringe, the two first usually interrupted. 

_Hab._ East Florida. (E. Doubleday, Esq.) (Coll. F. Smith.)

2. **Calliopsis flavipes.**

_Male._ Length 3 lines.—Black, the face, labrum, mandibles, scape, flagellum beneath, tubercles and legs bright yellow; the wings hyaline, iridescent, and faintly clouded at their apical margins; the disk of the thorax and the vertex have a slight aeneous tinge; the pubescence on the sides of the thorax pale ochraceous, most dense on the post-scutellum. Abdomen ovate, the margins of the segments testaceous, and having a fringe of short pale pubescence usually more or less interrupted on the two basal segments; the apex has on each side a short floccus of bright pale pubescence. 

_Hab._ East Florida. (E. Doubleday, Esq.) (Coll. F. Smith.)

3. **Calliopsis maculatus.**

_Female._ Length 4 lines.—Black, the sides of the clypeus, a coronet-shaped spot above, on each side of it a minute lunate spot, and another at the base of the mandibles, yellow; the flagellum fulvo-testaceous beneath. Thorax, the disk has a fulvous pubescence, on the metathorax and beneath it is griseous; the wings hyaline, iridescent, their apical margins having a slight fuscous cloud, the tegulae testaceous; the tibiae and tarsi above have a glittering pale yellow pubescence, on the tarsi beneath it is bright fulvous, the claw-joints ferruginous; the calcariae ferruginous, the extreme base of the anterior and intermediate tibiae yellow. Abdomen ovate, the margins of the segments narrowly testaceous, and having a marginal fascia of pale ochraceous pubescence, on the two basal segments usually nearly obliterated. 

_Hab._ East Florida. (E. Doubleday, Esq.) (Coll. F. Smith.)

4. **Calliopsis flavifrons.**

_Male._ Length 4 lines.—Black, the face, scape of the antennae in front, labrum and mandibles yellow, the latter have a black line on their inferior margin and are ferruginous at the
tips; the flagellum pale testaceous beneath. Thorax, the disk thinly covered with pale ochraceous pubescence; the anterior and intermediate tibiae in front yellow; all the tibiae and tarsi have a pale glittering pubescence; the apical joints of the tarsi ferruginous; wings subhyaline, iridescent, nervures fuscous, the tegulae testaceous. Abdomen short and somewhat globose, delicately punctured, the margins of the segments have on each side a short fascia of white pubescence.

Obs. The fascia on the abdomen probably in very recently disclosed specimens would be entire.

Hab. East Florida. (E. Doubleday, Esq.) (Coll. F. Smith.)

Genus 5. MACROTERA.

Macrotera, F. Smith's MSS. (Details, Plate V.)

Head as wide as the thorax, ocelli in a slight curve on the vertex; the mentum about one-third the length of the labium; the labium elongate, slender, tapering to a point at its apex; the labial palpi four-jointed, the basal joint one-third longer than the three following united; the basal joint narrowest at its apex; maxillary palpi six-jointed, gradually tapering to the apex; the anterior wings having one marginal cell, truncate at its apex; submarginal cells two, the first about twice the length of the second; the second narrowed to about half its length towards the marginal; the posterior tibiae having a long loose clothing of hair.

1. MACROTERA BICOLOR. B.M.

Female. Length 4 lines.—Head and thorax black, head delicately and closely punctured, the clypeus and lower parts of the face having large scattered punctures, the anterior margin of the clypeus truncate; the flagellum rufo-testaceous beneath; the mandibles ferruginous, rounded at their apex, edentate. Thorax, the disk smooth and shining, having a few scattered fine punctures, the metathorax rounded, impunctate above, and having a thin pale pubescence; the wings hyaline and iridescent, the tegulae testaceous, nervures ferruginous; the tarsi have a glittering pale yellow pubescence, and the posterior tibiae have a thin scopa of the same colour, the claw-joints of the tarsi rufo-testaceous. Abdomen elongate-ovate, ferruginous, more or less fuscous at the base, the apex having a thin fimbria of pale pubescence.

Hab. Mexico.
HYMENOPTERA.

This insect would be taken for a species of the genus *Andrena* without attentive examination, so closely does it resemble the insects belonging to that genus,—but it is easily distinguished from them.

Genus 6. SYSTROPHA.

(Details, Plate V.)

Andrena, *pt.*, *Ent. Syst.* ii. 308. 3 (1793).

1. SYSTROPHA CURVICORNIS.

Coqueb. *Illustr. Icon.* t. 15. f. 8.
St. Farg. *Hym.* ii. 144. 1.

Hab. France; Italy; Switzerland; Spain.

Genus 7. PTILOTHRIX.

Ptilothrix, *F. Smith's MSS.* (Details, Plate VI.)

Head not quite as wide as the thorax, ocelli placed in a slight curve on the vertex; the labium twice the length of the mentum, broadest about the middle, tapering towards the apex, which is blunt; the paraglossae half the length of the labium, attenuating to a point at their apex; the labial palpi rather shorter than the labium, four-jointed, the first and second elongate, placed end to end, the two apical joints minute, placed at the side of the second joint at its apex; the maxillary palpi six-jointed, the three basal joints of equal length, the three apical ones of equal length, but shorter than the basal joints; the anterior wing having one marginal and three submarginal cells, the marginal cell slightly rounded at its apex; the second submarginal cell
much narrowed towards the marginal, the third slightly so; the posterior tibiae and the basal joint of the tarsi furnished with a thin scopa of long pubescence.

1. PTILOTHRIX PLUMATUS.

Female. Length 5 lines.—Black, the clypeus and labrum have large scattered punctures and are thinly clothed with griseous pubescence, above the insertion of the antennae and on the cheeks it is dense, short, and dark fuscous; the flagellum ferruginous beneath, tips of the mandibles yellow. Thorax, the disk densely clothed with short fulvous pubescence, thinner and paler on the sides; the legs red, the coxae black; the anterior coxae and femora fringed with black pubescence; the intermediate and posterior coxae and trochanters fringed with cinereous pubescence; on the anterior tibiae and tarsi above, and on the posterior tarsi within, it is fuscous, otherwise the legs have a glimmering pale yellowish pubescence, having a little which is snowy-white at the apex of the posterior tibiae; wings hyaline, and having a yellowish tinge towards their base, tegulae and nervures pale rufo-testaceous. Abdomen ovate, the base fringed with short fulvous pubescence; the margin of the first and three following segments has a broad fascia of very short decumbent pubescence, broadest in the centre; the two apical segments covered with rigid black pubescence.

Obs. This beautiful species is remarkable for having the entire pubescence plumose, each individual hair being pectinate; that on the metathorax, viewed under a pocket lens of good power, resembles fine down; even the short pubescence which forms the fascia on the abdomen is equally beautiful.

Hab. Brazil. (Coll. F. Smith.)

Genus 8. ROPHITES.

(Details, Plate V.)

Rophites, Spin. Ins. Lig. fasc. 2. no. 50. p. 72.
Dufourea, St. Farg. Hym. ii. 228.

1. ROPHITES QUINQUESPINOSA. B.M.

Rophites quinquespinosa, Spin. Ins. Lig. fasc. 2. p. 72. no. 5.
Encycl. Méth. x. 312. 1.
Hab. France; Italy.
2. **Rophites minuta.**

  *Hab.* South of France; Spain.

3. **Rophites Dejeanii.**

* Dufourea Dejeanii, *St. Farg. Hym.* ii. 228. 2.
  *Hab.* France; Sweden; Finland. (Coll. F. Smith.)

4. **Rophites inermis.**

  *Hab.* Siberia.

5. **Rophites halictulus.**

  *Hab.* Sweden.

Genus 9. **OSMIA.**

(Details, Plate V.)

*Trachusa,* pt., *Jurine, Hym.* (1808).
*Diphysis,* *St. Farg. Hym.* ii. 307 (1841).

1. **OSMIA RUFA.** B.M.

  *Syst. Nat.* i. 954. 9.
  *Fabr. Syst. Ent.* ii. 34. 88.
  *Rossi, Faun. Etrus.* ii. 103. 913.
  *Soc. Syst. Nat.* i. 954. 10.
  *Rossi, Mant.* p. 310.
*Apicis bicornis,* *Harris, Expos.* p. 162. t. 49. f. 4, ♀.
Apicis agino, Harris, Expos. p. 163. t. 49. f. 7, ♂.
Apis cornigera, Rossi, Faun. Etrus. ii. 108. 925, var. ♀.
Panz. Faun. Germ. 55. 15.
Megachile cornigera, Spin. Ins. Lig. i. 147. 15, ♀.
Zett. Ins. Lapp. p. 466. 5.
Megachile bicornis, Latr. Hist. des Ins. xiv. 50.
Spin. Ins. Lág. fasc. 1. 147. 15.
St. Farg. Hym. ii. 314. 2.
Smith, Zool. ii. 745. 5. 8.
Amblys rufa, Klug, Illig. Mag. vi. 198. 220.
Osmia hedera, Smith, Zool. ii. 747. 10, var. ♂ ?
Mouche maconne, Reaum. vi. Mem. iii. 86.
Hab. Britain; France; Germany; Italy; Lapland; Finland; Denmark; Sweden.

2. OSMIA CORNUTA. B.M.
Spin. Ins. Lág. i. 146. 13.
St. Farg. Hym. ii. 313. 1.
Smith, Zool. vi. 2213.
Hab. Britain; France; Italy; Algeria.

3. OSMIA LEUCOMELANA. B.M.
Osmia leucomeleanna, Smith, Zool. ii. 741. 1, ♂ ♀.
Supp. 105, ♀.
Hab. Britain; Denmark; Sweden; Finland.

4. OSMIA SPINULOSA. B.M.
Osmia spinulosa, Smith, Zool. ii. 741. 2.
Hab. Britain; Denmark; Sweden; Finland.

5. OSMIA PARIETINA. B.M.
Osmia parietina, Curtis, Brit. Ent. v. t. 222, ♀.
Smith, Zool. ii. 743. 4, ♂.
Osmia inermis, Zett. Ins. Lapp. 466. 6, ♂♀.


Hab. Britain; Sweden; Finland; Lapland.

6. Osmia pilicornis.

Osmia pilicornis, Smith, Zool. iv. 1567, ♂♀.

Hab. Britain.

7. Osmia xanthomelana.


Osmia atricapilla, Curtis, Brit. Ent. v. 222, ♂♀.

Waterhouse, Zool. ii. 403, ♂♀.


Osmia xanthomelana, Smith, Zool. ii. 745. 7.


Hab. Britain; France; Lapland; Sweden; Finland.

8. Osmia aenea.

Apis aenea, Linn. Faun. Suec. 1695, ♂♂, & Syst. Nat. i. 995. 20.


Apis caeruleascens, Linn. Faun. Suec. 1696, ♂♀; Syst. Nat. i. 995. 21.


Rossi, Faun. Etrus. ii. 86. 893, ♂♀.


Apis superbus, Harris, Expos. p. 164. 10. t. 49. f. 10, ♂♀.

Andrena aenea, Rossi, Faun. Etrus. ii. 96. 894.

Panz. Faun. Germ. 56. 3.


St. Farg. Hym. ii. 325. 16.

Brullé, Hist. Nat. II. Canar. iii. 85. 10.

Smith, Zool. ii. 743. 5.


Abeille maçonnes, &c., De Geer, Mem. ii. 751. t. 30. f. 23 ♂♀, & t. 32. f. 1 ♂♀.

Hab. Britain; France; Italy; Germany; Portugal; Canary Islands; Algeria; Denmark; Sweden.


Hab. Britain; Sweden; Lapland; Finland.
Apis hæmatoda, Panz. Faun. Germ. 81. 20, ♂
Spin. Ins. Lig. fasc. 1. p. 144. 11.
St. Farg. Hym. ii. 323. 13. t. 20. f. 4, ♀.
Smith, Zool. ii. 744. 6.
Hab. Sweden.

10. OSMIA BICOLOR.

Panz. Faun. Germ. 56. 11, ♀.
St. Farg. Hym. ii. 318. 7, ♂ ♀.
Smith, Zool. ii. 746. 9, ♂ ♀.
Hab. Britain; France; Italy; Germany; Austria; Sweden.

11. OSMIA FUCIFORMIS.

Hab. Britain; France; Denmark.

12. OSMIA HIRTA.

Apis hirta, Fourc. Ent. Par. ii. 444. 6, ♀.
Apis fulviventris, Panz. Faun. Germ. 56. 18.
Osmia Leaiana, Spin. Ins. Lig. fasc. 3. 200. 1, ♀.
St. Farg. Hym. ii. 319. 9, ♂ ♀.
Osmia hirta, Smith, Zool. ii. 742. 3.
Hab. Britain; France; Germany; Italy; Spain; Denmark; Sweden; Finland.
13. **Osmia byssina.**

Osmia byssina, *Spin. Ins. Lig.* fasc. 3. p. 201. 3.
*Hab.* Italy; Germany; Moravia.

14. **Osmia tricornis.**

*St. Farg. Hym.* ii. 316. 4.
*Hab.* France.

15. **Osmia interrupta.**

*Hab.* Spain.

16. **Osmia melanippa.**

*Hab.* Italy.

17. **Osmia gallarum.**

*Hab.* Italy; France.

18. **Osmia fulvo-hirta.**

*St. Farg. Hym.* ii. 322. 12.
*Hab.* France.

19. **Osmia fronticornis.**

*St. Farg. Hym.* ii. 315. 3.
*Hab.* France; Germany; Italy; Switzerland; Denmark; Sweden.
20. Osmia angustula.
*Hab.* Sweden; Finland; Lapland.

*Hab.* France; Sweden.

22. Osmia inermis.
*Hab.* Sweden; Finland; Lapland.

23. Osmia nasidens.
*Hab.* France.

24. Osmia serratulæ.
*Hab.* France; Germany; Sweden; Finland.

25. Osmia mitis.
*Hab.* Sweden; Lapland.

26. Osmia tuberculata.
*Hab.* Sweden; Finland.

27. Osmia punctulatissima.
*Hab.* France. (Coll. W. W. Saunders, Esq.)
28. Osmia hyalinipennis.
Osmia hyalinipennis, St. Farg. Hym. ii. 329. 20.
Hab. France.

29. Osmia marginella.
Osmia marginella, St. Farg. Hym. ii. 320. 10.
Hab. France.

30. Osmia Pyrenæa.
Osmia Pyrenæa, St. Farg. Hym. ii. 319. 9.
Hab. France (Pyrenees).

31. Osmia emarginata.
Hab. France.

32. Osmia Spinolæ.
Osmia Spinolæ, St. Farg. Hym. ii. 328. 19.
Hab. France; Algeria.

33. Osmia annulata.
Hab. Spain.

34. Osmia versicolor.
Hab. Marseilles.

35. Osmia andrenoides.
Osmia andrenoides, Spin. Ins. Lig. fasc. 2. p. 61. 66.
Hab. France; Italy.

36. Osmia jucunda.
Female. Length 4½ lines.—Black, the head as large as the thorax, the face clothed with white pubescence, on the vertex it is thin, short and fulvous; the disk of the thorax clothed with bright fulvous pubescence, on the sides of the metathorax it is pale, and beneath it is short, sparing and white; wings subfuscous, their base and some irregularly scattered spots hyaline; the legs have a short white pubescence, the tarsi beneath rufo-fuscous, the claws ferruginous. Abdomen shining and strongly
punctured, the sides and apical margin of the basal segment, as well as the margins of the following segments, fringed with pale ochraceous pubescence, the fascia on the first and second interrupted in the middle, beneath densely clothed with dark brown pubescence.

_Hab._ Albania.

### 37. Osmia apicata. B.M.

**Female.** Length 5 lines.—Head blue-green, the rest of the insect of a bronze-green, the clypeus covered with pale pubescence, at the insertion of the antennae a tuft of dark fulvous pubescence; the thorax and three basal segments of the abdomen covered with long pale fulvous pubescence, on the three apical segments it is black, and beneath is densely clothed with bright fulvous; the femora fringed with long pale fulvous pubescence, on the tarsi beneath it is bright fulvous; the claw-joints of the tarsi ferruginous, the calcaria pale rufo-testaceus; wings hyaline, faintly clouded at their apical margins.

_Hab._ Albania.

### 38. Osmia sybarita. B.M.

**Female.** Length 4 lines.—Black, the head and thorax closely and strongly punctured, the mandibles ferruginous at their apex; on each side of the face is a little white pubescence, on the vertex and disk of the thorax it is fulvous; the wings subhyaline, their apical margins slightly clouded; the posterior legs above have a short white pubescence, on the tarsi beneath it is pale fulvous, the claws ferruginous; the abdomen thickly covered with sub-elongate punctures, the apical margins of the segments have a fascia of white pubescence, usually interrupted on the two basal, and sometimes also on the third segment; beneath, the pollen-brush is of a changeable golden lustre.

_Hab._ Albania.

### 39. Osmia Latreillii. B.M.


_St. Farg._ _Hym._ ii. 317. 5.


_Hab._ France; Italy; Sicily; Albania; Portugal; Egypt; Algeria.
HYMENOPTERA.

40. Osmia adunca.

Apis adunca, Panz. Faun. Germ. 56. 5.
Megachile phaeoptera, Spin. Ins. Lig. fasc. 1. p. 136. 4? (exclusive \(\delta\)).

St. Farg. Hym. ii. 327. 18.
Hoplitis adunca, Klug, Illig. Mag. vi. 221.

Hab. France; Germany; Italy; Albania; Denmark; Algeria.

41. Osmia melanogaster.

Osmia melanogaster, Spin. Ins. Lig. ii. 63. 47.
Latr. Enc. Méth. viii. 582. 15.
Osmia melanogaster, St. Farg. Hym. ii. 326. 17.
Megachile notata, Spin. Ins. Lig. fasc. 1. p. 146. 17?

Hab. France; Italy; Spain; Algeria.

42. Osmia ferruginea.

St. Farg. Hym. ii. 325. 15.

Hab. Egypt; Algeria; Morea; Barbary.

43. Osmia rufigastra.

Lucas, Explo. Sc. Algér. iii. 189. t. 7. f. 7.

Hab. Algeria.

44. Osmia luctuosa.

Hab. Algeria.

45. Osmia metallica.

Hab. Algeria.

46. Osmia fasciata.

Hab. Arabia.
47. Osmia spinigera.

Hab. Egypt.

48. Osmia fervida.

Male. Length 4 lines.—Black, the face below the insertion of the antennæ clothed with pale fulvous pubescence, that on the vertex and on the disk of the thorax is black; the cheeks, thorax beneath and the legs have a short griseous pubescence; the apical joints of the tarsi ferruginous; wings fusco-hyaline, the nervures black. The abdomen above densely clothed with short fulvous pubescence; the margin of the apical segment entire.
Hab. Port Natal.

49. Osmia frigida.

Female. Length 5 lines.—Black, the head has an ochraceous pubescence, which is dense on the face, and sparing on the cheeks and vertex. Thorax, the disk thickly clothed with ochraceous pubescence, the femora have a thin fringe beneath of the same colour, on the tibiae and tarsi it is fuscous; wings subhyaline, their apical margins faintly clouded; the two basal segments of the abdomen thinly clothed with ochraceous pubescence; on the third, fourth and fifth it is black; the apical segment covered with very short ochraceous pubescence; beneath it is dense and black.
Male. Length 3—4 lines.—The clypeus covered with long white pubescence, on the vertex and disk of the thorax it is long, thin, and pale ochraceous; the base of the abdomen has a little scattered long pale pubescence, otherwise it is short, sparing and fuscous; the margin of the fifth segment fringed with brown pubescence; the sixth segment has down the middle a shallow longitudinal channel; the apical margin entire.
Hab. Hudson’s Bay.

50. Osmia simillima.

Female. Length 4½ lines.—Steel-blue, head as wide as the thorax, the face, sides of the thorax and abdomen thinly covered with griseous pubescence, the entire insect closely and rather strongly punctured; the wings subhyaline, their apical margins faintly clouded; the legs have a griseous pubescence, that on the tarsi beneath brown; the abdomen beneath densely clothed with black pubescence.
Male. Length 4 lines.—Head and thorax of a bronzed green, abdomen blue; the antennæ a little longer than the head and
thorax, setaceous, fulvo-testaceous beneath; the face thickly covered with long white pubescence, a similar pubescence is also more thinly scattered over the vertex, thorax and base of the abdomen; wings as in the female; the apical segment notched in the middle; beneath, the ventral segment is bidentate.

**Obs.** This species very closely resembles the *Osmia caerulescens*; the female is difficult to distinguish; it differs in being larger and of a brighter blue, and in wanting the smooth, shining space below the post-scutellum always present in *O. caerulescens*. The male differs in the form and pale colour of the antennæ beneath, and in the margin of the apical segment being deeply notched in the middle and entire laterally.

*Hab.* Nova Scotia; U. States. (Coll. Lieut. Redman.)

51. **Osmia chalybea.**

Female. Length 6 lines.—Steel-blue, head very large sub-quadrate, and thorax strongly and closely punctured, the abdomen more finely so; the anterior margin produced in the middle, the apex of the lobe emarginate, the margin on each side is crenulated; the mandibles very large, a deep groove running along their inferior margin from the apex to the base, where it terminates in a pit or hollow. Thorax, the sides thinly covered with griseous pubescence; wings fuscous, palest towards the base; the sides of the abdomen fringed with short griseous pubescence; beneath densely clothed with black pubescence.

Male.—Closely resembles the female, the margin of the clypeus in this sex is entire, and the margin of the apical segment notched in the middle; beneath, the ventral segment bidentate.

*Hab.* St. John’s Bluff, East Florida. (E. Doubleday, Esq.)

52. **Osmia buconis.**


*Hab.* United States.

53. **Osmia lignaria.**


**Obs.** This species by some mistake was placed in the British Collection, and a label of locality in error attached.

*Hab.* United States.
Genus 10. ANTHOCOPA.


1. ANTHOCOPA PAPAVERIS.

Spin. Ins. Lig. fasc. 3. p. 201. 4.
Anthocopa papaveris, St. Farg. Hym. ii. 349. 1.
Smith, Zool. vi. 2213.
Coqueb. Icon. sec. 3. t. 21. f. 10.
Hab. Britain?; France; Germany.

Genus 11. LITHURGUS.

(Details, Plate V.)

Andrena, pt., Fabr. Ent. Syst. ii. 308.

1. LITHURGUS CORNUTUS.

Andrena cornuta, Fabr. Ent. Syst. ii. 308. 4.
Lasius cornuta, Panz. Faun. Germ. 94. 11.
St. Farg. Hym. ii. 344. 1.
Hab. Provence.

2. LITHURGUS CHRYSURUS.

1 D. f. 2 ♀, 1 ♂.
Hab. Provence; Spain. (Coll. W. W. Saunders, Esq.)
3. **Lithurgus analis.**
*Hab.* France.

4. **Lithurgus fuscipennis.**
*Hab.* France.

5. **Lithurgus hæmorroidalis.**
*Hab.* Sicily.

6. **Lithurgus umbraculatus.**
*Hab.* ——?

7. **Lithurgus atratus, n. s.**
Female. Length 5 lines.—Black, the sides of the face and front of the clypeus covered with silvery-white pubescence, antennæ beneath from the fourth joint to the apex testaceous; below the antennæ is an elevation, truncated at its inferior margin, which is rounded. Thorax, the disk anteriorly coarsely rugose, wings fusco-hyaline and having a slight purple iridescence; at the sides of the metathorax are tufts of white pubescence. Abdomen flat, shining and finely punctured, the margins of the segments have a narrow fascia of white pubescence, which is continued beneath; the apical segment covered with black pubescence; the pollen-brush is thin, and of a brownish black.

Of four specimens in the Collection only one retains the marginal fascia above, but all have them beneath, where it is not so liable to be rubbed off.
*Hab.* India.

8. **Lithurgus rufipes, n. s.**
Female. Length 4 lines.—Black, the head broad, depressed, the face as high as the anterior sterna, covered with white pubescence; the clypeus naked, shining and coarsely punctured; mandibles ferruginous, black towards their base; the cheeks and thorax beneath thinly covered with griseous pubescence; legs ferruginous; the tegulae pale ferruginous, wings subhyaline; a narrow fuscous cloud extends from the stigma to the apex of the wings; the nervures fuscous; a line of short white pubescence crosses the thorax from wing to wing, traversing the margin of
the scutellum. Abdomen pointed at the apex, shining, and having a metallic iridescence; the extreme lateral margins of the segments have a white fringe; the brush on the abdomen beneath yellowish white.

_Hab._ Port Natal.

9. **Lithurgus rubricatus**, n. s. _B.M._

Female. Length 5½ lines.—Black, the face covered with silvery-white pubescence, at the base of the clypeus is a rugose elevation or tubercle, the flagellum of the antennæ rufo-piceous beneath. Thorax, the disk rugose, the tubercles fringed with white pubescence, the sides of the metathorax covered with a mixture of black and griseous pubescence; wings hyaline, their nervures black. Abdomen, the apical margins of the segments fringed with ochraceous pubescence; the apex clothed with bright ferruginous pubescence; beneath, the pollen-brush is fulvous, brightest towards the apex.

Male.—Similarly coloured to the female, the face not tuberculate, the tarsi elongate, slender, the claw-joint rufo-testaceous; about the middle of the basal joint of the posterior tarsi within is a thin raised oblong tooth or elevation; the posterior coxae and femora incrassate, the femora slightly bent.

_Hab._ New Holland.

10. **Lithurgus dentipes**, n. s. _B.M._

Male. Length 5 lines.—Black, the face has a clothing of very pale yellow pubescence, that on the sides of the thorax is fusco-griseous; flagellum testaceous beneath, mandibles tridentate. Thorax, the disk thinly covered with ochraceous pubescence; wings subhyaline, nervures ferruginous; the legs beneath fringed with sooty-black pubescence; the apical joints of the tarsi rufo-testaceous, the claw-joint as long as the three preceding ones; the posterior coxae and femora incrassate, the latter somewhat flattened beneath and produced at its apex on each side, forming two flat broad teeth or spines; the spines which arm the apex of the tibiae black, long and stout. Abdomen short, flat, and having the margins slightly testaceous; at the base, sides and apex a short black pubescence.

_Hab._ New Holland.

11. **Lithurgus tuberculatus**.

_Lithurgus tuberculatus, St. Farg. Hym. ii. 346. 3._

_Hab._ South America?
12. **Lithurgus gibbosus**, n. s.  
**Female.** Length 7 lines.—Black, in front of the antennæ is a transverse curved elevation, which is concave in front, shining, and sprinkled with large deep punctures; at the base of the antennæ, down the sides of the face, and on the margin of the clypeus covered with white pubescence, that on the latter has some fulvous hairs intermixed. Thorax, disk much elevated and coarsely rugose; the pubescence in front and on the sides white, thickest at the sides of the metathorax, that on the legs is also white; the anterior and intermediate tarsi covered with long pubescence, that on the former has a slight yellowish stain, that on the latter pale fulvous; posterior tarsi wanting; wings fusco-hyaline, palest at their apical margins. Abdomen much depressed at the base, the margins of the segments laterally have a narrow white fringe; the apical segment above densely covered with black pubescence, the pubescence on the abdomen beneath pale yellow.  
*Hab.* United States.

13. **Lithurgus compressus**, n. s.  
**Male.** Length 5½ lines.—Black, the face covered with a silvery-white pubescence, on the cheeks, legs and sides of the thorax it is of the same colour; wings fusco-hyaline; claw-joint of the tarsi ferruginous, the calcaria testaceous. Abdomen much flattened, the margins of the segments depressed and having a fascia of white pubescence, more or less interrupted; the apical segment produced into a short point or style at the apex.  
*Hab.* United States. (E. Doubleday, Esq.)

**Genus 12. CHALICODOMA.**


1. **Chalicodoma muraria.**  
*Spin. Ins. Lág.* i. 148. 17.
*Brullé, Hist. Nat. II. Canar.* ii. 85. 13.  
*Hab.* France; Spain; Portugal; Albania; Italy, &c.; Africa (Algeria).

2. **Chalicodoma sicula.**  
*Hab.* France; Italy; Canary Islands; Algeria.

3. **Chalicodoma canescens.**  
Osmia (Chalicodoma) canescens, *Brullé, Hist. Nat. II. Canar.* ii. 85. 15.  
*Hab.* Canary Islands.

4. **Chalicodoma rufitarsis.**  
*Hab.* Algeria.

5. **Chalicodoma semivestita.**  
Male. Length 7 lines.—Black, the head and thorax densely covered with short fulvo-ochraceous pubescence, the metathorax and sides of the thorax beneath, and the wings posteriorly clothed with black; the breast and anterior femora beneath have an ochraceous pubescence; that on the intermediate and posterior legs and also on the abdomen is black; the wings have a pale violet tinge, the tegulae pale testaceous, the nervures black; the margin of the apical segment of the abdomen notched.  
*Hab.* India. (Coll. F. Smith.)
Subfam. 2. DASYGASTRÆ.


Genus 13. MEGACHILE.

(Details, Plate V.)


1. MEGACHILE CENTUNCULARIS. B.M.

Fabr. Syst. Ent. p. 385. 42; Ent. Syst. ii. 337. 98.
Fourc. Ent. Par. ii. 443. 5.
Schäff. Icon. t. 262. f. 6, 7.

Apicis fastuosus, Harris, Expos. p. 165. 13. t. 50. f. 13.


Spin. Ins. Lig. i. 142. 10.
Smith, Zool. ii. 695. 7.

Frisch. Ins. pt. xi. t. 2. f. 1-4.
Geoff. Ins. Par. ii. 410. 5.

Hab. Britain; France; Italy; Germany; Denmark; Sweden; Finland; Lapland; N. America; Hudson's Bay; Canada.

Specimens from the above localities are in the British Museum, in which no difference can be detected, both the sexes agreeing precisely with British and other European examples.
2. **MEGACHILE PARVULA.**


*Hab.* France.

3. **MEGACHILE ARGENTATA.**


*Apis Leachella* (*Kirby, MSS.*), *Steph. Syst. Cat.* p. 374. 5061.

*Megachile argentata*, *St. Farg. Hym.* ii. 343. 17.

*Spin. Ins. Lig.* i. 140. 9.


*Megachile albiventris*, *Smith, Zool.* ii. 696. 8.


*Hab.* Britain; France; Germany; Africa (Algeria); Denmark; Sweden.

4. **MEGACHILE RUFITARSIS.**

*Megachile rufitarsis*, *Smith, Zool.* ii. 695. 2, ♀.

*Megachile fasciata*, *Smith, Zool.* ii. 694. 5, ♀.

*Megachile pyrina*, *St. Farg. Hist. Nat. Ins.* ii. 334. 8, ♀♀?

*Hab.* Britain.

5. **MEGACHILE LIGNISECA.**

*Apicis centuncularis*, *Harris, Expos.* p. 162. 2. t. 49. f. 2.


*Don. Brit. Ins.* iv. t. 120.


*Megachile ligniseca*, *Smith, Zool.* ii. 694. 4.


*Hab.* Britain; France; Germany; Denmark; Sweden.

6. **MEGACHILE VERSICOLOR.**

*Megachile versicolor*, *Smith, Zool.* ii. 697. 9.

*Hab.* Britain.

7. **MEGACHILE ODONTURA.**


*Hab.* Britain.

8. **MEGACHILE DUFORII.**

*Megachile Dufourii*, *St. Farg. Hym.* ii. 337. 11.

*Hab.* France.
9. **Megachile 8-signata.**


*Hab.* France.

10. **Megachile pyrenaica.**


*Hab.* France.

11. **Megachile cristata.**


*Hab.* South of France.

12. **Megachile sericans.**


**Male.**—This sex resembles the female, the thorax and legs beneath densely pubescent, all the femora being thickly fringed, the anterior coxae have blunt spines, the anterior legs in front and their tarsi testaceous, the latter not dilated, at the apex of the basal joint beneath is a black dot; the abdomen beneath rufo-testaceous, the margin of the apical segment has numerous short teeth.

*Hab.* Provence; Albania.

13. **Megachile albo-cristata, n. s.**

**Female.** Length 6 lines.—Black, the pubescence on the face brown-black, on the vertex it is black. Thorax, the pubescence black, as also on the legs; on each side of the metathorax is a tuft of white pubescence; wings dark fuscous, having a violet iridescence; the posterior wings paler, particularly at their base; the pubescence on the intermediate tarsi above and on all the tarsi beneath fulvous, the claws rufo-testaceous. Abdomen, on each side of the basal segment a tuft of white pubescence, a patch of short pubescence of the same colour on each side of the second, third, and sometimes on the fourth segment, between which the pubescence is black; beneath, the pollen-brush is black, obscurely fulvous in the middle.

*Hab.* Albania.

14. **Megachile marginata, n. s.**

**Female.** Length 5 lines.—Black, the face below the insertion of the antennæ densely covered with white pubescence, above it is pale yellow, as it is also on the disk of the thorax; the flagel-
lum ferruginous beneath, its basal joints obscurely so above; tips of the mandibles ferruginous. Thorax, the sides beneath the wings, and of the metathorax, covered with long white pubescence; the margins of the scutellum have a border of short white pubescence; wings hyaline, the tegulae and nervures pale ferruginous; the legs dark rufo-testaceous, covered with a short glittering white pubescence, the tarsi fulvous beneath; the extreme apex of the anterior and intermediate tibiae as well as the claw-joint of the tarsi ferruginous. Abdomen, the basal segment covered with long white pubescence, particularly at the sides; the apical margins of all the segments have a fascia of white pubescence; beneath, the pollen-brush is composed of long white pubescence.

_Hab._ Albania. (Coll. W. W. Saunders, Esq.)

15. **Megachile apicalis.**

_Megachile apicalis, Spin. Ins. Lig. fasc. 4. p. 259._
_Osmia apicalis, Brullé, Hist. Nat. II. Canar. p. 86. 21._

_Hab._ Italy; Canaries.

16. **Megachile fulvescens, n. s.**

_Female._ Length 6 lines.—Black, the face densely clothed with fulvous pubescence, that on the cheeks is much paler. Thorax covered with fulvous pubescence; beneath, as well as on the legs, it is of a paler hue, on the tarsi beneath it is bright fulvous; the claws ferruginous, their tips black; wings subhyaline, the tegulae and nervures ferruginous. Abdomen, the four basal segments have a fulvous pubescence, on the two apical ones it is black; the apical margins of all the segments have a narrow fascia of pale fulvous pubescence; beneath, the pollen-brush is of a golden hue towards the base, becoming bright fulvous at the apex.

_Hab._ Sicily. (Coll. F. Smith.)

17. **Megachile serrata, n. s.**

_Male._ Length 5 lines—Black, the face below the insertion of the antennæ and the cheeks densely covered with white pubescence, that on the head above the antennæ, on the disk of the thorax and two basal segments of the abdomen is ochraceous, on the rest of the abdomen it is black; the thorax beneath, coxae and femora densely covered with long pale ochraceous pubescence, the tibiae and tarsi have an ochraceous pubescence, the claws testaceous; wings subhyaline, the nervures testaceous. Abdomen, the apical segment deeply depressed in the middle, its margin furnished with numerous teeth.

_Hab._ Sicily. (Coll. F. Smith.)
18. **Megachile Willughbiella.**


St. Farg. *Hym.* ii. 333. 5.

Smith, Zool. ii. 691. 1.


Hab. Britain; France; Germany; Denmark; Sweden; Finland; Lapland.

19. **Megachile maritima.**


Megachile maritima, Smith, Zool. ii. 692. 2.

Hab. Britain; France; Germany.

20. **Megachile lagapoda.**

Apis lagapoda, Linn. *Faun. Suec.* 1702; *Syst. Nat.* p. 957. 27.


Hab. Denmark; Sweden; Finland; Lapland.

21. **Megachile circumcincta.**


Megachile circumcincta, St. Farg. *Hym.* ii. 335. 9.

Smith, Zool. ii. 693. 3, ♂ ♀.


Hab. Denmark; Sweden; Finland.

22. **Megachile analis.**


Hab. Finland.

23. **Megachile Caucasia.**


Hab. The Caucasus.

24. **Megachile Ghilianii.**


Hab. Spain.
25. **Megachile albo-hirta.**

*Megachile albo-hirta*, *Brullé, Hist. Nat. II. Canar.* ii. 86. 22.

*Hab.* Canary Islands.

26. **Megachile binominata.**

*Megachile cincta*, *Brullé, Hist. Nat. II. Canar.* ii. 85. 20, not of *Fabr.*

*Hab.* Canary Islands.

27. **Megachile farinosa, n. s.**

Female. Length 4½ lines.—Black, the face above the insertion of the antennae as high as the anterior stemma covered with yellowish white pubescence, the clypeus strongly punctured and thinly covered with short fulvous hairs; the antennæ, labrum and mandibles red, the latter black at their apex, coarsely sculptured and armed with two teeth. Thorax, the disk covered with very short yellowish white pubescence; on the sides of the metathorax it is longer, as well as that on the sides, the latter being white; the legs, tegulae and nervures towards the base of the wings pale red; wings hyaline, and having a fuscous cloud on their apical margins. Abdomen, the upper surface entirely covered with a short scale-like pubescence; beneath, the pollen-brush pale yellow.

*Obs.* The entire insect has the appearance of being covered with a white powder.

*Hab.* Turkey (Bagdad).

28. **Megachile albo-picta, n. s.**

Female. Length 4 lines.—Black, the head and thorax very closely punctured, the face clothed with snow-white pubescence, the clypeus covered with large deep punctures, leaving a smooth line down the centre; the mandibles sculptured with deep elongate punctures and grooved towards their apex, which is armed with several sharp teeth. Sides of the thorax covered with snow-white pubescence; the wings subhyaline, the nervures fuscous; the legs covered with white pubescence, the tarsi beneath with fulvous, the calcaria pale testaceous, claws ferruginous, their tips black. Abdomen shining, closely punctured at the base, more distantly towards the apex; on the margin of each segment is a snow-white fascia, usually interrupted on the disk, the fascia broadest at the sides, forming elongate pointed angular patches; beneath, the pollen-brush is black towards the base and white at the apex.

*Hab.* Algeria.
29. **Megachile canescens**, n.s. B.M.

Male. Length 4 lines.—Black, the face densely covered with pale ochraceous pubescence, on the vertex as well as on the disk of the thorax it is sparingly scattered and fuscous; on the entire insect beneath the pubescence is long and hoary, very dense on the head beneath; the sides of the thorax covered with hoary pubescence; the wings fusco-hyaline, the anterior tarsi not dilated, and the anterior coxae unarmed; the tarsi beneath fulvous, the claws ferruginous, black at their tips, the calcaria pale testaceous. Abdomen short, very convex, the margins of the segments having laterally a white marginal fringe, continuous on the fifth and sixth segments, the apical segment notched in the middle and crenulated at the sides.

Obs. This is probably the male of *M. albo-picta*.

*Hab.* Algeria.

30. **Megachile Lefebvraei**.

*Megachile Lefebvraei, St. Farg. Hym. ii. 332. 4. Lucas, Explo. Sc. Algér. iii. 194. 120. t. 8. f. 1.*

*Hab.* Algeria.

31. **Megachile ericetorum**.


*Hab.* Algeria.

32. **Megachile flavipes**.


*Hab.* Egypt.

33. **Megachile patellimana**.


*Hab.* Egypt.

34. **Megachile nigripes**.


*Hab.* Egypt.

35. **Megachile gymnopygia**.


*Hab.* Egypt.
36. **Megachile denticulata.**  


*Hab.* Abyssinia.

37. **Megachile Atropos.**

Female. Length 5 lines.—Black, the face naked, deeply punctured, the margin of the clypeus entire, transverse; the mandibles stout, their apical margins straight, meeting beneath the clypeus, rather finely sculptured longitudinally, more deeply so at their base. The disk of the thorax covered with a black velvety pubescence, the scutellum produced backwards; wings yellowish towards their base, faintly clouded towards their apex, the nervures testaceous; the legs have a black pubescence; the apical joints of the tarsi ferruginous, the posterior legs slightly so towards their base. Abdomen short, very convex; the margins of the segments rufo-testaceous as well as the basal segments beneath; the pollen-brush is of a pale glittering yellow at the base and black towards the apex of the abdomen.

*Hab.* The Gambia. (Coll. F. Smith.)

38. **Megachile capitata, n. s.**

Male. Length 2½ lines.—Black, the face covered with pale pubescence, which is yellowish towards the clypeus; head much wider than the thorax, the antennæ ferruginous beneath. Thorax, the pubescence griseous, the legs rufo-testaceous, anterior tarsi simple; wings hyaline, iridescent, their apical margins slightly clouded, tegulae and nervures rufo-testaceous. Abdomen short, obtuse at the apex, at the base a little long griseous pubescence, the margins of the segments have a narrow fascia of pale pubescence; the apical segment vertical, covered with short white pubescence, its margin bidentate in the middle, the teeth short, and as well as the abdomen beneath rufo-testaceous.

*Hab.* The Gambia (Rendall). India (Coll. W. W. Saunders, Esq.).

39. **Megachile torridus, n. s.**

Female. Length 4½ lines.—Head and thorax black, the pubescence on the face is fusco-ferruginous, the basal joint of the antennæ dark ferruginous. Thorax, the pubescence on the disk is short, thin, and fulvous, at the sides of the metathorax it is dense and of a paler colour; wings fulvo-hyaline and having a broad dark fuscous margin, the tegulae and nervures fulvous; legs ferruginous; the three basal segments of the abdomen fer-
ruginous, the apical three black, their pubescence also black; on the basal segments it is fulvous, palest at the sides of the basal segment; the pollen-brush beneath is fulvous, darkest towards the apex.

The male is similarly coloured to the female, the antennae and anterior legs simple, the tarsi rufo-testaceous, the apex of the abdomen has two short blunt spines or tubercles.

_Hab._ The Gambia. (Rendall.)

40. _Megachile discolor_, n. s.

_Female._ Length 5 lines.—Black, the face, cheeks and mandibles covered with griseous pubescence; the vertex, margin of the clypeus, and apex of the mandibles have a fulvous pubescence, the mandibles and labrum ciliated with long fulvous hairs. Thorax, the disk reddish, strongly punctured and densely clothed with short bright fulvous pubescence, on the sides and beneath it is very sparing and of a dark brown colour; the legs dark ferruginous, the pubescence on the anterior and intermediate pairs sooty-black, on the posterior pair it is griseous; wings fuscohyaline, darkest at the base and along the anterior margin, tegulae rufo-testaceous. Abdomen convex above, thinly covered with a short griseous pubescence, the basal margins of the segments having a band of the same colour; the pollen-brush very pale yellow, nearly white.

_Hab._ The Gambia. (Coll. F. Smith.)

41. _Megachile angulata_, n. s. _B.M._

_Female._ Length 5½ lines.—Black, the face and cheeks covered with snow-white pubescence, the mandibles very stout and furnished with four stout teeth. Thorax naked on the disk, which is closely and strongly punctured; the sides covered with snow-white pubescence, and on each side of the abdomen are five angular patches of similarly coloured pubescence; wings hyaline at the base and dark fuscous towards their apical margins, having a violet iridescence; the legs above have a griseous pubescence. Abdomen elongate, rather strongly punctured, each segment having in the middle a transverse depression; beneath, the pollen-brush is black, having a bright fulvous line in the centre not reaching the apex.

_Hab._ The Gambia. (Rendall.)

42. _Megachile maxillosa_. _B.M._


_Hab._ The Gambia.
43. Megachile fimbriata, n. s.

Male. Length 5½ lines.—Black, the face densely clothed with white pubescence, the flagellum ferruginous beneath; the mandibles very broad to about half their length, whence they are abruptly narrowed. Thorax, the disk thinly covered with a short fulvous pubescence, at the sides of the metathorax it is long and pale; wings subhyaline, their apical margins clouded; the anterior legs pale ferruginous, their tarsi dilated, pale ferruginous, and having a marginal fringe, white at the base and fulvous at its outer margin, the coxae armed with stout spines; the intermediate and posterior legs dark ferruginous, their tarsi fringed with long white hairs. Abdomen, the pubescence at the sides cinereous, the basal segment has a fringe of short bright fulvous pubescence, on the other segments it is paler, and on the apical one it is very short and cinereous; the apex has a deep depression in the middle, bidentate in the centre and crenulated at the sides.

Hab. The Gambia. (Coll. F. Smith.)

44. Megachile imitata, n. s. B.M.

Female. Length 6 lines.—Black, the face has a sooty-black pubescence, the clypeus anteriorly broadly emarginate; mandibles longitudinally sculptured, having two or three grooves towards their apex, which is obsolescently bidentate, the tooth at the apex rounded; wings fuscous, at the sides of the metathorax a little fulvous pubescence, on other parts of the thorax it is sooty-black; on the legs above it is pale fulvous, and on the tarsi beneath bright fulvous; the calcarea and claws ferruginous. Abdomen entirely covered with fulvous pubescence.

Male.—Coloured as in the other sex, the face clothed with long white pubescence. Thorax, the tegulae rufotestaceous, the anterior femora, tibiae and tarsi, and the apical joints of the intermediate and posterior tarsi, ferruginous; the posterior legs covered with cinereous pubescence, as well as the thorax and abdomen beneath.

Obs. This species in general appearance closely resembles M. mystacea and M. rufiventris, particularly the male: the most apparent differences are pointed out.

Hab. South Africa. (Dr. A. Smith.)

45. Megachile cyanipennis.


Hab. Senegal. (Coll. F. Smith.)
46. **Megachile venusta**, n. s.  
Female. Length 3½ lines.—Black, the sides of the face have a bright silvery-white pubescence, between the antennæ and above it is slightly fuscous; the cheeks, legs and thorax have a hoary pubescence, on the disk it is short, sparing and ochraceous; the wings hyaline, their nervures black; all the tarsi beneath fulvous, the calcaria pale testaceous, claws ferruginous. Abdomen gradually tapering to the apex, the basal segment has a little pale pubescence, the margins of the segments have a narrow white fascia; beneath, the pollen-brush is white towards the base and fulvous towards the apex.

_Hab._ Port Natal; Cape of Good Hope.

47. **Megachile basalis**, n. s.  
Female. Length 5 lines.—Head and thorax black, the face covered with white pubescence; mandibles porrect, dark ferruginous, deeply sculptured longitudinally, and having three teeth at their apex; the pubescence on the thorax and legs cinereous; legs dark ferruginous, the basal joint of the posterior tarsi broadly dilated, all the tarsi fulvous beneath; wings hyaline, their nervures black. Abdomen red at the base, becoming gradually darker to the apex; the margins of the segments laterally have a pale fascia; the pollen-brush is of a bright golden yellow inclining to fulvous at the sides and towards the apex.

_Hab._ Port Natal.

48. **Megachile perplexa**, n. s.  
Male. Length 4½ lines.—Black, the face clothed with pale fulvous pubescence, as are also the cheeks and body beneath; on the vertex, and on the disk of the thorax it is black, and brown at the sides of the metathorax; the wings subhyaline, faintly clouded at their apex; the tarsi beneath clothed with fulvous pubescence, the apical joints ferruginous, the anterior tarsi simple, the coxae unarmed. Abdomen short and thickly clothed with bright fulvous pubescence; the sixth segment slightly produced in the middle and notched at the apex; beneath, the margins of the segments testaceous.

_Obs._ This is another of the species which closely resemble the _mystacea_ of Fabr., but the colour of the wings and pubescence of the face at once distinguish it.

_Hab._ Port Natal. (Coll. W. W. Saunders, Esq.)

49. **Megachile combusta**, n. s.  
Female. Length 10 lines.—Black, the head and thorax strongly
160 HYMENOPTERA.

punctured, the face thinly clothed with a scattered black pubescence; the thorax, legs and basal segment of the abdomen densely clothed with intensely black pubescence; wings black, palest towards their apical margins and having a violet iridescence; the five apical segments of the abdomen clothed above with bright fulvous-red pubescence, beneath the pubescence is of the same colour but longer.

_Hab._ Port Natal.

50. _MEGACHILE MACULATA_, n. s.

Female. Length 4½ lines.—Black, the pubescence on the head, thorax and legs black, the flagellum fulvous beneath. Thorax, the wings fulvo-hyaline, their apical margins pale, tegulae and nervures ferruginous; tarsi ferruginous and clothed with fulvous pubescence beneath; the abdomen shining, the second segment has a transverse arched depression, the second, third, fourth and fifth segments have on each side a transverse quadrate patch of yellow pubescence; the pollen-brush has the pubescence black at its base and pale towards the tips of the hairs.

_Hab._ Port Natal; Fernando Po. (Coll. F. Smith and W. W. Saunders, Esq.)

51. _MEGACHILE SENEX_, n. s.

Male. Length 5 lines.—Black, the face densely covered with long cinereous pubescence, very bright towards the apex of the clypeus; the cheeks have a thick fringe of the same colour, and a similar clothing is thinly scattered over the entire insect; the mandibles are longitudinally sculptured and have a long acute tooth at their apex. Thorax, the pubescence on the disk slightly ochraceous; wings subhyaline, faintly clouded at their apex, nervures testaceous; the apical joints of the tarsi rufo-testaceous, clothed beneath with bright fulvous pubescence; the anterior tarsi simple, fringed behind with long white hairs; the coxae armed with an obtuse spine; the sixth segment of the abdomen rounded, recurved and notched in the middle, each angle of the notch having a short acute spine, beyond which the margin is crenulated; the seventh segment has a stout spine in the centre of its margin.

_Hab._ Port Natal. (Coll. W. W. Saunders, Esq.)

52. _MEGACHILE MANDIBULATA_, n. s.

Male. Length 5 lines.—Black, the face covered with long ochraceous pubescence, on the cheeks, thorax and abdomen be-
neath it is griseous; the mandibles very broad at their base and to half their length, when they are abruptly narrowed, forming a sharp angle or tooth, their apex acute. Thorax, the pubescence on the disk pale ochraceous, thinly scattered and intermixed with black hairs; wings hyaline, having a cloud at their apical margins, the nervures fusco-ferruginous; the anterior tarsi simple, the coxae armed with obtuse spines; all the tarsi fulvous beneath, the claws ferruginous, their tips black. Abdomen shining and strongly punctured, the margins of the segments laterally are fringed with white pubescence, the fringe becoming narrower within, that on the fifth segment sometimes entire, the apex armed with four blunt teeth; the seventh segment is acute at its apex, having a raised sharp carina down the centre, a similar carina also runs down the centre of the sixth segment.

Obs. This is probably the male of *M. angularis*.

*Hab.* Port Natal; the Gambia.

53. *Megachile celocera.*

Male. Length 8 lines.—Black, the face covered with pale golden pubescence, the centre of the clypeus naked, shining and punctured, the cheeks fringed with long white pubescence; the antennæ subclavate, longitudinally grooved beneath. Thorax, the metathorax densely covered with sooty-black pubescence, that on the legs is short and black; the anterior tarsi dilated, the first joint broad at the base, much narrowed at the apex, its posterior margin rounded, the following joints gradually decreasing in width and somewhat heart-shaped, the whole fringed behind with ferruginous pubescence; the coxae armed with a stout tooth; the wings dark fuscous, palest at their apical margins, and having a purple tinge. Abdomen bright fulvous, the basal segment being clothed with black pubescence; the apical segment armed with two incurving obtuse teeth, and also a short acute one at the extreme lateral margins.

*Hab.* Port Natal.

54. *Megachile tarsata.*


*Hab.* Guinea.

55. *Megachile cincta.*


*Hab.* Sierra Leone.
56. **Megachile rufipes**

*Apis rufipes*, *Fabr. Ent. Syst. ii. 328. 62.*


*Hab*. Sierra Leone.

57. **Megachile barbata**, n. s.

*Male*. Length 4 lines.—Black, the face densely clothed with long pale ochraceous pubescence, which becomes nearly white towards the margin of the clypeus, the cheeks have a dense long white beard; the thorax beneath and all the legs have a similar white pubescence, on the thorax above it is slightly ochraceous; wings subhyaline, faintly clouded at their apical margins, the nervures black; the anterior tarsi and coxae simple, the femora at their apex beneath rufo-testaceous, all the tarsi beneath fulvous, the calcaria pale testaceous, claws ferruginous, their tips black. Abdomen short, very convex above, the segments have a narrow white fascia, broadest at the sides, more or less interrupted on the three basal segments, the apical segment irregularly dentate and notched in the middle.

*Hab*. Cape of Good Hope. (Coll. F. Smith.)

58. **Megachile unguilata**, n. s.

*Male*. Length 4½ lines.—Black, head broader than the thorax; the face densely covered with a bright pale yellow pubescence, on the vertex it inclines to fulvous; on the cheeks, thorax and legs beneath, it is of a very pale bright yellow; apex of the mandibles ferruginous; legs dark rufo-testaceous, the anterior femora and tibia in front and their tarsi testaceous, the latter slightly dilated and fringed with white pubescence; apical joints of the tarsi bright ferruginous, the claw-joints as long as the rest of the tarsi, tips of the claws black; the posterior tibiae incrassate. Abdomen short, and having at the base some long fulvous pubescence; the sides of the three basal segments pale rufo-testaceous, which is the colour of the abdomen beneath; the margins of the three apical segments above narrowly testaceous; towards the apex the pubescence is fuscous, intermixed with fulvous; the sixth segment notched in the middle.

*Hab*. Cape of Good Hope. (Coll. F. Smith.)

59. **Megachile apiiformis**, n. s.

*Female*. Length 5 lines.—Head and thorax black, on the sides of the face, along the margins of the eyes, the pubescence is short and white, below the insertion of the antennæ are some
long ochraceous hairs, on the vertex the pubescence is fuscous; mandibles ferruginous at their apex. Thorax above clothed with obscure yellow pubescence, at the sides of the metathorax it is paler, and beneath cinereous; the legs ferruginous, their pubescence cinereous, that on the tarsi beneath is fulvous; wings subhyaline, faintly clouded at the apical margins. The basal segment of the abdomen rufo-testaceous, the apical margins of the other segments also rufo-testaceous, each one much more narrowly so towards the apex; the pollen-brush is very pale fulvous.

Hab. Cape of Good Hope. (Coll. F. Smith.)

60. **MEGACHILE FRONTALIS, n. s.**

Male. Length 3½ lines.—Black, the face densely clothed with silvery-white hair, on the vertex and disk of the thorax it is pale ochraceous, short and very sparing; on the sides of the thorax beneath, and on the legs and head beneath, it is white; wings hyaline, tegulae and nervures rufo-testaceous; the extreme apex of the tibie and apical joints of the tarsi rufo-testaceous; the anterior tarsi simple, the coxae unarmed. Abdomen short, obtuse at the apex, the apical segment vertical, concave, and covered with short white pubescence, its margin notched in the middle, on each side of which are four short teeth, the innermost being longest; the segments are depressed at their base and have white bands on their apical margins; beneath, the segments are similarly banded.

Hab. Cape of Good Hope. (Coll. F. Smith.)

61. **MEGACHILE EURIMERA, n. s.**

Female. Length 5½ lines.—Black, the face densely covered with pale shining hair, having a golden lustre in certain lights; the mandibles broad, stout and tridentate at their apex, roughly sculptured and ferruginous in the middle; the pubescence on the disk of the thorax is somewhat ochraceous, and cinereous at the sides; the legs rufo-piceous, the tarsi testaceous, the basal joint of the posterior pair flattened and broadly dilated, the pubescence on the legs is pale fulvous, and bright deep fulvous on the tarsi beneath; wings subhyaline, faintly clouded at their apex. Abdomen subconical, clothed with fulvous pubescence; the pollen-brush of a golden yellow, palest towards the base of the abdomen.

Obs. This species closely resembles *M. dorsata*, but in that insect the basal joint of the posterior tarsi is simple.

Hab. Cape of Good Hope. (Coll. F. Smith.)
62. Megachile dorsata, n. s.

Female. Length 7 lines.—Black, the pubescence on each side of the face is white, between and above the antennæ it is ochraceous, and on the margin of the clypeus ferruginous, the mandibles and labrum are ciliated with hairs of the same colour. Thorax clothed above with pale fulvous pubescence, beneath it is nearly white; on the tarsi and posterior tibiae it is fulvous, and much paler on the other parts of the legs, all the tarsi ferruginous; wings subhyaline, the tegulae testaceous, the nervures ferruginous; the apical margins have a slight cloud. Abdomen covered with fulvous pubescence, which is bright towards the base, becoming much paler towards the apex; the apical segment has a scattered black pubescence; the pollen-brush is fulvous.

Hab. Cape of Good Hope. (Coll. F. Smith.)

63. Megachile pennata, n. s.

Male. Length 5½ lines.—Black, the face, the thorax posteriorly and the basal segment of the abdomen covered with white pubescence; that on the thorax anteriorly is black; the basal half of the wings hyaline, the apical half dark fuscous; the apical margins of the segments depressed, the fifth and sixth segments thinly covered with stiff black hairs, the margin of the latter notched in the middle.

Obs. This insect exactly corresponds with the M. maxillosa, Guér., in colouring, which is from Senegal; the difference in size and of locality appear to indicate a distinct species.

Hab. Cape of Good Hope. (Coll. F. Smith.)

64. Megachile ianthoptera, n. s.

Female. Length 7 lines.—Black, the face covered with silvery-white pubescence, leaving the clypeus which is coarsely punctured, naked; mandibles very stout, armed with four blunt teeth, covered towards their base with white pubescence, the cheeks covered with white pubescence. Thorax closely punctured, at the sides of the metathorax and beneath the wings a patch of long white pubescence, on the disk it is short and sparing, and posteriorly and on the scutellum it is black; anterior wings deep violet, the posterior pair subhyaline; legs clothed with short black pubescence, the anterior femora covered with long white pubescence, on the posterior tarsi within it is fuscous. Abdomen nigro-aeneous, elongate and somewhat pointed at the apex; on each side are six patches of white pubescence, those on the second, third and fourth segments are pointed within;
the segments have a transverse depression and are covered with deep but scattered punctures; the pollen-brush on the abdomen beneath is entirely black.

Male. Length 6 lines.—Closely resembles the female, the pubescence is longer and the tarsi beneath are covered with fulvous pubescence, the claws ferruginous; the basal joint of the anterior tarsi simple; the apical segment of the abdomen vertical, down the centre of which is an elevated carina; the margin deeply notched in the middle, and on each side two smaller notches.

Obs. This species resembles M. angularis, but is very distinct; the wings are entirely purple, and the pollen-brush is entirely black; it is altogether a larger and more conspicuous insect.

Hab. Cape of Good Hope. (Coll. F. Smith.)

65. MEGACHILE COGNATA.

Female. Length 7½ lines.—Head, thorax and legs black, and clothed with black pubescence; abdomen entirely clothed with rufo-fulvous pubescence; wings dark fuscous, darkest towards their apical margins. Head, the clypeus convex, and having at the sides some long, rigid, dark brown pubescence, its margin rounded; mandibles very stout, coarsely sculptured longitudinally, having a short groove towards their apex, which is armed with two obtuse teeth. Thorax, the calcaria, as well as the femora beneath, ferruginous.

Obs. This species closely resembles M. mystacea and Rufiventris, but is quite distinct from both; the difference in the form of the face distinguishes it from Rufiventris, whilst its size, coloration of the wings and calcaria will separate it from M. mystacea, in addition to which the pubescence of the abdomen is much longer.

Hab. Cape of Good Hope. (Coll. F. Smith.)

66. MEGACHILE FULVA, n. s.

Female. Length 7 lines.—Black, the pubescence of this species is entirely bright fulvous, the margin of the clypeus rounded, the mandibles longitudinally sculptured, and having a single tooth at their apex; the wings fulvo-hyaline, becoming fuscous towards their apex; the tegulae and nervures fulvo-testaceous towards the base of the wings, towards their apex they are fuscous; legs rufo-fulvous; the pubescence of the abdomen entirely fulvous, having a marginal fascia of the same colour.

Hab. Africa. (Coll. F. Smith.)
67. **Megachile flavipennis.**

Female. Length 7 lines. — Black, head and thorax very closely punctured, the puncturing strongest on the thorax and running into each other, forming on the anterior portion irregular transverse rugose striae; the face above the clypeus as high as the anterior stemma clothed with a short black pubescence; the clypeus rugose, mandibles very stout, covered with elongate punctures, quadridentate. Thorax, the disk thinly covered with short fulvous pubescence, on the sides of the metathorax it is longer, more dense, and of a paler colour; wings yellow, their apical margins fuscous, the nervures and outer margin of the tegulae rufostestaceous; legs ferruginous. Abdomen thinly clothed with rufous fulvous pubescence, that on the basal segment being pale fulvous, particularly at the sides; the margins of the segments have a fascia of rufous fulvous pubescence, beneath at the base clothed with fulvous and at the apex with ferruginous pubescence.

Male. — This sex only differs from the female in having some pale pubescence, the anterior margin of the clypeus being bearded with pale yellow pubescence; the antennae are attenuated towards their apex, the apical joint compressed.

_Hab._ Africa.

68. **Megachile æthiops, n. s.**

Female. Length 7 lines. — Black, the head and thorax closely and strongly punctured, the clypeus produced, its anterior margin waved, the mandibles very stout at their base and acute at their apex, not toothed; on the cheeks at the base of the mandibles is a short obtuse spine. Thorax nearly naked, a little sooty-black pubescence at the sides of the metathorax; wings very dark fuscous, palest at their apical margins, and having a violet iridescence; legs black, the anterior and intermediate tibiae have a short, acute, stout spine at their apex, above which as well as the claws are ferruginous. Abdomen short, very convex above, the pubescence black, very sparing above; closely punctured, and towards the apex having some larger punctures intermixed; the apical segment beneath smooth and shining, the sides broadly grooved, the groove roughened and pubescent.

_Hab._ Africa.

69. **Megachile mystacea.**


_Obs._ Four species are contained in the collection of the British
Museum, to all of which the brief description of Fabricius would equally apply; in order to distinguish the differences, the following additional particulars will be necessary.

*M. mystacea.*—Head, thorax, legs and basal segment of the abdomen black, the latter having on its apical margin a band of fulvous pubescence, with which the rest of the abdomen is covered; above the insertion of the antennae, as high as the anterior stemma, the face is covered with griseous pubescence; below the antennae on each side is a little black pubescence; the clypeus is rounded in front and has a slight notch in the centre; the mandibles are flat exteriorly and longitudinally grooved towards their apex, and covered with elongate punctures, armed at the apex with two teeth; the spines at the apex of the posterior tibiae black.

The male is coloured as in the other sex, but the face has a tuft of white pubescence between the antennae, the anterior margin of the clypeus has a long beard of the same colour; the legs are clothed above with black pubescence.

*Hab.* New Holland; Cape Upstart; Port Essington.

70. *Megachile erythropyga*, n. s. 

Female. Length 4½ lines.—Black, the face clothed with fulvous pubescence; the thorax covered with a griseous pubescence, very sparing on the disk, where it is somewhat fuscous on and towards the scutellum; wings fusco-hyaline, nervures black; the tarsi fulvous beneath, the claws rufo-testaceous. Abdomen very convex above, the three basal segments have on each side a short white marginal fringe; the fifth and sixth segments red, except the extreme base and sides of the former, and clothed with bright fulvous pubescence; the pollen-brush very pale yellow, the extreme apex fuscous.

Male. Length 4–4½ lines.—Resembling the female in general appearance, the pubescence similar; the abdomen has only a short fringe on the second segment, the fifth segment is covered with bright fulvous-red pubescence, except a narrow portion at the sides, the sixth segment black, depressed and notched at the apex; the anterior tarsi are simple, the coxae unarmed.

*Obs.* The sexes are united from the circumstance of their having been sent together, and the great general resemblance of the insects.

*Hab.* Western Australia. (The female in the Coll. of W. W. Saunders, Esq.)
71. Megachile punctata, n. s.

Male. Length 4 lines.—Black, the face covered with pale yellow pubescence, brightest on the clypeus; the cheeks, thorax and femora beneath covered with long cinereous pubescence; on the disk of the thorax it is very sparing and slightly ochraceous; the wings fuscous, hyaline towards their base. Abdomen naked, strongly punctured, and having on each side of the basal segment a spot of snow-white pubescence; the apical segment notched in the middle.

Hab. New Holland. (Coll. J. S. Baly, Esq.)

72. Megachile aurifrons, n. s. B.M.

Female. Length 5½ lines.—Black, the face thickly covered with bright fulvous pubescence, leaving the anterior part of the clypeus naked, on each side of which touching the eyes is a patch of white pubescence; the clypeus in the centre, produced into a somewhat quadrate lobe, which is widest at the base, and its anterior margin slightly emarginate; the lobe has several depressions above, and at its sides is deeply concave; antennae bright ferruginous at their base, becoming gradually darker to their apex; the cheeks and sides of the thorax have a hoary pubescence; the wings hyaline at their base, and slightly clouded towards their apical margins; the legs covered with short hoary pubescence, that on the tarsi beneath reddish brown; claws ferruginous, their tips black. The abdomen covered at its base with hoary pubescence; beneath densely clothed with pale pubescence, which in certain lights has a silvery brightness.

Hab. New Holland.

73. Megachile lucidiventris, n. s. B.M.

Female. Length 6 lines.—Black, on each side of the face and at the insertion of the antennae a little white pubescence, on the clypeus it is fuscous; the margin of the clypeus ciliated with ferruginous hairs; the cheeks coarsely punctured, and having as well as the thorax beneath and the legs a griseous pubescence; the metathorax covered with pale ochraceous pubescence, as well as the basal segment of the abdomen and basal margin of the second; wings subfuscous, palest at their base; the posterior femora and tibiae within covered with very short silvery-white pubescence, the tarsi beneath reddish-brown, the calcariae and claws ferruginous. Abdomen, excepting at the base, covered above with short black pubescence; beneath, the pollen-brush is of a glittering whiteness.

Hab. New Holland.
74. **Megachile ignita**, n. s.  
**B.M.**

Male. Length 5 lines.—Black, the head a little wider than the thorax, subquadrate, the face covered with fulvous pubescence, the cheeks have a thick fringe of the same colour, but much paler; on the thorax beneath and on the sides, also on the legs, the pubescence is pale bright yellow; wings pale fuscous; the anterior coxae unarmed, the tarsi simple, the apical joints pale testaceus; the anterior and intermediate tarsi behind and the posterior pair in front are fringed with long white pubescence. Abdomen, the base thinly covered with white pubescence, the two apical segments bright red, the apical segment having a deep depression in the middle, its margin deeply notched, angles of the notch rounded.

*Hab.* New Holland.

75. **Megachile abdominalis**, n. s.  
**B.M.**

Male. Length 3 lines.—Black, head wider than the thorax, the antennae as long as the head and thorax, the face covered with white pubescence; the cheeks, thorax beneath and legs thinly covered with white pubescence, the tarsi rufo-testaceus; the wings hyaline and iridescent, the anterior tarsi and coxae simple; the abdomen red, closely punctured, the apical segment entire.

*Hab.* New Holland.

76. **Megachile simplex**, n. s.  
**B.M.**

Female. Length 4 lines.—Black, the face has a little snow-white pubescence on each side; between and above the antennæ it is of a dirty white; the clypeus closely and deeply punctured; the cheeks roughly punctured and having a thin griseous pubescence. Thorax, the sides thinly covered with griseous pubescence, on the disk it is somewhat fuscous; wings subhyaline, faintly clouded at their apical margins; legs beneath dark rufo-testaceus, the tarsi have a reddish-brown pubescence beneath; the claws rufo-testaceus, their tips black. Abdomen pointed at the apex, the segments above have a narrow white marginal fringe; beneath, the pollen-brush is of a glittering whiteness.

*Hab.* New Holland. (From Hunter’s Coll.)

77. **Megachile latipes**, n. s.

Male. Length 5 lines.—Black, the face covered with golden-yellow pubescence, the antennæ ferruginous beneath; the cheeks, legs and thorax beneath thinly covered with long white pubescence; the anterior coxae armed with two long obtuse spines;
the anterior tarsi very pale testaceous, the three basal joints broadly dilated, and having behind a pale thick fringe, which is fulvous beneath; the intermediate tarsi are also covered above with long white pubescence; the joints of the posterior tarsi are very pale testaceous, and fusceous at their apex; the claws ferruginous, their tips black; wings subfuscous, palest towards their base; the metathorax and first segment of the abdomen covered with white pubescence, on the other segments it is short and black; the apex obtuse; the apical margin of the sixth segment emarginate.

**Hab.** New Holland. (Coll. J. S. Baly, Esq.)

78. **MEGACHILE OBTUSA**, n. s.

**Male.** Length 3½ lines.—Black, the head large, wider than the thorax; the face covered with bright yellow pubescence; the antennae rufo-testaceous beneath; the cheeks, legs and thorax beneath covered with long white pubescence; on the disk and on the sides of the metathorax it is pale yellow; wings hyaline and iridescent, faintly clouded at their apical margins, the nervures black; the anterior tarsi pale yellow testaceous, the basal joints slightly dilated, and of the same width throughout; the posterior margin thinly fringed with white pubescence, as are also the intermediate tarsi behind; all the tarsi beneath have a bright yellow pubescence, the calcaria pale testaceous; claws rufo-testaceous, black at their tips. Abdomen short, all the segments have a pale marginal fringe; the apical segment covered with bright yellow pubescence, its apex bidentate; the lateral angles acute.

**Hab.** Western Australia. (Coll. W. W. Saunders, Esq.)

79. **MEGACHILE CLYPEATA**, n. s.

**Female.** Length 3 lines.—Black, closely and strongly punctured, head subquadrate, on each side of the face a little griseous pubescence, the anterior margin of the clypeus has on each side a broad flattened tooth. Thorax, a little griseous pubescence on the sides; the wings hyaline and iridescent, the claws rufo-testaceous. Abdomen, the basal margins of the segments depressed, the apical margins on each side have a narrow white fringe, the apical segment ferruginous; beneath, the pollen-brush white.

**Hab.** Western Australia. (Coll. W. W. Saunders, Esq.)

80. **MEGACHILE MACULATA**, n. s. B.M.

**Female.** Length 5 lines.—Black, the face thickly covered with very pale ochraceous pubescence, nearly white at the mar-
gins of the eyes; the flagellum rufo-testaceous beneath; the cheeks, thorax beneath and the legs covered with glittering white pubescence; the vertex and disk of the thorax thinly covered with ochraceous pubescence, intermixed with a few black hairs; a small tuft of white pubescence beneath the tegulae, an ochraceous one above it, and two others touching the anterior margin of the scutellum; a line of pale pubescence along its inferior margin; the metathorax thinly covered with long white hairs; the wings hyaline, very faintly clouded at their apical margins. Abdomen broad at the base and acute at the apex; the margins of the segments having a narrow band of ochraceous pubescence; beneath, the pollen-brush is of a pale glittering brightness.

Male. Length 4½ lines.—This sex resembles the female in having the thorax similarly spotted with tufts of pale pubescence; that on the face is golden-yellow; the anterior femora and tibiae in front and beneath and the intermediate tibiae in front rufo-testaceous; the anterior tarsi very pale testaceous, nearly white, and having on their anterior margin a narrow fringe of ferruginous pubescence and a white fringe on the posterior one, the outer edge being narrowly fulvous; the intermediate tarsi have a long fringe of white hair; all the claws ferruginous, their tips black. The two apical segments of the abdomen covered with a short bright yellow pubescence intermixed with long black hairs; the apical segment bidentate; beneath, the segments have narrow white marginal fasciae.

Hab. Western Australia.

81. MEGACHILE CANIFRONS, n. s.  B.M.

Male. Length 3½ lines.—Black, the face clothed with long white pubescence, that on the clypeus silvery; the cheeks, sides of the thorax, the basal segment of the abdomen and sides of the second covered with white pubescence; the femora have a long fringe, and the tibiae and tarsi a thin clothing of the same colour; the tarsi beneath pale fulvous; the claws testaceous, their tips black; the wings hyaline, iridescent, and faintly clouded at their apical margins, nervures black. Abdomen short, rather narrowed at the base, the apical margins of the first and second segments have laterally a short fringe of snow-white pubescence; the three apical segments curving downwards; the fifth segment has a large patch of bright fulvous pubescence; the margin of the sixth segment entire.

Hab. Western Australia.
82. *Megachile apicata*, n. s.

Female. Length 3 lines.—Black and strongly punctured, on each side of the face a little white pubescence, on the anterior margin of the clypeus are three short teeth, mandibles coarsely sculptured and longitudinally grooved. Thorax, on the sides, beneath, and also on the legs a thinly scattered griseous pubescence; the claws ferruginous; wings hyaline and iridescent, the nervures dark brown; the basal margins of the segments depressed and having a band of white pubescence; the sides of the sixth segment broadly ferruginous; beneath it is entirely so, the pollen-brush griseous.

*Hab.* Adelaide. (Coll. F. Smith.)

83. *Megachile Heriadiiformis*, n. s.

Female. Length 5 lines.—Black, elongate and closely punctured; the face has a little white pubescence on each side; on the anterior margin of the clypeus are two minute tubercles; the labrum elongate, concave towards the apex, which is rounded and is produced into a sharp angle or tooth on each side; the mandibles obliquely truncate at their apex. Thorax, on the sides and beneath a thinly scattered white pubescence; the tarsi pale fulvous beneath, the apical joints of the tarsi and the calcaria ferruginous; wings subhyaline, faintly clouded at their apical margins, the nervures dark ferruginous. Abdomen slightly narrowed at the base, on each side of the three basal segments is a short fascia of white pubescence, those on the two latter are tinged with yellow at their inner extremities, on the margin of the fourth is a narrow fascia, a broad one on the fifth, and the sixth is covered, except at its extreme base, with pubescence of a golden-yellow colour; the pollen-brush is white.

*Hab.* Adelaide. (Coll. F. Smith.)

84. *Megachile semi-luctuosa*, n. s. B.M.

Female. Length 7 lines.—Black, on each side of the face a patch of white pubescence, the clypeus slightly produced in the middle of its anterior margin, which, near the base of the mandibles, has a short tooth. Thorax above thinly clothed anteriorly with black pubescence, posteriorly on the sides and beneath with white; the legs have a similar pubescence, except that on the tarsi beneath, which is of a reddish-brown; the wings subhyaline, and having a fuscous cloud on their apical margins. Abdomen elongate, the two basal segments covered with white pubescence, a minute spot of the same colour on the apical margin of the
third segment on each side; the pollen-brush is of a very pale yellow.

Male.—In general appearance closely resembling the female; the clypeus is bearded with brilliant silvery-white pubescence, the antennæ capitate, the apical joint being compressed, the anterior femora in front, all the tibiae in front, and the anterior tarsi rufo-testaceous, the latter being very pale, broadly dilated, and fringed with long pubescence, which is fulvous at its exterior margin; in the hollow of the dilated tarsus are two black dots; the anterior coxae are armed with two long obtuse spines, which, at their base in front, have another short acute spine which curves backwards; the intermediate and posterior tarsi fringed beneath with long pale hairs. Abdomen obtuse at the apex, the apical segment having a broad depression or concavity, its margin being simply emarginate and without teeth; beneath, the margins of the segments testaceous.

_Hab._ South Australia; Adelaide. (The male in the Coll. of W. W. Saunders, Esq.)

85. _Megachile leucopyga, n. s._ B.M.

Female. Length 4½—5 lines.—Black, the face thinly covered with griseous pubescence; on the vertex and disk of the thorax it is fuscous; the mandibles stout, obliquely truncate and bidentate at their apex; the cheeks, thorax on the sides and beneath, as well as the legs, thinly clothed with griseous pubescence; the wings fusco-hyaline, their nervures black; the claws and calcaria rufo-testaceous, the tarsi fulvous beneath. Abdomen elongate, at the sides of the basal segment a little white pubescence, on each side of the second and third segments a short fringe of snow-white pubescence; at the apex is an ovate patch of pale pubescence, slightly tinged with yellow, which extends to about the middle of the fifth segment; the pollen-brush very pale yellow, or nearly white.

_Hab._ Van Diemen's Land.

86. _Megachile chrysopyga, n. s._ B.M.

Female. Length 5—6 lines.—Black, the face as high as the anterior sterna clothed with fulvous pubescence; on the cheeks, sides of the thorax and beneath is a thin clothing of white pubescence; the tarsi are fulvous beneath, the anterior and intermediate pairs have a pale yellow pubescence above, the basal joint of the posterior tarsi flattened and broadly dilated; the entire legs are roughly punctured, and covered otherwise with a griseous pubescence; wings subhyaline, the nervures dark ferruginous. Abdomen short and broad, the segments having each
a deep transverse impressed line, the base covered with a thin griseous pubescence; the lateral margins have a short fringe of the same colour, more or less continuous, rarely entire, excepting on the fourth or fifth segments; on the sixth segment, and sometimes extending over a portion of the fifth, is a patch of fulvous pubescence; the pollen-brush is very pale yellow.

Male. Length 4–4½ lines.—In general aspect resembling the female, the mandibles very broad at their base, tridentate at their apex; the anterior legs have their femora concave beneath, are of a pale rufo-testaceous colour, and obliquely striped at their base with black lines; the tibiae and tarsi pale rufo-testaceous, having a dark stain behind and at their base; the two basal joints of the tarsi dilated, the second is produced at its apex above into a rounded lobe, the inferior margin has a thick fringe of white pubescence, which is stained with yellow at the edge; the dilated joints beneath have two black dots; the coxae armed with obtuse spines. The apical segment of the abdomen tridentate, the centre tooth very short.

Hab. Van Diemen’s Land; Western Australia.

87. MEGACHILE ordinaria.

Female. Length 4 lines.—Black, the face on each side has a little white pubescence, the margin of the clypeus slightly emarginate, the mandibles covered with coarse longitudinal punctures; the cheeks fringed with long white pubescence. The thorax on the sides and beneath as well as the legs have a thin long white pubescence; the tarsi beneath fulvous; the claw-joint ferruginous; the wings hyaline and iridescent, the nervures ferruginous. The apical margins of the segments of the abdomen have a narrow white fascia, more or less obliterated on the basal segments, the basal margins depressed, the apical segment covered with a short griseous pubescence; the pollen-brush beneath the abdomen is of the same colour.

Hab. Van Diemen’s Land. (Coll. F. Smith.)

88. MEGACHILE dimidiata, n. s. B.M.

Female. Length 6 lines.—Black, the head densely clothed with bright fulvous pubescence, the clypeus and the space between the stemmata naked, antennae ferruginous. Thorax entirely clothed, as well as the legs and basal segment of the abdomen, with bright fulvous pubescence; wings fulvo-hyaline, the tegulae and nervures rufo-testaceous. Abdomen, excepting the basal segment, covered above with very short and beneath with long black pubescence.

Hab. India.
89. Megachile anthracina, n. s. B.M.

Female. Length 7–8½ lines.—Black, the face above the clypeus as high as the anterior stemma thickly clothed with short black pubescence, the anterior margin slightly produced in the middle; the mandibles stout, having above some longitudinal punctures, and two grooves towards their apex, which is armed with two sharp teeth. Thorax above naked, shining and strongly punctured; each side of the metathorax thickly covered with sooty-black pubescence; wings dark fuscous, having a brilliant violaceous iridescence. Abdomen shining above, and having more or less of a changeable blue tinge; beneath, the pollen-brush is blackish-brown.

Hab. India.

90. Megachile conjuncta, n. s. B.M.

Female. Length 5 lines.—Black, the face clothed with black pubescence, at the lateral margins of the clypeus and on the mandibles a little cinereous pubescence; the metathorax and basal segment of the abdomen clothed above with yellowish white pubescence, on the disk of the thorax anteriorly it is sooty-black; wings broadly fuscous towards their apex, the base hyaline; all the tarsi beneath are fulvous, on the intermediate pair above the pubescence is fulvous; the posterior legs have a cinereous pubescence, and the basal joint of the posterior tarsi is dilated; the calcaria pale testaceous. The abdomen above has a metallic hue, and has a little black pubescence along its lateral margins; beneath, the pollen-brush is bright fulvous.

Male.—This sex bears a strong resemblance to the female, but is rather smaller; the face covered with white pubescence, the middle of the clypeus being naked, the anterior tarsi simple and the coxae unarmed; the claws ferruginous, the calcaria black; the apical segment of the abdomen entire, having a deep depression in the centre.

Hab. India; Bengal. (The male in the Coll. of W. W. Saunders, Esq.)

91. Megachile umbripennis, n. s. B.M.

Female. Length 5 lines.—Black, the face has a thin clothing of black pubescence, between the insertion of the antennæ and the anterior stemma it is slightly fulvous; mandibles porrect, deeply grooved and sculptured longitudinally, and armed with four stout teeth, the two apical ones acute; the cheeks and thorax beneath have a thin short cinereous pubescence; the thorax
above and basal segment of the abdomen densely covered with a short rich fulvous pubescence; the wings reddish brown with a purple or coppery iridescence, the externo- and interno-medial cells hyaline, the posterior wings also hyaline at their base, nerves ferruginous, the second and third segments of the abdomen having a narrow fulvous marginal fringe, usually much obliterated, particularly on the third segment; the fourth and fifth segments on each side have a short white marginal fringe; beneath, the pollen-brush is yellowish white, but black on the two apical segments.

Hab. Nepal. (Coll. Major Hardwick.)

92. **Megachile fulvo-vestita**, n. s.

**Female.** Length 6½ lines.—Black, densely clothed above with fulvous pubescence, that on the face is the longest; wings subhyaline, faintly clouded at their apical margins; the legs above have a pale fulvous pubescence; the tarsi beneath fulvous, the basal joint of the posterior tarsi broadly dilated; the calcaria and claws testaceous, the pollen-brush white.

**Male.**—Like the female; its pubescence above entirely fulvous, the anterior legs pale rufo-testaceous, their tarsi being palest; the basal joint at its apex anteriorly produced into an elongate process, which is rounded at the end; the second joint is of a similar form but much smaller, the whole fringed behind with white pubescence; the intermediate and posterior tarsi have a long loose fringe of pale pubescence; the basal joint of the posterior tarsi is broad and flattened, nearly square, and clothed beneath with fulvous pubescence; the calcaria and claws testaceous, the latter black at their tips; the apical segment naked, its margin crenulated.

Hab. Bombay. (Coll. F. Smith.)

93. **Megachile vestita**, n. s.

**Female.** Length 6 lines.—Black, the face densely covered with bright yellow pubescence; the mandibles short, stout, longitudinally grooved, and armed with three blunt teeth, pubescent at their base and ciliated with bright yellow hairs; the cheeks thickly covered with pale ochraceous pubescence. Thorax, the disk thinly clothed with bright yellow pubescence, densely so on the sides, and beneath it is cinereous; the legs densely covered with pale yellow pubescence, on the tarsi beneath it is fulvous; the calcaria testaceous, claws ferruginous, their tips black; wings subhyaline. Abdomen short, broad and pointed at the apex; the base, sides and margins of the segments have
a pale yellow pubescence; beneath, the pollen-brush is pale yellow in the middle and bright fulvous at the sides.

_Hab._ India. (Coll. J. S. Baly, Esq.)

94. Megachile rufipes, n. s.

_Male._ Length 5 lines.—Black, the face covered with a yellowish white pubescence, becoming fulvous at the insertion of the antennæ; mandibles ferruginous at their apex. Thorax very thinly clothed above with fulvous pubescence, on the sides and beneath it is cinereous; the legs red, the anterior pair have a tooth on their coxae, and their tarsi dilated, the basal joint becoming gradually broader from the base to the apex; the second and following joints very slightly dilated; the wings fulvo-hyaline, their apical margins slightly fuscous, the nervures pale ferruginous; towards the apex of the wing they become black. Abdomen, the apical margins of the segments ferruginous, narrowly fringed with fulvous pubescence, the apical segment ferruginous and deeply depressed at the apex, the two apical segments covered with short fulvous pubescence; beneath, the margins of the segments pale ferruginous, the apical segments have a short, thin, white pubescence.

_Hab._ East Indies. (Coll. F. Smith.)

95. Megachile imitatrix, n. s.

_Female._ Length 8 lines.—The face, vertex and metathorax clothed with fulvous pubescence, a fringe of the same colour on the anterior femora beneath, that on the cheeks is paler; the thorax beneath, its sides, and also the metathorax and legs, black; the abdomen entirely black, pubescent above, very densely so beneath.

_Hab._ India? (Coll. W. H. L. Walcott, Esq.)

96. Megachile grandis.

_Megachile grandis_, _St. Farg. Hym._ ii. 333. 6.

_Hab._ ——?

97. Megachile lanata.

_Apis lanata_, _Fabr. Ent. Syst._ ii. 335. 90.
_Megachile lanata_, _St. Farg. Hym._ ii. 342. 15.

_Hab._ India.

_Obs._ Fabricius has given for the habitat of this species South America; one of the most common species from India in every
particular agrees with his description, which is not the case with any species yet received from South America; it is most probable that the locality indicated is erroneous.

98. Megachile disjuncta. B.M.

Apis disjuncta, Fabr. Ent. Syst. ii. 328. 62.
Megachile disjuncta, St. Farg. Hym. ii. 331. 3.
Hab. India; Isle of France.

99. Megachile rufiventris. B.M.

Megachile rufiventris, Guér. Voy. Ind. Orient. (Belang.) p. 502. t. 4. f. 5?

Obs. This species very closely resembles the M. mystacea; in the Museum Collection are examples from India and the Isle of France: in all probability this is the insect described by M. Guérin: the following differences distinguish it from M. mystacea.

The abdomen entirely fulvous-red, the basal segment having no black pubescence on its superior surface; the pubescence of the head is entirely black; the face a little before the insertion of the antennae is obliquely truncated and roughened by irregular sculpture; the anterior margin of the clypeus is transverse, and on each side is slightly produced before reaching the base of the mandibles; the mandibles are rounded exteriorly and have no grooves towards the base, but have two short ones at their apex; the spines at the apex of the posterior tibiae red.

Male.—In colour agreeing with the female; the clypeus is convex in this sex and has a thick fringe of white pubescence on its anterior margin, a tuft of the same colour between the antennæ, and a line on each side along the margin of the eyes; between these it is black; the calcaria as in the female are red.

Hab. India; Isle of France.

100. Megachile fraterna, n. s. B.M.

Female. Length 7½ lines.—Black, the face as high as the insertion of the antennæ covered with black pubescence, leaving the basal portion of the clypeus naked; mandibles broad at their apex and armed with three teeth. The pubescence on the thorax and legs black; on the posterior tarsi it is fulvous, as also on the femora and tibiae within, but on the latter it is paler; the wings subhyaline, their apical margins having a fuscous cloud. Abdo-
men densely clothed above with short deep fulvous pubescence; beneath, the pollen-brush is of a golden-yellow.

Obs. This species bears a close resemblance to the *M. rufiventris* of Guérin, but independent of its larger size is distinguished by the colour of its wings and posterior legs.

*Hab.* India.

101. **Megachile monticola**, n. s. B.M.

**Female.** Length 9 lines.—Black, the face thickly covered with short black pubescence, the base of the clypeus produced in the middle, and on each side having also a small shining tubercle; below, the produced portion of the clypeus is deeply concave, its anterior margin transverse; mandibles porrect, tridentate at their apex. Thorax, the disk, metathorax and basal segment of the abdomen above densely covered with rich fulvous pubescence; wings subhyaline, their apical margins having a fuscous cloud, yellowish towards the base, the nervures ferruginous; the legs and apical segments of the abdomen covered with black pubescence, on the latter it is very short and sparing; the pollen-brush black.

*Hab.* Silhet; Northern China. (Coll. R. Fortune.)

102. **Megachile carbonaria**, n. s.

**Male.** Length 5½ lines.—Black and shining, the abdomen having in some lights a purple metallic iridescence; the face below the insertion of the antennæ densely covered with bright golden pubescence; wings purple-black, sides of the metathorax covered with black pubescence; disk of the thorax and the abdomen above naked, the apical segment has its margin notched in the middle.

*Hab.* Northern India. (Coll. W. W. Saunders, Esq.)

103. **Megachile cephalotes**, n. s. B.M.

**Female.** Length 4½–5 lines.—Black, head subquadrate, rugose; the vertex as well as the disk of the thorax is roughly sculptured transversely; on each side of the face a little white pubescence; the sides of the metathorax covered with white pubescence; wings subfuscous, hyaline towards their base; the legs above have a short white pubescence. Abdomen slightly metallic, the basal margins of the segments much depressed and having bands of white pubescence more or less interrupted, those on the apical segments usually obliterated; the sides of the basal segment have a square white patch; beneath, the pollen-brush is white.
Male.—Closely resembling the female, the coxae armed with short teeth, the anterior tarsi simple, rufo-testaceous; the margin of the apical segment of the abdomen notched in the middle.

Hab. Northern India.

104. *Megachile albibrons*, n. s. B.M.

Female. Length 6 lines.—Black, the face densely covered with white pubescence, the cheeks thinly covered with the same. Thorax, the sides covered with white pubescence, the apical half of the wings dark fuscous, the basal half subhyaline; the anterior legs have a fuscous pubescence intermixed with a few white hairs; the intermediate and posterior legs have a thin white pubescence, the tarsi beneath fuscous, the claws ferruginous, their tips black. Abdomen slightly metallic, on each side of the basal segment is a square patch of white pubescence, and the following segments have on each side an oblong patch pointed within; sometimes the bands are continuous on the fourth and fifth segments; the pollen-brush is snow-white.

Male.—Closely resembling the female; the anterior tarsi simple, rufo-testaceous; the coxae armed with short obtuse teeth; all the tarsi have a loose fringe of pale pubescence, the claws ferruginous, their tips black; the tarsi pale fulvous beneath. Abdomen elongate and slightly metallic, the segments banded with white pubescence, on the third, fourth and fifth continued beneath the abdomen; the apical segment vertical, having an elevated carina in the middle, its margin rounded and furnished with six or eight obtuse teeth.

Hab. Northern India.


Female. Length 8 lines.—Black, the face, thorax, legs and two basal segments of the abdomen densely clothed with short bright fulvous-red pubescence; the base of the clypeus marginate and having a raised carina down the centre; the wings subhyaline, yellowish, and faintly clouded at their apical margins; the tegulae and nervures pale rufo-testaceous; the four apical segments of the abdomen black; on the abdomen beneath, the pollen-brush is fulvous in the middle and black at the sides.

Hab. Northern India. (Coll. J. S. Baly, Esq.)


Male. Length 6½ lines.—Black, the face densely covered with a golden-yellow pubescence; on the cheeks and mandibles
it is very dense and ochraceous. Thorax, the anterior femora and tibiae pale rufo-testaceous, the femora behind and tibiae above fuscous, the coxae armed with short sharp spines; the tarsi slightly dilated, fringed behind with short fuscous pubescence; the intermediate tarsi have a long dense floccus of black pubescence behind; on the tarsi above it is slightly fulvous; the posterior tarsi have a pale fringe beneath; the disk of the thorax is thinly covered with pale yellow pubescence, on the metathorax it is black; wings subhyaline, their apical margins fuscous. Abdomen above naked, the apical segment notched, its margin crenulated; beneath, the pubescence is pale yellow.

_Hab._ Northern India. (Coll. W. W. Saunders, Esq.)

107. **MEGACHILE BICOLOR.** B.M.

_Apis bicolor, Fabr. Mantis._ i. 304. 66.
_Apis albiventris, Christ._ Hym. p. 171. t. 13. f. 9.
_Apis bicolor, Fabr. Ent. Syst._ ii. 335. 91.
_Anthophora bicolor, Fabr. Syst. Piez._ p. 373. 3.
_Megachile bicolor, St. Farg._ Hym. ii. 342. 15.

_Hab._ India; China.

108. **MEGACHILE SCULPTURALIS, n. s.** B.M.

_Female._ Length 9 lines.—Black, the face above the clypeus as high as the stemmata covered with black pubescence; the clypeus ruggedly sculptured, truncate in front; its anterior margin transverse, the mandibles stout and armed with two teeth, the apical one long and acute. The thorax, legs and basal segment of the abdomen covered with fulvous pubescence; wings fusco-hyaline, much clearer and yellowish towards the base, nervures ferruginous. Abdomen black, with a blue tinge, each segment having a transverse arched depression, the second and third segments covered with large deep punctures; beneath, the pollen-brush is fulvous towards the base, and red-brown towards the apex.

_Hab._ North China. (Coll. R. Fortune.)

109. **MEGACHILE FERVIDA, n. s.** B.M.

_Female._ Length 7½ lines.—Black, the pubescence on the clypeus fuscous, at the sides and above which as high as the anterior stemma it is pale fulvous; mandibles broad at their apex and armed with four stout teeth. Thorax, the sides covered with pale fulvous pubescence; wings fuscous, subhyaline at their base, nervures ferruginous; the pubescence on the anterior and intermediate legs is black, that on the intermediate tarsi
is fulvous; all the tarsi fulvous beneath, the posterior legs clothed with bright fulvous pubescence, as well as the abdomen above; the latter has a little of a much lighter colour on each side of the basal segment; beneath, the pollen-brush is of a golden-yellow.

Hab. Hong Kong.

110. *Megachile thoracica*, n. s.

Female. Length 5 lines.—Black, the pubescence on the face black, the cheeks coarsely punctured. Thorax coarsely rugose, the metathorax covered with snow-white pubescence, a tuft of the same colour on each side of the basal segment; wings dark fuscous, having a purple tinge, the extreme base hyaline; the abdomen above has a blue metallic tinge; beneath, the pollen-brush is of a yellowish white, on the two apical segments it is black.

Obs. The pubescence on the thorax beneath as well as that of the abdomen, under a moderate magnifying power, will be found to have each individual hair thickest at its apex.

Hab. Java. (Coll. F. Smith.)

111. *Megachile opposita*.

Female. Length 6½ lines.—Black, the face, cheeks, and disk of the thorax covered with short bright fulvous pubescence; the anterior legs beneath have also a fulvous pubescence, above it is black; on the metathorax, thorax beneath, legs and abdomen it is black; the claws ferruginous, their tips black; wings dark fuscous, their apical margins palest.

Hab. Java. (Coll. W. W. Saunders, Esq.)

112. *Megachile atrata*, n. s.

Female. Length 7–8 lines.—Entirely of a deep black, the mandibles porrect, very broad at their apex and armed with four teeth, when closed the teeth of each mandible fit into the spaces between the opposite ones; exteriorly the mandibles are somewhat rounded and project in a line with the face of the clypeus; the wings fusco-hyaline, and having a purple reflection, the nerves black; the pollen-brush beneath the abdomen has a slight reddish tinge in the middle.

Obs. The wings are sometimes yellow with a fuscous margin.

Hab. Philippine Islands.
113. Megachile laticeps, n.s.

Male. Length 4 lines.—Black, the head wider than the thorax, the face, sides of the thorax and the basal segment of the abdomen covered with a golden-yellow pubescence, the cheeks covered with long pale yellow pubescence; the wings subhyaline, faintly clouded at their apex; the anterior tarsi simple, the coxae unarmed, the anterior and intermediate tarsi behind, and the posterior pair before, fringed with long pale pubescence; all the tarsi pale fulvous beneath. The apical margins of the segments of the abdomen have laterally a little pale pubescence, the apical segment notched in the middle.

Hab. Philippine Islands.

114. Megachile ornata, n.s.

Female. Length 8 lines.—Black, on each side of the face is a little black pubescence, and in front of the insertion of the antennæ an elevation extending to the base of the clypeus, which from thence descends obliquely to its anterior margin, which is transverse. Thorax, the sides have a little cinereous pubescence, the legs rugose above, and having a thinly scattered stiff black pubescence, the tarsi fulvous beneath; wings subhyaline, and having a fuscous cloud at their apical margins. The four basal segments of the abdomen have a black pubescence, the apical margin of the fourth has a narrow fulvous fascia, and the fifth segment is covered with pale yellow pubescence, the sixth having a few scattered pale hairs; on each side of the second segment is a small spot of fulvous pubescence; the pollen-brush bright fulvous-red.

Hab. ——? (Coll. J. S. Baly, Esq.)

115. Megachile flavitarsata, n.s.

Male. Length 5–6 lines.—Black, the face densely covered with pubescence of a bright golden-yellow colour; the flagellum fulvo-testaceous beneath; the anterior legs pale rufo-testaceous, the extreme apex of the femora and base of the tibiae above fuscous, the tarsi pale yellow, broadly dilated, gradually decreasing in width from the base to the claw-joint; the tarsi have a thick fringe behind, which is bright yellow on the basal segment, and white on the following ones, its margin being yellow; the coxae armed with stout teeth; the intermediate and posterior legs rufo-testaceous, their tarsi flavo-testaceous, fringed with long pale hairs and covered with bright golden-yellow pubescence. Abdomen, the two basal segments have a thin pale fulvous pubescence, on the following it is short and black; the apical margins of the segments have a narrow pale fascia; the apical mar-
gin shagreened and notched in the middle, and having in the
centre a deep depression.
_Hab._ St. Vincent's. (Coll. F. Smith.)

116. _MEGACHILE LUCTIFERA._
_Megachile luctifera, Spin. Ann. Soc. Ent. Fr. xi. 142. 92._
_Hab._ Cayenne.

117. _MEGACHILE NIGRIPENNIS._
_Megachile nigripennis, Spin. Ann. Soc. Ent. Fr. xi. 143. 93._
_Hab._ Cayenne.

118. _MEGACHILE CONICA._
_Megachile conica, Spin. Ann. Soc. Ent. Fr. xi. 144. 94._
_Hab._ Cayenne.

119. _MEGACHILE POEYI._
_Hab._ Cuba.

120. _MEGACHILE SAULCYI._
_Megachile Sauleyi, Guér. Icon. R. Anim. p. 450._
_Hab._ Chili.

121. _MEGACHILE BINOTATA._
_Megachile binotata, Guér. Icon. R. Anim. p. 450._
_Hab._ Isle of St. Thomas. (Coll. F. Smith.)

122. _MEGACHILE HYPOCRITA, n. s._

_B.M._

_Female._ Length 6 lines.—Black, the face closely punctured,
the vertex smooth and shining, at the sides of the clypeus and
at the insertion of the antennæ a little griseous pubescence; the
mandibles broad at the apex, which is armed with two or three
very short blunt teeth; on the sides of the thorax and on the
legs the pubescence is fuscous; before and behind the tegulae
and on each side of the metathorax a little white pubescence;
all the tarsi have dark rufo-fuscous pubescence beneath, above
it is dense and dark fuscous, the basal joint of the posterior
tarsi broadly dilated and subconcave above; the wings dark
fuscous, the apical margins palest. Abdomen subtriangular,
acute at the apex, and having a slight metallic hue; on each side
of the basal segment a tuft of white pubescence; beneath, the pollen-brush is yellowish white.

Obs. The unique specimen described is probably worn by exposure, the upper surface being nearly without pubescence, and the wings are worn at the edges; in general aspect it appears to belong to another genus, but is a true *Megachile*.  

*Hab.* Para. (Coll. H. W. Bates, Esq.)

123. MEGACHILE XANTHURA.


*Hab.* Para.

124. MEGACHILE SIMILLIMA, n. s. B.M.

Female. Length 3 1/2 lines.—Black, on each side of the face a line of snow-white pubescence, the cheeks and sides of the thorax have a thin hoary pubescence; a line of short white pubescence in front of the tegulae, sometimes traversing their margin and passing along the base of the scutellum, usually more or less interrupted; the wings subhyaline, their nervures black; legs sometimes dark rufo-testaceous, covered with a short cinereous pubescence. Abdomen short and nearly triangular, the apical margins having a narrow white marginal fascia; beneath, the pollen-brush is yellowish white.

Obs. This species very closely resembles the European species *M. argentata*.  

*Hab.* Para. (Coll. H. W. Bates, Esq.)

125. MEGACHILE DENTICULATA. B.M.

Male. Length 4 lines.—Black, the face covered with white pubescence, the clypeus naked, the cheeks have a long beard of white pubescence; the sides of the thorax are clothed and the legs fringed with pubescence of the same colour; the tarsi elongate, the apical joints ferruginous, the calcaria testaceous; the wings fulvo-hyaline, the tegulae and nervures rufo-testaceous. Abdomen flat, the segments banded with white pubescence; the apical segment clothed with similar pubescence, its margin irregularly denticulate; beneath, the marginal bands are continued on the second, third and fourth segments.  

*Hab.* Brazil; Rio Tapajoz. (Coll. H. W. Bates, Esq.)

126. MEGACHILE EXALTATA. B.M.

Male. Length 3 1/2 lines.—Black, head large, wider than the thorax, the face densely covered with bright pale yellow pubes-
cence, that on the cheeks is long, dense and white. Thorax strongly punctured; wings hyaline, a fuscous cloud occupies the marginal cell and traverses the apical margins; the tegulae testaceous, the nervures ferruginous; legs red, the intermediate and posterior tarsi black, the claws red. Abdomen short and obtuse at the apex; on each side the margins have a short fringe of white pubescence, very narrow, but entire on the fifth; the apical margin entire, the third, fourth and fifth bands continued beneath.

Hab. Brazil; Rio Tapajoz. (Coll. H. W. Bates, Esq.)

127. Megachile Læta.

Female. Length 6 lines.—Black, the face and the mandibles exteriorly covered with short pale ochraceous pubescence, that on the cheeks and thorax beneath is of the same colour; in front of the anterior stemma a tuft of black pubescence. Thorax, the disk delicately punctured, shining; the scutellum highly polished and somewhat elevated, the sides of the metathorax covered with golden-yellow pubescence; wings subhyaline; the legs red, the basal joint of the posterior tarsi broad and flat, equal in size to the posterior tibiae. Abdomen short and broad; the basal segment covered with golden-yellow pubescence, and the margins of the segment having bands of the same colour; beneath, densely covered with bright fulvous pubescence.

Hab. Brazil; Rio Tapajoz. (Coll. H. W. Bates, Esq.)

128. Megachile nudiventris.

Female. Length 6—6½ lines.—Black, the face has a sparing short black pubescence, and a mixture of griseous hairs at the sides of the clypeus, in the middle of the anterior margin of the clypeus is a small notch, the antennæ beneath fulvous; the pubescence on the disk of the thorax anteriorly is black, posteriorly and at the sides of the metathorax it is griseous; the tarsi beneath covered with bright fulvous pubescence, the legs otherwise have a short scattered griseous pubescence, slightly fuscous on the anterior legs in front, the calcaria pale testaceous; the basal segment of the abdomen covered with griseous pubescence, beyond which it is naked and has an obscure metallic tinge; beneath, the pollen-brush is nearly white.

Hab. Brazil. (Coll. W. W. Saunders, Esq.)

129. Megachile susurrans.

Hab. St. Paul’s, Brazil. (Coll. W. W. Saunders, Esq.)
130. **Megachile villosa.**

*Apis villosa, Fabr. Ent. Syst. ii. 336. 94.*

*Hab.* India?

131. **Megachile curvipes, n. s.**

Male. Length 5¼ lines.—Black, the face densely clothed with bright golden-yellow pubescence, at the base of the clypeus intermixed with black hairs; the flagellum fulvous beneath; the cheeks beneath have a marginal line of white pubescence. Thorax, the disk sparingly covered with short fulvous pubescence, at the sides of the metathorax it is cinereous; wings fulvohyaline, the tegulae and nervures ferruginous; the anterior and intermediate legs rufo-testaceous, the anterior tarsi broadly dilated, the basal joint produced at the apex, forming a rounded lobe at the extremity; the whole tarsus having a thick fringe of white pubescence, fulvous at its margin, the coxae armed with stout spines; the intermediate tarsi behind and posterior pair in front have a loose fringe of long white pubescence, the posterior femora have a short tooth about the middle beneath, the tibia being arcuate; the basal segment of the abdomen covered with fulvous pubescence, and the three following segments fringed with the same; the apical segment has a deep depression in the middle, its margin being notched.

*Hab.* Brazil. (Coll. W. W. Saunders, Esq.)

132. **Megachile rubricata, n. s.**

Female. Length 6 lines.—Black, the sides of the face below the insertion of the antennæ covered with griseous pubescence, above the antennæ as high as the anterior stemma it is fulvous, as well as on the margin of the vertex; the scape of the antennæ black, the flagellum red, dusky above. Thorax, the pubescence on the disk fulvous, palest on the sides and beneath; wings flavo-hyaline, tegulae and nervures pale rufo-testaceous; the legs of the same colour; the coxae, trochanters and base of the femora black, thinly covered with pale fulvous pubescence, the anterior and intermediate tarsi thickly covered above; the basal joint of the posterior tarsi broadly dilated. Abdomen, the sides of the basal segment and the margins of the segments fringed with pale fulvous pubescence; the pollen-brush nearly white, its apex black.

*Hab.* Brazil. (Coll. F. Smith.)
133. **Megachile ruficornis**, n. s.

Female. Length 6 lines.—Black, the antennæ and mandibles red, the latter dusky at their tips; the head and disk of the thorax covered with fulvous pubescence, at the sides and beneath it is cinereous; the legs rufo-testaceous; wings hyaline, yellowish at their anterior margins, tegulae and nervures pale rufo-testaceous; all the apical margins of the abdominal segments have a narrow white fascia; beneath, the brush is very pale yellow, at its sides and at the apex intermixed with black hairs.

*Hab.* Brazil. (Coll. F. Smith.)

134. **Megachile squalens**.


*Hab.* St. Paul's, Brazil. (Coll. W. W. Saunders, Esq.)

135. **Megachile rufipennis**.

*Apis rufipennis*, Fabr. *Ent. Syst.* ii. 335. 89?

*Anthophora rufipennis*, Fabr. *Syst. Piz.* p. 373. 2?


*Hab.* St. Croix; South America.

136. **Megachile brevis**.


*Hab.* North America; Mount Pleasant, Ohio.

137. **Megachile femorata**, n. s.

Male. Length 6 lines.—Black, the face covered with long bright yellow pubescence, on the vertex it is ochraceous; antennæ subcapitate, the apical joint compressed; mandibles short, armed with three teeth at their apex, and with a stout tooth at their base beneath. Thorax, the disk covered with yellow pubescence, which in recent specimens is bright, but in most examples dull ochraceous; on the sides the pubescence is paler; wings hyaline, their apical margins faintly clouded; the anterior legs pale rufo-testaceous, their tarsi white, densely fringed with long white pubescence, the femora have a similar fringe at their base behind; the intermediate and posterior femora incrassate; the basal joint of the intermediate tarsi very much thickened, rounded, and polished behind; the intermediate and posterior tibiae arcuate, the apical segment of the abdomen having a ragged notch in the middle, on each side of which the margin has several small incisions.

*Hab.* United States.
138. **Megachile morio, n. s.**

Female. Length 6 lines.—Black, the pubescence entirely black, very dense on the face, sides of the metathorax, and basal segment of the abdomen; the following segments have a marginal fringe of the same colour; the wings fusco-hyaline, the anterior tibiae punctured, not rugose.

*Obs.* This species very closely resembles *M. xylocopoides*, but appears on comparison to be distinct; from the latter it differs in having the vertex more deeply emarginate, the thorax more closely punctured, the scutellum nearly covered with pubescence and rounded behind, the anterior legs not rugose, and the abdomen much more pubescent.

*Hab.* United States. (Coll. E. Doubleday, Esq.)

139. **Megachile xylocopoides, n. s.**

Female. Length 6 lines.—Black, the pubescence entirely black, the clypeus, vertex, disk of the thorax, and abdomen above naked, except a little at the sides of the basal segment; the scutellum slightly produced and somewhat pointed in the middle of its posterior margin, and being, as well as the disk, covered with large punctures, which are distant; the anterior tibiae rugose above; wings very dark fuscous, having a brilliant violet iridescence; the abdomen above has a metallic reflection; beneath, the pollen-brush black.

Male. Length 5 lines.—Black, the face covered with pale pubescence, towards the anterior margin of the clypeus it is white, the cheeks fringed with long white hair; the antennæ capitate, nigro-piceous beneath. Thorax, the metathorax at the sides has some cinereous pubescence; wings dark fuscous, and having a violet reflection, towards their base subhyaline; the anterior legs testaceous, the apex of the femora and the tibiae above rufo-fuscous, their tarsi dilated and having beneath a thick fringe of white pubescence, its border narrowly black; the first joint of the tarsi has a fringe of brown pubescence in front; the coxae armed with stout teeth; the intermediate and posterior tarsi beneath covered with reddish-brown pubescence; the intermediate tarsi elongate, the posterior pair stout, particularly the basal joint, the tibiae slightly curved.

*Hab.* United States. (Coll. E. Doubleday, Esq.)

140. **Megachile pollicaris.**


*Hab.* North America.
141. Megachile pugnata. B.M.
Hab. North America.

142. Megachile pruinata, n. s.
Female. Length 6 lines.—Black, the face on each side covered with snow-white pubescence; the three basal joints of the antennae black, the rest of the joints testaceous beneath; the sides of the thorax covered with snow-white pubescence, a small tuft of the same colour behind the tegulae; wings subhyaline, their apical margins fuscous, nervures black; the legs have a thin snow-white pubescence, that on the tarsi beneath dark brown; the claws ferruginous, their tips black; the calcaria pale testaceous. Abdomen obconic, the four basal segments have a deep transverse depression; the sides of the basal segment and the margins of all the segments laterally fringed with white pubescence; the apical segment covered with short hoary pile; the whole abdomen has a scattered short black pubescence; beneath, the pollen-brush white.
Hab. United States. (Coll. F. Smith.)

143. Megachile lanuginosa, n. s. B.M.
Female. Length 4½ lines.—Black, on each side of the face is a little snow-white pubescence, on the upper part of the head it is very sparing and black, as it is also on the disk of the thorax; on the cheeks, sides of the metathorax, prothorax and basal segment of the abdomen it is white, and has a downy appearance; the rest of the abdominal segments have a lateral short white marginal fringe; wings subhyaline, their apical margins faintly clouded; the brush on the abdomen beneath pale yellowish white.
Male. Length 4 lines.—Head wider than the thorax, anterior legs simple, the claw-joints ferruginous, the margin of the apical segment jagged irregularly. The specimen in bad condition.
Hab. St. John's Bluff, East Florida. (Coll. E. Doubleday.)

144. Megachile bidentata, n. s. B.M.
Male. Length 5 lines.—Black, the face thickly covered with a bright pale ochraceous pubescence, that on the thorax is of a similar colour; the wings subhyaline, slightly clouded at their apical margins, the nervures ferruginous; the anterior legs have their coxae unarmed and their tarsi simple; the femora beneath fringed with long pale pubescence, that on the tarsi beneath is pale fulvous. Abdomen, the apical margins of the segments have a fascia of pale pubescence, and the fifth and sixth densely
Hymenoptera.

Covered with a short pubescence of the same colour; the margin of the sixth segment armed with two stout teeth.

Obs. This species was received in company with M. acuta, of which it is probably the male.

Hab. Mexico.

145. Megachile scrobiculata, n. s.

Male. Length 4½ lines.—Black, the clypeus covered with white pubescence, above which it is griseous and very sparing on the vertex; the mandibles have a short white fringe beneath, at their base is a stout spine, the cheeks fringed with white; the pubescence on the thorax griseous, very sparing on the disk; the anterior legs have their tibiae pale testaceous in front, their femora slightly so, their tarsi dilated, the first joint at its apex produced into a projecting lobe, rounded at its apex; this lobe is grooved or hollowed out in front; the tarsi beneath clothed with pale yellow hairs, the coxae armed with long spines; the intermediate and posterior tarsi rufo-testaceous; the wings subhyaline, their nervures ferruginous; the apical margins of the segments have narrow white marginal fasciae, the apical segment slightly notched in the middle and sub serrate on each side.

Hab. North America; Mount Pleasant, Ohio.

146. Megachile parallela, n. s.

Male. Length 5½ lines.—Black, the clypeus and cheeks densely covered with white pubescence, on the upper part of the face and on the disk of the thorax it is slightly ochraceous; on the sides, beneath, and on the legs it is white, the anterior femora are thickly fringed; wings fusco-hyaline, their nervures black; the margins of all the segments and the sides of the basal one fringed with white pubescence; the base deeply emarginate; the margin of the apical segment has a central rounded incision, forming two incurving teeth; beneath, the margin of the venter has on each side two short teeth, directed inwards, between the inner ones a raised prominence.

Obs. This species is distinguished by its broad parallel form, the abdomen, head and thorax being of the same width.

Hab. Georgia. (Coll. F. Smith.)

147. Megachile melanophea, n. s. B.M.

Female. Length 6 lines.—Black, the face, thorax above and on the sides, and the two basal segments of the abdomen covered with ashy-grey pubescence; in recent specimens it has
an ochraceous hue; the legs and apical segments of the abdomen have a covering of black pubescence; the tarsi beneath fulvous; the wings hyaline, faintly clouded at their apical margins. The brush on the abdomen beneath is of a blackish brown.

Male.—Has the general appearance of the female, its pubescence is longer, that on the face being very dense and of a pale yellow colour; the apical joint of the antennae dilated and compressed: the anterior legs pale testaceous; the apex of the femora and the tibiae above black, the tarsi dilated and fringed beneath with pale hairs; the intermediate tarsi have a yellow pubescence above, and are, as well as the posterior pair, fulvous beneath, their claws ferruginous; the apical segment deeply notched, and on each side denticulate; beneath the abdomen on the ventral segment are two obtuse spines, and a little before them a central acute one.


148. **Megachile acuta**, n. s. B.M.

Female. Length 6 lines.—Black, the entire pubescence above of a pale yellow, in some specimens fading to grey; the legs have a short pubescence of the same colour, beneath the tarsi it is fulvous; wings hyaline, faintly clouded at their apical margins. Abdomen gradually tapering from the base to the apex; the base deeply emarginate, the second, third and fourth segments have a transverse arched depression; beneath, the pollen-brush bright fulvous.

Hab. North America; Trenton Falls; New York (E. Doubleday, Esq.); Mexico.

149. **Megachile vidua**, n. s. B.M.


Female. Length 6 lines.—Black, the face covered with pale ochraceous pubescence, brightest towards the margin of the clypeus, on the vertex and disk of the thorax it is dark fuscous, on the sides of the thorax, beneath, on the legs above and at the sides of the basal segment of the abdomen it is of a very pale yellow, being nearly white at the sides of the metathorax, and short and sparing on the legs; wings subhyaline, the apical margins faintly clouded; the tarsi fulvous beneath, on the anterior and intermediate pairs it is of a bright golden-yellow above, the
claws ferruginous. Abdomen short, broad and slightly convex above, the segments have narrow pale marginal fasciae, usually much interrupted on the three basal segments; beneath, the pollen-brush is of a golden-yellow.

*Obs.* This insect is probably the female of *M. frigida*, having been captured in various and the same localities as that species.


150. **Megachile frigida, n. s.**

**B.M.**

Male. Length 5—6 lines.—Black, the face densely clothed with bright yellow pubescence, the apical joint dilated and compressed; the disk of the thorax thinly clothed with ochraceous pubescence, that on the sides and also on the sides of the basal segments of the abdomen is pale ochraceous; the anterior legs pale testaceous, the apex of the femora and the tibiae above, except its apex, rufo-fuscous; the tarsi broadly dilated, and having beneath a dense fringe of yellowish-white pubescence; the first joint of the tarsi has above a narrow fuscous fringe; the femora beneath have a long loose fringe of nearly white pubescence; the intermediate tarsis covered with pale yellow pubescence, and having a long loose fringe behind of the same colour; the posterior tibiae curved. The apical segments of the abdomen curved beneath, the margin of the apical segment serrated and deeply notched in the middle.

*Obs.* This species very closely resembles the European one, *M. maritima*, from which it differs in wanting the black spot on the second joint of the anterior tarsi beneath, and in not having the mandibles yellow on their inferior margins; the posterior femora are also much less thickened and the posterior tarsi considerably longer.

*Hab.* United States (Coll. E. Doubleday); Nova Scotia (Coll. Lieut. Redman); Arctic America (Coll. Sir John Richardson); Canada (G. Barnston, Esq.).

151. **Megachile bucephala, n. s.**

**B.M.**

Female. Length 6½ lines.—Black and elongate, head quadrat, the face having on each side a little griseous pubescence; the anterior margin of the clypeus produced in the middle, and having on each side a short blunt tooth; the mandibles very stout, roughly sculptured above, and deeply channeled towards their apex, which is armed with two teeth, the apical one long
and acute. Thorax, the disk thinly sprinkled with fuscous pubescence, that on its sides is griseous; the wings fuscous towards their anterior margins, the nervures dark fuscous; the legs have a thin cinereous pubescence, that on the tarsi is bright fulvous-yellow. Abdomen, the sides of the basal segment and apical margins of all the segments fringed with white pubescence, usually more or less interrupted, particularly those on the basal segments; beneath, the pollen-brush pale yellow.

Hab. United States. (Coll. E. Doubleday.)
EXPLANATION OF THE PLATES.

PLATE I.

The letters indicate the same parts in all the figures; they are as follows:—a. the mentum; b. the labium; c. the labial palpi; d. the paraglossæ; e. the maxilla; f. the lobe of the maxilla; g. the maxillary palpi.

Fig.
1. Tongue of *Colletes*.
2. Maxilla of *Colletes*.
3. Wing of *Colletes*.
4. Tongue of *Paracolletes*.
5. Maxilla of *Paracolletes*.
6. Wing of *Paracolletes*.
7. Tongue of *Ptiloglossa*.
8. Maxilla of *Ptiloglossa*.
9. Wing of *Ptiloglossa*.
10. Labrum of *Ptiloglossa*.
11. Tongue of *Lamprocolletes*.
12. Posterior tibia of *Lamprocolletes*.
13. Maxilla of *Lamprocolletes*.

Fig.
15. Spines or calcariæ of tibiae of *Lamprocolletes*.
16. Tongue of *Leioproctus*.
17. Maxilla of *Leioproctus*.
18. Wing of *Leioproctus*.
19. Tongue of *Dasycolletes*.
20. Maxilla of *Dasycolletes*.
21. Wing of *Prosopis*.—Div. 1.
22. Wing of *Prosopis*.—Div. 2.
23. Wing of *Prosopis*.—Div. 3.

PLATE II.

1. Tongue of *Euryglossa*.
2. Maxilla of *Euryglossa*.
3. Labrum of *Euryglossa*.
4. Wing of *Euryglossa*.
5. Tongue of *Hyleoides*.
6. Maxilla of *Hyleoides*.
7. Anterior leg of *Hyleoides*.
8. Wing of *Hyleoides*.
9. Tongue of *Meroglossa*.
10. Maxilla of *Meroglossa*.
11. Antenna of *Meroglossa*.
12. Wing of *Meroglossa*.
13. Maxilla of *Halictus*.
14. Tongue of *Halictus*.
15. Wing of *Halictus*.
16. Labrum of ♀ of *Halictus*.
17. Labrum of ♂ of *Halictus*.
18. Tongue of *Temnosoma*.
19. Maxilla of *Temnosoma*.
20. Wing of *Temnosoma*.
PLATE III.

1. Tongue of Parasphecodes.
3. Wing of Parasphecodes.
4. Labrum of Parasphecodes.
5. Tongue of Sphecodes.
7. Wing of Sphecodes.
8. Tongue of Oxystoglossa.
10. Wing of Augochlora.
11. Maxilla of Megalopta.
12. Tongue of Megalopta.
13. Labrum of Megalopta.
15. Wing of Megalopta.

PLATE IV.

1. Tongue of Agapostemon.
3. Labrum of Agapostemon.
4. Labrum of Agapostemon.
5. Tongue of Nomia.
6. Wing of Nomia.
7. Tongue of Anthoglossa.
8. Maxilla of Anthoglossa.
9. Wing of Anthoglossa.
10. Wing of Cilissa.
11. Mandible of Callomelitta.
12. Tongue of Callomelitta.
13. Wing of Callomelitta.
15. Antenna of Callomelitta.
16. Tongue of Scrapter.
17. Maxilla of Scrapter.
18. Wing of Scrapter.
19. Tongue of Megaciliissa.
21. Wing of Megaciliissa.

PLATE V.

1. Tongue of Andrena labialis.
3. Wing of Andrena labialis.
4. Tongue of Macropis.
5. Maxilla of Macropis.
6. Wing of Macropis.
7. Tongue of Panurgus.
8. Maxilla of Panurgus.
9. Wing of Panurgus.
10. Tongue of Perdita.
11. Maxilla of Perdita.
12. Labrum of Perdita.
14. Wing of Perdita.
15. Tongue of Calliopsis.
17. Antenna of Calliopsis.
18. Labrum of Calliopsis.
19. Wing of Calliopsis.
20. Tongue of Macrotera.
22. Wing of Macrotera.
EXPLANATION OF THE PLATES.

PLATE VI.

Fig. 1. Tongue of Rophites 5-spinosus.
2. Maxilla of Rophites 5-spinosus.
3. Wing of Rophites 5-spinosus.
4. Tongue of Anthocopa papa veris.
5. Maxilla of Anthocopa papa veris.
6. Wing of Anthocopa papa veris.
7. Tongue of Systropha spiralis.
8. Maxilla of Systropha spiralis.
10. Wing of Systropha spiralis.

Fig. 11. Tongue of Ptilothrix plumosus.
12. Maxilla of Ptilothrix plumosus.
13. Labrum of Ptilothrix plumosus.
14. Wing of Ptilothrix plumosus.
15. Maxillary palpus of Lithurgus cornutus.
16. Labial palpus of Lithurgus cornutus.
17. Tongue of Megachile maritima.
18. Maxilla of Megachile maritima.
19. Wing of Megachile maritima.
PREFACE.

This Part contains the completion of the list of species belonging to the Family Apidae, at the same time indicating those at present contained in the Collection of the British Museum.

It has been prepared by Mr. Frederick Smith, who has taken every care in the determination of the species, the references to the synonyma, and in the descriptions of such species as hitherto are apparently undescribed.

The remaining Families will follow as soon as they can be completed.

JOHN EDWARD GRAY.

October 1854.
CATALOGUE

OF

HYMENOPTERA.

Div. II. ACULEATA.

Tribe 4. ANTHOPHILA.

Fam. 2. APIDÆ.

Subfam. 2. DASYGASTRÆ.

Genus 14. ANTHIDIUM.

Apis, pt., Linn. Syst. Nat. i. 953, 1766.

1. ANTHIDIUM MANICATUM. B.M.

Apis manicata, Linn. Faun. Suec. 1701; Syst. Nat. i. 958. 28, ♂.
Fabr. Syst. Ent. 384. 35; Ent. Syst. ii. 330. 73.
Schäff. Icon. Ins. t. 32. f. 11, 12.
Rossi, Faun. Etrus. ii. 103. no. 914.
Christ. Hym. p. 133. t. 9. f. 5.
Don. Brit. Ins. xiv. 57. t. 489.
Apicis dentata ♂, pervigil ♀, Harris, Expos. p. 161. t. 49. f. 1 ♂, 2 ♀.
*Curtis, Brit. Ent. iv. Hym. t. 61.*  
*St. Farg. Hym. ii. 355. 4.*  
*Smith, Zool. iv. 1452. 1.*  
Apis maculata, *Fabr. Ent. Syst. ii. 332. 77, var. ♀.*  

**Hab.** Britain; France; Italy; Switzerland; Germany; Denmark; Sweden; Finland.

2. **Anthidium diadema.**  
*St. Farg. Hym. ii. 363. 10.*

**Hab.** France; Algeria.

3. **Anthidium florentinum.**  
Apis florentina, *Fabr. Ent. Syst. ii. 331. 74.*  
*Oliv. Ency. Méth. iv. 73.*  
*St. Farg. Hym. ii. 359. 7. p. 13. f. 4, 5.*  
**Hab.** France; Italy; Germany; Albania.

4. **Anthidium annulatum.**  

**Hab.** France (Forest of St. Germain).

5. **Anthidium contractum.**  
*St. Farg. Hym. ii. 375. 21.*

**Hab.** France; Dalmatia; Africa.

6. **Anthidium cingulatum.**  
pl. 1. f. 4.  
*St. Farg. Hym. ii. 378. 21.*  
*Lucas, Expl. Sc. Algér. iii. 201. 129.*

**Hab.** France; Montpellier; Barbary; Algeria.
7. Anthidium flavilabre.
*St. Farg. Hym.* 372. 18.
*Hab.* France.

8. Anthidium fuscipenne.
*Hab.* France.

*St. Farg. Hym.* ii. 382. 29.
*Hab.* France; Dalmatia; Spain.

10. Anthidium lituratum.
*St. Farg. Hym.* ii. 371. 17.
Megachile florentina (minor), *Spin. Ins. Lig.* fasc. 1. 138.
*Hab.* France; Germany; Albania.

11. Anthidium luteipes.
*Hab.* France.

*Hab.* France.

*Spin. Ins. Lig.* fasc. 1. p. 137.
*St. Farg. Hym.* ii. 391. 37.
*Hab.* France; Switzerland.
14. **ANTHIDIUM PUNCTATUM.**

  * St. Farg. Hym.* ii. 364. 11.

*Hab.* France.

15. **ANTHIDIUM PARVULUM.**


*Hab.* France.

16. **ANTHIDIUM PROVENCIALE.**


*Hab.* Provence; Spain.

17. **ANTHIDIUM QUADRIDENTATUM.**


*Hab.* France.

18. **ANTHIDIUM STRIGATUM.**


  * St. Farg. Hym.* ii. 373. 19.

*Hab.* France; Germany.

19. **ANTHIDIUM STICTICUM.**


  * St. Farg. Hym.* ii. 352. 2.


*Hab.* France; Italy; Algeria.

20. **ANTHIDIUM SEPTEMDENTATUM.**


  * St. Farg. Hym.* ii. 353. 3.

*Hab.* France; Italy.
21. **ANTHIDIUM SEPTEMSPINOSUM.**

*Anthidium septemspinosum, St. Farg. Hym. ii. 359. 6♂.

_Hab._ France.

22. **ANTHIDIUM NIGRICEPS.**

_B.M._

Female. Length 4½ lines.—Black, the vertex has a yellow dot on each side behind the eyes, and as well as the disk of the thorax has a dusky ferruginous pubescence; the cheeks, thorax beneath and its sides, as well as the metathorax, covered with griseous pubescence; that on the face and the tarsi is of a pale glittering yellowish-white; on the tarsi beneath it is fusco-ferruginous; wings subhyaline, faintly clouded at their apical margins, also a fuscous streak in a line with the stigma across the marginal cell. Abdomen, a small lunate spot on each side of the basal segment, a lateral oblong stripe on the second broadest within, and the three following have on each side an ovate macula; the apical segment notched laterally, and its margin crenulated.

_Hab._ Polish Ukraine.

23. **ANTHIDIUM TÆNIATUM.**


_Hab._ Spain.

24. **ANTHIDIUM SINUATUM.**

*Anthidium sinuatum, St. Farg. Hym. ii. 374. 20.

_Hab._ Spain.

25. **ANTHIDIUM SCUTELLARE.**


_St. Farg. Hym._ ii. 389. 35.

_Hab._ Spain.

26. **ANTHIDIUM RUBIGINOSUM.**

*Anthidium rubiginosum, St. Farg. Hym. ii. 396. 41.

_Hab._ Spain; Arabia.

27. **ANTHIDIUM LATREILLII.**

*Anthidium Latreillii, St. Farg. Hym. ii. 393. 39.

_Hab._ Spain.
28. Anthidium ferrugineum.

Apis ferruginea, Oliv. Ency. Méth. iv. 74, 75 ♀.

Hab. Spain; Arabia.


Hab. Spain.

30. Anthidium coronatum.

Female. Length 4 lines.—Black, the clypeus, inner orbits of the eyes nearly reaching their vertex, a spot in front of the anterior stemma, the mandibles and outer orbits of the eyes yellow, the latter broadly so towards the vertex; the three basal joints of the flagellum and apex of the scape ferruginous. Thorax, the margin of the scutellum, the tegulae, a line in front, the collar, sometimes interrupted, the tubercles and a spot beneath them yellow; the disk sometimes encircled with yellow; the legs yellow; the coxae, trochanters and base of the femora beneath fusco-ferruginous, the two former have their tips ferruginous. Abdomen, a transverse yellow band at the basal margin of each segment, the first interrupted and acuminate, the second very slightly interrupted, the three following slightly emarginate on their inferior margin, the sixth segment entirely yellow; beneath densely clothed with golden-yellow pubescence.

Hab. Albania. (In the Coll. of W. W. Saunders, Esq.)

31. Anthidium cimbiciforme.

Female. Length 7 lines.—Head yellow, the anterior margin of the clypeus crenulated, the crenulation, labrum and teeth of the mandibles black, the latter has its margins stained with ferruginous; the front has an oblong black patch extending from the base of the clypeus a little beyond the posterior stemmata, in front of the anterior stemma is a small circular spot and a triangular one above the clypeus yellow; the black patch gradually narrows from the insertion of the antennae to the stemmata, where it again becomes wider, enclosing them; antennae ferruginous, darkest towards their apex, the scape yellow. Thorax yellow, having a broad black line down the centre, extending to the scutellum, from which on each side a narrower line passes forwards, terminating opposite the tegulae, which are also yellow.
and have a ferruginous spot in the middle; the margin of the scutellum broadly yellow and quadrilobate; the metathorax and breast black, legs yellow, the tibiae having an oblong black stain beneath; the femora are also more or less black in front, the apical joints of the tarsi ferruginous; wings fusco-hyaline, darkest towards their anterior margins. Abdomen, each segment has a very broad yellow band, the first and second interrupted, the third, fourth and fifth notched above; beneath densely clothed with yellow pubescence.

Male.—Closely resembling the female, but the disk of the thorax is sometimes entirely black, the margins only being bordered with yellow; or having indistinct yellow or ferruginous lines, that portion of the abdomen which is black in the female is more or less ferruginous in the male; the apical segment has a single stout spine in the centre, rounded at its apex and bright ferruginous.

_Hab._ Albania.

32. ANTHIDIUM BINOMINATUM.

_Anthidium rufiventrum_, Brullé, _Expéd. Sc. Morée_, iii. 339.752. pl. 48. f. 7 (not of Latr.).

_Hab._ Morea.

33. ANTHIDIUM SULPHUREUM.

_Anthidium sulphureum_, St. Farg. _Hym._ ii. 367. 13 8.

_Hab._ Sicily.

34. ANTHIDIUM LATERALE.


_St._ Farg. _Hym._ ii. 400. 45.

_Hab._ Barbary.

35. ANTHIDIUM FLAVUM.


_St._ Farg. _Hym._ ii. 397. 42.

_Hab._ Barbary.

36. ANTHIDIUM SUBSPINOSUM.

_Anthidium subspinosem_, Klug, _Symb. Phys._ Dec, iii. no. 2. t. 28. f. 2.

_Hab._ Syria.
37. **Anthidium melanurum**.
Anthidium melanurum, *Klug, Symb. Phys.* Dec. iii. no. 3. t. 28. f. 3.
*Hab.* Syria.

38. **Anthidium aculeatum**.
*Hab.* Syria.

39. **Anthidium auritum**.
*Hab.* Nubia (Saccahram).

40. **Anthidium alternans**.
*Hab.* Nubia (Saccahram).

41. **Anthidium cinctum**.
*Hab.* Nubia (Amboukohl).

42. **Anthidium pulchellum**.
Anthidium pulchellum, *Klug, Symb. Phys.* Dec. iii. no. 11. t. 28. f. 11.
*Hab.* Nubia (Saccahram).

43. **Anthidium thoracicum**.
*Hab.* Nubia (Saccahram).

44. **Anthidium Waltlii**.
*Hab.* Egypt.

45. **Anthidium Fischeri**.
*Hab.* Egypt.

46. **Anthidium Grohmanni**.
*Hab.* Egypt.
47. **Anthidium Siculum.**
   *Hab.* Egypt.

48. **Anthidium xanthopygum.**
   *Hab.* Arabia Felix.

49. **Anthidium tessellatum.**
   *Hab.* Arabia Felix.

50. **Anthidium helvolum.**
   Anthidium helvolum, *Klug, Symb. Phys.* Dec. iii. no.5. t.28. f.5.
   *Hab.* Arabia Felix.

51. **Anthidium posticum.**
   *Hab.* Arabia Felix.

52. **Anthidium albiventre.**
   *Hab.* Algeria?

53. **Anthidium afrum.**
   *Hab.* Algeria.

54. **Anthidium barbarum.**
   Anthidium barbarum, *St. Farg. Hym.* ii. 357. 5 ♂
   *Hab.* Algeria.

55. **Anthidium bellicosum.**
   *Hab.* Algeria.
56. Anthidium comptum.
Anthidium comptum, *St. Farg. Hym.* ii. 398. 44.
Hab. Algeria.

57. Anthidium discoidale.
St. Farg. *Hym.* ii. 397. 43.
Hab. Algeria.

58. Anthidium frontale.
Hab. Algeria.

59. Anthidium Fontainesii. B.M.
Hab. Algeria.

60. Anthidium Klugii.
Hab. Algeria.

61. Anthidium Numida.
Hab. Algeria.

62. Anthidium ornatum.
Anthidium ornatum, *St. Farg. Hym.* ii. 381. 29.
Hab. Algeria.

63. Anthidium Oraniense.
Hab. Algeria.
64. Anthidium scapulare.


Hab. Algeria.

65. Anthidium abdominale. B.M.

Thynnus abdominalis, Fabr. Ent. Syst. ii. 245. 3; Syst. Piez. p. 231. 3.

Hab. Port Natal.

66. Anthidium africanum. B.M.

Male. Length 5 lines.—Black, the clypeus and a triangular spot above, the sides of the face and a slender line along the inner orbits of the eyes above the insertion of the antennæ, not reaching their vertex, a short narrow stripe in front of the anterior stemma, and the mandibles exteriorly yellow. Thorax, a minute spot in front on the tegulae, and the margin of the scutellum, narrowly, yellow; the latter very broad and produced half-way over the basal segment of the abdomen; the wings dark fuscous and having a purple tinge; the legs and abdomen ferruginous, the latter armed at the apex with three teeth, the central tooth stout and rounded at the apex, the lateral ones curved inwards and acute.

Hab. Sierra Leone. (The Rev. D. Morgan.)

This species is very probably the male of A. bicolor; the insect which I have considered to be St. Fargeau's species merely differs slightly in the coloration of the clypeus.

67. Anthidium cordatum. B.M.

Female. Length 3½ lines.—Black, strongly and closely punctured; a minute spot on the front a little below the anterior stemma; a narrow line down the inner margin of the eyes, a similar one on the margin of the vertex, the clypeus and face on each side as high as the insertion of the antennæ, and a spot at the base of the mandibles yellow. Thorax, a spot on the tubercles, another on the tegulae, an epaulet over the tegulae, a spot at each of the lateral angles of the scutellum and the legs yellow; the legs roughly punctured; the wings fusco-hyaline, their apical margins darkest. Abdomen cordate, the sides fulvo-testaceous, each segment having an elongate ovate yellow macula, the sixth segment entirely fulvo-testaceous, and having on each side a yellow macula; beneath fulvo-testaceous, the basal margins of the segments fuscous.

Hab. Port Natal.
68. **Anthidium immaculatum.**

Female. Length 3½ lines.—Black, the face, cheeks, thorax on the sides and beneath densely clothed with griseous pubescence, on the vertex and disk of the thorax it is pale fulvous; the legs have also a thin griseous-white pubescence; the anterior and intermediate tarsi and the posterior pair beneath covered with bright fulvous pubescence, the claw-joints ferruginous. The abdomen above has a thin erect scattered pale yellow pubescence, becoming white towards the lateral margins; beneath, it is white at the sides and fulvous in the middle, the margins of all the segments narrowly testaceous.

*Hab.* The Cape of Good Hope. (In the Coll. of W. W. Saunders, Esq.)

69. **Anthidium bicolor.**

Anthidium bicolor, St. Farg. *Hym.* ii. 399. 45.

*Hab.* The Gambia.

70. **Anthidium reversum.**

Female. Length 3 lines.—Black, the clypeus, inner orbits of the eyes as high as the insertion of the antennæ, the apex of the scape in front, an uninterrupted line on the margin of the vertex broadest behind the eyes, and the mandibles, yellow; the latter are ferruginous at their apex and armed with four or five stout acute teeth; the flagellum fulvous beneath. Thorax, a broad stripe on each side, the margin of the scutellum subinterrupted in the middle, and the legs yellow; the apical joints of the tarsi and the tegulae ferruginous; the latter have a yellow spot in front; the femora fusco-ferruginous towards their base, wings subhyaline. Abdomen, the basal segment has on each side an oblong triangular macula, the following segments have a broad yellow band interrupted in the middle; the apical segment has two longitudinal yellow lines.

*Hab.* The Gambia. (Coll. F. Smith.)

71. **Anthidium truncatum.**

Female. Length 3 lines.—Black, the clypeus, a spot on each side and the mandibles exteriorly towards their base yellow, their margins and apex black or fusco-ferruginous, armed with four acute stout teeth; the intervals between them denticulate. The tibiae and tarsi yellow, the former fusco-ferruginous beneath; the wings smoky, darkest at their anterior margins; a minute yellow spot in front of the tegulae; the posterior margin of the scutellum broadly truncate. Abdomen, a broad oblong-ovate
macula on each segment laterally; the apical segment being entirely yellow, and having a central black dot.

_Hab._ The Gambia. (Coll. F. Smith.)

**72. ANTHIDIUM villosulum.**

_Male._ Length 5½ lines.—Black, the face as high as the stemmata and the cheeks densely covered with short pale yellow pubescence, the anterior margin of the clypeus fringed with the same, on the clypeus it is very sparing; the scape of the antennae in front, the clypeus, sides of the face adjoining, a minute spot above the eyes and the mandibles yellow, the latter armed with three stout black teeth at their apex. The thorax on the sides and beneath, the tibiae behind and all the tarsi above densely clothed with yellowish-white pubescence; the femora beneath, and the tarsi ferruginous; the anterior and intermediate tibiae above and the posterior pair at the base yellow, the whole having a short scattered glittering pubescence; the disk of the thorax covered with short ochraceous pubescence, the scutellum rounded behind and slightly emarginate in the middle; a minute spot on each side of the collar, and a very narrow line on the posterior margin of the scutellum, yellow; the wings subhyaline, their nervures black, except towards the insertion of the wings, where they, as well as the tegulae, are rufo-testaceous, the latter yellow at their anterior margins. The abdomen has four rows of small ovate yellow spots, the two outer rows touching the lateral margins; the sixth segment has only two central spots, from which an oblique line passes off to the lateral margins; the fifth and sixth segments are armed at their margins with a curved spine, the first pair yellow; the apical segment has two stout curved black spines; beneath, the apex ferruginous, and the lateral margins having a dense fringe of pale pubescence.

_Hab._ Africa. (The Gambia.)

**73. ANTHIDIUM coloratum.**

_Female._ Length 3½ lines.—Black, the face and cheeks clothed with long white pubescence, the vertex with fulvous; antennæ, legs and tegulae pale ferruginous; a small white spot on the vertex behind the eyes. The thorax beneath and metathorax covered with white pubescence, on the disk with fulvous; the wings slightly ferruginous towards their base. Abdomen, the basal margins of the segments have on each side an elongate white stripe emarginate posteriorly, the stripes on the fifth segment almost uniting; the sixth segment has on each side a minute tooth; the ventral scopæ golden-yellow.

_Male._ 3½ lines.—Very closely resembling the female, differing
only in having the clypeus and sides of the face white, in being more densely hairy, and in having the apical segment armed with three short teeth.

_Hab._ Chili.

74. **Anthidium bilineolatum.**

_Anthidium bilineolatum_, _Spin. Ann. Soc. Ent. Fr._ x. 141. 91 (1841).

_Hab._ Cayenne.

75. **Anthidium costatum.**

_Anthidium costatum_, _Spin. Ann. Soc. Ent. Fr._ x. 140. 90 (1841).

_Hab._ Cayenne.

76. **Anthidium divaricatum.**

_Male._ Length 4 lines.—Black, closely punctured; a narrow line traverses the outer orbits of the eyes, and passes along the margin of the vertex; a stripe along the inner orbits of the eyes, a short line at the insertion of each antenna, and the clypeus anteriorly, of a reddish-yellow; at the base of the clypeus are two black dentate spots; the mandibles reddish-yellow. Thorax, a narrow yellow line encircles the disk of the thorax, slightly interrupted on the collar and on the posterior margin of the scutellum; the tegulae rufo-testaceous, the wings fuscous, palest at their base; the hinder margin of the tubercles and a short line on the breast reddish-yellow; the tibiae and tarsi ferruginous and having a fuscous stain behind, the apex of the femora more or less ferrugious; the tarsi pubescent, having a fringe of pale hairs behind; a short yellow line on each side of the three basal segments, the fourth having a narrow interrupted line across the middle, the fifth an uninterrupted one, and the sixth entirely yellow, except its apical margin, the seventh yellow at the sides. its margin rounded and entire.

_Hab._ South America. (Coll. W. W. Saunders, Esq.)

77. **Anthidium flavo-pictum.**

_Male._ Length 3½ lines.—Flavo-testaceous, a narrow fuscous line behind the eyes; the region of the ocelli fuscous, terminating posteriorly in a line with the vertex of the eyes; the fuscous stain forms a quadrate shape before the ocelli, passing downwards to the insertion of the antennae, its inferior margin angulated in the centre; the scape yellow in front, the flagellum ferruginous beyond the third joint, black above. Thorax, the disk black, strongly punc-
tured, encircled by a reddish-yellow border, subinterrupted anteriory; the tegulae fulvous, the wings fuscous along their anterior margin, paler posteriorly, the nervures black; legs fulvo-ferruginous, variegated with yellow, the tarsi yellow above. Abdomen fulvo-ferruginous, each segment having a yellow fascia in the middle, the apical segment quadrate, deeply notched in the middle, the notch rounded: beneath, the basal margins of the segments narrowly fuscous, the segments having a yellow fascia; the entire abdomen coarsely punctured.

_Hab._ Brazil (Santarem).

78. **ANTHIDIUM GUTTATUM.**


_St. Farg. Hym._ ii. 382. 28.

_Hab._ Brazil.

79. **ANTHIDIUM LINEOLATUM.**

_Anthidium lineolatum, St. Farg. Hym._ ii. 390. 36.

_Hab._ Brazil.

80. **ANTHIDIUM STELOIDES.**

_Anthidium steloides, Spin. Faun. Chili, vi. 182. 3._

Female. Length 4 lines.—Slightly pubescent; antennae ferruginous, the apex fuscous; head and thorax black, maculated; the abdomen clothed beneath with black pubescence.

_Hab._ Chili.

81. **ANTHIDIUM CHILENSE.**

_Anthidium chilense, Spin. Faun. Chili, vi. 181. 2._

Female. Length 4 lines.—Black, pubescent; antennae, legs and tegulae fulvous; thorax black, maculated; the venter clothed with white pubescence; abdomen above shining black, variegated with yellow markings.

_Hab._ ———?

82. **ANTHIDIUM GAYI.**

_Anthidium Gayi, Spin. Faun. Chili, vi. 180. 1._

Female. Length 5 lines.—Antennae, legs and tegulae reddish-yellow; the two apical joints of the antennae fuscous; head and thorax black, immaculate; the abdomen clothed beneath with black pubescence; the abdomen variegated with yellow markings.

_Hab._ Chili.
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83. Anthidium maculifrons. B.M.

Female. Length 4 lines.—Black, the face has four ovate yellow maculae, two on the clypeus, and one on each side of it; a stripe on the inferior margin of the mandibles, and a minute spot on the vertex above the eyes, yellow. Thorax, a short stripe over the tegulae, and four on the margin of the scutellum; a spot on the tegulae anteriorly, and the tibiae at their base above, more or less yellow; the thorax, particularly beneath, the face, cheeks and legs have a cinereous pubescence, on the tarsi beneath it is rufo-fuscous; the claws ferruginous. The basal segment of the abdomen has on each side an angular macula and another minute one a little within; the four following segments have on each side, a little within their apical margins, an oblong stripe, pointed within, and deeply emarginate anteriorly, almost dividing the stripes; the apical segment has two central ovate spots, its margin crenulated, and laterally subemarginate, terminating in a short tooth; the ventral scopæ yellowish-white.

Hab. United States.

84. Anthidium jugatorium.


Hab. North America (Missouri).

85. Anthidium interruptum.

Megachile interrupta, Say, Long's Exped. Source St. Peter's River, Append. 82. 1.

Hab. North America (Missouri).

86. Anthidium emarginatum.


Hab. North America (Missouri).

87. Anthidium notatum. B.M.


Hab. North America (Carolina).

88. Anthidium perplexum. B.M.

Female. Length 4 lines.—Black, the face on each side of the clypeus and a little above the insertion of the antennæ yellow;
an uninterrupted line along the margin of the vertex, an ovate spot a little below the insertion of the antennæ, the scape and four or five basal joints of the flagellum ferruginous. Thorax, the margin ferruginous, interrupted only on the collar and on the posterior margin of the scutellum; the nervures towards the base of the wings, the tubercles and legs ferruginous; the wings dark fuscous. The basal segment of the abdomen ferruginous, having an ovate yellow macula laterally, its posterior margin narrowly black; the second segment has on each side a curved stripe nearly uniting in the middle, the stripes are tinged with ferruginous, the two following segments have on each side a subquadrangle macula similarly coloured, the two apical segments black; the ventral scopæ yellowish white.

Male.—This sex closely resembles the female, but differs in having the clypeus yellow as well as a spot above and the mandibles also yellow exteriorly. The abdomen has two additional spots on the fifth segment, and all the spots are emarginate at their outer margins, the sixth segment is sub-bituberculate on its apical margin, the seventh is somewhat produced and rounded, and has a slight central carina, its apical margin as well as the extreme lateral margins of all the segments yellow.

Hab. Georgia.

89. Anthidium curvatum.  B.M.

Female. length 4 lines.—Black, the clypeus yellow, having a broad black stripe down the middle, the inner orbits of the eyes nearly to their vertex broadly yellow, a minute yellow spot before the anterior stemma and a transverse yellow line on the vertex continued nearly half-way down the outer margins of the eyes. The collar, tubercles and posterior margin of the scutellum yellow, the former slightly interrupted; the tubercles and legs yellow, the latter varied with ferruginous, the femora being fuscocarminatus towards their base; the wings smoky, darkest towards their anterior margin. The basal segment of the abdomen has a transverse band, deeply emarginate laterally, the three following segments have on each side an oblong stripe curved downwards and pointed at their extremity within; the curved form being given by a deep notch in the middle of each stripe beneath; the fifth segment has two central oblique stripes, the sixth immaculate.

Hab. Georgia.

90. Anthidium dorsale.

Anthidium dorsale, St. Farg. Hym. ii. 384. 31.

Hab. North America (Georgia).
91. **Anthidium maculatum.**

Male. Length 5 lines.—Black, the entire insect thinly covered with cinereous pubescence; the clypeus, the face on each side, and the mandibles exteriorly of a yellowish-white; also a minute spot on the vertex above the eyes. Thorax, the scutellum has a narrow line on each side of its posterior margin, a spot on the tegulae, in front, and a minute one at the base of the anterior tibiae above yellow; all the tarsi have a dense white pubescence, and the basal joint of the anterior and posterior pairs is pale yellow. Abdomen, the first to the fifth segment have each four subtriangular yellow spots, the sixth has only two oblique spots, the lateral margins having a curved spine, the seventh is armed with three spines on its apical margin, the central one being the shortest.

_Hab._ Mexico.

92. **Anthidium rufiventre.**


_Hab._ —?

93. **Anthidium quadrilobum.**

_Anthidium quadrilobum, St. Farg. Hym. ii. 401. 47._

_Hab._ —?

94. **Anthidium productum.**

_Anthidium productum, St. Farg. Hym. ii. 400. 46._

_Hab._ —?

95. **Anthidium obtusatum.**

_Anthidium obtusatum, St. Farg. Hym. ii. 362. 9♂._

_Hab._ —?

96. **Anthidium Lepelleteri.**

_Anthidium Lepelleteri, Fons. Ann. Soc. Ent. Fr. 2 sér. iv. 43. 4._

_Hab._ —?

97. **Anthidium marginatum.**


_St. Farg. Hym. ii. 383. 30._

_Hab._ —?
98. Anthidium dissectum.
Hab. Russia.

99. Anthidium regulare.
Anthidium regulare, Eversm. Bull. Mosc. xxv. 80. 3.
Hab. Russia.

100. Anthidium nigripes.
Eversm. Bull. Mosc. xxv. 81. 5.
Hab. Russia.

101. Anthidium auripes.
Anthidium auripes, Eversm. Bull. Mosc. xxv. 82. 6.
Hab. Russia.

102. Anthidium integrum.
Hab. Russia.

103. Anthidium senile.
Hab. Russia.

104. Anthidium floripetum.
Hab. Russia.

105. Anthidium reptans.
Hab. Russia.

106. Anthidium sibiricum.
Hab. Russia.
Genus 15. SERAPIS, n. g.

Serapis, F. Smith's MSS. (Details, Plate IX.)

Head about the width of the thorax, the ocelli placed in a curve on the vertex; the maxillary palpi two-jointed, the basal joint short, much wider than the second, but not more than half the length; the second joint cylindric and furnished at its apex with two stout setae, which are about two-thirds the length of the joint; labial palpi four-jointed, the two basal joints elongate, the two apical ones minute; the labrum elongate, truncate at the apex. The anterior wings having one marginal and two submarginal cells, the former about the length of the two latter; the first submarginal cell receiving the first recurrent neryvre about one-fifth distant from its apex; the second recurrent neryvre uniting with the second transverse cubital neryvre; the abdomen furnished beneath with a dense scopa.

1. Serapis denticulatus. B.M.

Female. Length 5 lines.—Black, the face and cheeks densely covered with white pubescence, on the vertex it is more thinly scattered; the mandibles slightly bent and armed at their apex with a long acute tooth, on the inner margin are four short acute teeth, the basal one stoutest. Thorax, in front, on the sides and beneath, densely clothed with white pubescence; two small tufts of snow-white pubescence on the prothorax, one on the tegulae posteriorly, and two at the base of the scutellum; the posterior tibie at their base and apex are spotted with white pubescence, the scutellum very broad, slightly produced over the base of the abdomen, the thorax on each side of the scutellum produced into an acute angle. Abdomen, the basal segment has on each side a tuft of white pubescence, the four following segments have laterally a short fascia of snow-white pubescence, the sixth having an ovate spot, and in the centre a slightly elevated carina; the apical margin transverse, slightly produced in the middle; all the segments except the basal one produced at its lateral angles into a short stout acute tooth; the scopa beneath dense, fulvous in the middle and white at the sides.

Male.—This sex closely resembles the female, but has the clypeus and mandibles yellow, the latter edentate, acute at their apex; the pubescence on the face and disk of the thorax slightly ochraceous; the outer margin of the tegulae and scutellum testaceous, the apical margins of the segments of the abdomen rufo-testaceous; the seventh segment armed laterally with an elongate stout acute spine, the spines grooved exteriorly; also a central
spine slender and acute, shorter than the lateral spines, continued upwards as a carina to the base of the segment.

_Hab._ Interior of South Africa. (Presented by the Earl of Derby.)

**Genus 16. CHELOSTOMA.**

Apis, _pt._, Linn. Faun. Suec. 419 (1761).
Hylæus, _pt._, Fabr. Ent. Syst. ii. 302 (1793).
Heriades, _pt._, Spin. Ins. Ligur. fasc. ii. 9 (1808).

The labial palpi 4-jointed, the basal joint about one-third the length of the second, the third joint in a line with the second, the fourth placed at the side and near the apex of the third joint. The maxillary palpi 3-jointed, the joints minute and subovate.

1. **CHELOSTOMA FLORISOMNE.**


Apis maxillosa, Linn. Syst. Nat. i. 954. 11 ♀, and Cab. Mus. Linn. Soc.

Fabr. Mantis. i. 305. 86.

Hylæus florissonnis, Fabr. Ent. Syst. ii. 304. 5 ♂.


Hylæus maxillosus, Fabr. Ent. Syst. ii. 303. 4 ♀.


Anthophora truncorum, Fabr. Syst. Piez. 379. 29. var. β ♀.


Megachile florissonnis, Spin. Ins. Lig. fasc. i. 134. 1.


Smith, Zool. iv. 1445. 1.


Chelostoma florissonne, Éversm. Bull. Mosc. xv. 74. 3.

_Hab._ Britain; France; Germany; Morea; Denmark; Russia; Sweden; Finland; Lapland.
2. **Chelostoma nigricorne.**


*Hab.* France; Switzerland; Denmark; Sweden; Finland.

3. **Chelostoma grande.**


*Hab.* Switzerland.

4. **Chelostoma culmorum.**

*Heriades culmorum*, St. Farg. *Hym.* ii. 408. 2 (var. *H. florisomnisis*).

*Hab.* France (Paris).

5. **Chelostoma Campanularum.**


*f.* 14♀. 15♂.


*Heriades Campanularum*, Spin. *Ins. Lig.* fasc. iii. 198. 1.

*St. Farg. Hym.* 405. 2.

*Smith, Zool.* iv. 1448. 2.


*Chelostoma campanularum*, Eversm. *Bull. Mosc.* xxv. 75. 4.

*Hab.* Britain; France; Italy; Germany; Russia; Denmark; Sweden and Finland.

6. **Chelostoma robustum.**


*Hab.* Finland.

7. **Chelostoma albifrons.**


*Hab.* N. America.

8. **Chelostoma rugifrpons.**

*Female.* Length 5 lines.—Black, the head strongly punctured; the face has some white pubescence on each side at the insertion of the antennae; the mandibles very stout, having a tooth near their base within, their apex tridentate, the middle tooth minute, longitudinally grooved above. Thorax strongly punctured; its pubescence, as well as that of the legs, white, the claw-joint rufo-
testaceous, the tarsi beneath fulvous, the wings subhyaline, the nervures black. Abdomen cylindric, shining and strongly punctured; the basal and apical margins depressed; the first and three following segments have very narrow fasciæ of white pubescence, which is rather wider at the lateral margins; the fasciæ cross the segments about one-third within, curving backwards to the lateral apical margins, the sixth segment covered with white pubescence at the base; beneath densely clothed with white pubescence.

_Hab._ Georgia.

9. _CHELOSTOMA SIGNATUM._

_Chelostoma signatum_, _Eversm. Bull. Mosc. xxv. 73. 1 (1852).

_Hab._ Russia.

10. _CHELOSTOMA INERME._

_Chelostoma inerme_, _Schäff. Nom. Ent. p. 98._

_Eversm. Bull. Mosc. xxv. 74. 2._

_Hab._ Russia.

Genus 17. _HERIADES._

_Apis_, _pt., Linn. Faun. Suec. 419; Syst. Nat. i. 954. 11 (1761)._  
_Hylaeus_, _pt., Fabr. Ent. Syst. ii. 302 (1793)._  
_Megachile_, _pt., Latr. Hist. Nat. xiv. 52. sec. 2 (1805)._  
_Heriades_, _pt., Spin. Ins. Lig. fasc. ii. 8 (1808)._  

The labial palpi 4-jointed, the basal joint not quite half the length of the second, the third and fourth minute, placed at the side and near the apex of the second joint. The maxillary palpi 3-jointed, the two basal joints short and stout, the apical joint slender, cylindric and pointed at the apex.

1. _HERIADES TRUNCORUM._

_Apis truncorum_, _Linn. Faun. Suec. 1692; Syst. Nat. i. 955. 15,_  
_and Cab. Mus. Linn. Soc._

_Kirby, Mon. Ap. Angl. ii. 258. 51._  
_Hyleus truncorum_, _Fabr. Ent. Syst. ii. 305. 9._  
_Panz. Faun. Germ. 64. 15._  
_Anthophora truncorum_, _Fabr. Syst. Piez. p. 379. 29._  
_Megachile truncorum_, _Latr. Hist. Nat. xiv. 52. 3._  
_Spin. Ins. Lig. fasc. 2. p. 9._
  
  *Curtis, Brit. Ent*. xi. tab. 504.
  
  *St. Farg. Hym*. ii. 405. 2.
  
  
  
  *Smith, Zool*. iv. 1447. 1.
  
  
  *Hab*. Britain; France; Italy; Germany; Sweden; Finland; Lapland.

Genus 18. CERATINA.


The labial palpi four-jointed, the two basal joints elongate, the two apical ones minute, situated near the apex of the second joint at the side; the maxillary palpi six-jointed, the three basal joints of about equal length, subclavate, the three apical ones minute; the superior wings having one marginal and three submarginal cells. Claws of the tarsi bifid. The labial palpi are four-jointed.

*Latreille and St. Fargeau only observed three joints to the labial palpi; the maxillary palpi are also incorrectly figured in the 'Exploration Scientifique de l'Algérie.'

1. CERATINA cærulea. B.M.

*Apis cærulea*, *Vill. Ent. Europ*. iii. 88. t. 8. f. 25 ♂.

*Apis cucurbitina*, *Rossi, Mant*. i. 145. 325.


*Spin. Ins. Lig*. i. 151. 1 ♀.


*Ceratina nitidula*, *Spin. Ins. Lig*. 151. 2 ♂; ii. *App*. 80.

*Ceratina cyanea*, *St. Farg. Hym*. ii. 505. 1.

*Ceratina cærulea*, *Smith, Zool*. iv. 1448. 1.


*Hab*. Britain; France; Italy; Russia.
2. **Ceratina albilabris.**

_Hylæus albilabris, Fabr. Ent. Syst. ii. 305. 10._

_Prosopis albilabris, Fabr. Syst. Piez. 293. 2._


_Ceratina albilabris, Jurine, Hym. 234._

_Germar, Faun. Ins. Europ. fasc. 5. f. 17._

_St. Farg. Hym. ii. 506. 2. exclus. syn._

_Smith, Zool. App. vii. 57._

_Dufour, Ann. Soc. Ent. Fr. ix. (1840) 16._

_Lucas, Explo. Sc. Algér. iii. 223. 171._

_Hab. Britain?; France; Italy; Algeria._

3. **Ceratina aenea.**


_The female resembles the male, differing only in having a minute spot on the clypeus and in wanting the spine on the second ventral plate of the abdomen._

_Hab. The Morea; Albania._

4. **Ceratina decolorans.**


_Hab. The Morea._

5. **Ceratina parvula.**

_Female. Length 1½ line.—Black, head polished, smooth and shining, the clypeus on each side anteriorly stained with yellow, mandibles pale ferruginous, the antennæ testaceous beneath. Thorax smooth and shining, wings hyaline, iridescent, the nerves pale testaceous, the tegulae testaceous; the legs rufo-testaceous, the tarsi pale; the apical margins of the segments of the abdomen testaceous, the abdomen is delicately punctured, the two apical segments more strongly so, and having scattered pale hairs; beneath testaceous._

_Hab. Albania. (In Coll. W. W. Saunders, Esq.)_

6. **Ceratina mauritanica.**

_Ceratina mauritanica, St. Farg. Hym. ii. 507. 3._

_Lucas, Explo. Sc. Algér. iii. 223. 172. t. 10. f. 10._

_Hab. Algeria (Oran)._
7. Ceratina subquadrata. B.M.

Female. Length 3½ lines.—Black, the face coarsely punctured, the cheeks and mandibles smooth and shining; the clypeus truncate, not produced beyond the base of the mandibles and having an oblong cream-coloured stripe; the margin of the vertex rounded behind, giving the head a subquadrate form. Thorax, the tubercles and a line in front at the base of the anterior tibiae white, the intermediate and posterior legs wanting. Abdomen much narrowed towards the base, the apical margins of the three basal segments smooth and shining, and having a transverse impressed line, the three apical segments roughened.

Hab. South Africa.

8. Ceratina armata.

Female. Length 3½ lines.—Black, closely and strongly punctured; the clypeus has a central yellow groove, the punctures running irregularly into lines; the labrum and mandibles are similarly sculptured. Thorax, the tubercles and a minute spot at the base of the tibiae above, yellow; the metathorax opaque, very finely punctured; the wings fusco-hyaline, darkest at their apical margins; the legs dark rufo-testaceous, fringed with a pale glittering pubescence; that on the tarsi dense and pale fulvous; the claws ferruginous, the calcaria pale testaceous, the posterior tibiae armed in the middle exteriorly with a sharp stout spine. Abdomen, the basal segment depressed above, smooth, shining and finely punctured, on the fourth, fifth and sixth segments the punctures run into lines, the apical segment has a central raised carina; beneath, covered with strong elongate punctures.

Hab. Cape of Good Hope. (Coll. Fred. Smith.)

9. Ceratina viridis. B.M.

Ceratina viridis, Güér. Icon. R. An. Ins. 444. t. 73. f. 6.

(Var. a. of a rich coppery green.)

Hab. Bengal; Ceylon; China.

10. Ceratina picta. B.M.

Female. Length 3 lines.—Head and thorax black, smooth and shining; a line on the cheeks, a narrow one along the inner orbits of the eyes suddenly broadly expanded on each side of the clypeus, two short oblique lines meeting in front of the stemmata, a triangular spot at the base of the clypeus and a transverse line on its anterior margin, yellow; from the latter two very
narrow abbreviated lines run from the centre; the mandibles have also a yellow spot at their base; the labrum ferruginous. Thorax, except the disk which is shining and impunctate, closely punctured; the disk has two narrow parallel lines not reaching the collar or the base of the scutellum, a short narrow line over the tegula, a dot on the collar laterally, the tubercles and the middle of the scutellum, yellow; the wings fusco-hyaline, the nervures fuscous; a transverse curved line on each side of the pectus, and a short one in front of each intermediate coxa; the legs reddish-yellow, the femora and coxae more or less stained with fuscous. Abdomen entirely ferruginous.

Hab. Ceylon.

11. Ceratina simillima. B.M.

Male. Length 2½ lines.—Black, a trilobate spot on the clypeus, a transverse stripe above, widest in the middle; the inner margins of the eyes as high as the insertion of the antennae, above each of which is a minute oblique spot, and behind the eyes towards their vertex an oblique cream-coloured stripe. The thorax has a lunate spot on the scutellum, two narrow stripes on the disk, a minute spot over the tegulae, the collar and tubercles cream-coloured; the legs testaceous, the apex of the femora, the tibiae and tarsi yellowish-white; the apical margins of the segments have narrow white fasciae, interrupted in the middle, that on the basal segment waved; the abdomen beneath testaceous at the base.

Hab. East Indies.

12. Ceratina sculpturata.

Female. Length 4 lines.—Black, closely and deeply punctured; head, the clypeus has a transverse lunate yellow spot, and a similar yellow spot is situated on the face on each side; the punctures run into lines on the clypeus, those on the vertex are very large and deeply impressed; the mandibles have a triangular yellow spot at their base. Thorax, the disk shining, the metathorax opake, very closely and finely punctured, the wings fuscous, their tegulae testaceous; their outer margins pale; the legs have a fringe of pale pubescence beneath; the tarsi are densely covered with a glittering pale yellow pubescence, the claws and the apical joints ferruginous. The apical segments of the abdomen rugose; beneath, covered with a short griseous pubescence.

Hab. Senegal. (Coll. Fred. Smith.)
13. CERATINA HIEROGLYPHICA.  

Female. Length 3—4 lines.—Black, a T-shaped mark on the clypeus, a transverse line above, two spots above the insertion of the antennæ, and an abbreviated line on the inner and outer margin of the eyes, yellow. Thorax, a lunate spot on the scutellum, two abbreviated lines on the mesothorax, an epaulet over the tegulae, the collar and tubercles yellow; the tibiae above and the tarsi yellow, the latter stained with ferruginous; the segments of the abdomen have a transverse yellow band not quite touching the apical margins, the bands attenuated on each side, and towards the extreme lateral margins they are suddenly widened, the basal segment has a central spot and one on each side, the three united by two narrow curved lines; sometimes the basal segment has a transverse yellow line, which has two black spots; the apical segment black; beneath, the margins of the segments are narrowly testaceous, and ciliated with pale hairs.

The male closely resembling the female, the yellow markings being broader, the scape of the antennæ in front, the labrum and anterior femora are also yellow, the margins of the abdominal segments beneath are more broadly testaceous; the entire insect closely and rather strongly punctured, the disk of the thorax and the region of the insertion of the antennæ polished and sparingly punctured.

Hab. Northern India; Hong Kong; Philippine Islands.

14. CERATINA MACULATA.

Male. Length 3 lines.—Green, closely and strongly punctured, the clypeus and a circular spot on the labrum cream-coloured; the antennæ and mandibles black. Thorax, the tubercles and a line on the anterior femora beneath and on the tibiae in front, another at the base of the posterior tibiae above, yellow; the tarsi rufo-testaceous; the wings subhyaline, the tegulae and nervures rufo-testaceous. Abdomen, the basal margins of all the segments and a large lunate spot on each side of the fourth, fifth and sixth segments black, the three basal segments have on each side a minute black spot; the seventh segment has a central raised carina, produced at the apex into an obtuse spine.

Hab. Java. (Coll. W. W. Saunders, Esq.)

15. CERATINA SMARAGDINA.

Female. Length 4 lines.—Brilliant green, closely and strongly punctured; the antennæ, anterior margin of the clypeus, the labrum and mandibles black; the labrum on each side and the
mandibles at their base tinged with green. Thorax, the disk smooth and having a few large scattered punctures and four abbreviated longitudinal impressed lines, the wings fusco-hyaline; the posterior tibiae and all the tarsi have a long thin griseous pubescence, that on the tarsi beneath is pale fulvous; the claws ferruginous. Abdomen of a blue-green in certain lights, the three apical segments rugose.

Hab. Java. (Coll. W. W. Saunders, Esq.)

16. **CERATINA DUPLA.**


Hab. Indiana, U. States; St. John’s Bluff, East Florida. (E. Doubleday, Esq.)

17. **CERATINA LAETA.**


Hab. Cayenne; Brazil (Ega).

18. **CERATINA CHALCEA.**


Hab. Cayenne.

19. **CERATINA PUNCTULATA.**


Hab. Cayenne.

20. **CERATINA LUCIDULA.**

Female. Length 1½ line.—Olive-green, very bright and shining, the two basal joints of the antennæ pale testaceous, the flagellum rufo-fuscous; the mandibles, labrum and anterior margin of the clypeus pale yellow-testaceous. The disk of the thorax very smooth and shining, anteriorly are a few scattered large punctures; the scutellum has also some coarse punctures, the metathorax closely and finely punctured; the tegulae pale yellow-testaceous, the legs of the same colour, the wings hyaline, the stigma fuscous; the abdomen has a short scattered pale pubescence, and is somewhat coarsely punctured towards the apex.

Hab. Santarem (Brazil). (Coll. W. W. Bates, Esq.)

21. **CERATINA MACULIFRONS.**

Female. Length 4 lines.—Olive-green, closely and strongly punctured, a spot on the clypeus touching its anterior margin,
and two on the face on each side of the clypeus touching the margin of the eyes, yellow; an elongate yellow stripe behind the eyes; antennæ, labrum and mandibles black. Thorax, the anterior femora at their apex above, and all the tibiae at their base yellow; the posterior tibiae have a short spine near their base exteriorly; the posterior tibiae and all the tarsi densely covered with cinereous pubescence, the claws and apical joints of the tarsi ferruginous; the metathorax on each side covered with white pubescence; abdomen, the margins of the three basal segments depressed, smooth and shining, the three apical ones rugose.

Hab. Brazil. (Coll. Fred. Smith.)

Genus 19. ALLODAPE.

Allopace, St. Farg. Hym. ii. 531.

Maxillary palpi six-jointed, the basal joint thickest, nearly as long as the two following, the three apical ones minute, the labial palpi four-jointed, the two basal ones elongate, the apical ones minute; the superior wings having one marginal and two submarginal cells.

In the 'Encyclopédie Méthodique,' and also in St. Fargeau's 'Hymenoptera,' the number of joints in the maxillary palpi is incorrectly given; it has therefore been necessary to give the above short correction.

1. ALLODAPE RUFOGASTRA. B.M.

Allopace rufogaster, St. Farg. Ency. Mét. x. 119. 1; Hym. ii. 531. 1 ².


The male closely resembles the female, but has the clypeus entirely yellow; the abdomen is black at its extreme base as well as the four apical segments, except the base of the fourth; the apical segment is obtuse and fringed with curled fulvous pubescence.

Hab. South Africa. (Coll. the Rev. D. F. Morgan.)

2. ALLODAPE PICTIFRONS. B.M.

Female. Length 3½ lines.—Black, a narrow yellow stripe along the inner margins of the eyes, and another down the middle of the clypeus, which is produced and rounded at its anterior margin; the face on each side above the clypeus depressed, as in the genus Ceratina, the antennæ inserted in the depressions, between which is a raised carina running from the clypeus to the
anterior stemma, where it divides and partly encloses it; the head is shining and strongly punctured. Thorax smooth and shining on the disk, very delicately punctured, interspersed with larger punctures, particularly the scutellum and sides of the thorax; wings subhyaline, the nervures fuscous; the legs have a pale glittering pubescence, that on the tarsi, which is dense, slightly yellow; the posterior tibiae towards their apex in front and the claw-joint of the tarsi ferruginous. Abdomen shining, delicately punctured, and covered with shallow rough sculpturing, particularly the three apical segments; the entire margins of the segments narrowly rufo-testaceous.

_Hab._ Sierra Leone. (Coll. the Rev. D. F. Morgan.)

This species sometimes has a yellow transverse line on the scutellum, more or less frequently entirely obsolete.

3. _Allo dope simillima._

Female. Length 3½ lines.—Black, very closely resembling _A. pictifrons_; the clypeus is, however, more produced, and has a broad pear-shaped yellow spot extending from its base to the apex; the thorax is similarly sculptured; the base of the wings and outer margins of the tegulae are pale testaceous, the wings hyaline, the second submarginal cell narrowed towards the marginal, more angulated than in _A. pictifrons_, but the abdomen is of the same form and colour, and is similarly sculptured.

_Hab._ Australia (Macintyre River). (Coll.—Ker, Esq.)

4. _Allo dope foveata._

Female. Length 4 lines.—Black, shining and punctured, the clypeus pale yellow. Thorax, the disk smooth and very delicately punctured, the metathorax fringed on each side with silvery glittering hairs; the tegulae rufo-testaceous, the nervures ferruginous; the posterior tibiae and all the tarsi clothed with a glittering pale pubescence, the claw-joints ferruginous; the calcaria pale testaceous. Abdomen oblong, narrowest at the base, which has a deep fovea, the apex acute; delicately punctured and interspersed with larger punctures, most closely so towards the apex; the margins of the segments narrowly testaceous. Beneath, the thorax is thinly covered with griseous pubescence, the margins of the segments are fringed with pubescence of the same colour.

_Hab._ Sierra Leone. (Coll. the Rev. D. F. Morgan.)

5. _Allo dope variegata._

Female. Length 3 lines.—Head and thorax black, smooth
and shining, the clypeus and labrum yellow-testaceous, the mandibles ferruginous towards the apex; the scape ferruginous in front, the face depressed, an elevated carina passing between the antennae from the clypeus to the anterior stemma. The disk of the thorax glossy, thinly scattered over with pale hairs, and having a central impressed line passing from the collar to the middle of the mesothorax, also a shorter line on each side; the collar and scutellum yellow; the tegulae, extreme base of the wings and the nervures testaceous, the wings hyaline and beautifully iridescent; the legs pale rufo-testaceous, having the coxae, trochanters and base of the femora black, the two former pale testaceous at their extreme apex; the posterior legs have a long pale glittering pubescence. The abdomen oblong, rufo-testaceous; the basal segment has a central depression, the apical segments are dark fuscous and the sides of the anterior segments are spotted with the same colour, the two apical segments covered with short white hairs; the apex acute; beneath, pale rufo-testaceous.

_Hab._ Port Natal. (Coll. R. H. Plant.)

6. **Alloclape unicolor.**

**Female.** Length 2½ lines.—Black and shining, the clypeus having an elongate cream-coloured spot, transverse at the base and pointed at the apex of the clypeus. The metathorax delicately punctured, the wings hyaline, their extreme base yellowish, the nervures fuscous; the posterior legs and all the tarsi thinly covered with pale glittering pubescence, the claws testaceous; abdomen very delicately transversely aciculate, the apical segments rugose; the apex of the abdomen acute.

_Hab._ New Holland.

7. **Alloclape marginata.**

**Female.** Length 2½ lines.—Black, the clypeus cream-coloured, the labrum, apex of the mandibles and antennae beneath ferruginous. Thorax, the disk smooth and shining, the scutellum and metathorax delicately punctured; the tubercles, tegulae and base of the wings of a pale testaceous-yellow; the wings hyaline and iridescent, the nervures pale ferruginous; the posterior legs and the tarsi covered with a glittering pale pubescence, the apical joints of the tarsi and the calcaria pale testaceous. Abdomen oblong, acute at the apex, towards which it is roughened; the margins of all the segments narrowly pale testaceous.

_Hab._ East Indies?
8. **Allodae mucronata.**

Female. Length 6 lines.—Black, the head shining, strongly punctured; a narrow short yellow line along the inner margin of the eyes; on the lower part of the face parallel with the sides of the clypeus is a raised carina which reaches the base of the mandibles; the clypeus somewhat produced, covered as well as the labrum with coarse punctures; on each side of the stemmata on the vertex are some deep shining depressions, and a narrow yellow stripe along the hinder margins of the eyes. Thorax, the disk very smooth and shining, the prothorax coarsely punctured; the sides of the thorax have a thin pale fulvous pubescence, the tubercles having a thick fringe of the same behind; the posterior tibiae and all the tarsi densely covered with pale fulvous pubescence, the legs being dark rufo-testaceous, the tegulae are of the same colour, the wings subhyaline, the metathorax rounded and delicately and closely punctured. Abdomen shining, strongly punctured, of a dark rufo-testaceous colour above, beneath much paler and varied with dark stains, very smooth and shining, the apical portion of the segments punctured; above is a short, thin griseous pubescence, the margins of the segments being pale testaceous; the apical segment terminating in a sharp mucro, on each side of which the margin is angulated; the abdomen is recurved and somewhat concave towards the apex.

_Hab._ Cape of Good Hope. (Coll. Fred. Smith.)

9. **Allodae picta.**

Male. Length 2½ lines.—Black, antennæ pale fulvous beneath, fuscous above, the apical joint dilated and compressed; the clypeus and the face on each side yellow, a narrow yellow line along the inner margin of the eyes; the mandibles and labrum of a testaceous-yellow. Thorax impunctate, the metathorax rounded behind; the tegulae testaceous, wings hyaline, the nervures testaceous; the legs rufo-testaceous, the anterior and intermediate tibiae yellow in front. Abdomen smooth and shining, the second, third and fourth segments have on each side at their basal margins a transverse yellow spot; the apex of the abdomen acute.

_Hab._ Australia.

10. **Allodae panurgoides.**

Female. Length 4 lines.—Black and shining, the face closely and strongly punctured; a narrow line on the clypeus and another close to the eyes yellow; the cheeks very smooth and shining, the punctures scattered; the flagellum rufo-testaceous beneath.
Thorax, the disk smooth and shining, having a central impressed line and two on each side; the wings fusco-hyaline, the tegulae testaceous, the nervures ferruginous. The posterior tibiae and all the tarsi clothed with short bright fulvous pubescence, the claws ferruginous. Abdomen covered with strong elongate punctures, most dense towards the apex.

Hab. South Africa. (Coll. the Rev. D. F. Morgan.)

Genus 20. EXONEURA, n. g.

Head transverse, ocelli placed in a triangle on the vertex; the labrum obtuse at the apex, about the same length as the mentum; the labial palpi four-jointed, the two basal joints elongate, about equal in length, the two apical ones minute; the maxillary palpi six-jointed. The superior wings having one marginal and two submarginal cells; the first recurrent nervure received by the second submarginal cell, the second recurrent nervure and third discoidal cell obsolete; the posterior tibiae having a thin scopa of pubescence; the claws of the tarsi bifid.

1. Exoneura bicolor. B.M.

Female. Length 3 lines.—Head and thorax black, smooth and shining; the face delicately punctured, the ocelli very bright and glassy; the scape of the antennae in front and a line down the clypeus pale yellow-testaceous; the labrum and mandibles rufo-testaceous, the latter black at their base and apex. Thorax impunctate, the metathorax rounded, the margins of the tegulae rufo-testaceous, the nervures of the wings ferruginous, palest towards the base of the wings, which are fulvo-hyaline; the legs ferruginous, the coxae, trochanters and base of the femora black; the posterior tibiae and all the tarsi clothed with a glittering pale fulvous pubescence, that on the former stained with fuscous above. Abdomen ferruginous, subelavate; the basal segment has a central depression, which is black; the two apical segments very finely transversely reticulate, intermixed with punctures; the apex acute.

Var. B. The posterior femora and tibiae black, except their base and apex; the basal and second segment more or less stained with fuscous.

Hab. Australia (Swan River); Van Diemen's Land.
HYMENOPTERA.

Subfam. 3. DENUDATÆ.

Genus 21. NOMADA.


1. NOMADA ALTERNATA.

Smith, *Zool.* ii. 590. 3.
Eversm. Bully. Mosc. xxv. 92. 2.

Hab. Britain; France; Germany.

2. NOMADA ANNULARIS.


Hab. France.

3. NOMADA ATRA.


Hab. Britain.

4. NOMADA ARMATA.

Smith, Zool. vii. App. 41.

Hab. Britain; Germany; Albania; Denmark; Sweden; Finland.

5. NOMADA AGRESTIS.

*St. Farg. Hym.* ii. 467. 4; *Ency. Méth.* viii. 364. 1.

Hab. Spain; Portugal; Algeria.

6. NOMADA BACCATA.


Hab. Britain.
7. NOMADA BOREALIS. B.M.
Nomada inquilina, Smith, Zool. ii. 605. 21 ♂ ♀.
Hab. Britain; Denmark; Sweden; Finland; Lapland.

8. NOMADA FLAVOGUTTATA. B.M.
Nomada flavoguttata, Smith, Zool. ii. 598. 12 ♂ ♀.
Hab. Britain.

9. NOMADA FABRICIANA. B.M.
Apis Fabriciana, Linn. Syst. Nat. i. 955. 17.
Rossi, Faun. Etrus. Mant. no. 324.
Nomada Fabriciana, Fabr. Ent. Syst. ii. 348. 10.
Spin. Ins. Lig. fasc. 1. 152. 4.
Brullé, Expéd. Sc. de Morée, iii. 346. 765.
Smith, Zool. ii. 598. 11.
Hab. Britain; France; Germany; Italy; Denmark; Sweden.

10. NOMADA FURVA. B.M.
St. Farg. Hym. ii. 495. 27 ♂ ♀; Ency. Méth. viii. 373. 36.
Smith, Zool. ii. 599. 13 ♂ ♀.
Spin. Ins. Lig. fasc. 1. 152. 8.
St. Farg. Ency. Méth. viii. 373. 35.
Schäff. Germ. Zeits. i. 278. 7.
Eversm. Bull. Mosc. xxv. 98. 16.
Nomada conjungens, Schäff. Germ. Zeits. i. 279. 8.

Hab. Britain; France; Germany; Denmark; Sweden; Finland.

11. NOMADA FLAVICORNIS. B.M.
Nomada flavicornis, Rossi, Faun. Etrus. ii. 112. 934.
Hab. Italy; South of France; Albania.

12. NOMADA GERMANICA. B.M.
Apis ferruginata, Kirby, Mon. Ap. Angl. ii. 218. 34, et t. 16. f. 4 δ
(non Linn.).
Nomada stigma, Fabr. Syst. Piez. p. 393. 11.
Nomada pleurosticta, Schäff. Germ. Zeits. i. 276. 2.
Hab. Britain; France; Germany; Portugal; Denmark.

13. NOMADA INTERRUPTA.
Hab. Germany.

14. NOMADA FUSCICORNIS.
Hab. Finland.

15. NOMADA FULVICORNIS. B.M.
Spin. Ins. Lig. 152. 5.
Hab. Italy; France.

16. NOMADA JACOBÆAE. B.M.
Nomada Jacobæae, Panz. Faun. Germ. 72. 20 δ.

Smith, Zool. ii. 594. 7 ♂ ♂ .
Eversm. Bull. Mosc. xxv. 94. 7.

Nomada interrupta, Panz. Faun. Germ. 96. 22?

Hab. Britain; France; Germany; Denmark; Sweden; Finland.

17. NOMADA LATERALIS. B.M.

Schäff. Germ. Zeits. i. 227. 5.
Smith, Zool. ii. 601. 16.

Nomada melanostoma, Schäff. Germ. Zeits. i. 280. 11. var. ♂ .
Hab. Britain; France; Germany; Russia.

18. NOMADA LATHBURIANA. B.M.


Nomada rufiventris, Smith, Zool. ii. 590. 2 ♂ ♂ .
Hab. Britain; France; Germany; Denmark; Sweden; Finland.

19. NOMADA LABIATA.

Nomada labiata, St. Farg. Encycl. Méth. viii. 368. 16.
Hab. France.

20. NOMADA LINEOLA. B.M.

St. Farg. Hym. ii. 486. 20; Encycl. Méth. viii. 367. 11.

HYMENOPTERA.

21. NOMADA MISTURA.
Hab. Britain. (Coll. F. Smith.)

22. NOMADA NIGRICORNIS.
Nomada nigricornis, St. Farg. Encycl. Méth. viii. 372. 3r.
Hab. France (Paris).

23. NOMADA NIGELLA.
Hab. Siberia.

24. NOMADA OCHROSTOMA.
Mus. Ent. Soc.
Smith, Zool. ii. 596. 9.
Nomada vidua, Smith, Zool. ii. 602. 18 6.
Hab. Britain; France; Germany; Denmark; Sweden; Finland; Lapland.

25. NOMADA OBLIQUA.
Hab. France.

26. NOMADA OBSCURA.
Hab. Sweden; Finland; Lapland.
27. **Nomada obtusifrons**.


*Hab.* Sweden; Finland.

28. **Nomada ruficornis**.


*Rossi, Faun. Etrus.* ii. 112. 933.


*St. Farg. Ency. Méth.* viii. 366. 7 9; *Hym.* ii. 498. 29.


*Smith, Zool.* ii. 596. 9.


*Hab.* Britain; France; Germany; Italy; Denmark; Russia; Sweden; Finland; N. America; Canada.

29. **Nomada Roberjeotiana**.


*Spin. Ins. Lig.* fasc. 1. 151. 2.


*Smith, Zool.* ii. 603. 19 9.


*Hab.* Britain; Italy; Germany; Denmark; Sweden; Finland.
30. **Nomada rufa.**
*Hab.* Italy; South of France; Portugal; Tunis.

31. **Nomada rufipes.**
*Hab.* Germany.

32. **Nomada rubra.**
*Hab.* Britain.

33. **Nomada solidaginis.**
  *Spin. Ins. Lig.* fasc. 1. 152. 3.
  *Schäff. Germ. Zeits.* i. 284. 23 $\delta$ $\varphi$.
  *St. Farg. Hym.* ii. 472. 8; *Ency. Méth.* viii. 369. 18.
  *Smith, Zool.* ii. 595. 8.
*Hab.* Britain; France; Germany; Denmark; Sweden; Finland; Russia.

34. **Nomada signata.**
  *Smith, Zool.* ii. 602. 17.
*Hab.* Britain; France; Germany; Switzerland.

35. **Nomada succincta.**
  *Spin. Ins. Lig.* fasc. 1. 152. 7.
  *St. Farg. Hym.* ii. 469. 6; *Ency. Méth.* viii. 372. 33.
*Smith, Cat. Hym.* p. 89. 24.
*Hab. Britain; France; Germany; Russia.*

36. NOMADA SEXFASCIATA.
*St. Farg. Hym.* ii. 471. 7.
*Smith, Zool.* ii. 593. 6 ♀.
*Hab. Britain; France; Germany; Sweden; Russia.*

37. NOMADA SCUTELLARIS.
*Hab. France.*

38. NOMADA VARIA.
*Spin. Ins. Lig.* fasc. 1. 151. 1.
*Smith, Zool.* ii. 593. 5 ♂.
*Spin. Ins. Lig.* fasc. 1. 152. 6.
Nomada zonata, *St. Farg. Hym.* ii. 491. 23 (non *Panz.*).
*Hab. Britain; France; Germany; Austria.*

39. NOMADA VAGA.
*St. Farg. Ency. Méth.* viii. 372. 34.
*Hab. Austria.*
40. **Nomada versicolor.**
*Hab.* Austria.

41. **Nomada xanthosticta.**
Nomada xanthosticta, *Smith, Zool.* ii. 600. 15, and vi. 2214.
*Hab.* Britain. (Coll. F. Smith.)

42. **Nomada zonata.**
*Hab.* Austria; France; Russia.

43. **Nomada lutea.**
*Hab.* Russia.

44. **Nomada ornata.**
*Hab.* Russia.

45. **Nomada punctata.**
*Hab.* Russia.

46. **Nomada rubricosa.**
*Hab.* Russia.

47. **Nomada pastoralis.**
*Hab.* Russia.

48. **Nomada bimaculata.**
*Hab.* Russia.
49. Nomada dubia.
Hab. Russia.

50. Nomada aberrans.
Hab. Russia.

51. Nomada flavinervis.
Nomada flavinervis, Brullé, Exped. Sc. Morée, iii. 344. 762; Atlas, pl. 49. f. 2.
Hab. The Morea.

52. Nomada tricolor. B.M.
Nomada tricolor, Brullé, Exped. Sc. Morée, iii. 345. 763; Atlas, pl. 49. f. 3.
Hab. The Morea.

53. Nomada fulvipes.
Nomada fulvipes, Brullé, Exped. Sc. Morée, iii. 343. 761; Atlas, pl. 49. f. 1.
Hab. The Morea.

54. Nomada ferruginea.
Hab. Bagdad.

55. Nomada bifasciata.
Nomada bifasciata, St. Farg. Ency. Méth. viii. 365. 3.
Hab. Barbary.

56. Nomada versicolor. B.M.
Female. Length 4½ lines.—Head and thorax black, the clypeus, a quadrilateral spot above, the face on each side, and the entire orbits of the eyes of a reddish-yellow, the mandibles of the same colour, their apex rufo-piceous; the antennae ferruginous, the scape having a fuscous stain behind. Thorax, the collar, tubercles, the breast, a spot beneath the wings, a broad epaulet over the tegulae and a stripe parallel with it, the scutellum and post-scutellum, a stripe on each side of the metathorax and the legs, red. Abdomen, the basal segment black, having a transverse
red band in the middle; the second segment has a broad yellow band at the base, an angular fuscous spot in the middle, the apical portion ferruginous, darkest towards the margin; the three following segments yellow, and having a narrow ferruginous margin; the sixth segment covered with silvery pile.

*Hab.* North China.

57. *Nomada solitaria.*

Male. Length 5 lines.—Black, the clypeus and cheeks covered with silvery-white pubescence, the upper portion of the face, the vertex, and disk of the thorax clothed with yellow pubescence; the sides of the face, anterior margin of the clypeus, labrum, mandibles and scape in front yellow; the flagellum fulvous beneath. Thorax, the collar, tegulae, tubercles and scutellum yellow; the coxae and trochanters black; the legs otherwise yellow, excepting a black stain on the anterior and intermediate femora towards their base above, the posterior pair being black excepting at the knees; the posterior tibiae have a dark stain within; the basal joint of the posterior tarsi black above; the wings subhyaline, their apical margins slightly clouded. Abdomen, the basal segment has a broad yellow fascia towards its apical margin, the second segment has a similar fascia much attenuated in the middle, and the three following have each a narrow fascia of the same colour, all the apical margins being fusco-ferruginous; beneath, the segments are obscurely banded in a similar manner.

*Hab.* Northern India. From Captain Boys’ Collection.

58. *Nomada lusca.*

Female. Length 3 lines.—Ferruginous, the antennæ as long as the head and thorax, the flagellum fuscos above. Thorax, the wings fusco-hyaline, darkest at their apical margins; the apical joints of the tarsi fuscos. Abdomen subpetiolate, the basal segment having on each side a black spot.

*Hab.* Philippine Islands.

59. *Nomada decorata.*

Female. Length 4½ lines.—Head and thorax black; the anterior margin of the clypeus, sides of the face, orbits of the eyes slightly interrupted at their vertex, the labrum, mandibles and scape in front of an orange-yellow; the flagellum beneath and its apical joint ferruginous; otherwise fuscos above. The collar, tubercles, scutellum, post-scutellum, and an oblong macula on each side of the metathorax yellow, having more or less of a fer-
ruginous stain; legs yellow, varied with ferruginous; the coxae and trochanters above, the posterior femora beneath, and the basal joint of the posterior tarsi above, black; wings subhyaline, slightly clouded at their apical margins, their nervures ferruginous. The basal segment of the abdomen black above, having a broad yellow fascia, its apical margin ferruginous; the rest of the abdomen ferruginous, each segment having a broad yellow band; that on the second segment attenuated in the middle; the fascia continued beneath the abdomen.

_Hab._ Northern India. (Coll. J. S. Baly, Esq.)

60. **Nomada bipunctata**.


_Hab._ Tranquebar.

61. **Nomada albo-maculata**.


_pl. 10. f. 8._

_Hab._ Algeria.

62. **Nomada duplēx**.

Female. Length 4½ lines.—Black, the head and thorax have a fulvous pubescence, most dense on the clypeus and sides of the metathorax, the tubercles, tegulae, and a spot on the scutellum yellow; the wings fuscous, having an indistinct pale macula towards their apex; the coxae and trochanters black, the femora, tibiae and tarsi ferruginous. Abdomen black, the first, second and third segments have an oblong macula on each side, pointed within; between the two basal spots a ferruginous stain; the fourth segment has an entire fascia, and the fifth segment is entirely yellow; beneath, the four apical segments have a transverse broad yellow fascia sinuated posteriorly.

_Hab._ Tangiers.

63. **Nomada flavo-maculata**.


_pl. 10. f. 6._

_Hab._ Algeria.

64. **Nomada fuscienninis**.

Nomada fuscienninis, _St. Farg. Hym._ ii. 474. 10.


_Hab._ Algeria.
65. **Nomada fenestrata.**


**Hab.** Algeria.

66. **Nomada Kirbyi.**


**Hab.** Algeria.

67. **Nomada mauritanica.**


**Hab.** Algeria.

68. **Nomada numida.**


**Hab.** Algeria; South of Europe.

69. **Nomada pusilla.**

Nomada pusilla, *St. Farg. Hym.* ii. 466. 3.


**Hab.** Algeria.

70. **Nomada parvula.**


**Hab.** Algeria.

71. **Nomada punctata.**


**Hab.** Algeria (Oran).

72. **Nomada ruficeps.**

Nomada ruficeps, *St. Farg. Hym.* ii. 475. 11.


**Hab.** Algeria.
73. **Nomada sanguinea.**

Female. Length $\frac{3}{4}$ lines.—Bright red, the face and cheeks have a thin scattered silvery pubescence; the two basal segments of the flagellum above, and the eighth to the twelfth segments above fuscous, a large triangular black patch on the metathorax beneath the post-scutellum, also an oblique black stripe behind the insertion of the posterior wings; the wings fusco-hyaline, a pale macula towards their apex; the posterior tibiae have a fuscous stain within; the posterior coxae covered with silvery pubescence, a line of the same on each side of the metathorax; the margin of the apical segment of the abdomen fringed with silvery-white pubescence.

*Hab.* Algeria.

74. **Nomada variabilis.**


*Hab.* Algeria.

75. **Nomada valida.**

Female. Length 4 lines.—Black, the anterior portion of the clypeus, and sometimes a dot above, the antennae, labrum, mandibles and orbits of the eyes ferruginous; the disk of the thorax has on each side a large oblong ferruginous spot deeply notched anteriorly; the tubercles, a minute spot beneath the wings, sometimes united to a large one beneath, the scutellum and two minute spots beneath on the metathorax, ferruginous; wings subhyaline, a pale spot towards their apical margins which are clouded, their nervures pale ferruginous; the coxae, trochanters and femora ferruginous towards their apex, the anterior pair of the latter being black merely at their extreme base; the tibiae and tarsi ferruginous. Abdomen ferruginous, the first segment being black at the base, the apical margins of the segments having an indistinct darker stain.

*Hab.* Nova Scotia.

76. **Nomada imbricata.**

Female. Length $\frac{4}{5}$—5 lines.—Head ferruginous, a black spot above the insertion of each antenna, also a minute black dot on each side of the clypeus, above which there is sometimes a yellow spot; thorax ferruginous, the collar, tubercles, two spots on the scutellum, and an oblique line on each side of the metathorax yellow; a line down the centre of the metathorax and another oblique one on the sides of the thorax behind the wings black,
the legs ferruginous; wings slightly fuscous. Abdomen ferruginous, a yellow line or a spot on each side of the basal segment, and a broad band of the same colour on the basal margins of the three following segments, each more or less attenuated in the middle, the first usually interrupted, the fifth segment yellow.

_Hab._ United States.

77. Nomada pulchella.

_Male._ Length 3½ lines.—Black, the clypeus, labrum, mandibles and orbits of the eyes, not reaching their vertex, yellow; the scape yellow in front, the flagellum fulvous beneath. Thorax, the tubercles, tegulae, and two spots on the scutellum yellow; legs ferruginous, the intermediate and anterior pairs yellowish in front, the posterior femora and tibiae blackish within; the wings hyaline, faintly clouded at their apical margins, their nervures rufo-testaceous. Abdomen, the basal segment has a transverse ferruginous band, the four following segments have continuous yellow bands placed a little before the middle, the two first attenuated in the middle, the apex yellow.

_Hab._ North America. (Coll. F. Smith.)

78. Nomada fervida. _B.M._

_Female._ Length 4–5 lines.—Black, the sides of the face, the clypeus, labrum, mandibles and antennæ ferruginous, the latter slightly fuscous above; the clypeus and flagellum sometimes dark fuscous. Thorax, the disk coarsely rugose, the collar, tubercles, tegulae, a spot beneath the wings, the scutellum and post-scutellum ferruginous, the two latter sometimes have a yellowish stain; the legs ferruginous, the wings fuscous, their apical margins having a darker stain; the basal segment of the abdomen has a transverse rufo-testaceous band, sometimes bordered with yellow; the second segment has a similar band placed beyond the middle, the band more or less attenuated in the middle; the fourth segment has sometimes a transverse narrow line, and the fifth sometimes an oblique yellow dot.

_Hab._ St. John's Bluff, East Florida; Georgia. (E. Doubleday.)

79. Nomada bisignata. _B.M._


_Hab._ United States.
80. **Nomada Americana.**


*Hab.* North America; Hudson’s Bay.

81. **Nomada articulata.**

**Male.** Length 3½ lines.—Black, the clypeus, labrum, mandibles, sides of the face, scape in front and flagellum towards the base yellow, the latter ferruginous towards the apex, above fuscous, the scape black above, joints of the flagellum submoniliform. The tubercles, tegulae, scutellum and post-scutellum ferruginous, the wings hyaline, the nervures ferruginous, the apical margin of the superior wings fuscous; legs ferruginous; the coxae and posterior femora within fusco-ferruginous; the two basal segments of the abdomen dark ferruginous, the apical ones black; a minute spot on each side of the first segment, a large ovate one, pointed within, on the second, and a transverse fascia on the four following placed about the middle, yellow; the apex ferruginous.

*Hab.* North America. (E. Doubleday.)

82. **Nomada annulata.**

**Female.** Length 3½ lines.—Black, the sides of the face, orbits of the eyes, clypeus, labrum and mandibles yellow; the antennæ and a minute spot above the clypeus ferruginous. Thorax, the collar, tubercles, a spot before and a line below them, the scutellum and a patch on each side of the metathorax yellow; legs ferruginous, variegated with yellow, the wings slightly clouded on their apical margins. Abdomen slightly ferruginous towards the base, each segment having a transverse yellow band; the three basal bands more or less attenuated in the middle, the bands continued beneath the abdomen.

**Male.** Length 3½ lines.—This sex has the clypeus, labrum, mandibles, scape of the antennæ in front and the flagellum beneath of a pale yellowish-white, the latter is fuscous above towards the base and again towards the apex, the intervening joints are ferruginous and the apical one entirely yellowish-white; thorax, the scutellum ferruginous; the tubercles, tegule and nervures of the wings reddish-yellow, the wings subhyaline, having a fuscous cloud at their apex. Abdomen black at the extreme base, the rest of the first segment and the whole of the second ferruginous, the latter having a large angulated yellow macula on each side, the first only a minute dot; each segment
from the fourth to the apical one has a narrow yellow band; beneath entirely ferruginous.

_Hab._ North America. (Presented by Sir Roderick Impey Murchison.)

83. _Nomada luteola._
_Hab._ Carolina.

84. _Nomada rubicunda._
Nomada rubicunda, _Ency. Méth._ viii. 365. 4.
_Hab._ Carolina.

85. _Nomada vincta._

In some specimens the clypeus, labrum and mandibles are yellow.
_Hab._ Indiana (America).

86. _Nomada sulphurata._

Female. Length 5 lines.—Head of a sulphur-yellow, a black line passes forwards from the base of the antennae half-way down the lateral margins of the clypeus, above the insertion of the antennae is a circular black patch united to a quadrate one which occupies the vertex, a minute round yellow spot in front of the anterior stemma; the scape yellow in front, ferruginous behind and having a narrow black line, the two basal joints of the flagellum ferruginous in front, the apex of the mandibles ferruginous. The disk of the thorax black, having two central longitudinal yellow lines not extending to the collar or scutellum, both of which are also yellow; the tegulae, and also a line which passes over them from the collar to the angles of the scutellum, a broad longitudinal patch on each side of the metathorax, the sides of the breast, tubercles and legs yellow, the latter varied with ferruginous stains; the wings fusco-hyaline, the nervures ferruginous, having a pale macula towards their apex. Abdomen black, each segment having a broad yellow fascia, the margins of which are waved; beneath a broad yellow fascia on the second segment, the following are ferruginous narrowly edged with yellow.
_Hab._ Georgia.
87. **Nomada torrida.**

   Female. Length 4½ lines.—Head red, the basal joint and the flagellum of the antennae beneath red. Thorax red, the collar obscurely yellow, the scutellum and sides of the metathorax of a paler red, the sides of the metathorax covered with white pubescence; the legs have a short silvery pile, particularly on the posterior femora, tibiae and tarsi within; the wings fusco-hyaline, having a pale lunule towards their apex. Abdomen ferruginous, the extreme base black, also two black spots on each side of the basal segment; the third segment has on each side an oblong yellow stripe at its basal margin, the fourth has a narrow yellow fascia at its basal margin, the fifth entirely yellow.

   The yellow markings on this species are in some examples very obscure.

   Hab. Georgia.

88. **Nomada miniata.**

   Female. Length 4½ lines.—Head and antennae red, the apex of the mandibles fuscous. The thorax and legs red, the collar, a spot in front of the tegulae and a large macula on each side of the metathorax yellow, the latter covered with a silvery-white pubescence; two lines in the middle of the thorax, another passing over the tegulae and the scutellum pale red; the wings hyaline, slightly fuscous at their apical margins, the nervures ferruginous. Abdomen entirely red, the second segment having on each side an ovate yellow spot; beneath immaculate.

   The yellow markings on the thorax are sometimes obsolete.

   Hab. Georgia.

Genus 22. **Epiclopus;**


   Ocelli placed in a line on the vertex. Scutellum rounded, not toothed. The superior wings having one marginal and three submarginal cells; the third submarginal much restricted towards the marginal, receiving the second recurrent nervure a little beyond the middle; the first recurrent nervure received by the second submarginal near its apex.

1. **Epiclopus Gayi.**


   Female. Length 6 lines.—Black, the head anteriorly blue, variegated with white; the thorax above and the first and second
segments of the abdomen clothed with white pubescence, the apical segments blue.

Hab. Chili.

Genus 23. AMMOBATES.


1. AMMOBATES RUFU-VENTRIS.

  St. Farg. 3'Seru. Ency. Méth. x. 17. 1.
  St. Farg. Hym. ii. 510. 1.

Hab. Portugal.

2. AMMOBATES BICOLOR.

Ammobates bicolor, St. Farg. & Serv. Ency. Méth. x. 17. 2.
  St. Farg. Hym. ii. 511. 2.

This species in all probability does not belong to the genus; the maxillary palpi have only four joints, in the generic characters of Latreille the number given is six;—not having a specimen of the type to examine, the present species is retained in the genus.

3. AMMOBATES MUTICUS.

Ammobates muticus, Spin. Ann. Soc. Ent. Fr. (1843)i. 141. 29.

Hab. Spain.

4. AMMOBATES VARIEGATUS.

Female. Length 3½ lines.—Head ferruginous, the vertex and face as low as the insertion of the antennae fuscous, antennae ferruginous, the flagellum fuscous above. Thorax ferruginous, the collar, metathorax, and a stain down the middle of the disk fuscous; the wings fusco-hyaline, their apical margins having a dark cloud, the superior wings varied with hyaline spaces beyond the enclosed cells, the tegulae and extreme base of the wings ferruginous; the disk covered with large dispersed punctures, and having a deep impressed line down the centre which also passes over the scutellum, which is consequently bituberculate; the legs red, the posterior femora having a fuscous stain above. Abdomen ferruginous, the three apical segments sub-fuscous; a short silvery pubescence clothes the face and metathorax, and is more thinly scattered on the legs and abdomen.

Hab. Greece (Thessaly). (Coll. W. W. Saunders, Esq.)
Genus 24. LEIOPODUS.

_F. Smith's MSS._

The labial palpi 4-jointed, the two basal ones elongate, filiform, of about equal length, the third and fourth minute, inserted at the side of the second, near its apex. The maxillary palpi 4-jointed, the basal joint short and stout, the second more slender, twice the length of the basal one; the third rather shorter than the second, the apical one minute. The ocelli placed in a curve on the vertex. The thorax rounded, wider than the head; the superior wings having one marginal and three submarginal cells; the first submarginal cell oblique-quadrate, the second wider than the first and narrowed towards the marginal, receiving the first recurrent nervure near the apex; the third submarginal narrower than the second and slightly narrowed towards the marginal. Abdomen elongate, conical. The legs simple, the claws simple.

The general habit of this genus is that of an _Epeolus._

1. _Leiopodus lacertinus._

Female. Length 4½ lines.—Black, the pubescence on the face of a glittering yellowish-white, most sparing on the clypeus and the region of the ocelli; the labrum subquadrate, rounded at the anterior angles, deeply punctured and thinly sprinkled with similar pubescence to that on the face; the antennae filiform, the apical joint compressed, obtuse at the apex. Thorax having a deep longitudinal depression, which passes over the scutellum; the depression broadest anteriorly; another depression on each side; the pubescence on the thorax anteriorly yellowish-white, posteriorly and beneath it is nearly white; the legs red, mottled with a white glittering pile, the tarsi fuscous; the wings subhyaline, irregularly stained with fuscous, the apical margins clouded, darkest beyond the marginal cell along the margin. Abdomen conical, the basal segment having on each side a stripe of white pubescence which is recurved upwards at the extreme lateral margins, the second and following segments have a line of white pubescence along their basal margins which recurve downwards and are produced inwardly a little way along the apical margins; beneath, covered with a similar white pile, the second and third segments having each two round denuded spots, the basal and apical segments naked.

The male exactly resembles the female, differing only in having an additional segment to the antennæ and abdomen.

The pubescence of this insect is most beautifully plumose or feathered.

_Hab._ South America. (Coll. W. W. Saunders, Esq.)
Genus 25. PASITES.


1. PASITES Schottii.
St. Farg. Hym. ii. 532. 1.
Pasites unicolor, Jurine, Hym. p. 224.
Hab. France; Germany; Russia.

2. PASITES aTRA.
Spin. Ins. Lig. ii. t. 2. f. 7?
St. Farg. Hym. ii. 533. 2.
Hab. France; Italy.

M. Spinola has figured in plate 2 an insect which he believes to have been a Pasites, but as the specimen was destroyed or lost by the artist who executed the figure, there is no description of it in the work.

3. PASITES fasciATA.
Pasites fasciata, EverSm. Bull. Mosc. xxv. 90. 2.
Hab. Russia.

4. PASITES dichROA.
Male. Length 3½ lines.—Head and thorax black, strongly punctured, the face below the insertion of the antennae has a short glittering white pubescence, the flagellum fusco-ferruginous beneath, the labrum and mandibles ferruginous. Thorax, a longitudinal depression in the centre and a shorter one on each side opposite the tegulae; the scutellum bituberculate; the tubercles prominent and having a fringe of white pubescence behind; the wings dark fuscous; the legs ferruginous, the coxae black. Abdomen ferruginous.

Hab. Sierra Leone. (Coll. the Rev. D. F. Morgan.)

It is very probable that the present species may be separated from Pasites by a monographer of these parasitic genera, in which case we would propose the name of Morgania.
Genus 26. PHILEREMUS.


1. PHILEREMUS PUNCTATUS. B.M.
Phileremus punctatus, St. Farg. Ency. Méth. x. 104. 1; Hym. ii. 513. 2.

Hab. France.

2. PHILEREMUS ABDOMINALIS.
Hab. Russia.

3. PHILEREMUS HIRSUTULUS.
Hab. Russia.

4. PHILEREMUS MELECTOIDES. B.M.
Female. Length 5 lines.—Jet-black, the head and thorax strongly punctured, the face below the insertion of the antennae thinly covered with a mixture of fuscous and griseous pubescence, the punctures large and distant on the vertex. Thorax, a central longitudinal depression on the disk, and also a slight one on each side opposite the tegulae; a little white pubescence on each side of the metathorax at its base, also on the posterior margin of the tubercles; the tibiae and tarsi have a short white pubescence above, that on the tibiae intermixed with short black bristles or spines, the apical joints of the tarsi ferruginous, the pubescence on the tarsi beneath fuscous; the wings fuscous, the nerves black. Abdomen short, convex, and highly polished at the base, all the segments except the apical one have on each side a spot of snow-white pubescence, those on the basal segment round, from which each in succession is more elongate; the basal half of each segment is distantly and rather strongly punctured, the apical half finely and closely so.

Male. Exactly corresponds with the female, only being rather more pubescent.

Hab. Albania.

This insect has the wings of an Ammobates, but its maxillary
palpi are only two-jointed, its labial palpi being four-jointed; it might probably form a subgenus of *Ammobates*.

5. **Phileremus niveatus.**  
*Hab.* Egypt.

6. **Phileremus oraniensis.**  
*Phileremus oraniensis*, *St. Farg. Hym.* ii. 512. 1.  
*Hab.* Algeria (Oran).

**Genus 27. Epeolus.**


1. **Epeolus variegatus.**  
*Kirby, Mon. Ap. Angl.* ii. 222. 36. t. 16. f. 6 ′.  
*Donov. Brit. Ins.* xii. 10. t. 399. f. 2.  
*Nomada variegata*, *Fabr. Syst. Ent.* p. 389. 2; *Ent. Syst.* ii. 347. 5.  
*Apis muscaria*, *Christ. Hym.* 195. t. 17. f. 5 ′.  
*Nomada crucigera*, *Panz. Faun. Germ.* 61. 20 3′.  
*Epeolus variegatus*, *Latr. Ins.* iii. 375.  
*Curtis, Brit. Ent.* ii. t. 516.  
*St. Farg. Hym.* ii. 462. 2. t. 17. f. 5 ′. 6 ′.  
*Smith, Zool.* iii. 1150. 1.  
*Hab.* Britain; France; Germany; Denmark; Sweden; Finland; Lapland; Cape of Good Hope.

Specimens of this species from the Cape of Good Hope differ merely in having the legs and tegulae darker, the red on the scutellum reduced to two rounded spots, in every other particular they correspond with the European examples: amongst specimens from Sicily some have the abdomen red, variegated as usual; British specimens are sometimes partly red.
2. **Epeolus pictus.**


*Hab.* Siberia.

3. **Epeolus donatus.**

Epeolus donatus, *Harris, Cat.*

Female. Length 4–5½ lines.—Black, head and thorax covered with confluent punctures, the clypeus more finely punctured and interspersed with large punctures; above the clypeus the face is covered with cinereous pubescence. Thorax, a line on the collar, another over the tegulae and passing along the base of the scutellum, two abbreviated lines on the prothorax, and one passing from the base of the wings round the metathorax over the postscutellum, of cinereous pubescence; the legs are variegated with pubescence of the same colour; wings fusco-hyaline, clearest towards their base. Abdomen very finely punctured, at its apex is a semicircular space which is rugose; the basal segment has its margins traversed by a band of cinereous pubescence, slightly interrupted in the centre of both the basal and apical margins, the three following segments have a similar band on their apical margins; the apical segment has a triangular patch on each side.

The male exactly resembles the female, differing only in the usual characteristics of the sex.

*Hab.* United States; Ohio (Mount Pleasant). (E. Doubleday and R. Foster.)

4. **Epeolus mercatus.**


*Hab.* Carolina.

5. **Epeolus remigatus.**


*St. Farg. Hym.* ii. 461. 1.


*Hab.* North America; Carolina; Mexico.

This species varies in having the legs entirely red, the antennae also are occasionally red beneath; these differences occur in the specimens from Mexico, but they cannot be considered sufficient to constitute a distinct species.
6. **Epeolus scutellaris.**


*Hab.* North America; Carolina; Mexico.

7. **Epeolus zonatus.**

**Female.** Length 4 lines.—Head and thorax black, the antennæ, labrum and mandibles ferruginous, the face has a little silvery pubescence. Thorax encircled with ferruginous; the collar, sides of prothorax, tegulae and scutellum being red, the scutellum armed on each side with a short stout acute tooth; the legs ferruginous, the wings fusco-ferruginous, the nervures ferruginous. Abdomen, the two basal segments ferruginous, the apical ones black; the apical margins of the segments have fasciae of short white pubescence, usually much interrupted; the extreme base of the abdomen black.

**Male.** This sex differs in having the apex of the clypeus ferruginous, and only the basal segment of the abdomen of that colour.

*Hab.* United States; St. John's Bluff, East Florida.

8. **Epeolus fumipennis.**


*Hab.* North America.

9. **Epeolus Brasiliensis.**

**Male.** Length 4½ lines.—Black, the face covered with short silvery-white pubescence, the flagellum beneath and the mandibles towards their apex ferruginous. Thorax, the disk covered with confluent punctures, a line of golden pubescence on the collar and two short ones in the middle of the prothorax uniting with the collar; the scutellum rounded behind and having on each side a stout tooth; the legs nigro-ferruginous and having a short white glittering pile, the tarsi ferruginous; the wings fuscos, and having several hyaline spots towards their apical margins. Abdomen entirely covered with a short reddish-brown pile; the basal segment has on each side near its apical margin a line of golden-coloured pubescence which curves upward along the extreme lateral margins, the curved portion white; the following segments have each a narrow golden fascia towards their apical margins, each fascia becoming broader towards the apex, covered beneath with white pubescence.

*Hab.* Brazil. (Coll. W. W. Saunders, Esq.)
10. **Epeolus luctuosus.**

*Epeolus luctuosus, Spin. Faun. Chili. vi. 189. 3.*

Female. Length 3 lines. — Antennæ black, beneath from the third to tenth joints red. Abdomen maculated; the legs black, the tibiae having two white rings; wings hyaline, nervures black.

*Hab. Chili.*

11. **Epeolus Gayi.**

*Epeolus Gayi, Spin. Faun. Chili. vi. 188. 2.*

Female. Length 5 lines. — Black; the first and second joints of the antennæ red; the metathorax naked in the middle; abdomen, the margins of the segments having bands of pale pubescence; the legs reddish beneath.

*Hab. Chili.*

12. **Epeolus gigas.**


Female. Length 6 lines. — Labrum, antennæ and tegulae red; head, thorax and abdomen black, the latter having yellowish bands; the tibiae and tarsi ferruginous; wings hyaline, nervures fuscous, the base of the wings testaceous.

*Hab. Chili.*

13. **Epeolus tristis.**

*Epeolus luctuosus, Eversm. Bull. Mosc. xxv. 101. 1 (nec Spin.).*  

*Hab. Russia.*

14. **Epeolus transitorius.**

*Epeolus transitorius, Eversm. Bull. Mosc. xxv. 102. 3.*  

*Hab. Russia.*

**Genus 28. Coelioxys.**

*Apis, pt., Linn. Faun. Suec.; Syst. Nat. i. 953 (1766).*  

*Anthophora, pt., Fabr. Syst. Piez. 372 (1804).*  

*Megachile, pt., Latr. Hist. Nat. 53. sect. 3 (1805).*  

*Coelioxys, Latr. Gen. Cr. Ins. iv. 166 (1809).*

1. **Coelioxys quadridentata.**  

*Apis quadridentata, Linn. Faun. Suec. 1703; Syst. Nat. i. 958. 29, and Cab. Mus. Linn. Soc. 3.*
HYMENOPTERA.

Apis quadridentata, Fabr. Syst. Ent. p. 386. 49.
Apis conica, Linn. Faun. Suec. 1705; Syst. Nat. i. 958. 32, and
  Cab. Mus. Linn. Soc. ♀ .
Apis bidentata, Panz. Faun. Germ. 59. 7?
  St. Farg. Hym. ii. 517. 1.
Cœlioxys quadridentata, Smith, Zool. iii. 1151. 1 ♂ ♀ .
Cœlioxys umbrina, Smith, Zool. iii. 1153. 4. var. ♂ .
  Hab. Britain; France; Germany; Austria; Russia; Denmark;
  Sweden; Finland; United States; Trenton Falls. (E. Dou-
  bleday.)

2. Cœlioxys simplex.

Cœlioxys punctata, St. Farg. ?
  Hab. Britain; France, &c.; Sweden.

3. Cœlioxys brevis.

  Hab. Russia.


Cœlioxys rufescens, St. Farg. Hym. ii. 519. 2.
  Blanch. Hist. Nat. des Ins. iii. 413.
  Smith, Zool. iii. 1152. 3.
  Hab. Britain; France; Germany; Denmark; Sweden.

5. Cœlioxys apiculata.

  Hab. Britain.

6. Cœlioxys vectis.

Cœlioxys vectis, Curtis, Brit. Ent. viii. tab. 349.
Coelioxys vectis, Smith, Zool. iii. 1152. 2.
Hab. Britain; Jersey; France; Denmark; Sweden.

7. Coelioxys lanceolata.
Hab. Sweden.

8. Coelioxys tridentata.
Boreal. p. 278. 1.
Hab. Sweden; Finland.

Hab. Sweden; Finland.

10. Coelioxys punctata.
Coelioxys punctata, St. Farg. Hym. ii. 520. 3.
Hab. France (Paris).

11. Coelioxys elongata.
Coelioxys elongata, St. Farg. Hym. ii. 522. 4.
Hab. France (Paris).

12. Coelioxys rufocaudata. B.M.
Coelioxys octodentata, St. Farg. Hym. ii. 524. 6, nec Say.
Hab. France.

13. Coelioxys acanthura.
Anthophora acanthura, Illig. Mag. v. 105. 7.
Eversm. Bull. Mosc. xxv. 76. 3.
Hab. Russia.

Coelioxys conoidea, Illig. Mag. v. 105. 3.
Eversm. Bull. Mosc. xxv. 76. 2.
Hab. Russia.

15. Coelioxys farinosa. B.M.
Female. Length 5¼ lines.—Black, the flagellum, except the
basal joint and the extreme apex of the apical one, the mandibles and legs red, the face densely covered with snow-white pubescence, the entire insect as it were powdered with white scales, lines of the same traversing the collar, margins of the scutellum and epaulets of the tegulae; the entire thorax beneath and on the sides, the legs in front and the entire abdomen beneath densely covered with white scales; the transverse bands on the abdomen above cover both the apical and basal margins of the segments, widening and uniting at the sides, the margin of the base of the abdomen has an interrupted band; the superior plate of the apical segment is short, rounded gradually at the sides to the apex, which is furnished with a short acute spine, from which a sharp carina passes forwards half-way towards the base of the segment; the ventral plate is longer than the upper one and is rounded at its apex; the abdomen is more or less red beneath, sometimes entirely so.

Hab. Turkey.

16. **Cœlioxys caudata.**


*Hab.* Egypt; Albania; South of France.

Our specimens differ slightly from the type, but not sufficiently to justify making a distinct species unless a larger number could have been examined.

17. **Cœlioxys elytrura.**


*Hab.* Egypt.

18. **Cœlioxys rufiventris.**

*Cœlioxys rufiventris,* Spin. Ann. Soc. Ent. Fr. vii. (1838) 531.73.

*Hab.* Egypt.

19. **Cœlioxys decipiens.**


*Savig. Expéd. d'Egypte,* pl. 4. f. 14 ♂, 15 ♀ ♀.

*Hab.* Egypt.

20. **Cœlioxys afra.**

*Cœlioxys afra,* St. Farg. Hym. ii. 525. 7.


*Hab.* Algeria (Oran).
21. **Cœlioxys argentea.**

*Cœlioxys argentea,* St. Farg. Hym. ii. 523. 5.


*Hab.* Algeria (Oran).

22. **Cœlioxys subdentata.**

Male. Length 5 lines.—Black, head and thorax coarsely punctured, the punctures more or less confluent; the face and cheeks densely clothed with white pubescence. Thorax, beneath, the sides and the metathorax clothed with white pubescence; the femora beneath, and the tibiae and tarsi above, have a clothing of very short white pubescence; the extreme apex of the tibiae and the tarsi ferruginous; the wings fusco-hyaline, palest towards their base, darkest at their apical margins; the tegulae and nervures black; the posterior margin of the scutellum subangular, having a short tooth in the middle and another short obtuse one on each side. Abdomen shining, the punctures scattered; the apical margins of the segments have bands of white pubescence, much attenuated in the middle, and broad on each side; beneath, the segments have a broad band of white pubescence; the apical segment has a short tooth on each side at the base, and is deeply concave in the middle, and produced on each side, each production armed above with three short teeth, beneath which is a longer and more acute tooth.

*Hab.* Cape of Good Hope. (Coll. F. Smith.)

23. **Cœlioxys foveolata.**

Male. Length 6 lines.—Black, head and thorax shining, covered with large distinct punctures, the face and cheeks densely clothed with very pale ochraceous pubescence. Thorax, the sides, beneath, and the collar covered with pale ochraceous pubescence; two tufts of the same at the base of the scutellum, its posterior margin rounded, and armed on each side with a stout angular tooth; the wings fuscose, palest at their base, the tegulae and nervures black; the femora beneath, the tibiae and tarsi above densely covered with short snow-white pubescence. Abdomen shining, strongly punctured, the apical margins of the segments having a narrow white fascia which at the sides expands into a broad angular patch, the second, third and fourth segments beneath have a broad band of the same colour; above, the second and third segments have on each side a transverse oblong pear-shaped foveola enclosed by a smooth shining ridge; the two following segments have on each side a somewhat similar shaped depression not enclosed; the apical segment has on each side at
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Female. Length 5 lines.—Black, head and thorax closely and coarsely punctured, the face and cheeks densely clothed with short silvery-white pubescence, the mandibles ferruginous, their tips black. Thorax, beneath, the sides and metathorax clothed with silvery-white pubescence, also a tuft over the tegulae; the tegulae and nervures of the wings black, the apex of the wings fuscous; the scutellum rounded behind, and armed on each side with a short stout tooth, curved inwards; the legs red, the apical joints of the tarsi black, the claws red; the femora beneath, and the tibiae and tarsi above clothed with a short snow-white pubescence. Abdomen shining, covered with large scattered punctures, beneath, the margins of the segments and the apical segment ferruginous; all the segments have an uninterrupted white band of pubescence on their apical margins attenuated in the middle, the basal one sometimes interrupted; the apical segment acute, the upper plate having a sharp carina, not quite extending to its base, the sides of the plate fringed with white pubescence; the ventral plate longer than the superior, terminating in a short spine, subacute at its apex.

Male.—This sex closely resembles the female, but is more pubescent, particularly on the disk of the thorax, that on the face has a golden tinge; the apex of the abdomen armed with eight spines; the first pair are placed at the lateral angles of the fifth segment; the second pair at the basal lateral angles of the sixth segment, the apex of which is furnished with two on each side, the upper pair short and acute, the lower pair twice their length and more slender and acute.

Hab. Cape of Good Hope. (Coll. F. Smith.)

25. Cœlioxyx verticalis. B.M.

Female. Length 5½ lines.—Head and thorax strongly punctured, the vertex rugose; the face covered with silvery-white pubescence. Thorax, the sides and beneath have short white pubescence; the legs dark rufo-piceous, covered above with a short white pile, the tarsi ferruginous; the wings fuscous, palest towards their base; the scutellum rounded behind and having a short obtuse tooth on each side. Abdomen moderately punctured, most strongly towards the base; all the segments have a
narrow white fascia on their basal margins, which is widened laterally and is continuous beneath; the ventral plate of the apical segment a little longer than the upper plate and rounded at the apex, the upper plate terminating in a very acute spine.

\[\text{Hab.} \text{ Port Natal.}\]

26. \textit{Cœlioxys carinata}.

Female. Length 5½ lines.—Head and thorax closely and strongly punctured, the face on each side covered with short white pubescence; the clypeus has a central raised carina, its anterior margin subangular. Thorax, the collar and the metathorax clothed with white pubescence; the sides, beneath, the femora beneath, and tibia and tarsi above, covered with a very short white pile; the apical joints of the tarsi rufo-testaceous; the wings dark fuscous, the superior wings paler towards their base; the inferior wings have their basal half hyaline; the scutellum is rounded behind and armed on each side with an angular tooth. Abdomen shining, strongly punctured, the margins of all the segments have a narrow white fascia which expands laterally into broad patches; the abdomen is rounded at the sides, the sixth segment being suddenly narrowed, forming an elongate acute spine, the lower plate rather longer than the upper, which has an elevated carina towards its apex, on each side of which it is rugose.

\[\text{Hab.} \text{ Port Natal.} \quad \text{(Coll. W. W. Saunders, Esq.)}\]

27. \textit{Cœlioxys torrida}.

Female. Length 8 lines.—Black, head and thorax very closely and finely punctured, an elevated carina passing from the anterior stemma to the base of the clypeus, channelled above; the face on each side covered with white pubescence, that on the clypeus very short and fuscous towards the anterior margin. Thorax, a delicate impressed line down the centre extending to the base of the scutellum, the punctures on the disk confluent running into striae; a line of white pubescence on the collar, another over the tegulae, a third along the base of the scutellum; the metathorax covered and having a tuft on each side, another on the tubercles, and the whole thorax beneath thinly covered with short pubescence of the same colour; the legs are covered with a short white pile most dense and glittering above; the wings at their base hyaline, their apical half dark fuscous having a purple lustre; the scutellum rounded behind and armed laterally with stout curved tooth. Abdomen elongate, the apical segment long and spiniform; on each side of the basal segment a patch of snow-
white pubescence notched within, a narrow line on the basal margins of the following segments expanding laterally into a broader fascia equally covering apical and basal margins; the second and third segments have towards their base laterally a short curved line of white pubescence; the whole abdomen finely punctured, most strongly so towards the base; the apical segment beneath impunctate, except a few delicate punctures at the base.

Hab. Sierra Leone. (The Rev. D. F. Morgan.)

28. Cœlioxys aurifrons.

Female. Length 3½ lines.—Black; head and thorax very coarsely punctured, the face densely covered with golden pubescence. Thorax, the wings subhyaline, darkest towards their apical margins, the tegulae and nervures rufó-testaceous; the legs red; the femora beneath, and the tibiae and tarsi above, covered with a short white pile; the sides of the metathorax covered with white pubescence; the scutellum slightly rounded behind, and armed on each side with a stout bent tooth. Abdomen shining, covered with scattered punctures, most strongly so towards the base; all the segments have a narrow fascia of white pubescence on their apical margins, more or less interrupted in the centre; each segment has at the sides towards the base an impressed line; the apical segment is armed on each side with an acute spine, and with four at the apex all acute, the two lower spines being longer than the upper ones; beneath the abdomen is ferruginous at the base, and at the apex of the other segments.

Hab. Sierra Leone. (The Rev. D. F. Morgan.)

29. Cœlioxys pruinosa.

Male. Length 3 lines.—Black, head and thorax coarsely punctured, the former very large, wider than the thorax, the face densely clothed with a pale golden pubescence, that on the cheeks being snow-white; the antennæ rufó-testaceous beneath, the mandibles ferruginous, on the cheeks beneath is a deep smooth shining ovate fossulet. Thorax beneath, also the legs beneath, covered with a dense short white pile having the appearance of hoar-frost, the tarsi ferruginous; the apex of the wings fuscous, hyaline towards their base, the tegulae and nervures black; a band of white pubescence on the collar, an epaulet of the same over the tegulae, and a line at the base of the scutellum, the posterior margin of the latter rounded, and armed on each side with a large angular bent tooth. Abdomen shining, rather closely punctured; the apical margins have an interrupted white
band, broad and almost uniting at the sides, but much attenuated inwardly; the third, fourth and fifth segments at their basal margins have a transverse interrupted narrow band; the apical segment subquadrate, the apex ferruginous; on each side towards the base a short acute tooth, the apex having four short acute teeth above, and two below rather longer but less acute.

_Hab._ The Gambia. (Coll. F. Smith.)

30. _Cœlioxys loricula._

_Male._ Length 5 lines.—Black, head and thorax coarsely punctured, the face covered with a golden pubescence, and a narrow line of white behind the eyes. Thorax, the disk covered with large oblong punctures, those on the scutellum finer, close and rounded, the posterior margin rounded, armed on each side with a stout acute tooth; the wings fuscous, palest towards their base, the tegulae and nervures black, the thorax beneath covered with a short dense silvery-white pubescence, the femora beneath and the tibiae and tarsi above clothed with the same. Abdomen shining, the basal segment covered with scattered punctures, a few at the base and apex of the following; the basal segment has laterally a short marginal fascia, and the apical margins of the following segments a very narrow fascia slightly widening laterally; the apical segment armed on each side with a short acute tooth, and with four at the apex, the upper pair rounded at their apex, the inferior pair longest and subacute.

_Hab._ Guinea. (Coll. W. W. Saunders, Esq.)

31. _Cœlioxys fuscipennis._

_Female._ Length 5 lines.—Black, the head and thorax strongly punctured, the sides of the face and cheeks densely covered with snow-white pubescence, the clypeus thinly covered. Thorax, a spot behind the wings, the metathorax on the sides, and a large patch beneath the wings of white pubescence; the femora beneath and the tibiae and tarsi above have a covering of very short white pubescence, the legs rufo-testaceous, wings dark fuscous, subhyaline towards their base, the nervures black, the scutellum behind rounded and armed on each side with a short blunt tooth diverging outwards. Abdomen shining, the basal segment strongly and closely punctured, the punctures scattered on the other segments; the apical one very finely punctured; the segments have very narrow white marginal bands widened at the sides; beneath, they are narrow and interrupted in the middle; the superior plate of the apical segment is carinated in the middle and acute
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at the apex; the ventral plate is longer than the upper one and gradually narrows to an acute point.

Hab. India. (Coll. J. S. Baly, Esq.)

32. Cœlioxyx ducalis, n. s.

Female. Length 11 lines.—Black, the head clothed with a dense short bright fulvous pubescence, that on the cheeks is fuscous; the thorax above rugose, and having a slightly elevated carina passing from the collar to the middle of the scutellum, on each side of which is a bent tooth; the wings dark fuscous, having a splendid purple and coppery reflection, the posterior wing hyaline towards the base. The abdomen is strongly punctured, most sparingly so on the disk; the apical segment finely punctured.

Hab. India? (Coll. W. W. L. Walcott, Esq.)

33. Cœlioxyx apicata.

Female. Length 5½–6 lines.—Black, head and thorax strongly but not coarsely punctured, the face clothed with short white pubescence; that on the cheeks, vertex, collar, sides of the thorax, and metathorax, is also white; the wings subhyaline, their apex clouded, the scutellum rounded behind and subdente on each side. Abdomen shining, towards the base rather distantly punctured, more finely and closely so towards the apex; the superior plate of the apical segment broad and rounded at the apex, slightly notched at the sides, carinated down the centre and terminating in a slender acute spine; the inferior plate a little longer than the upper one, very broad and rounded at the apex.

Hab. Northern India. (Coll. J. S. Baly, Esq.)

34. Cœlioxyx capitata.

Female. Length 3 lines.—Head very large, and as well as the thorax, coarsely punctured; the face and cheeks covered with snow-white pubescence, antennae beneath rufo-testaceous, tips of the mandibles ferruginous. Thorax, two spots on the prothorax, one over the tegulae and two on the basal margin of the scutellum of white scales; the thorax on the sides and beneath, the femora beneath, and tibiae and tarsi above, also covered with white scales, the legs ferruginous; the wings fusco-hyaline, darkest towards their apical margins, the nervures fusco-ferruginous; the scutellum rounded behind and armed on each side with a short stout tooth. Abdomen shining, the punctures distinct but scattered, most dense at the base; all the segments
have a marginal fascia of snow-white scales; in the centre the bands are formed of single scales placed longitudinally, at the sides the bands are much widened and are continued beneath, both above and below usually more or less interrupted; the abdomen is rufo-testaceous beneath; the superior plate of the apical segment gradually narrows to a point, has a short carina towards the apex, and a white spot on each side about the middle; the lower plate is nearly twice the length of the upper, gradually tapering and notched at its apex.

The male only differs in the apical segment of the abdomen which is armed with eight spines, a short acute one on each side at the base, four short acute ones in a row at the apex above, and two longer ones beneath; there is also a very minute one on the apical margins of the fifth segment at its extreme lateral angles.

_Hab._ Northern India; North Bengal; Ceylon.

35. _Coelioxys vidua._

**Female.** Length 4½ lines.—Black, the face covered with very short pale ochraceous pubescence, the mandibles and scape of the antenna ferruginous. Thorax, a line on the collar, an epaulet over the tegulae, and a line at the base of the scutellum of ochraceous pubescence; the legs red, the tibiae and tarsi above, and femora beneath covered with a short white pile; the scutellum produced in the middle into an angular tooth, and armed on each side with a stout tooth; the disk covered with large distinct punctures, the tegulae red, the apex of the wings fuscous. Abdomen, the first segment above, the second and third laterally, and the whole beneath red; all the segments margined with pale ochraceous bands, continuous beneath; the superior plate of the anal segments rounded at its extremity and having a central carina extending nearly to its base; the inferior plate a little longer than the superior one, its apex terminating in a broad acute tooth, on each side of which it is notched, forming two short acute teeth.

_Hab._ Brazil. (Coll. F. Smith.)

36. _Coelioxys carinata._

**Female.** Length 5 lines.—Black, the face on each side densely covered with short yellowish-white pubescence, the mandibles ferruginous, their tips black. The thorax shining on the disk, nearly impunctate anteriorly, becoming deeply punctured towards the scutellum, the punctures large and not very close, the scutellum punctured on each side, its posterior margin angular, ferruginous at the point; on each side is a stout tooth; the tegulae ferruginous, the wings subhyaline, gradually becoming
fuscos towards their apical margins, the nervures dark ferruginous; the legs, abdomen beneath and base above, ferruginous; the abdomen shining, punctured at the base, and on the basal margins of the segments laterally; otherwise, the punctures widely scattered; an indistinct carina runs down the middle of the abdomen, becoming raised and decided on the apical segment, the upper plate of which is a little shorter than the lower one, which is acute at the apex and slightly notched on each side; beneath, the abdomen has a similar undefined carina down the centre.

_Hab._ Brazil. (Coll. W. W. Saunders, Esq.)

37. _Cœlioxys simillima._

Female. Length 4½ lines.—Very similar to _C. tridentata_, but the scape is entirely black, the thorax is not produced in the middle, the anal valve has the inferior plate produced into a more elongate spine and is not notched at the sides; in other respects it corresponds with that species, of which it possibly may be a mere variety; the male is not known; it may also be a variety of the _prætexta_ of Haliday, but the description of that species is too short to be at all relied upon in this variable genus.

_Hab._ Brazil.

38. _Cœlioxys lœvigata._

Male. Length 4½ lines.—Black, very smooth and shining; on the head and thorax the punctures are large and scattered, on the abdomen they are finer and cover the basal segment, and the base of all the following, a transverse line towards the margins of each, the intervening portions being smooth and shining; the face covered with very pale fulvous pubescence; the tegulae and legs bright ferruginous; the wings subhyaline, their apical margins have a fuscos cloud, as well as the upper half of the marginal cell; the nervures black; the scutellum impunctate, produced in the middle into a broad spine, which is rounded at its apex; on each side an elongate smooth spine; the apical segment of the abdomen armed with six acute spines, one on each side about the middle; four at the apex, two on each side, of which the two lower spines are the longest; all the segments have a narrow white marginal fascia a little widened at the sides and beneath, and more or less interrupted above; the apical margins of the ventral segments ferruginous.

_Hab._ Para.

39. _Cœlioxys zonula._

Female. Length 6–7½ lines.—Head and thorax black, the
head densely clothed with a short scale-like pubescence, the vertex naked; a transverse line of fuscous pubescence on the face, in a line with the anterior stemma; the disk of the thorax coarsely punctured, the scutellum rugose, having on each side a stout tooth; a continuous line of whitish pubescence passes over the collar, tegulae, and base of the scutellum; the thorax on the sides and beneath covered with a very short snow-white pubescence; the legs red, and having behind a line of snow-white pubescence; the tegulae red, the wings fusco-hyaline, their apical margins fuscous, a narrow cloud passing along the superior margin of the marginal cell; the nervures dark fuscous. Abdomen, the three basal segments red, and, except the apical segments, entirely red beneath; all the margins of the segments have a narrow fringe of short snow-white pubescence; a broad patch of the same in the middle of the basal ventral segment; the superior plate of the apical segment pointed, and having a central carina fringed with fuscous pubescence; the ventral plate longer than the superior, acute at the apex, having a fringe of dark fuscous pubescence on the sides.

Male.—This sex closely resembles the female, the apical segment denticulate, a short tooth on each side, the apex being quadridentate, the lower pair of teeth longest and acute.

Hab. Brazil (Santarem).

40. COELIOXYs RUFOPICTA.

Male. Length 6½ lines.—Black, the vertex of the head coarsely punctured, the face covered with a pale golden-yellow pubescence, the mandibles ferruginous in the middle. Thorax shining, sparingly punctured in the centre, but more thickly and strongly at the sides; the prothorax elevated, the scutellum smooth and shining, having on each side a few large punctures, its posterior margin slightly produced in the middle and armed on each side with an obtuse tooth diverging outwards; the wings fusco-hyaline, having irregular transparent spaces; the legs ferruginous, the femora being more or less fuscous. Abdomen elongate, rather strongly punctured at the base, but much more finely towards the apex; a bright ferruginous spot on each side of the basal segment, the apical margins of the segments beneath, ferruginous; all the margins have a narrow marginal fascia, more or less interrupted above; the ventral segments have a central carina which extends from the base to the apex of the fourth segment; at its termination are two short acute spines; the apex armed with six teeth, a short acute one on each side,
and two pairs at the apex, of which the upper ones are very short and acute.

_Hab._ South America. (Coll. W. W. Saunders, Esq.)

41. **Coelioxys Cayennensis**.


_Hab._ Cayenne. (Coll. W. W. Saunders, Esq.)

42. **Coelioxys praetexta**.

_Coelioxys praetexta_, _Halid. Linn. Trans._ xvii. 320. 15 (1837).

_Hab._ St. Catherine's. (Coll. W. W. Saunders, Esq.)

43. **Coelioxys abdominalis**.


_Hab._ Isle of St. Thomas.

44. **Coelioxys rufipes**.


_Hab._ Cuba.

45. **Coelioxys modesta**.

_Female._ Length 4½ lines. — Black, head and thorax covered with large distinct punctures, the face covered with white pubescence. Thorax, a line on the collar, a spot behind the tegulae, and a line at the base of the scutellum of white pubescence; the sides of the metathorax have some long white hairs, and the legs above are covered with very short white pubescence, the legs rufo-testaceous, as well as the tegulae and nervures of the wings, the latter fusco-hyaline, darkest towards their apical margins; the scutellum rounded behind and armed on each side with a short bent tooth. Abdomen shining, the punctures scattered, all the segments have fasciae of white pubescence, frequently interrupted; the apical segment has the lower plate broad, rounded at the apex, and having a minute point in the middle, the margins of the plate fringed with fuscous pubescence.

_Hab._ United States.

46. **Coelioxys rufitarsus**.

_Male._ Length 5½ lines. — Black, the head and thorax coarsely punctured, the face covered with white pubescence, the cheeks and the thorax beneath have a long white pubescence as well as
the sides of the metathorax, the tegulae testaceous in the middle, the wings subhyaline, their nervures ferruginous, all the tarsi bright ferruginous; the apical margins of all the segments have a white marginal fascia; the fifth segment has on its apical margin laterally a short blunt tooth, the sixth has a more acute one on each side in the middle, the apex having four teeth, placed two above and two beneath, the latter being the longest and most acute.

Hab. United States.

47. Cœlioxyx 8-dentata.  

Hab. N. America (N.W. Arkansas; Pennsylvania).

48. Cœlioxyx alternata.  

Hab. N. America (Indiana).

49. Cœlioxyx dubitata.  
Female. Length 5½ lines.—This insect exactly resembles C. rufitarsus, differing, as usual in the sex, in having the abdomen conical; the upper plate of the apical segment being suddenly narrowed at half its length, forming on each side a sharp angle, from which it gradually narrows to the apex, which is subacute; the lower plate is lanceolate, very slightly notched on each side towards the apex.

Hab. St. John's Bluff, East Florida. (R. Foster, Esq.)

50. Cœlioxyx funeraria.  
Male. Length 5 lines.—Black, head and thorax strongly and very closely punctured, the face covered with snow-white pubescence; the thorax has some long white pubescence on the collar, metathorax beneath, and on the sides; wings subhyaline, the nervures ferruginous, the tarsi ferruginous; the scutellum rounded at its posterior margin and armed on each side with a short bent tooth. Abdomen shining, closely and rather strongly punctured; all the segments have a snow-white band on their apical margins, which is narrow in the middle and gradually widened towards the lateral margins and continued uninterruptedly on the ventral segments; the apex armed with six teeth, placed one on each side, and four at the apex placed two above and two below, the lower pair longest and acute.

Hab. Canada.
This species closely resembles the *C. vectis*, but differs in having snow-white pubescence on the face, continuous bands on the abdomen, and also in wanting the transverse depressions on each segment; the fifth segment also is not produced at its apical lateral margins.

**Genus 29. DIOXYS.**

*Heriades, pt., Spin. Ins. Lig. fasc. 3. p. 198.*  
*Dioxys, St. Farg. & Serv. Ency. Méth. x. 109.*

1. **Dioxys cincta.**

*Heriades cincta, Spin. Ins. Lig. fasc. 3. p. 198. 2.*  
*Dioxys cincta, St. Farg. & Serv. Ency. Méth. x. 109. 1.*  
*St. Farg. Hym. ii. 514. 2.*

**Hab.** South of France; Italy.

2. **Dioxys Pyrenaica.**

*Dioxys Pyrenaica, St. Farg. Hym. ii. 515. 3.*  

**Hab.** The Pyrenees (Baréges); Algeria (Oran).

3. **Dioxys rufiventris.**

*B.M.*  
*Dioxys rufiventris, St. Farg. Hym. ii. 516. 4.*  
*Lucas, Explo. Sc. Algér. iii. 207. 139. t. 9. f. 5.*

**Hab.** Algeria (Oran).

4. **Dioxys maura.**

*Dioxys maura, St. Farg. Hym. ii. 516. 5.*  
*Lucas, Explo. Sc. Algér. iii. 208. 141. t. 9. f. 7.*

**Hab.** Algeria (Oran).

5. **Dioxys dimidiata.**

*Dioxys dimidiata, St. Farg. Hym. ii. 514. 1.*

**Hab.** Versailles.

6. **Dioxys chalicoda.**

*B.M.*  
*Dioxys chalicoda, Lucas, Explo. Sc. Algér. iii. 207. 140. t. 9. f. 6.*

**Hab.** Algeria (Oran).
Genus 30. STELIS.


1. STELIS ATERRIMA.

Apis aterrima, Panz. Faun. Germ. 56. 15.
Spin. Ins. Lig. fasc. 1. p. 135. 3.
St. Farg. Hym. ii. 527. 1.
Smith, Zool. iii. 1154. 1.
Hab. Britain; France; Germany; Denmark; Sweden; Finland.

2. STELIS PHAEOPTERA.

Spin. Ins. Lig. fasc. 1. p. 136. 4.
Stelis phaeoptera, St. Farg. Hym. ii. 527. 2.
Smith, Zool. iii. 1154. 2.
Hab. Britain; France; Italy; Germany; Denmark; Sweden; Finland.

3. STELIS MINUTA.

Stelis minuta, St. Farg. Enzy. Méth. x. 481. 1; Hym. ii. 529. 3 Q.
Smith, Zool. iii. 1155. 4.
Hab. Britain; France.
4. Stelis breviuiscula.
Hab. Sweden.

5. Stelis 8-maculata.
Stelis octomaculata, Smith, Zool. iii. 1155. 3♂♀.
Hab. Britain; Sweden.

Stelis aberrans, Eversm. Bull. Mosc. xxv. 87. 3.
Hab. Russia.

7. Stelis obesa.
Hab. North America (Indiana, United States).

8. Stelis fœderalis. B.M.
Female. Length 2½ lines.—Black, the face covered with griseous pubescence, the flagellum rufo-piceous; the thorax as well as the head strongly punctured, the former has a scattered griseous pubescence, the wings fusco-hyaline, the apical margins of the wings faintly clouded, the apical joints of the tarsi dark ferruginous. Abdomen ovate, shining and closely punctured, the basal segment having on each side a somewhat pear-shaped yellowish-white macula; the four following segments have across the middle a slightly interrupted narrow fascia, the sixth immaculate, its margin entire, rounded.

Male.—Closely resembling the female, the face being more densely pubescent; the five basal segments of the abdomen having a subinterrupted fascia of the same colour as in the female, the fasciae on each side are sinuated on their inferior margins; the apical segment rounded.
Hab. United States.

9. Stelis carbonaria. B.M.
Female. Length 4 lines.—Black, closely and strongly punctured, the head and thorax opaque; the abdomen shining, more finely and distantly punctured, the face covered with white pubescence; wings dark fuscous, palest towards their base; the scutellum rounded, and produced behind over the base of the abdomen and covered with large punctures; in the middle of the
posterior margin a deep depression. Abdomen curved, and
having a scattered griseous pubescence, the apex rounded.
The male resembles the female, but has the apical segment
of the abdomen tridentate.

*Hab.* East Indies; N. Bengal; Ceylon.

**Genus 31. CROCISA.**

Crocisa, *Jurine, Hym.* p. 239 (1807).

The mentum and labrum of about equal length; the labial
palpi five-jointed; the basal joint elongate, full half the length
of the mentum, the second not half the length of the basal joint,
the third about half the length of the second; the two apical
joints minute, placed near the apex of the third; the paraglossae
elongate, slender, rather longer than the basal joint of the labial
palpi. Maxillary palpi two-jointed. The superior wings having
one marginal and three submarginal cells, the second restricted
towards the marginal, receiving the first recurrent nervure a
little beyond the middle, the third receiving the second recurrent
nervure at its apex.

Type. *Crocisa histrio.*

1. **Crocisa histrio.**


*St. Farg. Hym.* ii. 454. 1.


*Hab.* India; France; Russia; Algeria.

2. **Crocisa scutellaris.**


Melecta histrionica, *Illig. Mag.?*


*Hab.* France; Germany; Italy; Spain; Albania; Siberia;

Turkey; Ceylon; Africa.
3. CROCISA NITIDULA.  
*St. Farg. Hym.* ii. 448. 1.  
*Hab.* Amboina; New Holland (Richmond River).  

4. CROCISA SPLENDIDULA.  
*Hab.* South Africa.  

5. CROCISA EMARGINATA.  
Crocisa emarginata, *St. Farg. Hym.* ii. 449. 3.  
*Hab.* Port Natal.  

6. CROCISA LAMPROSOMA.  
*Hab.* Vanikoro? Hunter River, Australia.  

7. CROCISA RAMOSA.  
Crocisa orbata, *St. Farg. Hym.* ii. 452. 6 (var.?).  
*Hab.* France; Albania; Canary Islands; Algeria.  

8. CROCISA DECORA.  
*Hab.* North China. (R. Fortune, Esq.)  

9. CROCISA PICTA.  
*Female.* Length 7 lines.—Black, the face and cheeks covered with a pale blue pubescence; the margin of the vertex has a fringe of pale blue pubescence, and the thorax an interrupted line on the collar; a round spot on each side of the scutellum at its base, a line on the prothorax reaching the middle of the disk, and a round spot on each side of bright blue pubescence; a large spot of the same beneath the wings, a smaller one on the breast, and all the tibiae and tarsi covered with pubescence of the same colour; the wings dark fuscous and having a violet irides-
cence, subhyaline towards their base; sometimes a spot of blue pubescence on the scutellum at its notch in the middle. Abdomen, a large subquadrate spot on each side at the base, emitting a short line from its apex within; the four following segments have on each side a broad line of blue pubescence; beneath, the second, third, and sometimes the fourth segments have a small spot on each side of similar pubescence.

Hab. Port Natal.

Genus 32. LIOGASTRA.

Rathymus, St. Farg. Hym. ii. 539.

The labial palpi four-jointed; the first joint about the same length as the mentum, the second joint rather more than half the length of the first; the two apical joints minute, placed at the side of the second joint nearly at its apex. The maxillary palpi obsolete; the mentum half the length of the labium; the paraglossæ short, acute at their apex, narrowed at their base. The superior wings having one marginal and three submarginal cells; the former as long as the three latter, rounded at its apex; the first submarginal cell a little longer than the second; the second and third of about equal length, the latter narrowed considerably towards the marginal; the two recurrent nervures uniting with the second and third transverse cubital nervures; the antennæ filiform, the scape short, much narrowed at the base, the ocelli placed in a slight curve on the vertex; the calcaria and claws of the tarsi simple.

1. Liogastra bicolor. B.M.

Rathymus bicolor, St. Farg. Hym. ii. 540. 1.

Hab. Brazil.

2. Liogastra unicolor. B.M.

Female. Length 8 lines.—Ferruginous, antennæ black, except the scape and two basal joints of the flagellum, which are ferruginous; the face, margin of the vertex and legs have a changeable golden pubescence; the collar and sides of the metathorax have a line of white pubescence; the scutellum elevated, bituberculate; the intermediate tibiae at their apex above produced into a short acute spine; wings dark fuscous, having a violet iridescence; the legs of a paler red than the body.

Hab. Brazil (Para). (H. W. Bates.)
3. **Liogastra atra.**

Male. Length 8 lines.—Black, the second joint of the flagellum rufo-testaceous; the sides of the face covered with fuscous pubescence; the wings fusco-hyaline; the scutellum elevated, bituberculate; the disk of the thorax covered with short velvety pubescence. Abdomen naked above, except the sides of the three apical segments, which are clothed with fusco-ferruginous pubescence; the abdomen has a slight blue tinge at its base.

*Hab.* Brazil (Para). (H. W. Bates.)

Genus 33. **Eurytis, n. g.**

(F. Smith's MSS.)

The labial palpi four-jointed, the first joint more than twice the length of the second, the two apical ones very minute; the maxillary palpi consisting of a single joint; the ocelli placed in a line on the vertex, the antennae filiform. The superior wings having one marginal and three submarginal cells; the former equal in length to the three latter, the second slightly narrowed towards the marginal, the third curved and of equal width; the two recurrent nervures uniting with the second and third transverse cubital nervures; the calcar of the intermediate tibiae elongate, very stout and denticulate at its apex. Destitute of pollinigerous organs.

1. **Eurytis funereus.**

Female. Length 7 lines.—Black, entirely clothed with short velvety pubescence; wings of a purple-black. The calcar of the intermediate tibiae elongate, bidentate at its apex; the calcar is rounded exteriorly and flattened beneath, the edges finely serrated; the calcaria on the posterior tibiae are also flattened beneath and the edges serrated. Abdomen acute at its apex, the pubescence having a gloss similar to velvet, of a somewhat bluish tinge, the apical segment beneath having a central longitudinal carina.

*Hab.* Brazil (Santarem). (H. W. Bates.)

Genus 34. **MELISSA, n. g.**

(F. Smith's MSS.)

The labium rather more than twice the length of the mentum, which is rounded at the base and trident at the apex; the paraglossae short, lanceolate; the labial palpi four-jointed, the first
joint more than twice the length of the second, the two apical joints minute. The maxillary palpi three-jointed, the basal joint minute, the second twice the length of the third. The antennae filiform, the ocelli placed in a line on the vertex. The anterior wings having one marginal and three submarginal cells, the second submarginal much contracted towards the marginal, the third slightly so. The calcaria of the intermediate tibiae enlarged, forming stout spines which are denticulate at their apex; the anterior tibiae have their calcaria bifid.

1. MELISSA RUFIPES. B.M.
Hab. Brazil (Para); Jamaica.

2. MELISSA DECORATA. B.M.
Female. Length 6 lines.—Head and thorax black, splendidly decorated with glittering pubescence (or scales) of a vivid green colour on the vertex, clypeus, disk of the thorax, tegulae, tubercles and a spot beneath them, also on the legs above; the face on each side, and the head behind, covered with white pubescence; the white has a yellow tinge towards the vertex of the eyes; the collar, sides of the thorax and metathorax, the anterior tibiae in front, a line from the collar to the middle of the disk, a round tuft on each side, and an epaulette over the tegulae, of short dense white pubescence; on the scutellum are two elevated conical tubercles; the wings subhyaline, the nervures black, the tips of the wings have a dark fuscous cloud; the calcaria on the intermediate tibiae bifurcate at their apex, the anterior spine has two sharp teeth within. Abdomen, of a dark blue, changing to black in certain lights, the apical margin of each segment having a broad band of pale glittering blue-green, the bands formed of minute scales as in the Lepidoptera; the segments have at their extreme lateral margins a spot of silvery-white pubescence; the entire insect beneath of dark purple-black, the abdomen being naked.
Hab. Brazil. (H. W. Bates.)

3. MELISSA REGALIS. B.M.
Female. Length 8 lines.—Head and thorax black, the vertex and disk of the thorax, scutellum and legs above, obscurely decorated with green pubescence (or scales), the face, vertex and cheeks densely covered with short white pubescence; the scape
of the antennae black, the flagellum ferruginous beneath, fuscous above; the margin of the prothorax has a line of white pubescence, a similar one encircles the tubercles, another forms an epaulet over the tegulae, a central one terminates on the disk and has an indistinct spot on each side of the same colour; on the scutellum are two raised conical tubercles; the wings dark fuscous, the nervures black; the legs have a black pubescence; the calcaria at the apex of the intermediate tibiae have two large spines at their extremity, the anterior spine having three sharp denticulations within, the apex of the basal joint of the intermediate tarsi produced into an obtuse spine. Abdomen of a metallic green, covered above with minute scales; the extreme lateral margins of the segments covered with short white pubescence; the ventral plates have laterally on their posterior margins an angular patch of white, and the apical one an elevated longitudinal carina.

The male closely resembles the female, the antennae are of the same length, the spur on the intermediate tibia is similar, but the abdomen is shorter, being incurved, the apical segment being subacute and notched in the middle. The posterior legs are more elongate than in the female, the femora and tibiae beneath being naked, polished and concave; the tibiae at their apex beneath have a brush of short stiff hairs, and the basal joint of the tarsi within has a clothing of the same.

_Hab._ Brazil (Santarem). (H. W. Bates.)

4. _Melissa ornata._

_Mesocheira ornata, Spin. Ann. Soc. Ent. Fr. x. 145. 96 (1841)._ 

_Hab._ Cayenne.

_Genus 35. Mesocheira._

Maxillary palpi obsolete, or rudimentary, consisting of a small tubercle; the labial palpi four-jointed, the mentum short, broadest at the base; the first joint of the labial palpi longer than the mentum, the second of about one-third the length of the first, the two apical joints minute, placed on the side near the apex of the second joint. The superior wings having one marginal and three submarginal cells; the former not quite the length of the three latter, rounded at its apex; the second cell subquadrate, slightly constricted, and the third considerably so, towards the marginal. The intermediate tibia furnished with a single spine, its apex bifid, the anterior tooth bidentate within; the spines at the apex of the posterior tibiae serrated within.

*Note.*—The generic characters are given at length in conse-
quence of the errors discovered in those of St. Fargeau in the 'Histoire naturelle des Insectes'; after a careful microscopic examination of several individuals of this genus, only rudimentary palpi or a small tubercle has been found in the maxillae; St. Fargeau gives six joints in his characters. The genera Mesoplia, Hopliphora and Mesonychium of St. Fargeau are stated by that author to agree with the genus Mesocheira in the character of the oral organs; on a careful examination of those parts they are found to differ very widely, and the difference in the number of spines which arm the large calcaria of the intermediate tibiae cannot be considered as affording anything beyond specific distinctions.

1. Mesocheira bicolor. B.M.
Mesocheira bicolor, St. Farg. & Serv. Ency. Méth. x. 106.

In this species the scutellum is produced over the base of the abdomen and deeply notched.

Hab. Brazil; Cayenne.

2. Mesocheira sericeus.

Hab. Rio Janeiro.

3. Mesocheira asteria.

Female. Length 5 lines.—Head and thorax black, the face covered with silvery-white pubescence, a line of similar pubescence passes along the margin of the vertex and down the outer margin of the eyes; the flagellum rufo-piceous beneath; the base of the scape ferruginous in front. Thorax, the tubercles and tegulae in front rufo-piceous; the scutellum bituberculate; a line on the collar continued round the tubercles, and the margins of the scutellum bordered with white pubescence; at the sides of the metathorax a tuft of white pubescence; the wings hyaline at their base, and having a fuscous cloud at their apical margins, the nervures black; the spurs at the apex of the intermediate tibiae elongate, filiform, slightly bent, and notched at the apex, one side of the notch produced into a sharp spine, the other side bidenticulate; the spines on the posterior tibiae finely serrated within. Abdomen conical, of a beautiful bright green, having a silken texture; the sides adorned with silvery-white markings; beneath testaceous, having spots of purple colouring, the sides of
the third and fourth segments having patches of silvery pubescence.

_Hab._ Brazil. (Coll. F. Smith.)

Genus 36. _THALESTRIA_, n.g.

_(F. Smith’s MSS.)_

The ocelli placed in a triangle on the vertex; the labial palpi four-jointed, the basal joint about two-thirds of the length of the mentum; the second joint half the length of the basal, both covered with scattered pubescence. The maxillary palpi have one joint, and a small tubercle at its base. The labrum transverse, rounded at its angles, and tuberculate on each side at its base. The superior wings having one marginal and three submarginal cells; the former about the length of the three latter united, rounded at its apex; the second and third submarginal cells narrowed towards the marginal, the second receiving the first recurrent nervure a little beyond the middle; the second recurrent nervure received by the third submarginal cell about one-third from its apex. The calcaria simple.

1. _THALESTRIA SMARAGDINA._

_Female._ Length 8 lines.—Black, the face and cheeks have a dense short pale ochraceous pubescence, the clypeus more or less naked, truncate anteriorly and finely punctured, the pubescence (or scales) which decorate the thorax, brilliant green; anteriorly and down the centre intermixed with black; the collar on each side, a ring surrounding the tubercles, a spot beneath the wings, an epaule over the tegulae, and the metathorax on each side having a tuft of pale yellowish-white pubescence; the scutellum furnished behind with two pointed tubercles, and on each side with an acute incurved spine; the legs have a green iridescence, the apex of the femora and tibiae having tufts of white pubescence; the wings hyaline, clouded at their apical margins. Abdomen, conical and covered with a brilliant green effulgence above, changing in certain lights to black or deep green; the extreme lateral margins of the three apical segments have a narrow stripe of white pubescence; beneath, the abdomen is naked and of a changeable blue-black colour.

_Male._—Rather smaller than the female, and similar in colour, the thorax having a black pubescence, intermingled with obscure green on the disk, the scutellum similarly adorned; the abdomen is brilliant as in the other sex, the second and three following
segments having a round spot of white pubescence at their extreme lateral margins.

_Hab._ Para. (F. Smith's Coll.)

**Genus 37. CTENIOSCHELUS.**

Melissoda, _St. Farg. Hym._ ii. 508 (not of _Latr._ 1841).
Ctenioschelus, _Romand, Mag. Zool._ (1841).

Antennae of the females filiform, the apical joint compressed, rounded at the apex. The maxillary palpi composed of a single joint; the labial palpi four-jointed, the basal joint elongate, the second scarcely one-third the length of the first; the two apical joints minute, placed at the side of the second at its apex; the tongue elongate, twice the length of the labial palpi. The superior wings having one marginal and three submarginal cells; the former about the length of the three latter, rounded at its apex; the first recurrent nervure uniting with the second transverse cubital nervure; the second recurrent nervure received near the apex of the third submarginal cell. The intermediate tibiae armed at their apex with a single spur, which is furcate at the apex; the anterior spine of the furcation having three acute teeth or spines on its posterior margin; the spines at the apex of the posterior tibiae simple. In the males, the antennæ are longer than the body, the four apical joints being clavate, and the apex of the abdomen spinose.

1. **CTENIOSCHELUS LATREILLII.**

Melissoda Latreillii, _St. Farg. Hym._ ii. 508. pl. 16. f. 3 ♂.

_Female._—This sex is rather larger than the male, but similar in colour, and having a similar calcar on the intermediate tibiae; the abdomen is acute at the apex, and without spines; the third, fourth and fifth ventral segments of the abdomen have laterally on their posterior margins a patch of silvery-white pubescence.

_Hab._ Monte-Video; Paraguay; Brazil.

**Genus 38. ACANTHOPUS.**


The labial palpi four-jointed, the two apical joints minute;
the maxillary palpi obsolete, or reduced to a minute tubercle; the superior wings having one marginal and three submarginal cells, the former longer than the three latter united, rounded at its apex; the first and second submarginal cells subquadrate, oblique; the third submarginal much narrowed towards the marginal, receiving the second recurrent nervure in the middle, the first recurrent nervure uniting with the second transverse cubital nervure; posterior legs elongate and densely pubescent in both sexes. In some instances the first recurrent nervure is received a little within the third submarginal cell, but the typical form appears to unite it to the transverse nervure.

1. Acanthopus splendidus. B.M.

Apis palmata, Ency. Méth. iv. 68. 41.
Romand, Mag. Zool. 1841, tab. 68 ♂ ♀.

Hab. Cayenne; Brazil.

Genus 39. AGLAE.


The labial palpi composed of two joints, the basal joint half as long again as the mentum, the second joint twice its length, its apex terminating in a sharp spine or point; the maxillary palpi composed of one joint situated on a tubercle at the side of the maxillae. The superior wings having one marginal and three submarginal cells, the former being longer than the three latter united.

St. Fargeau gives four joints to the labial palpi, which after an examination of several specimens cannot be detected.

1. Aglae cærulea. B.M.

Aglae cærulea, St. Farg. Hym. ii. 439. 1; Ency. Méth. x. 105. 1.
Hab. Brazil (Para); Venezuela; Cayenne.

Genus 40. MELECTA.

Crocisa, pt., Jurine, Hym. p. 239 (1807).

1. **Melecta luctuosa.**

Rossi, Faun. Etrus. ii. 105. 918.

*Apis punctata,* Fabr. Syst. Ent. p. 385. 43; Spec. Ins. i. 484. 60; Mant. Ins. i. 304. 71; Ent. Syst. ii. 337. 99.


*Spin. Ins. Lig.* fasc. 1. 153. 3.
*St. Farg. Hym.* ii. 441. 1.


*Smith, Zool.* iii. 1149. 2♂♀.

Melecta Lachesis, Newm. Ent. Mag. ii. 514. 5♀.

Hab. Britain; France; Italy; Germany; Spain; Denmark; Sweden; Russia.

2. **Melecta armata.**

Don. Brit. Ins. xii. 47. 376.

*Andrena armata,* Panz. Faun. Germ. 70. 22.

Centris punctata, Fabr. Syst. Piez. p. 360. 30?

Melecta punctata, Illig. Mag. v. 98. 1.

*Smith, Zool.* iii. 1148.

Melecta Clotho, Newm. Ent. Mag. ii. 513. 4♀.


Melecta Alecto, Newm. Ent. Mag. ii. 513. 3♂.

Hab. Britain; France; Germany.

3. **Melecta diacantha.**


Hab. Russia.
4. **MELECTA ATERRIMA.**
*Hab.* France (Island of Noirmoutier). (Coll. F. Smith.)

5. **MELECTA NIGRA.**
*Hab.* Italy; Canary Islands; Sicily. (Coll. F. Smith.)

   This species might possibly be considered an extreme variety of punctata, but the antennae are longer than in that species; the specimen examined is from Sicily.

6. **MELECTA BIPUNCTATA.**
Melecta bipunctata, *St. Farg. Hym.* ii. 446. 7.
*Hab.* Italy; Tuscany.

7. **MELECTA FASCICULATA.**
*Hab.* Italy; The Morea.

8. **MELECTA PLURINOTATA.**
   *St. Farg. Hym.* ii. 442. 2.
*Hab.* The Morea; Bagdad; Sicily; Spain; Algeria.

9. **MELECTA FUNERARIA.**
   Female. Length 6 lines.—Intensely black; the face, a broad band on the collar, a tuft behind the wings, a large rounded patch on the sides of the basal segment of the abdomen, a large subquadrate one on the second, and a quadrate one on the third and fourth segments on each side, snow-white; the legs entirely black, the wings fusco-hyaline.
*Hab.* Albania. (Coll. W. W. Saunders, Esq.)

10. **MELECTA GRANDIS.**
Melecta grandis, *St. Farg. Hym.* ii. 443. 3.
*Hab.* Algeria (Oran).

Female. Length 7 lines.—Black, a tuft on the face, the thorax above and the two basal segments of the abdomen, clothed with white pubescence, that on the apical segments dark green.

*Hab.* Chili. (Coll. F. Smith.)


*Hab.* — ?


*Hab.* — ?


Male. Length 3 lines.—The antennæ, body and legs black; the pubescence long and white on the head and thorax above; the wings hyaline, the nervures black.

*Hab.* Chili.

Genus 41. *Osiris,* n. g.

*(F. Smith's MSS.)*

Body elongate, naked, destitute of pollinigerous organs; maxillary palpi five-jointed, slender, the joints of about equal length, the maxillæ very long and slender, tapering to a point; mentum less than half the length of the labium, which is about half the length of the body; the labial palpi four-jointed, the basal joint very long, the second about twice the length of the two apical joints; labrum transverse, slightly emarginate anteriorly, the mandibles bidentate. The superior wings having one marginal and three submarginal cells, the first as long as the three latter, the second submarginal cell nearly quadrate, the third a little wider and narrowed towards the marginal; the basal joint of the posterior tarsi as long as the tibiae, the following joints short, their united length less than that of the basal joint. Abdomen, the sixth segment concealed, the ventral portion of the apical segment produced, forming an elongate concave receptacle for the basal portion of the sting; the sting apparently always exserted, as long as the abdomen; the male having apparently only six segments in the abdomen, the seventh concealed.
1. **Osiris pallidus.**

   Male. Length 5 lines.—Pale testaceous, apex of the mandibles, eyes and flagellum fusco-ferruginous, the apical joint of the latter and towards its base beneath, ferruginous. The collar bilobate, the disk of the thorax fuscous, and having a central oblong-ovate pale testaceous macula; down the middle of the disk a slightly elevated carina, the scutellum transverse, somewhat rounded and elevated; the metathorax and femora within are pale yellow-testaceous; wings flavo-hyaline, the costal nervure fuscous, the stigma and the nervures towards the apex of the wing pale ferruginous, towards the base of the wing the nervures are darker. Abdomen elongate, pale rufo-testaceous, the apical margins of the segments slightly fusco in the middle. 

   *Hab. Brazil.* (Coll. W. W. Saunders, Esq.)

2. **Osiris variegatus.**

   Male. Length 5 lines.—Head and thorax yellow-testaceous varied with fuscos; the antennae, face, leaving the orbits of the eyes yellow, and the base of the clypeus fusco-testaceous; an elevation between the antennae yellow; the margin of the vertex fusco, as well as the space behind the ocelli; between the ocelli and the eyes the vertex is yellow. The disk of the thorax, the posterior margin of the scutellum and the metathorax on each side, the trochanters and femora beneath, as well as an oblique line beneath the wings, fusco-testaceous; wings yellowish hyaline, stigma and nervures towards the apex testaceous, those towards the base of the wings darker. Abdomen elongate, fuscos, the basal margins of all the segments above and beneath yellow-testaceous.

   *Hab. Brazil.* (Coll. W. W. Saunders, Esq.)

**Genus 42. CHRYSANTHEDA.**

*Apis, pt.,* Linn. Syst. Nat. i. 953.

1. **Chrysantheda dentata.**

   *Apis dentata, Linn. Syst. Nat. i. 954. 14.
   Sulz. Gesch. Ins. t. 27. f. 16.

   *Hab. Brazil; Columbia; Demerara.*
2. CHRYSANTHEDA NITIDA. B.M.
Hab. Brazil; Columbia; Demerara; Venezuela.

3. CHRYSANTHEDA FRONTALIS. B.M.
Hab. Brazil (Para).

4. CHRYSANTHEDA SMARAGDINA. B.M.
Hab. Brazil.

5. CHRYSANTHEDA APPENDICULATA.
Hab. Caracas.

Subfam. 4. SCOPULIPEDES.

Genus 43. EUCERA.

Apis, pt., Linn. Syst. Nat. i. (1785).

The maxillary palpi 4-jointed; the labial palpi 4-jointed; the superior wings having one marginal and two submarginal cells. The antennae of the males elongate.

1. EUCERA LONGICORNIS. B.M.
Apis longicornis, Linn. Faun. Suec. 1684; Syst. Nat. i. 953. 1 ♂.
Schäff. Icon. Ins. t. 44. f. 3.
Fourc. Ent. Par. ii. 445. 10.
Rossi, Faun. Etrus. ii. 922.
Christ. Hym. p. 142. t. 11. f. 9.
Fabr. Ent. Syst. ii. 343. 1 ♂.
Eucera longicornis, *St. Farg. Hym.* ii. 118. 3.

*Smith, Zool.* iv. 1449. 1.


*Fabr. Ent. Syst.* ii. 344. 3.


Apis tuberculata, *Fabr. Ent. Syst.* ii. 334. 84♀.


Eucera linguaria, *Panz. Faun. Germ.* 64. 22♂?

*St. Farg. Hym.* ii. 122. 6.

*Bür, Bull. Mosc.* xxiii. 534. 11. t. 13. f. 11.

*Andrena strigosa, Panz. Faun. Germ.* 64. 16♀.

Eucera similis, *St. Farg. Hym.* ii. 121. 4?

*Hab.* Europe; Algeria.

2. **EUCERA DISTINCTA.**


*Hab.* France.

3. **EUCERA FASCIATELLA.**


*Hab.* France (Paris, Forest of Bondy).

4. **EUCERA NIGRILABRIS.**


*Lucus, Explo. Sc. Algér.* iii. t. 3. f. 4♀.


*Hab.* South of France; Algeria (Oran).

5. **EUCERA NIGRIFACIES.**


*Hab.* Bordeaux.

6. **EUCERA PUNCTILABRIS.**


*Hab.* Bordeaux.
7. **Eucera subfasciata.**
Eucera subfasciata, *St. Farg. Hym.* ii. 136. 27 ♂.
*Hab.* France.

8. **Eucera subrufa.**
*Hab.* Lyons.

9. **Eucera brevicornis.**
*Hab.* Italy.

10. **Eucera analis.**
*Hab.* Russia.

11. **Eucera albicans.**
*Hab.* Russia.

12. **Eucera binominata.**
*Hab.* Russia.

13. **Eucera cantatrix.**
*Hab.* Russia.

14. **Eucera crinita.**
*Hab.* Russia.

15. **Eucera cingulata.**
*Hab.* Russia.

16. **Eucera continua.**
*Hab.* Russia.
17. **Eucera cana.**
*Hab.* Russia.

18. **Eucera Dasypoda.**
*Hab.* Russia.

19. **Eucera Fischeri.**
   f. 3♂.
*Hab.* Russia.

20. **Eucera interrupta.**
*Hab.* Russia.

21. **Eucera robusta.**
*Hab.* Russia.

22. **Eucera vittigera.**
*Hab.* Russia.

23. **Eucera coarctata.**
*Hab.* Russia.

24. **Eucera cineraria.**
*Hab.* Russia.

25. **Eucera Dalmatica.**
Eucera Dalmatica, *St. Farg. Hym.* ii. 133. 22♂.
*Hab.* Dalmatia.

26. **Eucera glauca.**
*Hab.* Bagdad.
27. **Eucera grisea.**


*Spin. Ins. Lig.* fasc. 1. 150. 3.


*Hab. Barbary; Algeria (Oran).*

28. **Eucera atricornis.**

Eucera atricornis, *Fabr. Ent. Syst.* ii. 344. 2; *Syst. Piez.* 382. 2.

*Coqueb. Illus. Ins.* dec. 2. p. 64. t. 15. f. 11.

*Spin. Ins. Lig.* fasc. 1. 150. 3.

*St. Farg. Hym.* ii. 128. 15.


*Hab. Barbary; Algeria (Oran).*

29. **Eucera dimidiata.**


*Hab. The Morea.*

30. **Eucera seminuda.**


*Hab. The Morea.*

31. **Eucera trivittata.**


*Hab. The Morea.*

32. **Eucera vulpes.**


*Hab. The Morea.*

33. **Eucera pollinosa.**

*Female.* Length 6½ lines.—Black, the face has a pale fulvous pubescence, that on the labrum is of the same colour, the mandibles ferruginous towards the apex, the tips black; the thorax above clothed with fulvous pubescence; the legs rufo-piceous, their pubescence fulvous, that on the tarsi beneath ferruginous, the apical joints of the tarsi ferruginous; the tegulae pale testaceous, the wings fulvo-hyaline, the nervures ferruginous, slightly clouded at their apical margins. The base of the abdomen has
HYMENOPTERA.

A long pale fulvous pubescence, the five apical segments, except the middle of the first, entirely covered with a very short fulvous pubescence, resembling the pollen of flowers; the basal segment has also a little at its lateral angles, this pubescence becomes gradually brighter towards the apex; the apical segments beneath have a long fulvous fringe.

Hab. Albania.

34. Eucera Hispana.
Eucera Hispana, St. Farg. Hym. ii. 135. 25♀.
Hab. Spain.

35. Eucera nigripes.
Hab. Syria.

36. Eucera helvolia.
Eucera helvolia, Klug, Symb. Phys. dec. v. t. 50. f. 7.
Hab. Syria.

37. Eucera thoracica.
Hab. Egypt.

38. Eucera affinis.
Hab. Egypt.

39. Eucera unicincta.
Eucera unicincta, St. Farg. Hym. ii. 138. 29♂.
Lucas, Explo. Sc. Algér. iii. 163. 46. t. 4. f. 4.
Hab. Algeria (Oran).

40. Eucera vidua.
Eucera vidua, St. Farg. Hym. ii. 121. 5.
Lucas, Explo. Sc. Algér. iii. 159.
Hab. Algeria (Oran).

41. Eucera subvillosa.
Eucera subvillosa, St. Farg. Hym. ii. 125. 9♂.
Hab. Algeria (Oran).
42. Eucera pyrrhula.
Eucera pyrrhula, *Erich. in Wagner, Reis. in der Regents Algier.*
iii. 195. 55. t. 9.
Lucas, Explo. Sc. Algér. iii. 159.
Hab. Algeria.

43. Eucera oraniensis.
Lucas, Explo. Sc. Algér. iii. 159. t. 3. f. 2♀. 2♀.
Hab. Algeria (Oran).

44. Eucera notata.
Eucera notata, *St. Farg. Hym.* ii. 126. 11♂.
Hab. Algeria (Oran).

45. Eucera nigra.
Lucas, Explo. Sc. Algér. iii. 126. 41. t. 4. f. 1♀.
Hab. Algeria (Oran).

46. Eucera ferruginea.
Lucas, Explo. Sc. Algér. iii. 164. 47. t. 4. f. 5♀.
Hab. Algeria (Oran).

47. Eucera bicincta.
Lucas, Explo. Sc. Algér. iii. 163. 45. t. 4. f. 3♀.
Hab. Algeria (Oran).

48. Eucera africana.
Lucas, Explo. Sc. Algér. iii. 160. t. 3. f. 3♀.
Hab. Algeria (Oran).

49. Eucera algira.
Lucas, Explo. Sc. Algér. iii. 162. 44. t. 4. f. 2♀.
Hab. Algeria (Oran).
50. **Eucera rufescens**.
*Hab.* Cayenne.

51. **Eucera alternans**.
*Hab.* ——?

52. **Eucera cinerea**.
Eucera cinerea, *St. Farg. Hym.* ii. 125. 11♂.
*Hab.* ——?

53. **Eucera marginata**.
*Hab.* ——?

54. **Eucera pulvinata**.
Eucera pulvinata, *St. Farg. Hym.* ii. 140. 32♀.
*Hab.* ——?

55. **Eucera squamosa**.
*Hab.* ——?

56. **Eucera vetula**.
*Hab.* ——?

**Genus 44. TETRALONIA.**


The maxillary palpi 6-jointed, the labial palpi 4-jointed; the superior wings having one marginal, and three complete submarginal cells; the first recurrent nervure received at or very near the apex of the second submarginal cell, occasionally uniting with the second transverse cubital nervure, the second recurrent nervure received at the apex of the third submarginal cell. The antennæ of the males elongate.
HYMENOPTERA.

1. TETRALONIA ATRICORNIS.
Hab. Europe; Egypt.

2. TETRALONIA ALTICINCTA. B.M.
Hab. France (Paris).

3. TETRALONIA ANTENNATA.
Eucera antennata, Fabr. Ent. Syst. ii. 345. 7; Syst. Piez. 384. 8♂.
Spin. Ins. Lig. fasc. 1. 149. 2.
Hab. Europe.

4. TETRALONIA GRANDIS.
   6 (var. ruficollis, St. Farg.?).
Hab. France (Aix).

5. TETRALONIA LONGICORNIS. B.M.
Eucera longicornis, Panz. Faun. Germ. 64. 21♂.
Macrocera longicornis, St. Farg. Hym. ii. 90. 2.
   Lucas, Explo. Sc. Algér. iii. 156. 29. t. 3. f. 1.
Hab. Dalmatia; Montpellier; Algeria.

6. TETRALONIA MALVÆ.
Apis Malvae, Rossi, Faun. Etrus. ii. 923.
Eucera antennata, Fabr. Ent. Syst. ii. 345. 7♂.
Hab. France; Italy; Germany.

7. TETRALONIA POLLINOSA.
Macrocera pollinosa, St. Farg. Hym. ii. 92. 4.
Hab. France (St. Sever).
8. **TETRALONIA SALICARIÆ.**
Macrocera Salicariæ, *St. Farg. Hym.* ii. 102. 15.
*Hab.* France (Paris).

9. **TETRALONIA DENTATA.**
*Hab.* Russia.

10. **TETRALONIA NASALIS.**
*Hab.* Russia.

11. **TETRALONIA MEDIOCRIS.**
*Hab.* Russia.

12. **TETRALONIA GRAJA.**
*Hab.* Russia.

13. **TETRALONIA ALBIDA.**
*Hab.* Spain.

14. **TETRALONIA RUFICORNS.**
*Hab.* Spain.

15. **TETRALONIA RUFICOLLIS.**
  t. 48. f. 5.
  *St. Farg. Hym.* ii. 89. 1 ♂ ♀.
  t. 48. f. 4?
  *St. Farg. Hym.* ii. 108. 22.
Macrocera rufa, *St. Farg. Hym.* ii. 91. ♂.


*Hab.* Greece; Spain; Algeria (Oran).

16. **Tetralonia strigata**.
Macrocera strigata, *St. Farg. Hym.* ii. 104. 16 ♀.
*Hab.* Spain.

17. **Tetralonia subundulata**.
*Hab.* Spain.

18. **Tetralonia tarsata**.
*Hab.* Sicily.

19. **Tetralonia Grohmanni**.
*Hab.* Sicily.

20. **Tetralonia Olivieri**.
*Hab.* Bagdad.

21. **Tetralonia atrata**.
*Hab.* Egypt (Cairo).

22. **Tetralonia pumila**.
*Hab.* Egypt (Cairo).

23. **Tetralonia Capensis**.
Macrocera Capensis, *St. Farg. Hym.* ii. 95. 7 ♀.
*Hab.* Africa. (Coll. F. Smith.)

24. **Tetralonia basizona**.
*Hab.* Egypt.
25. **Tetralonia cuniculina**.


*Hab. Egypt (Cairo).*

26. **Tetralonia crinita**.

*Macrocera crinita, Klug, Symb. Phys. dec. v. t. 50. f. 12.*

*Hab. Egypt (Cairo). (Coll. W. W. Saunders, Esq.)*

27. **Tetralonia lanuginosa**.

*Macrocera lanuginosa, Klug, Symb. Phys. dec. v. t. 50. f. 11.*

*Hab. Egypt.*

28. **Tetralonia testacea**.

*Male. Length 4½ lines.—The face below the antennæ pale rufo-testaceous, the labrum, mandibles and inferior margin of the cheeks ferruginous, the antennæ ferruginous, fuscous above towards their apex, the vertex black; the thorax dark rufo-testaceous, on the disk are two obscure parallel longitudinal lines of a lighter colour, the disk has a thin short griseous pubescence; on the metathorax and beneath it is of the same colour, but longer; the tegulae and legs pale rufo-testaceous; the wings fulvo-hyaline, the nervures ferruginous. Abdomen fusco-ferruginous, naked or merely having a few scattered griseous hairs, beneath brighter ferruginous.*

*Hab. Africa.*

29. **Tetralonia Chinesis**.

*Male. Length 5½ lines.—Black, the clypeus yellow, the labrum white, fringed with bright pale yellow hairs; the sides of the face below the antennæ covered with long griseous pubescence; on the vertex and disk of the thorax a clothing of pale fulvous pubescence, on the cheeks and thorax beneath it is white; the antennæ as long as the body, the joints subarcuate; the tegulae pale testaceous, the wings subhyaline, the nervures pale ferruginous; the four apical joints of the tarsi pale ferruginous, the pubescence of the legs pale ochraceous. Abdomen nigro-seneuous, the apical margins of the segments broadly rufo-testaceous; the basal segments have a thin pale fulvous pubescence, beyond which it is fuscous.*

*Hab. North China (Shanghai).*
30. TETRALONIA DUVAUCELII.

Macrocera Duvaucelii, St. Farg. Hym. ii. 98. 11 φ.

Hab. India (Bengal).

31. TETRALONIA ELEGANS.

Male. Length 5 lines.—Black, the clypeus, labrum and mandibles yellow, the latter ferruginous at their apex; the flagellum, tegulae, nervures of the wings and the apical joints of the tarsi bright ferruginous; the face and legs have a silvery white pubescence; that on the disk of the thorax pale fulvous; the wings hyaline, very faintly clouded at their apical margins; the base of the abdomen has a little pale fulvous pubescence, the three following segments have on their basal margins a fascia of short white pubescence, the third fascia broad, nearly covering the segment, the fifth segment entirely covered; the apical segment covered on each side with fuscous pubescence; beneath, the margins of the segments rufo-testaceous and ciliated with white pubescence.

Hab. India. (Coll. W. W. Saunders, Esq.)

32. TETRALONIA FLORALIA.

Male. Length 5 lines.—Black, the face thinly covered with a long griseous pubescence, the labrum having a long beard of pale yellow hairs; the clypeus yellow, the antennae longer than the body, the joints subarcuate. Thorax, the disk shining, strongly punctured, thinly clothed with pale yellow pubescence, the wings hyaline, the nervures and tegulae rufo-testaceous; the legs have a dense pale glittering silvery pubescence, the apical joints of the tarsi bright ferruginous. Abdomen ovate, convex, the base coarsely punctured, the apical margins of segments testaceous and having a fringe of pale pubescence; the base having some long pale hairs, and the entire abdomen a short scale-like pubescence.

Hab. North China (Shanghai).

33. TETRALONIA FASCIATA.

Male. Length 4½ lines.—Black, the clypeus, labrum and tips of the mandibles yellowish-white; the flagellum fulvous beneath; the pubescence on the face below the antennae white; above, as well as on the disk of the thorax, it is pale fulvous, and on the cheeks and thorax beneath griseous; the wings fulvo-hyaline, the nervures ferruginous, the tegulae testaceous; the apical joints of the tarsi ferruginous, the legs have a bright yellowish-white pu-
bescence, on the basal joint of the posterior tarsi within it is fulvous. Abdomen of a dark fuscous, the apical margins of the segments narrowly rufo-testaceous; the base has a little pale fulvous pubescence, the second and third segments have a fascia of white short scale-like pubescence, the first much attenuated in the middle, the other segments are entirely covered with a similar pubescence.

_Hab._ North China (Foo-cho-foo).

34. **TETRALONIA TRICINCTA.**

*Macrocera tricincta, St. Farg. Hym. i. 101. 14.*

_Hab._ Algeria.

35. **TETRALONIA SENEX.**

Male. Length 4 lines.—Black, entirely covered with snow-white pubescence, the sixth and seventh segments of the abdomen black, beneath black; the legs black beneath, the posterior tarsi entirely so; the flagellum except the two apical joints nigro-piceous beneath; the clypeus and mandibles white, the apex of the latter ferruginous, the claws dark ferruginous; the wings hyaline, the nervures ferruginous, pale towards the base of the wings, the tegulae pale rufo-testaceous.

_Hab._ Algeria? (Coll. J. S. Baly, Esq.)

36. **TETRALONIA BREVICORNIS.**

_B.M._

Male. Length 5½ lines.—Black, the pubescence on the head and thorax pale ochraceous, that on the cheeks, sides of the metathorax and on the thorax beneath griseous; the antennæ not longer than the head and thorax, submoniliform, fulvous beneath; the mandibles ferruginous, their tips black; the wings subhyaline, faintly clouded at their apical margins, the tegulae ferruginous; the tibiae and tarsi ferruginous. Abdomen fusco-testaceous, sometimes rufo-testaceous, the apical margins being pale; the whole abdomen has a thinly scattered griseous pubescence, that on the margins slightly fulvous; beneath, the margins of the segments are of a shining reddish yellow, having a transparent lustre.

_Hab._ Australia (Moreton Bay).

37. **TETRALONIA TERMINATA.**

Female. Length 5½ lines.—Black, the face clothed with cinereous pubescence, the cheeks densely covered with white pubescence, the mandibles yellow towards their apex, their tips
black, the flagellum fulvous beneath; the thorax covered anteriorly with sooty-black pubescence, posteriorly with fulvous, the fulvous pubescence forming an epaulet over the tegulae; the wings fusco-hyaline; legs dark rufo-testaceous, their pubescence black. Abdomen ovate, shining, and having a little cinereous pubescence at the base, the apical margin of the third segment and the whole of the fourth and fifth segments covered with a silvery pubescence, sometimes it has a golden lustre, the apex fuscous and having on each side some long white hairs; the abdomen obscure rufo-testaceous beneath, the margins of the segments palest, the two apical ones fringed with pale pubescence.

Hab. South America. (Coll. F. Smith.)

38. Tetralonia bifasciata.

Female. Length 5½ lines.—Black, the pubescence on the head, thorax and legs fuscous, on each side of the clypeus is a little that is short and white, on the cheeks it is also white; on the sides of the metathorax it is griseous; the scopæ on the posterior tibiae in certain lights has a fulvous tint; the flagellum fulvous beneath, the labrum, apex of the mandibles and apical joints of the tarsi ferruginous; the legs fusco-ferruginous; the wings fulvo-hyaline, the nervures ferruginous, their tegulae rufo-testaceous. The abdomen has a Æneous tinge, the margin of the basal segment being narrowly rufo-testaceous, the second and third segments have their margins broadly pale yellow-testaceous, the following segments faintly testaceous; the pale fasciae have thin golden pubescence, the base of the abdomen has a little white pubescence; beneath, rufo-testaceous, the margins of the segments having a thin fringe of curled white pubescence.

Hab. Brazil. (Coll. W. W. Saunders, Esq.)

39. Tetralonia analys.  
Macrocera analys, St. Farg. Hym. ii. 104. 16  
Hab. Brazil.

40. Tetralonia festiva.

Female. Length 5 lines.—Black, the pubescence on the sides of the face and labrum short, dense, and of a yellowish-white, it is of the same hue but thinner on the clypeus, which is coarsely punctured, apex of the mandibles yellow; the flagellum, except the three basal joints, fulvous beneath. Thorax, the disk has an Æneous tinge, the sides densely clothed with a short pale fulvous pubescence, on each side in front of the tegulae is a tuft of black pubescence, the scutellum is clothed with pubescence of the same
colour, and surrounded with a thick fringe of pale fulvous; the tegulae pale fulvo-testaceous, the wings fulvo-hyaline, the nervures ferruginous; the femora dark rufo-testaceous, the tibiae and tarsi ferruginous, and clothed with fulvous pubescence. Abdomen nigro-aeneous, the margins of the segments pale testaceous, the base has a thin covering of pale fulvous pubescence, the second and third segments have a broad fascia of short, dense, fulvous pubescence, the fourth segment entirely covered and the fifth laterally clothed with a similar pubescence; the fifth in the middle has a fuscous pubescence, as well as the sides of the sixth segment.

Hab. Brazil (Para). (Coll. F. Smith.)

41. TETRALONIA FULVIPES.

Male. Length 5 lines.—Black, the pubescence on the head, thorax and legs fulvous, the clypeus, labrum, and the base and apex of the mandibles yellow; the middle of the latter ferruginous; the flagellum fulvous beneath; the tegulae rufo-testaceous, the wings fulvo-hyaline, the nervures and base of the wings ferruginous, the legs ferruginous, the coxae and base of the femora slightly fuscous; the abdomen has an aeneous tinge, the apical margins of the segments broadly pale testaceous; the base of the abdomen has a little pale fulvous pubescence, the basal margin of the second segment has a band of pale pubescence, the fourth and fifth segments have on their apical margins laterally a fringe of pale pubescence, all the segments have on their middle some erect fuscous hairs.

Hab. Brazil. (Coll. F. Smith.)

42. TETRALONIA NIGRO-ÆNEA.

Female. Length 5 lines.—Head and thorax black, the face thinly clothed with a short griseous pubescence, on the cheeks it is of the same colour, but longer; the flagellum, except the three basal joints, fulvous beneath; the labrum testaceous, the mandibles ferruginous at their apex; the pubescence on the thorax and the anterior and intermediate legs black; on the metathorax and base of the abdomen it is fulvo-ochraceous; wings subhyaline, nervures and tegulae ferruginous; the tarsi ferruginous beneath, as well as the claw-joint, the claws black; the posterior tibiae have a scopa of pale fulvous pubescence, that on the tarsi beneath bright fulvous. Abdomen nigro-æneous, the second segment has a band at its base and another a little beyond the middle, a third on the third segment towards the base; the fourth a band on its apical margin and an oblique
stripe on each side from the middle of its base to its lateral margin, where it unites with the marginal band, all of pale yellowish-white pubescence; beneath, the margins of the segments rufo-testaceous, the apical segments fringed with fulvous pubescence.

*Hab.* Brazil. (Coll. W. W. Saunders, Esq.)

43. **Tetralonia thoracica.**

Female. Length 5 lines.—Black, the pubescence on the vertex and thorax above fulvous, the labrum has a fringe of fulvous hairs, and the face is thinly clothed with light fulvous; the pubescence on the legs sooty-black; the wings fulvo-hyaline and having a fuscous cloud at their apical margins, which also covers the upper portion of the marginal cell, the nervures and tegulae ferruginous, the latter palest; the abdomen has a little fulvous pubescence at its base, the third and fourth segments have a very narrow white marginal fascia, the first subinterrupted; the apical segments have a little fuscous pubescence; beneath rufo-testaceous, the third and fourth segments having a pale marginal fringe.

*Hab.* Brazil. (Coll. W. W. Saunders, Esq.)

*Tetralonia unifasciata* is very probably the male of this species; they are from the same locality.

44. **Tetralonia unifasciata.**

Male. Length 4 lines.—Black, the pubescence on the head, thorax and base of the abdomen fulvo-ochraceous, palest on the face; on the cheeks and thorax beneath it is griseous; the femora and tibiae have also a griseous pubescence, that on the tarsi is very pale fulvous; the clypeus, labrum and mandibles yellow; the flagellum, except the two basal joints, fulvous beneath; the wings subhyaline, faintly clouded at their apical margins, the nervures ferruginous, the tegulae pale ferruginous, as well as the apical joints of the tarsi. Abdomen, a fascia of silvery-white pubescence on the basal margin of the second segment; the following segments have on their apical margins laterally a little short white pubescence, frequently obliterated; the apex slightly fulvous, the apical segment having on each side a minute tooth.

*Hab.* Brazil. (Coll. W. W. Saunders, Esq.)

45. **Tetralonia sexcincta.**


*Hab.* Brazil.
46. *Tetralonia dispar.*

Female. Length 5½ lines.—Black, the face covered with cinereous pubescence, intermixed with some long black hairs; clypeus convex, produced, the labrum covered with yellowish-white hairs, the flagellum fulvous beneath; the cheeks have a dense white pubescence. Thorax anteriorly clothed with sooty-black pubescence, posteriorly with fulvous; wings subhyaline, the legs fusco-ferruginous, their pubescence black, the apical joints of the tarsi ferruginous. Abdomen black and shining, at the base a little fulvous pubescence, and the sides towards the apex fringed with black pubescence; the margins of the basal segments beneath rufo-testaceous, the apical segments fringed with sooty-black hairs.

*Hab.* Peru.

47. *Tetralonia marginata.*


*Hab.* Cayenne.


Macrocera Cajennensis, *St. Farg. Hym.* ii. 94. 6 3.

*Hab.* Cayenne; West Indies. (Coll. F. Smith.)

49. *Tetralonia atrifrons.*

Male. Length 5 lines.—Black, the pubescence on the face black, that on the margin of the vertex cinereous; the clypeus yellow at its anterior margin; the mandibles dark ferruginous, and having a yellow spot a little before their apex; the antennæ entirely black. The thorax above, the metathorax, two first segments of the abdomen, and a patch beneath the wings ochraceous; otherwise entirely black, excepting a few pale hairs on the anterior tibiae behind, on the intermediate pair as well as on their tarsi, and on the posterior tibiae and tarsi in front; the wings subhyaline, their nervures dark brown; the claw-joint of the tarsi slightly ferruginous, the claws black.

*Hab.* Chili.

50. *Tetralonia melanura.*


Length 5 lines.—Black, pubescent; thorax above and the first and second segments of the abdomen clothed with white pubescence; antennæ of the male longer than the body.

*Hab.* ——?
51. Tetralonia flavitarsis.


Length 4½ lines.—Black, the pubescence fulvous; the tarsi and tegulae subrufous; the abdomen having three fasciae of white pubescence; the antennæ of the male longer than the body.

Hab. Chili.

52. Tetralonia melæna.


Length 5 lines.—The pubescence entirely black; wings hyaline, nervures black.

Hab. Chili.

53. Tetralonia Gayi.

Tetralonia Gayi, Spin. Faun. Chili. vi. 176. 3.

Length 5 lines.—The pubescence white; the labrum, legs and abdomen beneath black; the antennæ of the male shorter than the body.

Hab. Chili.

54. Tetralonia Lanierii.


Hab. Cuba.

55. Tetralonia fulviventris. B.M.

Female. Length 7 lines.—Head and thorax black, the face has a thin pale fulvous pubescence, that on the disk of the thorax is similar; the labrum ciliated with bright fulvous hairs; the tegulae rufo-piceous, wings fulvo-hyaline, the nervures ferruginous, the apical margins of the wings faintly clouded; the legs nigro-piceous, the tarsi ferruginous; the legs clothed with bright fulvous pubescence. Abdomen, the base of the segments black, the apical margins of the segments broadly rufo-testaceous, except the basal half of the first segment, the whole densely clothed with a short bright fulvous pubescence; beneath the margins of the segments rufo-piceous, ciliated with ferruginous hairs.

Hab. Mexico?

56. Tetralonia atrifrons.

Female. Length 7 lines.—Black, the pubescence on the head entirely black. The thorax above, and the basal segment of the abdomen, clothed with ochraceous pubescence, on the other
parts it is entirely black; the wings fusco-hyaline, their nerves fusco-ferruginous; the anterior tarsi brownish beneath, the claws ferruginous.

**Hab.** North Carolina. (Coll. W. W. Saunders, Esq.)

57. **TETRALONIA BICOLOR.**


**Hab.** ———

58. **TETRALONIA BARBATA.**


**Hab.** ———

59. **TETRALONIA ATRA.**


**Hab.** ———

60. **TETRALONIA NIGRICORNIS.**


**Hab.** ———

61. **TETRALONIA CINGULATA.**


**Hab.** ———

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**Genus 45. MELISSODES.**

_Melissodes, Latr. Rég. Anim. v. 354 (1829)._

_Macrocera, Say, Bost. Journ. i. 403 (1837)._

The maxillary palpi 4-jointed, the labial palpi 4-jointed. The ocelli placed in a line on the vertex, the antennæ elongate in the males. The anterior wings having one marginal and three submarginal cells.

1. **MELISSODES PRUINOSA.**

_Macrocera pruinosa, Say, Bost. Journ. i. 405. 3._

**Hab.** United States (Mount Pleasant, Ohio).

2. **MELISSODES RUSTICA.**

_Macrocera rustica, Say, Bost. Journ. i. 406. 4._

**Hab.** North America (Indiana).

This may possibly be the species described as *M. denticulata,*
but as the teeth which arm the apex of the abdomen are not mentioned by Say, it becomes doubtful.

3. **Melissodes obliqua.**


*Hab.* North America (Indiana).

4. **Melissodes nigra.**

Macrocera nigra, *St. Farg. Hym.* ii. 112. 27.

*Hab.* North America. (Coll. F. Smith.)

5. **Melissodes desponsa.**

Female. Length 6 lines.—Black, the pubescence on the head and thorax ochraceous; the flagellum, except the three basal joints, testaceous beneath, the clypeus strongly punctured and having a little dark fuscous pubescence; the apex of the mandibles pale testaceous yellow; the wings subhyaline, the nervures ferruginous; the pubescence on the body and legs beneath entirely black; the base of the abdomen has a little ochraceous pubescence, beyond which it is black, as it is also on the anterior and intermediate legs above, on the posterior tibiae, and at the base of the first joint of the posterior tarsi above, pale fulvous, the claw-joint of all the tarsi dark ferruginous; the margins of the segments of the abdomen beneath rufo-testaceous.

*Hab.* North America (Ohio).

Var. The wings fuscous, and the fourth segment of the abdomen having on its apical margin laterally, a short white fringe. This is probably the female of "Americana," both sexes having been received from the same locality.

6. **Melissodes atriventris.**

Male. Length 6 lines.—Black, the clypeus and labrum yellow, the pubescence on the head and thorax ochraceous, that on the face and metathorax palest; the legs have a similar pubescence, the apical joints of the tarsi rufo-testaceous; the wings subhyaline, the nervures testaceous, the tegulae pale testaceous; the base of the abdomen clothed with pale ochraceous pubescence, beyond which it is entirely black, beneath it is of the same colour; the entire apical margins of the segments rufo-testaceous, the abdomen having a slight æneous tinge.

*Hab.* North America?
7. *Melissodes denticulata*. B.M.

Male. Length 4 lines.—Black, the clypeus yellow, and having its base narrowly black; the mandibles yellow at their tips; the flagellum fulvous beneath, except the two basal joints; the head and thorax have a thin hoary pubescence, as well as the legs, the apical joints of the tarsi ferruginous; the wings hyaline, their nervures fuscous. Abdomen ovate, and having a thin hoary pubescence at the base and sides; on the second, third, fourth and fifth segments are indistinct bands of the same coloured pubescence, usually more or less interrupted on the second and third; at the lateral margins of the fifth segment, at its base, a short angular acute tooth and a smaller one at the base of the sixth segment; the lateral margins of all the segments slightly testaceous.

*Hab.* United States.

8. *Melissodes senilis*.

Female. Length 4½ lines.—Black, the pubescence of the head and thorax cinereous; the legs nigro-piceous, the apical joints of the tarsi ferruginous; the anterior and intermediate tarsi have fuscous pubescence, on the posterior tibiae and tarsi it is pale fulvous, on the basal joint of the posterior tarsi within it is fuscous; the wings subhyaline, the nervures ferruginous. Abdomen very smooth and shining, at the base a little cinereous pubescence, the second segment has on its basal margin laterally, a line of white pubescence attenuated within; a similar line in the middle; the third and fourth segments have a band on their basal margin, attenuated in the middle; the fifth and sixth are clothed with fuscous pubescence; beneath, the apical margins are ciliated in the middle with fuscous pubescence, and on the sides with white.

*Hab.* North America (Mount Pleasant, Ohio).

This is very probably the female of *M. denticulata*; both are from the same locality and have a close specific resemblance.

9. *Melissodes nigripes*. B.M.

Female. Length 7 lines.—Black, the head and thorax covered with ochraceous pubescence, that on the latter palest; the legs and their pubescence black; wings subhyaline, their nervures ferruginous; the tegulae pale testaceous; the abdomen and its pubescence entirely black; sometimes a little ochraceous pubescence at the base and the apical margins rufo-testaceous.

Male. Length 5½ lines.—Very closely resembling the female; the clypeus yellow; the flagellum pale fulvous or yellow beneath,
except the two basal segments; the claws ferruginous: otherwise as in the other sex.

_Hab._ United States.

10. **MeliSSodes Pennsylvanica.**

**MacrocerA Pennsylvanica,** _St. Farg. Hym._ ii. 97. 9 ♂

_Hab._ Pennsylvania.

11. **MeliSSodes Philadelphica.**

**MacrocerA Philadelphica,** _St. Farg. Hym._ ii. 110. 24 ♂

_Hab._ Pennsylvania.

12. **MeliSSodes Americana.**

**MacrocerA Americana,** _St. Farg. Hym._ ii. 92. 4 ♂

_Coll. F. Smith._

13. **MeliSSodes Dentiventris.**

_Male._ Length 5½ lines.—Black, the clypeus, and mandibles at their apex yellow; the flagellum, except the two basal joints, fulvous beneath, and fuscous above; the pubescence on the head, thorax and legs fulvous; the wings subhyaline, their nervures ferruginous; the legs dark rufo-testaceous, the apical joints of the tarsi ferruginous; the base of the abdomen clothed with fulvous pubescence, the second segment has a narrow band of short pubescence of the same colour, and on each side about the middle a short line of the same; the remaining segments have a scattered black pubescence with which their sides are fringed; beneath, the pubescence is black; at the extreme lateral margins of the fifth and sixth segments is a minute tooth or spine, the apical segment above rufo-testaceous.

_Hab._ Georgia.

14. **MeliSSodes Manipularis.**

_Male._ Length 4½ lines.—Black; the clypeus and tips of the mandibles yellow, the flagellum, except the two basal joints, fulvous beneath, and fuscous above; the face clothed with white pubescence, on the vertex it is pale fulvous, as it is also on the disk of the thorax; beneath, and on the sides it is paler, as well as that which clothes the metathorax; the legs rufo-testaceous, the apical joints of the tarsi pale testaceous, the claws ferruginous; the wings hyaline, the nervures and tegulae ferruginous. Abdomen, the base thinly clothed with pale pubescence; the second segment has a band of cinereous pubescence at its basal
margin, and a second a little before its apex; the third and fourth segments have a band in the middle, which on each side is slightly oblique; the fifth has a band at its base and on each side a short acute tooth bent inwards, the seventh segment has also a small tooth on each side at its base.

_Hab._ Georgia.

15. _Melissodes terminata._

Female. Length 5½ lines.—Black, the labrum and a spot at the tips of the mandibles yellow; the flagellum, except the two basal and two or three apical joints, fulvous; the pubescence on the head, thorax and base of the abdomen cinereous, the wings subhyaline, their apex faintly clouded; the legs dark rufo-testaceous, the anterior femora have a long fringe of white pubescence, the apical joints of the tarsi pale ferruginous; the pubescence on the anterior and intermediate legs cinereous, that on the posterior pair dense, short, and black. Abdomen covered with fine shallow punctures, the apical margins of the segments slightly rufo-testaceous; the apex adorned with short golden pubescence, covering the two apical and the margin of the fourth segment. In old or worn specimens the golden pubescence on the abdomen becomes silvery or white.

_Hab._ Venezuela.

16. _Melissodes hæmorrhoidalis._

Female. Length 5½ lines.—Black, the head shining, rather strongly punctured, the clypeus having a central longitudinal depression, and the face a thinly scattered sooty-black pubescence; the labrum densely covered with pale fulvous pubescence; the flagellum, except the two basal joints, fulvous beneath; the thorax shining on the disk, the punctures scattered, thinly clothed with sooty-black pubescence, most dense on the sides and beneath, the pubescence on the anterior and intermediate legs black, that on the posterior tibiae and tarsi pale fulvous, the femora beneath fusco-ferruginous; the wings fulvo-hyaline, the nervures ferruginous, the tegulae slightly rufo-testaceous. Abdomen, fusco-ferruginous at the base, the apical margin of the second segment having a yellowish tinge particularly towards the sides, the rest of the segments of a reddish-yellow, the third and fourth segments at their basal margins laterally slightly fuscous, the four apical segments covered with pale fulvous pubescence; the abdomen entirely of a reddish-yellow beneath, the segments fringed with fulvous pubescence.

_Hab._ South America. (Coll. F. Smith.)
17. Melissodes Æthiops.

Male. Length 5½ lines.—Black, the pubescence entirely black, except a little on the cheeks, sides of the face, and a fringe on the segments of the abdomen beneath, which is of a dirty white; the pubescence dense on the thorax, legs, and base of the abdomen; the wings subhyaline, faintly clouded at their apex, the nervures black, the claws, tips of the mandibles, and the anterior margin of the clypeus narrowly, ferruginous; the labrum yellow; the apex of the abdomen has a little fulvous pubescence. The pubescence of this insect is beautifully plumose or feathered.

Hab. Columbia. (Coll. W. W. Saunders, Esq.)

18. Melissodes Fulvipes.

Male. Length 5 lines.—Black, the labrum, clypeus and base of the mandibles yellow, the apical half of the latter ferruginous; the flagellum fulvous beneath, except the two basal segments; the pubescence on the head, thorax and legs fulvous, being pale at the sides of the metathorax; the legs fulvous; the tegulae fulvo-testaceous, the wings fulvo-hyaline, the nervures and tegulae rufo-testaceous. Abdomen fusco-ferruginous, the apical margins of the segments rufo-testaceous; the base clothed with pale fulvous pubescence, the second segment has a band of short scaly pubescence at its basal margin, which is much narrowed in the middle, the third segment has a band at its base, and the following at their apical margins; the abdomen rufo-testaceous beneath.

Hab. Cayenne.

19. Melissodes Rufo-Dentata.

Male. Length 4½ lines.—Black, the clypeus and base of the mandibles yellow; the labrum cream-coloured and the flagellum fulvous beneath; the pubescence on the vertex and disk of the thorax, fulvo-ochraceous; that on the sides of the metathorax is paler; on the thorax beneath and on the cheeks it is cinereous; the wings fulvo-hyaline, the nervures and tegulae pale ferruginous, all the tibiae and tarsi of the same colour; the claws black. Abdomen fusco-ferruginous, the apical margins of the segments palest, the whole having a slight metallic or æneous tint; the second segment has a band of short pale ochraceous pubescence at its basal margin, and another a little beyond the middle; the three following segments have a single band towards their base; the apical segment is ferruginous in the middle, and has a small tooth of the same colour on each side; beneath, the apical margins of the segments are broadly rufo-testaceous.

Hab. St. Vincent’s. (Coll. F. Smith.)
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20. Melissodes Fonscolombei.

Melissodes Fonscolombei, Romand, Mag. Zool. (1841) t. 70. f. 1 a, b, c & q.

Hab. Chili.

Genus 46. Xenoglossa.

Xenoglossa, F. Smith's MSS

Head transverse, stemmata very large, approximating, placed in a curve on the vertex. The mentum of about equal length with the two basal joints of the labial palpi, the latter 4-jointed, the two apical joints minute, placed at the apex of the second joint; the paraglossæ setiform, pubescent, nearly as long as the labium; the maxillary palpi 5-jointed; the basal joint incrassate, of the same length as the second joint, the third joint of the same length as the second, the fourth joint shorter than the third, the fifth very minute. Antennæ of about equal length in the two sexes, the flagellum subclavate. The superior wings having one marginal and two submarginal cells; the marginal as long as the three submarginal ones united; the second submarginal cell oblique-quadratè, the third narrowed towards the marginal; the posterior tibiae slightly dilated and having a long dense scopæ; the claws bifid; the intermediate legs of the males simple.

1. Xenoglossa fulva.

Female. Length 8 lines.—Entirely bright fulvous, and clothed with fulvous pubescence, the flagellum fuscos; the wings fuscos, the nervures black, the tips of the claws black, the pubescence on the tarsi beneath ferruginous; the pubescence on the abdomen short and velvety, that on the basal segment is long, as well as that on the thorax.

Male.—Closely resembling the female, but having the clypeus and labrum yellow, the base of the mandibles is also yellow. The apical segment of the abdomen subquadratè, having on each side an elevated carina, and a central abbreviated one reaching the apex; above subrugose, beneath smooth and shining.

Hab. Mexico (Puebla).

Genus 47. Oxæa.


1. Oxæa flavescens.

Oxœa flavescens, Klug, Berlin Mag. p. 262. t. 7. f. 1 (1807) q.

Female. Length 8 lines.—Head and thorax black, smooth and shining; the face has a pale yellow pubescence, that on the vertex and on the disk of the thorax fulvo-ochraceous; the wings subhyaline, their nervures testaceous; the legs pale fulvo-testaceous, and clothed with short fulvo-ochraceous pubescence, the posterior pair having a dense floccus on the posterior femora at their base, and the tibiae having a dense scopula. Abdomen bright green, the base, sides and apex having a scattered yellow pubescence; beneath fulvo-testaceous, the margins of the segments thickly fringed with pale fulvous pubescence; the abdomen above is finely shagreened, the apical margins smooth and shining.

_Hab._ Brazil.

2. _Oxaea festiva._

Female. Length 9 lines.—Head and thorax black, smooth and shining; the clypeus has a few scattered punctures, on each side of which is a little short dense white pubescence; the mandibles elongate, arcuate, the labrum having a central carina; the mandibles rufo-piceous, fringed below with short ferruginous hairs. Thorax, the sides of the disk have a short velvety pubescence, the wings smoky-hyaline, the nervures and tegulae black; the legs fulvo-testaceous, densely clothed with short fulvo-ochraceous pubescence, the posterior pair having a dense floccus at the base of the femora beneath, and the tibiae a dense scopula of short pubescence. Abdomen brilliant green, very closely punctured, most strongly so towards the base, the apical margins of the segments smooth and shining, and having a brilliant golden effulgence; the fifth and sixth segments black, clothed with black pubescence; beneath rufo-testaceous, the margins of the apical segments fringed with ferruginous hairs.

_Hab._ Para (W. W. Bates). (Coll. F. Smith.)

Genus 48. _MELITTURGA._


1. _MELITTURGA CLAVICORNIS._

_St. Farg._ *Hym.* ii. 172. 1 & ².
_Eversm._ *Bull. Mosc.* xxv. 125. 1.

_Hab._ South of France.
2. **Melitturga fervens.**

*Melitturga fervens*, St. Farg. *Hym.* ii. 143. 3♂


*Hab.* Algeria.

3. **Melitturga Oraniensis.**

*Melitturga Oraniensis*, St. Farg. *Hym.* ii. 142. 2♂

*Lucas, Explo. Sc. Algér.* iii. 165. 49. t. 4. f. 7.

*Hab.* Algeria.

Genus 49. **SAROPODA.**


1. **SAROPODA bimaculata.**


*St. Farg. Hym.* ii. 36. 11.


*Curtis, Brit. Ent.* viii. t. 361.

*Smith, Zool.* iii. 891. 1.


*Hab.* France; Germany; Britain.

2. **SAROPODA fulva.**


*Hab.* Russia.

3. **SAROPODA tenella.**


*Hab.* Egypt.

4. **SAROPODA byssina.**


*Hab.* Egypt.
5. **Saropoda lutulenta.**


*Hab.* Egypt.

6. **Saropoda bombiformis.**

*Female.* Length 6 lines.—Black, the scape of the antennæ, clypeus and labrum of an orange-yellow, the mandibles yellow, their tips ferruginous; the flagellum rufo-piceous beneath. The entire insect clothed with a short rich fulvous pubescence, having a golden effulgence on the abdomen; the legs fulvo-ferruginous, the posterior femora more or less fuscos; wings fusco-hyaline, the nervures black, the tegulae pale rufo-testaceous; the posterior tibiae and the basal joint of the tarsi fringed with black pubescence, the claws black. Abdomen, the base of the second segment naked, forming a black band, the apical margins of the third and fourth segments and the entire apical ones fulvous.

*Male : var. α.* The legs entirely dark fuscos, and the posterior tarsi black.

*Male.*—This sex is coloured precisely the same as the female.

*Hab.* Australia (Richmond River).

7. **Saropoda latizona.**


*Hab.* Egypt.

8. **Saropoda humilis.**


*Hab.* Africa.

9. **Saropoda nigrilabris.**


*Hab.* Africa.

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Genus 50. **Habrophora.**

*(F. Smith’s MSS.)*

The labial palpi 4-jointed, the basal joint thrice the length of the second, the third and fourth minute, inserted at the side and near the apex of the second joint; the mentum about one-third shorter than the labium.

The maxillary palpi 6-jointed, the basal joint scarcely half the length of the second, the third a little longer than the first; the
three apical joints each in succession shorter than the preceding, the apical joint minute.

The superior wings with one marginal and three submarginal cells, the second and third submarginal cells narrowed towards the marginal, the first recurrent nervure uniting with the second transverse cubital nervure.

The flagellum of the antennae of the male one-third longer than that of the female, but having the basal joint of the flagellum shorter than in the other sex.

This genus in many particulars agrees with that of Anthophora; the relative proportions of the mentum, labium and palpi are however different, but the neuration of the wings precludes the possibility of placing it in that genus.

1. Habrophora zonatula. B.M.

Female. Length 6½ lines.—Black; the face clothed with fulvous pubescence, pale at sides, sparing on the clypeus, and darkest on the vertex; the labrum densely covered with yellowish-white pubescence; the apex of the mandibles fulvo-testaceous. The thorax and basal segment of the abdomen densely clothed with fulvous pubescence above, beneath the former it is paler; the legs ferruginous, densely clothed above with fulvous pubescence, the scopæ on the posterior tibiae pale, on the tarsi beneath it is ferruginous; the wings subhyaline, the nervures ferruginous, the tegulae pale rufo-testaceous. Abdomen; the apical margins of the segments have fasciæ of short yellowish-white pubescence; the fifth and sixth segments have a fringe of longer pubescence, which is white at the sides and fulvous in the middle.

Male.—Closely resembles the female, but having the clypeus, a triangular spot above it, the face on each side, the scape in front, the labrum and mandibles, yellow; the tips of the latter and the anterior margin of the clypeus ferruginous; at the base of the clypeus are two quadrate spots united at the base, but not touching the base of the clypeus. The pubescence of the thorax, abdomen and legs as in the other sex; the anterior coxae armed with an elongate bent spine, which is slightly recurved and thickened at the apex, terminating in an acute point; all the femora incrassate; the basal joint of the anterior tarsi have a broadly dilated quadrate process occupying the apical half behind; this process has a row of short curved teeth along its apical margin; the second joint is armed beneath with an acute tooth; the basal joint of the posterior tarsi is produced at its apex beneath; this process is rounded at the extremity.

Hab. Albania.
2. Habrophora ezonata. B.M.

Female. Length 7 lines.—Black, the face has a cinereous pubescence thinly scattered over the clypeus, but dense on each side of the face, that on the vertex is black, the labrum has a dense tuft of white pubescence, and the cheeks a dense beard of the same colour. The thorax and basal segment of the abdomen above, densely clothed with fulvo-ochraceous pubescence; the anterior femora have a long thick fringe which is formed by a mixture of pale and dark fuscous pubescence, the intermediate and posterior femora are fringed with fuscous pubescence, and above the legs have a short pubescence of the same colour, except the scopæ on the posterior tibiae, which is glittering yellowish-white. Abdomen; the second and third segments have a very short black pubescence, on the fourth it is silvery-white, very short and having some long white hairs intermixed, its apical margin has a dense white fringe; the sides of the following segment are similarly adorned, in the middle it is fuscous, as it is also on the apical segment.

Male.—Closely resembles the female, but the clypeus and a transverse line above, the face on each side, the scape in front and the basal half of the mandibles yellow; the apical half of the latter ferruginous; the anterior coxae armed with an elongate filiform spine, obtuse at its apex and having a brush-like tuft of white hair at the extremity: these spines as well as the legs are ferruginous; the thorax beneath, the coxae and trochanters covered with long white pubescence; the tibiae and tarsi have a white pubescence above, the posterior femora having some long fuscous pubescence within; the basal joint of the posterior tarsi broadly dilated, angulated beneath, convex exteriorly, concave within. The pubescence of the abdomen longer, but coloured as in the female, the apical segment fringed with short black hairs.

Hab. Albania.

Note.—The name Habrophora, as I have lately ascertained, having been preoccupied by Erichson in Coleoptera, Habropoda must be substituted.

Genus 51. Anthophora.

Apis, pt., Linn. Syst. Nat. 953 (1766).
1. Anthophora retusa. B.M.
Apis retusa, Linn. Faun. Suec. 1689; Syst. Nat. i. 954. 8, et Cab. Mus. Linn. Soc.♀.
Anthophora Haworthana, Curtis, Brit. Ent. viii. t. 357♂.
Smith, Zool. iii. 895. 2♂♀.
Anthophora retusa, St. Farg. Hym. ii. 69. 38.
Hab. Britain; France; Germany; Italy; Denmark; Sweden.

2. Anthophora acervorum. B.M.
Apis acervorum, Fabr. Syst. Ent. p. 382. 21♀ (nec Linn.); Ent. Syst. ii. 322. 36.
Apis Hispanica, Panz. Faun. Germ. 55. 6♂ (nec Fabr.).
Smith, Zool. iii. 894. 1.
Hab. Britain; France; Germany; Denmark.

3. Anthophora pilipes. B.M.
Apis pilipes, Fabr. Ent. Syst. ii. 326♂.
Anthophora pilipes, St. Farg. Hym. ii. 57. 31♂♀.
Hab. France; Italy; Germany.

4. Anthophora parietina. B.M.
Apis parietina, Fabr. Ent. Syst. ii. 323. 38.
Spin. Ins. Lig. fasc. 1. p. 126.
St. Farg. & Serv. Ency. Méth. x. 798. 2.
St. Farg. Hym. ii. 79. 46.
Hab. France; Italy; Denmark; Sweden.
5. **Anthophora nidulans.**

Apis quadrifasciata, *De Vill. Entom.* iii. 319. 90.
Anthophora nidulans, *St. Farg. Hym.* ii. 27. 2 ♂ ♀.
Brullé, *Hist. Nat. II. Canar.* iii. p. 84. 8.

**Hab.** France; Madeira; Algeria; Albania; Italy.

The specimens of this species from Madeira have the markings, as well as the pubescence, similarly distributed, but the latter is more or less fulvous.

6. **Anthophora furcata.**

Anthophora furcata, *St. Farg. Hym.* ii. 82. 49.
Saropoda furcata, *Smith, Zool.* iii. 893. 3.

**Hab.** Britain; France; Germany; Denmark; Sweden; Finland; Lapland.

7. **Anthophora quadrirnaculata.**

Anthophora quadrirnaculata, *St. Farg. Hym.* ii. 84. 51 ♂ (type in Coll. Westw.).
Eversm. *Bull. Mosc.* xxv. 110. 5.
Anthophora mixta, *St. Farg. Hym.* ii. 85. 52 ♀ (type in Coll. Westw.).
Saropoda vulpina, *Smith, Zool.* iii. 892. 2 ♂ ♀.

**Hab.** France; Germany; Denmark; Sweden.

8. **Anthophora albigena.**

Anthophora albigena, *St. Farg. Hym.* ii. 28. 3 ♂ ♀.

**Hab.** France; Sicily; Algeria.
Anthophora varia, St. Farg. Hym. ii. 43. 17♂.
Hab. France (Paris).

10. Anthophora binotata.
Anthophora binotata, St. Farg. Hym. ii. 38. 12♂.
Hab. France (Paris; Lyons).

11. Anthophora squalida.
Anthophora squalida, St. Farg. Hym. ii. 53. 27.
Hab. France (Paris).

12. Anthophora pubescens.
Apis pubescens, Fabr. Ent. Syst. ii. 336. 95.
St. Farg. Hym. ii. 54. 28♀.
Hab. Italy; Algeria (Oran).

Anthophora podagra, St. Farg. Hym. ii. 44. 18♂.
Hab. France (Montpellier).

Hab. Germany.

15. Anthophora femorata.
St. Farg. Hym. ii. 45. 19.
Hab. France (Montpellier; St. Séver); Germany. (Coll. W. W. Saunders, Esq.)

Hab. Lyons; Algeria (Oran). (Coll. W. W. Saunders, Esq.)

17. Anthophora dubia.
Female. Length 6 lines.—Black, the face clothed with pale pubescence, the clypeus and labrum coarsely punctured, the disk
of the thorax clothed with black pubescence, enclosed by a circle of short fulvous pubescence; beneath, the pubescence is black; the fringe of the femora intermixed with pale hairs; the legs dark rufo-piceous, the posterior tibiae and the basal joint of the tarsi covered with short fulvous pubescence; the wings fuscohyaline, the nervures black. Abdomen clothed with a dense short fulvous pubescence, which is brightest on the two basal segments, on the third and following segments it becomes ochraceous, the fifth segment has a little bright fulvous pubescence on the marginal fringe, on the apical one it is ferruginous.

_Hab._ South of France.

18. _Anthophora Dufourii._

*Anthophora Dufourii, St. Farg. Hym. ii. 75. 43.*

_Hab._ France; Spain.

19. _Anthophora crassipes._

*Anthophora crassipes, St. Farg. Hym. ii. 41. 15♂.*

_Hab._ France (St. Germains).

20. _Anthophora crinipes._

*Female._ Length 5 lines.—Black, clothed with a pale ochraceous pubescence, inclining to hoary-gray on the face, metathorax, femora beneath, and on the posterior tibiae above; at the apex of the femora and tibiae is a little bright yellow or golden pubescence; the apical margins of the segments of the abdomen are pale testaceous, and have a fringe of nearly white pubescence; the abdomen beneath and the legs are rufo-piceous; the fourth and fifth ventral segments have a mixture of ferruginous hairs with the pale pubescence which fringes them; the wings subhyaline, the nervures ferruginous; the apical joints of all the tarsi ferruginous; the flagellum of the antennae rufo-piceous beneath.

_Male._—Rather smaller than the female, clothed with similar pubescence; the clypeus, a transverse line above, the labrum and scape in front, yellow; the margins of the labrum and two round spots at the base fuscous. The intermediate legs elongate, the basal joint of the tarsi dilated towards the apex, and having on its apical half in front a short fringe of black pubescence; the entire joint as well as the tibiae behind covered with a thin long pale pubescence; the apical joint of the tarsi black, and having a short fringe on each side of black pubescence.

_Hab._ Italy.
21. **Anthophora balneorum**.
Hab. The Pyrenees.

22. **Anthophora fulvipes**.
Hab. Russia.

23. **Anthophora atricilla**.
Hab. Russia.

24. **Anthophora Ireos**.
Apis Ireos, *Pallas, Iter.* ii. 731. 93♂
Hab. Russia.

25. **Anthophora lepida**.
Hab. Russia.

26. **Anthophora vetula**.
Hab. Russia.

27. **Anthophora personata**.
*Waltl, Reise.* p. 209.
Hab. Russia.

28. **Anthophora albifrons**.
Hab. Russia.
*Hab.* Russia.

30. Anthophora fulva.
*Hab.* Russia.

31. Anthophora dubia.
*Hab.* Russia.

32. Anthophora segnis.
*Hab.* Russia.

33. Anthophora cinerea.
*Hab.* Russia.

34. Anthophora quadricincta.
*Hab.* Russia.

35. Anthophora cognata.
Female. Length 5 lines.—Black, the clypeus and labrum have a glittering white pubescence, on the vertex it is fulvous intermixed with fuscous; the anterior margin of the clypeus, and an angular shape uniting with it, in the middle, the labrum and mandibles, yellow; a narrow line on the margin of the clypeus, a minute spot on each side of the labrum at the base, black; the tips of the mandibles ferruginous. Thorax, clothed above with a dense fulvo-ochraceous pubescence, the tips of the hairs fuscous; the wings subhyaline, nervures fuscos, the tegulae pale testaceous; the legs fusco-ferruginous, the pubescence beneath black and sparing, above densely clothed with a yellowish-white pubescence, the basal joint of the tarsi beneath has an obscure ferruginous pubescence. Abdomen, the apical margins of the segments have a fascia of short fulvo-ochraceous pubescence, the fasciae uniting at the extreme lateral margins; the second
and third segments have in the middle an abbreviated line of pubescence which unites with the marginal fasciae; the apex of the abdomen fuscous.

This species bears a strong resemblance to the *Saropoda bi-maculata.*

*Hab.* Albania. (Coll. W. W. Saunders, Esq.)

36. **ANTHOPHORA INTERMEDIA.**

*Anthophora zonata,* Brullé, *Expéd. Sc. de Morée,* iii. 331. 737. (nec Fabr.).

*Anthophora intermedia,* St. Farg. *Hym.* ii. 64. 35.

*Hab.* Morea; Algeria (Oran).

37. **ANTHOPHORA AFFINIS.**


St. Farg. *Hym.* ii. 61. 33.


*Hab.* Morea; Algeria (Oran).

38. **ANTHOPHORA RUFA.**

*Anthophora rufa,* St. Farg. *Hym.* ii. 48. 22♀.

*Hab.* Dalmatia.

39. **ANTHOPHORA SICULA.**

Female. Length 6¼ lines.—Black, clothed with pale fulvous pubescence, the legs ferruginous, the scopa of a bright fulvous above, beneath short, sparing and fuscous; the apical joints of the tarsi ferruginous, the calcaria black. Abdomen densely pubescent, the cilia on the margins of the segments being long and dense; abdomen, beneath fuscous-ferruginous, the margins of the segments ciliated with pale fulvous hairs. The wings fusco-hyaline.

Male.—The pubescence on the head, thorax and abdomen short, dense and fulvous, that on the cheeks, legs and abdomen beneath black; the scape in front, clypeus and face on each side, also the labrum and a spot at the base of the mandibles white; wings as in the other sex.

*Hab.* Sicily. (Coll. F. Smith.)

40. **ANTHOPHORA PRUINOSA.**

Female. Length 6 lines.—Black, the face, thorax above, two
basal segments of the abdomen and the posterior tibiae above, clothed with a cinereous pubescence, more or less tinged with ochraceous; that on the tibiae has a silvery effulgence in certain lights; on the vertex, sides of the head, and the entire insect beneath it is black; the legs are dark rufo-piceous; the wings subhyaline, their apical margins faintly clouded; on the apical margin of the second segment is a narrow fringe of white pubescence; the third and apical segments have a thin black pubescence; the abdomen rufo-piceous beneath.

Male.—Clothed more densely than the female, but similarly coloured; the scape in front, the clypeus and labrum yellow, the clypeus has two rounded black maculae at the base; its anterior margin and two spots on the labrum black; the thorax and cheeks have a cinereous pubescence; the anterior and intermediate femora have a fringe of that colour; the intermediate legs elongate, their tibiae have a long fringe of white pubescence behind; the basal joint of their tarsi fringed in front with short, and behind with long black pubescence, the second, third and fourth joints pale testaceous.

Hab. Sicily. (Coll. F. Smith.)

41. Anthophora Hispanica. B.M.
Apis hispanica, Fabr. Ent. Syst. ii. 318. 17♂.
Anthophora hispanica, St. Farg. Hym. ii. 55. 29.
Lucas, Explo. Sc. Algér. iii. 146. 11.
Eversm. Bull. Mosc. xxv. 108. 3?

Hab. Spain; Algeria (Oran).

42. Anthophora canifrons.

Female. Length 7 lines.—Black, the clypeus has a narrow, abbreviated, yellow line in the centre, touching the anterior margin; the face has a cinereous pubescence, the tips of the hairs black. Thorax densely clothed with a short obscure dirty yellow pubescence; on the sides and on the metathorax it is nearly white; legs dark rufo-piceous, the pubescence beneath black; above, the pubescence is of a yellow cinereous; the basal joint of the intermediate and posterior tarsi have a black pubescence in front, posteriorly it is pale ochraceous. Abdomen rufo-piceous beneath; above, the apical margins of the segments have a very narrow white marginal fascia, which is continued beneath; the third and fourth fasciae are fuscose in the middle.

Hab. Canary Islands. (Coll. F. Smith.)
43. **Anthophora atro-alba.**

*Anthophora atro-alba, St. Farg. Hym. ii. 73. 41.*

*Brullé, Hist. Nat. Il. Canar. iii. 84. 9.*

*Hab.* The Canaries; Albania; Italy.

44. **Anthophora pulverosa.**

Female. Length $5\frac{1}{2}$ lines.—Black, densely clothed with hoary pubescence, that on the disk of the thorax has an ochraceous tinge, on the abdomen it is very short and also tinged with ochraceous, that on the apex of the abdomen is dark fuscous; on the posterior tibiae the pubescence is bright and glittering, faintly tinged with yellow, but at the apex of the intermediate tibiae and on the anterior tarsi it is of a brighter yellow, the apical joints of the tarsi ferruginous; the flagellum beneath, the legs and abdomen beneath rufo-piceous; the wings hyaline, the nervures and tegulae pale testaceous; on the apical margins of the segments of the abdomen is a fascia of pale pubescence.

Male.—Rather smaller than the female and having a similar dusty appearance, the pubescence being of a little brighter yellow; the scape in front, the clypeus, the face on each side, a line above the clypeus, the labrum and mandibles white, the latter ferruginous at their apex, the legs ferruginous; otherwise as in the female.

*Hab.* Canary Islands. (Coll. W. W. Saunders, Esq.)

45. **Anthophora socia.**

*Megilla socia, Klug, Symb. Phys. dec. v. t. 49. f. 6♀.*

*Hab.* Syria.

46. **Anthophora robusta.**

*Megilla robusta, Klug, Symb. Phys. dec. v. t. 49. f. 5♀.*

*Hab.* Syria.

47. **Anthophora concinna.**

*Megilla concinna, Klug, Symb. dec. v. t. 49. f. 11♂.*

*Hab.* Syria. (Coll. F. Smith.)

48. **Anthophora farinosa.**

*Megilla farinosa, Klug, Symb. Phys. dec. v. t. 50. f. 2♀.*

*Hab.* Arabia Felix.
49. **Anthophora valga.**
*Hab.* Arabia.

50. **Anthophora vetula.**
*Hab.* Arabia.

51. **Anthophora scopipes.**
*Hab.* Egypt.

52. **Anthophora caliginosa.**
*Hab.* Egypt; Syria.

53. **Anthophora crocea.**
*Hab.* Nubia (New Dongala).

54. **Anthophora incana.**
*Hab.* Egypt.

55. **Anthophora alternans.**
*Hab.* Egypt.

56. **Anthophora lanata.**
*Hab.* Alexandria.

57. **Anthophora mucorea.**
*Hab.* Egypt; Arabia.

58. **Anthophora Nubica.**
*Hab.* Africa (Nubia).
59. **Anthophora cinerascens.**

*Anthophora cinerascens, St. Farg. Hym. ii. 51. 25♀.*

*Hab.* Nubia.

60. **Anthophora vidua.**

*Megilla vidua, Klug, Symb. Phys. dec. v. t. 49. f. 10♀.*

*Hab.* Egypt (Saccahram).

61. **Anthophora Savignyi.**

*Anthophora Savignyi, St. Farg. Hym. ii. 47. 21♀.*

*Hab.* Egypt.

62. **Anthophora senescens.**

*Anthophora senescens, St. Farg. Hym. ii. 71. 39.*

*Hab.* Algeria (Oran).

63. **Anthophora ventilabris.**

*Anthophora ventilabris, St. Farg. Hym. ii. 72. 40♂.*

*Hab.* Algeria (Oran).

64. **Anthophora Romandii.**

*Anthophora Romandii, St. Farg. Hym. ii. 87. 54.*


*Hab.* Algeria (Oran).

65. **Anthophora biciliata.**

*Anthophora biciliata, St. Farg. Hym. ii. 83. 50.*

*Lucas, Explo. Sc. Algér. iii. 154. 25. t. 2. f. 4.*

*Hab.* Algeria (Oran).

66. **Anthophora calcarata.**

*Anthophora calcarata, St. Farg. Hym. ii. 42. 16♂♀.*

*Hab.* Algeria (Oran).

67. **Anthophora dispar.**

*Anthophora dispar, St. Farg. Hym. ii. 56. 30.*


*Hab.* Algeria (Oran).
68. **Anthophora ephippium.**


*Hab.* Algeria (Oran).

69. **Anthophora fulvitarsis.**


*St. Farg. Hym.* ii. 62. 34.

*Hab.* Morea; Algeria (Oran).

70. **Anthophora ferruginea.**

Anthophora ferruginea, *St. Farg. Hym.* ii. 78. 45.


*Hab.* Algeria (Oran). (Coll. W. W. Saunders, Esq.)

71. **Anthophora liturata.**

Anthophora liturata, *St. Farg. Hym.* ii. 74. 42.


*Hab.* Algeria (Oran).

72. **Anthophora mauritanica.**


*Hab.* Algeria.

73. **Anthophora nigro-cincta.**

Anthophora nigro-cincta, *St. Farg. Hym.* ii. 76. 44.


*Hab.* Algeria (Oran).

74. **Anthophora nigro-fulva.**


*Hab.* Algeria (Oran).

75. **Anthophora Oraniensis.**


*Hab.* Algeria (Oran).
76. **Anthophora nasuta.**

*Anthophora nasuta,* St. Farg. *Hym.* ii. 66. 36.


**Hab.** Algeria (Oran).

77. **Anthophora nigro-maculata.**


10. t. 1. f. 3.

**Hab.** Algeria; Spain; Portugal.

78. **Anthophora pennata.**

*Anthophora pennata,* St. Farg. *Hym.* ii. 59. 32.


**Hab.** Algeria (Oran).

79. **Anthophora quadricolor.**

*Anthophora quadricolor,* Erichs. in Wagner *Reis. in der Regents. Algier.* iii. 193. 54. t. 9.


**Hab.** Africa.

80. **Anthophora atrifrONS.**

Female. Length 6 lines.—Black, the head clothed with black pubescence, on the vertex is a little fulvous pubescence; the thorax and abdomen above clothed with bright fulvous pubescence; on the disk of the thorax between the wings, not reaching the tegulae, is a rounded patch of black pubescence, there is also a little in the middle of the two basal segments; the entire pubescence of the legs and of the body beneath is black; towards the apex of the abdomen the pubescence is paler than the rest; wings of a smoky hyaline.

**Hab.** Cape of Good Hope. (Coll. F. Smith.)

81. **Anthophora bipartita.**

Female. Length 7½ lines.—Black, the face thinly covered with a short griseous pubescence, mixed with black at the sides and on the vertex; the clypeus has a narrow white line running down the middle, expanding into an angular shape at the margin of the clypeus, immediately beneath is a white spot on the labrum, which is covered with short griseous pubescence, as well as the sides of the head and the cheeks. Thorax densely pubescent above, the anterior portion as far as the tegulae black; posteriorly
fulvous; the wings dark fuscous, having a purple iridescence; the coxae and femora fusco-ferruginous, the pubescence of the legs black, the posterior tibiae and the basal joint of the tarsi have a dense fringe of that colour. Abdomen shining, finely punctured and having a little black pubescence at the sides and apex, beneath obscurely ferruginous towards the base.

_Hab._ Port Natal.

### 82. Anthophora vestita.  
**B.M.**

Female. Length 6 lines.—Black, the head covered with a dense white pubescence, the labrum covered with the same; the mandibles have their tips and a minute spot at their base yellow. Thorax densely pubescent, that on the disk is a mixture of black and pale ochraceous, on the metathorax it is very pale fulvous, and beneath it is white, the legs ferruginous; the femora beneath, and the posterior tibiae and basal joint of the tarsi above, clothed with white pubescence, that on the anterior and intermediate legs above is of a yellowish-white, on the tarsi beneath it is fulvo-ferruginous; the calcaria ferruginous; the wings subhyaline, having a fulvous tinge, the nervures black, the tegulae pale testaceous. Abdomen densely clothed above with a short fulvo-ochraceous pubescence.

_Hab._ Port Natal.

### 83. Anthophora plumipes.  
**B.M.**


_Anthophora atrocincta, St. Farg. Hym._ ii. 35. 10 ♀.

Fabricius has given the habitat for this insect India, but this must be an error; it appears to be a common African species.

_Hab._ Senegal; the Gambia.

### 84. Anthophora nivea.

_Anthophora nivea, St. Farg. Hym._ ii. 52. 26 ♀.

_Hab._ Senegal.

### 85. Anthophora calens.  
**B.M.**

_Anthophora calens, St. Farg. Hym._ ii. 49. 23 ♀.

_Hab._ Senegal.
86. **Anthophora basalis.**

Female. Length $7\frac{1}{2}$ lines.—Black, the head densely clothed with a short black pubescence, the apex of the clypeus naked, obliquely truncate and roughly punctured, the labrum pubescent and the mandibles ciliated with black hairs beneath, their tips pale testaceous; the thorax above and the first segment of the abdomen densely clothed with a rich fulvous pubescence; the legs entirely black; the wings fuscous, their nervures black, the tegulae pale rufo-testaceous. Abdomen, the fifth and apical segment covered with black pubescence, and having a little pale pubescence laterally; beneath, obscurely rufo-piceous, the third, fourth and fifth segments having on each side a pale fringe.

*Hab.* South Africa. (Coll. Dr. A. Smith.)

87. **Anthophora pulchra.**

Female. Length 5 lines.—Black, the clypeus, a triangular shape above, the face on each side, the labrum, a spot on the scape in front, and the mandibles, yellowish-white; an elongate stripe on each side of the clypeus, its anterior margin and two minute dots at the base of the labrum black, the tips of the mandibles ferruginous; the flagellum fulvous beneath; the face has a griseous pubescence, on the vertex it is ochraceous. Thorax, the disk clothed with fulvo-ochraceous pubescence, paler on the sides, and beneath of a bluish-white, in some individuals it has a greenish tinge; the wings subhyaline, the nervures fuscous; the legs rufo-piceous and having a little black pubescence beneath; the tibiae and the basal joint of the anterior and intermediate tarsi clothed with white pubescence, which has usually more or less of a yellow tinge, sometimes it is tinged with blue or green; the basal joint of the posterior tarsi has usually a patch of pale pubescence at the base, but it is frequently black. Abdomen, the apical margins of the four basal segments have fasciae of bluish-white pubescence, the fifth segment has a little white pubescence on each side, the sixth is dark rufo-piceous, and has some fuscous pubescence on each side.

Var. *a.* having an oblique quadrate spot on each side of the clypeus, its anterior margin ferruginous, the spots on the labrum obsolete.

Male.—Closely resembles the female, but has only a narrow black line on each side of the clypeus; in other respects as in the other sex.

*Hab.* Australia (Cape Upstart; Moreton Bay; Hunter River).
88. **Anthophora cingulata.**

Banks.
Anthophora cingulata, *St. Farg. Hym.* ii. 46. 20.

**Hab.** Australia.

89. **Anthophora æruginosa.**

Female. Length 5 lines.—Black, the head and thorax densely covered with short green pubescence, varying in the tint in different individuals; the clypeus, labrum, mandibles, and a triangular spot above the clypeus, yellow; the clypeus has on each side at the base a quadrate black spot, which is emarginate at its inferior side; the labrum has two fuscosus dots at the base, and the tips of the mandibles are fusco-ferruginous, the flagellum fulvous beneath. Thorax, the wings hyaline, the nervures fuscosus, the tegulae pale testaceous; legs rufo-piceous; beneath, their pubescence is black; the pubescence of the tarsi black, the intermediate and posterior pairs having a little green at their base above; the posterior tibiae have a line of black pubescence at their base above. Abdomen rufo-piceous beneath; above, the extreme apex covered with black pubescence.

Male.—Closely resembling the other sex, but having the scape yellow in front; the cheeks and anterior femora beneath have a long dense white pubescence; the intermediate tibiae and tarsi are fringed with long black pubescence in front, and with white behind; the posterior tarsi have a dense black pubescence; otherwise as in the female.

**Hab.** Australia (Hunter River).

90. **Anthophora zonata.**


**Hab.** India; Ceylon; Philippine Islands; Hong Kong; North China.

91. **Anthophora subcærulea.**


**Hab.** India (Bengal). (Coll. W. W. Saunders, Esq.)
92. **Anthophora niveo-cincta**.

Female. Length 5 lines.—Black, a triangular spot above the clypeus, the clypeus, the face on each side, the labrum and mandibles, and a spot on the scape in front, yellow; the clypeus has on each side at the base an elongate quadrate spot, and its anterior margin narrowly, black; the labrum has a fuscous spot on each side at the base, the apex of the mandibles and the flagellum ferruginous; the pubescence on the face and cheeks white, on the vertex and disk of the thorax it is pale fulvous, the tips of the hairs being black; the pubescence on the sides of the thorax, beneath, and also on the metathorax, white; the legs ferruginous, above densely covered with white pubescence; beneath it is black. Abdomen, the margins of the segments have a fascia of white pubescence, the fifth is covered with the same, the apex fuscous; beneath, the abdomen is ferruginous.

*Hab. India. (Coll. J. S. Baly, Esq.)*

93. **Anthophora fasciata**.


*Hab. India.*

94. **Anthophora confusa**.

Female. Length 6 lines.—Black, a minute triangular spot above the clypeus, a line down its centre, a transverse line on each side of it on the face at the anterior margin, and the labrum yellowish-white; the labrum has a narrow transverse line at the base, a rounded spot on each side at the base, and its anterior margin narrowly, black; the mandibles yellow, their apical half ferruginous; the face has a short cinereous pubescence, intermixed with long black hairs, on the cheeks it is white; the thorax has a dense obscure fulvous pubescence above, the tips of the hairs black; the wings fusco-hyaline; the pubescence on the thorax beneath, and the fringe on the femora white; legs fusco-ferruginous; the pubescence on the anterior pair above pale; on the intermediate ones fuscous, and having a white fringe behind; the posterior pair have black pubescence within and beneath, and white above; having an abbreviated black stripe at the base of the tibiae. Abdomen, the four basal segments have a narrow band of short white pubescence on their apical margins, the fifth is fringed on each side with white.

*Hab. India. (Coll. J. S. Baly, Esq.)*
95. **Anthophora bicincta.**

*Apis bicincta, Fabr. Ent. Syst. ii. 338. 101.*


*Anthophora bicincta, St. Farg. Hym. ii. 34. 9.*

*Hab. India.*

96. **Anthophora violacea.**

*Anthophora violacea, St. Farg. Hym. ii. 80. 47.*

*Hab. India.*

97. **Anthophora villosula.**

Male. Length 6 lines.—Black, densely covered with hoary pubescence, the tips of the hairs on the vertex and thorax fuscous; the scape in front, the clypeus, labrum and mandibles yellow; on each side at the base of the clypeus a large rounded black spot, a similar fuscous spot on each side at the base of the labrum, the apical half of the mandibles ferruginous. Thorax, the wings subhyaline, the tegulae and nervures rufo-piceous; the intermediate legs elongate, the basal joint of the tarsi clavate, having towards the apex in front a little fuscous pubescence intermixed with a few long pale hairs, behind ciliated with very long pale fuscous hairs; the apical or claw-joint has on each side a similar pubescence, that in front and behind on the intermediate and posterior tibiae is yellowish; the tarsi have beneath a short dense dark brown pubescence; the apical joints of the tarsi ferruginous; the apical margins of the segments testaceous.

*Hab. North China (Shanghai).*

98. **Anthophora abrupta.**


*Hab. North America (Indiana).*

99. **Anthophora bomboides.**

*Anthophora bomboides, Kirby, Faun. Boreal. Amer. 271. 1.*

*Hab. North America.*

100. **Anthophora fuscipennis.**

Female. Length $4\frac{1}{4}$ lines.—Black, the pubescence black, on the head it is sparing, the clypeus strongly punctured. Thorax moderately punctured, the wings fuscous, the apical joints of the tarsi ferruginous, their pubescence beneath ferruginous.
Abdomen shining, finely punctured, the base more strongly so, pubescent; on the apical margin of the fourth segment on each side is a patch of white pubescence.

_Hab._ North America. (Coll. F. Smith.)

101. _Anthophora sponsa._

Female. Length 6½ lines.—Black, the pubescence of the head black, the clypeus covered with large deep punctures, subcarinate in the centre; the labrum rugose. Thorax clothed above and on the sides with ochraceous pubescence; the wings subhyaline; the nervures black, the second submarginal cell narrowed towards the marginal and receiving the first recurrent nervure in the middle; the legs fusco-ferruginous, their pubescence entirely black; the basal segment of the abdomen covered with ochraceous pubescence, the following segments with black; beneath obscurely fusco-ferruginous; the apical half of the segments strongly punctured.

This species may very possibly prove to be the other sex of Say's _A. abrupta_.

_Hab._ United States.

102. _Anthophora frontata._

_Anthophora frontata, Say, Bost. Journ. Nat. Hist. i. 409. 2♂._

_Hab._ North America (Louisiana).

103. _Anthophora taurea._

_Anthophora taurea, Say, Bost. Journ. Nat. Hist. i. 410. 3♂ ♀._

_Hab._ North America (Indiana).

104. _Anthophora marginata._

Female. Length 5½ lines.—Black, the head and thorax covered with grey pubescence, the anterior margin of the clypeus and the labrum coarsely rugose; the wings subhyaline; the thorax beneath and the femora have a long cinereous pubescence; the tibiae and tarsi above have a pale ochraceous or dirty-white pubescence, the tarsi beneath have dark ferruginous pubescence, the apical joints ferruginous. Abdomen, a little cinereous pubescence at the base, the apical margins of the segments yellowish-white, naked.

_Hab._ Mexico.

105. _Anthophora floridana._

Female. Length 6 lines.—Black, the pubescence on the head
entirely black, the clypeus strongly punctured; the thorax above, and the basal segment of the abdomen above, densely clothed with short ochraceous pubescence; the wings subhyaline; the second submarginal cell receiving the first recurrent nervure near its apex; the pubescence of the legs black; the abdomen smooth and shining, having a little black pubescence at the sides of the apical segments.

Male.—Like the female, with the following exceptions: the clypeus, the face on each side, and a narrow line above the clypeus yellow; the posterior legs more slender and elongate; the claw-joints ferruginous.

Hab. East Florida (St. John’s Bluff.)

106. Anthophora melaleuca.
Anthophora melaleuca, St. Farg. Hym. ii. 32. 7♂.
Hab. Paraguay.

107. Anthophora apicalis.
Hab. Cuba.

108. Anthophora Domingensis.
Anthophora Domingensis, St. Farg. Hym. ii. 32. 6♂.
Hab. St. Domingo.

109. Anthophora dimidiata.
Male. Length 6 lines.—Head, thorax and legs black, the clypeus and labrum yellowish-white, immaculate, the labrum having a few scattered black hairs; the flagellum nigro-piceous beneath; the pubescence on the thorax very dense, short, and of a sooty-black, that on the legs is of the same colour, the scopa on the posterior legs long and dense; the wings hyaline, the nervures ferruginous. Abdomen violet and having a short scattered black pubescence.

Hab. Chili. (Coll. F. Smith.)

110. Anthophora Chilensis.

Male and female. Length 5 lines.—The pubescence cinereous; the tarsi of the female testaceous, the pubescence of the head, thorax, the first segment of the abdomen, the legs and venter
cinereous; the pubescence is black, but sparing, at the base of the second abdominal segment; all the segments have fasciae of white pubescence.

**Hab.** Chili.

111. **ANTHOPOHORA TRISTRIGATA.**


Female. Length 5 lines.—Black; the pubescence on the face and thorax above white; the clypeus and legs above black; the abdomen has three white pilose fasciae.

**Hab.** Chili.

112. **ANTHOPOHORA INCERTA.**


Female. Length 6 lines.—The antennae, abdomen and legs black; the pubescence of the head and thorax in front pale fulvous.

**Hab.** Chili.

113. **ANTHOPOHORA GAYI.**


Male. Length 4 lines.—Black; the pubescence cinereous; antennae luteous, the scape black; the clypeus, labrum and anterior sides of the face white; the posterior femora swollen; the first joint of the posterior tarsi dilated, the apex bispinose.

**Hab.** Chili.

114. **ANTHOPOHORA DISTINGUENDE.**


Male. Length 4 lines.—The clypeus and antennae in front yellow; the posterior femora swollen, but the tarsi simple; otherwise very like *A. Gayi.*

**Hab.** Chili.

115. **ANTHOPOHORA FULVIFRONS.**

Female. Length 4½ lines.—Black, the face and the labrum clothed with fulvous pubescence; the cheeks have a cinereous pubescence; the antennae and legs ferruginous; the thorax above has a short cinereous pubescence, on the middle of the disk it is sooty-black, and a line of similar pubescence passes off on each side to the humeral angles; the scutellum is also covered with
blackish pubescence; the wings fusco-hyaline, their nervures black; the tegulae rufo-piceous, the pubescence of the legs black. Abdomen smooth and shining, at the base a little cinereous pubescence, the apical margins of the second, third and fourth segments have a narrow fascia of white pubescence, the apex fuscous.

_Hab._ Brazil (Para; Santarem).

116. _Anthophora albifrons._

_Female._ Length 5½ lines.—Black, the head densely clothed with long hoary pubescence; the mandibles ferruginous at their base and apex, pale yellow in the middle. Thorax densely clothed above with short ferruginous pubescence; the wings subhyaline, their nervures black; on the thorax beneath, coxae and femora is a long white pubescence; legs fusco-ferruginous, clothed above with a pale glittering pubescence. Abdomen, the basal segment clothed above with ferruginous pubescence, the margins of the three following segments have a fascia of yellowish-white pubescence, between the fasciae the pubescence is black.

_Hab._ South America.

117. _Anthophora tecta._

_Female._ Length 6½ lines.—Head and thorax black, the clypeus having a broad T-shaped white mark on the clypeus, its anterior margin ferruginous, the labrum yellowish-white, the margin broadly ferruginous, the mandibles ferruginous; the sides of the face covered with dense short white pubescence, the sides of the head and the cheeks densely covered with long white pubescence, on the vertex it is fulvous. Thorax clothed above with fulvous pubescence, on the middle it is fuscoseous, on the sides the fulvous colouring graduates into white, the femora fringed with yellowish-white pubescence; the legs rufo-testaceous, the legs above have a cinereous pubescence, the posterior tibiae and the basal joint of the tarsi densely clothed above with white pubescence, the calcaria black. Abdomen fusco-aeneous, the basal segment clothed with fulvous pubescence, on the second and third segments the pubescence is very sparing and black, the fourth and fifth densely clothed with very short griseous pubescence, the pubescence at the apex of the latter segment fuscous; the margins of the segments pale rufo-testaceous; beneath rufo-testaceous, the margins of the segments thinly fringed with long pale pubescence, the fifth ciliated with short fulvous pubescence.

_Hab._ Brazil? (Coll. F. Smith.)
118. *Anthophora tricolor*.


*Anthophora tricolor*, *St. Farg. Hym.* ii. 86. 53.

*Hab*. South America.

Female. This sex closely resembles the male, but has the head entirely black; the head has a griseous pubescence, the posterior tibiae have exteriorly a white pubescence, the abdomen as in the male.

119. *Anthophora rufipes*.

*Anthophora rufipes*, *St. Farg. Hym.* ii. 50. 24 ♀.

*Hab. — ?*

120. *Anthophora maculicornis*.

*Anthophora maculicornis*, *St. Farg. Hym.* ii. 31. 5 ♂.

*Hab. — ?*

121. *Anthophora acarensis*.

*Apis acarensis*, *Fabr. Ent. Syst.* ii. 329. 68.


*Hab*. Guinea; South Africa (the Gambia).

Genus 52. *Diphaglossa*.


Ocelli placed in a triangle on the vertex; the labial palpi 4-jointed, about the same length as the labium; the two basal joints stout, subclavate, the basal joint as long as the second and third, the three apical joints gradually decreasing in length, the two apical joints slender, inserted at the apex of the second joint; the labium obtuse and broad at the apex, which is emarginate; near the apex on each side is a notch; the angles of the apex rounded and having each a long slender filament, acute at its apex, a shorter filament is also produced in the notch on each side. Maxillary palpi 6-jointed, the joints slender and subclavate. The superior wings have one marginal and three submarginal cells.
1. Diphaglossa Gayi.


Male. Length 7 lines.—The pubescence fulvous; antennae, mandibles and thorax black; abdomen and legs rufous.

*Hab.* Chili.

Genus 53. XYLOCOPA.


1. Xylocopa violacea.


*Linn. Syst. Nat.* i. 959. 38.
Fabr. *Syst. Ent.* p. 379. 2; *Ent. Syst.* ii. 315. 3.
Schäff. *Icon. Ins. Ratisb.* t. 102. f. 7, 8.
Christ. *Hym.* p. 119. t. 4. f. 5.


*Reaum. Ins.* vi. t. 5. f. 1, 2.

*Hab.* Europe; Algeria.

2. Xylocopa cyanescens.


*t. 48. f. 8.


Xylocopa minuta, *St. Farg. Hym.* ii. 190. 30.


*Hab.* France (Montpellier); Morea; Algeria.
3. **Xylocopa fuscata.**

Female. Length 8 lines.—Fuscos, the antennæ ferruginous, slightly fuscos towards their apex above; the face on each side of the clypeus, which is strongly punctured, has a pale fulvous pubescence; the thorax and legs have a fulvous pubescence, palest on the former beneath, and very bright on the posterior tibiae and tarsi; the legs ferruginous; wings subhyaline, the nervures and tegulae rufo-testaceous. Abdomen ovate, the apical margins of the second and three following segments fringed with pale pubescence, interrupted in the middle; the apex bright fulvous; beneath rufo-testaceous, the apical segments fringed with ferruginous pubescence.

*Hab.* Albania (Yanina). (Coll. W. W. Saunders, Esq.)

4. **Xylocopa lanata.**

Male. Length 6 lines.—Head and thorax black; the clypeus, a triangular shape above it, and the labrum, white; the antennæ ferruginous, the mandibles rufo-testaceous; the head and thorax have a dense white woolly pubescence, that on the disk of the latter has a yellow hue; the wings hyaline, having a pale fulvous stain, the nervures pale rufo-testaceous, the tegulae white, having a ferruginous stain in front; the legs pale rufo-testaceous, having a pale golden fulvous pubescence. Abdomen dark testaceous, having on the basal segment a pale yellow pubescence, the apical segments clothed with bright fulvous; the apical margins rufo-testaceous, and having laterally a narrow white marginal fringe; beneath ferruginous.

*Hab.* Turkey.

5. **Xylocopa cantabrita.**

*Xylocopa cantabrita,* St. Farg. *Hym.* ii. 193. 35.

*Hab.* Spain.

6. **Xylocopa sinuatifrons.**


*Hab.* Spain.

7. **Xylocopa hellenica.**

*Xylocopa hellenica,* Spin. *Ann. Soc. Ent. Fr.* ser. 2. i. 144 (1843).

*Hab.* Spain.
8. *XYLOCOPA LATERITIA.*

Female. Length 9 lines.—Black, the face having a raised tubercle in front of the anterior stemma, between the antennae; the margins of the clypeus slightly raised; the antennae dark rufotestaceous, the flagellum beneath palest; the thorax above and the first segment of the abdomen densely clothed with a short brick-red pubescence; wings very dark brown, having a violet iridescence; the legs entirely black; the abdomen very finely and closely punctured, towards the apex fringed at the sides with short black pubescence.

*Hab.* Isle of Johanna (Mozambique). (Coll. W. W. Saunders, Esq.)

9. *XYLOCOPA CARIBEA.*


*Hab.* Isle of Guadaloupe.

10. *XYLOCOPA CAFFRA.*


*Xylocopa cafra,* St. Farg. *Hym.* ii. 197. 41.

*Hab.* Africa.

11. *XYLOCOPA CRASSA.*

*Xylocopa crassa,* St. Farg. *Hym.* ii. 204. 52.

*Hab.* Africa.

This is probably the female of *torrida,* both having been sent together from Fernando Po on more than one occasion, with a note to this effect.

12. *XYLOCOPA AFRIicana.*


*Xylocopa africana,* St. Farg. *Hym.* ii. 198. 43.

*Hab.* Africa.

13. *XYLOCOPA RUFITARSIS.*

*Xylocopa rufitarsis,* St. Farg. *Hym.* ii. 191. 32.

*Hab.* Africa (Cape).
14. *XYLOCOPA PÆBUSTA.*

Female. Length 10 lines.—Black, the head and thorax densely clothed with short golden-yellow pubescence, the scape in front and the clypeus yellow, the flagellum pale testaceous beneath. Thorax: the legs rufo-testaceous, the anterior coxae and trochanters terminating in a sharp spine, the anterior tibiae having a long dense fringe, pale above and black beneath, the tarsi having on both sides a long pale fringe; the intermediate tibiae and tarsi have a long pale pubescence, that on the tarsi brightest, the posterior pairs have a similar pubescence; the tarsi beneath bright fulvous; wings fusco-hyaline. Abdomen: the base above has a pale golden-yellow pubescence, graduating to bright fulvous at the apex.

*Hab.* Africa. (Coll. F. Smith.)

15. *XYLOCOPA OBSCURATA.*

Male. Length 9 lines.—Black, the head, thorax and basal segment of the abdomen densely clothed with short obscure fulvous pubescence; the scape in front yellow; the flagellum, except the two basal joints, pale testaceous beneath. Thorax: the wings fusco-hyaline, and having a faint purple iridescence; the legs beneath fusco-ferruginous, the anterior legs brightest; the legs have a pale fulvous pubescence, that on the tarsi beneath ferruginous, the posterior pair black above; the apical joints of the tarsi ferruginous, the claws black. Abdomen minutely and very closely punctured, rendering the surface opaque; the pubescence short and black, that on the apical segment bright golden-yellow; beneath rufo-testaceous.

*Hab.* Africa. (Coll. F. Smith.)

16. *XYLOCOPA GRISESCENS.*

Male. Length 9 lines.—Black, the pubescence on the face, thorax above, and legs, of a yellowish-grey, that on the tarsi and apex of the posterior tibiae bright pale fulvous, on the four apical segments of the abdomen it is black and sparing, at the extreme lateral margins the pubescence is pale; the wings fusco-hyaline, their apical margins clouded, the nervures dark ferruginous; the metathorax rounded behind.

*Hab.* Algeria.

17. *XYLOCOPA CIRTANA.*

*XYLOCOPA CIRTANA.*


*Hab.* Algeria (Constantine).
18. **XYLOCOPA AMEDÆI.**

*XYLOCOPA AMEDÆI, St. Farg. Hym. ii. 188. 23.*

_Hab._ North Africa (Tlemcen); Algeria (Oran; Constantine).

19. **XYLOCOPA CAPENSIS.**

*XYLOCOPA CAPENSIS, St. Farg. Hym. ii. 179. 8._

_Hab._ Cape of Good Hope.

20. **XYLOCOPA ALBIFRONS.**

*XYLOCOPA ALBIFRONS, St. Farg. Hym. ii. 191. 31.*

_Hab._ Cape of Good Hope. (Coll. F. Smith.)

21. **XYLOCOPA CAPITATA.**

_Female._ Length 13 lines.—Black, the head nearly as wide as the thorax; the face clothed with short black pubescence, and having a short tubercle between the antennae; the flagellum beneath rufo-piceous. Thorax: the disk smooth and shining, having a few scattered fine punctures; the sides of the disk have a short black pubescence, the metathorax rounded; wings very dark fuscous, having a rich purple iridescence; legs entirely black. Abdomen very smooth and shining, and having a few scattered fine punctures, the sides fringed with black pubescence.

_Hab._ Cape of Good Hope.

22. **XYLOCOPA AMETHYSTINA.**

*APIS AMETHYSTINA, Fabr. Ent. Syst. ii. 325. 51._

*ANDRENA AMETHYSTINA, Latr. Ins. iii. 375._

*XYLOCOPA AMETHYSTINA, Fabr. Syst. Piez. p. 341. 16._

_St. Farg. Hym. ii. 182. 12._

_Hab._ India; Cape of Good Hope?

23. **XYLOCOPA TARSATA.**

_Female._ Length 7 lines.—Black, the head very closely punctured, having an elevated short carina between the antennae; the thorax shining, closely punctured, except in the middle of the disk; the metathorax rounded behind; wings very dark violet; the posterior tarsi and apex of the tibiae densely clothed with bright fulvous pubescence. Abdomen closely punctured, shining, the apex fringed with black hairs.

_Hab._ Cape of Good Hope. (Coll. W. W. Saunders, Esq.)
HYMENOPTERA.

24. XYLOCOPA OLIVACEA.  
Apis olivacea, Fabr. Ent. Syst. ii. 319. 21 ♂.  
Xylocopa luteola, St. Farg. Hym. ii. 198. 42 ♂.

Female. Length 7–8 lines.—Black, the face having a little short black pubescence, the thorax and basal segment of the abdomen densely clothed with short bright yellow pubescence; the wings subhyaline towards their base, their apical margins broadly dark fuscous; the legs entirely black.

Hab. Sierra Leone.

25. XYLOCOPA APICALIS.  
Xylocopa apicalis, White, MSS.

Female. Length 10 lines.—Black, the face densely clothed with black pubescence; the thorax above and also the basal segment of the abdomen clothed with bright yellow pubescence; the wings dark fuscous, and having a violet tinge towards the base, the margins faintly brassy; the legs and abdomen have a black pubescence, the latter shining and thickly fringed at the sides, sparingly pubescent above, the margins of the segments narrowly rufo-testaceous.

Hab. Sierra Leone; the Gambia.

26. XYLOCOPA HOTTENTOTTA.  
Female. Length 8 lines.—Black, the face very closely and strongly punctured; an elevated sharp carina runs from the base of the clypeus up to the anterior stemma; the flagellum, except the two basal segments, fulvous beneath; the disk of the thorax shining, the punctures scattered, the metathorax rounded behind; wings dark fuscous, having a purple iridescence.

Hab. Sierra Leone; Port Natal.

27. XYLOCOPA ALBICEPS.  
St. Farg. Hym. ii. 189. 27.

Hab. Africa; Sierra Leone; Guinea.

28. XYLOCOPA TORRIDA.  

Hab. Tropical Africa; Fernando Po.
29. **Xylocopa flavo-rufa.**

*Apis flavo-rufa, De Geer, Mém. vii. 605. t. 45. f. 1.*

_Oliv. Ency. Méth. iv. 63. 3._

*Xylocopa trepida, Fabr. Syst. Piez. p. 340. 10._

_Hab._ South Africa (Port Natal).

30. **Xylocopa calens.**

*Xylocopa calens, St. Farg. Hym. ii. 196. 40♀._

_Hab._ Africa (Port Natal; Abyssinia); Madagascar.

31. **Xylocopa conjuncta.**

_Male._ Length 1 inch 3 lines.—Rufo-testaceous, the scape of the antennae, as well as the flagellum in front, a spot on each side of the vertex touching the eyes, the margins of the clypeus, and a line down the centre, a transverse line above, a line across at the base of the labrum, and a spot at the base of the mandibles, yellow; the entire insect has a short ochraceous pubescence; in parts, the pubescence has a fulvous tinge, as that on the legs and at the apex of the abdomen; the breast, the femora, tibiae, coxae and trochanters nigro-piceous; wings fulvo-hyaline, the nervures ferruginous; the abdomen beneath has on each segment a broad yellow stripe.

_Hab._ South Africa.

32. **Xylocopa combusta.**

_Female._ Length 13 lines.—Black, the clypeus having the margins a little raised, smooth and shining, also a central smooth line, forming a trident; from the base of the clypeus a smooth raised line passes upwards and encloses the anterior stemma; the face densely clothed with short black pubescence. _Thorax:_ the posterior margin of the scutellum slightly raised and acute; wings deep fuscous, having a brilliant metallic green iridescence; the legs black. Abdomen elongate, shining, and sparingly punctured in the middle, closely so at the sides, towards the apex fringed with black pubescence, at the extreme apex a little bright ferruginous pubescence.

_Male._ Length 12 lines.—Very closely resembling the female; the scape in front, the clypeus and a triangular shape above it, a minute spot on each side beneath the anterior stemma, another on each side of the labrum, and a small one at the base of the mandibles, yellow; sometimes a minute yellow spot on the second joint of the flagellum in front; the tarsi beneath have a bright ferruginous pubescence; the intermediate legs have the
femora compressed beneath, and expanded, forming a flattened angular shape, the tarsi a little dilated, densely ciliated on both sides with long fulvous pubescence; the posterior tibiae bent inwards, the tarsi covered exteriorly with long black pubescence: otherwise as in the other sex.

*Hab.* Congo.

33. *XYLOCOPA USTULATA.*

Female. Length 7½ lines.—Black, the face densely covered with griseous pubescence, the mandibles and antennae ferruginous, the flagellum obscure above; the disk of the thorax very glossy and sparingly punctured; in front, clothed with griseous pubescence; the wings dark fuscous, having a violet iridescence, sub-hyaline at their extreme base; the anterior legs ferruginous beneath, the intermediate and posterior pairs obscurely ferruginous, and clothed above with black pubescence. Abdomen shining, very closely punctured at the sides, sparingly so in the middle, naked; the apex fringed with black pubescence.

Male.—Exactly corresponds with the other sex, but has a little white pubescence on the sides of the thorax beneath the wings, and also a little at the base of the abdomen.

*Hab.* The Gambia. (Coll. F. Smith.)

34. *XYLOCOPA VARIPES.* B.M.

Female. Length 9 lines.—Black, the pubescence on the head, thorax, basal segment of the abdomen above, ochraceous; that on the thorax inclining to fulvous; the lateral margins of the clypeus slightly raised, and having also a central raised carina; the wings dark fuscous, and having a purple iridescence; the anterior tibiae and tarsi, the intermediate tibiae above, as well as the posterior pair, clothed with fulvo-ochraceous pubescence; the intermediate tarsi have a bright ferruginous pubescence with a tuft of ochraceous at their base above, the posterior tarsi have a dark fuscous pubescence with a little bright ferruginous at the apex, the tibiae have also a little bright ferruginous at their apex above. Abdomen, the second, third and fourth segments fringed at the sides with black pubescence, the fifth and sixth are fringed with fulvo-ochraceous pubescence, the apex with bright ferruginous.

*Hab.* South Africa (Fernando Po); Sierra Leone.

35. *XYLOCOPA IMITATOR.* B.M.

Female. Length 9 lines.—Black, the face has a griseous pubescence, that on the cheeks snow-white; the flagellum except the three basal joints testaceous beneath. Thorax, smooth and
shining on the disk, the sides of which are densely clothed with short black pubescence; wings very dark fuscous, having a bright purple iridescence; the legs have a black pubescence. Abdomen shining, finely and closely punctured at the sides, the punctures more distant in the middle; the extreme apex has a little bright ferruginous pubescence.

_Hab._ Sierra Leone.

This species very closely approaches the _X. albiceps_, but it is one-third larger, the wings are of a uniform deep purple, not lighter towards the base, as in _X. albiceps_, nor is the abdomen so closely punctured.

36. _XYLOCOPA MODESTA._

_Female._ Length 6½ lines.—Black, the face densely covered with short black pubescence, the vertex fringed with black; the thorax and basal segment of the abdomen above densely clothed with short bright yellow pubescence; the wings dark fuscous at their apical margins, towards the base subhyaline, and having a faint purple iridescence; the legs black.

_Male_ closely resembling the female, but having the face covered with cinereous pubescence, and the legs beneath rufo-piceous; the wings as in the female.

_Hab._ The Gambia. (Coll. F. Smith.)

37. _XYLOCOPA LUNATA._

_Xylocopa lunata_, _Klug, Mag. der Gesell. Nat. Fr. zu Berlin_ (1807), t. 7. fig. 2.

_Hab._ Tranquebar.

38. _XYLOCOPA INDICA._

_Xylocopa Indica_, _Klug, Mag. der Gesell. Nat. Fr. zu Berlin_ (1807), t. 7. f. 2.

_Hab._ Tranquebar. (Coll. W. W. Saunders, Esq.)

39. _XYLOCOPA VERTICALIS._

_Xylocopa verticalis_, _St. Farg. Hym._ ii. 195. 38.

_Hab._ India.

40. _XYLOCOPA VIRIDIPENNIS._

_Xylocopa viridipennis_, _St. Farg. Hym._ ii. 205. 54.

_Hab._ India; Philippine Islands.
41. **XYLOCOPA TENUISCAPA.**
   Hab. India (Madras); N. India (Silhet); Ceylon.

42. **XYLOCOPA RUFICORNIS.**
   Hab. India.

43. **XYLOCOPA LATIPES.**
   Apis latipes, *Drup. Ill. Exot. Ins. ii. 98. t. 48. f. 2 ♂.
   *Fabr. Ent. Syst. ii. 314. 1.*
   Apis gigas?, *De Geer, t. 3. p. 28. f. 15 ♀.
   *Christ. Hym. t. 4. f. 1, 2 ♀, 3 ♂.*
   Hab. India; Ceylon; Philippine Islands; China.

44. **XYLOCOPA IRIDIPENNIS.**
   Xylocopa iridipennis, *St. Farg. Hym. ii. 188. 23.
   Hab. India.

45. **XYLOCOPA FERRUGINEA.**
   Hab. India; Bengal.

46. **XYLOCOPA FENESTRATA.**
   *St. Farg. Hym. ii. 184. 15.*
   Hab. India (Bengal).

47. **XYLOCOPA COLLARIS.**
   Hab. India; Sumatra; Bengal.

48. **XYLOCOPA AESTUANS.**
   Apis aestuans, *Linn. Syst. Nat. i. 961. 53 ♂.
   *Fabr. Ent. Syst. ii. 323. 41.*
Apis leucothorax, De Geer, Mem. iii. 573. 4. t. 28. f. 7.
Bombus aestuans, Fabr. Syst. Piez. p. 351. 44.
Xylocopa aestuans, St. Farg. Hym. ii. 193. 36.
Xylocopa pubescens, Spin. (Klug, MSS.) Ann. Soc. Ent. Fr. vii. 518. 64, and var. a, b, c, d (1838).

Hab. India.

49. Xylocopa Olivieri. B.M.
Xylocopa Olivieri, St. Farg. Hym. ii. 192. 34.
Hab. India; Bagdad.

50. Xylocopa orichalcea.
Xylocopa orichalcea, St. Farg. Hym. ii. 181. 10.
Hab. Bengal; China.

51. Xylocopa nigro-cincta.
Female. Length 10 lines.—Head and thorax black; an elevated carina between the antennae, the margin raised round the base of the clypeus, not continued to its anterior margin; the labrum has three elevated tubercles. Thorax: the disk smooth, shining, and very delicately punctured, the sides having a dense, short, black pubescence; the wings dark fusco-ferruginous, having a splendid violet iridescence, the legs have a dense black pubescence. Abdomen ferruginous, the apical margins of the segments have a black fascia, the fifth segment obscure, the sixth black, the sides of the abdomen ciliated with a dense black pubescence; the entire abdomen closely punctured; beneath is an elevated sharp longitudinal carina down the centre.
Hab. South America. (Coll. J. S. Baly, Esq.)

52. Xylocopa flavo-nigrescens. B.M.
Male. Length 11 lines.—Black, the pubescence is short and dense, on head and thorax fulvo-ochraceous, at the margin of the basal segment of the abdomen it is bright yellow, gradually becoming more obscure towards the apex, where it is deep black, the apex and sides being fringed with long pubescence of that colour; the basal margin of the second and three following segments have a narrow line of bright yellow pubescence, subinterrupted in the middle, and not reaching the sides. The scape of the antennae in front, and the flagellum, except the two basal joints, pale testaceous beneath; the wings fuscos, with a purple iridescence; the legs have a black pubescence; the anterior and intermediate tarsi have a long fringe of black pubescence in front,
and of pale yellow behind; the posterior femora incrassate, very broad at their base, which is produced and rounded posteriorly; beneath, the segments of the abdomen are fringed with long yellow pubescence.

_Hab._ Silhet.

53. _XYLOCOPA ACUTIPENNIS_.

_Male._ Length 10 lines.—Black, head much narrower than the thorax; eyes very large; the scape in front, the clypeus, a triangular shape above it, the labrum, and a minute spot at the base of the mandibles, yellow; the vertex covered with a brownish black pubescence, the disk of the thorax smooth and shining in the middle, the sides densely clothed with a short black pubescence, the mesothorax in front obscurely yellow; beneath, the thorax and cheeks are covered with pale yellow pubescence, having in parts a ferruginous stain; the legs beneath are of a dark rufo-testaceous colour; the femora compressed beneath, the posterior pair being broadly grooved longitudinally, and produced at the basal extremity into two sharp angular projections; the posterior tibiae deeply notched beneath, and produced at their apex into a broad flattened tooth or spine; the anterior tarsi densely clothed with bright golden-yellow pubescence, the intermediate pair with ferruginous, and the posterior pair with black above, and with obscure ferruginous beneath. Abdomen: the basal segment covered with black pubescence, and the apex densely fringed with long blackish-brown pubescence; the apex rufo-piceous.

_Hab._ Silhet.

54. _XYLOCOPA BASALIS_.

_Female._ Length 6½–8 lines.—Black, the face densely covered with a short cinereous pubescence, the antennæ ferruginous; the face depressed in front of the posterior ocelli, forming a sharp transverse edge; a tubercle in front of the anterior ocellus. Thorax shining, the wings hyaline at their base to about one-third of their length, beyond which they are dark purple, the apical margins paler, the legs entirely black; the abdomen black, shining and closely punctured, the apex fringed with pale pubescence.

_Male._—Closely resembling the female, but having a fulvous pubescence on the clypeus; a tuft of white pubescence before the wings, and another on each side of the basal segment of the abdomen; the posterior tibiae slightly curved, the basal joint of the tibiae incrassate, and having a tuft of white pubescence at the
apex, the joint compressed above; the abdomen fringed with white pubescence, that at the extreme apex fuscous.

*Hab.* Northern India.

55. **XYLOCOPA AURIPENNIS.**


*Hab.* Bengal; China.

56. **XYLOCOPA CHLOROPTERA.**

*XYLOCOPA chloroptera,* St. Farg. *Hym.* ii. 207. 56♀.

*Hab.* China.

57. **XYLOCOPA SINENSIS.**

Female. Length 11 lines.—Black, the head closely and strongly punctured, the margins of the clypeus, and a central line, smooth and shining; the labrum has a tubercle in the centre; the flagellum, except the two basal joints, testaceous beneath; the margin of the vertex, the disk and sides of the thorax and the basal segment of the abdomen densely covered with bright yellow pubescence; the wings rufo-hyaline, their apical margins having a rufo-fuscous cloud, the nervures ferruginous; the tibiae and tarsi clothed with bright rufo-fulvous pubescence. Abdomen very closely punctured, subopake, the apical margins of the segments very narrowly rufo-piceous; the sides of the abdomen fringed with black pubescence, at the extreme apex a little bright ferruginous pubescence.

*Hab.* China (Foo-chow-foo).

58. **XYLOCOPA DISSIMILIS.**


*Hab.* China; Madras.

59. **XYLOCOPA PICTIFRONS.**


*Hab.* North China.

60. **XYLOCOPA RUFIPES.**


*Hab.* North China.
61. **XYLOCOPA CÆRULEA.**


*XYLOCOPA CÆRULEA*, *St. Farg. Hym.* ii. 200. 46.

*Hab.* Java; East India.

62. **XYLOCOPA DEJEANII.**

*XYLOCOPA (Schonnherria) Dejeanii*, *St. Farg. Hym.* ii. 209. 59.

*Hab.* Java.

63. **XYLOCOPA MARGINELLA.**

*XYLOCOPA MARGINELLA*, *St. Farg. Hym.* ii. 205. 53.

*Hab.* Java.

64. **XYLOCOPA MESOXANTHA.**

*Xylocopa mesoxantha*, *St. Farg. Hym.* ii. 199. 45.

*Hab.* Java.

65. **XYLOCOPA PHILIPPINENSIS.**

Female. Length 12 lines.—Black, the pubescence entirely black, except that on the basal segment of the abdomen and on each side of the metathorax, which is yellow; the wings dark fuscous, having a purple iridescence.

*Hab.* Philippine Islands.

66. **XYLOCOPA DIMIDIATA.**

*Xylocopa dimidiata*, *St. Farg. Hym.* ii. 199. 44 ♀.

*Hab.* Isle of Timor; Australia (Cape Upstart; Port Essington; Macintyre River).

67. **XYLOCOPA MUSCARIA.**


*Lestis muscaria*, *St. Farg. Hym.* ii. 211. 1 ♂.

*Hab.* New Holland.

68. **XYLOCOPA SIMILLIMA.**

Female. Length 10 lines.—Head and thorax black, a slightly
elevated carina passes forward from the anterior stemma and terminates opposite the insertion of the antennae; the margins of the clypeus not raised; the labrum having a central quadrate tubercle. Thorax smooth and shining, having a beautiful violet iridescence; the metathorax sometimes having a ferruginous tinge; the wings dark fuscous, and having a violet iridescence; the legs entirely black. Abdomen: the three basal segments, sometimes the base of the fourth, red, their apical margins having a black band; sides of the abdomen having a fringe of black pubescence; the entire surface closely punctured beneath, the margins of the segments rufo-piceous.

Hab. Australia.

69. XYLOCOPA BRASILIANORUM. B.M.
Apis Brasilianorum, Linn. Syst. Nat. i. 961. 49 ♂.
Fabr. Ent. Syst. ii. 323. 40.
St. Farg. Hym. ii. 201. 47.

Hab. Brazil.

This insect is in all probability identical with the X. teredo of Guilding; there is nothing in the descriptions to separate them.

70. XYLOCOPA CARBONARIA. B.M.
Female. Length 8 lines.—Black, the head narrower than the thorax, closely and strongly punctured; the clypeus coarsely punctured, the margin raised posteriorly, and a little way on each side, not reaching the anterior margin; in the centre a narrow longitudinal smooth space, the labrum having three small tubercles. Thorax: the middle of the disk impunctate smooth and shining, beyond which it is strongly punctured, and densely clothed with short black pubescence; wings dark fuscous, and having a changeable violet iridescence; the legs entirely black. Abdomen very closely punctured, fringed at the sides with black pubescence, densely so towards the apex; beneath, strongly punctured and longitudinally subcarinate in the centre.

Hab. Brazil (Tapajos). (Coll. W. W. Bates.)

71. XYLOCOPA COLONA. B.M.
Xylocopa colona, St. Farg. Hym. ii. 185. 17.

Hab. Cayenne.
72. XYLOCOPA FRONTALIS.

Apis frontalis, Oliv. Ency. Méth. iv. 64. 6 ♀.


St. Farg. Hym. ii. 175. 1.

Hab. Brazil; Cayenne.

73. XYLOCOPA FIMBRIATA.


St. Farg. Hym. ii. 177. 4.


Xylocopa cornuta, St. Farg. Hym. ii. 176. 2, var. ♀.

Hab. Brazil; Cayenne.

74. XYLOCOPA FERVENS.

Xylocopa fervens, St. Farg. Hym. ii. 196. 39 ♀.

Hab. Brazil (Para). (Coll. F. Smith.)

75. XYLOCOPA FASCIATA.


Hab. Brazil.

76. XYLOCOPA MACROPS.

Xylocopa (Schonnereria) macrops, St. Farg. Hym. ii. 209. 60 ♂.

Hab. Brazil.

77. XYLOCOPA MÆRENS.

Xylocopa moerens, Perty, Del. An. Art. p. 150. t. 28. f. 11 ♀.

Hab. Brazil (Province of Minarum).

78. XYLOCOPA MORIO.

Apis morio, Fabr. Ent. Syst. ii. 315. 2.

Xylocopa morio, Latr. Ins. iii. 380.


Hab. Brazil.

This is probably the female of X. Brasilianorum.
360 HYMENOPTERA.

79. XYLOCOPA SPLENDIDULA.
Xylocopa splendidula, St. Farg. Hym. ii. 190. 29♀.
Hab. Brazil.

80. XYLOCOPA TEREDO.
Xylocopa Brasilianorum, Fab. ♀ X. morio, Fab. ♀?
Hab. Brazil.

81. XYLOCOPA VIRIDIS. B.M.
Male. Length 7 lines.—Green, the clypeus and sides of the
face, the labrum, a line on the mandibles, the scape in front, and
two or three of the basal segments of the flagellum in front,
yellow; the face has a little pale pubescence intermixed with
black hairs, the cheeks and margin of the vertex have a pale
pubescence. Thorax shining, the middle of the disk sparingly
punctured, thickly so on the sides, clothed with a pale fulvous
pubescence; the wings subhyaline, the nervures and tegulae
ferruginous; the anterior legs beneath, and the joints of the
intermediate and posterior pairs rufo-testaceous; the tarsi be-
neath have a fulvous pubescence; above, the legs have a mixed
pubescence, pale fulvous on the anterior pair, the same on the
intermediate tarsi, the posterior legs having some white on the
posterior tarsi above, black within, and a mixture of fulvous
beneath. Abdomen: the pubescence pale, thinly scattered, the
apical segment having a black loose fringe; the apical margins
of the segments narrowly bordered with white pubescence.
Hab. Brazil (Rio Tapajos).

82. XYLOCOPA XANTHOCHNEMIS.
Hab. Brazil.

83. XYLOCOPA AUGUSTI. B.M.
Hab. Brazil.

84. XYLOCOPA AENEIPENNIS. B.M.
Apis aeneipennis, De Geer, Mem. iii. 573. 5. t. 28. f. 8.
Xylocopa aeneipennis, St. Farg. Hym. ii. 186. 20.
Hab. Brazil; Cayenne.
HYMENOPTERA.

85. XYLOCOPA GROSSA.

Centris grossa, Drury, Ill. Exot. Ent. i. 102. t. 45. f. 3.
Apis purpurascens, Fabr. Ent. Syst. ii. 325. 50.
XYLOCOPA IRICOLOR, St. Farg. Hym. ii. 185. 16.

domin. South America.

86. XYLOCOPA PULCHRA.

Female. Length 6½ lines.—Head and thorax black, the face has a little fuscous pubescence, the flagellum beneath fulvo-testaceous. Thorax: the pubescence above sooty-black, the wings subhyaline, having a fulvous tinge, the nervures ferruginous; the anterior legs black, the intermediate tarsi have a mixture of pale pubescence; the posterior tarsi have the basal half of the first joint clothed above with pale ochraceous pubescence. Abdomen green, shining and finely punctured, the basal segment has a little ochraceous pubescence on each side, the apical margin of the second and three following segments have a fascia of pale ochraceous pubescence, broadly interrupted in the middle; the sides thinly fringed with black hairs, the extreme apex ferruginous.

Hab. Rio. (Coll. F. Smith.)

87. XYLOCOPA AFFinis.


Hab. Cayenne.

88. XYLOCOPA AURULENtA.

XYLOCOPA AURULENTA, St. Farg. Hym. ii. 192. 33.

Hab. South America (Cayenne).

89. XYLOCOPA BARBATA.


Hab. South America; Cayenne; Brazil.

90. XYLOCOPA CAJENNÆ.

XYLOCOPA CAJENNÆ, St. Farg. Hym. ii. 203. 50.

Hab. Cayenne.
91. **XYLOCOPA NITENS.**

*XYlocopa nitens, St. Farg. Hym.* ii. 176. 3.

*Hab.* Cayenne.

92. **XYLOCOPA VIRIDIGASTRA.**

*XYlocopa viridigasta, St. Farg. Hym.* ii. 186. 19.

*Hab.* Cayenne.

93. **XYLOCOPA VIRESCENS.**

*XYlocopa virescens, St. Farg. Hym.* ii. 186. 18.

*Hab.* Cayenne.

94. **XYLOCOPA LATERALIS.**


*Hab.* Mexico.

95. **XYLOCOPA TABANIFORMIS.**

*B.M.*

Female. Length 8 lines.—Black, the face has a thin griseous pubescence, that on the cheeks dense and hoary; the flagellum beneath, except the two basal joints, rufo-testaceous. Thorax smooth and shining on the disk, the centre of which is sparingly pubescent, on the sides and beneath it is dense and hoary; the legs have a similar pubescence, the scopa above slightly ochraceous, beneath black; the apical joints of the tarsi ferruginous. Abdomen, the basal segment has a griseous pubescence, the intermediate segments have on each side a white marginal fringe, the fifth segment has on its lateral margins a white fringe, and the sixth is fringed with black; the wings subhyaline, the nervures dark fuscous, the tegulae ferruginous.

*Hab.* Mexico.

96. **XYLOCOPA VIRGINICA.**

*B.M.*

*Apis Virginica, Drury, Ill. Exot. Ins.* i. t. 43. f. 1.


*Fabr. Ent. Syst.* ii. 318. 15.


*St. Farg. Hym.* i. 470. 17.

*XYlocopa Virginica, Westw. in Drury, Ill. Exot. Ins. (1837)* i. t. 43. f. 1.

*Hab.* Virginia.
97. *XYLOCOPA CAROLINA.*


(Hoffm. (*Schonnherria*), *St. Farg. Hym.* ii. 207. 57.

*Hab.* United States; St. John's Bluff, East Florida.

98. *XYLOCOPA MICANS.*

*XYLOCOPA MICANS.* St. Farg. *Hym.* ii. 208. 58. j.


*Hab.* N. America; St. John's Bluff, East Florida.

99. *XYLOCOPA OBSCURA.*

*XYLOCOPA obscura,* St. Farg. *Hym.* ii. 188. 25.

*Hab.* N. America?

100. *XYLOCOPA PHALOTHORAX.*


*Hab.* ——? (Coll. F. Smith.)

101. *XYLOCOPA DIVISA.*


*Hab.* ——?

Genus 54. LESTIS.


Head transverse, as wide as the thorax; scape subfiliform, two-thirds of the length of the flagellum, the latter filiform; the ocelli placed in a triangle on the vertex. The labial palpi 4-jointed, shorter than the labium, about two-thirds of the length of the labium, which is very pubescent; the basal joint of the palpi elongate, thrice the length of the second joint, the two apical joints minute, placed continuous with the two basal ones. The maxillary palpi 4-jointed, gradually tapering from the base to the apex; the basal joint stout, about half the length of the second joint, the third shorter than the basal joint, the apical one slender, minute. The superior wings have one marginal and three submarginal cells; the marginal cell as long as the three submarginals, very narrow, and having a short abbreviated nervure at its apex; the second submarginal cell scarcely
half the width of the first, the third submarginal cell longer than the first, widest at its apex; the first recurrent nervure uniting with the second transverse nervure; the second recurrent nervure received by the third submarginal cell a little beyond the middle.

1. **Lestis bombylans.**


*Hab*. Australia.

The *Centris muscaria* of Fabricius is a *Xylocopa♂*.

2. **Lestis aeratus.**


*Hab*. Australia; Hunter River; Van Diemen’s Land.

Genus 55. **EXOMALOPSIS.**


Head as wide as the thorax, the ocelli placed in a line on the vertex. The labial palpi 4-jointed, the two basal joints elongate, the first twice the length of the second, the third and fourth minute, placed at the side and near the apex of the second joint. The maxillary palpi 6-jointed, the three basal joints of about equal length, the three apical joints gradually decreasing in length. The superior wings having one marginal and three submarginal cells, the second submarginal cell small, subquadrate; the first recurrent nervure uniting with the second transverse cubital nervure, the second recurrent nervure received near the apex of the third submarginal cell, which is narrowed towards the marginal cell. The posterior tibiae furnished with a dense pollen-brush; the calcarias simple, the claws bifid. The abdomen globose.

1. **Exomalopsis auropilosa.**


*Hab*. Brazil (Para).

2. **Exomalopsis analis.**

*Exomalopsis analis*, *Spin. Mem. Accad. Torino*, xiii. 91. 73.

*Hab*. Para.
3. **Exomalopsis pilosa.**

Male. Length 3 lines.—Black, the face clothed with silvery white pubescence, the flagellum rufo-piceous, the mandibles ferruginous. Thorax clothed with pale pubescence; the wings subhyaline, the nervures and tegulae pale rufo-testaceous; the legs rufo-piceous, the tarsi pale rufo-testaceous, clothed with long loose pale glittering pubescence. Abdomen ovate, rufo-piceous, clothed with a silvery pubescence; the second segment has on each side an oblique line of silvery pubescence, the third and following segments densely clothed with short silvery pubescence; beneath the margins fringed with long pale pubescence.

*Hab. Brazil.*

4. **Exomalopsis villipes.**

Female. Length 3½ lines.—Black; the face has a thin pale fulvous pubescence, the mandibles ferruginous, ciliated beneath with long hairs; the flagellum fulvo-testaceous beneath. Thorax above thinly clothed with pale fulvous pubescence; the legs rufo-piceous, the intermediate and posterior tarsi, as well as the posterior tibiae, fulvous; the anterior and intermediate tarsi have a fulvous pubescence; the posterior legs have a dense scopa of long pubescence, that on the basal half of the tibiae fulvous, the apical half sooty-black, beneath entirely fulvous. The wings subhyaline, the nervures pale testaceous. Abdomen ovate, smooth and shining, and beyond the second segment covered with a pale golden pubescence.

*Hab. Brazil. (Coll. F. Smith.)*

5. **Exomalopsis testacea.**

Female. Length 3 lines.—Head and thorax rufo-testaceous, the flagellum and labrum pale testaceous. Thorax: the wings clear hyaline, the nervures and tegulae pale testaceous, the disk margined with yellowish-white pubescence; legs pale testaceous; the posterior legs have a dense yellowish-white scopa. Abdomen pale ferruginous, the second and third segments have on each side an oblique line of white pubescence, the sides and the apex fringed with white pubescence.

*Hab. Brazil. (Coll. F. Smith.)*

**Genus 56. Tetrapedia.**

1. **Tetrapedia diversipes**.

   *Tetrapedia diversipes*, *Klug, Berl. Mag.* iv. 35. t. 1. f. 2.

   *Hab.* Brazil.

2. **Tetrapedia bicolor**.

   Female. Length 3 lines.—Head and thorax black, the anterior margin of the clypeus, the labrum and mandibles, the cheeks and antennae ferruginous, the former obscurely so. Thorax: the wings testaceo-hyaline, the nervures pale testaceous, becoming darker towards the base of the wings; the legs dark rufo-piceous, the posterior pair densely clothed with black pubescence. Abdomen ferruginous, the apex having a thin black pubescence.

   *Hab.* Brazil. (Coll. F. Smith.)

3. **Tetrapedia atripes**.

   Female. Length 5 lines.—Black, the flagellum piceous beneath; the mandibles have a testaceous spot near their apex; the thorax finely punctured, and thinly clothed with short black pubescence; the metathorax rounded, shining, and finely punctured; the legs have a black pubescence, the posterior tibiae and tarsi densely clothed with long black pubescence.

   *Hab.* Mexico. (Coll. F. Smith.)

4. **Tetrapedia testacea**.

   Female. Length 3 lines.—Testaceous, the labrum and mandibles pale yellow testaceous; the antennae pale beneath. Thorax: two longitudinal pale yellow lines on the disk, an epaulet over the tegulae yellow, the scutellum paler than the disk; wings subhyaline, the nervures testaceous; the legs pale testaceous; the posterior legs densely clothed with golden-yellow pubescence.

   *Hab.* Brazil (Para). (Coll. F. Smith.)

5. **Tetrapedia nasuta**.

   Male. Length 3 lines.—Head and thorax black, the clypeus anteriorly, the labrum, mandibles, and scape in front, yellowish-white, the flagellum rufo-testaceous beneath, the inner orbits of the eyes white. Thorax: the disk has two obscure pale lines; the wings testaceo-hyaline, the nervures pale testaceous; the thorax beneath testaceous, the legs testaceous; the intermediate and posterior tibiae darkest, clothed with black pubescence. Abdomen fulvo-testaceous, the margins of the segments darkest.

   *Hab.* Brazil. (Coll. F. Smith.)
Genus 57. ANCYLOSCELIS.


1. ANCYLOSCELIS URSINUS.
Ancyloscelis ursinus, Hal. Trans. Linn. Soc. xvii. 320. 16.
Hab. Brazil (St. Paul’s). (Coll. W. W. Saunders, Esq.)

2. ANCYLOSCELIS ORNATUS.
Hab. Brazil (Para).

3. ANCYLOSCELIS ARMATUS.
Male. Length 2½ lines.—Black, the face has a thin ochraceous pubescence, the antennae rufo-piceous beneath, the scape ferruginous; the anterior margin of the clypeus, the labrum and mandibles pale testaceous, the latter ferruginous at their tips. Thorax: the pubescence on the disk ochraceous, on the sides and beneath it is cinereous; the tegulae and costal nervure rufo-testaceous; wings hyaline, the nervures black; the posterior coxae and femora incrassate, the latter flattened beneath, and having a raised carina or margin on each side; the tibiae incrassate, less so than the femora; the tarsi and the apex and extreme base of the tibiae ferruginous; the posterior tarsi have a stout curved tooth at their base beneath. Abdomen subovate, the apical margins of the segments having a fascia of white pubescence.
Hab. Brazil. (Coll. F. Smith.)

4. ANCYLOSCELIS LINEATUS.
Hab. Para.

5. ANCYLOSCELIS NIGRIPES.
Hab. Para.

Genus 58. EPICHIARIS.

HYMENOPTERA.

1. **Epicharis rustica.**

Apis hirtipes, *Fabr. Ent. Syst.* ii. 325. 49.
Blanch. *Hist. nat. des Ins.* iii. 405.
Epicharis rustica, *St. Farg. Hym.* ii. 170. 1, and type sp. in *Coll. Westw.*

*Hab.* Cayenne; Brazil.

2. **Epicharis Dejeanii.**

Epicharis Dejeanii, *St. Farg. Hym.* ii. 171. 2 ♀, and type sp. in *Coll. Westw.*
Epicharis fasciata, *St. Farg. Hym.* ii. 172. 4 ♂, and type sp. in *Coll. Westw.*

*Hab.* Brazil; Cayenne.

3. **Epicharis analis.**


*Hab.* Brazil?

4. **Epicharis umbraculata.**


*Hab.* Brazil (Santarem); Cayenne.

5. **Epicharis bicolor.**

Male. Length 8 lines.—Black, a triangular spot at the anterior angles of the face, the scape in front and the labrum yellow; a pale yellow testaceous spot near the apex of the mandibles, sometimes two minute yellow spots at the base of the clypeus; thorax clothed above with dark cinereous pubescence, that on the sides, beneath, on the femora, anterior and intermediate tibiae, black; the posterior tibiae and basal joint of the tarsi above yellow, beneath they are black, as well as the apical joints of the tarsi, the claws ferruginous, their tips black; the wings fuscous, the tegulae having an obscure yellow spot on each side. Abdomen orange-yellow, the margins of the segments pale rufo-testaceous.

*Hab.* Brazil.
6. **Epicharis zonata.**

Male. Length 9 lines.—Head and thorax black, the scape in front, the face below the insertion of the antennae white, the labrum white; a triangular black spot on each side of the clypeus; the pubescence on the cheeks white; that on the vertex, and that on the disk of the thorax of a griseo-fuscous mixture, at the sides of the metathorax it is whitish, that on the breast black; the posterior margin of the scutellum deeply emarginate; the wings fusco-hyaline; the legs have a fuscous pubescence beneath, the intermediate and posterior tibiae and tarsi fringed behind with long pale yellow pubescence, the apical joints of the tarsi pale testaceous; the claws, and also the calcaria ferruginous, the latter serrated on their inner margins. Abdomen yellow, the apical margins of the segments have a narrow fusco-ferruginous band.

*Hab.* Brazil.

**Genus 59. CENTRIS.**


1. **Centris hæmorrhoidalis.**


*Hab.* Brazil; St. Domingo.

2. **Centris flavifrons.**

Centris flavifrons, *St. Farg. Hym.* ii. 152. 6, and type sp. in Coll. Westw.

Male. Length 8 lines.—This sex closely resembles the female, but differs in having the face below the insertion of the antennae and the mandibles yellow, the latter black at their tips; the clypeus has on each side a large black lunate spot; the anterior and intermediate tibiae have a yellow stripe above.

*Hab.* Brazil.
3. **Centris Langsdorfii.**

Centris Langsdorfii, *St. Farg. MSS.* (Blanch.) *Hist. nat. des Ins.* iii. 1. 405. t. 7. f. 7♀.

The male of this species closely resembles the female, the pubescence of the thorax being of a deeper fulvous tint, the scape in front, the clypeus and labrum being pale testaceous.

*Hab.* Brazil.

4. **Centris Ænea.**


*Hab.* Brazil. (Coll. J. S. Baly, Esq.)

5. **Centris Bicolor.**

Centris bicolor, *St. Farg. Hym.* ii. 163. 25♀.

*Hab.* Brazil.

6. **Centris Bimaculata.**


*Hab.* Brazil.

7. **Centris Collaris.**


*Hab.* Brazil (St. Paul’s).

8. **Centris Chrysitis.**


*Hab.* Brazil (St. Paul’s).

9. **Centris Ferruginea.**

Centris ferruginea, *St. Farg. Hym.* ii. 156. 12♀, and type sp. in Coll. Westw.

Centris longimana, *Fabr. Syst. Piez.* 356. 6♂?

*Hab.* Brazil.

10. **Centris Fuscata.**

Centris fuscata, *St. Farg. Hym.* ii. 167. 34♂.

*Hab.* Brazil (St. Paul’s).
11. **Centris furcata.**


*Centris furcata, St. Farg. Hym. ii. 151. 3, and type sp. in Coll. Westw.*

*Blanch. Hist. nat. des Ins. iii. 405. 1. t. 7. f. 6.*

_Hab._ Brazil.

12. **Centris nitens.**

*Centris nitens, St. Farg. Hym. ii. 163. 27.*

_Hab._ Brazil.

13. **Centris punctata.**

*Centris punctata, St. Farg. Hym. ii. 169. 37 ♀ (nec Fabr.).*

_Hab._ Brazil.

14. **Centris pulverata.**

*Centris pulverata, St. Farg. Hym. ii. 161. 22 ♀.*

_Hab._ Brazil (St. Paul's).

15. **Centris rufa.**

*B.M.*

*Centris rufa, St. Farg. Hym. ii. 153. 8 ♀, and type sp. in Coll. Westw.*

_Hab._ Brazil.

16. **Centris thoracica.**

*Centris thoracica, St. Farg. Hym. ii. 158. 16 ♀.*

_Hab._ Brazil.

17. **Centris vitta.**

*Centris vitta, St. Farg. Hym. ii. 168. 35♂♀.*

_Hab._ Brazil.

18. **Centris violacea.**

*Centris violacea, St. Farg. Hym. ii. 151. 4 ♀ (type sp. in Coll. Westw.).*

_Hab._ Brazil.

19. **Centris modesta.**

*B.M.*

_Male._ Length 9 lines.—Black, the apex of the mandibles pale yellow testaceous, the thorax densely clothed above with
dark brown pubescence, palest on the posterior margin of the scutellum; the wings dark fuscous, having a slight violet iridescence; the legs black. Abdomen, the two basal segments have a black pubescence, that on the following segments being of a pale reddish-brown.

*Hab.* Brazil.

### 20. *Centris maculifrons.* B.M.

Female. Length 7 lines.—Head and thorax black; the clypeus has a broad transverse stripe anteriorly, united to a perpendicular one yellow; the face on each side of the clypeus, the labrum and mandibles yellow, the latter black at their tips, the anterior margin of the clypeus black; the face has a little pale pubescence at the insertion of the antennae and at the sides of the face; that on the disk of the thorax anteriorly fuscous, posteriorly pale yellow, the collar, sides and thorax beneath pale yellow; the legs dark rufo-testaceous; the anterior tibiae fringed behind with a thin pale pubescence, that on the tarsi brown; the intermediate and posterior legs have a black pubescence. Abdomen metallic green, the basal segment clothed with pale pubescence; the apical margin of the third segment, the fourth and fifth have a pale golden pubescence, the sixth segment fringed with bright golden hairs.

*Hab.* Brazil.

### 21. *Centris decorata.* B.M.

Male. Length 11 lines.—Black, the clypeus and labrum pale testaceous, their margins more or less fuscous; the disk of the thorax clothed with short black pubescence, encircled with bright yellow; this colour also adorns the metathorax, the sides of the thorax and the breast; the wings nearly black, and having a violet iridescence; the legs black. Abdomen: the base has on each side a little pale yellow pubescence, the second, third and fourth segments clothed with olive-green pubescence; their basal and apical margins have a narrow border of black, the apical segment fringed with long black pubescence.

*Hab.* Brazil.

### 22. *Centris rubella.*

Female. Length 8 lines.—Head and thorax black; the face has a little white pubescence on each side, a tuft between the ocelli, and the cheeks densely clothed with white; the labrum has a bright golden pubescence, the clypeus has a large testaceous
spot on each side, and the mandibles a similar spot near their apex. Thorax: the disk covered with very short black pubescence, a little pale pubescence on each side of the collar, a tuft behind the wings; the metathorax has laterally a little fusceous pubescence; the legs rufo-testaceous, the anterior and intermediate pairs fusceous above, their tarsi densely clothed with rufous pubescence; the scopae on the posterior legs bright fulvo-ochraceous above, beneath having a ferruginous stain; wings dark fusceous, with a purple iridescence. Abdomen ferruginous.

Hab. Brazil (Rio Tapajos).

23. Centris plumipes. B.M.

Female. Length 9 lines.—Black, the head and thorax black, the former having a purple or aeneous tinge on the face and vertex; the clypeus on each side, as well as the anterior angles of the face, the labrum and mandibles pale testaceous; the cheeks densely clothed with cinereous pubescence; there is also a little short cinereous pubescence between the antennae. Thorax: the middle of the disk has an aeneous tinge, densely clothed above and at the sides with a short black pubescence, beneath it is pale bright ochraceous; the legs have more or less of an aeneous tinge above; the anterior and intermediate legs, above, have their pubescence black, that on the tarsi beneath reddish-brown; the posterior tibiae and tarsi pale rufo-testaceous, densely clothed exteriorly with long pale ochraceous pubescence, the hairs beautifully pectinated or plumose; the wings dark fusceous, beautifully tinged with a purple iridescence. Abdomen olive-green at the base, gradually becoming coppery towards the apex.

The male only differs in having the clypeus and labrum entirely pale testaceous, the former having a broad spatuliform black mark in the middle.

Hab. Brazil (Santarem).

24. Centris flavopicta. B.M.

Male. Length 10 lines.—Head and thorax black, the latter as well as the cheeks covered with cinereous pubescence; the scape in front, the anterior margin of the clypeus and a perpendicular line uniting with it, a transverse line above it, the sides of the face, the labrum and mandibles yellow, the latter ferruginous at their tips; the legs yellow, the femora black at their base, and the tibiae having a black spot above; the pubescence on the legs fulvous; the wings smoky, towards their apical margins subhyaline. Abdomen yellow, the margins of the segments rufo-piceous, having more or less of a metallic tinge; the apex
thinly covered with fulvous pubescence, beneath thickly covered with pale fulvous pubescence.

Hab. Brazil (Ega).

25. CENTRIS DIFFORMIS. B.M.

Female. Length 9 lines.—Head and thorax black, the flagellum beyond the third joint fulvous beneath; the clypeus short, transverse and elevated, its anterior portion vertical, having a transverse pale testaceous depression; the labrum pale testaceous, having two longitudinal fuscous stripes; the mandibles large, very broad at their base, and armed above with a stout tooth, their apex bidentate, having a longitudinal pale testaceous stripe; the cheeks densely clothed with white pubescence; between the antennae and on each side of the face below their insertion, a little white pubescence, that on the vertex black. Thorax clothed with fuscous pubescence at the sides, beneath it is cinereous; the legs dark rufo-testaceous, the posterior pair ferruginous; the tibiae and basal joint of the tarsi densely clothed exteriorly with bright fulvous pubescence; the anterior and intermediate tarsi have a fulvous pubescence; the wings smoky. Abdomen ferruginous, the base having a little cinereous pubescence, that at the apex ferruginous.

Hab. Brazil (Rio Tapajos).

26. CENTRIS DENTATA.

Male. Length 7½ lines.—Black, the scape, clypeus, labrum and mandibles yellow, at the base of the clypeus two abbreviated black stripes; the flagellum rufo-testaceous beneath; the cheeks densely clothed with pale pubescence, that on the vertex fulvous. Thorax clothed with fulvous pubescence, palest on the metathorax; the wings subhyaline, the tegulae pale testaceous; the legs rufo-testaceous, the posterior pair much darker than the others, their femora incrassate, and armed in the middle beneath with a short stout curved spine; the tibiae and basal joint of the posterior tarsi densely fringed with black pubescence. Abdomen, the base and the apical segments clothed with fulvous pubescence.

Hab. Brazil (Rio Tapajos).

27. CENTRIS SPONSA.

Female. Length 11 lines.—Black, the collar has a broad band of short ochraceous velvety pubescence, which is continued down the sides, not beneath; the metathorax has a mixture of ochreous pubescence; the wings dark fuscous, opake, and having a metallic-green iridescence; legs black. Abdomen, the first
and second segments densely clothed with a short velvety ochraceous pubescence, inclining to an olive-yellow; the apical margin of the basal segment, and the basal margin of the second, narrowly black.

_Hab._ Columbia.

This is probably the female of _C. decorata._

28. **Centris insignis.**

**Female.** Length 11 lines.—Black, the head ferruginous, the front above the insertion of the antennae testaceous, the scape and two basal joints of the flagellum ferruginous; the apical half of the mandibles black; the pubescence on the head, thorax and legs fulvous; the wings dark fusco, and having a violet iridescence; the legs ferruginous. Abdomen, the second segment densely clothed with very short pale yellow pubescence; a patch of the same at the extreme lateral margins of the third segment.

_Hab._ Columbia. (Coll. W. W. Saunders, Esq.)

29. **Centris festiva.**

**Female.** Length 9 lines.—Head and thorax black, a tuft of pale pubescence between the antennae, and a pale testaceous spot on the mandibles near their apex. Thorax densely clothed with short dark olive pubescence, the wings rather dark fusco-hyaline; the posterior legs have dense scopæ of long fulvo-ochraceous pubescence. Abdomen of a rather obscure metallic-green; the base has a little short cinereous pubescence; the margin of the second segment narrowly and the third more broadly testaceous, the former having a pale and the latter a bright fulvous pubescence; the fourth and fifth have a pale pubescence intermixed with black hairs; the apical segment fringed with bright ferruginous hairs; the sixth segment ferruginous.

_Hab._ Columbia. (Coll. W. W. Saunders, Esq.)

30. **Centris Americanorum.**

_Ptilotopus Americanorum,_ Klug, _Mag. Berlin_, 1810, p. 32. t. 1. f. 1. _Centris Americanorum,_ St. Farg. _Hym._ ii. 156. 13 (nec _Bombus Americanorum_, Fabr.).

_Hab._ Cayenne.

31. **Centris bombyformis.**


_Hab._ Cayenne.
32. **Centris clypeata.**
Centris derasa, *St. Farg. Hym. ii. 150. 2 ♀ (and type sp. in Coll. Westw).*
Centris emarginata, *St. Farg. Hym. ii. 157. 15. var. ♀?*
*Hab. Cayenne.*

33. **Centris denudans.**  
Centris denudans, *St. Farg. Hym. ii. 150. 1 ♀ (and type sp. in Coll. Westw).*
*Hab. Cayenne; Brazil (Rio Tapajos).*

34. **Centris emarginata.**  
*Hab. Cayenne.*

35. **Centris lanipes.**
   *St. Farg. Hym. ii. 165. 29 (sp. in Coll. Westw.)*
*Hab. Cayenne; Brazil.*

36. **Centris longimana.**
   *St. Farg. Hym. ii. 164. 28.*
*Hab. Cayenne.*

37. **Centris laticincta.**
Hemisia laticincta, *Spin. Ann. Soc. Ent. Fr. x. 148. 98 ♀ (1841).*
*Hab. Cayenne.*

38. **Centris lineolata.**  
Centris lineolata, *St. Farg. Hym. ii. 158. 17 ♀.*
*Hab. Cayenne.*
39. **Centris nigrescens.**

Centris nigrescens, *St. Farg. Hym.* ii. 166, 32 ♂.

*Hab.* Cayenne.

40. **Centris obsOLETA.**

Centris obsolenta, *St. Farg. Hym.* ii. 153. 7 ♀ (and type sp. in Coll. Westw.).

The male has the thorax irregularly garnished with lines of pale yellow pubescence.

*Hab.* Cayenne; Brazil (Rio Tapajos and the Amazons).

41. **Centris pyropyga.**


*Hab.* Cayenne.

42. **Centris scapulata.**

Centris scapulata, *St. Farg. Hym.* ii. 159. 18 ♀.

*Hab. Cayenne; Columbia.* (Coll. W. W. Saunders, Esq.)

43. **Centris poecila.**

Centris poecila, *St. Farg. Hym.* ii. 154. 10 ♀ (type sp. in Coll. Westw.).

*Hab.* Havannah.

44. **Centris fasciata.**

Female. Length 7 lines.—Head and thorax black; the clypeus has a somewhat curved transverse fascia, from the middle of which a line terminating in a point passes upwards to the base; the face on each side, the labrum and mandibles yellow, the latter black at their tips; the scape yellow in front, the flagellum, except the two basal joints, testaceous beneath. Thorax clothed above with fulvo-ochraceous pubescence, paler on the metathorax and beneath; legs rufo-testaceous; tibiae and tarsi clothed above with fulvo-ochraceous pubescence, that on the tarsi brightest; wings hyaline and iridescent; the basal segment of the abdomen of a metallic green, the following segments yellow, their apical margins having a fascia of a rufo-testaceous colour, having a metallic green tinge; beneath reddish-yellow, the third and fourth segments having a transverse fuscous stain.

Male.—Rather smaller, but closely resembling the female, differing only in having the yellow of a brighter colour on the
face, the clypeus having merely a dark line on each side; the scutellum pale testaceous; the anterior femora in front, towards their apex, and the tibiae above having a yellow line; the intermediate and posterior tibiae have a spot at their base, and the femora a yellow spot near their apex beneath; otherwise as in the other sex.

_Hab._ Jamaica.

45. _Centris ephippium._

_Male._ Length 9 lines.—Black, the labrum and clypeus pale yellow testaceous, the margins of the latter fuscous; the labrum densely clothed with a short pale woolly pubescence; the mandibles have a pale testaceous spot near their apex. _Thorax:_ the disk behind the insertion of the wings densely clothed with short ochraceous pubescence, the scutellum clothed with the same; the sides of the metathorax, the thorax beneath, the legs and abdomen, entirely black.

_Hab._ Venezuela.

46. _Centris cineraria._

_Female._ Length 7 lines.—Head and thorax black, the thorax clothed above with short white pubescence, on the sides and beneath it is black; the legs have also a black pubescence; the wings subhyaline, their nervures black. Abdomen blue-black, fringed at the sides and apex with black hairs.

_Hab._ Chili.

47. _Centris Mexicana._

_Female._ Length 7 lines.—Black, the three basal joints of the antennae rufo-testaceous, the thorax densely clothed with ochraceous pubescence; wings fuscous, palest towards their margins; the legs have a black pubescence, that on the posterior pair very long and dense. Abdomen, the basal segment covered with pale ochraceous pubescence; the apex fringed with black.

_Hab._ Mexico.

48. _Centris aterrima._

_Male._ Length 8 lines.—Entirely black, the pubescence of a sooty-black; the labrum rugose. _Thorax:_ the wings dark fuscous, paler towards their apical margins. Abdomen shining, delicately reticulated, and sparingly covered with pubescence; at the sides and at the apex it is more dense.

_Hab._ Mexico.
49. **Centris versicolor.**


*St. Farg. Hym.* ii. 154. 9 (sp. in Coll. Westw.).


Centris decolorata, *St. Farg. Hym.* ii. 160. 19 ♂ (type sp. in Coll. Westw.).

*Hab.* South America.

50. **Centris testacea.**


*Hab.* South America.

51. **Centris trigonoides.**


*Hab.* South America.

52. **Centris picea.**


*Hab.* S. America (Napo).

53. **Centris maculata.**

Centris maculata, *St. Farg. Hym.* ii. 160. 20 ♀ (type sp. in Coll. Westw.).

Very closely allied to *C. versicolor*, if not indeed a variety, the only difference being in the maculation of the face.

*Hab.* South America.

54. **Centris dorsata.**


*Hab.* South America.

55. **Centris analis.**

Centris analis, *St. Farg. Hym.* ii. 152. 5 ♀.


*Hab.* S. America.
56. **Centris Chilensis.**


Female. Length 6 lines.—Black; abdomen above smooth and shining; the disk of the thorax densely clothed with yellowish-white pubescence; wings hyaline, the nervures obscure.

*Hab.* Chili.

57. **Centris nigerrima.**


Female. Length 6 lines.—Closely resembling *H. chiliensis*, but the pubescence of the thorax and abdomen is black.

*Hab.* Chili.

Genus 60. **Euglossa.**

Apis, pt., *Linn. Syst. Nat. i. 953.*

Euglossa, *Latr. Hist. nat. des Cr. et Ins. iii. 384 (1802).*

Eulema (and Euglossa), *St. Farg. Hym. ii. 11 (1841).*

1. **Euglossa dimidiata.**

*Apis dimidiata, Fabr. Ent. Syst. ii. 316. 6.*


*Hab.* Brazil; Cayenne.

2. **Euglossa cordata.**

*Apis cordata, Linn. Syst. Nat. i. 955. 15.*

*De Geer, Ins. iii. t. 28. f. 5.*


*St. Farg. Hym. ii. 9. 1.*


*Hab.* Brazil (Para); Cayenne.

3. **Euglossa analis.**


*Hab.* Brazil (Santarem).
4. **Euglossa piliventris.**


*Hab.* Para.

5. **Euglossa Romandii.**


*Hab.* Brazil.

6. **Euglossa fallax.**

Female. Length 9 lines.—Black, the head and thorax clothed with short black pubescence; the clypeus has a central raised sharp carina, which passes also down the middle of the labrum; the latter has another carina on each side; the posterior tibiae compressed and broadly dilated. Abdomen densely clothed with short fulvo-ochraceous pubescence, palest towards the apex.

Male. Length 9 lines.—Black, the head and thorax having a vivid golden-green effulgence; the clypeus has a central raised carina; the thorax has a short black pubescence; the wings subhyaline, smoky towards their base; the legs have more or less of a blue or coppery effulgence; the posterior tibiae broadly dilated, convex exteriorly, flat within.

*Hab.* Brazil (Para).

7. **Euglossa pulchra.**

Female. Length 8 lines.—Head of a brilliant golden-green, the margins of the clypeus slightly raised at the sides anteriorly, and having a smooth impunctate line down the centre; the antennae black; the thorax and two basal segments of the abdomen of a beautiful purple, smooth and shining; the thorax anteriorly clothed with short black pubescence; the legs black, the posterior tibiae broadly dilated and concave exteriorly, the basal joint of the tarsi also dilated; the wings fuscous. Abdomen, the four apical segments green, and having a short changeable golden pile.

*Hab.* Brazil (Tapajos).

8. **Euglossa violacea.**


*Euglossa caeruleascens*, *St. Farg. Hym.* ii. 11. 3♂.

The female of this species is entirely purple, the pubescence on the thorax being black.

*Hab.* Brazil.
9. **Euglossa nigrata.**


*Hab.* Cayenne; Brazil.

10. **Euglossa Brullei.**

Euglossa Brullei, *St. Farg. Hym.* ii. 10. 2.

*Hab.* Brazil?

11. **Euglossa Surinamensis.**


De Geer, iii. t. 43. f. 4.

*Fabr. Ent. Syst.* ii. 326. 53.


Eulema Surinamensis, *St. Farg. Hym.* ii. 13. 4 (type sp. in Coll. *Westw.*).


*Hab.* Brazil; Columbia; British Guiana.

12. **Euglossa smaragdina.**


*Hab.* Brazil.

13. **Euglossa elegans.**

Eulema elegans, *St. Farg. Hym.* ii. 13. 3 (type sp. in Coll. *Westw.*).

*Hab.* Cayenne; Brazil.

14. **Euglossa Cajennensis.**


*Hab.* Cayenne; Honduras; Brazil.
Subfam. 5. SOCIALES, Latr.

Genus 61. APATHUS.


1. APATHUS RUPESTRIS.

B.M.

Apis frutetorum, Panz. Faun. Germ. 75. 20 ♂.
Bremus pomorum, Panz. Faun. Germ. 75. 18 ♂.
Latr. Hist. Nat. xiv. 64. 3.
Psithyrus rupestris, St. Farg. Hym. ii. 426. 1.
Drews. & Schiodte, Kröy. Tidsskr. ii. 125. 5.
Curtis, Brit. Ent. x. t. 468.
Psithyrus frutetorum, St. Farg. Hym. ii. 436. 5 ♂.
Apathus rupestris, Smith, Zool. ii. 543. 1; Cat. Acul. Hym. 97. 1.
Hab. Britain; France; Germany.

2. APATHUS NEMORUM.

B.M.

Apis nemorum, Fabr. Ent. Syst. ii. 317. 11, and Cab. Banks.
Mus. Linn. Soc. ♀.
Bremus vestigalis, Panz. Faun. Germ. 89. 16.
Apis vestalis, Fourc. Ent. Par. ii. 450. 27.
Kirby, Mon. Ap. Angl. ii. 347. 95. t. 18. f. 3 ♀ (nec f. 4 ♂).
Illig. Mag. v. 174. 60.
Psithyrus vestalis, St. Farg. Hym. ii. 430. 3 ♀.
Psithyrus festivalis, *Drews. & Schödte, Kröy. Tidsskr. ii. 124. 3 ♀.


*Hab.* Britain; France; Germany; Denmark; Sweden; Finland.

3. **APATHUS CAMESTRIS.**


f. 1 ♂.


Dahlb. *Bomb. Scand.* 51. 34.


1. t. 2. f. 9 ♂.


*Drews. & Schödte, Kröy. Tidsskr.* ii. 123. 2.


Psithyrus Francisanus, *Drews. & Schödte, Kröy. Tidsskr.* 125. 4.


*Hab.* Britain; France; Germany; Denmark; Sweden; Finland.

4. **APATHUS BARBUTELLUS.**


f. 4 ♂.


Apathus Barbutellus, *Smith, Zool.* ii. 543. 3 ♂ ♀.

*Hab.* Britain; France; Denmark; Sweden; Finland; Lapland.

5. **APATHUS ARENARIUS.**


Psithyrus Pyrenæus, *St. Farg. Hym.* i. 427, var. 2 (*type sp. in Coll. Westv.)*.

*Hab.* France; Germany; Polish Ukraine.
6. APATHUS FRATERNUS.  

Male. Length 10 lines.—Black; the face below the insertion of the antennae densely covered with dark fuscous pubescence; the flagellum very slender, the joints subarcuate; on the vertex the pubescence is mixed with fulvous. Thorax clothed with short fulvo-ochraceous pubescence, on the middle of the disk it is black; the wings fuscous, darkest towards their base; the legs clothed with short dark fuscous pubescence. Abdomen elongate, narrowed towards the apex; the two basal segments clothed with short fulvo-ochraceous, and the apical segments with short black pubescence. 

Hab. North America.

7. APATHUS CITRINUS.  

Male. Length 6½ lines.—Black, the face densely clothed with long black pubescence; on the vertex it is obscurely yellow. Thorax thinly clothed above with long lemon-coloured pubescence, having a black band between the wings; the wings fuscocyaneus, slightly clouded at their apical margins; the sides of the thorax have a yellow pubescence, but beneath and also on the legs it is black. Abdomen, the three basal segments clothed with lemon-coloured pubescence, the apical ones with black; beneath black. 

Hab. United States.

8. APATHUS BRASILIENSIS.  

Female. Length 7 lines.—Black; head subrotundate, the face clothed with black pubescence, that on the vertex mixed with a few yellow hairs. Thorax clothed anteriorly with long yellow pubescence; the disk shining, thinly covered with black hairs; the metathorax, the sides and beneath have also a black pubescence; the wings subhyaline, their nervures ferruginous. Abdomen shining, the base thinly clothed with black pubescence; on the third and fourth segments it is white, but on the apical ones it is black; the apical segment incurved, nearly naked and acute. 

Hab. Brazil (Para). (Coll. F. Smith.)

Genus 62. BOMBUS.

Apis, pt., Linna. Syst. Nat. i. 953 (1766). 
Bombus, Latreille Hist. nat. Ins. xiv. 63 (1802). 
Bremus, Jurine, Hym. (1807).
1. BOMBUS MUSCORUM.  


Apis collium, Scop. Ent. Carn. 823.  


Apis vulgo, Harris, Expos. 137. 13. t. 40. f. 13 9.  

Apis melinus, Harris, Expos. 138. 17. t. 40. f. 17 9.  

Apis agrorum, Fabr. Ent. Syst. ii. 321. 29 9, var.  


Dahlb. Bomb. Scand. 48. 28 9, 9, 9.  

Drews. & Schiödte, Kröy. Tidsskr. ii. 108. 2.  


Bombus museorum, Smith, Zool. ii. 545. 2 9, 9, 9.  

L’abeille fauve à ventre jaune et extrémité fauve, Geoff. Ins. Par. ii. 419. 42.  

Hab. Europe.  

2. BOMBUS SENILIS.  


Rossi, Faun. Etrus. ii. 102. 909 9.  


Schrank, Ins. Aust. 801.  

Rossi, Faun. Etrus. ii. 100. 904.  

Christ. Hym. 130. t. 8. f. 3, and 142. t. 11. f. 8 9.  


Don. Eng. Ins. xi. 70. t. 382. f. 2.  

Apicis impavidus, Harris, Expos. 131. 6. t. 38. f. 6 9.
Apicis melleus, Harris, Expos. 138. 18. t. 11. f. 18.
Bombus muscorum, Fabr. Syst. Piez. 349. 32.
   Dahlb. Bomb. Scand. 47. 27.
   Brullé, Expé. de Morée, iii. 328. 733.
   Westw. Nat. Lib. xxxviii. 225. t. 17. f. 1; p. 252. t. 16. f. 3.
   Smith, Zool. ii. 544. 1.
Bremus muscorum, Jurine, Hym. 261.
   f. 3 7.
Bombylus, Ray, Hist. Ins. 246. 3.
Bourdon, Reaum. vi. Mem. i. 32. t. 2. f. 1, 2, 3.
Hab. Britain; France; Germany; Denmark; Sweden; Finland; Lapland.

3. BOMBUS AUTUMNALIS.

Apis autumnalis, Fabr. Ent. Syst. ii. 324. 43.
Bombus autumnalis, Fabr. Syst. Piez. 352. 47.
Hab. Germany?; Lapland.

4. BOMBUS ITALICUS.

   Spin. Ins. Lág. p. 130. 3.
Bremus italicus, Panz. Faun. Germ. 89. 17.
Hab. Italy.

5. BOMBUS SMITHIANUS.

Bombus arcticus, Dahlb. Bomb. Scand. p. 50. 32. f. 20 7 (nee Kirby).
Hab. Britain (Shetland); Norway; Lapland; Finland.

6. BOMBUS MERIDIANUS.

Apis meridiana, Panz. Faun. Germ. 80. 19 (nee hypnorum, Linn.).
Hab. Germany.
   Schönk. Act. Holm. i. p. 57. t. 3. f. 2♀.
Hab. Lapland.

Apis hypnorum, Linn. Faun. Suec. no. 1715; Syst. Nat. i. 960. 47.
   Fabr. Ent. Syst. ii. 322. 32.
   St. Farg. Hym. i. 465. 10 ♀ (type sp. in Coll. Westw.).
   Drews. & Schiödtle, Kröy. Tidsskr. ii. 110. 6.
   St. Farg. Hym. i. 465. 10 ♀ (type sp. Coll. Westw.).
Hab. France; Denmark; Sweden; Finland; Lapland.

Apis equestris, Fabr. Ent. Syst. ii. 320. 23.
   Illig. Mag. v. 171. 43.
   Drews. & Schiödtle, Kröy. Tidsskr. ii. 110. 5. t. 2. f. e.
Apis arctica, Quenzel, Acerbi's Trav. Lap. ii. 253. t. 1. f. 7? (1802).
Hab. Denmark.

10. Bombus fragrans. B.M.
   'Apis fragrans, Pallas, It. i. 474. 75.
   Apis pratorum, Fabr. Ent. Syst. ii. 322. 34.
   Bombus fragrans, Illig. Mag. v. 165. 10.
      St. Farg. Hym. i. 464. 9.
      Smith, Zool. ii. 545. 3.
      Drews. & Schiödtle, Kröy. Tidsskr. ii. 121. 17.
Hab. Britain; France; Italy; Germany; Denmark; Sweden; Finland; Lapland; Siberia.
11. **Bombus zonatus.** B.M.

Female. Length 9 lines.—Black; the head has a black pubescence, the anterior portion of the thorax as far as the insertion of the wings clothed with fulvo-ochraceous pubescence, the rest of the thorax and the basal segment of the abdomen clothed with black pubescence; the second, third and fourth segments of the abdomen have a fulvo-ochraceous pubescence, that on the two apical segments is black; the wings fuscous, the legs black.

*Hab.* Greece (Zanti).

Closely resembling *B. Americanorum*, but the wings are paler, and the abdomen has three segments covered with yellow pubescence; in *B. Americanorum* only two are yellow.

12. **Bombus ericetorum.**

*Apis ericetorum,* Panz. Faun. Germ. 75. 19 (hypnorum ?).  

*Hab.* Germany.

13. **Bombus Latreillellus.** B.M.

*Bombus Latreillellus,* Illig. Mag. v. 165. 11 .  
Drews. & Schiödte, Kröy. Tidsskr. ii. 120. 16.  

*Hab.* Britain; France; Denmark.

14. **Bombus sylvarum.** B.M.

*Apis sylvarum,* Linn. Faun. Suec. 1713, and Cab. Mus. Linn. Soc.;  
*Syst. Nat.* i. 960. 45.  
Scop. Ent. Carn. 822.  
Fabr. Syst. Ent. p. 321. 27.  
Rossi, Faun. Etrus. ii. 906?  
Kirby, Mon. Ap. Angl. ii. 326. 82. t. 17. f. 15 , f. 16 .  
Bremus sylvarum, Panz. Faun. Germ. 85. 19?  
*Bombus sylvarum,* Fabr. Syst. Piez. p. 348. 27.  
Illig. Mag. v. 164. 9.  
Spin. Ins. Lig. p. 131. 6.  
390 HYMENOPTERA.

Bombus sylvarum, St. Farg. Hym. i. 463. 8.
   Smith, Zool. ii. 546. 4.


Hab. Britain; France; Germany; Denmark; Sweden; Finland.

15. BOMBUS TERRESTRIS.

   Fabr. Syst. Ent. p. 379. 5.
   Rossi, Faun. Etrus. ii. 99. 902, nec var.
   Don. Brit. Ins. iii. 41. t. 88. f. 1.

Apis audax, Harris, Expos. p. 130. t. 38. f. 1.

   Dahlb. Bomb. Scand. p. 34. 5. f. 5 ?
   Brullé, Expéd. Sc. de Morée, p. 523. 730?
   Drews. & Schödte, Kröy. Tidsskr. ii. 118. 12?
   Smith, Zool. ii. 547. 10.
   Lucas, Expéd. Sc. Algér. iii. 142. 3?
   Reaum. Ins. vi. Mem. 1st, 2. t. 3. f. 1.
   Frisch, Ins. ix. 17. f. 13 9.
   Sultz. Ins. t. 19. f. 124.
   Schaff. Icon. t. 251. f. 7.

Hab. Britain; France; Germany; Italy; Denmark; Sweden; Algeria.

16. BOMBUS COLLINUS.


Hab. Britain.

17. BOMBUS LUCORUM.

   Fabr. Syst. Ent. ii. 322. 35.
Fabr. Syst. Ent. ii. 320. 22.

Apis terrestris, Christ. Hym. p. 127. t. 7. f. 2 ♀.


Hab. Britain; France; Germany; Sweden; Austria; Finland; Denmark.

A form of this species received from Portugal has the pubescence on the legs fulvous.

18. BOMBUS HORTORUM. B.M.

Rossi, Faun. Etrus. ii. 100. 903?

Apis c. fidens, Harris, Expos. p. 130. 3. t. 38. f. 3 ♀.


Ilig. Mag. v. 166. 17.
Walck. Ins. Par. ii. 146.
St. Forc. Hym. i. 466. 12.
Brullé, Expéd. Sc. de Morée, iii. 328. 731.
Drews. & Schödtle, Kröy. Tidsskr. ii. 120. 16.
Smith, Zool. ii. 546. 7.
Ray, Hist. Ins. p. 248. 11.
Huber, Obs. p. 226. t. 25. f. 10–12.

Hab. Britain; France; Germany; Italy; Austria; Denmark; Sweden; Finland; Lapland; Siberia.
19. **Bombus Scrimshiranus.**


Bombus Scrimshiranus, Illig. Mag. v. 166. 18.


Drews. & Schödte, Kröy. Tidsskr. ii. 118. 12.

Smith, Zool. ii. 547 ♀, ♀, ♂.


Bombus Jonellus, Illig. Mag. v. 166. 16 ♂.

Dahlb. Bomb. Scand. p. 43. 21 ♂?

Hab. Britain; Denmark; Sweden; Finland; Lapland; Siberia.

20. **Bombus subterraneus.**

Apis subterranea, Linn. Faun. Suec. no. 1718; Syst. Nat. i. 961. 51, and Cab. Mus. Linn. Soc.

Fabr. Ent. Syst. ii. 322. 37.

Müller, Prodr. Z. Dan. p. 165. 1928.


Drews. & Schödte, Kröy. Tidsskr. ii. 116. 11.


Smith, Zool. ii. 550. 16.

Bombus soroensis, St. Farg. Hym. i. 468. 14 (type sp. in Coll. Westw.).

Bombus Burrellanus, St. Farg. Hym. i. 462. 6 ♂ (type sp. in Coll. Westw.).

Bombus flavo-nigrescens, Smith, Zool. iv. 1566.

Hab. Britain; France; Germany; Denmark; Sweden; Lapland.

21. **Bombus soroensis.**

Apis soroensis, Fabr. Ent. Syst. ii. 318. 12 ♀.


Drews. & Schödte, Kröy. Tidsskr. ii. 112. 8. t. 2. f. e ♂, ♂ ♀.


Bombus neutra, St. Farg. Hym. i. 469. 15.

Hab. Britain; France; Germany; Denmark; Sweden.
22. **Bombus nivalis.**


Apis alpina, *Fabr. (Otho) Faun. Grænl.* p. 199. 155?

_Hab._ Britain (Perthshire and Shetland); Lapland.

23. **Bombus Grænlandicus.**

Bombus Grænlandicus, *Western. MSS.?*_

Female. Length 9—10 lines.—Black; the pubescence on the face black, that on the vertex is also black; the face elongate. Thorax, above, anteriorly and posteriorly having a long loose yellow pubescence, between the wings a broad band of black; wings subhyaline, stained with fuscous towards their base; the legs have a black pubescence. Abdomen, the two basal segments covered with long yellow pubescence, the apical ones with black.

_Hab._ Greenland.

24. **Bombus consobrinus.**


_Hab._ Sweden; Finland; Lapland.

25. **Bombus cryptarum.**


_Hab._ Copenhagen.

26. **Bombus mniorum.**


*Drews. & Schiödte, Kröy. Tidsskr.* ii. 108. 3. t. 2. f. a ♀, f. b ♂.


_Hab._ Denmark.

27. **Bombus Altaicus.**


_Hab._ Russia.

28. **Bombus patagiatus.**


_Hab._ Siberia.
29. **Bombus Ligusticus.**

*Bombus Ligusticus, Spin. Ins. Lig. fasc. 1. p. 29.*

*St. Farg. Hym. i. 471. 21 (type sp. in Coll. Westw.).*

*Bombus scutellatus, Jurine, Hym. t. 12. gen. 37.*

*Hab. Italy.*

30. **Bombus Pratorum.**

*Apis pratorum, Linn. Faun. Suec. no. 1711; Syst. Nat. i. 960.*

*43, and Cab. Mus. Linn. Soc. δ.*

*Schrank, Ins. Aust. no. 798.*


*Apis collaris, Scop. Ent. Carn. no. 818.*

*Apis Arbustorum, Fabr. Ent. Syst. ii. 320. 24 δ.*


*Apis Donovanella, Kirby, Mon. Ap. Angl. ii. 357. 100. t. 18. f. 6 Ψ (var.).*  


*Zett. Ins. Lapp. p. 473. 5.*

*Bombus subinterruptus, Latr. Hist. Nat. xiv. 64. 4.*

*Illig. Mag. v. 167. 20.*

*Dahlb. Bomb. Scand. p. 35. 7.*

*St. Farg. Hym. i. 461. 5 (type sp. in Coll. Westw.).*  

*Drews. & Schiödtë, Kröy. Tidsskr. ii. 111. 7.*


*Bombus ephippium, Dahlb. Bomb. Scand. p. 37. 10 Ψ.*

*Zett. Ins. Lapp. p. 473. 6.*

*Bombus pratorum, Illig. Mag. v. 168. 27.*

*Dahlb. Bomb. Scand. p. 36. 9 δ.*

*Drews. & Schiödtë, Kröy. Tidsskr. ii. 111. 7.*

*Smith, Zool. ii. 548. 11.*

*Bombus Donovanella, Westw. Nat. Lib. xxxviii. 255. t. 17. f. 2 δ.*


*Hab. Britain; France; Germany; Austria; Denmark; Sweden; Finland; Lapland.*

31. **Bombus Montanus.**

*Bombus montanus, St. Farg. Hym. i. 463. 7 (type sp. in Coll. Westw.).*  

*Hab. France; The Pyrenees; Polish Ukraine.*

32. **Bombus Tricolor.**

*Bombus tricolor, Dahlb. Bomb. Scand. p. 40. 17 (var. nivalis?).*  

*Zett. Ins. Lapp. p. 474. 9.*

*Hab. Denmark; Lapland.*
33. **Bombus alpinus.**

Apis alpina, Linn. Faun. Suec. no. 1719; Syst. Nat. i. 961. 55.
Bombus rufescens, St. Farg. Hym. i. 460. 1 (type sp. in Coll. Westw.).

*Hab.* Sweden; France; Finland; Lapland.

34. **Bombus Lapponicus.**

  Quenz. Acerbi’s Trav. Lap. ii. 253. t. 1. f. 3.
  St. Farg. Hym. i. 459. 1 (type sp. in Coll. Westw.).
Bombus regelationsis, Newm. Ent. Mag. ii. 327 (nec Panz.).
Bombus montanus, Smith, Zool. ii. 549. 13 (nec St. Farg.).

*Hab.* Britain; Lapland; France.

35. **Bombus Derhamellus.**

Bombus Derhamellus, Dahlb. Bomb. Scand. p. 44. 23 ♀, ♂, ♀.
  Drews. & Schiödte, Kröy. Tidsskr. ii. 115. 9.
  Smith, Zool. ii. 550. 15.

*Hab.* Britain; France; Denmark; Sweden; Finland; Lapland.

36. **Bombus Lapidarius.**

Apis lapidaria, Linn. Faun. Suec. 1712, and Cab. Mus. Linn. Soc. ♀; Syst. Nat. i. 960. 44.
Apis lapidaria, Scop. Ent. Carn. 813, and f. 813 ♀, no. 1.
Fourc. Ent. Par. ii. 449. 22.
Christ. Hym. p. 126, and t. 7. f. 1 ♀.
Don. Eng. Ins. iii. 97, and t. 108. f. 1 ♀, t. 58. f. 2 ♂.
Apicis opis, Harris, Expos. p. 137. t. 40. f. 12 ♂.
Apis coronata, Fourc. Ent. Par. ii. 449. 23 ♂.
Spin. Ins. Lág. fasc. i. p. 130. 4.
St. Farg. Hym. i. 460. 3.
Drews. & Schödtle, Kröy. Tidsskr. ii. 116. 11.
Westw. Nat. Lib. xxxvii. 252. t. 16. f. 1, 2.
Reaum. Ins. vi. 2. 3. t. 1. f. 1–4.
Schäffer. Icon. Ins. t. 69. f. 9.
Huber, Obs. Linn. Trans. vi. 223. t. 25. f. 1, 2, 3.
Bombus Lefebvrei, St. Farg. Hym. i. 461. 4 (type sp. in Coll. Westw.).
Hab. Britain; France; Germany; Austria; Denmark; Sweden; Finland; Lapland.

37. BOMBUS RUDERATUS.

Apis ruderata, Fabr. Ent. Syst. ii. 317. 10.
Bombus hortorum, St. Farg. Hym. i. 466 (nec Linn.) (type sp. in Coll. Westw.).

An examination of the authentic specimen proves this insect to be distinct from the “hortorum” of Linnaeus, with which it has hitherto been confounded; the black band on the abdomen only occupies one segment, the general pubescence of the insect is shorter and more dense than in B. hortorum, and the mouth is less produced.
Hab. Madeira.
HYMENOPTERA.

38. BOMBUS ANTIGUENSIS.

Apis antiquensis, Fabr. Ent. Syst. ii. 318. 16.

Hab. Antigua.

39. BOMBUS MELANURUS.

Bombus melanurus, St. Farg. Hym. i. 469. 16 ♀ (type sp. in Coll. Westw.).

Hab. Syria.

40. BOMBUS ERIOPHORUS.


Hab. The Caucasus.

41. BOMBUS ALBOCINCTUS.

Female. Length 10 lines.—Black; the pubescence black. Thorax, the collar having a white band, also the first and third segments of the abdomen clothed with white pubescence.

Hab. Kamtschatka. (In Coll. Linn. Soc. Lond.)

42. BOMBUS SITKENSIS.


Hab. Sitka; Russian North America.

43. BOMBUS POLARIS.


Female. Length 10 lines.—Black; clothed with yellow hairs above, with a black band across the thorax, and an indistinct one across the abdomen.

Hab. Arctic Regions.

44. BOMBUS KIRBIELLUS.


Female. Length 10 lines.—Black; anterior and posterior margins of the thorax, and base and apex of the abdomen clothed with yellowish hairs.

Hab. Arctic Regions (Boothia Felix). (Coll. W. W. Saunders, Esq.)
45. **Bomhus Americanorum.**


*St. Farg. Hym.* i. 472. 22 (type sp. in Coll. Westw.).

_Hab._ North America (St. John's Bluff, East Florida).

46. **Bomhus Carolinus.**


_Hab._ North America.

47. **Bomhus Virginicus.**


*St. Farg. Hym.* i. 470. 17 (type sp. in Coll. Westw.).

_Hab._ North America (St. John's Bluff, East Florida).

48. **Bomhus laboriosus.**


_Hab._ Carolina.

49. **Bomhus fervido.**


*St. Farg. Hym.* i. 470. 8 (type sp. in Coll. Westw.).

_Hab._ North America (Trenton Falls).

50. **Bomhus arcticus.**

Bomhus arcticus, *Kirby, Parry's 1st Voy.* (1821) *Append.* p. ccxvi, 3 φ.

_Hab._ Arctic America.

51. **Bomhus ternarius.**


_Hab._ Indiana.

52. **Bomhus ornatus.**

Female. Length 7 lines.—Black; the pubescence on the head black, mixed with yellow hairs at the insertion of the antennae; the thorax has a rich fulvo-ochraceous pubescence, and has a broad black band between the wings, the sides of the
thorax anteriorly yellow; the legs have a black pubescence, with a few pale hairs at the base of the femora beneath; wings fusco-hyaline. Abdomen, the pubescence on the basal segment yellow, on the three following segments it is fulvous, having a narrow border of yellow, which divides it from the black pubescence which clothes the apex.

The colouring of the male and worker is the same, but less bright, and the pubescence is longer in the male than in the other sexes.

*Hab.* North America; Hudson’s Bay; Arctic America.

53. **Bombus vagans.**

Female. Length 7 lines.—Black; the pubescence on the head black, that on the thorax above pale bright yellow; the wings subhyaline, the apical margins have a fusco-fulvous, the pubescence on the wings black. Abdomen, the pubescence on the two basal segments yellow, on the following it is black.

*Hab.* North America.

54. **Bombus frigidus.**

Female. Length 7 lines.—Black; the pubescence of the head black, mixed with a few pale hairs at the insertion of the antennae; the vertex has also some pale yellow pubescence. Thorax clothed with yellow pubescence, having a black band between the wings, the latter fusco-hyaline; the legs have a black pubescence, the fringe on the posterior tibiae fulvous. Abdomen, the two basal segments clothed with rich yellow pubescence, the third with black, that on the apical segments fulvous.

Male. Resembling the female, but having the face clothed with yellow pubescence.

This species closely resembles the *B. montanus* of St. Fargeau, of which it may be the arctic form.

*Hab.* Arctic America; Hudson’s Bay.

55. **Bombus sonorus.**


*Hab.* Mexico.

56. **Bombus ephippiatus.**


*Hab.* Mexico.
57. Bombus Californicus.

Female. Length 10 lines.—Black; the pubescence on the head black, that on the thorax before the wings fulvo-ochraceous, posteriorly and beneath black; the legs black; wings fuscous. Abdomen, the pubescence black, except that on the fourth segment, which is yellow.

Male. Length 5–6 lines.—The pubescence as in the female, differing only in having that on the face yellow.

Hab. California.

58. Bombus Rubicundus.

Female. Length 9 lines.—Black; the face clothed with fulvous pubescence, the mouth very slightly produced, head subrotundate; the thorax and abdomen above densely clothed with short rufo-fulvous pubescence; the wings smoky; the legs have a black pubescence.

This species closely resembles B. Dahlbomii, but that species has an elongate face clothed with black pubescence.

Hab. Columbia.

59. Bombus Robustus.

Female. Length 10 lines.—Black; the pubescence on the head black, that on the thorax above orange-yellow, having a black band between the wings; the wings fuscous; the legs black. Abdomen, the three basal segments have a yellow pubescence, that on the fourth is black, on the fifth and sixth it is white.

Hab. Columbia.

60. Bombus Funebris.

Female. Length 8 lines.—Black; the pubescence on the head black, that on the disk of the thorax snow-white; the wings fuscous; the pubescence on the legs black, that on the three basal segments of the abdomen black; on the apical segments it is white.

Hab. Quito.

61. Bombus violaceus.

Bombus violaceus, St. Farg. Hym. i. 473. 24 (type sp. in Coll. Westw.).

Hab. S. America (Monte Video); Brazil (Para).
62. BOMBUS BRASILIENSI S.
Bombus Brasiliensis, St. Farg. Hym. i. 470. 19 (type sp. in Coll. Westw.).
Hab. Brazil.

63. BOMBUS CAJENNENSIS.
Bombus Cayennensis, St. Farg. Hym. i. 471. 20 (type sp. in Coll. Westw.).
Halid. Linn. Trans. xvii. 320. 16.
Hab. Cayenne; Brazil (Para; Rio Tapajos).

64. BOMBUS DAHLBOMII.
Hab. Chili; Brazil (St. Paul’s).

65. BOMBUS RUBRIVENTRIS.
Bombus rubriventris, St. Farg. Hym. i. 472. 23 (type sp. in Coll. Westw.).
Hab. Brazil.

66. BOMBUS RUFIPES.
Bombus rufipes, St. Farg. Hym. i. 473. 25 (type sp. in Coll. Westw.).
Hab. Java. (Coll. F. Smith.)

67. BOMBUS TUNICATUS.
Hab. Northern India; North China (Chusan).

68. BOMBUS TRIFASCIATUS.
Hab. North China (Chusan).
69. **Bombus alienus.**

Worker. Length 5 lines.—Face subelongate, the clypeus smooth and shining, strongly punctured at the sides; the pubescence on the head black; that on the thorax anteriorly, posteriorly and on the sides yellow, on the disk between the wings it is black; the wings subhyaline, the anterior margins of the superior pair slightly fulvous, the nervures and tegulae ferruginous; the femora black, the tibiae and tarsi ferruginous. Abdomen, the pubescence on the two basal segments yellow, on the third and fourth black, and on the apical segments fulvous.

*Hab.* North China. (Coll. R. Fortune, Esq.)

70. **Bombus rufo-fasciatus.**

*Hab.* Northern India.

71. **Bombus orientalis.**

Female. Length 10 lines.—Black; the head and thorax clothed with black pubescence; the legs have a black pubescence; wings dark fuscous; the two basal segments of the abdomen clothed with a rich yellow pubescence, the third with black, and the apical segments with ferruginous pubescence.

*Hab.* East Indies.

72. **Bombus nasutus.**

*Hab.* North China (Chusan).

73. **Bombus breviceps.**

*Hab.* North China.

74. **Bombus hæmorrhoidalis.**

*Hab.* Northern India; North China (Chusan).

75. **Bombus funerarius.**

  t. 8. f. 6 φ.  
*Hab.* Northern India.
76. **Bombus flavescens.**

*Hab.* North China (Chusan).

77. **Bombus formosus.**

Female. Length 9 lines.—Black; the pubescence on the head and thorax above black, on the sides of the metathorax and beneath the wings it is yellow; the legs black; wings smoky; the basal segment of the abdomen and a broad angular patch on the two following segments, of bright yellow pubescence; that on the second and third segments laterally, is bright ferruginous; the three apical segments covered with black pubescence.  
*Hab.* India.

78. **Bombus eximius.**

*Bombus eximius, Smith, Trans. Ent. Soc.* ii. 47. new ser. t. 8. f. 5♀.  
This species resembles the *B. rufipes* of St. Fargeau; but the type-specimen described by that author is in the collection of J. O. Westwood, Esq., and it differs from the present species in having dark smoky wings, with only the intermediate tarsi, and posterior tibiae and tarsi ferruginous; in *eximius* all the tibiae and tarsi are pale, the wings yellow, and the nervures ferruginous.  
*Hab.* Silhet.

79. **Bombus similis.**

*Hab.* Northern India.

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**Genus 63. Melipona.**

*Trigona, pt., Jurine, Hym.* (1807).

1. **Melipona favosa.**

*Latr. Mem. Ann. Mus.* v. 175. t. 13. f. 5; iv. t. 69. f. 6, 8  
(type sp. in Coll. Westw.).  
*Hab.* Cayenne; Venezuela.

2. **Melipona fasciata.**
*Hab.* Brazil.

3. **Melipona interrupta.**
*Hab.* Brazil; Cayenne.

4. **Melipona postica.**
*Hab.* Brazil.

5. **Melipona scutellaris.**
*Hab.* Brazil.

6. **Melipona fuliginosa.**
*Hab.* Cayenne.

7. **Melipona mutata.**
Melipona mutata, *St. Farg. Hym.* i. 419. 5 (*type sp. in Coll. Westw.*).
*Hab.* Cayenne.

8. **Melipona bicolor.**
Melipona bicolor, *St. Farg. Hym.* i. 423. 11 (*type sp. in Coll. Westw.*).
*Hab.* Brazil (Para).

9. **Melipona anthidioides.**
Melipona anthidioides, *St. Farg. Hym.* i. 417. 3 (*type sp. in Coll. Westw.*).
*Hab.* Brazil.
10. **Melipona fulva**.
_Hab._ Brazil.

11. **Melipona Sant. Hilarii**.
_Hab._ Brazil.

12. **Melipona mixta**.
Melipona mixta, *St. Farg. Hym.* i. 422. 10.
_Hab._ Brazil.

13. **Melipona marginata**.
_Hab._ Brazil. (Coll. F. Smith.)

14. **Melipona nigra**.
_Hab._ Brazil.

15. **Melipona quadrispathiata**.
_Hab._ Brazil.

16. **Melipona quinquespathiata**.
Melipona quinquespathiata, *St. Farg. Hym.* i. 418. 4.
_Hab._ Brazil.

17. **Melipona rufiventris**.
_Hab._ Brazil.

18. **Melipona vicina**.
_Hab._ Brazil.

19. **Melipona grandis**.
_Hab._ Bolivia.
20. Melipona testacea.
Hab. Brazil.

Melipona fulvipes, Guér. Icon. Rég. Anim. Ins. p. 462. t. 75. f. 6, 64.
Hab. Cuba.

22. Melipona compressipes.
Hab. Guiana.

23. Melipona lateralis.
Hab. Guiana.

24. Melipona pallens.
Hab. Guiana.

25. Melipona fasciculata.
Worker. Length 4½ lines.—Black; the vertex of the head, the thorax and legs have a hoary pubescence; head, the face has a narrow line along the inner orbits of the eyes, a line down the centre of the clypeus, and the labrum, yellow; mandibles ferruginous; the antennae reddish-yellow in front, above fuscous, the two apical joints entirely reddish-yellow. The thorax has anteriorly on each side before the insertion of the wings a tuft of red pubescence; wings subhyaline, the superior pair having a yellow stain, the tegulae and nervures pale rufo-testaceous; the legs rufo-testaceous, the tarsi beneath clothed with fulvous pubescence; the apical margins of the segments of the abdomen have a narrow yellow line; the pubescence at the base, apex and beneath hoary, that at the apex intermixed with black hairs.
Hab. Para.

Male. Length 5½ lines.—Black, the clypeus, face anteriorly,
labrum and mandibles rufo-testaceous; the flagellum ferruginous beneath; the face is smooth and shining, and has a tuft of sooty-black pubescence above the insertion of the antennæ. Thorax nearly naked on the disk, smooth and shining, having anteriorly at the sides and along the margin of the scutellum a dense fringe of black pubescence; the pubescence on the legs black, except that on the tarsi beneath, which is fulvous; the posterior tarsi beneath, the apical joint of all the tarsi, and the apex of the posterior tibiae within, ferruginous; the wings bright yellow, palest towards their apical margins, the nervures and tegulae rufo-testaceous. Abdomen smooth and shining, the apical margins of the segments having a thick fringe of sooty-black pubescence.

_Hab._ Brazil (Para). (Coll. F. Smith.)

Genus 64. _TRIGONA._

Trigona, _pt._, _Jurine, Hym._ (1807).
Melipona, _Illig. Mag._ v. (1805).

1. _TRIGONA AMALTHEA._


_Jurine, Hym._ p. 246.

Melipona amalthea, _St. Farg. Hym._ i. 425. 16.

_Hab._ Brazil.

2. _TRIGONA PALLIDA._


_f. 6_ (type sp. in Coll. Westw.).

Melipona pallida, _St. Farg. Hym._ i. 432. 30.


_Hab._ Cayenne; Brazil.

3. _TRIGONA COMMISSA._


_f. 7_.

_Hab._ Brazil.
4. **Trigona ruficrus.**


*Jurine, Hym.* p. 246.

*Melipona ruficrus*, *St. Farg. Hym.* i. 426. 17 (*type sp. in Coll. Westw.*).

*Hab.* Brazil.

5. **Trigona angustula.**

*Centris pediculana*, *Fabr. Syst. Piez.* p. 361. 36?


*Hab.* Brazil.

6. **Trigona bipunctata.**

*Melipona bipunctata*, *St. Farg. Hym.* i. 427. 20.

*Hab.* Brazil.

7. **Trigona bipartita.**

*Melipona bipartita*, *St. Farg. Hym.* i. 432. 31.

*Hab.* Brazil.

8. **Trigona elongata.**

*Melipona elongata*, *St. Farg. Hym.* i. 433. 33.

*Hab.* Brazil.

9. **Trigona hyalinata.**

*Melipona hyalinata*, *St. Farg. Hym.* i. 428. 21.

*Hab.* Brazil.

10. **Trigona iris.**

*Melipona Iris*, *St. Farg. Hym.* ii. 431. 28 (*type sp. in Coll. Westw.*).

*Hab.* Brazil.

11. **Trigona longula.**

*Melipona longula*, *St. Farg. Hym.* i. 434. 34.

*Hab.* Brazil.
12. **Trigona lineata.**
*Hab.* Brazil.

13. **Trigona quadrangula.**
Melipona quadrangula, *St. Farg. Hym.* i. 433. 35 (*type sp. in Coll. Westw.*).
*Hab.* Brazil.

14. **Trigona quadripunctata.**
Melipona quadripunctata, *St. Farg. Hym.* i. 430. 27.
*Hab.* Brazil.

15. **Trigona varia.**
Melipona varia, *St. Farg. Hym.* i. 433. 32.
*Hab.* Brazil.

16. **Trigona punctata.**
Worker. Length 2 lines.—Black; head and thorax coarsely punctured, the scape in front, the apical joints of the antennæ and the mandibles ferruginous; the face densely clothed with short golden-yellow pubescence; a line passing over the tegulae and uniting with a spot on each side of the scutellum, at its base, and the posterior margin of the scutellum, bright yellow; the base of the tibiae yellow; the legs rufo-testaceous; the coxae, trochanters and tarsi ferruginous; the wings hyaline at their base, fuscous towards their apex. Abdomen smooth and shining, the apical segments covered with golden-yellow pubescence.
*Hab.* Brazil (Para).

17. **Trigona capitata.**
Worker. Length 3 lines.—Black; the head broad, flattened and wider than the thorax; the flagellum obscurely ferruginous, the base of the scape ferruginous. **Thorax,** a yellow line along the margin of the tegulae; the wings testaceous, the nervures ferruginous; the legs dark rufo-testaceous, the posterior tibiae broadly dilated. Abdomen, the margins of the segments membranaceous, the apical segment covered with cinereous pubescence.
*Hab.* Brazil.
18. **Trigona luteipes.**

Worker. Length 2½ lines.—Pale testaceous; the face having on each side a large elongate ovate spot, extending from the stemmata to the base of the mandibles; the scape pale testaceous, the flagellum fuscous; the vertex and disk of the thorax have a scattered black pubescence; the wings fuscous; legs yellow, the apex of the basal joint of the posterior tarsi fuscous; the apex of the abdomen fuscous.

*Hab.* Brazil.

19. **Trigona Ghiliani.**


*Hab.* Para.

20. **Trigona peltata.**


*Hab.* Para.

21. **Trigona lurida.**


*Hab.* Para.

22. **Trigona stigma.**

Worker. Length 3 lines.—Jet-black; head wider than the thorax, the face anteriorly having a silvery pile; the vertex, thorax and legs covered with rigid black pubescence; wings hyaline, iridescent, nervures fuscous, the stigma yellow. Abdomen elongate, narrow, smooth and shining.

*Hab.* Brazil (Amazons).

23. **Trigona femorata.**

Worker. Length 3½ lines.—Head and thorax black; head wider than the thorax, the clypeus coarsely punctured, the scape ferruginous in front towards the base; the flagellum fulvous in front. Thorax, a pale line passes over the tegulae, uniting with a pale triangular spot on each side at the base of the scutellum; wings subhyaline, nervures and tegulae rufo-testaceous; the thorax at the sides and beneath obscurely testaceous and covered with short cinereous pubescence; the femora and abdomen beneath pale rufo-testaceous; abdomen above fuscous, pale testa-
ceous at the base; the posterior tibiae broadly dilated and having a testaceous stain within; the claws ferruginous.

_Hab._ Brazil (Amazons).

**24. TRIGONA DORSALIS.**

Worker. Length 2 lines.—Head black; the clypeus, a triangular spot above, the face on each side, the scape in front, and the mandibles, yellow; the flagellum testaceous in front. Thorax reddish-yellow, the disk black, encircled with yellow; a dark line beneath the wings and the centre of the metathorax black; legs of a yellow-red, the dilatation of the posterior tibiae black; wings testaceous. Abdomen subellongate, of reddish-yellow or pale ferruginous.

_Hab._ Brazil (Para).

**25. TRIGONA DIMIDIATA.**

Worker. Length 4½ lines.—Jet-black, the face anteriorly having a short silvery pile; the vertex, disk of the thorax and legs clothed with rigid black pubescence, that on the tarsi beneath reddish-brown; the metathorax smooth and shining, pubescent at the sides; the basal half of the wings dark brown, the apical half milky-white. Abdomen elongate, smooth and shining.

_Hab._ Brazil (Para). (Coll. F. Smith.)

**26. TRIGONA LONGIPES.**

Worker. Length 2 lines.—Black; the inner orbits of the eyes, the clypeus and a minute triangular spot above it, the labrum and mandibles, yellow, the base of the latter and the anterior margin of the clypeus: fuscous; the scape pale rufo-testaceous, having a fuscous spot at the apex above; the flagellum testaceous beneath. Thorax, the collar, and a narrow line passing over the tegulae, uniting with a spot on each side at the base of the scutellum, yellow; the scutellum, tegulae and nervures of the wings pale rufo-testaceous; the wings fusco-hyaline, darkest towards their apex; legs rufo-testaceous, a line on the posterior femora beneath, the apex of the intermediate tibiae, and the basal joint of the tarsi black; the posterior tibiae elongate, broadly dilated at their apex, somewhat battledore-shaped, the dilatation black. Abdomen testaceous, fuscous towards the apex.

_Hab._ Brazil (Para).

**27. TRIGONA ZONATA.**

Worker. Length 3 lines.—Head and thorax black; a broad
line on each side of the face touching the eyes, and a minute spot between the antennae yellow, the labrum and mandibles ferruginous; the flagellum fulvous beneath; wings subhyaline, having a fulvous tint towards the base, the nervures testaceous, the stigma yellow; the legs dark rufo-testaceous. Abdomen ferruginous, the margins of the segments having a black band.

_Hab._ Columbia.

28. **Trigona Basalis.**

Worker. Length 3 lines.—The head, thorax, legs, antennae and basal segment of the abdomen black, the rest of the abdomen ferruginous; the flagellum ferruginous in front, as well as the extreme base of the scape and mandibles, a perpendicular line on the clypeus, and an angular spot on the sides of the face, the tarsi and posterior tibiae testaceous; sometimes the entire legs rufo-testaceous; the wings hyaline and iridescent, the nervures pale testaceous.

_Hab._ Brazil; Columbia.

29. **Trigona D'Orbignyi.**


_Hab._ Bolivia.

30. **Trigona Argentata.**

_Melipona argentina, St. Farg. Hym. i. 428. 22 (type sp. in Coll. Westw.)._

_Hab._ S. America.

31. **Trigona Sexpunctata.**

_Melipona sexpunctata, St. Farg. Hym. i. 431. 29._

_Hab._ ——?

32. **Trigona Scutellata.**

_Melipona scutellata, St. Farg. Hym. i. 426. 17._

_Hab._ South America.

33. **Trigona Minuta.**

_Melipona minuta, St. Farg. Hym. i. 427. 19._

_Hab._ ——?
34. **TRIGONA FERRUGINEA.**
Hab. Para.

35. **TRIGONA MEXICANA.**
Hab. Mexico.

36. **TRIGONA LIGATA.**
Hab. Mexico.

37. **TRIGONA FULVIVENTRIS.**
Hab. Mexico.

38. **TRIGONA BILINEATA.**
Hab. Mexico.

39. **TRIGONA FUSCATA.**
Melipona fuscata, *St. Farg. Hym.* i. 424. 14 (*type sp. in Coll. Westw.*).
Hab. Peru.

40. **TRIGONA VIDUA.**
Hab. India; Isle of Timor.

41. **TRIGONA TESTACEA.**
Hab. ——?

42. **TRIGONA IRIDIPENNIS.**
Worker. Length 1½ line.—Black; the face clothed with short silvery pubescence; the labrum, mandibles and antennæ pale testaceous. The margins of the thorax and scutellum fringed with fuscous pubescence; the apical joints of the tarsi testaceous, the sides of the metathorax having a silvery pubes-
ence; the wings subhyaline, splendidly iridescent. Abdomen, the base testaceous, very smooth and shining, the extreme apex pale testaceous; beneath pale testaceous, and having a short silvery pubescence.

Hab. Ceylon.

43. TRIGONA NEBULATA. B.M.

Worker. Length 2½ lines.—Black; the clypeus, a triangular spot above it, the anterior angles of the face, the scape in front, the labrum and mandibles yellow. Thorax, a narrow yellow line passing from the collar on each side to the lateral angles of the scutellum; the coxae and trochanters yellow, the apical joints of the tarsi ferruginous; the pubescence of the legs black; the wings fusco-hyaline, and having a dark fuscous cloud beyond the stigma. Abdomen, the two basal segments red, their apical margins having a narrow black transverse line, the third and following segments black.

Hab. Western Africa.

44. TRIGONA CARBONARIA. B.M.

Worker. Length 1½ line.—Jet-black; the face covered with a short hoary pubescence, the base of the antennæ and tips of the mandibles pale rufo-testaceous. The thorax shining, the scutellum fringed with pale pubescence, the collar and thorax anteriorly covered with pale pubescence; the sides of the meta-thorax covered with short white pubescence, naked and very smooth and shining; the wings hyaline, the nervures black; the legs obscurely testaceous. Abdomen naked and glossy black.

Hab. Australia.

Genus 65. APIS.

Apis, Auctorum.

1. APIS MELLIFICA. B.M.

Apis mellifica, Linn. Faun. Suec. 1697.
Sulz. Ins. t. 19. f. 123.
Harris, Expos. Eng. Ins. t. 39. f. 9, 10.
Rossi, Faun. Etrus. ii. 103. 912.
Christ. Hym. 73. t. 1. f. 1 ♂, t. 2. f. 5 ♀, t. 3. f. 1 ♂.
Don. Brit. Ins. xiv. 63. t. 492.


Spin. Ins. Lig. i. 35. 15.
Jurine, Hym. p. 244. t. 12. gen. 35 ♀ .
Curtis, Brit. Ent. xvi. t. 769 ♂ , ♀ , ♂ .
Brullé, Expéd. Sc. de Morée, iii. 327. 728.
St. Farg. Hym. i. 401. 1.

Apis gregaria, Geoffr. Ins. ii. 407. 1.
Reaum. Ins.v.t.22.f.1♂ , f. 2 ♀ , f. 4 ♀ , t. 25. f. 1 ♂ , f. 10 ♂ , f. 16, 17 ♀ .

Hab. Britain; France; Italy; Albania; Africa; Sandwich Islands; S. America; Jamaica; New Holland.

2. Apis Ligustica.

Apis Ligustica, Spin. Ins. Lig. i. fasc. 1. p. 35. 15.
Voy. Humb. & Bonp. i. 287. t. 19. f. 4 ♂ , 5 ♀ , 6 ♂ .
St. Farg. Hym. i. 402. 3.

Hab. Italy; France.

3. Apis Socialis.

St. Farg. Hym. i. 404. 8 (type sp. in Coll. Westw.).

Hab. India (Bengal); Java; Malabar.

4. Apis Adansonii.


Hab. Senegal.

5. Apis Dorsata.

Apis dorsata, Fabr. Ent. Syst. ii. 328. 64; Syst. Piez. p. 370. 7.
St. Farg. Hym. i. 405. 9.
(type sp. in Coll. Westw.).

Apis bicolor, *Klug, Mag. der Gesell. Nat. Fr. zu Berlin, 1807,*
p. 264. t. 7. f. 3.

*Hab. India.*

6. **Apis Delessertii.**


*Hab. India (Pondicherry).*

7. **Apis Indica.**

p. 370. 4.

3. t. 13. f. 5; *Voy. Humb. & Bonp. i. 287. 4. t. 19. f. 10 6.*

*St. Farg. Hym. i. 403. 5* (type sp. in Coll. Westw.).

*Hab. India.*

8. **Apis Perrottetii.**


*Hab. India.*

9. **Apis Peronii.**


*Voy. Humb. & Bonp. i. 289. 9. t. 19. f. 12 6.*

*St. Farg. Hym. i. 405. 10.*

*Hab. India; Isle of Timor.*

10. **Apis Lobata.**

Male. Length 4½ lines.—Black; the head, thorax and basal
segment densely clothed with cinereous pubescence; wings hya-
line, iridescent, the nervures testaceous; legs rufo-testaceous,
the posterior tarsi having an elongate lobe produced at the base
beneath; the joints densely pubescent beneath.

*Hab. India.*

11. **Apis Fasciata.**


*Voy. Humb. & Bonp. i. 288. 6. t. 19. f. 7 6.*

*St. Farg. Hym. i. 406. 11.*

*Hab. Egypt.*
12. **APIS UNICOLOR**.


*S. Farg. Hym.* i. 403. 4.

*Hab.* Isle of Bourbon; Madagascar.

13. **APIS NIGRITARUM**.


*Hab.* Congo.

14. **APIS SCUTELLATA**.


*Hab.* Africa.

15. **APIS CAFFRA**.


*Hab.* Africa.

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**APPENDIX.**

20. **COLLETES HYLAÆIFORMIS.** Page 1.


*Hab.* Russia.

21. **COLLETES FLORALIS.**


*Hab.* Russia.

22. **COLLETES JUVENCULA.**


*Hab.* Russia.

23. **COLLETES CHILENSIS.**


*Hab.* Chili.
24. **Colletes nigroventris.**
*Hab.* Chili.

25. **Colletes tetra.**
*Hab.* Chili.

26. **Colletes semi-cyanea.**
*Hab.* Chili.

27. **Colletes albopilosa.**
*Hab.* Chili.

28. **Colletes cognata.**
*Hab.* Chili.

29. **Colletes fulvipes.**
*Hab.* Chili.

30. **Colletes semi-nitida.**
*Hab.* Chili.

31. **Colletes atripes.**
*Hab.* Chili.

**Colletes fodiens.**
*Hab.* Russia.

**Colletes succincta.**
*Hab.* Russia.
APPENDIX.

Colletes marginata.
Colletes occidentalis, Halid. Linn. Trans. (1837) xvii. 322.
Hab. Chili.

Colletes hirta.
Colletes hirta, St. Farg. Hym. ii. 296.
Hab. Chili.

Colletes cyanescens.
Hab. Chili.

Genus PASIPHAÆ.

The ocelli placed in a triangle on the vertex; the antennae filiform; the superior wings with one marginal and two submarginal cells; the marginal cell elongate and acute at the apex; the second submarginal cell obliquely quadrato, receiving both the recurrent nervures. The maxillary palpi 6-jointed; the labial palpi 4-jointed, the basal joint longer than the three following, much thicker, broadest at the base; the labrum obtuse at the apex, which is emarginate.

1. PASIPHAÆ CAERULESCENS.
Pasiphae caerulescens, Spin. Faun. Chili. vi. 228. 1. t. 1. f. 4.
Hab. Chili.

2. PASIPHAÆ FLAVICORNIS.
Pasiphae flavicornis, Spin. Faun. Chili. vi. 228. 2.
Hab. Chili.

3. PASIPHAÆ RUFIVENTRIS.
Pasiphae rufiventris, Spin. Faun. Chili. vi. 229. 3.
Hab. Chili.

4. PASIPHAÆ TRISTIS.
Hab. Chili.
Genus CAUPOLICANA.


The superior wings with one marginal and three submarginal cells. The maxillary palpi 6-jointed, the labial palpi 4-jointed; the labium transverse at the apex, produced laterally into elongate acute points, the margins of the apex ciliated; the para-glossae as long as the palpi.

This genus is closely allied to *Lamprocolletes* of this Catalogue.

1. CAUPOLICANA GAYI.


*Hab.* Chili.

2. CAUPOLICANA FULVICOLLIS.


*Hab.* Chili.

3. CAUPOLICANA HIRSUTA.


*Hab.* Chili.

50. PROSOPIS PATELLATA. Page 31.


*Hab.* Russia.

51. PROSOPIS DISTANS.


*Hab.* Russia.

52. PROSOPIS LAEVIGATA.

Female. Length 3½ lines.—Black; head and thorax subopake, very delicately punctured; the head subovate, the face having on each side of the clypeus an angular yellow spot; the anterior margin of the clypeus slightly emarginate. Thorax, the tubercles and an interrupted line on the collar, yellow; the metathorax smooth and rounded; the wings subhyaline and beautifully iridescent; the legs entirely black. Abdomen elongate, sublanceolate, very smooth and shining, having a few black hairs towards the apex.

*Hab.* New Zealand.
APPENDIX.

**PROSOPIS VARIEGATA.**

*Hab.* Russia.

**PROSOPIS DIFFORMIS.**
  *Eversm. Bull. Mosc.* xxv. 52. 3.

*Hab.* Russia.

**PROSOPIS SIGNATA.**

*Hab.* Russia.

**PROSOPIS LÆVIGATA.**

*Hab.* Russia.

**PROSOPIS INFLEXA.**

*Hab.* Russia.

**PROSOPIS ANNULATA.**

*Hab.* Russia.

**PROSOPIS ANNULARIS.**

*Hab.* Russia.

**PROSOPIS PERPLEXA.**

*Hab.* New Holland.
Genus CHILICOLA.


The superior wings with one marginal and two submarginal cells; the second submarginal cell narrowed towards the marginal; the first recurrent nervure uniting with the first transverse cubital nervure; the second recurrent nervure entering the second submarginal near its apex. The posterior legs have the outer spur serrated within.

1. CHILICOLA RUBRIVENTRIS.
Chilicola rubriventris, Spin. Faun. Chili. vi. 211. l. t. 1. f. 5 ♀.
Hab. Chili.

2. CHILICOLA PLEBEIA.
Chilicola plebeia, Spin. Faun. Chili. vi. 211. 2.
Hab. Chili.

3. CHILICOLA LONGITARSA.
Chilicola longitarsa, Spin. Faun. Chili. vi. 212. 3.
Hab. Chili.

18. SPHECODES CHILENSIS. Page 38.
Hab. Chili.

SPHECODES FUSCIPENNIS.
Hab. Russia.

SPHECODES RUFESCENS.
Apis rufescens, Fourc. Ent. Par. ii. 447. 17.
Hab. Russia.

SPHECODES GIBBUS.
Sphex gibba, Linn. Syst. Nat. i. 946. 33 ♀.
Dichroa monilicornis, Eversm. Bull. Mosc. xxv. 49. 3 (1852).
Hab. Russia.
APPENDIX.

Sphecodes Geoffrellus.
Hab. Russia.

Sphecodes Africanus.
Sphecodes Africanus, St. Farg. Hym. ii. 541. 1.
Hab. Algeria (Oran).

Hylæus brunnescens, Eversm. Bull. Mosc. xxv. 36. 2 (1852).
Hab. Russia.

117. Halictus Tomentosus.
Hab. Russia.

118. Halictus Senilis.
Hab. Russia.

119. Halictus Rostatus.
Hylæus rostratus, Eversm. Bull. Mosc. xxv. 38. 9 (1852).
Hab. Russia.

120. Halictus Fulvicrus.
Hab. Russia.

121. Halictus Rubens.
Hab. Russia.

122. Halictus Mucoreus.
Hylæus mucoreus, Eversm. Bull. Mosc. xxv. 44. 25 (1852).
Hab. Russia.
123. **Halictus Chiliensis.**
*Hab.* Chili.

124. **Halictus chloris.**
*Hab.* Chili.

125. **Halictus nigro-marginatus.**
*Hab.* Chili.

126. **Halictus nigro-caeruleus.**
*Hab.* Chili.

127. **Halictus proximus.**
*Hab.* Chili.

128. **Halictus mutabilis.**
*Hab.* Chili.

129. **Halictus emarginatus.**
*Hab.* Chili.

130. **Halictus corinogaster.**
*Hab.* Chili.

131. **Halictus Gayi.**
*Hab.* Chili.

132. **Halictus posticus.**
*Hab.* Chili.
133. Halictus Gayatinus.
Hab. Chili.

Halictus quadricinctus.
Halictus quadricinctus, Smith, Zool. vi. 2040. 1.
Hab. Russia.

Halictus sexcinctus.
Hylaeus sexcinctus, Eversm. Bull. Mosc. xxv. 36. 3 (1852).
Hab. Russia.

Halictus rubicundus.
Hab. Russia.

Halictus fulvipes.
Hylaeus fulvipes, Eversm. Bull. Mosc. xxv. 37. 6 (1852).
Hab. Russia.

Halictus interruptus.
Eversm. Bull. Mosc. xxv. 37. 7 (1852).
Hab. Russia.

Halictus sexnotatus.
Hab. Russia.

Halictus leucozonius.
Hab. Russia.

Halictus lugubris.
*Hab.* Russia.

**HALICTUS ABDOMINALIS.**
*Hab.* Russia.

**HALICTUS ALBIPES.**
*Hab.* Russia.

**HALICTUS FULVICORNIS.**
*Hab.* Russia.

**HALICTUS NITIDIUSCULUS.**
*Hab.* Russia.

**HALICTUS MINUTISSIMUS.**
*Hab.* Russia.

**HALICTUS æRATUS.**
*Hab.* Russia.

**HALICTUS SMEATHMANELLUS.**
*Hab.* Russia.
APPENDIX.

HALICTUS FLAVIPES.
15, & 57. 16.
23, & 44. 24.
Hab. Russia.

HALICTUS MINUTUS.
Halictus minutus, St. Farg. Hym. ii. 277. 17?
Spin. Faun. Chili. vi. 207. 9.
Hab. Chili; France?

NOMIA DIFFORMIS.  Page 88.
Lasius difformis, Panz. Faun. Germ. 89. 15.
Hab. Russia.

150. ANDRENA FUSCOSA.  Page 118.
Hab. Russia.

151. ANDRENA COMTA.
Hab. Russia.

152. ANDRENA OVINA.
Hab. Russia.

153. ANDRENA CUNICULARIA.
Hab. Russia.

154. ANDRENA FULVITARSIS.
Hab. Russia.
155. **Andrena limbata.**
*Hab.* Russia.

156. **Andrena aberrans.**
*Hab.* Russia.

157. **Andrena ambigua.**
*Hab.* Russia.

158. **Andrena hirticeps.**
*Hab.* Russia.

159. **Andrena longula.**
*Hab.* Russia.

160. **Andrena xanthothorax.**
*Hab.* Russia.

161. **Andrena brevitarsis.**
*Hab.* Russia.

162. **Andrena fallax.**
*Hab.* Russia.

163. **Andrena campestris.**
*Hab.* Russia.

164. **Andrena microstigma.**
*Hab.* Russia.
165. **ANDRENA SENILIS.**
*Hab.* Russia.

166. **ANDRENA FLORICOLA.**
*Hab.* Russia.

167. **ANDRENA LABROSA.**
*Hab.* Russia.

168. **ANDRENA FLORIVAGA.**
*Hab.* Russia.

169. **ANDRENA GRACILIS.**
*Hab.* Russia.

170. **ANDRENA TRICINCTA.**
*Hab.* Russia.

171. **ANDRENA QUADRICINCTA.**
*Hab.* Russia.

172. **ANDRENA SENEX.**
*Andrena senex*, *Eversm. Bull. Mosc. xxv. 27. 50* (1852).
*Hab.* Russia.

173. **ANDRENA INCERTA.**
*Andrena incerta*, *Eversm. Bull. Mosc. xxv. 27. 51* (1852).
*Hab.* Russia.

174. **ANDRENA NIGRIFRONS.**
*Andrena nigrifrons*, *Eversm. Bull. Mosc. xxv. 27. 52* (1852).
*Hab.* Russia.
175. **Andrena gravida.**
*Hab.* Russia.

176. **Andrena scita.**
*Hab.* Russia.

177. **Andrena strangulata.**
*Hab.* Russia.

178. **Andrena consobrina.**
*Hab.* Russia.

179. **Andrena zonalis.**
*Hab.* Russia.

180. **Andrena rufiventris.**
*Hab.* Russia.

**Andrena pilipes.**
*Hab.* Russia.

**Andrena funebris.**
*Eversm. Bull. Mosc.* xxv. 11. 3 (1852).
*Hab.* Russia.

**Andrena cineraria.**
*Hab.* Russia.
ANDRENA THORACICA.
Hab. Russia.

ANDRENA GWYNANA.
Melitta Gwynana, *Kirby, Mon. Ap. Angl.* ii. 120. 60.
Hab. Russia.

ANDRENA TRimmerANA.
Hab. Russia.

ANDRENA NIGRO-æNEA.
Hab. Russia.

ANDRENA VARIANS.
Hab. Russia.

ANDRENA Fuscipes.
Hab. Russia.

ANDRENA BARBATula.
(1852).
*Zett. Ins. Lapp.* p. 461. 5?
Hab. Russia.

ANDRENA ALBICRus.
Hab. Russia.
ANDRENA ARMATA.
Andrena helvola, *Linn. 3? nec armata, Kirby.*
*Hab.* Russia.

ANDRENA ALBICANS.
*Hab.* Russia.

ANDRENA ANALIS.
*Hab.* Russia.

ANDRENA COITANA.
*Hab.* Russia.

ANDRENA LABIALIS.
*Hab.* Russia.

ANDRENA PILOSULA.
*Hab.* Russia.

ANDRENA MINUTULA.
*Hab.* Russia.

ANDRENA DENTICULATA.
*Hab.* Russia.
APPENDIX.

ANDRENA COLLISIONANAN.
Hab. Russia.

ANDRENA INTERRUPTA.
Hab. Russia.

ANDRENA CINERASCENS.
Hab. Russia.

ANDRENA CANDENS.
Hab. Russia.

ANDRENA INCISA.
Hab. Russia.

ANDRENA LISTERELLA.
Hab. Russia.

ANDRENA FULVICRUS.
Hab. Russia.

ANDRENA SMITHELLA.
Hab. Russia.
ANDRENA AFZELIELLA.
Hab. Russia.

ANDRENA HATTORFIANA.
Hab. Russia.

ANDRENA ROSAE.
Eversm. Bull. Mosc. xxv. 29. 58 (1852 ?).
Hab. Russia.

ANDRENA FLOREA.
Hab. Russia.

ANDRENA FULVA.
Hab. Russia.

ANDRENA CETII.
Hab. Russia.

MACROPIS LABIATA. Page 125.
Hab. Russia.

8. DASYPODA VILLIPES. Page 125.
Hab. Russia.
9. **Dasypoda braccata.**
*Hab.* Russia.

10. **Dasypoda nemoralis.**
Dasypoda nemoralis, *Bäer, Bull. Mosc. xxvi.* 70. 2. t. 1. f. 2. 2♂ ♂ (1853).
*Hab.* Russia.

11. **Dasypoda palleola.**
Dasypoda palleola, *Bäer, Bull. Mosc. xxvi.* 70. 3. t. 1. f. 3. 3♂ ♂ (1853).
*Hab.* Russia.

12. **Dasypoda Tschertkoviana.**
*Hab.* Russia.

13. **Dasypoda thoracica.**
*Hab.* Russia.

14. **Dasypoda melanopleura.**
*Hab.* Russia.

15. **Dasypoda decora.**
*Hab.* Russia.

16. **Dasypoda nigricans.**
*Hab.* Russia.

**Dasypoda hirtipes.**
*Hab.* Russia.

**Dasypoda plumipes.**  
*Büer, Bull. Mosc.* xxvi. 71. 4. t. 1. f. 4. 4 ♂ ♀ (1853).  
*Hab.* Russia.

**Dasypoda argentata.**  
*Hab.* Russia.

*Hab.* Russia.

*Hab.* Russia.

**Panurgus calcaratus.**  
*Hab.* Russia.

Genus *Camptopœum.*  
1. **Camptopœum Gayi.**  
*Hab.* Chili.

2. **Camptopœum nomadoides.**  
*Hab.* Chili.

3. **Camptopœum maculatum.**  
*Hab.* Chili.
4. **Camptopæum trifasciatum.**
*Hab.* Chili.

5. **Camptopæum submetallicum.**
*Hab.* Chili.

6. **Camptopæum hirsutulum.**
*Hab.* Chili.

7. **Camptopæum nigrum.**
*Hab.* Chili.

8. **Camptopæum varipes.**
*Hab.* Chili.

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**Systropha curvicornis.** Page 131.
*Hab.* Russia.

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*Hab.* Russia.

7. **Rophites bispinosa.**
*Hab.* Russia.

**Rophites quinquiespinosa.**
Rophites 5-spinosa, *Spin. Ins. Lig.* fasc. 2. 72. 5.
*Hab.* Russia.
*Hab.* Russia.

153. Megachile maxillosa.
*Hab.* Russia.

154. Megachile obscura.
*Hab.* Russia.

155. Megachile albicilla.
*Hab.* Russia.

156. Megachile fulvimana.
*Hab.* Russia.

*Hab.* Russia.

158. Megachile melatronicha.
*Hab.* Chili.

159. Megachile Chilensis.
*Hab.* Chili.

Megachile lagopoda.
*Hab.* Russia.

Megachile Willughbiella.
*Hab.* Russia.
MEGACHILE CENTUNCULARIS.
Apis centuncularis, Linn. Faun. Suec. 1687.
Megachile centuncularis, Eversm. Bull. Mosc. xxv. 70. 5 (1852).
Hab. Russia.

MEGACHILE CIRCUMCINCTA.
Megachile circumcincta, Eversm. Bull. Mosc. xxv. 70. 6 (1852).
Hab. Russia.

MEGACHILE ARGENTATA.
Hab. Russia.

MEGACHILE PACIFICA.
Hab. Russia.

MEGACHILE POLLINOSA.
Hab. Chili.

54. OSMIA FULVA. Page 143.
Hab. Russia.

55. OSMIA SICITA.
Hab. Russia.

56. OSMIA HAMATA.
Osmia hamata, Eversm. Bull. Mosc. xxv. 64. 5 (1852).
Hab. Russia.

OSMIA RUFIA.
Apis rufa, Linn. Faun. Suec. no. 1690 ♂.
Osmia bicornis, Eversm. Bull. Mosc. xxv. 63. 3 ♂ ♀ (1852).
Hab. Russia.
Osmia serratulæ.
Osmia serratulæ, Eversm. Bull. Mosc. xxv. 64. 4 (1852).
Hab. Russia.

Osmia leucomelana.
Eversm. Bull. Mosc. xxv. 64. 6 (1852).
Hab. Russia.

Female. Length 4 lines.—Black; the head and thorax strongly punctured, the punctures confluent on the disk of the thorax; the extreme base of the scape and the third joint of the flagellum ferruginous beneath. The thorax on the sides and beneath covered with large distinct punctures; the superior wings have a dark fuscous stain along their anterior margins; the scutellum bright yellow; the apical joints of the tarsi ferruginous; the anterior and intermediate tarsi clothed exteriorly with bright golden pubescence, that on the tarsi beneath ferruginous. Abdomen shining, finely punctured at the base, and gradually more strongly so to the apex, which is very coarsely punctured; the first and second segments have on each side a short yellow line, the third and fourth segments have in the middle a transverse narrow yellow fascia, the fifth and sixth segments are yellow, their apical margins only being very narrowly black; the ventral scopo golden-yellow.
Hab. Brazil (Alta de Chää on the Tapajos). (Coll. H. W. Bates.)

ADDENDA ET CORRIGENDA.
Page 8, line 25. For antennæ read ocelli.
Page 19. Prosopis annulata, Fabr. (communis, Nyland.).
Page 48. Halictus flavipes, Fabr., Nylander, Revis. (ver.).
Page 104. Andrena analis, Panz. (nec Fabr.).
Page 133. After line 17, add Subfam. 2. DASYGASTRÆ, Latr.
Trachusa serratulæ, Nyland.
EXPLANATION OF THE PLATES.

PLATE VII.

The letters indicate the same parts in all the figures; they are as follows:—a. the mentum; b. the labium; c. the labial palpi; d. the paraglossae; e. the maxilla; f. the lobe of the maxilla; g. the maxillary palpus.

Fig.
1. Anthidium Africanum.
2. Serapis denticulatus.
3. Osiris pallidus.
4. Exoneura bicolor.
5. Allodape pictifrons.
6. Habropoda ezonata.
6 a. Posterior tibia and tarsus of Habropoda ezonata.

PLATE VIII.

1. Chrysantheda frontalis.
2. Leiopodus lacertus.
3. Ancylosceles ursinus.
5. Epicharis bicolor.
7. Euglossa pulchra.

PLATE IX.

1. Tongue of Serapis.
2. Maxilla of Serapis.
3. Wing of Serapis.
4. Mandible of Serapis.
5. Labrum of Serapis.
6. Tongue of Allodape.
7. Maxilla of Allodape.
8. Wing of Allodape.
10. Maxilla of Exoneura.
12. Claw of Exoneura.
13. Wing of Exoneura.
14. Tongue of Leiopodus.
15. Maxilla of Leiopodus.
16. Wing of Leiopodus.
17. Tongue of Crocisa.
18. Maxilla of Crocisa.
19. Wing of Crocisa.

x 2
EXPLANATION OF THE PLATES.

PLATE X.

Fig.
1. Tongue of Liogastra.
2. Maxilla of Liogastra.
3. Wing of Liogastra.
4. Tongue of Euritis.
5. Maxilla of Euritis.
6. Calcar or spur of the posterior tibiae of Euritis.
7. Labrum of Euritis.
8. Wing of Euritis.
9. Tongue of Melissa.

Fig.
10. Maxilla of Melissa.
11. Spur of the intermediate tibiae.
12. Wing of Melissa.
13. Tongue of Mesocheira.
15. Spur of intermediate tibiae.
16. Wing of Mesocheira.
17. Wing of Acanthopus.

PLATE XI.

1. Tongue of Thalestria.
2. Maxilla of Thalestria.
3. Wing of Thalestria.
4. Labrum of Thalestria.
5. Tongue of Ctenioschelus.
7. Maxillary palpus of Ctenioschelus.
8. Antennæ of Ctenioschelus.
9. Wing of Ctenioschelus.

10. Spur of intermediate tibiae of Ctenioschelus.
11. Tongue of Aglae.
12. Maxilla of Aglae.
13. Wing of Aglae.
14. Wing of Meleett.
15. Wing of Crocisa.
16. Wing of Phileremus.
17. Wing of Ammobates.
18. Wing of Pasites.

PLATE XII.

1. Tongue of Osiris.
2. Wing of Osiris.
3. Labrum of Osiris.
4. Apex of the abdomen of Osiris, anal valve and aculeus.
5. Maxilla of Osiris.
6. Antennæ of Osiris.
7. Maxilla of Xenoglossa.
8. Wing of Xenoglossa.
10. Tongue of Habropoda.

11. Wing of Habropoda.
12. Tongue of Lestis.
13. Maxilla of Lestis.
15. Wing of Lestis.
17. Labrum of Dioxys.
18. Wing of Dioxys.
21. Wing of Epicharis.
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THE END.

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HYMENOPTERA.

Pl. X.
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