

4-1-1864

## Descriptions of several new species of North American Apidae

Ezra Townsend Cresson

Follow this and additional works at: [https://digitalcommons.usu.edu/bee\\_lab\\_co](https://digitalcommons.usu.edu/bee_lab_co)



Part of the [Entomology Commons](#)

---

### Recommended Citation

Cresson, Ezra Townsend, "Descriptions of several new species of North American Apidae" (1864). Co. Paper 391.

[https://digitalcommons.usu.edu/bee\\_lab\\_co/391](https://digitalcommons.usu.edu/bee_lab_co/391)

This Article is brought to you for free and open access by the Bee Lab at DigitalCommons@USU. It has been accepted for inclusion in Co by an authorized administrator of DigitalCommons@USU. For more information, please contact [digitalcommons@usu.edu](mailto:digitalcommons@usu.edu).



for this species was taken from specimens so named in the Harrisian Collection at Boston.

33. *O. vicina*, n. sp.

*Male*.—Head large, as wide as the thorax, green, finely and closely punctured, clothed especially in front with long pale yellowish pubescence; mandibles black, shining, deeply bifid at tip; antennæ black, nearly as long as the thorax. Thorax bronze-green, closely and finely punctured, rather densely clothed with long yellowish pubescence; tegulæ black, shining. Wings hyaline, apical margins faintly clouded; nervures pale fuscous. Legs green, clothed with pale pubescence; tarsi beneath with yellowish pubescence, the apical joints rufous. Abdomen elongate, rather broader posteriorly, dull bronze-green, closely, finely and confluent punctured, clothed above with pale yellowish pubescence, which is long on the basal segments and more dense on the apical margin of the remaining segments, especially the terminal ones; apical margin of the sixth segment slightly reflexed, obtusely notched in the middle, and entire laterally; apical segment bidentate; beneath, the ventral segments are flat and tinged with blue. Length  $3\frac{1}{4}$  lines.

*Hab*.—Virginia. Coll. Entom. Soc. Philadelphia.

Allied to the preceding, but more elongate, not so robust, and entirely of a different color.

Descriptions of several new species of North American APIDÆ.

BY E. T. CRESSON.

Genus *EPEOLUS*, Latr.

1. *Epeolus bifasciatus*, n. sp.

*Male*.—Black, opaque. Head rather coarsely and confluent punctured, clothed about the insertion of the antennæ with appressed whitish pubescence; antennæ short, black, shining, the three basal joints, as well as the labrum and mandibles, rufous. Thorax deeply, roughly and confluent punctured, the punctures much coarser than those of the head; the tubercles, tegulæ and scutellum rufous, the latter having the lateral teeth prominent and subacute; anterior margin of the mesothorax rufous and clothed with dense, scale-like, ochraceous pubes-

cence, as well as the margin beneath the scutellum; metathorax thinly clothed with short ochraceous pubescence; pleura shining. Wings fusco-hyaline, darker towards the tip and having a strong æneous or violaceous reflection; there is also a pale spot about the third submarginal cell; posterior wings hyaline at base. Legs rufous, the posterior coxæ and femora beneath and the tibial spurs and tarsal claws, black. Abdomen rather short, minutely punctured, the apical segments and the sides of the two basal segments clothed with very short cinereous pubescence; base of the first segment above with a broad band of ochraceous, scale-like pubescence which extends posteriorly on each side of the segment and is deeply indented on the disk in front; in a specimen where the pubescence is rubbed off, the surface is more or less rufous; posterior margin of the second segment above with a rather broad band of ochraceous, beneath which the surface is also sometimes rufous; the apical segment narrow and rounded at tip, the margins reflexed; beneath sparsely clothed with short cinereous pubescence, the apical segments with longer yellowish pubescence. Length  $3\frac{1}{4}$  lines.

*Hab*.—Illinois (Mr. Walsh and Dr. Lewis). Two specimens. (Coll. Ent. Soc. Philadelphia.)

Genus *STELIS*, Panz.

2. *Stelis montana*, n. sp.

*Female*.—Head subtransverse, narrower than the thorax, densely and rather strongly punctured, dark olive-green, shining, clothed with black pubescence; anterior margin of the clypeus truncate; antennæ black, the scape tinged with green. Thorax densely and strongly punctured, dark olive-green, shining, clothed with rather long black pubescence, which is more dense beneath the wings; the mesothorax in front with a finely impressed longitudinal line, and on each side just above the tegulæ a short impressed longitudinal line; metathorax tinged with deep blue; tegulæ dark blue, closely punctured, shining. Wings subhyaline, costal half of the marginal cell fuscous; nervures black. Legs dark bluish-green, punctured, clothed with blackish pubescence. Abdomen subglobose, rather wider posteriorly, densely, strongly and confluent punctured, dark olive-green, shining, clothed above and beneath with rather sparse, short, black pubescence. Length 4 lines.

*Hab.*—Rocky Mountains, Colorado Territory. One specimen. (Coll. Ent. Soc. Philadelphia.)

This species probably belongs to the genus under which it is placed, as the maxillary palpi have but two joints, and the wings have the second recurrent nervure received a little beyond the apex of the second submarginal cell. The general appearance is similar to an *Osmia*, but the head is narrower than the thorax and the abdomen is without a ventral scopa.

Genus **XYLOCOPA**, Fabr.

3. *Xylocopa californica*, n. sp.

*Female.*—Head large, as wide as the thorax, black, slightly tinged with blue and green, especially on the cheeks, sparsely clothed with short black pubescence, that on the lower portion of the cheeks much longer; face flat, closely and confluent punctured, the punctures on the vertex stronger, those on the cheeks sparse; on each side of the face a deeply impressed longitudinal line commencing at the insertion of each antenna and ending on the lateral margin of the clypeus; on the middle of the clypeus a short, smooth, slightly elevated, longitudinal line, anterior margin truncate, smooth and polished; anterior margin of the labrum smooth, polished, with a small, square, emarginate process in the middle; mandibles smooth, polished, with a small patch of punctures near their base, the outer and inner margins channelled, the apex obtuse and slightly emarginate; the extreme lower orbits of the eyes, at the base of the mandibles, flattened, smooth and polished. Thorax clothed with rather dense black pubescence, closely and deeply punctured, except the disk above which is smooth, polished and without pubescence; beneath bluish-green, above black and on each side of the disk between the wings, where the surface is punctured, it is iridescent; middle of the mesothorax in front with a finely impressed longitudinal line which becomes obsolete before reaching the posterior margin; scutellum closely punctured, golden-green. Legs bluish-green, clothed with black pubescence. Abdomen dark-green, with a blue and purple reflection, polished, sparsely punctured, the sides of the apical segments more closely and deeply punctured; disk of the apical segment with two oblique pubescent carinae, meeting posteriorly and diverging anteriorly; this segment, as well as the fifth, fringed with

long, dense black, pubescence; beneath bluish-green, sparsely clothed with black pubescence. Length 11 lines.

*Hab.*—Fort Crook, California. Mr. Henry Ulke. (Coll. Ent. Soc. Philadelphia.)

Genus **BOMBUS**, Latr.

4. *Bombus consimilis*, n. sp.

*Female.*—Head black, with a tuft of yellowish pubescence on the vertex. Thorax entirely pale yellow, sometimes slightly tawny. Wings subhyaline, darkest along the apical margin. Legs black, with black hairs, those on the femora beneath more or less mixed with yellow; tarsi rufous within. Abdomen short, subglobose, the two basal segments pale yellow, sometimes slightly tawny; the apical segments black. sometimes the two apical segments are more or less mixed with yellowish; beneath black. Length 8—9 lines.

*Hab.*—Canada, New York, Massachusetts. Eight specimens. (Coll. Ent. Soc. Philadelphia.)

Colored same as *B. vagans* Smith, but is much smaller and more robust in proportion to the size. Mr. T. B. Ashton collected a number of this species, all females, early in the spring, in Northern New York, together with females of *B. vagans*, *fervidus*, *borealis*, *virginicus*, *pen-sylvanicus*, *separatus*, and *terricola*.

5. *Bombus centralis*, n. sp.

*Female.*—Head black, with a tuft of yellowish hairs above and below the antennae and on the vertex. Thorax yellow above and on the sides, with a broad black band between the wings. Wings subhyaline, stained with fuscous, especially along the costa. Legs black, with black hairs; tarsi rufous within. Abdomen with the two basal segments yellow, with a rather large black patch on the disk above; the third and fourth segments pale orange-yellow; the apical segments black; beneath clothed with short yellowish pubescence. Length 8 lines.

*Hab.*—Fort Crook, California. One specimen. Mr. H. Ulke. (Coll. Ent. Soc. Philadelphia.)

Closely resembles *B. flavifrons* Cresson, but is rather more robust, and may be at once distinguished from that species by the black patch on the disk of the two basal segments of the abdomen above.

6. *Bombus borealis*, Kirby.

In my list of the N. A. species of *Bombus* (*Proc. Ent. Soc. Philad.*

II, p. 93), I referred to this species, with some doubt, a single ♀ specimen from Canada; since then I have received, through the kindness of Mr. William Saunders and Mr. T. B. Ashton, a fine series (♀, ♂ and ♂) of the true *borealis* of Kirby. The characters of this fine species are as follows:—

*Female*.—Head black, with the face and vertex clothed with pale yellowish pubescence, slightly tawny on the vertex. Thorax above densely clothed with bright tawny-yellow pubescence, with a broad black band between the wings; beneath entirely black. Wings fusco-hyaline, darkest along the apical margin. Legs black, tarsi pale without, rufous within. Abdomen above with the four basal segments clothed with bright tawny-yellow pubescence, the two apical segments black; beneath black. Length 8—9 lines.

*Worker*.—Colored same as the female. Length 6 lines.

*Male*.—Like the female and worker, except that the antennæ are as long as the thorax and setaceous, the sides of the thorax and the femora beneath are sometimes mixed with yellowish, the three apical segments of the abdomen above are more or less mixed with yellow and the last segment is tufted, the ventral segments are clothed with short pale yellowish pubescence. Length 7—8 lines.

*Hab*.—Canada (Saunders) and New York (Ashton). Coll. Ent. Soc. Philadelphia.

The males have much the appearance of some of the ♂ varieties of *Apathus elatus* Fabr., but they do not belong to that genus.

The single ♀ specimen which I supposed to be identical with this species, differs from the ♀ above described by having the abdomen above tawny-yellow, except the last segment which is black, and the ventral segments are clothed with short pale pubescence. It may be only a variety, and for the present it is probably best to consider it as such.

Genus *APATHUS*, Newm.

7. *Apathus Ashtoni*, n. sp.

*Female*.—Head entirely black. Thorax clothed above with pale yellowish, and beneath with black pubescence, on the disk above between the wings there is a mixture of black hairs and the scutellum is sometimes altogether black. Wings fusco-hyaline, darker along the apical margin. Legs black, with black hairs, tarsi within rufous, the apical

joints exteriorly pale rufous. Abdomen black, smooth and shining, the posterior margin of the third segment above, broader laterally, the whole of the fourth and the extreme sides of the fifth segment densely clothed with yellowish pubescence, the remaining segments rather sparsely clothed with black pubescence; apical segment smooth and shining, without pubescence; in one specimen the basal segment above has a mixture of fuscous pubescence; beneath black. Length 8—9 lines.

*Hab*.—New York (Ashton); Maine (Packard); Canada (Saunders). Coll. Ent. Soc. Philadelphia.

Allied to *A. insularis* Smith. Mr. Packard informs me that there is a specimen of this species in the Harrisian Collection taken in Massachusetts. I have dedicated this fine species to my friend Mr. T. B. Ashton, of Washington Co., New York, who was the first to communicate it to me. I have not seen the ♂.

STATED MEETING, MAY 9.

President BLAND in the Chair.

The Secretary read a letter from Mr. John Kirkpatrick of Cleveland, Ohio, transmitting to the Society pupæ of *Eudryas unio* in stems of *Hibiscus militaris*, which is abundant in wet swamps. Mr. K. says:—

"The first time I found the pupæ was last spring (1863) in pieces of stem washed ashore. Last winter I visited the locality on the ice and found nearly all the dead stems of the above plant burrowed by the larvæ, and containing pupæ. In the burrows of the *Eudryas*, a friend of mine found a few pupæ of a dipterous insect and much resembling the pupæ of the Tachinæ that destroys the army worm. For many days last fall, there was a constant stream of butterflies passing over this city; occasionally hundreds would be seen at once, at other times only a few. They were all of one species—*Danaïs archippus*. Its food-plant is abundant here. The larva of *Sesia diffinis* feeds on the leaves of the Snowberry (*Symphoricarpos racemosus*) and also on those of the upright Honeysuckle (*Lonicera tartarica*) in gardens. Neither Dr. Harris or Dr. Clemens observed this. Three or four years ago I caught a specimen of *Argynnis columbina* on the Cuyahoga flats, and within half a mile of this city. I have compared it with specimens from Florida, in the Cabinet of Prof. J. P. Kirtland, and it in no wise differs from them. This is the only time, to my knowledge, it has been seen so far north. *Papilio cressphontes* was occasionally found here, but not since the cold winter of 1856-7."