

SYNOPSIS OF THE NORTH AMERICAN SPECIES OF GORYTES Latr.

BY WILLIAM J. FOX.

GORYTES Latreille.

Gorytes Latreille, Hist. Nat., XIII, p. 308, 1805.*Hoplisus* Lepeletier de St. Fargeau, Ann. Soc. Ent. France, I, p. 56, 1832.*Euspongus* Lepeletier de St. Fargeau, *ibid.**Dienoplus* Fox, Proc. Acad. Nat. Sci., Phila., p. 549, 1893.

For the full synonymy of this genus see Handlirsch's monograph.*

FEMALES.

- Antennæ strongly clavate. (Eyes large, strongly convex and strongly converging toward clypeus; tarsi graceful and long; mesosternum not carinated.) *moneduloides*.
- Antennæ not strongly clavate 2
2. First segment of abdomen coarctate at apex 3
- First segment of abdomen not coarctate, sessile or subpetiolate 5
3. First recurrent nervure received by the first submarginal cell; wings hyaline throughout; submedian cell (anal area) of posterior wings terminating *much* before the origin of the cubital nervure; size small *bipunctatus*.
- Both recurrent nervures received by the second submarginal cell; wings with a fuscous cloud; submedian cell (anal area) not or terminating but little before the origin of the cubital nervure; size larger 4
4. Enclosure of middle segment striated at base only; head, thorax, abdomen and legs spotted with yellow . . *mellinoides*.
- Enclosure of middle segment striated throughout; entirely black, except the second abdominal segment which is rufous *rufocinctus*.
5. Wings clear, without the usual fuscous spot 6
- Wings more or less fuscous, always with a cloud in the vicinity of the marginal and submarginal cells 8
6. First abdominal segment subpetiolate, the apical margins of all the segments broadly clothed with pale pubescence. *eximius*.
- First abdominal segment sessile 7

* Sitzungsberichte der k. k. Akademie der Wissenschaften, Wien, Mathematisch-naturwissenschaftliche Classe, Abtheilung I, XC VII Bd., p. 317.

- 7. Submedian cell of posterior wings terminating *much* before the origin of the cubital vein; thorax and legs black, not spotted; abdomen reddish in greater part, not marked with yellow; enclosure of middle segment striated basally. *pictifrons*.
- Submedian cell of posterior wings not, or but slightly, terminated before the origin of the cubital vein; thorax and legs spotted with pale yellow; hind femora and two basal segments of abdomen, reddish, the abdominal segments above with pale yellow on their apical margins; enclosure of middle segment striated throughout *Coquillettii*.
- 8. Second ventral segment not at all angular 12
- Second ventral segment prominently angular 9
- 9. Middle segment coarsely rugose throughout 11
- Middle segment not rugose, the furrow forming the enclosure broad, crossed longitudinally by coarse ridges; flagellum subclavate (third segment not fasciate; second ventral with very large punctures toward the base) *nigrifrons*.
- 10. Palpi dark; fourth dorsal abdominal segment without a fascia, or with a very short one *mystaceus*.
- Palpi in part yellow; fourth dorsal segment with a complete fascia *campestris*.*
- 11. Eyes converging but little toward the clypeus 12
- Eyes distinctly converging toward the clypeus 20
- 12. At the most the middle segment and first segment of abdomen rufous; space between base of clypeus and fore ocellus as broad, or nearly so, as long 13
- Entirely rufous, with yellow markings, the yellow bands of abdomen unusually broad; middle segment yellow; space between base of clypeus and anterior ocellus distinctly longer than broad *diversus*.
- 13. Middle segment and first segment of abdomen more or less reddish 14
- Middle segment and first segment of abdomen not reddish . . 15
- 14. Last dorsal segment with a well-developed pygidial area which is subtriangular and rugose; second discoidal cell with apical portion dark fuscous; legs variegated with red, black and yellow *spilopterus*.
- Last dorsal segment with the pygidial area poorly developed, short and broad, strongly punctured; second discoidal cell pale fuscous except its lower portion; legs red, with the tibiae yellow in part *tricolor*.

* According to Handlirsch, the second ventral segment of *mystaceus*, toward the base, is marked with deep foveæ, while in *campestris* that segment has only larger punctures toward the base. According to the specimens before me, consisting of a ♂ and ♀ of *mystaceus* and a ♂ *campestris*, this statement should be reversed as *campestris* has the deep foveæ and *mystaceus* the punctures.

15. Last dorsal segment yellow 16
 Last dorsal segment black 17
16. Legs black; first dorsal segment not fasciate *fuscus*.
 Legs reddish, except base; first dorsal segment fasciate. *pygidialis*.
17. Mesosternum anteriorly sharply and strongly carinated;
 pygidium broad, not more than twice as long as its width
 in the middle 18
 Mesosternum anteriorly neither sharply nor strongly cari-
 nated; pygidium long, narrow, somewhat more than twice
 as long as its width in the middle (form very robust) . *costalis*.
18. No distinct fuscous cloud in the second discoidal cell; front
 distinctly longer than broad; coxæ and trochanters reddish,
 rarely obscure 19
 A distinct fuscous cloud filling the apical third of second dis-
 coidal cell; front fully as broad as long; coxæ, trochanters
 and femora in part, obscure *nebulosus*.
19. Wings, excepting the usual fuscous cloud in the vicinity of
 the marginal cell, hyaline; enclosure of middle segment
 with 14-16 close-set ridges *confertus*.
 Wings fuscous, the cloud in the vicinity of the marginal cell
 darker; enclosure of middle segment with 10-12 well-
 separated ridges *denticulatus*.
20. Middle segment more or less coarsely sculptured 21
 Middle segment not coarsely sculptured, smooth 30
21. Posterior surface of middle segment coarsely sculptured 22
 Only the basal enclosure of middle segment coarsely sculp-
 tured entirely or in part 27
22. Wings with a strong yellow tinge on basal two-thirds 23
 Wings not yellow basally 25
23. Sculpture of enclosure of middle segment consisting of even,
 radiating ridges; flagellum either entirely black, or with
 basal joints reddish 24
 Sculpture of enclosure of middle segment coarsely and irregu-
 larly rugose; flagellum yellow beneath, black above (mark-
 ings bright yellow; first joint of flagellum distinctly shorter
 than the two following united) *asperatus*.
24. Flagellum long, scarcely clavate, the first joint distinctly
 shorter than the two following united; clypeus entirely
 black; markings yellow *atrifrons*.
 Flagellum short, subclavate, the first joint but little longer
 than the following two united; clypeus whitish basally;
 marking whitish *albosignatus*.
25. Femora, except apex, and the tibiæ in part, black; flagellum
 yellow beneath, black above 26
 Femora in greater part, tibiæ and tarsi, reddish; flagellum
 black, basal joints reddish (middle segment with two large
 yellow spots) *decorus*.

26. Flagellum long, setaceous; scape elongate much more than twice as long as broad at apex; middle segment with two yellow spots *atricornis*.
 Flagellum shorter, a little clavate; scape short but little more than twice as long as its width at apex, middle segment not spotted *canaliculatus*.
27. Extreme base of enclosure of middle segment only striated . . . 28
 Entire enclosure covered with striæ 29
28. Wings scarcely yellow the stigma testaceous; markings palish yellow; dorsal segments 4 and 5 impunctate *simillimus*.
 Wings with a tolerably yellow tinge, the stigma yellow; markings bright yellow; dorsal segments 4 and 5 with scattered punctures *angustatus* var.
29. Antennæ with the flagellum distinctly thickened apically, yellowish beneath, at least basally *angustatus*.
 Antennæ slender, the flagellum setaceous, obscure testaceous beneath *nevadensis*.
30. Dorsal segments 4 and 5 impunctate 31
 Dorsal segments 4 and 5 with distinct, scattered punctures . . . 35
31. Suture between dorsulum and scutellum foveolate 32
 Suture between dorsulum and scutellum not foveolate *phaleratus*.
32. Wings, in greater part, dark fuliginous 33
 Wings yellow ferruginous *venustus*.
33. Wings clear at apex; first two segments almost entirely yellow *abdominalis*.
 Wings entirely fuliginous; only the first segment spotted with yellow 34
34. Head and thorax black, ornamented with yellowish; clypeus black; first dorsal segment entirely yellow *Smithii*.
 Head and thorax reddish-brown, including the clypeus; first segment yellow at apex, otherwise colored like thorax. *floridanus*.
35. Wings subfuscous; clypeus entirely yellow; middle segment entirely black, pygidial area with sparse, shallow punctures *bipartitus*.
 Wings hyaline, the marginal cell excepted; clypeus with base only yellow; middle segment with two rufous spots; pygidial area with deep, closer punctures . . . *rufomaculatus*

MALES.

- Antennæ strongly clavate; hind tarsi unusually long and graceful *moneduloides*.
 Antennæ not strongly clavate; hind tarsi not unusually long . . . 2
2. First segment of abdomen coarctate at apex (abdomen black, the second and third dorsal segments with a lateral pale spot) *bipunctatus*.
 First segment not coarctate, sessile or subpetiolate 3

3. Submedian cell of posterior wings terminating before the origin of the cubital vein 4
 Submedian cell of posterior wings not terminating before the origin of the cubital vein 8
4. Second ventral segment prominently angular 6
 Second ventral segment not angular 5
5. First abdominal segment subpetiolate, apical margins of the segments broadly margined with pale pubescence; antennæ short *eximius*.
 First abdominal segment sessile, the abdomen red in part, not pubescent; antennæ long, slender *pictifrons*.
6. Middle segment coarsely rugose throughout 7
 Middle segment not rugose, the furrow forming the enclosure wide, crossed longitudinally by strong ridges; antennæ shorter than head and thorax, joints 2-6 of flagellum strongly rounded-out beneath *nigrifrons*.
7. Antennæ very long; palpi obscure *mystaceus*.
 Antennæ shorter; palpi in part yellow *campestris*.*
8. Middle segment more or less coarsely sculptured 9
 Middle segment not coarsely sculptured, smooth 31
9. Dorsulum strongly punctured 10
 Dorsulum not strongly punctured 20
10. First abdominal segment subpetiolate; last ventral segment bifid 19
 First abdominal segment not subpetiolate 11
11. Fifth ventral abdominal segment armed with a strong prominence at each side. (See fig. 1.) *confertus*.
 Fifth ventral segment unarmed 12
12. Mesosternum dentate laterally (entirely red, with pale markings) 13
 Mesosternum not dentate 14
13. Middle segment not at all yellow; abdominal fasciæ narrow; fuscous cloud of fore wings not extending beyond the apex of marginal and third submarginal cells *dentatus*.
 Middle segment yellow in greater part; abdominal fascia unusually broad; fuscous cloud of fore wings extending to apex of wing *diversus*.
14. Eighth and ninth joints of flagellum spinose beneath 16
 Eighth and ninth joints of flagellum not spinose, at the most tuberculate 15
15. Enclosed space on middle segment smooth; middle segment and first and last abdominal segments more or less red; legs entirely red *tricolor*.
 Enclosed space on middle segment distinctly striated; middle

* See foot note, p. 518.

- segment and first abdominal segment not red, the last segment yellow *pygidialis*.
16. Clypeus with a bunch of long, curved hairs in each angle . . . 17
Clypeus with the hair at angles not very long, not curved or bunched 18
17. Spine of ninth joint of flagellum large and distinct; head as wide as thorax; legs black and yellow *hamatus*.
Spine of ninth joint of flagellum small, indistinct; head small, narrower than thorax; legs red and yellow . . . *microcephalus*.
18. Wings fuscous, the cloud in the vicinity of the marginal cell darker; middle segment with two yellow spots . . *denticulatus*.
Wings, except the usual fuscous cloud in the vicinity of the marginal cell, subhyaline; middle segment not spotted *barbatulus*.
19. Wings entirely yellowish, the marginal cell scarcely darker; antennæ entirely rufous. Length 11 mm *laminiferus*.
Wings slightly yellowish basally, the marginal cell distinctly fuscous; antennæ dark above *mirandus*.
20. Last ventral segment emarginate or bifid, flagellum rather short, the last four joints enlarged, somewhat emarginate beneath (wings without a fuscous cloud) *insolitus*.
Last ventral segment with a spine or process 21
21. Posterior surface of middle segment coarsely sculptured . . . 22
Only the basal enclosure of middle segment coarsely sculptured 27
22. Eyes very broad, their width equalling more than half their length, the space between them at base of clypeus about equal to the length of the latter in the middle; enclosure of middle segment irregularly rugose *asperatus*.
Eyes as usual, their width scarcely equalling half their length, the space between the eyes at base of clypeus greater than the length of the latter in the middle; enclosure of middle segment longitudinally ridged 23
23. Wings with a strong yellow tinge on basal portion 24
Wings not, or but slightly, yellow basally 25
24. Antennæ tolerably long, reaching a little beyond the scutellum; markings bright yellow *atrifrons*.
Antennæ shorter, not reaching beyond the scutellum; markings whitish *albosignatus*.
25. Antennæ a little thickened apically, the joints irregular (legs black and yellow) *canaliculatus*.
Antennæ not thickened apically, the joints more even 26
26. Femora except apex and tibiæ in part yellowish; dorsulum unspotted *atricornis*.
Femora, in greater part, tibiæ and tarsi, reddish; dorsulum with a lateral stripe or spot *decorus*.
27. Only the base of the enclosure of middle segment with striæ . . 28
The entire surface of enclosure of middle segment striated . . . 29

28. Flagellum not thickened apically; wings scarcely yellowish.
 *simillimus*.
 Flagellum thickened apically, wings yellowish basally.
 *angustatus* var.
29. Wings distinctly yellowish; femora entirely yellow beneath. . . 30
 Wings scarcely yellowish; femora black basally beneath.
 *simillimus* var.
30. Flagellum thickened apically *angustatus*.
 Flagellum setaceous *nevadensis*.
31. Dorsal segments 4 and 5 impunctate 32
 Dorsal segments 4 and 5 with distinct, scattered punctures . . . 36
32. Suture between dorsulum and scutellum foveolate 34
 Suture between dorsulum and scutellum not foveolate 33
33. Flagellum rather long, the joints about twice as long as broad,
 prominently rounded-out beneath; wings with a yellowish
 cast *phaleratus*.
 Flagellum shorter, somewhat subclavate, the joints (basal
 ones excepted) not twice as long as broad, not rounded-out
 beneath; wings black, apex pale *propinquus*.
34. Wings in greater part dark fuliginous 35
 Wings yellow, ferruginous *venustus*.
35. Wings clear at apex; middle segment spotted with reddish.
 *abdominalis*.
 Wings entirely fuliginous (head and thorax black) . . . *Smithii*.
36. Antennæ rather long, reaching at least to apex of scutellum. . . 37
 Antennæ shorter, not reaching to apex of scutellum, subclav-
 ate (middle segment spotted with rufous) . . . *rufomaculatus*.
37. Abdomen with very broad fasciæ; middle segment spotted
 with yellow; basal joints of flagellum reddish . . . *fasciatus*.
 Abdomen with narrow fasciæ; middle segment not spotted;
 basal joints of flagellum black above *bipartitus*.

1. *Gorytes moneduloides* Pack.

Gorytes moneduloides Packard, Proc. Ent. Soc., Phila., VI, p. 424. ♂.
Gorytes Belfragei Cresson, Trans. Am. Ent. Soc., IV, p. 224. ♀

Georgia, Louisiana, Texas. A ♀ specimen, from Mexico, differs by the dark legs, absence of yellow spots of scutellum, and the band of first dorsal abdominal segment is broken into two spots.

2. *Gorytes bipunctatus* Say.

Gorytes bipunctatus Say, Narr. Exped. St. Peter's River (Keating) II, Zool., p. 338.
Lesliophorus bipunctatus Dahlbom, Hym. Eur., I, p. 157.
Euspongus bipunctatus Dahlbom, ibid., p. 480; Cresson, Synopsis, p. 117.
Gorytes bipunctatus Handlirsch, Sitzb. k. k. Akad. Wissensch., Wien, Mathem.-naturw. Classe, Abth. I, Band XCVII, p. 355, ♀

Found throughout the United States, except in the States north and northeast of Pennsylvania. The male is similar to the female,

being marked the same. It agrees with the group characters given by Handlirsch, on p. 347 of his work, except that the first recurrent vein is received by the second submarginal cell, instead of the first as in the female.

The spots on the second abdominal segment are occasionally absent, or enforced by the presence of an additional pair on the third segment.

3. *Gorytes rufocinctus* Fox.

Gorytes rufocinctus Fox, Can. Ent., 1892, p. 153, ♀

Washington State. This may be the female of *piceus* Hdl., which I have not seen.

4. *Gorytes piceus* Hdl.

Gorytes piceus Handlirsch, l. c., p. 455, ♂

British Columbia. Unknown to me and may be the ♂ of *rufocinctus*. The face, antennæ and legs are said to be more or less yellow, and the second dorsal laterally and the second ventral rufobrunneous.

5. *Gorytes mellinoides* n. sp.

♀.—Eyes diverging toward the clypeus, the latter convex, its anterior margin a little incurved medially; antennæ long, slender, the first joint of flagellum longer than the scape and pedicellum united; suture between dorsulum and scutellum foveolate; mesosternum carinated anteriorly, with the epimerum and episternum of the mesothorax not separated; middle segment with the enclosure well marked, and large, divided by a central furrow and longitudinally striated on basal third, otherwise finely punctured; wings clear, a slight fuscous cloud including part of the marginal, second submarginal and part of third discoidal cells, nervures and stigma testaceous, submedian cell of posterior wings terminating at, or slightly before, the origin of the cubital vein; legs with the medial and hind tibiæ spinose, the anterior tarsi with a distinct comb, pulvilli distinct; abdomen with first segment distinctly coarctate at apex, second segment much broader, sides rounded, pygidial area coarsely and sparsely punctured, not distinctly ridged laterally, second ventral strongly punctured. Black; clypeus, except apical margin and a basal spot, inner orbits, spot between antennæ, scape, pedicellum and first flagellum joint basally beneath, line on pronotum and scutellum, the fore and medial coxæ, trochanters and femora

beneath, spot at each side of first dorsal segment, an oblique spot on each side of the second, apical margin of the third dorsal and second ventral, all yellow; flagellum beneath, tegulæ and greater part of legs testaceous. Length 9 mm.

Texas (Belfrage). Collection of U. S. National Museum.

6. *Gorytes mystaceus* Linné.

Sphex mystacea Linné, Fauna Suecica, p. 412.

Gorytes mystaceus Handlirsch, l. c., p. 367, pl. II, f. 15; pl. III, f. 6, ♀ ♂.

For full synonymy see Handlirsch, l. c.

Handlirsch records this species from America. I have only seen European examples.

7. *Gorytes campestris* Müll.

Vespa campestris Müller, Linne's Natursystem, V, II, 883.

Gorytes campestris Handlirsch, l. c., p. 372, ♀ ♂, pl. I, f. 1, 25, 28; pl. II, f. 14. For full synonymy see this author.

Also recorded from North America by Handlirsch. I doubt the occurrence of either *mystaceus* or *campestris* in America, the specimens seen by Handlirsch being very likely labelled erroneously.

8. *Gorytes nigrifrons* Smith.

Gorytes nigrifrons Smith, Cat. Hym. B. M., IV, p. 368, ♀

Gorytes Bollii Cresson, Tr. Am. Ent. Soc. IV, p. 225 ♀

Gorytes nigrifrons Handlirsch, l. c., p. 376.

Nova Scotia (Smith); North Carolina, in Collection of U. S. Nat'l Museum; Texas. Through the courtesy of Mr. Samuel Henshaw, I have examined the type of *G. Bollii* Cr., and find it agrees exactly with Smith's description of *nigrifrons*, which therefore corroborates Handlirsch's action in uniting the two, although he had seen specimens of neither. The wide furrow, which forms the enclosure of middle segment, distinguishes this species from any of its congeners, and by which character the ♂, heretofore unknown, may also be separated from either of the two preceding species.

9. *Gorytes fuscus* Tasch.

? *Gorytes vespooides* Smith, Ann. Mag. Nat. Hist. XII, p. 407, ♀ 1873.

Hoplilus fuscus Taschenburg, Zeitsch. f. d. ges. Naturw., p. 368, 1875.

Recorded from Connecticut by Handlirsch. Occurs in Mexico and Brazil. The ♂, which I have not seen, is said to be distinguished from its allies by its simple, non-emarginate, non-spinose or tuberculate antennæ, and by the first segment being not fasciate.

10. *Gorytes confertus* n. sp.

♀.—Eyes toward the clypeus very slightly converging; antennæ a little clavate, the scape longer than the pedicellum and first joint

of flagellum united, the latter joint much longer than the second; clypeus with anterior margin truncate, not barbate laterally; front strongly and sparsely punctured; dorsulum with large sparse punctures, those of the mesopleuræ less strong; suture between dorsulum and scutellum foveolate; episternum and epimerum mesothoracis indistinctly separated, the mesosternum sharply carinated anteriorly and laterally; middle segment posteriorly with large punctures, the enclosure rather large, well-marked, with 14-16 close-set, ridges or striæ; legs stout, the tibiæ spinose, fore tarsi with a strong comb; wings clear, except the usual fuscous cloud, which includes the marginal and part of the second and third submarginal cells, nervures brown, stigma yellowish, submedian cell of posterior wings terminating at the origin of the cubital vein; abdomen strongly punctured, particularly the second ventral segment, pygidial area with large, elongate punctures, ridged laterally. Black; clypeus, labrum, mandibles except apex, scape, flagellum beneath, inner and posterior orbits, sometimes a line across the vertex, line on pronotum, tubercles, spot behind them, scutellum, postscutellum sometimes, a broad fascia at apex of dorsal segments 1-5, and apex of second and third ventrals more or less, all yellow; legs, including coxæ, entirely reddish-testaceous. Length 8-8½ mm.

♂.—Resembles ♀ as to coloration but has a strong grayish sericeous reflection over the entire insect, and the tibiæ and tarsi are more or less yellow. Eyes strongly converging beneath; clypeus with a fringe of hairs on each side, anteriorly, which are not bunched, however; joints 8 and 9 of flagellum somewhat tumid beneath, otherwise the antennæ simple; fifth ventral segment developed into a distinct lobe on each side (see figure 1). Length 8 mm.

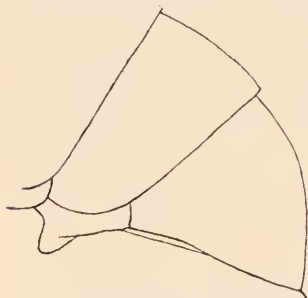


FIG. 1. Apical segments of abdomen, *G. confertus*, showing production of fifth ventral segment.

Montana. Is remarkable for the peculiar modification of the fifth ventral segment of the male.

11. *Gorytes tricolor* Cress.

Gorytes tricolor Cresson, Tr. Am. Ent. Soc., I, p. 380, ♂ (non ♀).

Gorytes tricolor Fox, Can. Ent., 1892, p. 149, ♀.

New Mexico; Colorado; Montana. The color of this species

varies from back with the middle segment red to entirely rufous. The yellow ornamentation is usually the same in both forms, however.

12. *Gorytes ruficornis* Prov.

Gorytes ruficornis Provancher, Add. Hym. Quebec, p. 273, ♀ ♂.

California (Provancher). Unknown to me. Seems to be near *tricolor*.

13. *Gorytes diversus* n. sp.

♀.—Eyes parallel within; front with shallow punctures; space between the fore ocellus and base of clypeus distinctly longer than wide; clypeus strongly convex in middle; antennæ rather longer than usual for species of this section, the flagellum but little thickened apically, its first joint more than one-third longer than the second, scape long and narrow, longer than the following two joints united; dorsulum, mesopleuræ and middle segment posteriorly with large, separated punctures; suture between dorsulum and scutellum foveolate; mesosternum carinated anteriorly, not laterally, the epimerum and episternum mesothoracis indistinctly separated; enclosure of middle segment well marked, with about 18 striæ; tibiæ and tarsi spinose, anterior tarsal comb well developed; wings with a fuscous cloud including the marginal, second and third submarginals and part of the third discoidal cells, a fuscous stain along the basal nervure, stigma yellowish, nervures black; abdomen strongly punctured, particularly ventrally, pygidial area with strong punctures, scarcely ridged laterally. Rufous; anterior and posterior orbits, the former narrowly, pronotum, greater part of mesopleuræ, scutellum, postscutellum, middle segment almost entirely, spot on medial and hind coxæ; dorsal segments of abdomen except extreme base of second and the last usually, and greater part of ventrals 2-4, or 5, all yellow; apical antennal joints fuscous. Length $8\frac{1}{2}$ -9 mm.

♂.—Colored like the ♀, except in the following points: clypeus, mandibles, inner orbits broadly, scape beneath, dorsulum at sides, and the legs, more or less, yellow; rufous on middle segment and abdomen more extended. Fuscous cloud reaching apex of wing; clypeus not barbate laterally; antennæ shorter and stouter, joints of flagellum rounded beneath, 8-10 subemarginate; eyes very slightly converging beneath; enclosure of middle segment smaller than in ♀, with about 14, rather feeble, striæ; mesosternum dentate laterally. Length 8 mm.

Los Angeles, California (Coquillett). In collection U. S. Nat'l Museum.

14. *Gorytes dentatus* Fox.

Gorytes dentatus Fox, Can. Ent., XXV, p. 116, ♂.

Grand Canōn, Arizona (Townsend). This species has no yellow on the middle segment, and the yellow markings of abdomen are narrow, wanting entirely on three last segments.

15. *Gorytes pygidialis* n. sp.

♀.—Eyes diverging slightly toward clypeus; the latter scarcely convex; front strongly punctured, with a strong central furrow; scape about as long as the following two joints united, flagellum somewhat thickened apically, the first joint about one-third longer than the second; dorsulum, mesopleuræ and middle segment with large separated punctures, closest on posterior face of middle segment whose enclosure is scarcely defined, with about 16 coarse ridges; mesopleuræ indistinctly carinated, epimerum and episternum mesothoracis indistinctly separated; tibiæ and tarsi strongly spinose, the anterior tarsi with a distinct comb; wings clear, except the fuscous cloud which includes the marginal, upper portion of second and third submarginals, thence extending to the basal nervure bordering the first submarginal and first discoidal cells; abdomen strongly punctured, pygidial area long and narrow, ridged laterally and with large punctures. Black; clypeus in part or entirely, mandibles except apex, scape more or less, inner and posterior orbits, basal joints of flagellum beneath and sometimes above, line on pronotum, tubercles, spot behind them, scutellum, postscutellum sometimes, femora and tibiæ in part, fascia at apex of segments 4-5, last segment entirely or in part and apical margin of ventrals of 2 and 3, or 4, more or less, yellow; the width of the fasciæ varies somewhat; legs reddish testaceous in greater part, basally obscure. Length 9-10 mm.

VAR.—Antennæ reddish-yellow; dorsal segments of abdomen except the base of 1 and 2, entirely yellow; a small yellow spot on each side of middle segment.

♂.—Eyes converging toward the clypeus but not strongly; clypeus barbate laterally, transverse; joints 2-7 of flagellum tumid beneath, the eighth and ninth submarginate; between the antennæ a short, distinct carina; mesosternum distinctly carinated, both anteriorly and at the sides. Length 8 mm.

Montana; Colorado (Snow); Las Cruces, New Mexico (Cockerell). The ♀ is very like *costalis*, but is smaller and has the last segment yellow. If the ♂ of *costalis*, when discovered, presents no better characters for distinction than those of the ♀, the two will probably have to be united.

16. *Gorytes costalis* Cress.

Gorytes costalis Cresson, Tr. Am. Ent. Soc., IV, p. 225, ♀.

Texas; Algonquin (Nason) and Peoria, Illinois. A specimen from St. Augustine, Florida (Johnson) has the legs entirely reddish testaceous, only the two first segments margined with yellow and the fuscous of the wings is much more extended than is usual. I am indebted to Mr. Henshaw for the opportunity of examining the type of this species.

17. *Gorytes hamatus* Hdl.

Gorytes hamatus Handlirsch, l. c., p. 403, ♂, pl. 2, f. 17.

Gorytes maculatus Provancher, Le Nat. Can. XXII, p. 140, ♀.

Texas (Belgrave); Colorado; Dakota; Montana; Washington State; Nevada; Los Angeles, California (Coquillett). This is a variable species—both in size and coloration. The middle segment is sometimes bispotted, and the legs may be yellow and black or the femora may be more or less reddish. The spine of the ninth antennal joint is much more distinct in some specimens than in others. Length 7–9 mm.

18. *Gorytes microcephalus* Hdl.

Gorytes microcephalus Handlirsch, l. c., p. 405, ♂.

Georgia (Handlirsch); Colorado. I have taken it in the latter part of June, in Camden County, New Jersey, but not commonly.

19. *Gorytes Pergandei* Hdl.

Gorytes Pergandei Handlirsch, l. c., p. 407, ♂.

Virginia and Illinois (Handlirsch). Unknown to me. The middle segment is said to be more coarsely sculptured posteriorly than in its allies, *microcephalus* and *barbatulus*, being “almost cicatricose.”

20. *Gorytes nebulosus* Pack.

Gorytes nebulosus Packard, Proc. Ent. Soc., Phila., VI, p. 424, ♀.

Massachusetts (Packard); New Jersey; Georgia. The front in this species is fully as broad as long, and the pygidium is broader than usual.

21. *Gorytes rugosus* Pack.

Gorytes rugosus Packard, l. c., p. 427, ♂.

Brunswick, Maine (Packard). Unknown to me. This will, no doubt, eventually prove to be the ♂ of *nebulosus*.

22. *Gorytes armatus* Prov.

Gorytes armatus Provancher, Add. Hym. Quebec, p. 272, ♂.

Ottawa, Canada (Provancher). Unknown to me. This species is said to have the mandibles spined near the base on "superior" margin. The occurrence of such a character in *Gorytes* is questionable; and it is not unlikely that Provancher has been misled by the lateral bunches of hair, with which the clypeus of the males of this section is furnished, and which frequently present a waxy appearance, thereby resembling a spine to some extent. The removal of this character from consideration suggests the uniting of *armatus* with *rugosus*.

23. *Gorytes barbatulus* Hdl.

Gorytes barbatulus Handlirsch, l. c., p. 408, ♂.

Illinois and Texas (Handlirsch); Agricultural College, Mississippi (H. E. Weed); District of Columbia. The female specimens, doubtfully referred to *barbatulus* by Handlirsch, belong to *denticulatus*.

24. *Gorytes denticulatus* Pack.

Gorytes denticulatus Packard, Proc. Ent. Soc., Phila., VI, p. 430, ♂ (non ♀).

Gorytes barbatulus (in pt.) Handlirsch, l. c., p. 410, ♀.

Florida; Georgia; Louisiana; Mexico. Handlirsch is right in assuming Packard's type to be a ♂, instead of a ♀, as I have examined the type. The middle segment may or may not be yellow-spotted, and the first abdominal segment is sometimes variegated with rufous. I have no doubt but that *denticulatus* is identical with *placidus*, which I have not seen.

25. *Gorytes placidus* Sm.

Gorytes placidus Smith, Cat. Hym. B. M. IV, p. 368, ♂ ♀.

Gorytes rufipes Smith, *ibid.*, p. 369, ♀.

Gorytes placidus Handlirsch, l. c., p. 530.

East Florida (Smith). Unknown to me. I fully agree with Handlirsch in uniting *placidus* and *rufipes*.

26. *Gorytes spilopterus* Hdl.

Gorytes spilopterus Handlirsch, l. c., p. 414, ♀, pl. I, f. 18.

Colorado; Nevada; Montana; Washington State.

27. *Gorytes pictifrons* Fox.

Dienoplus pictifrons Fox, Proc. Acad. Nat. Sci. Phila., 1893, p. 549. ♀ ♂.

Washington State. Seems to differ only from *mendicus* by having the enclosure of middle segment striated basally, a character liable to vary.

28. *Gorytes mendicus* Hdl.

Gorytes mendicus Handlirsch, Ann. k. k. naturh. Hofmuseums, VII, p. 278, ♀.

British Columbia (Handlirsch). Unknown to me.

29. *Gorytes Coquillettii* n. sp.

♀.—Eyes strongly converging toward the clypeus; the latter rounded behind, its anterior margin a little incurved; front with punctuation indistinct, apparently coriaceous; antennæ short, flagellum clavate, the first and second joints about equal in length, scape short and broad, longer, however, than the two following joints united; dorsulum and mesopleuræ finely and closely punctured; suture between dorsulum and scutellum foveolate; mesosternum not ridged, the epimerum and episternum mesothoracis separated; middle segment finely punctured, the enclosure large, well-defined and covered with about 16, oblique striæ, the central furrow rather broad; legs stout, tibiæ and tarsi spinose, the fore tarsi with a distinct comb; wings clear throughout, nervures and stigma black, submedian cell of hind wings terminating at the origin of the cubital vein; abdomen elongate, the segments not much constricted at the sutures, indistinctly punctured, finely so ventrally, pygidium with strong punctures, margined at the sides. Black; first three or four abdominal segments more or less, and hind femora, except base, reddish, antennæ beneath, clypeus, labrum, mandibles except apex, line on pronotum, tubercles, spot on scutellum, spot at apex of fore and medial femora, short stripe on the medial and hind tibiæ exteriorly, two transverse spots on apical margin of the first abdominal segment and a long, sinuate stripe on each side of the apical margin of segments 2–4, whitish-yellow; tarsi dark; front and dorsulum brownish tomentose, that on clypeus, sides of thorax and in particular the middle segment, silvery. Length 7 mm.

Los Angeles, California, in April (Coquillett). In collection of U. S. Nat'l Museum.

30. *Gorytes insolitus* n. sp.

♂.—Head rather large; eyes converging toward the clypeus; the latter large, most prominent anteriorly, anterior margin truncate, not barbate, front finely and closely punctured, without a median impressed line; antennæ tolerably stout, flagellum with joints 2-9 tuberculate beneath, particularly the sixth joint, from which joint the flagellum is suddenly thickened; scape short triangular; thorax finely and closely punctured, most strongly on mesopleuræ; metapleuræ striated; suture between dorsulum and scutellum foveolate; mesosternum ridged anteriorly; enclosure of middle segment large, well defined, the striæ coarse, not well marked; hind tarsi thick, scarcely spined, fore tarsi somewhat flattened; wings clear throughout, nervures and stigma black, submedian cell of hind wings terminating a little before the origin of cubital vein; abdomen short and broad, not constricted at the segments, finely punctured; ventrals 3-5 with a prominent transverse fringe of appressed yellow hair, last ventral bifid. Black; clypeus, labrum, mandibles except apex, spot between antennæ, sometimes wanting however, inner orbits, scape, flagellum beneath, line on pronotum, tubercles, a spot behind them, scutellum, dot on postscutellum, apex of femora more or less, tibiæ except within, fore and medial tarsi except last joint, a fascia at apex of segments 1-6, twice emarginate anteriorly and enlarged laterally, and apical margin of second ventral in part, sometimes, all yellowish; middle segment with silvery pubescence; hind tarsi dark. Length 6 mm.

Southern California; Nevada. The small size, stout form, and shape of antennæ easily distinguish this species.

31. *Gorytes gracilis* Patt.

Hoplisis gracilis Patton, Can. Ent., XI, p. 210, ♀.

Gorytes gracilis Handlirsch, l. c., p. 456, ♀ ♂.

Connecticut (Patton); Georgia (Handlirsch). Unknown to me.

32. *Gorytes mirandus* Fox.

Gorytes mirandus Fox, Can. Ent., XXIV, p. 152, ♂.

Nevada.

33. *Gorytes laminiferus* n. sp.

♂.—Eyes but little converging toward clypeus the latter convex, rather small, transverse; front with large, shallow punctures; antennæ long, scape broad, a little shorter than the following two joints united, flagellum thickest between middle and apex, first joint

longer than the second, joint 8 excised beneath, joints 9 and 10 much smaller, also excised beneath, the ninth indistinctly so, last joint rather long and slender; dorsulum and mesopleuræ with large, rather shallow punctures; mesosternum carinated laterally and anteriorly; epimerum and episternum mesothoracis distinctly separated; middle segment posteriorly cicatricose, its enclosure very strongly defined, the striæ coarse and rather irregular; legs long, tibiæ and tarsi spinose, fore femora formed into a broad lamina; wings yellowish, including nervures and stigma, submedian cell of posterior wings terminating at the origin of the cubital vein; abdomen with first segment long and narrow, subpetiolate as in *mirandus*, apical segments distinctly punctured, last ventral segment bifid. Black;

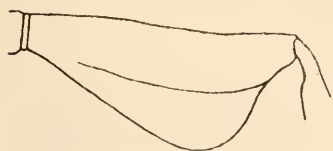


FIG. 2. Fore femur, *Gorytes laminiferus*.

antennæ entirely and base of wings rufous; clypeus, inner and posterior orbits, face below antennæ, labrum, mandibles except apex, line on pronotum, tubercles, long spot behind them, scutellum, postscutellum, spot on each side of middle segment, and a broad fascia at apex of dorsal seg-

ments 1-6 and ventrals 2-4, entirely yellow; last two ventrals reddish; legs variegated with reddish, yellow and black, abdomen tomentose. Length 11 mm.

Washington State. Apparently close to *gracilis*, but differs in the enclosure of middle segment being striated throughout, coarse punctures of dorsulum, yellow wings, etc. Handlirsch does not mention the anterior femur in his description of the ♂ of *gracilis*, and it is therefore likely that they are not laminate as in *mirandus* and *laminiferus*.

34. *Gorytes atrifrons* Fox.

Gorytes atrifrons Fox, Can. Ent., XXIV, p. 151, ♀ ♂.

Nevada.

35. *Gorytes albosignatus* Fox.

Gorytes albosignatus Fox., *ibid.*, p. 152, ♀ ♂.

Montana; Colorado (Gillette). The specimen from the latter locality, a ♀, measures but 7 mm. The basal spot of clypeus is sometimes divided.

36. *Gorytes geminus* Hdl.

Gorytes geminus Handlirsch, l. c., p. 478, ♀ ♂.

Virginia (Handlirsch). Unknown to me. The flagellum in both sexes is said to be entirely black, the ♀ thus being distinguished from both *atricornis* and *canaliculatus*. The ♂ has the flagellum joints about twice as long as broad, in which it agrees with *canaliculatus*, but differs thereby from *atricornis* ♂. *G. canaliculatus* (♂) has the flagellum beneath and two spots on middle segment yellow, whereas in *geminus* these parts are said to be black.

37. *Gorytes vicinus* Hdl.

Gorytes vicinus Handlirsch, Ann. k. k. naturh. Hofmuseums, VIII, p. 279, ♀.

Washington State (Handlirsch). Unknown to me. It is evidently close to *atricornis*; but the wings are said to be strongly tinged with yellow.

38. *Gorytes atricornis* Pack.

Gorytes atricornis Packard, Proc. Ent. Soc. Phila., VI, p. 428, ♀ ♂.

Canada; Maine; New Hampshire; Massachusetts; Washington State; Nevada. The middle segment may or may not be spotted.

39. *Gorytes canaliculatus* Pack.

Gorytes canaliculatus Packard, *ibid.*, p. 428, ♀.

Canada. The flagellum of the ♂ is shorter than in *atricornis* and is yellowish beneath, and the enclosure of middle segment has 15-16 even striae.

40. *Gorytes asperatus* n. sp.

♀.—Eyes toward the clypeus distinctly converging, about as in *canaliculatus*; scape short, stout, subtriangular, about as long as the following two joints united; flagellum evidently a little clavate [last seven joints missing], the first joint about one-third longer than the second; clypeus rather long, transverse, feebly convex, its posterior margin nearly straight; front finely and closely punctured, faintly impressed, thorax finely and closely punctured, suture between dorsulum and scutellum foveolate; mesosternum sharply ridged; middle segment coarsely rugose, except on the sides near the base, enclosure large, strongly marked, covered with irregular rugæ; legs stout, comb of fore tarsi distinct; basal two-thirds of wings yellowish, marginal cell fuscous, nervures dark, stigma yellow, submedian cell of hind wings terminating beyond the origin of the cubital vein; abdomen rather short and broad, finely punctured,

first segment not striated basally, pygidial area triangular, indistinctly margined at the sides, with large, sparse punctures. Black; clypeus except fore margin, labrum, mandibles except apex, inner orbits, antennæ beneath, line on pronotum, tubercles, spot behind them, scutellum, line on metanotum (postscutellum), small spot on each side of middle segment, femora at apex and anterior pair beneath, tibiæ except a spot within, tarsi except apical joints, a broad fascia on dorsal abdominal segments 1-5, and a spot on the apical margin of second ventral laterally, which at the extreme sides is enlarged and runs toward the base of the segment, all yellow. Length 8 mm.

♂.—Similar to the ♀ as the coloration, but the flagellum entirely black; eyes large strongly converging toward the clypeus, the space between them at the base of the latter about equal to half that at the vertex; clypeus but little shorter than broad; flagellum stout, a little thickened apically, the joints (first two excepted) about twice as long as broad, last joint a little longer than the preceding one; tibiæ and tarsi scarcely spinose, hind tarsi thickened; wings but slightly yellowish basally; greater part of ventral segments yellowish. Length 7-8 mm.

Southern California. Distinguished from *canaliculatus* by the yellowish wings, particularly in the female, irregular sculpture of enclosure of middle segment, and much broader eyes of male, which give the head, seen from the front, a very transverse shape. There are four ♂ specimens before me from Washington State which I refer doubtfully to this species. The yellow markings are more restricted, there being no yellow on the tubercles and middle segment. The markings, also, are a paler yellow.

41. *Gorytes decorus* n. sp.

♀.—Eyes converging toward the clypeus, but a little less strongly so than in the two preceding species; front finely and closely punctured; clypeus transverse, somewhat convex, with large punctures; antennæ tolerably long, not thickened apically, scape elongate, about as long as the first joint of the flagellum, the latter joint scarcely one-third longer than the second; thorax shining, indistinctly punctured; mesosternum distinctly carinated, the epimerum and episternum mesothoracis separated; suture between dorsulum and scutellum foveolate; middle segment irregularly rugose posteriorly,

the enclosure large, well defined, and covered with about 12 strong, somewhat wavy striæ; tibiæ and tarsi spinose; wings subhyaline, the marginal cell excepted, nervures brownish, stigma yellowish, submedian cell of posterior wings terminating much beyond the origin of the cubital vein; abdomen shining, almost impunctate, first segment not striated basally, pygidial area flat, rounded at apex, distinctly margined laterally, strongly punctured. Black; base of clypeus, scape beneath, sometimes a small spot on inner orbits beneath, pronotum, tubercles, a spot behind them, a stripe bordering the dorsulum laterally, scutellum, spot on metanotum, large spot on each side of middle segment, a fascia at apex of dorsal segments 1-5 and a narrow one at apex of ventrals 2 and 3 or 4, yellow; legs except base testaceous, the fore and medial femora more or less yellow beneath; basal half of flagellum beneath of the same color as legs, which color sometimes extends to the upper portion. Length 8 mm.

♂.—Colored like the ♀, but the clypeus entirely yellow and the flagellum entirely black; eyes strongly converging beneath, the space between them at the base of clypeus equal to somewhat more than half of that at the vertex; clypeus about twice as broad as long in the middle; flagellum long, somewhat setaceous, the joints more than twice as long as broad, the first two joints about equal in length; hind tarsi less thickened than in *asperatus*. Length 7-8 mm.

Montana. The color of legs, large spots of middle segment and almost want of yellow on orbits are good superficial characters to separate *decorus* from its allies.

42. *Gorytes simillimus* Sm.

Gorytes simillimus Smith, Cat. Hym. B. M., IV, p., 367, ♀.

Gorytes ephippiatus Packard, Proc. Ent. Soc. Phila., VI, p. 423, ♂.

Gorytes simillimus Handlirsch, l. c., p. 500. ♀ ♂.

Occurs from Canada to Georgia (Handlirsch), westward through the more northern States to Washington. The spots on middle segment are not constant. A ♀ specimen from New Jersey, collected in the latter part of June, I refer to *simillimus* doubtfully. Its legs are highly colored with yellow and reddish, mandibles with a yellow spot basally, and the furrow between the metapleuræ and middle segment is foveolate throughout, whereas in typical specimens the foveæ are confined to the top. Another specimen, a ♂, from Washington State has the enclosure of middle segment striated throughout.

43. *Gorytes angustus* Prov.

Gorytes laticinctus Provancher (nec Shuckard), Add. Hym. Quebec, p. 274. ♂.
Gorytes angustus Provancher, Le Nat. Can., XXII, p. 141. ♀.

Vancouver (Provancher); Washington; California; Nevada. A variable species as to size and coloration. The abdomen in two (♀) specimens before me is densely tomentose so that when held in certain lights, its maculation is almost concealed.

44. *Gorytes nevadensis* Fox.

Gorytes nevadensis Fox, Can. Ent., XXIV, p. 150, ♀ ♂.

Nevada.

45. *Gorytes venustus* Cress.

Gorytes venustus Cresson, Proc. Ent. Soc. Phila., IV, p. 472. ♀ ♂.
Hoplisis venustus Cresson, Synopsis, p. 280.
Gorytes venustus Handlirsch, l. c., p. 504.

Colorado; Texas; New Mexico (Sante Fé, Cockerell); Mexico (Handlirsch).

46. *Gorytes Smithii* Cress.

Gorytes Smithii Cresson, Proc. Ent. Sect., A. N. S. Phila., 1880, p. 18, ♂
 (non ♀) (Tr. Am. Ent. Soc., VIII).
Hoplisis Smithii, Cresson, Synopsis, p. 280.
Gorytes Smithii Handlirsch, l. c., p. 531.

Illinois; Kansas. The type of this species is a ♂, and not ♀ as stated by Cresson.

47. *Gorytes floridanus* Fox.

Hoplisis foveolata Fox (nec Handlirsch), Ent. News, I, p. 106, ♀.
Gorytes floridanus Fox, *ibid.*, II., p. 196.

Florida. The eyes converge less toward the clypeus in this species than in *Smithii*.

48. *Gorytes phaleratus* Say.

Gorytes phaleratus Say, Bost. Journ. Nat. Hist., I, p. 367.
Gorytes fulvipes Smith, Cat. Hym. B. M., IV, p. 367, ♀.
Gorytes apicalis Smith, *ibid.*, p. 369, ♀.
Gorytes modestus Cresson, Proc. Ent. Soc. Phila., IV, p. 473, ♂.
Gorytes rufoluteus Packard, *ibid.*, VI, p. 425, ♂ ♀.
Gorytes flavicornis Packard, *ibid.*, p. 429, ♂ ♀.
Gorytes phaleratus Handlirsch, l. c., p. 507, ♀ ♂.

Occurs from Canada to Texas and Mexico; Colorado; Dakota. A variable species as the synonymy indicates.

49. *Gorytes propinquus* Cress.

Gorytes propinquus Cresson, Tr. Am. Ent. Soc., I, p. 379, ♂ (non ♀).
Gorytes abdominalis Handlirsch, l. c., p. 510.

New Mexico; Texas. Not identical with *abdominalis* as supposed by Handlirsch.

50. *Gorytes abdominalis* Cress.

Gorytes abdominalis Cresson, l. c., p. 474, ♂ ♀.
Hoplisis abdominalis Cresson, Synopsis, p. 279.
Gorytes abdominalis Handlirsch, l. c., p. 510.

Colorado.

51. *Gorytes bipartitus* Hdl.

Gorytes bipartitus, Handlirsch, l. c., p. 521.

Georgia.

52. *Gorytes divisus* Sm.

Gorytes divisus Smith, Catal. Hym. B. M. IV, p. 370, ♂.

Georgia (Smith). Unknown to me. This differs only from *bipartitus*, apparently, by the suture between dorsulum and scutellum being smooth, not foveolate. It is very likely, however, as suggested by Handlirsch, that Smith's statement is erroneous.

53. *Gorytes rufomaculatus* n. sp.

♀.—Eyes strongly converging toward the clypeus, somewhat less so than in *bipartitus*, however; front with large punctures, strongly impressed down the middle; clypeus convex, strongly punctured, about one-quarter broader than long, subemarginate in middle of anterior margin; antennæ shorter than in *bipartitus*, the flagellum subclavate; thorax smooth, impunctate; mesosternum distinctly carinated; suture between dorsulum and scutellum foveolate; enclosure of middle segment broad and short, well marked and divided by a longitudinal furrow; suture between metapleuræ and middle segment not foveolate; legs robust, tibiæ and tarsi spinose; wings clear, except the marginal cell, nervures testaceous, stigma yellow, submedian cell of hind wings terminating much beyond the origin of the cubital vein; abdomen short and broad, first segment impunctate, the following segments distinctly punctured, pygidial area rather long, coarsely punctured and distinctly margined laterally. Black; base of clypeus, inner orbits, line on pronotum, tubercles, spot behind them, scutellum except base, and a fascia at apex of dorsal segments 1-3, yellow; antennæ, legs, large spot on each side of middle segment, small spot on dorsulum at wings, tegulæ and the first abdominal segment at the sides, rufous. Length 9-10 mm.

♂.—Colored like the ♀, but the clypeus entirely, a fascia on abdominal segments 4 and 5, and the fore tarsi, yellow; clypeus nearly as long as broad; antennæ shorter than in *bipartitus*, flagellum

with joints not rounded-out as in that species, the last 6 or 7 joints not twice as long as broad; seventh dorsal segment distinct, broad, rounded at apex; hind tarsi somewhat thickened. Length 8 mm.

Dakota; Montana; Colorado (Gillette).

54. *Gorytes fasciatus* n. sp.

♂.—Eyes strongly converging toward the clypeus; the latter convex, distinctly broader than long; front strongly punctured, with a medial impressed line; antennæ much longer than in *rufomaculatus*, joints of flagellum cylindrical, rather long; thorax impunctate; mesosternum distinctly carinated; suture between dorsulum and scutellum foveolate; enclosure of middle segment well-marked; suture between metapleuræ and middle segment foveolate above only, and is deeper than in *rufomaculatus*; legs tolerably robust; wings yellowish on basal two-thirds; fuscous in marginal cell only, submedian cell of hind wings terminating much beyond the origin of cubital vein; abdomen long, dorsals 1 and 2 impunctate, the remainder strongly punctured, seventh dorsal distinct, rounded apically. Black; clypeus, inner orbits, face below antennæ, labrum, mandibles except apex, scape and pedicellum, line on pronotum, tubercles, spot behind them, scutellum posteriorly, spot on each side of middle segment, fore femora beneath, tibiæ and tarsi more or less, a broad fascia on dorsal abdominal segments 1–6, on ventrals 2 and 3 and spot on each side of ventrals 4–6, bright yellow; basal joints of flagellum, tegulæ and greater part of legs, reddish. Length 10 mm.

Colorado. Differs from the two preceding in the yellowish wings, yellow spots on middle segment, broad fascia of abdomen, and by the suture between metapleuræ and middle segment being foveolate above.