

In my "Mosquito Notes"* I referred to *Culex taniorhyncus*, Wied., as not having been found, so far as I knew, north of Florida. The mistake was caused by my being so impressed with the statement (Theobald's Monograph, Vol. I., pp. 352, 353, 1901), "Mr. Coquillett writes me this species is not found north of Florida and Mexico," that I did not even consult American authorities. This statement is, of course, superseded by later work, and the species is found in the vicinity of Washington, D. C., in Pa., and in N. J., etc., as shown by various authorities, notably the interesting work on *C. taniorhyncus* and *G. sollicitans*, by Dr. J. B. Smith, of N. J., to whom, as to others, my apology is due. This is another very variable species. Dr. Smith writes me that those he finds show much variation as to abdominal markings, but that the leg maculation is constant; those sent me from Florida and N. C., while fairly stable as to abdominal markings, are not constant as to the band on the proboscis, it being at times hardly more than a dot, while the last tarsal joint of the hind legs shows all variations from pure white to almost pure brown, the two legs on the same insect being often quite unlike. Mr. Coquillett tells me he also finds these differences in the specimens sent him.

NOTES ON SOME BEES IN THE BRITISH MUSEUM.

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Spending the summer in England, I have, of course, hastened to examine the types of F. Smith, and other bees contained in the collection of the British Museum. The following notes elucidate some species which had puzzled American entomologists, who had access only to the descriptions :

Chelostomoides rugifrons (Smith).

Chelostoma rugifrons, Sm., type ♀.—Would be large for *Chelostoma*; a transverse ridge, with large punctures, below the antennæ, and below this a smooth shining impunctate depressed area, bounded on each side by a vertical ridge, so that one gets the impression at first that the clypeus is very broadly and deeply emarginate; the long labrum, seen from above, looks like the end of an elephant's trunk, being broadened at the end, and presenting a median elevation; the "tooth near the base within" of the mandibles is a shining tubercle; the recurrent nervures join second submarginal cell at about equal distances from its base and apex respectively; the basal nervure just fails to reach transverso-medial; claws

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broad and angled basally, but not cleft; no pulvillus (*Chelostoma florissomne* has a large pulvillus); first abdominal segment with a distinctly margined though shallow concavity.

Emphoropsis cineraria (Smith).

Anthopora cineraria, Sm., ♀.—Easily known by its rather large size and grayish appearance, rather like a large *Clisodon terminalis*; hair on outer side of hind tibiæ entirely shining orange-golden; hair on sides of face is black, and black hair is mixed with that of mesothorax; the venation is of the type of *E. floridana*, marginal cell comparatively long, and recurrent nervures entering it at ends of second and third submarginal cells, though not meeting transverse cubital nervures; third submarginal cell strongly contracted above. The male has a white clypeus, very broadly margined laterally with black; the white area is broader than long, and is a curious sort of pinkish-white.

The Mexican species of *Emphoropsis* (placed by Smith in *Habropoda*) represent a distinct section of the genus, known by the light area on the clypeus being much longer than broad, and separated from the lateral face-marks. Our *E. floridana* differs also from the Mexican ones by its much broader face, with a broader and shorter clypeus. The Mexican *E. agilis* has maxillary palpi slender, 6-jointed, second joint longest, last two small; paraglossæ short; galea long and parallel-sided, as long as labial palpi. Male with third antennal joint not elongated, though its apical half is broadened. The second joint of maxillary palpi is much longer than first, but not as long as the last three together. The Mexican species are readily separated, thus:

- Pubescence of thorax black *Emphoropsis terminata* (Smith).
 Pubescence of thorax not black 1.
 1. Ground-colour of abdomen red *E. agilis* (Sm.).
 Ground-colour of abdomen black or largely so 2.
 2. Pubescence of thorax bright orange-fulvous, anteriorly with black hairs intermixed *E. fulva* (Sm.).
 Pubescence of thorax without black hairs intermixed 3.
 3. Pubescence of thorax light yellowish; clypeus without black marks on the yellow; apical part of abdomen not red . . . *E. montezumia* (Sm.).
 Pubescence of thorax bright orange-fulvous; clypeus with two black streaks on the yellow; apical part of abdomen with red ground-colour *E. bombyformis* (Sm.).

Perdita halictoides, Smith.

Type: Abdomen very dark brown, almost black; nervures and stigma sepia, strongly defined; marginal cell with the poststigmatal part hardly as long as the substigmatal; metathorax and sides of thorax dark blue, but the prothorax, mesothorax and scutellums practically black, tinged with aeneous; face more or less greenish, with no light marks; mandibles fulvo-ferruginous, scape reddish; legs dark brown, femora darker. Nearest to *P. aeneifrons*, Ckll.

Pseudopanurgus andrenoides (Smith).

Scrapter andrenoides, Sm., type ♀.—Rugose, with pale fuliginous wings, head and thorax almost nude; marginal cell truncate; stigma large, brown; first recurrent nervure enters second submarginal cell a long way from its base; second recurrent joins cell at its extreme tip; basal nervure falls short of transverso-medial by a moderate distance; maxillary palpi 6-jointed; first joint of labial palpi somewhat shorter than the other three united; facial foveæ club-shaped in outline, smooth and shining; no raised nodule on vertex; process of labrum broadly truncate; mandibles reddened; clypeus densely punctured, except a narrow median line; punctures of mesothorax minute and extremely numerous, though quite distinct; the abdomen has not the large coarse punctures of some forms of *Pseudopanurgus*; tegulæ shining testaceous; basal half of the abdomen with a strong reddish tinge; hind legs slender; hind tibial scopa thin but abundant. The truncation of the marginal cell is not nearly so oblique as in *Panurginus Cressoniellus*.

Nomia fausta (Smith).

Andrena fausta, Sm., type ♀.—Natal. Third submarginal cell at least as large as first; enclosure of metathorax practically reduced to a transverse band; head and thorax with very dense large punctures; basal joint of hind tarsi with the apical margin very oblique, second joint triangular; tegulæ with a little keel behind. Colours like those of *Nomia rubella*, Sm. Also examined by Col. Bingham, who agrees with me that it is a *Nomia*.

Prosopis.

♂.

- Supraclypeal mark well developed; lateral face-marks extending upwards along eye-margin; scutellum yellow I.
 1. Marginal cell and beyond fuliginous; sides of clypeus, except basally, narrowly margined with black (Mexico) *maculipennis*, Smith.
 Marginal cell not clouded; sides of clypeus not marginal with black (S. Paulo, Brazil) *rugosa*, Smith.

♀.

Lateral face-marks continued upwards along eye-margin; clypeus with a broad central yellow stripe... 1.

1. Scutellum black (Brazil) *variolosa*, Smith.
Scutellum yellow *vigilans*, Smith.

Prosopis trepanda, Smith, is a synonym of *vigilans*.

Gastropsis.

Ashmead puts this in the *Andreninae*, but it is really a relative of *Meliturga*, and has, like it, terminal abdominal spines in the ♂, and the same sort of eyes (though in *Meliturga* ♂ they converge above) and the same third antennal joint. They also agree in having the basal nervure falling a long way short of the transverso-medial. They are, of course, quite distinct genera, *Meliturga* being the more aberrant. *Oxæa* also appears to be related.

Gastropsis pubescens, Sm., ♂.

W. Australia; the only known species of the genus. Its general appearance is very like that of the Peruvian *Megacilissa vestita*, Smith, but the venation, of course, is different. It has the broad second submarginal cell like that of *Anthoglossa plumata*, Sm., and like it has the stigma obsolete. First and second recurrent nervures enter middle of second and third submarginal cells; third antennal joint very long; face narrow, with large eyes; maxillary palpi 6-jointed; area of metathorax very long and narrow; abdomen very hairy, and rather tapering, with two terminal spines, which are sometimes folded back, and then not readily seen.

Sphecodes dichroa, Smith.

Type ♀. Vertex with a low but quite observable tubercle just behind the ocelli, and behind this are a number of transverse grooves or striæ; mesothorax with large strong punctures well separated on a shining surface; abdomen with distinct but only moderately close punctures, only the last segment blackish; area of metathorax strongly but not closely longitudinally wrinkled, and with some irregular cross-wrinkles.

Sphecodes pilosulus, Smith.

Type ♀. Mandibles dentate; metathoracic area semilunar, very distinct, with a strong margin, and very strongly, closely longitudinally ridged; rest of metathorax hairy; face hairy; first abdominal segment with a black discal patch.

Sphecodes mandibularis, Cresson.

An apparently authentic ♀ in the Museum has the mandibles dentate.