

✓ 10. ***Sphex mexicana*.**

*Sphex mexicana*, Taschenberg, Zeitschr. ges. Nat. Sachs. Thür. xxxiv. p. 416 (1869)<sup>1</sup>.

*Hab.* MEXICO<sup>1</sup>.

✓ 11. ***Sphex ichneumonea*.** (Tab. III. figg. 8, ♀; 8 a, ♂.)

*Sphex ichneumonea*, Linn. Syst. Nat. i. p. 959; Fabr. Ent. Syst. ii. p. 207; Dahlbom, Hymen.

Eur. i. p. 26; Lepel. de St.-Fargeau, Hist. Nat. Ins. Hymen. iii. p. 346; Smith, Cat.

Hymen. Ins. iv. p. 261<sup>1</sup>; Packard, Guide to the Study of Ins. p. 167 (1869).

*Sphex dorsalis*, Lepel. de St.-Fargeau, loc. cit. p. 347; Smith, Trans. Ent. Soc. Lond. 1862, p. 36<sup>2</sup>.

*Sphex micans*, Taschenberg, Zeitschr. ges. Nat. Sachs. Thür. xxxiv. p. 419.

*Sphex cræsus*, Lepel. de St.-Fargeau, loc. cit. p. 351; Smith, Cat. Hymen. Ins. iv. p. 262<sup>3</sup>.

*Hab.* NORTH AMERICA<sup>1 3</sup>.—MEXICO<sup>3</sup>, Orizaba (*F. D. G.*), Atoyac in Vera Cruz (*Schumann*), Teapa in Tabasco (*H. H. Smith*), Valladolid in Yucatan (*Gaumer*); GUATEMALA, El Reposo, Zapote, San Gerónimo (*Champion*); NICARAGUA, Chontales (*Belt*); COSTA RICA, Cache (*Rogers*); PANAMA, Bugaba, Volcan de Chiriqui (*Champion*), Aspinwall<sup>2</sup>.—SOUTH AMERICA, Cayenne<sup>2</sup>, Ega<sup>2</sup>, Santarem<sup>2</sup>.

This is a somewhat variable species in size and coloration. The tegulæ are usually red, but sometimes verge into blackish; the amount of red on the abdomen varies in extent, and the apex is sometimes more or less of that colour, and the petiole occasionally shows traces of red; the femora are sometimes lined above with black in both sexes; and the colour of the wings varies in intensity. In the male the hind tibiæ are usually lined behind with black; and the tarsi are more or less black. In some examples the hair inclines to cinereous in tint, but this is perhaps due to discoloration.

On the habits of this species, Mr. Stretch says:—"From the sandy embankments of the railway at Aspinwall, it constructs a long burrow perpendicularly into the hard sand. I saw it bring a grasshopper as large as itself, with great difficulty, to the entrance of its burrow; laying it down, it retreated, apparently to see that all was ready, and then, re-emerging, seized the grasshopper and backed into its hole" (*cf.* Smith, Trans. Ent. Soc. Lond. 1862, p. 36).

Packard (*loc. cit.*) gives the following account of its mode of life:—

"In the last week of July, and during August and early in September, we noticed nearly a dozen of these wasps busily engaged in digging their holes in a gravelly walk. In previous seasons they were more numerous, burrowing into grassy banks near the walk. The holes were from four to six inches deep. In beginning its hole, the wasp dragged away with its teeth a stone, one half as large as itself, to a distance of eight inches, while it pushed away others with its head. In beginning its burrow it used its large and powerful jaws almost entirely, digging to the depth of an inch in five minutes, completing its hole in about half an hour. After having inserted its head into the hole, where it loosened the earth with its jaws, and threw out the earth with its jaws