Bulletin of the Museum of Comparative Zoölogy

AT HARVARD COLLEGE.

Vol. LX. No. 8.

ANTS COLLECTED IN TRINIDAD BY PROFESSOR ROLAND THAXTER, MR. F. W. URICH, AND OTHERS.

By WILLIAM MORTON WHEELER.

CAMBRIDGE, MASS., U. S. A.
PRINTED FOR THE MUSEUM.
MARCH, 1916.

No. 8.— Ants collected in Trinidad by Professor Roland Thaxter, Mr. F. W. Urich, and Others.

CONTRIBUTIONS FROM THE ENTOMOLOGICAL LABORATORY OF THE BUSSEY INSTITUTION, HARVARD UNIVERSITY. NO. 108.

By WILLIAM MORTON WHEELER.

FORMICIDAE.

- 1. Ectatomma tuberculatum Olivier. ♀ ♀.— Port of Spain and Sangre Grande (Thaxter).
- 2. Ectatomma ruidum Roger. §.—Port of Spain (Thaxter); Chaguanas (Urich).
- 3. Neoponera obscuricornis Emery var. latreillei Forel. \$\ \mathrm{Q}\$.— Caura (Urich).
- 4. Neoponera unidentata Mayr. \$\opin\$.— Port of Spain (Thaxter).
- 5. Pachycondyla crassinoda Latreille. ♀ .— Port of Spain (Thaxter).
- 6. Pachycondyla harpax Fabricius. \$\Begin{aligned} \text{P-Port of Spain (Thaxter).} \end{aligned}
- 7. Pachucondula impressa Roger. & Port of Spain (Thaxter).
- 8. Euponera (Mesoponera) constricta Mayr. § 9.—Port of Spain (Thaxter).
- 9. Euponera (Trachymesopus) stigma Fabricius. ♀ ♀ .— Port of Spain (Thaxter).
- 10. Ponera opaciceps Mayr. \$\Bar{\gamma}\$.— Aripa Savanna (Thaxter).
- 11. Odontomachus haematoda Linné. ♀ ♀.— Port of Spain, Gasparee Island, and Sangre Grande (Thaxter).
- 13. Odontomachus haematoda Linné subsp. meinerti Forel. § .—Port of Spain (Thaxter).
- 14. Anochetus inermis Ern. André var. meinerti Forel. ♀ ♀ ♂.—Chaguanas (Urich); Port of Spain (Thaxter).

The worker and female of this variety differ from those of the typical form in having the superior border of the petiole distinctly excised and the inner border of the mandibles with three teeth.

- 15. Anochetus (Stenomyrmex) emarginatus Fabricius (typical).

 Port of Spain (Thaxter); Ariopita Valley (H. D. Chapman).
- 16. Eciton burchelli Westwood. \$\overline{2}\$.—Port of Spain (Thaxter).
- 17. Eciton burchelli Westwood var. urichi Forel. 2.—Port of Spain (Thaxter); Erin (Urich).

I doubt whether this variety will prove to be valid. Among a large number of specimens from the same colony received from Urich, there are numerous transitions in color to the typical form.

- 18. Eciton (Labidus) crassicorne F. Smith. 2.—Matura (Urich); Port of Spain (Thaxter).
- 19. Eciton (Acamatus) pilosum F. Smith. 2.—Aripa Savanna (Thaxter).
- 20. Pseudomyrma championi Forel var. paulina Forel. §.—Port of Spain (Aug. Busck and Thaxter).
- 21. Pseudomyrma excavata Mayr. \$\circ\$.— Port of Spain (Thaxter).
- 22. Pseudomyrma pallida F. Smith. § .— Aripa Savanna (Thaxter).
- 23. Pheidole (Macropheidole) fimbriata Roger. 21.—Port of Spain (Thaxter).
- 24. Crematogaster brasiliensis Mayr. §.— Aripa Savanna and Sangre Grande (Thaxter).
- 25. Crematogaster limata F. Smith subsp. parabiotica Forel. §.—Port of Spain and Gaspari Island (Thaxter).
- 26. Monomorium floricola Jerdon. . Port of Spain (Thaxter).
- 27. Megalomyrmex bituberculatus Forel. § .— Arima (Urich); Port of Spain (Thaxter).
- 28. Tranopelta gilva Mayr. \circ O'.—Port of Spain (Aug. Busck).
- 29. Solenopsis geminata Fabricius. \$\Q2009 \cdots \text{Port of Spain (Thaxter);} \text{Chaguanas (Urich).}
- 30. Solenopsis minutissima Emery. \$\overline{2}\$.— Trinidad (Thaxter).
- 31. Solenopsis altinodis Forel. \$\Bar{\gamma}\$.—Port of Spain (Thaxter).

This species, which is easily recognized by the peculiar high petiolar node, rectangular in profile and laterally compressed, the absence of distinct clypeal ridges and the distinctly marginate epinotum, has been recorded from Trinidad by Forel. The types are from Zigzag, Venezuela.

- 32. Solenopsis tenuis Mayr. § .— Port of Spain (Thaxter).
- 33. Wasmannia auropunctata Roger. ♥ ♀.—Port of Spain (Thaxter).

- 34. Mycocepurus smithi Forel. § .— Diego Martin (Urich).
- 35. Apterostigma wasmanni Forel. \$\varphi\$.— Four Roads, Port of Spain (Thaxter); "from fungus garden under a log."
- 36. Apterostigma urichi Forel. §.— Caparo (Thaxter); "from fungus garden under a log."
- 37. Trachymyrmex urichi Forel. \$\varphi\$.— Ariopita Valley (H. D. Chapman); Gasparee Island (Thaxter).
- 38. Trachymyrmex humilis, sp. nov.

Worker. Length 2.2-2.5 mm.

Mandibles rather long, with concave external borders, three large apical and several smaller basal teeth. Head subrectangular, as broad as long, with broadly and feebly excised posterior and rather convex lateral borders and rounded posterior corners. Eves moderately convex. Clypeus short, with nearly straight, entire anterior border. Expanded anterior lobes of frontal carinae moderately large. rounded, not angular, posterior ridges diverging but not reaching the posterior corners of the head. Praeorbital carinae straight, not curved inward across the antennal scrobes, terminating a little behind the eyes. Antennal scapes moderately stout, reaching a distance not exceeding their greatest transverse diameter beyond the posterior corners of the Joints 2-8 of the funiculi not longer than broad, two terminal joints forming an indistinct club, the penultimate longer than broad and half as long as the last joint. Thorax with the pro- and mesonotum rather convex and rounded in profile, the mesoëpinotal constriction short and deep. Inferior pronotal spines short, moderately acute. Epinotum much higher than long, the base in profile very convex anteriorly, sloping behind, broadly sulcate above, somewhat longer than the declivity, the spines reduced to two teeth which are only slightly longer than broad at their bases, directed upward, outward, and backward. Petiole small, not longer than high, the node feebly developed, acute in profile, with longer concave anterior and short concave posterior slope. Postpetiole very large, more than twice as broad as the petiole, as long as broad, broadest behind, with a median semicircular impression at the posterior border; in profile the node is very convex and high in front, the remaining dorsal surface flattened. Gaster suboblong, with rounded anterior and posterior corners, a little longer than broad, with straight, marginate sides, its upper surface evenly and feebly convex, without any longitudinal impressions. Legs moderately long.

Mandibles shining, with a few very coarse, elongate punctures.

Remainder of body opaque, very densely punctate-reticulate. The tubercles on the head, thorax, petiole, postpetiole, and gaster are small and rather uniformly distributed, noticeably so on the posterior corners of the head and dorsal surface of the gaster. On the front and vertex of the head they are somewhat elongate so that the general effect is that of several frequently interrupted rugae. Tibiae and femora covered with minute, uniformly distributed tubercles. What correspond to the spines and projections on the head and thorax of other species of Trachymyrmex are reduced to tubercles not much smaller than the teeth on the epinotum.

Hairs yellowish, very short, hooked, moderately abundant but not conspicuous. Pubescence of the same color, short, distinct only on the antennal funiculi.

Uniformly brownish ferruginous; mandibles a little darker, legs a little paler than the remainder of the body.

Two specimens; one from Gasparee Island and one from Port of Spain (Thaxter).

This species is very peculiar, in its small size, small petiole, large postpetiole, and the great reduction of the spines and tubercles on the head and thorax.

- 40. Atta cephalotes Linné. \$\varphi\$.—Port of Spain and Sewa Valley (Thaxter).
- 41. Cryptocerus pusillus Klug. §.— Aripa Savanna (Thaxter).
- 42. Cryptocerus (Zacryptocerus) clypeatus Fabricius. §.— Sangre Grande (Thaxter); Port of Spain (U. S. N. M.).
- 43. Cryptocerus (Cephalotes) atratus Linné. §.— Port of Spain (Thaxter).
- 44. Strumigenys saliens Mayr. § .— Port of Spain (Thaxter).

Codiomyrmex, gen. nov.

Worker. Monomorphic, closely related to Strumigenys F. Smith, Epitritus Emery, and Glamyromyrmex Wheeler, but differing in the shape of the head. Mandibles large, swollen, triangular, their apical margins with numerous, regular, acute teeth. Clypeus well developed, projecting over the extreme bases of the mandibles and not separated behind by distinct sutures from the head. Frontal carinae widely separated, expanded horizontally and continued backward to form sharp lateral margins as far as the posterior corners of the head, over-

arching broad scrobes for the antennae dorsal to the eyes, which are small but otherwise well developed. Ocelli absent. There is a short, sharp longitudinal carina ventral to the insertion of each antenna and a small acute tooth at each lateral corner of the gula near the lateral insertion of the mandible. Ocelli absent. Frontal area represented by a smooth, transverse region in the sculpture of the head; frontal groove represented by a raised line extending back to the vertex. Antennae, robust, 6-jointed. Thorax, petiole, postpetiole, and gaster much as in Strumigenys. Spongiform appendages well developed on the petiole, postpetiole, and base of gaster. Head coarsely sculptured. Squamiform or clavate hairs absent, but both the body and appendages covered with long, soft, dense, pointed hairs.

45. Codiomyrmex thaxteri, sp. nov. (Fig. 1).

Worker. Length nearly 2 mm.

Mandibles very convex dorsally and laterally, somewhat narrowed

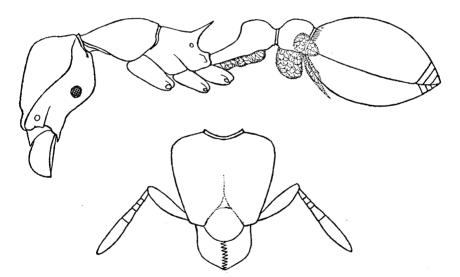


Fig. 1. Codiomyrmex thaxteri, sp. nov. Body of worker in profile; head of same from above.

at their insertions, their straight apical margins furnished with numerous, crowded, acute, and equal teeth. Head subtriangular, a little

longer than broad, decidedly broader behind than in front. with straight sides, rounded posterior corners, and narrow, excised, and marginate occipital border. In profile the head is very convex in the region of the vertex above and posterior portion of the gula below, flattened in front and on the sides to the sharp edge of the frontal carinae and their backward continuations. Clypeus rather concave. about as long as broad, with semicircular, entire anterior border. Eves convex, at about the middle of the head, but near the ventral surface and not visible when the head is seen from above. Antennae robust, scapes terete but distinctly swollen, first funicular joint as long as the second and third together. These are subequal and scarcely Third joint longer than broad and nearly \frac{1}{3} as long longer than broad. Thorax slender, through the pronotum about as the terminal joint. half as broad as the head, broadest through the humeri which are very projecting and distinctly angular or conical. Pro- and mesonotum in profile gently convex, not separated by a suture, the mesonotum laterally marginate and with a median longitudinal ridge, the mesopleurae high and rather concave. The lateral marginations of the mesonotum are continued back over the base of the epinotum into the spines, which are well developed, straight, and acute, nearly as long as the base of the epinotum and directed backward, upward, and out-Their bases are laterally compressed and translucent below. Epinotal declivity concave, somewhat shorter than the base, its inferior angles compressed but not acute. Petiole with a long peduncle, as long as the node, which rises abruptly in front and has a gently convex, backwardly sloping dorsal surface; seen from above the node is as long as broad and evenly rounded and submarginate on the front and sides. Attached to the ventral border of the peduncle and node is a long, compressed, band-shaped, transparent, spongiform appendage. Postpetiole from above, transversely elliptical, nearly twice as broad as the petiolar node and twice as broad as long, in profile a little longer than high, evenly convex above, with a large and prominent ventral and two smaller, lateral spongiform appendages. Gaster a little larger than the head, elliptical, with nearly straight anterior and rather sharply marginate lateral borders, its ventral as convex as its dorsal surface and nearly the entire surface formed by the first segment. Its anteroventral surface is furnished with a flat, squamiform and pointed spongiform appendage. Legs rather long and stout.

Mandibles shining, evenly and sparsely punctate. Head subopaque; clypeus and upper surface of head reticulate-rugose and coarsely punctate; antennal scrobes and gula densely and evenly punctate; region of the frontal area smooth and shining. Thorax smooth and shining, except the epinotum, the base of which is coarsely, the declivity and sides more finely reticulate-punctate. Petiole and postpetiole shining, the node of the former opaque, coarsely and somewhat longitudinally reticulate-rugose, the node of the latter coarsely and sparsely punctate. Gaster smooth and shining, its extreme base with short, longitudinal rugae. Antennal scapes coarsely and densely punctate, opaque; legs smooth and shining.

Hairs yellowish gray, very fine, long, dense, flexuous, and erect, covering the whole body and legs, as long on the latter as on the former, shorter and subappressed on the antennae, where they are if anything even denser. Pubescence absent.

Castaneous brown; clypeus, head, and antennal scapes black; mandibles, bases of antennal funiculi, neck, knees, tibiae, tarsi, anterior portion of first gastric segment, and whole of terminal gastric segments, deep red.

Described from three specimens taken by Professor Thaxter in the neighborhood of Port of Spain.

This species is very easily recognized by the singular shape of the head and peculiar fleece-like pilosity of the body. I have made it the type of a distinct genus, though it is evidently much like a Strumigenys, except in the structure of the head, because I believe that this latter genus is soon destined to suffer disintegration into a number of subgenera or genera. This fate has already overtaken several other ant-genera (Camponotus, Formica, Crematogaster, Monomorium, Pheidole, etc.) that have become unwieldy through accumulation of species which even a very conservative myrmecologist must regard as heterogeneous.

- 46. Dolichoderus attelaboides Fabricius. §.—Arima (Urich); Port of Spain (Thaxter).
- 47. Dolichoderus decollatus F. Smith. 2 .— Port of Spain (Thaxter).
- 48. Dolichoderus (Hypoclinea) bidens Linné. § .— Tamana (Urich).
- 49. Dolichoderus (Hypoclinea) championi Forel var. taeniatus Forel. §.—Port of Spain (Thaxter). A single worker of very small size, but agreeing in color and structure with cotypes from Colombia.
- 50. Dolichoderus (Hypoclinea) championi Forel subsp. trinidadensis Forel. §.—Port of Spain (Thaxter).

A single worker differing from a cotype specimen received from Professor Forel only in having the head, tibiae, and antennal scapes dark brown.

- 51. Dolichoderus (Monacis) bispinosus Olivier. ♀ ♀ ♂.—Port of Spain (Thaxter); Erin (Urich).
- 52. Dolichoderus (Monacis) debilis Emery. 2.—Matura (Urich); Sangre Grande (Thaxter).
- 53. Iridomyrmex dispertitus Forel subsp. micans Forel. \Quad .— Port of Spain (Thaxter).
- 54. Tapinoma melanocephalum Fabricius. Ş.— Aripa Savanna (Thaxter).
- 55. Azteca chartifex Forel. § .— Arima (Urich).
- 56. Azteca chartifex Forel subsp. decipiens Forel var. lanians Forel.

 ♥ ♀.— Arima (Urich).
- 57. Azteca barbifex Forel. § .— Port of Spain (Thaxter).
- 58. Azteca trigona Emery subsp. mediops Forel. 2.—Port of Spain (Thaxter); Ariopita Valley (H. D. Chapman).
- 59. Azteca foreli Emery subsp. ursina Forel. § .— Chatham, "on cacao" (Urich).
- 60. Azteca velox Forel. \$.— Arima (Urich).
- 61. Azteca velox Forel var. nigriventris Forel. \$\omega\$.—Port of Spain (Thaxter).
- 62. Prenolepis (Nylanderia) longicornis Latreille. §. Sangre Grande (Thaxter).
- 63. Prenolepis (Nylanderia) vividula Nylander. \$\mathbb{Q}\$.— Port of Spain (Thaxter).
- 64. Camponotus (Dinomyrmex) agra F. Smith. & Platanal (Urich).
- 65. Camponotus (Myrmothrix) abdominalis Fabricius. §.—Port of Spain (Thaxter); Ariopita Valley (H. D. Chapman).
- 66. Camponotus (Myrmothrix) femoratus Fabricius. 2.—Port of Spain (Thaxter).
- 67. Camponotus (Myrmobrachys) excisus Mayr. § .— Port of Spain (Thaxter).
- 68. Camponotus (Myrmobrachys) senex F. Smith. 2.—Port of Spain (Thaxter).
- 69. Camponotus (Myrmobrachys) lindigi Mayr. \$\omega\$.—Gasparee Island (Thaxter).
- 70. Camponotus (Myrmobrachys) zoc Forel. § .— Ariopita Valley (H. D. Chapman).
- 71. Camponotus (Myrmorhachis) latangulus Roger. §.—Port of Spain (Thaxter).
- 72. Camponotus (Myrmorhachis) bidens Mayr. § .— Port of Spain (Thaxter).