

BULLETIN
OF THE
AMERICAN MUSEUM OF NATURAL HISTORY.

VOLUME XXXV, 1916.

59.57,96(88)

**Article I.—ANTS COLLECTED IN BRITISH GUIANA BY THE
EXPEDITION OF THE AMERICAN MUSEUM OF
NATURAL HISTORY DURING 1911.¹**

BY WILLIAM MORTON WHEELER.

WITHIN recent years the majority of ants described from South America have come from Brazil, Paraguay, Argentina and Colombia, and comparatively little material has found its way into collections from the Guianas, which furnished the early naturalists with so many specimens. This is, of course, explained by the large number of resident and visiting collectors who have been recently working in other parts of South America, especially in Brazil and Argentina. I was glad, therefore, to have an opportunity to study the ants collected during 1911 in British Guiana by Dr. H. E. Crampton and Dr. F. E. Lutz of the American Museum of Natural History. The course of the expedition was from Georgetown through Rockstone, Tumatumari, Kangaruma, Tukeit, Kaieteur, Chenapown, Saveritik, Parmak to Kamawa-wong (Roraima) and return by the same route. The collection contains several new and interesting species, though the greater number are well known. This was to be expected, because so many members of the neotropical ant-fauna have a very wide distribution, not only in northern South America but also in Central America and tropical Mexico.

¹ Contributions from the Entomological Laboratory of the Bussey Institution, Harvard University.
No. 105.

Family FORMICIDÆ.

Subfamily PONERINÆ.

1. *Paraponera clavata* Fabr. Several workers taken at Tukeit and Kaieteur on the forest floor (Lutz) and one from near the Wailang River (Crampton).

2. *Ectatomma tuberculatum* Olivier. Numerous workers from Kaieteur and Tumatumari; at Kaieteur they were most numerous in the forest where it meets the savannah (Lutz); also workers from near the Karanang River (Crampton).

3. *Ectatomma quadridens* Fabr. Numerous workers from Georgetown and Kaieteur (Crampton and Lutz) and from the former locality (J. J. Welsh).

4. *Ectatomma strigosum* Emery var. *lugens* Emery. A single worker from Kaieteur (Lutz) agreeing well with Emery's description.

5. *Ectatomma* (*Gnamptogenys*) *mordax* F. Smith. Numerous workers and one winged female from Kaieteur (Lutz).

6. *Ectatomma* (*Gnamptogenys*) *tortuosolum* F. Smith. Workers from Rockstone (Lutz).

7. *Neoponera villosa* F. Smith subsp. *inversa* F. Smith. Three workers from Kaieteur (Lutz).

8. *Neoponera apicalis* Latr. Two workers from Tukeit and one from Kaieteur (Lutz).

9. *Neoponera obscuricornis* Emery. A single worker from Kaieteur (Lutz), attached to a leaf and with a fungus (*Cordyceps unilateralis* Tul.) growing out of the back of its head.

10. *Neoponera unidentata* Mayr. Two workers from Kaieteur (Lutz).

11. *Neoponera carinulata* Roger. A single worker from Tukeit (Lutz).

12. *Neoponera commutata* Roger. Several workers and a partially deallated female from Kaieteur, Potaro Landing and Tukeit (Lutz). The specimen from Tukeit is accompanied by a large termite worker labelled "this ant's prey."

13. *Pachycondyla crassinoda* Latr. Seven workers from Kaieteur and Tukeit (Crampton and Lutz).

14. *Euponera* (*Mesoponera*) *lævigata* F. Smith. A single worker from Kaieteur (Lutz).

15. **Euponera (Mesoponera) constricta** Mayr. Several workers from Kaieteur and Tukeit (Crampton and Lutz).

16. **Euponera (Trachymesopus) stigma** Fabr. Specimens of all three phases from Kaieteur and Tukeit (Lutz).

17. **Ponera opaciceps** Mayr. Five workers from Kaieteur and a deälated female from Tukeit (Lutz).

18. **Anochetus mayri** Emery. A single worker from Tukeit (Lutz).

19. **Anochetus (Stenomymex) emarginatus** Fabr. Two workers of the typical form of the species from Rockstone and Tumatumari (Lutz).

20. **Odontomachus chelifer** Latr. Two workers taken in the forest near Tururaparu — a small creek west of Chenapown (Crampton).

21. **Odontomachus hastatus** Fabr. A worker and female taken at Kaieteur (Lutz).

22. **Odontomachus hæmatoda** L. A worker and deälated female from Kaieteur (Lutz).

Subfamily DORYLINÆ.

23. **Eciton burchelli** Westwood. Numerous workers from Parmak, Brazil. They were part of an "army" on the move in a large area of forest surrounded by savannah, five miles west of the Cotinga River, 3° north latitude; altitude, 2800 feet (Crampton).

Subfamily MYRMICINÆ.

24. **Pseudomyrma gracilis** Fabr. Half a dozen workers of the typical form of this species from Georgetown, Rockstone and Kaieteur, B. G. and New Amsterdam, Paramaribo, D. G. (Lutz).

25. **Pseudomyrma gracilis** Fabr. var. **dimidiata** Roger. A deälated female from Tumatumari B. G. and a worker from New Amsterdam, D. G. (Lutz).

26. **Pseudomyrma nigrocincta** Emery. A single small deälated female from Kaieteur (Lutz).

27. **Solenopsis geminata** Fabr. A single small worker from Tumatumari.

28. **Solenopsis geminata** Fabr. subsp. **sævissima** F. Smith. Three workers from Georgetown (Crampton).

29. **Solenopsis brevicornis** Emery. A single worker from Tumatumari (Lutz).

30. *Pheidole cramptoni* sp. nov.

Soldier. Length 3-3.5 mm.

Allied to *Ph. subarmata* Mayr and *cornutula* Emery. Head rather flat, subrectangular, about $\frac{1}{3}$ longer than broad, slightly broader in front than behind, with deeply and acutely excised occipital border, nearly straight, subparallel sides and very prominent anterior corners. Occipital groove deep and narrow. Gular teeth very prominent and rather pointed. Eyes small, situated a little less than $\frac{1}{2}$ the distance from the anterior to the posterior corners of the head. Mandibles very convex, with two apical teeth. Clypeus very short, flattened, but with a short, prominent carina behind, the anterior border nearly straight. Frontal area impressed, subtriangular, without a median carinula. Frontal carinae short, each anteriorly forming a prominent, suberect, tooth-like lobe, diverging behind to form the indistinct mesial borders of very shallow scrobe-like impressions for the antennae. Antennae short and slender; scapes reaching to the middle of the head; funicular joints 2-7 broader than long, club scarcely longer than the remainder of the funiculus, its two basal joints of subequal length and only a little longer than broad. Thorax small, through the humeri about half as broad as the head; pro- and mesonotum forming a single mass, transversely flattened dorsally between the humeri which are prominent and bluntly angular; in profile the mesonotum is convex, without a torus behind, marginate on the sides and falling rather abruptly to the pronounced mesoepinotal constriction. Epinotum small, much narrower and lower than the promesonotum; its base and declivity subequal in profile, sloping between the spines, which are rather stout, moderately long and acute, nearly as long as the base of the epinotum, longer than broad at their bases, but shorter than their distance apart, directed upward, outward and backward. Petiole from above violin-shaped, a little more than twice as long as broad, broader behind than in front, the node rather low, compressed anteroposteriorly, with transverse, broadly excised superior border. Postpetiole only a little broader than the petiole, subrectangular from above, a little broader in front than behind and only slightly broader than long. Gaster as large as the head, elongate elliptical, with straight anterior border. Femora strongly swollen in the middle.

Smooth and shining: mandibles very sparsely punctate. Anterior $\frac{2}{3}$ of head sharply but not densely, longitudinally rugose, with feeble indications of interrugal reticulation, posterior corners of head with very sparse and rather coarse, piligerous punctures. Epinotum and sides of petiole and postpetiole rather indistinctly and irregularly rugose. Gaster and legs with very fine, sparse, piligerous punctures.

Hairs pale yellow, rather fine but uneven, moderately long, suberect on the body, legs and antennal scapes.

Chestnut brown; antennae and tibiae paler; tarsi, mandibles and anterior $\frac{2}{3}$ of head pale brownish yellow; borders of mandibles, frontal carinae, clypeal border and a spot on the clypeal carina, dark brown.

Worker. Length about 2 mm.

Head, excluding the mandibles, a little longer than broad, subelliptical; eyes prominent, just in front of the middle of its sides. Mandibles with several small subequal teeth. Clypeus with straight anterior border, rather convex, ecarinate. Antennal scapes reaching a little beyond the posterior corners of the head. Thorax similar to that of the soldier, but without prominent, angular humeri and the base

of the epinotum longer in proportion to the declivity, the spines well-developed, but more slender, nearly as long as their distance apart at the base. Petiole slender, more than 3 times as long as broad, with small, rounded, entire node. Postpetiole half again as broad as the petiole, a little longer than broad, subglobular. Gaster with very straight, transverse anterior border.

Sculpture and pilosity very similar to those of the soldier, but the head not rugose in front, except at the extreme anterior corners, and the rugosity of the epinotum, petiole and postpetiole very feeble.

Chestnut brown; antennæ, mandibles, clypeus and legs paler and more yellowish. Described from 10 soldiers and 12 workers taken at Kaieteur (Lutz).

This species is closely related to *Ph. subarmata* and *cornutula*, being about midway between the two in the shape of the head and frontal carinæ of the soldier, but the thorax is very different, as neither of the species mentioned has prominent, angular humeri or such a small postpetiole. The worker of *cramptoni* has prominent epinotal spines, which are lacking in *subarmata* and *cornutula* and the thorax is more robust and has the promesonotum transversely flattened above.

31. **Pheidole biconstricta** Mayr. Numerous soldiers and workers from Tukeit (Crampton and Lutz).

32. **Pheidole jelskii** Mayr. Numerous soldiers and workers from Rockstone (Lutz).

33. **Pheidole exigua** Mayr. Soldiers and workers from Tukeit and Kaieteur (Lutz).

34. **Pheidole mimula** sp. nov.

Soldier. Length 2.3 mm.

Related to *Ph. punctatissima* Mayr and *anastasii* Emery. Head very large, a little longer than broad, slightly narrower in front than behind, with deeply excised posterior border, feebly convex sides and rounded posterior corners, without traces of scrobes on the sides. Occipital groove moderately deep; eyes rather large and convex, elliptical, situated $\frac{1}{4}$ the distance from the anterior to the posterior corners of the head. Mandibles convex, with two apical teeth. Clypeus short, rather flat, ecarinate, its anterior margin very feebly bidentate and scarcely excised in the middle. Frontal area distinct, impressed, subtriangular. Frontal carinæ very short. Antennæ rather long and slender, the scapes reaching to nearly $\frac{3}{4}$ the distance between the eyes and the posterior corners of the head; joints 2-8 of the funiculi as long as broad; two basal joints of club each more than twice as long as broad and together equalling the terminal joint. Thorax small, through the pronotum less than half as broad as the head. There is a distinct transverse line-like impression between the pro- and mesonotum and another broader one across the mesonotum, so that the thorax resembles that of *Ph. triconstricta* Mayr in profile. The humeri are neither angular nor prominent, the posterior portion of the mesonotum falls as an abrupt declivity to the mesoepinotal constriction. Epinotum small, much lower than the promesonotum, with subequal base and declivity, the former feebly convex in profile, the latter concave. Spines slender, pointed, about half as long as the base of the

epinotum, directed upward, backward and slightly outward; between them the surface of the epinotum forms a gradual, uninterrupted slope. Petiole about twice as long as broad, broadest behind through the node which is rounded and subconical, not compressed. Postpetiole broader than the petiole, somewhat broader than long, its sides bluntly but distinctly angular just in front of the middle. Gaster much smaller than the head, elliptical, with rounded anterior border. Legs rather long, femora incrassated in the middle.

Mandibles smooth and shining, very sparsely punctate. Clypeus, head, thorax, pedicel and basal $\frac{1}{4}$ of first gastric segment opaque. Clypeus obscurely punctate-rugulose. Head, thorax, pedicel and anterior portion of first gastric segment very finely and densely punctate; head also feebly longitudinally rugulose on the front and cheeks; its posterior corners with a few shallow, elongate foveolæ. Posterior fourth of first gastric segment and all the remaining segments shining. Legs subopaque.

Hairs yellow; on the head, thorax and gaster sparse, erect and blunt. Appendages with very fine pale pubescence, without erect hairs.

Testaceous; head slightly darker and more reddish; inner borders of mandibles and anterior border of clypeus and head dark brown or blackish.

Described from two specimens taken at Tukeit (Lutz).

This species belongs to a very complex and difficult group and seems to be most closely related to *Ph. punctatissima* and *anastasioi*, but differs from both in its smaller size, much longer antennæ, very differently shaped promesonotum, narrower and less distinctly conulate postpetiole and peculiar pilosity, the hairs being blunt on the body, instead of pointed, and absent on the scapes and legs.

35. *Pheidole cataractæ* sp. nov.

Soldier. Length: 2.5 mm.

Related to *Ph. dimidiata* Emery and *orbica* Forel. Head large, as broad as long, a little broader behind than in front, with straight sides, broadly rounded posterior corners and deep occipital excision extending forward into a deep and rather broad occipital groove. Teeth on the anterior border of the gula large and projecting. Eyes moderately large and convex, situated a little less than $\frac{1}{2}$ the distance from the anterior to the posterior corners of the head. Mandibles convex, with two apical teeth and two basal denticles. Clypeus short, flat, ecarinate, the anterior border with a small but distinct median excision, sinuate on the sides. Frontal area large, impressed, semicircular. Frontal carinæ diverging behind, continued back to the posterior third of the head as a ruga forming on each side the mesial border of a very faint, narrow scrobe-like impression. Antennæ rather slender; scapes reaching fully $\frac{2}{3}$ the distance between the eyes and posterior corners of the head, funicular joints 2-7 as long as broad; the two basal joints of the club subequal, fully twice as long as broad, together as long as the terminal joint. Thorax rather robust anteriorly through the humeri which are prominent but not angular. Promesonotal suture distinct and impressed; base of mesonotum convex, sloping rather gradually behind

to the deep mesoëpinotal constriction. Epinotum in profile with straight base and concave declivity, the former distinctly longer than the latter; spines slender, short and acute, shorter than their distance apart at the base, directed upward. Petiole slender, fully 3 times as long as broad, slightly broader behind through the node, with straight sides, the node rather low, scarcely compressed anteroposteriorly, with straight, entire superior border. Postpetiole small, a little broader than the petiole and as long as broad, trapezoidal, broadest through the anterior border, with distinct anterior corners. Gaster much smaller than the head, elliptical, with rounded anterior border. Legs rather long; femora distinctly enlarged in the middle.

Smooth and shining; mandibles coarsely and sparsely punctate, coarsely rugose at the base. Clypeus smooth in the middle, longitudinally rugulose on the sides. Anterior $\frac{2}{3}$ of head sharply but not very densely, longitudinally rugose, the inter-rugal spaces more or less reticulate-punctate; posterior portion of head glabrous, with sparse piligerous punctures. Pronotum smooth and shining; meso- and epinotum subopaque, densely and uniformly punctate. Gaster and nodes of petiole and postpetiole smooth and shining, peduncle of petiole densely punctate.

Hairs whitish, very long, rather abundant but uneven, suberect both on the body and appendages and as long on the scapes and legs as on the thorax and gaster.

Black; antennæ castaneous; legs slightly paler, tarsi yellowish; mandibles, except their borders, clypeus and cheeks deep brownish red.

Worker. Length 2 mm.

Head a little longer than broad, regularly elliptical, without posterior corners, evenly and convexly narrowed behind to the occipital articulation which is distinctly marginate. Eyes in front of the middle of the sides. Mandibles with numerous small but very unequal denticles, apical tooth not enlarged nor lengthened. Clypeus convex, with rounded, slightly projecting anterior border. Antennæ long and slender, the scapes extending about $\frac{1}{4}$ of their length beyond the occipital border of the head. Thorax similar to that of the soldier, but more slender and the epinotum without spines, each of which is represented merely by the angle between the base and declivity in profile. Petiole and postpetiole also similar to those of the worker but the latter small and globular, scarcely broader than the petiole. Gaster smaller than the head. Legs slender.

Smooth and shining; mandibles sparsely punctate; mesonotum and epinotum densely punctate and subopaque.

Hairs whitish, suberect, abundant and conspicuously long, as long on the appendages as on the body; even the funiculi, excluding the clubs, bear long and conspicuous hairs.

Black or very dark brown; antennæ, and legs paler brown; mandibles and tarsi yellowish.

Described from three soldiers and five workers taken at Kaieteur (Lutz).

This species is evidently related to *Ph. dimidiata* and *orbica*, but is easily distinguished from both in the soldier phase by the much longer antennæ, more slender and upwardly directed epinotal spines, much longer and narrower petiole, longer hairs, etc. The worker of *cataractæ* has a very different head, lacking the posterior corners, the antennæ and legs are much longer than in *dimidiata* and *orbica* and the pilosity is much longer and more abundant, especially on the appendages.

36. *Monomorium pharaonis* L. Several workers taken on board the steamship "Korona" (Lutz).

37. *Wasmannia auropunctata* Roger. Numerous workers and a single winged female from Tukeit (Lutz and Crampton).

38. *Wasmannia subpolita* sp. nov.

Worker. Length: 2-2.2 mm.

Head as broad as long, distinctly broader behind than in front, with very feebly concave posterior border and rather convex sides; the posterior orbits of the rather large eyes at the median transverse diameter of the head. Mandibles with oblique terminal borders, armed with four subequal teeth. Clypeus large, convex, with evenly rounded, entire, projecting anterior margin. Frontal area small, crescentic. Frontal carinae diverging behind, continued nearly to the posterior corners of the head, distinct in front but very feeble and more or less obsolete behind, forming the mesial borders of shallow, indistinct antennal scrobes. The lateral border of each scrobe is formed by a delicate ridge running just above the eye and also growing very faint posteriorly. Antennal scapes reaching to the posterior corners of the head; club of funiculus distinctly 3-jointed, its basal joint nearly as long as the second, but more slender; both together shorter than the enlarged terminal joint; first funicular joint fully 3 times as long as broad; second and seventh joints as long as broad; joints 3-6 a little broader than long. Thorax rather robust, but much narrower than the head, broadest through the pronotum, which is a little longer than broad, with rounded sides, flattened above and marginate along the raised border just back of the neck, the margination running down on each side to the insertion of the fore coxa. Mesoepinotal constriction distinct; epinotum from above as broad as long, with inflated sides; in profile the base is convex in front, flattened behind, longer than the sloping, concave declivity. The spines are small and acute, as long as the distance between their bases, directed upward and outward and slightly backward. Petiole less than twice as long as broad, broadest behind through the rounded node, which rises rather abruptly from the peduncle; postpetiole rounded, a little broader than long and a little broader than the postpetiole, its node convex but lower than the petiolar node. Gaster about the size of the head, elongate elliptical, with rather straight anterior border.

Subopaque; delicately reticulate rugose; mandibles, clypeus, upper surface of head, nodes of petiole and postpetiole, gaster and appendages smooth and shining.

Hairs white, glistening; on the body very sparse, short, erect and slender but blunt at the tips, still shorter and oblique on the legs and scapes.

Honey yellow throughout, with only the mandibular teeth and articulations of the appendages brown and the eyes black.

Described from numerous workers taken at Tukeit and Kaieteur (Lutz) and Kauwa Creek, Roraima (Crampton).

This species at first sight may be readily mistaken for a *Leptothorax*, but it is evidently referable to the genus *Wasmannia*, though it exhibits many of the generic peculiarities in a feeble or obliterated condition. Among

the described species it most closely approaches *W. iheringi* Forel of Brazil, but is very different in the shape of the thorax and in the peculiar and very feeble sculpture.

39. *Daceton armigerum* Perty. Several workers from Tukeit (Lutz) and a winged female from an unrecorded locality in British Guiana (R. W. Crew).

40. *Basiceros singularis* F. Smith. A worker from Tukeit and two workers and a dealated female from Kaieteur (Lutz). This seems to be the first time this extraordinary ant has been taken since the types were captured by Bates at Ega, Brazil. The specimens from British Guiana agree well with Smith's figures if due allowance be made for the inaccuracies that characterize all his illustrations.

41. *Sericomyrmex lutzi* sp. nov.

Worker. Length 3-3.5 mm.

Head cordate, narrowed in front, a little broader than long, the posterior corners prominent and angular but not acute, the posterior border angularly excised, the lateral borders feebly convex; scrobes for the antennæ distinct in front, not carried to the posterior corners but fading out about half way between them and the dilated frontal carinæ. Genal carinæ sharp, extending a little further back than the eyes. Eyes rather large, moderately convex; their posterior orbits about $\frac{1}{3}$ the distance between the anterior and posterior corners of the head. Mandibles rather long, their external borders concave in the middle, their terminal borders armed with 7 or 8 large teeth. Clypeus rather flat in the middle, its anterior border transverse, entire and nearly straight. Antennal scapes reaching to a little more than $\frac{2}{3}$ the distance between the eyes and the posterior corners of the head. Pronotum with three blunt tubercles, the median slightly larger than the others which form the lateral corners of the segment. Inferior pronotal angle with a flat, pointed tooth. Mesonotum with a pair of pointed, conical tubercles at its anterior corners, much larger than those on the pronotum, a little longer than broad at their bases, posteriorly with a pair of much smaller and blunter, approximated tubercles. Mesoëpinotal constriction short and pronounced. Epinotum short, as broad as long; the base with a pair of low blunt longitudinal ridges, in profile convex in front, sloping behind, very distinctly longer than the concave declivity. Petiole from above subrectangular, longer than broad, a little broader in front than behind, the node formed by a couple of small, blunt tubercles with rather straight anterior and concave posterior slopes in profile. Postpetiole about $1\frac{1}{2}$ times as broad as the petiole and nearly twice as broad as long, triangular in profile, its upper surface longitudinally impressed in the middle. First gastric segment subrectangular, a little longer than broad, with four blunt longitudinal ridges, two on the dorsal surface and one on each side forming the lateral borders. The latter are short and rather indistinct. Legs long and stout.

Mandibles shining, sparsely and coarsely punctate, with a few short, coarse striæ at the extreme base and near the terminal border. Remainder of body opaque, densely punctate-rugulose and covered with minute piligerous tubercles.

Covered, apart from the mandibles, with a dense layer of fine, grayish yellow hairs, partly forming a long, dense appressed pubescence and partly, on the dorsal surface of the body, funiculi and extensor surfaces of the legs, a sparser layer of longer, nearly reclinate and straight hairs.

Deep ferruginous red; legs scarcely paler; mandibles bright red, their terminal borders and the anterior border of the clypeus and head black.

Female. Length 5 mm.; wings 7 mm.

Differing from the worker in having the antennal scrobes more distinct behind, the mesonotum flattened above and without tubercles and the ridges on the first gastric segment longer and curved ventrally behind. Wings heavily infuscated; opaque, with dark brown veins.

Male. Length 4 mm.

Head, including the eyes, a little broader than long, narrowed behind, with straight, distinct posterior and postocular borders; cheeks short but distinct; eyes very large and convex; ocelli rather far apart. There are distinct but short scrobe-like depressions at the sides. Frontal carinae short. Mandibles long and slender with three large apical and several small basal teeth. Antennae slender, 12-jointed; scapes as long as the funiculi without their terminal joint; funiculi with a distinct 4-jointed club, the three basal joints of which are subequal and together longer than the terminal joint; first funicular joint nearly twice as long as broad, joints 2-7 distinctly longer than broad. Thorax rather robust, broader than the head, without tubercles; mesonotum without distinct Mayrian furrows; scutellum with a median longitudinal impression. Petiole from above broadest in the middle, the posterior lateral borders excised. Postpetiole similar to that of the worker. Gaster of the usual structure in male *Attini*, without longitudinal ridges on the first segment. Cerci distinct; genitalia very small and retracted. Legs slender.

Sculpture much as in the worker, but the mandibles less smooth and shining, very finely and densely striate. Gaster coarsely reticulate and sparsely punctate.

Both the pubescence and long, oblique hairs much less abundant than in the worker and female so that the surface of the integument is clearly visible. Legs and scapes with very fine, appressed pubescence, appearing naked under a low magnification.

Color more brownish than in the worker and female; head dark brown; antennae, mandibles and legs brownish yellow. Wings colored as in the female.

Described from numerous workers and females and a single male from small "island" of forest in the savannah near Kauwa Creek, Roraima.

The relationship of this to the nine other known species of *Sericomyrmex* may best be shown by slightly modifying Forel's recent table for the workers and females of the genus and inserting the new form:

1. Pubescence woolly, whitish, resembling mold; erect or reclinate hairs absent.
♀ 5.7 mm. Brazil. *burchelli* Forel
- Suberect or reclinate hairs present, more or less abundant; aspect not moldy. . . 2
2. Head with scrobes on each side for the accommodation of the antennae. 3
- Scrobes absent. ♂ 4.5 mm. Brazil. *mayri* Forel
3. Scrobes complete and very distinct. 4
- Scrobes incomplete or partially indistinct. 5

4. First gastric segment not marginate on the sides; petiole unarmed. ♀ 3.5-3.8 mm. Brazil. *scrobifer* Forel
First gastric segment marginate on the sides, petiole bidentate ♀ 8 mm. Brazil. *opacus* Mayr
5. Mesonotum in front with a pair of elevated horns. 6
Mesonotum in front only with tubercles. 7
6. Epinotum bidentate; horns of mesonotum long and spiniform. ♀ 3.5-4 mm. Brazil. *saussurei* Emery
Epinotum unarmed; with two longitudinal ridges only; horns of mesonotum smaller, conical. ♀ 3-3.5 mm. ♀ 5 mm. British Guiana. *lutzi* sp. nov.
7. Pile of body and appendages reclinate or very oblique. Gaster scarcely marginate on the sides. ♀ 3.3-3.7 mm. Colombia. *diego* Forel
Pile suberect, first gastric segment anteriorly marginate on the sides. 8
8. Mesonotum bidentate behind. ♀ 2.7 mm. Brazil. *parvulus* Forel
Mesonotum obtusely bituberculate behind. Larger. 9
9. Scrobe very indistinct. ♀ 4.5 mm. Trinidad. *urichi* Forel
Scrobe rather distinct. ♀ 3.5 mm. Mexico. *aztecus* Forel

42. *Apterostigma mayri* Forel. Several workers from Tukeit (Lutz).

43. *Apterostigma urichi* Forel, var. A single worker from Kaieteur (Lutz) is considerably darker than typical specimens from Trinidad and covered with a bluish bloom. It may represent a new variety, but the material is not sufficient to justify the introduction of another name.

44. *Trachymyrmex farinosa* Emery. A single worker from Tukeit (Lutz).

45. *Trachymyrmex urichi* Forel subsp. *fuscus* Emery, var. Eight workers from the savannah 10 miles west of Parmak and the Cotinga River, altitude about 3000 ft. (Crampton). These agree closely with cotype specimens but are somewhat darker and covered with a whitish bloom.

46. *Acromyrmex emilii* Forel. Numerous workers from Kaieteur and Amatuk (Lutz).

47. *Atta sexdens* L. Workers of the typical form from Rockstone (Lutz).

48. *Atta sexdens* L. subsp. *laevigata* F. Smith. Fine series of workers from Rockstone (Lutz) and from Saveritik forest (Crampton). The latter are darker than the former.

49. *Atta cephalotes* L. Workers from Tumatumari (Crampton) and Tukeit (Lutz).

50. *Cryptocerus oculatus* Spinola. Two workers from Kaieteur (Lutz).

51. *Cryptocerus spinosus* Mayr. Two workers from Rockstone and Potaro Landing (Lutz).

52. *Cryptocerus maculatus* F. Smith. A worker minor from Tumatumari (Lutz).

53. **Cryptocerus pusillus** *Klug.* A worker minor from Georgetown (Lutz).

54. **Cryptocerus (Cephalotes) atratus** *L.* Several workers from Georgetown and Rockstone (Lutz).

55. **Crematogaster acuta** *Fabr.* Four workers from Kaieteur (Lutz).

56. **Crematogaster quadriformis** *Roger.* A single dark-colored worker from Kaieteur (Lutz).

57. **Crematogaster longispina** *Emery* subsp. **tenuicula** *Forel.* A large number of workers, Tukeit and Kaieteur (Lutz), agreeing closely with cotype specimens from Pará, Brazil.

58. **Crematogaster limata** *F. Smith* subsp. **ludio** *Forel.* Many worker specimens from Kaieteur, Tukeit and Tumatumari, B. G. and Fort Amsterdam, D. G. (Lutz) agreeing very closely with Forel's description, except in the shape of the petiole, which is distinctly narrowed in front.

59. **Crematogaster limata** *F. Smith* subsp. **parabiotica** *Forel.* Several workers from Tukeit (Lutz) agreeing very closely with cotypes from Colombia.

60. **Crematogaster brevispinosa** *Mayr* var. **tumulifera** *Emery.* Numerous workers found nesting in old moth cocoons at Georgetown (Lutz) agree with this variety except in being rather dark in color and in having the convex base of the epinotum striated. As Forel distinguishes no less than 19 varieties and subspecies of *brevispinosa* I feel disinclined to add another name till the whole group can be carefully studied with abundant material.

Subfamily DOLICHODERINÆ.

61. **Dolichoderus attelaboides** *Fabr.* One worker from Tukeit (Lutz) and one from Bartica (Geo. Engelhardt).

62. **Dolichoderus decollatus** *F. Smith.* Two workers from Kaieteur (Lutz).

63. **Dolichoderus (Hypoclinea) bidens** *Latr.* Several workers from Kaieteur (Lutz) and one from Bartica (Geo. Engelhardt).

64. **Dorymyrmex pyramicus** *Roger.* Two workers from Tumatumari (Lutz).

65. **Azteca instabilis** *F. Smith.* Numerous workers from Kaieteur (Lutz).

66. **Azteca jelskii** *Emery.* Numerous workers from Tukeit (Lutz).

67. **Azteca sericea** *Mayr.* Several media and minor workers from Kaieteur (Lutz).

Subfamily CAMPONOTINÆ.

68. **Brachymyrmex patagonicus** *Mayr.* More than a dozen workers from Kaieteur and six dealated females from Tukeit (Lutz).

69. **Prenolepis (Nylanderia) longicornis** *Fabr.* A few workers taken on board the steamship "Korona."

70. **Prenolepis (Nylanderia) cæcilie** *Forel.* Numerous workers and three winged females from Kaieteur (Lutz).

71. **Prenolepis (Nylanderia) lietzi** *Forel.* Four workers from Kauwa Creek, Roraima (Crampton).

72. **Gigantiops destructor** *Fabr.* Several workers and a dealated female from Kaieteur, Tukeit and Tumatumari (Lutz).

73. **Dendromyrmex fabricii** *Roger.* Three workers and a dealated female from Tukeit (Lutz), together with their small carton nest on the under side of a leaf. The worker agrees very closely with Roger's description based on specimens from Surinam. The female measures about 7 mm. and very closely resembles the worker except that the basal segments of the gaster are darker and the legs are deep red instead of testaceous.

74. **Dendromyrmex fabricii** *Roger* var. **rufescens** var. nov.

Worker. Differing from the typical form in color, the whole body and the appendages being ferruginous red, the gaster considerably darker and more brownish, with the posterior portions of each segment blackish and the clypeus, mandibles and anterior border of the head more yellowish. The appressed pubescence on the gaster is a little sparser than in the typical form, so that the punctate integument is more clearly visible.

Numerous specimens from Tukeit (Lutz).

75. **Dendromyrmex nidulans** *F. Smith* var. **nigripes** var. nov.

Worker. Differing from the typical form in having the legs and antennal funiculi black or very dark brown, with only the terminal tarsal joints and the tip of the last funicular joint reddish. The gaster is golden brown as in typical specimens from Brazil.

Female. Differing from the female of typical *nidulans* in the same characters as the worker. The wings have the veins bordered with dark brown as in the type.

Several workers and a single female from Kaieteur (Lutz).

76. **Dendromyrmex chartifex** *F. Smith* var. **felis** *Mann* (MS.).

Worker. Differing from the typical form in having the body opaque and densely and finely punctate. Hairs on the head, thorax and gaster somewhat more abundant. There is no appreciable difference in color.

Female (deälated). Length 10.5 mm. Very closely resembling the worker. Numerous workers and a single female from Tukeit, in the fold of a leaf the edges of which had been drawn together and fastened with silk by a spider (?) (Lutz).

77. **Camponotus** (**Dinomyrmex**) **agra** *F. Smith*. Two minor workers from Kaieteur (Lutz).

78. **Camponotus** (**Dinomyrmex**) **mocsaryi** *Forel*. Three minor workers from Kaieteur (Lutz). The upper surface of the gaster is opaque and yellow, with a narrow transverse black band near the posterior edge of each segment. Forel does not describe the gaster but Emery mentions the black bands in the worker of this species (*Rend. Accad. Inst. Sc. Bologna* 1903, p. 20).

79. **Camponotus** (**Myrmothrix**) **rapax** *Fabr.* Several major and minor workers from Tukeit (Lutz).

80. **Camponotus** (**Myrmothrix**) **abdominalis** *Fabr.* Seven workers of the typical form of this variable species from Tukeit and Kaieteur (Lutz) and Bartica (Geo. Engelhardt). Three of the specimens, a media and two minors, are attached to leaves and have a fungus (*Cordyceps unilateralis* Tul.) growing out of the top of the head.

81. **Camponotus** (**Myrmosphincta**) **sexguttatus** *Fabr.* var. **fusciceps** *Emery*. Several workers and a deälated female from Kaieteur (Lutz). The head and antennal scapes of the female are black, the mandibles and funiculi deep red.

82. **Camponotus** (**Myrmamblys**) **novogrenadensis** *Mayr*. Eight workers from Fort New Amsterdam, Paramaribo, Dutch Guiana (Lutz).

83. **Camponotus** (**Myrmobrachys**) **senex** *F. Smith*. Numerous workers from Kaieteur and Tukeit (Crampton and Lutz).

84. **Camponotus** (**Myrmorhachis**) **rectangularis** *Emery*. A single worker from Tumatumari (Lutz).

85. **Camponotus** (**Myrmorhachis**) **latangulus** *Roger*. A single worker from Tumatumari (Lutz).