PARC NATIONAL ALBERT
I. MISSION G. F. DE WITTE 1933-1935
Fascicule 43 (12)

NATIONAAL ALBERT PARK
I. ZENDING G. F. DE WITTE 1933-1935
Aflevering 43 (12)

HYMENOPTERA

Family SPHEGIDAE

BY

G. ARNOLD (Bulawayo).

Subfamily TRYPOXYLONINAE

I. — Genus **TRYPOXYLON** LATREILLE.

Trypoxylon LATREILLE, Préc. car. génér. Ins., 1796, p. 121. — DE DALLA TORRE, Catal. Hymenopt., VIII, 1897, p. 700. — BRADLEY, Trans. Ent. Soc. Lond., 1919, p. 60. — ARNOLD, Ann. Transv. Mus., IX, 1922, p. 105; idem, XI, 1924, 1, p. 10.

Apius JURINE, Nouv. méth. class. Hymén., 1807, p. 140; T. 3, Gen. 8.

1. — **Trypoxylon chirindensis** ARNOLD.

Trypoxylon chirindensis ARNOLD, Occ. Pap. Rhod. Mus., 5, 1936, p. 35, fig.

Rhodesia.
Rutshuru (alt. 1.285 m.), I.1934.
1 specimen ♂.

Trypoxylon aeneipennis n. sp.

(Fig. 1.)

♀ 12,5 mm. long. Black. Mandibles fusco-ferruginous, the extreme base black. Wings pale brown, iridescent and with a pale bronzy lustre, the veins black. Clypeus and sides of the face below the ocular sinuses and the temples with yellowish grey pubescence, sparse on the temples. Face, vertex and thorax, excepting the anterior face of the pronotum, with erect and fairly long pilosity, black and dense on the head and thorax, greyish brown, sparse and short on the epinotum. Tergites 1-5 with a

little greyish pubescence at the sides, eauch of the sternites 2-5 with two outstanding bristles near the apex.

Clypeus, ocular sinuses and supra-antennal carina nearly dull and very shallowly punctured, the apical margin of the clypeus depressed and almost smooth. Face, as fas as the anterior ocellus, dull, indistinctly and longitudinally rugose and shallowly punctured between the rugae. The vertex, from the anterior ocellus to the occiput, sparsely punctured, slightly shining between the punctured. Occiput and temples shining, almost impunctate. Pro-mesonotum, mesopleurae, scutellum and metanotum closely punctured, the punctures smallest on the pronotum and metanotum, largest on the mesopleurae. On the mesonotum, scutellum and metanotum which are dull, the punctures for the greater part are as wide as the spaces between them, but on the mesopleurae behind the episternal suture they are wider apart and the spaces between are shining. Metapleurae impunctate and shining. Median area of the epinotum U-shaped, about as long as

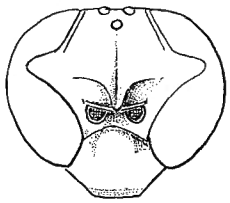

FIG. 1. — *Trypoxylon aeneipennis* n. sp. ♀ (head).

wide at the base, widely grooved down the middle, obliquely rugose at the base, transversely so at the apex, the rugae ending at the outer margin of the lateral furrows, the spaces between them somewhat shining. The rest of the dorsum and the declivity of the epinotum reticulate-rugose, the former margined at the sides with à longitudinal carina and also with a few short carinae posteriorly; the declivity has several strong and transverse carinae and is deeply grooved down the middle. Separated from the bottom of the groove by a smooth space, there is a semi-circular and horizontal lamella above the insertion of the first tergite. The sides of the epinotum are closely and obliquely striate.

Clypeus moderately swollen at the base, about three-fourths wider than long, the apical margin transverse in the middle. Face with a transverse carina below the supra-antennal carina; above the latter the face is somewhat tumid, without carinae but with a median impression reaching from the supra-antennal carina to the anterior ocellus. The emargination of the inner orbits is a little deeper than wide. Interocular distance on the vertex equal to the length of the first two joints of the flagellum plus one-third of the third joint. The second joint is three times longer than wide at the apex and two-sevenths longer than the third. Shoulders of the pronotum fairly prominent but rounded. Petiole a little more than twice as long as

the second tergite, five times longer than wide behind and very little shorter than the hind tibia and metatarsus united.

The puncturation of the head and thorax is much closer than in any other Ethiopian species of the group in which the face is without large carinae, and also stronger, except in *T. brevipenne* SAUSSURE, which, however, is a much smaller insect. In the entirely fuscous wings, this species also differs from all the other Ethiopian species.

Lac Magera (alt. 2.000 m.), III.1934, 1 ♀.

Subfamily **PHILANTHINAE**

II. — Genus **PHILANTHUS** FABRICIUS.

Philanthus FABRICIUS, Skrivt. naturh. Selsk. Kjobenhavn, I, 1, 1790, p. 224, n. 7. — KOHL, Ann. naturh. Hofmus. Wien, VI, 1891, p. 345. — DE DALLA TORRE, Catal. Hymenopt., VIII, 1897, p. 482. — ARNOLD, Ann. Transv. Mus., IX, 2, 1922, p. 107; idem, XI, 3, 1925, p. 138.

Chilopogon WESTWOOD, Zool. Journ., V, 1832-1834, p. 441.

Simblephilus JURINE, Nouv. méth. class. Hymén., 1807, p. 185, n. 18; T. 4, Gen. 18.

3. — **Philanthus limatus** BINGHAM.

Philanthus limatus BINGHAM, Trans. Zool. Soc. Lond., 19, 1909, p. 180.

Ruanda : Visoke (alt. 3.770 m.), II.1935; Kibati (Shove) (alt. 1.900 m.), VI.1935; Kibumba (alt. 2.000 m.), V.1935; Bugeshi (alt. 2.650 m.), III.1935; volcan Nyiragongo (alt. 2.300 m.), II.1935; Nyarusambo (alt. 2.000 m.), VII.1935; Gandjo (alt. 2.050 m.), IX.1934; Ruanda : Ninda (alt. 2.150 m.), IX.1934; Ruanda : Nord-Est Gando (alt. 2.400 m.), VI.1935.

18 specimens.

4. — **Philanthus nigrohirtus** TURNER.

Philanthus nigrohirtus TURNER, Ann. Mag. Nat. Hist., 2, 1918, p. 461. — ARNOLD, Ann. Transv. Mus., XI, 3, 1925, pp. 141, 143, 164.

Kibati (Shove) (alt. 1.900 m.), VI.1935; Gandjo (alt. 2.050 m.), IX.1934; Nyarusambo (alt. 2.000 m.), VI.1935; Ruanda : Nord-Est Gando (alt. 2.400 m.), VI.1935.

12 specimens.

5. — **Philanthus foveatus** ARNOLD.

Philanthus foveatus ARNOLD, Occ. Pap. Rhod. Mus., 2, 1933, p. 55.

Kibati (Shove) (alt. 1.900 m.), VI.1935.

4 specimens.

6. — **Philanthus stygius** GERSTAECKER.

Philanthus stygius GERSTAECKER, Monatsber. Akad. Wiss. Berlin, 1857, p. 509, n° 1, ♂; Peter's Reise Mossambique Zool., V, 1862, p. 472, ♂, T. 30, fig. 11. — BISCHOFF, Wiss. Ergebn. Deuts. Zentr. Afr. Exped., 1907-1908, III, Zool., I, 1912, p. 225. — ARNOLD, Ann. Transv. Mus., XI, 3, 1925, pp. 141, 143, 163.

Described from the Luangfia Valley; N.-E. Rhodesia.

W. Ruwenzori, II.1908.

Subfamily **CERCERINAE**

III. — Genus **CERCERIS** LATREILLE.

Cerceris LATREILLE, Hist. nat. Crust. Ins., III, 1802, p. 367. — DE DALLA TORRE, Catal. Hymenopt., VIII, 1897, p. 449. — ARNOLD, Ann. Transv. Mus., IX, 2, 1922, p. 107; idem, XI, 3, 1925, p. 137; idem, XIV, II, 1931, pp. 135, 136. — BRAUNS, Ann. Transv. Mus., XI, 4, 1926, p. 268.

7. — **Cerceris multipicta** SMITH.

Cerceris multipicta SMITH, Ann. Mag. Nat. Hist., 4, XII, 1873, p. 411, ♂ ♀. — SCHLETTERER, Zool. Jahrb., II, 1887, p. 430, n. 43. — ANDRÉ, Spec. Hymén. Europe, III, 33, 1889, p. 310, ♂ ♀. — BRAUNS, Ann. Transv. Mus., XI, 4, 1926, p. 323. — ARNOLD, Ann. Transv. Mus., XIV, II, 1931, pp. 144, 147.

Bitshumbi (alt. 925 m.), X.1933.

1 specimen ♀.

8. — **Cerceris** sp. ?

2 specimens.

Bitshumbi (alt. 925 m.), X.1933.

Subfamily **STIZINAE**

IV. — Genus **STIZUS** LATREILLE.

Stizus LATREILLE, Hist. Nat. Crust. Ins., III, 1802, p. 344. — DE DALLA TORRE, Catal. Hymenopt., VIII, 1897, p. 519. — ARNOLD, Ann. Transv. Mus., IX, 2, 1922, p. 110; idem, XIII, 4, 1929, p. 260.

9. — **Stizus niger** RADOSZKOWSKI.

Stizus niger RADOSZKOWSKI, Journ. Acad. Sc. Math., etc., Lisboa, VIII, 1881, p. 208, n° 71, ♀. — HANDLIRSCH, A., Sitzb. Akad. Wiss. Wien, CI, 1892, p. 182, n° 142, ♀. — TURNER, Ann. Mag. Nat. Hist., IX, 1912, p. 346, ♂. — ARNOLD, Ann. Transv. Mus., XIII, 4, 1929, pp. 263, 267, 314.

Rivière Molindi (alt. 1.200 m.), V.1934.

1 specimen ♀.

Subfamily **AMPULICINAE**

V. — Genus **DOLICHURUS** LATREILLE.

Dolichurus LATREILLE, Gen. Crust. Ins., IV, 1809, p. 387. — DE DALLA TORRE, Catal. Hymenopt., VIII, 1897, p. 370. — ARNOLD, Ann. Transv. Mus., IX, 2, 1922, p. 110; idem, XII, 3, 1928, p. 192.

10. — **Dolichurus** sp. ?

Rutshuru (alt. 1.285 m.), XII.1933.

1 specimen ♂.

VI. — Genus **AMPULEX** JURINE.

Ampulex JURINE, Nouv. Méth. Class. Hyménopt., 1807, p. 132; t. 14, fig. 16. — KOHL, Ann. naturh. Hofmus. Wien, VIII, 1893, p. 455. — DE DALLA TORRE, Catal. Hymenopt., VIII, 1897, p. 372. — ARNOLD, Ann. Transv. Mus., IX, 2, 1922, p. 109; idem, XII, 3, 1928, p. 197.

11. — **Ampulex lazulina** KOHL.

Ampulex lazulina KOHL, Ann. naturh. Hofmus. Wien, VIII, 1893, pp. 475, 495, n° 34, ♀, t. 13, fig. 52. — ARNOLD, Ann. Transv. Mus., XII, 3, 1928, pp. 200, 222.

Camp de la Rwindi (alt. 1.000 m.), XI.1934.

1 specimen ♀.

12. — **Ampulex senex** BISCHOFF.

Ampulex senex BISCHOFF, Mitth. Zool. Mus. Berlin, VII, 1915, p. 474, ♀. — ARNOLD, Ann. Transv. Mus., XII, 3, 1928, pp. 201, 228.

Ruanda : Karisimbi.

Subfamily **SPHEGINAE**

VII. — Genus **SCELIPHRON** KLUG.

Sceliphron KLUG, Neue Schr. Ges. naturf. Fr. Berlin, III, 1801, p. 561. — DE DALLA TORRE, Catal. Hymenopt., VIII, 1897, p. 378. — ARNOLD, Ann. Transv. Mus., IX, 2, 1922, p. 109; idem, XII, 3, 1928, p. 234.
Pelopoeus LATREILLE, Hist. nat. Crust. Ins., III, 1802, p. 334.
Chalybion DAHLBOOM, Hymen. Eur., I, 1843-1845, p. 21.

13. — **Sceliphron brachystylus** (KOHL).

Pelopoeus brachystylus KOHL, Verh. Zool. Bet. Ges. Wien, XXXVIII, 1888, p. 154, ♀; Ann. K. K. N. H. Mus. Wien, XXXII, 1918, p. 83 ♂.
Sceliphron brachystylus ARNOLD, Ann. Transv. Mus., XII, 3, 1928, pp. 236, 243.

Rutshuru (alt. 1.285 m.), VI.1934.
1 specimen ♀.

14. — **Sceliphron spirifex** (LINNÉ).

Sphex spirifex LINNÉ, Syst. Nat. Ed., 10*a*, 1758, p. 570.
Pelopoeus spirifex LATREILLE, Hist. nat. Crust. Ins., III, 1802, p. 334.
Sceliphron spirifex DE DALLA TORRE, Catal. Hymenopt., VIII, 1897, p. 390. — ARNOLD, Ann. Transv. Mus., XII, 3, 1928, pp. 236, 244.

Rutshuru (alt. 1.285 m.), VI.1934; Kisigari (alt. 1.900-2.200 m.), VII.1934; camp de la Rwindi (alt. 1.000 m.), XI.1934.
5 specimens.

15. — **Sceliphron quartinae** (GRIBODO).

Pelopoeus quartinae GRIBODO, Ann. Mus. civ. Genova, XXI, 1884, p. 298, n° 35, ♂♀.
Sceliphron quartinae DE DALLA TORRE, Catal. Hymenopt., VIII, 1897, p. 389. — ARNOLD, Ann. Transv. Mus., XII, 3, 1928, pp. 236, 245.

Tshambi (alt. 975 m.), I.1935.
1 specimen ♂.

VIII. — Genus **SPHEX** LINNÉ.

Sphex LINNÉ, Syst. Nat. Ed. X, n° 216, 1758, pp. 569-572; Fauna Suecica, 1761, p. 411. — KOHL, Ann. Naturh. Hofmus. Wien, V, 1890, pp. 76, 317. — DE DALLA TORRE, Catal. Hymenopt., VIII, 1897, p. 412. — ARNOLD, Ann. Transv. Mus., IX, 2, 1922, p. 110; idem, XII, 3, 1928, p. 247.
Ammophila KIRBY, Trans. Linn. Soc., IV, 1798, p. 195 (ex parte).

16. — **Sphex tenuis** PALISOT-BEAUVAIS.

Sphex tenuis PALISOT-BEAUVAIS, Ins. rec. Afr. et Amér., 1837, p. 48. — ARNOLD, Ann. Transv. Mus., XII, 3, 1928, pp. 250, 252, 265.
Ammophila rugicollis LEPELETIER, Hist. nat. Ins. Hymén., III, 1845, p. 373, n° 14, ♂.
Ammophila guineensis RITSEMA, Tijdschr. v. Entom., XVII, 1874, p. 192, n° 13, ♀.
Ammophila coeruleoornata CAMERON, Ann. Transv. Mus., II, 1910, p. 135, ♂.
Ammophila maculifrons CAMERON, Ann. Transv. Mus., II, 1910, p. 134, ♀.

Camp de la Rwindi (alt. 1.000 m.), XI.1934.
1 specimen ♀.

17. — **Sphex bonae-spei ferrugineipes** (LEPELETIER).

Ammophila ferrugineipes LEPELETIER, Hist. nat. Ins. Hymén., II, 1845, p. 383, n° 24, ♀. — SMITH, Catal. Hymen. Brit. Mus., IV, 1856, p. 212, n° 24. — GERSTAECKER, Peter's Reise Mossambique, Zool., V, 1862, p. 481, ♂♀. — GRIBODO, Ann. Mus. Civ. Genova, XXI, 1884, p. 297, n° 33, ♀.
Ammophila erythrospila CAMERON, Rec. Albany Mus., I, 1905, p. 303, ♂.
Ammophila dunbrodyensis CAMERON, Rec. Albany Mus., I, 1905, p. 322, ♂.
Sphex bonae-spei var. *ferrugineipes* ARNOLD, Ann. Transv. Mus., XII, 3, 1928, p. 276.

Camp de la Rwindi (alt. 1.000 m.), XI.1934.
2 specimens ♀.

IX. — Genus **CHLORION** FABRICIUS.

Chlorion FABRICIUS, Syst. Piez., 1804, p. 217. — ARNOLD, Ann. Transv. Mus., IX, 2, 1922, p. 109; idem, XII, 4, 1928, p. 338.

18. — **Chlorion xanthocerum** (ILLIGER).

Sphex xanthocerus ILLIGER, Mag. Insect., I, 1801, p. 193.
Sphex (*Chlorion*) *xanthoceros* KOHL, Ann. naturh. Hofmus. Wien, V, 1890, p. 183.
Sphex massaicus CAMERON, Sjöstedt Kilimandjaro-Meru Exped., VIII, 1910, p. 262.
Chlorion xanthocerum ARNOLD, Ann. Transv. Mus., XII, 4, 1928, pp. 341, 344, 347.

Kisenyi (lac Kivu) (alt. 1.460 m.), IX.1907 (Herz. MECKLEMB.).

18*a*. — **Chlorion xanthocerum maxillaris** (PALISOT-BEAUVAIS).

Pepsis maxillaris PALISOT-BEAUVAIS, Ins. rec. Afr. et Amér., 1811, p. 38. Hymén.

Pronaeus affinis SMITH, Catal. Hymen. Brit. Mus., IV, 1856, p. 240, n° 5, ♂ ♀.

Chlorion fulvipes GERSTAECKER, Monatsber. Akad. Wiss. Berlin, 1857, p. 510, n° 5, ♂: Peter's Reise in Mossambique, Zool., V, 1862, p. 482, ♂, pl. 31, fig. 1.

Sphex laevilabris CAMERON, Ann. Transv. Mus., II, 1910, p. 137, ♀.

Sphex xanthocerus var. *maxillaris* KOHL, Ann. Naturh. Hofmus. Wien, V, 1890, p. 185, n. 4, ♀.

Chlorion xanthocerum maxillaris ARNOLD, Ann. Transv. Mus., XII, 4, 1928, p. 348.

Kisenyi (lac Kivu) (alt. 1.460 m.), IX.1907 (Herz. z. MECKLENB.); Bitshumbi (alt. 925 m.), X.1933; Kalinga (alt. 1.082 m.), XI.1934; Tshambi (alt. 975 m.), XII.1934.
5 specimens.

18*b*. — **Chlorion xanthocerum subcyaneum** GERSTAECKER.

Chlorion subcyaneum GERSTAECKER, Monatsber. Akad. Wiss. Berlin, 1857, p. 510, n. 6, ♀; Peters' Reise in Mossambique, Zool., V, 1862, p. 482, ♀, pl. 31, fig. 2.

Sphex xanthocerus var. *subcyaneus* KOHL, Ann. Naturh. Hofmus. Wien, V, 1890, p. 185, n. 3, ♂ ♀.

Chlorion xanthocerum subcyaneum ARNOLD, Ann. Transv. Mus., XII, 4, 1928, pp. 341, 345, 348.

Camp de la Rwindi (alt. 1.000 m.), XI.1934.
1 specimen ♂.

18*c*. — **Chlorion xanthocerum unicolor** (SAUSSURE).

Sphex unicolor SAUSSURE, Reise d. Novara, Zool., II, 1, 1867, Hymen., p. 37.

Sphex xanthocerus var. *unicolor* KOHL, Ann. Naturh. Hofmus. Wien, V, 1890, p. 185, n. 1, ♀, fig. 20.

Chlorion xanthocerum unicolor ARNOLD, Ann. Transv. Mus., XII, 4, 1928, pp. 341, 345, 348.

Rivière Molindi (alt. 1.000-1.200 m.), V.1934.
1 specimen.

19. — **Chlorion viduatum** (CHRIST).

Sphex viduata CHRIST, Naturg. d. Insect., 1791, p. 305, pl. 30, fig. 4.
Sphex (*Parasphex*) *viduatus* KOHL, Ann. Naturh. Hofmus. Wien, V, 1890, p. 332, n. 32, ♂ ♀.
Chlorion (*Parasphex*) *viduatum* ARNOLD, Ann. Transv. Mus., XII, 4, 1928, pp. 342, 345, 349.

Bitshumbi (alt. 925 m.), X.1933; camp de la Rwindi (alt. 1.000 m.), XI.1934.

20. — **Chlorion umbrosum lanatum** (MOCSÁRY).

Sphex lanatus MOCSÁRY, Magy. Akad. Termész. Ertek., XIII, 11, 1883, p. 34, n. 44, ♂.
Sphex umbrosus var. *lanata* KOHL, Ann. Naturh. Hofmus. Wien, V, 1890, p. 408, n. 7, ♂.
Chlorion (*Proterosphex*) *umbrosum lanatum* ARNOLD, Ann. Transv. Mus., XII, 4, 1828, pp. 343, 346, 362.

Kalinga (alt. 1.082 m.), XI.1934; Ndeko (près de la Rwindi) (alt. 1.083 m.), XI.1934.
2 specimens.

Subfamily **LARRINAE**

X. — Genus **TACHYTES** PANZER.

Tachytes PANZER, Krit. Revis., II, 1806, p. 129. — KOHL, Verh. Zool. Bot. Ges. Wien, XXXIV, 1884, p. 327. — DE DALLA TORRE, Catal. Hymenopt., VIII, 1897, p. 686. — ARNOLD, Ann. Transv. Mus., IX, 2, 1922, p. 109; idem, 3, 1923, p. 179; idem, IX, 4, 1923, p. 191.

21. — **Tachytes observabilis** KOHL.

Tachytes observabilis KOHL, Ann. Naturh. Hofmus. Wien, IX, 1894, p. 295, ♀, pl. 13, fig. 29. — ARNOLD, Ann. Transv. Mus., IX, 3, 1923, p. 184.

Bitshumbi (alt. 925 m.), X.1933.
1 specimen ♀.

XI. — Genus **LEPTOLARRA** CAMERON.

Leptolarra CAMERON, Ann. Mag. Nat. Hist., V, 1900, p. 29.

22. — **Leptolarra Alberti** n. sp.
(Figs. 2, 2*a* and 2*b*.)

♂ 7,5 mm. long. Black. Mandibles fusco-ferruginous. Wings pale brownish fuscous, the apical third darker than the rest, the veins blackish.

Clypeus and face with a sparse silvery pubescence. The first three tergites with narrow and very inconspicuous apical bands of grey pubescence.

Median area of the clypeus a little raised, shining and very sparsely punctured, the apical margin obtusely angular, the lateral areas very minutely punctured. Face and vertex dull, finely and closely reticulate-punctate, the temples and occiput shining and microscopically punctured. The interocular distance across the clypeus is nearly three times as great as across the vertex, where it is equal to the length of the second joint of the flagellum plus half on the first.

Pro-mesonotum and mesopleurae dull, very closely and very finely punctured, the sides of the epinotum almost dull, more finely punctured than the mesopleurae and with a few fine striae posteriorly. Mesonotum

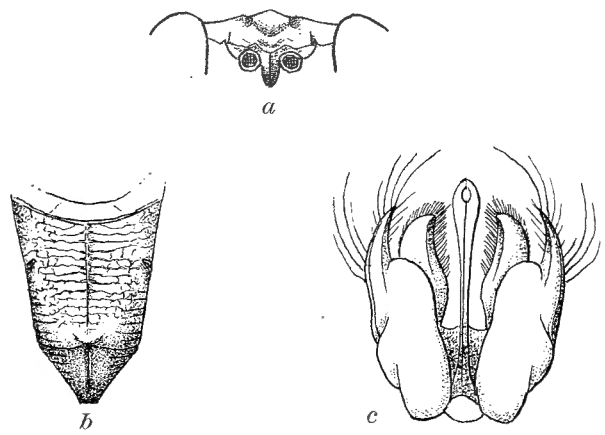

FIG. 2. — *Leptolarra Alberti* n. sp. ♂.
a, Clypeus; *b*, Epinodium; *c*, Genitalia.

two-fifths wider than long. Dorsum of the epinotum one-fifth wider at the base than long, moderately narrowed behind, dull, with a median longitudinal carina which does not reach the hind margin, finely and transversely rugose and also slightly reticulate-rugose towards the lateral margins; the posterior margin and sides of the declivity with a few strong rugae. Eighth sternite slightly narrowed towards the apex, which is transversely truncate.

Outer paramera of the genitalia not much longer than the inner, their ventral portion curved inwards, gradually attenuate apically, the outer margin and apex with a few long, curved black setae; the inner paramera are thick, triangular in cross-section and densely fringed below and at the apex with short yellow hairs. Second and third abscissae of the radius of about equal length.

♀ 8,5 mm. long. Tarsi dark brown, temples and sides of the epintoal declivity with a little silvery pubescence, otherwise like the ♂ in colour

and pubescence. Median area of the clypeus flatter and less produced in front than in the ♂, its apical margin feebly convex and with a minute medion excision. Interocular distance on the vertex nearly as long as the second joint of the flagellum. The latter is twice as long as the first and nearly three times longer than wide at the apex. The sculpture of the face and thorax is like that of the ♂ but finer, especially on the scutellum and postscutellum, which are slightly shining. Dorsum of the epinotum one and a half times wider at the base than long. Pygidial area triangular, rounded at the apex, glabrous at the base medially, elsewhere covered with adpressed, yellowish grey setae, the apical margin with six ferruginous spines. The tarsal spines are ferruginous. Otherwise litke the ♂.

Rutshuru (alt. 1.285 m.), I-IX.1934.
1 type ♂, 1 paratype ♀.

XII. — Genus **LARRAXENA** SMITH.

Larraxena SMITH, Ann. Mag. Nat. Hist., (2), VII, 1851, p. 30. — DE DALLA TORR, Catal. Hymenopt., VIII, 1897, p. 676. — ARNOLD, Ann. Transv. Mus., IX, 2, 1922, p. 108; idem, IX, 4, 1923, p. 226.

23. — **Larraxena dux** KOHL.

Larraxena dux KOHL, Ann. Naturh. Hofmus. Wien, VII, 1892, p. 220, ♀, pl. 14, figs. 8 ,10; idem, IX, 1894, p. 306, ♂. — ARNOLD, Ann. Transv. Mus. IX, 4, 1923, p. 227.

Rutshuru (alt. 1.285 m.), X.1934.
1 specimen ♀.

XIII. — Genus **LIRIS** FABRICIUS.

Liris FABRICIUS, Syst. Piez., 1804, p. 227, n. 40. — DE DALLA TORRE, Catal. Hymenopt., VIII, 1897, p. 661. — ARNOLD, Ann. Transv. Mus., IX, 2, 1922, p. 108; idem, IX, 4, 1923, p. 251.

24. — **Liris haemorrhoidalis** (FABRICIUS).

Pompilus haemorrhoidalis FABRICIUS, Syst. Piez., 1804, p. 198, n. 55.
Liris haemorrhoidalis GERSTAECKER, Peters' Reise in Mossambique, Zool., V, 1862, p. 477, ♀. — KOHL, Verh. zool. bot. Ges. Wien, XXXIV, 1884, p. 256, n° 1, ♂♀; Ann. Naturh. Hofmus. Wien, VII, 1892, pp. 227, ♀, 229 ♂, pl. 14, fig. 16, pl. 15, figs. 8, 13. — ARNOLD, Ann. Transv. Mus., IX, 4, 1923, p. 251.

Rutshuru (alt. 1.285 m.), X.1934.
1 specimen ♀.

Subfamily **PEMPHREDONINAE**

XIV. — Genus **PASSALOECUS** SHUCKARD.

Passaloecus SHUCKARD, Essay indig. Fossor. Hymenopt., 1837, p. 188, n. 25. — DE DALLA TORRE, Catal. Hymenopt., VIII, 1897, p. 367. — ARNOLD, Ann. Transv. Mus., IX, 2, 1922, p. 106; idem, X, 1, 1923, p. 51.

25. — **Passaloecus Braunsi** KOHL.

Passaloecus Braunsi KOHL, Verh. Zool. Bot. Ges. Wien, LV, 1905, p. 361 ♂. — ARNOLD, Ann. Transv. Mus., X, 1, 1923, pp. 52, 53, figs. 78, 79.
Passaloecus striatifrons CAMERON, Ann. Transv. Mus., 2, 1910, p. 151, ♂.

Rutshuru (alt. 1.285 m.), XI.1933.
1 specimen ♂.

26. — **Passaloecus Bequaerti** ARNOLD.

Kibati (alt. 1.900 m.), I.1934.
1 specimen ♀.

Subfamily **CRABRONINAE**

XV. — Genus **CRABRO** FABRICIUS.

Crabro FABRICIUS, Syst. Entom., 1775, p. 373, n. 117 (nec GEOFFROY). — MORAWITZ, Bull. Acad. Sc. St-Pétersbourg, VII, 1864, p. 451. — DE DALLA TORRE, Catal. Hymenopt., VIII, 1897, p. 578.
Thyreopus LEPELETIER, Ann. Soc. Ent. France, III, 1834, p. 751. — ARNOLD, Ann. Transv. Mus., XI, 4, 1926, p. 338.
Sudg. *Dasyproctus* LEPELETIER, Ann. Soc. Ent. France, III, 1834, p. 801. — DE DALLA TORRE, Catal. Hymenopt., VIII, 1897, p. 579. — ARNOLD, Ann. Transv. Mus., IX, 2, 1922, p. 106; idem, XI, 4, 1926, pp. 340, 357; idem, XX, 2, 1940, pp. 134, 135.
Subg. *Rhopalum* KIRBY, in STEPHENS, Syst. Cat. Brit. Ins., 1829, p. 366. — DE DALLA TORRE, Catal. Hymenopt., VIII, 1897, p. 579. — ARNOLD, Ann. Transv. Mus., XI, 4, 1926, pp. 340, 352.

27. — **Crabro ruwenzoriensis** (ARNOLD).

Thyreopus ruwenzoriensis ARNOLD, Ann. Transv. Mus., XI, 4, 1926, p. 354.
Mont Ruwenzori (J. BEQUAERT).

28. — **Crabro burungaensis** ARNOLD.

Thyreopus burungaensis ARNOLD, Occ. Pap. Rhodesian Mus., 3, 1934, p. 22.

Burunga (Mokoto) (alt. 2.000 m.).

29. — **Crabro (Rhopalum) stramineipes** (ARNOLD).

Thyreopus stramineipes ARNOLD, Occ. Pap. Rhod. Mus., 1, 1932, p. 21 ♂.

♀ 5,2 mm. long (hitherto undescribed). Black. Fore und middle tibiae and tarsi and the basal fourth of the hind femora, pale yellow and paler than in the ♂, the underside of the tibiae slightly fuscous. Pronotal tubercles and scapes black, the abdomen entirely black.

Face and vertex not quite so shining as in the ♂, more clearly punctured, the punctures just visible under a magnification of 30 diameters. Clypeus like that of the ♂. The interocular distance at the level of the antennal sockets is equal to four-fifths of the length of the scape and to half of the distance across the vertex. The triangular plate between the antennae sockets is a little less prominent than in the ♂. The posterior femora are more swollen than in the ♂, they are thickest across the pre-apical fourth of their lenght, where the width is about equal to a fourth of the length. Otherwise like the ♂.

Kibati (alt. 1.900 m.), I.1934. A ♂, taken in the same locality, does not differ in any way from the type of the species, which was taken in the Chirinda Forest, Southern Rhodesia.

1 specimen ♀ (allotypus).

1 specimen ♂.

30. — **Crabro (Dasyproctus) bipunctatus lugubris** ARNOLD.

Dasyproctus bipunctatus LEPELETIER, Ann. Soc. Ent. France, III,1834,p. 802, n. 1, ♀; Hist. nat. Ins. Hymén., III, 1845, p. 203, n. 1, ♀. — DAHLBOM, Hymen. Europ., I, 1845, p. 294, ♀, 511, n. 1, ♂♀.

Crabro bipunctatus BLANCHARD, Hist. nat. Ins., III, 1840, p. 362, n. 6. — SMITH, Catal. Hymen. Brit. Mus., IV, 1856, p. 392, n. 5.

Crabro simillimus SMITH, Catal. Hymen. Brit. Mus., IV, 1856, p. 393, ♂♀.

Dasyproctus rabiosus KOHL, Ann. Naturh. Hofmus. Wien, IX, 1894, p. 283, ♂.

Thyreopus (*Dasyproctus*) *bipunctatus* ARNOLD, Ann. Transv. Mus., XI, 4, 1926, pp. 359, 365.

Var. *Crabro* (*Dasyproctus*) *bipunctatus lugubris* ARNOLD, Ann. Transv. Mus., XII, 2, 1927, p. 127.

Rutshuru (alt. 1.285 m.), I.1934; lac Kivu : Sake (alt. 1.460 m.), II.1934; Muhavura (alt. 4.127 m.), IX.1934.

4 specimens of the var. *lugubris* ARNOLD.

Subfamily **OXYBELINAE**

XVI. — Genus **OXYBELUS** LATREILLE.

Oxybelus LATREILLE, Préc. Car. génér. Ins., 1796, p. 129, n. 31. — DE DALLA TORRE, Catal. Hymenopt, VIII, 1897, p. 637. — ARNOLD, Ann. Transv. Mus., IX, 2, 1922, p. 106; idem, XII, 2, 1927, p. 73.
Notoglossa BAHLBOM, Hymen. Eur., I, 1845, p. 514.

31. — **Oxybelus** sp.

Lac Kivu : N'Zulu (alt. 1.460 m.), II.1934.
1 specimen ♂.