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LI.—Descriptions of new species of Fossorial Hymenoptera in the collection of the British Museum

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L.—*Description of a new Species of Freshwater Crayfish from New Zealand.* By F. W. HUTTON, F.G.S., C.M.Z.S.

Paranephrops setosus, sp. nov.

Carapace with a strong transverse furrow and two longitudinal waved furrows behind it; centre polished, with minute impressed dots; sides thorny, with many short spines projecting forward. Beak reaching beyond the pedicel of the inner antennæ, broad, flattened, and rather hollowed out above, with four teeth on its sides and two teeth at the sides of the base; *a slight median ridge behind, which extends to the anterior of the two spines at the sides of the base of the beak.* Abdominal segments smooth above, the sides obtusely angled. Caudal appendages striate at the ends; middle tail-piece single, the spine one third from the end. Lamellar appendages of the outer antennæ extending slightly beyond the thickened basal joint, and with a strong spine close to their base. The first two joints of the arms with two rows of spines inside; wrists spined all round; hands spined on the sides and below, and a central row of spines outside; *outside covered with distant, long, stiff hairs, the tips of which are often split;* hands longer than the fingers, which are nearly straight and tuberculated inside, slightly curved at the points, and spinous on the outer edge. Legs slender, the claws straight, they and the last joints slightly hairy; order of their length 2, 3, 4, 1.

Olivaceous brown, reddish on the centre of the carapace and first and second abdominal rings; below paler, tinted with green round the base of the legs and on the abdominal rings. Spines and tubercles of the hands and fingers black, with yellow tips; spines on the carapace black. Length 5·4 inches.

Hab. Stream near Invercargill, Province of Otago; and the river Avon, near Christchurch, Canterbury.

LI.—*Descriptions of new Species of Fossorial Hymenoptera in the Collection of the British Museum.* By FREDERICK SMITH, Assistant in the Zoological Department of the British Museum.

[Continued from p. 300.]

Family Nyssonidæ.

Genus LARRA, Klug.

Larra agilis.

Female. Length $4\frac{1}{2}$ lines. Black, with yellow spots and

bands. Head: the labrum, clypeus, a line running halfway up the inner margin of the eyes, and the antennæ beneath yellow; a black line down the middle of the clypeus and a spot at the base of the labrum; the mandibles rufo-piceous at their apex, and the palpi pale testaceous; the clypeus covered with silvery pile. Thorax: a line on the margin of the prothorax, a spot behind the tegulæ, and the postscutellum yellow; the anterior and intermediate tibiæ yellow in front, and the anterior tarsi yellow beneath. Abdomen: the first segment with a transverse yellow band a little before its apical margin; the four following segments with a narrow fascia on their apical margins; these fasciæ are continued beneath.

Var. The band on the basal segment obsolete, and the apical margin yellow.

Hab. Brazil (Ega).

Larra cornuta.

Female. Length 8 lines. Black, with the second, third, and fourth segments of the abdomen ferruginous; wings dark brown, with the base and apex hyaline. Head: the face covered with silvery pile, and with an erect obtuse tubercle above the base of the clypeus. Thorax: the metathorax densely covered with bright silvery pubescence; the legs and base of the abdomen with changeable silvery pile; abdomen black beneath, with the sides of the second and third segments ferruginous.

Hab. Bombay Presidency (India).

This species was collected by Dr. Leith, and presented by him to the national collection.

Larra magnifica, Savigny's Egypt, pl. 16. fig. 15.

Female. Length 17 lines. Head and thorax ferruginous; abdomen yellow above, with the first segment and apical margins of the two following narrowly black; apical margins of the fourth and fifth narrowly ferruginous. Head: the labrum, clypeus, face as high as the ocelli, and a spot in front of the scape of the antennæ yellow. Antennæ and legs ferruginous. Thorax: the metathorax with a dark stain at the base; the wings hyaline, the nervures ferruginous; the prothorax with a narrow yellow margin; both the head and thorax covered with a changeable silvery pile, observable in certain lights. Abdomen: the first segment has at its base a minute central and two lateral ferruginous spots; beneath, the first five segments black, the fifth with two large yellow maculæ, the sixth segment ferruginous.

Hab. Egypt.

St.-Fargeau has described a species of this genus, which he names *Savignyi*; the size given is 9 to 10 lines. He quotes, however, a figure in Savigny's 'Egypt' as being his species; the figure is over 15 lines long, and is certainly the species now described as *L. magnifica*, and has no reference to St.-Fargeau's insect.

Larra flavo-maculata.

Male. Length 8 lines. Black; the abdomen with bright yellow maculæ; wings dark brown, with a violet iridescence. Head: the antennæ, labrum, and mandibles ferruginous; the face with silvery pubescence. Thorax more or less covered with griseous pubescence; the apex of the anterior femora, the tibiæ, and the anterior and intermediate tarsi ferruginous. Abdomen shining; the second, third, and fourth segments with irregular-shaped transverse maculæ in the middle of the segments on each side, those on the second segment smallest; beneath entirely black.

Hab. S. Africa (Burghersdorp).

Genus NYSSON, Latr.

Nysson pilosus.

Female. Length 4 lines. Black, variegated with yellow, and covered with changeable white silky pile. Head strongly punctured, and covered anteriorly with pale golden pile, but not quite as high as the anterior ocellus; the clypeus widely emarginate; the mandibles whitish at their base and ferruginous at their apex. Thorax strongly punctured; the mesothorax with a central longitudinal impressed line; the scutellum rugose, its lateral margins, as well as those of the post-scutellum, raised; the enclosed space at the base of the metathorax with divergent carinæ, and the posterior lateral angles produced into large flattened acute spines that are pale at their apex and covered with dense silvery pubescence; the legs obscurely ferruginous; the wings subhyaline and iridescent; the nervures black. Abdomen: the base strongly punctured; beyond, finely and sparingly so; the apical margins of the segments pale testaceous, and narrowly edged with bright golden pubescence.

The male differs only in having the face covered with bright silvery pubescence, and the legs of a brighter ferruginous.

A variety from St. Paulo has the legs quite black, as well as the apical margins of the segments of the abdomen, except the first segment, which is pale laterally; three specimens from Para agree with the above description.

Hab. Brazil (Para).

Genus SERICOPHORUS, Shuck.

Sericophorus bicolor.

Female. Length $3\frac{1}{4}$ lines. Head and thorax blue; abdomen and legs ferruginous. The head closely and finely punctured; the antennæ, anterior margin of the clypeus, mandibles, and palpi ferruginous; the mandibles abruptly narrowed in the middle, the angle of the broader part produced into a tooth. The thorax finely and closely punctured; the wings flavo-hyaline, the nervures pale ferruginous; a deep channel runs from the base to the apex of the metathorax. The abdomen smooth, shining, and immaculate.

Hab. Australia (Swan River).

Genus MEGALOMMA.

Head transverse; eyes very large, ovate, lateral, and approximating anteriorly, their inner orbits touching the margins of the clypeus; the ocelli in a triangle on the vertex; the clypeus transverse, rounded anteriorly; mandibles arcuate, acute at their apex, and with two minute teeth within; the antennæ inserted above the clypeus, about half the width of the latter above it; the scape short, shorter than the second joint of the funiculus, which is slightly thickened towards the apex. Thorax ovate; the collar transverse; the metathorax narrowed posteriorly, and rounded at its apex, and with a large triangular space at its base, defined by an impressed marginal line; the anterior wings with one marginal and three submarginal cells, the marginal cell narrow, elongate, and pointed at its apex; the first submarginal cell nearly as long as the two following; the second narrowed towards the marginal, and receiving the two recurrent nervures, the first being received about the middle, the second near the apex of the cell; the third cell quadrangular and oblique; the tibiæ and tarsi moderately spinose; the claws simple, with a large pulvillus between their fork. Abdomen: the first segment forming a petiole as long as the second segment, and narrowed towards its base, on each side of which is a minute tooth.

The name of this genus was proposed by Shuckard in Lardner's 'Encyclopædia,' but the genus was never characterized; it is given in the 'Nomenclator Zoologicus' of Agassiz. The insect typical of the genus is in the British Museum, with a manuscript name attached; the name is therefore retained. The species included in the genus form what may be regarded as a section of the genus *Gorytes*, having a petiolated abdomen.

Megalomma politum.

Female. Length 6 lines. Smooth and shining; head and thorax black; legs yellow; abdomen obscure ferruginous. Head: the base of the mandibles yellow, the clypeus obscurely so, as is also the front of the scape; the flagellum fulvous beneath. The sides of the meso- and metathorax with ferruginous stripes; two abbreviated lines on the disk of the mesothorax above ferruginous; the enclosed space at the base of the metathorax with a deep longitudinal central impressed line that runs on to the apex of the metathorax; legs yellow, with ferruginous stripes on the tibiæ and femora within; the wings hyaline and iridescent, the anterior pair yellow along the frontal margin. Abdomen black towards its apex; the apical segment ferruginous, smooth, shining, and carinate at the sides; the second and two following segments with narrow yellow fasciæ on their apical margins; beneath, the fasciæ are much broader, and border the fifth segment also.

Hab. Brazil.

This species is described from an old specimen. The colouring of a recent example would no doubt be much brighter; the ferruginous markings would probably be yellow on the head and thorax.

Megalomma elegans.

Female. Length 6 lines. Yellow, with black markings; abdomen fusco-ferruginous beyond the base of the second segment. Head: the mandibles, labrum, clypeus, and scape of the antennæ yellow; the flagellum ferruginous, more or less fuscous above, and palest at the base; the head in front and behind ferruginous, and yellowish towards the mandibles; the latter rufo-piceous at their apex. Thorax: three black longitudinal stripes on the mesothorax; the sutures of the triangular space at the base of the metathorax black; wings flavo-hyaline and iridescent, the nervures ferruginous; legs yellow, with more or less ferruginous stains. Abdomen: the base of the petiole yellow, its apex ferruginous; the base of the second segment and its lateral margins yellow, the rest of the segment and the base of the third ferruginous—beyond, becoming gradually darker to the apex; beneath, the three basal segments are yellow.

Var.? Abdomen ferruginous; the base of the first and second segments and the apical margins of the following segments yellow; beneath yellow.

Hab. Brazil.

This species was intended by Shuckard for the type; but he never described it; it is possible that the colouring of the abdomen may be more or less suffused, the variety being the natural condition. *Gorytes natalensis*, Smith (Catalogue of Hymenopterous Insects, part iv. p. 365, pl. xi. fig: 3) belongs to this genus.

Megalomma nigriceps.

Female. Length $5\frac{1}{4}$ lines. Yellow, with ferruginous markings; the head black. Head: the mandibles and a spot on the cheeks at their base, the clypeus, and the face a little higher than the insertion of the antennæ, and the scape in front yellow; antennæ ferruginous. Thorax: three longitudinal black lines on the mesothorax; the lateral margins of the triangular space at the base of the metathorax black; the wings flavo-hyaline; the nervures ferruginous, the postcostal nervure black; the legs slightly ferruginous above, with a black line on the posterior femora above at their base. Abdomen ferruginous above; the base of the petiole and a narrow fascia on the apical margins of the three following segments, with the two apical segments, yellow.

Hab. Brazil.

Genus GORYTES, Latr.

Gorytes specialis.

Female. Length 6 lines. Black, and variegated with yellow, smooth and shining. Head: the palpi, labrum, clypeus, sides of the face a little above the insertion of the antennæ, the scape of the antennæ, and an abbreviated line behind the eyes at the base of the mandibles, yellow, the tips of the latter rufo-piceous; the antennæ beneath and the apical joint fulvous. Thorax and legs yellow; the mesothorax black above, with a yellow line at the sides over the tegulæ; the suture between the scutellum and postscutellum, and a central line down the triangular enclosed space at the base of the metathorax black; the pectus and a stripe on the posterior femora above black; wings flavo-hyaline, the nervures rufo-fuscous, with a slight cloud in the marginal cell; the tegulæ and nervures at the base of the wings ferruginous; the stigma pale. Abdomen with a short petiole, which is yellow at the base, and has a minute tooth on each side; the apical margins of the segments narrowly and obscurely rufo-piceous.

Hab. Ega, on the Amazon.

Gorytes vespoides.

Female. Length $5\frac{3}{4}$ lines. Black, clothed with grey seri-

ceous pile; abdomen with yellow bands. Head: the scape yellow beneath, and the first three joints of the funiculus fulvous beneath; on the vertex and on the cheeks the pile has, in certain lights, a pale golden tinge, as it has also on the disk of the thorax. A yellow line on the collar and an orange one on the scutellum; the triangular space at the base of the metathorax longitudinally and divergently striated; wings hyaline, the nervures pale ferruginous; the tibiæ and tarsi spinose; the spines ferruginous; the tibiæ, as well as the apex of the femora, more or less ferruginous within. Abdomen: the apical margin of the second and following segments with yellow fasciæ, which widen laterally; beneath, these segments are yellow.

Hab. Ega.

In general appearance this is the counterpart of the social wasp *Nectarina analis*.

Gorytes triangularis.

Female. Length 7 lines. Black, with the triangular space at the base of the metathorax yellow, smooth, and shining. Head: the base of the mandibles, the labrum, clypeus, face as high as the antennæ, and a broad stripe behind the eyes reddish yellow; the scape of the antennæ of the same colour, and the flagellum fulvous beneath. Thorax: a narrow line on the posterior margin of the prothorax and the postscutellum yellow; the sides of the mesothorax ferruginous; the anterior legs reddish yellow; wings dark brown along the anterior margin of the fore pair, and subhyaline behind. Abdomen velvet-black. The tibiæ and tarsi with pale ferruginous spines.

Hab. Para.

Gorytes facilis.

Male. Length $4\frac{3}{4}$ lines. Black, smooth, and shining; the metathorax and base of the abdomen yellow. Head: the base of the mandibles, the labrum, clypeus, and scape of the antennæ honey-yellow, the latter slightly fuscous behind. Thorax: the margin of the prothorax, the tubercles, a spot beneath the wings, the tegulæ and an epaulet over them, the scutellum, postscutellum, and metathorax honey-yellow; the triangular space at the base of the metathorax black, and with a central impressed line which is continued to the apex of the metathorax; the wings light fuscous, with their apical margins paler; the anterior and intermediate legs yellow; the femora ferruginous above; the posterior legs ferruginous; the third and fourth joints of the tarsi yellow, the claw-joint black;

the apex of the tibiæ and a line on the inside of the femora fuscous. Abdomen: the first segment entirely yellow, and the apical margins of the other segments with a narrow yellow band; the second segment ferruginous above at the base, and entirely ferruginous beneath.

Hab. Para.

Family Philanthidæ.

Genus CERCERIS, Latr.

Cerceris striata.

Female. Length 4 lines. Black, with yellow markings; the mesothorax longitudinally striated. Head: the clypeus slightly elevated and bidentate at its apex; the clypeus, sides of the face, scape in front, and the mandibles yellow, the latter black at their tips; four or five of the joints at the base of the flagellum beneath, and the apical joint entirely, ferruginous. Thorax: the posterior margin of the prothorax transverse, raised, and forming acute lateral angles, yellow, as are also the tubercles, the scutellum, and a line at the sides of the metathorax, which is continuous outside the triangular space at the base of the metathorax; the legs rufo-piceous behind, and yellow in front; wings hyaline and iridescent, with a fuscous stain in the marginal cell which extends to the apex of the wing. Abdomen: the first segment yellow, except its extreme base and apex; the second yellowish at the base; the third with a yellow fascia at its apical margin, the third and fourth with very narrow fasciæ; beneath rufo-testaceous, with the three basal segments more or less yellowish.

Hab. Para.

Cerceris rostrata.

Female. Length 6 lines. Yellow, with black markings; the clypeus elevated and narrowed at half its length to a point. Head: the vertex black, with a black line running to the base of each antenna; two oblique yellow lines converge inwardly from the eyes and meet (or nearly so) at the margin of the vertex; an ovate black spot on each side of the head; the antennæ ferruginous and more or less fuscous above. Thorax: the prothorax black above, with its posterior margin yellow; the mesothorax black above, its lateral margins yellow, and three sides of a square traced in yellow on the disk; a black spot in the middle of the scutellum; the triangular space at the base of the metathorax with a black line in the centre, on each side of it a black line runs halfway down the metathorax; the tibiæ and tarsi with a narrow black line above; wings

fulvo-hyaline. Abdomen black above, with a narrow yellow line on the apical margins of the segments, the first segment ferruginous above.

Hab. Mexico.

Cerceris exsecta.

Female. Length 8 lines. Black, sparingly variegated with bright yellow spots and bands; the clypeus elevated and deeply emarginate anteriorly; a broad oblong spot on each side of the face, the anterior half of the clypeus and a central line running nearly to its base, a minute spot between the antennæ, a narrow longitudinal line on each side of the vertex above the eyes, and the mandibles yellow; antennæ ferruginous and more or less fuscous above. Thorax: an interrupted line on the prothorax, a spot on the tegulæ, another on each side of the scutellum and also of the metathorax posteriorly and the postscutellum, yellow; tibiæ and tarsi variegated with yellow and ferruginous, the posterior pair blackish above; wings fusco-hyaline, the nervures ferruginous. Abdomen: the first, third, and fourth segments with narrow marginal fasciæ.

Male. Smaller than the female; closely resembling it, but differing as follows:—the clypeus not elevated, and entirely yellow, the scape yellow in front; the posterior trochanters yellow, and the apical margins of all the segments, except the second, with narrow yellow fasciæ. Both sexes have a quadrate yellow spot on the underside of the first segment.

Hab. Mexico.

Cerceris graphica.

Female. Length 7 lines. Head and thorax black, spotted with yellow; abdomen ferruginous, with yellow bands. Head: the clypeus, a narrow line running halfway up the inner margin of the eyes, and the mandibles yellow; the latter black at the tips; a narrow line behind the eyes which runs backwards to the margin of the vertex before reaching their summit, the scape of the antennæ, and four or five of the basal joints of the flagellum ferruginous. Thorax: a transverse spot on each side of the prothorax, a spot on the tegulæ and a small one beneath them, two ovate spots on the scutellum, two minute ones on the postscutellum, two central ones on the triangular enclosed space at the base of the metathorax, a line on each side of the metathorax, which widens posteriorly into a large macula; the legs ferruginous, with yellow tarsi; the coxæ, trochanters, and a line beneath the femora black. Abdomen: the sides of the basal segment yellow, and a narrow yellow fascia on the apical margins of the third, fourth, and

fifth segments, their basal margins black; beneath black, with the margins ferruginous. Wings fusco-ferruginous.

Hab. Mexico.

Cerceris multipicta.

Female. Length $9\frac{1}{2}$ lines. Black, variegated with yellow and ferruginous; the abdomen with a large yellow macula on each segment laterally. Head: the clypeus with the anterior margin deeply sinuated and, as well as the sides of the face a little higher than the insertion of the antennæ, and also a large spot behind the eyes, pale yellow; antennæ ferruginous, with the scape yellow in front, and five or six of the apical joints black; the cheeks and mandibles ferruginous, the latter black at their tips. Thorax: the prothorax above, two spots on the postscutellum, the metathorax, and the triangular space in the centre of its base yellow; a longitudinal black line down the centre of the metathorax, and a narrower one down the triangular space; the legs, and a large patch at the sides of the thorax beneath the wings, ferruginous; the anterior tibiæ and the femora spotted with yellow; wings flavo-hyaline, with a dark cloud at their apex, their nervures and tegulæ ferruginous. Abdomen: the basal segment oblong, with the sides, as well as the apical margin, yellow.

Male. This sex is smaller, is similarly coloured, but it has the clypeus rounded anteriorly.

Hab. Angola (Lower Guinea).

Dr. Gerstæcker has described a species of this genus, *Cerceris pictiventris*, in Peters's 'Naturw. Reise nach Mossambique,' a figure of which is given in Taf. xxx. fig. 12 (♂). It resembles the present species—but differs from it in being only 5 lines in length, in having the head and thorax differently coloured, in being smooth and shining, with rather distant punctures, in having the basal segment of the abdomen nearly as broad as long, and in having the triangular space at the base of the metathorax divergently grooved; in the present species it is glassy smooth and shining in both sexes.

Cerceris fervens.

Female. Length 4 lines. Black, strongly and closely punctured, variegated with yellow, and with yellow legs. Head: the mandibles, face, clypeus, and scape of the antennæ yellow. Thorax: an interrupted line on the collar, two on the scutellum, the postscutellum, a large ovate spot on each side of the metathorax, and a spot beneath the wings yellow, the posterior femora and tibiæ fuscous at their apex within; wings subhyaline and iridescent, the anterior pair slightly

clouded at their anterior apical margin. Abdomen: the base of the second segment and the third and fifth segments yellow, with a semicircular black macula at their basal margins; the fourth segment with a lateral yellow spot; beneath yellow, with the apical margins of the segments rufo-piceous.

Male. Length 3–3½ lines. Resembles the female—but is not so brightly coloured, the spots on the scutellum obsolete, and the yellow segments have more black at their base, and it is the third and sixth segments that are coloured; the femora, tibiæ, and posterior tarsi are more or less black; the abdomen beneath is only slightly marked with yellow.

Hab. Northern India.

This species has the aspect of a small form of the European *Cerceris ornata*.

Cerceris albopicta.

Female. Length 4½ lines. Head and thorax black, with white markings; abdomen red at the base, black beyond, with white fasciæ. Head black, and finely and closely punctured; the mandibles, face as high as the insertion of the antennæ, the clypeus, and scape in front white; sometimes a white line behind the eyes. Thorax: the collar, tubercles, two spots on the scutellum, the postscutellum, and legs white; the femora and tibiæ with a fuscous line behind; the antennæ and first two segments of the abdomen ferruginous; the second segment more or less black at its apical margin; the third and fifth segments with white fasciæ on their apical margins, the fasciæ widening laterally.

Male. Length 3–3½ lines. Only differs in having fewer of the white markings, particularly those on the thorax.

Hab. India (Bombay Presidency).

Cerceris fluvialis.

Female. Length 5½ lines. Reddish yellow, closely punctured, the mesothorax and fourth segment of the abdomen most finely so. Head: a curved black band on the vertex between the eyes, widest in the middle, and enclosing the ocelli; the clypeus truncate in front, the upper margin of the truncation subtuberculate in the middle; tips of the mandibles black; a sharp carina between the antennæ. Thorax beneath, the mesothorax above, and hinder portion of the metathorax black; the wings towards their base flavo-hyaline, the nervures ferruginous; the apex of the wings fuscous, with a darker cloud in the marginal cell. The fourth segment of the abdomen black.

Hab. Swan River, Australia.

Cerceris varipes.

Female. Length 7 lines. Black, with the second and fifth segments orange-yellow. Head: the base of the mandibles, the clypeus, the face (as high as the insertion of the antennæ), and a minute ovate spot behind the eyes yellowish white; a spot on the scape, and the second and four following joints of the antennæ fulvous beneath. Thorax: the triangular space at the base of the metathorax with fine divergent striæ; wings subhyaline, with a dark fuscous cloud occupying the marginal cell and passing on to the apex of the wing; the nervures rufo-fuscous; the tegulæ rufo-testaceous, with a yellow spot in front; the apex of the femora and the tibiæ ferruginous; the anterior and intermediate tarsi white, slightly stained with ferruginous at the apex of the joints, the posterior tarsi fuscous, with their base and the claw-joint ferruginous, the posterior trochanters white beneath. Abdomen black beneath.

Hab. Adelaide.

Cerceris venusta.

Female. Length $4\frac{1}{2}$ lines. Variegated with black and yellow; the head wider than the thorax. The mandibles, clypeus, face higher than the insertion of the antennæ, a line between them (which terminates in a round spot), the scape in front, a line behind the eyes, and two oblique spots on the vertex yellow; the flagellum fulvous and slightly fuscous above. Thorax black, with a broad fascia on the prothorax, the tegulæ, scutellum, postscutellum, and a large ovate oblique spot on each side of the metathorax yellow; the legs ferruginous, with yellow stains; beneath, the trochanters and some spots on the coxæ white; a black line on the posterior femora and tibiæ; wings subhyaline, with a fuscous cloud occupying the marginal cell and passing beyond to the apex of the wing. Abdomen: the base of the first, second, and fourth, and the third segment entirely black; a small ovate yellow spot on each side of the third segment; otherwise yellow; a central ferruginous stain on the first and second segments; beneath ferruginous, with the margins of the segments narrowly black; the fourth and fifth segments with a yellow spot on each side.

Hab. Queensland.

Cerceris opposita.

Female. Length $4\frac{1}{2}$ lines. Black; the clypeus elevated, and with three yellow fasciæ on the abdomen; the insect covered with rather fine confluent punctures. Head: the mandibles, clypeus, sides of the face as high as the insertion of the antennæ, a narrow line between them, and a minute spot behind the eyes

yellow ; tips of the mandibles black ; the flagellum of the antennæ fulvous beneath. Thorax : a narrow line on each side of the posterior margin of the prothorax, and another on each side of the postscutellum, yellow ; wings subhyaline, with a faint cloud beyond the stigma ; nervures fuscous ; tegulæ yellow ; the tips of the femora, the tibiæ, and tarsi ferruginous, the anterior and intermediate tarsi have the first joint white, the posterior pair are slightly fuscous above.

Hab. Australia (Lower Plenty, Victoria).

Cerceris sæva.

Female. Length $3\frac{1}{2}$ – $4\frac{1}{2}$ lines. Black, very closely and strongly punctured ; variegated with yellow and ferruginous spots and fasciæ. Head : clypeus elevated and truncate ; the mandibles, clypeus, sides of the face as high as the insertion of the antennæ, a narrow carina between them, and sometimes a minute dot behind the eyes, yellow. Thorax : two spots on the collar, two on the postscutellum (these are frequently obsolete), and the tegulæ yellow ; wings subhyaline ; a fuscous stain in the marginal cell, which extends to the apex of the wing ; tips of the femora, the tibiæ, and tarsi ferruginous ; the basal joint of the anterior and intermediate tarsi whitish. Abdomen : the second segment black at the base and more or less so down the centre, at the sides ferruginous, and with a yellow spot ; the fourth and fifth segments with a narrow yellow fascia on the apical margin.

Hab. Victoria (Lower Plenty, &c.).

This is a variable species : sometimes the apex of the first segment of the abdomen is ferruginous ; occasionally the apical segment is entirely so ; the third segment rarely more or less ferruginous ; the scape of the antennæ usually yellow in front, and the flagellum fulvous beneath. The male varies principally in the colouring of the abdomen ; it is sometimes yellow at the base and ferruginous beyond, with a black spot in the middle, or it is half yellow and half black ; the thorax black, with two minute yellow spots on the collar.

Cerceris aurantiaca.

Female. Length 5 lines. Pale orange-coloured ; the fourth segment of the abdomen, the mesothorax, and a macula on the vertex black ; closely punctured. Head : a short carina between the antennæ ; the clypeus oblong, curved, and elevated ; a black macula on the vertex encloses the ocelli, and extends to the insertion of the antennæ, it is somewhat heart-shaped, and unites with a black broad line at the summit of the eyes,

from which a narrow curved line runs to the margin of the vertex, where it is more or less interrupted; the tips of the mandibles also black; the head and thorax black beneath; wings subhyaline, with a fuscous stain running from the base of the marginal cell to the apex of the wing. The fourth segment of the abdomen above, and the fourth and fifth beneath, black.

Hab. South Australia.

Genus *PHILANTHUS*, Fabr.

Philanthus niloticus.

Female. Length 4 lines. Black, and variegated with bright yellow spots and fasciæ. Head: the mandibles, clypeus, sides of the face as high as the insertion of the antennæ, a lunate spot above the clypeus, a large transverse semicircular spot in front of the anterior ocellus, a transverse line above the ocelli, and a broad line behind the eyes yellow. Thorax: the prothorax, two abbreviated lines on the disk of the mesothorax, the tegulæ, the scutellum and postscutellum, an ovate spot on each side of the metathorax, the tubercles, two irregular-shaped spots beneath them, and the legs yellow; the posterior femora only yellow at their apex; the wings hyaline and iridescent. Abdomen: the second segment, a broad band on the first and fourth segments, a narrow band on the two following, and the apical segment yellow.

Hab. White Nile.

Philanthus elegans.

Female. Length $4\frac{1}{2}$ lines. Variegated with white, black, and ferruginous. Head white in front and pale yellow behind; the vertex black, with a transverse white line between the eyes above the ocelli, and a white tridentate spot in front of them; the flagellum ferruginous. Thorax very pale yellow, nearly white; a black spot on the prothorax; and the mesothorax black, with four longitudinal white lines, the lateral ones close to the tegulæ, the two central lines running backwards a little beyond the disk; a large triangular black spot at the base of the metathorax above, and a central one behind uniting with it; wings hyaline, the nervures pale ferruginous; the thorax beneath and the legs pale yellow, with ferruginous stains on the femora above. Abdomen pale yellow beneath, with two black ovate spots on the second segment; above, ferruginous at the base and black beyond; each segment with a large transverse yellowish-white macula on each side and nearly uniting in the middle; the apical segment pale.

Hab. Northern India.