

NEW SPECIES OF AUSTRALIAN PROCTOTRYPOIDEA, WITH
REVISIONAL NOTES.

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This small paper describes one new genus in the family Scellionidae, and ten new species in the families Scellionidae, Belytidae, and Diapriidae. At the same time, the genera *Dichoteleas* Kieffer and *Neoscelio* Dodd in the Scellionidae are redescribed, and notes given on the Diapriid genera *Neopria* Dodd and *Propentapria* Dodd.

Family Scellionidae.

DICHOTELEAS Kieffer.

(*Berlin. Ent. Zeitschr.*, 51, 1907, 297.)

Head transverse, the vertex thin; eyes very large, bare; ocelli large, the lateral pair close to the eyes; viewed from in front the head is as wide as deep; frontal depression large and shallow, feebly margined above; cheeks narrow; mandibles large, curved, bidentate, the teeth acute. Antennae 12-jointed; in the female the funicle joints are elongate, the club slender and 7-jointed; in the male the flagellar joints are filiform. Thorax stout, no longer than its greatest width; from lateral aspect, as long as high; pronotum very short; scutum large, much wider than long, broadly rounded anteriorly; parapsidal furrows narrow and obscured by the sculpture, but complete; scutellum transverse, on either side just out from base with a large stout tooth or spine; postscutellum projecting narrowly as a very transverse plate, at meson with a large acute tooth or short spine; propodeum very short and excavated at the meson in both sexes, laterally with a patch of white pubescence; tegulae large; propleurae depressed; mesopleurae with a long oblique dorsoventral depression. Forewings long and broad, when closed reaching apex of abdomen; submarginal vein attaining the costa at distinctly beyond one-half the wing length; marginal vein punctiform, the stigmal vein long, the postmarginal fully twice as long as the stigmal; radial vein indicated, the basal and median veins not showing. Legs normal; coxae of moderate size; tibiae and tarsi hairy, but not spinous. Abdomen somewhat longer than the head and thorax united, two and one-half times as long as its greatest width; ovate, narrowed at base, blunt posteriorly; viewed from the side almost flat dorsally and ventrally; segment 1 about as long as its greatest width, faintly elevated at base; 2 and 3 about subequal in length, somewhat longer than 1 or 4; 5 much shorter than 4; 6 quite short.

Type, *D. rugosus*.

Kieffer erected this genus for a male from Mackay, Queensland. In my collection there is what is evidently the opposite sex of the genotype, and also both sexes of a second species. Kieffer has made the statement that the parapsidal furrows are absent. Some years ago, I had the opportunity of examining the

unique example of the genotype in the British Museum, finding that, as in the material of my own collecting, these furrows are complete but delicate and more or less obscured by the sculpture.

Dichoteleas would not seem to have been recorded from outside Australia; its nearest allies would appear to be the Australian *Neoscelio* Dodd and the Oriental *Merrivca* Dodd. In *Neoscelio*, the postmarginal vein is wanting, while in *Merrivca* the postscutellum is armed with two teeth. Some of the points of resemblance and difference between *Neoscelio* and *Dichoteleas* are pointed out when discussing the former genus. It is well to note that the legs in *Dichoteleas* are much less spiny, and that the antennal club, although slender, is truly 7-jointed.

Table to the Species of Dichoteleas.

Thorax wholly black, the scutellar spines concolorous; first five antennal joints in the female dark-brownish; first funicle joint in the female less than twice as long as the second; median lobe of scutum longitudinally striate; abdominal segments 2-4 without a median carina	<i>rugosus</i> Kieffer
Thorax more or less metallic-blue; the scutellar spines yellow; first four antennal joints in the female bright yellow; first funicle joint in the female more than twice as long as the second; median lobe of scutum without noticeable striae; abdominal segments 2-4 with a distinct median carina	<i>subcoeruleus</i> , n. sp.

DICHOTELEAS RUGOSUS Kieffer.

(*Berlin. Ent. Zeitschr.*, 51, 1907, 297.)

♀. Length, 4 mm. Black; legs, including the coxae, bright lemon-yellow, the posterior tarsi and apex of posterior tibiae dusky; first five antennal joints more or less brownish, the rest black; mandibles reddish, the teeth black; tegulae yellow.

Upper frons moderately coarsely rugose-punctate or reticulate-punctate, and with several irregular longitudinal striae; around ocelli irregularly rugose-punctate; upper face and vertex with semi-recumbent black pubescence; frontal depression smooth mesially, laterally with striae which converge toward the mouth; cheeks with numerous small setigerous punctures. Antennal scape as long as the next three joints combined; pedicel almost twice as long as its greatest width; funicle 1 very long, rather more than twice as long as the pedicel; 2 a little more than one-half as long as 1; 3 a little longer than wide; club not much wider than the funicle, 7-jointed, the joints a little wider than long. Scutum with dense pale pubescence; with numerous small punctures, the punctures denser and confluent on the lateral lobes, the median lobe with numerous fine longitudinal striae which are more distinct posteriorly; parapsidal furrows obscure and delicate, but complete; scutellum densely pubescent and with numerous small punctures; depression of mesopleurae smooth, above this with several strong longitudinal striae; metapleurae finely rugose-punctate and pubescent. Forewings lightly smoky, the venation thick and fuscous. Segment 1 of abdomen strongly striate; 2 and 3 densely and rather finely rugose-punctate and with numerous wavy and irregular longitudinal striae or rugae; 4 and 5 with similar finer sculpture but smooth mesially except for pin-punctures; 6 finely rugose; 4-6 with dense pubescence, which is very short and not conspicuous on 2 and 3.

♂. Antennal scape and pedicel yellow; the first flagellar joint suffused with yellow, the remainder black; pedicel no longer than wide; funicle 1 longest, at least four times as long as wide; 2-9 gradually shortening; 3 very feebly excised.

Habitat.—North Queensland: Mackay (type); Cairns district, one female in January, A. P. Dodd.

Type in the British Museum.

Several years ago I made a few notes on the type specimen in the British Museum, from which it was possible to associate the female described above with Kieffer's species, and there seems little doubt but that this identification is correct.

DICHOFFLEAS SUBCOERULEUS, n. sp.

♀. Length, 4.25-4.5 mm. Black; head, scutum, and scutellum deep metallic-blue; tegulae and the scutellar spines pale yellow, the postscutellar spine black; legs, including the coxae, bright golden-yellow, the posterior tarsi and apex of posterior tibiae dusky; first four antennal joints bright yellow, the remainder black.

Eyes very large, converging somewhat above; around the ocelli and the frons with large, dense, rather shallow punctures, laterally on either side of frons with two strong longitudinal striae, one of which is against the eye margins; frontal depression smooth; mouth with strong converging striae; frons with scattered pubescence; occiput smooth, except for a few pin-punctures. Antennal scape as long as the next three joints united; pedicel one-half longer than its greatest width; funicle 1 very long, fully three times as long as the pedicel; 2 somewhat less than one-half as long as 1; 3 a little widened and not much longer than wide; club slender, 7-jointed, the joints a little wider than long. Pronotum transverse, with fine, dense, setigerous punctures; parapsidal furrows rather wide apart and almost parallel, delicate but complete; median lobe with a complete obtuse median carina; lateral lobes with an obtuse median carina that disappears anteriorly, and against the tegulae there is a narrow groove with carinated margins; surface of scutum with shallow indefinite punctures bearing fine white setae; scutellum smooth, except for a few shallow punctures bearing setae. Forewings lightly smoky, the venation thick and fuscous. Segment 1 of abdomen strongly striate; 2-4 with a strong median carina which disappears posteriorly on 4; 2 and 3 confluent rugose-punctate, and with several wavy irregular longitudinal striae or rugae; 4 and 5, and lateral margins of 2 and 3 very finely, densely punctate; segments, except 1, with fine, dense, short pubescence.

♂. Metallic tint hardly noticeable on head and thorax. Antennae black, the first two joints yellow, the third brownish; pedicel scarcely longer than wide; funicle 1 lengthened, one-half longer than 2, which is fully twice as long as wide; 2-9 gradually shortening; 3 feebly excised on one side.

Habitat.—North Queensland: Mossman, two females in April; Cairns district, 1,100 feet, one male, one female, in January.

Type in South Australian Museum; cotypes in the author's collection.

NEOSCELIO Dodd.

(*Trans. Royal Soc. S. Aust.*, xxxvii, 1913, 135.)

Head, viewed from above, transverse, the vertex thin; eyes large, with a few scattered setae; ocelli large, the lateral pair closer to the median ocellus than to the eye margins; vertex sloping to the occiput which is feebly margined and from the dorsal aspect gently concave; from lateral aspect the head is almost straight from the median ocellus to the mouth; viewed from in front the head is wider than deep; antennal depression large, circular, and shallow, immargined; cheeks not broad; antennal prominence very conspicuous; mandibles long, bi- or tridentate, the outer teeth long, the inner tooth, where tridentate, small. Antennae 12-jointed in both sexes; in the female, the first funicle joint is much longer than the preceding or following joint, the club 6-jointed; in the male the pedicel is short, the flagellar joints filiform. Thorax stout; viewed from above, not much longer

than its greatest width; viewed from the side, as high as long; pronotum visible laterally, its anterior angles rounded or subacute; scutum much wider than long, the parapsidal furrows not evident; scutellum semicircular, at one-half its length laterally with a stout or acute tooth; postscutellum short, armed at the meson with a long slender spine, which is as long as the scutellum and projects high above the basal abdominal segment; propodeum rather abruptly declivous, short at meson, longer laterally, and with a straight carina on either side at one-half its width from the median line; propleurae, for the most part, excavated; mesopleurae with a deep dorsoventral impression. Coxae large, the legs slender; tibiae and tarsi spinous; tibiae, at apex, with one long spine and several shorter ones. Forewings long and broad; when closed extending somewhat beyond apex of abdomen; venation thick and distinct, the submarginal vein terminating at about one-half the wing length in a thickened quadrate marginal vein; stigmal vein moderately long, the postmarginal absent; a more or less distinct stigmal spot is present; basal, median, and radial veins indicated. Abdomen shaped much as in the genera of the Teleasinae (*Hoplogryon* Ashmead, *Trimorus* Foerster, etc.); pyriform, narrowed at base, rounded posteriorly; not more than twice as long as its greatest width; no longer than the head and thorax united; viewed from the side, straight or gently convex above, the first segment straight beneath, the remainder convex, especially in the female; segments all wider than long, 3 somewhat longer than 2, and almost as long as the following segments united.

Type, *Neoscelio gloriosus* Dodd.

In the original description of this genus, the writer overlooked the presence of the teeth on the scutellum, and from the characters of the venation wrongly inferred a relationship with *Scelio* Latreille. Its nearest ally would, however, appear to be another Australian genus, *Dichoteleas* Kieffer; both possess the lateral teeth on the scutellum, and a spine or tooth on the postscutellum; but *Dichoteleas* has a long postmarginal vein, the abdomen is longer, its segments more uniform in length, and when viewed from the side is almost flat above and beneath. In all five species of *Neoscelio*, the postscutellar spine is very long, whereas in the two species of *Dichoteleas* the spine is comparatively short.

Neoscelio was founded on a single species from Mt. Tambourine, South Queensland; to this must be added three further species from the same locality, and one from the Cairns district, North Queensland. All five bear close structural and sculptural resemblances, are of about the one size, and bear a marked superficial likeness to members of the Teleasinae genera *Hoplogryon* and *Trimorus*, but the latter are of considerably smaller size.

Table to the Species of *Neoscelio*.

1. Trochanters contrasting black; forewings not uniformly smoky, with one or two hyaline bands	<i>pulchralis</i> , n. sp.
Trochanters concolorous with the legs; forewings uniformly smoky, without bands..	2
2. Thorax not wholly black, at least the propodeum and the sides red	3
Thorax wholly black	4
3. Size larger, 5.5 mm.; scutum mostly red, the pronotum red; abdomen longer	<i>rubidus</i> , n. sp.
Size smaller, 3.5 mm.; scutum black, also the pronotum; abdomen shorter	<i>lateralis</i> , n. sp.
4. Segment 3 of abdomen much longer than 2; lateral ocelli separated from the eyes by more than their own diameter	<i>gloriosus</i> Dodd.
Segment 3 of abdomen not much longer than 2; lateral ocelli separated from the eyes by one-half their own diameter	<i>agilis</i> , n. sp.

NEOSCELIO GLORIOSUS Dodd.

(Trans. Royal Soc. S. Aust., xxxvii, 1913, 138.)

♀. Length, 5 mm. Black; legs, including the coxae, bright reddish-yellow; first six antennal joints reddish-yellow, the club black; mandibles red.

Vertex of head coarsely rugose; frons strongly longitudinally rugose-striate, except for the large smooth depression; lateral ocelli separated from the eyes by more than their own diameter; mandibles bidentate, the teeth long, the outer tooth much the longer. Antennal scape moderately long and slender; pedicel one-half longer than its greatest width; funicle 1 two-thirds longer than the pedicel and more than one-half as long as the scape, nearly four times as long as its greatest width; 2 hardly one-half as long as 1; 3 and 4 somewhat wider than long; club joints all somewhat wider than long. Thorax with a few, scattered, long fine setae; scutum with very large confluent punctures with an irregular longitudinal arrangement; scutellum with large confluent punctures with a reticulate arrangement; teeth on scutellum stout and blunt. Forewings stained rather deeply brownish; venation fuscous, thick and distinct. Abdomen fully twice as long as its greatest width; segment 1 as long as the width at one-half its length; 2 scarcely longer than 1; 3 very distinctly longer than 2, not as long as 1 and 2 combined, but almost as long as 4-6 combined, somewhat less than twice as wide as long; 4 one-half as long as 3; 6 quite short; 1 with nine strong irregular longitudinal striae, the surface between the striae opaque; median stria of segment 1 continued on segment 2 as a strong median carina, which is replaced on segment 3 by a narrow smooth median line; segments 2-5 with large subconfluent punctures with a tendency toward longitudinal arrangement; ten of these punctures are present in a longitudinal count at meson of 3; posterior margin of 3 and 4 very narrowly smooth; punctures setigerous.

♂. Unknown.

Habitat.—South Queensland: Mt. Tambourine, 2,000 feet; one female taken by Mr. A. M. Lea. The type remains unique.

Type in South Australian Museum, I. 1371.

NEOSCELIO RUBIDUS, n. sp.

♂. Length, 5.5 mm. Head black; thorax rich red, the scutellum, spine on postscutellum, and a patch on the posterior half of the scutum at the meson, black; abdomen wholly black; first six or seven antennal joints clear reddish-yellow, the apical five or six joints black; legs wholly clear reddish-yellow; mandibles red, their teeth black.

Head with a scattered pubescence of long fine silky hairs; frons strongly longitudinally rugose-striate, between the striae densely, moderately finely punctate, the punctures subobsolete on either side of the long, smooth antennal impression; vertex behind the ocelli strongly confluent reticulate- or rugose-punctate, laterally with an oblique tendency; cheeks with several longitudinal striae, between which are shallow punctures; mandibles tridentate, the middle tooth small; lateral ocelli separated from the eyes by fully their own diameter. Antennae normal; scape rather stout; pedicel small, hardly longer than wide; funicle 1 more than twice as long as the pedicel, and about one-half as long as the scape; 2 two-thirds as long as 1; 3-9 moniliform, each a little longer than wide; 3 feebly excised on one margin. Pronotum densely rugose-punctate and pubescent; scutum and scutellum densely, strongly, reticulate- or rugose-punctate, and with sparse long fine pubescence; lateral teeth of the scutellum short and acute; spine

on postscutellum very long and slender, almost as long as the scutellum, with two strong median carinae for one-half its length; propodeum rugose-punctate, laterally with dense white pubescence; depression of mesopleurae smooth and polished, with one row of punctures toward the posterior margin; anterior of the depression the surface is densely finely punctate and pubescent; metapleurae densely punctate and pubescent. Forewings smoky, without bands; venation fuscous, thick and distinct. Abdomen two and one-half times as long as its greatest width; segment 1 rather longer than its greatest width; 2 and 3 subequal in length; 3 twice as wide as long; 4 two-thirds as long as 3; 1 rugose-punctate, the raised mesial area with several strong longitudinal striae; 2 foveate at base; 2-6 very densely, sub-confluently punctate, the punctures moderately large, the longitudinal tendency hardly indicated; there are about 12 punctures in a longitudinal count on segment 3; sides of abdomen, segments 5 and 6 and apical third of 4, with a conspicuous pubescence of long yellow hairs; rest of abdomen dorsally with scattered inconspicuous pubescence.

♀. Unknown.

Habitat.—South Queensland: Mt. Tambourine, 2,000 feet; three males taken by the author in December.

Type in South Australian Museum; cotypes in the author's collection.

NEOSCELIO AGILIS, n. sp.

♀. Length, 4.45 mm. Black; legs, including the coxae, bright reddish-yellow, the tarsi dusky; antennal scape reddish-yellow, the next four joints sometimes washed with yellow, sometimes wholly fuscous, the club black; mandibles reddish-yellow, also the tegulae.

Ocelli close together, the lateral pair separated from the median ocellus narrowly and from the eye margins by about one-half their own diameter; vertex and frons, except the smooth shallow depression, rather strongly longitudinally striate; between the striae are obscure shallow punctures, each bearing a long fine seta; striae disappearing toward the occiput; cheeks with obscure shallow punctures and one median carina; mandibles tridentate, the outer teeth long and acute, the middle tooth very small. Antennal scape long and slender; pedicel less than twice as long as its greatest width, as long as funicle 2; funicle 1 long and slender, fully one-half as long as the scape, and two and one-half times as long as the pedicel; 3 quadrate; 4 wider than long. Scutum with large confluent elliptical punctures arranged in irregular longitudinal lines, there being ten punctures in the median line; scutellum with large confluent punctures arranged reticulately; punctures of pronotum, scutum, and scutellum each bearing a long fine black seta; scutellar teeth stout and acute; propodeum laterally with a patch of white pubescence. Forewings stained light brownish; venation fuscous, thick, and distinct. Abdomen twice, or less, as long as its greatest width; segment 3 only slightly longer than 2; surface shining; segments 2-5 with very large punctures, confluent, and arranged in irregular longitudinal lines on 2 and 3 (only five punctures are present in each row); punctures dense but not confluent on 4 and 5; posterior margin of 2-4, and base of 4 and 5 with a narrow transverse path which is minutely punctate; median carina on segment 2 not differentiated.

♂. Resembling the female but the abdomen, from lateral aspect, is almost flat above and beneath, and the punctures on the abdomen are somewhat smaller. Antennal scape yellow, the flagellum fuscous, the basal three or four joints sometimes suffused with yellow; scape rather short; pedicel scarcely longer than wide;

funicle 1 more than twice as long as the pedicel; 2 plainly, but not greatly, shorter than 1; 3 very feebly excised on one side; 4-9 subequal, rather less than twice as long as wide.

Habitat.—North Queensland: Cairns district, 0-1,500 feet; a long series taken by the author in January-May, September-December.

Type in South Australian Museum; cotypes in the South Australian Museum, Queensland Museum, and the author's collection.

This species agrees exactly in colour with the genotype, but there are structural and sculptural differences. For instance, in *gloriosus*, segment 3 of the abdomen is very distinctly longer than 2, the lateral ocelli are separated from the eye margins by more than their own diameter, and the first funicle joint of the antennae is not so long in relation to the pedicel.

NEOSCELIO LATERALIS, n. sp.

♀. Length, 3.5 mm. Head, prothorax, scutum, scutellum, postscutellum, and the abdomen, black; rest of thorax bright red; legs, including the coxae, bright reddish-yellow; antennal scape reddish-yellow, the next four or five joints somewhat dusky, the club black; mandibles red.

Lateral ocelli separated from the median ocellus by nearly their own diameter, and from the eye margins by somewhat more than their own diameter; frons longitudinally striate, between the striae with moderately small and dense punctures, each bearing a long fine seta; behind the ocelli the surface is densely punctate, the punctures of moderate size and setigerous; mandibles tridentate, the middle tooth very small. Antennal scape moderately long; pedicel one-half longer than its greatest width; funicle 1 barely twice as long as the pedicel; 2 shorter than the pedicel and not much longer than wide; 3 and 4 somewhat wider than long. Scutum and scutellum with large confluent punctures, with a tendency, which is more pronounced posteriorly, to longitudinal arrangement, there being about twelve punctures in a longitudinal count at the median line of the scutum; arranged reticulately on the scutellum; teeth on scutellum short, stout, and subacute. Forewings rather deeply smoky throughout; venation fuscous, thick and distinct, the stigmal vein rather short. Abdomen rather distinctly less than twice as long as its greatest width; segment 3 fully twice as wide as long, not much longer than 2, and less than twice as long as 4; 2 and 3 densely punctate, the punctures with a tendency toward longitudinal arrangement, there being seven or eight punctures in a longitudinal count on 3; posterior margin of 2-4, and anterior margin of 4 and 5, with a narrow path which is finely pin-punctate; base of 1 with a small faint smooth elevation; punctures of 2 and 3 not setigerous; 4 and 5 with dense nonconfluent punctures which bear long fine setae.

♂. Agreeing with the female. Antennae fuscous, the scape and pedicel yellow; as in *agilis*.

Habitat.—South Queensland: Mt. Tambourine, 2,000 feet; a small series taken by the author in February; Blackall Range, one female, three males in January.

Type in South Australian Museum; cotypes in the South Australian and Queensland Museums, and the author's collection.

This species is somewhat smaller than *agilis*, and the punctures of the thorax and abdomen are not as large as in that species; there are few punctures behind the ocelli in *agilis*; the first funicle joint of the antennae is longer in that species; and the lateral ocelli, although nearer to the median ocellus, are separated from the eye margins by less than their own diameter. Moreover, the smooth frontal

depression is smaller in *lateralis* and rather broadly separated from the eyes, and the punctures between the striae on the frons are more pronounced.

NEOSCELIO PULCHRALIS, n. sp.

♀. Length, 3.5 mm. Head and abdomen black; thorax rich red, the scutum, scutellum and postscutellum, black; legs, including the coxae, bright reddish-yellow, the trochanters black, the anterior femora sometimes somewhat dusky; first six antennal joints reddish-yellow, the scape sometimes more or less dusky, the club black; mandibles red.

Frons confluent punctate, the punctures not large, and with scattered silvery pubescence; behind the ocelli and the cheeks rugose-punctate and with dense silvery pubescence; frontal depression smooth, moderately large; mandibles tridentate, the middle tooth small; lateral ocelli separated from the median ocellus by rather less than their own diameter, and from the eyes by somewhat more than their own diameter. Antennal scape moderately long; pedicel fully one-half longer than its greatest width; funicle 1 one-third longer than the pedicel, twice as long as 2, which is quadrate; 3 and 4 wider than long. Scutum and scutellum with large confluent punctures, with a tendency toward longitudinal arrangement on the scutum, reticulate on the scutellum; teeth on scutellum short and acute. Forewings dusky, the basal two-fifths, up to the marginal vein, subhyaline; more rarely there is a hyaline cross-band some distance from the apex; venation fuscous, thick and distinct, the stigmal vein rather short. Abdomen somewhat less than twice as long as its greatest width; segment 3 fully twice as wide as long, and slightly longer than 2; 4 fully one-half as long as 3; 1 strongly striate, faintly elevated and smooth at base; 2 and 3 with large confluent punctures arranged in irregular longitudinal lines, there being eight or nine punctures in a longitudinal count on 3; 4 and 5 densely but not confluent punctate; posterior margin of 2, 3, and 4, and anterior margin of 4 and 5, narrowly pin-punctate.

♂. Second band of wing always absent. Antennae variable in colour, the first five joints sometimes bright yellow, sometimes almost wholly dusky. Pronotum, sides of the thorax, and the coxae sometimes more or less dusky.

Antennal scape stout; pedicel hardly longer than its greatest width; funicle 1 almost twice as long as the pedicel, hardly twice as long as its greatest width; 2 slightly longer than wide; 3-9 scarcely longer than wide.

Habitat.—South Queensland: Mt. Tambourine, 2,000 feet; five females, ten males taken in December by the author.

Type in South Australian Museum; cotypes in the South Australian Museum, Queensland Museum, and the author's collection.

The first flagellar joint in both sexes is shorter than in *lateralis*; for example, in the male antennae of *lateralis*, this joint is more than twice as long as the pedicel and in the female is about twice as long as the pedicel (one-third longer than the pedicel in *pulchralis*).

The variation in the fasciation of the forewings is interesting; the second band is present in only one female, but occurs in the three examples of the variety described beneath.

NEOSCELIO PULCHRALIS Dodd, var. *MEDIALIS*, n. var.

♀. Scutum and scutellum rich red, each with a black patch medially. Forewings with two cross-bands.

Habitat.—South Queensland: Mt. Tambourine, 2,000 feet; two females in December, one female in February, A. P. Dodd.

Type in South Australian Museum; cotypes in the author's collection.

DUARINA, n. gen.

♀. Small and stout. Head large, somewhat wider than the thorax; viewed from above, twice as wide as long, the vertex rather long, the longitudinal distance from the anterior ocellus to the occipital margin being considerably greater than the transverse distance between the eyes at the ocelli; occipital line concave and margined; viewed from in front, the head is wider than deep; frontal depression shallow and not margined; cheeks moderately narrow; eyes large, bare, but well separated from the occipital line; ocelli small, wide apart, the lateral pair against the eyes; mandibles tridentate. Antennae 12-jointed; scape slender; funicle joints short, the club stout, compact, 6-jointed. Thorax not much longer than its greatest width; viewed from the side, fully as high as long; pronotum hardly visible from above; scutum large, the parapsidal furrows wide apart, delicate, complete, and almost parallel; scutellum of moderate length, projecting somewhat over the propodeum, its posterior margin rather deeply concave, postscutellum unarmed; propodeum almost perpendicular, short, from dorsal aspect somewhat hidden by the scutellum. Forewings when closed not extending beyond apex of abdomen; short and moderately broad; banded; submarginal vein attaining the costa at somewhat beyond one-half the wing length, the marginal vein linear, distinctly longer than the stigmal vein which is short and oblique, the postmarginal vein not developed. Legs normal, slender; posterior tarsi hardly as long as their tibiae, their basal joint as long as 2-5 combined. Abdomen broadly oval, somewhat narrowed at base, one-half longer than its greatest width, and rather wider than the thorax; segment 1 very short, transverse; 2 twice as long as 1; 3 somewhat longer than 1 and 2 or 4-6 combined, occupying a little less than one-half of the abdomen; 4, 5, and 6 short and transverse.

This genus comes near to *Anteris* Foerster, which is well represented in Australia; it differs mainly in the deeply concave posterior margin of the scutellum. The affinity with *Anteris* is indeed close; both possess the same shaped head, the stout abdomen with the long third segment, the short antennae; in both the postmarginal vein is not developed. However, in *Anteris* the postscutellum bears an acute tooth, and the marginal vein is shorter in relation to the stigmal vein. In none of the species of *Anteris* known to me are found definitely banded wings.

Type, *Duarina venustella*, n. sp.

DUARINA VENUSTELLA, n. sp.

♀. Length, 1.5 mm. Head, thorax, and first two abdominal segments black; rest of abdomen intense orange; antennae black, the club brown at base and becoming pale yellow on the apical joints; coxae fuscous, the legs dusky-brown, the trochanters and tarsi yellow.

Head with very fine, impressed, polygonal reticulation and with scattered very small punctures each bearing a short fine seta; frontal depression smooth. Antennal scape slender; pedicel one-half longer than its greatest width; funicle 1 much smaller, no longer than wide, 2-4 wider than long; club 6-jointed, the joints transverse. Scutum with similar sculpture to the head; scutellum finely and very densely rugose-punctate. Forewings stained yellowish, and with two dark transverse bands, the first involving apical fourth of the submarginal and all of the marginal veins, the second at the wing apex; venation fuscous, the stigmal vein pale yellow. Abdominal segments 1 and 2 strongly longitudinally striate; 3 finely striate at base and laterally, smooth for the rest; 4-6 with fine polygonal sculpture and a few setigerous pin-punctures.

♂. Unknown.

Habitat.—South Queensland: Mt. Tambourine, two females in February, A.P.D. Type in South Australian Museum; cotype in the author's collection.

A striking little species. The contrast between the sculpture of the scutum and scutellum is rather curious.

Family Belytidae

ISMARUS Haliday.

This genus is characterized by the absence of parapsidal furrows, and the shape of the head, which is much more transverse than is usual for the family; the antennal prominence very small and inconspicuous. Not many species have been described, chiefly from Europe, and one from North America. The following species differs from the generic diagnosis, as given by Kieffer, in the raised, margined posterior border of the scutellum, and the thickened posterior tibiae.

ISMARUS TIBIALIS, n. sp.

♀. Length, 2.30 mm. Black, shining; legs, including the coxae, bright golden-yellow, the posterior tibiae and tarsi dusky-brown, the basal joint of the posterior tarsi black; tegulae yellowish; basal three or four antennal joints yellow, the remainder more or less suffused with yellow, the apical ones fuscous.

Head, viewed from above, transverse, somewhat distinctly wider than the thorax, the vertex short; viewed from in front, distinctly wider than deep; eyes moderately large, bare; ocelli of moderate size, the lateral pair much closer to the median ocellus than to the eyes; antennal prominence small, not visible from above; surface smooth and shining, with a few scattered fine setae. Antennae 15-jointed, without a club, the apical joints not thickened; scape short and stout, not much longer than funicle 1; pedicel two-thirds longer than its greatest width; funicle 1 more slender than the pedicel and distinctly longer; 2 as long as 1; 3 plainly shorter than 2; 4-12 moniliform, each about one-third longer than wide, the apical joint one-half longer. Thorax rather stout; pronotum very short at meson, more distinct laterally, densely punctate and pubescent; scutum from lateral aspect convex, from dorsal aspect subquadrate, the anterior margin feebly convex, smooth and shining, without parapsidal furrows; in front, on either side near the anterior margin there is a large circular fovea; there is a deep groove containing setigerous punctures against the tegulae, and there is a curved row of six white setae on either side on the posterior third, wide apart anteriorly, approximating at the posterior margin, together forming a broadly open U of setae whose base rests against the posterior margin of the scutum; scutellum trapezoidal, almost twice as wide anteriorly as posteriorly, the lateral and posterior margins straight and finely carinate, the posterior angles prominent in the form of tubercles; at base with two large deep foveae, narrowly separated, each fovea divided by several longitudinal carinae; against the lateral margins are several small setigerous punctures; from lateral aspect the scutellum is raised, perpendicularly truncate posteriorly; propodeum quite short, its posterior border margined, its posterior angles prominent, at meson with a raised tubercle; propleurae densely punctate except for a smooth depressed area; mesopleurae smooth and shining; metapleurae rugose and with long white pubescence. Forewings broad, when closed extending somewhat beyond apex of abdomen; faintly tinted; submarginal vein attaining the costa a little before one-half the wing length, the marginal vein long, the stigmal vein short; radial cell closed, small, one-half as long as the marginal vein; radial vein directed backward shortly. Hindwings with

one closed cell. Legs normal, except that the posterior tibiae are much thickened. Abdominal petiole short, twice as wide as long, strongly striate; body of abdomen, from lateral aspect, convex; composed of six segments; segment 2 (first body segment) occupying three-fifths of the surface; 3-5 transverse; 6 a little longer; 7 (apical segment) also short; abdomen smooth and shining, segments 3-7 with a few scattered setae.

♂. Unknown.

Habitat.—North Queensland: Cairns district, four females taken by Mr. F. P. Dodd on flowers in March.

Type in South Australian Museum; cotypes in the author's collection.

Family Diapriidae.

NEOPRIA Dodd.

(*Trans. Royal Soc. S. Aust.*, xxxix, 1915, 429.)

This genus approaches *Idiotypa* Foerster, from which it differs, apparently, in the antennal club being abruptly 3-jointed, and in the presence of three foveae at the base of the scutellum. However, certain American species described under *Idiotypa*, notably *I. pallida* Ashmead and *I. pallipes* Fouts, possess the three foveae. Perhaps *Neopria* cannot be considered a distinct genus.

The species described below differs from the other Australian forms in the wings being vestigial.

NEOPRIA VESTIGIALIS, n. sp.

♀. Length, 1.25 mm. Head, thorax, and petiole of abdomen, very dark red-brown; body of abdomen bright orange-yellow; legs bright yellow; antennae deep yellow, the three club joints fuscous.

Head, from dorsal aspect, subquadrate, not much wider than long; smooth and shining; eyes small, with a few short hairs; ocelli either very minute or absent. Antennae 12-jointed; scape normal; pedicel stout, no longer than its greatest width; funicle joints small, 1 much narrower than the pedicel, somewhat wider than long, 2-7 transverse, 7 a little widened; club very abrupt, 3-jointed, joints 1 and 2 somewhat wider than long. Thorax slender, somewhat narrower than the head, twice as long as its greatest width, smooth and shining; parapsidal furrows deep and complete; scutellum with three rather small circular foveae at base; median carina of the propodeum elevated posteriorly. Wings vestigial, bristle-like, reaching as far as the posterior margin of the abdominal petiole. Petiole of abdomen fully as wide as long, finely densely longitudinally striate; body of abdomen plainly wider than the thorax, fully twice as long as its greatest width, its base shortly striate and with a short median groove; smooth and shining; segment 2 occupying four-fifths of the surface, the remaining segments short and transverse.

♂. Unknown.

Habitat.—South Queensland: Mt. Tambourine, 2,000 feet; one female in February, A. P. Dodd.

Type in South Australian Museum.

PROPENTAPRIA Dodd.

(*Trans. Royal Soc. S. Aust.*, xxxix, 1915, 425.)

This genus differs from *Paramesius* Westwood only in the form of the basal foveae of the scutellum; in *Paramesius* two large foveae may be present, or one only; *Propentapria* has the basal fovea subdivided by longitudinal carinae, so that

five foveae are present, of which the outer two are circular, the inner three narrow. Possibly the distinction is not great enough to allow full generic rank to *Propentapria*, but as three species have been discovered in which this character remains constant, no alteration is considered necessary at present.

Table of Species of Propentapria.

1. Body black, the antennae wholly black *multifoveata* Dodd.
Head and abdomen black, the thorax chestnut-red; at least the first six antennal joints bright red 2
2. Marginal vein longer, about one-fourth as long as the submarginal; foveate area at base of scutellum oval, twice as wide as long; second funicle joint of male antennae as long as the scape and nearly four times as long as the first *venusta*, n. sp.
Marginal vein shorter, no more than one-sixth as long as the submarginal; foveate area at base of scutellum with its posterior margin concave, four times as wide as long; second funicle joint of male antennae less than one-half as long as the scape, and not twice as long as the first *consimilis*, n. sp.

PROPENTAPRIA VENUSTA, n. sp.

♀. Length, 3.3-5 mm. Head and body of abdomen black; thorax and petiole of abdomen bright chestnut-red, the scutum, except the posterior half of the median lobe, and most of the mesopleurae, dusky-black; legs wholly reddish-yellow; first six antennal joints bright red, the next two dusky, the apical five black.

Body normal; smooth and shining; head and thorax with a few small scattered punctures giving off long fine setae. Head normal, subglobular; from dorsal aspect less than twice as wide as long; eyes moderately small; ocelli normal; antennal prominence rather conspicuous; face below antennal prominence with fine, more numerous setae. Antennae two-thirds as long as the body; 13-jointed; scape very long and slender, fully as long as the next four joints combined; pedicel one-half longer than its greatest width; funicle 1 somewhat narrower and longer than the pedicel, almost three times as long as its greatest width; 2-6 gradually shortening; 6 somewhat longer than wide; club ill-defined, 5- or 6-jointed, the joints, except the last, quadrate, the apical joint fully twice as long as the penultimate. Thorax twice as long as its greatest width; pronotum not long, but plainly visible, especially on the sides; scutum narrowed anteriorly, almost as long as its greatest width, the parapsidal furrows well-marked and complete, the median lobe convex, the lateral lobes feebly depressed and with a punctate groove running round the outer margin; depression at base of scutellum oval, hardly twice as wide as long, subdivided into five narrow foveae of which the outer two are largest; lateral margins of the scutellum with a shallow obscure fovea; propodeum long, at base with a small raised blunt tooth or tubercle, its surface with several irregular longitudinal carinae or rugae; propleurae depressed, against the posterior margin with a row of small foveae or punctures; mesopleurae large, quadrate, smooth, with two longitudinal grooves against the dorsal and ventral margins; metapleurae rather coarsely rugose-punctate. Forewings when closed reaching apex of abdomen; broad; lightly clouded; venation terminating at slightly beyond one-half the wing length; marginal vein very long, about one-fourth as long as the submarginal, many times as long as thick, and several times as long as the stigmal vein, which is short; basal vein represented by a thick oblique brown line. Petiole of abdomen slender, about three times as long as wide, with four dorsal carinae; body of abdomen not raised from the petiole, ovate, terminating in a sharp point, fully three times as long as its greatest width; segment 2 (first body segment) fully twice as long as the remainder combined, smooth, without grooves

or striae at base; 3 and 4 transverse, with minute punctures; 5 rather longer than 3 and 4 combined, near its base with a transverse row of several very long setae; 6 almost as long as 5, with several long setae.

♂. Resembling the female, but the abdomen is shorter, its segments 3-6 much shorter, 2 occupying four-fifths of its length. Antennae somewhat considerably longer than the body, dusky, the first three joints reddish; scape moderately long; pedicel less than twice as long as its greatest width; funicle 1 a little shorter and narrower than the pedicel; 2 almost four times as long as 1 and about as long as the scape, very feebly excised on one margin at one-half its length; 3-11 very slightly and gradually decreasing in length.

Habitat.—North Queensland: Cairns district, four females, three males, taken in August around a rotten log in the jungle, A. P. Dodd.

Type in South Australian Museum; cotypes in the South Australian Museum and the author's collection.

PROPENTAPRIA CONSIMILIS, n. sp.

♀. Length, 3.3-5 mm. Strikingly similar to *venusta*, but the colour of the thorax is darker, the sides and venter and the propodeum and the petiole of the abdomen verging to black; femora and tibiae more or less dusky. Foveate area at base of scutellum not oval, but the posterior margin is concave, about four times as wide as long, the appearance of a subdivided fovea being practically lost and appearing more truly as five distinct foveae; propodeum more distinctly rugose, the carinae or rugae more oblique than in *venusta*. Venation terminating a little before one-half of the wing length, the marginal vein much shorter, about one-sixth or one-seventh as long as the submarginal and about three times as long as the short stigmal vein, the basal vein faint. Base of second abdominal segment with several shallow impressions. Pedicel of antennae rather longer than in *venusta*, the second funicle joint plainly shorter than the first (not noticeably so in *venusta*).

♂. Antennae no longer than the body; black, the first three joints red; scape long and slender; pedicel hardly twice as long as its greatest width; funicle 1 narrower than, but as long as, the pedicel; 2 two-thirds longer than 1, not one-half as long as the scape; 3-10 very slightly and gradually decreasing in length.

Habitat.—South Queensland: Mt. Tambourine, 2,000 feet, a large series in February, collected on leaves in the jungle.

Type in South Australian Museum; cotypes in the South Australian and Queensland Museums and the author's collection.

The differences in the antennal structure will readily separate the males of these two species, while the females may be distinguished by the different lengths of the marginal vein, and the shape of the foveate area at the base of the scutellum.