

New Species of Proctotrupeoidea. By G. E. J.
NIXON, B.A., Imperial Institute of Entomology.

NAMES have been asked for two species of *Telenomus* from the West Indies and three from India. Of these one has been already described by Ashmead, the others are brought forward as new. The Indian species are important as having been bred from the eggs of a butterfly associated with lac.

Since the appearance of my 1937 paper * I described further Asiatic *Telenomi* in 1938 † which were not fitted into the key given in the earlier paper. I have therefore thought it a good thing to rewrite and revise the key, and to include in it the forms I described in 1938 as well as those whose descriptions appear in the following pages.

There will also be found below a reference to *Telenomus manolus* Nixon.

Subfamily *TELENOMINÆ*.

Key to the Asiatic Species of Telenomus (females).

1. Postorbital carina continued as a sharp, more or less completely differentiated margin right across the vertex immediately behind the posterior ocelli; the vertex falling away almost perpendicularly behind this ridge and here usually highly polished; occipital margin absent above, that is, obliterated along its transverse course 2.
Postorbital carina not thus continued; the vertex of different conformation, its surface between the anterior ocellus and the more or less well-defined occipital margin varying from nearly flat through curved to feebly angulate 7.
2. Large species, at least .9 mm. in length; hind wings wide, the fringe at widest part of wing not more than half the width of the wing there. (Spp. of stout build; medial postscutellar swelling subtriangular, coarsely rugose; legs entirely yellow.) 3.
Smaller species, at most .7 mm. in length; hind wings narrow, its fringe at widest part of wing at least distinctly a little more than half width of wing there . . . 4.

* Nixon, G. E. J., "Some Asiatic Teleonominæ," 1937, Ann. & Mag. Nat. Hist. (11) vol. xx. pp. 444-475.

† Nixon, G. E. J., "Five new Asiatic Teleonominæ," 1938, Ann. & Mag. Nat. Hist. (11) vol. i. pp. 584-593.

3. Vertex between the ocelli more or less smooth, with a few isolated punctures; radicle of the scape about one-third the length of the scape; pedicel+first five segments of flagellum brownish; venation brown, well defined [Malaya.
lelus Nixon (1937):
- Vertex between the ocelli with well-marked scaly-reticulation; radicle about one-quarter the length of the scape; pedicel and first 5 segments of the flagellum bright yellow; venation pale yellowish, indistinct [Java.
lucullus Nixon (1937):
4. Sides of the ocellar triangle considerably more than half the base, about 2:3; vertex within the ocellar triangle shining, with close, numerous and, for the size of the insect, rather large punctures and with virtually no sculpture between them; tergite 1 noticeably yellowish .. Sides of the ocellar triangle only slightly more than half base, the triangle very narrow transversely; vertex within the triangle differently sculptured; tergite 1 not yellowish 5.
5. Legs entirely clear yellow; build narrow; abdomen narrow at base; tergite 1 not strongly transverse nor very short medially. (Sp. with the head large and wide.) [Sumatra.
ochus Nixon (1938):
- At least the coxæ darkened; build stout; abdomen broad at base; tergite 1 very strongly transverse, very short medially. (Spp. with the scape, pedicel and first three segments of the flagellum predominantly brownish or blackish; hind wing distinctly widened beyond the nervature; dumpy insects of the form shown in fig. 22.) 6.
6. A line joining mid-points of posterior ocelli touches the vertical margin at middle; vertical margin hardly completely differentiated medially, the vertex immediately behind it not falling away perpendicularly; postscutellar medial swelling distinctly sculptured [United Provinces.
proditor Nixon (1937):
- A line joining mid-points of posterior ocelli lies behind the vertical margin; vertical margin completely differentiated throughout, the vertex behind it falling away perpendicularly; postscutellar medial swelling showing as a smooth, shining band *transversiceps*, sp. n.
7. Species of narrow build, with the abdomen at least about twice as long as wide. (Spp. with the legs entirely yellow.) ... 8.
- Species not of narrow build, the abdomen considerably less than twice as long as wide 16.
8. Tergites beyond 2 with numerous unusually long hairs; frons, except

- the impression, evenly scaly-reticulate, shining. (Sp. with the eyes close together on the vertex, so that when this is seen from above, at right angles to the ocellar triangle, the shortest distance between the eyes is not greater than their width; posterior part of vertex steeply declivous, somewhat characteristically hollowed out; occipital circumference small.)
- [Malaya, Siam.
attaci Nixon (1937):
- Tergites beyond 2 with only minute hairs, or almost without hairs (except in *pontus* Nixon, where the hairs are rather long); frons in greater part smooth, shining, at most with a few punctures and indication of scaly-reticulation along the eye-margin 9.
9. Thorax very short, slightly wider than long; scutellum unusually strongly transverse, its posterior margin virtually straight; postscutellum without a medial swelling, over most of its medial surface flattened and forming part of the posterior vertical wall of the thorax; tergite 2 emarginate at apex; tergite 1 virtually smooth all over, its costae absent or reduced to an almost imperceptible row of minute foveae at base. (Spp. with the legs entirely yellow.) 10.
- Thorax less short, at least slightly longer than wide; scutellum not very transverse, its posterior margin rounded; postscutellum with a medial rugose swelling or completely smooth, but in neither case forming part of the posterior vertical wall of the thorax; apical margin of tergite 2 straight; tergite 1 strongly and evenly costate except at extreme apical margin, or, if its costae somewhat reduced, then the postscutellum is flattened and polished 11.
- [Malaya.
sorus Nixon (1937):
[Philippines, Java.
rowani (Gahan):
10. Abdomen beyond the middle abruptly, cylindrically narrowed
- Abdomen beyond the middle evenly tapering to apex, somewhat flattened
11. Postscutellum flattened, polished. (Spp. with the eyes apparently bare at a magnification of $\times 90$.) 12.
- Postscutellum rugose, or, if somewhat smooth as in *beneficiens* Zehnt., then the eyes very distinctly hairy at $\times 90$ 13.
12. Segment I of the middle tarsus hardly twice as long as wide; head, seen from above, not cubical; postorbital margin hardly raised (fig. 1, f, 1938)
- [(1938): E. Sumatra.
periparetus Nixon
- Segment I of the middle tarsus 3-4 times as long as wide; head approaching a subcubical condition (fig. 1, b, 1938); postorbital margin strongly raised. (Sp. with the eyes large, very close together on the vertex.)
- [E. Sumatra.
olyntus Nixon (1938):

13. Thorax elongate, very distinctly longer than its greatest width; head approaching a subcubical condition, the eyes close together on the vertex, the shortest distance between them not at all greater than their width as seen from above (figs. 8, *a* & *g*, 1937) 14.
- Thorax hardly longer than its greatest width; head not approaching a subcubical condition, being rather markedly transverse; shortest distance between the eyes clearly greater than their width as seen from above (figs. 8, *e* & *f*, 1937). 15.
14. Eyes large, their greatest width fully twice as long as the malar space, mesonotum evenly convex; abdomen exactly twice as long as wide, widest at middle; legs somewhat dingy yellow (due to being in alcohol and then dried?) [Solomons.
pontus Nixon (1937):
- Eyes small, their greatest width much less than twice the length of the malar space, about 11:8; mesonotum somewhat flattened; abdomen short, less than twice as long as wide, widest posterior to middle; legs bright yellow [Java.
beneficiens Zehntner:
[pines, China, Java.
dignus Gahan: Philip.
[Java.
dignoides Nixon (1937):
15. Abdomen hardly twice as long as its greatest width.
- Abdomen nearly three times as long as its greatest width
16. Hind wing much widened beyond nervature, the fringe at widest part being clearly a little less than half the width of the wing there; antennæ slender, flagellum 1 being fully as long as the pedicel; flagellar segments 2 and 3 clearly elongate; vertex with a short, ill-defined groove running inwards from each ocellus. (Sp. with the facies of a *Microphanurus*; antennæ slender, flagellum 4 being intermediate between 3 and 5.) . . [Java.
cyrus Nixon (1937):
- Hind wing much less widened, usually more or less parallel-sided beyond the nervature, the fringe at widest part being at least a little more than half the width of the wing there; flagellum 1 always shorter than pedicel; at least flagellum 3 not at all elongate; vertex without such a groove 17.
17. Postscutellum with a subtriangular, strongly rugose, medial dilatation; striations of tergites 2 extending over basal third. (Fairly large species, .85 mm.) . . [Malaya.
triptus Nixon (1937):
- Postscutellum without such a rugose dilatation; striations of tergite 2 not, or hardly, extending beyond the basal furrow 18.
18. Length about .7 mm. (Sp. with the hind wing clearly a little widened beyond the nervature; flagellum 5 very strongly

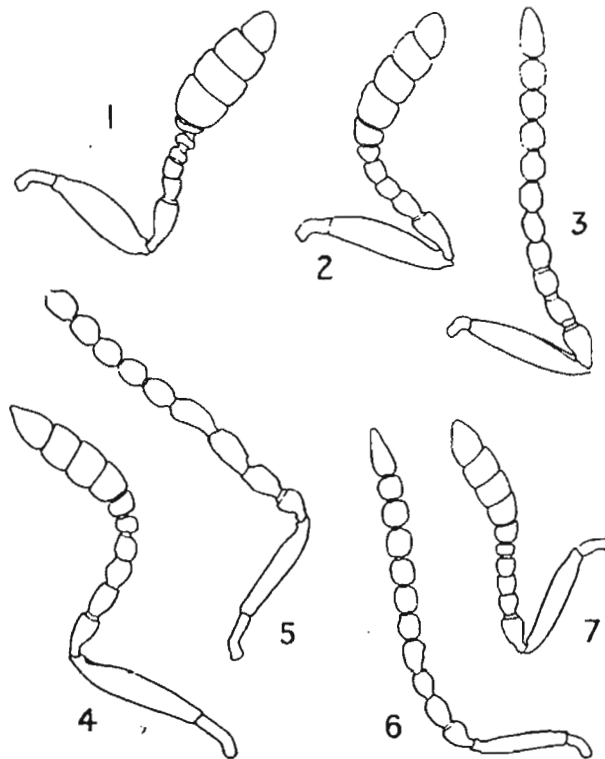
- transverse, in length obviously nearer in size to 4 than to 6, the club hence more or less 4-segmented; tergite 1 very strongly transverse, its medial length only about half its lateral length.)
- Length at most .55 mm.
19. Legs entirely pale yellow. (Rather slenderly built species, with the antennæ rather long; club sharply 5-segmented, flagellum 5 being much nearer in size to 6 than to 4; scape, pedicel, and first 4 segments of flagellum yellow.)
- At least the coxæ and femora darkened
20. Head articulated rather low on thorax, so that, in a lateral view of the thorax, the top of the head lies distinctly below the level of the tegulæ. (Dingy species, with the antennæ entirely brown and the legs predominantly brownish; head markedly wider than the thorax, somewhat crescentic as seen from above.)
- Head articulated in the usual position, so that, in a lateral view of the thorax, the top of the head lies above the level of the tegulæ.
21. Basal foveæ of tergite 1 deep and distinct. (Sp. with the head not obviously wider than the thorax, approaching a sub-cubical condition.)
- Basal foveæ of tergite 1 very shallow, indistinct
22. Flagellum somewhat yellowish brown; body not very black
- Flagellum deep brown; body very black.
- [Malaya.
manolus Nixon (1937):
19.
- [Burma.
usipetes Nixon (1938):
20.
- [Malaya.
remus Nixon (1937):
21.
- [Java.
tirathabæ Ferrière:
22.
- pegasus*, sp. n.
olones, sp. n.

Telenomus crassiclava, sp. n.

♂♀.—Black. Legs entirely deep yellow throughout. Scape of ♀ yellowish on basal half but becoming dark brown towards apex; pedicel and first five segments of the flagellum yellowish; apical four segments blackish. Scape of the ♂ yellow like the legs; pedicel and first three segments of the flagellum paler than the apical seven segments, which are brown. Wings hyaline.

♀.—General form much as in *impressus* Ashm. (cf. figs. 20 & 23). Head only very slightly wider than the thorax, 25:24, not (for the genus) markedly crescentic or transverse, and, seen along a line perpendicular to a line between the posterior ocelli, about one and a half times as wide as its greatest length, not at all flattened above. Frons, in a dorsal view of the head, more evenly and noticeably convex than in *impressus* (cf. fig. 20). Shortest distance between the eyes (on the vertex) equal to their

width when the head is seen from above. Frons right down to the genal sulcus completely smooth. Vertex shining, with some weak scaly-reticulation, amongst which there are a few very indistinct punctures, evenly rounded between the anterior ocellus and the occipital margin. Antennæ: pedicel about as long as the following



Antenna of: 1. *Telenomus crassiclava*, sp. n., ♀; 2. *T. impressus* Ashmead, ♀; 3. *T. impressus* Ashmead, ♂; 4. *T. transversiceps*, sp. n., ♀; 5. *T. transversiceps*, sp. n., ♂; 6. *T. pegasus*, sp. n., ♂; 7. *T. pegasus*, sp. n., ♀.

three segments together; flagellum 5 very short, very strongly transverse, saucer-shaped; if size alone is taken into account the club is 4-segmented, but if width, then virtually 5-segmented; it is unusually thick (fig. 1).

Thorax: mesonotum over most of its surface smooth and shining, especially on posterior half, except for

minute setiferous punctures; around the anterior margin there is the merest indication of the usual scaly-reticulation ($\times 90$). Scutellum hardly convex, smooth, shining. Postscutellum with a medial, coarsely rugose swelling. Mesopleura antero-ventrally completely smooth. Hind wing not parallel-sided beyond the nervature; fringe at widest part of the wing shorter than the width of the wing there, about 9 : 10.

Abdomen in shape much like that of *impressus* Ashm. (cf. fig. 20), but the apical segments are somewhat contracted in dried specimens. Tergite 1 with strong costæ nearly to apex. Tergite 2 at base with short striæ which are not longer than the middle length of tergite 1. Tergites 3-6 smooth, impunctate.

♂.—Antennæ hardly distinguishable from those of *impressus* Ashm.; compared with that species the radicle is longer and the pedicel is slightly longer and stouter in proportion to flagellum 1; the hairs of the flagellum are finer, there being fewer of the thickened differentiated ones. Genitalia (fig. 18).

Length: ♂♀, ca. 7 mm.

W. INDIES: Santa Lucia, 14 ♀♀ (one the type), 1 ♂, bred 11. xii. 1938, in company with *Telenomus impressus* Ashm. from at least one species of *Ormenis* (probably *O. pygmæa*) (*R. G. Fennah*). The host is a ubiquitous minor pest in St. Lucia, occurring on some ornamental plants.

This does not appear to be any of the species described by Ashmead from St. Vincent, the types of most of which are in the British Museum. The species is largely characterized in both sexes by the smooth strongly shining mesonotum, and in the female especially by the thick club and very short fifth flagellar segment.

Telenomus impressus Ashmead.

Telenomus impressus Ashm., 1894, J. Linn. Soc. xxv. p. 204.

Liophamurus impressus Ashm., 1926, Kieffer in 'Das Tierreich,' Lief. 48, p. 78.

Ashmead described this species from one male and six females. In the British Museum there are only two specimens, a male and a female, both labelled "*impressus*" in Ashmead's writing. My conclusion that they belonged to the same species as the bred

series I had before me was confirmed by a comparison of the genitalia of the males.

As Ashmead's description is inadequate to make identification of the species possible I give a redescription of it below.

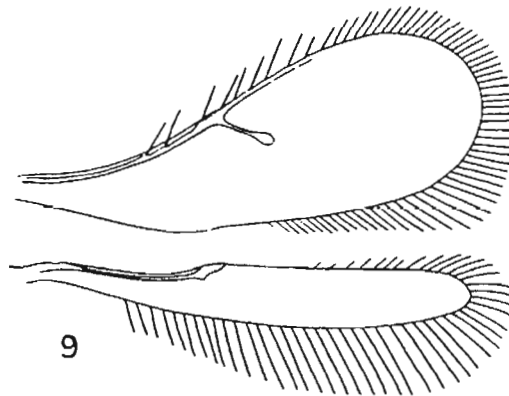
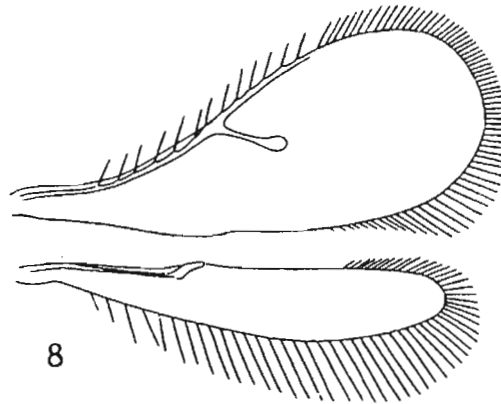
♂♀.—Black. Legs entirely deep yellow. Scape same colour as legs; flagellum brown in both sexes, the underside of the club segments in the female noticeably yellowish; this is not a feature of all specimens. Venation pale, by no means sharply defined.

♀ (figs. 20 & 23).—*Head* not (for the genus) strongly transverse, and not at all crescentic as seen from above; seen along a line perpendicular to a line between the posterior ocelli one and a half times as wide as its greatest length (fig. 20). Shortest distance between the eyes, when the head is viewed as just mentioned, to their width as 8:7. Frons virtually smooth and shining; above and towards the eye-margin there is a faint trace of scaly-reticulation visible at $\times 90$, with a few widely separated, rather sharp punctures; between the antennal insertions and lower margin of the eye there is an indication of similar sculpture. Vertex in a lateral view of the head somewhat flattened and with hardly a trace of a posterior declivity (fig. 23); sculpture of vertex consisting of faint, broken scaly-reticulation with a slight transverse tendency; a few scattered punctures are also present; similar sculpture occurs on the head behind the eyes. Antennæ: pedicel twice as long as flagellum 1; flagellum 5 nearer in width to 6 than to 4, so that the club is 5-segmented (fig. 2).

Thorax: Mesonotum distinctly a little flattened above, with feeble, rather wide meshed scaly-reticulation which has a longitudinal and slightly convergent tendency on about posterior half; sparse punctures are present. Scutellum completely smooth. Postscutellum with a transverse rugose medial swelling. Antero-ventral part of the mesopleura with feeble scaly-reticulation; this sculpture limited above by a nearly transverse crenate groove. Stigmals of fore wing only of moderate length; hind wing slightly widened beyond the nervature; fringe at widest part of wing equal to width of wing at the same place. *Abdomen* appearing a little shorter than in fig. 20 owing to retraction of segments. Tergite 1 with strong costæ nearly to apex. Striations of tergite 2 covering

an area not longer than medial length of tergite 1. Apical segments completely smooth.

♂.—Antennæ: flagellum 1-3 only very slightly longer than wide; 5-9 moniliform (fig. 3). Genitalia very distinctive; especially characteristic is the great length



Wings of: 8. *Telenomus otonos*, sp. n., ♀;
9. *T. pegasus*, sp. n., ♀.

of the sheath-like part of the structure; its limits are indicated by the cross-hatched margin shown in the figure (fig. 19).

Length: ♂♀, .7 mm.

W. INDIES : Santa Lucia, 7 ♀♀, 3 ♂♂, bred, 11. xii. 1938, in company with *T. crassiclava* sp. n., from at least one species of *Ormenis* (probably *O. pygmæa*). The host is a ubiquitous minor pest in St. Lucia, occurring on some ornamental plants. The type of *T. impressus* Ashmead is from St. Vincent.

This species seems to be characterized by the shape of the head, which renders the facies somewhat distinctive, especially in profile, and by the sculpture of the mesonotum. This sculpture is not essentially different from that which occurs in most species of *Telenomus*, but what is characteristic about it in *impressus* is the comparatively large size of the meshes and their tendency to be elongate in the longitudinal direction of the thorax.

Telenomus transversiceps, sp. n.

♂♀.—Black. Radicle of the antenna yellow ; scape blackish, yellowish at base ; flagellum dark brown, the first five segments slightly paler in the female. Legs of the female dingy yellowish, with the femora darker than the tibiæ and all the coxæ blackened ; the single male has the legs more clearly yellowish than the female, with only the front femora slightly darkened and all the coxæ less blackened.

♀.—*Head* very strongly transverse, much wider than the thorax, 21 : 16, and, seen from above along a line perpendicular to a line between the posterior ocelli, fully three times as wide as its medial length ; when the head is seen from above, so that the antennal prominence is wholly in view, the frons shows a distinct bulge on each side between the lowest point of the eye and the antennal insertions. Postorbital carina continued as a sharp, completely differentiated margin right across the vertex. Eyes occupying entire lateral surface of the head when this is seen from above, with sparse, extremely short hairs which are hardly visible at $\times 90$; in one female I can see no hairs at all. No occipital carina present, the surface of the head posterior to the ridge of the vertex completely smooth and somewhat concave, and, behind the eyes, cut away at more than a right angle. Frons completely smooth, shining except for a narrow band of scaly-reticulation joining the lowest point of the eye with the antennal insertion. Vertex anterior to the ridge

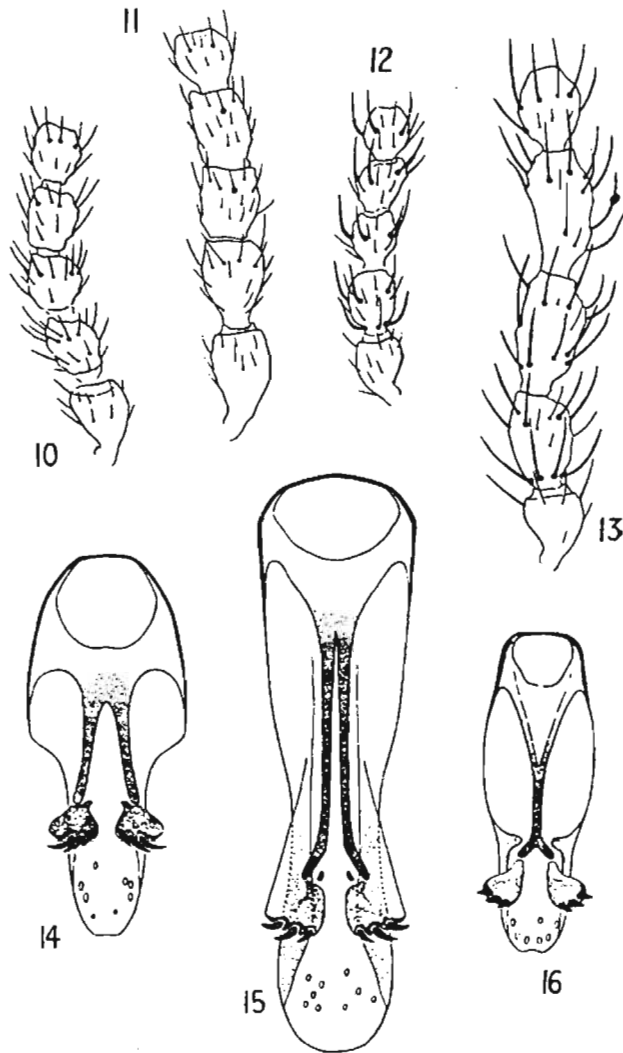


Fig. 10. Antennal segments 2-6 of *Telenomus impressus* Ashm., ♂; 11. Same of *T. manolus* Nixon, ♂; 12. Same of *T. otones*, sp. n., ♂; 13. Same of *T. transversiceps*, sp. n., ♂; 14. Genitalia of *T. otones*, sp. n., ♂; 15. Same of *T. transversiceps*, sp. n., ♂; 16. Same of *T. pegasus*, sp. n., ♂. (Genitalia drawn to same scale as figs. 17-19.)

with fine scaly-reticulation and with a single puncture on each side about midway between anterior and posterior ocellus. Antennæ: radicle long, more than one-third the length of the scape; flagellum 1 about two-thirds the length of the pedicel; flagellum 5 more or less intermediate in width between 4 and 6, so that the club is hardly differentiated (fig. 4).

Thorax: Mesonotum strongly convex, feebly shining, covered closely with tiny raised points, the surface between which shows faint scratches. Scutellum completely smooth. Postscutellum medially flattened, polished, unsculptured except for the feebly foveolate posterior margin. Hind wing clearly widened at middle, its fringe at widest part four-fifths of the wing-width at same place.

Abdomen only very slightly longer than wide, rather strongly narrowed to base. Tergite 1 about twice as wide basally as long medially, evenly costate to apex; 2 with very short striations at extreme base.

♂.—Flagellum 1 slightly longer than pedicel; flagellum 1-3 very distinctly elongate; 5-9 slightly longer than wide (fig. 5). Genitalia very distinctive (fig. 15), the ventral struts appear to be separated for nearly their whole length; that part of the ventral plate posterior to struts is much more heavily pigmented than are the struts themselves, though the figure shows this area white; the apical appendages are similarly strongly pigmented; the basal portion (? cardo), not shown in figure, is one-third the length of the ædeagus itself.

Length: ♂♀, about 5.6 mm.

INDIA: Namkum, Ranchi, 1 ♂, 3 ♀♀ (one ♀ the type), bred 24. i. 1938, from eggs of the Lycænid butterfly, *Tarucus theophrastus* L. on lac hosts (Indian Lac Research Institute).

Telenomus pegasus, sp. n.

♀.—Black. Radicle of the antenna more or less yellowish; the extreme base of the scape, the pedicel and first five segments of the flagellum slightly paler than the apical flagellar segments; the entire antenna is obscure in colour. Wings with a slight yellowish tint.

Head distinctly but only a little wider than the thorax, 13:11, and, seen along a line perpendicular to a line

between the posterior ocelli, not quite twice as wide as its greatest length (fig. 21). Shortest distance between the eyes on the frons, seen from above, nearly one and a half times as great as the width of the eye, 7 : 5. Frons virtually smooth all over ; against the eye-margin above the merest trace of reticulation and one or two minute punctures ; between the antennal insertions and the base of the eye there is some weak scaly-reticulation. Vertex more or less evenly rounded between the anterior ocellus and the occipital margin, shining and with only weak, broken scaly-reticulation, in which are present a few small indistinct punctures. Head behind the eyes cut away fairly sharply (fig. 21). Antennæ : radicle rather long ; pedicel much longer than flagellum 1 ; f. 1 and f. 2 not longer than wide ; club sub-five-segmented (fig. 7).

Thorax : Mesonotum weakly shining, its sculpture not resolvable at $\times 90$, though the usual elements of scaly-reticulation and feeble punctures are indicated. Scutellum smooth except for a few small punctures, which seem to be more or less crowded along the anterior margin. Medial rugose swelling of the postscutellum somewhat flattened and shining when the insect is viewed from behind. Wings (fig. 9).

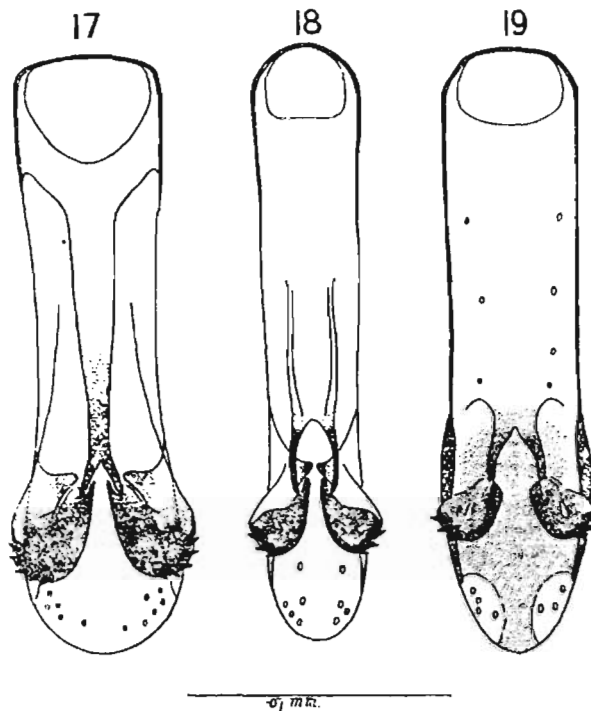
Abdomen rather strongly narrowed to base. Tergite 1 very strongly transverse and very short medially, its costæ hence so short as to form merely a row of oblong foveæ ; 2 feebly costate at extreme base ; in fig. 21 the shape of the abdomen beyond tergite 2 has been somewhat generalized because in dried specimens the apical tergites are always retracted.

♂.—Legs paler than in the female ; antennæ pale, obscure yellowish, darkened only on apical 5–6 segments ; flagellum slightly more hairy than in the next species (cf. fig. 12), the thickened seta-like hairs less differentiated. Genitalia very distinctive (fig. 16), on account of being widened medially and having the “ventral plate” greatly narrowed in apical half, so that the struts, which normally form the lateral margin of the plate, in this case have become so approximated as to be fused ; the basal portion (cardo ?), not shown in figure, longer than broad and fully half as long as the rest of the genitalia.

Length : ♂♀, ca. 4.8 mm.

INDIA: Namkum, Ranchi 8 ♀♀ (one the type), 9 ♂♂, bred 24.i.1938, from eggs of the Lycaenid butterfly *Tarucus theophrastus* L. on lac hosts in company with *Telenomus transversiceps*, sp. n., and the following species (Indian Lac Research Institute).

There is nothing at all characteristic about the external appearance of this *Telenomus*. It is extremely like the



Male genitalia of: 17. *Telenomus manolus* Nixon; 18. *T. crassiclava*, sp. n.; 19. *T. impressus* Ashmead.

following species, in the description of which it will be further discussed.

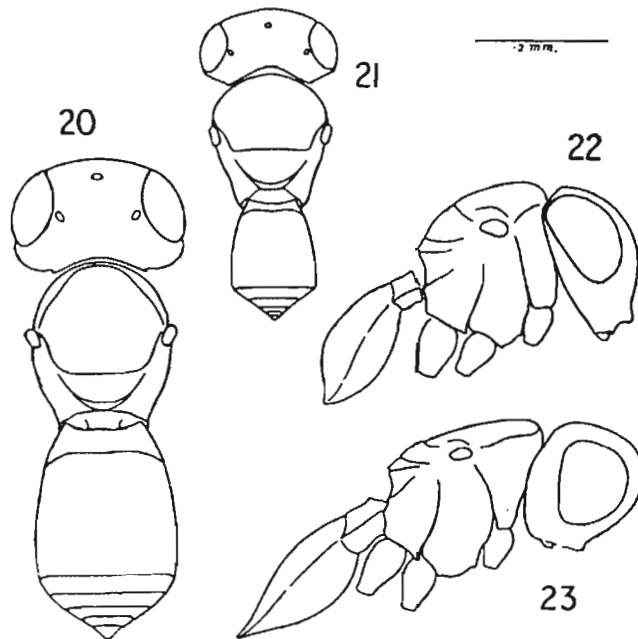
Telenomus otones, sp. n.

As already pointed out this insect closely resembles *pegasus*, sp. n., in general appearance. It is the genitalia of the males, however, which show them to be widely

different species. The differences shown by this structure are of such a magnitude as to suggest that the apparent close affinity of the two species may be only superficial. Although I have already examined the genitalia of a good many species of *Telenomus* I have not yet been able to get a clear idea as to how far their form is a guide to specific relationships. I think many more species will have to be examined before conclusions on this subject can be reached.

T. otones differs from *pegasus* as follows:—

♀.—Antennæ darker; radicle of the scape slightly shorter. Head slightly more transverse and slightly



Body of: 20. *Telenomus impressus* Ashmead, ♀; 21. *T. pegasus*, sp. n., ♀; 22. *T. transversiceps*, sp. n., ♀ (lateral); 23. *T. impressus* Ashmead, ♀ (lateral).

wider in proportion to the width of the thorax. Mesonotum rather more shining, not so clearly convex as in *pegasus*. Wings more hyaline in tint, the fore wing distinctly broader at apex and more bluntly rounded

here ; hind wing clearly widened between nervature and apex (fig. 8).

♂.—Scape and radicle darker than in male of *pegasus*, but structurally the antenna hardly different ; arrangement of hairs as in fig. 12. Tergite 1 slightly less transverse and slightly longer medially. Genitalia remarkable in that the "ventral plate" is extremely deeply excised, so that the lateral struts project as two free arms (fig. 14) ; cardo (not shown in figure) short, transverse, hardly more than one-fifth of the rest of the structure.

INDIA : Namkum, Ranchi, 5 ♀♀, one the type, 1 ♂, bred 24. i. 1938, in company with the two preceding species from eggs of the Lycænid butterfly, *Tarucus theophrastus* L. on lac hosts (Indian Lac Research Institute).

Telenomus manolus Nixon.

Telenomus manolus Nixon, 1937, Ann. & Mag. Nat. Hist. (10) vol. xx. p. 454.

Originally recorded from Malaya, Kuala Lumpur, where it was bred from lepidopterous eggs on coffee. I have now seen a series from E. SUMATRA : Asahan, 50-60 mm., 1934-36, both sexes bred from eggs of some pest of *Uncaria gambir* Roxb. (*F. Schneider*).

In referring to the male genitalia, in my earlier paper, I expressed a doubt concerning the tooth-like thickening which occurs on each of the apical articulated appendages behind the posterior tooth. I mentioned that it appeared to be free, although I did not show it free in the figure, believing it to be homologous with a similar sclerotization seen in other species of *Telenomus*. On re-examining the preparation from which the drawing was made, and in which the balsam has now become darkened, I find that the thickened process in question is not free. The original figure, p. 457 *l. c.*, shows the "ventral plate" rather too much widened to base and the sides of the basal cylinder slightly too much curved outwardly. Fig. 17 has been drawn from a male belonging to the series I now record from Sumatra, and, embodying the corrections of the mistakes in the earlier figure, gives a more faithful representation of the genitalia of the species.