Abbreviations.—C.I. = Head index, i.e., the ratio of the breadth of the head to its length. B. = breadth of any structure; L. = length of any structure.

Notes.—The numbers at the right hand of a word refer to the notes on pp. 468–475.

Acknowledgements are due to Mr. G. H. E. Hopkins for certain valuable criticisms and suggestions.

KEY.

1. Venter of 3rd femora with a limited number of combs 1 of stout setae (fig. 1) ........................................ 2

Venter of 3rd femora with irregular rows of minute combs (fig. 2). (Prosternal notch 4; prosternal plate developed; prosternum with two median setae; varying number of sternites with rows of minute combs as on 3rd femora) ........................................ 3

Venter of 3rd femora without such combs ........................................ 4

2. One or more abdominal sternites with combs of setae similar to those on 3rd femora ........................................ 5

Abdominal sternites without combs of setae similar to those on 3rd femora. (Head without prosternal slit or notch; terminal segment of antenna elongate and cylindrical; prosternum with two median setae; sternites III–IV with small brushes of stout setae; sternite VII with three long setae each side; tergite VI with comb of elongate stout setae, the clubbed ends of which are held in pocket on tergite VII.) ........................................ 6

3. Head with ventral sclerotized processes arising near base of pulpi (fig. 16) ........................................ 7

Head without such processes ........................................ 8

4. Head with two pairs of ventral processes (fig. 16). (Deep, narrow prosternal slit; prosternal plate developed; prosternum with more than two median setae; sternites III–IV with single full comb each side.) ........................................ 9

Head with one pair of ventral processes. (Narrow prosternal slit; prosternal plate developed; prosternum with two median setae; sternites III–IV or III–V with two or more combs each side.) ........................................ 10

5. Terminal segment of antenna with definite signs of division into two (fig. 3). (Deep, narrow prosternal slit; prosternal plate developed; prosternum with two median setae; lateral margins of tergites with or without internal sclerotic buttresses; sternites III–IV in a, III–V in b with two or more combs each side.) ........................................ 11

Terminal segment of antenna without definite signs of division into two (figs. 4 and 5) ........................................ 12

6. Prosternum with more than two median setae ........................................ 13

Prosternum with two median setae ........................................ 14

7. Antennae lying in ventral spherical excavations of dorsal margins of head, partly covered by lateroventral margins (fig. 20). (Species large, length < 3.8 mm.; deep, narrow prosternal slit; gular and prosternal plates well developed; sternite III with two or more combs each side; sternite IV with or without combs.) ........................................ 15

Antennae not lying in such spherical excavations ........................................ 16

8. Segments of antenna short; terminal segment approximately globate or shortly ovoid (fig. 4) ........................................ 17

Segments of antenna elongate; terminal segments elliptical or cylindrical (fig. 3). (Short, broad or narrow prosternal slit; prosternal plate developed; sternites III–IV with single full comb each side.) ........................................ 18

9. Females ........................................ 19

Males and those females without abdominal characters described in 10–12 ........................................ 20

10. Ventral sclerite between vulva and anus with spine-bearing processes, the two lateral spines each side, stout and projecting well beyond posterior margin of abdomen (fig. 31); sternites III–IV or III–V with single full comb each side. (Broad, shallow prosternal slit; abdomen short and broad, ratio of B. : L. is < 0.75.) ........................................ 21

Without above combination of characters ........................................ 22

Microcentia. ........................................ 23

2. ........................................ 24

3. ........................................ 25

New Genus A 2. ........................................ 26

4. ........................................ 27

5. ........................................ 28

Odoriphila. ........................................ 30

6. ........................................ 31

7. ........................................ 32

8. ........................................ 33

Cuculiphilus 3. ........................................ 34

New Genus B 4. ........................................ 35

9. ........................................ 36

Piagetella (part.). ........................................ 37

8. ........................................ 38

Ciconiphilus (part.). ........................................ 39

Dicteisia. ........................................ 40

10. ........................................ 41

11. ........................................ 42

Turacoeca.
11. Ventral sclerite present between vulva and anus bearing marginal and surface setae (fig. 32); abdomen ovoid with greatest width at segment IV, ratio of B.: L. is < 0.70; dorsal bands joining occipital and prescutal sclerotized areas absent. (Deep, broad or narrow prescutal slit; sternite III with two or more full combs; sternite IV with group of one to six lateral setae each side similar to those in combs.)

Without above combination of characters

12. Abdomen with either or both of the following characters: tergites of one or more segments divided longitudinally into three areas; marginal setae of vulva long and curved round lateral margins of abdomen. (Tergites as in 13; either sternite III with single full comb or sternite III with two or more combs and sternite IV with or without single full comb.)

Abdomen without either of the above characters

13. Temples with square (fig. 17) or flatly rounded (fig. 18) never tapering (fig. 19) ends; prescutellar notch (fig. 17) or short broad slit (fig. 18) never deep narrow slit (fig. 19); head with conspicuous dark brown or black sclerotized areas; one at each prescutellar notch or slit, one at each proximal end of lateroscutal margin, one pair on occipital margin linked by transverse band and by lighter band to prescutal areas (fig. 17). (Combs as in 12)

Temples as above; prescutellar notch never slit; sclerotized areas of head partially or totally absent except for small prescutal areas. (Combs as in 12)

Without above combination of characters

14. Stermites of more than one segment (III-IV or III-V) with only single full comb each side. (Temple not greatly expanded with square or flatly rounded ends; abdomen short and broad, ratio of B.: L. is < 0.78.)

Stermites of more than one segment (III-IV) with two or more full combs each side. (Temple well expanded with rounded tapering ends; deep prescutellar emargination and deep narrow slit; abdomen with lateral internal thickening in both sexes.) Stermites of one segment (III) with single full comb or sternite of one segment with two or more combs each side and following sternite with or without single comb

15. Temples not greatly expanded with square or flatly rounded ends (fig. 18)

Temples well expanded with rounded somewhat tapering ends (fig. 19)

16. Shallow prescutellar notch

Prescutellar slit, deep and narrow or short and broad

17. Males

Females and those males with characters described in first line of 18

18. Telomera (sens. Waterston, 1914, p. 279) with one or more lateral or posterior pointed projections

Telomera without such projections

19. Distal anterior angle of 2nd segment of antennae produced laterally and pointed (fig. 4)

2nd segment of antenna not as above

20. Laterodorsal margin of head with small protuberance bearing seta (fig. 21); 1st and 2nd segments of antennae with distal anterior expansions (fig. 6). (Large species, L. < 4.0 mm.; laterodorsal emargination of varying depths which may overlap eye giving appearance in some species of deep slit; prosternum with many setae; 3rd femora and sternites IV-V with thick or more scattered brushes of small setae.)

Head without above combination of characters

21. Laterodorsal margin of head with precutellar emargination overlapping eye-bearing margin, the latter margin in form of a pointed process anteriorly (fig. 22); posterior region of head with four ventral sclerotized processes. (Head considerably broader than long, C.I. < 1.90; antennary fossa deep and pouch-like; prosternal plate developed with median pointed process; prosternum with many median hairs; 3rd femora and sternites IV-VI or VII with scattered brushes of normal setae.)

Head without above combination of characters
Figs. 1–15.

22. Laterodorsal margin with precocular slit; gular plate characteristic, large and tripartite in form (fig. 23). (Head with or without pair of ventral sclerotized processes originating near base of palp; abdominal pleurites with posterolateral angles prolonged posteriorly as pointed process (as in fig. 38); 3rd femora and sternites III–V or VI with small scattered brushes of normal setae.)

Head without above combination of characters

Pseudomenopon.

23. Head with pair of ventral sclerotized processes arising near or near anterior margin. (Deep, narrow precocular slit; antennary fossae deep and pouch-like; 3rd femora with scattered brushes of stout setae; one or more sternites with single comb of stout setae each side.)

Head without such processes

Eomenopon 11

24. Deep, narrow precocular slit; laterodorsal margin of head fuses to anterodistal temple angle where it fuses (fig. 24); cavity between latero-dorsal and ventral margins of head not roofed over distally (cf. fig. 27); terminal segment of antenna approximately globate; femoral and sternal brushes and combs absent. (Sclerotized processes arising near base of palp may be present or absent.)

Without above combination of characters

Genus C 12

25. Head with ventral sclerotized processes arising near or lateral to base of palp

Head without such processes

26.

27. Laterodorsal margin of head without precocular slit or notch. (Terminal segment of antenna globate with stout spines; protarsum IV–V with median point; prosternum with two median setae; 3rd femora and sternites IV–VI with scattered brushes of normal setae.)

Laterodorsal margin of head with precocular slit

28. Distal anterior angle of 2nd segment of antenna greatly prolonged and rounded (fig. 7). (Narrow, deep precocular slit; some abdominal pleurites with posterolateral angles elongated posteriorly; 3rd femora and sternites IV–V or III–V with scattered or thick brushes of stout setae.)

Distal anterior angle of 2nd segment not prolonged as above. (3rd femora with or without brushes; sternites either with brushes and/or marginal spine-like setae; abdominal pleurites may have posterolateral angles prolonged posteriorly.)

Hohorstiella.

29. One ventral process originating near base of each palp and one near base of each antenna; some abdominal pleurites with posterolateral angles prolonged posteriorly or laterally, as pointed processes. (Precocular slit; 3rd femora and sternites IV–V with brushes of normal setae; sternite VI with more scattered brushes; all brushes may be absent.)

Two processes originating near base of each palp, none near base of antennal posterolateral angles of abdominal pleurites not prolonged as pointed processes. (Short broad precocular slit; prosternum with more than two median setae; 3rd femora and sternites III–VI with scattered brushes of normal setae.)

Menacanthus 14.

30. Sternite III with two or more combs of setae; 3rd femora with scattered brushes of stout setae

Without above combination of characters

31. Head without precocular notch or slit; both sexes with group of long stout or spine-like setae on each posterolateral angle of enlarged sternite II (fig. 37); ♀ or both sexes with metanotum and or tergal plates I, II or more usually modified. (Gular and prosternal plates well developed; prosternum with two median setae; 3rd femora and abdominal sternites with or without brushes.)

Without above combination of characters

Myrsidea.

32. Prosternal plate with thickened margin and extending from anterior prothoracic margin to between 1st coxae (fig. 33); head without precocular notch or slit; ventral truncated-ovoid excavation on dorsal margin of head with thickened anterior rim and partly roofed over by ventral margin (fig. 25). (Prosternum with more than two median setae.)

Without above combination of characters

33.
33. Gular plate horse-shoe shaped (fig. 33); temples greatly expanded, C.I.<1·9. (3rd femora and sternites V–VII with thick brushes of small setae.) ........................................
Gular plate not horse-shoe shaped; temples not greatly expanded C.I.>1·3. (3rd femora and sternite V with thick brushes of small setae; sternite VI with smaller more scattered brushes.) ........................................
34. Head without precocular notch or slit; cavity between latero-
dorsal and lateroventral margins of head pouch-like and usually deep, with basal thickening passing up to latero-
dorsal margin and not roofed over distally by fusion between
dorsal and ventral margins (fig. 26).
Head with narrow precocular slit; cavity between latero-
dorsal and lateroventral margins as above, but is roofed over distally by fusion between ventral and dorsal margins (fig. 27). (Prosternal plate developed with median pointed process; prosternum with two median setae; 3rd femora and sternites IV–VI with brushes of normal setae, those on VI may be scattered.) ........................................
Head without above combinations of characters ........................................
35. Latero-dorsal margin of head with row of short fine setae (fig. 28). (3rd femora and abdominal sternites without brushes of setae; marked sexual dimorphism in size and in form of gular and prosternal plates.) ........................................
Latero-dorsal margin of head without row of short fine setae. ........................................
36. Prosternum with more than two median setae; prosternal plate characteristic (fig. 34). (Gular plate large with or without central perforation and lateral processes; 3rd femora without brushes; abdominal sternites without brushes, but with one or more short spine-like setae laterally.) ........................................
Prosternum with two median setae; prosternal plate not as above ........................................
37. Prosternal plate with deeply serrated posterior margin (fig. 33). (3rd femora and sternites IV–V with scattered to moderately thick brushes of normal setae; sternites III and V may also have scattered brushes.) ........................................
Prosternal plate without deeply serrated posterior margin. (Brushes as above or absent.) ........................................
38. Tibiae I–III with outer submarginal comb of fine setae (fig. 39).
Tibiae I–III without such comb ........................................
39. Short, narrow precocular slit; sclerotized area at proximal end of lateroventral margin with median fault; brushes on sternites IV–V towards centre of sternites. (Terminal segment of antenna elongate and cylindrical; venter of 2nd femora covered with scattered setae; 3rd femora with thick brushes of small setae; sternites IV–V with small brushes of small and normal setae.) ........................................
Precocular notch not slit; sclerotized area at proximal end of lateroventral margin without median fault; sternal brushes at lateral margins of sternites. (Terminal segment of antenna elongate and cylindrical; 3rd femora and sternite IV with thick brushes of small setae; sternites II–III and V–VIII with scattered brushes of larger setae.) ........................................
40. Antennary fossa formed by cavity between dorsal and ventral margins absent; head either with B. = L. B.<L or B. slightly > L, C.I.> or approximates to 1; abdomen elongate, tubular and weakly sclerotized ........................................
Without above combination of characters ........................................
41. Terminal segment of antenna showing definite signs of division into two. (Laterodorsal margin without precocular notch or slit; lateral margins of head almost parallel, diverging slightly posteriorly; head longer than broad, C.I.>0·7–0·9; 3rd femora each with two to four setae on venter, no definite brush; abdominal sternites without brushes; abdominal chaetotaxy sparse.) ........................................
Terminal segment of antenna without definite signs of division into two ........................................

Eureum.

DENNYUS.

35.

Eidmaniaella.

38.

Ancistrana.

36.

Maccherilaeus.

37.

Holomenopon.

Austromenopon 11.

39.

40.

Hoazineus.

Heleomonmus.

41.

45.

NEW GENUS E 18.

Fig. 31. Turacoeca scleroderma (Ewing), ventral sclerite between vulva and anus.

Fig. 32. Kurodaia haskaeti (Denny), terminal abdominal segments, ventral.


Fig. 37. Myrsidea vitrix Waterston, abdominal sternite II, ♂.

Fig. 38. Plegadiphus threkiornis Bedford, abdominal pleurites, III-IV.


42. Terminal segment of antenna narrow and elongate; sternite IV with definite brushes. (Laterodorsal margin of head with anterior ventral excavation; preocular notch or slit absent, but has line of thickening; 3rd femora with small scattered brushes of small setae; sternite IV with brushes of small setae; abdominal chaetotaxy heavy.) ............ Somaphantus.

Terminal segment of antenna broad and short (fig. 10); no definite sternal brushes. (Laterodorsal margin of head with shallow posterior ventral excavation; preocular notch, slit or thickening absent; 3rd femora and sternites IV-VI with slight concentration of hairs insufficient to form brushes.) .. New Genus F' 10.
43. Anterolateral margins of head swollen considerably to point or flattened margin from which they pass posteriorly and inwards to narrow precocular slit (figs. 29–30); prosternal plate developed, with central perforation.

Without above combination of characters ........................................ 44.

44. Cavity between dorsal and ventral margins of head deep and pouch-like (fig. 29); 3rd femora and sternites IV–VI with thick brushes of normal setae; more scattered brushes on VII. (Temples well expanded; terminal segment of antenna globose.)

Cavity between dorsal and ventral margins of head shallow (fig. 30); 3rd femora and sternites IV–V with brushes of small setae; more scattered brushes on VI. (Temples moderately or well expanded; posteroventral angles of pleurites may or may not be prolonged posteriorly.) ........................................ 45. Neomenopon.

45. Prosternum with two median setae ........................................ 46.

Prosternum with more than two median setae ................. 45.

46. Ends of temples square or flatly rounded; precocular notch or broad slit; brushes confined to or thickest on sternite IV. (Gular and prosternal plates developed; 3rd femora and sternites IV with thick or scattered brushes of normal setae; sternites III and V may have scattered brushes.)

Without above combination of characters ........................................ 47.

47. Terminal segment of antenna showing definite signs of division into two, either by transverse line or marginal indentation (fig. 8). ........................................ 48.

Terminal segment of antenna without definite signs of division into two (fig. 8) ........................................ 49.

48. Some abdominal pleurites with posteroventral angles prolonged posteriorly as pointed process (fig. 38). (Precocular slit deep and narrow or short and broad; 3rd femora and sternites IV–V or VI with scattered brushes of normal setae, in some species scarcely forming brushes.)

Abdominal pleurites with posteroventral angles not prolonged posteriorly as pointed process. (Head somewhat pointed anteriorly; precocular notch or short broad slit; 3rd femora and sternites IV–V either without brushes or with brushes of normal setae; abdomen with processes arising from sclerite between vulva and anus bearing long stout setae and strong spines.) ........................................ 48. Plegadiphilus.

49. Mesosternum with only two median setae. (Precocular slit or shallow notch; terminal segment of antenna short and broad; prosternal plate developed; 3rd femora and sternites IV–V or IV–VI with thick brushes of small and normal setae; sternites II and III may also have scattered brushes; abdomen with processes as in Bucerophagus, but never bearing strong spines.) ........................................ 49. Bucerophagus.

Chafania. ...

50. Tibiae I–III with outer marginal and submarginal setae finer than normal marginal setae of legs, but not arranged in comb (fig. 40). (Shallow precocular notch; 3rd femora and sternite IV with thick brushes of small setae.)

Tibiae I–III without above chaetotaxy ........................................ 51.

51. Terminal segment of antenna short and irregular in shape (fig. 11; femoral brushes absent. (Shallow precocular notch backed by narrow sclerotized area; head not greatly broader than long. C.I. > 1.25; abdomen ovoid with chaetotaxy sparse, 3rd femora with 3–5 hairs on venter, no definite brushes; sternite III with small scattered brushes of spine-like setae.)

Terminal segment of antenna elongate and cylindrical (figs. 12–14); femoral brushes usually present ........................................ 52.

52. Antennae with all segments very narrow and elongate (fig. 12); abdomen short and broad with flattened or flatly rounded lateral margins. (Laterodorsal margin without precocular notch or slit, but has line of thickening; abdominal chaetotaxy heavy.) (3rd femora and sternites IV–VI with small scattered brushes of stout setae.)

Antennae without all segments very narrow and elongate (figs. 13–14); abdomen narrowly elongate or elongate-ovoid ........................................ 53.
53. Pleural plates well developed with row of posterior marginal setae; ventral abdominal chaetotaxy normal or heavy. (Laterodorsal margin with shallow notch or narrow preocular slit, deep or shallow; temples little to well expanded; 3rd femora and sternites III–IV or V, IV–V or IV–VI with thick or scattered brushes of small and normal setae; sternites III and VII may have more scattered brushes; sternal brushes may be absent; abdomen with or without internal pleural thickening.)

Pleural plates very narrow or non-apparent, never with posterior marginal setae; ventral abdominal chaetotaxy sparse

54. Define brushes on sternites IV–V, tergite VI with comb of stout elongate setae (this and other characters described under 2)

Define brushes on sternite IV only; tergite VI without comb of stout elongate setae. (Laterodorsal margin with or without narrow preocular slit; 3rd femora and sternite IV with thick brushes of small setae; sternite V may have indefinite brushes of 3–6 setae; abdomen with internal pleural thickening.)

55. Prosternum normally with three median setae (fig. 36). (Preocular notch; ends of temples square; 3rd femora and sternite IV with brushes of normal setae.)

Prosternum with four or more median setae

56. Terminal segment of antenna elongate and cylindrical, without signs of division. (Laterodorsal margin with broad preocular slit or shallow notch; temples little to moderately expanded; 3rd femora and sternites IV–VI with small brushes of normal setae; sternite VII may have more scattered brushes.)

Terminal segment of antenna with signs of two or more divisions (fig. 15). (Narrow preocular slit; tergites of certain abdominal segments with raised transverse bars; 3rd femora and sternites IV–V with scattered brushes of normal setae)

NOTES.

1. A comb of setae (fig. 1) is here used to describe the row of short stout setae, with the alveoli lying close together and approximately in a straight line, which are found on the venter of the third femora and posterolateral areas of one or more abdominal sternites in certain genera. In some species or in some specimens of a species there may be two or more such setae forming a partial comb, either in addition to the one or more full combs on a sternite or alone on the following sternite; for the purpose of the key these are not considered as combs.

2. The preocular slit is an emargination in the laterodorsal margin of the head immediately anterior to the eye, the margins of which are approximately equal and parallel (fig. 19). The preocular notch is a similar emargination in which the margins are strongly divergent (fig. 17); the notch may be triangular or semicircular in shape.

3. New genus A (shortly to be described) is represented in the Meinertz-hagen collection by two females collected from a skin of Ptilinopus bellus (Sclater) (Columbidae) from New Guinea. The setae on the third femora are irregular in arrangement and do not form typical combs. This and the absence of sternal combs suggests that species will be found with definite femoral brushes; the species has therefore been included both with the comb- and non-comb-bearing genera. The unusual character of the setae on tergite VI will be fully described elsewhere.

4. New genus B*, the description of which by G. H. E. Hopkins is in the press, has been erected for Menacanthus megaspinus Carricker. Only a single
