

**KEY TO ANOPLURA
OF
NORTH AMERICA**

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Key to Families of Anoplura

1. Head and thorax more or less thickly covered with setae; in some species the setae are modified into scales (Fig. 1 A). On marine animals.....FAMILY ECHINOPHTHIRIIDAE

Head and thorax with only a few setae (Fig. 1 B).....2

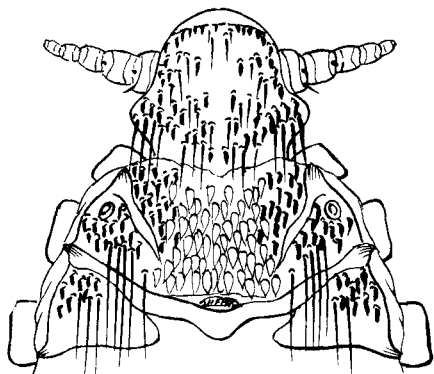


Fig. 1 A

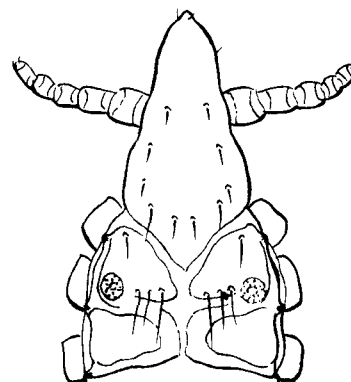


Fig. 1 B

2. Eyes present or with prominent ocular points (Fig. 2 A & B).....3

Eyes and ocular points absent (Fig. 2 C).....4

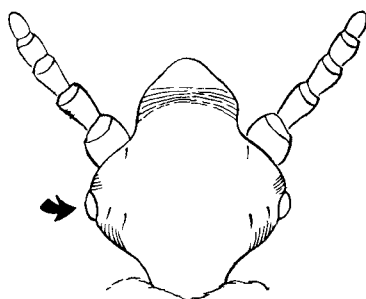


Fig. 2 A

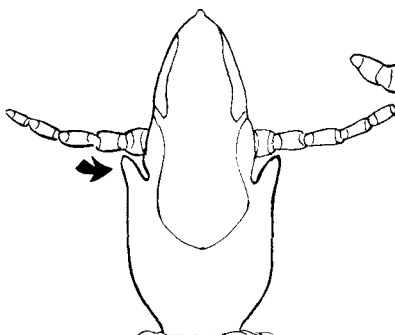


Fig. 2 B

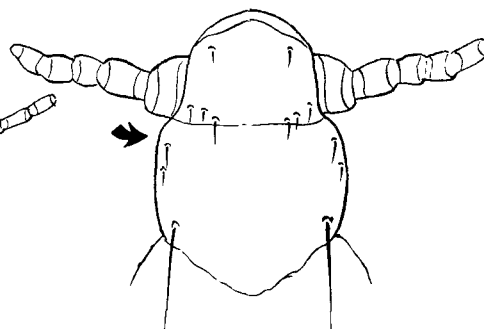


Fig. 2 C

3. Abdomen without irregular sclerotized plates on dorsum and venter (Fig. 3 A). On man.FAMILY PEDICULIDAE

Abdomen with irregular sclerotized plates on dorsum and venter (Fig. 3 B). On hoofed animals.....FAMILY HAEMATOPINIDAE

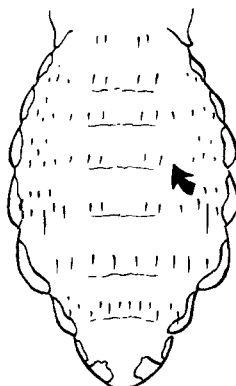


Fig. 3 A

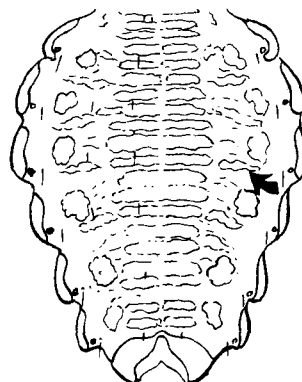


Fig. 3 B

4. Paratergal plates absent (Fig. 4 A). On hoofed animals or carnivores.....
FAMILY LINOGNATHIDAE
- Paratergal plates present (Fig. 4 B). On rodents and lagomorphs...FAMILY HOPLOPLEURIDAE

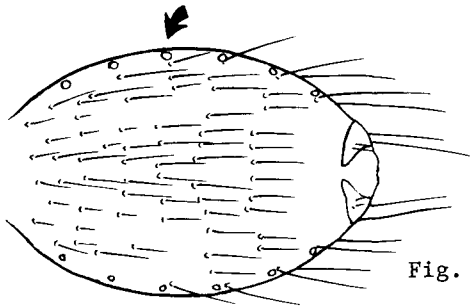


Fig. 4 A

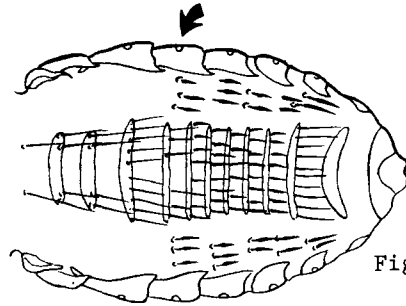


Fig. 4 B

Key to Genera of Echinophthiriidae

1. Antennae four-segmented; abdomen without scale-like setae (Fig. 1 A).....2
- Antennae five-segmented; abdomen with scale-like setae (Fig. 1 B).....Antarctophthirus

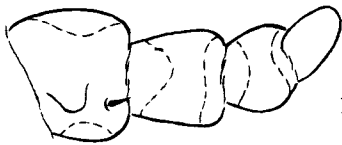


Fig. 1 A

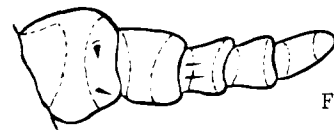


Fig. 1 B

2. Legs all essentially the same size (Fig. 2 A).....Echinophthirus horridus (von Olfers)
- Anterior legs small; second and third legs stout (Fig. 2 B).....
Proechinophthirus fluctus (Ferris)

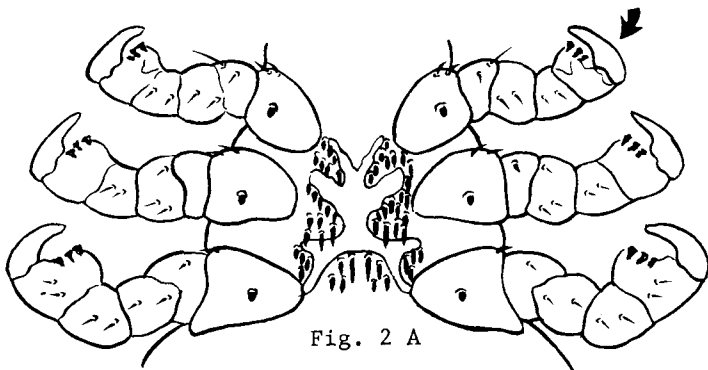


Fig. 2 A

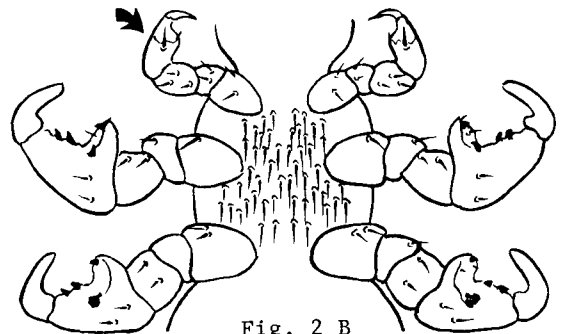


Fig. 2 B

Key to Species of *Antarctophthirus*

1. Scale-like setae present only on abdomen (Fig. 1 A). *Antarctophthirus callorhini* (Osborn)
 Scale-like setae present on thorax and abdomen (Fig. 1 B).....2

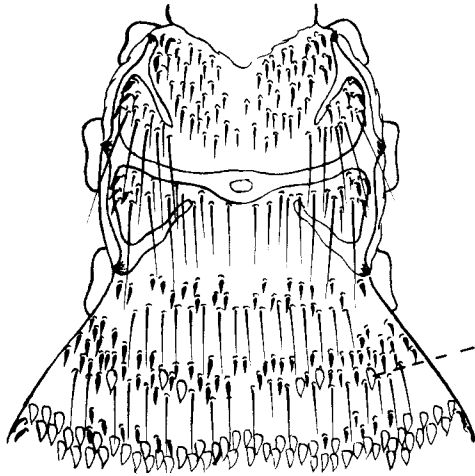


Fig. 1 A

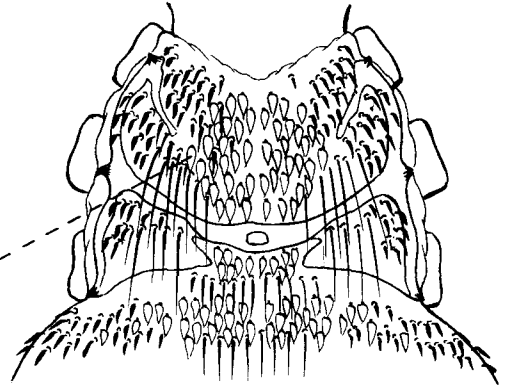


Fig. 1 B

2. Thoracic sternum with a few long setae on posterior border (Fig. 2 A).....
*Antarctophthirus microchir* (Troussart & Neumann)
 Thoracic sternum without long setae on posterior border (Fig. 2 B).....
*Antarctophthirus trichechi* (Bohemann)

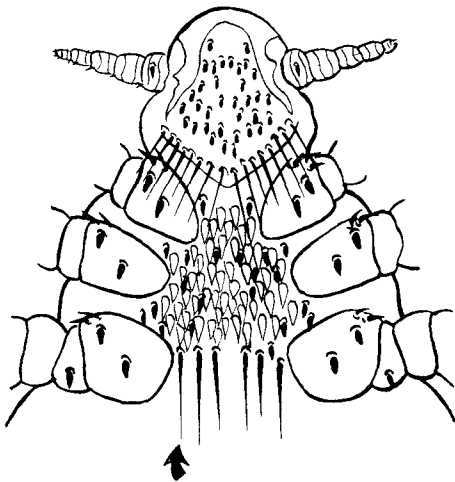


Fig. 2 A

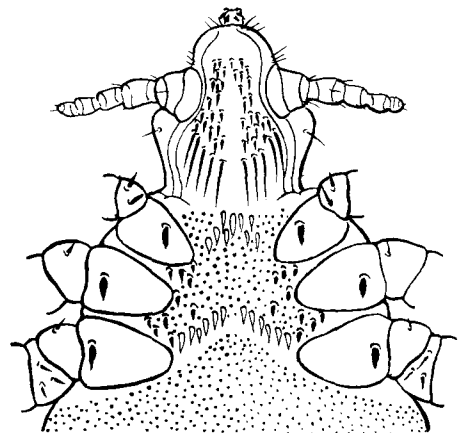
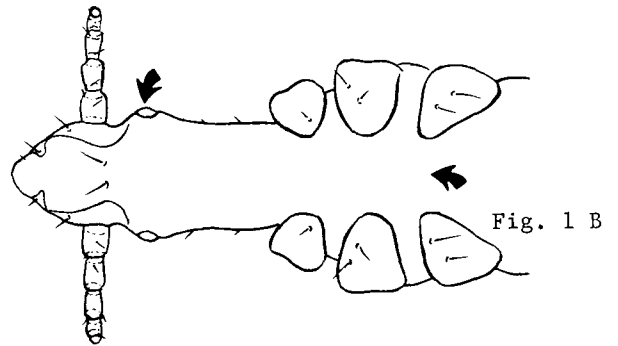
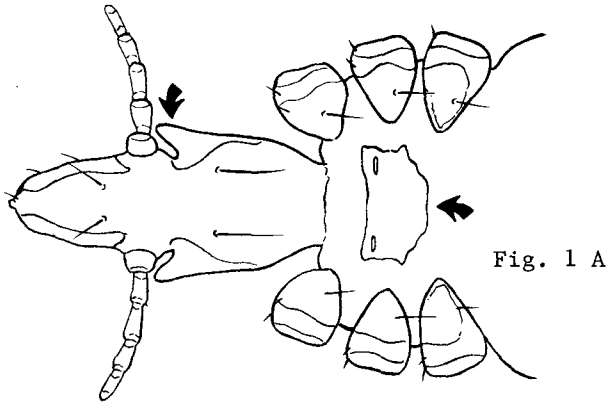


Fig. 2 B

Key to Genera of Haematopinidae

1. Sternal plate of thorax present; eyes absent but with prominent ocular points (Fig. 1 A)Haematopinus
- Sternal plate of thorax absent; eyes present (Fig. 1 B). On peccary.....Pecaroecus javalii Babcock & Ewing



Key to Species of Haematopinus

1. Thoracic sternal plate wider than long, sternal pits on plate (Fig. 1 A). Hog louse....
.....Haematopinus suis (Linnaeus)
- Thoracic sternal plate longer than wide; sternal pits off plate (Fig. 1 B).....2

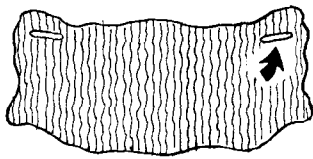


Fig. 2 A

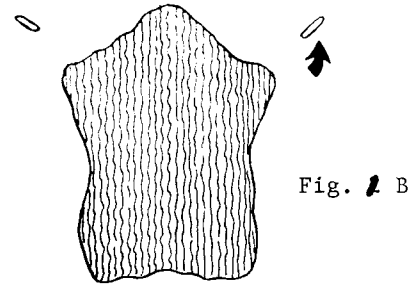


Fig. 2 B

2. Head at least two times as long as wide at ocular points; sternal plate without a median projection (Fig. 2 A & B). On equines. Horse sucking louse.....
.....Haematopinus asini (Linnaeus)
- Head not two times as long as wide at ocular points; sternal plate with a median projection (Fig. 2 C & D). On cattle.....3

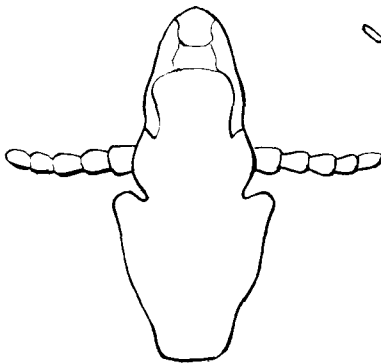


Fig. 2 A

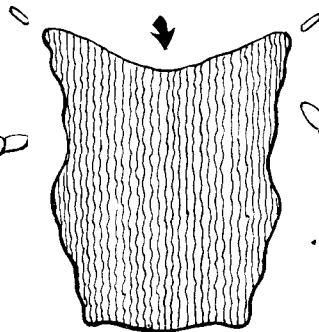


Fig. 2 B

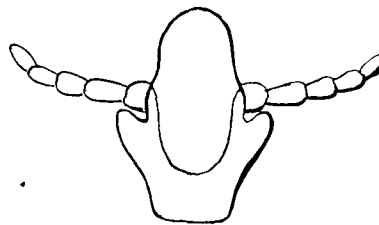


Fig. 2 C

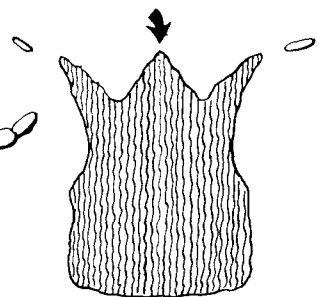


Fig. 2 D

3. Thoracic sternal plate with median projection blunt and rounded; male genital plate with six setae (Fig. 3 A & B). Short-nosed cattle louse.....
Haematopinus eurysternus (Nitzsch)

Thoracic sternal plate with median projection more acute and longer; male genital plate with four setae (Fig. 3 C & D). Cattle tail louse.....
Haematopinus quadripertusus Fahrenholz

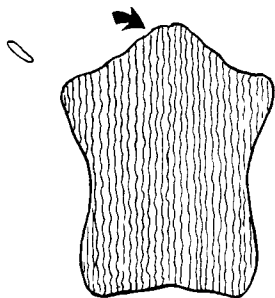


Fig. 3 A

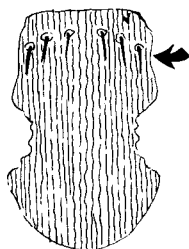


Fig. 3 B

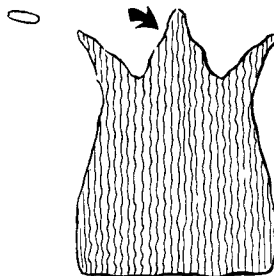


Fig. 3 C



Fig. 3 D

Key to Genera of Hoplopleuridae

1. Paratergal plates very small being merely slightly sclerotized points (Fig. 1 A).....
Haemodipsus

Paratergal plates on at least one abdominal segment usually as long as, or at least half as long as, the sternal plate (Fig. 1 B).....2

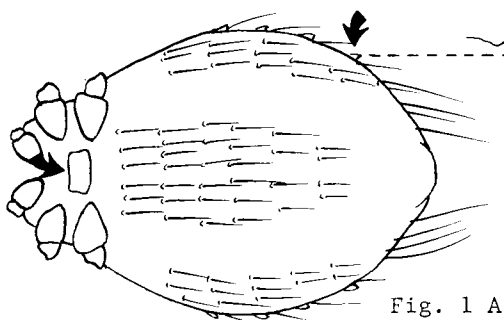


Fig. 1 A

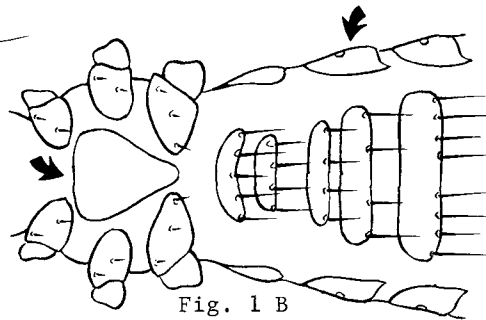


Fig. 1 B

2. First and second pair of legs of the same size and form, both being more slender and smaller than the third pair of legs (Fig. 2 A).....3

First pair of legs smallest of the three pairs; the second pair with stouter claws (Fig. 2 B).....4

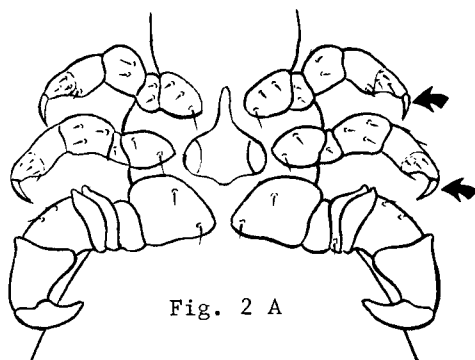


Fig. 2 A

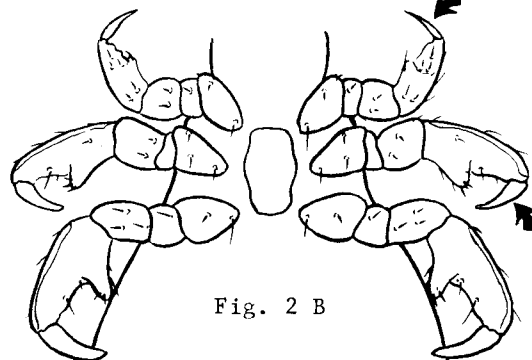


Fig. 2 B

3. A pair of small sclerotized plates present on venter of abdominal segment 2 (Fig. 3 A); antennae and head without hook-like processes.....Enderleinellus

Sclerotized plates entirely lacking on venter of abdominal segment 2; antennae and head with hook-like processes (Fig. 3 B).....Microphthirus uncinatus (Ferris)

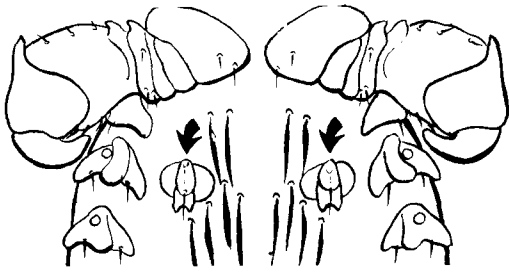


Fig. 3 A

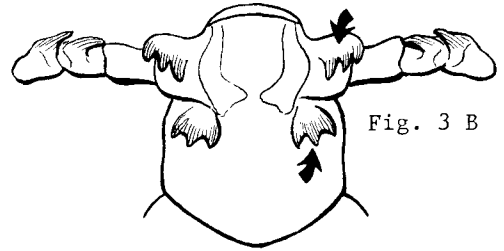


Fig. 3 B

4. Antennae four-segmented (sometimes appearing three-segmented); bladder-like expansions on third leg (Fig. 4 A & B).....Haematopinoides squamosus Osborn

Antennae five-segmented; bladder-like expansions lacking on third leg (Fig. 4 C).....5

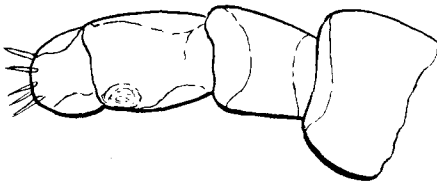


Fig. 4 A

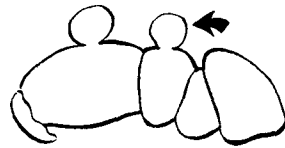


Fig. 4 B



Fig. 4 C

5. First sternite of abdominal segment 3 extended laterally to articulate with its corresponding paratergal plate; this sternite bearing two groups of two or three stout setae (Fig. 5 A).....Hoplopleura

First sternite of abdominal segment 3 never articulating with paratergal plate (Fig. 5 B).....6

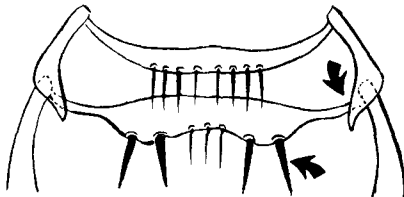


Fig. 5 A

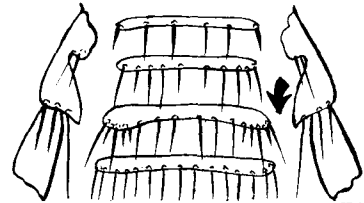


Fig. 5 B

6. Paratergal plate 2 completely divided longitudinally, one plate on the dorsum and the other on the venter of the abdomen (Fig. 6 A).....Fahrenheitzia

Paratergal plate 2 never completely divided to form two distinct plates (Fig. 6 B)....7



Fig. 6 A



Fig. 6 B

7. Sternal plate of thorax usually pointed posteriorly or, if truncate, always associated with a huge enlargement of the first antennal segment (Fig. 7 A & B).....Polyplax

Sternal plate of thorax usually emarginate posteriorly or sometimes quadrate in shape (Fig. 7 C & D).....Neohaematopinus

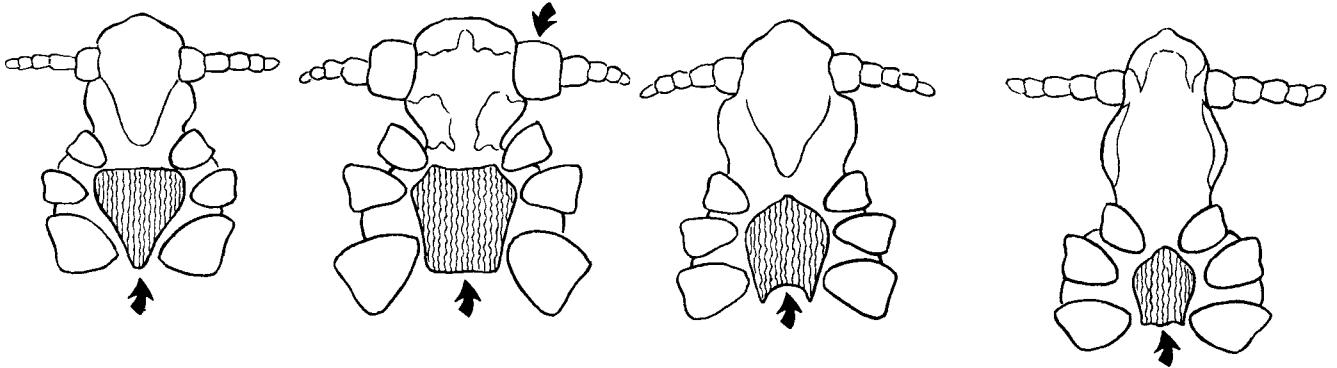


Fig. 7 A

Fig. 7 B

Fig. 7 C

Fig. 7 D

Key to Species of Enderleinellus

1. Paratergal plates present on abdominal segments 2-5 (Fig. 1 A).....2

Paratergal plates present on abdominal segments 2-6; abdominal sternites and tergites present in both sexes (Fig. 1 B). On Sciurus.....Enderleinellus nitzschi Fahrenholz

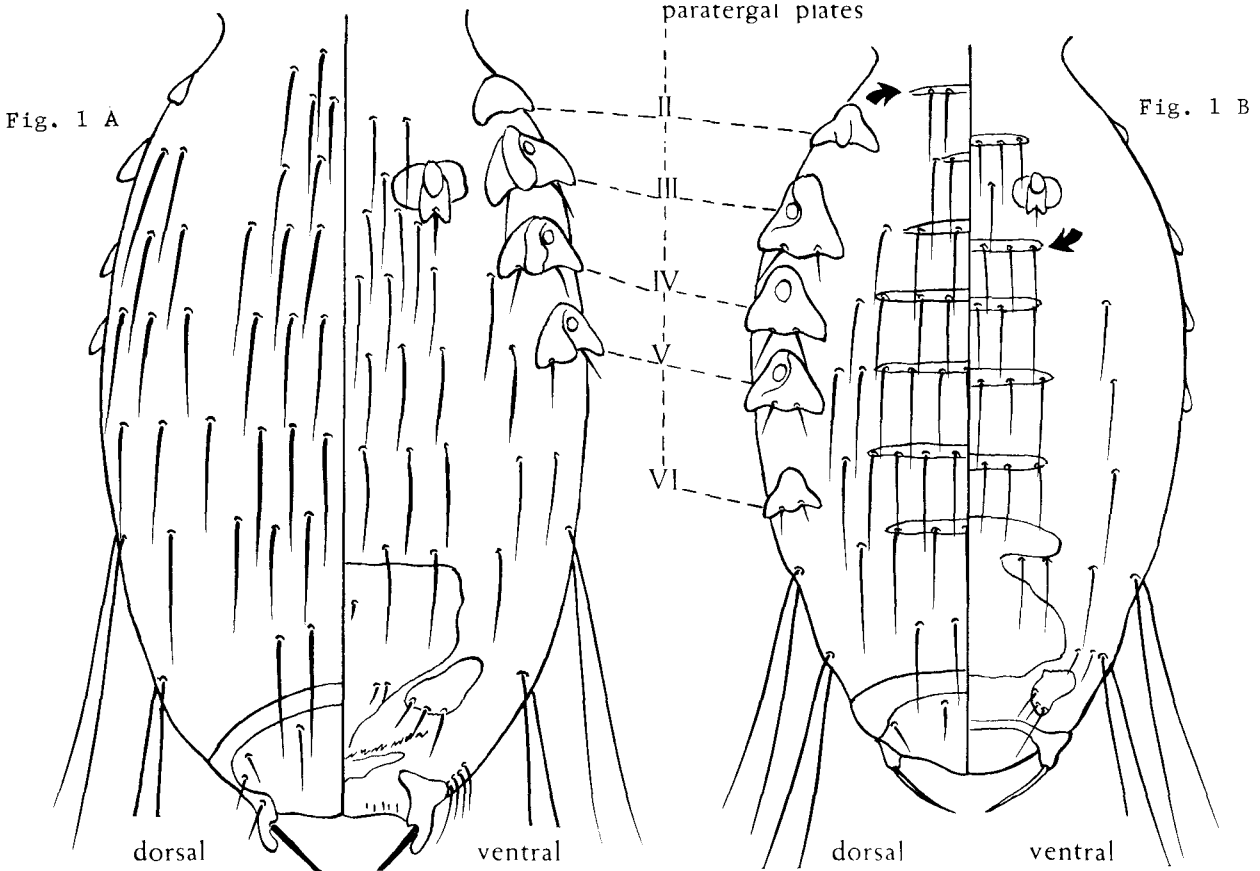


Fig. 1 A

Fig. 1 B

2. Paired ventral plates of abdominal segment 2 completely detached from its corresponding paratergal plate; each ventral plate bearing a single seta (Fig. 2 A). On Sciurus....3

Paired ventral plates of abdominal segment 2 each extending laterally to unite with its corresponding paratergal plate; ventral plates without setae (Fig. 2 B).....5

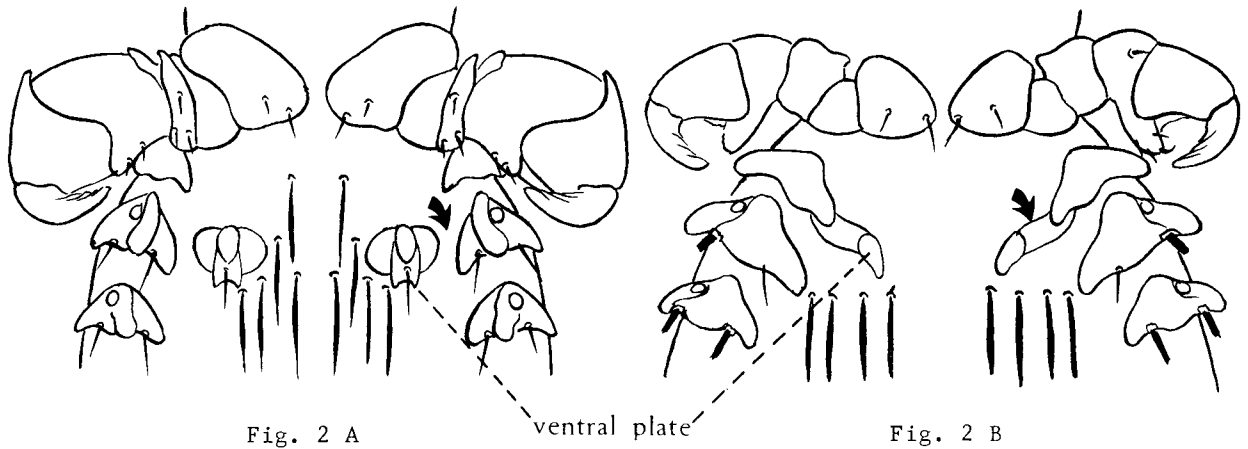


Fig. 2 A

ventral plate

Fig. 2 B

3. Spermatheca present; arms of basal plate apically bilobed (Fig. 3 A & B).....4

Spermatheca absent; arms of basal plate not apically bilobed (Fig. 3 C).....
Enderleinellus kelloggi Ferris

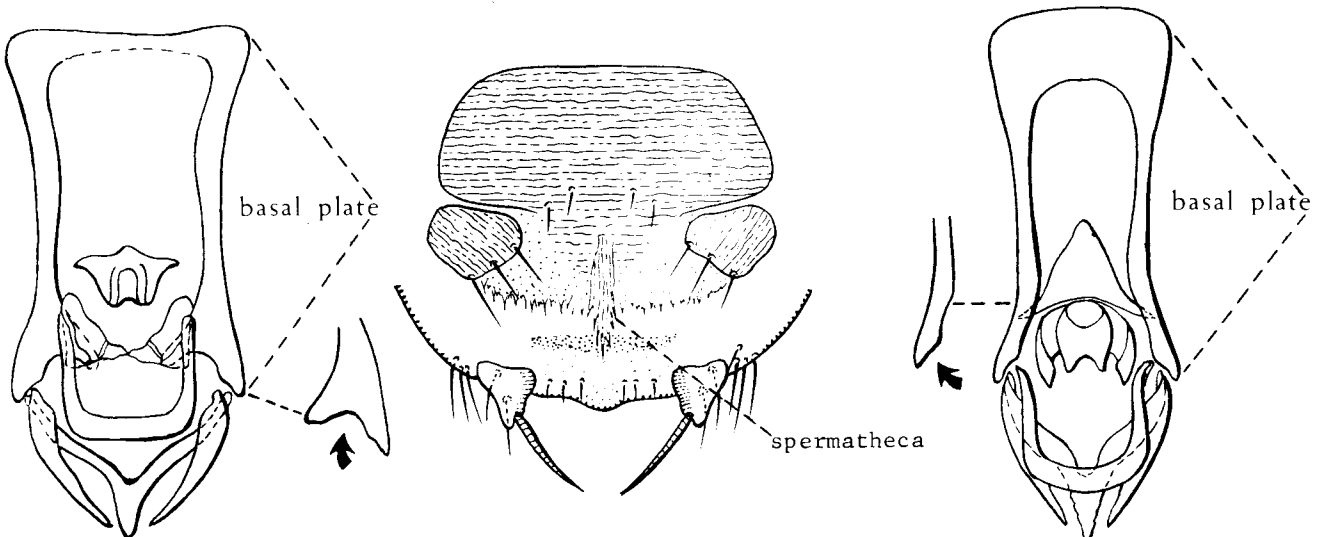
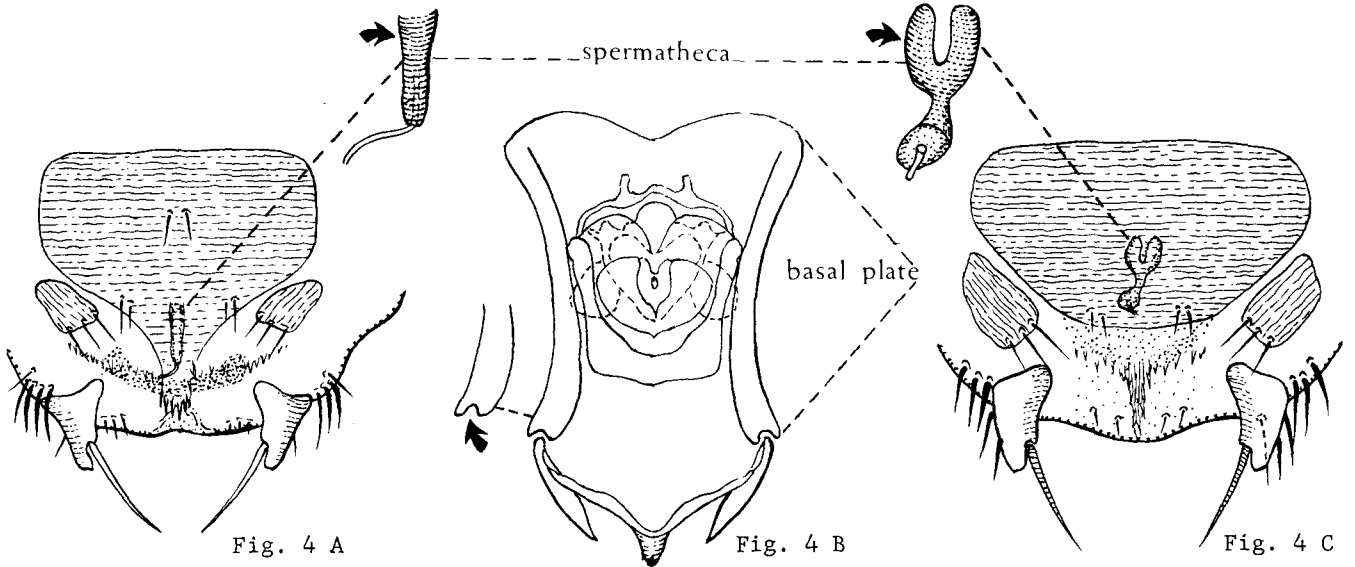


Fig. 3 A

Fig. 3 B

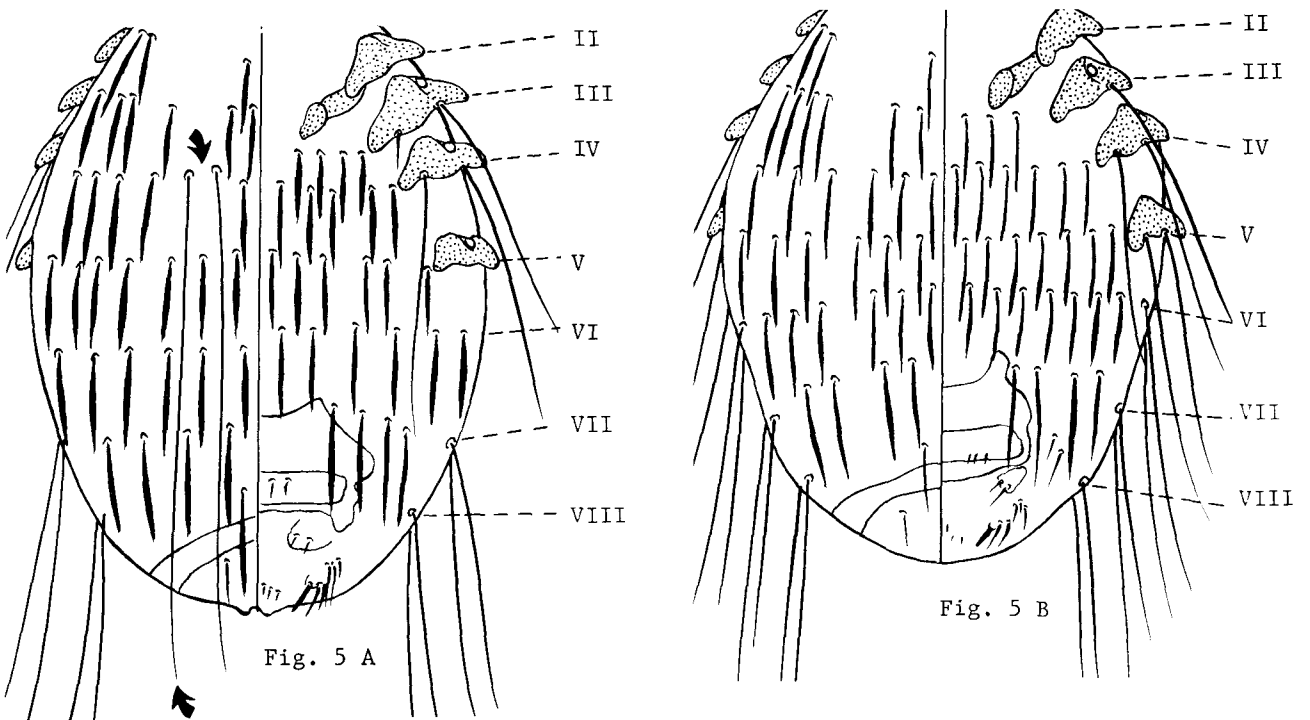
Fig. 3 C

4. Spermatheca a straight slightly tapering tube; arms of basal plate apically bilobed but not expanded (Fig. 4 A & B).....Enderleinellus longiceps (Kellogg & Ferris)
- Spermatheca bent and with its ends expanded; arms of basal plate apically expanded and strongly bilobed (Fig. 4 C).....Enderleinellus arizonensis Werneck



5. Paratergal plate 5 and lateral margin of abdominal segment 6 without a pair of long setae (Fig. 5 A).....6

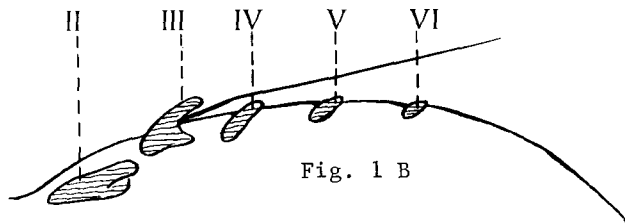
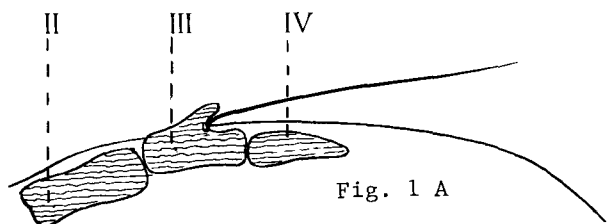
Paratergal plates or lateral margins of abdominal segments 4-8 with a pair of long setae (Fig. 5 B). On Marmota.....Enderleinellus marmotae Ferris



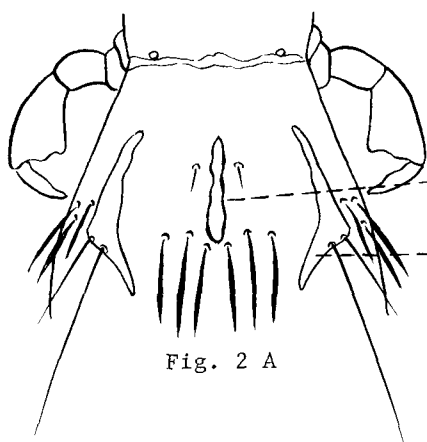
6. Female with 2-4 long setae on dorsum of abdominal segment 4 reaching to apex of body (Fig. 5 A). On Citellus and Cynomys.....Enderleinellus osborni (Kellogg & Ferris)
- Female without such setae. On Citellus.....Enderleinellus suturalis (Osborn)

Key to Species of *Fahrenholzia*

1. Paratergal plates present only on abdominal segments 2 to 4 (Fig. 1 A).....2
- Paratergal plates present on at least abdominal segments 2-6 (Fig. 1 B).....6



2. Dorsal surface of abdomen with a narrow, sclerotized, median, longitudinal plate between paratergal plates 2 (Fig. 2 A). On *Liomys*.....3
- Dorsal surface of abdomen without such a plate (Fig. 2 B). On *Perognathus* and *Dipodomys*.....5



median longitudinal
plate

paratergal plate II

Fig. 2 A

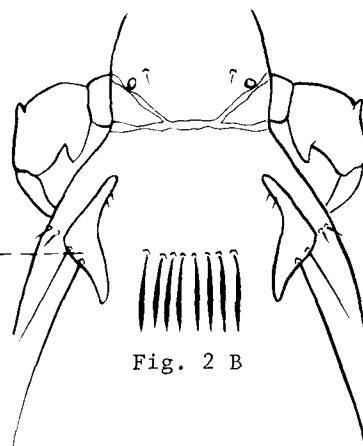


Fig. 2 B

3. Thoracic sternal plate concave on anterior margin; dorsal lobe of paratergal plate 3 pointed apically (Fig. 3 A & B).....*Fahrenholzia texana* Stojanovich & Pratt
- Thoracic sternal plate convex on anterior margin; dorsal lobe of paratergal plate 3 apically truncate (Fig. 3 C & D).....4

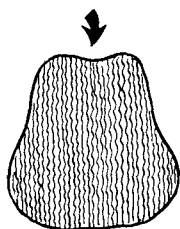


Fig. 3 A

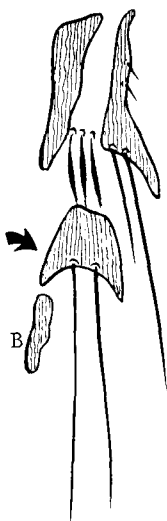


Fig. 3 B

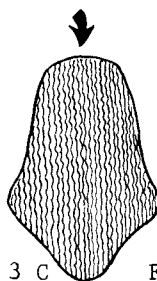


Fig. 3 C

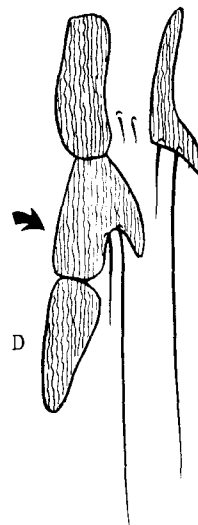


Fig. 3 D

4. Dorsal lobe of paratergal plate 2 with the smaller seta about as long as the plate (Fig. 4 A).....Fahrenheitzia ehrlichi Johnson

Dorsal lobe of paratergal plate 2 with the smaller seta minute, much shorter than the plate (Fig. 4 B).....Fahrenheitzia microcephala Ferris

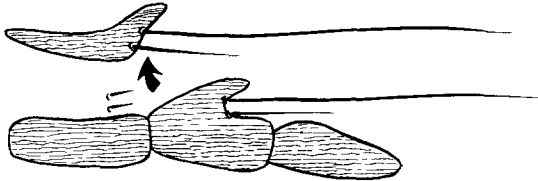


Fig. 4 A

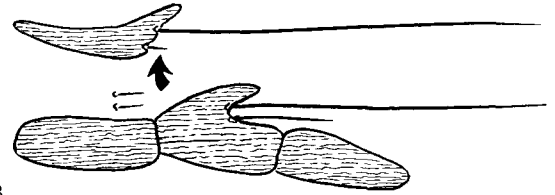


Fig. 4 B

5. Paratergal plates of abdominal segment 2 with a single pair of setae between dorsal and ventral lobes; male genitalia with parameres greatly expanded; female genital plate present (Fig. 5 A, B, & C).....Fahrenheitzia pinnata Kellogg & Ferris

Paratergal plates of abdominal segment 2 with 6 to 8 long setae between dorsal and ventral lobes; parameres of male genitalia not expanded; female genital plate absent (Fig. 5 D & E).....Fahrenheitzia reducta Ferris

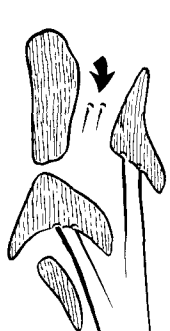


Fig. 5 A

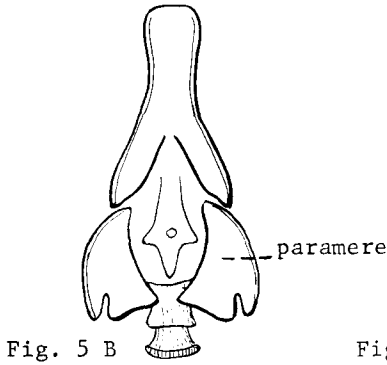


Fig. 5 B

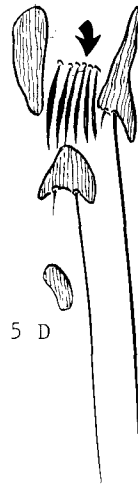


Fig. 5 D

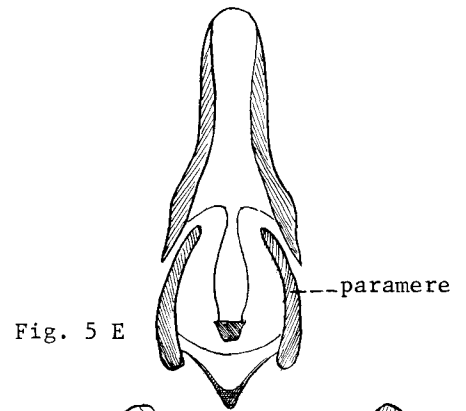


Fig. 5 E

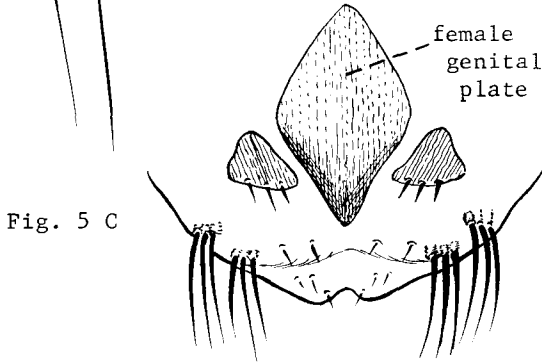


Fig. 5 C

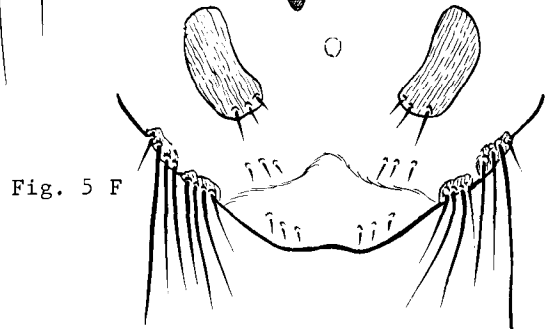


Fig. 5 F

6. Paratergal plates present on abdominal segments 2 to 6; paratergal plate 3 bilobed (Fig. 6 A).....Fahrenheitzia zacatecae Ferris

Paratergal plates present on abdominal segments 2 to 7; paratergal plate 3 not bilobed (Fig. 6 B).....Fahrenheitzia tribulosa Ferris

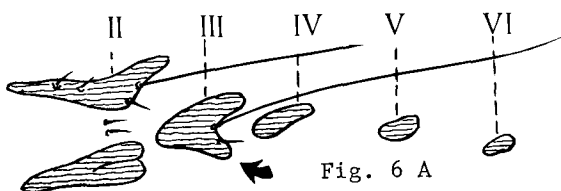


Fig. 6 A

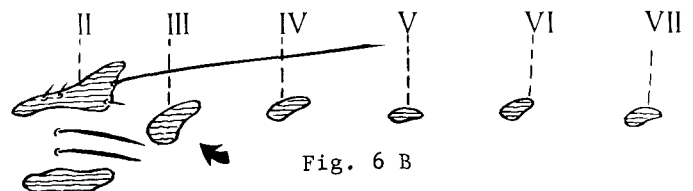


Fig. 6 B

Key to Species of Hoplopleura

1. Third abdominal sternal plate with two groups of two stout setae (Fig. 1 A).....2

Third abdominal sternal plate with two groups of three stout setae (Fig. 1 B).....
 On Glaucomys.....Hoplopleura trispinosa Kellogg & Ferris

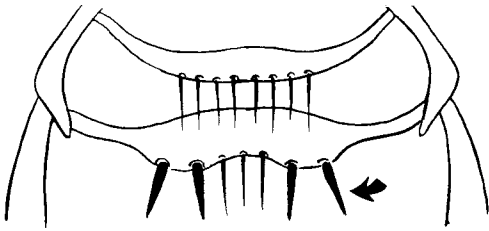


Fig. 1 A

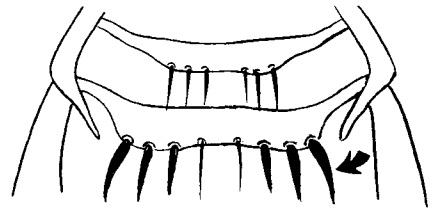


Fig. 1 B

2. Posterior margins of paratergal plates 3-5 with a broad or pointed lobe on each side (Fig. 2 A & B).....3

Posterior margins of paratergal plates 3-5 with four rounded lobes (Fig. 2 C).....
 On Oryzomys.....Hoplopleura oryzomydis Pratt & Lane

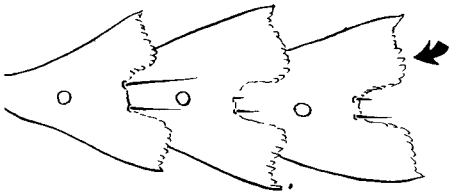


Fig. 2 A

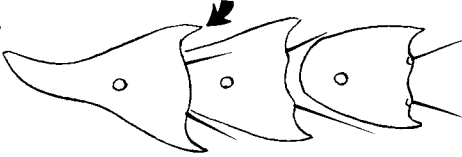


Fig. 2 B

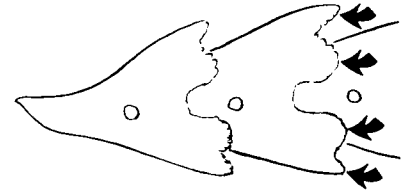


Fig. 2 C

3. Paratergal plates 4 and 5 with broad lobes on posterior margin (Fig. 3 A).....4

Paratergal plates 4 and 5 with pointed lobes on posterior margin (Fig. 3 B).....7

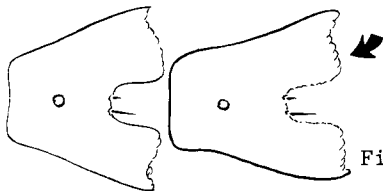


Fig. 3 A



Fig. 3 B

4. Paratergal plates 4 and 5 with one large and one minute seta on posterior margin (Fig. 4 A).....5

Paratergal plates 4 and 5 with two large setae on posterior margin (Fig. 4 B).....
 On field rodents.....Hoplopleura acanthopus (Burmeister)

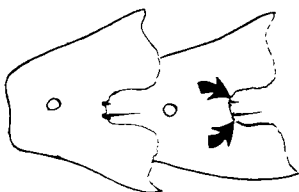


Fig. 4 A

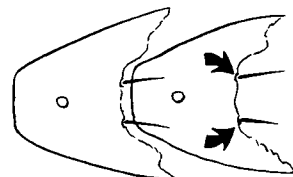


Fig. 4 B

5. Abdomen with setae in some of the membrane between sternal and paratergal plates (Fig. 5 A). On Rattus.....Hoplopleura oenomydis Ferris
- Abdomen without setae in membrane between ends of sternal and paratergal plates (Fig. 5 B).....6

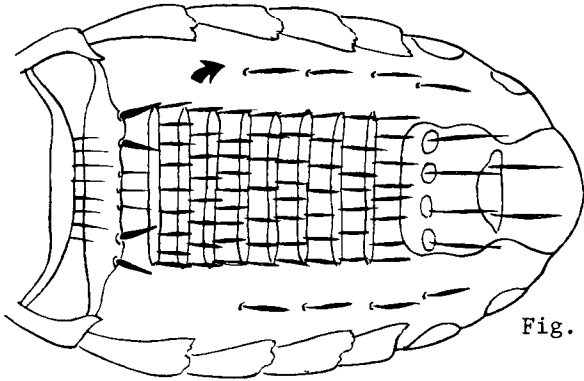


Fig. 5 A

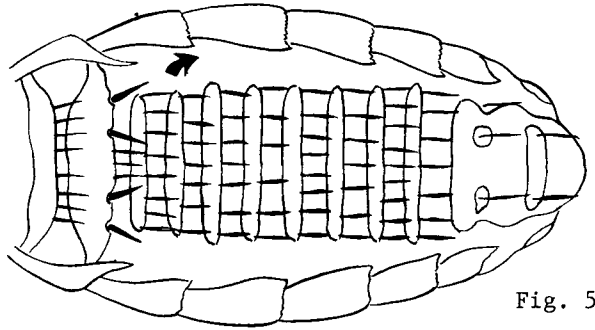


Fig. 5 B

6. Thoracic sternal plate pointed posteriorly (Fig. 6 A). On Peromyscus.....
.....*Hoplopleura hesperomydis (Osborn) and *Hoplopleura ferrisi Cook & Beer
- Thoracic sternal plate blunt posteriorly (Fig. 6 B). On Onychomys.....
.....Hoplopleura onychomydis Cook & Beer

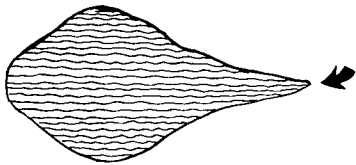


Fig. 6 A

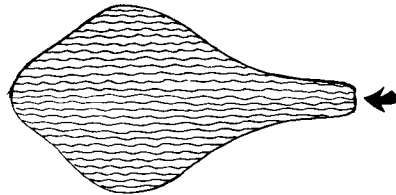


Fig. 6 B

7. Thoracic sternal plate about as long as broad; first sternal plate on abdominal segment 3 with two stout setae usually set close together on each side (Fig. 7 A).....8
- Thoracic sternal plate definitely longer than broad; first sternal plate on abdominal segment 3 with two stout setae more widely spaced on each side (Fig. 7 B).....9

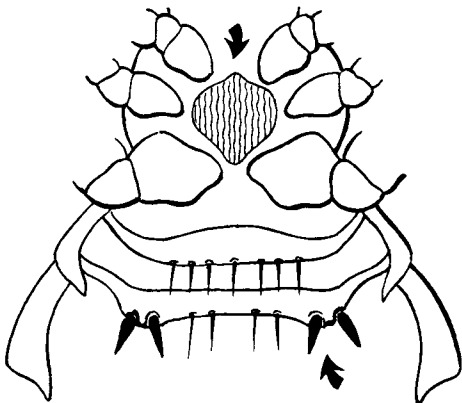


Fig. 7 A

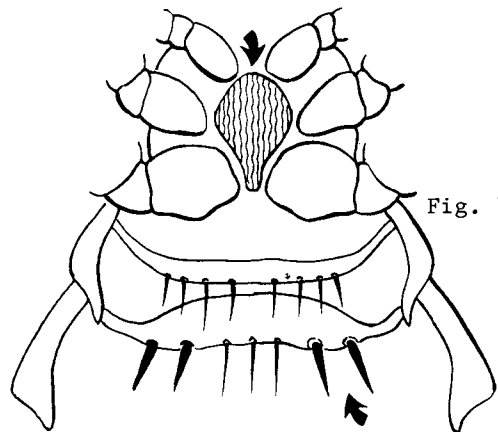


Fig. 7 B

*These species are separated only in the immature stages.

8. Paratergal plate 6 with posterior angles produced into points (Fig. 8 A). On EutamiasHoplopleura arboricola Kellogg & Ferris
- Paratergal plate 6 without points on posterior angles (Fig. 8 B). On TamiasHoplopleura erratica (Osborn)

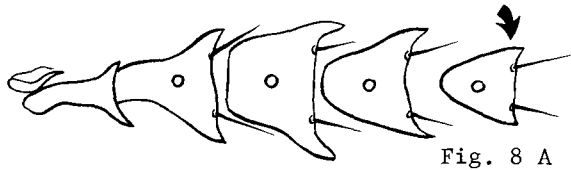


Fig. 8 A

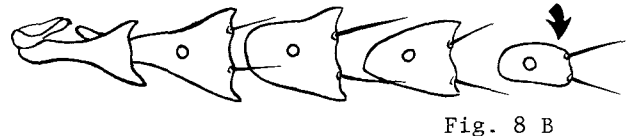


Fig. 8 B

9. Posterior margin of paratergal plate 6 with angles produced to form a deep emargination (Fig. 9 A). On SciurusHoplopleura sciuricola Ferris
- Posterior margin of paratergal plate 6 with angles not produced to form a deep emargination (Fig. 9 B). On Sigmodon10

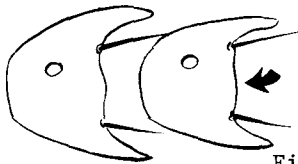


Fig. 9 A

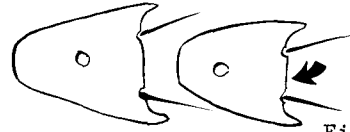


Fig. 9 B

10. Female with paratergal plates 4-6 elongated; male with 11 tergal plates bearing a row of setae (Fig. 10 A & B)Hoplopleura arizonensis Stojanovich & Pratt
- Female with paratergal plates 4-6 only slightly elongated; male with only 7 tergal plates bearing a row of setae (Fig. 10 C & D)Hoplopleura hirsuta Ferris



Fig. 10 A



Fig. 10 C

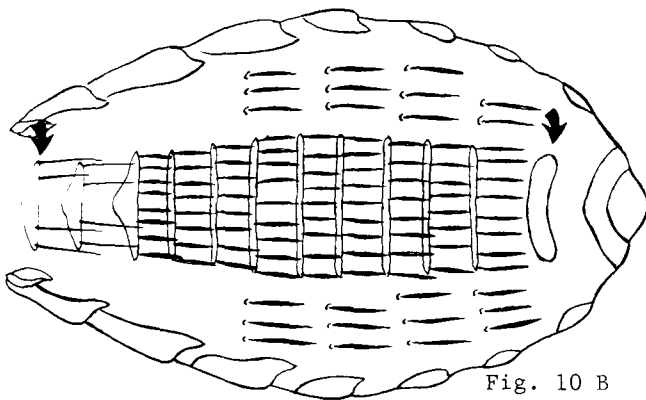


Fig. 10 B

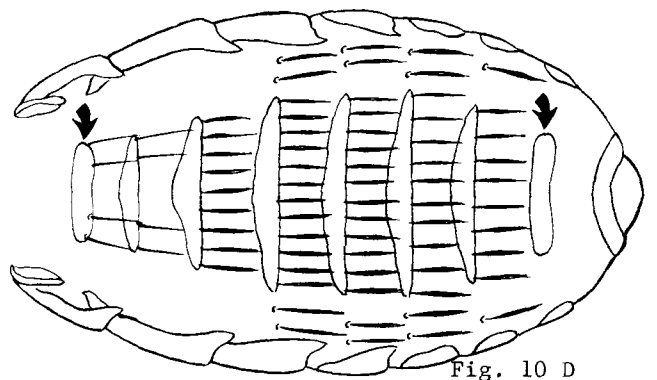


Fig. 10 D

Key to Species of Haemodipsus

1. Thoracic sternal plate almost three times as wide as long (Fig. 1 A). On domestic rabbits (Oryctolagus).....Haemodipsus ventricosus (Denny)

Thoracic sternal plate hexagonal, being almost as long as wide (Fig. 1 B). On wild rabbits and hares (Sylvilagus and Lepus).....Haemodipsus setoni Ewing

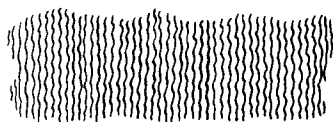


Fig. 1 A

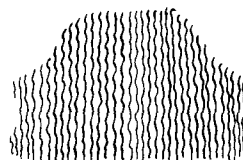


Fig. 1 B

Key to Species of Neohaematopinus

1. Thoracic sternal plate concave on posterior margin (Fig. 1 A).....2

Thoracic sternal plate somewhat oval, and convex on posterior margin (Fig. 1 B).....11

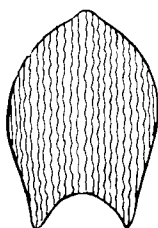


Fig. 1 A

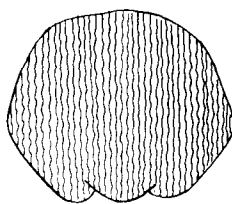


Fig. 1 B

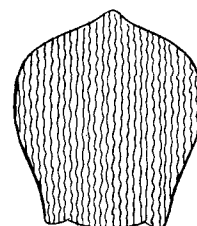


Fig. 1 C

2. Paratergal plates 3 to 6 with three spines on posterior margins (Fig. 2 A).....3

Paratergal plates 3 to 6 with two spines on posterior margins (Fig. 2 B).....5

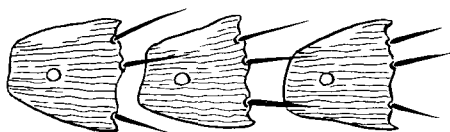


Fig. 2 A

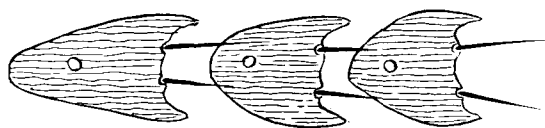


Fig. 2 B

3. Posterior angle of first antennal segment with a stout spine (Fig. 3 A). On Eutamias...
.....Neohaematopinus pacificus (Kellogg & Ferris)

Posterior angle of first antennal segment without a stout spine (Fig. 3 B).....4



Fig. 3 A

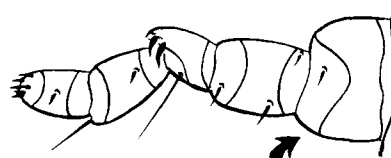


Fig. 3 B

4. Abdominal tergal and sternal plates present on each segment in both sexes (Fig. 4 A)....
 On Citellus tereticaudus.....Neohaematopinus citellinus Ferris

Abdominal tergal and sternal plates absent in the middle segments of female; male with only sternal plates absent (Fig. 4 B). On Citellus spilosoma.....
Neohaematopinus spilosomae Stojanovich & Pratt

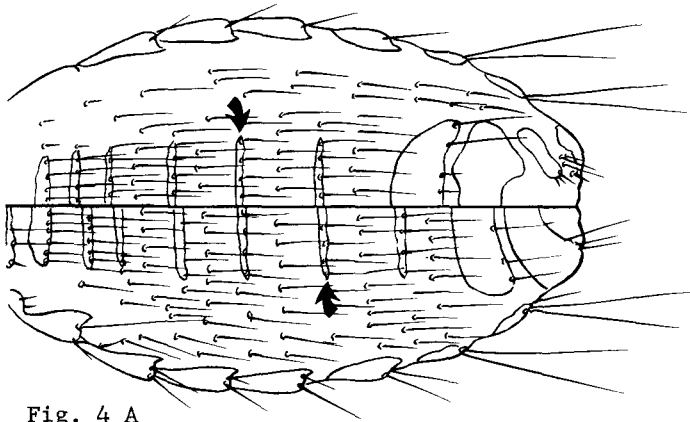


Fig. 4 A

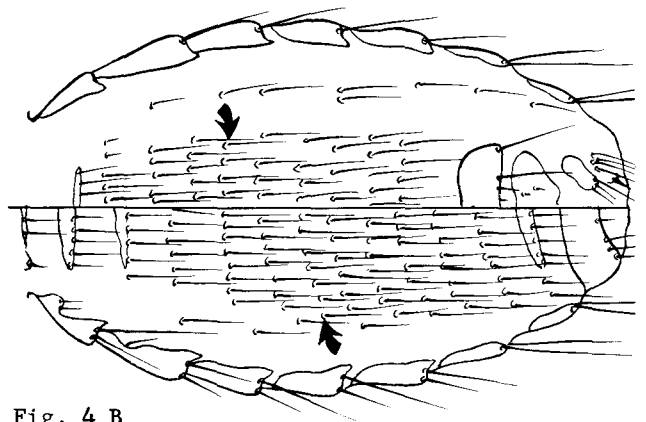


Fig. 4 B

5. First antennal segment prolonged postero-apically, with stout spine (Fig. 5 A).....6
 First antennal segment without such a prolongation (Fig. 5 B).....8

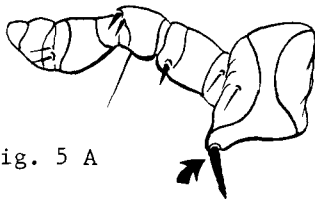


Fig. 5 A

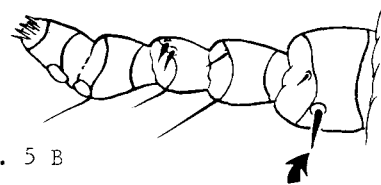


Fig. 5 B

6. Female without sternal and tergal plates on abdominal segments except for the normal terminal and genital segments (Fig. 6 A). On Sciurus griseicolus.....
Neohaematopinus griseicolus Ferris

Female with sternal and tergal plates on all abdominal segments (Fig. 6 B).....7

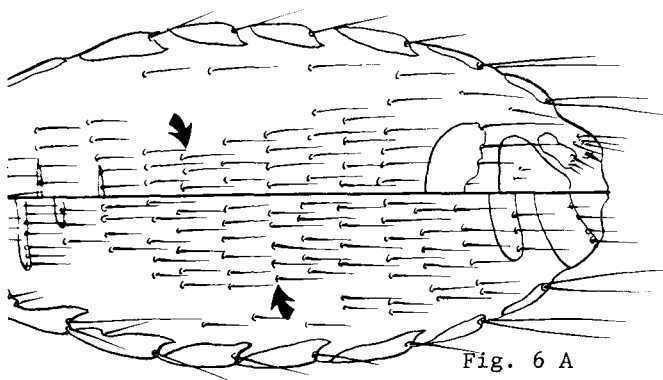


Fig. 6 A

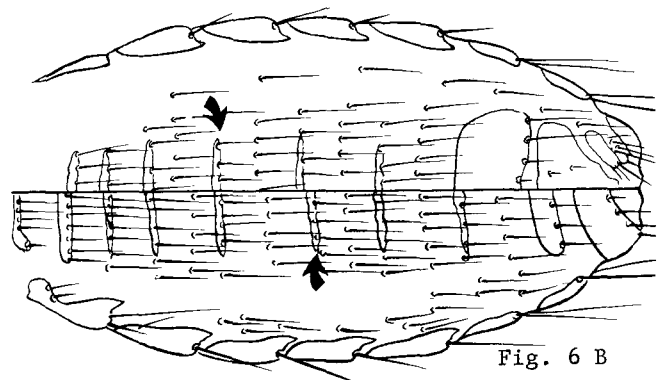


Fig. 6 B

7. Second antennal segment with short spine-like seta on posterior margin (Fig. 7 A).....
 On Tamias hudsonicus.....Neohaematopinus semifasciatus Ferris
- Second antennal segment without spine-like seta (Fig. 7 B). On Sciurus niger.....
Neohaematopinus sciurinus Mjöberg

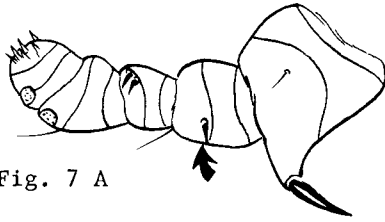


Fig. 7 A

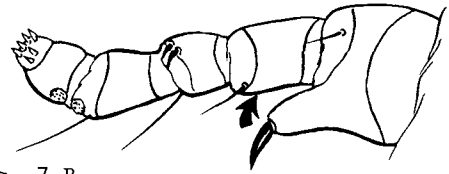


Fig. 7 B

8. Abdominal sternal and tergal plates absent in female; male with only sternal plates absent (Fig. 8 A). On Neotoma cinerea.....Neohaematopinus inornatus Ferris
- Abdominal sternal and tergal plates present in both sexes (Fig. 9 A).....9

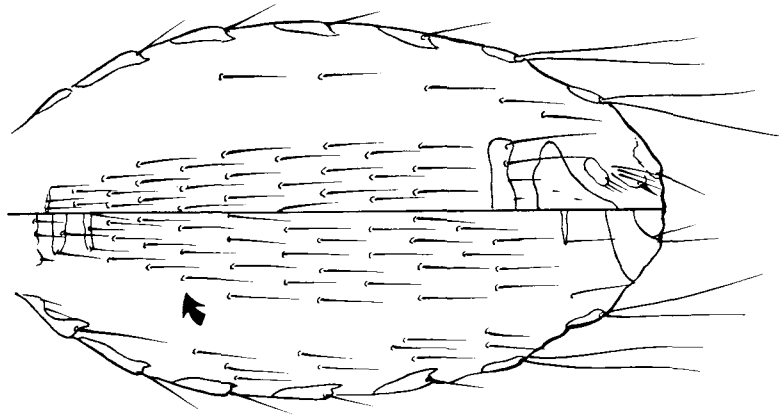


Fig. 8 A

9. A row of setae present on membrane between most of the sternal and tergal plates of abdomen (Fig. 9 A).....10
- Membrane between the abdominal sternal and tergal plates without a row of setae (Fig. 9 B). On Glaucomys.....Neohaematopinus sciuropteri (Osborn)

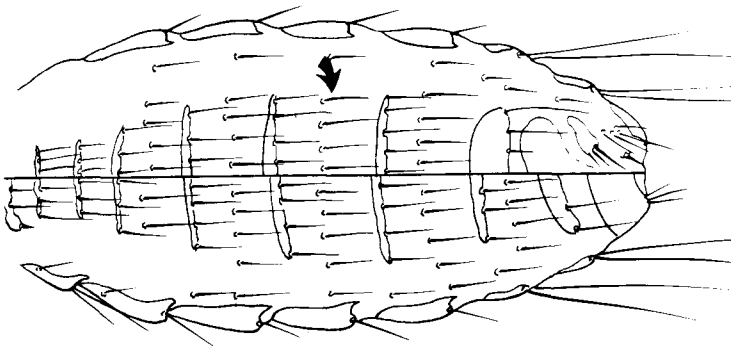


Fig. 9 A

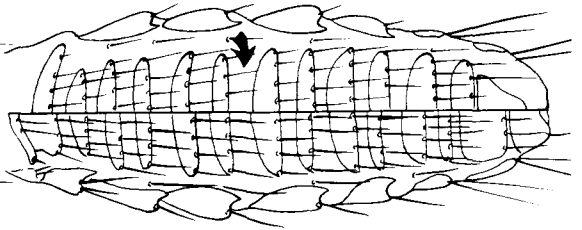


Fig. 9 B

10. First antennal segment with a spine-like seta at the postero-apical angle (Fig. 10 A)
 On Sciurus carolinensis.....Neohaematopinus sciuri Jancke
- First antennal segment with a spine-like seta set somewhat away from the margin in the
 postero-apical angle (Fig. 10 B). On Neotoma albigula, streatori and micropus.....
Neohaematopinus neotomae Ferris

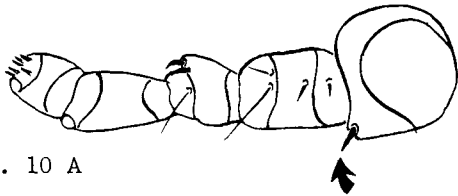


Fig. 10 A

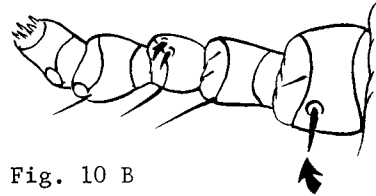


Fig. 10 B

11. Thoracic spiracle small, about one-fourth length of second coxa (Fig. 11 A).....
 On Citellus and Cynomys.....Neohaematopinus laeviusculus (Grube)
- Thoracic spiracle larger, almost one-half length of second coxa (Fig. 11 B).....
 On Marmota.....Neohaematopinus marmotae Ferris

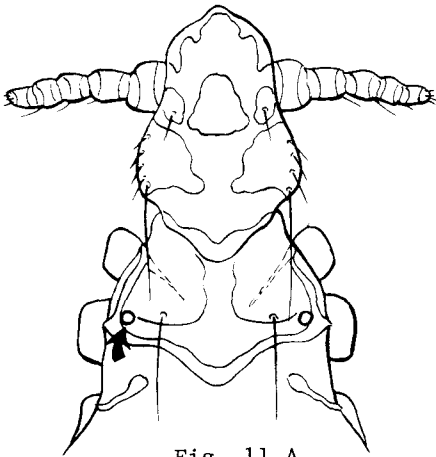


Fig. 11 A

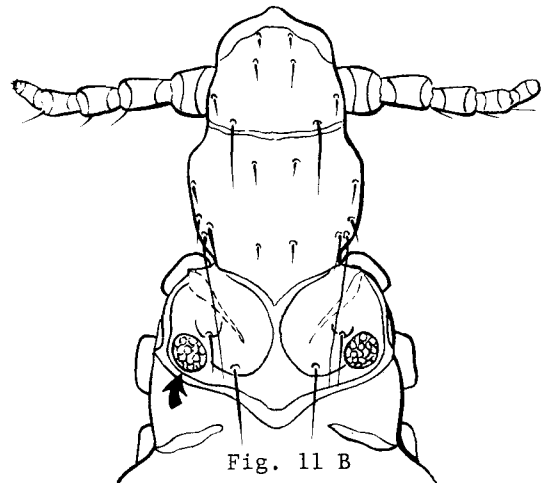


Fig. 11 B

Key to Species of Polyplax

1. Sternal plate of thorax rounded or pointed posteriorly (Fig. 1 A).....2
 Sternal plate of thorax truncate posteriorly (Fig. 1 B). On Peromyscus and Onychomys...
Polyplax auricularis Ferris

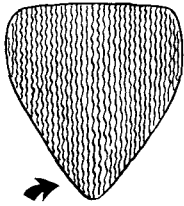


Fig. 1 A

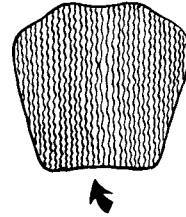


Fig. 1 B

2. Paratergal plate 4 with both setae short or subequal (Fig. 2 A).....3
 Paratergal plate 4 with dorsal seta longer than ventral seta; usually as long or longer than plate (Fig. 2 B). On house mouse.....Polyplax serrata (Burmeister)

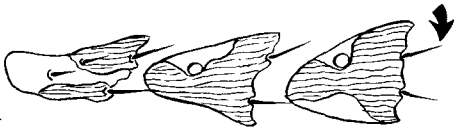


Fig. 2 A

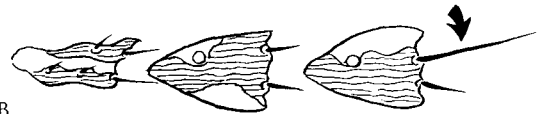


Fig. 2 B

3. Paratergal plates 3-5 with both apical angles produced into points (Fig. 3 A).....
 On microtene mice.....4
 Paratergal plates 3-5 with only dorsal apical angle produced into a point (Fig. 3 B)....
 On Rattus.....Polyplax spinulosa (Burmeister)

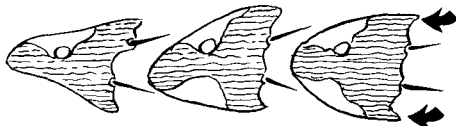


Fig. 3 A

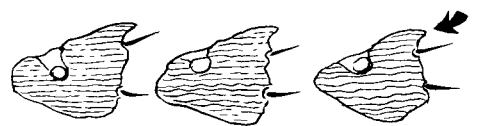


Fig. 3 B

4. First abdominal sternal plate strongly arcuate and with its lateral angles somewhat prolonged (Fig. 4 A).....Polyplax borealis Ferris
 First abdominal sternal plate not arcuate, its posterior margin almost straight and lateral angles not produced (Fig. 4 B).....Polyplax alaskensis Ewing

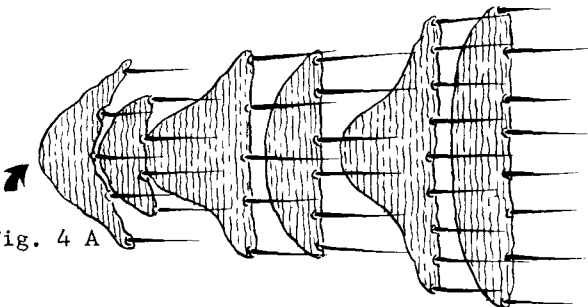


Fig. 4 A

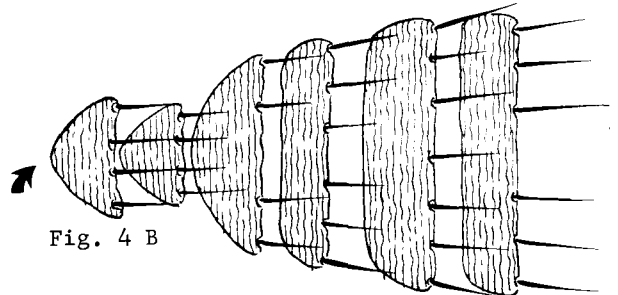


Fig. 4 B

Key to Genera of Linognathidae

1. Sternal plate of thorax at least half as wide as long (Fig. 1 A).....Solenopotes
 Sternal plate of thorax small and slender or completely lacking (Fig. 1 B)..Linognathus

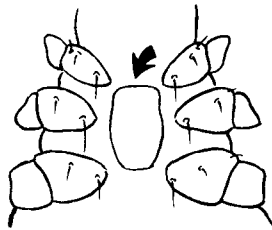


Fig. 1 A

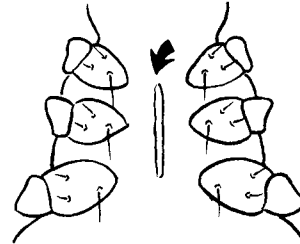


Fig. 1 B

Key to Species of Linognathus

1. Head about as broad as long; antennae almost as long as head (Fig. 1 A).....2
 Head almost twice as long as wide or longer; antennae noticeably shorter than head (Fig. 1 B).....3

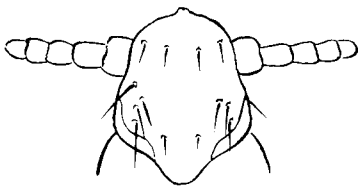


Fig. 1 A

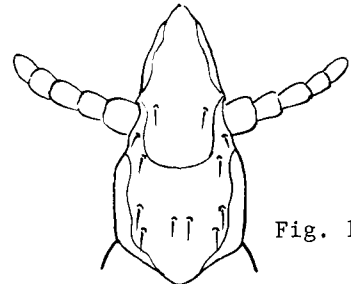


Fig. 1 B

2. Thoracic dorsum with four long setae; head slightly longer than broad (Fig. 2 A). On dogs, foxes and ferrets. Dog sucking louse.....Linognathus setosus (von Olfers)
 Thoracic dorsum with two long setae; head definitely as broad as long (Fig. 2 B).....
 Sheep foot louse.....Linognathus pedalis (Osborn)

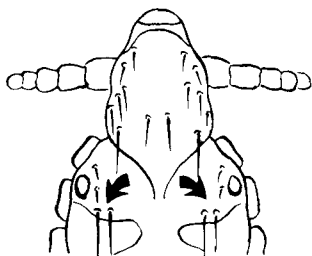


Fig. 2 A

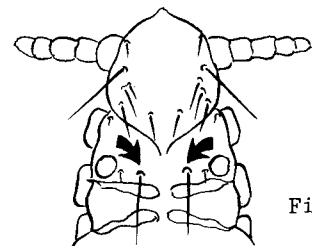


Fig. 2 B

3. Fore head acutely conical and much elongated; female gonopod with a sclerotized hook (Fig. 3 A & B). On cattle. Long-nosed cattle louse.....Linognathus vituli (Linnaeus)

Fore head rounded (Fig. 3 C); female gonopod rounded or with a slight tooth (Fig. 5 B & C). On sheep and goats.....4

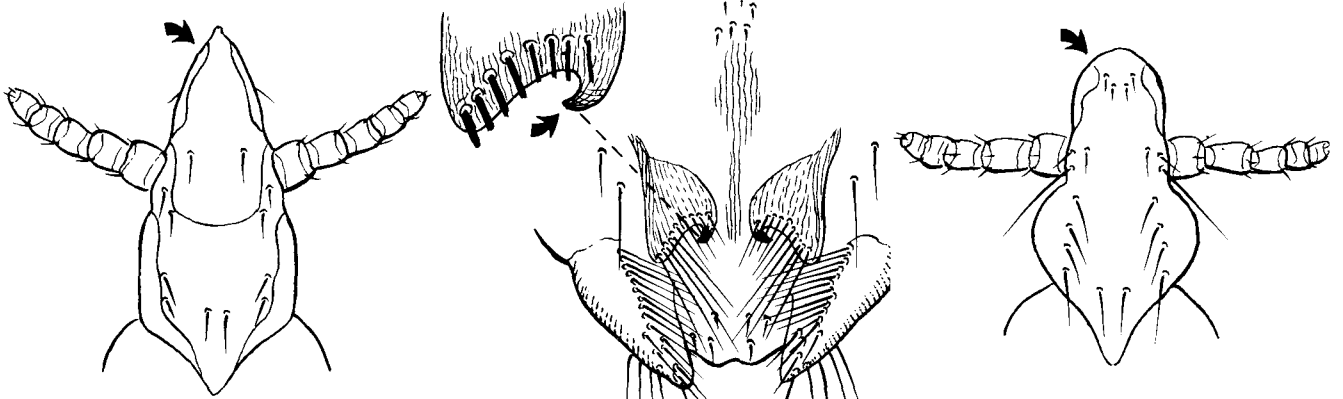


Fig. 3 A

Fig. 3 B

Fig. 3 C

4. Head greatly expanded behind antennae; female gonopod rounded (Fig. 4 A & B). Goat sucking louse.....Linognathus africanus (Kellogg & Paine)

Head not greatly expanded behind antennae (Fig. 4 C).....5

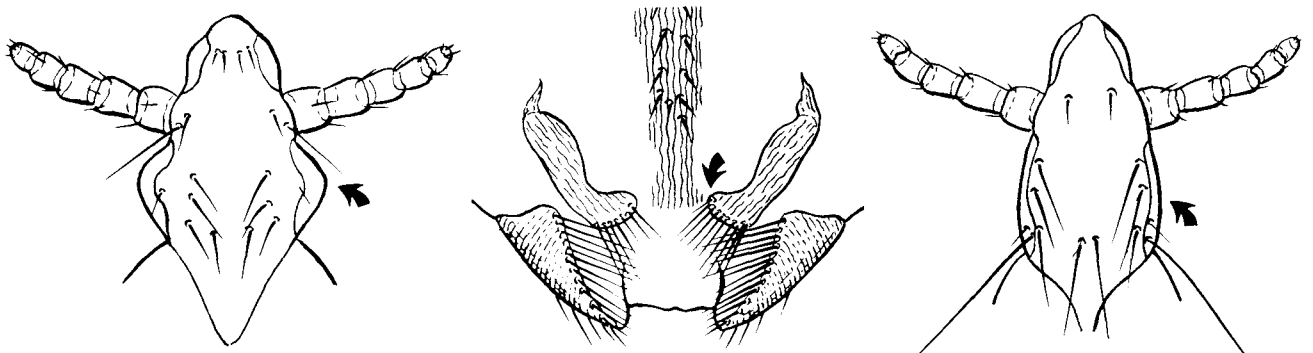


Fig. 4 A

Fig. 4 B

Fig. 4 C

5. Thoracic spiracle large and conspicuous; female gonopod rounded (Fig. 5 A & B). Sheep louse.....Linognathus ovillus (Neumann)

Thoracic spiracle not large and conspicuous; female gonopod with a slight tooth (Fig. 5 C & D). Goat sucking louse.....Linognathus stenopsis (Burmeister)

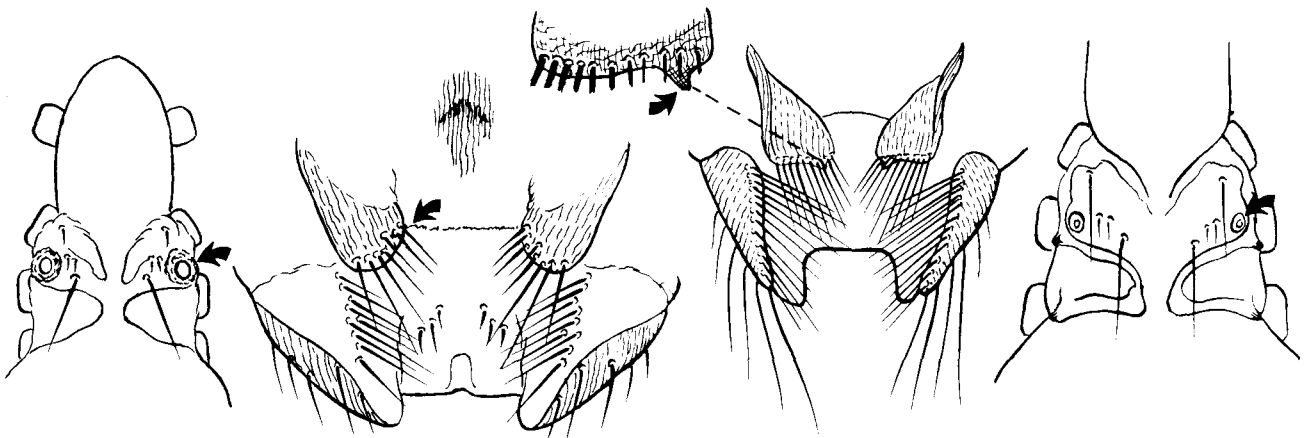


Fig. 5 A

Fig. 5 B

Fig. 5 C

Fig. 5 D

Key to Species of Solenopotes

1. Abdominal spiracles strongly protuberant (Fig. 1 A); female genitalia with apical processes strongly constricted near middle (Fig. 1 B);-male genitalia as in figure 2 E. On cattle. Little blue cattle louse.....Solenopotes capillatus Enderlein

Abdominal spiracles only slightly protuberant (Fig. 1 C); female genitalia with apical processes not constricted (Fig. 1 D & E); male genitalia as in figures 2 C & D. On deer.....2

Fig. 1 A

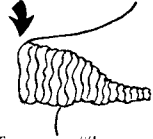


Fig. 1 C

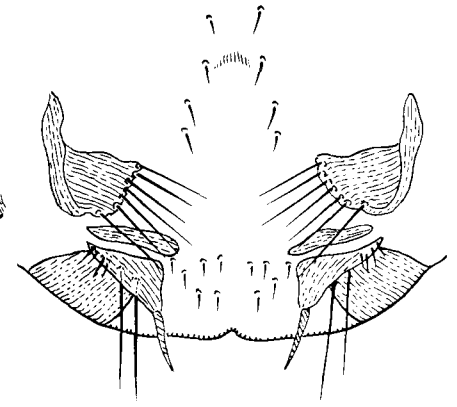
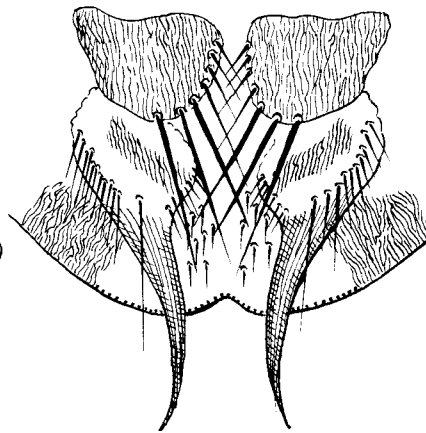
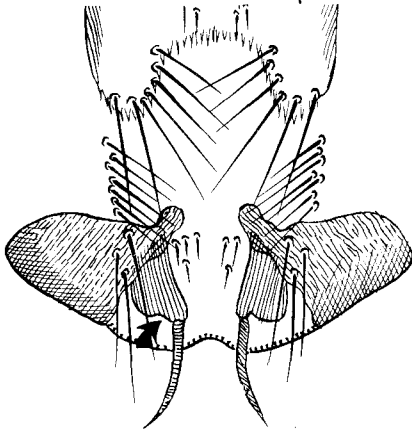


Fig. 1 B (capillatus)

Fig. 1 D (binipilosus)

Fig. 1 E (ferrisi)

2. Neck present, head with distinct posterior-lateral angles (Fig. 2 A); female genitalia as in figure 1 E; male genitalia as in figure 2 C.....Solenopotes ferrisi (Fahrenholz)

Head without distinct posterior-lateral angles (Fig. 2 B); female genitalia as in figure 1 D ; male genitalia as in figure 2 D.....Solenopotes binipilosus (Fahrenholz)

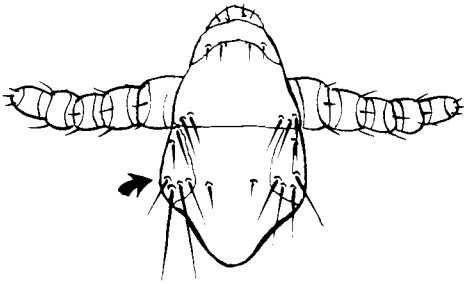


Fig. 2 A

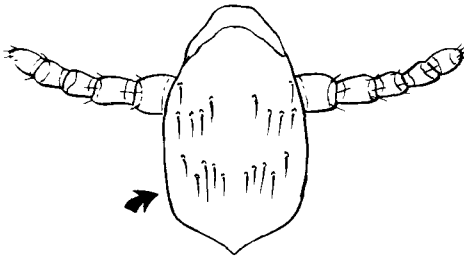


Fig. 2 B

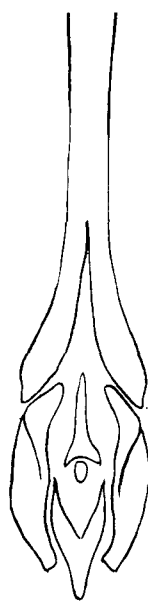


Fig. 2 C
(ferrisi)



Fig. 2 D
(binipilosus)

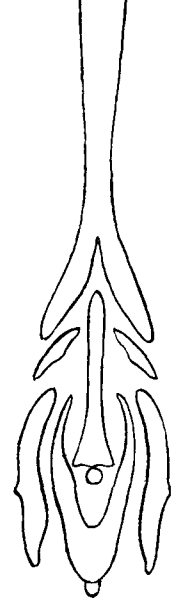


Fig. 2 E
(capillatus)

Key to Genera of Pediculidae

1. Abdomen much longer than basal width; without hairy tubercles (Fig. 1 A). Head and body louse.....Pediculus humanus Linnaeus
- Abdomen about as long as basal width; with hairy tubercles (Fig. 1 B). Crab louse....
.....Pthirus pubis (Linnaeus)

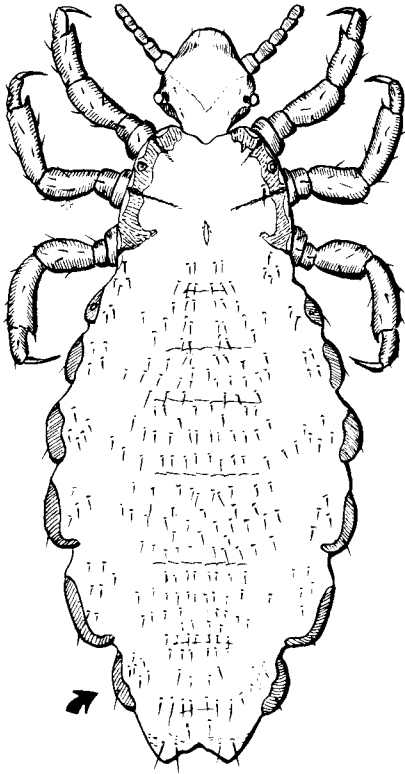


Fig. 1 A

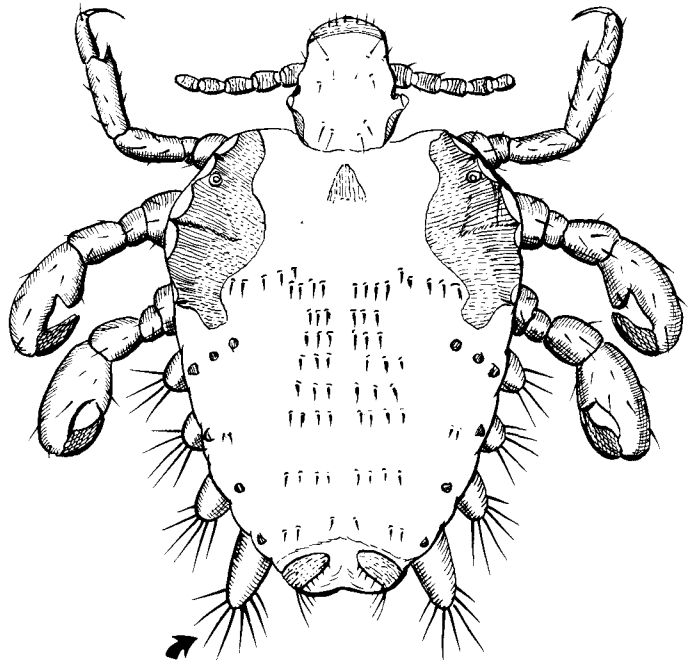


Fig. 1 B

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