

With respects of the author.

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1876

Manuscript Notes from my Journal,

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OR

ILLUSTRATIONS OF INSECTS,

NATIVE AND FOREIGN.

ORDER HEMIPTERA,

SUBORDER HETEROPTERA,

OR PLANT-BUGS.

BY TOWNEND GLOVER, WASHINGTON, D. C.

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Written & Etched by Townend Glover. Transferred to & Printed from Stone by J. C. Entwistle.

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I.

Manuscript notes from my Journal. or Illustrations of Insects. Native and Foreign.

Heteroptera.

Plant Bugs.

Introduction.

It is now two years since a pamphlet was published on the *Diptera* or two winged flies on a plan somewhat similar to the present work, as written by the author himself, on prepared lithographic paper, from the original manuscript notes, and accompanied with figures, etched on copper plates. This plan of issuing the work on manuscript form, was adopted, because it was much cheaper, for a small edition, of only fifty or sixty copies, than regular typographic printing, & served the purpose equally well. The figures were etched, and then printed, and colored by hand, and, in fact, the whole work (except the printing) was done by the author during his leisure hours, either before or after the hours of official duty, and moreover, has been published entirely at his own expense, and not by the Department of Agriculture, (as has been most generally supposed) for gratuitous distribution to agricultural, and Entomological Societies, or specialists, maturing a particular study of the suborder Heteroptera.

The thanks of the author are especially due to Professor P. G. Uhler of the Peabody Institute, Baltimore, Maryland, who has materially assisted in preparing the work, by furnishing the specimens, from which to figure, for advice, and correcting the text, and for the Classification, and valuable notes at page 124 &c, all of which have been taken from Prof. Uhler's last work "List of Hemiptera of the regions west of the Mississippi, including those collected by the Hayden exploring expeditions," 1873. (Washington 1876) It being impossible in the manuscript copy, to correct proof, as in common typographical printing, no doubt numerous errors, and omissions, will occur, which cannot be corrected without rewriting whole pages, but should the work be found worthy of a second edition, they can readily be corrected. As the names of the genera, and species, given from Professor Uhler's report, on p 124 &c, are the latest published, they will therefore have to be adopted, instead of the older names in the first part of this work, (which was already written before the report was published,) & must therefore hereafter be considered merely as Synonyms. — The figures on plate X, have been taken from Fieber. As the reasons for writing this work have already been given in the former "Introduction" to the work on *Diptera*, we will conclude by repeating the latter part of said

II.

introduction. "One of the principal reasons for publishing these notes at all, is the fact, that should the single manuscript copy be lost, or destroyed, it would be impossible to replace it, without going over the same ground again, and the labor of years be entirely lost; whereas, if merely a dozen copies are judiciously distributed, to the leading agricultural, or scientific societies, to be preserved in their libraries, it will be very easy to refer to them, if necessary. Another reason for not expending more money on the work, or of issuing a larger edition, is the ephemeral character of the classification, and nomenclature of insects, in the present progressive age, as most probably, in eight or ten years the whole order will be revised, and most of the names will be changed. Should however the Entomologists, or Agriculturists, who see this work think it of sufficient value to be republished, the original note book can be revised by some competent specialist, and published in whatever manner the public think the best, and most advantageous. whilst all the other orders which are already written up, in like note books, and illustrated in a similar manner, can be added from time to time, as they are finished."

Townend Glover

—
Washington, D.C.

July, 1876.

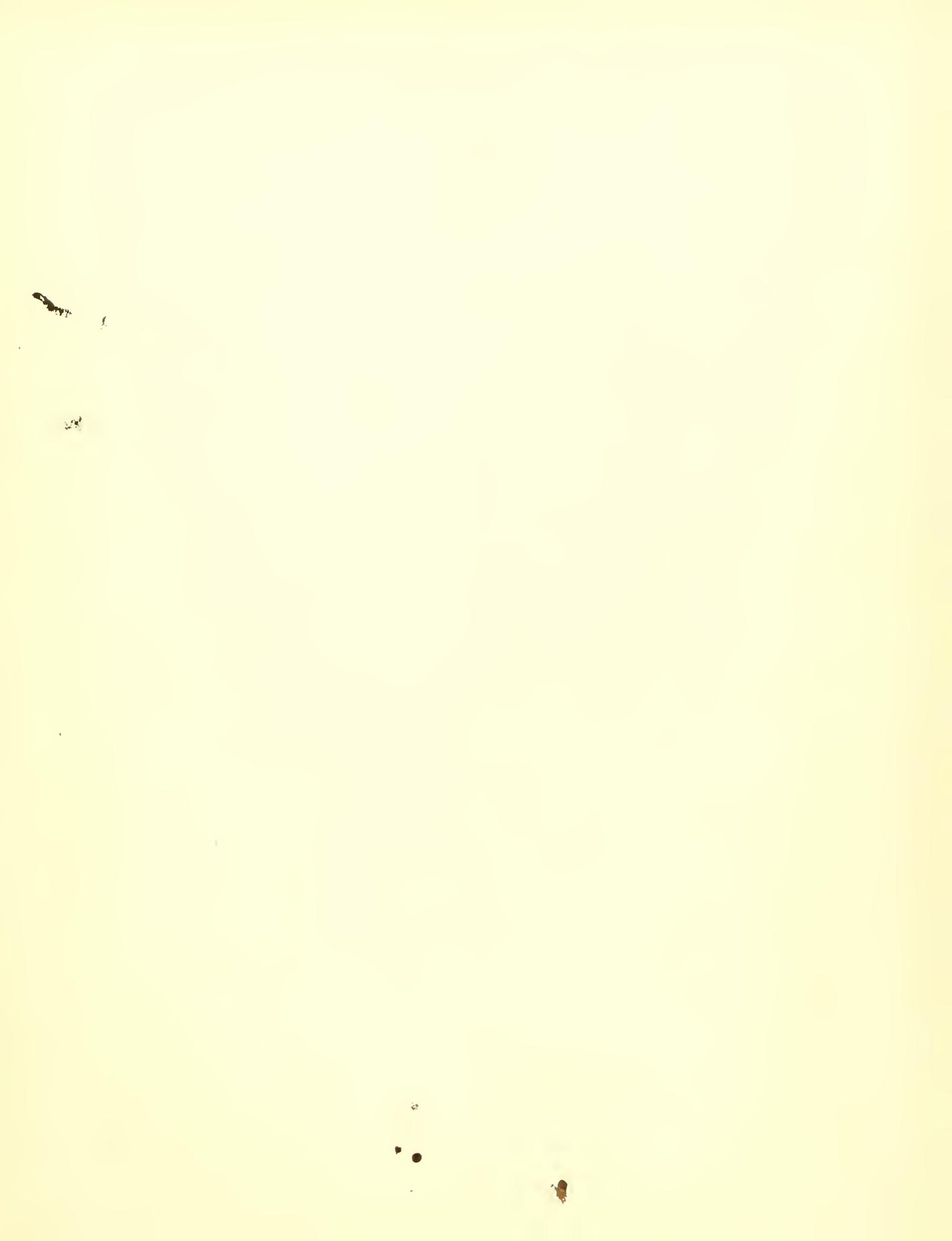


Plate II. Heteroptera.

1. *Resthenia* (Spin.) *visitiva* Say 1. 340. *Capsus*. Tab. Say. — Fam 5 Bicelluli.
2. *Calocoris* (Fiel.) *rapidus*. Say 1. 339. *Capsus*. Say. — " — " —
3. *Lygaeus* (Fab.) *bifasciatus*. Say. 2. 246. — " — " — 3 Infericornes.
4. *Resthenia* (Spin.) *confraterna*. Uhler *Capsus* — " — 5 Bicelluli.
5. — " — " — " — " — " — " — " — " — " —
6. *Lygaeus* (Fab.) *turcicus*. Tab. — " — " — " — " — 3 Infericornes.
7. *Onemodus* (H. Schf.) *mavortius*. Say 1. 337. *Astemma*. Lat. Say. " — " — " —
8. *Calocoris* (Fiel.) *rapidus*. Say 1. 339. *Capsus* Say — " — 5 Bicelluli.
9. *Lygus* (Hahn) *lineatus*. Fab *Capsus*. 4 *vittatus*. Say 1. 339. — " — " — " —
10. *Calocoris* (Fiel.) *bimaculatus*. H. Schf. *Capsus*. — " — " — " — " —
11. *Dysdercus* (Amy.) *suturalis*. H. Schf. *Pyrhocoris*. Fall. — " — 4. Cecigenae.
12. *Largus* (Hahn) *succinctus*. Linn. — " — " — " — 4. Cecigenae.
13. *Anthocoris* (Fall.) *insidiosus*. Say. *Reduvius*. Say 1. 357. — " — 3 Infericornes
14. *Anasa* (Amy.) *tristis*. Degeer. — *Gonocerus*. Latr. — " — 2 Supericornes.
15. *Alydus* (Fab.) 5 *spinosa*s. Say. *Lygaeus*. Say. 2. 247. — " — " — " —
16. *Charisterus*. (Lap.) *antennator*. Tab. *Gonocerus*. Say 1. 323. *Corces*. Tab. — " — " —
17. *Merocoris* (Perty) *distinctus*. Dallas. — " — " — " — " —
18. *Euthoctha* (Mayer) *galeator*. Tab. *Crinocerus*. Burn. — " — " — " —
19. *Acanthocphala* (Lap.) *terminalis*. Dallas. *Metapodus*. Westw. — " — " — " —
20. — " — " — " — { *femorata*, Tab. *Rhinuchus*. Kirby. *Anisocelis*. *nasulus*. Say 1. 305. 327. } — " — " — " —
21. *Leptoglossus* (Stål. & Guen.) *phylopus*. Linn. — { *Anisocelis*. *allicinctus*. Say 1. 326. } — " — " — " —

• Bicelluli

• allicinctus.

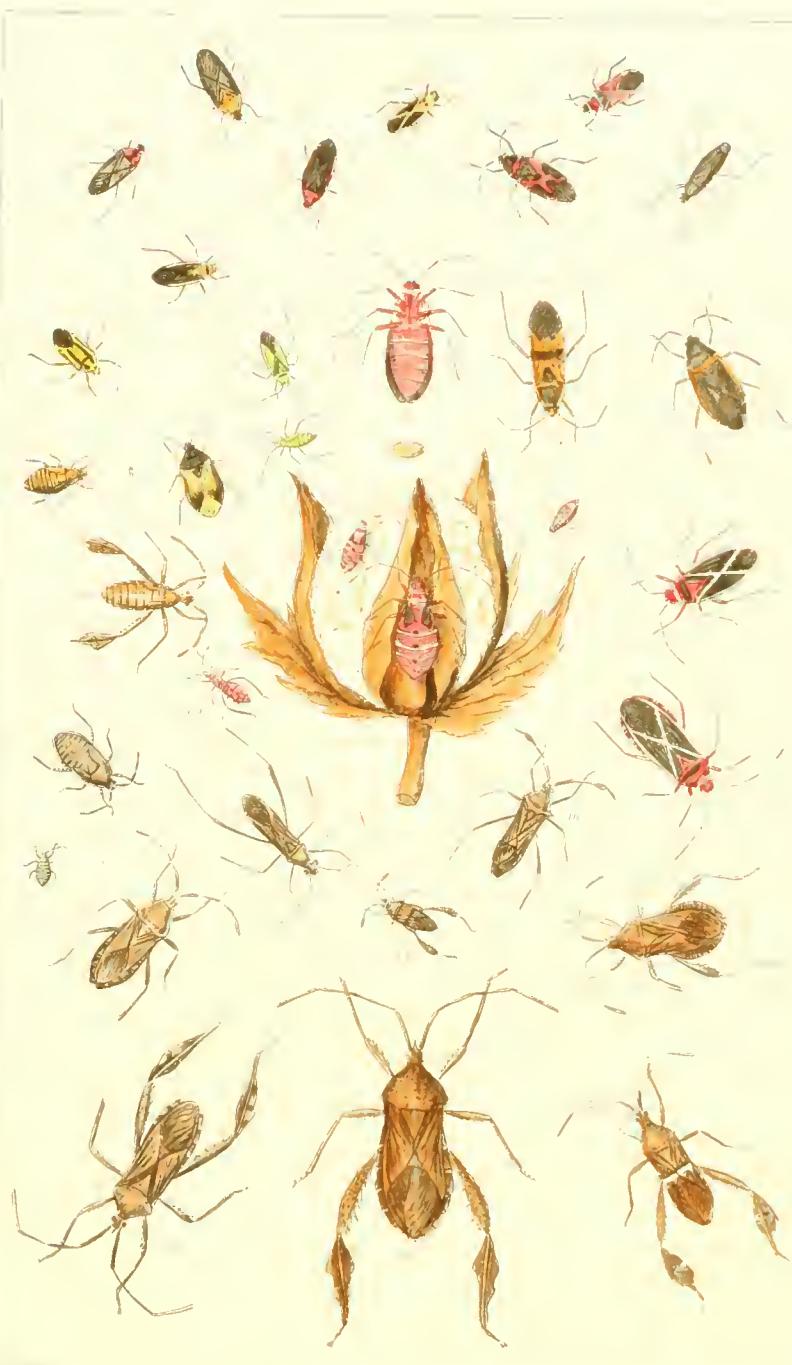


Plate II. Heteroptera.

1. <i>Homaemus</i> , (Dallas) <i>parvulus</i> . H. Schf.	<u>Pachycoris</u> , Burm.	Sam 1. Longisutuli.
2. <i>Ophthalmicus</i> , (Schill) <i>piceus</i> . Say.	<u>Salda</u> , Say 1. 336.	" -- 3. Inferioris.
3. <i>Trichopepla</i> , (Stål) <i>semivittata</i> . Say.	<u>Pentatoma</u> , Say 2. 322.	" -- 1. Longisutuli.
4. <i>Pelionotus</i> , (Uhler) <i>abbreviatus</i> . Uhler.		" -- 3. Inferioris.
5. <i>Cenex</i> , (Dallas) <i>delia</i> . Say.	<u>Pentatoma</u> , Say. 2. 320.	" -- 1. Longisutuli.
6. <i>Cosmopepla</i> , (Stål) <i>carnifex</i> . Fab.	<u>Eysarcoris</u> , Dallas.	" -- " -- "
7. <i>Ablus</i> , (Stål) <i>typhaeus</i> . Fab.	<u>Mormidea</u> , Amy.	" -- " -- "
8. <i>Schizus</i> , (Amy.) <i>ligata</i> . Say.	<u>Cydnus</u> , Say. 1. 322.	" -- " -- "
9. <i>Mormidea</i> , (Amy. 134) <i>lugens</i> . Fab.	Say 1. 322.:	<u>Pentatoma</u>
10. <i>Corimelaena</i> , (Kreuter) <i>lateralis</i> . Fab.		" -- " -- "
11. <i>Allothus</i> , (Dallas) <i>bilineatus</i> . Say.	<u>Cydnus</u> , Say. 2. 242 & 323.	" -- " -- "
12. <i>Euschistus</i> , (Dall) <i>punctipes</i> . Say.	<u>Pentatoma</u> , Say 1. 314.	" -- " -- "
13. <i>Euschistus</i> , (Dall) <i>luridus</i> . Dall		" -- " -- "
14. <i>Hymenarcys</i> , (Amy. 124) <i>nervosa</i> . Say.	<u>Pentatoma</u> , Say. 1. 321.	" -- " -- "
15. <i>Euschistus</i> , (Dall) <i>ictericus</i> . Linn.		" -- " -- "
16. <i>Micropus</i> , (Spin.) <i>leucopterus</i> . Say.	<u>Tygaeus</u> Say 1. 329. <u>Rhyparochromus</u> , Curt.	3. Inferioris.
17. -- " -- " -- " -- " -- " -- " -- " -- " -- " -- "		" -- " -- "
18. <i>Halticus</i> , (Fieb.) <i>pallicornis</i> . Fab.	<u>Caprus</u> .	" 5 Bicelluli.
19. <i>Ptochomera</i> , (Say) <i>nodosa</i> . Say. 1. 335.		" 3 Inferioris.
20. <i>Stiretrus</i> , (Lap.) <i>fimbriatus</i> . Say.	<u>Setyra</u> , Say. 1. 94	" 1. Longisutuli.
* 21. <i>Perillus</i> , (Stål) <i>clandus</i> . Say.	<u>Pentatoma</u> , Say, Tourn. Acad IV. 572.	" -- " -- "
22. <i>Strachia</i> , (Hahn) <i>hastionica</i> , Hahn.		" -- " -- "
23. <i>Rhaphigaster</i> , (Lap. Amy. 145) <i>hilaris</i> . Say.	<u>Pentatoma</u> , Say 1. 304. 376.	" -- " -- "
24. <i>Thyanta</i> , (Stål) <i>custator</i> Fab	<u>Pentatoma calcata</u> Say 1. 320	" -- " -- "
25. <i>Stiretrus</i> , (Lap.) <i>deana</i> . Fab.	<u>Asopus</u> , Amy.	" -- " -- "
26. <i>Brechymera</i> , (Amy.) <i>arborea</i> . Say	<u>Pentatoma</u> Say 2. 239.	" -- " -- "
27. <i>Setyra</i> , (Fab.) <i>bipunctata</i> , H. Schf.		" -- " -- "
28. <i>Podisus</i> , (Stål) <i>spiniferus</i> . Dallas.	<u>Arma</u> , Hahn.	" -- " -- "
29. <i>Podisus</i> , (Stål) <i>cynicus</i> . Say.	<u>Pentatoma</u> Say 1. 312. <u>Arma grandis</u> , Dallas,	" -- " -- "
	{ <u>Arma bracteata</u> , Fisch. is only a broad shouldered var.}	

* *Perillus clandus* should be *clandus*. (Typ. error in Say.)



Plate III. Heteroptera.

1. *Nabis*. (Latr.) *fornus*. Linn. ——— *Nudirostris*.
2. *Garganus*. (Stål) *fusiformis*. Say. *Capsus*. Say. ——— 5 *Bicelluli*.
3. *Anadus*. (Fab.) *americanus*. H. Schf. ———, — *Ductirostris*.
4. *Brachyrhynchus*. (Lap.) *granulatus*. Say. *Aradus*. Say. ——— " " "
5. *Edancala*. (Amy.) *dorsalis*. Say. *Miris*. Say. 1. 348. ——— " *Inferioris*.
6. *Harmastes* (Dall) *reflexulus* Say. *Syromastes*. Say 1. 323 (var) " — *Supercornis*.
7. *Myodocha*. (Lat.) ? — — on *Tobacco*. Fla. ——— " *Inferioris*.
8. *Sinea*. (Amy.) *multispinosa*. Degeer. ♀. ——— " *Nudirostris*.
9. *Acanthia* (Fab.) *Lectularia*. Linn. ——— " *Ductirostris*.
10. *Neides*. (Latr.) *spiniferus*. Say 1. 28. & 328. *Berytinus*. (Fab.) Say. ——— " *Supercornis*.
11. *Phytocoris* (Fall.) *multistriatus*. Say. — *Capsus*. Say. 1. 321. — " " 5 *Bicelluli*.
12. *Milias* (Stål) *cinctus*. Fab. *Harpactor*. Lap. ———, — *Nudirostris*.
13. *Phymata* (Latr.) *erosa*. Fab. *Syrtes*. Fab. ——— " *Ductirostris*.
14. *Prionotus*. (Latr. Amy 357) *cristatus*. Linn. *Pedunus*. Fab. *novenarius*. } Say. 1. 71. *Nabis* Say 1. 358. } *Nudirostris*.
15. *Leptocorisa*. (Latr.) *tipuloides*. Latr. ——— " *Supercornis*.
16. *Hammatocerus*. (Burm.) *piucus*. Drury. *Nabis* (Amy) Say. 1. 358. " " *Nudirostris*.
17. *Ectrichodia*. (Lep. & Scra) *cruciata*. Say 1. 358. *Petalochirus*. Beauv. " " "
18. *Evagorus*. (Burm.) *nubidus*. Lep. ——— " " "
19. *Conorhinus*. (Lap.) *variegatus*. Drury. *C. Sanguisuga*. LeCont. " " "
20. *Melanolestes*. (Stål.) *abdominalis*. H. Schf. *Pirates*. Amy. " " "
21. *Myodocha*. (Lat.) *petiolata*. Say 1. 357. *M. optilata*. Say. error. " *Inferioris*



Plate. IV. Heteroptera.

1. *Brachytropis*. (Fieber.) *calcaratus*. Fallen. — Fam. 5. *Bicelluli*.
2. *Tingis*. (Fab.) *arcuatus*. Say 1. 350. — " 6. *Nudirostris*.
3. *Labops* (Fiel.) *hesperus*. Uhler. — " 5. *Bicelluli*.
4. *Eurygaster*. (Lap.) *alternatus*. Say 2. 243. *Coreus*. Say — " 1. *Longiscutis*.
5. *Perillus*. (Stål) *exaptus* Say. *Pentatomia*, Say 2. 240. *Xirona*. Amy. 86. — " — "
6. *Pachycooris* (Burm.) *Fabricii*. Linn. — " — " —
7. *Neottiglossa*. (Kirby.) *undata*. Say. *Pentatomia* Say 1. 319. — " — " —
8. *Homaemus*. (Dall.) *aeneifrons*. Say. *Scutellera*. Say 1. 198. *Pachycooris exilis*. H. Sch. — " —
9. *Chelinidea*. (Uhler) *vittigera*. Uhler. — " 2. *Supericornes*.
10. *Harmastes*. (Gall.) *fraterculus*. Say. *Syromastes* Say 1. 324. — " — " —
11. *Acanthocephala*. (Lap.) *thomasii*. Uhler. *Metapodus*. Westw. — " — " —
12. *Euthynnichus*. (Dall.) *Florianus*. Linn. *Asopus*. Burm. *Pentatomia* — } " — 1. *Longiscutis*.
} *marginata* Say 1. 313
13. *Ocanthosoma*. (Curt.) *cruciata*. Say. *Edessa*. Say 1. 311. — " — " —
14. *Stiretrus*. (Lap.) *fimbriatus*. Say. (var.) *Tetra*. Say 1. 93. 811. *Asopus*. Burm. — " — "
15. *Banasa*. (Stål.) *calva*. Say. *Pentatomia*. Say 1. 318. — " — " —
16. *Prooxys*. (Amy.) *victor*. Fab. *Prooxys*. Spin. — " — " —
17. *Pygolampus*. (Germ.) *pectoralis*. Say. *Reduvius*. Say 1. 306. 357. — " — 7. *Nudirostris*.
18. *Salda*. (Fab.) *saltatoria*. Linn. — " — " —
19. *Cœnus*. (Dall.) *vinidicatus*. Uhler. — " — 1. *Longiscutis*
20. *Stretnus*. (Lap.) *diana*. Fab. *Asopus*. Burm. — " — " —
21. *Tropicoris*. (Dall.) *rufipes*. Linn. — " — " —
22. *Pirates*. (Amy.) *biguttatus*. Say. *Petalochirus*. Say 1. 307 — " — 7. *Nudirostris*.
23. *Chlorochroa*. (Stål.) *ligata*. Say. *Pentatomia*. Say 1. 316. *P. rufocincta* } 1. *Longiscutis*.
of Hahn.
24. *Leptocoris*. (Hahn.) *trivittatus*. Say. Jour Acad. Sc. Phil Vol IV. — " — 3. *Infericornes*.
25. *Emesa*. (Fab.) *longipes*. De geer. *Ploiania*? *brunneennis*. Say 1. 106. — " — 7. *Nudirostris*.
26. *Alydus*. (Fab.) *ater*. Dallas. — " — 2. *Supericornes*.



Plate V. Heteroptera.

1. *Gerris*. (Fab.) *lacustris*. Fab. — Fam 8. *Ploteres*.
2. *Golgulus*. (Latr.) *oculatus*. Fab. — " 9. or 1. *Pigomni*
3. *Panatra*. (Fab.) *4. dentata*. Stål. — " 10. or 2. *Pedirapti*.
4. *Notonecta*. (Linn.) *insulata*. Kiel. — " 11. or 3. *Pedirapti*
5. *Naucoris*. (Geoff) *poeyi*. Guen. (var.) — " 10. or 2. *Pedirapti*.
6. *Gerris*. (Fab.) *conformis* Uhler. — " 8. *Ploteres*.
7. *Corixa*. (Geoff) *interrupta* Say 2.250 *Corixa*. Amy. — " 11. or 3. *Pedirapti*.
8. *Belostoma*. (Latr.) *americana*. Leidy. *Nepa*. Linn. — " 10. or 2. *Pedirapti*.
9. *Notonecta*. (Linn.) *undulata*. Say 1. 368. — " 11. or 3. *Pedirapti*.
10. *Nepa*. (Linn.) *apiculata*. Harr. — " 10. or 2. *Pedirapti*.
11. *Serphus*. (Stål) *dilatatus*. Say 1. 366. *Zaitha*. Amy *stollii*. Amy. — " — " —
12. *Zaitha*. (Amy.) *fluminea*. Say 1. 365. *Pentostoma* Leidy — " — " — "
13. *Rhagovelia*. (Mayer.) *collaris*. Burm. *Velia*. Latr. — " — " — "
14. *Corixa*. (Geoff.) *vulnerata*. Uhler. — " 11. or 3. *Pedirapti*.
15. *Hebrus*. (Curtis.) *americanus*. Uhler. — " — 6. *Ductirostri*
16. *Halobates*. (Esch.) *pictus*. H. Schf. — " — 8. *Ploteres* —
-
-

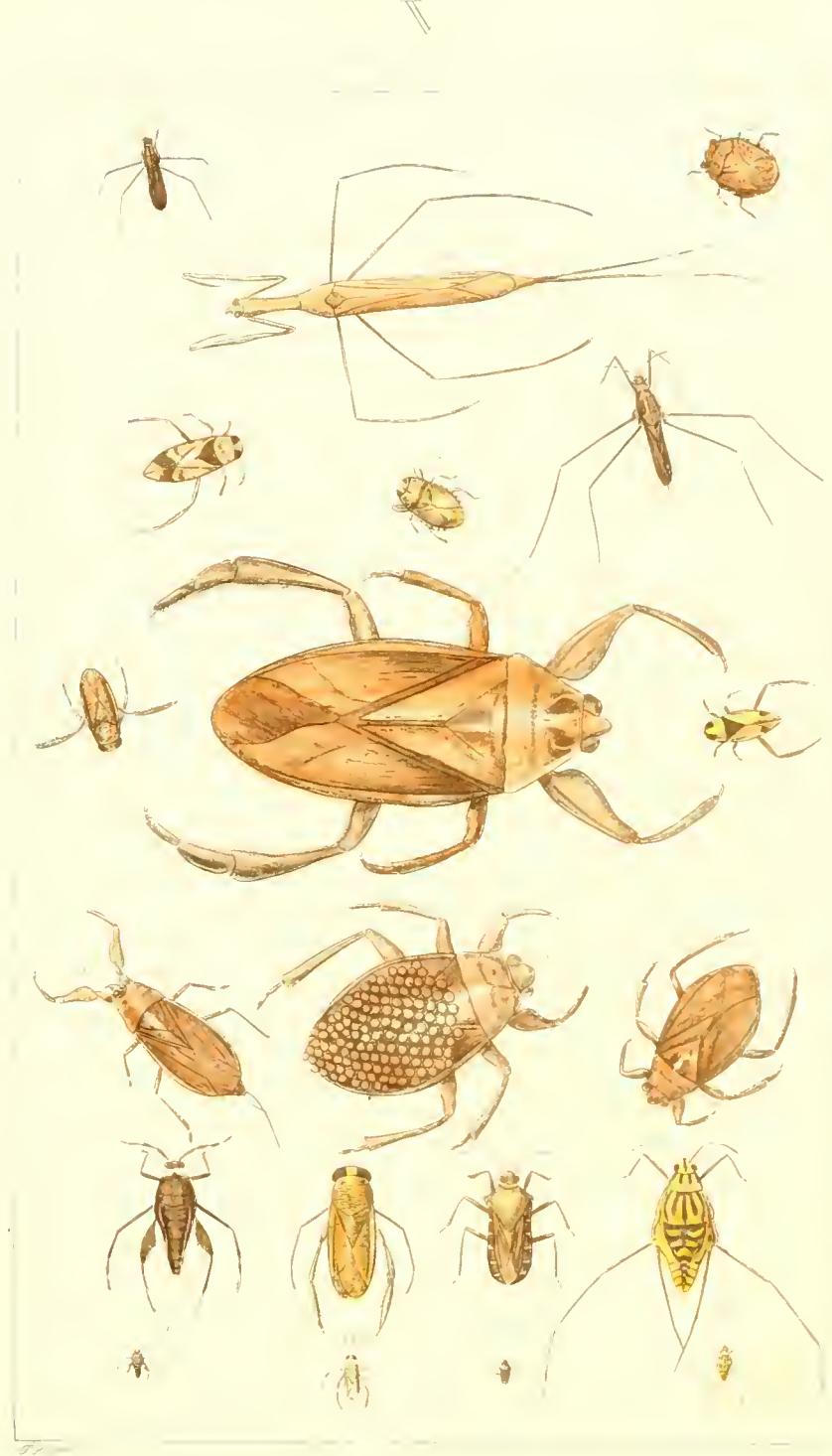


Plate. VII. Heteroptera.

	Fam 5. Bicelluli.
1. <i>Rhopalotomus</i> . (Fieb.) <i>pacificus</i> . Uhler.	" — " — "
2. <i>Paciloscytus</i> . (Fieb.) <i>diffusus</i> . Uhler.	" — " — "
3. <i>Heraeus</i> . (Stål) <i>insignis</i> . Uhler. <i>Pachymerus</i> . Lepell.	" — 3. Infericornes
4. <i>Orthotylus</i> . (Fieb.) <i>discordalis</i> . Uhler. <i>Capsus</i> .	" — 5. Bicelluli
5. <i>Lygas</i> . (Hahn.) <i>Lineolaris</i> . Beauv. <i>Phytocoris</i> Fall. <i>Capsus oblineatus</i> . Say ¹ / ₃₄₀	" — " — " — "
6. <i>Lopidea</i> . (Uhler). <i>media</i> . Say. <i>Capsus</i> . Say 1. 341.	" — " — " — "
7. <i>Calocoris</i> . (Fieb.) <i>Palmerii</i> . Uhler.	" — " — " — "
8. <i>Zicrona</i> . (Amy.) <i>Cuprea</i> . Dall.	" — 1. Longiscutis
9. <i>Lygaeus</i> . (Fab.) <i>circumscriptus</i> . Stål.	" — 3. Infericornes
10. <i>Lygaeus</i> . (Fab.) <i>histriangularis</i> . Say 1. 328.	" — " — " — "
11. <i>Charagocheilus</i> . (Fieb.) <i>venaticus</i> . Uhler.	" — 5. Bicelluli.
12. <i>Dasyconis</i> (Dall) <i>humilis</i> . Stål.	" — 2. Supericornes.
13. <i>Nabis</i> (Lat) <i>coleoptratus</i> . Kirby.	" — 7. Nudirostris
14. — " — " — " wingless form.	" — " — " — "
15. <i>Harmastes</i> . (Dale) <i>reflexulus</i> . Say. <i>Syromastes</i> . Say ¹ / ₃₂₃ . <i>Rhopalus</i> . Schill.	" — 2. Supericornes
16. <i>Catorhyntha</i> . (Stål) <i>guttula</i> . Fab. <i>Metastemma</i> . Amy.	" — 7. Nudirostris.
17. <i>Margus</i> . (Fab.) <i>inconspicuus</i> . Hb. Schf.	" — 2. Supericornes
18. <i>Miris</i> . (Fab.) <i>debilis</i> . Uhler.	" — 5. Bicelluli.
19. <i>Lygas</i> . (Hahn) <i>annaeus</i> . Uhler	" — " — " — "
20. <i>Malacoconis</i> . (Fieb.) <i>irroratus</i> . Say. <i>Capsus</i> . Say 1. 346.	" — " — " — "
21. <i>Alydus</i> . (Fab.) <i>euninus</i> . Say. <i>Lygaeus</i> . Say 2. 247.	" — 2. Supericornes.
22. <i>Cimex</i> (Linin) <i>platychelius</i> . Uhler	" — 1. Longiscutis.
23. <i>Protenor</i> . (Stål) <i>belfragei</i> . Hagland.	" — 2. Supericornes.
24. <i>Apiomerus</i> . (Barw.) <i>spissipes</i> . Say. <i>Reduvius</i> . Say 1. 72.	" — 7. Nudirostris.
25. <i>Pterogaster</i> . (Amy) <i>calcarator</i> . Fab. { <i>Coneus alternatus</i> . Say Journ. " — 2. Supericornes. and IV. <i>Archimerus</i> . Stål. }	
26. <i>Lygaeus</i> . (Fab.) <i>reclivatus</i> . Say. 2. 245.	" — 3. Infericornes.
27. <i>Chlorochroa</i> . (Stål) <i>congrua</i> . Uhler.	" — 1. Longiscutis
28. <i>Leptoglossus</i> . (Stål & Guerin) <i>corculus</i> . Say 1. 326. (var.)	" — 2. Supericornes.
29. <i>Olivetinus</i> . (Lap.) <i>deana</i> . Fab.	" — 1. Longiscutis.
30. <i>Apiomerus</i> . (Barw.) <i>crassipes</i> . Fab. <i>Reduvius</i> . Say. 1. 72.	" — 7. Nudirostris.

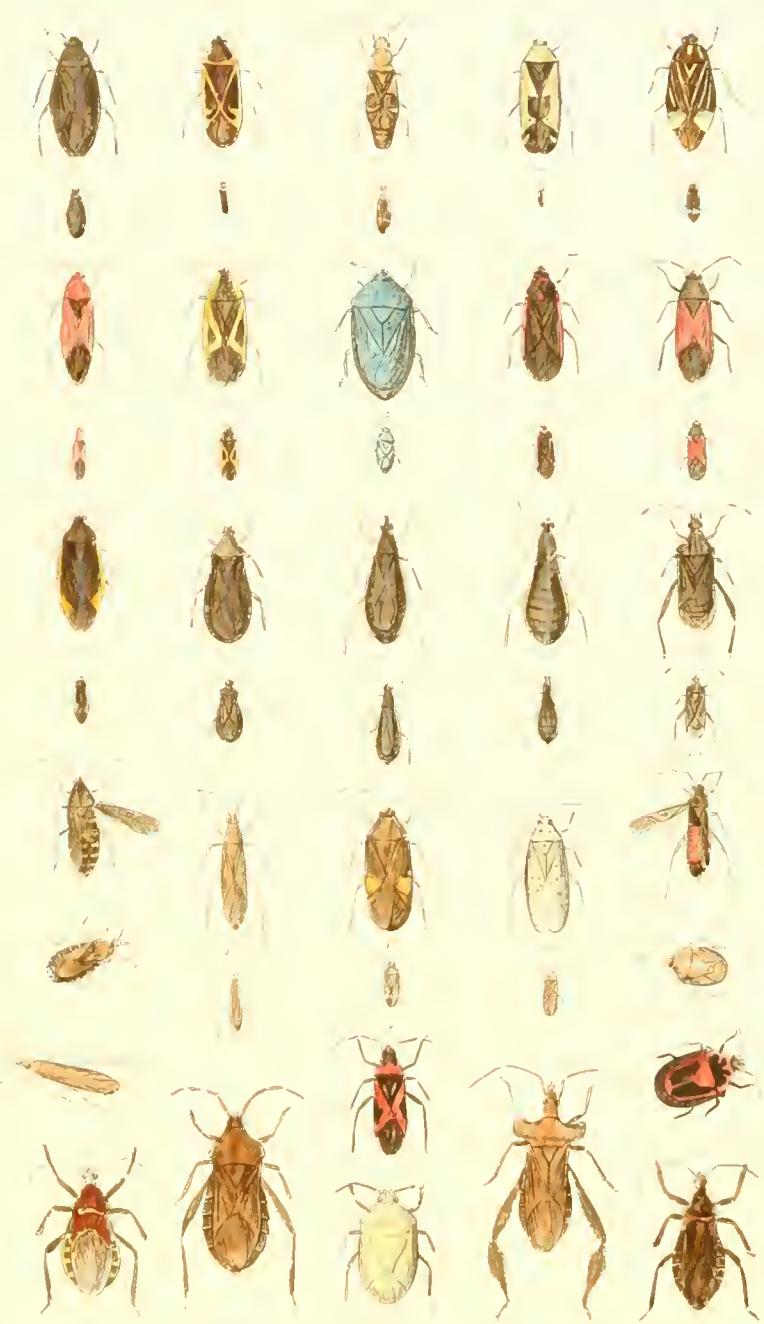
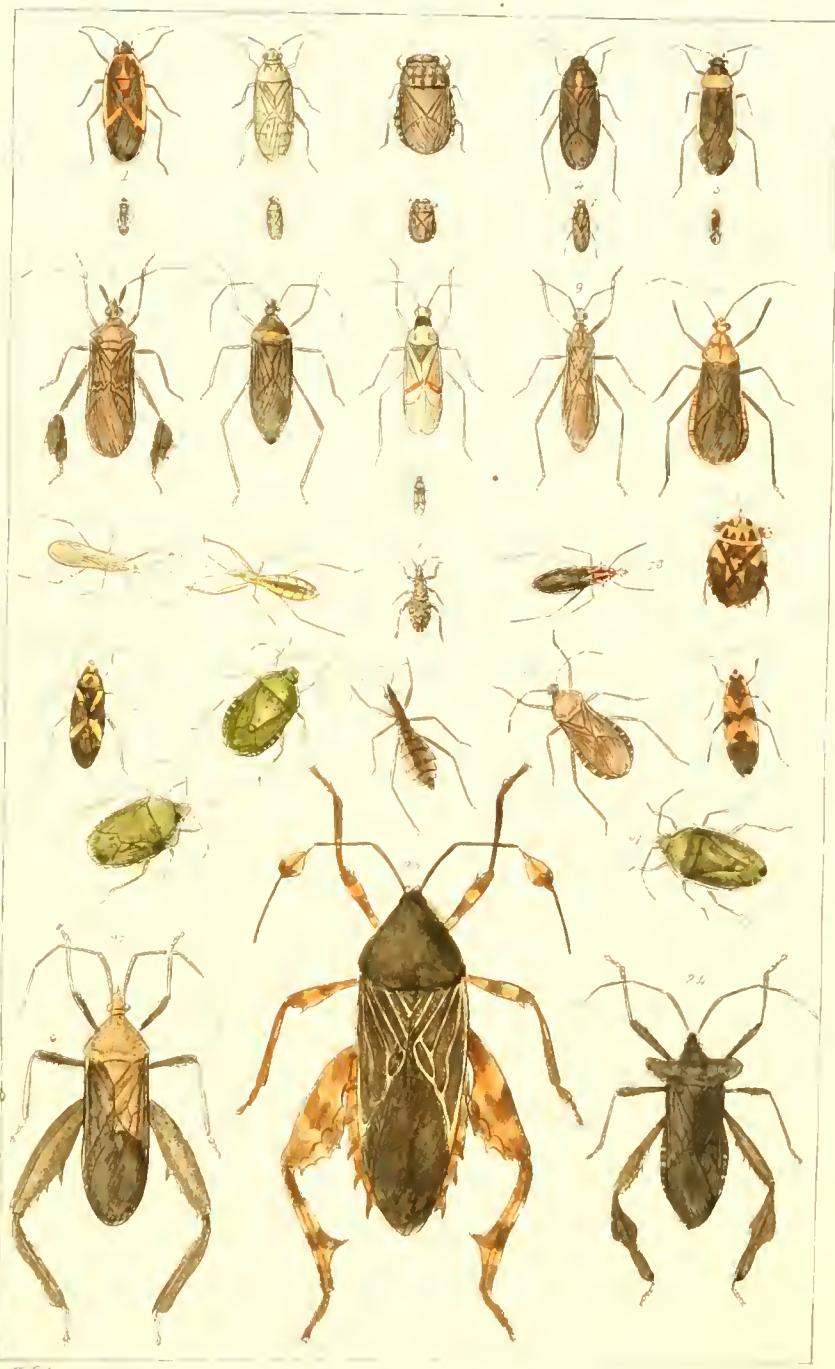


Plate VIII. Heteroptera.

1. *Lygaeus*. (Fab.) *admirabilis*. Uhler: ————— 3. Infericernes
 2. *Nysius*. (Dall.) *californicus*. Uhler: ————— " " "
 3. *Mononyx*. (Lap.) *badius*. H. Schf. ————— " ^{9 or 1. Bigemmii}
^{Amyot 425}
 4. *Resithenia*. (Spin.). *eremicola*. Uhler. — Capsus Fab — " 5. Bicelluli-
 5. *Oncostylus*. (Fieb) *militaris*. Uhler: ————— " " "
 6. *Leptoglossus*. (Stål & Guer.) *zonatus*. Dall. ————— " 2 Supericernes
 7. *Pthia*. (Girou). *picta*. Drury. ————— " " "
 8. *Campyloneura*. (Fieb) *nitripennis*. Say 1. 345. Capsus. Say. — " 5 Bicelluli-
 9. *Reduvius*. (Fab.) *personatus*. Linn. ————— " 7 Nudirostri.
 10. *Ectrichodia*. (Lap & Serv.) *cinctiventris*. Stål. — Ectrichotes. Burm. — " " "
 11. *Fitchia*. (Stål.) *spinulosa*. Stål. ————— " " "
 12. — " — *nigrovittata*. Stål. ————— " " "
 13. *Rhipipta*. (Stål) *taurus*. Fab. ————— Zelus. Fab. — " " "
 14. *Ambrysus*. (Stål.) *signoreti*. Stål. ————— Naucoris. Geoff. — " 10 or 2. Pediropti
 15. *Lygaeus*. (Fab.) *gutta*. H. Schf. ————— " " 3. Infericernes.
 16. *Chlorochroa*. (Stål, Sayi). Stål. Pentatomæ. ————— " 1. Longiscutellæ
 17. *Stenopoda*. (Lap.) *cinerea*. Lap. ————— " 7. Nudirostri ..
 18. *Anasa*. (Amy.) *armigera*. Say 1. 244. ————— Coreus. Say. — " 2 Supericernes.
 19. *Lygaeus*. (Fab.) *fasciatus*. Dallas. ————— " " 3. Infericernes.
 20. *Nerara*. (Amy.) *viridula*. Linn. ————— Pentatomæ. — " 1 Longiscutellæ
 21. *Pentatomæ*. (Pal. de Beauv.) *juniperana*. Linn. ————— " " "
 22. *Acanthocephala*. (Lap.) *thomasii*. S. Uhler. — Metaphoccius. Westw. " 2 Supericernes.
 23. *Pachylypis*. (Lap. & Serv.) *gigas*. Burm. ————— " " "
 24. *Acanthocephala*. (Lap.) *declivis*. Say. Rhinocerus, Say 1. 305. 327. " " " "



T. G. Morris

Plate VIII. Heteroptera.

1. *Monanthia*. (Lep & Serv.) ? — *Tingis*. Fab. — (U.S.) Sam 6 Ductirostr.
 2. " " *plexus* Say — *Tingis* Say 1. 349 — " " " " —
 3. *Tingis* (Fab.) *gossypii* Fab. — Fieber. p. 104. pl. IX. fig. 1. — (West Ind.) " " " " —
 4. " " *hyalina* Fab. — Fieber. p. 103. pl. IX. fig. 5. — (U.S.) " " " " —
 5. *Monanthia*. (Lep & Serv.) ? — *Tingis* — (U.S.) " " " " —
 6. " " ? — *Tingis* — (U.S.) " " " " —
 7. *Piesma*. (Lep & Serv.) *cineria*. Say *Zosmerus*. Burm. *Tingis* Say ¹₃₄₉ U.S. — " " " " —
 8. *Comimelaena*. (White) *pulicaria*. Germar. — (U.S.) " — 1. Longiscutis.
 9. *Mysius*. (Dalb.) *raphanus*. Howard. *M. destructor*. Riley. — " " 3. Infericornes.
 10. *Macrocephalus*. (Swederus) *prehensilis*. Fab. — " " 6. Ductirostr.
 11. *Rhipharochromus*. (Curtis.) *fallax*. Say 1. 333. *Pachymerus*. Burm. — " 3. Infericornes.
 12. *Lygaeus*. (Fab.) *facetus*. Say 1. 328 — " " " " —
 13. *Velia* (Lat.) *currens*. Lat. — Douglas p. 571. pl. XIX. 2 — (Eu) — " 8. Ploteres.
 14. *Limnobates*. (Burm.) *stagnorum*. Burm. — Doug. p. 576. pl. XX. 7. (Eu) — " 7. Nudirostr.
 15. *Plea* (Leach.) *minutissima*. Leach. *Plea*. Burm. p. 591. pl. XX. 3. " — 11 or 3. Pediremi.
 16. *Aphelocheirus*. (Westw.) *festivalis* Westw. — Doug. p. 578. pl. XIX. 5. " — 10 or 2. Pedirapt.
 17. *Sigara* (Fab.) *minutissima*. Leach. — " p. 616 pl. XX. 6. " — 11 or 3. Pediremi.
 18. *Hedrus*. (Curt.) *fusillus*. Curtis. — " p. 266 pl. XIX. 4. " — 6. Ductirostr.
 x. 19. *Myrmecodia*. Bärens. *coleoptrata*. Bärens. ♀, p. 484 pl. XVI. 1. " — " 3. Infericornes.
 { ♂. *Sclerotropus exilis* Fiel. Doug.
 20. *Pygolampus*. (Germ.) *bifurcata*. Fiel. — " p. 639. pl. XVII. 4. " — " 7. Nudirostr.
 21. *Salda*. (Fab.) *fulchella*. H. Schaf. — " p. 520. pl. XVIII. 9. " — " " —
 22. *Ceratocombus*. (Sign.) *muscorum*. Fab. — " p. 419. pl. XXI. 5. " — " " —
 23. *Maotys*. (Amy) *fuscus*. Gray. Amgot. p. 318 pl. 4 fig. 4. — (Java) — 7. Nudirostr.
 24. *Stiphrosoma*. (Fiel.) *leucocephala* Fiel. — Doug p. 682. pl. XXI. 2. (Eu) — 5. Bicelluli.
 25. *Lioderma*. (Uhler.) *sauzia*. Say *Pentatomia*. Say. 1. 318 — (U.S.) — 1. Longiscutis.
 26. *Chlorochroa*. (Stål.) Uhlerii. Stål. — " " " " —
 27. *Moxena* (Amy 192) *lineolata* H. Schaf. — " " " " 2. Supericornes.
 28. *Proxys* s. (Amy) *tenebrosa*. Say. *Pentatomia* Say 1. 304. *Proxys* Spin. (U.S.) — 1. Longiscutis.
 29. *Arvelius*. (Spin.) *albopunctatus*. (Uhler's coll.) — (U.S.) — " " " —
 30. *Gerris*. (Fab.) *remigis* Say 1. 362. — (U.S.) — " 8. Ploteres.
 31. *Perillus*. (Stål.) *circumcinctus*. Stål. in Stettinger. Ent. Test. Vol. XX. — " — 1. Longiscutis.
 32. *Aceratodes* (Amy 160) *cornuta*. Burm. *Edessa* Fab. — " " " " —
Pentatomia bifida. Say. 1. 303. 322. 5
 33. *Spantocerus*. (Burm.) *fuscus*. Thunb. *Coneus diffusus* (var) Say 1. " — 2. Supericornes
 34. *Naucoris*. (Geoff.) *poeyi*. Guen. — " " " " 10 or 2. Pedirapt.
 35. *Acinocoris*. (Hahn) *separatus*. Uhler. Miss. — " " " " 4. Cecigenae.
 36. *Pachylis*. (Lep & Serv.) *gigas*. Burm. (Nymph. or pupa) — " " " 2. Supericornes
 37. *Augocoris*. (Burm.) *pallidus*. Burm. — " " " " 1. Longiscutis.
 38. *Chlorochroa*. (Stål.) *sayi*. Uhler's Coll. — " " " " " —
 39. *Apionerus*. (Burm.) *occidentalis*. Uhler. Miss. — " " " " 7. Nudirostr.

VIII

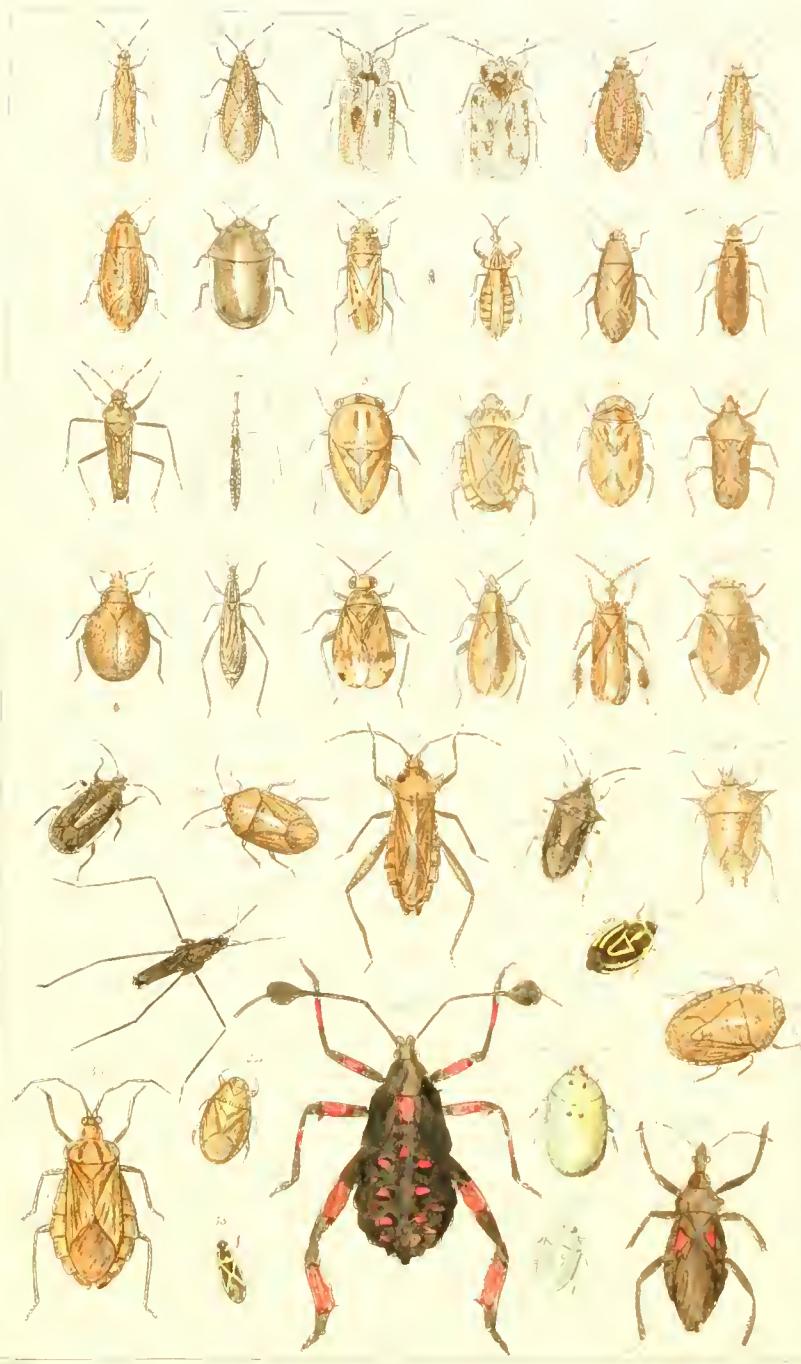


Plate. IX. Heteroptera.

1. *Melanolestes*. (Stål) *picipes*. H. Schf. — *Pirates*. Amy. — Jam 7. Nudirostris.
 2. *Brechymena*. (Amy) *annulata*. Fab. — " — 1. Longiscutis.
 3. *Vulcirea*. (Spin.) *violacea*. Fab. — " — " — "
 4. *Nerara*. (Amy.) *pennsylvanica*. De geer. *Raphigaster*. Fitch 1856. 389. " — " — "
 5. *Tadera*. (Stål) *haematosoma*. Burn — " — 2. Supericornes.
 6. *Polygonus*. (Latr.) *marginatus*. Lat Amy 409. Westw 2. 465 fig 120. (Eu) — 7. Nudirostris.
 7. *Acanthasma*. (Curtis.) *nebulosa*. Körz. — " — 1. Longiscutis.
 8. *Coptosoma*. (Lap) *globus*. Fab. Amy. 65. Westw 2. 485. fig 122. (Eu) — " — " — "
 9. *Pyrrhocoris*. (Fall) *apterus*. Linn. Amy 267 Westw. 2. 475 fig 121. *Cimex* (Eu) — " — 4. Cecigenae.
 10. *Acanthia*. (Fab.) *saltatoria*. Linn. Westw. 2. 465. fig 120. (Eu) — " — 6. Ductirostris.
 11. *Aula costatus* (Uhler) *marmoratus*. Say *Setyra*. Say. 1. 310 — " — 1. Longiscutis.
 12. *Podisus*. (Stål) *modestus*. Dallas. *Arma*. Fitch. 1856. 390 — " — " — "
 13. *Ploaria*. (Scop) *vagabunda*. Linn. Douglas. 536. XVIII. 1. *Gerris*. Fab. *Cimex* Linn. (Eu) Nudirostris.
 14. *Corimelaena*. (White) *nituloides*. Wolff. *C. heteroides*. Say 1. 311. *Thysocoris*. Schrank. Longiscutis.
 15. — " — " — *atra*. Amy. 68. *Galgupha*. Amy. — Jam. 1. Longiscutis.
 16. *Podops*. (Lap) *dubius*. Beauf. — " — " — "
 17. *Chorosoma*. (Curtis. Amy. 231.) *Schellingi*. Fiel. *Rhopalus*. Schill (Eu) Doug. 139. V. 5. " — 2. Supericornes.
 18. *Rhopalus*. (Schill) *lateralis*. Say. C. reus. Say 2. 245. — " — " — "
 19. *Diplodus*. (Amy 370) *luridus*. Stål. *Reduvius* Lep & Gerv. *Evagonus* Burn *viridis* (Uhler) Nudirostris.
 20. *Coranus*. (Curtis.) *subapterus*. Degeer. Doug. 541. XVIII. 9. *Cimex*. Degeer. (Eu) { — } — 7 Nudirostris.
{ *Tylocoris pedestris*. Dub }
 21. *Eurygaster*. (Lap) *maurus*. Linn. Amy 53. Douglas 65. II. 6. (Eu) *Cimex* Linn. — 1. Longiscutis.
 22. *Podisus*. (Stål) *placidus*. Uhler. — " — " — "
 23. *Abelia*. (Fall) *acuminata*. Linn. Doug. 68. II. 6. (Eu) *Cimex* Linn. — " — " — "
 24. *Euschistus*. (Dallas) *tristigma*. Harr. *Pentatomia* Say 1. 314. — " — " — "
 25. *Syromastes*. (Latr) *marginatus*. Linn. Doug. 110. IV. 3. (Eu) *Cimex* Linn. — " — 7 Supericornes
 26. *Alydus*. (Fall) *calcaratus*. Linn. Amy 226. Doug. 163. V. 7. (Eu) *Cimex* Linn. " — " — "
 27. *Iherapha*. (Amy 264) *Hydrocyama*. Linn. Doug. 129. V. 2. (Eu) Amy. 264. " — 3 Infericornes?
 28. *Bryocoris*. (Fall) *pteridis*. Fall. Doug. 277. X. 1. (Eu) *Capsus*. " — 5 Bicelluli.
 29. *Anthocoris*. (Fall) *nemorum*. Linn. Doug. 495. X. 6. (Eu) *Cimex* Linn. — " — 3 Infericornes.
 30. *Camaronotus*. (Fiel) *cinnamopterus*. Kirschb. Doug. 359. XI. 8. (Eu) *Capsus*. " — 5 Bicelluli. —
 31. *Lyzus*. (Koch) *pratensis*. Linn. — " — 464. XV. 2. (Eu) *Cimex* Linn. — " — "
 32. *Tylocoris*. (L. Dup.) *ater*. L. Dup. — " — 507. XII. 6. (Eu) — " — " — "
 33. *Agramma*. (Westw) *laeta*. Fall. — " — 262. IX. 1. (Eu) *Tingis*. Fall. — " — "
 34. *Zasmenus*. (Lap.) *quadratus*. Fiel. — " — 238. XVIII. 9. (Eu) — Jam — 3. Infericornes.
 35. *Heterosternis*. (Spin. Amy. 250.) *taticeps*. — " — 229. XVIII. 5. (Eu) — " — " — "
- { *Heterogaster*, Curtis }

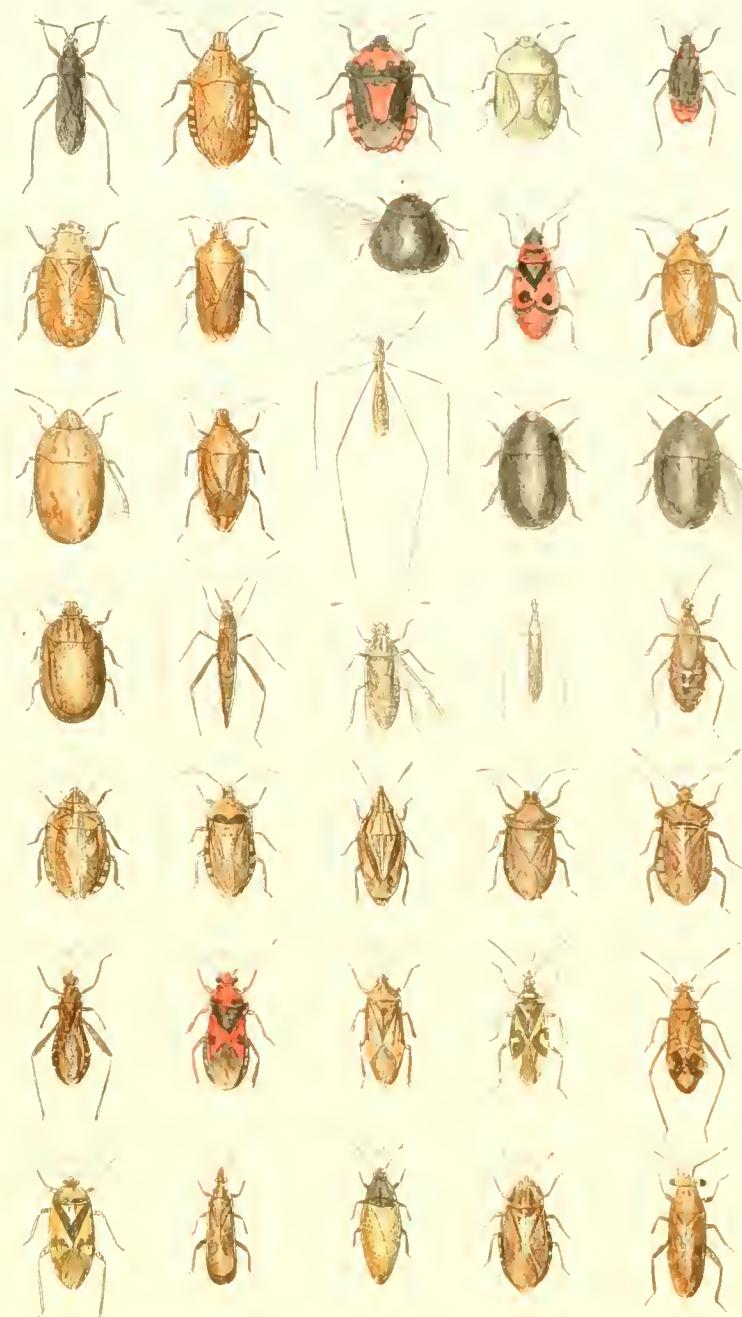


Plate X. Heteroptera.

- | | | |
|-----|----------------------------------|---|
| 1. | <i>Conomictopus</i> | <i>Fieber. Wiener Ent. Monatschrift. Vol 2. Nov 1858. pl 6.</i> (Side view of head) Bicelluli |
| 2. | <i>Acetaspis.</i> | " " " " |
| 3. | <i>Leptoterna.</i> | " " " " |
| 4. | <i>Camptobrochis.</i> | " " " " |
| 5. | <i>Brachycoleus.</i> | " " " " |
| 6. | <i>Heterocordylus.</i> | " " " " |
| 7. | <i>Oncotylus.</i> | " " " " |
| 8. | <i>Hacthorinus.</i> | " " " " |
| 9. | <i>Dioncus.</i> | " " " " |
| 10. | <i>Orthops.</i> | " " " " |
| 11. | <i>Tetricephalus.</i> | " " " " |
| 12. | <i>Stethosoma.</i> | " " " " |
| 13. | <i>Pithanus.</i> | " " " " |
| 14. | <i>Diciphus.</i> | " " " " |
| 15. | <i>Lioconis.</i> | " " " " |
| 16. | <i>Orthocephalus.</i> | " " " " |
| 17. | <i>Mecomma.</i> | " " " " |
| 18. | <i>Brachystira.</i> | " " " " |
| 19. | <i>Lobostethus.</i> | " " " " |
| 20. | <i>Iugonotylus.</i> | " " " " |
| 21. | <i>Loxops.</i> | " " " " |
| 22. | <i>Amblytylus.</i> | " " " " |
| 23. | <i>Alloctonus.</i> | " " " " |
| 24. | <i>Tichorhinus.</i> | " " " " |
| 25. | <i>Macrolophus.</i> | " " " " |
| 26. | <i>Packalops.</i> | " " " " |
| 27. | <i>Eremnoides.</i> | " " " " |
| 28. | <i>Camaronetes.</i> | " " " " |
| 29. | <i>Systellonotus</i> | " " " " |
| 30. | <i>Eremnoides.</i> | " " " " (Wing) |
| 31. | <i>Longiscutell</i> | Family 1. of Amyat & Scoville. |
| 32. | <i>Orbiscutell</i> (Tribe) | " " " " {Tribe 1 Orbiscutell |
| 33. | <i>Coniscutell</i> (Tribe) | " " " " {Tribe 2 Coniscutell |
| 34. | <i>Supericornes</i> | 2. " " " |
| 35. | <i>Infericornes</i> | 3. " " " |
| 36. | <i>Tetragonoccephali</i> (Tribe) | (2) <i>Supericornes</i> " " {Tribe 1. Tetragonoccephali |
| 37. | " | " " " " {Tribe 2. <i>Tetragonoccephali</i> |
| 38. | <i>Tetragonoccephali</i> (Tribe) | " " " " {Tribe 2. <i>Tetragonoccephali</i> |
| 39. | <i>Cecidogene</i> | 4. of Amyat & Scoville. |
| 40. | <i>Bicelluli</i> | 5. " " " |
| 41. | <i>Ductirostrum</i> | 6. " " " |
| 42. | <i>Nudirostrum</i> | 7. " " " |
| 43. | <i>Plerores</i> | 8. " " " |
| 44. | <i>Bugemmi</i> | Fam (1 or) 9. " " " |
| 45. | <i>Pedirapti</i> | (2 or) 10. " " " |
| 46. | <i>Pediveme</i> | (3 or) 11. " " " |
| 47. | <i>Pentatomia</i> - wing. | " " " |



J.G. -

Arrangement of Families &c of the Heteroptera.
or Plant bugs.

As no catalogue or synopsis of this order has yet been published in this country; it will be necessary to review what has already been done in Europe, and to give young entomologists some idea of the order in which the various families have hitherto been arranged. we will cite the different classifications of four of the principal authorities on the subject. viz. Burmeister in 1835. Westwood in 1840. Amyot & Serville. 1843. and lastly Douglas & Scott in 1864.

Burmeister in his "Handbuch der Entomologie" vol 2. (Berlin 1835) classifies the Hemiptera in the following manner.

Principal group 1. Insecta ametabola. or Insects without change (with imperfect metamorphosis.)

Order 1. Rhynchota. or insects with beaks.

Stirpes. (Westw 2.418) 1. Pediculinae. (Lice) - 2 Coccina. (Barth lice) - 3. Phytophyges.
(leaf lice) - & 1. Cicadina. (Kurrest flies.)

These are now all classed under the Homoptera. The first great group of the Hemiptera. whilst the second great group consists of the true Heteroptera. which are again subdivided into two divisions. or tribes.

Trib 1. (Stirpes 5. of Burm.) consisting of the water bugs. (Hydrocorces.)

" 2 (" 6. ") which contains true land bugs. (Geocores.)

The Hydrocorces are divided into 3 families. 1. Notonectini 2. Nepini. & 3. Galgulini.

The Geocores. are divided into 7 families. — 1. Hydromici. 2. Riptarii. 3. Reduvini

4. Membraeci. 5. Capsini. 6. Lygaeodes. 7. Coreodes.

The Genera and their Synonyms. are then arranged by Burmeister in the following manner.

2.

*Burmister's arrangement.*Division 1. (Linn & Burm)Family.GenusSynonyms1. *Notonectici*

Swimmers on the back

Notonectides. Lat.*Notonectites*. Lap.

1. *Corixa* Geoff. Latr. — { *Sigara* Fab.
Burm. p. 186. *Notonecta* Linn.
2. *Sigara* Leach. Fab Coque. { *Notonecta* Linn
Burm. p. 188.
3. *Plex* Stephens. — { *Notonecta* Burm.
Burm. p. 188. *Plex* Leach.
4. *Notonecta* Burm. —
Burm. p. 190.

2. *Nepini.*

Water Scorpions. —

1. *Naucoris* Burm. —
Burm. p. 193.

2. *Diplonychus* Lap. — { *Sphaeroderma* Lap.
Burm. p. 198. *nepha* Fab.
 Belostoma Latr.
3. *Belostomum*. Burm. — { *Belostoma* Latr.
Burm. p. 195. *nepa* Linn. Fab.
4. *Nepa*. Burm. — { *Nepa* Linn.
Burm. p. 195.
5. *Ranatra*. Burm. — { *Nepa* Linn.
Burm. p. 199.

3. *Galgulinii.*

Shore scorpion bugs. —

Galgulites. Lap. —

1. *Mononyx*. Lap. — { *Naucoris* Fab.
Burm. p. 201.
2. *Galgulus* Lat. Lap. — { *Naucoris* Fab.
Burm. p. 201.
3. *Pelozonus*. Lat. Lap.
Burm. p. 202.

Division 1.Hydrocores.

Water bugs. —

1. *Hydromici.*

Water runners.

Ploteres. Lat.*Amphicorisces* L. Duf.*Hydrometridae*. Lap.

1. *Halobates*. Esch. Lap.
Burm. p. 208.
2. *Hydrometra*. Fab. — { *Gerris* Lat. Lap. Schum.
Burm. p. 209.
3. *Limnobates*. Burm. — { *Hydrometra* Fab.
Burm. p. 210. Lat. Lap. Schum. Stegb.
4. *Oelia* Lat. Lap. Schum. — { *Hydrometra*. Fab.
Burm. p. 211.
5. *Hydracsa*. Burm. — { *Oelia* Leon Duf.
Burm. p. 213. *Microscotia* Wied.
6. *Helorus*. Westw. —
Burm. p. 21.

Division 2.Geocores.

Land bugs. —

2. *Riparii.*Runners on Shores —
or banks.

1. *Sanda*. Lat. Lap. — { *Acanthia*. Lat. Lap.
Burm. p. 215.
2. *Liptopus*. Lat. L. Duf.
Burm. p. 216.

over.

● *Omniphilicorisces*

3.
~ Burmeister's arrangement.

Division 1.

Family

Genus

Synonyms

- | | | |
|--|---|---|
| 1. <i>Emesa</i> . Tab. 1 Burm p 223) | { | <i>Picaria</i> . Gatr. |
| 2. <i>Gerrus</i> . - Tab. 1 (- " 223) | { | <i>Ploraria</i> . Scov. 3 Lst. Lep. |
| 3. <i>Xelus</i> . - Tab. 1 (- " 223) | | |
| 4. <i>Mycocoris</i> . Burm. (- " 226) | | |
| 5. <i>Eusagoris</i> Burm. (- " 226) | { | <i>Xelus</i> . Sch. |
| 6. <i>Notocryptus</i> . (- " 227) | { | <i>Reduvius</i> . Tab. |
| 7. <i>Ariulus</i> Hahn. (- " 227) | { | <i>Prionotus</i> Lap. <i>Xelus</i> Tab. |
| | | <i>Reduvius</i> . Burm. |
| 8. <i>Harpactor</i> . Lep. (- " 229) | { | <i>Reduvius</i> . Burm. |
| 9. <i>Apheimerus</i> Hahn. (- " 230) | { | <i>Reduvius</i> . Burm. |
| 10. <i>Macrops</i> . Burm. (- " 232) | { | <i>Macrothamus</i> . Lap. |
| 11. <i>Platynemus</i> . Lep. (- " 233) | | |
| 12. <i>Spinigoris</i> . Burm. (- " 234) | { | <i>Reduvius</i> . Lap. Sch. |
| 13. <i>Pseduvius</i> . Burm. (- " 235) | { | <i>Utriculus</i> . Klug. |
| 14. <i>Hammatocerus</i> . (- " 235) | { | <i>Hammatoerus</i> . Lap. |
| 15. <i>Sipinus</i> . Lep. (- " 236) | | |
| 16. <i>Diardes</i> . Burm. (- " 237) | { | <i>Cimbus</i> . Lap. |
| 17. <i>Ectrichotes</i> . (- " 237) | { | <i>Soricosus</i> Hahn. |
| | | <i>Ectrichodia</i> . Lap. |
| 18. <i>Pirates</i> . Scov. Lap. (- " 238) | { | <i>Eumerus</i> . Klug. |
| 19. <i>Pachynomus</i> . Klug. Lep. (- " 240) | | |
| 20. <i>Prosthemma</i> . Lap. (- " 241) | { | <i>Reduvius</i> . Tab. <i>Nabis</i> . Linn. |
| 21. <i>Nabis</i> . Gatr. (- " 241) | | |
| 22. <i>Oncoccephalus</i> . Klug. (- " 242) | | |
| 23. <i>Pygolampris</i> . Germ. (- " 243) | { | <i>Serris</i> . Tab. <i>Oncelatus</i> . Hahn. |
| 24. <i>Stenopoda</i> . Lap. (- " 243) | | |
| 25. <i>Lophocerihala</i> . Lap. (- " 244) | | |
| 26. <i>Cimbus</i> . Hahn. (- " 245) | | |
| 27. <i>Conortinus</i> . Lap. (- " 246) | { | <i>Reduvius</i> . Burm. |
| 28. <i>Petalochirus</i> - Tab de Beauv. (- " 246) | | |
| 29. <i>Holotrichus</i> . Burm. (- " 247) | | |
| 30. <i>Holopilus</i> . Lep. (- " 248) | { | St. Torg. Scov. Lap. |

Division 2.

Geocores.
or
Land bugs.

continued.

3.

Reduvini.

4.

Membranacei

Phymatidae.

Tingidae.

Cimicidae. Lep.

- | | | |
|--|---|--|
| 1. <i>Syrtis</i> . Tab. (Burm. p 251) | { | <i>Thymela</i> . Lst. <i>Acanthia</i> . R. |
| 2. <i>Macrocephalus</i> . Lst. (- " 252) | { | <i>Syrtis</i> . Tab. |
| 3. <i>Acanthia</i> . Tab. (- " 252) | { | <i>Cimex</i> . Lin. Lat. Lep. |
| 4. <i>Aneurus</i> . Cint. Lep. (- " 253) | | |
| 5. <i>Brachyrhynchus</i> . Lep. (Burm. p 254) | | |
| 6. <i>Dysodius</i> . Lep. Scov. Lap. (- " 255) | { | <i>Aradus</i> . Tab. |
| 7. <i>Uradus</i> . Burm. (- " 255) | | |
| 8. <i>Piesma</i> . Lap. (- " 257) | { | <i>Acanthia</i> . Wolt. |
| | | <i>Grammox</i> . Reitter |
| | | <i>Tingis</i> . Br. Tsch. |
| 9. <i>Euryicerca</i> . Lep. (- " 258) | | |
| 10. <i>Tingis</i> . Burm. (- " 259) | { | <i>Acanthia</i> . Br. |
| | | <i>Lictyonotus</i> . Curtis. |
| | | <i>Steph</i> . Lep. |
| 11. <i>Monanthia</i> . St. Torg. Scov. (Burm. p 261) — | { | <i>Tingis</i> . Burm. |
| | | |
| 12. <i>Zosmerus</i> . Lep. (Burm. p 262) | { | <i>Sold</i> . R. |
| | | <i>Pisra</i> . Enzy. Melano. |

Division.Obermeyer's Arrangement.
Family Genus.Synonyms.

Fam 5.

Caprinae.

Blind bugs.
(no ocelli)1. *Miris*. Burm. (Burm p. 264)2. *Phytocoris*. Fall. (— — — 265) *Miris Lygaeus* Fab.
Hahn. *Lygaeus Lopha, Phylus*
Polymerus ex Cauda, Hahn.
Globiceps. Method. Encycl.
Pectosoma. Stepi.3. *Capsus*. Burm (— — — 273)4. *Heterotoma*. Lat (— — — 275) *Capsus*. Fab.5. *Alticus*. Hahn. (— — — 276) *Salda*. Fab. *Lygaeus*
Capsus. Phytocoris. Fall.
Ctenonotus. Westw. Steph.
Bryocoris. Fall.
Cleomma. Serv.6. *Halticus*. Hahn. (— — — 277)7. *Labops*. Burm. (— — — 279)

Div 2.

Geocorines.
Land bugs.
continued.

Fam 6.

Lygaeodes.

1. *Largus*. Hahn! Burm p. 281. *Euryophthalmus* Lap.
Asternma. Encycl. Method2. *Pyrhocoris*. Fall. (— — — 283) *Platynotus*. Schill. Hahn.
Lygaeus. Fab. *Meganotus*
Odontotus. Lap.
Asternma. Lap. & Serv.3. *Microphysa*. Westw. (— — — 287)4. *Anthocoris*. Fall (Burm p. 288) *Lygaeus*. Fab.
Thinarius. Hahn.
Pedicularis. Lap. ?
Hylophila. Körb. & Steph.5. *Xylocoris*. L. Duf. (— — — 289) *Naegeleus*. Lap.6. *Blissus*. Kl. (— — — 290)7. *Ophthalmicus*. Hahn (— — — 291) *Salda*. Fab. Lat. Serv. Lap.
Geocoris. Fall.8. *Cymus*. Hahn. (— — — 292) *Lygaeus*. Fall
Heterogaster. Schill.
Kleidocerys. Westw.9. *Heterogaster*. Schil. (— — — 293) *Lygaeus*. Fall. Fab.10. *Pachynemus*. St. Tan. (— — — 293) *Lygaeus*. Burm.
Schill. Steph. — — — — —11. *Lygrius*. Burm (Burm p. 297) *Corisus*. Steph.1. *Leptocoris*. Hahn. (Burm p. 305) *Lygaeus*. Fab.2. *Coreus*. Fall. Hahn. (— — — 306) *Coreus & Lygaeus*. Fab.
Rhopalus. Schill.
Kleidocerys. Westw.3. *Harmostes*. Burm (— — — 307)4. *Pseudophilacus*. Burm (— — — 308) *Coreus* Pz. Fab. Schill.
Wrenecoris. Hahn.5. *Coreus*. Burm. — (— — 309) *Microcoris*. Hahn.6. *Phyllomorphus*. Burm (— — — 310) *Phyllomorpha*. Laporte7. *Gonocerus*. Lat. Lap. (— — — 310) *Coreus*. Burm.8. *Myrmus*. Hahn. — (— — 312) *Achroalaus*. Schill.9. *Berytinus*. Fab. (— — — 312). *Coreus*. Pz. M.10. *Syromastes*. Burm (— — — 313) *Coreus*. Fab. Lat. Lap.

OVER

● *Ophthalmicus*Fam 7.
Coreodes.Coreites. &
Anioscittus. Lap.

5.

<u>Division.</u>	<u>Burmeister's Arrangement.</u>		<u>Synonyms.</u>
	<u>Family.</u>	<u>Genus.</u>	
		11. Discogaster. Burm. (Burm p. 315)	
		12. Homeocerus. Burm (316)	{ Chondocera.
		13. Charisterus. Lap. (316)	
		14. Crinocerus. Burm. (318)	{ Anthocerus. Beauv. Lap.
		15. Hypselonotus. Hahn. (318)	{ Lygaeus. Tab.
		16. Archimerus. Burm. (321)	{ Pachymeria.
		17. Meropachys. Lap. (322)	
		18. Alylus. Burm. (323)	
		19. Calabothristes. Burm (323)	
		20. Myodochus. Burm. (324)	{ Myodocha. Lat. Lap.
			{ Leptocorina. Lat. Lap.
		21. Actorus. Burm. (327)	{ Hydrometra. Tab.
			{ Anelytrum. Lap.
		22. Stenocephalus. (328)	{ Alylus. Lap.
		Lat. Lap.	{ Coreus. Tab
			{ Dieranomerus. Hahn.
		23. Elytriscolaphus. Burm (328)	
		24. Copius. Thunb. (329)	{ Holymenia. Lat. Lap.
		25. Anisoscelites. Burm (331)	{ Lygaeus. Tab. Anisoscelites
			{ Leptocephalus. Lat.
			{ Diactor. Party.
			{ Hypselonotus. Hahn
		26. Diactor. Burm. (333)	{ Lygaeus. Tab
			{ Acanthocnophalus. Lap.
		27. Paraphes. Burm (335)	{ Lygaeus. Tab.
		28. Remalopus. Lat. Lap. (336)	{ Lygaeus. Tab.
		29. Pachylis. Serv. (338)	{ Lygaeus. Tab.
			{ St. Jang. Lat. Lap
		30. Cerbus. Hahn (339)	{ Anisoscelis. Lat.
			{ Lygaeus. Tab
		31. Physomerus. Burm (341)	{ Lygaeus. Tab.
		32. Spartocerus. Burm (341)	{ Mononotus. et
			{ Spartocerus. Lap.
			{ Basynus. Burm.
		33. Atrachalus. Lap. (343)	

Division 2

Geocoris.

Land bugs.

continued.

Fam. 7.
Coreodes.Coreodes. et
Anisoscelites. Lap.

continued.

Fam. 8.

Scutati.

Longitibra. Lat.
Pentatomites et
Scutelliferites. Lap.

1. Amaurus. Burm. (349)	{ Micygnenum. Guer. Lap.
2. Tesseratoma. (350)	{ Edessa. Tab. Fall.
	Lat. Lap.
3. Asiphonopodus. Lap. (351)	{ Euithenes. Lap
	{ Edessa. Tab.
	{ Nendor. Party
4. Oncomerus. Burm (352)	{ Oncomerus. Lap.
	{ Edessa. Tab.
	{ Tesseratoma. Guer.
	{ Merocoris. Burm.
5. Agapophytus. Guer. (353)	
6. Edessa. Tab. Lap. (355)	{ Pentatomidae. Lat. Party
	{ Cimex. Tab.
	{ Centroproctus. Hahn.
7. Celia. Burm. (356)	{ Celia. Edessa. Tab
	{ Cimex. Tab.
	{ Tesseratoma. Lat.
	{ Neognathus.
	{ Phyllocoptes. Lap.

over.

<u>Division</u>	<u>Family.</u>	<u>Genus.</u>	<u>Synonyms.</u>
	continued from p. 5.		
		8. Acanthosoma Curtis Burm. 358	<i>Cimex Odessa</i> Fab. <i>Pentatomia</i> Latr.
		9. Atelocerus Lap. - (" - 361)	
		10. Halyss. Burm. - (" - 362)	<i>Heteroscelis</i> Lat. - <i>Halyss</i> Lat. -
		11. Dinocoris. Burm. - (" - 363)	<i>Pentatomia</i> Party - <i>Lindor</i> Lap. -
		12. Cimex. Fab. — — (" - 364)	<i>Pentatomia</i> , Lat. Lap. Hahn. - <i>Raphigaster</i> Hahn. <i>Iropicoris</i> Strachia <i>Eusarcoris</i> Hahn. <i>Oelia</i> Fab. Lap. Hahn.
		13. Dryptocophalus. Lap. (" - 370)	<i>Stethis</i> Party. -
		14. Phlaecoris. Burm. - (" - 371)	<i>Cimex</i> Drury. <i>Phlea</i> Lep. Scm. Lap. <i>Paracoris</i> Hahn.
		15. Scioscoris. Tall. — (" - 372)	<i>Cydnus</i> & Halyss. Fab. <i>Discocophala</i> Lap.
		16. Cydnus. Burm. — (" - 373)	
		17. Sceptocoris. Party. — (" - 376)	
		18. Osopus. Burm. — (" - 377)	<i>Cimex</i> , <i>Tetra</i> Fab. <i>Discocera</i> , <i>Scutellata</i> . <i>Pentatomia</i> Lap. <i>Talla</i> , <i>Arma</i> . <i>Eusarcoris</i> , ? Hahn.
		19. Canopus. Fab. — (" - 382)	
		20. Chlaenocoris. Burm. (" - 383)	
		21. Thyreocoris. Schr. — (" - 383)	<i>Tetra</i> , Fab. <i>Scutellera</i> Lat. <i>Platycerata</i> , et <i>Cyrtosoma</i> , Lap. <i>Globocoris</i> Hahn.
		22. Odontoscelis. Lap. (" - " 385)	<i>Tetra</i> , Fab. <i>Urocoris</i> , et, <i>Thyreocoris</i> , Hahn.
		23. Pedops Lap. — (" - 386)	<i>Tetra</i> , Fab.
		24. Cryptocoris. Burm. (" - " 387.)	<i>Tetra</i> , Fab.
		25. Trigonosoma. Lap. (" - " 388)	<i>Trigonosoma</i> <i>Oganosoma</i> . <i>Graphosoma</i> , Lap. <i>Scutellera</i> , Hahn.
		26. Tetra. Fab. — (" - " 389.)	<i>Scutellera</i> , Lat. <i>Eumygastr</i> Lap. <i>Bellocoris</i> , Hahn.
		27. Sphaerocoris. Burm. (" - " 390.)	<i>Tetra</i> , Fab.
		28. Pachycoris. Burm. (" - " 391.)	<i>Tetra</i> , Fab. <i>Scutellera</i> , Lat., Lap. <i>Bellocoris</i> , Hahn.
		29. Peltorhina. Burm. (" - " 393.)	<i>Scutellera</i> , Guer. Lap.
		30. Callidea. Burm. (" - " 395.)	<i>Tetra</i> , Fab. <i>Scutellera</i> , Lat. <i>Calidea</i> , Lap. <i>Crypsocoris</i> Hahn.
		31. Scutellera. Lat. (" - " 395.)	<i>Tetra</i> , Fab.
		32. Ongocoris. Burm. (" - " 396.)	

Division. 2 Geocoris.

Land bugs
continued.

Fam. 8. Scutati.

Longilabia Lat.
Pentatomites et
Scutelliferites Lap.

7.
Westwoods. classification

In the "Introduction to the Modern Classification of Insects" by J. O. Westwood, F. L. S. published in London, 1840, in two volumes, the order of the Heteroptera, or true plant bugs is divided into two sections 1. The Hydrocorisæ or water bugs, and the Aurocorisæ, or land bugs. (Geocores of Burmeister). These two sections are then subdivided into families as follows.

Section 1. Hydrocorisæ. West. water bugs.	Family.	1. Notonectidae. Leach. Westo 2. 459. <u>Notonectici</u> Burnm
	Family.	2. Nepidae Leach. " 460.
Section 2. Aurocorisæ. West. Land bugs. <u>Geocores</u> . Burnm.	Family.	1. Galgulidae. " 463.
		2. Acanthiidæ. Leach. " 465. <u>Riparii</u> . Burnm
		3. Hydrometridæ. Leach. " 467. <u>Hydromici</u> . Burnm
		4. Reduviidæ. Stephens. " 471. <u>Reduvini</u> . Burnm
		5. Cimicidae. Westw. " 474. <u>Membranacei</u> . Burnm
		6. Tingidae. Westw. " 477. "
		7. Capsidae. " 479. <u>Capsae</u> . Burnm
		8. Lygaeidae. " 480. <u>Lygaeodes</u> . Burnm
		9. Coreidae. " 482. <u>Coreodes</u> . Burnm
		10. Scutelleridae. " 484. <u>Scutati</u> . Burnm

Order. XI. of "Westwoods General Synopsis." Vol 2. p. 119. Heteroptera. ~
Hemiptera. Mc. L. Stephens. Hemiptera Heteroptera. Lat. Hemimeroptera. Clad Rhyngota. Tab

Section.	Family.	Genus.	Synonyms. West. Syn. 119.
Section 1. Hydrocorisæ. Leach. Westo 2. 457. <u>Hydrocores</u> . Burnm.	1. Notonectidae. Leach. Westo 3. 458. <u>Notonectici</u> . Burnm.	1. Notonecta. Linn. 2. Ploa. Steph. 3. Sigara. Leach. 4. Gorixa. Geoff.	Plea. Leach. Notonecta. Linn. Sigara. Tab. t
	2. Nepidae. Leach. Westo 2. 460.	1. Naucoris. Geoff. 2. Nepa. Linn. 3. Ranatra. Tab.	Nepa. Linn. t Nepa. Geoff. t Ranatra. Linn. t
Section 2. Aurocorisæ. Westwood.	1. Galgulidae. West 2. 463. 2. Acanthiidæ. Leach. Westo 2. 465. 3. Hydrometridæ. Leach. Westo 2. 467. 4. Reduviidæ. Stephens. West 2. 471. 5. Cimicidae. Leach. Westo 2. 474. Membranacei Burnm	1. Gaigulus — no British species. 1. Cyphelochirus. Westw. Riparii. Burnm. W. 2. 465. 2. Acanthia. Lat. Hydrometa. Burm. Amphicorisides L. Duf. 1. Reduvius. Tab. 2. Coranus. Curtis. 3. Prostemma. Lap. 4. Pygolamis. Germ. 5. Ploaria. Scop. 6. Nabis. Latr.	Naucoris. Westw. Salda. Tab. Limnolates. Burm. Hydrometa. Tab. Sagittaria. Burm. Hydrometa. Burm. Ligaeus. Full. h. Opicaetus. Klug. Giblicornis. Hahn. postemma. L. Duf. Ochetopus. Hahn. Gerris. Burm. Optus. Hahn. Reduviculus. Kirby
	5. Cimicidae.	1. Cimex. Linnaeus	Acanthia. Tab. over.

8.

Westwood's classification, cont'd

Section .

Fam 6.

Tingidae.

Westwood 2.477.

Phymatites

Tingidites

Cimicites Lap.

Membranacei Burm.

Lat.

Genus.

1. Cineurus Curtis
2. Aradus Fab.
3. Tinges Fab.
4. Dielma St. Targ & Serv.
5. Agramma Westw.
6. Monanthia Enc. Method.
7. Galeatus Curt.
8. Dictyonota Curt.
9. Acalypta Westw.

Synonyms.

- Aradus*, Fab. p. —
Cimex, Linn. —
Catoplatus, Spin. —
Aspidotoma, Curt. —
Xasnerus, Lap. & Burn. —
Pisma, Lap. *Serenthus*, Sp. —
Tinges, Lap. p. —
Tinges, Burn. p. —
" " " p. —
Tinges, Pr. p. —

Fam 7.

Capsidae.

Westw 2.479.

Capsini Burm.

Coreidae Steph.

Astemmites Lap.

1. Heterotoma Lat.
2. Capsus Fab.
3. Chlamydatus Curt.
4. Astemmae Salv.
5. Lopus Hahn.
6. filophorus Hahn.
7. citteri Hahn.
8. Harpocera Curtis.
9. Pantilius Curtis
10. Lygus Hahn.
11. Polymerus Hahn.
12. Cilleonis Hahn.
13. Phytocoris Fall.
14. Murius Fab.

- Capsus*, Fab. p. —
Lygaeus, Hoff. p. —
Capsus, Hahn. p. —
Orthoneurus, West. *Halicus*, Hahn.
Eurychela, Lap. *Bryocoris*, Fall. —
Phytocoris, Burm. p. —
Blaciceps, Enc. Meth. —
Phytocoris, Fall. p. —
Arimocera, Steph. —
Lorus, H. Schy. p. —
Cimer, Linn. p. —
Phytocoris, Steph. —
Phytocoris, Fall. —
Stenodema, Lap. —
Cimer, Linn. p. —
Lygaeus, Fab. —
Heterogaster, Schill. —
Pyrrhocoris, Fall. —
Rhypharochromus, Hahn. —
Gastrophes, Westw. —
Anthocoris, Fall. —
Xylocoris, Louw. —
Microphysa, Westw. —

1. Lygaeus, Fab.
2. Heterogaster, Schill.
3. Pyrrhocoris, Fall.
4. Rhypharochromus, Hahn.
5. Gastrophes, Westw.
6. Anthocoris, Fall.
7. Xylocoris, Louw.
8. Microphysa, Westw.

- Cimer*, Linn. p. —
Lygaeus, Fab. —
Platynotus, Schill. *Megantus*, Lap.
Aphanus, Lap. *Pachybrachis*, Hahn.
Pachymerus, St. Targ. & Serv.
Rhyphagus, West. —
Microstoma, Lap. —
Polycanthus, Lap. —
Platygaster, Schill. —
Rhinanus, Hahn. —
Pedeticus, Lap. —
Hylophila, Krb. —
Lygaeus, Fab. —

9. Stenocephalus, Lat.
10. Alydus, Fab.
11. Neides, Lat.
12. Corizus, Fall.
13. Rhopalus, Schill.
14. Cygnus, Hahn.

- Syromastes*, Lat. —
Conus, Lat. —
Abrachlus, Lap. Curtis. —
Pseudophlaus, Burm. —
Rhopalus, Schill. —
Myrmus, Hahn. —
Dicranocephalus, Hahn. —
Lygaeus, Fab. —
Berytus, Fab. —
Lygaeus, Fab. p. —
Coricus, Burm. —
Kleidocerys, Westw. —
Heterogaster, Schill. —

Section . 2.

Aurocorisa

Westw.

Geocoris, Burm.

Geocorise Lat.

Fam 8.

Lygaeidae.

Westw 2.480.

Coreidae Leach Steph.

Lygaeodes, Burm.

Lygaeites et.

Astemmites, Lap.

Fam 9.

Coreidae.

Westw 2.482.

Coreidae Leach, Steph.

Coreodes, Burm.

Anisoscolites, H.

Coreites, Lap.

1. Coreus, Fab.
2. Merocoris Hahn.
3. Arenocoris, Hahn.
4. Chorosoma, Curt.
5. Stenocephalus, Lat.
6. Alydus, Fab.
7. Neides, Lat.
8. Corizus, Fall.
9. Rhopalus, Schill.
10. Cygnus, Hahn.

- Cyromastes*, Lat. —
Conus, Lat. —
Abrachlus, Lap. Curtis. —
Pseudophlaus, Burm. —
Rhopalus, Schill. —
Myrmus, Hahn. —
Dicranocephalus, Hahn. —
Lygaeus, Fab. —
Berytus, Fab. —
Lygaeus, Fab. p. —
Coricus, Burm. —
Kleidocerys, Westw. —
Heterogaster, Schill. —

9.

Westwood's Classification continued.

<u>Section.</u>	<u>Family.</u>	<u>Genus</u>	<u>Synonyms.</u>
Sec. 2 continued.			
<u>Aurocorisae.</u>			
Westw.			
<u>Geocores.</u> Burm.			
<u>Geocoris.</u> Lat.			
	<u>Fam 10.</u> <u>Scutelleridae.</u>		
	<u>Pentatomidae.</u> Westw. 2. 484	<u>Subfam 1.</u> <u>Pentatomidae.</u>	<u>Cimex.</u> Burm. — <u>Clinocoris.</u> Hahn. — <u>Pentatoma.</u> Curtis p. — <u>Strachia.</u> Hahn. <u>Cimex Asopus.</u> Burm — <u>Cimex.</u> Linn p — <u>Cydnus.</u> Fab. — <u>Sciocoris.</u> Fall. —
	<u>Leach & Steph.</u>		
	<u>Pentatomites.</u> S.		
	<u>Scutellercites.</u> Lap.	<u>Subfam 2.</u> <u>Scutelleridae.</u>	<u>Thyreocoris.</u> Leach. — <u>Thyreocoris.</u> Hahn. — <u>Odontoscelis.</u> Burm p. — <u>Setyra.</u> Steph. p. — <u>Eurygaster.</u> Lap. — <u>Trigenosoma.</u> Burm. —

C.B Amyot & Audinet Serville, in their work on the Hemiptera (1843) divide the Heteroptera into two sections, viz Section 1. Geocorisaæ, or the land bugs and Section 2. Hydrocorisaæ, or water bugs. These two sections are then subdivided into 8 families in the Geocorisaæ, and 3 families in the Hydrocorisaæ. These families being founded on some peculiarity of scutel. antennæ. eyes. wings. beak. habit. or feet. as follows.

<u>Section 1.</u> <u>geocorisaæ.</u>	<u>sec pl. X. 31.</u> <u>Fam 1.</u> Longiscuti — Scutel long & reaching at least to mid abdomen 34. " 2. Supericornes — Antennæ inserted above the middle of the eye. 35. " 3. Infericornes. — " " below " — 39. " 4. Cœcigenae. — Blind bugs having no ocelli. 40. " 5. Bicelluli. — Having 2 cells in wings. 41. " 6. Ductirostri. — " beak or rostrum in a duct or groove. 42. " 7. Nudirostri. — " the beaks naked or not in a duct. 43. " 8. Ploteres. — Rowers. with 4 posterior feet formed for gliding on the water.	<u>Fig.</u>	

<u>Sec. 2</u> <u>Hydrocorisaæ.</u>	<u>Fig.</u> 44. " 1 (or 9) Bigemini. — having 2 ocelli. 45. " 2 (or 10) Pedirapti. — feet for seizing prey, or raptorial. 46. " 3 (or 11) Pediremi. — feet formed like oars, for propulsion on the water	<u>Fig.</u>	
	These Families are again divided into Tribes as follows. Fam 1. Longiscuti	<u>Fig.</u>	
	Tribe 1. Ovuliscuti. Saule orl shaped reaching to or nearly to the extremity of abdomen (pl. X. 32)	<u>Fig.</u>	
	2. Coniscuti — cone shaped or not reaching to. — Fam 2. Supericornes.	<u>Fig.</u>	
	Tribe 1. Tetragoncephali. bugs having heads square (pl. X. 34) 2. Trigoncephale heads triangular (pl. X. 37) Families 3. Infericornes. 4. Cœcigenæ & 5. Bicelluli groups only. Fam 6. Ductirostri.	<u>Fig.</u>	

Tribe 1. Spissipedes. Thick fat or legs. Thighs very thick. anterior feet raptorial.
2. Repicolæ. bugs inhabiting or frequenting shores, or banks.
3. Membranacei. " having elytra membranous, being a net-work resembling a coat of mail.
4. Corticolæ. " inhabiting, or frequenting bark of trees.
5. Lecticolæ. " beds.

Fam 7. Nudirostri.

Tribe 1. Ramecornes. Bug, having branching antennæ. or
2. Spongipades. " — spongy feet.
3. Conicpitæ. " — cone shaped heads
4. Breviscipitæ. " — short heads.
5. Cylindricpitæ. " — cylindrical heads
6. Longicori — " — long coxae.
7. Stagnigradi. " — walking on the surface of stagnant or still waters.
8. Oculari. " — having large & projecting eyes.
9. Bravicornes. " — short horns or antennæ.

Fam 8. Ploteres. group only.

The Hydrocorisaæ are divided into Families & groups only. Fam 1. Bigemini.
bugs with only 2 ocelli. Fam 2. Pedirapti. bugs having raptorial fore feet. & Fam 3.
Pediremi bugs having oar shaped hind feet.

Cœcigenæ

10.
Amyot's Classification.

The tribes are finally subdivided into Races and groups as in the following table which we give in full for the use of young Entomologists.

Section Family.

Section 1. Geocoridæ.

Antennæ uncovered. See.

1. Longiscutî.

Scutel long.
reaching at
least to the mid.
line of Abdomen
Amy XVII 19.
Scutellæ Burm
Gpl x fig 31.

Tribe.

2. Orbiscutî.
Scutel orb shaped.
or roundæ reaching
to or nearly to the
extremity of Abdomen
Amy XV.

Scutellites Lap.
Gpl x fig 32.

2. Coniscutî.
Scutel cone shaped.
& not reaching to
extremity of the
Abdomen, leaving
the base of the elytra
uncovered.
Amy XI X. & p. 72.
Pentatomites Lap.
Gpl x fig 33.

1. Tetrongocephali.

Square heads.
with or without a prolonged
scale between antennæ
Amy XXX. p 184 Gx 36.37.

2. Trigonocephali.

Triangular heads.
Amy XXX. p. 216
Coreodes Burm
Anisocelides Lap.
Gpl x fig 34.

3. Ingercornes antennæ inserted below an ideal line
drawn from the eyes to the beginning of the labium. —
third joint of beak longer than the fourth. Amy. XXXVI. 248
Gpl x. fig 35.

Race.

1. angulosi.
Anteriorly angular.
Amy. XVI. & p. 24.

2. globulosi.
Anteriorly globular.
Amy XVIII. & p. 60.

1. spissirostrî.
Thick beaks Amy XIX. & p. 74.

2. spinipedes.
Shiny feet. Amy. XXI. & p. 67.

3. nudipes.
naked feet. Amy. XXII
& p. 101.

4. breverostrî.
Short beaks Amy XXVII. & p. 155.

5. canalirostrî.
Beaks in a channel or
Groove Amy. XXIX & p. 181

Group.

1. Scutellides Amy p - 25.
2. Pachycorides " " - 34.
3. Selyrides " " - 45.
4. Eurygasterides " " - 51.
5. Podopides. " " - 56.
6. Oxynotides. " " - 68.

1. Thyreocorides " " - 60.
2. Odontoscelides " " - 67.
3. Canopides. " " - 70.

1. Stenotrides. " " - 74.
2. Asopides. " " - 77.

1. Cydnides. " " - 87.
2. Schirides. " " - 96.
3. Psocodicles. " " - 99.

1. Halydes. " " - 102.
2. Phæcides. " " - 115.
3. Sciocorides " " - 116.
4. Pentatomides " " - 124.
5. Rhabtugasterides " " - 141.

1. Edessides. " " - 155.
2. Phyllocephalides " " - 174.

1. Megimenides " " - 181.
2. Homocerides " " - 202.

1. Sectifrontes.
Cut foreheads Amy XXX. & p. 184.

2. Plenifrontes.
full foreheads. Amy XXXI. & p. 191.

3. Spinifrontes.
Shiny foreheads. Amy. XXXII. & p. 206

1. Linicornes.
Thread like antennæ
Amy XXXIV. p. 217.

2. Nodicornes.
Node or Knobbed Anten.
Amy. XXXV. & p. 232.

3. Ingercornes antennæ inserted below an ideal line
drawn from the eyes to the beginning of the labium. —
third joint of beak longer than the fourth. Amy. XXXVI. 248
Gpl x. fig 35.

1. Spartocerides " " - 184.
2. Mictides " " - 187.

1. Nematopides " " - 191.
2. Homeocerides " " - 202.

1. Syromastides " " - 206.
2. Ucanthocorides " " - 211.

1. Anisocelides " " - 217.
2. Alydides " " - 225.

1. Coreides " " - 232.
2. Rhopalides " " - 243.

1. Lygaeides " " - 248.
2. Rhyparochromides " " - 251.
3. Anthocorides " " - 262.

Amyot's classification.

<u>Section</u>	<u>Family</u>	<u>Tribe</u>	<u>Race</u>	<u>Group</u>
	4. <u>Ocigenae</u> . with no ocelli. Amy. XXXVIII & p. 265. Gpl. X. fig. 39.			{ 1. <u>Pyrhocorides</u> . Amy. p. 265. 2. <u>Largidae</u> " 273. 1. <u>Mitidae</u> " 277. 2. <u>Capsidae</u> " 278. 3. <u>Asterimidae</u> " 283
	5. <u>Bicellulae</u> . membrane of wing with 2 basal cells, & with no other nerves than those forming these cells last joint of antennae very fine & set. long, no ocelli Amy. XXXVIII & 276. Gpl. X. fig. 40.			
		{ Tribe 1. <u>Spirolypedes</u> . thick feet, thighs very thick, anterior feet raptorial. Amy. XXXIX. & p. 268.		{ 1. <u>Phymatidae</u> . " 282. 2. <u>Macrocerthalidae</u> " 291.
	6. <u>Ductirostris</u>	Tribe 2. <u>Ripicolae</u> . inhabiting or frequenting shores & banks. Amy. XL & p. 293.		{ 1. <u>Heteridae</u> " 293.
	Beak or piercer in a groove, or duct, & having ocelli. Amy. XXXIX & 285. Gpl. X. fig. 41.	Tribe 3. <u>Membranacei</u> . membranous the elytra being a net work, fine & rounded like a coat of mail. Amy. X. 295.		{ 1. <u>Tingidae</u> " 295. 2. <u>Piesmidae</u> " 300.
		Tribe 4. <u>Corticola</u> . bugs inhabiting or frequenting the bark of trees. Am. XI. & p. 303.		{ 1. <u>Brachyrhynchidae</u> " 303. 2. <u>Oradidae</u> " 307.
		Tribe 5. <u>Lecticola</u> . bugs inhabiting or frequenting beds. Amy. XI. & p. 309.		{ 1. <u>Acanthidae</u> " 310.
		Tribe 1. <u>Ramicornes</u> . Am. XI. & p. 318. bugs with branching or ramiform antennae		{ 1. <u>Hoplotilidae</u> " 318.
		Tribe 2. <u>Spongipedes</u> . bugs having spongy feet. Amy. XI. & p. 321.		{ 1. <u>Piratidae</u> " 321. 2. <u>Reduviidae</u> " 323. 3. <u>Ectrichodiidae</u> " 342. 4. <u>Macropodidae</u> " 345. 5. <u>Salyavatidae</u> " 349.
	7. <u>Nudirostris</u> .	Tribe 3. <u>Conicipites</u> . having cone shaped heads. Am. XI. & p. 350.		{ 1. <u>Apioneridae</u> " 350. 2. <u>Baratarioridae</u> " 355. 3. <u>Zelidae</u> " 367. 4. <u>Holotrichidae</u> " 376. 5. <u>Succoderidae</u> " 379.
	beak or piercer naked or free & entirely disengaged, not being in a duct Antennae much longer than body Amy. XI. & p. 314. Gpl. X. fig. 42.	Tribe 4. <u>Brachicarpites</u> . having short heads. Am. XI. & p. 381.		{ 1. <u>Sphaeridopidae</u> " 381.
		Tribe 5. <u>Cylindricipes</u> . having cylindrical heads. Am. XI. & p. 383.		{ 1. <u>Conophoridae</u> " 383. 2. <u>Stenopodidae</u> " 386.
		Tribe 6. <u>Longicoxi</u> . having long - coxæ. Am. XI. & p. 393. -		{ 1. <u>Eonesidae</u> " 393.
		Tribe 7. <u>Stagnigradi</u> . bugs walking on stagnant water. Amy. XI. & p. 395.		{ 1. <u>Hydrometridae</u> " 398.
		Tribe 8. <u>Oculati</u> . eyed bugs or having large eyes. Amy. XI. & p. 401.		{ 1. <u>Gerridae</u> " 401. 2. <u>Saldidae</u> " 402.
		Tribe 9. <u>Brevicornes</u> . having - short antennæ. Amy. XI. & p. 406.		{ 1. <u>Pelognathidae</u> " 401.
	8. <u>Ploteres</u> , or rowers. the four posterior feet being formed for rowing or gliding on the - surface of water. Amy. L. 400. fig. G.X. 43 -			{ 1. <u>Gerridae</u> " 401. 2. <u>Veliidae</u> " 416.

continuation of Section 1 Geocoridæ. antennæ uncovered & free

12.

Amyot's Classification, continual.

<u>Section</u>	<u>Family</u>	<u>Tribus.</u>	<u>Race</u>	<u>Group</u>
<u>2. Hydrocorisae.</u> water bugs. extreme concealed.	1.(or 9). <u>Begemmi.</u>	bugs having 2 ocelli. Amy L. 623. pl G. X. -- Pg 44	{ 1. Galvulides Amy p 423.	
	2(or 10). <u>Pedirapti.</u>	Anterior feet raptorial. Amy L. 626	{ 1. Naucorides -- " 426. 2. Nepides -- " 437. pl G. X. fig 45.	
	3(or 11). <u>Pediixemi.</u>	posterior tarsi generally in the form of oars. Anterior feet not raptorial Amy L. & p 444. G. pl X fig 46.	{ 1. Corisides -- " 444. 2. Notonectides -- " 449.	

Classification of the British Homoptera.

by Douglas and Scott. London 1861. p 10.

Suborder 1. Homoptera. Heteroptera. Lat. — Rhynchota Heteroptera. FaberDivision 1. Gymnocerata. Fab. { Geocorisae Lat. Amy & Serv. Gecores. Burmeister.Subdivision 1. Geodromica. Fab. — Geocores. Westwood.Section 1. Scutatina. { Scutati Burm. Scutata Dall & Flor. Longiscuti Amy & Serv.
Scutelleridae. Westwood. Cydindae Tetraphae & Macropeidae Faber.Section 2. Corenia Doug 16. Coneodes. Burm Coreidae Westw. Supericornes Amy & ServSection 3. Berytina. " Berytidae. Fab. Coneodes p. Burm. Coreidae p. Westw. Supericornes p. Amy & Serv.Section 4. Cæuginina — { Doug 19. cæuginæ. Amy & Serv. Lygaeodes p. Burm. Lygaeidae p. Westw.
Pyrrhocoridae FabSection 5. Lygaeina — Doug 20. Lygaeodes Burm. Lygaeidae Westw. Infericornes p. Amy & ServSection 6. Jingidina — Doug. 23. Membranæci. Lat. Burm. Jingidae Amy & Serv. Jingidae Westw.Section 7. Hebrina. — Doug. 25. Hebridae. Amy T. & v. Hybrornici. p. Burm.Section 8. Corticolina. — Doug. 25. Corticidae Amy & Serv. Membranæci. p. Lat. Burm. Aradidae. FabSection 9. Capsinæ. — Doug 27. { Capsini Burm. Bicelluli. Amy & Serv. Capsidae Westw.
Phycocoridae FabSection 10. Anthocorina. — Doug. 36. { Lygaeodes Burm. Anthocoridae Amy & Serv. Microphysidae{ Anthocoridae. Acanthidae & Ceratocombidae FabSection 11. Oculatina. — Doug 38. — Oculati. Lat. Amy & Serv. Riparii. Burm. Saldae Fab.Section 12. Recturina. — Doug 38. Recturini Burm. Recturiidae Westw. Nudirostræ Amy & Serv.Subdivision 2 of Div 1. (Gymnocerata) Hydrodromica Doug p 40.Section 1. — Hydrometrina. Doug 40. Hydrometrae & Leptocera. Fab.

over.

13.
Douglas & Scott's classification continued. →

Division 2 Cryptocerata. Fiel. Augus 11. & 577. Cryptoceridae. Westw.

Lat. Lett. Cydoniidae. & Nauconidae. Fall.

Subdivision 1. Litoralia. Fiel. Doug 11 & 43. contains only the genus Polygonus.
which is wanting in Britain.

Subdivision 2. Aquatilia. Doug. 11. 43

Section 1. Aphelochirina Doug 43. Acanthidae Westw. Aphelochirae Fiel.

" — 2. Nauconina Doug 45. { Nepidae p. Leach Westw. Nepuna p. Burm. Nauconidae.
Amy & Serv.

" — 3. Nepuna. Doug 45. 581. Nepidae Westw. Nepuni p. Burm. Nepidae Amy & Serv.

" — 4. Notonectina Doug 48 { Notonecidae p. Amy & Serv. Notonectidae Burm.
Notonectidae Westw.

" — 5. Corixina — Doug 49 { Notonectidae p. Burm. Notonectidae Westw.
Corixidae Amy & Serv.

Suborder. 1. Hemiptera. Heteroptera Lat.
Rhynchota Heteroptera Fiel.

Division. 1 Gymnocerata. Fiel. Gymnoceridae Lat. Am & Serv.
Gesocidae Burm. Auroconisidae Westw.

Subdivision 1. Geodromica. Fiel. Geocoridae Doug.

Section 1. Scutellina. Doug 11. { Scutellidae Burm. Longiscutellidae Amy & Serv.
Scutelleridae Westw.

Section 1. Scutellina

	Doug	Doug.
Family 1. <u>Cydnidae</u>	(p. 12)	Genus <u>Sekirus</u> Ann. (p. 52)
- " - 2. <u>Odontoscelidae</u> (p. 13)	" - 1. <u>Corimelainus</u> (p. 58) White	
" - 2. <u>Odontoscelis</u> Lep. (p. 59)		
" - 3. <u>Sciocoridae</u> (p. 13) - " 1. <u>Sciocoris</u> Fall. (p. 61)		
" - 4. <u>Eurygasteridae</u> (p. 13) - " 1. <u>Eurygaster</u> Lep. (p. 64)		
" - 5. <u>Aleyidae</u> . (p. 14) - " 1. <u>Aelia</u> Fall. (p. 68) " - 2. <u>Aeliodes</u> Dohrn (p. 70)		
" - 6. <u>Podopidae</u> . (p. 14) - " 1. <u>Podops</u> Lep. (p. 72)		
" - 7. <u>Pentatomidae</u> (p. 15) - " 1. <u>Eysarcoris</u> Hahn (p. 74) " - 2. <u>Pentatoma</u> Lat. (p. 77) " - 3. <u>Strachia</u> Hahn (p. 84)		
" - 8. <u>Aspididae</u> (p. 15) - " 1. <u>Zicrona</u> Amy. (p. 88) " - 2. <u>Tallu</u> Hahn (p. 89) " - 3. <u>Rhacognathus</u> (p. 91) Fiel. " - 4. <u>Asopus</u> Burm. (p. 93) " - 5. <u>Picromerus</u> Amy. (p. 95.)		
" - 9. <u>Raphigasteridae</u> . (p. 16) - " 1. <u>Tropicoris</u> Hahn (p. 97.) " - 2. <u>Pierodorus</u> Fiel. (p. 99) " - 3. <u>Acanthosoma</u> Curi. (p. 101)		

	Doug.	Doug.	Doug.
Family 1. <u>Coreidae</u> (p. 17.)		<u>Coreidae</u> Doug. <u>Coreodes</u> Burm <u>Coreidae</u> Westw. <u>Supercoreidae</u> Amy & Serv.	
		Genus 1. <u>Syromastes</u> Lat. (p. 109)	
		" - 2. <u>Enchelops</u> Amy. (p. 111)	
		" - 3. <u>Gonocerus</u> Lat. (p. 113)	
		" - 4. <u>Berlusca</u> Spin. (p. 115)	
		" - 5. <u>Coreus</u> Lat. (p. 117)	
		" - 6. <u>Spathocera</u> Stein. (p. 121)	
		" - 7. <u>Pseudaethiops</u> (p. 123) Burm.	
		" - 8. <u>Ceralytes</u> Westw. (p. 127)	
		" - 1. <u>Therapha</u> Am. (p. 129)	
		" - 2. <u>Conixes</u> Fall. (p. 131)	
		" - 3. <u>Myrmus</u> Hahn (p. 136)	
		" - 4. <u>Chorosomidae</u> (p. 17.)	
		" - 1. <u>Chorosoma</u> Curi. (p. 139)	
		" - 4. <u>Stenocephalidae</u> (p. 18.)	
		" - 1. <u>Stenocephalus</u> Lat. (p. 140)	
		" - 5. <u>Aleydidae</u> (p. 18.)	
		" - 1. <u>Aleyda</u> Fall. (p. 143)	

	Doug	Bergyidae Lat.
		<u>Cereodes</u> Burm & Westw. <u>Ceroididae</u> p. Westw.
		<u>Supercoreidae</u> p. Amy & Serv.
Family 1. <u>Metaanthidae</u> (p. 19.)	{ Genus 1. <u>Metacantha</u> Costa. (p. 148.)	
	" 2. <u>Milatropis</u> Fiel. (p. 147)	
	" 1. <u>Berytinus</u> Lat. (p. 149)	
	" 2. <u>Neides</u> Lat. (p. 160)	

74.
Douglas & Scott's classification continued.

Division 1. Gymnocratae. Tel.

Sub div 1. Giedromicidae. Tel.

Section 4. Cœcigenea. Doug. p. 19.

Cœcigenea Amy & Serv. Syacocidae. Burm.

Syacocidae. p. Heistw. Pyrhocoridae. Tel.

Fam 1. Pyrhocoridae. Doug p. 20. Genus 1. Pyrhocoris. Tel. p. 20.

Section 5. Lygaeina. Doug. 20. Lygaeodes. Burm.

Lygaeidae. Heistw. Infericornis. p. Amy & Serv.

Fam 1. Lygaeidae. Genus 1. Lygaeodes. Doug.

1. Gastrocides Meiso (p. 165).

2. Plociomerus Say (p. 169).

3. Macronotus — (p. 20).

4. Calyptonotus. Doug. p. 171.

5. Enemocoris Tel. — (p. 177).

6. Dieuches Dohrn (p. 179).

7. Scolopostethus. Tel. (p. 181).

8. Peritrichus Tel. — (p. 187).

9. Traperonotus. " — (p. 190).

10. Pionosomus — (p. 195).

11. Drymophilus — (p. 20).

12. Drymus Tel. — (p. 197).

13. Tropistethus — (p. 200).

14. Rhypharochromus. Cunt. Tel. p. 201.

15. Hypognathus. Doug. (p. 208).

16. Plinthisus Lato. (p. 211).

17. Stygnocoris Doug. (p. 213).

18. Stygnus Tel. — (p. 213).

19. Acompus. Tel. (p. 217).

20. Technodemus — (p. 219).

Section 6. Singidae. Membrane p. Lat. Burm.

Singidae. Amy & Serv. Singidae. Heistw.

Fam 1. Agrammidae. — p. 23. Genus 1. Agramma Heistw. (p. 222).

1. Monanthia Lep. Seul. (p. 22).

2. Sterophysia Spin. — (p. 233).

3. Dictyonota. Cunt. — (p. 255).

4. Campylostenia Tel. — (p. 257).

5. Orthostena Tel. — (p. 260).

Section 7. Hebrinae. Hebrinae. Amy & Serv.

Heteronotus. p. Burm.

Fam 1. Hebridae. — Doug p. 25. Hebrus Cunt. (p. 265).

Section 8. Corticolina. Corticolae Amy & Serv.

Membrane p. Lat & Burm. Aradidae. Tel.

Fam 1. Aradidae. Doug p. 27. Genus 1. Aneurus Cunt. — (p. 267).

" 2. Uradidae. — (p. 27). 2. Aratus Tel. (p. 264).

Section 9. Capsina. Capsini Burm. Bicelluli Amy & Serv.

Capsidae Heistw. Phytoecidae. Tel.

Div 1. Unicelluli. Doug.

Fam 1. Bryocoridae. — p. 28. 1. Bryocoris Tale. — (p. 276).

Section 9. Capsina. continued.

Liv 2. Bicelluli.

Fam 2. Bikanidae. — Doug Genus 1. Pilhæus Tel. p. 281.

3. Miridae. — p. 29. { 1. Miris Tel. (p. 282).
2. Acetropis Tel. (p. 290).
3. Lophomorphus. Doug (p. 293).

4. Phytoecidae. — p. 29. { 1. Meridius. Tel. (p. 299).
2. Phytoecus. Fall. (p. 301).

5. Deracoridae. p. 30. { 1. Deracoris Kirsch. (p. 315).
2. Pantilius. Cunt. (p. 332).

6. Lethosomatidae. p. 30. { 1. Lethosoma Doug (p. 334).

7. Phylidae. — p. 30. { 1. Aethorhinus. Tel. (p. 346).
2. Sphaeracephalus. Doug. (p. 348).
3. Byrsoptera Spin. (p. 351).
4. Phylus. Hahn. (p. 354).

8. Camaronotidae. p. 30. { 1. Camaronotus. Tel. (p. 358).

9. Globicepididae. p. 31. { 1. Globiceps. Lat. — (p. 362).

10. Idolocoridae. p. 31. { 1. Cylocones. Hahn. (p. 367).
2. Systelonotus. Tel. (p. 369).
3. Campyloneura. Tel. (p. 372).
4. Idolocoris. Doug. (p. 374).
5. Macrolophus. Tel. (p. 381).
6. Malacocones. Tel. (p. 383).

11. Oncotylidae. p. 32. { 1. Anoderops. Tel. (p. 384).
2. Macrocoleus. Tel. (p. 387).
3. Ormbytylus. — (p. 388).
4. Sinceralulus. — (p. 391).
5. Oncotylus. — (p. 392).
6. Hoplomachus. — (p. 393).
7. Conostethus. — (p. 397).

12. Psallidae. p. 32. { 1. Plagiognathus. Tel. (p. 400).
2. Aprocennus. — (p. 403).
3. Psallus. — (p. 410).
4. Sthenarus. — (p. 421).

13. Capsidae. p. 32. { 1. Neocoris. Doug. (p. 428).
2. Agaliastes. Tel. (p. 426).
3. Orthocephalus. " (p. 429).
4. Heterocordylus. " (p. 432).
5. Atractotomus. " (p. 435).
6. Heterotoma. Lat. (p. 437).
7. Rhopalotomus. Tel. (p. 439).
8. Capsus. Tel. — (p. 441).
9. Polymerus. — (p. 442).
10. Systratus. — (p. 443).

over.

Douglas & Scott's classification continued.

<u>Section 9. Capsina</u> , continued.		
Fam	Doug Genus	Doug
	1 Charagochilus Tief. (p 445)	
	2 Campstochetus. — (— 447)	
	3. Lioscoris. Tief. — (— 449)	
	4. Orthops. Tief. — (— 451)	
14 Lygaeidae. — p 33.	5. Lygus. Hahn. — (— 456)	
	6. Peclocyrtus. Tief. (— 466)	
15 Harpoceridae. p 34.	{ 1. Harpocera Curt. — (— 468)	
16, 17, Myrmecocoridae. p 35.	{ 1. Myrmecocoris. — (— 34)	
16, Exocoridae. — p 35.	{ 1. Exocoris. Doug. (— 471)	
17. Lopidae. — p 34.	{ 1. Lopus. Hahn. — (— 474)	
18. Dicranoxytidae. p 34.	{ 1. Dicranoxytus Tief. (— 477)	
19. Halticoridae. p 34.	{ 1. Halticoris. Doug. (— 478)	
20. Stiphnosomatidae. p 35.	{ 1. Stiphnosoma. Tief. (— 481)	
<u>Section 10 Anthocorina</u> Syagodes. p. Burm.		
Anthocoridae. Amy & Serv. Microphysae		
Anthocoridae Acanthidae. & Ceratocan-		
-idae. Tief.		
Fam	Doug Genus	Doug
1. Microphysidae. p 36.	{ 1. Myrmecobia Barren. (p 488)	
	2. Xygonotus Tief. — (— 486)	
	(1. Tetraphleps Tief. — (— 490)	
	2. Jemnostethus " — (— 491)	
	3. Anthocoris Fall. — (— 494)	
	4. Lyctocoris. Hahn. — (— 498)	
2. Acanthidae. — p 37	5. Peristethus. Tief. — (— 500)	
	6. Tricholeps — " — (— 502)	
	7. Brachysteles. Muls. — (— 505)	
	8. Cardiostethus Tief. — (— 507)	
	9. Xylocoris. L. Guf. — (— 507)	
3. Acanthidae. — p 37.	{ 1. Acanthia. Fall. — (— 509)	
4. Ceratocomidae. — p 37.	{ 1. Ceratocombus Sign. (— 513)	
	{ 2. Dipsocoris. Haq. — (— 515)	
<u>Section 11. Oculatina</u> . Oculati. Lat. Amy & Serv.		
Riparii. Burm. Saldae. Tief.		
Fam	Doug Genus	Doug
1. Saldidae. — p 38.	{ 1. Salda. Fall. — p 517.	
<u>Section 12. Reduvina</u> . Reduvini. Burm.		
Reduvidae. Westw. nudirostris Amy & Serv.		
Fam	Doug. Genus	Doug.
1. Reduviidae. — p 39.	{ 1. Plocaria Scop. — (p 535)	
	2. Pygolampis. Germ. (— 539)	
	3. Coranus. Curt. — (— 540)	
	4. Reduvius. Fall. — 542	
Suborder Hemiptera Heteroptera. con-		
Division 1. Gymnocerata. continued.		
Subdiv. 2. Hydrobromica.		
Sect. 1. Hydrometrina. Hydrometrae &		
Hydresses Tief.		
Fam	Doug Genus	Doug.
	1. Hydrometridae. p 41. { 1. Hydrometra. Fall. (p 557)	
	2. Veliidae. — p 42. { 1. Velia. Latr. — (— 569)	
	2. Mucronelia. Metz. (— 573)	
<u>Section 2 Limnobatina</u> . Limnobatidae. Tief		
Fam	Doug Genus	Doug
	1. Limnobatidae. (p 43. f 1. Limnobates. Burm. p 575)	
Suborder Hemiptera. Heteroptera.		
Division 2. Cryptocerata. Doug II. 577		
Hydrocorisae. Westw. &c		
Subdiv. 1. Litoralia. Doug. 43.		
contains only one genus. Pelagonus. which		
wanting in Britain.		
Subdivision 2. Aquatilia.		
Section 1. Aphelochirina. Acanthidae. Westw.		
Aphelochirae. Tief.		
Fam	Doug Genus	Doug.
	1. Aphelochiridae. p 46. { 1. Aphelochirus. Westw. (p 577)	
Section 2. Naucorina. Doug 45. Nepidae.		
p. Westw. Nepini p. Burm.		
naucorides. Amy & Serv.		
Fam	Doug Genus	Doug
1. Naucoridae. p 45. { 1. Naucoris Geol. (p. 579)		
Section 3 Nepina. Doug 45. 581. Nepidae p. Westw.		
Nepini p. Burm. Nepides Am & Serv.		
Fam	Doug Genus	Doug
1. Ranatridae. p 46. { 1. Ranatra Fall. (p. 581)		
	2. Nepa Lin. — (p. 583)	
Section 4. Notonectina Doug 49.		
Notonectidae. p. Amy & Serv. Notonectini. p. Burm.		
Notonectidae. p. Westw.		
Fam	Doug Genus	Doug.
1. Notonectidae. p 48. { 1. Notonecta Linn. — (p. 585)		
2. Pleidae. — p 48. { 1. Plea. Leach. — (p. 590)		
Section 5. Coreicina. Notonectini. p. Burm.		
Notonectidae. Westw. Coreidae Amy & Serv.		
Fam	Doug Genus	Doug.
	{ 1. Corixa Geoff. — (p. 591)	
1. Coreixidae. — p 50. { 2. Cymatia Flor. — (p. 613)		
2. Sigaridae. — p 50. { 1. Sigara Fall. — (p. 615)		

16.

In order to give a more general and condensed idea of the general classification of Heteroptera, as given by some of the best authorities, it will be necessary to recapitulate and we shall mention only the most important divisions as given by Burmeister Westwood Amyot & Serville. & Douglas Scott.

Burmeister as will be seen by referring to p 1. to 6. Separated the Heteroptera into two great divisions, namely the water bugs Hydrocores, and the land bugs Geocores. These were again divided into families *vix.*

Division 1 Hydrocores	Fam 1. Notonectidae. " 2. Nepidae. " 3. Galgulidae.
Division 2 Geocores -	" 1. Cydromidae. " 2. Rhipidiidae. " 3. Reduvidae. " 4. Membracidae. " 5. Capsidae. " 6. Lygaeidae. " 7. Coreidae

These families are then subdivided into genera & species

Westwood (see p 7) divides the Heteroptera into two Sections Hydrocoris. Water bugs and Aurocoris. Air (or land) bugs

Section 1. Hydrocoris	Fam 1. Notonectidae Leach " 2. Nepidae Leach
Section 2. Aurocoris.	Fam 1. Galgulidae. " 2. Acanthiidae. Leach " 3. Cydrometridae Leach " 4. Reduviidae Steph. " 5. Cimicidae West. " 6. Tingidae Westw. " 7. Capsidae. " " 8. Lygaeidae " " 9. Coreidae " " 10. Scutelleridae "

Amyot & Serville divide the Heteroptera into two Sections. Geocores, & Hydrocores, as on p 9.

Section 1. Geocores.	Fam 1. Longiscuti " 2. Subreicornes. " 3. Insericornes " 4. Cecigenae. " 5. Boceciuli. " 6. Ductirostris. " 7. Nudirostris. " 8. Ploteres.
Section 2 Hydrocores	" 1. Bigemini. " 2. Pedirapti. " 3. Pediremi.

These families are then subdivided into Tribes Races & Groups

Maugas and Scott in their arrangement of the British Hemiptera Heteroptera, published in London 1865. adopt the following classification.

Suborder 1. Hemiptera. Heteroptera.

Division 1. Gymnocerata.

Subdivision 1. Geodromica

Section 1. Scutellina	Section 7. Hebrina.
Scutellina	
" 2. Coreina	" 8. Corticolina.
{ Coreidae	{ Aradidae. Tab.
" 3. Berytina	" 9. Capsina
{	{ Capsidae.
" 4. Coccoenina	" 10. Anthocorina.
{ Pynhocoridae	{ Anthocoridae
" 5. Lygaeina	" 11. Oculatina.
{ Lygaeidae	{ Oculati.
" 6. Tingidina	" 12. Reduvina.
{ Tingidae.	{ Reduviidae

Subdi 2 of Div. 1. Hydromica. Hydrocoraces

Section 1. Hydrometrina.

" 2. Limnotrina.

Division 2. Cryptocerata

Subdivision 1. Litoralia. (am Pelagonus only.)

Subdivision 2. Aquatilia

Section 1. Aphelochorina.

- " 2. Naucorina.
- " 3. Nepuna.
- " 4. Notonectina
- " 5. Corixina

These sections are then subdivided into families & genera as on page 12213..

Alphabetical List of the Families, & Genera of Heteroptera

mentioned in this work. with Synonyms. Habits. Food. Habitat. &c.

as the works of Thomas Say on American Entomology, edited by G. C. O. Say, are in almost all Entomological libraries, and have been most frequently consulted. all the species mentioned by him are noted down in this list together with the names of the genera to which they have more recently been removed by Professor P. R. Uhler, and others.

The number of the plate on which a larva, pupa or perfect insect is figured, is distinguished by being in Roman numerals, whilst the number of the figures is in Italic, thus IV. 2. denotes that the insect is figured on Plate 4. figure - 2. Notes and Observations by Professor P. R. Uhler, will have his initials (P.R.U.) placed after them. The Synonyms will also be in Italics.

Acanthia, Tab. Burm 252. Cimex. Linn. Cap. Westw. 2 474. Acanthia. Tab. Amy 310. Doug 509.

" { Sch. & Lat. see Say 1. 359. small insects found under bark of trees, on beds &c.

Acanthia columbaria. Jenyns. Ann. Nat. Hist. III. 1839. Doug. 511. Pack 551. Verrell 103

Westw 2. 477. Cimex. Pigeon bug.

This insect is smaller, and more orbicular than the common house bed bug. the antennae shorter, &c. (see Douglas, p. 511) it infests Pigeons, & pigeon houses. berrill (p. 103) says, "it is doubtful however whether A. columbaria, A. hirundinis, & A. pipistrella are not identical with the common species. (A. lectularia) at any rate it appears that the common bed bug will attack itself to bats, & various birds, when opportunity offers." Ins. infests pigeons. Luctirostre

Acanthia confluenta. Say 1. 361. (confusa) U.S. is Salda. Tab. (P.R.U.)

Acanthia gossypii. see Tingis. Fieb. p 104.

Acanthia hirundinis. Jenyns. Ann. nat. hist. III 1839. Pack. Verrell. Westw. Doug. as 511. Cimex Swallow bug. The insect is less than A. columbaria, the antennae are comparatively short. Eyes not so prominent. Thorax much less hollowed out in front. &c. see Douglas, p 511. Ins. infests swallows.

Acanthia humulis. Say 1. 360. (Fla) is Salda. Tab.

Acanthia hirta. Say 1. 359. (Ind) is Salda. Tab.

Acanthia interstitialis. Say 2. 248. "not uncommon on the shore of the Missouri river skipping nimbly about." Say. is Salda Tab

Acanthia lectularia. Linn (Cimex) Amyot 313 Doug 510. Leucis 658. as Cimex lectularius Am Ent 1. 87. Pack 551. Verrell 103. Westw 2 475. Ann Nat. IV. 85 &c (Eu & S) Ind. III. 9. fm. Ma.

Westwood states "it is generally asserted that this insect was brought over to England from America whence it passed over to the continent of Europe. & that it was not known in England until 1650. Moxfett however

Acanthia (Tet) Lectularia. continued.

mentions its having been seen in 1503. Leunis states that they probably originated in the East Indies. & says "it is a historical fact that they first appeared at Strasburg in the eleventh century." & that "they were first imported into London in the bedsteads of the banished Huguenots." Verrill states that this insect is mentioned by Pliny, Aristophanes, Aristotle and other ancient writers, and although it was seen by Mawffett in 1503 in England it does not appear to have been common there until a century later.

The eggs are white, oval, slightly narrowed at one end, and terminated by a cap, which breaks off when the young one escapes. The young ones at first are very small white, and transparent. It takes eleven weeks, before they attain their full growth. & they are said to cast their skin several times before attaining maturity. It is probable however that temperature, and food have much influence in accelerating, or delaying their final change into the full grown imago. The insects are gregarious in habits. & herd together in cracks, chinks, & corners of bedsteads. & return constantly to the same hiding places morning after morning, like birds returning to their roosts. (Verrill) They are very tenacious of life, and have been kept hermetically sealed in glass bottles for more than a year without food. & were yet lively. & had a good appetite. Leunis mentions an instance where a female bed bug lived for six months in a tightly closed box which when opened was found to contain not only the mother, but also her numerous progeny, of young bugs, both mother and offspring being as transparent as glass from want of food. They hibernate in cracks and crevices of the walls, floor, or furniture. Leunis also states that the female lays about fifty eggs. & that the principal months for oviposition (in Europe) are March, May, July, & September, but that the September brood perish and only the fully matured insects are able to live over the cold of winter. Their food consists of blood. & they are very troublesome to Mankind. & Bats, swallows, pigeons, domestic fowls, &c (Am Ent. 1. 131) are very much infested by bed bugs, probably however of different species to our common house bed bugs. (See *Acanthia columbaria*, &c.) These insects although apterous, are said to have been seen with wings, but this is probably an error. & some other insects (*Cyllocoris domesticus*, &c) have been mistaken for them. They are likewise said to have been found under bark of trees, in woods & fields, but Mr. Walsh... (Am Ent. 1. 87) has never found them in such situations. & thinks that a small beetle, (*Prometopia sexmaculata*) has been mistaken for them, as they inhabit such localities. Bed bugs are said to be destroyed by Cockroaches, (Blattidae) by *Reduvius personatus*, probably by *Piratas biguttatus* (Am Ent. 37 Pack 541) & *Conorhinus variegatus*, (*C. sanguisuga*) Am Ent. Dactylosternum ligata, Say. 1. 859. (Ind.) is *Salda Tab.* Lugubris, Say 1. 360. (Ma) is *Salda Tab.*

Acanthia.

Acanthia.

20.

Acanthia pipistrelli, Jenzns Ann. nat. hist. III. 1839. Aug 512. Pack. verrell. Westw.

Bat bug. (*Cimex*)

Insect with antennae of intermediate length between *A. leclvaria*. and *A. columbaria*. 3^d joint obviously longer than the 4th. Eyes prominent. Abdomen narrower & much more attenuated posteriorly, the whole insect very pubescent. ♀. See Doug. p 512. Ins. infests Bats (Eu) Dactylostri

Acanthia saltatoria Linn. Westw. 2. 465. fig. 120. (Eu) — Pl. IX. fig 6. } — Dactylostri

Acanthiidae (Leach) see also Westw 2 p 465. Ins. small. eyes large oval depressed bodies. ♀. see Westw

Acanthocephala (Lap.) *declivis*, Say. *Rhinuchus* Say 1. 305. 327. *Metapodus* Westw
(Geo. Louisiana. Say.) *Anisocelis* Say. 1. 305. 327. In VIII. 24. Supericornes

Acanthocephala femorata Fab. ♂. *Rhinuchus nasulus*, Say 1. 305. *Anisocelis*, Say.

1. 327. 305. *Rhinuchus nasulus*. Walsh. Am. Ent. 1. p 12. *M. nasulus* Pack 546.
(Geo Fla. Ga.) Ins. I. 20. Supericornes

Eggs smooth short oval. found arranged like beads of a necklace in July on a leaf of white pine. (Am Ent 2.25.) This insect in the western states is said to injure cherries by puncturing them with its beak sucking out the juices. Supericornes.

Acanthocephala terminalis Dallas. — Metapodus. — Ins. I. 19. Md. Sep.

common on bushes. in low grounds. near woods. (P.R.U) Supericornes.

Acanthocephala thomasi. Uhler. — Metapodus. Ins. IV. 11. 4. VII. 22. "

Acanthosoma (Curtis) *cruciata* Say. *Edessa* Say 1. 811. Ins. IV. 13.

a species inhabiting New England. Canada & British America

thus far not found south of Massachusetts." (P.R.U) Longiscuti.

Acanthosoma grisea, Burm. *Pentatoma*. Lat. Amy 154. Aug 101. K&S. 203. Westw 486.

(Europe) Insect found on Birch. May. & Sep. De Geer in his "Memories" gives a very interesting account of this insect he states that the females accompanied by their respective broods. each consisting of from 20 to 40 young ones. — are found in July. & that the mother conducts the young as a hen does her chickens. never leaving them. but assembling them together in a cluster. when restless. she beats her wings. as if to protect them. this is said to be in order to guard them from the males which otherwise would destroy them. in Leunis it is even stated that the mother is said absolutely to sit upon the eggs as if to hatch them. but this latter fact is somewhat doubtful more lately however Douglas states that Mr Parfit of Exeter. says — that he saw "the mother insect watching over & protecting her young" and adds "indeed I never before saw such affection exhibited by any insect." *Acanthosoma lateralis*. of Say. is said by Prof. Uhler to be our north American representative of this insect. Longiscuti.

- Ocanthosoma*. (Curtis) *tutelaris*. Say Heteropt p.3. no 2. *Edessa* Say 1. 312.
 { *nebulosum* Kirby Ins. IX. 7.
 "This is the North American representation of *A. grisea*. Burm. & agrees with
 it in pattern of markings very closely" (P.R.U.) *Longiscutellum*.
- Aceratodes*. (Amy. 160) *cornuta*. Burm *Edessa* Tab. *Pentatomula bifida* Say 1. 308. 322.
 { (Southern States) Ins. VIII. 32. coll of Mr Uhler
 Insect not yet discovered north of S.C. *Longiscutellum*
- Acetropis*. Fiel. 302. 347. (Europe) side view of head. X. 2. pl 6 Tab *Bicellulum*
- Acinocoris* (Hahn Amy 274). *separatus*. Uhler (Califor). VIII. 35. *Cecigenae*
- Aelia*. (Tab) *acuminata*. Linn. *Cimex* Linn *Pentatomula* Lat. Amy 134 Doug 68 pl. 2 fig 6.
 (Europe) Ins. IX. 23.
 Insect very common in France in summer. It frequents the extremities of
 the cereals especially the ears of barley (Amy). It is found also amongst grass
 in June. (Douglas.)
 Ins. flavous or ochreous. with a green tinge. a black stripe down the middle.
 a strong raised yellow line being in the centre of the black stripe. & *Longiscutellum*
- Aethus* (Hall) *bilineatus*. Say 1. 348. & 2. 242. *Cydnus* Latr Amy 91
 (Pa. Ind. Miss) Ins. II. 11.
 "The fossorial legs fit it especially for digging. & it is commonly found beneath
 sticks. and stones. on the ground. in Maryland." (P.R.U.) *Longiscutellum*.
- Agramma*. (Westw.) *laeta*. Fall *Tingis* Fall. Doug 243. pl 9. fig 1.
 (Europe) Ins. found by sweeping grass. Ins. IX. 33.
 Ins. black. anterior margin. & scutellar process. of pronotum & elytra. wholly pale
 ochreous. legs yellow brown. *Bicellulum*
- Allotomus* Fiel 303. 347. (Europe) side view head X. 23 pl 6 Tab *Bicellulum*
- Alydus*. (Fab) head prolonged. ocelli near together last joint antennae often twice as
 long as the two preceding ones together. body small. & slender *Supericornes*
- Alydus* (Fab. Amy 225) *ater*. Dallas (US) Ins. IV. 26.
 "This is only the ♀ of *A. eurinus*. Say" (P.R.U) see below.
- Alydus* — *calcaratus*. Linn. Amyot 226. Doug. 143. pl 5. fig 7. Ins. IX. 26.
 (Europe & US) This insect is common in the vicinity of Paris at the end of
 summer according to Burmeister it frequents plants of Spurge (*Euphorbia*)
 but according to Schilling it frequents *Spartium scoparium*. & dyers weed. —
 (*Genista tinctoria*) Douglas states that it has been taken among heath & on *Ulex* & *Ononis*
 note "It has been found once or twice in the northern parts of the United States" (P.R.U)
 Ins. black. through which a dull ochreous ground color indistinctly shows. *Supericornes*
- Alydus*. — *eurinus*. Say ♂ *Lygaeus* Say 2. 247. Pack. 546. "a widely diffused species."
A. ater above is the ♀. Ins. VI. 21. Ind.
 "occurs in late summer & autumn sometimes in great numbers on Golden-
 rod. & other herbaceous plants growing rankly near the edges of woods. also
 on *Rhus glabra* (smooth sumach)" (P.R.U.) *Supericornes*

- Alydus* (Fab.) *spiniferus*. Gay. *Tyqueus quinque spinosus*. Say 2.247. Ins I. 16. Md.
 { (U.S. Md.) common in rank growth in damp meadows & woods. Supericornes
- Amblytylus*. Tsch. 326. 347. (Europe) side view of head. X. 22. pl 6 Tsch. Bicelluli
- Ambyrus*. (Stål) *signoreti* Stål. *Nauconis* Geoff. Ins VII. 14.
 { (Cal Ariz. New Mex.) "An inhabitant of lakes, & still ponds, on the bottom among
 the slushy debris." (P.R.U.) Pedirapti
- Amnestus*. (Dallas) see *Cydnus spiniferus*. Say 2.243 (Missouri) Longiscuti
- Anasa*. (Amy 209.) *armigera*. Gay. *Coreus armigerus* Say 2.244 Ins VII. 18. Supericornes
 { In Florida and the southern states, on low bushes and herbaceous plants. (P.R.U.)
- Anasa*. *frustis* Deger. *Coreus*. (Lat Amy 287) Tsch. Harris. Recd Reps. Ontario fruit grow-
 ers ass'g. 1871. 74.90. Riley 2^o rept. 1809. 31.8^c. *Coreus ordinatus* Say 2.244.
Gonocerus (Lat Amy 288.) Pack 565. Squash bug. L Ins I. 14. Md. →
 (U.S. Mass. N.Y. Me. Va. Fla 8^c)
- Eggs said to be round flattened on sides, & of a metallic brown color, deposited
 in little patches, fastened with a gummy substance, to the underside of the leaves
 of Squashes & other Cucurbitaceæ, in June, July, &c until late autumn. These
 eggs are not all deposited at one time on the plants, but in successive broods
 during the whole season. The Larvae, Pupæ, & perfect insects, all indiscrimin-
 ately attack the leaves and cause them to wither up by sucking out the
 sap and appear to poison the foliage. — They moult their skins several
 times before attaining the perfect or winged state. & become more oval in form
 as they grow older, and as successive broods throughout the summer, they
 do much injury to squash, & pumpkin vines. These insects sometimes collect in
 masses around the stem, near the earth & injure the plant itself, by extracting
 its sap with their piercers. They also give out an odor somewhat similar to
 that of an overripe pear, but which is too powerful to be agreeable. The perfect
 insects late in the autumn or when cold weather begins, leave the plants, &
 hibernate, or pass the winter, under bark of trees, on moss, or in crevices of
 stone walls, and old fences. & in Maryland they have been found in mid-
 winter in great numbers in old decayed trees, & stumps, in a perfectly tor-
 pid state, but when exposed to moderate heat, they soon regain their vitality.
 These insects have been reported by some farmers as beneficial by destroying
 the Colorado potato beetle, (*Doryphora decimlineata*) but this most probably
 is incorrect, & the bug reported as seen killing the Colorado beetle was prob-
 ably, *Podisus* (Anna) *spiniferus*, (an insect well known to feed on other in-
 sects,) as it somewhat resembles a Squash bug in size, shape, & color, & by
 the uninitiated might possibly be mistaken for it, although the habits of the
 two insects are essentially different, the *Podisus* being highly carnivorous
 whilst the Squash bug confines itself to vegetable food. (Am Ent 1. p. 47.)
 It is true however, that we once saw a mature squash bug, busily engaged in
 sucking the juices out of the body of a young insect of its own species, that
 had been accidentally crushed to death on a squash leaf. Supericornes

- Aneurus. (Curtis) politus. Say 1. 364. Fla. — Ductirostris.
- Anisoscelis. (Amy. 217. of Gal.) albicinctus. Say 1. 396. See Leptoglossus phyllopus. Supericornes.
- Anisoscelis (Gal.) circinus Say 1. 326. See Leptoglossus.
- Anisoscelis declivis Say 1. 305 327. Rhinichus Kirby (Geo. Low) see Ocanthocephala.
 { "posterior tibiae dilated & compressed their whole length. more prominent - towards exterior base"}
- Anisoscelis. nasulus Say 1. 305 327. Rhinichus (Geo. Fla. Low) see Ocanthocephala —
- Anisoscelis. oppositus Say 1. 326. (Ind.) very closely allied to A. albicinctus but may be known by the small white point of the hemelytra. see also Leptoglossus.
- Anthocoris. (Lygaeodes. Burm.) (Anthocorides. Amy & Serv.) Doug 36. Section 10 of Subdi-
 vision 1. Geodromica. (Geocoris) it contains 4 families. Doug 36 & 483.
- Anthocoris Fall Amy 262. insidiosus Say. Reduvius Say 1. 357. Pack. 544. Riley 2d Rep. 1869
 p 27. A. pseudochinche Fitch 395. Triphleps Fiel. (Md. Illin. N.Y. Va. &c.)
Insidious Flower bug or False Chinch bug. L.P. Ins I. 18.
 Insect found upon the same flowers & leaves, as the true chinch bug. & is frequent-
 ly mistaken for it. it is probably beneficial by feeding on other insects. Two
 European species "A. minutus. & A. nemorum" have been well known as preying
 on plant lice? (Aphides) (Curtis Farm insects. p 439) The perfect insects inhabit
 flowers. & the immature ones wander about in search of plant lice. which they
 transfuse with their sharp beaks. & suck out their juices. Our native species also
 probably preys upon the true chinch bug. (Micropus Leucopterus) (Am Ent)
 Mr. Riley in the 2d Report 1869 p 27. states that this insect does feed on the
 Chinch bug, as it does also on the grape leaf gall louse. (Pemphigus vitifoliae)
 and in the Am. Entomologist 1. p 248 a notice will be found where two in-
 sects of this species were found in grape vine leaf galls. destroying the lice.
 "It is very common in Maryland on the Ox eye daisy & is not unrequent-
 ly upon the fruit of Raspberries. and Blackberries. This is one of the insects
 which produce such a disagreeable "chinchy" taste when taken into the mouth
 with Blackberries. & Raspberries" (Dr. U.) Infericornes.
- Anthocoris musculus Say Reduvius. musculus. Say 1. 357
- Anthocoris nemorum. Linn. Doug 496. pl 16. 6. Cimex Linn (Europe) Ins IX. 29.
 Insect found on trees & bushes. Individuals of this species & also of A. nemoralis.
 are often found in the bladdery mines. made on the leaves of Oak, by the larvae
 of the genus Litocalotes. (Lepidop.) Mr. Stanton once saw an Anthocoris outside
 one of such mines. with its rostrum thrust through the loosened outer cuticle
 of the leaf, sucking the larva within. Infericornes
- Anthocoris nemoralis. Fal. Doug 496. (Europe)
 Ins. black. shining. elytra pale whitish yellow. membrane yellowish -
 white posteriorly. centre fuscous black. legs yellow.
- Anthocoris nemoralis. Fal. Doug 496. (Europe)
 Ins. common on various trees from July to Sep. & for habits see A. nemorum.
 black with fine appressed yellowish hairs. 2d joint of antennae broadly -
 yellow brown on the middle &c.

24.

Aphelochirina. Doug 44. 577. Section 1. of Subdiv 2. *Aquaticia* or water bugs, containing only one family. *Aphelochiridae*.

Aphelochirus. (Westw. Syn 119. & 2463.) approximates nearly to *Naucoris* in being truly aquatic - whilst the elongated structure of its rostrum proves its decided affinity to *Peleognathus*. & *Salda*. (*Acanthia* of Westw.) Pedirapti.

Aphelochirus (Westw.) *aestivalis*. Westw. Doug 572. pl. 19. 5. Naucoris Tab. (Europe) Ins VIII. 16.

Insect swims. & dives like Corixa. it is also found in damp situations, near-water. swims very fast, chiefly with its hind legs. & creeps slowly using only its fore legs. - Ins. smooth & of a dull light brown color. Pedirapti.

Apiomerus. (Burm.) Amy 337. *crassipes*. Tab. (U.S. Md.) Reduvius Say 1. 72.

Insect raptorial in habits, & feeds on other insects. Ins VI. 30.

Apiomerus. *linitaris*. Say. Reduvius Say 1. 355. (U.S.)

Apiomerus. *spissipes*. Say. Reduvius Say 1. 72. (U.S.) Ins. VI. 24.

Ins feeds upon other insects. & has been reported as killing bees.

Apiomerus. *occidentalis*. Uhler. MSS. note. (U.S.)

Ins probably raptorial in habits.

Ins VIII. 39.

Apiomerus. *ventralis*. Say. Reduvius. Say 1. 355.

Aquaticia. Douglas 44. Subdiv 2 of Div 2. *Cryptocerata*. (Hydrocorisae) or "Water bugs".

It is divided into 5 sections. viz 1. *Aphelochirina* (Doug 44. 577) 2. *Naucorina*. (Doug. 44. 579.) 3. *Nepina*. (Doug 46. 581.) & *Notonectina*. (Doug 48. 585.) & 5. *Corixina* (Doug 50. 591)

Aradus (Tab. Amyot 307.) Beak longer than head. prothorax widely expanded. wing covers rounded at base." The species are said to feed on fungi". Doug 271.

Aradus. Tab. *acutus*. Say 1. 351. (Fla. Ind.)

Dactylostri

" " *aequalis*. Say 1. 352. (Ind.)

Aradus. " *americanus*. H. Schf. (Md) Ins III. 3. Md.

{ Insect found under bark of dead trees. & not uncommon.

Aradus. " *crenatus*. Say 1. 350. Pack. 553. (Mo. Ind.)

{ Insect cylindrical with edge of abdomen obtusely crenated. found under bark

Aradus. " *emarginatus*. Say 1. 354 (Mex.)

Aradus. " *granulatus*. Say 1. 353. see *Brachyrhynchus*. (Fla. Ind.)

{ possibly the connecting link with *Anurus*. Say.

Aradus. " *lobatus*. Say 1. 354 see *Brachyrhynchus* (Ind.)

" " *ornatus*. Say 1. 352. (Ind.)

" " *quadrilineatus*. Say 2. 249. (Mo.)

" " *rectus*. Say 1. 352. (Mo. Fla.)

" " *similis* Say 1. 351. resembles *acutus*. Say.

Archimenes. Stål see *Pterogaster calcarator*.

Arilus. Hahn. see *Prionotus*. & *Reduvius*.

25.

- Arma. (Hahn) Amy 85. Am Ent 1. 207. Soldier bugs. a carnibal group. the eggs are deposited in a round mass. with long slender sharp prickles around their tip see also Podisus. Longiscutu.
- Arma. bracteata. Fitch see Podisus cynicus. (a var)
- Arma. grandis Dallas. " " "
- Arma. modestus Dallas. see Podisus.
- Arma. spinosa Dallas. see Podisus.
- Arvelius. (Spin.) albopunctatus. Taurocerus Amy 151. (218) Ins VIII. 29. Longiscutu.
- Asopus. (Burm Amy. 83) deania. see Stiretrus. (218) Longiscutu
- Asopus. emarginatus. see Euthyrhynchus floridanus. (218) "
- Asopus. luridus. Burm. (Europe.) Ins found Aug. & Sep. in damp places. Doug 95 "
- Astemma (Lat) see also Bayecoris Bicellati
- Astemma. apterum. Linn. Amy 284. (Europe.) " Insect common in France. on Graminiflorous plants. & on Umbelliferæ. "
- Astemma. mavortiae Say 1. 337. (Pa. Fla. Ind. & Mo.) see Cremodes. Inferiorines.
- Augocoris. (Burm. Amy 36.) pallidus Beauv. (U.S. Fla. Cuba) Ins VIII. 37. Longiscutu.
- Aulacostethus. (Uhler) marmoratus. Say. Tetyra Say 1. 310. Pack. 547. Ins. IX. 11. Insect very variable in arrangement & brightness of colors. it inhabits the pine regions of New Jersey. (Say) Ins. variegated. the costal margin of its wing being provided with transverse fuscous lines. (Pack) Longiscutu.
- Aurocorixa. (Westw) (Geocoris. Burm) Section 2 of Westwood vol 2 p 463. & gen. Syn. p 119. Containing the land bugs. It is divided into 10 families, viz 1. Galgalidae. (Burm) 2 Acanthidae (Leach) 3. Hydrometridae (Leach) 4 Reduviidae (Staph.) 5 Cimicidae. (Westw) 6 Tingidae (Westw) 7. Capsidae. (Westw) 8 Lygaeidae. (Westw). 9. Coreidae. (Westw) & 10 Scutelleridae. (Westw)
- Banasa. (Stål) calva Say Pentatoma Say 1. 318 (U.S. Md. Va.) Ins IV. 15. Md. Ins taken by Say in Va on the holly. Longiscutu.
- Banasa. dimidiata. Say. Pentatoma Say 1. 318. (Geo Fla.) "
- Banasa. ruecklora. Stål (Md. N.J. Ic.: a;) Ins VIII. 31. " Ins. rare in Maryland. but quite common in Texas. ... (PERU)
- Bed Bug. see Acanthia lectularia.
- Beharus. Amy 352. Reduvius. Lat Apiomorphus. Burm. Amy. Nudostri
- Belonocheilus (Uhler) see Lygaeus numenius Say 1. 331.
- Belostoma. (Lat. Amy 427.) Nepa. Linn. Pack 537. Westw. 2. 462. Say 1. 864 8^o Podirapti. Insects generally of large size. living principally in the water but coming out occasionally in the evening or at night. & taking long flights. some species measure 3 to 4 1/2 inches in length. their eyes are large, body elliptical. oval. the 2^d to the 4th Antennal joints. are furnished with hook like expansions. the body is oval. elliptical. & flattened. the fore tarsi of the adult is two-jointed. with a single claw whilst the larvae have two claws. The hindtars are broad. flat. but not fringed. Their habits are predaceous. & they feed on aquatic larvae. insects & young fish. & probably destroy fish eggs etc.
- Inferiorines error should be Bicellati

Belostoma continued.

26.

also. The females of some species (Serpulus, or Laius) carry their eggs upon their backs, arranging them with great symmetry in a single layer. (Westw.) Other species deposit their eggs, (which are smooth, cylindrical, & about 0.16 inches in length) in a mass of about 90 eggs, under logs, just at, but above the surface of the water. These eggs are attached by the posterior end to a mass of silk gum, and partially overlap each other, & the young escape by a round lid, indicated by a semicircular white one.

Belostoma. (Latr.) americana. Leidy Taur. Acad. Nat. Sc. Phil. 2^d series. 1. 58 Say 2. 366.

{ B. annulipes H. Sch. (Maine to Fla) Ins. V. 8. Md.

Insect aquatic & feeds on other insects & small fishes &c. A small goldfish in the aquarium of the Department of Agriculture was killed by one of these insects during the night, thus proving conclusively that they are injurious to fish. & should be destroyed in or near fish breeding establishments. They also leave the ponds at night time & fly to considerable distances Pedirapti

Belostoma annulipes H. Sch. Say 1. 365 syn of B. americana Leidy

Belostoma boscii Say 1. 364 see Zaitha fluminea.

Belostoma dilatata. Say 1. 366. (Mex) Serpulus Stål

Belostoma fluminea. Say 1. 364 see Zaitha & Peristostoma.

Belostoma grandis. Say 1. 365. Gigantic water bug Am Ent 1. 119 269.

{ Ins lives in the water & feeds on aquatic insects & small fish &c

"Does not live in North America. (Proc. Surinam Caracas &c") P.R.U.

Belostoma guineae Say 1. 365. Nepea (Can to Fla) Ins 3 1/2 inches in length

Belostoma haldemanni. Leidy Pack 537. (Md.)

{ Ins. 3 1/2 inches in length & has black patches on underside of body. Pedirapti

Berytina. Doug. (Coxeodes Burm) (Coneidae Westw) (Supercornes Amy & Serville)

{ Section 3 of subdiv 1. Geodromica. (Geocoris) Doug 19. 165. contains only 2 families: Berytus. & Neides.

Berytus (Fab) muticus, Say 1. 328. (Nth West. Terr.)

{ Ins. differs from B. spinosus. in being destitute of spines before the posterior coxae, & on the scutel. B. tipularis of Say 1. 328 has the head elongated before, & the hemelytra are spotted. Supercornes

Berytus spinosus. Say 1. 28. 328. pl 14. See Neides.

Berytus tipularis. Say 1. 328. See Neides.

Bicelluli. Fam 5. of section 1. Geocorisaec, Land bugs. Amy & Serv. XXXVIII. 275.

{ (Capsini. Burm) Heteroptera or plant bugs which have the membrane of the wing presenting 2 basal cells, & no other nerves, but those forming the cells. the last joint of the antennae is very fine, & setiform. & the insect has no ocelli. it contains 3 groups. viz 1. Mirides (Amy 277) Capsides. - (Amy 278) & 3 Astemmides Amy 383 G. pl. X. fig 40.

Bicelluli. Douglas. Division 2. of section 9. Capsinae. Doug 28. 281. it contains

{ 20 families. see p. 15.

27.

- Bicemmni*. Amyot. Fam 1. of Section 2. *Hedyscorisae*, or water bugs. Amyot 4
 Serville. I. 423. they possess 2 ocelli, hence name. it contains only one group
 viz. *Galgulidae*. (Amy). Gpl. X. 44.
- Brachycotus*. Tiel. 305. 347. side view head. X. 5. pl 6. Tiel (Europe) Bicelluli
- Brachyrhynchus* (Lap Amy 304) *granulatus* Say *Aradus* Say 1. 353
 { Insect found under bark of a dead tree. (Md.) Ins. III. 4. Ductinostri
- Brachyrhynchus*. lobatus. Say. *Aradus*. Say 1. 353.
- Brachystira*. Tiel 300. 347. side view head. X. 18 pl 6. Tiel (Europe) Bicelluli
- Brachytropis*. Tiel 301. *calcaratus*. Tellen. (Md) Ins. IV. 1. Md. Bicelluli
- Brevicornes*. Race 9. of Fam 7. *Nudirostris*. Amy & Serv XLIX. 406. containing only -
 { one group. *Polygonides*.
- Brevicipites*. Race 4. of Fam 7. *Nudirostris*. Amy & Serv. XLVII. 381. containing only -
 { one group. *Spheridopides*.
- Brochymena* (Amy 106) *arborea*. Say. Pentatoma Say 2. 230. Haly's. Tab. 1 (Md) --
 { Ins found on trees in Maryland. & not uncommon. Ins II. 26.
 { " lives on trees in the city of Baltimore, and was active as late as Dec. 10th
 { of 1874, in the streets on door steps." (POR U) Longiscuti.
- Brochymena*. *annulata*. Tiel. Haly's. Tab. Am Ent 227. (Md) Ins. IX. 2. Longiscuti.
- { Ins "large angular, color brown, speckled with grayish yellow, & having the
 { edges of the body protruding from the half wings, the legs are marked trans-
 { versely, with black bars.
- Brochymena*. *taticornis*. Say. Pentatoma Say 1. 315. (U.S)
- Bryocoris* (Tellen) *Orthoneurus*. Westw. Cestemma Lat. 8. Westw. 2. 479.
 { Hind legs greatly elongated, with femora thickened. Insects of small size?
 { they leap with agility, & the hemelytra are often destitute of the apical mem-
 { brane. & are found generally on the ground, in sandy places. Westw.
- Bryocoris*. Tiel. *pteridis*. Tiel. Doug. 277. pl 10. fig 1. Capsus. Tiel (Europe), Ins. IX. 28.
 { The undeveloped form was found on *Pteris aquilina*. (Brake, or Bracken)
 { in England Sep (Europe & U.S. Md) Bicelluli.
- { Ins. black, somewhat shining, & thickly clothed with fine depressed golden hairs.
 { " It has become quite common near Baltimore on a species of *Pteris*, but was
 { unknown here prior to 1860." (POR U.)
- Cecigenae*. Doug. Cecigenae Amy & Serv Lygaeodes p. Burn Tygaenae Wesw. Sec-
 { tion 4 of Subdiv 1. Geodromica (Geocoris) Douglas 20 & 163. it contains
 { only one family Pyrroconidae. Doug. p 163. See also Cecigenae. Amy. 265.
- Calocoris*. (Tiel) *bimaculatus*. H Schf. Capsus Tab. (Md) Ins. I. 10 Md. Aug. Bicelluli
- Calocoris*. " Palmerii Uhler. (U.S) Ins from Dr E Palmer. Ins. VI. 7. Bicelluli
- Calocoris*. (Tiel 304.) *rapidus*. Say. Capsus Say 2. 339. C. multicolor. H Schf. (Md) Bicelluli
 { Ins. very common in Maryland & "lives on *Eupatorium*" POR U.
 { Ins. I. 2. (var) & 8. Md. Aug. & Sep. "

- Camaronetes*. (Feb. 322. 347.) *cinnamopterus*. Kirschb. *Capsus*. Kirschb. Doug. Pl. 11 fig. 8 & 359.
 { (Europe) Ins IX. 30. ♀ side view head. X. 28. Feb. pl. 6. -
 Ins. found on Pines, & Oaks. & when at rest might easily be mistaken for
 a small specimen of the large wood ant. (*Formica rufa*) Bicelluli
Camptobrochys. (Feb. 304. 347.) (Europe) Side view of head. X. 4. Feb. pl. 6. Bicelluli
Camaronetus. Feb. *clavatus*. Doug. see *Globiceps*.
- Geocorinae*. Fam 4. of Section 1. *Geocorisae* or land bugs Amyot & Serv. 38. 265.
 { *Lygaeides* Burm. Heteroptera or plant bugs having no ocelli, it con-
 tains 2 groups. 1. *Syrphocorides*. (Amy 265) & 2. *Largides*. (273 Amy.)
Campyloneura. (Feb. 309) *vitripennis*. Say. *Capsus* Say. 1. 345. Riley 3d Rep. 137
 "Glassy winged Soldier bug." of Riley. (Mo. Md. Va. W.) Ins. VII. 8 Uhler. Coll.
 Ins. taken in Aug. (Say) It is said to be beneficial by destroying the
 leaf hoppers. (*Erythroneura vitis*. Homop.) on the grape vine leaf. The
 insect is pale greenish yellow. Head & thorax tinged with pink. The upper
 wings are transparent, with a rose colored cross. Bicelluli
 "It lives besides on the wild chicken Grape. in Maryland, becomes adult.
 in August. & thrusts its beak into small caterpillars to suck their juices."
 "P.R.U."
- Capsidae*. (Feb. 2. 479) Fam. 7. of Section 2 *Aurocorisae*. (*Geocoris* Burm.) containing 14 genera. (see p. 8) Habits active. they frequent plants, fruits & trees. The females have the ovipositor nearly half the length of their bodies, somewhat Sabre shaped. & received into a slit on the under side of the abdomen. The insects are active, running & flying with agility. They frequent plants & trees upon the juices of which they appear exclusively (?) see below, to subsist. some of the species are especially fond of fruit, such as raspberries. which they suck with their rostrum. & impart a very nauseous taste to the fruit. (Uhler) For figures of head & descriptions. see Fieber in *Wiener Entomologische Monatschrift*. Vol 2. Nov. 1858. & plate 6.
- Capsidæ*. Amy 278 Group 2 of Fam 5 *Bicelluli*. are distinguished from Group 3. *Aileminides*. by the existance of a membrane to the elytrae. & the constant presence of wings. Bicelluli
- Capsini*. Fam 5 of Division 2. *Geocoris* Burm. It contains 7 genera. (see p 4) Insects of this family are found on plants, & flowers. where without doubt says Burmeister. (Amyot p 276. *Bicelluli*) they hunt other insects the fineness of the last joint of their antennæ leads us to suppose that by analogy, they are carnivorous."
- Capsus*. (Feb. Amyot 280.) Head triangular, convex. Antennæ elongated & narrow
 { the 2d joint often thickened at the tip. the terminal joints very slender
 rostrum long. & 4-jointed. body convex. oval. & of soft consistence. (Pack 550)
- Capsus* (Feb.) Nels. syn. 121. *Lygacis* Wolff. Broadly oval. punctured. antennæ with
 { 2d joint longest. clavate at tip. wings & hemelytra perfect. neck moderate
 or narrow. (Uhler)

- Capsus (Fab) ambucans. (Fallen) (Europe.) Bacelluli
 Fallen states that the winged males are always found coupled with
 apterous females. Westw. 2. 454
- Capsus (Fab Amy. 280) bimaculatus. H. Sch. see Calocoris.
- Capsus — bractatus. Say 1. 348. see Cylapus. Say.
- Capsus — chlorionis. Say 1. 346. (Ind.) Genus?
- Capsus — circumcinctus. Say 1. 343. see Resthenia. "resembles C medius but has
 black thoracic vittae." Say
- Capsus — clavatus. Fitch 1857 h 742. Club horned Capsus. (U.S. N.Y.)
 Ins. found on pine leaf. 0.20. in length. oblong. black with 3 silvery
 lines transverse. on wing cases.
- Capsus — colon. Say 1. 346 (Ind) Genus?
- Capsus — cinnamopterus. Hirschb. see Camaronotus.
- Capsus — confluentus. Say 1. 343. (Mo.) (somewhat resembles C gomphorus. Say.)
- Capsus — confraterna. Uhler. see Resthenia. (U.S.)
- Capsus — danicus. (Foreign) mentioned by Pack 550. the pupa being clothed with
 short & somewhat clavate hairs.
- Capsus — dislocatus. Say 1. 339. (Pa) on Verbasum Thapsus. (Mulleri) Say. Lygus
- Capsus — eremicola. Uhler. see Resthenia.
- Capsus — fusiformis. Say 1. 339. see Garganus. Stål.
- Capsus — geminus. Say 1. 346 (Ind) Genus?
- Capsus — gomphorus. Say 1. 341 (Ark) see Resthenia.
- Capsus — imbecilis (Ind) Say 1. 345. Genus?
- Capsus — insignis. (Geo) Say 1. 342. see Resthenia
- Capsus — irritans. (Ind) Say 1. 340. see Resthenia.
- Capsus — invictus. (Ind) Say 1. 345. see Lygus.
- Capsus — irroratus. (Ind) Say 1. 346. see Malacocoris.
- Capsus — lineatus. (Fab) see Lygus. Capsus quadrivittatus Say 1. 339. is a Spn.
- Capsus — lineolatus (Beauv) (Ptytocoris Fall) (Capsus obtineatus Say 1. 340) see Lygus
- Capsus — medius. Say 1. 341 see Lopidea
- Capsus — mimus. Say 1. 338. (Mex) see Dysdercus
- Capsus — multicolor. H. Sch. see Calocoris. rapidus.
- Capsus — nubilus. Say 1. 341. (Ind)
- Capsus — oblineatus Say 1. 340. (Pa. Ind. Nth west Terr. Mo.) see Lygus lineolatus
- Capsus — ochreatus. Say 1. 338. (Geo) see Dysdercus.
- Capsus — quadriannulatus. Say 1. 339. (Nth West Ter. Pa. Ind. Mo. Geo. see Lygus lineatus
- Capsus — pallicornis. Fab. see. Haeticus.
- Capsus — pteridis. Fall. see Bryocoris. (on Pteris)
- Capsus — rapidus. Say 1. 339. (Ind) see Calocoris.
- Capsus — scrupos. Say 1. 342. (U.S) resembles (C. insignis. Say.) see Ptytocoris.
- Capsus — stygius. Say 1. 344. (Ind) see Stiphnosoma. Fiss.
- Capsus — submarginatus. Say 1. 347. (Mo. Ind.) Genus?
- oreocatus.

- Capsus. (Fab. Amyat 280.) succinctus. Say 1. 338. (Mex) see Gargus Bicelluli.
- Capsus. — tenuicornis. Say 1. 347. (Ind) see Cylapus.
- Capsus. — vitripennis. Say 1. 345. on Oak. Aug. (Fa. & Ind.) see Campyloneura.
- Catorhintha (Stål) guttula. Fab. Metastemma. Amy. 327.
(South & west. U.S.) Ins. **VII**. 16. Uhler's coll. Nudirostris.
- Cerascopus. (Heineken) Emesodema. Spin (allied to Floraria) Ins. domestic.
& never acquires wings. Nudirostris
- Cerascopus. marginatus (Eu) Ins. very slow in its motions. & so insectivorous, that a female killed & sucked a companion of her own sex. after only a few days fast, for own mate, & sucked her own eggs. Westv. 2. 473. Nudirostris
- Ceratoconbus. (Signoret) mucronum. Fiel. Bryocoris. Fall, Doug 415. pl. 21. 5. (Europe)
Ins found among mass on the ground. Aug & Sep.. Ins **VIII**. 22.
This insect resembles a dipteron. (two winged fly) which occurs abundant ly in their habitat..
" pronotum black. Scutellum blackish brown. Elytra olive brown. legs yellowish" Supericornes
- Charagocheilus. (Fiel) 309) venaticus. Uhler. (West. U.S.)
Ins pl. **VI**. 11. Uhler's coll. Bicelluli.
- Chariesterus. (Lap. Amy 210) antennator. Fab. Gonocerus. Lat. Say 1. 323.
& dubius. Say 1. 323. (Pa. Ind. Md) Ins pl. **I**. 16. Md. Supercornes.
- Chelidinea. (Uhler) vittigera. Uhler. Ins **IV**. 9. (28) Supercornes.
- Church bug. see Microplus leucopterus.
- Church bug. false. see Anthocoris insidiosus.
- Chlorochroa. (Stål) congrua. Uhler. (Colorado &c) Ins **VI**. 27. Longiscuti.
- Chlorochroa. faceta. Pentatomia. Say. 2. 242. (Mo.) "
- Chlorochroa. ligata. Say. Pentatomia Say 1. 315. Fitch 390. (1856) Pack 54. 6.
{ P. rugicincta. H. Sch. Bound tree bug. Ins. **IV**. 23. (Mo. N.Y.)
L.P.I puncture leaves & suck sap of Hemlock & Grape Fitch 1657. 748.
Ins large. green. Widely edged all round except head with pale red. "
- Chlorochroa. Sayi. Stål Pentatomia. (U.S) Ins. **VII**. 16. Uhler's coll. Longiscuti.
- Chlorochroa. Uhleri Stål (West U.S) Ins. **VIII**. 26. " "
- Chorosoma. (Curtis) Rhopalus Schr. Westv. 2. 483.
- Chorosoma. { Curtis Amy. 231.) Schillingii Schumm. Amy 231 Fiel Doug 139 pl 5. fig 5.
& Rhopalus. Schill (Eu) Ins in France taken on Rushes. Supercornes
- Cimex. Linnae - acuminata Linn. see Aelia (Europe) Longiscuti.
- Cimex. — apterus. Linn. see Typhlocoris. (Europe) Cecidae.
- Cimex. — calcaratus. Linn. see Aegidus. (Europe) Supercornes.
- Cimex. — cristatus Linn? see Prionotus (U.S) Nudirostris.
- Cimex. — bifurcata. qmelin. see Pygolampus. (Europe) Nudirostris.
- Cimex. — leucocaphala. Linn. see Siphnosoma. Europe Bicelluli.
- Cimex. — lectularius. Linn. see Acanthocoris. (Eu U.S) Longiscuti.
- Cimex. — marginatus. Linn. see Syromastes. Europe Supercornes.
- Cimex. — maurus. Linn. see Erygaster. (Europe) Longiscuti.

- Cimex (Linn). nemorum Linn. See Anthocoris. Europe. Infericorns.
- Cimex. " platychilus. Uhler. (U.S.) Ins. VI. 22. Uhlers Cole Infericorns.
- Cimex. — pratensis. Linn. See Lygus. (Europe) Bicelluli.
- Cimex. — rufipes. Linn. (Md) see Tropicorix. Longiscuti.
- Cimex. subapterus Dc G. (Eu) See Coranus. Insect mentioned as emitting a sharp sound, probably with its rostrum, by moving its head up & down. K & S. 492. Nudirostris.
- Cimicidae. Westw. 2. 474. Fam 5 of Section 2. Eurocorixa. Westw. / Geocoris Burme. It contains only one genus. Cimex, (Linn) Acanthia (Fab) smoothish, body oval, flat, mesothorax broad, head small, proboscis or beak slender, three jointed & seldom, if ever, with wings. Westw.
- Cnemodus. H. Sch. mavorius. Say. Asterma (Lat Amy 264.) Say 1. 338. Infericorns.
- { (U.S., Ind., Pa., Fla., Mo., Md.) Ins. I. 7. Md.
- Coenus. (Dallas) delia. Say. Pentatoma. Say 1. 320. Longiscuti.
- { (Md., Mo., Mass) Ins. II. 5.
- Coenus. aequalis. Say Pentatoma Say 1. 319. (Ind.) "
- Coenus. viridicatus. Uhler. Ins. IV 19. (Tex Lou. Col) "
- Conicippites. Race 3. Fam 7. Nudirostris. Amy & Serv. 44. 350. It contains 5 groups, viz.
- { 1. Apionerides. (Amy 350.) 2. Chrysactorides. (Amy 355.) 3. Telides. (Amy 367.)
4. Holotrichides. (Amy 367.) & 5 Saccoderides. (Amy 379.)
- Coniscutus. Tribe 2 of Fam 1. Longiscuti. Amy & Serv. 19. & 72. Pentatomites. Lap.
- { Heteroptera or plant bugs having the scutel. cone shaped, triangular & not reaching to the extremity of abdomen, leaving the base of the elytra uncovered. it contains 5 races, viz. 1. Spissirostris. (Amy. 19. 74.) 2. Spinifedes. (Amy. 20. 87.) 3 Nudipedes. (Amy. 22. & 101.) 4 Trevirostris. (Amy. 28. & 155.) & 5 Canalirostris. (Amy 29. & 161) fig^d G. pl X. 33.
- Conometopus. Fiel. 304 & 307. (Europe,) side view head. X. 1. Fiel. pl 6. Bicelluli.
- Conorhinus. (Lap) rubrofasciatus. De Geer. Amy p 384. habitat, Brazil. Fab & Woep (say the East Indies. Burmeister South America. & we (Amyot. & Serville) doubt both the last localities. This insect is merely mentioned here, as by some, it has been considered as a synonym of the following. C. variegatus.
- Conorhinus. sanguisuga. Le Conte. see. C. variegatus. Nudirostris.
- Conorhinus (Lap) variegatus. Drury. C. sanguisuga. Le Conte. Am. Ent. 1. 88. & 2. 28. 65 &c Pack. 542. Blood sucking Cone nose & Big bed bug. (Md Va) Inspe III. 19. Insect invades itself into beds, & sucks human blood, causing great pain & inflammation. it hibernates in both pupa, & perfect state, under bark. it is also said to prey on common bed bugs? (Steinchia lectularius) & probably likewise sucks the juices of other insects. (Am Ent.) Nudirostris.
- Coranus. (Curtis) subapterus. De Geor Doug 541. pl 18. fig 2. Amer. J. Z. Pack 541. Cyllocoris. (Hahn) (Cyllocoris in Beauv) pedicularis Fiel. Europe, Ins IX. 20. In either entirely apterous, or with fore wings rudimentary, although occasionally, it is met with having all four wings completely developed, it is found in dry sandy places, under ferns, & heather. July to Sep. & if handled gives out over
- Infericorns error, should be Bicelluli

Coranus. (Curtis) *subapterus* continued.

{ a delicate odor like that of ripe pears. Ins. dull black, densely clothed with short, yellowish, gray, appressed hairs.

Westwood & Spinola think that, especially in hot seasons, some apterous hemiptera acquire full sized wings. (Westw. 2. 481.) (Eu) Nuderostri.

Coptosoma. (Cap. Westw. 124. Syn.) *globus*. Tab. Amy. 65. Metto. 2. 486. fig 122. (Europe)

Ins. IX. 8. Westw.

{ Ins. scutellum broader than long, fore wings also very long, & partially folded in repose. Longiscuti: -

Coreidae. Westw. 2. 463. (supericornes. Amy) Fam. 9. Section 2 *Aurocoris* (Westw.) Geocores Burm. It contains 10 genera. (See. p 8) This family is distinguished by the large & either thickened, or elongated size of the terminal joint of the 4-jointed antennae, which are inserted near the lateral, & superior margins of the head, above a line drawn from the eyes to the base of the rostrum. "The insects are found upon trees & plants, upon the juices of which they appear to subsist. They fly & run well, especially in the heat of the day, in many exotic species the hind legs are singularly enlarged, especially in the males, in some, the femora are thickened, & the tibiae curved, & hooked at the tip, fitting to the femora like the fore leg of a Mantis. The antennae also of others have the intermediate joints of one of them occasionally dilated into a broad plate. The larvae & pupae of several species, differ from the perfect insect, in wanting ocelli, & possessing apparently only 2-joints to their tarsi." "Several adult forms of Coreidae are known to be partially wingless" Pack 565.

Coreina. (Douglas 16) (Coreidae, Westw.) (Supercornes, Amy & Serv.) Section 2 of. Subdivision 1. Geodromica. Douglas. (Geocores Burm) it is divided into 5 families (see p. 13).

Coreodes. (Burm 305) Fam 7. of Division 2. Geocores. it contains 33 families (see p 4)

Coreus. (Tab.) Antennae, with basal joints flattened, the 2^d & 3^d longer slender and nearly equal, the 4th is shorter, the sides of the thorax are clavate & not dilated. Westw. Syn. 123.

Coreus. *alternatus* Say. Jour. Acad IV. Say 2. 243. "This must fall as a Synonym of *Piezogaster calcarator* Tab. (P.R.U.) see also *Eurygaster alternatus* Delvra of Say 1. 94. & *Coreus*. 2. 243 (Mo) & which is an extremely distinct insect.

Coreus. *antennator*. Say 1. 323. See *Charistomus*. Supercornes

Coreus. *armigerus*. Say 2. 244. (Mo) See *Anasa*.

Coreus. *confuentus*. (Mex) Say 1. 325 see *Sagotylus*. Mayr "

Coreus. *diffusus*. (Geo) Say 1. 325. differs from *confuentus* by being somewhat more dilated & having the anterior lateral edge of thorax rectangular " see *Spartocerus*.

Coreus. *lateralis*. Say 2. 244. (Pa) see *Coreus*.

33.

Corusus. (Fab.) *marginalis*. (Eu) Pack 545. Pack 545.

{ Insects when hovering together in a sheltered sunny spot, emit a noise as loud as that of the honey bee. the eggs present a splendid golden appearance

Corusus. *ordinatus*. (L.S.) Say I. 244. (Pa Mo Fla Md Va) a very common species &

{ it diffuses an odor like a ripe pear. see *Anasa tristis*, the "Squash bug"

Corusus. *scapha*. (Europe) Pack 546. The larva differs from the imago in hav-

{ = ing the margins of the abdomen notched. Supericornis

Corusus. *tristis*. See *Anasa*.

Corimelaena. White. wing covers nearly covered by the scutellum. & resembles a

{ small beetle, of a black color. The insects are generally of a shining black.

{ they impart a very disagreeable taste, or bed bug odor, & flavor, to rasp-
berries, and other fruits, when eaten with them. Longiscutis

Corimelaena. *albipennis*. Say. Thyreocoris. Say I. 311. (Mo.)

Corimelaena. *atra* Amy. 68. (Galgupha Amy.) (U.S.) Ins IX. 15. Longiscutis

Corimelaena - Histeroides. Say I. 34. (Arkt.) (Thyreocoris, Say) See *C. nituloides* "

Corimelaena. *lateralis*. Fab. (Md. Va). Ins. II. 10. Ma.

{ Said to be almost undistinguishable from *C. pulicaria* but is one half
longer & wider" Riley. 2^d Rep. 35. Longiscutis

Corimelaena. (White) *nituloides*. Wolff. Thyreocoris (Schrank) Histeroides Say I. 20 (Arkt.)
Ins IX. 14. Ma.

Corimelaena. *pulicaria*. Germar. Pack 547. Am Ent I. 207. 250. Can Farmer. Aug 1867.

Pract Ent. 2. 119. Riley 2^d Rep 1869. 32. 42. (Mo. N.Y. Md. Va.) Ins VIII. 8. Ma.

Insects abundant on Strawberries, Raspberries, and other fruit. They puncture the stems, and cause them to wilt. They also infest Cherry, & quince. On Cherry trees, they occur in great numbers, & cause the stems of the young fruit to shrivel, and wither. They also injure flowers of Coreopsis, & other garden flowers. It may be considered as protot. general feeders. (Am Ent.) They also collect on the ends of Rosin weed. (Silphium) & the shoots of young pear. — (Am Ent I. 250.) they also frequent Geonothus americanus. (the New Jersey tea plant, or red root) Veronica. (or Speedwell) & Portulaca. (or purslane) in June. in fact they breed on these plants. Their color is black with a white stripe on each side. & they resemble *C. lateralisis* so much, that but for the fact — that they differ so much in size, & that there are no intermediate grades between the two species, they might be considered as merely varieties of the same insect" Riley 2^d Rep 1869 p. 35. (Md. Va. Mo. N.Y.) Longiscutis

Corimelaena. (White) *unicolor*. Beauv. Riley 2^d Rep. 1869 p 35.

{ Insect twice as long & wide as *C. pulicaria*, but has no white border whatever. 3 Longiscutis

Conisa. Amy. 445. See *Conia*.

Pedremi.

34.

Corixidae. (Latr) Coreus. &c. Pack. 542. see also *Ceratidae*, *Hetero.*

{ head flat, extended horizontally, & sunken up to the eyes within the pro-thorax. Antennae long, filiform, often clavate at the top. & from 3. to 5 jointed. Beak sheath (Labium) 4 jointed, & claws provided with two suctorial pads. The membranous wingcovers have distinct, often forked, longitudinal veins. This family includes *Lycoidae*, *Ceratidae*, & *Pentatomidae*.

Corixina — Douglas. 50. 591. Section 2 of subdivision 2. *Aquaticia*, or water bugs. it — contains 2 families. viz. 1. *Corixidae*, & 2 *Sigaridae*. (Doug.)

Corixa — (Geoff. Amyot. 445.) prothorax large, & covers mesothorax. & characterized by single jointed fore tarsi which are flattened, & strongly ciliated. The insects frequent pools. their motions are rapid in water, they dive when disturbed, & seize hold of submerged objects. They also fly well, but walk with difficulty. (Pack 536)

Corixa — Westw. 2. 460. Ins. fore legs imperfectly prehensile, with tarsi composed of a single large, & ciliated joint, the midlegs are slender with remarkably long & slender claws, whilst the hind legs are long, with the two tarsal joints very broad, ciliated, & well adapted for swimming. Westwood observed great numbers of these insects of different species congregated, & huddled together, at the surface of the water, beneath the ice when frozen. Many of them had hold of each other, & they appeared to be very inactive. (Westw.)

Corixa (Geoff) *abdominalis*. Say 1. 367. (Mex) Pediromi.

Corixa — *alternata*. Say 2. 251. (Mo). smaller & darker than *C. interrupta*. Black the prevailing color beneath. Say.

Corixa — *calva*. Say 1. 366. (US)

Corixa — *femorata*. Ins. Found in Mexico, see Rept of Dept. of Agriculture. Walling-ton 1866. 38. "The eggs of this insect are said to be gathered from water plants, and are used as an article of food by the dwellers near the lakes where they abound. The natives cultivate in the lagoon of Chalco, a sort of Carex, called 'Toule' on which the insects deposit their eggs very freely. This carex is made into bundles which are removed to Lake Texcoco & floated in the water until covered with eggs. The bundles are then taken out, dried, and beaten over a large cloth, the eggs being then disengaged and cleaned, & pounded into flour." (see also *C. mercenaria*) Pediromi

Corixa — *interrupta*. Say 2. 250. *Corixa*. Amy 445. Pack 536. (Md. Mo) Ins not uncommon in pools of water. Ins V. 7. Mo. Pediromi

Corixa — *mercenaria*. Say 1. 367. (Mex)

"passing through the market in the city of Mexico. I obtained a few specimens from a quantity of at least a peck, exposed for sale, by an Aztec woman. they are made use of as food." Say 1. 367. (See *C. femorata* where it is said the eggs are used. & probably these insects have been confounded together, or they may be synonymous.)

35.

Ceris. Geoff. *striata*. (Europe) *Ceris*. De Geer states that this insect is found — plentifully in all fresh waters. & that it does not swim upon its back (like *Notonecta*) but upon its belly, it ordinarily suspends itself by the tail to the surface of the water, but at the least movement it precipitates itself quickly to the bottom, where it remains resting some time, clinging to a plant or stone. It walks slowly & badly on the ground, when resting tranquilly in the water, the posterior feet are advanced forwards, and pass the intermediate feet, so that the posterior feet are apparently the anterior. These insects exhale a strong & disagreeable odor like that of a bed bug. When they dive the under part of their bodies appears silvery, which is caused by the air which attaches itself, & remains adhering to the body under water, when swimming, if they encounter any small piece of grass they grasp it with their intermediate feet, & rise with it to the surface, but they also frequently fix themselves upon plants, at the bottom of the water. The insects are carnivorous — feeding upon other insects. (Amy & Serv 445)

Peduremi

Ceris *vulnerata*. Uhler. (Dakota. US). Ins. pl. V. fig 14. fm Uhler Coll. "

Ceris. Fall *Cereus lateralis*. Say 2.244 Pa.

Corticola, Amy & Serv. XI. 303. Tribe 4 of fam C. Ductirostris. Heteroptera or plant bugs inhabiting places in or under bark of trees, it contains 2 groups, viz 1. *Brachyrhynchides* (Amy 303.) & 2. *Aradides*, (Amy 307.)

Cosmopepla, Stål *carnifex* Lab. *Eysarcoris*, Dallas. (US: Md)

{ Ins probably destroys other insects Ins. II. 6. Md. Longiscuti.

Eremnoderes, Fiel 302. 347. (Europe) side view of head. X. 27. wing X. 30. pl 6. Bicelluli

Crinocerus, (Burm Amy 214) galator. see *Euthroctha*. Supericornes.

Cryptocerata (Doug 11. 577.) Hydrocorisae. Hetero. Division 2. Heteroptera it contains

{ such bugs as have concealed antennae. & is divided into 2 subdivisions.

viz 1. *Litoralia*. & 2. *Aquatilia*.

Cydnus, (Bal) Amy 91. "Insects which suck the sap of fruit & forest trees, vegetables, &c."

Cydnus, *bilineatus*, Say 1. 323. & 2. 262. (Ind. mo. Pa) see *Althus*.

Cydnus, *ligatus*, Say 1. 322. *Schirus albonotatus*, of Dallas, See *Schirus ligatus*. Longiscuti

Cydnus, *spinipennis* Say 2.248. (Mo) *Amnestus* Dallas.

Cylapus, Say. *tenuicornis* Say. *Capsus* Say 1. 347. (Ind) Bicelluli

Cylapus, Say. *bractatus*, Say. *Capsus* Say 1. 348. (Ind)

Cyllocoris, (Schin in Doug 368) Fiel 312 pedestris see *Coranus subapterus*

Cyllocoris (Tahn) genus 12. of Fam 7. *Capsidae*. Hetero Syn. 122

Cylindricipes, Race 5 of Fam 7. *Nudirostris* Amy & Serv. 47. 382. it contains two groups

{ 1. *Conorrhiniodes* & 2. *Stenopododes* (Amy 386)

Casyconis (Dallas) *humilis*. Stål. (Western States.)

{ Ins VI. 12. Supericornes.

Dicyphus, (Fiel. 327 347. (Europe), side view head. X. 14. Fiel. pl 6. Bicelluli.

Diocles, (Mayer,) *chrysorrhaeus*, fig 460. H. Sch. & see *Scutellera viridipunctata*. Longiscuti,

Diobius, *viridipunctatus*, see *Scutellera*. Say 1. 310.

36.

Dionous. Fieb. 308. 347. (Europe,) side view of head. X. 9. Fieb. pl 6.

Ductirostri.

Diplodus. (Amyot 370) *luridus*, Stål. *Reduvius*. Lep & Serv. *Eragorus*. (Burm.) *viridis*. -

Uhlir mss. Pack 542. Am Ent 1. 13. (U.S.) Ins **I X . 19.** Nudirostri
 The larva is very common on forest trees. it is wingless, & covered with a glutinous substance, to which little pieces of dust, & dirt, are commonly seen to adhere. The insect is winged & feeds on other insects amongst it is said to destroy the plum curculio. (*Conotrachelus*. non *uphar*. Coleop.)
Ductirostri. Amy & Serv. 39. & 285. Membranacei. Burm. Heteroptera, or Plant bugs.
 having their beak or proboscis in a groove, or furrow. Having ocelli it contains 5 tribes. viz 1. *Spissipedes*. (Amy 39. 288) 2. *Ripicolaræ*. (Amy 40. 293)
 3. *Membranacei*. (Amy 40. 295.) 4. *Corticolaræ*. (Amy 41. 303). & 5. *Lecticolæ*.
 (Amy. 41. 309) G. pl **X . fig 4.**

Dysdercus. (Amy. 272) *mimus*. Say Capsus. Say 1. 338.

Cecigenæ

Dysdercus. *ochreatus*. Say. Capsus. Say 1. 338.

Dysdercus *suturalis*; H Schf. *Syrhocoris*. Burm. Report Dept Ag' 1858. p 121. & 1866 p 33. Red bug, or Cotton stainer. (Fla) Ins **I . 11** Fla.

Eggs 20. to 30 deposited on the leaves, or stalks. of cotton. (*Gossypium*) When young, the larvae congregate together, but when older they separate, & spread over the plant. The larvae, pupae, & perfect insects, all suck the sap from the plants, & bolls, after puncturing them with their rostrum or beak, thus causing the bolls to become diminutive, & abortive, & the plant to become sickly, & weak.. The principal injury however is caused by the insects sucking the juices of the seeds, & bolls, & then voiding the excretions, yellowish liquid over the cotton, in the opening or open boll, which stains the cotton fibre, yellowish, or reddish in spots. These stains being indelible, very much depreciate the market value. of the cotton. It was thought at one time that this insect, from its beautiful red color, might be made useful by producing, a brilliant red dyeing material, but Dr Chas Jackson, of Boston, to whom specimens were sent, in order to test its coloring matter, wrote that "no red color could be extracted from them," but that a rich yellow, or ochraceous yellow lake, was made, which is readily fixed on woollen, or silk fabrics, & that the coloring matter would also serve as the yellow basis, for green, or brown dyes. (see Rept Dept Ag. 1858. 272.) This insect has also been mentioned as staining cotton on Crooked Island, one of the Bahamas, so much, in places as to render it of little or no value.

Ins when young red with black spots on top of abdomen. when older the ♀ is 0.65 to 0.70. in length, red with black mark on thorax. the upper wings are black, edged & marked across its upper surface with a St Andrews cross of a cream color.

Cecigenæ

• *Ductirostri* error. should be Bicelluli

- Ectrichodia { Lep & Serv. Amy 343. conciventris. Stål. Ectrichodes. Burm. (Tex. 248.)
 Ins. VII. 10 Texas. Nudirostris.
- Ectrichodia. cruciata. Say. Petalocherus. error in Leconte's edit. of Say 1. 358 (P.R.U.)
- { Ectrichodes. Burm. (Ins. Mo. Gev. Md) Probably feeds on other insects
 { Ectrychotes bicolor } Ins. III. 17. Md. rare. Nudirostris
 See Say 1. 358
- Ectrichotes. bicolor. Say 1. 358 see Ectrichodia.
- Edessa (Fab. Amy. 158) cornuta.. Burm. see Aceratodes. Longiscutis
- Edessa. cruciata. Say 1. 311. see Acanthosoma.
- Edessa. lateralis Say 1. 312 see Acanthosoma
- Edessoides. Group 1. Race to. Brevirostris. Amy. 155.
- Emesa. (Fab Amy 393.) feed on other insects. they resemble the thinnest bits of sticks fastened together, the antennae are long & delicate. The fore legs are raptorial. with long. thin. coxae. the body is also long. thin & hair like. The wings are either wanting. or reach only to the middle of the abdomen. These insects are distinguished by the perfectly raptorial structure of the very small fore legs, with coxae greatly elongated. like those of the Mantidae. In motion they resemble the Sipula. or crane fly. (Diptera) balancing them selves on their long legs. (Hestw 2: 372.) Nudirostris
- Emesa, (Fab) longipes De Geer. Pack 531. E. brevipennis Say 1. 106 Ins. IV. 25 (Md.)
 Ins. very common in some localities. it inhabits out houses, where it may be observed generally motionless on the walls, when disturbed it moves its body up & down. on its legs. at the same time moving forwards, Ins. reddish-winged. feet ringed. near the knee. Nudirostris
 "This insect within the last 5 years, has appeared near Baltimore, on small pine trees. It is now widely distributed in the country" (P.R.U.)
- Emesodema. (Spinola) see Cerascopus. Heineken.
- Epiceridae. (Uhler) equivalent to Supericornes of Amyot.
- Ememocornis. (Fitch) fera. Say. Pameria Say 1. 333.
- Eurygaster. (Lap. Amy. 51.) alternatus. Say. Tetra Say 1. 94. (U.S) Sup pl 43.
 Ins. IV. 4. Longiscutis
 This insect must not be confounded with Says Coneus alteratus. which belongs to Pterogaster (or Archimerus of Stål) & is one of the Supericornes maurus. (Linn) Amyot 53. Douglas 65, pl 11. Cimex. Linn. (Europe.) According to Leon Dufour this species is common in France, upon the ears of wheat. which it pierces & sucks whilst in the green state. July. Sep. Ins. varies from fulvous brown. without markings. to luteous with stripes of shades of brown. Ins. IX. 21. Doug pl 11, fig 6. Longiscutis
- Eriagonus. Burm. viridis. see Diplodus. curiolus Nudirostris

38.

Euagorus. (Burm. Amy 369. rubidus. Lep & Serv. E. speciosus. Burm. US. Fla.)

{ Ins. III. 3. Fla. Larvae, pupae, & insects, prey upon other insects. They are very useful in destroying myriads of plant lice. (Aphides, Homopt) upon the Orange trees in Florida, where they are very numerous. Nudirostrini

Euagorus. uridus. Walsh Am. Ent 1. 13. & Pack 542. see Diplodus curidus.

Euschistus. (Dallas.) cticicus. Linn. (Md. US) Ins II. 15 Md.

{ "closely allied to E. punctipes Say, but the last ventral segment of the male lacks the black spot" (P.R.U) Longiscutis

Euschistus. curidus Dallas. (Md. US) Ins II. 13. Md.

Euschistus. punctipes. Say. Pentatoma Say 1. 314. Riley 5th Rep. 1873. p. 12. (Md. US)

{ common on Thistles & Mullen II. 12. Md Longiscutis

Euschistus. Serva. Say. Pentatoma Say 1. 314.

Euschistus. tristigma. Say Pentatoma Say 1. 314 Harr mss. Pack 565. (Md. Va. US)

{ Ins. IX. 24. Md. "Sp. not rare, it resembles P. punctipes but is smaller & distinguished by the 3 ventral spots, & black points on the lateral edge of the venter." (Say.)

Euthoatha. (Mayer) galeator. Fab. Crinocerus. Burm. Amy. 214 (Md. US)

{ Ins. I. 18. Md July Supericornis

Ethyphynchus. (Dallas) floridanus. Linn. Asopus. Burm. Amy. 83. Pentatoma emarginata

{ Say 1. 313. Ins. IV. 12. Md. Longiscutis

Eysarcoris. (Dallas.) carnifex. see Cosmopepla.

Fitchia. (Stål) nigrovittata. Stål. (US) Ins VII. 12. fm Uhler's coll. Nudirostrini

Fitchia spinulosa. Stål. (US) Ins. VII 11. fm Uhler's coll. "

Galgalidae. (Galgalini) Burm. "head broad, with peduncled eyes. antennae 4 jointed concealed beneath eyes, ocelli present. body short, broad, & flattened. hind legs formed for running." These insects somewhat resemble miniature toads at first glance, in both form & color. The form of the fore feet & peduncled eyes clearly show these insects to be predatory. & feeding upon other insects. The legs are cursorial. A Mauritian species, is found under stones, & wet leaves on the coast. (Kerler 2. 466) These insects are said to live on the edge of the water, burying themselves in the sand, especially in the larva state. & form a link between the aquatic & terrestrial plant eating species" Pack 539. Bigemmi

Galgalidae. Sam 1 of Sect 2. Aurocoris, Kerler 2. 458. (Geocoris. Burm.

Galgalini. Burm. Sam 3 of Div 1. Hydrocoris. Burm 201. Bank, or Shore Scorpion bugs - Divided into 3 Genera. 1. Mononyx. Latr. (Burm 201.) 2 Galgalus. Latr. (Burm 201.) & 3 Pelagonus. Latr. (Burm 202.)

Galgalus (Latr Amy 424.) oculatus. Fab. Ins. V. 2. Md. Aug. Bigemmi

{ Ins. taken in Md running on the sand near a swift stream. In my day book I find it noted down, that professor Cyrus Thomas says, they feed upon Xylotermes or X. apicalis, but Professor Uhler to whom I mentioned it expresses much doubt about this fact.

39.

Galzupha. (Amyot 68.) see Corimelaena atra.

Longicuti.

Garganus. (Stål) fusiformis. Say. Capsus Say 1. 344. Us.

Bicelluli.

In 111. 2. fm Uhler's coll.

Geocoris Burm. Div 2 of Order Heteroptera. Burm 208. containing the land bugs. & divided by Burmeister into 8 families. viz 1. Hydromici - (Burm. 208) 2. Ploteres. Lat. & Amy. 3. 2. Ripsavii (Burm. 215) 3 Reduvini. (Burm. 223) 4 Membranacci (Burm 257) 5 Capsini (Burm 264) 5 Lygaeodes (Burm. 281) 7 Coreodes. (Burm. 305) & 8 Scutati (Burm. 349)

Geocorisae. Amy & Serv. Section 1. of Amyot & Serville. Heteroptera Land bugs containing 7 families. viz 1 Longicuti. 2 Supericornes. 3 Infericornes. 4 Cicigenae. 5 Bicelluli. 6 Ductirostris. 7 Nudirostris. & 8 Ploteres. see pl X.

Geodromica. Tuller. (Earth runners) Geocoris. Doug. Subdivision 1. of Div 1. Gymnoscata. Tull & Doug. (Geocoris Burm) it contains 12 Sections viz 1. Scutatina. - (Doug 11.) 2 Coreina. (Doug 19.) 3 Berytina. (Doug 18.) 4 Cæcigenina. (Doug 19) 5 Lygaeina. (Doug 20) 6 Tingidina. (Doug 24) 7 Hebrina. (Doug 25.) 8 Corticolina. (Doug 27.) 9 Capsina. (Doug 28.) 10 Anthocorina. (Doug 36) 11. Oculatina. (Doug 38) & 12. Reduvina. (Doug 39)

Gerris. (Fab. Amy 414.) Pack. 539. Pls 8. 158. (Water boatman) Insect very active & skims the surface of water with great velocity. when gliding over the water. the hind feet act conjointly as a rudder. & the longer middle feet, are used somewhat as oars. not dipped into. but merely brushing along the surface - (Westw 2. 468) The prothorax is very long, & covers the mesothorax. The ocelli are present. & the larvae are much shorter. & have broader bodies than the adults. There are some apterous forms among them. they feed on other insects & the eggs in Europe are destroyed by a parasitic insect. Teleas. (see Hymenoptera)

Gerris Fab. canaliculatus. Say 1. 363. Ins. differs from G marginatus. in having an obvious groove beneath extending to the venter. (Geo.) Ploteres.

Gerris " conformis. Uhler. (Md. US) Ins V. fig 6. Md June Ploteres.
Insect taken in Maryland feeding on dead flies on the surface of the water.

Gerris. " currans. see Nelia.

"

Gerris. " lacustris. Fab (Md) Ins V. 1. Md "

"

Gerris. " marginalis Say 1. 362. (US)

"

Gerris. " remigis. Say 1. 362. (Mex. Say) Ins. VIII. 30. (US generally) (PRU) Ploteres.

Gerris. " rufoscutellatus. Fab (US) Pack 540

Ploteres.

Insect of a reddish color.

Gonocerus. tristis. see Anasa.

Supericornes

Gonocerus. antennator. see Chariesterus Pa Ind

"

Gonocerus. dubius. Say 1. 328. see Chariesterus antennator.

"



40.

- Globiceps* (Latr.) *claratus*. Linn. *Camaronotus*, Doug. 367. (Europe) Bicelluli
- { ~ Burmeister says this insect is common on Red currant.
- Globiceps*. *selectus*. Fiel. Doug. 368. (Europe.)
- { Ins. males taken on umbelliferous flowers. Both sexes were found among grass, at the roots of Broom, & other bushes in July. (Europe) Bicelluli
- Gymnocerata*. (Fab) Douglas. *Geocorisae*, Amy. & Serv. *Geocores*, Burm. *Ourocoresa*, Westw. Division 1 of suborder 1. Homoptera Heteroptera. Doug.
- Haetorhinus*. Fiel 318. 347. (Europe) side view head X. 8. Fiel pl 6. Bicelluli
- Halobates*. (Esch.) Antennae first joint as long as the two following put together.— { Ocelli 0. Mesothorax very large & elongated posteriorly. wings 0. fore legs short, outstretched with thickened femora. Middle pair of legs longest. Insect formed for swimming on the surface of the ocean, in the tropics. Far from land. (Pack 540) (:P.R.U.S)
- "Common on our streams of water" (P.R.U) Ploteres.
- Halobates*. (Esch. Amyot 410) *pictus*. Sch (Md. U.S.) Ins V. 16. Ma. " "
- { "Lives both solitary & in swarms, on the surface of lakes, & streams in the U.S" (P.R.U.) Ploteres
- Halyss*. (Fab) see *Brochymena arborea*. Longiscutis.
- Harmostes*. (Dallas) *fraterculus*. Say. *Syromastes*. Say 1. 326 (Geo Ind) Supericornes.
- Harmostes*. *obliquus*. Say. *Syromastes*. Say 1. 326. (U.S)
- Harmostes*. *reflexulus*. Say. *Syromastes*. Say 1. 323. *Rhopalus*. Schell (Pa)
- Ins VI. 15 Md & var III. 6. Supericornes.
- Halticus*. (Fab) *pallicornis*. Fab. *Capsus*. (Md. U.S) Ins II. 18. Md Bicelluli
- Harpactor*. (Lap) head convex behind eyes. Ocelli distant. Antennae 1st joint as long & stouter than the two succeeding ones together.
- Harpactor*. *cinctus*. see *Milius*. Nudirostris.
- Hammatocerus*. (Burm. Amy 345) *purcis*. Drury. *furcis*. Amy 346. *nabis* (Amy 330) *purcis*. Say 1. 358. (Md. Geo. Fla) Ins pl III. 16. Nudirostris
- Hebrus*. (Curtis) *pusillus*. Curtis. Doug. 266. pl. 19. fig 4. Westw 2. 670 (Europe) Ductirostris— *Lygaeus*. Tali. Ins found among aquatic plants June July (Europe) on Lemna. &c Ins VIII. 18. (color black dull.) Ductirostris.
- Hebrus*. (Curtis Amyot 293.) Insects of this genus do not walk on the water their feet not being adapted for it? (Amy 294) although Mr Westwood says they live on the surface of the water, but adds upon the Lemna or duck weed. "They do skim over the surface of the water with great rapidity in Maryland. (P.R.U.)
- Hebrus*. *americanus*. Uhler. Ins. V. 15. (U.S) Ductirostris
- Hemiptera*. of fresh water, are sometimes infested with a parasitic species of water mite. (*Hydrachna*) Pack 661.
- Hemiptera*. *Heteroptera*. Latr Douglas & Scott. *Rhynchota*. *Heteroptera*. Sieber Sub order 1. Douglas & Scott.

Sp. 1.

Hemestaris, (Spin Amy. 250) *laticeps*, Curtis. Doug. 229. 8. fig 5. *Heterogaster*, Curtis —
(Europe). Ins found under a stone. color ochreous. more or less clouded
with brown. & with very fine short yellow hairs. Ins IX. 35. Infericornes.

Heraeus (Stål) *insignis*. Uhler. *Pachymerus*, Lepell. Schill. Lounis 657.
{ Ins. VI. 3. fm Mr Uhler coll. Infericornes.

Heterogaster. see *Hemestaris*. Spinola. Amy 250.

Heteroptera. Westwood. 2. 450 " Insects having four wings. the anterior pair larger than
the posterior.lapping partly over each other, the basal part coriaceous the
apical part being membranous, body depressed. antennae generally
elongated. filiform. mouth arising from the anterior & inferior part
of the head. prothoracidate. (ie in the form of a projecting beak, or trunk)
pupae active. semicomplete. The nutriment of these insects consists —
solely of the juices of plants, and animals, which are pumped up the
labial canal by the gradual contraction of that organ. The substance
from which such juices are derived having been previously wounded by
the four internal sharp setae. most of them are found on plants. Some
however feed on other weaker insects. The larvae have not even the re-
mants of wings. as pupae the wings are to be observed. upon the back.
of the meso- & metathorax in a rudimentary state. & the ocelli are only
developed in the perfect insect. Almost all the terrestrial Heterop-
tera on being suddenly alarmed, or touched. emit a peculiar odor.
more or less disgusting. The exhalation of this scent. is not however
continued. for if suddenly seized. & plunged into a fluid. innumerable
minute bubbles will be observed to issue from the two pores
between the hind feet, which on bursting at the surface. immediate-
ly emit the scent peculiar to the species. Some of the Heteroptera. —
Reduvius. &c. are able to inflict severe wounds. by means of their strong
curved beaks. emitting at the same time a drop of poisonous fluid.—
into the wound. Among the Heteroptera may sometimes be found
undeveloped individuals without wings. which pair and are fertile &
this fact has led some naturalists to imagine that the pupae are
sometimes able to copulate. as they have seen such in coitus. whilst
in fact the supposed pupa. was one of these what Westwood. calls
"imperfect perfect insects" This being the case in the Heteroptera —
may not the same occur with the Orthoptera? as sometimes we have
ourselves seen a perfect winged grasshopper & an apparently wingless
pupa. also "in coitus" Westwood says "A peculiarity occurs in some
of these insects. where analogous instances have been noticed among
Orthoptera. Homoptera. Aphidae. & even a species of the Chalcididae
(Röyman) are the undeveloped state of some specimens in the Imago
state. which are as capable of reproduction. as others of the same species.
which have fully developed wings. (West 2 454). the larvae are —
over

{ said to cast their skins three times. in most instances before they reach the pupa state. Then the insect is more like the imago but some of its parts. such as ocelli, wings, & claws, are either rudimentary, or are barely indicated. & only become perfect after the last moult.

Heterocordylus. Fieb 316. 347. (Europe) side view of head. X. 6. Fieb pl 6 Bicelluli

Homaemus. (Dallas) aeneifrons. Say. Scutellera Say 1.198. Pachyconis (Burm. Amy 37)
 { exilis. H Schf. (Md. U.S.)

. Ins IV. 8. Md.

Longiscute.

Homaemus. parvulus. H Schf. Pachyconis. Burm. (Md U.S)

{ Ins II: 1. Md.

Longiscuti

Hydrocoris. (Burm.) Div 1. of order Heteroptera. Burm p 186. contains water bugs
 { it is divided into 3 families. 1. Notonectici. (Burm 186). 2. Nepini. (Burm 193).
 & 3. galbulini. (Burm 201).

Hydrocoris (Westw) Section 1. of Westwood. 2.457. & gen. Synopsis 119. contains water bugs. & is divided into 2 families. viz. Notonectidae (Leach) & 2 Nepidae - Leach. The insects are aquatic. The antennae are very short, & concealed in cavities beneath the eyes. the legs are more or less fitted for action in the water & generally ciliated on the last pair. whilst the fore legs are short & fold forming a pair of claws. whereby the insects seize their prey. which consists of other insects. the eyes are often of large size. - These insects are compelled continually to resort to the surface of the water in order to attain fresh supplies of air. Nearly all the Hydrocoris are of a dull brown. or obscure black color. (Westw) Some of them sting severely. & at night fly from pond to pond.

Hydrocoris (or Hydrocoris), Amy 1. & Serville Section 2. of Order Heteroptera "Water bugs" Amy & Serv. 50. 422. contains Water bugs, with concealed or hidden antennae. & is divided into 3 families. viz 1. Bigemmi. 2. Pediapti. & 3. Pediremi. These families are subdivided into tribes. races. & finally into groups. (See p 12.) most of these insects feed on other insects.

Hydrometra. (Lat) lineata. Say 1. 361. resembles H. stagnorum. (L.) Nudirostris.
Hydrometra palidum See Gerris

Hydrometra (Lat Amy 399.) stagnorum Amy 600. (Limnolates Burm) Nudirostris
 Ins found throughout Europe on the margin of stagnant water. & often on moist earth, along brooks, or on the water. but they do not live an exclusively aquatic life. the weakness of their feet & their want of agility constrain them to keep themselves hidden. amongst the low herbage. or in the little hollows.. see also Limnolates Burm Westw Syn 119.
 In Westwood's Syn p. 119 the difference between *Hydrometra* & *Gerris* is as follows. *Hydrometra*. (Lat). Linear. first & 2^d joints of antennae short 3^d longest legs formed for walking whilst *Gerris*. (Fab) *Hydrometra*. Burm. has the basal joint the longest & 4 hind legs very long. & at a great distance from the fore legs.

43.

Hydrometridae. (Leach.) Westw. 2.467. Ploteridae. Latr. Fam 3 of Section 2 Aurocorisæ
 Westw. (Geocoræ Burm.) it contains 5 genera. viz. 1. Hydrometra (Lac.)
 2. Belia (Latr.) 3. Microvelia (Westw.) 4. Gerris (Fab.) & 5. Heterus (Walk.)
 Westwood states that the genus Hydrometra, merely creeps slowly on the
 surface of the water, the body of the insect being considerably elevated,
 hence it is found amongst low plants, growing out of, or at the side of
 water. (Westw. 2.468.) Douglas. (p. 558) says "the Hydrometrae live on the
 surface of running, or stagnant water, where they propel themselves rapidly,
 by a rowing motion of their second & third pair of legs, feeding upon any
 insects that may come in their way, catching them by springing upon them.
 They can also dive when alarmed." These insects are sometimes known as
 water measurers, & are found on the borders of ponds, on the herbage.
 Burneister says "they walk on the surface of water as other insects do
 on land, by alternate movements of their feet." Schummel says "they inhabit
 stagnant water, where they walk slowly on aquatic plants. Some apterous
 forms are found among them. (Pack 539) They subsist on aquatic insects.
 (R.S. 158.)

Hydrodromica. Subdiv 2 of Division 1, Gymnocerata. Doug 41 & 557. contains 2 Sections
 { Hydrometrina & Limnotatina.

Hydrometrina. Doug 41 & 557. Section 1. of Subdiv 2 Hydrodromica (Doug) it contains
 { 2. families. 1. Hydrometridae. & 2. Beliidae.

Hymenarcys. (Amyot. 124) nervosa. Say. Pentatomæ Say 1. 321. (U.S. Ma)

{ In 11. 14. Md. Longicute.
Infericornæ. Amyot & Serville. 35. 268. Fam 8 of Section 1 Geocorisæ, or land bugs.
 Heteroptera, or Plant bugs, having their antennæ inserted on the under side of the head, below an ideal line drawn from the eye, to the
 beginning of the labium. - the third joint of the beak is longer than
 the fourth. This family contains 3 groups, viz. 1. Lygæides. (Amyot 268)
 2. Rhynchosomides. (Amy 251) & 3. Anthocorides. (Amy 262) G.X. 35.

Ischnorhynchus. resedæ. Sygaeus geminatus Say 1. 380 (P.R.U.)

Tadra. Stål. haemataloma, Burm. Ins 1X. 5. Mr Uhler's Coll. Supericornæ (P.R.U.)

Labops. (Fab. 316) (Burm 279) hesperius. Uhler. Ins IV. 3.

Bicelluli —

Largus. (Hahn. Amy 273.) succinctus, Linn. Capsus Say 338. (Mex. Soc.) Ma Pa & Ba (P.R.U.)
 Ins. I. 12. Md. Eugenaæ.

Lecicolaæ. (Amy & Serv. 41. 309. Rule 1. of Fam 6. Ductirostæ). Heteroptera or bugs
 inhabiting beds. It contains only one group Acanthidae.

Leptoconis. (Hahn) turritatus. Say. Journ. Acad. Nat. Sci. Phil. vol. VI.
 Ins. IV. 24. Supericornæ (P.R.U.)

Leptoconis (Lat. Amyot 228.) tipuloides. Latr. (Md. U.S.)

Ins 111. 15. Supericornæ.

Leptoglossus (Stål. & guerin) circulus. Say 1. 326. (var) (Md. U.S.) anisocelis Say 1. 326 (Ila)

Ins. VI. 28 Supericornæ —

Leptoglossus (Stål & Guér.) *oppositus*, Say. Anisocelis, Say 1. 326. (Ind.)

{ very closely allied to *A. albicinctus*, but may be known by the small, white point of the hemelytra. (Say) Supericornes.

Leptoglossus phyllopus Linn. Anisocelis (Latr. Amy 277) *albicinctus*, Say 1. 324.

(Md. S.C. Md. 465) I. 21. —

{ Insect feeds on & destroys other insects. A correspondent Mr E. T. Earle of Evergreen, S.C. June 1869, wrote a letter to the department, in which he stated that he caught this insect destroying the cabbage plant bug, *Strachia hirsutonica*. Say 1. 324, says that the male of *A. albicinctus* has only two denticulations, on the dilated edge of the posterior tibiae whilst the female has three. Supericornes.

Leptoglossus sonatus, Dallas. (N. Mex.) Ins. VII. 6..

Limnabates, Burm. Pack. 450. Insect aquatic, & runs over the surface of the water like *Gerris*. The prothorax is as long as the rest of the thorax, body linear & hind wings are absent. Pack. 540. (PRU) Nudirostris

Limnabates stagnorum Burm. Doug. p. 576. pl 19. fig. 7. (Europe) Ins. VIII. 14 Nudirostris { Ins. common on ponds, amongst Duck weed (*Lemna*) from spring to autumn. These insects move but slowly on the surface of the water, color black. "Limnabates is remote from *Hydrometra* & does not belong to *Ploteres* (PRU)

Leptoterna. Fiel. 302. 347. Side view of head. X. 3 pl. 6. (Europe) Bicelluli. —

Lioconis. Fiel. 309. 347. " " " X. 15 " (") "

Lioderma (Uhler) *saucia*, Say. Pentatoma, Say. 1. 318. Ins. VIII. 25. (US) Longiscutellata

Lioderma senilis, Say. Pentatoma Say. 1. 316. (US) "

Litoralia. Doug 43. Subdiv 1. of Div 2. Cryptocerata. (Hydrocorisae. Hestio.) it contains only one genus *Pelagonus*.

Lobostethus. Fiel. 300. 347. (Eu) side view of head. X. 19. pl. 6. Fiel. Bicelluli

Longicoxi, (Amy & Serv. 48. 393.) Race 6. of Fam 7. Nudirostris, it contains only one group. *Emesides*. (Am 393.

Longiscutellata. Amy & Serv. XV. 19. Fam 1. of Geocorisae. Plant bugs having the scutellum long, reaching at least to the middle of abdomen, & divided into two tribes. 1. *Orbiscutellata*. & 2. *coniscutellata*. fig. G X. 31.

Lopidea (Uhler) *media*, Say. Capsus Say. 1. 341. (Ind.) Ins VI. 6. Bicelluli.

Loxops. (Fiel 314. 347.) (Europe.) side view of head. X. 21. Sub pl 6. "

Lyttaeidae. Hestio. 2. 480. Fam 8. of Section 2. Aurocores (W) Geocoxes, Burm. it contains 8 genera. (see p 8.) These insects have the antennae 4-jointed, attached below the middle of the side (PRU) of the head. the beak is tolerably long & the scutellum is of normal size. (Pack 522) Many of the exotic Lyttaeidae are remarkable for their various colors, in which red or yellow & black are the most conspicuous. They are mostly found on plants, others however of a smaller size, & obscure colors, are distinguished by having greatly thickened fore legs these are found on the ground at the roots of plants. (Hestio 2. 481.)

45.

- Lygaeina. { Doug 20. 165. (Lygaeodes, Burm.) (Lygaeidae). Westw. ? (Infericornes, Amy.)
 Section 2. of Subdiv 1. Geodromica. Geocores. contains only one family. —
 { Rhypharochromidae.
- Lygaeodes. Burm 281. Fam 6. of Div 2. Geocores. contains 71. families. (See p 4.) —
- Lygus. (Fab.) Amy. 249. Insects with head "conical in front." (PRU) eyes globular.
 { ocelli distinct, with "moderately" slender antennae, scarcely half as long as
 the body, & slightly clavate. (Pack 543)
- Lygaeus, (Fab.) admirabilis. Uhler in Haydens survey. Ins pl VIII. 1. (US) Infericornes.
- Lygaeus. auleius. an exotic species from Brazil.
- Lygaeus. bicrucis. Say 2. 266. (Md. Miss., Geo.)
 { Insect taken under bark in winter. in Md. I. 8. Md.
- Lygaeus. bistriangularis. Say 1. 329. (Mex., Say.) (Aniz., Texas, &c) (PRU)
 { Ins. allied to L. bicrucis, but not half so large (Say) Ins VII. 10
- Lygaeus. circumcinctus. Stål. (US) Ins. VII. 9.
- Lygaeus. disconotus. Say 1. 330. (Mo.)
- Lygaeus. eurinus. Say 2. 247. (Mo. Ark.) see Alydus.
- Lygaeus. facetus. Say 1. 328. (Fla.) Ins. VIII. 12..
- Lygaeus. salicus. Say 1. 331. (Mo.) see Micropterus.
- Lygaeus. geminatus. Say 1. 330. (Ind. Mo) see also Ischnorhynchus resedae.
- Lygaeus. fasciatus. Dallas. (Md US) Ins I. 11X. & VII. 19. Md
 { Ins. found at the Md. Ag. Coll. in great abundance. on flowers of Milk or
 silk weed. (Asclepias) Aug 6th 1868. in company with caterpillars of
 Euchetes. Egle. (Lepid.) by Mr Pect.
- Lygaeus. gutta. H. Sch. (Mex. Calif.)
 { Ins VII. 15. coll of Mr Uhler Infericornes
- Lygaeus. leucopterus. (Chinch bug) Say 1. 329. (Va) see Micropterus.
- Lygaeus. numenius. Say 1. 331. see Belonocheilus Uhler.
- { Ins resembles L scolopax. but the 2^d joint is longer than the 3^d. and
 the rostrum is more elongated. " (Say)
- Lygaeus. pusillus. see Heterus.
- Lygaeus. quinque (5) spiniferus. Say 2. 247. (U.S.) see Alydus.
- Lygaeus. reclivatus. Say 2. 245. (Mo.) Say 1. 328) VII. 26. Uhlers coll. (Mex) Infericornes
 { This insect resembles L turcicus. (Fab.) but is distinguishable by the large-
 white spot. on the membranous moiety. of the hemelytra. (Say)
- Lygaeus. scolopax. Say 1. 330. (Ind.) see Nysius.
- Lygaeus. sandarakatus. Say 1. 328. (Mex.)
- Lygaeus. turcicus. Fab. Pack 543. (Md.) Ins I. 6. Infericornes
 { Ins "noticed once or twice preying upon small caterpillars on —
 Asclepias the milk. or silk weed.
- Lygus. dislocatus. Say 1. 339. (Pa.) on Verbascum. Thapsus (Mullein)
- Lygus. invitus. Say 1. 345. (Ind.)
- Lygus. see also Capsus. also.

Lygus (Hahn.) *lineatus*. Fab. *Capsus quadrivittatus*. Say 1. 339. Am Ent 1. 246. —

Phytocoris (L.) *quadrivittatus* Le Baron 1st Rept 1871 p. 61. Saunders Report - Ontario Canada. 1871. 40 Four striped plant bug" Le Baron Insect 1. 9. Md Insect very common in Maryland. The female when dissected by Dr. Le Baron was found to contain 14 to 24 oblong, subcylindrical, flask shaped, eggs. The larvae pupae & perfect insects puncture the leaves, obstruct the sap, & produce a blighted appearance in the foliage, sometimes even causing it to wither away. These insects are found on currants, Parsnips, (Saunders & Le Baron) Mint (Saunders) & in May on *Weigelia*, *Dicentria* &c. Fitch in the Trans. N.Y. St. Ag. Society. 1869 p 513. states that *Lygus lineatus* also injures Bitter sweet, Burning bush, Currant, Dahlia, Plantain, Raspberry, Snapdragon, Soap wort, Sumach. — Janey & Neigolov.

Bicelluli

Lygus ... *lineolaris* (Beauv.) *Phytocoris* (Fall) Harris 201. Coccoe. *Coccus* Brau.

Capsus linearis. Pack. 550. Le Baron. 1871. 63. *Capsus obliterated* Say 1. 340. — Am Ent 1. 227. 2. 276. 921. 8°. Riley 2^o Rept 1869 113. Ann Ent & Natl. 2. 276. Prairie Farmer. May 2^o 1863. "Little lined Plant bug" of *Überri*. (N.Y. Md. Va Illin 8°) Insect. pl. VI. 5 Md. very common on almost all kinds of plants, it appears in April, but is more abundant during the summer, when it injures plants by sucking their sap, & the punctures made by them appearing to be poisonous — (Am Ent 1. 237) This insect injures Pear twigs, & Grape vines comes "Polic's stem" & Strawberry vines, fruit trees, quince &c. It is very fond of congregating on flowers of Cabbage. It is stated to have injured the crops in Illinois to the amount of \$ 1000. Has been taken in the perfect state in winter. Dr. Le Baron (1871, p. 63) says it destroys the eggs of the Colorado Potato bug (*Doryphora decimlineata*) & the Am'n Ent (1. 223) reports it as destroying the eggs of other insects.

Insect head yellowish, with 3 longitudinal reddish stripes. Thorax yellow, with 5 longitudinal yellow lines on it. Ins. 0.20 in length. & the males are darker colored than the females. (Pack)

Bicelluli

Lygus. *pratensis*. Fiel. 311 Douglas 664 pl. 15 fig. 2. (Europe) Comis Linn. Insect

{ found on flowers in woods, in blossoms of Furz & roots of Heath. Bicelluli

Macrocephalus (Swederus.) scutellum entirely covers the wings. They probably —

{ feed upon other insects, as the raptorial character of their fore legs — indicates Westw. 2. 478

Ductirostris

Macrocephalus (Swed.) Amyot 292. *prehensilis*. Fab. (Burris) (US) Ins. VIII. 10. Uhler's coll.

Macrocoleus. Fiel. 325. 326 (Europe)

Bicelluli

Macrolophus. Fiel. 326 347. (")

"

Malacocoris. Fiel. 326. *irroratus*. Say. *Capsus* Say 1. 346. (Md. US) Ins. VI. 20 Md. Aug.

{ Great numbers of these insects were taken in Aug & Sept on a wild sunflower. (*Helianthus*) near the Maryland Agricultural college. Bicelluli

Mallophaga. includes the Bird lice. It is placed by Packard in the Remiptera.

{ although the mouth parts are mandibulate, see in Orthoptera (Gibor)

• *Maotys*. (Amyot.) *fuscus* (Gray.) Amyot p 318 pl IV 4 (Burris) *Ptilocnemus*. Westw.

{ Ins. VII. 23 This insect is figured from Amyot, merely as a specimen.

• *Maotys*. of the Ramicornes no specimen being in our collection. Nudirostris

{ No Ramicorn belongs to this continent" (P. B. U.)

- Margus*. (Lat.) *inconspicuus*. H. Schff. (Aurora. Texas. &c.)
 } Ins. VII. 17. Uhlers Coll. Supericorones.
- Mecomma*. Fiel. 313. 347. (Europe.) Ins. X. 17. Fins. pl 6. Bicelluli.
- Melanolestes*. (Stål) *abdominalis*. H. Schff. Pirates, Amy 324.
 } (Md. U.S.) Ins. III. 20. Ins. common under logs. moss, dead bark &c it
 } preys upon other insects, & if handled cautiously is capable of inflicting
 } a very severe wound with its beak. Nudirostris.
- Melanolestes*. *picipes* H. Schff. Pirates, Amy. Am Ent 1. 87. & 2. 108 (Md. U.S.)
 } Ins. IX. 1. Ins. said by Walsh to be found underground, where no
 } doubt it feeds on subterranean larvae. (Am Ent 2. 108.) in Maryland
 } it is found under logs. stones. &c. & is capable of inflicting a severe
 } sting with its beak. it lives on other insects. Nudirostris.
- Membranacei* Amy & Serv. 40. 295. Tribe 3 of Fam 6 Ductostri. Heteroptera or
 } plant bugs having membranous elyt. &c. or rather the elytra present
 } the appearance of a net work of fine & rounded meshes, like a coat-
 } of mail. it contains 2 groups. *Singides* (Amy 295) & *Piesmides* (Amy 300.)
- Membranacei* (Lat.) Burmeister 251. Fam 4. of Div 2. Geocoris. it contains twelve
 } genera (see p. 3.)
- Membranacei* (Lat) Pack. 555. Antennae 2 jointed. clavate or knobbed. ocelli for
 } the most part 0. beak. gutter like. Sheath (labium) 3 jointed. tarsi
 } 3 jointed.
- Meneclis*. (Stål) *inserta* Say. Pentatomidae. Say 1. 317. Longicute.
- Mononyx*. (Lap Amy 425.) *badius*. H. Schff. (So. Calif. Mex &c.)
 } Ins. VII. 3. Uhlers Coll. Bigemmi.
- Merocoris*. (Pent. Amy. 243) *distinctus*. Dallas. Harmostes. Burm (Md. U.S.)
 } Ins. I. 17. Md. Supericorones.
- Metapodus* (Westw. Amy 192.) *declinis*, see Acanthocephala. Lap. Supericorones.
Metapodus, " " *femoratus*, " " "
Metapodus, " " *nasulus*, see Acanthocephala femoratus.
Metapodus, " " *terminalis* " Acanthocephala.
Metapodus, " " *thomasi* " "
Microplus. (Spinola.) *fallax*. Say. Lygacae. Say 1. 331. Fitch. N.Y. St Ag Rep. 1855. 526.
 } (Md. U.S. Mo) Black veined Microplus. Fitch.
 } Habits unknown. The base of the thorax is elevated, & smooth, the
 } wing covers & wings reaching only to the anterior edge of the ~
 } last segment of the abdomen, & frequently shorter. with wings ~
 } entirely wanting or rudimentary. Wing covers dull white, with ~
 } black longitudinal stripes, following the veins, to the tip. Insect, ~
 } longer & narrower than the chinch bug length 0.20. Irpericorones.
 } " Is sometimes abundant in sandy places, on, and around, rankly
 } growing plants". (P.R.U.)

Micropus (Spinola) leucopterus .. Say *Zygaeus* Say 1. 329. *Diphya ochromus*. (Curtis Amy. 253) Pack 543. & *R. devastator*. Le Baron in Prairie Farmer. 1850. Carrus 198.

see also Le Baron. 2^d Rept. 163. Am Ent. (Walsh) 1. 169. 172. &c Fitch. 1855. 509.

Pract. Ent. 1. 47. & 2. 21 Pack 1st Mass Ag Rep. 5. Riley 2^d Rept. 1869. p 10.

Saunders. Rept. Ontario. 1871. 55. Shimer. Trans. Nth. Illinois. Hist. Soc. 98. -

Smith. Rept. Conn. Bd. Ag. 1871. p 204. Walsh. Illinoian Ag Soc Vol 4. 4368^c

Am "Agriculturist". 1864. 39. Prairie Farm 1845 H. 8. 92. 8^c 8^e

"Chinch bug." "Mormon louse" (Walsh. Am Ag 1864. 39). 11. 16. 17. -

Eggs to the number of about 500. laid in the ground about June. upon the roots of plants. (or elsewhere) & the young larvae are said by some to remain underground for some time, after they are hatched out. sucking the sap from the roots. & have been found in great abundance at the depth of an inch or more. The female is said by Shimer. to be occupied about 20 days. in laying her eggs. which remain in the egg state about 15 days. The first brood matures from Mid July. to Mid August. & the second brood. hatches out late in the summer. Although only 2 generations are usually produced in the course of one year. in Illinois. & the more northern states. yet in the south they may be three brooded. Some of the perfect insects continue alive throughout the winter concealed under brush heaps. logs. bark. stones. or moss. or even in the earth. & revive in spring to deposit their eggs in the ground. These insects. attack & destroy almost every description of garden vegetable. Grain. Maize. Herds grass. Wheat. Oats. potatoes. buds of Pear. (Am Ent. 1. 12) &c & &c preferring principally the most succulent parts as buds. & terminal shoots. puncturing them with their beaks. & apparently poisoning the parts attacked. In the summer of 1865 according to Dr. Shimer the progeny of the broods of the preceding year. were entirely swept off by an epidemic disease. which was doubtless produced by deficient light. heat. & electricity. combined with the excessive humidity of the atmosphere. (Pack) This insect was named and described by Say in 1831. as from Indiana. & in 1854. did considerable injury in Missouri.

In hot dry seasons these insects are most destructive. but heavy rains destroy them. In the single state of Illinois. Dr. Shimer estimated the damage done in 1864 to the wheat & corn crops by the Chinch bug alone. at over seventy three millions of dollars. (Am Ent. 1. 197.) & to give some idea of how these insects swarm in some localities. it is stated in the "Practical Entomologist" that in Ogle Co. Illinois as many as 30 to 40. bushels a day were taken out of holes dug to entrap them. & the process was repeated until only 3 or four bushels could be shovelled out of the holes" It is probably the normal habit of the perfect Chinch bugs. to take wing in vast droves. in spring & summer. during their love season. but at other times they appear unwilling to use their

over

wings at all. it is said that there are two varieties. one with long & the other with short wings, & in the Proc Ent 2.21 it is stated that this insect was found in Canada. It was remarkable for having the wings only half as long as the abdomen. These insects multiply much faster in dry seasons wet weather being unfavorable to them. Another insect is frequently mistaken for the true Chinch bug, as it resembles it somewhat, in size, shape, and color, for the differences between the two insects see pl I. fig 13. which is Anthocoris insidiosus or the false Chinch, & plate II fig 16. which represents Micropterus leucopeltatus or the true Chinch, by consulting these figures it will be seen that the false Chinch bug, is much smaller, of a broader form, & is also marked in a different manner. Kirby & Spence (p 92) mention the true Chinch bugs. & say that in smell & color, they resemble the bed bug (Cimex lectularia) & travel in immense columns from field to field. destroying everything as they proceed, & add that their ravages are confined to the 40° degree of north latitude. Chinch bugs (Micropterus) are destroyed by several parasitic insects, two lady birds have been mentioned Hippodamia maculata & Coccinella munda, (Am Ent 1. 194) 2 species of Scymnus, (also Coleoptera & lady birds) have been reported as destroying them. A neuropterous insect the larva. of Chrysops floridana of Fitch, and another Chrysops Illinoisensis, is also said to feed on them. The insect also so frequently mistaken for it Anthocoris insidiosus before mentioned is also said to prey upon Chinch bugs. & the common Quail (Oryzopsis virginianus), is stated to destroy numbers of them (Am Ent 1. 197 & 1864. p 89.) These birds should therefore be preserved as much as possible by the farmers, wherever this noxious insect does much injury to the grain crops.. especially as it is stated that the stomachs of some quails shot in a wheat field were found filled with these destructive pests of the farmer. The young insects are wingless, & of a bright red color Infericornes

Microvelia, (Hertig) pygmaea, (Hertig) Doug. 574 pl 19 3. (Europe)

{ Insects move more slowly than Velia, mostly among aquatic plants. The females seem more numerous than the males. & the winged specimens are very rare (Doug 574). "This is true of England, but not of temperate U.S." Plates.

Milas. (Stål.) cinctus. Tab. Harpactor. Lep. Amy. 365. Am. Ent. 1.47 & 2. 25. U. M. Nat.

{ Shiner 3. 98. LeBaron Sept 1871. 63. Proc Ent 1.3. Pack 542. Fired in Report w Ontario. Canada 1871 p 74 (Ma. Can. Illin 28 8c.) Ins III. 12. Ma. Nudirostris Ins. destroy the larvae of Doryphora decimlineata or the Colorado Potato bug probably also of Solanum malacophana (Lip) LeBaron. Am. Nat. V. 209.

Miris. (Fab. Amyot 277.) (Kahn Tab. Steiner. Ent. Zeitung. p 301.) Head elongated, triangular.

{ Basal joint of antennae the thickest. (Carini) Ficelluli -

Miris. Fab. debilis. Uhler. Ins. VII. 16. Uhlers Coll. (26)

Miris. .. { dorsalis. Say 1. 348. Pack 550 (U.S.) Antennae rather stout, tapering. & rufous. Ins. pale yellowish rufous immaculate. "an unrecorded species PRU" Bisituli

Miris. " vagans Tab. Say 1. 348. (U.S.) "



50.

- Monanthia*. (Lepelet &c. Amy. 248) *cardue*. Linn. (Amy. 299. (Europe))
 { Ins on Thistle heads, & on Serratula, near Paris. Ductirostris
- Monanthia*. ? (U.S.) Ins. **VIII**, fig. 1. (U.S.) "
- Monanthia*. ? (U.S.) Ins. **VIII**, fig. 5. " "
- Monanthia*. ? (U.S.) Ins. **VIII**, fig. 6. " "
- Monanthia. mutica*. Say. Tengis. Say 1. 349. (Ind.) "
- Monanthia. plexus*. Say. Tengis. Say 1. 349. (U.S.) Ins. **VIII**. 2. "
- Mormidea*. (Amy 136) *tugens*. Tab. (Md.) Longiscutis
- Mormidea. typhaea*. Tab. see *Oebalus*. "
- Mormon*. lice. see *Micropus leucopterus*. or Chinch bug.
- Morenia*. (Amy. 192) *lineolata*. H. Schff. in "Wanzen artigen insecten."
 { Ins. **VIII**. 27. Uhler's Coll. Supericornes
- Myodocha*. (Lat. Amy. 256) *pétiolata* Say 1. 337. (Mecopitilata Say error in Lec.)
 { not uncommon in many parts. Ins. **III**. 21. Infericornes
- Myodocha*. ? { Insect abundant on Tobacco in Florida Ins. **III**. 7. Infericornes
- Myrmecobia*. (Bärens) *coleopterata* Bärens. Berlin Ent. Zeit. 1858 Doug. 484. pl 16 fig 1.
 Salda. Fallén. Ins. **VIII**. 19. (Europe)
- Myrmecobia*, in Germany is said to be found in the nests of ants. the ♂ is very active, & instantly takes flight. The insects were found under leaves on a hedge bank.
- { Ins. ♀. black & red. shining. head red. Elytra black. Pronotum red or red brown. sternum red sides dusky & abdomen red. The male is winged & somewhat resembles a Capsus. The female at first sight resembles the coleopterous insect. "Alexia pulipera" which was found with it. Infericornes.
- Nabis* (Lat. Amy 330) back slender, & extending to the hind legs the anterior tibiae have an apical cushion. (Pack 541) Nudirostris
- Nabis*. (Lat.) *coleopteratus*. Kirby. *N. marginatus*. Riley 2^d Rep. 32. (Northern U.S.)
 { Ins. **VI**. 13. winged form.
 { **VI**. 14. apterous form. Nudirostris
- Nabis* — ferus. Latr. Proc. Ent. 2. 43. 94 8^e (Md. Va. U.S.)
 { Insect said by Dr. Silch to destroy the plant lice (Aphides) on grain, it also feeds on other insects. Nudirostris
- Nabis*. — *marginatus* of Riley's 2^d Rep. p 32. see *Nabis coleopteratus*. Kirby. " { Ins said to smell like a bedbug.
- Nabis*. — purcis. Drury. Say 1. 358. see *Hammatocephalus*.
- Naucorina*. Doug. 45. & 579. Section 2. of Subdiv. 2. Aquatilia. it contains one family. *Naucoridae*.
- Naucoris*. (Geoff. Amy. 431.) *estivalis*. see *Aphelocheirus*. Pediraptis
- Naucoris*. (Geoff.) ? (Md.) **V**. 5. Fiduraptis
- { Specimen from Illinois it closely resembles *N. poeyi*. on next page & probably is only a var. "It gives a severe pain by plunging its beak into the finger that touches it." (P.R.W.)

56.

Naucores. (Geoff. Amy 431). *cimicoides*. (Europe.) (Amyot. 433).

Pedirapti

{ Ins. swims swiftly, & frequently leaves the water during the night, to fly over the country. It feeds upon all kinds of small insects it can capture when swimming. (Amy 433)

Naucores. *poezi*. Guerin. Amy 434. (Md. Ill? 218.) Ins VIII. 34.

{ Insect uses its four hind legs in swimming. The eggs are said to be glued to the blades or leaves of water plants, in April, feeds on other insects. Pedirapti

Naucores. *profunda*. (Mex) Say 1. 363..

Naucores. *Signoreti*. See *Ambrysus*.

Naucores. { *stygica*. Say 1. 364. Sp. probably Apterous. the Hemelytra being united by a rectilinear suture. a new genus has been proposed for it by say to be called "Nerthra"

Neides. (Lat. Amy. 233.) Insects with body remarkably thin & slender. (Pack 575) Supericornes

Neides. ~ *elegans*. Ins. found in Europe, in great profusion about the roots, & young stems of Rest harrow. (*Ononis arvensis*) "As the larvae & pupae, were discovered in company with the imago, it appeared evident, that this was its food plant" Westw 2. 483..

Neides. ~ *spinosus*. Say 1. 28. Berytes. (Lat Amy 323. (Md. Va. 218) Ins III. 10 "

Neides. ~ *tipularia*. Linn. Amyot. 233 Berytes. (Lat. (Europe))

{ Insect not very common in France, found in humid obscure places, climbing & crawling slowly upon high plants. Wolff found it common in sand, at the roots of different plants. (Amy.)

Supericornes

● *Neotiglossa*. (Kirby) *undata*. Say. Pentatoma. Say 1. 319. (Md. 218) Ins IV. 7. Longiscutellata

Nepa. — *Nepa*. (Linn. Amy. 437). Water scorpion.

Antennæ very short, 3 jointed, the last 2 joints being expanded laterally. Body flat, oval, with 2 respiratory tubes. Thorax trapezoidal. Thighs dilated, with a notch to receive the tibia, which is curved, & soldered to the tarsus. (Pack. 539.) The eggs are deposited in water, they are oval in form & surmounted by seven elongated filaments, which serve while the egg is in the oviduct, to form a kind of cup for the reception of the next egg, but which are recurved, when the egg is discharged. These insects are not lively, & drag themselves along at the bottom of the water, when in a vase, they are carnivorous, not even sparing their own species. They seize their prey between the shanks of the tarsi, which they fold under the thigh, & retain it in this manner, whilst they suck its juices. The four posterior feet are used, only for swimming. This insect living in water, is compelled to resort to the surface continually, in order to obtain a fresh supply of air, which it does with the assistance of the two skin dages, at the extremity of its body, which conduct the air to the 2 spiracles, at the side of the anus. (Hector)

"The tracheal system is largely developed, on the under side of the body" (Pack 537.)

Pedirapti.

Nepa. *apiculata* Harr. Ins V. 10 (Mass. Md. 218.)

Pedirapti.

● *Neotiglossa*



52.

Nepa. Linn. Amy. 437. *Cinerea*. Linn. Pl. 85. 158. Doug. 584. Amy. 439. (Europe.)

{ Ins common in the mud & stagnant water. (Doug) Degeer found in a female about 80 elongated eggs. of a yellow white color. & having 7 elongated filaments at one end. these hatch at midsummer, & the complete development of the insect requires 2 months. (De Geer) This insect is very common in stagnant water, near the edges. & the female fastens her eggs to aquatic plants. They are very voracious, & prey upon other aquatic insects. (Amy). Kirby & Spence. (p 158) state that a Nepa put onto a basin of water, with several young tadpoles, killed them all, without attempting to eat them. It is therefore very evident that they will destroy young fish. & should be extirpated in, or near, any fish breeding establishments.

Pedicularis

Nepa - *grisea*. see *Belostoma*.

Nepidae. - (Leach.) Body depressed, head small, with large lateral eyes. fore legs strongly raptorial. the 2 other pair of feet, are alike in structure, & formed for creeping amongst the roots of aquatic plants. extremity of body in the typical species, furnished with 2 long & slender filaments. antennae, short & variable in structure, & only 3 jointed in the typical species. rostrum short, & robust. (Mestig. 2.461)

Nepina - Douglas. 46. & 581. Section 3 of subdv 2. Aquatilia. or water bugs. - containing only one family. Ranatridae.

Nepini. - (Burm.) Fam 2. of Div 1. Hydrocoraces. (Burm 193) Water scorpions - divided into 5 genera. viz 1 Naucoris (Burm p 193) 2 Diplonychus - Lap. (Burm 194) 3 Belostoma (Burm p 195). 4 Nepa (Burm 195. &) - 5 Ranatra. (Burm 199) Some of the nepina according to Leuris, are often covered "with the pear shaped red cases of water mites". some of these insects, sting severely (see Naucoris &c)

Pedicularis

Nethra. Say new genus, proposed by Say for Naucoris stygica. Say 1.364 see Naucoris.

Nerara. (Amy. 143) *helaria*. Say. *Pentatoma*. Say 1.304. *Rhaphigaster*. (Lap) *pennsylvanicus*, Fitch. (nec Degeer.) 3^d Rep. 1856. 389. 452. (Md. Mo. N.Y. Geog. &c)

Ins 11. 23. Large green tree bug. of Fitch

Ins. punctures, leaves, & sucks the sap. of grape, Hickory, Willow & other trees

Ins flattened, grass green, edged all round with a yellow line, interrupted at each joint of abdomen by a small black spot.

This insect is the Rhaphigaster Pennsylvanicus, of Fitch. it differs from R pennsylvanicus of Degeer, in having the posterior angles of the pro-notum triangular instead of rounded. (P.R. 2).

note. A species of Rhaphigaster resembling this, being a large green insect about $\frac{1}{2}$ an inch in length, has also been mentioned in the Am Ent. 2. 121. as "being found preying" upon the larvæ of *Doryphora lineata*. "it was also observed sucking a wild bee (Andrena)" (Walch)

longisutis

Nerara (Amy. 453) *pensylvanica* Deger. *Rhamphaster pensylvanicus*. Error of
Fitch. 3^d Report, 1856. 389 452. Ins. IX. 4. Longiseta

This insect is not the *R. pensylvanicus*. of Fitch, but an entirely different insect. & differs from *N. hilares* (which is the *pensylvanica* of Fitch) in having the posterior angles of the pronotum rounded, instead of triangular, as in *N. hilares*. The two insects are entirely separate as species. (P&U)

Nerara. - *viridula*, Linn. *Pentatoma*. (Southern U.S.) Ins. VIII. 20. Uhler's coll. —

Natonecta. Linn. Amy. 450. H. & S. 148 &c. Body somewhat prismatic. uniform. hairy. beneath fore tarsi 3-jointed. hind legs very long. (Pack 536) The eggs are white & elongated and are said by Roesel to be attached to the stems & leaves of aquatic plants. They are of an oval form. & are hatched in about 15 days. The young make their appearance at the beginning of the spring, & the parent survives until they have arrived at maturity. The newly hatched young are broad & oval. (Hestio 2. 457.) These insects living in the water, are obliged to come to the surface, in order to obtain air. in doing this the extremity of the body is thrust out of water, whereby a supply of air is introduced beneath the wings & the upper surface of the abdomen, where it is retained by rows of hairs, with which the segments are dorsally furnished. (Hestio 2. 457.) — When stationary on the surface of the water, in still hot weather, — they are able by a single stroke of their oar like paddle feet, which are generally stretched out at full length, to descend into the water out of sight. Their motions in the water are quick but on the ground they are scarcely able to walk. Their hind wings being exceedingly delicate, they fly well. (Hestio 2. 459) Thus they generally do in the evening or at night, passing in this way from pond to pond. They are carnivorous & the insects attacked die very soon after they have been pierced, supposed to be in consequence of some poisonous liquid, like that of spiders. (Amy. 453) These insects swim very rapidly, with the back down-wards, using their legs as oars, whence their name of boatflies. — Their rostrum is capable of inflicting a severe wound, in the hands of those who take hold of them, without due care. (Dowd 587) In the Practical Entomologist. (2 p 57.) it is stated that the insect punctures the skin, causing a sort of sting, but Mr Walsh believes there is no poison bag attached to the instrument. The ourselves have experienced the pain caused by their sting, & should think that some poisonous liquid must have been introduced, to cause the prolonged pain, & subsequent inflammation, as also the almost immediate death of the insects pierced by them, as mentioned by Amyot. M Brulle states that the larvae arrive at their perfect state in the course of the summer, but that their life is seldom prolonged until the following over.

Notonecta continued.

54.

{ spring. (Amy 453) According to Ballot, two Mexican species deposit their eggs upon water plants, where the Indians collect them, & use them in the preparation of different articles of food. (Learns) In the Popular science review for 1875, Jan. p 81 it is said that "a not less curious article of food, is the egg of an insect, which inhabits the fresh waters of Mexico, & which is made into cakes, under the name of "Caoutle". This most probably refers to the eggs of *Ceratopeltis femorata*, before mentioned. & not to *Notonecta*, as the specimens in the Museum of the Department of Agriculture presented by M Gueron Monerville belong undoubtedly to *Ceratopeltis*. but as both these insects inhabit the same waters, they may possibly have been taken at the same time, & confounded together. Pedemini.

Notonecta. (Linn) *insulata*. Kirby (Md. U.S.) Ins V. 4. very common (Md. May. Sept)
& Ins in ponds & stagnant pools.

Notonecta. " *irrorata*. Uhler. Pack. 536. a very common form in Mass.

Notonecta. " *minutissima* (Feb., Pla. Doug 571. pl XX. 3.

Notonecta. " *minutissima* (Linn) *Sigara*. Doug. 616. pl XX. 5.

Notonecta. " *undulata*. Say 1.368. Pack. 536. (Mass Md. Mo Ind. U.S.)

Ins pl V. 9. common Md

Pedemini

Notonectidae. " *Burm*. 186. Fam 1. Heterocores Water bugs which swim on their backs, divided into 4 genera. 1 *Ceratopeltis* Geoff (Burm 186,) 2. *Sigara* Leach (Burm. 188,) 3 *Pla* Stephens (Burm 198) & *Notonecta* (Burm p 190)

Notonectidae. (Latr) see Pack 536. Water Boatmen. Head large, & nearly as wide as rest of body, with broad, & rounded front. antennae 4 jointed, and concealed beneath the eyes. Ocelli 0 body convex above, but flat beneath. habits aquatic. hind legs very long, ciliated & formed for swimming.

Notonectina. Doug 48. & 585. Section 4. of subdivision 2. Aquatilia. or Water bugs - containing 2 families. *Notonectidae*, & *Pleidae*.

Nudirostrini. (Amy 41. 314) Fam 7. of Section 1. Geocorisid. or land bugs having the beak or rostrum entirely naked or free & disengaged. The antennae are much longer than the body. it contains 9 tribes viz. 1. *Ranuncornes* (Amy 42. 318) 2. *Spongipedes* (Amy 42. 321.) 3. *Conicripes* (Amy 44. 350) 4. *Brevicripes*, (Amy 47. 381.) 5. *Cylindricripes*, (Amy 47. 383) 6. *Calongecoxi*, (Amy 48. 383.) 7. *Stagnigrade*, (Amy 49. 398) 8. *Oculatus* (Amy 49. 401.) & 9. *Brevicornes* (Amy 49. 406) G Pl. 42.

Nysius. (Dallas) Doug. 225. (p. 8. 4.) *californicus*. Olivier. (Cal. U.S.) Ins VII. 2. Infericornes.

Nysius. " *raphanus*. Howard in Phillips southern Farmer. N. destructor. Riley 5th report 1873. III. Ins VIII. 9.

Ins sucks the sap of plants, causing them to wither. The leaves injured show little rusty circular spots, where the beak of the insect has been inserted & little irregular holes, which look more as if made by a flea-beetle. (Coleopt.) They injure Radishes, Mustard, Lettuce, Cruciferous plants over

{ Grape, cabbage, Potatoes & other vegetables. There are probably 2 or 3 broods annually. The insect itself has a disagreeable scent. (Mr Howard in Phillips Southern Farmer, & in Canadian Entomologist.)

Note. { As this insect was described by Mr Wm R Howard Sept 15th 1872 in Phillips Southern Farmer, & in the Country Gentleman, on Nov. 1872, in the Canadian Entomologist. Whilst Mr Riley merely announced his intention to describe it in the Western Planter, June 29, 1872, of course the priority of name is given to Mr Howard. Especially as Mr Riley's description first appeared in 1873.

Myrmecophytes. (Dall.) *scolopax*. *Lycaeus*. Say 1. 330.

Infericornis.

Oculati. { Amy & Serr. 49. 401. Race 8. of Fam 7. It contains 2 groups viz 1. *Leptospides* (Amy 401) & *Saldidae* (Amy 404)

Oculatina. Doug 38.577. *Oculati* Lat Amy & Serr. *Riparii*. Burn. Sect. 11 of sub div 1. { *Geodromica*. (Doug) (*Geocoris*) It contains one family *Saldidae*.

Obalus. (Stål) *typhaeus*. Fab. *Mormidea*. Amy 134. *Pentatomia*. Say 313. (Md. U.S. Geo.)

Ins. II. 11.

{ *Pentatomia augur*. (Say 1318) agrees in most respects with *P. typhaeus*, but has no sanguineous marks in the middle of the Hemelytra (Say). *Longiscutellata*.

Edancala. (Amy 258) *dorsalis*. Say. *Miris*. Say 1. 348. (U.S.) Ins III. 5. Infericornis.

Odontoscelis (Lap.) *bimaculata*. say. *Scutellera*. Say 1. 198. (Nth West Ter.) Longiscutellata.

Oncerotrachelus. (Stål) *acuminatus*. Say. *Reduvius*. Say 1. 356

Oncotylus. Fiel 318. 347. Side view of head. X. 7. pl 6 Fiel. (Eu)

Oncotylus militaris. Uhler. V II. 5. Bicellula.

● *Ophthalmicus* (Schil.) (Amy 260) *bulbatus*. Say. *Salda* Say 1. 336 (U.S.) punctatus, var. Infericornis

● *Ophthalmicus* *peiceus*. Say. *Salda*. Say 1. 336 (U.S.) Ins II. 2 "

● *Ophthalmicus* *punctatus*. Say. *Salda*. Say 1. 336. (U.S.) a variety of *O. bulbatus* "

● *Ophthalmicus* *uliginosus*. Say. *Salda* Say 1. 336 (U.S.) resembles *O. bulbatus* but is darker. "

Osculus. (Amy & Serr. 15. *Scutelliferites* Lep. Heteroptera or plant bugs having the scutellum oval-shaped or rounded & reaching to or nearly to the extremity of the abdomen. It contains two races. 1. *Angulosi*. (Amy 14 243 & 2. *Globosi* (Amy 18 & 60) G. pl X 32.

Orthocephalus. Fiel 316. 347. (Eu) side view head. X. 16. Fiel. pl 6. Bicellula.

Orthocerus. (Hest.). See *Bryocoris*. Fall. Bicellula.

Orthops. Fiel. 311. 347. (Europe) side view head. X. 10 Fiel pl 6. Bicellula.

Pathostenus. (Virg.) Virg. Vir. Germpl p 130. Bicellula.

Orthotylus. Fiel. 315. *discedens*. Uhler *Capsid*. Ins VI. 4 (Md. U.S.) Ins very common on Ragweed (Amaranthus) in Aug. & Sept. at the Maryland Agricultural College. Bicellula.

Tachysurus. (Burm. Amy 31.) *chrysorrhoeus* & *Scutellera viridis-punctata*. Say 1. 310. see also *Dilectus*. Mayer.

Tachysurus. ex. see *Homaeamus*. *semifrons* Bicellula.

56.

Pachyconis. (Burm. Amy. 37.) Fabreui. Linn. Mant. p. 534. (Calif. Mex. &c.) Longicula.
 { Ins. IV. 6.

Pachyconis. pavulus. see Homaemus.

Pachyconis. chrysorrhaeus. see Dioleus. Stål & Scutellera viridipunctata. Say 1. 310.

Pachyles. (Lep. Serv. Amy. 194.) gigas. Burm.

{ 2 Specimens were sent to the Dept of Ag^o from Arizona.
 Ins. VII. 23. Nymph. VIII. 36. Uhler's coll. Supericornes
Bicelluli

Pachylops. Fieb. 318. 347. (Europe.) side view of head. X. 26. Fieb. Pl. 6. Pococeroides

Pamera (Say) bilobata. Say 1. 334. (Louisiana. Mex.) see Plociomerus. Amy. Infericornes

Pamera. constricta. Say 1. 332. (U.S.) see Plociomerus. (Amy.)

Pamera. (Lepel & Serv. Say. contracta. Say 1. 332 (Nth. West. Terr.) see Plociomerus. Amy)

Pamera. dorsalis. Say 1. 335 see Plociomerus. Amy.

Pamera. (Pachymera.) fallax. (Nth. West. Terr.) see Rhyparochromus.

Pamera. lera. Say 1. 333. (U.S.) see Eremocoris. Fieb.

Pamera. una. Say 1. 333. (Int.) see Megalonotus. Fieb.

Pamera. vincta. Say 1. 333 (Ila) see Plociomerus. Amy.

Pamera. Lepel. & Serv. Say. "The original word of Lepel & Serv is Pachymera, which
 { Latreille informs us is preoccupied." (Say)

Pachymera. is Pamera of Say. see above.

Pachymerus. St. Farg. Schill. Steph. (Burm 293.) Lygaeus. Burm.

Pachymerus. insignis. see Heraeus.

Pirates. & Pirates. see Melanolestes.

Pedirapti. Amyot & Serville. 50. & 426. Fam 2. of Section 2. Hydrocorisae. it contains
 { water bugs. having their fore legs raptorial. or adapted for catching their
 prey. & is divided into 2 groups. viz 1. Nauconides. (Amyot 426.) and.
Nepides. (Amy 437.) G. pl X. 45.

Pedixemi. Amyot. & Serville. 51. 444. Fam 3. of Section 2. Hydrocorisae. Water bugs
 having their posterior tarsi. generally in the form of oars. & the anterior
 feet not raptorial. it contains 2 groups. 1. Corisides. (Amy. 444) & Notonec-
tides. (Amy 449) G. pl X. 46.

Peltionotus. (Uhler.) abbreviatus. Uhler. Ins. II. 4. (Md) Infericornes
 { Ins. very common on bushes. & tall herbage. in woods near the Ag^o Coll.
 Aug. & Sep.. Maryland.

Polygonus. (Latr. Amy 407) marginatus. Westw. 2. fig 120. 8. page 465. (Europe.)

{ Ins IX. 6. Ins. Found on banks of rivers. where it runs quickly
 & probably feeds on other insects. Ruficornis

Pentatomia (Oliv. Amyot 128.) Ins Subelongate. ovate. head coning. legs smooth. tarsi
 { 3 jointed. scutellum not covering abdomen. Eyes slightly prominent. —
 (Westw. Syn 124) The beak is somewhat slender & reaches to the end of breast.
 with its first joint lying in the furrow of the throat. Scutellum two thirds
 length of abdomen. (Pack 546. see also Amyot p 128) Colors generally bright
 over

{ and the insects are of large size, they are found on shrubs, trees, &c — sucking the leaves, & often transfixing caterpillars to extract their juices. by sucking & eventually killing them. The eggs are generally of an oval form, attached by a glutinous secretion to leaves, the other end, being furnished with a cap, which the young larva bursts off, when it hatches out. The larvae are more convex, & less flattened, out than the adults.

Pentatoma. (Oliv. Amy. 128.) abrupta. Say 1. 317. (Geo) see Nerara pensylvanica Deger (P.R.U.)

Pentatoma. acuminata. (Europe) see Cilia.

Longicula.

Pentatoma. aqualis. Say 1. 319. (Ind.) see Cenus.

Pentatoma. arborea. Say 2. 239. (Mo.) see Brochymena.

Pentatoma. augur. Say 1. 313. (Geo) see Obalus typhaeus.

Pentatoma. beddens. P. & S. 158. (Ew) " six or eight of these insects shut up in a room swarming with bed bugs for several weeks completely extirpated the bed bugs. (Kuhn)

Pentatoma. bifida. Say 1. 303. 322. (Louisiana) see Aceratodes cornuta.

Pentatoma. bioculata. Say 1. 322. unknown to P.R.U. (South St)

Pentatoma. calceata. Say 1. 320. (U.S.) see Ilyanta (Stål) custator. Tab.

Pentatoma. calva. Say 1. 318. (Va.) see Banasa.

Pentatoma. clanda. Say 2. 240. (Mo.) see Perillus.

Pentatoma. custator. Tab. see Ilyanta.

Pentatoma. cynica. Say 1. 312. (Mo.) see Podusus.

Pentatoma. delia. Say 1. 320. (Mass Mo.) see Cenus.

Pentatoma. dimidiata. Say 1. 318. (Fla.) see Banasa.

Pentatoma. emarginata. Say 1. 313. (Geo) see Euthyrhynchus floridanus.

Pentatoma. exapta. Say 2. 240. (Mo.) see Perillus.

Pentatoma. gamma. Say 1. 322 see P. lugens. Tab.

Pentatoma. hilaris. Say 1. 304. 316. (U.S. Geo. Miss.) see Nerara.

Pentatoma. inserta. Say 1. 317. (Miss. Ark.) see Meneclis. Stål.

Pentatoma. juniperana (U.S.) Linn Ins VII. 21.

Longicula

Pentatoma. ligata. Say 1. 315. see Chlorochroa. (Mo.)

Pentatoma. laticornis. Say 1. 315. see Brochymena.

Pentatoma. lugens. Tab. Say 1. 322. Ins II. q. Md. July to Sep. P. gamma. Syn.

Pentatoma. nervosa. Say 1. 321 (Ind.) see Hymenarcys.

Pentatoma. punctipes. Say 2. 241 (Mo. Pa.) Say 1. 314. see Euschistus. found on Mullein & Thistles.

Pentatoma. rufipes. (Europe) Cimex. Ins. destroys caterpillars. Leonis.

Pentatoma. rugocincta. (H. Sch.) Say 1. 315. (Mo. Tex) see Chlorochroa ligata.

Pentatoma. rugulosa. Say 1. 319. (Wth west Terr.) see Ilyanta.

Pentatoma. saucia. Say 1. 318. (U.S.) see Lioderma.

Pentatoma. semivittata. Say 1. 322. (Ind.) see Trichopepla.

Pentatoma. senilis. Say 1. 316. (U.S.) see Lioderma.

57. X

- Pentatoma. (Oliv. Amyot 128.) serva. Say 1. 314 (U.S.) Euschistus. Longiscutis.
- Pentatoma. tenebrosa. - Say. 1. 314. (Lac. see Proxyz.)
- Pentatoma. tristigma. Say. 1. 314. Harr. Miss Pack. 565. (Mass. Md. U.S.)
see Euschistus. Ins has 3 or 4 black dots on the underside of the abdomen, of which the posterior is the largest. Ins. 7/20. mcs in length undata. Say 1. 319. (Nth. west. Tenn.). see Neotigosa.
- Pentatoma. viridula. Linn. see Nerara. longiscutis.
- Pentatoma. wing. fm Douglas. pl 3 fig 1. G. X. 41.
- Terillus. (Stål) circumlineatus. Stål. Stettiner Ent Zeit vol 22. Reed. Pers. fruit-growers.
(Also? Ontario Canada. 1871. p 73. Riley 4th Rep. p 19.)
"Ring banded Soldier bug." (Riley) This insect is reported as killing the Colorado potato bug. (Doryphora coloradensis) in Ontario Co. Canada & in Mo. Ins VIII. 31. (Missoula Md. Canada)
"Color rich polished brown, marked with pale yellow underneath, on the vertex is a large patch, containing 4 black spots, equilaterally arranged. & a yellow border extends round the body". (Riley) longiscutis
- Terillus. (Stål) clandus. Say. Pentatoma. Say 2. 260 (Md. Va. U.S.) Ins II. 21. "
- Terillus. exaptus. Say. Pentatoma Say 2. 260. Zicrona. Amy 86. (Mo. Md. Va.)
Ins IV. 5. Md.
- Penthastoma (Leidy) aurantiacum. Leidy. syn. Belostoma flumineum. Say 1. 365
see Zaitha fluminea Pediraptis
- Penthastoma flumineum. see Zaitha.
- Petalochirus. (Beauv.) Say 1. 358. Petalochirus. Say 1. 307. & last. (Error in Say) ligulatus
{ Say 1. 307. 358. (Say) see Porales. ligulatus. (See also P. multilarius) multistriatus,
Petalochirus. (Beauv.) (Error in Leconte's Say.) cruccatus 1. 358. (Ins. Mo. Geo)
see Ectrichodia bicolor. Ins. III. 17. Md. mucro triangulatus
- Phæa. (Lep. Scav. antennae). 3 jointed, the first joint longest. Body much flattened. &
{ expanded laterally, into leaf like flaps. (Pentatomidae) longiscutis
"can never be found in N Amer because too tropical." (P. 22. (South Am))
- Phæa. (Lep. Scav.) corticacea. Drury. Pack. 546. (Brazil)
- Phymata (Lac.) crassipes. (Europe) is said by Dufour "to fly rapidly & to emit
{ no scent" (Hestia. 2. 478.)
- Phymata. (Lac.) erosa. Fab. Amyot 290. Syrtes Latr. Pack 552. (Mass. N.Y. Md. U.S.)
Ins BB. 13. Md.
- { Ins. stings severely. It sits in wait for its prey in flowers. &c. Am Ent 2. 25.
it is said to prey upon small bees, & wasps. (Am Ent 1. 1st) & is useful in destroying plant lice. (Aphides) (Am Nat. 1. 359. Pack 552) a specimen of this insect was taken at Mt Calvary near the Methodist college. as it was lying concealed among the petals of a rose. usually employed in sucking out the juices of a small blue butterfly. which it had caught. & killed. many others. were also observed on various flying insects. & other insects that might be attracted to them. lectivostane

- Ptytocoris. Patens. On mac. slender. w. first joint. as angles reaching thorax. Its. latter not margined) head broader than long. hind legs very long. (Heslo. 122 Amy. 278.) Ptytocoris differs from Capsus in having a smaller head. the thorax is also wider behind & narrower in front. the second joint of the antennae is the stoutest. (Pack. 580.)
- Ptytocoris. carcelii. (Lep. & Serv.) Amy. 277. (Europe) Bicellariæ.
- { This insect gives out a peculiar odor like that of the Hymenopterus racemosus.
- Ptytocoris. lineolaris. Capsus obsoletus. Say 1. 340. See Glycus.
- Ptytocoris. nubilus. Say. Capsus. Say. 341. (Md. US) Ins. 118. II. Ovuliculae.
- Ptytocoris. scrupens. Say. Capsus. Say 1. 342.
- Piesma. (Lep. & Serv.) ciliata. Say. Singis 1. 349. Nudirostræ.
- Piesma. cineraria. Say. Singis Say. 1. 347. Am. Ent. 1. p. 19. Cieg. 2^d Rept. 233..
- { Zosmerus Burm. Ins. VIII fig. 8. (Mus. Mo. Va. US)
- { Ins. injures the bud of blossoms of grape vines. it also attacks fruit trees & fruit bearing bushes. it hibernates under bark. especially of Shagbark Hickory.
- Pirates. (Amyot. 324.) abdominalis. see Melanolestes. Nudirostræ.
- Pirates. (Amy. 324.) biguttatus. Say. Petalochereus. (Error) Say 1. 307. Pirates. Serv.
- { Ins. IV. 22. (Illin. Ind. Mex. Louis. Texas. Calif. US) Spotted Corsair.
- { Ins. found between the matresses of a bug infested bed. in South Illin. it is allied to Reduvius personatus of Europe which feeds upon bed bugs.
- Pirates. multilarvus. Fab. Petalochereus. (Error) Say 1. 307.
- { Ins. very much resembles P. biguttatus. Say,
- Pirates. picipes. see Melanolestes.
- Pirates. striatus. (Europe) This insect makes a loud noise by the friction of the neck within the prothoracic cavity. (Heslo. 2. 673.) Nudirostræ.
- Pterogaster. (Amy. 197.) alternatus. Say. Coreus Say. Journ Acad. IV. Archimerus. Schil. See below as P. calcarator. Supericornes.
- Pterogaster. (Amy.) calcarator. Fab. C. alternatus. or Say (above) (US) Ins. VI. 25. Supericornes.
- Pithanus. Feb. 303. 347 (Europe) wide view here. X. 13. Feb. pl. 6. Bicellariæ.
- Plea. Leach. Ploa. Burn. Notonecta. sub. it differs from Notonecta in the fore wings being coriaceous. & joined together by a straight suture. and do not over lap each other in the least. (Pack. 536.) Pediomini.
- Plea. Leach. minutissima. Fab. (Europe) Douglas. p. 591. pl. 20. 3. Ploa. Burn.
- { Ins. VIII. 15. Doug. Insect common amongst vegetation in Spring & autumn. color cinereous gray clouded with brown.
- Plochiomera of Say. Error see Plochiomera.
- Plochiomera. (Amyot 255.) bilobata. Say. Panera Say 1. 253. (Louis. Mex) Pachynemurus Schil.
- Plochiomera. " recta Say. Panera. Say 1. 333. Pachynemurus Schil. Inplicornes
- Plochiomera. " constricta Say. Panera. Say 1. 334 (US) Pachynemurus. Schil. "
- Plochiomera. " contracta Say. Panera. Say 1. 332. (W. West. Tex) " "
- Plochiomera. " dorsalis Say. Panera. Say 1. 335. (Ind) " "

Ploaria (Scop. Amy 396.) Insect distinguished by the perfectly raptorial structure of its very small fore legs, with coxae elongated like those of Mordellidae. in motions they resemble Siphula, or the crane fly (Dipt) balancing themselves on their long legs (Kester 2.472) habits raptorial. Frequenting gardens. — These insects are remarkably slender, & thread like, with long hair like posterior legs. (see Douglas) *Ploaria maculata* of Haid. is very rare. It looks like a Sipula of small size. It is found in Pa. & Mass. Nudirostris

Ploaria. (Scop.) *erratica*. Fiel. Doug. 536 (Europe). Fieber. Europ. Hemip. 149. 2. 1861. Ins. found in Thatch in Autumn. The larva according to Burmeister covers itself with dust. Insect taken on Guy. Nudirostris. " *P. erraticus* of Sabl. Geoc. Gen 149 & Fiel 150 p. 1861. is said to be a syn. :onym of *P. vagabunda* of Linn" ?

Ploaria. *errabunda*. Say 1. 359. Insect closely allied to *Ploaria vagabunda*. It. is said to be a synonym of *P. maculata*. (Hald. Pr Acad. Nat. Sci. Phil. 3. 151. Nudirostris

Ploaria. Scop. *fraterna*. Say 1. 358.

Ploaria " *maculata*. Hald. Pr Acad. Nat. Sc. Phil. see *Perrabunda*. Nudirostris

Ploaria. (Scop.) *vagabunda*. Linn. 1788. 451. *Ploaria*. Amy. 397. *Gerris*. Fab. *ciner* *vagabunda*. Linn. Doug. 537. 18 fig 1. K. 2. Ins **IX**. 13. (Europe) Nudirostris. Ins. with very short anterior legs, or rather arms, whilst the two posterior pair are very long. When walking it moves very slowly, with its fore legs (which are perhaps useful in climbing or to seize its prey) which are applied to its body, whilst the antennae, being bent at their extremity which is rather thick, are made to rest upon the surface on which the insect moves so supinely, place of fore legs. The insect is found on trees, it vacillates or trembles, & balances itself constantly, like a Sipula or crane fly (Dipt). Geor. De gear says it is found in houses. it walks slowly, but flies easily, and quickly. Burmeister states that the larva covers itself with dust & lives on prey. In England it is found in Thatch in Autumn, & is not scarce

as say. nodosa. Say 1. 335. Error see *Plochiomera*

Plochiomera. Ramkars. Amy 40 & Serville. 50. 409. Fam 8 of Section 1. Geocorisac. Bugs having the four posterior feet formed for rowing, or gliding, on water. it contains only 2 groups. 1. *Gerrides*. (Amy 410) & 2. *Velides* (Amy 418) **G X**. 42.

Poecilus. (Siel) *cynicus* Say. *Pentatomia*. Say 1. 213. *Arma*. (Cahn Amy 86) grandes Dallas. Fitch. N.Y. St Ag' Rep 1856 335. • *Arma bracteata*, is only a short shouldered variety (Ohio, N.Y. Md Va. U.S.) Large tree bug (Fitch) Ins **II**. 29. Md. common. L.P.J. puncture the leaves & tender limbs, & suck the sap from July to the end of the season, on Apple, Oak, & other trees. Geo B. Morlon. M.D. of north bass Island Ottawa Co. Cinc 1871. found this insect sucking the juices of a young Colorado potato beetle. (*Doryphora* 10 *lineata*). over

The insect is somewhat the shape of a pumpkin seed with a conspicuous sharp spine projecting outwards on each side, anteriorly. The color is dull pale yellowish, with numerous minute punctures of brown above, & of red on the underside, with two burnished brassy green dots, near each anterior angle of thorax. Male 0.60, female 0.75. (Fitch)

note

Arma. bracteata of Fitch is only a variety of *Podisus cynicus* found by Fitch (1856. 336) puncturing leaves. Small branches of Apple trees, it is darker colored than *P. Cynicus*. It has in addition to the brassy green dots, one, on each anterior angle of the thorax, 2 on the mid anterior edge, & two others back of these last. It was therefore named by Fitch the "Strangled Tree bug".

Longiscutis

Podisus (Stål) *modestus*. Dallas. *Arma*. Fitch 3^d Rep. 1856. 390. (NY. Md. U.S.)

Insects suck the sap from leaves & tender branches of trees & shrubs. group 4
Ins **IX. 12.** Mr Walsh in the Ann Ent. 1. p 47. says that an allied species in the larva & pupa state inhabits the nests of *Cyphostria textor*, or the Gall web worm (Lepid) & destroys the caterpillars. The marsh bread it from the larva to the pupa state, feeding it with caterpillars. Mr Riley in the 5th Rep. 1873. p 183. says it destroys the caterpillars of *Hemileuca maia* (Lepid).

Ins. tawny yellowish gray, dotted with brown punctures, & having a spine like point, at the base of underside of abdomen very short & the angular projections, on each side of thorax, not drawn out to a sharp point. length 0.40. to 0.46.

Longiscutis

Podisus -

placidus. Uhler. Am. Ent. & Bot. 2. 203. Saunders. Rep. Ontario Can. 1871. p 31. fig? Ins **IX. 22.**

Longiscutis.

Ins. destroys the larvae of *Nematus ventricosus* (Hymen) or the impeded gooseberry saw fly, at the rate of about two worms per diem it also probably sucks sap of trees & shrubs.

Podisus -

spinosa. Dallas. *Arma* (Cahn) *spinosa* Fitch 3^d Rep. 1856. 336. Ann Ent 1. 14. 46. fig. Pack 574. Le Baron 1871. 63. Riley 2^d Rep 1869 p 32. Shimer Am Nat III. 98. Walsh Am Ent 1. 13. Fitch Rept. Fruit growers Assⁿ Ontario Can 1871. 73. (Can. Ill. Ma. Va. N.Y. Mass. &c, Spined tree bug (Fitch) Ins **II. 28** Md

Longiscutis

Ins. found puncturing the leaves & limbs of Apple trees, sucking out the sap. (Fitch) it is however also beneficial as destroying the larvae of the Colorado potato bug (*Doryphora* 10 linearis) by pinching them with its beak, & sucking out their juices. It also destroys Lady bugs. (Coccinella). (Am Ent), *Andrena*, a wild bee & the American gooseberry saw fly. (*Pristiphora grossulariae*. Walsh) also the Cicada (Clement 1. 67) This insect is said to be one of the bitterest enemies to the Colorado potato bug, & therefore although it may perhaps do some damage to fruit trees, it ought to be regarded as a public benefactor. It is a strong

61.

Podops (Lap.) *clubius*. Beauv. *Setyra cinctipes*. Say 1. 94 (Md. Miss.) Spongiscutell

{ In IX. 16 found under stones, & rubbish, in vallies, spring, & Fall. (1824)

Podops (Lap.) *inunctus* Gap (Europe) Ins not uncommon in sandy places amongst roots
& grass, in Spring & Autumn. Doug 74. Longiscutell

Bicornute

Pacilocytus. Fiel 310 diffusus. Wher. Ins V. 2.

Pacilodus. (Lap Amy 35^v) *cristatus*. Linn. *Reduvius*. Tab. novenarius. Say 1. 71. & 358.

Am Ent 1. 96, & Rept Dept Ag 1866. 43. *Nabis* Say 1. 368. *Prionotus*
cristatus, Linn, Amy 35^v. & Ins. III 14. Md. Nine spined wheel bug.
& sometimes in Md. Devil's horse (*Cimex* of Linn) Nudostri

Eggs to the number of from 70. to 130. deposited in a hexagonal mass. cemented together with a thick brown viscid substance. each egg when separated from the mass, presenting the appearance of a somewhat square flask, standing on its own bottom. This mass of eggs is placed on the bark of a tree, a fence rail, under the eaves of outbuildings or wherever the female chances to be, at the time of oviposition. The larvae when young, are blood red with black marks, & do not resemble the adult insect, at all, excepting somewhat in form & habit. The larva pupas & perfect insects feed upon all other insects, they can overcome, not even sparing their own brethren. When very young, they destroy great numbers of Plant lice. (*Aphides*) & when older they prey upon caterpillars, or indeed upon any other insect they can overpower. They kill their prey by inserting their proboscis into it & which emits a most powerful poisonous liquid into the wound. The victim thus pierced dies in a very short time. They then leisurely suck all the juices out, & drop the empty skin. The perfect wheel bug is a large, & very singular looking insect, of very slow, & deliberate motions when undisturbed. & stealing up to its prey. It is of a gray color, & has a high semicircular ridge or projection on the crest of its thorax, armed with 9 perfectly arranged teeth, or cog like protuberances, like very short spokes, or cogs of a wheel, hence the vulgar name of "Wheel bug". The young shed their skins several times before attaining their full size. As this insect is constantly employed from the moment it is hatched, in searching for & destroying noxious insects, it may be considered a friend to the horticulturist & farmer -- A dozen or so of these insects placed near the nest of some of those caterpillars, so destructive to our fruit, & forest trees, will destroy almost every caterpillar in it in a short time, as they are exceedingly voracious, & each insect will kill & destroy several caterpillars daily. Great care must however be taken, when handling the adult insects, as they are very apt to sting, or rather insert their strong curved beak into the naked flesh, & the poisonous fluid ejected, when the wound is inflicted, is extremely powerful. & is much more painful than the sting of a large wasp, or hornet. one of these insects having stung over.

the winter. the pain lasted for several hours. & was only alleviated by applications of ammonia. Several days afterwards the flesh immediately surrounding the puncture, was so much poisoned, that it sloughed off, leaving a small hole in the thumb injured. (see Rep't. Dept. of Agriculture, 1866, p 43. (see also Prionotus. (Arctes) serratus or the "wheel bug" of the West Indies.

"This insect must not be left under Reduvius (where it formerly was placed,) it is a Prionotus. & is quite remote from Reduvius of modern times." (PPU)

Nudirostris

Prionotus (Lap.) novemarius. See P. cristatus.

Prionotus. serratus. "Wheel bug of the west Indies."

In's so called from its singular prothorax, which is circularly elevated, & toothed like a cog wheel. It is stated by Kirby & Spence (p 110) to be able to "communicate a sharp electric shock to the person whose flesh it touches" An instance is given where it gave a considerable shock, as of from an electric jar, with its legs, six marks being observed upon the hand, where the feet had stood."

note. Our native species Prionotus cristatus, above mentioned, & which is said to differ from its west Indian relative in the number of notches or teeth in its rounded prothorax only, is certainly able to shock any person who handles it, but it is by the painful sting, it is able to inflict with its short, stout, & crooked proboscis, or piercer, & not by electricity at all see Prionotus cristatus.

Nudirostris

Proxys. (Spinola) (Proxys, Amy. 139) brevispinis. Guer. . see P. tenebrosa. longiseta.

Proxys. -- { tenebrosa. Say Pentatomia Say 1. 304. 322. P. brevispinis. Guer 185. longiseta.
In's VIII. 28. coll of Mr. Uhler.

Proxys. vactor. Fab. In's IV. 16.

Prostemma. (Lap.) guttula. Fab. Pack 541. (Europe)

{ Insect generally found in an undeveloped imago state.
Westwood & Spinola think that especially in hot seasons some otherous hemiptera acquire full sized wings.

Protenor. (Stål) beltragei. Hagland. In's. V. 23.

Nudirostris

Ptilocnemis (Westw.) fuscus. see Mastry.

Supercornua

Pthia. (Giron.) picta. Drury. (Mix?) In's VII. 7

Nudirostris

Ptochionera. (Say) nodosa. Say 1. 335. not Ptochionera of Say.

Supercornua

{ In's. II. 19:
"Ptochionera" of Amyot 255. has no affinity whatever with Ptochionera, or Ptochionera (error) of Sag. (PPU)

Supercornua

Pygolampis. (Germ.) bifurcata. Fiel. Daug. 539. pl 17. 4. P. pallipes. Fab see Amy 292.

Nudirostris

{ In's. found beneath a piece of Sandstone. in England. Sep.

{ In's. VIII. 20. In's. dull brown. with fine appressed hairs.

Supercornua

Pygolampis pallipes see P. bifurcata.

Nudirostris

Pygolampis. (Germ. Amy. 391) *pectoralis*. Say *Reduvius*. Say 1 357. 305. (See 3d. Lown.)
 { Ins. IV. 17. Nudirostris

Pyrhocoris. (Fab. Amy. 267.) *apterus*. Linn. 1283. 293. 521. Westw 2.475. fig 121 Cimex. Linn
 { *Pyrhocoris calmarensis*. (Fallen) *Papterus*. Pack. 539. 43. Doug. 165. p. 6. 293.
 { Ins. IX. 9. Ins. social in habits & hibernates in associations together.
 found in Europe. "occasionally in the greatest profusion, & seen sucking fruit
 berries, and seeds" they feed also on dead insects, but will not attack li-
 ving ones. "they moult 3 times before arriving at the Imago or perfect
 state." (Westw 2.475.) Cecigenae

Pyrhocoris. *suturalis*. see *Dysdercus*.

Rameurs. Amy. & Serv. see *Ploteres*.

Ranicones. Amy. & Serv. 42. 318. Race 1. of Sam T. Nudirostris, contains one group.
 { *Holoptilides*. represented - by Mastys. of Amyot. see. pl. VIII. 23.

Ranatra. (Fab. Amy. 445) Pack 538. Insect. body long, with a long, double tube at
 the end for respiration. the eyes are prominent. the two fore legs are
 raptorial, the other legs are long & slender - the prothorax is greatly
 elongated. This insect living in the water, is compelled to come to the
 surface for air, which it obtains with the assistance of the two appen-
 -dages at the end of its body, which conduct the air to the spiracles -
 placed at each side of the anus. (Westw 2.457) The eggs are more
 elongated than in *Nepa*. Furnished above, with slender setae. Roesel
 states that the eggs are deposited at random, in the water, but Geoffrey
 & Amyot say that they are introduced into the stalk or blades of -
 aquatic plants. the elongated filaments alone being exposed. These in-
 -sects are very voracious. & feed on other aquatic animals. They -
 fly principally in the evening. & at night, from one pond to another.
 especially when the waters begin to dry up. Pedirapti.

Ranatra. *fusca*. Beauv. Pack. 538. (Mass. Md. US)

{ This is a common species it feeds on aquatic larva. *Ephemerella* &
 & also destroys small fish. Pedirapti.

Ranatra. *linearis*. Linn. Amy 444. Douglas 582. (Europe.)
 { This insect is common in stagnant water in spring. & it is rare to
 meet with individuals of this species, that do not carry attached
 to their feet, very small grains of a lively red color, which adhere
 firmly to them. These are as we have heard the eggs of an aquatic
 mite. probably *Leptus* (?) (Latr. Amy. 444) The insects are mostly
 found at the bottom of stagnant water, as they swim badly.
 Douglas. 582. Pedirapti.

Ranatra. *quadridentata*. Stål. (US) Ins. V. 3.

Reduvina. Doug. 39. *Reduviidae*. Westw. *Nudirostris*. Amy. & Serv., Section 12
 { of Subdivision. 1. *Geodromica*, Doug. (*Geocores*) it contains 2 families:
 { 1. *Reduviidae*. & 2. *Nabidae*.

64.

Reduviidae. (Stephens) Westw. 2. 471. Fam 4. of Section 2. Geocorina Westw.)

(Geocores) Burm. it contains 6 genera! Westw) see p 7.

Insect terrestrial. with short. thick. naked curved rostrum. labrum asserted. head narrowed behind into a more or less elongated neck & is furnished with two large prominent eyes. & two ocelli antennae of moderate. or of considerable length. with terminal joints very slender. Prothorax often spined. as well as more or less divided into 2 parts — legs long. fitted for running. tarsi 3 jointed. & simple the basal joint being very short. anterior tibiae in some species terminated by an oblique hollow fleshy tube. The membranous parts of the fore wings often extend to the base of the wings. habits extremely predaceous feeding on other insects. The Reduvii. & other carnivorous species. with strong curved beaks. when alarmed or disturbed. are able to produce a smart pain by plunging their rostrum into the flesh. & emitting a drop of fluid discharged from the salivary glands. (Westw 2. 454 & Pack 540.

Reduvini. (Burm. p 228) Fam 3 of Div 2 Geocores it contains 30 Genera see p 8.)

Reduvius. (Fab. Amy. 337. Pack. 541. Antennae with 2 or 3 joints longer than the first. 4th joint hair like. beak short & stout. limbs densely hirsute.

Reduvius. acuminatus. Say 1. 356. (Ind) see Oncerotrachelus Stål

Reduvius. biceps. Say 1. 356. (Bar) genus unknown to P.R.U.

Reduvius. crassipes. Say 1. 72 pl 31. (Car. & Ark.) see Apiomerus.

Reduvius. insidiosus. Say 1. 357. common on flowers. (U.S.) see Anthocoris.

Reduvius. linitaris. Say 1. 355. (Ind.) see Apyomerus.

Reduvius. musculus. Say 1. 357 (N.W. West Tern.) see Anthocoris.

Reduvius. novenarius. Say 1. 72 pl 31. see Pnionotus cristatus.

Reduvius. pectoralis. Say 1. 306. & 357. see Pygolamis.

{ (Ind. Fla. & Louis.) "a complicated spine beneath the eye. & a projecting spine. on each side of the pectus before."

Reduvius. reptatorius. Say 2. 249. (Mo Pa. Md. Va. U.S.) see Sinea mullochinosa

+ Reduvius. curvidus. see Diplodus

Reduvius. spissipes. Say 1. 72 & 2. 250 (Ark) see Apyomerus.

Reduvius. ventralis. Say 1. 355. (Mo.) see Apyomerus.

+ Reduvius. multispinosus. see Sinea.

Reduvius. personatus. Linn. Amyol. 337. Am Ent. 1. 13 1887. N. Y. 158. 495. 244. &c
Douglas 546. Ins VII. fig 9. (Europe. U.S.)

Ins. not rare in houses. where it is generally found dead. Hanging on spiders webs. Burmeister says that the Spiders do not seize it — as its puncture is very poisonous. but let it encumber their webs until it dies of hunger. This insect is said to exhale a disagreeable something like that of mice. it hibernates without taking any food. when its body becomes meagre. & flat. but on the return of fine weather it recovers from its lethargy. & commences to hunt for such insects as

form its prey (Amy) The larva & pupa cover themselves with a mask of dust, & dirt, even to the legs and antennae. & so disguise themselves, as scarcely to be distinguished from the places it frequents. & prey upon the best bugs, (Acanthia Lectularia,) It is said that the larva is covered with a glutinous substance, to which the particles of dust adhere. & when hunting for its prey it is said to move in a very leisurely manner, so as not to disturb them

Kirby & Spence state that this insect makes a noise which Ray compares to the chomping of a grasshopper. (K&S 492.) In regard to the covering of dust, & dirt, already alluded to. M Boulle says, that a specimen shut up by him which had undergone one of its moultings, during its imprisonment, divested its old skin of its coat of dust, in order to recover itself therewith. Douglas says it is found occasionally in houses, and fowl houses. & flies at night to light in windows. An insect very similar to the larva as described, & covered with dust in a similar manner, was found in an old discarded insect box, at the Maryland Agricultural College but it

unq. tumultuously escaped before attaining the Imago state. Nudostri

Prospalta, (Stål) taurus. Fal. Telus Fal Amy 373 (US) Ins VIII. 13 Uhlers coll. Nudostri

Pesthenia Spin Amy 280. confraterna. Uhler. Capsus, Fal. Md.

{ Ins I. fig 4. & 5. var.

Bicelluli

Pesthenia. gonophorus. Say. Capsus gonophorus Say 1. 341.

Pesthenia. insignis. Say. Capsus. Say 1. 342.

Pesthenia. insitiva. Say New Harmony p 21. no 8. Capsus Say 1. 340. (Ind US)

{ Ins I. fig 1. Md.

Bicelluli

Pestheria. eremicola. Uhler. Capsus. Ins VIII. 4. Uhlers Coll.

Rhagovelia, (Mayer) collaris. Burm. Telia Latr Amy 414. US.

Platens

{ Ins V. 13. Uhlers coll.

Rhaphigaster. filaria. see Nerara.

Longiscuti

Rhaphigaster. pennsylvanicus. see Nerara.

Rhaphigaster (Lap.) punctipennis. Kliger. Amy 146 (Europe;) The female deposits her eggs near each other, but never heaped up. It is found in all Europe in cultivated fields, in gardens & sometimes on the trunks of large trees, especially of Elms, which line the high roads. According to M Blanchard, it is one of the first plant bugs that makes its appearance in spring in France. (Amy.) Many of the Geoconidae or land bugs are especially provided with an organ which exhales a scent more or less disagreeable, when irritated or menaced with danger. & if Rhaphigaster punctipennis, is suddenly seized and placed in a vessel containing clear water, a number of small bubbles will be seen to issue from its body, & rise to the surface. then burst & give out this, disagreeable odor. This scent however is not always disagreeable altogether, but in some species, it resembles the smell of ripe pears. (Amy ot;) Longiscuti

66.

Rhaphigaster. (Lap.) surprenans. Dallas. Say 1. 305. see Nerara hilaris. Longicula.

Rhaphigaster. Base of venter with a spine projecting forwards. Antennae with the first joint shortest. & the 3^d shorter than the 2^d. (Westw. Syn 126.)

Rhinuchus. Kirby, see also Metapodus.

Rhinuchus. declivis. Say 1. 305. 327. Anisoscelis. Goo. Louisiana. see Acanthocophala

Rhinuchus. nasulus. " " " (Geo. Fla La.) see Acanthocophala

Rhopalotomus. (Tief 307. pacificus. Uhler. (U.S.) VI. fig 1. Uhlers coll. Bicelluli.

Rhopalus. (Schill Amy 245. lateralis Say. Walsh Am Ent. 1. 12. (Ill. U.S.) Sypricornes.

{ Ins IX. 18. " an insect allied to this is one of the commonest bugs - near Rock Island. Ill. & ruins the buds of the pear tree." Walsh

Rhopalus. see also Chorosoma. & "genus allied to Alydus" (Pack 546.)

Rhopalus. reflexulus. see Harmostes.

Rhynchota. Hemiptera. Burm. Westw. 2. 450. see Heteroptera.

Rhynchota. Heteroptera. Tief. see Hemiptera Heteroptera. Douglas

Rhyngota. p Tab. Westw. 2. 450 Heteroptera.

Rhipharochromus. (Curtis) Dallas 2. p 532. Membrane destitute of basal cells. The

{ nervures not united by transverse ones. anterior thighs spinous beneath body. oblong. or elongated. not flattened. abdomen as broad as the hemelytra. basal joints of the antennae not longer than the head.

▷ Rhipharochromus. (Curtis Amy. 253.) (Westw. 2. 122) fallax. Say. Pamera. Say 1. 334.

{ Ins VIII. 11. coll of Mr C Dodge. Sypricornes

Riparie. Burm. 215. Fam 2. of Div 2. Geocores. Bugs running on the banks

{ or shores : it contains but 2 genera. Salda. Lat. (Burm 215) & Leptopus. Lat. (Burm. 216.)

Ripicolae. Amy. & Serv. 40. & 293. Tribe 2 of Fam 6. Ductirostrini. Heteroptera.

{ on plant bugs in or on banks or shores. containing only one group.

Sagotylus. Mayr. sec Coreus confluentus. Say 1. 325. Elebrus

Salda. Tab. Amyat 405. antennae long. thread like. beak reaching to end of

{ breast. the second joint being at least 6 times as long as the first.

{ body small. elliptical. & flat. legs short. & slender. species found mostly in Europe. along shores of the ocean. & inland waters (Pack 511)

Salda. bullata. Say 1. 366. Nudicostri.

{ bullata Say 1. 366 & var punctipes. see Ophthalmicus

Salda. cocleoptrata see myrmecobius

Salda. confluens Say Acanthia Say 1. 361. (U.S.)

Salda. hirta. Say. Acanthia. Say 1. 359. (Ind.)

Salda. humilis. (humilis) Say. Acanthia. Say 1. 360 (Fla.)

Salda. interstitialis. Say. Acanthia. Say 2. 278. (Ma)

Salda. legata. Say. Acanthia. Say 1. 360 (Ind.)

Salda. lugubris. Say. Acanthia. Say 1. 360. (Ma)

Salda. lutchella. (Curtis) t Sch. Doug p 520 pl 17.9. Europe Acanthia Curtis

{ Ins VIII. 21. Doug. all the species live on the margin of ponds & over

Insert. Rhipharochromus. devastator. lecepterus. see Micropus.

Salda fuscella continued.

67.

{ rivers. or on the sea coast running. jumping. & flying. with great activity. & are very difficult to catch. Doug.) Nudirostris.
Ins. ovate. black. shining. legs ochreous in t. yellow brown.

Salda Tab. fuscia. Say 1. 336. (Mass.) see Ophthalmicus.

Salda. fructipes. Say 1. 336. (var.?) S. bullata.) see Ophthalmicus.

Salda. saltatoris. Linnaeus. (Mass Me) Ins. VIII. 18. Nudirostris

Salda. Signoreti. Guerin. (Md.)

{ The largest. & most beautiful species. yet discovered in this country. it extends from Cuba to coast of Delaware. PRW.

Salda. uliginosa. Say 1. 336. see Ophthalmicus. it resembles S. bullata. but is darker

Scutati. Burm. 349. Fam. 8. Geocores. (Shield bugs.) it contains 32 Genera. (See p 5)

Scutatina. Doug. 12. 52. (Scutati. Burm.) Longiscutii Amyot & Serv.) Section 1 of Subdiv. { Geodromica. (Geocores Burm) Divided into 12. Families. Doug. (See p 13.)

Scutellaria. (Lam.) Insects remarkable for the large size of the scutellum. hence name

{ Antennae. 5 jointed. 2 first joints small. the three last long. quite large scutellum an elongated triangle which covers not only the entire abdomen. but also the wings. species of gay metallic colors. (Pack 57) Longiscutii

Scutellaria. aenescens. Say 1. 198. (Nth west Terr.) see Homaemus.

Scutellaria. bimaculata. Say 1. 198. (Nth west Terr.) see Odontoscelis.

Scutellaria. viriadepunctata. Say 1. 310. Pack 54. Pachycoris chrysorrhoeus. Tab. & see

{ Dolcus (Mayer) chrysorrhoeus. fig 460. H. Ich. S.C. Fl. Miss. US)

{ Ins. 7.20 inch long color piceous. with green impressed punctures. Longiscutii

Scutellidae. (Westw 2. 484. (Scutati. (Burm) Fam 10. of Section 2. Aurocoris. Westw.)

{ (Geocores. Burm) it contains 2 subfamilies viz 1. Pentatomides & 2 Scutellidae. The eggs are varied in form. but generally are of an oval shape attached to leaves by a glutinous secretion. by one end the other end being furnished with a cap. which the insect detaches on bursting forth. (Westw 2. 486.)

Scutellidae. (Westw 2. 484.) Subfam. 2. of Fam 10. Scutellidae. it contains six

{ families. (see p. 9.) (see also Pentatomidae Leech.)

Schinus. (Amy 96.) ligatus. Say. Cydnus. Say 1. 322. S. albonotatus. Dallas. Longiscutii.
{ Ins. VIII. 8. Md.

Serphus. (Stål) dilatatus. Say. Belostoma. Lat. Say 1. 366. Zaitha stoliczkae. Amy & Serv.) Ins. V. 11. (Ariz. Cal. Utah) Pediranis.

Sigara. (Tab. Amy 448) minutissima. Linnaeus Doug. p 616. pl 20 fig 6. Nolonecta. Linnaeus (Europe) Ins. VIII. & not rare in Cambridge fens Eng (th gray) Pediranis

Sinea. (Amy 375.) multispinosa. ♀ Dr. Geor.. Zelus. (Tab. Amy. 373. quadroma? Tab.

{ Pediranis raptatorius Say Jour. Acad. Nat. Sci 4. 327. Am Ent 72. 72. fig
Walsh. Am Ent. 1. p 13. Le Baron. 1871. p 63. Proc. Ent 2. 43. Feed. Period. Ontario fruit growers Ass'n. Ont. p 78 (imida). & possibly R. diadema. Si. not L.P. I destroy plant lice (Aphides) Colorado potato bug (Doryphora) & insects & other insects. Ins 88. 8 (Md. Can. Va. N.Y. & S.C.) Nudirostris

68.

- Spartocerus*. Burm. *fuscus*. Thunb. var. *diffusus*. Say. *Coreus diffusus*. var. 1. 325.
 { Ins VIII. 33. Uhlers coll. Supericornes.
- Sphaeridopides*. Group 1. of Race 4 *Previcipites*, fam *Nudirostrini*. Amy. 47. & 381.
- Spissipedes*. Amyot & Serv. 39. & 288. Tribe 1. of Fam 6. *Ductirostrini*. *Festivoptera*.
 { or plant bugs, having thick feet, or thighs very thick. The fore feet are raptorial, it contains 2 groups. 1 *Phymatides*. (Amyot 288.) & *Macroscophalides*. (Amy 291.)
- Spongipedes*. Amyot & Serville. 42. 321. Race 2 of Fam 7. *Nudirostrini*, it contains 5 groups: viz 1. *Pyratides*. (Amy 321.) 2. *Pedivides*. (Amy. 333.) 3. *Cetrichoides*. (Amy. 342.) 4. *Macropides*. (Amy 345) & 5 *Sylvatides*. (Am 349.)
- Squash bug. see *Anasa tristis*.
- Stagnigradi*. Amyot & Serv. 49. 398. Race 7. of Fam 7. *Nudirostrini*, containing only one group. *Cyrometrides*. (Amy 398.)
- Stenopoda*. Lap. Amy 390. *cinnerea*. Lap. (U.S.) Ins. VIII. 16. Nudirostrini.
- Stiretrus*. (Lap) *diana*. Fab. *Asopus*. (Burm Amy 83.)
 { Ins IV. 20 & VI. 29. Md. Ins. destroys other insects & found preying upon the Squash lady bug. (*Epilachna borealis*. Coleop.) at the Md Agricultural college. Longiscutellum
- Stiretrus*. *simbriatus*. Say. *Telyra* Say 1. 93 & 311. fig 43/fig 1. *Stiretrus*. Walsh Am Ent. page 14. & 47. pl 1. Pack 547. Recd. Rept. Fruit growers Assn: Ontario Canada. 1871 p 74. "Bordered Soldier bug. Ins II. 20 & VIII. 14. & on Ins preys upon other insects. & also upon the larvae of the Colorado potato beetle. (*Dionephora luteata*. Coleop.) 7 or 8 individuals of this species were found in the web nest of a social caterpillar. & also were seen destroying the larva of the *Papilio asterias*. or *Asterias* butterfly. by Mr. Walsh. Longiscutellum.
- Stiretrus*. *violaceus* Say. *Telyra*, Say 1. 94 (Fla)
- Stiphnosoma*. Fab. 312. 347. (Europe.) side view head. X. 12. Tab. pl 6. Bicinctum.
- Stiphnosoma*. Fab. *leucocephala*. Linn. Doug p 482. pl 21. fig 2. *Cimex* Linn (Europe)
 { Ins VIII. 24. Doug. Ins. found among grass abundantly on the cliffs at Scarborough. England, & on flowers of a *Luzia cracca*. in July. ~ Color black, with short white hairs. Bicinctum
- Stiphnosoma*. *stygeus*. Say. *Carsus*: Say 1. 344.
- Strachia* (Hahn) Amyot 127. *histrio* Hahn (Hahn) Prac Ent 1. 110. Coss Ent. 41 Bot 2. 78. 177.
 { Prairie Farmer 18. 152. Dept Ag. Rep. 1867 p 71. Ins II. 52. Md.
 Texas Cor. Geo. Natl. Miss. Tenn. Md. Va. U.S.)
- Harlequin Cabbage bug*.
 { S.P. injure cabbages. Turnips Radishes Mustard & cruciferous plants by puncturing the leaves & sucking the sap, & apparently poisoning the parts attacked. Dr Lincecum of Texas has given a very interesting account of this insect. & the injury done by it. in his state.

over

The eggs generally 10. to 12. in number. are deposited mostly on the under side of the leaves. about the 15th of March, or beginning of April. These are set in two rows. on end. cemented together on the leaf. & require about 6 days in April. or only 4 days in July. to hatch out. There are 2 broods annually. the first brood hatching out in April. & the second in July. The young larva resembles the perfect insect. with the exception of being wingless. 12. 16. or 18 days elapse from the deposition of the egg to the developement of the perfect insect. which passes the winter or hibernates. in the perfect or imago state. issuing forth from its winter retreat at the approach of warm weather. These insects do very great injury to the plants above mentioned. Especially to cabbages. The leaves they have punctured immediately wilting. as if from the effects of poison. They are said to be exceedingly numerous. & destructive in Texas (& other Southern States) as many as 47000. having been (in one instance) gathered by hand. (Am Ent & Bot.)

Longisucte.

Supericornes. Amy & Serv 183. Fam 2. of Section 1. Geocoridæ. Coneodes. Burn.

Anisoscelites. Lap Heteroptera or Plant bugs having their antennæ inserted on the upper side of the head. above an ideal line. drawn from the eyes. to the origin of the labium. it contains 2 tribes 1. Tetragonocephali. (Amy 30. 184) & 2. Tetragonoccephali. (Am xxxiv & 216. G X. 34.

Supericornes.

Syromastes. Lat. Fraterculus. Say 1. 324. (Geo. Ind.) see Harmostes

Supericornes.

Syromastes marginatus. Linn. Doug p 110. pl 4. fig 3. Cimex Linn (Europe)

Enoplops. Amy 208. Ins. IX. 25. common Autumn on plants & said to frequent Bramble & Columbine. Supericornes.

Syromastes obliquus. Say 1. 325 see Harmostes. distinguished by the remarkable obliquity of the terminal line of the cornua.

Syromastes reflexulus. Say 1. 323. (Pa) see Harmostes.

Syrtis (Latr) Pack 552 head small. compressed. laterally. fore legs raptorial. Dactirostræ

Syrtis erosa. see Phymata.

Systellonotus. Fab. 326 & 347. (Europe) side view of head. X 29. Fab pl 6. Bicelluli.

Systriatotus. (Doug 443). nigritus. tt Sch. Capsus.

{ Ins taken by sweeping amongst Stachys (Hedge nettle) sylvatica. in July Bicelluli

Taurocerus Amy 151. see Arvelius.

Tetragonocephali. Amy & Serv. 30. 184. Tribe 1. of Fam 2. Supericornes. Heteroptera or plant bugs having the head square. with or without a prolonged scale between the antennæ. it contains 3 races. ver 1. Sectiprontes. (Amy xxx. 184) 2. Pleuroptentes. (Amy xxxi. 1911) & 3. Spiniprontes. (Amy xxxii. 1916). G X. 36. & 37.

Tetyra (Fab. Amy 46) scutellum nearly covers the whole of the abdomen. but leaves the side of the wing covers exposed. Antennæ slender. 1st joint longer than 2^d. the 3^d being the shortest. & the 5th is twice as long as the 4th.

- Setyra (Fab. Amy 46) alternata. Say 1. 94. pl 43. (Middle States) See Eurygaster Longiscutellata
- Setyra - bipunctata. 168. Ins **II**. 27. Longiscutellata
- Setyra. cinctipes. Say 1. 94. (Mid States,) See Podops dubius.
- Setyra. fimbriata. Say 1. 94. Pa. La! see Stiretrus.
- Setyra. marmorata. Say 1. 340. (Hab. Pine regions of New Jersey) see Aula costatus.
- Setyra silphoides. Fab. Amy 63. (Europe)
- { These insects sometimes assemble in great quantities upon the heads of rice & the natives pretend that they commit great havoc with the plant (Amy.)
- Setyra. violacea. Say 1. 94. (Fla) see Stiretrus.
- Theraphosa (Amy 246) hyoscyami. Linn. Doug 129. pl 5, fig 2 (Europe) Sukerecornis.
Conexus. Tall. Ins **IX**. 27
- { Ins. common on Hensbane. De Geer says it takes its nourishment from this poisonous plant, sucking the leaves & twigs. It exhales a strong agreeable odor of Thyme. (Amy) found on Thistles, & rest harrow. (Doug) color Scarlet with black spots above & beneath. Sukerecornis.
- Thripidae Fallen. Pack. (Thripoides)
- { Placed by Latreille amongst the Homoptera although acknowledged to resemble Orthoptera in their pre-biting parts, & to which they are referred by Goeury. Packard places them amongst the Heteroptera. & considers them as degraded Lygaeids. Goeury however has been followed in this work & the Thripidae will be found in the Orthoptera.
- Thyanta (Stål) custator Fab. Pentatoma, calceata. Say 1. 320. (Md. Va)
- { Ins **II** fig 24. Md July Aug. Longiscutellata
- Thyanta (Stål) rugulosa. Say Pentatoma. Say 1. 319 "
- Thyreocoris (Schrank) body short, transverse, being broader than long, scale shaped, { or semicircular in form, wing covers nearly covered by scutellum, which is wider behind than before, (Pack 547.)
- Thyreocoris (Schrank) albiventris. Say 1. 311. (Missouri river) See Corimelaena.
- Thyreocoris. histeroides, see Corimelaena nituloides, Wolf. Sy 1. 311 (Ark U.S) Pack 547.
- Thyreocoris. nituloides. see Corimelaena.
- Tichokinus. Tsch 314. 347. (Europe) side view head. **X**. 24. Fab pl 6. Buccululi
- Singidae - Hestia 2. 477. Fam 6 of Section 2. Aurocoris Burm, et
- { contains 9 genera, (see p 8) Insects small, & distinguished by the broad & depressed form of the body. Antennae with joints not thinner than the preceding. rostrum very short, & 3-jointed, received into a gutter, on the underside of head. Tarsi often 2-jointed. Thorax generally furnished with a membranous dilatation on each side, & posteriorly produced, in place of a scutellum. some have fore legs strongly upcurved, & are found on the plants & trees in which they subsist.
- Singidina. Doug 1st. 234. 242. Membranace. Lai Dern. Singidae. Fam 2. Section 6, subdivision 1 Geodromica. Doug. Geodromes Burm, et. is divided into 2 families 1. Agrammidae. & 2. Singidiinae

Tingis. Tab. body ovate, depressed antennae naked with the third joint longest.

{ prothorax scarcely dilated at the sides, bending triangularly behind like a scutellum, with three elevated lines. (Heslop Syn. 120, Amy 296.)
small insects, with beak extending to end of breast, four legs simple.
Thorax & wing covers spread out leaf-like. (Pack 552.)

Tingis. Tab. arcuata, Say 1. 360. (Miss. Fla. 28, Ins. IV. 2 Miss. ulcerans)

{ Ins. resembles T. ciliata, but is distinguished by the brown bands & the arcuated edge of the hemelytra. Say These insects live on the sap of plants & trees & were found especially on the quince in Mississippi & Florida, where the bushes were entirely covered with them, in all stages, as Larvae, pupae & perfect insects. Some trees were very much injured & not entirely destroyed by them. The insects are able to sting severely, when on the naked flesh of mankind.

Tingis. ciliata. Say 1. 348. very common in the US.

Tingis. cineraria. Say 1. 349. (U.S.) not uncommon. see Piesma

Tingis. clavicornis. (Europe) described by Reaumer as attacking flowers of Teucrium (Germander) chamaedrys, preventing the blossoming, & causing them to swell out to a distropheronate size. (Heslop 2478.)

Tingis. echii. Wolff. Amy 297. (Europe.) Ins. found on Vipers bugloss or blue weed. (Gray)

Tingis — Gossypii. Tab. Tab p 104. pl 1X. fig 1. Acanthia. Tab (Hest. Ind.)

Ins. VIII. 19 3. Ins probably taken on Cotton: Gossypium,

Tingis. histicellus. Richter. Pack 552. fig. magnified.

Inset from Ceylon. Larva black. Ins. sticks close to top of Brignall, & there undergoes its changes from the larva to the perfect state.

Tingis. — hyalina. H Sch. Tab 103. pl 1X. 5. Pack 552. (U.S.)

Ins VIII. 4, on Tieber. Said by Packard (552) to be abundant on the Willow.

Tingis. — juglandis. Fitch 3d Rep. 1856. p 466.

Ins. pierces the leaves, & sucks the sap of Butternut, Birch, Willow, & other trees. from May to Nov.

Ins. O. 14. resembles a flake of white froth, its whole upper surface being composed of a net work of small cells, with an inflated egg shaped protuberance like a small bladder, on the top of head & thorax, wing covers small & square, with corners rounded. There is a broad blackish spot on the shoulder, & a broad blackish band on their tips with an irregular whitish spot on the shoulder. a spot on the hind inner corner, body beneath black. Antennae & legs. honey yellow. (Fitch)

Tingis. — laetaria. see Agramma.

Tingis. — mutica. Say 1. 369. (Ind.) see Monanthia

Tingis. — plexus. Say 1. 349. (U.S.) see monanthia.

Tingis. — oblonga. Say 2. 248. (Mo.)

72.

Tingis. (Fab.) *pyri*. Tab. Amy ab. 297. (France, Europe)

Tractivostri.

{ Ins. injure Pear trees, and are found attached to the underside of the leaves.

Tingis. (Fab.) *teucrii*. Host (Europe) injures flowers of *Teucrium surinum*, in a similar manner to *T. clavicornis*, above mentioned.

Tonicephalus. Fieb 318 347. Europe. side view head. X. 11. Tab. pl 6.

Picidula

Tauchopepla. (Stål) *semivittata*. Say Pentatomidae. Say 1. 322 (Ind, Ins 11. 3. longiscutellata)

Trigonocophali. Amy & Serv. 34. 216. Tribe 2 of Fam 2 Superfamilies Heteroptera or plant bugs, having triangular heads. It contains 2 races 1 *Sericornes*.

(Amy xxxiv. 217.) 2 *Modicernes*. (Amy xxxv. 232) G X. 38.

Trigonotylus. Fieb 302, 347. (Europe) side view of head. X. 20. Tab. pl 6.

Picidula

Tropicoris. Hahn. *rufipes*. Linnaeus. Cimex Linnaeus Amy 169. Pentatoma. Lep & Serv. Longiscutellata

{ Ins 11. 21. very common near Paris, in woods. Gardens &c it exhales a very disagreeable odor. & De Geer has observed that it is carnivorous, roving on trees, & searching for caterpillars, in order to suck their juices.

Unicelluli. Douglas. xxviii. 276. Div 1. of Sect. 9 Capsina. Doug. It contains only one family. *Bryocoridae*.

Velia. (Lat. Amy 419) Head triangular. Sunken in thorax, up to the eyes. Ocelli 0.

{ Thorax large. wings present. There are however some apterous forms. (Pack 520) These insects run swiftly upon tranquil & shady water-edges, feed upon small insects (Amy) They live gregariously on the surface of streams, and ponds, where they look like spiders. Move rapidly by little leaps. Feed on insects &c. Doug 571.

Pedemini

Velia (Lat.) *collaris*. see *Thagovelia*.

Velia. — *currens*. Lat. Douglas. 571 pl xix. 7. Dennis. Tab. (Europe) Ins VIII 13.

{ Doug The apterous form is common in small comrancas, on clear streams from March to Sep. (in England.) The winged form is rare (Mister 2. 468) says "Velia skims along the surface of water, in a similar manner to Gerris, but has a slower action."

Head & antennae black. pronotum reddish brown with 2 large white glossy spots. Elytra brown black with four clear white spots.

Velia. — *pygmaea*. (Europe) observed by Dujaur having only two or three with wings, out of some hundreds of specimens. (Mister 2. 468)

Velisirea. (Spin.) *violacea*. Tab. Pl 12. 3. coll of Mr Uhler. Longiscutellata

Xylocoris. L. Duf. differs from *Anthocoris*, only in the 2nd basal joints of the antennae being rather longer & the terminal joint of antennae more slender. The Hemelytra are sometimes imperfect. (Hesler Spn. 123 & Amy. 263)

Xylocoris. — ater. L Duf. Doug. 505 Ins 17. fig. 6. (Europe) Ins 12. 32. Americana { Ins. gregarious, found under bark of dead trees, nearly all the year round. Ins. black smooth & shining.

Xylocoris — *domesticus*. (Kuhn) Fitch 1855, p. 527. *Glyptocoris* of Doug 499, 15. 17. fig 1

{ Ins. mentioned by Fitch as being common in America as well as Europe

73.

- Zaitha. Amy. 480. bivittata. Hald. See also Belostoma dilatata. Say 1. 366.
 { & Seriphus dilatatus. Pediroptili
- Zaitha. Boscii. See Belostoma plumineum. & Z. plumineum. (Say 1. 364.)
- Zaitha. plumineum. Say. Belostoma boscii. Say Colerop. p 37 & 1. 364..
 { Perthostoma Leidy. (U.S.) pl **V**. 12. Ins aquatic. Sediraptili
 ana feeds on other insects.
- Zaitha. Stallii. H. Sch. q. 292. Say 1. 236. See Seriphus dilatatus. Pediroptili
- Zelus. Fab. Amy. 373. (Alydus. Fab) diadema. Fab see Sinix multispinosa.
- Zelus. — tulobus. Say 1. 306. (Geo. Lou.) Nudirostris
 Ins like Taurus. but much larger. & unarmed.
- Zelus — Taurus. see Peripta.
- Zicrona. (Amy 86) cuprea. Dallas. Brit Mus. Cat. Ins. **VI**. fig 8. Longiscutis
- Zicrona. exapta See Perillus exaptus.
- Zasmerus. see Pisimia cinerea.
- Zasmerus. (Lap.) quadratus. Fiel Doug 238. pl 8, fig 9. (Europe) Inferioris
 { Ins **IX**. 34. Ins. found on the ground under debris. & at roots of
 grass.
 Ins. pale gray. with dark gray. or blackish spots. but sometimes pale.
 greenish white. pale gray. or pale red. spotless.
-

y 8.

Alphabetical List of Predaceous or Parasitic Heteroptera

The Larvae, pupae, or perfect insects, of which destroy
other Insects ~

- Acanthocoris. insidiosus destroys Plant lice (Aphides) chinch bugs. (Microplus leucopterus) & grape leaf gall lice. (Pemphigus vitifoliae) (Homop.)
- Anasa. tristis. (Squash bug.) reported as destroying (Doryphora decim lineata)
The Colorado potato bug (Coleop) but probably erroneously. it has however
been seen sucking the juices out of a dead insect of its own species.
which had been accidentally killed.
- Anthocoris. nemoralis. & A. nemorum. (Europe) destroy small caterpillars of a
leaf mining moth (Lithocolletis) on Oaks.
- Apiomerus. crassipes. & A. spinipes destroy & feed on other insects. A. spinipes is
said also to kill bees (Apis mellifica) (Hym.)
- Campyloneura. nitripennis is said to destroy the grape vine leaf hopper. (Erythro-
neura. sitis) (Homop.) & caterpillars.
- Capsidae. destroy small insects, but they likewise injure plants. &c.
- Cerascopus. marginatus (Eu) destroy other insects, not sparing even their own species.
- Conorhinus. variegatus. destroys other insects, & are said to be beneficial by destroying
Bed bugs (Acanthia lectularia)
- Coxia. ~ destroy other insects principally aquatic, or those falling in water.
- Cosmopepla. cornifex. destroys other insects.
- Diplodus. laetus. destroys other insects including also the Curculio or plum
weevil. (Conotrachelus nenuphar) (Coleop.)
- Edriochlaena cruciata. destroys other insects.
- Emesa. longipes. " " "
- Eragoneus. rubidus. " " " including plant lice (Aphides) Homop.
- Galgulus. oculatus. " " " Zyga. (Orthop) said to be amongst the
number destroyed. (but somewhat doubtful.)
- Gerris. conformis. &c. destroys other insects on the water & is itself destroyed in
(Europe) by a Teleas (Hym) when in the egg state.
- Hydrocorisæ (water bugs) destroy other insects principally aquatic.
- Leptoglossus. phyllopus. (Anisoscelis albocinctus) reported as destroying the Cabbage
bug. Strachia histrio nica.
- Macrocephalus. probably destroys other insects.
- Melanolestes. abdominalis. &c. M. picipes destroys insects.
- Miliyas. (Harpactor) cinctus destroys other insects, amongst which are the
Colorado potato bug. (Doryphora 10 lineata) & probably Tortrix
malivora (Lepid.)
- Nabis. ferus. destroys other insects, including the grain plant lice. (Aphides (Homop.)
- Nicara. bilineata. said to destroy the Colorado potato bug. (Doryphora 10 lineata)
& (Andrena) sp. wild bee. (Hym.) - see Walsh.

Parasitic or Predaceous Heteroptera..

Nepa. . { cannibal insects, feeding even on their own species. & also destroying other insects, principally aquatic.

Notonecta. destroys other insects, principally aquatic.

Pelagonus. marginatus (Eu) probably destroys insects.

Pentatoma. *bidens*. (Eu) said to destroy bed bugs. (*Acanthia lectularia*) (Hct.)

Phymata. *erosa*. destroys insects, amongst which are Aphides (Plant lice) small { bees, wasps, & butterflies &c.

Perillus. *circumcinctus*. Feeds on other insects. & destroys the Colorado potato bug.

+ { Doryphora 10 lineata) Colop.

Pheraria *vegetunda* (Eu) destroys other insects.

Podisus. *cynicus*. destroys insects the Colorado Potato bug! Doryphora 10 lineata &

Podisus - *modestus*. destroys insects caterpillars of (Hyphantria texana) the fall web { worm. Hemileuca maia). &c (Lepidopt.) it also injures foliage of fruit trees &c

Podisus. *placidus*. destroys insects. larvae of the imported gooseberry saw fly. (Nematus { ventricosus.) &c. it also injures fruit trees, by sucking sap.

Podisus. *spinulosus*, destroys the Colorado potato bug (Doryphora 10 lineata) ivy { birds (Coccinella) wild bees (Andrena) the Harvest fly, commonly but erroneously called the Locust. (Cicada) the American gooseberry saw fly. (Pristiphora grossulariae) &c but also damages fruit trees, by sucking the sap.

Prionotus. *cristatus*. destroys caterpillars. plant lice. (Aphides Homop.) Father insects,

+ *Pirata* - *biguttatus*. is said to destroy bed bugs. (*Acanthia lectularia*! Hct.)

Pyrhocoris apterus. (Eu) feeds on dead insects

Rhaphigaster (see *Neruda pilaris*) said to destroy. Doryphora 10 lineata (Col). & { Andrena. (Hym)

Ranatra. destroys insects, principally aquatic.

Reduvius. *personatus*. destroys bed bugs. (*Acanthia lectularia*) & other insects.

Sinea. - *multispinosa*. destroys the Colorado potato bug. (Doryphora 10 lineata Col) { plant lice. (Aphides Hct) & other insects.

Stiretrus. *deana*, found destroying the Squash lady bird. (Epilachna borealis, Col)

Stiretrus. *fimbriatus* destroys insects among which are the Colorado potato { beetles. (Doryphora 10 lineata) caterpillars, & the larva of a butterfly (Papilio asterias.) &c

Uelia. destroys insects, on the water.

76.

Alphabetical List of Vegetable and Animal substances,
frequented, injured, or destroyed.

By Heteroptera.

- Abies. ? (Fir ?) The insect of *Ptylocoris ater*. (Europe.) is found under the bark of Fir
 Abies. *canadensis*. (Hemlock. Spruce.) Sap sucked by *Chlorochroa ligata*.
- Ambrosia. (Ragweed.) frequented by *Orthotylus (Capsus) discoidalis*.
- Aphides see Insects of other orders. (Homop.)
- Apple. see *Pyrus malus*.
- Avena. (Oats.) injured & destroyed, by the chinch bug (*Nicropus leucopterus*.)
- Aquatic. *Ambrysus signoreti* &c in Lakes & ponds on the bottom amongst the slushy debris.
- Aquatic. *Aphelocheirus aestivalis*. (also in damp situations)
- Aquatic. *Belostoma, Corixa* &c sometimes fly in the evening, or dark wet weather.
- Aquatic. *Halobates*. on surface of water chiefly.
- Aquatic. *Heleus*. amongst aquatic plants.
- Aquatic. *Hydroconisae*.
- Aquatic. *Hydrometra*. (water measurer) on surface of water. *Microvelia pygmaea*. &c
- Aquatic. *Naucoris. Nepa. Notonecta* & *Ranatra*.
- Aquatic. *Velia*. on the water.
- Aquatic. on aquatic plants in stagnant water. *Scutellus pusillus* & *Plea*.
- Aquigilia. (Columbine) frequented by *Syromastes marginatus*. (Eu.)
- Asclepias. (Milk. or Silk weed.) frequented by *Lygaeus fasciatus*. & by *Lygaeus turcicus*
 { the latter insect killing the caterpillars infesting the plant..
- Banks of rivers. ponds. &c frequented by *Galgulus oculatus*. *Pelagonus. Salda*
 { *gracchella*. &c
- Bark of dead trees. *Aradus americanus*. *Brachyrhynchus granulatus*. The
 { *Corticola*. &c are found under bark.
- Bark of trees. used by *Lygaeus bimaculatus*. as a secure place under which to hibernate.
 { the Insect of the bed bug. (*Acanthia lectularia*) is said to have been
 found under bark of trees. but this fact has been doubted. (see *Acanthia*)
- Bats. are infested with bed bugs. (*Acanthia pipistrella*) (Eu. U.S.)
- Barley. see *Hordeum*.
- Beds. are infested by bed bugs. (*Acanthia lectularia*) & are also sometimes frequented
 { by *Conophthorus variegatus*. *Pirates ligulatus* *Pedrinus personatus*. &
 other insects which are said to feed upon & destroy bed bugs.
- Bed bugs see *Acanthia Lectularia*.
- Berries & leaves when fallen are sucked by *Pyrrhocoris apterus*. (Eu.)
- Betula. (Birch) is frequented by *Acanthosoma. (Pentatomia) grisea*. (Europe)
 { *A. lateralis*. of the United States. is said by Prof. Uhler to be the
 representative of *A. grisea* in this country. The birch (*Betula*) is also
 infested. & injured by *Tingis juglandis*. (U.S.)
- Blackberry. see *Rubus villosus*.
- Blood. see Mankind.

Animal and vegetable substances injured. &c.

Blue weed, or Tangles. see *Echium*.

Brake, or Bracken. see *Pteris*.

Bramble. see *Rubus villosus*.

Brassica oleracea. (Cabbage.) foliage & plant injured & destroyed by *Mysinus raphanus*. & *Strachia histrionicha* The flowers are frequented by *Lygus lineolatus*. (*Capsus oblineatus*. of Say.)

Brassica rapa. (Turnip.) foliage & plant injured by *Strachia histrionicha*.

Broom. see *Genista*.

Brignon. (Ceylonese plant) frequented by *Singis histricellus*

Bushes, & shrubs. frequented by *Pelionotus abbreviatus*. (US) &c &c. See also
{ *Ceanothus*. *Ilex* &c

Butternut. see *Juglans cinerea*.

Cannibal. (ie insects eating even their own species.) *Nepa*. *Cerascorus marginatus*
{ *Prionotus crustatus*. (when young) &c &c

Carnivorous. see Insects destroying other insects.

Carya alba. ♀. Shagbark, or Shell bark hickory. Sap sucked by *Nexara*
{ *hilares*. ♀. The insect of *Piesma cinerea*. hibernates under the bark.

* *Carya glabra*. Pig nut hickory. injured, & frequented, by the same insects as
{ infest, *Carya alba*.

Cerasus - Cherry. infested & injured by the insects. of *Corimelaena pulicaria*. ♀.
{ which puncture the stems & cause the young fruit to wither

Cerasus - in the western states said to be injured by *Acanthocephala femorata*.
{ *Metapodus nasus*. which punctures the fruit, & sucks out the juices

+ *Ceanothus americanus*. (Red Root, or New Jersey Tea) is infested & injured by
{ *Corimelaena pulicaria*. ♀

Cereals. - (Wheat, Rye, Barley, &c) the extremities of the plants are frequented in
{ France by *Aelia acuminata*. (Eu) (Barley especially.)

Chinch bug. see *Microtropus leucopterus*.

Cirsium. Thistle. is frequented by *Sphenophora hyoscyami*. (Eu) *Euscheslus*
{ *punctipes* (US) the heads of Thistles are frequented by *Monanthia*
{ *cardui* (Eu) *cardui*. or plumeless thistle. (Gray. 234.)

Citrullus vulgaris. Water melon. (Cucurbitaceae)

Columbine. see *Aquilegia*.

Corn (Indian) see *Zea mays*.

Coreopsis. flower frequented by *Corimelaena pulicaria*. ♀

Cotton. see *Gossypium*.

Cruciferae (Mustard &c) foliage injured by *Mysinus raphanus*. *Strachia*
{ *histrionicha*. ♀.

Cucumis sativus. (Cucumber.) *C. melo*. (Muskmelon.) *C. citrullus*. (Water melon.)

Cucurbita pepo. (Pumpkin) *C. melopepo*. (round squash) *C. vevucosa* (long squash)
{ all belong to the Cucurbitaceae. (See Cucumber squash. &c.)

Animal and Vegetable S. Botanicae

Cucurbita maxima. ♂ injured by *Lycus lineatus*.

Cucurbitaceae include: Cucumber, melons, pumpkins, squashes, ".

Currant. see *Rubus*.

Cydonia. vulgaris. (Quince.) twigs & foliage injured by *Conimelaena pulicaria*.

{ *Ligus arcuatus*, *Ligus lineatus*, *Ligus obsoletus* Say, or

Schizium. Vipers bugloss. Blue weed or forget-me-not injured by *Ligus flavonotus* & *Ligus flavonotus* { *flavonotus* & *T. ochre*. (Europe.)

* Electric shock said to have been given by *Pezomachus serratus*. (West Indies)

* Erica (heath) frequented by *Alydus calcaratus*; Eu. *Ceratopus evonymi*. *Ligus protensis*. (rats)

* Elm. see *Ulmus*.

Eupatorium. (Thoroughwort) frequented by *Calocoris rufidorsus* &c.

Euphorbia. (Spurge) frequented by *Alysus calcaratus*. Eu.

Hedysaria. foliage injured by *Ligus lineatus*. *Capsus tenuilobus* Say,

Dyers weed, or Broom. see *Genista tinctoria*.

Duck weed & Lemna.

Fir. see *Abies*.

Fish. Eggs. Young fish are destroyed by *Neha Belostoma tanakae* &c.

Flowers frequented (probably for the sake of the insects attracted by them) by *Anthocoris* { *insidiosus* (us) *Ligus pratensis* (Eu) *Phymata crassifrons* (Eu) (Us).

Flowers garden. (*Oenopsis* &c.) injured by *Conimelaena pulicaria*. &c.

Food for Mankind see Insects used as food.

Fuels. infested by a species of beet bug. *Acanthoscelides*

Fragaria. (Strawberry) plants ♀ injured by *Conimelaena pulicaria* ♀ which puncture { the stems causing them to melt ♀. The insect itself when inadvertently swallowed in the fruit, gives it a peculiarly nauseous beet bug taste. The plants are also injured by *Ligus lineatus*. (*Capsus obsoletus* Say) many of the other carabidae impart a very disagreeable taste when accidentally taken into the mouth with fruit.

Fruit. when ripe, infested with *Capsidæ*. *Conimelaena*. *Ligus*. ♀ which not only injure fruit, but also taste very disagreeably when accidentally eaten with it.

Fruit trees are injured by *Pectina cinerea*. (see also Grape, Apple &c)

Fungi. are said to form food of *Anthonomus*.

Gall like swelling. see *Leucrum*.

Germander. see *Teucrium*.

Genista tinctoria. (Dyers weed or broom). the grass near roots of genista is frequented by { *Alydus calcaratus* (Eu) & *Globiceps selectus*. (Eu).

Golden Rod. see *Solidago*.

Gold fish. killed by *Belostoma americana*

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Animal and Vegetable Substances injured &c

Gossypium. Cotton. frequented & probably injured. by *Tingis Gossypii* (West Ind) { the bolls and seeds are pierced by *Dysdercus suturellus*. (*Pyrrhocoris*) the red bug or cotton stainer of Florida. & the cotton is stained by the excrementitious matter. & oily exudation of sap. &c

Grain. in general. (Wheat. Oats, barley &c.) is injured by the Chinch bug. (*Micropus leucopterus*.)

Graminiferous plants. in France. are frequented by *Astemma apterum*. (Eu) Gramineae ((grasses.) under this general term are included our common grasses. (*Dactylis*. (orchard grass.) *Eleusine*. (yard or crab grass.) *Festuca*. (Fescue)

Grape vine { *Poa*. (meadow grass.) *Phleum* (cat tail grass) *P. pratense* (Timothy or herds grass.) &c see below

Grass. roots. near Dyers broom. *Genista tinctoria*. frequented by *Globiceps selecta* &c

Grass. roots. frequented. by *Podops inunctus*. (Eu) *Zoemerus quadratus*. (Eu) &c

Grass. herds grass. & other grasses. (*Phleum pratense*. Gray. 541) &c are injured by { *Micropus leucopterus*. (Us) (The chinch bug).

Grass. frequented by *Allia acuminata*. (Eu) *Ogramma laeta*. (Eu) *Stephanomeria leuccephala*. (Eu) &c

Havoutle. an article of food used in Mexico. it is made into cakes. from the eggs of a water insect. either *Coxixa* or *Notonecta* (but most probably of *Coxixa*. as the specimens sent from Mexico. in the museum are undoubtedly. *Coxixa*) (see Popular science Review Jan 1875 p. 81)

Heath. see *Erica*.

Hedge nettle. see *Stachys*.

Helianthus (Sunflower) frequented by *Malacoconis*. (*Carsus*) *irroratus*. (Us)

Hemlock. spruce. see *Abies canadensis*.

Hickory. see *Carya. alba*. &c

Hensbane. see *Hyoscyamus*.

Holly see *Ilex*.

Hordeum. (Barley.) (& grass) the ears & extremities are frequented by *Aelia*. { *acuminata*. in France.

Ilex (Holly) *Banasa calva*. was taken by Say on Holly.

Insects. when dead are occasionally sucked by *Anasa tristis* or the squash bug.

Insects. are destroyed by *Apiomerus*. *crassipes* & *A. spinipes*.

Insects. are destroyed by *Arma*. (see *Fabulus*.)

Insects. principally aquatic. are destroyed by *Oculostoma*.

Insects. are destroyed by certain species of *Cypraea*.

Insects. are destroyed by *Cerasus marginatus*. (Eu) these insects are so carnivorous that they kill & destroy even their own species.

Insects. are destroyed by *Cosmopepla*. (*Eysarcoris*) carniver.

Insects. principally aquatic. are destroyed by *Coneza*.

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Animal and Vegetable substances injured, &c.

Insects are destroyed by Conorhinus variegatus. &c.

Insects are destroyed by Diplodus curvidus. (Eragorus viridis) amongst
 { which is said to be the Circulus, or Plum weevil (Conotrachelus
nenuphar) (Coleop.)

Insects are destroyed by Ectrichodia cruciata, Eragorus rubulus & mesa
 { longipes &c.

Insects aquatic & on the surface of the water, are destroyed by Gerris conformis.

Insects are destroyed by Galgulus, see also Iya (Orthop.)

Insects principally aquatic, are destroyed by the Hydrocorisae.

Insects probably destroyed by Macrocephalus, as their fore feet are raptorial.

Insects are destroyed by Leptoglossus phyllopus. (Anisocelis albicinctus) inclu-
 { ding Strachia histrionica, or the Cabbage bug.

Insects, especially under logs & stones, are destroyed by Melanolestes abdominalis
 { & M. picipes.

Insects are destroyed by Mylas cinctus. (Harpactor cinctus) & Nabis ferus.

Insects principally aquatic, are destroyed by Nepr. Notonecta, &c.

Insects are destroyed by Plovanea. & probably also by Pelagonus marginatus (Eu)

Insects, including Hemileuca maia (Lepid) & Hyphantria lector (Lepid), are
 { destroyed by Podisus modestus, it also sucks sap of trees.

Insects, including the Colorado potato bug, Doryphora 10 lineata, are destroyed by
 { Podisus cynicus, (also sucks sap of trees)

Insects, including Nematus ventricosus, or the unrooted gooseberry saw fly (Hym) are
 { destroyed by Podisus placidus, it also sucks sap of trees.

Insects, including Doryphora 10 lineata (Colorado potato bug, Coleop) Pristiphora
 { grossulariae, (the native gooseberry saw fly) (Hym) (bees wild)
 { Andrena, Cicada (or harvest fly commonly known as the Locust)
 { (Homop.) &c. are destroyed by Podisus spinosus This insect
 also sucks sap of trees.

Insects, in general, caterpillars, plant lice. Even their own species when young.
 { are destroyed by Priionotus crustatus. (Reduvius novenario)

Insects, when dead, are eaten or sucked, by Pyrrhocoris apterus. (Eu)

Insects principally aquatic destroyed by Ranatra. & by Microvelia & Velia

Insects, destroyed by the Reduviidae in general, by Sinea multispinosa -
 { by Sirthenea diana, S. fimbriatus &c. &c.

Insects, Heteroptera, used as food by Mankind. Conix mercenaria.
 { (Mex) Say. the eggs of Conix femorata (Mex) (Rept Dep Ag.)
 { & 2 species of Notonecta. (Mex) see Lewis, are said to be used
 as food in Mexico, all these being water insects & having similar
 habits, have doubtless been confounded together, by different writers.
 see also Baoille, or cakes made of these eggs.

Animal . and Vegetable Substances injured. &c

- Juglans. (walnut.) *Juglans cinerea*. (Butternut.) foliage injured by *Tingis juglandis*.
- Juncus. (rush.) The insect of *Chorosoma thillingii* in France. is taken on Rushes.
- Lactuca. (Lettuce.) injured by *Nysius raphanus*.
- + Lettuce. see Lactuca.
- Lemna. Duck. weed. is frequented by Hebrus. Limnolabates &c &c.
- Leucanthemum vulgare. (Ox eye daisy. White weed) The flowers are frequented
 { by *Anthocoris insidiosus*. or the false chinch bug.
- + Leaves. when fallen are sucked by *Pyrrhocoris apterus*. (Eu)
- Maize. (or Indian corn.) see Zea mays.
- Mankind. Heteropterous insects. used as food by Mankind. The eggs or
 { insects of *Cimex femorata*. (Eggs) *C. mercenaria* (Say Insect.) (Mus.) & 2
 species of *Notonecta* or Boatflies. (see also Insects used as food.)
- Mankind. injured and annoyed by *Acanthia lectularia*. (Bed bug) the
 { insect of which sucks blood. beds are also sometimes frequented by -
Conophthorus variegatus. (sanguisuga Lec) which is said to have the same
 habits.
- Mankind. injured & stung by the piercers of *Melanolestes abdominales*. M. pricipes.
 { Terrestrial.) *Naucoris*. *Notonecta*. & pro. *Belostoma*. & *Ranatra* (aquatic)
Phymata crassa, *Reduvius personatus*. *Tingis arcuata*. also cause severe
 pain by plunging their beaks into the flesh. & probably injecting a
 poisonous or acrid liquid into the wound.
- Mankind. stung most severely by the piercer or beak of *Prionotus cristatus*.
 { (Reduvius novenarius)
- Mankind. A kind of Electric shock is reported to be given by *Prionotus serratus* or
 { the wheel bug of the West Indies. to mankind when handled inadvertently
- Melons. see Cucumis.
- Mentha. (Mint.) leaves &c injured by *Lygus lineatus*. (Capsus quadripunctatus)
- Moss. is frequented by *Ceratocombus muscorum* (Eu) &c &c & many other heteroptera
- Mullein. see Verbascum.
- Mustard. see Sinapis.
- Nettle Hedge. (Europe) see Stachys.
- New Jersey Tea. see Ceanothus americanus.
- Nicotiana tabacum. (Tobacco) frequented & injured in Florida. by a species of
 { *Myodocha*?
- Oak. see Quercus.
- Oats. see Avena.
- Oars. given out by the Heteroptera when disturbed explained (see Rhathigaster
 { punctipennis)
- Odor like bed bugs given out by *Acanthia lectularia*. *Cortex striata*. *Nabis*
 { *marginalis* &c &c.

Animal and Vegetable Substances injured &c.

- Odor. like overripe pear. given out by *Anasa tristis*. (us) *Rhabdigaster punctata*.
 { *pennata*. (Eu) & *Coranus subapterus*. Eu. &c.
- Odor. like *Hyacinthus* racemosa. given out by *Phytocoris carcelii* Eu
- Odor. disagreeable. given out by *Tropicoris rufipes*. (Eu) &c.
- Odor. like mice. given out by *Cedrus personatus*.
- Odor. like Thyme given out by *Therapha hyoscyami*. (Honslane) Eu
- Ononis. (Rest harrow) frequented by *Olymus ciceratus* (Eu) *Therapha hyoscyami* (Eu).
 The roots & young stems are frequented by *Neides elegans* on which plant
 { the insect probably feeds. (Eu)
- Oryza. (Rice) frequented & probably injured by *Tetra sylphoides*. (Eu) The insects
 { assembling in great numbers on heads of rice.
- Ox eye daisy. see *Leucanthemum vulgare*.
- Parsnip. see *Pastinaca*.
- Pastinaca. (Parsnip) leaves &c. injured by *Ligus lineatus*.
- Pear. see *Pyrus communis*.
- Pigeons. Pigeon houses. infested with Bedbugs, or Pigeon bugs. *Acanthia columbaria*.
- Pine trees. (*Pinus*) frequented by *Emesa longipes*. (us) leaves frequented by *Capsus cla-
 vatus*. (us) &c.
- Pinus sylvestris*. (Eu) *Camaronotus cinnamopterus*. (Eu) from which tree the insect
 { was beaten off.
- Pine regions of New Jersey. frequented by *Aulacostetus marmoratus*. (us)
- Portulaca. Purslane. frequented by *Corimelaena pulicaria*. &c. &c.
- Potatoes. see *Solanum tuberosum*.
- Predatory. see Insects destroying other insects.
- Pteris. (Brake or Cracken) frequented by *Bryocoris pteridis*. (Eu)
- Pumpkins. see *Cucurbita pepo*.
- Purslane. see *Portulaca*.
- Pyrus communis*. (Pear) injured by *Corimelaena pulicaria*. the insects collect on the
 { ends of the young shoots & the twigs are injured by *Ligus lineatus*. *Capsus
 oblineatus*. (us) & the buds are injured by *Microtus*. (*Erynnochromus*).
leucopterus (us) or the Chinch bug. (Acanth. 1.10 ft.) the buds are also injured by
Rhipidolus latealis. (us)
- Pyrus malus*. (Apple) the twigs & leaves are injured by *Podessus cynicus*. (Eriovixia.
 { bracteatus var) *P. spinosus* &c. &c. (us)
- Quercus. (Oak) frequented by *Antilocoris remoratus* & *A. nemorum*. Eu which destroy
 { the caterpillars or leaf mining small moths *Lithocolletes*. (Lepidopt.)
- { The insect of *Campylocerura nitidivena* (us) is also taken on Oaks. but is said
 to be beneficial by destroying Grape Leaf hoppers. *Erythronera velutina* (Thom.)
- Quercus (Oak) frequented by *Camaronotus cinnamopterus* (us) & injured by *Podessus
 cynicus* which sucks the sap.

Animal and Vegetable substances injured &c.

- Guince. see *Cydonia vulgaris*.
- Radish see *Raphanus*.
- Rag weed see *Ambrosia*.
- Raphanus. (Radish) Leaves, &c. injured by *Nysius raphanus*. & *Strachia histriomicha* (G.)
- Raptorial. see Insects destroying other insects.
- Raspberry. see *Rubus idaeus*.
- + *Ribes*. (currant) foliage, &c. injured by *Ligus lineatus*. (*Carens 4 vittatus* Say) (U.S.)
 " Red currant. (Eu) frequented by *Globiceps clavatus* (Eu)
- Red Root. see *Ceanothus*.
- Rest Harrow. see *Ononis*
- + *Rhus glabra* (Sumach smooth) frequented by *Alydes eurinus*. (U.S.)
- Rice. see *Oryza*.
- River banks. frequented by *Polygonus marginatus* (Eu) (see also Banks.)
- Rosin weed. see *Silphium*.
- Rubus idaeus*. (Raspberry) infested. & injured by *Corimelaena pulicaria*. &c.
 This insect punctures the stems. & causes the fruit to wilt. it also imparts a taste, or flavor, like that of bed bugs to the fruit, when accidentally eaten with them. The raspberry is also frequented by *Anthocoris insidiosus*. which although it may also destroy other insects, is accused of imparting a nauseous flavor to this fruit. Some species of the *Capsidae* are likewise said to give a disagreeable taste to the fruit. in a similar manner. also injured by *Syngas. tenintus*
- Rubus villosus*. (Blackberry. Bramble.) frequented. by *Anthocoris insidiosus*. to the fruit of which, when eaten by mankind. these insects are said to impart a very disagreeable taste. (U.S.) The bramble in Europe is also frequented by *Syromastes marginatus*.
- Rush. or Rushes. see *Tuncus*.
- Salix*. (Willow) Sap sucked by *Nerara fulans*. (U.S.) & frequented probably by *Singis hyalina*. & *S. juglandis*. (U.S.)
- Sap of forest. fruit trees. vegetables. &c. &c. sucked by *Cydus*. &c. &c. see apple. Willow &c.
- Seeds when fallen sucked by *Pyrrhocoris apterus* (Eu) &c.
- Serratula*. frequented by *Monanthia carolini* (Eu)
- Shag, or Shell bank: Hickory. see *Carya*.
- Shrubs. see *Ceanothus*. &c. &c.
- Silphium. (Rosin weed.) frequented by *Corimelaena pulicaria*. & the insects of which collect on the shoots.
- Sinapis*. (Mustard.) injured by *Nysius raphanus*. & *Strachia histriomicha* (G.)
- Solanum tuberosum*. (Potato.) foliage &c. injured by *Nysius raphanus*. by the Chinch bug. *Microplus* (*Rhiparocharinus*), *Leucopterus*. & by *Ligus lineolaris*. (*Carens oblineatus*. Say.)

84.

- Animal and Vegetable substances injured. &c
- Solidago. (Golden rod) frequented by Aleydus curinus. (U.S.)
- + Speedwell. see Veronica
- + Spartium. (Spartium) frequented by Aleydus calcaratus.
- Spurge. see Euphorbia.
- Squash. see Cucurbita. injured by Unasa triplex
- + Sting. see Mankind injured or annoyed.
- Sumach. see Rhus.
- + Stachys. Hedge nettle. (Eu) frequented by Systenatistus (Capsus) nigretus.
- Sticks & Stones. Cethus bilineatus (U.S.) is found under sticks & stones.
- Strawberry. see Fragaria
- Sunflower. see Helianthus.
- Swallows. infested with bugs. Acanthia kirundinis.
- Tadpoles. killed (but not eaten) by Nepa cinerea.
- Teucrium. (Germander) flowers attacked & injured by Tingis clivicornis. (Eu) causing them to swell out to a disproportionate size, somewhat resembling galls.
{ Teucrium is also infested by Tingis teucrii. (Eu)
- Thalea. (Europe) frequented by Ploaria erratica.
- Thistle. see Cirsium.
- Thoroughwort. see Eupatorium.
- Thyme. (Thymus) odor like Thyme, given out by Therapha hyoscyami. (Eu)
- Tobacco. See Nicotiana.
- Trees frequented by Brochymena arborea. (U.S.) & by the Corcidae, upon the sap
{ of which these insects appear to exist. (see also Oak &c)
- Trees forest. frequented by Diplodus lundus. (Evagonus viridis) & the sap is sucked
{ by Hexara hilaris. Podusus cynicus. &c (see also oak &c)
- Trees fruit. see Apple &c
- Triticum vulgare. (Wheat) ears in France, infested and injured by Gonygaster maura. (Eu) & in the United States wheat is injured & destroyed by Micrococcus pus. (Rhiparochromus) leucoplerus. &c
- Turnip & Brassica. Rapa.
- Ulex. (Whin) (Europe) frequented by Aleydus calcaratus. (Eu) The flowers are frequent
{ ed by Lygus pratensis. Coranus subapterus is also found under
Fern or Whin. (Eu)
- Ulmus. (Elm) Trunks. &c frequented by Chrysogaster punctiferus. (Eu)
- Umbelliferous plants. frequented by Globiceps selectus. (Eu) & in France by Asteroma apterum (Eu)
- Vegetables. injured by Micrococcus. (Rhiparochromus) leucoplerus. or the chinch bug
{ by Nysius raphanus. &c &c. (see also Cabbage &c)
- Verbascum. (Mullein) frequented by Lygus. (Capsus) dislocatus Say, & by Euschistus functipes &c. (U.S.)
- Veronica (Speedwell) infested by Corimelaena pulicaria. &c &c. U.S.
- Vetch. see Vicia.

Animal & Vegetable substances injured. &c.

Vicia (Vetch) frequented by *Stiphrosoma (Capsus) leucocephala*. (Europe)
Vipers bugloss see *Echium*.

Vitis. (Grape vine) The four principal wild species growing in the northern & middle states are as follows. *Vitis aestivalis* (the Summer Grape).
Vitis labrusca. (the Northern Fox grape.) *Vitis cordifolia* (the winter or Fox grape & *Vitis vulpina* (the Muscadine or Southern Fox grape (see Gray p 77)

Vitis ? (Chicken Grape) frequented by *Campyloneura vitripennis* where it destroys caterpillars.

" Grape blossoms (canes & foliage) are injured by *Piesma cinerea* (U.S.) — the canes & foliage are injured by *Lygus lineolaris* & *Mysius raphanus* — Sap is sucked by *Chlorochroa (Pontatoma) ligata* (Fitch 1857 p 748) & *Nerara hilaris* *Podisus modestus* U.S. (218)

Vipers bugloss. or Blue Tangles. see *Echium*.

Walnut see *Juglans*.
Water insects see Aquatic

Wheat. see *Triticum vulgare*.

White weed or Ox eye daisy see *Leucanthemum*.

Whin. or Furr. see *Ulex*.

Weigelia. foliage injured by *Lygus lineatus* (*Capsus 4 vittatus* Say)

Willow. see . *Salix*.

Zea mays. Maize or Indian corn. is injured by the Chinch bug. *Micropus (Rhyparochromus) leucopterus*.

Phytocoris lineatus is said by Fitch in the Trans of the N.Y. State Ag Soc 1869 p 513 to injure the following plants. shrubs &c.

Bitter sweet. *Solanum dulcamara*.

Burning bush. *Euonymus*

Currant. *Ribes*.

Dahlia.

Euonymus see Burning Bush

Linaria see Snapragon.

Plantain *Plantago*.

Plantago see plantain.

Ribes see Currant.

* *Snapragon Linaria*

+ *Saponaria*. see Soapwort

Soapwort. *Saponaria*

Tanacetum. see Tansy

Tansy. *Tanacetum*.

* *Solanum dulcamara*. see Bitter sweet.
Weigelia.



86.

Alphabetical List of Insects - of other orders. -
 either destroying Heteroptera, or destroyed by them.

Andrena. (Hym) Wild bee. destroyed by *Phymata crassa*. (Hct. U.S.). ♂. *Podisus*. -
 { *spiniferus*. (Hct. U.S.)

Ants. (Hym) (*Formica*. &c) the nests are inhabited or frequented by *Myrmecobia* (Hct. U.S.)
 { in Germany.

Aphides. (Homop) Plant lice, are destroyed by *Anthocoris nemorum*, & *A. minutus*.
 { (Eu. Hct.) *Evaconus rubidus*. *Nabis purciss.* *Podisus spinosus*. *Prion-*
 { *atus cristatus*. *Sinea multispinosa* (Hct. U.S.) ♀.

Apis mellifica. (Hym) Honey bee. is killed & the juices sucked out by *Cyriomerus sps.*
 { *sipes*. (Hct. U.S.)

Bee wild see *Andrena*. (Hym) Bee honey see *Apis mellifica*. (Hym)

Blatta. cockroach. (Orth.) is said to destroy the bed bug. *Ocathia lectulana* (Hct.)

Butterflies (Lep) small. destroyed by *Phymata crassa*. (Hct. U.S.)

Campyloneura vitripennis. (Hct. U.S.) destroys leaf hoppers. see *Erythroneura* (Hct.)

Caterpillars. (Lep) (on Chicken grape) are destroyed by *Campyloneura vitripennis*
 (Hct. U.S.)

Caterpillars. are destroyed by *Lygaeus turcicus*. (Hct. U.S.) (Pentatomidae)
 { *Tropicoris neophyes*. (Hct. Eu) *Prionotus cristatus*. (Hct. U.S.) (Reduviidae)
 { *novenarius* *Stiretrus fimbriatus*. (Hct. U.S.) ♀. & ♂.

Chrysops. *illinoiensis*. ♂. *C. pluribunda* (Fitch) (Diptera) Larvae destroy the
 { chinch bug. *Micropus* (Rhypharochromus) *leucopterus*. (Hct. U.S.)

Cicada (Homop) Harvest fly. (or improperly known as the Locust.) is destroyed by
 { *Podisus spinosus*. (Hct. U.S.) ♂.

Coccinella. (Coleop) Lady bird. is destroyed by *Podisus spinosus*. (Hct. U.S.)

Coccinella munda. & others (Coleop) destroy the Chinch bug. *Micropus leucopterus*. (Hct. U.S.)
 Colorado. potato bug. (Coleop) see *Doryphora decimlineata*.

Cockroach. see *Blatta* (Orth.)

Conotrachelus nenuphar. (Coleop) The Curculio. or Plum weevil. is said to be destroyed
 fed by *Diplodus lunatus*. (Hct.)

Doryphora decimlineata (Coleop) (The Colorado Potato beetle. 10 lined Spearman
 ♂.) is said to be destroyed by *Anasa tristis*. but it is doubtful, and
 most probably a somewhat similar insect. *Podisus* (Arma) *spiniferus*.
 which is known to prey upon other insects. has been mistaken for the
 squash bug *Anasa tristis*. The Colorado beetle is destroyed by
Podisus cyaneus. *P. spiniferus*. *Lytta lineolaris*. (probably when in the
 egg) *Milys cinctus*. *Penitus circumcinatus*. *Sinea multispinosa*. &
Stiretrus fimbriatus. (Hct. U.S.) ♀ & ♂.

Epilachna borealis. (Coleop) The squash vine lady bird. is said to be destroyed
 by *Stiretrus Diana*. (Hct. U.S.)

Insects of other orders destroying Heteroptera, or destroyed by them.

Erythronaera vitis. (Homop) grape leaf hopper, is destroyed by *Campyloneura*
 { *vittipennis*. (Hct. us)

Formicæ. see Ant.

Gooseberry. (*Grossularia*) gooseberry saw flies. (Hym) see *Prestiphora grossulariae* (us)
 { & *Nematus ventricosus* (Eu)

Grape vine leaf Gall louse. (Homop) see *Pemphigus vitifoliae*. (us. Hct.)

Hemileuca maia. (Lep) is destroyed by *Podisus modestus*. (Hct. us.)

Hydrachna. a species of water mite which infests fresh water Hemiptera.

Hemiptera. infested by water mites (Hydrachna)

Hippodamia maculata. (Coleop) destroys the Chinch bug *Micropus leucopterus*. (us. Hct.)

Hoplophantis testor (Lep) caterpillars destroyed by *Podisus modestus* &c. (Hct. us.)

Insects destroyed by Heteroptera, or destroying them. see *Alyommerus*, *Conotrachelus* &c.

Insect. eggs. destroyed by *Lygus lineolaris*. the Lygus however also injures plants &c.

Insects when dead. eaten by *Pyrhocoris apterus*. (Eu) (Hct.)

Leptus? a water mite. "grains of a lively red color. Supposed to be the eggs of a
 { water mite. (*Leptus*?) are found deposited on the feet of *Ranatra linearis*
 (Europe. Hct.)

Lithocelotes { a leaf mining small moth. the caterpillars are destroyed by *Anthocoris*
 { *nemoralis* & *A. nemorum* in Europe. (Hct.)

Micropus (*Rhypharochromus*) *leucopterus*. the Chinch bugs. are destroyed by *Coccinelli*
 { *dae* or lady birds (Coleop) *Chrysops illinoiensis* & *C. ploriflunda*. lace
 wing flies. (Neuro) by *Anthocoris insidiosus*. or the false Chinch bug (Hct)
 (probably) & by quails feeding on them in the fields.

Mites water. (Arach) see Hydrachna & Leptus.

Nematus ventricosus. imported gooseberry Saw fly. (Hym) is destroyed by *Podisus*
 { *modestus*. (Hct. us.)

Oryx. (quail). destroys great quantities of Chinch bugs. *Micropus leucopterus*. (us. Hct.)

Pemphigus vitifoliae, the grape leaf gall louse. (Homop) is said to be destroyed
 { by *Anthocoris insidiosus*. (Hct. us.)

Plant lice. see Aphides

Plum weevil. or *Curculio*. & *Conotrachelus nenuphar*. (Coleop)

Prestiphora grossulariae. native gooseberry saw fly. (Hym) is destroyed by *Podisus*
 { *spinatus*, &c (Hct. us.)

Quail. (a bird) see Oryx.

Raptorial. see Insects preying on other insects. as Phymata. Prionotus, &c.

Scymnus. (Coccinella. Col) destroys Chinch bugs. *Micropus leucopterus*. (us. Hct.)

Squash vine Lady bird. see *Epilachna borealis*.

Tadpoles. (young of Frogs.) are killed, but not eaten, by Nepa. the water scorpion (us. Hct.)

Tealat. (Hym) destroys eggs of Gorris Europe (Hct.)

Ten lined Spearman. see *Doryphora decimlineata*

Tortrix malivora. (Lep) probably destroyed by *Milias*. (*Harkactor*) *cinctus*. (us. Hct.)

Vespa. Wasp (Hym) small wasps destroyed by *Phymata Erosa*. (Hct. us.)

Xylo. (Orthop) said to be destroyed by *Galculus oculatus*. (but doubtful) (Hct. us.)

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and of Authorities, or Societies &c referred to in this work.

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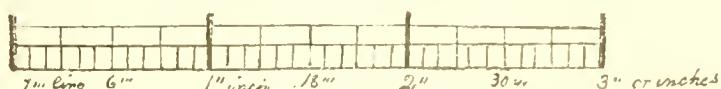
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Abbreviations used in this work

Alab. Alabama.	Irons. Imago or Insect.	Phil. Philadelphia.
Anat. Anatomy.	Iowa.	Pa. Pennsylvania.
Apr. April.	Jan. January.	Pl. Plate.
Arach. Arachnida.	Kans. Kansas.	Rh. I. Rhode Island.
Ark. Arkansas.	Ky. Kentucky.	S. Am. South America.
Aug. August.	L. or Lat. Latin.	Sep. September.
Cal California.	Lor Lar. Larva.	S.C. South Carolina.
Can Canada.	Lep Lepidoptera.	Sp. Species or Specimen.
Car. Carolina.	La. Louisiana.	Syn. Synonym.
Cat. Catalogue.	Me. Maine.	Syn. tab. Synoptical table.
Coc Cocoon.	Md. Maryland.	Tenn. Tennessee.
Coll. Collection.	Mass. Massachusetts.	Terr. Territory.
Conn. Connecticut.	Mch. March.	U.S. United States.
D.C. District of Columbia.	Mex. Mexico.	Verm. Vermont.
Dec. December.	My. May.	Va. Virginia.
Del. Delaware.	Mich. Michigan.	Wisc. Wisconsin.
Deriv. Derivation.	Minn. Minnesota.	Wash. Washington.
Dipt. Diptera.	Miss. Mississippi.	♂. Male.
Eu. Europe.	Mo. & Misso. Missouri.	♀. Female.
Ex. Example.	Myth. Mythological.	♂ neuter.
Fam. Family.	Neb. Nebraska.	1" 1 line or 12 th of an inch.
Feb February.	N.J. New Jersey.	1" 1 inch.
Fig Figure.	N.Y. New York.	1' 1 foot.
Fla Florida.	Noo. November.	?). Doubtful. This note of interrogation affects the term to which it is applied. if applied to the generic name, it indicates that it is doubtful whether the species is referred to the proper genus. If applied to the specific name, it shows a doubt as to the species &c (LeBaron)
Gen. Genus.	N.C. North Carolina.	
Geo. Georgia.	Oct. October.	
Gr. Greek.	Ohio.	
Hab. Habitat.	Oreg. Oregon.	
Hemip. Hemiptera.	Or. order.	
Het or Heter. Heteroptera.	Orth. Orthoptera.	
Hom. Homoptera.	O: S. Cat { Osten Sacken's Catalogue.	
Hym. Hymenoptera.	p. page.	
Ill. Illinois.	P. pupa.	
Ind. Indiana.		

Three inches Paris measurement from Lewis



The French foot measure is somewhat longer than that of England & the U.S.
being as 12.780 English inches, to only 12.000 of our measurement.
"from Height & measures, by W.S.B. Woolhouse, London"



Remedies reported to be serviceable
in destroying Insects

of the suborder Heteroptera or Plant bugs.

A patient study in the open field of the natural history, habits, instincts and favorite food or haunts, of the insects injurious to the crops, is absolutely indispensable to the working naturalist, who wishes to find out successful methods of destroying them, as it is only by knowing what substances are especially disagreeable to their taste, or smell, that we can drive them away, or by placing substances they are especially fond of in their haunts, that we can allure them to destruction. A thorough knowledge of their habits, and instincts will also teach us where to look for them, at what time, and on what plants. Take for example, although Paris green is eaten by the larvae of the Colorado potato beetle when sprouts lead on the outside of the leaf of the potato, and proves certain death to millions of them, as the larvae possess jaws, and eat the whole substance of the leaf poison and all yet a plant bug on the same leaf would probably escape without injury, as insects of the suborder Heteroptera do not eat any of the leaf itself (not having jaws) but merely pierce the outer cuticle in order to reach the parenchyma, or inner substance, to suck the sap, and most probably not a particle of the poison on the outside of the leaf would enter the hunger or sucker of the plant bug.

Again the Tobacco fly, moth, or Sphinx by means of its very long flexible trunk or sucker is enabled to reach the nectar at the bottom of the long tubular flowers of Tobacco and Jamestown weed (*Datura*) which it sucks during the evening twilight. advantage has been taken of this habit, to drop poisoned syrup or honey, into these flowers, which being imbibed by the Sphinx, causes its death in a short time, without giving it a chance to deposit its eggs. Yet the same remedy in the same flowers would be of no use if applied to destroy moths of the cut-worms (*Ogrotis* &c) as their trunks are much too short to reach the poisoned liquid at the bottom of the long blossom of the tobacco plant. It is also necessary for the naturalist to find out — whether certain insects are beneficial to the farmer, by killing other noxious insects, or not, before wantonly taking their lives as although an insect may frequent a particular plant or tree, it is by no means certain that it feeds upon the plant, it frequently happening that the insect visits such plants, merely, for the sake of feeding upon other insects that are in the habit of injuring the plant itself, or are attracted by its flowers.

In the suborder Heteroptera, however, it is very difficult to distinguish friends from foes, or even to decide whether certain plant bugs are more beneficial or injurious, as many of them at almost the same time are herbivorous, & carnivorous, one minute sucking the sap of the plant itself, and the next minute drawing the life juices of some insect which feeds upon & destroys the same plant. If poison be used to destroy insects of this suborder it should be in a liquid state like very thin syrup, so that the insect can take it into its stomach through the very narrowed sucking tube. A double net of cotton or gauze (as described in a former report) will be found exceedingly useful in capturing the agile Capsidae, and other small nimble plant bugs, the net is brushed lightly against, and under, the plants, until a sufficient number of the noxious insects have been collected in the second net or bag, which can be emptied out into boiling water or its contents otherwise destroyed. For the cabbage bug (*Strachia histionica*), the Squash bug (*Anasa tristis*), and insects of this same habit, the same remedies here mentioned will answer. Hand picking early in the morning and before they have thawed out into life & activity is always a sure & good but slow method the females, & bunches of eggs, should be sought for early in the season before the young bugs hatch out & spread over neighboring plants, & it must be remembered that anything which contributes to bring the plants forward rapidly, & promotes the vigor & luxuriance of their foliage, renders them less liable to succumb to the attacks of insects. A weak solution of good guano, or water drained from a cow yard or mixed with well rotten manure, applied to the roots, is very invigorating to young plants, & causes rapid & healthy growth but care should be taken not to make the mixture too strong else it would probably do more injury than good. When plant bugs injure Cabbages, Squashes, &c planted singly, or in rows, it would be well to leave the ground rough upon the hills, or between the rows & to lay loose shingles on it near the plants, under which the bugs will crawl at night & where -

and where they may be found in the morning & killed. Small heaps of old trash, such as corn stalks, weeds. &c may be made here and there on the ground, near the plants to be protected from the heat of the summer sun, or from the cold of winter. & if they have done so, in sufficient numbers, when the brush is dry, fire can easily be applied. & the trash and bugs destroyed together. The crushed stalks of sugar cane, & heaps of old refuse cotton seeds, have been used in this manner in Florida, to destroy the Red bug or Cotton stainer. & found to be very useful, as these substances furnish the bugs, not only with shelter, but also with abundance of food. Large leaves of plants. Cabbage, squash &c may be cut off the parent plants, & placed on uneven ground. These withering leaves form excellent traps for several plant bugs. The leaves however should be examined early in the morning, before the insects have been warmed by the heat of the sun, & escaped from their nocturnal shelter. Small wooden boxes covered with gauze are frequently used to protect very young plants from insects, until they have acquired size & strength to resist their attacks. An oblong four-cornered hole, about twelve (or more) inches in depth, and a little smaller than a pane of glass (say seven by ten inches, or larger if required) dug in the earth, in a place where there is a sandy subsoil, or good drainage. & then filled up with good rich soil in a huck to plant a few seeds. & the hole then covered over with the glass. & loose earth heaped over in the edges to exclude the air and insects, forms a very good miniature hotbed for cucumbers, squashes, melons, &c as likewise for starting cuttings of roses &c. If sand be employed instead of rich earth & should the sun prove too powerful, a slight scattering of sand, or loose soil, over the glass will protect them. When the plants are grown some size, the glass can be removed, & the hole filled up to its former level. The glasses can afterwards be gathered together & stored away in some-outhouse in much less space, & with less trouble than so many unwieldy wooden boxes. A mixture of one part of Peruvian guano, with three parts of plaster, or lime, is said to be offensive to most insects. A strong decoction of quassia, or berries leaves of the pride of China tree, might drive plant bugs away from the plants. Paris green or Hellebore sprinkled over the leaves when moist with dew or rain, would doubtless destroy many larvae of beetles & other insects having jaws, but probably would not have much effect on insects having sucking, as in the heteroptera or plant bugs although they might make them void the plants.

Sulphur: soot, wood ashes, lime, & even dry road dust, sprinkled over young plants, have in-some cases proved beneficial in driving away insects. & paper, rags, or sawdust, soaked in kerosene or carbolic acid & water are said to be so offensive to insects as to cause them to leave the plants. Soap suds made from whale oil, or cresylic soap. Tobacco water &c have also been highly recommended by some of our correspondents as being very disagreeable to the organs of smell, if not of taste of many plant bugs. As remedies for these insects Dr Harris recommends sprinkling with alkaline solutions, potash and water decoctions of Walnut leaves, & perhaps a decoction of the leaves of the China berry tree might answer in the Southern state as a correspondent in Georgia says that they have been used with very beneficial effect to drive away cut worms. Most of the plant bugs hibernate, or remain all winter in a somnolent state - under bank of old trees, stones, moss &c it would therefore be advisable, at the approach of spring to burn all old stumps, & dead or decaying wood, weeds &c near the garden. Old stone fences piles of loose stones, hedge rows of weeds & briars, & dead trees, are the places where many of our plant bugs and other noxious insects spend the winter, & whence they issue forth in Spring to deposit their eggs. Innumerable larvae & pupae of noxious insects are also found in the same places waiting only for the warm weather to complete their changes. If these places are examined in midwinter, the entomological student can procure a very good collection of specimens, for his cabinet, even when the ground is covered with ice and snow. Mr Walsh speaking of the carus, a small nimble plant bug, very numerous & destructive to the foliage of plants, says "If my own trees were attacked, I should go to work early in the morning, while they are dull & sluggish. shake them off the trees, on a cloth, & crush them between the finger & thumb."

Swallows, Hawks, Ducks - insectivorous birds, & some small animals, are also useful agents, by destroying multitudes of injurious insects. Even common mice have been known to dig up, and eat the larvae of the peach tree borer in a grape house, where the gardener had almost extirpated them as injuring the root of his vines whereas the animals had made the holes merely, to search for animal food. & had not touched the roots at all.

Several of the remedies above mentioned under the Cabbage bug (*Strachia hirsutioricha*) - are also recommended to be used for several other Heteropterous insects, having somewhat similar habits, such as the plant bugs injuring squashes &c (*Anasa tristis*), *Rhopalae lateralis*, *Nysus zaphanus* & many others. The Chinch bug, *Microtus (Rhynchosciurus) cecropius*, is exceedingly destructive in the grain fields of the west, and many remedies have been recommended or suggested for their destruction, or to drive them away. among the rest lime is said to have been used with good effect, when dusted over the plants when the insects first appear. Other farmers however assert they have used lime, and have derived no benefit from it. Burning the ground before ploughing, or after the infested crops have been removed, has also been recommended. & all the chaff, and refuse remaining after winnowing grain, ought likewise to be burnt & as before mentioned, if small piles of refuse or trash be heaped up here and there in the fields, and after cold weather sets in, if these heaps are dry enough to burn, they are fired on a chilly morning & all the insects sheltering under them will be burned & destroyed, as Chinch bugs are very apt to take shelter under such heaps, from the inclemency of the weather. From other farmers, we have received reports as to the efficacy of gas lime, in driving the insects away from growing crops, but they say nothing about the benefit or injury the plants themselves receive from such an application.

In a former report, Mr Sauchlin states that although he used lime with no effect whatever, yet the "application of salt to only one acre of wheat in the proportion of one bushel to the acre - drove all the insects away, & saved his crop on that single acre, while the rest of 10 acres planted - was destroyed by chinch bugs." Salt however when applied too freely would be very apt to injure the plants themselves. Mr Sauchlin also states that he was satisfied that if he had sown $1\frac{3}{4}$ - bushels of rock salt (not more) to the acre, by the first of June, or 10 to 14 days sooner, he would have saved his whole crop. At the same time he recommends a spoonful of salt, to be put on each hill of maize. Some farmers at the west, tried the experiment of sowing Hungarian grass with wheat and other grains, & state that their crops have been saved, by the Chinch bugs preferring the tender grass, leaving the grain uninjured. Open ditches or trenches dug around the fields, overrun with Chinch bugs, have been highly recommended, as preventing the migrations of these insects - from an infested field to another uninfested field in the immediate vicinity. These trenches - should be dug a foot or more in depth having a sloping side towards the infested field, and a perfectly perpendicular side toward the field intended to be protected, so that the insects could readily crawl into the trench from the field already injured, & not being able to crawl up the perpendicular side toward the uninjured field, would fall back into the trench and could be destroyed by lime or gathered up & burnt, but by no means be only half killed and buried, as they might revive & make their escape out of the earth. It would even be better, if the perpendicular side of the trench should slope somewhat inward, at the bottom, so as to make its upper edge project a few inches over the trench, & then it would be almost impossible for any of the wingless larvae or pupae to ascend & crawl into the neighboring fields. Pine or fence boards set lengthwise, & close together, or the ends even a little overlapping each other, & sunk a little in the earth so that the chinch bugs could not creep through the crevices made by the joining of the boards, or underneath, & the upper edge of this fence kept moist with coal tar, will also prevent the migration of Chinch bugs from field to field as they are unable to cross the tarred line & fall to the ground inside the fence.

For Bed bugs (*Acanthia lectularia*) washing the bedsteads with boiling water - mixed with salt or alum, corrosive sublimate & alcohol, lard & quicksilver, have been highly recommended, especially the corrosive sublimate, although if the bedsteads are varnished care should be taken not to use any substance that will take off or discolor the polished surface, as we have known varnished bedsteads almost totally disfigured by the cautious use of some of these mixtures. Ponsoni Insect powder (only when perfectly fresh) blown into the crevices with bellows made for that purpose, will slay & destroy many but the great remedy is cleanliness, & a constant care & vigilance every few days to examine all the crevices & joints, to make sure that none of the pests are hidden away, and as these insects deposit their eggs in cracks on the floor, or walls, under carpets, in old curtains & in all secret or dark places they can find it is necessary that the application of all the remedies used should be very thorough & perfect cleanliness should be preserved by frequent scalding & whitewashing where practicable.

There are a few Heteropterous insects that feed upon Bed bugs, mentioned under the head of *Acanthia lectularia* in the former part of this work, but they are not numerous enough to do much good, & besides that, some of them frequently also attack mankind. From their size, & strength, inflict much more severe wounds than the bed bugs themselves. Many of the carnivorous Heteroptera, *Prionotus cristatus*, & others, are able to inflict very severe wounds with their beaks, or piercers, which they thrust into the flesh, at the same time ejecting a poisonous liquid, into the wound. The pain from such stings or punctures may be very much alleviated by an application of liquid ammonia.

In conclusion we would again urge farmers to clear up all weedy fence corners — remove all old heaps of loose stones, & rubbish and to burn all trash, rotten stumps, and decaying wood, as such places serve only as a shelter to all noxious insects, during the winter & from which they issue forth in spring, to scatter themselves over the whole farm & lay the eggs of the millions of injurious insects, which in summer & autumn destroy the hopes of the husband man. & are most generally not observed until they have become too numerous to be destroyed without immense labor and cost.

The following list of some of principal families and genera of the order Heteroptera has been compiled from the works of Burmeister, (1835) Westwood, (1840) Amyot, & Serville, (1843) Douglas, & Scott (1855); and others, and is intended for the use of young Entomologists who wish to study this order. I have no better work to refer to. A synopsis and Catalogue of the Heteroptera of the United States by Professor Philip E. Uhler Librarian of the Peabody Institute in Baltimore. Maryland. We are happy to say is now in the course of preparation and almost ready for publication. In this list many of the synonyms found in Burmeister, and the others, have been purposely omitted, as serving only to perplex young beginners, and for the same reason, many of the genera mentioned in Douglas & Scott, have also been omitted, not yet having been recorded as existing in this country. Their names therefore would only serve to swell the list, and confuse beginners. The derivations of names, are taken principally from Agassiz, Amyot, and other good authorities, and when there is much doubt, as to whether they are correct as having been taken merely from dictionaries, such names will be distinguished by having a note of interrogation (?) placed after them. As the classification of this suborder by Amyot & Serville, appears to us to be the most natural, and readily understood for young beginners, we have therefore given the name of the family in which each genus either would be or is placed in Amyot's classification. So that by consulting Amyot, us on page 9, 10, 11 & 12. Young collectors will have some guide by which to arrange the specimens in their private cabinets, until a better & more complete system of classification is adopted by some future Entomologist.

Alphabetical list of Sections. Families. and Genera of the Hemiptera. Heteroptera.

with Derivation of names Ex^c Ex^e.

- Acalyptera. Westw. Genus 6. of Fam. 6. Tingidae. Westw. Syn. 121. Doriv. Gr. a. without Kalypter a covering
Acanthia. Lat. in Fam 3. Acanthidae. Doug p 509. Burm p 253. Westw. Syn. (Lat.) p 119. }
" Schr. Lat. (testa Say 1. 359) " Doriv. acantha a thorn or prickle. }
Acanthidae. Leach. Fam 2. of Sect 2. Aurocoris. Westw 2.465. & W. Syn p 119. also fam 3. of Sect 10. Acanthoc-
-corina. Doug. 37. 509 &c.
Acanthides. Group 1. Tribe 5. Lecticolae. Amyot. p 310.
Acanthocephalia. Lap. (Syn. Diator. Anisoscissi. Metapodus. Rhinuchus.) Burm. 333 Doriv
{ Gr. acantha a thorn & kephala head }
Acanthocorides. Group 2. or Race 3. spiny ronles. Amy. 311. . . Doug Gr. acantha a thorn & kots' bug
Acanthosoma. Curtis. Genus 2. of fam 10. Scutellidae. Westw. Syn. 124. Gr. acantha & soma body.
Aceratodes. Amy & Serv 160. (Coniscuti.) Edessa. Lat. . . Doriv Gr. a. pru. or without. keras. horn.
Acetropis. Fieb. in fam 3. Muridae. Douglas 240. . . . Gr. ake, sharp & tropis, keel or ridge.
Acinocoris. (Fahm). Genus 16. in fam 1. Rhytidochromidae. Doug 27. Gr. a. without. komos noise.
Acompus. (Fieber). Genus 16. in fam 1. Rhytidochromidae. Doug 27. Gr. a. without. komos noise.
Actonus. (Burm). 327. Genus 21. of fam 7. Coreidae. Burm. . . . Gr. aktor. a lector. Agath. ?
Aelia. (Burm). 356. Genus 7. of fam 8. Scutellidae. (Burm) Westw. Syn 123. (Lat) Amyot 133. Doug & Lat }
Aeliidae. Fam. 5. Douglas. Sect 1. Scutellina. Doug 14. 68. Aelius. a name given to Jerusalem. . . .
Aelididae. (John), Genus 2. in fam 5. Aeliidae. Doug 14. 70.
Actites. Hall. (Syn Cydnus. Lat) in Songasouti. Say 1. 343 & 2. 262. Gr. aithros black
Aethus. Hall. (Syn Cydnus. Lat) in Songasouti. Say 1. 343 & 2. 262. Gr. aethos an eagle & Rhin. beats.
Aethorhinus. (Fieb). Genus 1. in fam 7. Phylidae. (Ceratina) Doug 346. . . . Gr. aethos exomo to embellish. adorn
Agalleates. (Fieb) 321. Genus 2. in fam 13. Capsididae. Doug 426. . . . Gr. agello exomo to embellish. adorn
Agnosoma. Lap. Burm 388. (Syn. Iugonosoma. Lat) Fam 8. Scutellidae. Amy 45. Long. scut.
{ Gr. a without. gonia angle & some body
Agaphyta. Guen. Genus 5. of Fam 8. Scutellidae. Burm 353. Amy. 162. fr. agapao to love. phyta a plant.
Ulydidae. Fam 5. of Sect 2. Coreina. Doug. 18. 143. Doriv unknown to Amy. but alio (var?) to wender (Agasi)
Alydidae. Group 2. of Race 1. Lincornes. Amyot. 225
Alydes. Lat. Baum. 323. Genus 18. of Fam 7. Coreidae. Burm. Amy. 225. Westw. Syn 123 Doug 143.
Amaurus. Burm 349. Genus 1. of Fam 8. Scutellidae. Burm. Doriv. Fr. amaruce to darken. or obscure.

- Amblytylus*. Fiel. 324. Doug. 388. in fam 11. Oncotylidae Derw. Gr. Ambly blunt? + tylus a bump or swelling?
- Ambrysus*. Stab. in fam 2 Pedicaptidae of Amyot.
- Allectomus*. Fiel. 303 & 369 in Bicelluli. Amyot.
- Agramma*. Westw. Syn. 120. in fam Agrammidae Doug. 262. & Derw. a without. gramma a line or written mark
- Agrammidae*. Fam 1 of Sect 6. Lingidini Doug 23. 262.
- Amelobela*. Insects having an incomplete metamorphosis. In Derw. a without metabolis. change.
- Amnestus*. Fall. see Lydus spinifrons Say 2. 263. in Longisetae & Derw. amnestos. forgotten.
- Amphicoris*. L. Sp. see in fam 1 Hydromici of Div 2 Geocoris Burm. 208. Derw. Gr. omphi around or on both sides & Koris bug
- Anasa*. Amy. 209. (Syn. Corvus. Gonocerus &c) in fam 2. Supericornes. Am. Derw Sanscrit anata without a nose.
- Anelytrum*. Lap. Burm. 327. (Syn of Actonus Burm. . . . & Derw ana without elytron a wing cover.)
- Anurus*. Curtis. Lap. Burm. 253. Genus 4 of fam 4. Membranacei. (Burm). in fam 6 Tingidae Westw. Syn 120 (aradus. Fab. Westw) Amyot 306. in fam Dactylostri. & in fam 1 Anuridae. Doug. 267.
- Anuridae*. Fam 1 Sect 8. Corticolina Doug. 27. & 267. Derw. a without neuron a nerve.
- Angulosci*. Race 1. of Tribe 1. Osbiscuti Amyot 16. & 24. Derw angulosci. having angles.
- Anioscelides*. Group 1. of Race 1. Linicornes Amy. 217. . . . Derw anios. unequal. skeles (joints) leg.
- Anioscelis*. Lap. Syn of Coreodes. Burm 306. fam 7 Coreodes.
- Anioscelis*. Burm. 331. Genus 25. of fam 7. Coreodes.
- Anioscelis* Lat. Amy. 217 in fam Supericornes (Syn Leptoglossus.)
- Anostrops*. Fiel. in fam 11 Oncotylidae Doug. 384. Fam 5. Bicelluli. Amy. Derw. Gr. anostros higher. ops sight.
- Anthocerus*. Beauv. (Syn of Crinocerus) Genus 14 in fam 7. Coreodes Burm. 318. Derw. Gr. anthos a flower & keras horn
- Anthocoridae*. Fam 2 of Sect 10 Anthocorina Doug 37. 490. Derw anthos a flower. & Koris a bug
- Anthocorides*. group 3. in fam. 3. Insecticornes Amy. 262.
- Anthocorina*. Sect 10. of Geodromica Doug. 36. & 483.
- Anthocoris*. Fall. in fam 3 Insecticornes. Amy. 262 Burm. 288 Westw. Syn 122. Douglas 494.
- Aphanus*. Lap. (Syn of Rhyparocharinus Hahn Westw. syn. 122. Dow. Gr. a without phaine to lighten. from the absence of supposed luminous cephalic prolongation. see Aphana in Homop. Amyot. . . .)
- Aphelochirina*. Sect 1 w Subdi 2 Aquaticia Doug. 44. 577. Derw Gr. aphelos smooth cheir hand. ?
- Aphelochiridae*. Fam 1 of Sect 1. Aphelochirina Doug. 44. 577.
- Aphelochirus*. Westw. Syn 119. Genus 1 in fam 2. Acanthidae Westw. Syn 119. & genus 1 in fam 1. Aphelochiridae Doug. 577.
- Apionerides*. Group 1. in Tribe 3. Conicipites Amy. 350. Derw Gr. apios long or pear shaped. meros. thigh
- Apionerus*. Burm. Genus 9. of Fam 3. Reduvini. Burm 230. & Amyot 351 in fam. Nudirostri
- Apocremnus*. Fiel. 320. Doug 403. in fam 12. Psaltidae (Bicelluli) Derw Gr. apokremnos steep.
- Aptus*. Hahn. (Syn. Nabis Lat) Westw. Syn 120. Derw aptes (adprehensus) taken hold of or caught. Agas.
- Aquablia*. Subdiv 2 of Div 2 Cyprhocerata Doug. 44. 577. Derw Lat. aqua. water.
- Aradidae*. Fam 2. Sect. 8. Corticolina Doug 27. 269. Derw aradus. name of an ancient town in Syria. Amy. or arados a rumbling in the stomach (hurritus) Agas. }
- * *Aradides*. Group 2 Tribe 4 Corticolae. Amy. 307.
- Aradus*. Burm. 225. Genus 7 of fam 4 Membranacei. & Amyot. p 307. in fam 6. Dactylostri. Westw. Syn 120
- Aradus*. Fab. Doug. 296.
- Archimerus*. Burm. 321. (Pachymeria. Lap) genus 16 of Fam 7. Coreodes Burm. Amy 197 Supericornes
- Derw arkte principally? meros thigh ?
- Arenocoris*. Hahn. Genus 3 w fam 9 Coreidae Westw. Syn. 123. (Syn of Alraetius Lap & of pseudophlebius. Burm. 308. Derw arena sand & Koris bug)
- Arilus*. Hahn. Genus 7 in fam 3. Reduvini Burm 227. (Syn Pionotus & Reduvius) in fam. Nudirostri. of Amyot. . . . Derw Proper name Agassiz.
- Arma*. Hahn. Amyot 64 (Syn Pedius) Derw. arma arms weapons.
- Arvelius*. Spinola. (Syn. Taurocerus) Amyot. 151. Fam 1. Longisetae. Derw anagram or balerius.
- Asopidae*. Fam 8. Sect 1. Scutellina Douglass. 15. 88 Derw unknown to Amyot - proper name Agassiz
- Asopidae*. Group 2. Race 1. Spissirostris Amyot 77.
- Asopus*. Burm. 377. Genus 18 of fam 8 Scutellini (Burm) Doug 73.
- Aspongopus*. Lap. Burm. 351. Genus 3 of fam 8 Scutellini Burm. Amy 173. . . .
- Derw Gr. a without. spoggios sponge. & pus foul.
- Aspidotoma*. Curtis'. (see Piesma St. Targ & Serv) Westw. Syn 120. Derw Gr. aspis a shield & time a joint segment. agas }

- Astemma*. Lat. Amy. 284. a genus in Fam. Bicelluli. Amy 284. (Syn. *Briscones*. *Cnemodus*, &c.)
Hestia Syn. 121. in Fam 7. *Capsidae*. Deriv fr. a without, stemma ocelli (Amy?) or insula mitre (Agass?)
Astennides. Group 2. Fam 5. Bicelluli. Amyot. 283.
Atelocerus. Lap. Burm 361. genus 4. of Fam 8. *Scutati*. Burm. Amyot. *Songiscutu*. Deriv fr. atelles imperfect. *Kerashon*.
Atrachtomus. Fab. 377. genus in Fam *Capsidae*. Doug. 435. Fr. atractos. a spindle. & tome, a stump or cut end.
Atrachthus. Lap. Burm 343. Ge. us 33. of Fam 7. *Coreodes*. also see *Arenocoris*. Hahn. & Amyot 209.
Attus. Hahn. Burm 277. genus 5. of Fam 5. *Capsini*. Burm. (Syn. *Phytocoris*) genus 7 of Fam 7.
Capsidae. Hestia Syn. 121. . . . Deriv Proper name. Agass.
Augocoris. Burm 396. genus. 32. of Fam 8. *Scutati*. Burm. Amy (Songiscuti) 36. Deriv fr. auge, light or brightness
 & Ronis, a bug. . . .
Aulaconostethus. (Uller) (Syn. *Telyra*, *marmorata*. Say 1. 310. in Fam *Longiscuti*: deris. fr. aulakizo. suko to plough
 or make furrows.
Aurocoris. Hestia 2. p 436 (see *Geocoris*. Burm.) Sect 2. Hestia, containing the *Land bugs*. Fr. aura. air & Ronis, bug.
Arinecera. Steph. Hestia Syn. 121. (see also *Harpocera*) Deris. Fr. akinos, a kernel or stone of a fruit. & Ronas.
 horn. Agassiz (or axine an axe?)
Banasa. Stål (See also *Pentatomidae*). Fam *longiscuti*. Amy. Deriv Banasa. a city of Mauretania. behar stupis
Bekares. Amyot. (Syn. *Apionerus*. Burm. *Reduvius* Fab. 81) in Fam 7. *nudirostris*. Amy 352. Deriv Hebrew.
Bellocoris. Hahn. (*Eurygaster* Lap) genus 5. of sub fam 2. *Scutellerides*. Hestia Syn. 124 (Telyra Fab) Burm 398.
 (Pachyconus) Burm. 391. . . . Deris. belleus beautiful. Ronis bug.
Belostoma. Lat. Amy 427. Hestia 2. 462. in Fam *pedicapti*. of Amy. Deriv fr. belos a dart. & stoma mouth.
Belonocheilus. Uller. (*Lycaeus numerous*. Say 1. 251. Syn.) Fr. Deriv. belos, a dart or arrow. & cheilos. lip or trunk.
Berytidae. Fam 2. of Sect 3. *Berytina*. Doug 19. 149. Deriv. Beyrouth a town in Syria ?
Berytina. Sec 3. of Subdiv 1.. *Geodromica*. Doug. . . .
Berytus. Fab. Burm. 313. Amyot. 232 Doug 149. (syn. *Neides*) in Fam. *Supericornes*. Amyot
Bicelluli. Fam 5 of Sect 1. *Geocoridae*. Amyot 37. 275. Deriv. Lat. having two cells.
Bigemni. Fam 1. of Sec 2. *Hydrocoridae*. water bugs. having 2 ocelli. Amy 50. 423. Deriv. Lat. having 2 ocelli
Blissus. Klug. Genus 7 of Fam 6. *Lygacodes*. Burm 296. Deriv. blissu to cut the comb of bees?
Brachycoleus. Fab. 305 & 347. Bicelluli. . . . Deriv Brachys. short. Koecos, sheath?
Brachyrhynchedes. Group 1. Tribe 4. *Corticidae*. Amy 303 Fr. Cerco Brachys. short rynchus. snout.
Brachyrhynchus. Lap. Burm 254. Genus 5 of Fam 4. *membranacei*.
Brachystelus. Muls. Genus 7 of Fam 2. *Anthocoridae*. Doug. 505. Deriv fr. brachus. short. & stela, a post or pillar.
Brachystiora. Fab. 300. 347. Bicelluli Amy. Deriv brachus short. & steira. a keel?
Brachylopus. Fab. . . . " " " " " tropis, a keel?
Brevicipites. Tribe 4. of Fam 7. *nudirostris*. Amy 47 & 381. Deriv. Lat. brevis. short & carus. head.
Brevicornes. Tribe 9. of Fam 7. *nudirostris*. Amy 49. & 406. (Example *Pelagonus*) Deriv. Lat brevis. short & cornu. horn.
Brevirostris. Race 4. of Tribe 2. *Conisculi*. Amy 27 & 155. Deriv. Lat. brevis. short & rostrum beak.
Brochymena. Amy in Fam 1. *longiscuti*. Amyot 106. . . . Deriv brochos (main) a ring or crest of mice. & umen membrum.
Bryocorisidae. Fam 1. in Div 1. *Unicelluli*. Sect 9. *Capsina*. Doug 28. 276. Deriv Bryos. loess moss. & Ronis. bug. Agass.
Bryocoris. Fam. (See *Astemma*. Genus 4 in Fam 7. *Carsidae* Hestia Syn 121) *Bryocoris*. in Div 1. *Unicelluli*.
 section 9. *Capsina*. Douglas. 276.
Byrsopteron. Spin. in Fam *Phylidae* (*Carsina*) Doug. 254. Deriv. Burso. a purse or sac. & pteron wing..
Coccigenina. Sec 4 of Subdiv 1. *Geodromica*. Doug. 20 & 186. (Coccigenae. Amyot.) locus Lat coccus brim
Calothristes. Burn 324. genus 19. of Fam 7. *Coreodes*. . . . Deriv fr. kalobos short?
Callidea. Lap. see *Callidea*. Burm. 393.
Callidea. Burm. 393. genus 30. of Fam 8. *Scutati*. (*Callidea* Lap.) Amy 31. in Fam *longiscuti*.
Calocoris. Fab 305. *Catus*. leuis. Kalos. beautiful. Idea. form or aspect.
Calocoris. Fab 305 (*Catus*) Fam. Bicelluli Amy & Kalos. beautiful. Ronis. bug.
Caloptenatus. Doug. Genus 3. in Fam 1. *Rhyzocochroidae*. Doug 171. Fr. Kampto to cover or hide notes as with
Camarostidae Fam 8. of Sect 9. *Capsina*. Doug 30. 358. . . . Deriv fr. Kamara. an arched vault & notos back?
Camarontulus. Fab. 322. in Fam 8. *Camaronotidae*. Doug. 360.
Camptobrochis. Fab 304. 365. in Fam 14. *Lycidae* Doug 447. in Fam 5. *Decubiti*. Amyot.
 & Deriv fr. Kampte. to curve or crook. trox. a snail. neuris.
Campyloneura. Fab 309. (*Capsina*) Doug 327. (Syn. *C. vitripennis* Say 1. 360) Deriv fr. Kamprys. curved. neuron. a nerve.
Campylosticta. Fab. Genus 4. Fam 2. *Singidae* Doug. 257.
Canopus. Fab. Burm 383. genus 19. of Fam 8. *Scutati*. Burm. Hestia Syn. 121.
Canopidae. Group 3. Race 2. *Globulosi*. Amy 70. *longiscuti*.

- Canalirostri*. Race 5. of tribe. 2. *Coniscuti*. Amyot 29 & 181. Deriv. *Canalis*, a channel or groove. *rostrum*, beak.
Capsidae. Fam 13. of Sect. 9. *Capsina*. Douglas 32. 423. Deriv. Lat. *Capse* a chest or box. ?
Capsides. Group 2. of fam 5. *Bicelluli*. Amy 278.
Capsina. Sect. 9. *Geodromica*. Doug. 276.
Capsini. Burm. Fam 5. *Cecidovae*. Burm 264.
Capsus. Burm. 273. Feb 307. genus 3 of fam 5. *Capsini*. I Aug (Tab) 461.
Cardiastethus. Feb. genus 2 of fam 2 *Anthocoridae*. Douglas 507. Deriv. Gr. *Kardia*, heart. & *stethos*, breast.
Catoplates, Spin. Syn of *Tingis* Tab. Westw. Syn. 120. Gr. Deriv. *Katos* below. *pistatis* broad.
Catorhintha. Stål. (*Metastemma*. Amy. 327) *nudirostris*. Deriv. Gr. *mota*, below. *rhintha* nosed. ?
Cecigenae. Fam 4 of Sect 1. *Geocorisae* Amyot 38 & 265. (see also *coccinellae*)
Centroproctus. Hahn. Burm. 353. (Syn *Edessus*. Tab) Deriv. *Centron* a needle or point & ?
Ceraleptus. Costa. genus 8 in fam *Coccoidea*. Douglas 127. Deriv. Gr. *Heras* horn & *leptos* thin.
Ceras copus. Heinecken, (Emesodema) Spin. Westw. 2. 473 (aliied to *placoria*) Deriv. *keras* a horn & *Kopis* a crown.
Cerato combidae. Fam 4 of Sect 10 *Anthocoridae*. Douglas 57. 513. Deriv. Gr. *Keras* a horn & *Komis* a stroke of cloth?
Cenbus. Hahn. Burm 389. (*Lygaceus* Tab) genus 20 of fam 7. *Cenodes*. Burm. Deriv. proper name.
Charagocheilus. Feb. 309. in Fam 14 *Lycidae* Douglas 445. In fam 5 *Bicelluli* Amy. Deriv. Gr. *cheruchs* notch { & *Heilos* margin }
Charisteres. Lap. Amyot 210. Burm. 316. (Syn *Coreus*) in fam *Saperecornes*. Amy. Deriv. Gr. *Karisteros*. very graceful. (gratior agas)
Chelinidea. Uhler in Fam 2 *Sapericornes* Amyot. Deriv. *Chelys*, a tortoise &. *Ideas*, arm.
Chlaenocoris. Burm (Tetra Tab) genus 20. of Fam 8. *Scutati*. Burm 383. Amy. Longiscutell. p 36 {
 Deriv. Gr. *Klaina* a manel & *Koris* a bug }
Chlamydatus. Curtis (Capsus Hahn) Linnaeus 3 in, 5 in 7 *Capsidae*. Westw. Syn. 121. Amy 285 in *Bicelluli*.
 Deriv. Gr. *Klamas* a mantle ?
Chlorochroa. Stål (Pentatomidae, Burm) in fam 1. *Longiscutell* Amyot. Deriv. Gr. *chloros* green *Chroa* skin.
Chondrocera. Burm 316. *Cenodes*. Syn of *Homocerus*. Gr. Deriv. *Chondros*, cartilage. *gristle*. & *Keras* horn.
Chorosoma. Curtis. genus 1 of fam 3. *Chorosomidae*. Douglas 139. & genus 4 of fam 7. *Cenodes* Westw
 {Syn. 123. (*Rhotanoides* Schil.) Amyot 231 in fam *Suturali*. Deriv. Gr. *Koros* (char) chorus or choir.
 - & *Soma*. 106. Amy p 231.
Chorosomidae. Fam 3. of Sect 2. *Cenidae*. Douglas 17. 130.
Cimicus. Lap. (see *Siarodes*. Burm) Fam 3 *Pedurini*. Burm. 237. Deriv. *Kimber* a kind of warp? (sordide am)
Cimicus. Hahn. Burm 245. Genus 26. w/ Fam 3 *Pedurini*. Deriv. *Kimbe* cymble a kind of boat? Agas.
Cimex. Tab. genus 12. Burm 364 w/ fam 8 *Scutati*. Westw. (Linnaeus) Syn. 120. Deriv. Lat. *cimex* a bug.
Cimicidae. Westw. 2. 474. Fam 2. of Sect 2. *Aeroconida*.
Cimicidae. Lap. see Fam 4. *Membranacei*. Burm.
Cladocoris. Hahn. Syn of *Acanthosoma*. Curtis. Westw. Am. 124. Deriv. Gr. *kladon* bed or couch & *Koris* bug. ? or *klino* to incline ?
Cnemodus. (H Sch) (Syn *Asteroma* Tab) in Fam 5 *Bicelluli* Amy 283. Gr. Deriv. *Knemodes*. well wiggled. Agas.
Coenus. Dallas. (Pentatomidae. Lap) in Fam 1. *Longiscutell* Amy. Deriv. name of one of Alexander's Generals, or *Koinos* to suffice.
Collicoris. Hahn. (Syn of *Coranus* Curtis) Westw. Syn. 120. Deriv. Gr. *Kolles* glue & *Koris* bug. ?
Coniciphores. Tribe 3 of Fam 7. *Nudirostris*. Amy 46 & 350. Deriv. Lat. *conus* a cone & *capit* head.
Coniscuti. Tribe 2 of Fam 1. *Longiscutell*. Amyot 19. & 72. (*Pentatomites*, Lap.) Deriv. *conus*, a cone & *scutum*, shield.
Conometopus. Feb. 304. 347. *Bicelluli* Amy. Deriv. *conus* a cone & *metopon* forehead.
Conophintidae. Group 1. in tribe 5. *Cyindriciputes*. Amyot 383. Deriv. Gr. *Konos* a cone & *phus* navel. nose.
Conophorus. Lap. Amy 383. Burm 245. in Fam 7. *nudirostris* Amy.
Conostethus. Feb 318. in Fam 11. *Oncolytidae* Douglas 397. & in Fam 5 *Bicelluli* Amy. Deriv. Gr. *Koris* a cow. & *stethos* breast.
Copius. Thunb. Burm 329. Genus 24 w/ Fam 7. *Cenodes*. Deriv. Gr. *Kopios* a small ear. ? w/ doublets.
Coplosoma. Lap. genus 1. of subfam. 2. *Scutelleridae*. Westw. 2. 464. W. Syn. 124. in *Longiscutell*. Amyot 65.
 Deriv. *Koplo* to cut. *soma* body.
Coranus. Curtis. Genus 3. of Fam 7. *Pedurini*, w/ Sect 12. *Pedurinia*. Douglas 560. *skoala* h. shell. *carina* ?
 Deriv. Gr. *Koros* no to hurt.
Coneidae. Westw. 2. 452. Syn 123. Fam 7. or Sect 2. *Eurocorus* & Fam 1. of Sect 2. *Cenidae*. Douglas 17. 109.
Coneides. Group 1. of race 2. *Noedicornis*. Amyot 232. Deriv. Gr. *Koris* a bug.
Cenidae. Sect 2 w/ Subs 1. *Geodromica*. Tab. Douglas 16.
Cenides. Lap. see Fam 7. Burm. 305 &
Cenodes. Fam 7. Burm. 305 &
Cenous. Tab. Amyot 237. Douglas 117. Westw. Syn 123 (Syn *Orasa* H) Gen. Fam *Longiscutell*. Amyot.
Cenous. of Burm. 309 (Merocoris Hahn) is genus 5 in Fam 1. *Cenoides* Burm.

- Doryctocephalus*. Lep. Genus 13. Burm. fam 8. Doryctocephalus. Amy. 370. & in Gasterostri. to worn & scratch. Kephale the head
- Dysdercus*, Amy 272. Pyrrhocorids. Fall. Amyot 265. in, am 4. Cicindelidae. Amy 272. & see also Burm 283. { also syn of *Capsus concavatus*. Say 1. 338. n. Doris der bad dormo, to sit. as it has no eyes.
- Dysodius*. Lep. Lep. Genus 6. or fam 4. Membranacei. Burm 255. Amy 364. Gasterostri. & *dysodea* a bad
- Ectirostri*. Fam 6. of Sect 1. Geocoridae. Amy 37. 285. Loris at ductus a duct or groove & rostrum beam.
- Ectrichodia*. Lep & Scr. Amy. 373 in fam 7. nudirostri 4. Loris Ek of trich hair. from its hairy antennae.
- Ectrichododes*. group 3. or tribe 2. Spongipat. nudirostri. Amy 4. 342
- Ectrichotes* Burm 237. See *Ectrichododes* Lep. " Scrr. Amy 343.
- Edessa*. Fab. Burm 353. Genus 6. q. am 8. Scutellati. Burm. Amy 103. n. am 1. Songiscuti. - new proper name
- Emesa*. Fab. Amy 393. Burm 223. Genus 1 fam 3. Oleuvini Heito syn 2. 272. in, am 7. Amy. 393. { nudirostri. Loris Proper name.
- Emesides*. group. in Tribe 6. Longicori. Amyot
- Emesodema*. Spin. (See *Cerascopus*. *Hecinechus*) Heito 2. 175. Amy. 395. named to *Hecinechus*. ex. ram 7. { nudirostri. Amy. Loris Emesa. 4. dermis beam.
- Enoplos*. Amy 208. Genus 2. in, am 1. Cocicidae. Doug 111. inornata. Amy. Loris Gr crochis armadillo, etc?
- Epiceridae* of Uhler. equivalent to *Supernicetes* of Amyot. Loris Gr Epi above. Keras the horn. or antennae.
- Eremocoris*. Syn *Pamerla* pra or Say 1. 333. 4. Loris cremer desert Koris bug.
- Eroticoridæ*. Fam 10. or Sect 4. *Capsina*. Doug. 471. Loris Gr eross. wool. & Koris. bug.
- Eroticoris* Doug 471. in, am *Eroticoridæ*. (*Capsina*)
- Eusagorus*. Burm. See *Evagorus*.
- Eumerus*. Hug. (see genus 18 *Torates*. Scrr. in Burm p 239, 7th n, am 3. *Peltavini* Burm. Gr eumell. mero, & thigh.
- Eurycephala*. Lep. (see *astemma* Lat.) genus 4. in fam 7. *Capsidae*. Westw. Syn 181. Scrr. Gr eurus. broad. & Kephale head
- Eurycerata*. Lep. Burm 258. genus 9. of fam 4. Membranacei. Amy. 293. Gasterostri. Gr eurus. large. Keras horn.
- Eurydema* Lep (Strachia Hahn) genus 4. q. am 10. *Scutellidae* Westw. Syn 124. Amyot 125. Songiscuti
- Eurygasteridae*, fam 4. of Sect 1. *Scutellinia*. Doug 139. 66. { Loris. 4. Eurus. large. dermis. body.
- Eurygaster*. Lep. Amy. p 157. in fam 1. Songiscuti. & in Douglas p 64. Loris Gr eurus large. gaster belly.
- Euryophthalmus*. Lep. sa genus 11 (Largus. Hahn) q. am 6. *Sygaodes*. Burm 281. Gr Eurus. croaa or large } ophthalmus q. .
- Eusarcoris*. Hahn. Syn of *Asopus*. Burm 377. genus 18. q. fam 8. *Scutellati*. Burm. q. of *cimex* Lat. { Burm 364. *Eysarcoris*. Gr. Loris eu sarkos well fleshed. or fleshy. Gr Koris bug.
- Euschistus*. Valv. (Pentatom. Say.) in fam 1. Songiscuti. Amy. Loris Gr Euschistos easily split, according to head?
- Eusthenes*. Lep. syn of genus 3. *Clytongopus*. in fam 8 *Scutellati*. Burm. Loris Gr Eusthenos. strong, firm.
- Euthochtha*. Hahn (Ceratocerus Burm 381.) in, am 2 *Saburicorns* Amyot. Scrr. Gr euthus straight } togkos proverence
- Euthyrhynchus*. Dallas. (*Asopus* Burm. 377. in, am 1 Songiscuti Amy. Loris Euthus. straight & tugchor back.
- Evagorus*. Dallas. (See *Cosmopepla* Stål) sa also *Evargorus*. Burm. Loris. said to be a proper name
- Evargorus*. Burm 226. Amyot 363. see also *Ligulellus*. Amy. 370. in fam 7. nudirostri.
- Eysarcoris*. Dallas (See *Cosmopepla*. Stål & *Eysarcoris*. Hahn. alveolaris Hahn. 74. Scrr. am 1. Songiscuti. or Amyot. Loris eu sarkos. well fleshed or fleshy. Koris bug. one curiously goes on derivatives as "beautifull skin bug"?)
- Fitchia*. Stål. in fam 7. Nudirostri. Amy. Loris prop named from Dr Fitch & new Gr. & C. & G.
- Galeatus*. Curtis. genus 7. of fam 6. *Singulidae*. Heito syn 121. Loris Latin galeatus furnished with a helmet.
- Galquidae*. Fam 1. of Section 2. *Aurocoridae*. Heito 2. 456. Loris Latin name of a bird (plain) prop name Agassiz?
- Galquidæ*. only group in fam 1. Cor 9. *Bigenmi*. Amy. 423.
- Galgulini* Fam 3. q. Div 1. *Cydnocorids*. Burm. 201.
- Galgulus*. Lat. Amy. 424. Burm 201. Heito 2. 463. & syn 119. in fam *Biginni*. Gr. & L. & Sygal.
- Galgulæ*. Amy. 68. a syn of *Covimelaena altra*. Loris gal. sphaericus & gupt body. (not in Dictionary?)
- Gargania*. Fiel. (Stål) syn of *Capsus pusiformis*. Say 1. 344. Loris Garganius. a mountain or prairie onlay } in Ururu.
- Gastrodes*. Heito. Genus 1 of Fam 1. *Rhaphacromidae*. Doug 160. Loris Gr gastrodes hunciu a big belly.
- Gastrodes*. Heito. (Platygaster Schilb) genus 5. q. fam 3. *Lycocidae*. Heito syn. 122. Doug 160.
- Geocoris*. Division 2. of *Heteroptera*. Burm 208. Loris Gr carth. & Koris bug.
- Geocoris*. Fall. See genus 7. *Ophthaimicus*. Hahn. in, am 5. *Lycocidae*. 1. Burm 271.

Geocorisae. Section 1. *Heteroptera*. Amyot & Serville

Geodromica. Subdiv 1. of Div 1. *Gymnacera* Doug. Deriv Gr. ge. earth. dromos. runner.

Gerridae. Group 1. in fam 8. *Ptolemy*. Amy. 410.

Gerris. Fab. Amyot 414. Burm 223. Westv Syn 119. genus 4. in fam 3. *Cydnidae*.

Ptolemy. Amyot.

Globicardiidae. Fam 9. of Sect 9. *Capsina*. Douglass 31. 362. Deriv. Lat. Globus, a globe. & caput heart.

Globiceps. Ency. Method. see *Phytocoris*. Fab. Genus 2. q. Fam 5. *Capsina*. Burm. p 265. *Philophorus*. Hahn. Westv Syn 121.

Globiceps. Lat. Amy. 283. Doug 362. in fam *Globicardiidae* Doug. (see *Capsina*). Fab. 319.

Globoconus. Hahn Syn q. *Thysanocoris*. Schön. Burm. 383. Deriv. Lat. Globus, a globe. & Konus, a bug.

Globulosi. Race 2. of Tribe 1. *Oreocoris*. Amy. 18. 60.

Gonocerus. Lat. Amyot. 293. Burm. Genus 7. in fam 7. *Coccoidea*. Burm. 310. (Clerasa) Amyot. 309.

Doug 113. & in fam 2. *Supericorna*. Amy. 238. Deriv. Gr. gonia an angle. & keras, horn or antennae.

Graphosoma. Lap. Genus 6. of Subfam 2. *Scutellacrididae*. Westv Syn 126. *Trigonosoma*. Burm. Westv. Burm 386. Amyot. 53. *Longiscutellum*. Deriv. Gr. grapho, to write. & soma, body.

Gymnacera. Fab. & Doug. Div 1. of *Heteroptera*. *Heteroptera*. Doug. Deriv. Gr. gynnes, concealed. Keras, Keratinus. Fab. 318. 357. *Bicelluli*. Deriv. Gr. aetos, eagle. rhinos, beak or snout.

Habrobaenus. Esch. Amy. 11. Burm 208. Genus 1. q. in fam 8. *Habrobaenidae*. Burm. in fam 8. *Ptotres* Amy.

{Deriv. Gr. hab to brood & baino to wall}

Halticocoridæ. Fam 19. q. Sect 9. *Capsina*. Doug 30. 478. Deriv. Halticus, good at trapping. & Keras, lung.

Halticocoris. Doug 30. 478. in fam 19. *Coccoidea*. & in fam 5. *Bicelluli*. Amyot.

Hastatus. Hahn. Burm. Genus 6. in fam 5. *Capsina*. Burm 277. (Burm. Faber 312, see also *Astomata*. Lat. genus 4. in fam 7. *Coccoidea*. Hahn. Syn 121. & cannot in fam *Bicelluli*.

Hatelyus. Group 1. Hahn 3. *Nudipedes*. Amyot. *Longiscutellum*. 103. Deriv. proper name of a river in Asia minor.

Halyds. Burm. 362. Genus 10 of fam 8. *Scutellidae*. Burm.

Halyds. Fab. Syn of *Microcoris*. Burm 368. q. of *Biochymona*. Amyot. 108 in fam 1. *Longiscutellum*.

Hammatocerus. Burm. genus 14. Fam 3 *Reduviae*. Burm 235. Westv 2. 474. *Rhopulus*. Schill Amy. 245.

{Deriv. Amma, a knot or knot. & Keras horn. . . .}

Harmastes. Burm. Genus 3. of fam 7. *Coccoidea* Burm. 317. & Syn of *Microcoris*. Amy. 263. Deriv. Gr. harmo a

Harpoceridae. Fam 15. of Sect 9. *Capsina*. Doug 34. 468. Deriv. Gr. harp, a sickle. & Keras horn. {governor}

Harpocerides. Group 2. Tribe 3. *Conicula*. Amy. 355.

Harpocera. Curtis. genus 8. of fam 7. *Capsidae*. Westv Syn 121. Fab. 317. Douglas 468. in fam 3 *Herpoceridae*.

Harpactor. Lap. Amyot 364. Burm 227. genus 8. in fam 3. *Reduviae*. & in fam 7. Amyot. in *dirasite*

Gr. Doris Harpactor a robber

Hebridae. Fam 1 of Sec 7. *Hebrus*. Lap. 265. Burm *Hydromini*. 208. Deriv. Gr. Hebrus, a river in Thrace.

Hebrides. Group 1. Tribe 2. *Rhipicotes*. Amy. 293.

Hebrina. Sect 7. of Subdiv 1. *Geodromica*. Doug. 265. & 25.

Hebrus. Curtis. Amyot. 293. Burm. Genus 5. in fam 1. *Geodromici*. Burm 214. Douglas (Curtis) 265.

& in fam *Ripicole*. Amyot.

Hebrus. Walk. Westv. Genus 5. in fam 3. *Lycoperatidae*. Westv. Syn 110.

Hemiptera. Heteroptera. Lat. Subor 1. Douglas 9. *Rhynchota* Heteroptera Fab. Heteroptera Westv. 2. 450. Syn. 119. Gr. Hemi, half. pteron, wing.

Hemestavis. Spin. Amyot 250. *Heterogaster*. Curtis. in fam *Infericornes*. Am. Deriv. Anagram of Theres?

Heraeus. Stål. *Pachymerus*. Lepell. & Syn. *Infericornes*. Amy. Deriv. proper name. son of Sycaon? ^{entia}

Hepa. Geoff. see *Nepa* Linna. Westv. Syn 119. *Stanatra*. Amy. 441 in fam *Pedocryptidae*. Deriv. Hepa the liver?

Heterocordylus. Fab. 316. Westv 432 in fam 13. *Psueda*. *Bicelluli*. Amy. Deriv. Eteros, dissimilar. {

Kordule, a swelling or tumor.

Heterogaster. Schill. Burm 293. genus 4. q. am 6. *Lycocidae*. Burm 1. Syn of *Cyrus*. Natur. Burm. 292. genus 2. of fam 8. *Lycocidae*. Westv. Syn 122. (Syn *Lycocetus*. Fab. *Hecito*) Amy. 257 in fam

Infericornes. & Syn of *Hemestavis*. Deriv. Gr. eteros, dissimilar. gaster belly.

Heteroscelis. Lat. syn of *Halyds*. Burm 362. In. Deriv. eteros, dissimilar. skeles, leg.

Heteroptera. Burm. Westv. Order XI. Vol 2 p 450. syn 119. Heteroptera. Heteroptera. & Douglass. &

Rhynchota Heteroptera of Faber. Deriv. Gr. eteros dissimilar or pteron wing.

Heterotoma. Lat. Burm 275. *Capsus*. Fab. genus 4. in fam 5. *Capsidae*. genus 1 in fam 7. *Capsidae*

Westv. inv 121. Doug in fam 13. *Capsidae* p 437. Amyot 283. in fam *Brassaei*.

Deriv. Gr. eteros dissimilar. come, section or joint}

Holoptilidae. only group on tribe 1. Homoceridae. Amy. 318. Deriv. Gr. olos. all. plura down, soft hair, plumage
holoptiles. Le P. Serv. Burn. 248. Genus 30. a Fam 3. Reduvii. istes 2.4-4. Heterocerus. Gray.
Holostrichidae. Group 4. a Tribe 3. Conociptidae. Amy. 376. Icrid. Gr. olos. all. thin, hair.
Holotrichius. Burn. 247. Genus 29. of Fam 3 Reduvii. Burn.
Holymenia Lat. Lap. syn of Cossid. Thunb. Gr. olos ac? monia. male or female?
Homaeus. Dallas. Pachycoris. Burn. 391. Amy. 37. in fam 1. songesculi Amy. Serv. Gr. Hornaeus. similar
Homoceridae. Group 2. a race 2. puerifontes, Amy. 202.
Homoceridae. Burn. 316. genus 12. Burn in; am 7. Coreodes.
Hoplomachus. Feb. 324. Aug. 305. in fam 11. Encyrtidae. Doug. in Picidae. Amy. Burn. Gr. Hoplomachus.
Hydrassidae. Burn. 218. (Linn. L'v.) in. Hydroveneria. Hester. Genus 5. Burn in fam 1. Hydroveneri. Udroes.
Hydrocoridae. Div 1. Burn. 186. Water bugs. Deriv. Gr. udor. water. Hydro, bug.
Hydrocoris. Sect 1. (Gen Syn 119) & var 2. 457.
Hydrocoridae. Sect 2. Amy. 50. 422.
Hydrometra. Lat. Genus 1. Fam 3. Hydrometridae. Hester. Syn 119. & Amy 397. in; am. Hydrostro. { Deriv. Gr. udor water. & in tree to measure.
Hydrometra. Feb. Burn. 209. genus 2. Fam 1. Hydrometridae. & genus 1. of Fam 1. Hydrostrom. Trilaz. Doug.
Hydrometridae. Leach. Hester. Syn. 119. Fam 3. or Sect 2. Hydrocoris. & Fam 1. of Sect 1. Hydrometrida.
Douglas 41. & 557.
Hydrometridae. Lap. Hydrodromini. Fam 1. Burn. Geocoris. Burn. 208. & only group on Tribe 7.
{ Stenopsidei. Fam 7. Hydrostroti. Amy. 348.
Hydrometrina. Sect 1. or Sublio 2. Hydrodromica. Doug. 11. of Feb & Flor. Der. Gr. udor. & dromos runner?
Hydrodromica. Sublio 2. of Div 1. Gymnociatu. Lec.
Hydrodromi. Fam 1. of Div 2. Geocoris. Burn. 208.
Hydrophilia. Kirby & Stephens. see Genus 4. Anthocoris. Fam. of Fam 6. Lygaeodes. Burn. 288. & Anticoris.
{ Nestis Syn 122. Deriv. Gr. ile wood or forest. & phile, friend.
Hydrocoris. Amy. 124. in fam 1. Longescutell. Amy. & Deriv. Gr. amen a membrane. & aricus a net.
Hydrophilidae. Doug 208. Genus 13 in fam 1. Rhyparochromidae. Doug 208. Deriv. Gr. hypno. Mass. {
Hyptilius. 328 Genus 23 in fam 7. coreodes. Deriv. hypso high. & los foot.
Hypselonotus. Hahn. Burn. 318. syn of Ameoscelis. Burn. p 381. genus 15 in fam Coreodes. Burn.
{ (Lygaeus. Lat) Deriv. Gr. Hypselonotus, having a long back.
Idiotrochus. Feb. exilis. Feb. syn of Myrmecobius. coleoptrata. Talla. Deriv. Gr. idio-troch. peculiar. Kiel.
Idolocoridae. Fam 10. of Sect 9. Capsina Doug 31. 267. Deriv. Gr. idion, an ido. & Koris bug. ?
Idolocoris. Doug 374. in fam 10. Idolocoridae. Uni Fam Bicellaria. of Amy. &
Infericornes. Fam 3. of Sect 1. Geocorides. Amy. 36. & 248. Deriv. Lat. inferus, beneath. & cornu, horn.
Ischnodemus. Feb. Genus 17. in fam Rhyparochromidae. Doug 217. Deriv. Gr. ischne, thin demas body?
Ischnorhynchus. resedae. Genus of Lygaeus. geminatus. Say 1. 330. Deriv. Amy. Deriv. ischne, thin rugos, weak.
Jaderus. Stål. haematoxoma. Burn. in supericornes. Amy. & Deriv. ?
Talla. Hahn. Genus 2. in fam 8. Aleyrodidae. Doug 89 (Syn of Aleyrus. Burn. 377. genus 18. of fam 2.
{ scutell. Burn. Deriv. perhaps from Galo, to sling or dart.
Kleidocerys. or Kleidocerys. Hester. sec. Cymus. Genus 8. of fam 6. Lygaeodes. Burn. 292. kleidoc.
{ syn. 123. Hyp of Zoreras. J. H. Burn. p 306. Genus 9. in Fam 7. Coreodes. Burn.
{ Deriv. Gr. kleis a key & koras horn.
Lebops. Burn. 279. Genus 7. of Fam 5. Capsini. Burn. Feb 316. Deriv. Gr. lebus, a handle. & op, face or eye.
Lergidae. Group 2. in fam 4. Cecidini. Amy. 273. Deriv. Lat. largi, large?
Largus. Hahn. Amy. 273. Burn. Genus 1. in Fam 6. Lygaeodes. Burn. 287.
Largus succinctus. Say (1821) 84. & Capsus. Say 1. 338.
Largus succinctus. Deriv. Lat. leclus, a bed. & coleo, to inhabit.
Lecticulus. Tribe 5. of Fam 6. Ductiastri. Amy. 41. 309.. Deriv. Lat. lectus, a bed.
Leptoconica. Lat a genus in Amy. p 289. Supericornes. Deriv. Gr. leptos, slender. & Koris bug.
Leptoconica. Burn. 224. a syn of Myrmechidae. Burn. Genus 20. in Fam 7. Coreodes.
Leptoconis. Hahn. Burn. 305. Genus 1 in Fam 7. Coreodes. (Lygaeus. Lat.) in for supericornes Amy.
Leptoconis. Stål & Guerin (misspelled of Lat) Amy. 25. in Fam 2. Supericornes. Amy.
{ leptos. slender glossa longue
Leptoptilidae. Group 1. in tribe 8. cululi. Amy. 401. Deriv. leptos, slender. & pous, foot.

- Leptopus*. Lat. genus 2. Burm. in fam 2. Tipanae. Peru Gr. leptos. slender, & pus foot.
- Leptocelis*. Lat. syn of *Amsoscelis*. Burm 331. Peru Gr. leptos. slender, & skins. e.g.
- Limnobates*. Burm 210. Genus 3. of fam 1. Hydrocoris. Burm. Genus 1. of fam Limnobatidae. Doug 575. Hydrometra. Westo syn 119. in fam 3. Hydrometridae. Peru Gr. limne, a marsh, & bos, & tus.
- Limnobatidae*. Fam 1. in Sec 2. Limnobatina. Doug 43 573. Hydrometridae. Westo. syn 119.
- Limnobatina*. Sect 2. of Sec 2. Hydrocoris. Doug 43 576.
- Linicomus*. Race 1. of 2. Trigonocephali. Amy 34 & 217. Peru Gr. linum, a thread, & cornu, horn.
- Licoris*. Fab 309. 347. Doug 449. in fam 14. Lygidae. Amy. Bicellari. Peru Gr. leco. Smooth & cornu horn.
- Lidderda*. Uhler. (Lancia. Say 1. 319. Minaloma) in fam longitarsid. Amy. Peru Gr. lidus. Smooth & derma, skin.
- Litoralia*. Sub div 1. or Div 2. Cryptocerata. Hydrocoris. Westo. Douglas 43. contains only one fam. (Pelagonius.) Westo 2.465. Amyot. 409. in Nudostri. Peru Lat. Cetus, a shore or bank.
- + *Leptoterna*. Fab in Bicellari. Peru. Leptos slender, & ?
- Litosoma*. Doug Fam Litosomidae. in capsina. Doug 334. Peru Gr. litos. smooth & soma body.
- Lobastethus*. Fab. 300. 347. Bicellari. Amy. Peru Gr. lobos, a hole. & stethos, breast.
- Longicorni*. Tribe 6. of fam 7. Nudostri. Amy 393. ex emesa. Peru Lat. longus, long, cori.
- Longiscutis*. Fam 1 of Sect 1. Geocorides Amy 15. Scutati Burm. Peru Lat. longus long scutum shield.
- Longilabris*. Lat. see fam 8. scutati Burm. 349. Peru longus & labrum lip or labrum.
- Lophocephaia*. Lat. genus 25. of fam 3. Reduvini. Burm 244. Peru Gr. lophos, a crest & cephale head. Gr.
- Lophornorphus*. Doug 298. in fam Miridae. Catesbeia. Peru Gr. lophos, a crest, & morphe, form.
- Lopidae* Uhler. Syn Caprus medius Say 1. 341. in fam Bicellari Amy. Peru gr. lora bark (cortex legas).
- Lopus*. Cahn. (Phytocoris) Burm 263. Genus 5. of fam 7. Capsidae. Westo syn 121. Doug. in fam 17. Lygaeidae. Doug 474. Capsina Doug 34 & 474.
- Lonicerus*. Cahn. See genus 17. Ecstrichotes. Burm 287. in fam 3 Reduvini. Burm. Peru Gr. coron & hong? & Kera.
- Loricula*. Curtis. see Microphysa. Westo syn 123. Peru Gr. loricula, a small breast plate?
- Loxops*. Fab 314. 347. Bicellari. Amy. Peru Gr. loxos, slanting. ops eye.
- Lyctocoris*. Cahn. Genus 4. of fam 2. Anthocoridae. Doug 478. Peru Gr. lyge darkness. & Koris, bug.
- Lygreidae*. Fam 8. westo syn 122. Peru gr. lygaios, obscure, or dark.
- Lygaeidae*. Morot 1. in fam 3. Insecocornis. Amyot 268.
- Lygaeina*. Sect 5. of Subdiv 1. Geocoridea. Doug 20. 166. fam 3. Insecocornis. Amy.
- Lygaeodes*. Fam 6 Burm. 381. Geocorides.
- Lygaeus*. Fab. Amy. 249. in fam Insecocornis. Amy. Westo syn 122. genus 1. fam 8. Lygaeidae.
- Lygaeus*. Burm. 297. Genus 11. of fam 6. Lygaeidae. Burm.
- Lygidae*. Fam 14. of Sec 9. Capsina. Doug 33. 445.
- Lygus*. Hahn. Fab 311. Westo syn. 122. genus 10. in fam 7. Capsidae. Westo syn 121. Doug 458.
- in fam 14 Lygidae. Peru Gr. lyge, darkness.
- Macrocephalides* Group 2. of in 1. Spongipedes. Amy 291. Peru Gr. makros. Large cephale head.
- Macrocephalus*. Swederus Amy 293 in fam Nudostri. Amy.
- Macrocoleus*. Fab. Doug 378. in fam 11 Oncotylidae. Amyot. in Bicellari. Peru Gr. makros. & colus sheath.
- Macrolophus*. Fab 326. in fam 10. Sclerotocidae. Doug 382. Peru Gr. makros. Large lophos crest.
- Macronotus*. Doug 20. in fam 1. Rhyparocharinidae. Peru Gr. Makros. Large notus back.
- Macropeltidae*. See Sectatana. Dougear. p 11. Peru Gr. makros. Large peltis, a shield.
- Macropedes*. Gr 4. in F 2. Spongipedes. Amy. 349. Nudostri. Peru Gr. makros, large spine foot.
- Macrops*. Burm. 232. Macropeltidamus. Lap. Genus 10. in fam 3. Reduvini. Burm. Amy 367. nudostri. Peru Gr. makros large ops eye.
- Macrophthalmus*. Lap. See Macrops. Burm 232. Peru & makros, large ophthalmus, eye.
- Malacocoris*. Fab 327. Doug 383. in fam 10. Idolocoridea. Bicellari of Amyot. Peru Gr. makros, a meadow & Koris a bug.
- Mallophaga*. (Bird lice) placed by Packard in Hemiptera although the mouth is mandibulate & not haustellate. see in Orthoptera. Peru Gr. mallos hair & phagion, i.e. cat.
- Mastys*. Amy. 318. Ptilocnemus. Westo. See Amyot in fam Nudostri. Peru Gr. chenes, mast, & hairy.
- Margus*. Lat. in fam Supericornis Amyot. Peru Gr. Margus. Mad or furious. ?
- Mecomma*. Fab. 313. 347 in Bicellari & Amyot. Peru Gr. Mecos long amma eye.
- Megacnetus*. Lap. see Genus 2. Pyrrhocoris. Fab. Fam 6 Lygaeidae. Burm 283. & Pyrrhocoris. genus 3 of fam 8. Lygaeidae. Westo syn. 122. Peru Gr. Megas large, & notus back.
- Megalonotus*. Fab. Pamera una of Say 1883 syn.

- Mesarchynchus*. Lap. syn of *Aelia*, Burm. 356. Amy. 179. *Longiscula* Lewv Gr. negro, large, rugos, snout
Megymenides. Gr 1. of Race 5. *Canalirostris*. Amy. 181. *Longisculi*; Lewv Gr. negro, large, worn, membrane.
Megymenum. Guer. Lap. Burm. 349. Syn of *Amaurus*. Burm. 349.
Melanolestes, Stål. (Pirates, Amyot 324) in fam *Nudirostris*. Amy. Lewv Gr. melas, dark. & *Cestes*, calvier.
Membranacei. Lat. Amy 40 & 295. Trile. 3. & fam 6. *Diclidrostis*. Amy. 8 fam 4. Burm. 257
 { (Ex. *Tingis*) Membranaceous.
Meneclae. Stål. *Pentatomidae*. inserted. Say 1. 317.
Menenotus. Lap. Burm. 361. syn of *Spartoceraeus*. Lewv. Gr. menos, the mean & nolos, jack.
Meroconis. Perty. Amy. 243. in fam *Supercornes*. Amy. see also *Hermestes*. Lewv. meros, the thigh & Koris bug.
Meroscoris. Burm 352. syn of *Oncomerus*. Derm. Hali. Westw. Syn. 128. in, am. *creida*.
 { 4 syn of *Coreus*. genus 5. of fam 7. *Coreodes* Burm 352.
Meropechys. Lap. Burm 322. genus 17. Burm of fam ? . *Coreodes* Burm. Lewv Gr. meros Union,
 { & pachus snout thick.
Metacanthidae. Doug. Fam 1. Sect 3. *Berytina*. Doug 145. 19. Lewv. Mela, behind, akartha, a spine.
Metacanthus. Costa. genus 1 in fam 1 *Metacanthidae*. Doug. 145.
Melapodus. Westw. Amy 192. (*Melapodus*, Amy) see also *Acanthocarhala*. in fam 7. *Nudirostris*.
 Amy. Lewv. Gr. metapodus, the forehead. & odous a tooth.
Metasternma. Amy 327. in fam 7. *Nudirostris*. Amy. 4 in fam 2. *Nabidae*. Doug. 545.
 { Lewv. Gr. meta, behind, sternma, neck.
Metatropis. Fiel. genus 2. in fam 1. *Metacanthidae*. Doug 147. Lewv. gr. meta, behind, & sternma
Myrmecolix, Bären. genus 1. Fam 1. *Microphysidae* in Sect 10 *Antaeocerata*. Doug. 483. *Supercorne*.
 { Amy. 6. Lewv. Murmidon. an Anti nest. & bios to inc.
Myrmus. Hali. 3. genus 3. in Fam 2. *Coridae*. Doug 136. *Photinus*, etc. Genus 8. Burm 32.
 { in fam ? *Coreodes*. & see *Chorosoma*. or ante, thelw syn. 123. Lewv. Gr. Marmes an ant?
Naliidae. Fam 2. of Sect 12. *Peduvinae*. Doug 39. 540. Lewv. Lat. nali, sheep. Amy. ? prot name. gas
Nali. Lat. { Amy 330. Westw. syn. genus 6. in Fam 4. *Peduvinae*, in Fam 2. Doug. *Naliidae*. 547.
 { in Fam 7. *Nudirostris*. Amyot.
Naoegeus. Lap. see genus 5. (*Xylocoris* Lap. in Fam 6. *Lygaeodes*, Burm 289. Lewv. Gr. nao, to whist.
Nauconidae. Fam 1. of Sect 2. *Nauconina*. Doug. 45. Lewv. Gr. nau, ship. & Koris, bug.
Nauconides. Group 1. in Fam 2. (or 10) *Pedirapti*. Amy 426..
Nauconina. Doug 45. Sect 2. of Subdiv 2. *equatoriae*. Doug. 4 in Fam *Pedirapti*. Amy.
Nauconis. Geoff. { Burm. Genus 1 in Fam 2. *Nepini*. Westw. syn 19. Burm 193. Ver. Fam *Nauconidae*.
 { Doug. 579. & Amy. 431.
Nauconis. Fab. see *Mononyx*. 8. Burm 201.
Neides. Lat. Amy 233. (*Serratus*. Fab., Westw. Syn. 123. 8 nov 18. in Fam *Lugaeidae*. Doug. 160
 { Lewv. unknown to Amyot & Gr. neis (misur), ignorant. Agassiz.
Nematopides. Group 1. or Race 2. *Plenifrontes*. Amy 191. *Supercornes*. Amy. Lewv. Gr. nema thread, front.
Nematopus. Lat. Burm 336. *Lygacus* Fab. genus 28 of Fam 7. *Coris* Lat. Burm Amy 192. in Fam 2 *Schenk*
Neocoris. Doug. 423. in Fam 13. *Cassidae*. Doug 423. *Brachylili* Amy. Lewv. Gr. neos, new. Koris, bug.
Neotliglossa. Kirby (undata) *Pentatomidae* Say 1. 319. in Fam *Songiscutis*. Amy. Lewv. neos. Tlasse a tongue?
Nepa. Linn. { Westw. 2. 450. & Sen. 119. *Stoecha*. Gen. 1 genus 2. in Fam 2. *Neidae*. Leach. thelw.
 { genus 2. in Fam *Ranatridae*. Doug 583. Amy. 37. in Fam 2. *Pederarti*. Lat. nepa.
 { a scorpion.
Nepa. Burm. genus 4. in Fam 2. *Nepini*. Burm. 195.
Repides. Group 2. in Fam 2. (or 10) *Pederupti*. Amy 437.
Nepina. Sec 2. of Subdiv 2. *Aquaticia* Doug 45. 531..
Nepini. Fam 2. & Fam 1. *Hydrocoris*. Burm. 193.
Nerthra. Say 1. 304 name proposed for *Nauconis*. *Stygica*. *Pedirapti*. Amy. Lewv. Gr. nerthra, 2 gods.
Nerthra. Amy 143. (*Pentatomidae*. & *Rhaetigaster*. Syn. in Fam 1. *longiscula* Amy. Lewv. *ceratiation*,
 { nerth girded with a cor.}
Rudeicornes. Race 2. of Tribe 2. *Trigonocephali*. Amy 35 & 232 (ex *Photinus*). Lewv. Lat. nodus, a node? cornu.
Notoeyptus. Burm 227. (*Peduvines*. Fab.) genus 6. in Fam 3. *Gledivina*. Burm. Amy 648.
 { Lewv. Gr. notus, back. & eypt, curved}
Nolonecta. Linn. Burm. Genus 4 in Fam 1. *Nolonectici*. Burm 190. Westw. 248. Synt. 11. genus 1 in, am.
 { *Nolonectidae*. Doug. 585. Amyot, Fam. 11. or 3) *Pederomi*. Lewv. Gr. nolus, back. & neti, to swim.

- Notonectici*. Burm. 186. fam 1. of Fam 1. *Hydrocoris*. Burm. 186
Notonectidae. Westw. Doug 484 585. fam 1. of Sect 4. *Notonectina*. Doug
Notonectides. Lat. Tab. see fam 1. *Notonectici*. Burm. 1. Group 2. in fam 3 or 11. *Pedromi*. iemy. 119.
Notonectina. Doug 48. Sect 4 or Subch 2 *Aquaticia*. Doug 585.
Notonectites. Lat. see fam *Notonectici*. Burm.
Nudipedes. Race 3. of 2. *Coniscuti*. Amy. 22. 101. in Fam 1. *Longuscute*. Ex *Pentaloma*, nudus, natus, ne, foot.
Nudirostris. Fam 6. of Sect 1. *Geocorisa*. Am 41. 8 84. Deriv. In nudus, natus, rostrum, weak.
Nysius. Dallas Doug 225. Genus 2 *Fuga*. in Fam *Intericornis*. Amy. *Nysius*, a name of Bacchus.
Ochetopus. Hahn. See *Pygolampis*. Germ. Burm 243. genus 23. in Fam 3. *Reduvini*. Burm.
{ Deriv. Gr. *Ochetos*, a channel or groove. & pus foot
Oculati. Trich 8. of fam 7. *Nudirostris*. Amy. 49. & 401. (Ex *Salda*) See *oculatus*; having eyes
Oculatina. Sect. 11. of Subch 1. *Geocromica*. Doug 38 516. *Riparia*. Burm.
Oebalus. Stål (Mormidea. Amy) in Fam 1. *Longuscute*. Amy. name of a Spartan King.
Oedancala. Amy 258. in Fam 3. *Intercornis*. Amy. Deriv. Gr. *oedos*, a swelling. *Ogkala*, the bent arm.
Odontopus. Lat. see genus 2. *Pyrhocoris* (all) of fam 6. *Lygaeodes*. Burm. 283 Deriv. Gr. *edous*, a tooth. { teeth foot
Odontoscelidae. Fam 8. Sect 1. *Scutatina*. Doug 13. 58. Deriv. In edens, a tooth. & skeles. Leg.
Odontoscelides. group 2. of Race 2. *Globulosa*. Amy. *Longuscute*.
Odontoscelis. Lep. Burm 385. genus 22. of Fam 8. *Scutata*. Burm. & genus 2. of Subfam 2. *Scutelliferidae*. *theata*.
{ Syn 124. Dougla 57. Amy of *Longuscute*.
Oncerotracheus. Stål. *Reduvius acuminatus*. Say 1. 356 Deriv. Gr. *Oktos*, a swelling. & tracheios, throat.
Oncoccephalus. Klug. Burm. 242. Genus 22. of Fam 3 (*Reduvini* Burm. Amy 386 in *ogkos* a curve & *Kephare*).
Oncomerus. Burm. 352. (Oncomeris. Lat.) Genus 4. of Fam 8. *scutata*. Burm. Amy 168. in Fam 1.
Longuscute. Deriv. Gr. *Ogkos*, a tumor or swelling. Amer. thigh.
Oncotyidae. Doug 32 & 392. Fam 11. of Sect 9. *Capsina*. Doug. in *Bicellula*. & Amy. Gr. *ogkos*, a swelling {
{ & typos the frontal ridge. ?
Oncotylus. Fiel 318-347. Doug 392 in Fam 11 *Oncotyidae* *Capsina* Doug
Opsecates. Klug. see genus 18. *Reduvius*. Burm. 234. *Hecate* syn 20. Deriv. Gr. *Opisthotors* (sere dormiens Agar).
Ophthalmicus. Hahn. Burm. 291. Genus 7. of Fam 6. *Lygaeodes*. Burm. { going late to sleep.
{ Gr. *Ophthalmos*, the eye.
Ophthalmicus. Schill. Am 260. in Fam 3. *Intercornis*.
Orbiscuti. Trich 1. of Fam 1. *Longuscute*. Amy 16. & 24. (*Scutelliferidae*. Burm) *Longuscute*. Amy.
Deriv. orbis, in orb. & scutum shield
Orthocephalus. Fiel 316. 347. Doug 429. in Fam 13. *Capsidae*. *Bicelluli*. Amy. Gr. *orthos*, straight. *cephale* head
Orthonotus. Hettig Syn. 121. See genus *Astemma* Lat. Hettig Syn. - genus 4 in Fam 7 *Capsidae*. *theata*.
{ syn 121. See also *Halticus* Hahn. genus 6. in Fam 5. *Capsini*. Burm 277. also *Proconis*.
{ in Fam 5. *Bicelluli*. Amy. Deriv. Gr. *orthos*, straight. *onotos*, back.
Orthops. Fiel 311. 347. Doug 451. in Fam 14 *Lygidae* *Bicelluli*. Amy. Deriv. *orthes* straight. *ops* eye.
Oothorina. Fiel. genus 5. of Fam 2. *Singidae*. Doug. 260. Deriv. Gr. *oithos*, straight. & *steira*, a Reel.
Oxynotides. Group 6. of race 1. *Angulosi*. Amy 58. *Longuscute*. Amy. Deriv. Gr. *oxus*, sharp acute. *notos*, back
Pachybrachius. Hahn. See *Rhypharochromus*. Hahn. Westw. Syn 122. Deriv. Gr. *pachys*, thick. *Brachion* arm.
Pachyconidae. Group 2. Race 1. *Angulosi*. Amy 34. Deriv. Gr. *pachys* thick. & *Kornis*, bug.
Pachycoris. Burm 391. Genus 28. Fam 8. *scutata* (See also *Holomastus*. Dallas) in Fam 1. *Longuscute*.
Pachylis. Lep & Scru Burm. 338 (*Lygaeus* Lat. genus 29 of Fam 7 *Coneodes*. Burm. in Fam *Superconis*. Am). { Deriv. *pachys*, fat or thick.
Pachylips. Fiel 314. 347. *Bicilo*. Deriv. Gr. *pachys*, thick. *ops* face or eye.
Pachymera. See Say 1. 332 as *Pamera*. Deriv. *pachys*, thick *meros*, thigh.
Pachymeria Lat. syn of *archimeres*. Burm. 321.
Pachymeris. Burm. 293. Genus 10. Fam 6. *Lygaeodes* (See also *Rhypharochromus*) in Fam *Superconis*. Amy.
Pachynurus. Klug. genus 19. in Fam 3. *Reduvini*. Burm. 240. Deriv. unknow to Amy at.
Pamera. Say. 1. 332. name proposed by Say, for *pachymera* as being preoccupied. (See *Placuumerus*)
{ Deriv. no meaning, but perhaps *remaino* to us, & the thigh.
Pantilius. (Cent) Lopis 1150. genus 9. of Fam 1. *Capsidae*. Westw. Syn 121. Dougla 382, in Fam.
Paracoris { Deracorisidae. See *Capsina*. Deriv. Gr. *pantilius*, perfectly. Agar perfect.
Paracoris. Hahn. syn of *holocoris*. Burm 371 (See also *Scutellera* Say) Deriv. Gr. *para*, before. *Koris*, bug.
Papyphes. Burm. *Lygacis*. Genus 27 of Fam 7. *Coneodes*. Burm. 335. Amy. 102. in Fam *Superconis*.
{ Deriv. papyrus. a Roman garment.

- Pedeticus*. Lap. see *Anthocoris*. Fall. genus 4. of fam 6. *Lycocoides*. Burm 288. Westw Syn. 122.
Deriv. Gr. pedetes, one who hinders? Sic.
- Pederapti*. Fam 2. or 10. of Sect 2. *Heterocoristae*. Amy 50. & 626. Lat. & crav. per a foot & raptus. sicred. {
Pedurini. Fam 3 (or 11). of Sect 2. *Heterocoristae*. Amy 50. 444. Lat. taken by force. {
Deriv. per a foot & raptus. enoar }
- Pelirates*. Scrn. (Pirates Amy. 324 (see *Melanolestes*, in fam 7 *nudirostris* Amy. Deriv & pirates a pirate.)
- Pellionotus*. Uhler. in fam *Infericornes*, Amy. Deriv pelios, discolored, notas back.?
- Pelagonides*. Grausp 1. in Tribe 9 *Infericornes*. Amy 407. Deriv. Gr. pelos, dark colored; or mud? & gone race.
- Pelagonus*. Lat. Amy 409. Burm 202. Genus 3. in 3. *giganteus*. Westw 2. 465. Syn. Doug 43.
{ in fam *Nudirostris*. Amy. }
- Peltophora*. Burm. Genus 29. in fam 8. *Scutellati*. Burm 393. Deriv 3n. peltis, a small shield. Phoros, bearing.
- Pentatoma*. Pal de Beauv. anterior to either Oliv. or Latr. Deriv. pentagon, cone, division or segment.
- Pentatoma*. Oliv. Amy 128. See also Aëlia. *Banasa*. *Conus*. *Microchroa*. *Terillus*. 8^e in fam *Longicollis*. Amy.
- Pentatoma*. Lat. (*Cimex*, & *Asaphus*. Burm.) Westw Syn. 124. genus 5. Fam *Scutellidae*. Doug 77.
- Pentatomidae*. Group 4. race 3. *Nudipedes*. Amy 124.
- Pentatomites*. Lap. see fam 8 *Scutellati*. Burm 349.
- Perillus*. Stål. (Syn. *Pentatoma*. *Zecrona*. ?) in fam *longiscutis*. Amy. Deriv. name of a Greek statuary.
- Perostomata*. Leidy. See *Zaitia*. Amy 430. in Fam 10 (or 2) *Pedirapti*. Amy. Deriv. Gr. perostoma ravage, destroy. { stoma mouth. }
- Peritrichus*. Fab. Genus 7 in Fam 1. *Rhypharochromidae*. Doug 187. Deriv Gr. peritricho, is spun round?
- Petalochirus*. Pal de Beauv. genus 28 in fam 9. *Reduvini*. Burm 246. *setis* 2. 473 Amy 377.
{ in fam *Nudirostris*. Deriv. Gr. petalon a leaf, or petas. & cheir hand. (*Petalochirus*) }
- Philophorus*. Hahn. see *Globiceps*.
- Phloea*. Sep. Scrn. (syn of *Phloeocoris*. Burm 371. (*P. corticaria*. Braggi is in *Pentatomidae*.
{ Pack. Am 117. *Longiscutis* (?), Deriv. Gr. phlois, bark.
- Phloeocoris*. Burm 371. Genus 14. of Fam 8. *scutellata*. Burm.. Deriv. haloios, bark, & Koris, bug.
- Phlaeides*. Group 2. Race 3. *Nudipedes*. Amy 115.
- Phloecephala*. Lap. Burm. 356. Syn of *Aëlia* o/Burm. Deriv. Gr. phullon, a leaf & kephal, head.
- Phyllocephalides*. Group 2. of Race 4. Biövera tri. Amy 174.
- Phyllomorphus*. Burm. Genus 6. Fam 7. *Coricoides*. Burm 310. Amy 235. *Supericornes*. Gr. phullon & morphe form.
- Phyllophaga*. Laporte. in *Phyllophagidae*.
- Phylidae*. Fam 7. of Sect 9. *Capsina* Doug 30. 346.. Deriv Gr. phyle, a race or kind.
- Phylus*. Hahn. Fab 323. Doug 354 in fam *Phylidae* *Capsina*
- Phymata*. Lat. Amy 286. (*Syratus* & al.) in fam *Lucterostri*. Amy 1. Deriv Gr. phuma, a tumor or swelling.
- Phymatidae* Fam 4. *Membranacei*. *Geoconus* Gr 1. Gr 1. *Spissipedes* Amy 288.
- Physomerus*. Burm 341 (Lygaeus. Fab.) Genus 31. of Fam 7. *Coreoides*. Burm. Deriv. Gr. phuse, a bladder? meros thigh.
- Phytocoridae*. Fam 4. Sect 9. *Capsina*. Doug. 29 299.. Deriv Gr. phulon a leaf. & Koris, bug.
- Phytoconis*. Fall. Amy 278. Burm 265. Genus 2, am 3 *Capsini*. Westw Syn 122. Fab 306. *Bicelluli* Amy.
- Phytophthires*. leaf lice. *Aphides*. in *Bicelluli*. Amy. Deriv. Gr. phulon, a leaf & their animal. Lause?
- Picromerus*. Amy. Genus 5. in Fam 8. *Asopidae* Doug 95 Amy 84. *longus*. Deriv Gr. petros sharp or pointed
{ *Pithia*. Orton. in fam *superconusidm*. Deriv. *Pithia* Proname, daughter of Amphion tribe. } meros thigh
- + *Pterates*? Westw 2. 473 see *porates*
- Piesma*. Lap. Burm. 257. Genus 8. of Fam 4. *Membranacei*. Burm. Sep & Scrn. in fam *Lucterostri* Amy
(*Zosmerus* Syn) Westw Syn 120. Deriv. Gr. piesma. anything pressed or squared.
- Pesmides*. Group 2. Gr 3. *Membranacei*. Amy 300.
- Ptilocerus*. Gray syn of *Holoptilus*.
- Ptilocnemis*. Westw see *Maotys* Amy at 318. in Fam 7 *Nudirostris*. Deriv ptilon down or soft hair. nema, thread.
- Ptochomera*. Say 1. 335. (*Plocionera*. Say Error) *Infericornes*. Scrn. Gr. ptochos a beggar. meros thigh. ?
- Ptycholampis*. Germ. Westw Syn 120. genus 4. fam *Reduvidae*.! Syn *Ochetopus*. Hahn. *ptechis* genus 2 in, am 1.
- Reduviidae*. Doug 539. Amy 391 in Fam 7 *Nudirostris*. Deriv. Gr. puge, the hinder part. & langua a comb
- Pyrhocoris*. Fallen. Amy 265. Burm 283. genus 2 in Fam 6. *Lycocoides* Doug 163. Amy 1, con 4. *Coccinoides*
{ 4niv. Gr. Pyrrhos a red flame. & Koris bug. }
- Pyrhocoridae*. Group 1. in Fam 4. *Coccinoides*. Amy 1.
- Rameurs*. Amy. See *ploteres*. Deriv French. rameur, or ravers..
- Ramicornes*. Tribe 1. of Fam 7. *Nudirostris*. Amy 42. 318. Deriv. Lat. ramus a branch. & corno, horn.

- Ranatra*. Tab. Westw. Syn. 119. Genus 3. of fam 2. *Nepidae*. Leach. *Ranatra* syn. 3. of fam
 { *Ranatridae*. Doug 581. Amy. 441. in fam 10. or 2. *nepartii*. Tab. *ranatra*. a frog on
Ranatra. Burm 199. Genus 5. of fam 2. *nepini*.
Ranatridae. Fam 1. Sect 3. *nepini*. Doug 468 & 581.
Raphigaster. Lap. (See also *Rhaphigaster*). Westw. Syn 124. Genus 3. of fam *Siatellidae*. H. & L.
 { Doug 16. *Raphigasteridae* See also *Nerara Pentatomidae* & *Rhaphigaster* being right P. R.
Rarhiga teridae. fam 9. Sect 1. *Scutatona*. Doug 16. 97. { *Derv Gr raphus* a nede. juv. & *gaster*. belly.
Reduvidae. Steph. Westw. Syn. 120. Vol 2. 471. fam 4. of Sect 2. *Aurocoris*. Fam 1. of Sect 12.
 { *Reduvina*. Doug 39. 353. Derv. *Reduvia* old or cast off clothes. or *reduviae* a small
 ulcer on the border of the nails. (Amy.)
Reduvides. Group 2. Tribe 2. *Spongipedes*. Amy. *Nuderostri*. 333.
Reduvina. Sect 12 of Subcl 1. *Gordomica*. Doug 335. 39.
Reduvoculus. Kirby. See *Nabes*. Lat. Westw. syn 120.
Reduvius. Tab. Westw. Syn 121. *Aspicetus*. Klug. genus 1. in fam *Reduvidae*. Burm. genus 13. in
 { fam 3. *Reduvini*. 1. var 234. genus 4. in fam 1. *Reduvidae*. Doug 331. See also
 { *Priornotus*. & *Anicus*. in fam *Nuderostri*. Amy. 337.
Reptitus. Stål (Xenus. Tab) Am 373. in fam 7. *Nuderostri*. Amy. Derv. in ref. to sciim towards?
Oestherenia. Spin. Amy. 280. (*Capsus*) in fam *Bucculic*. Amy. Derv. *Anagram* & *Stenosoma*. Amy.
Phaeognathus. Fiel. genus 3. in fam 8. *Aspididae*. Doug 91. Derv. to *ratis*. a wavy garment.
 { "gnathos" me 12 }
Ortho reduci. Meyer in fam 8. *psiloteris*.
Rhaphigaster. Lap. Amy 140. See also *Raphigaster*. *Rhaphigaster* being right. 21 from *rhaphi*. P. R.
Rhaphigasteridae. Group 5. race 3. *Nudipedes*. Amy 141.
Rhinocerus. Kirby. Say 1. 305. See *Acanthocerata*. *Sukk iconae*. Derv. Gr. rhin a nose.
Rhopaloceridae. Group 2. in race 2. *Nodicornes*. Amy 263. *Sphaericornes*. Derv. Gr. *rhope* a cone.
Rhopalotomus. Fiel. 307. in fam 13. *Captidae*. Doug 439. Fiel. in fam *Rhopalon* & *tome*. L. & G.
Rhopalus. Schill. *Covinus*. Burm. genus 5. fam *Comidae*. Westw. Syn 123. Amy 265. Race 2
 { *Nodicornes* in *Sphaericornes*
Rhynocerus. Hahn. genus 4. *Anthocoris*. Fiel. of fam 5. *Lycocidae*. Burm 208. H. & L. syn 122.
 { in *Syracidae*. Derv. rhin. nose.
Rhynchota. *Heteroptera*. sa. Faber. & Douglas. *Hemiptera*. *Heteroptera*. Tab & Doug. *Rhyngota*
 { Tab Derv. Gr. *Rugros* a break or nostrum
Rhyngota. p. Tab. H. & L. 2. 650. see *Rhynchota*. *Heteroptera*.
Rhynchochromidae. Fam 1. of Sect 5. *Lycocidae*. Doug 20. Derv. Gr. *Rhypharos*. dirty. *chromes* color.
Rhynchochromidae. Group 2. in fam 3. *Infericorixes*. Amy 251.
Rhynchochromus. Curtis. Genus 12. in fam 1. *Rhynchochromulai*. Doug 201.
Rhynchochromus. Hahn. Westw. Syn 122. Genus 4. in fam *Lycocidae*. (or six syn. see Westw.)
 { *Microchus*. Syn. fam. *Infericorixes*. Am 253.
Riparii. Fam 2. Burm 215. *Ripicolae*. Amy. Derv. Gr. *Ripa*, the bank & a river &
Ripicolae. tribe 2. of fam 6. *Ductirostrid*. Amy 40. 393. (Ex *Hister*) Derv. *Ripa*. & *cole* to inhabit.
Saccoderes. Spinola. (Erotes) in *Reduvidae*. Westw. 2.. 470. Derv. Gr. *Sacos*. a sack & *dere* nest.
Saccoderidae. Group 5. Tribe 3. *Conichites*. Amy 379. fam 7. *Nuderostri*.
Sayalystes. Mayer. Syn of *Coreus confluentus*. Say 1. 325. *Longisutuli*. Derv. Gr. *sagax*. a manti. *tylos* ridge.
Salda. Tab. Genus 1. fam 1. *Salidae*. Doug 517. Amy 404. Burm 215. Gr. 1. Genus 1.
 fam 2. *Riparii*. Tab. See *Hacticus* Hahn. Burm 277. in fam *Capsididae*
 in *Nuderostri*. Amy. Derv. a prop name. Agass. or. perhaps, from *Saita* a pump.
Salidae. Fam 1 of Sect 11. *Oculatina*. Doug 38. 317.
Salidae. Group 2. of tribe 8. *Oculatae*. Amy. 404.
Selyavatides. Group 5. of Tribe 2. *Spongipedes*. Amy 349. Derv. Sanscrit. *Saya*. a porcupine.
Scaphiphora Guer. Lap. Burm. a syn of *Protophora*. Burm. { & *vale*. resembling
 Derv. Gr. *Scapto*. lotus. v. phone. to bear)
Scaptocoris. Peletier. Burm 376. Genus 17. of fam 8. *Scutati*. Burm. Sc. res. Gr. *scabio*. to dig. & *Korn*. bug.
Sciocoridae. Fam 3. of Sect 1. *Scutatina*. Doug 13. 59. Derv. Gr. *Skia*. shade. & *Korn*. bug.
Sciocoridae. Group 3. of race 3. *radulodes*. Amy 116. *Songiscuti*.
Sciocoris. Fam 1. Burm. 372. (*Cydnus*. & *Kalyx*. Tab) Genus 15. of fam 8. *Scutati*. Burm. Genus 7. of
 { fam 10. *Protericidae*. Acute Syn 124. Doug 6. Amy of 120. *angiscuti*.

- Scelopostethus*. Fiel., genus α n. fam 1. *Silurusochromedus*. Doug 181. Gr. *scelopos*, scutum, *stethos*, breast.
Scutellera. Lat. Burm. 395. (Syn. *Sclerurus* Fab., genus 31, or fam 8. *Scutellata* Burm. (Denis) *Scutellata*) a
Scutellidae. Westw. 2. 484. & Syn 123. fam 10. (or 12.) or sect 2. *Ourocorusa*. *Geocoris* plate, dish, or small
Scutellidae. Amy 25. Group 1. of race 1. *Angulosci*. Amy 25. *Longiscutellata*.
Scutellidae. Lat. in fam 8. *Scutellata*, Burm.
Scutellata, fam 8 Burm. Deniv. Scutum, a shield.
Scutatina. Sect 1. of sub div 1. *Geodromica*. Fiel & Doug.
Sectifrontes. Race 1. of Tr 1. *Setragonocephali*. Amy 30. 184. Deniv. Lat. *Sectus*, cut, *frontis*, forehead.
Selviniidae. Group 2. Race 2. *Spinipedes*. Amy 96. *Longiscutellata*. Amy. Deniv. Hebrew. *sekir*, bursting with pricks.
Schinus. Amy 96 (Cymus. Fab. am 91.) Doug genus 1. of fam 1. *Cynditas*.
Serenthia Spin. (see *Agramma*. Westw. Syn 120. Amyot 300. *Ductirostris*. Deniv. *Anagramma*, *Thoresina*.
Serpinius. Stål. (Zaitza) Amy. 436 in fam *Pedraplata*. Deniv. Fr. *Serpilos*, a small winged insect.
Sigara. Fab. Genus 2. of fam 1. *Nolonectici*. Burm 188. Amy 448. (*Nolonecta*) Doug 615. Westw. Syn 119.
 ? in fam 11. (or 3) *Pteremis*. Amy ? Deniv. *Sigatobolensis*? Deniv. unknown to Amyot.
Sigaridae. Fam 2. of Sect 5. *Cocaina*. Doug 50. & 615.
Sinea. Amy. 373. in fam *Nudirostris*. Deniv. Hebrew. *sen*, a prickly bush.
Spartoceridae. Monoc 1. in race 1. *Sectifrontes*, am 2. *Supericornis*. Amy 184. Deniv. Gr. *sparton*, a cord. *Viers*.
Spartocerus. Burm 341. Genus 32. in fam 7. *Conoides*. Burm in fam *Supericornis*. no.
Spathocera. Stein. genus 6. in fam 1. *Cocoides*. Doug 121. Deniv. Fr. *tritale* a broad blade, or *skutula* *Varas*, a horn.
Sphaerocoris. Burm 390. (*Sclerurus*. Fab.) Genus 26. of fam 8. *Scutellata* Burm. Amy 40, fam 1. *Longiscutellata*.
 ? Deniv. *Sphara*, & *sphere* & *Varis*, bug, }
Sphaeroderma. Lap. *Diplongchus*. Lap. in Burm. 196. Deniv. Gr. *Sphaera*, a sphere, & *derma*, skin.
Sphaerolophides. group 1. of Tr 4. *Brevicollites*. *Nudirostris* Amy 381. in *sphaera* a sphere & *Utris*, eye, appearance.
Sphaerolops. Amy 381. in tribe 4 *Brevicollites*.
Sphracophala. Doug. 348. Genus 2. in fam *Phylidae*. (*Capsina*, Deniv. *Spina*, & *Kephala*, head).
Spinifrontes. Race 3. of Tr 1. *Setragonocephali*. Amy 32 & 206. in *supericornis*. Lat. *Spina*, a spine, & front. } forehead.
Spiniger. Burm 234. (*Reduvius*, Lap.) genus 12. of fam 3. *Reduvini*. Burm. Lat. *Spino*, a spine, & *genito* bear.
Spinipedes. Race 2. of tribe 2. *Coniscuti*. Amy 20. 87. *Longiscutellata*. " " " " " a foot.
Spissipedes. Tribe 1. of fam 6. *Ductirostris*, (ex *Phymata*) Amy. 19 & 74. *Spissus*, thick, pes, foot.
Spissirostris. Race 4. of tribe 2. *Coniscuti*. Amy. 19. & 74. (ex *Asopus*) in fam 1. *Longiscutellata*, *Spissus*, & *rostrum*, beak.
Spongipedes. Tribe 2. of fam 7. *Nudirostris*. Amy 42 & 321. (ex *puratus*). Deniv. Lat. *Spongia*, a sponge, & *pes*, foot.
Stagnigradi. Tribe 7. of fam 7. *nudirostris*. Amy 49 & 398. (ex *Yeromitra*). Lat. *Stagnum*, a still pool, & *gradus*, a step.
Stenocephalus. Lat. Lap. Burm. 328. Genus 22. of fam 7. *Cocoides*. Burm. Westw. Syn. 123 (*Licranoceratae*).
 { Hahn) genus 5. of fam 9. *Cocidae*. Westw. Doug 140. *Supericornis*. Amy. Deniv. Gr. *stenos*.}
Stenocephalidae. Fam 4. of sect 2. *Cocaina*. Doug 18. & 140. ? narrow, & *Kephala*, head.
Stenodema. Lap. see Genus 16. (Miris Fab) in fam 7 *Cocidae*. Westw. Syn. 122. *Bicelluli*.
 { Deniv. gr. *stenos*, narrow, *dema*, band.
Stenopoda. Lap. Amy. 390. Burm 243. genus 24. of fam 3 *Reduvini*. Amyot 390. Burm in fam 7
 { *nudirostris*. Deniv. Gr. *stenos* narrow, & *pes*, foot.
Stenopodidae. Group 2. in Tribe 5. *Cylindricipes*. Amy 386. *Nudirostris*. Amyot.
Sthenarus. Fiel. 320. Doug 421. in fam 12. *Bellidae*, *Bicelluli*? Deniv. gr. *sthenos*, strength.
Stiphrosoma. Fiel. Doug 481. in fam 20. *Stiphrosomidae*, *Bicelluli*. Deniv. Gr. *stikhros*, compact, soma, body.
Stiretridae. Group 1. Race 1. *Stipeirostris*. Amy 74. Fam 1. *Longiscutellata*. Deniv. Gr. *sterna*, a tail, & *etron*, under below.
Stiretrus. Lap. Amy 75. (ex *Asopus*. Amy 83) in fam 1. *Longiscutellata*.
Strachia. hahu { (syn. *Murgantia*. Stål) Amy 127. Doug 184. genus 3. *Scutellaria*, see also *Eurydema*.
 { Lap. Deniv. Syn 124. fam 4. *Longiscutellata*. Amy. Gr. *straggleo* (stills), to trickle down, ordro, Ag.
Stygnoconis. Doug genus 15. of fam 1. *Rhypherochromidae*. Doug 218 (see also *Stygnus*, op. Fieber.)
 { Deniv. Gr. *stygnos*, hard, Roni, bug, Agas.}
Supericornis. Fam 1. of Sect 1. *Geocorisac*. Amy 30. Lat. *super*, above, & *cornu*, horn.
Syromastidae. Lat. Burm. 314. Genus 10. in fam 7. *Cocoides*, (see *Cocidae*. Fab) Genus 1. in fam 9.
 { *Cocidae*. Westw. Syn 123. Doug 109. Amyot 206. in fam 2. *Supericornis*.
 { Deniv. a proper name, a maelstrom, whirlpool.
Syrtis. Fab. Burm. 257. (*Phymata*. Lap) in fam 6. *Ductirostris*. Amy. Deniv. Gr. *Syrtis*, a sand bank? } proper name, Agassiz.

- Zicrona*, Amy { Genus 1. in fam 8. Aspididae Doug 88 Amyol 86. see also *Ponera*
 in fam 1. *Longiscutellae* Deriv. Zicrona. odorous.
- Zosmerus*, Lap. Burn 262. Genus 12. fam 6. Membranace. Burn, &c. also *Pisima* Herbst Syn 125.
 { Genus 4. fam 6. (or 8) *Tingulata* Doug 238 Amy 301. in fam 7. *Lucerostrae*.
Zygonotus, Fins. Genus 2. in fam 1. *Microrhysidae*. See 10 *Anthocorina* Doug 186
 { or *Zosmer.* (*cinctum*) e. girdle
 or *Zygon* a zote (notas back)

Alphabetical List of Species. of the Homoptera. Heteroptera.

abbreviates.	<i>Pelionotus</i> . Lat abbreviated	antennator.	<i>Charisterus</i> .
abdominalis.	Lat. or or belonging to the abdomen	" .	<i>Coneus</i> . <i>Charisterus</i> .
" .	<i>Coneus</i> .	" .	<i>Ponocerus</i> . do.
" .	<i>Mexicoistes</i> .	<i>apiculata</i> .	<i>Nepa</i> . <i>apiculata</i> . pointed.
" .	<i>Pirates</i> . <i>Melanolestes</i> .	<i>aterus</i> ..	<i>Pissid</i> , a without, plena wing.
abrupta.	<i>Pentatomia</i> . abrupt. or cut off.	" .	<i>Cimex</i> <i>Pyrrhocoris</i> .
acuminatus..	acuminate. or coming to a sharp point.	" .	<i>Pyrrhocoris</i> .
" .	{	<i>arboreus</i> .	of a tree, branching, arboreus.
" a.	<i>Achla</i> .	" .	<i>Brochymena</i> .
" .	<i>cimex</i> <i>Achla</i> .	" .	<i>Pentaloma</i> . <i>Brochymena</i>
" .	<i>Oncerotrachelus</i> .	<i>arcuata</i> .	<i>Tenigis</i> . curved, w ^e a bow.
" a.	<i>Pentatomia</i> . <i>Achla</i> .	<i>annigera</i> .	<i>Anasa</i> . arms. zero. to sea.
" .	<i>Rosdurus</i> . <i>Oncerotrachelus</i> .	" .	<i>Coneus</i> . <i>Anasa</i> .
acute ^s . .	<i>Aradus</i> . acute. or pointe.	<i>ater</i> .	<i>Alydus</i> . ater. black.
admirabilis..	<i>Lygaeus</i> . admirabilis.	" .	<i>Xylocoris</i> .
aeneifrons..	aeneus, irarens, irans, brachead front	<i>alra</i> .	<i>Corimelaena</i>
" .	<i>Homa-mus</i> .	" .	<i>Galgatha</i> . see <i>Corimelaena</i> .
" .	<i>Scutellera</i> . <i>Homa-mus</i> ,	<i>augur</i> .	an augur, or Soothsayer
xestivalis.	op or belonging to summer	" .	<i>Pentatoma</i>
" .	<i>Aphiocheirus</i> .	<i>calicus</i> .	of the court or court like.
" .	<i>Vauconis</i> <i>Aphiocheirus</i> .	" .	<i>Sygaecus</i>
aequalis.	equal.	<i>auranteacum</i> .	orange yellow.
" .	<i>Aradus</i> .	" .	<i>Perthostoma</i> .
" .	<i>Cænus</i>	<i>badius</i> .	<i>Menonyx</i> , bay, or chestnut color.
" .	<i>Pentatoma</i> . <i>Cænus</i> .	<i>belfragei</i> .	<i>Protenor</i> , prop name.
albicinctus.	albus white, & cinctus. banded.	<i>biceps</i> .	<i>Reduvius</i> twice tipped or pointed
" .	<i>Genuscecius</i> .	<i>bedens</i> .	<i>Pentatoma</i> . <i>bedens</i> , two toothed.
albipennis.	albus white, punn. & piume. wing	<i>bicolor</i> .	<i>Ectrichodia</i> , of two colors.
" .	<i>Corimelaena</i> .	" .	<i>Ectrichotes</i> , see <i>Ectrichodia</i> .
" .	<i>Thyreocoris</i> . <i>Corimelaena</i>	<i>bicrucis</i> .	<i>Sygaecus</i> , b. cruc, having 2 crosses.
albopunctatus.	albus, white. punctatus, dotted.	<i>bifida</i> .	<i>Pentatoma</i> . cloven, cut in 2 parts.
" .	<i>Orvelus</i> .	<i>bifoveata</i> .	<i>bis</i> , breated, having 2 cavities. or holes.
alternatus.	alternate. intervalled?	<i>bifurcatus</i> .	two forked.
" a.	<i>Corixa</i> .	" .	<i>Cimex</i> , see <i>Pygocampis</i> .
" .	<i>Tetra</i> . <i>Eurygaster</i> .	" .	<i>Pygolampis</i> .
" .	<i>Coneus</i> . <i>Pierogaster</i> .	" .	having two dots. or spots.
" .	<i>Eurygaster</i> .	<i>biguttata</i> .	<i>Piratas</i> . <i>Pirates</i> .
" .	<i>Pierogaster</i> .	" .	<i>Petaiocheirus</i> . Erron.
ambulans.	<i>Carsus</i> . ambulans. walking.	<i>bilobatus</i> .	bis. lineatus, having 2 lines.
americanus..	<i>Aradus</i> . american.	" .	<i>Aethus</i> .
" .	<i>Bolostoma</i> .	" .	<i>Cyaneus</i> . <i>Aethus</i> .
annulata.	<i>Brochymena</i> , annulata, ringed	" .	having two lines.
annulipes.	annulus a little ring pes, ist.	<i>bilobatus</i> .	<i>Parmara</i> . <i>plicomorus</i> .
" .	<i>Bolostoma</i> .	" .	<i>Plociomerus</i> .
antennator.	distinguished by 2 antennæ. or antennæbearer.	" .	

113.
List of Species.

<i>bilobus</i>	<i>Zelus</i> .	<i>cinerascens</i>	<i>Nera</i> gray, ash, colored.
<i>bimaculatus</i>	<i>bis. maculatus</i> , two spotted	"	<i>Pesma</i> .
" "	<i>Calocoris</i> .	"	<i>Strobode</i> .
" "	<i>Capsus</i> , <i>Calocoris</i> .	"	<i>Singis</i> , <i>Pesma</i> .
<i>binotatus</i>	<i>bis. notatus</i> , twice, marked.	"	<i>Zalmias</i> , <i>Pesma</i> .
" "	<i>Clytostomis</i> .	<i>cinnamopterus</i> ,	cinnamon, colored, wing,
" "	<i>Scutellera</i> , <i>Olonotoscelis</i> .	"	<i>Camarocetes</i> .
<i>bisulcata</i>	two cysd., or spotted.	"	<i>Carsus</i> , in <i>Camarocetes</i> .
" "	<i>Pentatomia</i> .	"	bordered, with a band.
" <i>bipunctata</i>	having 2 points, or pricks.	"	<i>Sygnus</i> .
" "	<i>Setyra</i> .	"	<i>Ricinus</i> .
<i>bistriangularis</i>	bis - triangularis, twice bran gular.	<i>Clauda</i> ,	<i>Pentatomia</i> , cluda-shut w. closed
" "	<i>Gigas</i> .	"	<i>Priscus</i> .
<i>boscii</i>	<i>Belostoma</i> . prop name.	<i>caeruleus</i> ,	<i>Camarocetes</i> , club, or club-shaped
" "	<i>Zaitza</i> , (<i>Yumuncus</i>)	"	<i>Capsus</i> .
<i>bracteatus</i>	<i>bracteatus</i> , sprinkled with gold.	<i>clavicornis</i> ,	<i>Tinges</i> , club, horned
" "	<i>Capsus</i> , <i>Cylapus</i> .	<i>Coligatralis</i> ,	like a bell, <i>Coligatra</i> .
" "	<i>Cylapus</i> .	"	<i>Myrmecobius</i> ,
<i>bracteatus</i>	<i>Arma</i> , plated, gilt ing.	<i>coeruleatus</i> ,	with wings closely covered, or sheathed,
<i>brevipennis</i>	<i>brevis</i> short & <i>pennis</i> wing	"	Naked.
" "	<i>Emesa</i> , having short wings	<i>coleatum</i> ,	<i>Salda</i>
<i>brevispinis</i>	<i>Proxys</i> , <i>Proxes</i> having short spines	"	<i>Phagovelia</i> , collared.
<i>bulla</i>	<i>Ophihaematus</i> , <i>bulla</i> a bossor, like	<i>colon</i> ,	<i>Leuca</i> , in <i>Phagovelia</i> .
<i>bullata</i>	<i>Salda</i> embossed or studded.	"	<i>Latus</i> , iron, or with 2 close lob.
<i>californicus</i>	<i>Nysius</i> , California.	<i>concentricus</i> ,	<i>Acantha</i> , occurs a low or pigeon,
<i>calcaratus</i>	<i>Archimerus</i> , <i>Pterogaster calcar</i>	"	confident, or joining together.
" "	" <i>spinosus</i>	"	<i>Capsus</i> .
" "	<i>Pterogaster</i> , <i>thomomorphus</i> , <i>scar</i>	"	<i>Conus</i> , <i>Baculus</i> .
<i>calcaratus</i>	<i>Alydus</i> , with spine.	"	<i>Sagittulus</i> .
" "	<i>Brachytropis</i> , with spurs.	"	<i>Didea</i> .
" "	<i>Cimex</i> , <i>Alydus</i> .	<i>conformis</i> ,	meat or formed like.
<i>calceatus</i>	shod, from <i>Calceus</i> , a shoe.	"	<i>Ferris</i> .
<i>Calva</i>	<i>Banasa calva</i> , bald.	<i>confabrus</i> ,	bald, or related to.
" "	<i>Coxia</i> .	"	<i>Testrenus</i> .
" "	<i>Pentatomia</i> , <i>Banax</i> .	<i>congruus</i> ,	came together or agreeing well.
<i>canaliculatus</i>	having a small channel, or groove	<i>constrictus</i> ,	<i>Therococcaea</i> .
" "	<i>Gerris</i> .	"	constricted, or in an egg-like.
<i>Carcelii</i>	<i>Phytocoris</i> , prop name.	"	<i>Flimora</i> , <i>Flaciomerus</i> .
<i>cardui</i>	<i>Monanthia</i> , w. the thistle.	"	<i>Flaciomerus</i> .
<i>carmipes</i>	<i>Eusurcoris</i> , <i>Cosmopepla</i> , assassin	<i>contracta</i> ,	<i>Locusta</i> , contracted.
" "	<i>Cosmopepla</i> .	<i>corvulus</i> ,	<i>Holopogonius</i> , innocent
<i>chlorionis</i>	<i>Capsus</i> , chloros green.	<i>cornuta</i> ,	<i>Decoratodes</i> , having horns
<i>chrysorrhaeus</i>	<i>Lucus</i> , <i>Litot</i> .	"	<i>Eissa</i> , in <i>Decoratodes</i>
" "	" or <i>Scutellera viridifundata</i>	<i>corticaria</i> ,	<i>Phlaea</i> , cortex, bark.
<i>ciliatus</i>	<i>Pachycoris</i> " "	<i>danicus</i> ,	<i>Capsus</i> , <i>danicus</i> , <i>Lanic</i>
" "	<i>Nysius</i> , ciliated, or fringed.	<i>debelis</i> ,	<i>Miris</i> , weak, or crippled.
* <i>cimicoides</i>	resembling a <i>cimex</i> , or bug	<i>decipiens</i> ,	standing, or bending downward.
" "	<i>Nauconus</i> .	"	<i>Acanthociphale</i> .
<i>ciliata</i>	<i>Singis</i> , ciliated or fringed.	"	<i>Metaphodius</i> , <i>Acanthocips</i> ".
<i>cinctipes</i>	<i>Setyra</i> , cinctus, gorilla, pes, foot	"	<i>Rhinuchus</i> , <i>Acanthocarsalis</i> .
<i>cinctiventris</i>	<i>Ectrichodius</i> , girdled, or banded	<i>delia</i> ,	<i>Gr delucornis</i> , to destroy?
" "	belly.	"	<i>Coenus</i> .
<i>cinctus</i>	<i>Harpactor</i> , <i>Milyas</i> .	<i>destructior</i> ,	<i>Pentatomia</i> , cornus.
" "	<i>Milyas</i> , a band, or girdle	"	<i>Nysius</i> , destroyer
<i>cineraceus</i>	<i>Cinereous</i> , ash color.	"	" see <i>N. rhinoceros</i> .

List of Species.

devastator.	destroyer.	<i>Facetus</i>	<i>Lygaeus</i> .
"	<i>Rhiperochromus</i> , see <i>Nucropus</i> . tenuiterus.	<i>Talurus</i>	<i>Lygaeus</i> , see <i>Pseudevona</i> , and <i>Lacuna</i> .
"	<i>Zelius</i> . a. d. l. m.	"	<i>Mecocerus</i> .
diadema.	<i>Asopus</i> . <i>Solenurus</i> . a. yodulus.	<i>Falax</i>	{ <i>Lacuna</i> .
diana.	<i>Solenurus</i> .	<i>Fallax</i>	<i>eleciphilus</i> .
diana.		"	<i>Panura</i> , see <i>Rhiperochromus</i> .
diffusus.	diffuse, or spread around.	<i>Fasciatus</i>	<i>Rhiperochromus</i> .
"	<i>Coreus</i> . <i>diffusus</i> . <i>Shartocerus</i> . <i>jaceus</i>	<i>femoratus</i>	<i>Lygaeus</i> , banded.
"	<i>Secuscyclus</i> .	"	Distinguished by <i>longitudinal</i> <i>Acanthocerasaria</i> .
dilatata.	dilated, enlarged or made wider.	"	<i>Conexa</i> .
"	<i>Belostoma</i> , see <i>Saphus</i> .	<i>fera</i>	<i>Melapodus</i> <i>cellentromaculata</i> .
"	<i>Sorbus</i> .	"	<i>Eumocoris</i> . m. c. not to <i>estriatus</i>
devidata.	<i>Banasz</i> . halved.	<i>levus</i>	<i>Nabis</i> .
" "	<i>Pentatom</i> . <i>Baras</i> .	<i>leva</i>	<i>Pamer</i> , see <i>monocordis</i> .
disoidaeus.	discoidal.	<i>limbatus</i>	<i>Stiretrus</i> . <i>subnervatus</i> .
" "	<i>Oribotylus</i> .	"	<i>Telyra</i> , see <i>Stiretrus</i> .
disconotus.	stictos, a disc, & <i>notos</i> back.	<i>floridanus</i>	<i>Euthryynchus</i> .
" "	<i>Syzyrus</i> .	<i>fluminensis</i>	<i>Flumin</i> , a river + <i>stictos</i> .
dislocatus.	displaced, or dislocated.	"	<i>Belostoma</i> , see <i>Talita</i> .
"	<i>Capsus</i> . see <i>Lyges</i> .	"	<i>Porthostoma</i> see <i>Zelius</i> .
"	<i>Lyges</i> .	"	<i>Zelita</i> .
distinctus.	merocoris. distinct.	<i>fraterculus</i>	(a little brother) <i>Syronetus</i> .
dorsalis.	dorsal, or belonging to the back	<i>fraterna</i>	<i>Ploianis</i> <i>fraterna</i> , or <i>brother</i> .
" "	<i>Miris</i> , see <i>Calenula</i> .	<i>furcis</i>	<i>Hammatocephalus</i> . <i>furcatus</i> ?
" "	<i>Pamer</i> . see <i>Placochirus</i> .	<i>fusca</i>	<i>Maothus</i> . fuscous, dark brown.
"	<i>Placochirus</i> .	"	<i>Stipecnemis</i> , see <i>Marty</i> .
dubius.	<i>Goneccerus</i> , <i>dubius</i> , see <i>Chrysoterus</i> <i>antennatus</i> .	<i>fraterculus</i>	<i>Ranatra</i> .
"	<i>Bodops</i> . dubius, doubt, inc.	"	<i>Spartocerus</i> .
Echii	<i>Tingis</i> , of the Echium <i>bifurca</i> <i>lagopus</i>	<i>fusciformis</i>	<i>fusca</i> , formis. spindle form or shape.
Elegans.	<i>Neides</i> . elegant, graceful.	"	<i>Capsus</i> , see <i>Garganus</i> .
Emarginatus.	<i>Emarginata</i> . edges broken into	<i>galeator</i>	<i>Garganus</i> .
"	obtuse notches.	"	one who wears a helmet.
"	<i>Orodus</i> .	<i>gamma</i>	<i>Crinocerus</i> , see <i>Euthochtha</i> .
Emarginatus	<i>Asopus</i> , see <i>Euthochtha</i> .	<i>gemmatus</i>	<i>Euthochtha</i>
"	<i>Pentatom</i> . do.	"	Pentatom. a great star
errunicola.	<i>Capsus</i> , see <i>Pesthemis</i> . <i>Comit</i> .	"	double, or twin.
"	<i>Pesthemis</i> .	<i>geminis</i>	<i>Ligula</i> .
Erosa.	<i>Phymata</i> . eroded, or gnawed with	<i>gloceus</i>	<i>Capsus</i> .
"	<i>Syrtes</i> . see <i>Phymata</i>	<i>gomphorus</i>	<i>Optosoma</i> , a proto.
erratica.	<i>Ploiania</i> . wandering, erratic.	"	<i>Gomphus</i> , a statue on back, flower, m. 10
errabunda.	"	"	<i>Capsus</i> , see <i>Pesthemis</i> .
Euchloria.	<i>Banasz</i> . bright green.	<i>gossypium</i>	<i>Pesthemis</i> .
euinus.	<i>Alytus</i> . curvus curva.	"	<i>Gossypium</i> . cotton.
"	<i>Lygaeus</i> see <i>Alytus</i> .	"	<i>Acanthia</i> , see <i>Tingis</i> .
Exaptus.	waxy apt. & f.t.	"	<i>Tingis</i> .
"	<i>Pentatom</i> , soft form.	<i>grandidis</i>	<i>carpe</i> , grand.
" (us).	<i>Perillus</i> .	"	<i>Ar. 12</i> .
" x.	<i>Zicrona</i> .	<i>granulatus</i>	<i>Bejostoma</i> .
exilis.	<i>Pachycoris</i> . slender, thin.	"	granulata, or grained.
Fabrixi.	<i>Pachycoris</i> . prop name	"	<i>Aradus</i> , see <i>Brachyrhynchus</i> .
Fecetus.	elegant, graceful, but probably	<i>griseus</i>	<i>Brachyrhynchus</i> .
"	should be spelt <i>phaecetus</i> from	"	grayish color.
"	{ <i>Phaeetus</i> white?	"	<i>Acanthosoma</i> .
faceta.	Chloroscelus.	"	<i>Decostoma</i> .
		"	<i>None</i> see <i>Belostoma</i> .

List of Species

gutta	<i>Sygaeus.</i> gutta a drop.	<i>juglandis.</i> Singes or the walnut.
guttula	a little drop.	<i>juniperana</i> <i>Pentatoma.</i> juniper
"	<i>Catorhyntha.</i>	<i>laevis.</i> Icarus a lice
"	<i>Metastemma.</i> See <i>Catorhyntha</i>	<i>laeta</i> <i>Agramma.</i> cheerful glad
"	<i>Prostomma?</i> Eu.	<i>Jingis.</i> See <i>Agramma</i> .
<i>haldemanii.</i>	<i>Belostoma.</i> Haldeman.	<i>lateral.</i> of or belonging to the side
<i>haematoxina.</i>	<i>Tadera.</i> Red - border.	<i>Acanthosoma.</i>
<i>hesperius.</i>	<i>Labops.</i> towards sunset, western.	<i>Coronatus</i> See <i>Acanthosoma</i> .
<i>hilarius.</i>	<i>Nerana.</i> joyful, or cheerful.	<i>Corimelaena.</i>
"	<i>Pentatoma</i> see <i>Nerana</i> .	<i>Coxenus</i>
"	<i>Rhipidigaster.</i> "	<i>Edessa.</i> See <i>Acanthosoma</i> .
<i>hinta.</i>	<i>Acanthia.</i> see <i>Salda.</i> rough.	<i>Rhopalus</i>
"	or hairy.	<i>tatus</i> broad caput head.
"	<i>Salda.</i>	<i>Heterogaster.</i> See <i>Heneslaria</i> .
<i>hirundinis.</i>	<i>Acanthia.</i> o, the swallow	<i>Heneslaria.</i>
<i>histeroides.</i>	<i>Corimelaena.</i> resembling a hister	<i>Brockymena.</i> broad corns or antenn.
"	see <i>C. nituloides</i> .	<i>Pentatoma.</i> See <i>Brockymena</i> .
"	<i>Thyreocoris</i> See <i>Corimelaena</i>	<i>Acanthia.</i> tectus i bed.
<i>histrionicus.</i>	<i>Singes.</i> histrionic, belonging to an	<i>Cornix.</i> See <i>Acanthia</i> .
"	actor.	<i>leucus.</i> white cephalic head, fm
<i>histrionicus.</i>	<i>Strachia.</i> Histrio, a mimic or actor.	<i>Cornix.</i> See <i>Siphrosoma</i> .
<i>humulis.</i> or <i>humilis?</i>	<i>Acanthia,</i> see <i>Salda.</i> humble.	<i>Siphrosoma.</i>
"	<i>Dasyconis.</i>	<i>Sygaeus.</i> See <i>Mucrofus</i> .
<i>hyalina</i>	<i>Singes.</i> hyaline, or glassy	<i>Mucrofus.</i> fr leucus, white pteron wing.
<i>hyoscyami</i>	<i>Therapha.</i> hyoscyamus, a plant.	<i>Rhypharochromus.</i> See <i>Mucrofus</i> .
<i>ictericus.</i>	<i>Euschistus.</i> of a yellow color.	bounded, or marginell.
<i>imbecilis.</i>	<i>Capsus.</i> imbecile, or weak.	<i>Acanthia</i> See <i>Sleda</i> .
<i>inconspicuus.</i>	<i>Margus.</i> inconspicuous.	<i>Chlorochroa.</i>
<i>insorta.</i>	<i>Meneclis.</i> put into or inserted.	<i>Cydnus.</i> See <i>Schirus</i> .
"	<i>Pentatoma.</i> See <i>meneclis</i>	<i>Pentatoma.</i> See <i>Chlorochroa</i> .
<i>insidiosus.</i>	mischievous, hurtful.	<i>Sleda.</i>
"	<i>Anthocoris.</i>	<i>Schirus.</i>
"	<i>Reduvius.</i> See <i>Anthocoris</i> .	consisting of lines, lined.
<i>insignis.</i>	remarkable, or beautiful.	<i>Ranatra.</i>
"	<i>Carsus.</i> See <i>Anthocoris</i> .	<i>Capsus.</i> See <i>Sygas.</i> lined.
"	<i>Anthocoris.</i>	<i>Hydrometra.</i> Line like.
"	<i>Horaeus.</i>	<i>Ligatus.</i> with lines
"	<i>Pachymerus</i> See <i>Horaeus</i> .	<i>Capsus</i> with little lines see <i>Sygas</i>
<i>insitivus.</i>	spurious, not genuine.	<i>Sygroconis</i> See <i>Sygas</i>
"	<i>Capsus.</i> See <i>Resthenia</i> ,	<i>Sygas.</i>
"	<i>Resthenia.</i>	<i>Mozzava.</i>
<i>insulata.</i>	Notonecta. insulata by itself.	<i>Linum.</i> woolly? fm Linum?
<i>interstitalis.</i>	interstitium, in interval, or break	<i>areomerus</i>
"	<i>Acanthia</i> see <i>Salda</i> ,	<i>Peltatus</i> See <i>Uromerus</i> .
"	<i>Salda.</i>	<i>Emesa</i> long foot.
<i>interrupta.</i>	<i>Coxixa.</i> interrupted.	<i>Oratus.</i> locust.
<i>invictus.</i>	<i>Podops.</i> invictus smeared or	<i>Thermidora</i> rugo. to mourn
"	anointed	<i>Pentatoma.</i> see <i>invictus</i>
<i>invictus.</i>	<i>Capsus.</i> & Sygas. unwilling or	<i>Acanthia.</i> See <i>Sleda.</i> See
"	reluctant.	<i>Sacculi.</i>
<i>irroratus.</i>	flecked, or besprinkled.	<i>furidus.</i> ewish or raw
"	<i>Capsus.</i> see <i>Malacocoris</i> .	<i>Assidus.</i>
"	<i>Malacocoris.</i>	<i>Diploides.</i>
" (a)	<i>Nolancei.</i>	<i>Euscherus.</i>
		<i>Reducitus.</i> See <i>reducens</i>

List of Species

<u>maculata</u>	<u>Pleuaria</u> see also <u>Perrabunda</u>
	<u>maculatus</u> . spotted.
<u>marginatus</u> .	<u>margined</u> , or bordered.
"	<u>Cimex</u> . <u>Syromastes</u> .
"	<u>Cerascopus</u> .
"	<u>Coreus</u> .
"	<u>Gerris</u> .
<u>marginatus</u>	<u>Nabis</u> , see <u>N. coleopteratus</u> .
" "	<u>Peltagonus</u>
" "	<u>Syromastes</u> .
<u>marboratus</u>	<u>Aulacostethus</u> . marbled.
" "	a. <u>Setyra</u> . <u>Aulacostethus</u> .
<u>maurus</u>	<u>cinerex</u> . <u>Eurygaster</u> . Moorish dark <u>Eurygaster</u> .
<u>marvortina</u>	<u>Astemma</u> See <u>Cnemodus Mars</u> .
" "	<u>Cnemodus</u> . belonging to Mars.
<u>medius</u>	<u>Capsus</u> (see <u>Lopidea medius modest</u>)
<u>mercenaria</u>	merchantable saleable.
" "	<u>Corsa</u> .
<u>militaris</u>	<u>Oncotylus</u> . military
<u>minus</u>	<u>Capsus</u> . <u>Dysdercus</u> .
"	<u>Dysdercas</u> . minus. a minus.
<u>minutissima</u>	<u>Nolonecta</u> . see <u>Klea Segara</u> . } the smallest }
" "	<u>Xlea</u> .
" "	<u>Segara</u> .
<u>modestus</u>	<u>Arma</u> <u>Podisus</u> . of modest appearance
" "	<u>Podisus</u> .
<u>multicolor</u>	<u>Capsus</u> . see <u>Catocoris ranidus</u> .
"	{ of many colors..
<u>multispinosus</u>	<u>Reduvius</u> . see <u>Sinea</u> . many spined
" a.	<u>Sinea</u> .
<u>muscorum</u>	<u>Ceratocombus</u> . of mosses
<u>musculus</u>	<u>Anthocoris</u> . a small mouse
"	<u>Reduvius</u> . see <u>Anthocoris</u> .
<u>mutica</u>	<u>Monanthia</u> , unbearded.
<u>multicus</u>	<u>Barytis</u> .
"	<u>Tingis</u> . see <u>Monanthia</u> .
<u>multilarvatus</u>	{ <u>Pirates</u> . maimed. mutilated. or the mutilator ...
<u>nasulus</u>	<u>Anisocelis</u> see <u>Ucanthocorpha</u>
<u>nasulus</u>	a small nose) (femorata)
"	<u>Metaphodius</u> . see <u>Acanthocerhale</u> . émo
"	<u>Opchinichus</u> " " "
<u>nemoralis</u>	<u>Onthocoris</u> . belonging to a wood, or grove.
<u>nemorum</u>	" . . . of the woods.)
"	<u>Cimex</u> . See <u>Anthocoris</u>
<u>nervosa</u>	<u>Hymenocoris</u> nerved.
"	<u>Pentatomia</u> . see <u>Hymenocoris</u> .
<u>nigritus</u>	<u>Systratiotys</u> . nigritus. blackened
<u>nigrovittata</u>	<u>Pselliota</u> . black striped.
<u>nitidulaoides</u>	<u>Corimelaena</u> resembling <u>nitidula</u> .
" "	<u>Thyreocoris</u> . see <u>Corimelaena</u> .
<u>nodosa</u>	<u>Plochiomera</u> . error sa <u>Plochiomera</u>
"	<u>Plochiomera</u> . full of knots. Knotty
	<u>novarius</u>
	"
	<u>nubilus</u> .
	"
	<u>numerus</u>
	"
	<u>oblineatus</u>
	"
	<u>obliquus</u> .
	<u>oblonga</u> .
	<u>occidentalis</u>
	<u>ocreatus</u> .
	"
	<u>oculata</u> .
	<u>oppositus</u> .
	<u>ordinalis</u> .
	<u>ornatus</u> .
	<u>pacificus</u> .
	<u>hallicornis</u> .
	<u>pallidus</u> .
	<u>palipes</u> .
	<u>palmeri</u> .
	<u>paludum</u> .
	<u>panulus</u> .
	<u>pectoralis</u> .
	<u>pedestris</u> .
	<u>peruviana</u> .
	<u>personatus</u> .
	<u>petiolata</u> .
	<u>phyllopus</u> .
	<u>picea</u> .
	<u>picipes</u> .
	<u>recta</u> .
	<u>peplinellii</u> .
	<u>racianus</u> .
	<u>platychilus</u> .
	<u>pusillus</u> .
	<u>poyyi</u> .
	<u>politus</u> .
	<u>prateris</u> .
	<u>pratinellii</u> .
	<u>platynotus</u> .
	<u>pluridis</u> .
	<u>novenus</u> . nine (falling to 7 teeth on thorax)
	<u>Pronotus</u> . see <u>Pronotus crustatus</u>
	<u>Reduvius</u> v " "
	<u>Capsus</u> . see <u>Phytocoris</u> .
	<u>Phytocoris</u> . cloudy, or gloomy.
	<u>curlew</u> . from bird with long bill
	<u>Belonocheilus</u> .
	<u>Lygaceus</u> . see <u>Belonocheilus</u> .
	<u>Catrus</u> smeared or bespattered
	{ see <u>Lygus lineolaris</u> .
	<u>Syromastes</u> . oblique;
	<u>Tinges</u> .
	<u>Apionerus</u> . occidental western.
	furnished with greaves booted.
	<u>Capsus</u> see <u>Dysdercus</u> .
	<u>Dysdercus</u> .
	<u>Galgulus</u> . oculatus. cycd.
	<u>unisocelis</u> . see <u>Leptoglossus</u> . opposite
	orderlies. were ordered.
	<u>ornatus</u> .
	<u>Rhopalotomus</u> . fm Pacific side.
	<u>Census</u> . with pale horns.
	<u>Augocoris</u> . pale.
	<u>Pygolampis</u> . with pale feet.
	<u>Caiocoris</u> . fm Dr. Edw ^d Palmer.
	<u>Hydrometra</u> . palus. a marsh. bog.
	<u>loomae</u> . very small.
	<u>Pachycorix</u> . see <u>Homaenus</u> .
	<u>Pygolampis</u> . pectoral. or of the breast.
	<u>Reduvius</u> . See <u>Pygolampis</u> .
	<u>Cylindronis</u> . pedestrial? or gay on foot
	<u>Nerara</u> . Pennsylvanica.
	<u>Rhiphegaster</u> . see <u>Nerara</u> .
	<u>Teraturus</u> . personatus. masked
	<u>Mycodocha</u> . petiolata. having a stem
	{ Leptoglossus. phyllon leaf. post foot
	<u>Solda</u> . see <u>Ephthalmicus</u> .
	<u>Ephthalmicus</u> . piceous, ritchy
	<u>Inclemistes</u> . piceous. red foot
	<u>Pirates</u> . "
	<u>Pterea</u> . pectus painted.
	<u>Ucanthia</u> . & the last
	<u>Podus</u> . placed calm.
	<u>Cimex</u> . pirates broad. shield up.
	<u>Tingis</u> . plaited, see <u>Monanthia</u>
	Monanthia.
	<u>Haucoris</u> . Posy. prop name.
	<u>Cneurus</u> . polished.
	<u>Cimex</u> see <u>Glycus</u> .
	<u>Glycus</u> . pratensis. v. the field (pratensis.) (or meadow.)
	<u>Macrocephalus</u>
	<u>haucoris</u> . clear. profound.
	<u>Myocoris</u> . Tere's a plant
	<u>Capsus</u> . See <u>Bryocoris</u> .

List of Species.

<i>pulchella</i>	<i>Salda</i> . the little beau the one	<i>sauvagei</i>	<i>Liederma</i> , wounded or injured
<i>pulicaria</i>	<i>Cerimelaena</i> . puli, a flea, scia like,		<i>Pentatoma</i> . see <i>Liederma</i>
<i>punctiferis</i>	<i>functus</i> . & penna, dotted or spotted		<i>Chlorochroa</i> . Say, & say
" "	wings.		<i>Coxus</i> , <i>scapha</i> , a sky, or boat,
			<i>Chlorosoma</i> , prop name.
			<i>Dysacus</i> see <i>Nyctius</i> , a woodcock
			<i>Nyctius</i> .
			<i>cupsus</i> , see <i>Phytocoris</i>
			<i>Phytocoris</i> , rough, shaggy.
			half lined, or striped.
			<i>Pentatoma</i> see <i>Trichopeplus</i>
			<i>Trichopeplus</i> ,
			senile, or old
			<i>Pentatoma</i> see <i>Liederma</i>
			<i>Liederma</i> .
			<i>Acanthocoris</i> , separati.
			zerrate, or having teeth like a saw.
			<i>Prionotus</i> .
			<i>Euschistus</i> s. n. a female name.
			<i>Pentatoma</i> , see <i>Euschistus</i>
			<i>Ambrysus</i> , prop name.
			<i>Nauvois</i> see <i>Ambrysus</i>
			<i>Salda</i> .
			<i>Telytra</i> , resembling a <i>Sirha</i> }
			<i>Aradus</i> , ante, or similar,
			having a spiny forehead, or front
			armatures.
			<i>Gymnus</i> , see <i>Amnestus</i> .
			<i>Arma</i> see <i>Pedilus</i> , full of spines
			<i>Bonytus</i> , see <i>Needes</i> .
			<i>Needes</i>
			<i>Opodus</i>
			<i>Litchia</i> , little spined.
			<i>Spissus</i> , thick, per foot.
			<i>Apoemerus</i> .
			<i>Reduvius</i> , sex <i>Apionorus</i>
			<i>Stagnorum</i> , a pool of still water lake.
			<i>Hymenoptera</i> .
			<i>Sinonobatus</i> , see <i>Hydrometra</i> .
			<i>Stollii</i> .
			<i>Zanthus</i> , prop name. <i>Stollii</i>
			<i>Corona</i> , smooth, streaked.
			<i>Stridulus</i> , making a whistling
			sound. (or hissing sound)
			<i>Stygicus</i> .
			<i>Capsus</i> , see <i>Styracosoma</i> <i>Styrian</i>
			<i>Nauvois</i>
			<i>Styracosoma</i> .
			<i>Subapterus</i> , partially velvety wings.
			<i>Cimer</i> , see <i>Coranus</i> .
			<i>Coranus</i>
			<i>submarginalis</i> , somewhat bordered, or margined.
			<i>Sabatus</i> see <i>Sargus</i>
			<i>Sargus</i> , Succinct, short.
			<i>Capsus</i> see <i>Sargus</i> .
			<i>Dysdercus</i> , slender armed.
			<i>Pyrhocoris</i> , see <i>Dysdercus</i> .

List of Species.

<i>taurus</i>	<i>Petruha taurus</i> a bull.	<i>vividipunctata</i> , green pointed or dotted.
"	<i>Telus</i> . see <i>Rapta</i>	<i>Diolcus</i> .
<i>tenebras</i> a.	<i>Pentatoma</i> . see <i>Proxys</i> , dark.	<i>Scaevolera</i> . see <i>Diolcus</i> .
"	<i>Proxys Proxes</i> .	<i>Evagorus</i> . see <i>Diplocerus horridus</i> .
<i>tenuicornis</i>	<i>Tenuicornis</i> , tenui. slender, cornu, horn.	a little green, or greenish.
"	<i>Carsus</i> . see <i>Cyprinus</i> .	<i>Nerara</i> .
"	<i>Cyprinus</i> .	<i>Pentaloma</i> . see <i>Nerara</i> .
<i>teucrii</i>	<i>Tingis</i> . (Plant) Germ andor.	<i>vitrinipennis</i> vitreus, glassy, transparent. ?
+ <i>terminalis</i>	<i>Acanthocephala</i> . terminal.	" Spenna, a wing.
"	<i>Metapodus</i> . See <i>Acanthocephala</i> .	<i>Campyloneura</i> .
<i>thamasi</i>	<i>Acanthocephala</i> . Prop name.	<i>Capsus</i> , see <i>Campyloneura</i> .
"	<i>Melapodus</i> see <i>Acanthocephala</i>	<i>Velutigeria</i> Chelidonia. snake bearing.
<i>tipularia</i>	<i>Heides</i> . Schule a crane fly.	<i>venenata</i> Cosa. wounded.
<i>tipularis</i>	<i>Berytus</i> . see <i>Heides</i> .	
<i>tipuloides</i>	Leptocoris. like a crane fly.	
<i>thistigma</i>	<i>Euschistus</i> , three spots or mark.	
"	<i>Pentatoma</i> . see <i>Euschistus</i> .	
<i>tristis</i>	<i>Anasa</i> . salt or dark colored.	
"	<i>Coues</i> . See <i>Anasa</i> .	
"	<i>Gonocerus</i> . " "	
<i>trivittatus</i>	<i>Septocoris</i> . three striped.	
<i>turcicus</i>	<i>Lycaeus</i> . turceus. Turkish (red)	
<i>typhaea</i>	<i>typhaeus</i> (Stapor) because they sign.	
"	<i>Mormidea</i> . see <i>Obalus</i> . (death.)	
"	<i>Obalus</i> .	
"	<i>Pentatoma</i> . see <i>Obalus</i> .	
<i>uhleri</i>	<i>Chlorochroa</i> . Prop name.	
<i>uliginosus</i>	moist, wet, or marshy.	
" a	<i>Ophthalmicus</i>	
<i>una</i>	<i>Salda</i> . see <i>Ophthalmicus</i> .	
"	one, together, or associated with.	
"	<i>Megalotinus</i> .	
"	<i>Pameria</i> . see <i>Megalotinus</i>	
<i>unicolor</i>	<i>Conimelaena</i> , one color.	
<i>undata</i>	<i>Neottiglossa</i> . wavy, wave like.	
"	<i>Pentatoma</i> . see <i>Neottiglossa</i> .	
<i>undulata</i>	<i>Notonecta</i> undulate.	
<i>vagabunda</i>	a wanderer or vagabond	
<i>vagans</i>	<i>Miris</i> . wandering, roving	
<i>variegatus</i>	<i>Conorthinus</i> . variegated.	
<i>veneratus</i>	<i>Charagochetus</i> . pertaining to hunting.	
<i>ventralis</i>	ventral, or relating to the belly.	
"	<i>Apionerus</i> .	
"	<i>Reduvius</i> . see <i>apionerus</i> .	
<i>vincta</i>	<i>Pameria</i> see <i>plociomerus</i> .	
"	bound or girl.	
"	<i>Plociomerus</i> .	
- <i>violaceus</i>	of a violet color.	
"	<i>Stiretrus</i> .	
"	<i>Tetra</i> . see <i>Stiretrus</i> .	
- <i>violacea</i>	<i>Bulsirea</i> . violet	
<i>vividusatus</i>	made fresh, or green	
"	<i>Cœnus</i> .	

ORDER HEMIPTERA. Subor Heteroptera.
Plant Bugs

Genera as arranged in the Entomological Cabinet of the Museum of the Department of Agriculture, Washington, D.C. 1876.

The general classification is from Amyot & Servelle.

It must be observed that this arrangement is only provisional, and prepared merely for convenience of reference in the general collection, and to serve temporally until a complete scientific list (which is now in the course of preparation) by Prof. F. E. Uller or the Peabody Institute in Baltimore, Maryland is published.

General mention in Amyst. will be distinguished by having the letter G and the number of the page placed after them and the genera in Italics, after the general names either are or were Synonyms.

120.

Arrangement in Cabinet.

Sect.	Fam.	Inde.	Group	Genus
Race 1. <i>Piceocephala</i> .				<i>Spartocerus</i> . C. 184. <i>Miclus</i> . C. 167.
Race 1. <i>Sectiones</i> . Race 2. <i>Monopontes</i> .				<i>Miruna</i> . C. 142. <i>Melapodus</i> . C. 194. <i>Oeanthociphala</i> syn. <i>Melapodus</i> . <i>lemoni</i> . <i>Sthenuchus</i> Syn. <i>Aca</i> ... <i>dicinus</i> <i>Pachylis</i> . C. 196. <i>Pterogaster</i> . C. 197. <i>Meropaeus</i> . C. 198. <i>Nemiatopus</i> . C. 199.
Race 1. <i>Sectiones</i> . Race 2. <i>Monopontes</i> . Race 3. <i>Spinipectentes</i> .				<i>Enoplopus</i> . C. 208. <i>Carmastes</i> . syn. <i>Syromastes</i> . <i>replex</i> ad. Sav. <i>Syromastes</i> . C. 208. <i>Anasa</i> . C. 209. syn. <i>Gonocerus</i> . <i>tenuis</i> . <i>Charoxestes</i> . C. 210. <i>Crenocerus</i> . C. 214. <i>Eulachna</i> . syn. <i>Crenocerus</i> . <i>gauatus</i> .
				<i>Amphorophorus</i> . 2. <i>Anthocoris</i> . 3. <i>Gymnacanthus</i> . 4. <i>Gymnacanthus</i> . 5.
				<i>Geocorinae</i> . Section 1. <i>Geocorinae</i> . 4. <i>Cecogenes</i> . 5. <i>Ricellinae</i> .
				<i>Anisoscelis</i> . C. 217. <i>Lipoglossus</i> . near <i>Anisoscelis</i> . <i>pthisa</i> . " " <i>Hector</i> . C. 218. <i>Liposcelis</i> . C. 219. <i>Clytus</i> . C. 225. <i>Chelidonea</i> . near <i>Clytus</i> . <i>Prosternon</i> <i>Stenorrhina</i> . C. 226. <i>Lophocoris</i> . C. 228. <i>Korssoma</i> . C. 231. <i>Beryllus</i> . C. 232. <i>Milles</i> . C. 233. <i>Coxenus</i> . C. 237. <i>Margus</i> . near <i>Coxenus</i> . <i>Sagotylus</i> . <i>confluentus</i> . syn. <i>Gonocerus</i> . <i>Ananas</i> . C. 238. <i>Meropaeus</i> . C. 263. <i>Sheraphim</i> . C. 264. <i>Schopulus</i> . C. 265. <i>Lasycoris</i> . near <i>Schopulus</i> . <i>Tadra</i> . " <i>Leptocoris</i> . " <i>Pseudoleptocoris</i> . C. 266.
				<i>Glycous</i> . C. 249. <i>Psemonochirus</i> . <i>rubulus</i> . syn. <i>Glycous</i> . <i>nassonovi</i> . Sav. <i>Conistatus</i> . C. 250. <i>Onodus</i> . near <i>Conistatus</i> . <i>Peponotus</i> . " <i>Heterogaster</i> . " <i>Ischnorhynchus</i> . syn. <i>Glycous</i> . <i>q-maculatus</i> . Sav. <i>Nysius</i> . syn. <i>Glycous</i> . <i>steppae</i> . <i>Parimyrus</i> . ? syn. <i>Glycous</i> . <i>luteus</i> . <i>Pamera</i> . see <i>Pathymorus</i> . <i>Heraculus</i> . ? syn. <i>Pathymorus</i> . <i>integimus</i> .
				<i>Rhypherochroa</i> . C. 253. <i>Micropterus</i> . syn. <i>Rhypherochroa</i> . <i>Procambarus</i> . C. 255. <i>Myodocha</i> . C. 256. <i>Edancala</i> . C. 258. <i>Cymus</i> . C. 259. <i>Ophthizemus</i> . C. 260. <i>Untiaconis</i> . C. 262. <i>Myrmecium</i> . (after <i>Anthocoris</i>) <i>Pycoconis</i> . C. 263. <i>Gyrrhocoris</i> . C. 264. <i>Odontophus</i> . C. 270. - <i>4-dercus</i> . C. 272. - syn. <i>Papsus</i> . <i>creatus</i> . Sav. <i>Targus</i> . <i>Acinocoris</i> . C. 273. <i>Thrinax</i> . <i>Thrinaxides</i> . <i>Brachytrupes</i> . near <i>Thrinax</i> . <i>Phytocoris</i> . C. 278. <i>Penthima</i> . C. 279. <i>Cephalus</i> . C. 280. <i>Globiceps</i> . C. 282. <i>Xestocoris</i> . C. 283. <i>Stalinia</i> . - <i>ides</i> . <i>Ustemma</i> . C. 284.
				For more extensive arrangement of <i>Capsus</i> see end of this list n

121.

Arrangement in Cabinet.

Over

122.

Arrangement in Cabinet

123.
Capricini.

"Generische Streitung der Phytoconiden by Dr. Franz. Paver. Füller.
"Separat-abdruck aus Nr. 11. des Bandes der Wiener Entomologischen Monatschrift"

Genera as arranged in collection

<i>Bryocoris.</i>	<i>Hadrodesma.</i>	<i>Sthenarus.</i>
<i>Ceratocombus.</i>	<i>Orthops.</i>	<i>Aquicastes.</i>
<i>Myrmacoris.</i>	<i>Stichrosoma.</i>	<i>Malthacus.</i>
<i>Miris.</i>	<i>Galleius.</i>	<i>Camaronotus.</i>
<i>Bachytropis.</i>	<i>Cylapus.</i>	<i>Dioncus.</i>
<i>Lobostethus.</i>	<i>Globiceps.</i>	<i>Hoplomachus.</i>
<i>Acetropis.</i>	<i>Mecamma.</i>	<i>Macrotylus.</i>
<i>Leptoterna.</i>	<i>Cyrtorhinus.</i>	<i>Amblytylus.</i>
<i>Cremnodes.</i>	<i>Haeterhinus.</i>	<i>Macrocoleus.</i>
<i>Pithanus.</i>	<i>Pachylaps.</i>	<i>Macrolophus.</i>
<i>Ailacetonus.</i>	<i>Loxops.</i>	<i>Malacocoris.</i>
<i>Camptobrachys.</i>	<i>Tukorhinus.</i>	<i>Systellonotus.</i>
<i>Brachycoleus.</i>	<i>Orthotylus.</i>	<i>Brachyceraea.</i>
<i>Calocoris.</i>	<i>Heterostoma.</i>	<i>Dicaphus.</i>
<i>Miridius.</i>	<i>Heterocordylus.</i>	
<i>Phytocoris.</i>	<i>Lioscoris.</i>	
<i>Reshenia.</i>	<i>Orthocephalus.</i>	
<i>Lopidea.</i>	<i>Labops.</i>	
<i>Rhopalotomus</i>	<i>Atrachtostomas.</i>	
<i>Capsus.</i>	<i>Cenometopus.</i>	
<i>Trigonostylus</i>	<i>Carprocera.</i>	
<i>Lopus.</i>	<i>Oncotylus.</i>	
<i>Dioncus.</i>	<i>Conoslethus.</i>	
<i>Targanius.</i>	<i>Tinicaphalus.</i>	
<i>Dichrooscyrtus.</i>	<i>Brachyarthrum.</i>	
<i>Charagocheirus.</i>	<i>Plagognathus.</i>	
<i>Lyzus.</i>	<i>Prostemmnus.</i>	
<i>Pecilascytus.</i>	<i>Psallus.</i>	

124.

Extracts from the list of Hemiptera
 ~of the region west of the Mississippi
 including those collected by the Hayden Explorations of 1873.

by T R Uhler. Baltimore, Md.

Washington D.C. Jan 1

Since the foregoing notes were written, Dr. G. O. Ulmer of Baltimore, Maryland, has published a list of the Hemiptera of the region west of the Mississippi or westward to 100°, arranged the families &c. in a somewhat different manner than in the author's notes quoted on pp. 1, 7, 9, 12 & 119, &c. which we will give as below, for the benefit of young students.

Order. Hemiptera.	Suborder Heteroptera	Division Homocerata
<i>Superfamily</i> Coccoidea.	Sub. am. o.	Genus <i>Covonidaea</i> White. U.S.
<i>Family</i> Pachycoridae	Subfam. o.	Genus <i>Hemisphaerius</i> Ill. U.S. " <i>Aulacostethus</i> Uhler " 6 " <i>Tachycoris</i> , Mayr " 7.
<i>Subfamilies</i>	Sub. am. Eurygastrina.	Genus <i>Eurygaster</i> Lep. U.S. 8
<i>Subfamilies</i>	Subfam. Podopina.	Genus <i>Podops</i> Lep. U.S.
<i>Family</i> Cydnidae	Subfam. o.	Genus <i>Pangaeus</i> Stål. U.S. " <i>Synecis</i> , " 10. " <i>Amnestus</i> , Del. U.S. 12. " <i>Macroporus</i> Uhler 8. " <i>Scherus</i> , " 13.
<i>Subfamilies</i>	Subfam. Aesopina	Genus <i>Stereotomus</i> Lep. U.S. " <i>Perillus</i> Stål. U.S. 15. " <i>Zicrona</i> Amy. U.S. " <i>Potestes</i> , " Stål. U.S. 17.
<i>Family</i> Pentatomidae	Subfam. Halydina.	Genus <i>Brochymena</i> Amy. U.S. 17.
<i>Subfamilies</i>	Subfam. Pentatomina.	Genus <i>Abia</i> Fab. U.S. 18. " <i>Neottiglossa</i> Kirby. U.S. 18. " <i>Mormidea</i> Amy. U.S. 19. " <i>Abasius</i> , Stål. U.S. 19. " <i>Euscinus</i> , " 20. " <i>Proxys</i> Spin. U.S. 20. " <i>Hymenopterus</i> Lin. U.S. 21. " <i>Conus</i> , Gall. U.S. 21. " <i>Monocentrus</i> , " 22. " <i>Chilocroca</i> , " 22. " <i>Tachysphex</i> , Stål. U.S. 23. " <i>Keyserla</i> , " 23. " <i>Murcynia</i> , " 24. " <i>Ischnocnemis</i> Stål. U.S. 24. " <i>Baraka</i> Stål. U.S. 25.

125.

(Notes from Uhler

	Subfam. <i>Spartocerina</i> . { Genus. <i>Liparocera</i> Fab v. 225.
	Subfam. <i>Characticina</i> . { " Chamesterus. Sap. 225.
	Subfam. <i>Careina</i> . { " Margus. Daz. 226.
	" Crendinea Uhler 226.
	" Catorhyntha. Stal 226.
	" Anasa. Amy. 227.
	Subfam. <i>Aleydina</i> . . { " Aleydus. Fab. 227.
	Subfam. <i>Leptocorisina</i> . { " Leptocoris. Lat. 228.
	" Protenor. Stal. 229.
	Subfam. <i>Morocorina</i> . { " Corynoconis. Mayr. 229.
	" <u>Morocoris</u> syn.
Fam. <i>Coreidae</i> .	{ " Pachylo St. Far. 229.
	" Morona Amy. 229.
	" Archimerus. Burm 231.
	" Sagotylus. Mayr. 231.
	" Euthochtha. Mayr. 231.
()	Subfam. <i>Acanthocephala</i> . { venus. <i>Acanthocethala</i> Fab. 231.
	" <i>Matapidia</i> West 231.
	Subfam. <i>Anisoscelidina</i> . { " <i>Leptoglossus</i> . Guer 232.
	" <i>Anisoscelis</i> syn.
	" <i>Ptha</i> Stal 233.
	Subfam. <i>Berytina</i> . { " <i>Neides</i> Lat. 233.
	" <i>Berytus</i> syn.
	Subfam. <i>Pseudophloeina</i> . { " <i>Dasyconus</i> . Gall v. 233.
	" <i>Harmostes</i> Burm. 234.
	" <i>Covirus</i> Fall. 234.
	" <i>Latoecoris</i> Haan 235.
	" <i>Jadera</i> Stal. 236.
Fam. <i>Lygaeidae</i> . --	Subfam. 0 - - - - - { " <i>Lygaeus</i> Fab. 236.
	" <i>Eurythreschius</i> Stal. 237.
	" <i>Melanoleurus</i> Stal 237.
	Subfam. <i>Nysiina</i> . { " <i>Nysius</i> . Wall. 238.
	" <i>Belenochetus</i> Uh. 239.
	" <i>Oreocerus</i> Lat. 239.
Fam. <i>Lygaeidae</i>	Subfam. <i>Cymina</i> . . { " <i>Ischnorhynchus</i> Fab 249.
	" <i>Ischnodemus</i> Fab 239.
	" <i>Microtropus</i> syn.
	" <i>Blissus</i> Burm. 239.
	" <i>Microtropus</i> syn.
	" <i>Syn. Schizopachromus</i> .

Notes from Uhler

	Subfam. Geoconina	{ Genus. <i>Geoconus</i> . Fallen. 2.60.
	Subfam. Pachygronthina	{ " <i>Oedancala</i> Amy. 2.61.
	Subfam. Oxyconina	{ " <i>Crotalus</i> . Stål 2.61
		{ " <i>Plectromera</i> . Jay 2.62
		" <i>Cnemodus</i> H. Sch. 2.62
		" <i>Myodocha</i> Lat. 2.63.
		" <i>Hercus</i> . Stål. 2.63
		" <i>Famora</i> Jay 2.64
		" <i>Trachonotis</i> . Fab. 2.65.
		" <i>Eremocoris</i> Fab. 2.65.
	Subfam. Lygaeina	{ Genus. <i>Lygocerus</i> . Amy. 2.65
	Subfam. Pyrrhocorina	{ Genus. <i>Acronotus</i> . Wash. 2.66.
	Subfam. Largina	{ " <i>Largus</i> . Hahn. 2.67.
()	Fam. Phytocoridae. { Subfamily O.	{ Genus. <i>Monocoris</i> . Lohr. 2.69
		" <i>Tegonotinus</i> . Fab. 2.50
		" <i>Leptotarsus</i> . Fab. 2.50
		" <i>Brachytrax</i> . Fab. 2.50.
		" <i>Venex</i> . Uhler. 2.50.
		" <i>Phytocoris</i> . Fab. 2.51
		" <i>Sapideus</i> Uhler. 2.51.
		" <i>Radovornis</i> Uhler. 2.51.
		" <i>Lugus</i> Hann. 2.52.
		" <i>Laevocoris</i> . Fab. 2.52.
		" <i>Resthenia</i> Amy. 2.52.
		" <i>Psiliscytus</i> . Fab. 2.52.
		" <i>Rhopalotomus</i> . Fab. 2.53
		" <i>Salardus</i> . Buire 2.53
		" <i>Camptobrochys</i> . Fab. 2.53.
		" <i>Imicophaeus</i> . Fab. 2.53.
		" <i>Plagiozathus</i> . Fab. 2.53.
		" <i>Aquilonotis</i> . Fab. 2.53.
		" <i>Excluderis</i> Uhler. 2.53.
	Fam. Anthocoridae. { Subfam. O.	{ Genus. <i>Trichocoris</i> . Uhler 2.54.
		" <i>Anthocoris</i> . Fab. 2.55.
	Fam. Aradidae { Subfam. O.	{ Genus. <i>Aradus</i> . Lat. 2.45.
		" <i>Frachyrhynchus</i> . Lap. 2.57.
	Fam. Pyrrhocoridae. { Subfam. O.	{ Genus. <i>Pyrrhalta</i> Lat. 2.58.
		" <i>Syn Syntis</i>
		" <i>Macrostethus</i> . Swed 2.59
	Fam. Nabidae. { Subfam. O.	{ Genus. <i>Pagesa</i> . Stål. 2.50.
		" <i>Conicus</i> . Schrank. 2.59.
		" <i>Syn Nabis</i> . Lat

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(Notes from Uhler's)

Superfamily. Reduvioidae.

Fam. O.

Subfam. Reduviiina.

Genus	Binco Am.	4.6
"	Ucholla. Stål	4.60
"	Promotus Say	4.61.
"	Atrachneus. Am.	4.61
"	Fitekia. Stål	4.61.
"	Ripista. Stål	4.61.
"	Telus. Tab	4.61.
"	Lytodus. Stål	4.61.
"	Pindus. Stål	4.62
"	Muyas. Stål	4.62
<u>Garnactis</u> Syn.		

Subfam. Apiomerina. { Genus. Apiomerus. Rafn. 4.62.

Subfam. Hammatocerina. { Genus. Hammatocerus Durm. 4.63

Subfam. Ectrichodina. { Genus Ectrichoda. Say. 4.63.

Subfam. Piratina. { Genus Piratina. Say. 4.63
Pulansus. Stål 4.64

Subfam. Acanthaspida. { Genus. Conurillus. Say. " 4.65

Family Stenopodiidae. { Subfam. O. . . . { Genus. Pygolampus. Gmelin 4.66.
Stenopoda. Say. 4.66

Fam. Emesidae { Subfam. O. . . . { Genus. Emesa. Tab. 4.66.

Fam. Saldidae { Subfam. O. . . . { Genus. Valda. Tab. 4.67.
Acanthia. Syn.Fam. Velidiidae. { Subfam. O. . . . { Genus. Macrovelia. Linn. 4.68.
Velia. Tab. 4.68.
Rhagovelia. Muvar 4.68.

Fam. Hygrometridae. { Subfam. O. . . . { Genus. Timmophora. Stål. 4.69.

Fam. Peleponidae. { Subfam. O. . . . { Genus. Peleg. Linn. Tab. 4.69.

Fam. Galloidae. { Subfam. O. . . . { Genus. Galloides. Satz 4.70.
Mononyx. Tab. 4.71.Fam. Paucoridae. { Subfam. O. . . . { Genus. Muicoris. Ecol. 4.71.
Ambyres. Stål 4.71.Fam. Belostomatidae. { Subfam. O. . . . { Genus. Belostoma. 4.71.
B. nasus. Stål 4.71.
Zeitha Am. 4.71.
Scorpio. Stål 4.71.Fam. Nepidae. { Subfam. O. . . . { Genus. Ranatra. Tab. 4.72
Nepa.

Fam. Notonectidae. { Subfam. O. . . . { Genus. Notonecta. Linna. 4.73

Fam. Corixidae. { Subfam. O. . . . { Genus. Corixa. Geor. 4.73

Notes from Uhler.

The following interesting notes on the habits of Heteropterous insects with the latest changes in the nomenclature, position & classification of the various Families. Subfamilies General & species have been taken from Prof. S. G. Uhler's list of the Hemiptera of the region west of the Mississippi river including those collected during Haydens explorations of 1873. The older names will be distinguished by being in Italics.

Acanthia lugubris. Say see Salda. Fab. found in Maryland Sep. on black marshy spots, overgrown with cresses. near a brook & clear water. U. 267.

Acanthocephala. decolor. This species varies greatly in size, shape & acuteness of pronotal wings, in the number of spines, in the width & shape of expansions of tibiae &c. U. 31

Acanthocephala tremula see Metapodus U. 31.

Acanthocephala. Thomasi see Metapodus granulosus U. 32.

Airydia. ater Dall is A. curinus U. 27.

Anasa. armigera is very rare in Maryland only a single specimen having thus far been known to be captured in this state Uhler p. 27.

Anasa. tristis. (Squash bug) "In the larval stage they are often guilty of cannibalism, the stronger ones sucking the juices of the weaker, leaving only their dried empty skins to attest their places on the squash vines." Uhler. 27.

Anisoscelis. albicans. is Leptoglossus Guen. U. 32

Anisoscelis. declivis. Say see Acanthocephala U. 31.

Anisoscelis. oppositus Say. is Leptoglossus U. 32.

Anthocoris insidiosus (Pseudochunche) should be Tricholeps, Uhler. 53.

Anima grandis. Dall. (Bentatoma cynica of Say) is Podesca cynicus. Uhler. 16.

Astemma mavortia Say is Cnemodus mavortius Latre. 42.

Anurus albirunctatus. Syn Tauroceres or Amy p. 121. is not in Uhler's list. p. 26

Banasa. erichsoni. (not figured at pl. VIII. Error) feed beneath bark of Cedar trees Texas U. 25.

Belastoma. quisea found from Mass. to Fla. is Benashenus. Stål. U. 71.

Camptibrochis (Fab.) nebulosus. Fab. in Maryland is sometimes common in crevices of the bark of Linden and in Mass. feeds upon the females, & perhaps the eggs of the Canker moth. U. 53.

Capsus. lineolatus see Lugus. U. 32.

Capsus. medius. Say. see Lophidea U. 51.

Capsus. nutulus. Say see Phytocoris. U. 51.

Capsus. rapides. Dan. see Calocoris U. 52

Capsus. succinctus Say see Largus cinctus U. 47.

Chelinidea (Uhler) vittigera in Texas according to Mr Beltrago less on a species of Orientia U. 36

Chlorochroa seu new sp. Uhler. found in Colorado by Scut. Carpenter. U. 52.

Corrus. alternatus. Say see Archimerus calcarator. U. 21.

Corrus. armigera. Say See Anasa. U. 27

Corrus. confluentus. Say see Sagotylus Mayr U. 31

Corrus. diffusus. Say. see Spatoceara cinnamonea Dall U. 25

Corrus. galeator Fab. Cinocerus syn. see Euthochtha Mayr U. 31.

Cnemodus H. Sch. Mavortius (= Astemma mavortia Say) found beneath stones &c. Mich to Nov. Md. U. 42.

* Conorhinus variegatus, & C. sanquisuga have been classed as Synonyms. but Prof. Uhler at p. 55 mentions both separately, & of C. Sanquisuga which inhabits Va. Md. Ohio. See Illus. of Panama, he says: "The extended geographical range of this bloodthirsty tenant of houses is noteworthy. & no doubt it has, like its congener C. gigas been ruled in its range by human agency." U. 65

Conuridae is the first in Scut. Verdict of Uhler's list. Cephalocarea is found from Quebec to Fla. & Tex. H. U. 5.

Corynocoris. distinctus. Fab. amongst small weeds & shrubs growing luxuriantly as late as October. (Syn. Microcoris) U. 29.

* Corixus subcoleopteratus. syn Nahus U. 59.

* Corixus lateralis. Md. first brood late in May. to early July. 2nd brood Aug. Sept & Oct. Found in rank growth on borders of woods.

Cynocerus galeator Dall. see Euthochtha. U. 31.

* U. 20. i.e. name signifies it is missing in the Alphabetical list.

Crodes from Uhler.

- * Corylus. Fab. "on one occasion in the early part of June this species occurred in considerable numbers near the city of Baltimore but since that time, not a single specimen has been captured in this vicinity" Uhler 36.
- Corylus, mercenaria. Say (used as food in Mexico) Mex. Mexico 274
- Cydnus. bilineatus. (Aethus) see Tanacanthus. Stål. U. 9.
- Dysdercus. (Comy) obliquus. (Gerrheocoris. Gvn)
- Ectrichodes. cruciata. Stål (Peltoschemus. Say.) Pe., Tex., &c. U. 63.
- Emesa. longipes. "This species within a few years has spread into the region adjoining Baltimore, living in the branches of small pine trees, & in outhouses, or barns". U. 66.
- Euschistus, fasciatus. Walk. (Ependitor Dall.) see Thyanta. Stål. perdetar. In Nebraska to Venera. cl. It varies much in form & size U. 19
- Euschistus, punctipes. Dall. see E. varians. Par de Beau. U. 19.
- Euschistus, tenuistigma. Pentatomus Say Euschistus curvidus. Lax. sometimes occurs in large numbers on bushes in damp situations. It no species thus far discovered in this country exhibits such a wide range of differences in the form of pronotum" U. 20.
- * Eurygaster, alternatus. "cold division of the north temperate zone" Not found as far south as Md. 28.
- Eysarcoris, carnipes. see Cosmopepla. U. 18.
- Fitchia. Stål. nigrovittata. Stål. Texas, Kansas, Indian Ter., & Colorado. U. 61
- Galgulus, ocellatus. Md. There are sometimes two broods annually, in May & Aug. Prof Cyrus Thomas observed this species Eupung to seize (as he supposed) Drya terminalis. (Orth) in the state of Illinois. U. 70.
- Gerris, remiges. Say. is Hyalotrechus. Stål. U. 69.
- Gonocerus, testaceus. Anasa. testacea U. 26.
- Hammatocerus. (Burn) parvus. of Drury, is H. furcatus Blanch. U. 3.
- Krombeinus, venustus, is rare in Maryland, & affects the colder parts of the state U. 6
- * Harpeactor, cinctus. is Milrys cinctus of Stål. U. 62.
- Hymenocallis, nervosa. is Pentatomus of Say. U. 21.
- Ischnorhynchus. See didymus. (Lycaeus of Say) in Maryland is found sparingly upon bushes & shrubbery near edges of woods. U. 39.
- Leptocoris, tipulatus. Fab. Tex., Mex. & central America, but not mentioned as being found in the more northern regions. by Uhler 28.
- Lopidea, medea. (Capsus medius. Say) Colorado. by Lewis Carpenter. U. 51.
- Lycaeus, admirabilis. Uhler. is Melanocoryphus Stål U. 37.
- Lycaeus, aniculus. H Sch. L. fasciatus. Dallas is Erythrischius fasciatus. of Stål. U. 37.
- Lycaeus, bimaculatus. of Say. is Melanocoryphus. Stål. U. 38.
- Lycaeus, bistrigularis. of Say. is Melanopleurus. Stål. U. 37.
- Lycaeus, didymus of Say. is Ischnorhynchus. Fab. U. 39.
- Lycaeus, eurnius of Say. is Alydus. Fab. U. 27.
- Lycaeus, facetus. of Say is Melanocoryphus. Stål. U. 37.
- Lycaeus, gallicus. Say (Micropus) is Ischnodemus. Fab. U. 39. "hybernates under stones. ♀?"
- Lycaeus, geminatus. Say. is Ischnorhynchus didymus. Stål. U. 39.
- Lycaeus, gutta. H Sch. is Oncopeltus. Stål. U. 36.
- Lycaeus, leucopterus Say (Micropus & Rhypharoachromus) Chinch bug. is Blissus. Burn. U. 40.
- Lycaeus, lateralis. Wall. is Melanocoryphus. of Stål. U. 38.
- Lycaeus, numenius. Say. is Belonochetus. of Uhler p. 39 "very rare in Maryland."
- Lycaeus, reticulatus. Say. Graptolomus, Stål. lives like its congeners. on a sp. of Asclepias. U. 36.
- Lycaeus, scolopax. Say. is Orsillus. Dallas. U. 39.
- * Lycaeus, lineola. Dall. is Ochrostomus. of Stål. U. 37.
- * Lycaeus, spinifer. Say (Alydus cruentus H Sch) is Megalotomus. Fab. U. 28.
- Lycus, lineolatus. (Capsus) found above the timber line in Colorado, & on the bald summits of mountains in North Carolina. U. 52.
- Merecoris, distinctus. Dall. See Comynocoris. Mayr. common in field corners, adjoining woods, &c. U. 29.
- Metapodus. see also Acanthocephala. &c.
- Micropus. (see also Rhypharoachromus) gallicus. see Ischnodemus. Fab. U. 39.
- Micropus. leucopterus. See Blissus. U. 40
- * Before a name signifies it is misplaced in the alphabetical list.

Notes from Utler.

- Monalocoris. Lake (Eu) Md. Found late in summer, & autumn, on ferns U 44
- Mycodocha. pelicolar Say erroneously removed Cretula see M. Semper's Obs. found beneath stones in spring & autumn. Hibernates in crevices & bark. Fe. U. 43.
- Nabis ferus Linn. see Conicus Strandz. Md. & Europe. U. 59.
- Nabis. coarctatus is Conicus subcoarctatus Herb. U. 59.
- Notonecta undulata. Maryland. "inhabitats the fire" for in dirty slush, & slimy pools it revels in full enjoyment of the pitch." U. 73
- Notonecta insulata Herb. lives in clear cold water U. 73
- Nysius. californicus. Still rare in Maryland, but common in California. U. 33.
- Oebalus. typhaeus Stål (Pentatomus angust Say) is Oebalus hugnus. Fair & co. found in Maryland in low spots in meadows. June Aug & Sep U. 1
- * Odonotocoris. cateralis & justiciae. see Cormoecina. U. 5.
- Oedancala. (Panora Say) dorsalis. Say. common in Maryland. U. 41
- Pachynoris. conspicuus. See Homaenus Fall. U. 6
- Panora. viridis Fall. Maryland, found in region of metamorphic rocks, living in grass & wheat fields in summer & spring. Hibernating beneath rocks. U. 44.
- Panora. consticta Say is Ligyrocoris Stål U. 43.
- Panora. fascia Say is Iraperonotus (Fab.) nebulosus. Fair. U. 40.
- Panora. sera Say is Eumecocoris. Fab. U. 45.
- Pelogonius. int. americanus L. & P. quite rare in collections, occurring near water, in places overgrown with marsh plants. U. 70.
- * Panora. domestica. Say see Oedancala, Am. N. 41
- Pentatomus. angustus Say. ex Hymenocoris. hibernates beneath stones. U. 24
- Pentatomus. arboreus Say is Brockmanni Amy. E. 17
- Pentatomus. calcata Say & P. custator of Th. Sch. See Thysanota Fall. U. 23
- Pentatomus. delia Say. is Tanys (in) U. 25
- Pentatomus. granulosus Uhler. is Phlorocorisa. Sayi. Stål. U. 21.
- Pentatomus. insignis Say is Manecius insigilis. Fall. U. 21.
- Poultonia. ligata Say. is Chlorochroa. U. 22.
- Pentatomus. funicularis? of Say. Euschistus. varicornis. Fall de For. 50 & 63 U. 19.
- Pentatomus. funicularis? of Say. is a soft place under Marmidae. & is syn of Plygiomera of Stål.
It was captured near New York at about sea level. U. 47.
- Pentatomus. rugulosa of Say. is Thysanota. Stål U. 24
- Pentatomus. tenebricosa of Say ex Praxys punctatulus. Fall de For. U. 20.
- Paymalo. Lat. cosa. Brit. It in Maryland is very useful in destroying caterpillars, & other vegetable feeding insects but is not very discriminating in its tastes & would as soon seize the winged insect in the morning as in the evening. It walks about in the thick, orange or the garden & conceals on the stem of a leaf or stem it grasps suddenly with its fore claws the insect that may get in or it will thrusting its stout legs into the body with sudden, powerful force to withdraw its fine jaws. U. 58
- Thysanota. Fall. nubilus. (Lepisus Say) in Maryland runs on Eupatorium. U. 24 Aug U. 61
- Plygiomera. nodosa. see Phloeoceris.
- Pronotus (Lap.). cristatus. (Proctocerus novemcarius) in Maryland. like Proctocerus of Lap. & makes holes well in calcareous shells which come within its reach U. 1. (in the Smithsonian Grounds, Washington D. C., and are as follows: Proctocerus & Pronotus inaccuracy upon the insect). U. 47
- Proteron (Stål.) Prague. U. 47. and runs in Maryland. U. 24
- Prothecocera. (Say) notata. Say. hirticornis Erro. Will find under stones & on the first to become yellow & dying. In autumn it is found in old stems & dried or drying reeds & in winter it is buried thus leaves U. 42
- Reduvius. lunatus Say is Thaumastus classified Stål. U. 2
- Reduvius. norvarius. in Maryland. testaceus. U. 61.
- Reduvius. pectoralis. Say see gambus. U.
- * before a name signifies it is not in the natural habitat in order

Notes from Uhler.

- Pedurus. neptunius Say see Sinea diana U. 60. see also S. multispinosa Amy.
- Pedurus. musivus, Say. see Chionomus. U. 2
- Peripla! Stål' Tunes. Texas Mex Fla. syn Tenes. U. 61.
- Phenuchus. see Acanthocerphalus & Melochodaeus. U. 31.
- Rhypharochromus. See Microctes Scorpioides & Thelia. &c
- Salidae. Of this family Poey¹ U. 20. says "that it is interesting to record that the few colored species inhabit the white sandy spots near the beaches, whilst S. nigro. lives on the dark green banks of our streams and S. interstincta & other black spec. select the black sandy soil, adjacent to water, for their dwelling places" thus showing that the light or dark are not at the same families. so that a similarly colored habitat is themselves. "our birds tend to escape their enemies & not be too conspicuous" Salda extreme. probably the U.S. Canada. & also Europe. U. 68.
- Sinea. multispinosa. de Geer. & Achillee. Stat. U. 60. ?
- Sinea. multispinosa. Amy & Serv is Sinea diana. Tab. 9 U. 61.
- Spartocera. Westw. is Spartocera. Lap. U. 25.
- Stiretrus (Lap.) diana. Tab. is S. anchorago. Tab. very variable in color from grey to (imbricatus). through the red & blue drama. to the orange violet. var. veracae. U. 15.
- Syromastes. inconspicuus. H. Schf. is Marques. or Cuba. U. 26.
- Syritus. erose see Dynamata. also syn of Macroceraius. U. 58
- x Strachia. histrio. Hahn is Murgantia Stål' Hab. from Delaware to Fla & Louisiana. The colors of this insect vary ranging from yellow to steel blue markings also var. "In the Atlantic region the species seems to be steadily but slowly advancing northward. Its introduction into Maryland has been effected since the late war. & now it is known as far north as the vicinity of the Pennsylvania boundary line in Delaware." Common also in the Mississippi valley, in Illinois Missouri. U. 24.
- Telyra. cinctipes. see Podars. dubius. Moors. to Fla. U. 8
- Ilyanassa. castanea. (Pentatoma calcata Say) Atlantic region Quebec to Fla. U. 23.
- Ilyanassa. Streperator. (Euschiates fasciatus. Walker) winter as far as Nebraska. South as far as Venezuela. U. 23.
- Trigonotylus. (Frob.) vulgaris. Fall. (Meris) inhabits grass & weeds, in brackish marshes in Maryland. & salt marshes in Maine. U. 5.

x. before a name signifies that it is not on the regular zoological order.

1st
Erata and Addenda

Page I. n. 2	to <u>see</u> in
II.	13. omit first word <u>value</u> .
" 25. "	29. omit VIII 31. as no insect { is figured.
- 35. "	33-34 <u>Cyllocoris</u> , or <u>Cylloconus</u> ?
" 36. "	15. after 4. a cut of one, misc'd 155. n. 10.

Page 46. line 1. 45-46. true error marks	•
76 - " 29. for <u>Hydrocyamus</u> " <u>Hypse</u> "	•
" 33. 23. after man : & insert, also " injured by <u>Phytocoris unicolor</u>	
58 - " 30. insert. <u>Suspensum</u> , 16 as, idem.	
128 - " 27. for <u>Benachus</u> & read <u>Benachus</u>	

(Note.) Where a circlear black spot, •, or star is placed after a name or word, it signifies that it is an error, •, should be corrected, as in plate 1 the word Amphicoris (•) should be changed to Bacillus. And on page 2, • Amphicoris, should be Amphibacillus. The small cross X by one a name, signified that it was misplaced in the alphabetical list.

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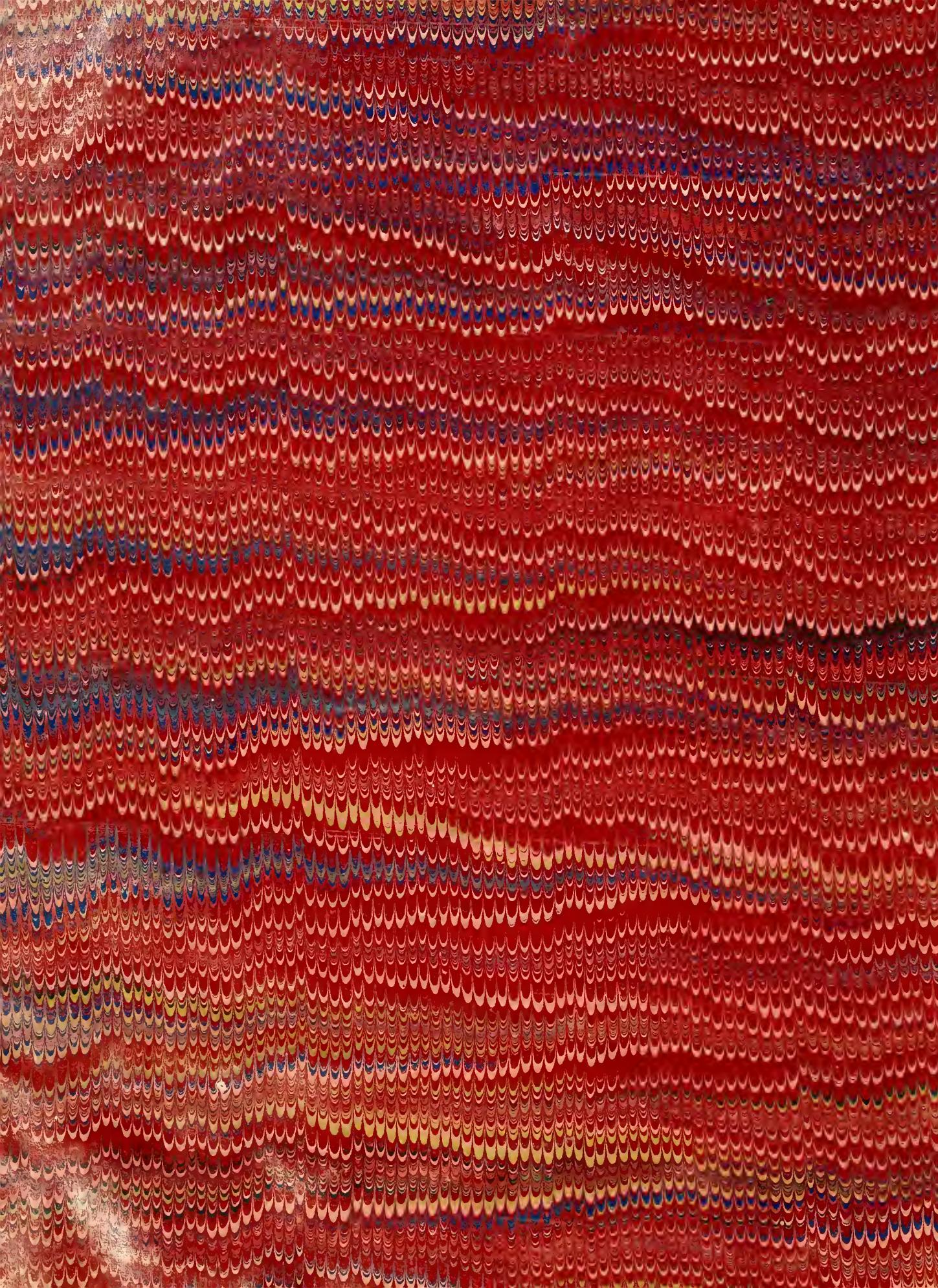
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